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Phase I Environmental Site Assessment

75 Tupelo Lane
75 Tupelo Lane, Amherst, NY 14228

Prepared for:
Town of Amherst
5583 Main Street
Amherst, New York 14221

July 2023

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ACRONYMS

AAI - All Appropriate Inquires

ACM - Asbestos Containing Materials

AST - Aboveground Storage Tank

ASTM - American Society for Testing Materials

AUL - Activity and Use Limitation

BCP - Brownfield Cleanup Program

BGS - Below Ground Surface

BTEX - Benzene, Toluene, Ethylbenzene, Xylene

CBS - Chemical Bulk Storage

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

CREC - Controlled Recognized Environmental Condition

EDR - Environmental Data Resources

EP - Environmental Professional

ERIS - Environmental Risk Information Service

FIM - Fire Insurance Map

FOIL - Freedom of Information Law

GIS - Geographic Information System

GPR - Ground Penetrating Radar

HREC - Historical Recognized Environmental Condition

LBP - Lead Based Paint

LUST / LTank - Leaking Underground Storage Tank Site

MSL - Mean Sea Level

NAPL - Non-Aqueous Phase Liquid

NFA - No Further Action

NPL - National Priority List

NRCS - Natural Resource Conservation Service

NY Spills - NYSDEC Spill Site

NYSDEC - New York State Department of Environmental Conservation

OHSA - Occupational Safety and Health Administration

PAH - Polycyclic Aromatic Hydrocarbon

PBS - Petroleum Bulk Storage

PCB - Polychlorinated biphenyl

PFAS - Per- and polyfluoroalkyl substance

Phase I ESA - Phase I Environmental Site Assessment

Phase II ESA - Phase II Environmental Site Assessment

PPB - Parts Per Billion

PPM - Parts Per Million

PSR - Physical Setting Report

REC - Recognized Environmental Condition

RCRA - Resource Conservation and Recovery Act

SHWS - State Hazardous Waste Site

SSDS - Sub-Slab Depressurization System

SVOC – Semi-volatile Organic Compound

TPH - Total Petroleum Hydrocarbon

TSD - Treatment Storage and Disposal Facility

USDA - United States Department of Agriculture

USEPA - United States Environmental Protection Agency

USGS - United States Geological Service

UST - Underground Storage Tank

VEC - Vapor Encroachment Condition

VI - Vapor Intrusion

VOC - Volatile Organic Compound

EXECUTIVE SUMMARY

At the request of the Town of Amherst, C&S Engineers, Inc. (C&S) has completed this Phase I Environmental Site Assessment report of the property identified as Amherst Tax Map ID No. 26.06-8-33, which is located at 75 Tupelo Lane, Amherst, Erie County, NY 14228. The Subject Property is 1.69 acres and is reportedly owned by Cimato Enterprises.

The Subject Property is 1.69-acre primarily vacant lot, but is improved with a small portion of Tupelo Lane, which dead-ends on the Subject Property. Further information concerning existing Subject Property conditions is summarized in Section 8.

The location of the Subject Property is depicted on a 7.5 Minute USGS Topographic Quadrangle as well as on a site plan, which are provided in the **Figures** section of this report.

The observations made during C&S' July 19, 2023, Subject Property reconnaissance are included in latter sections of this report. The remainder of this report includes information collected from various local, state, and federal agencies, interviews, user-provided information, and reasonably ascertainable historical records such as tax records, aerial photographs, fire-insurance maps, local city directories, and topographic maps.

Based on the results of this Phase I ESA, the following findings and opinions are provided:

Findings and Opinions:

- The Subject Property is identified as Amherst Tax Map ID No(s). 26.06-8-33, which is located at 75 Tupelo Lane, Amherst, NY 14228. The Subject Property is 1.69 acres and is currently owned by Cimato Enterprises, Inc.

- The Subject Property was first developed for agricultural uses in a primarily agricultural area bounded by Tonawanda Creek by 1927. Aerial photographs indicate that the area surrounding the Subject Property began to develop with residential uses in the 1950s. By 1961, according to the 2011 Phase II ESA prepared by Barron & Associates, PC, the agricultural land northeast of the Subject Property had been converted into a golf course, and a bowling alley had been constructed near the southeastern boundary of the Subject Property. The Subject Property appears to be located on the western boundary of the golf course, but partially within landscaped / maintained areas. This information is confirmed in the 1963 aerials reviewed in this assessment. By 1972, residential development had become somewhat denser in the surrounding areas according to aerial photographs. The Subject Property and surrounding areas remained largely unchanged until 2013, when development of a subdivision began.

- By 2022, the Evergreen Landing subdivision appears to be almost completely developed except for a small portion in the northern part of the neighborhood along Tonawanda

Creek. Tupelo Avenue has been constructed and appears to dead-end just within the eastern Subject Property boundary.

- The Subject Property and adjoining properties are not listed in any local, state or federal databases. A portion of the Evergreen Golf Course, approximately 1,500-ft north from the Subject Property along Tonawanda Creek, was the subject of a successful superfund remediation. The contamination is not expected to have impacted the Subject Property.

- The 2011 Barron & Associates PC Phase II ESA did include sampling efforts in the vicinity but not directly on the Subject Property. Sample results did not exceed Residential and Restricted Residential SCOs. While the presence of any elevated analytes over Unrestricted Use SCOs may be cause for concern depending on the intended future use of the Subject Property, in this scenario the possible contamination from historical operations is considered a De Minimis Condition by definition and not a REC.

- The Subject Property reconnaissance was performed on July 19, 2023. Minimal construction debris (road blockade, silk fence debris, and gravel/sand) and dumped mulch were observed at the Subject Property, but were not at quantities that would cause concern.

- Regarding the historical use of pesticides and herbicides as it relates to both agricultural land and golf course operations, it has been assumed that the use of those chemicals, if any such use ever occurred at the Subject Property, was in conformance with the manufacturer's instructions. The ASTM E1527-21 standard includes a "pesticide exemption", defined as:

    - The purpose of CERCLA's pesticide exemption is "to prevent the typical pesticide user from incurring CERCLA liability when he has done nothing more than to have purchased and applied a pesticide in the customary manner…The pesticide must have been applied in accordance with the labeling requirements established for that pesticide product at the place where the pesticide product was to be applied."

- Mr. Jeffrey Szatkowski of the Town of Amherst returned a completed user questionnaire on July 20, 2023. Mr. Szatkowski summarized information provided by the User to C&S in regards to the Subject Property's historical use as a portion of a golf course. He indicated that another portion of the same golf course approximately 2,000 feet away along Tonawanda Creek is a closed superfund site. Furthermore, Mr. Szatkowski referenced the historical use of pesticides and herbicides that are consistent with golf course uses, and the deed restriction related to the 100-ft NYSDEC wetland buffer. The historical information provided by the Town of Amherst is attached as **Appendix D.**

- The Subject Property reconnaissance was performed on July 19, 2023. Minimal construction debris (road blockade, silk fence debris, and gravel/sand) and dumped mulch

were observed at the Subject Property, but were not at quantities that would cause concern.

- As described in this document, this Phase I ESA has revealed no evidence of a REC, including CRECs, or significant data gaps at the Subject Property.

- Based on the results of the 2011 Barron & Associates PC Phase II ESA, the presence of analytes with concentrations exceeding Unrestricted Use SCOs but below Residential or Restricted Residential SCOs is possible on the Subject Property. This may be cause for concern depending on the intended future use of the Subject Property. In the Subject Property's current state, the possible contamination from historical operations is considered a De Minimis Condition by definition and not a REC. Therefore, based on the results of this Phase I ESA, no further investigation is necessary. Depending on the intended future use of the property, the Town of Amherst may consider additional surface soil investigation at that time for their records.

Please refer to Sections 9 and 10 for the complete Findings, Opinions and Conclusions.

1.0 INTRODUCTION

1.1. Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) is to evaluate whether current or historical activities on or adjacent to the property located at 75 Tupelo Lane, Amherst, NY 14228 (the "Subject Property") may have resulted in contamination of the Subject Property by hazardous materials and/or petroleum products. The presence of or potential for contamination is subsequently referred to in this report as a Recognized Environmental Condition (REC). Specific elements of the Phase I ESA include the identification of:

- Possible environmental contaminants
- The proximity of sensitive receptors
- Past and present uses on or adjacent to the Subject Property that may be a REC
- Hazardous material and waste storage or disposal practices

The work conducted in the process of this Phase I ESA was completed consistent with the applicable guidelines developed in the American Society of Testing Materials (ASTM) Standards E1527-21. The performance of this Phase I ESA will help establish the innocent landowner defense through the identification of potential environmental issues which may affect future development of the Subject Property. Specifically, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability: that is, the practice that constitutes "all appropriate inquiries into the previous ownership and uses of the subject property consistent with good commercial and customary practice as defined in CERCLA, 42 U.S.C. 9601(35) (B) and 40 C.F.R. Part 312."

It is C&S' understanding that the Town of Amherst requires a Phase I ESA for the Subject Property for the purpose of environmental due diligence related to property acquisition.

ASTM E1527-21 defines three types of RECs as follows:

Recognized Environmental Condition (REC):
"(1) The presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment. "

Controlled Recognized Environmental Condition (CREC):
"A recognized environmental condition affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations)."

Historical Recognized Environmental Condition (HREC):
"A previous release of hazardous substances or petroleum products affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the regulatory authority or authorities without subjecting the Subject Property to any controls (for example, activity and use limitations or other property use limitations)."

In addition to defining RECs, ASTM E1527-21 also defines the following terms that may be applicable when assessing a site's environmental risk:

De Minimis Condition:
A de minimis condition is defined as a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. These are not considered to be RECs, but may warrant consideration.

Business Environmental Risk:
A Business Environmental Risk is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.

1.2. Scope of Services

The scope of services for this Phase I Environmental Site Assessment included the following tasks:

- Review of the current and past uses of the Subject Property;
- Review of environmental studies/data readily available for the Subject Property;
- Subject Property reconnaissance to evaluate current conditions;
- Review of state and federal databases;
- Evaluation of the potential environmental impact of adjacent properties on the Subject Property; and
- Interview with state / local agencies and Subject Property owner and / or manager, as available.

The scope of services for the Phase I ESA was described in C&S' agreement with the Town of Amherst signed and dated June 14, 2023.

1.3. User Reliance

This report was prepared by C&S expressly and exclusively for use by the Town of Amherst and its successors and/or assigns. This entity can use and rely upon the information contained in this report, findings, and conclusions. No one else is authorized to rely on this report for any purpose, except to the extent that such reliance is specifically authorized in writing by C&S. Any person

who intends to take action, which is in any way related to or affected by the information contained herein, should independently verify all such information.

2.0 SUBJECT PROPERTY DESCRIPTION

2.1. Location, Use, and Description

The Subject Property is identified as Amherst Tax Map ID No(s). 26.06-8-33, which is located at 75 Tupelo Lane, Amherst, Erie County, NY 14228. The Subject Property is 1.69 acres and is owned by Cimato Enterprises.

The Subject Property is 1.69-acre primarily vacant lot, but is improved with a small portion of Tupelo Lane, which dead-ends on the Subject Property. The Subject Property is relatively flat with areas of grass and dirt/gravel and a freshwater forested / shrub wetland portion along the western boundary. Further information concerning existing Subject Property conditions is summarized in Section 8. The location of the Subject Property is depicted on a 7.5 Minute USGS Topographic Quadrangle as well as on a site plan, which are provided in the **Figures** section of this report.

2.2. Description of Subject Property Improvements and Utilities

The Subject Property is vacant lot in a Multifamily Residential District 5 (MFR-5) that primarily contains areas of grass and dirt/gravel with a wooded portion along the western boundary. There are no structures.

The following utilities are available in the vicinity of the Subject Property:

- Electric: National Grid
- Natural Gas: National Fuel
- Sanitary Sewer: Town of Amherst
- Potable Water: Erie County Water Authority

2.3. Current Uses of Adjoining Properties

The Subject Property is located in a residential district. At the time of the Subject Property reconnaissance, the lands which adjoin the Subject Property were viewed from the property line and roadways. The following table provides a summary of land uses and features observed.

Table 2-1
Adjacent Land Use

Direction	Land Use
North	Residential
South	Memorial Park Cemetery / Community Facilities District
East	Manor Lanes II / Residential
West	White Chapel Memorial Cemetery / General Business District

3.0 PHYSICAL SETTING

A Physical Setting Report (PSR) was provided by Environmental Risk Information Services (ERIS) (**Appendix A**). The PSR includes detailed information regarding topographic, hydrologic, and geologic conditions for the Subject Property and surrounding areas, as well as information on soil, groundwater, and radon. Geologic mapping and documentation from C&S' private library were also reviewed. The purpose of reviewing physical setting information is to assess the potential for the migration of contaminants from sites of concern. Observations regarding the physical setting are discussed below.

3.1. Physical Setting Description

3.1.1. General Topographic Setting

Information shown on the representative USGS 7.5 Minute Quadrangle indicates that generally, the topography of the Subject Property is relatively flat and is at an approximate elevation of 578 feet above mean sea level.

3.1.2. General Geologic Setting

According to the PSR provided by ERIS, the following soil types and rock formations represent the geologic conditions at the Subject Property:

- Soils consist primarily of Raynham silt loam with 0 to 2 percent slopes, which is comprised of silt loam and very fine sandy loam. A small band of the Lamson very fine sandy loam passes through the center of the Subject Property.

- Bedrock consists of shale, dolostone, salt, and gypsum of the Camillus, Syracuse, and Vernon Formations of the Upper Silurian Period.

3.1.3. General Hydrogeologic Setting

The Subject Property is located approximately 2,181 ft east and 1,300 ft south of a bend in Tonawanda Creek. Based on the interpretation of the USGS Topographic Map, groundwater in the area is assumed to move generally to the southwest towards Tonawanda Creek. Groundwater flow specific to the Subject property is unknown and may be different from the regional flow. Potential influences include local drainage features, seasonal groundwater level fluctuations, subsurface geology, surface topography, and / or other local site features.

Approximately 0.19-acres of the Subject Property along the western property boundary is a NYSDEC freshwater forested/shrub wetland, and the majority of the Subject Property is located within the 100-ft wetland buffer area.

4.0 USER PROVIDED INFORMATION

In accordance with ASTM E1527-21, a "User" is defined as the party seeking to complete an environmental site assessment of the Subject Property. If the user is aware of any specialized knowledge or experience that is material to RECs in connection with the Subject Property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional.

Mr. Jeffrey Szatkowski of the Town of Amherst returned a completed user questionnaire on July 20, 2023. The completed user questionnaire is available in **Appendix B.** Mr. Szatkowski summarized information previously provided by the user to C&S in regards to the Subject Property's historical use as a portion of a golf course. He indicated that another portion of the same golf course approximately 2,000 feet away along Tonawanda Creek is a superfund site. Further information on this remediated and closed superfund site is available in **Section 6.0** and **Appendix D**. Furthermore, Mr. Szatkowski referenced the historical use of pesticides and herbicides that are consistent with golf course uses, further discussed in **Section 5.0**, and the deed restriction related to the 100-ft NYSDEC wetland buffer.

5.0 HISTORICAL USE ASSESSMENT

5.1. Historical Use Information on Subject Property and Adjoining Properties

Historical information was used to develop a history of the previous uses of the Subject Property and surrounding area. Typical sources utilized to understand historical land use of a property include topographic maps, aerial photographs, fire insurance maps, building department records, property tax files, city directories, and historical reports. These sources are used to help identify the possibility of past land uses contributing to RECs with respect to a property.

These historical sources satisfy the standard for CERCLA's most "reasonably ascertainable" information available. ASTM E1527-21 defines "reasonably ascertainable" as information that is publicly available, obtainable within reasonable time and cost limits, and practically reviewable.

This assessment used the following informational resources to help identify past and present site uses upon and surrounding the Subject Property.

Table 5-1
Historical Information Summary

Section	Historical Source	Source Years	Source/Comments
5.2	Fire Insurance Maps		N/A
5.3	Topographic Maps	1897, 1900, 1901, 1948, 1950, 1965, 1980, 2013, 2016, 2019	Environmental Risk Information Services
5.4	Aerial Photographs	1927, 1951, 1958, 1963, 1972, 1981, 1995, 2006, 2008, 2009, 2011, 2013, 2015, 2017, 2019, 2021, 2022	Environmental Risk Information Services
5.5	City Directories	1963, 1968, 1971, 1976, 1980, 1985, 1990, 1996, 2000, 2003, 2008, 2012, 2016, 2020, 2022	Environmental Risk Information Services
5.6	Recorded Land Title Records	N/A	N/A

These sources were used to help identify the possibility of past land uses contributing to RECs in regard to the current Subject Property.

5.2. Historical Fire Insurance Mapping

A search for fire insurance mapping of the Subject Property and its surrounding area was conducted. However, due to the past rural nature of the Subject Property area, fire insurance maps were not available. A copy of the "No Coverage" letter is provided in **Appendix A.**

5.3. Historical Topographic Mapping

The table below summarizes the information shown on these topographic maps and provides interpretations when appropriate (**Appendix A)**.

Table 5-2
Topographic Map Review

Year	SP Observations	Adjoining Site Observations
1897	The map shows that the SP is located in Amherst, south of the Erie Canal.	The Erie Canal can be seen north and west of the SP and forms the border between Erie County and Niagara Count and the Towns of Amherst and Tonawanda. The area is relatively undeveloped, though a few roads have been constructed.
1900	The SP appears to remain unchanged.	The areas surrounding the SP appear to remain unchanged.
1901	The SP appears to remain unchanged.	The areas surrounding the SP appear to remain unchanged.
1948	The SP appears to remain unchanged.	The areas surrounding the SP show signs of development and construction of larger roads near the SP, including Niagara Falls Blvd and Tonawanda Creek Rd. White Chapel Memorial Cemetery has also been established and abuts the SP.
1950	The SP appears to remain unchanged.	The areas surrounding the SP appear to remain unchanged.
1965	The SP appears to remain unchanged. A golf course is now designated on the map directly north of the SP, but boundaries are not clearly delineated and could overlap SP boundaries.	The areas surrounding the SP appear to remain unchanged except for light residential development primarily to the southeast and a golf course proximate to and potentially on the SP. A small structure was also constructed directly adjacent to the SP southeast boundary.

Year	SP Observations	Adjoining Site Observations
1980	The SP appears to remain unchanged. The structure along the southeast boundary now overlaps the SP boundary. This could be to expansion of the structure or inconsistency with the map.	The areas surrounding the SP appear to remain unchanged except for further residential development primarily to the southeast across Tonawanda Creek Rd.
2013	The SP appears to remain unchanged.	The areas surrounding the SP appear to remain largely unchanged.
2016	The SP appears to remain unchanged.	The areas surrounding the SP appear to remain largely unchanged.
2019	The SP appears to remain unchanged.	Initial development of the neighborhood surrounding the SP can be seen. Otherwise, the area surrounding the SP appears to remain unchanged.

SP = Subject Property
Observations consider information gleaned from previous historical sources.

5.4. Historical Aerial Photography

The table below summarizes the information shown on these aerial photographs and provides interpretations when appropriate (**Appendix A**). It should be noted that the scale of the photography can make identification and interpretation of fine details difficult. Therefore, the interpretations that follow are primarily relative to observable gross characteristics and features.

Table 5-3
Historical Aerial Photograph Review

Year	SP Observations	Adjoining Site Observations
1927	The SP appears to be located entirely within a larger agricultural property.	The area surrounding the SP appears to be primarily occupied by agricultural land.
1951	The SP appears to remain generally unchanged.	The surrounding area appears to remain largely unchanged except for the construction of the White Chapel Memorial Park cemetery.
1958	This aerial photograph is of poor quality, but the SP appears to remain unchanged.	The surrounding area appears to show signs of light development to the northwest and southeast of the SP. The photo quality is poor, but the development appears to be primarily residential.

Year	SP Observations	Adjoining Site Observations
1963	The SP appears to remain generally unchanged, however, a small portion of the parking area built directly adjacent to the SP appears to cross the southeastern boundary of the SP. The adjacent golf course appears to overlap the SP on the northernmost portion of the SP.	The surrounding area appears to remain largely unchanged except for the construction of a bowling alley directly adjacent to the east. This includes a parking area to the south that appears to partially cross into the SP boundaries. A golf course can also be seen in the area to the northeast of the SP.
1972	The SP appears to remain generally unchanged.	Further residential development can be seen to the southeast of the SP across Tonawanda Creek Rd.
1981	The SP appears to remain generally unchanged.	The surrounding area appears to remain generally unchanged.
1995	The SP appears to remain generally unchanged.	The surrounding area appears to remain generally unchanged. Some commercial development can be seen further south from the SP.
2006	The SP appears to remain generally unchanged.	The surrounding area appears to remain generally unchanged.
2008	The SP appears to remain generally unchanged.	The surrounding area appears to remain generally unchanged.
2009	The SP appears to remain generally unchanged.	The surrounding area appears to remain generally unchanged.
2011	The SP appears to remain generally unchanged.	The surrounding area appears to remain generally unchanged.
2013	The SP appears to remain generally unchanged.	Site work for a future neighborhood development can be seen to the east of the SP where the golf course had previously occupied.
2015	The SP appears to remain generally unchanged.	Further development of the adjacent neighborhood can be seen. Several houses have now been constructed.
2017	The SP appears to remain generally unchanged.	Continued development of the adjacent neighborhood can be seen.

Year	SP Observations	Adjoining Site Observations
2019	The SP appears to remain generally unchanged.	Continued development of the adjacent neighborhood can be seen.
2021	The SP appears to remain generally unchanged.	Continued development of the adjacent neighborhood can be seen, especially directly north of the SP and along Tonawanda Creek..
2022	The SP appears to remain generally unchanged.	The surrounding area appears to remain generally unchanged.

SP = Subject Property
Observations consider information gleaned from previous historical sources.

5.5. City Directory Search

City directories (**Appendix A**) are a screening tool to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. A summary of significant entries is provided below.

Table 5-4
City Directory Summary

Year	Property Address	Bearing / Distance / Location	Occupant
1990-2022	168 Tonawanda Creek Rd	Subject Property	Evergreen Golf Club/ Course
1980-1985	170 Tonawanda Creek Rd	Subject Property	Creekside Golf
1976-1980	170 Tonawanda Creek Rd	59 ft E	Creekside Lanes
1990-1996, 2020-2022	170 Tonawanda Creek Rd	59 ft E	Manor Lanes II
1976-1996	254 Tonawanda Creek Rd	982 ft ESE	Brenon Leo Top Soil

5.6. Recorded Land Title Records

A chain of title / title abstract was requested from the Town of Amherst. As of the date of this report, a chain of title / title abstract was not provided, however, information contained within historical documents provided by the Town of Amherst include information relative to Subject Property ownership. The 2011 Phase II ESA conducted by Barron & Associates, P.C. indicate that the Subject Property, as part of the larger parcel of land formerly located at various addresses between 100 – 170 Tonawanda Creek Road, was owned by the following persons/entities:

- Creekside Gulf & Lanes, Inc. from 1961 – 1977
- Anthony M. Palumbo from 1977 – 1978
- Creekside Gulf Course, Inc. from 1978 – 1985
- Tennis Schreckengost / Evergreen Golf Course, Inc. from 1985 – 2011.

Finally, based on a response in the User Questionnaire (**Section 4.0**), there is a deed restriction on the Subject Property related to 100-ft wetland buffer that the majority of the Subject Property is located within.

5.7. Other Historical Sources

As part of the review of historical information associated with the Subject Property, C&S reviewed several historical reports pertaining to the Subject Property and adjacent properties provided by the Town of Amherst. The documents are included as **Appendix D.** Pertinent information obtained from those reports is summarized below.

Phase II Environmental Site Assessment, Barron & Associates, P.C. – October 2011

There were no sampling efforts on or analytical results available for the Subject Property, however, the Subject Property was part of the larger golf course parcel that was investigated by B&A in 2011. The report is summarized below for informational background on the investigations made prior to the current Evergreen Landing subdivision's development.

The 2011 Phase II ESA, mainly prepared for the area directly to the north and east of the Subject Property, and including the Subject Property, formerly the Evergreen Golf Course, was completed to investigate and confirm that former environmental remediation activities on the property were adequately completed to ensure compliance with Part 375 Restricted Residential Use and Residential Use Soil Cleanup Objectives of the time, effective December 14, 2006 and NYSDEC CP-51 Supplemental SCOs, effective October 21, 2010.

On September 6 and 7, 2011, B&A oversaw Phase II ESA activities on the larger property. Twenty-four soil probes were advanced with a direct push soil sampler to depths ranging from four to 30 feet below grade. One petroleum above ground storage tank (AST) was observed in the vicinity of the garage. This AST was apparently utilized to fuel vehicles associated with golf course operations and was not located on the Subject Property or in the vicinity of the Subject Property.

No soil analytical results exceeded NYSDEC 375 Restricted Residential, Residential SCOs, or CP-51 SCOs. Furthermore, B&A did not encounter any significant chemicals of concern on the property detected by visual, olfactory, or laboratory results.

Based on the Phase II ESA results and according to NYSDEC 375 Restricted Residential or Residential SCOs, B&A concluded that the remedial activities that removed and over-excavated drums of liquid and solid tars containing phenolic tar residues with TCDDs/PCDDs and dibenzofuran were effective at successfully remediating the site adequately for residential land use.

5.8. Historical Use Summary

The Subject Property was first developed for agricultural uses in a primarily agricultural area bounded by Tonawanda Creek by 1927. Aerial photographs indicate that the area surrounding the Subject Property began to develop with residential uses in the 1950s. By 1961, according to the 2011 Phase II ESA prepared by Barron & Associates, PC, the agricultural land northeast of the Subject Property had been converted into a golf course, and a bowling alley had been constructed near the southeastern boundary of the Subject Property. The Subject Property appears to be located on the western boundary of the golf course, but partially within landscaped / maintained areas. This information is confirmed in the 1963 aerials reviewed in this assessment. By 1972, residential development had become somewhat denser in the surrounding areas according to aerial photographs. The Subject Property and surrounding areas remained largely unchanged until 2013, when development of a subdivision began.

By 2022, the Evergreen Landing subdivision appears to be almost completely developed except for a small portion in the northern part of the neighborhood along Tonawanda Creek. Tupelo Avenue has been constructed and appears to dead-end just within the eastern Subject Property boundary.

No Recognized Environmental Conditions were identified during the review of historical information. A portion of the Evergreen Golf Course, approximately 1,500-ft north from the Subject Property along Tonawanda Creek, was the subject of a successful superfund remediation. The contamination is not expected to have impacted the Subject Property. Furthermore, the Phase II ESA that was performed in 2011 did include sampling efforts in the vicinity of the Subject Property on Tupelo Lane. Sample results did not exceed Residential and Restricted Residential SCOs. While the presence of any elevated analytes with concentrations exceeding Unrestricted Use SCOs may be cause for concern depending on the intended future use of the Subject Property, the possible contamination from historical operations is considered a De Minimis Condition.

Regarding the historical use of pesticides and herbicides as it relates to both agricultural land and golf course operations, it has been assumed that the use of those chemicals, if any such use ever occurred at the Subject Property, was in conformance with the manufacturer's instructions. The ASTM E1527-21 standard includes a "pesticide exemption", defined as:

- The purpose of CERCLA's pesticide exemption is "to prevent the typical pesticide user from incurring CERCLA liability when he has done nothing more than to have purchased and applied a pesticide in the customary manner…The pesticide must have been applied in accordance with the labeling requirements established for that pesticide product at the place where the pesticide product was to be applied."

6.0 RECORDS REVIEW

6.1. Standard Environmental Record Sources

C&S reviewed the regulatory status of the Subject Property using a summary report of local, state and federal environmental databases prepared by Environmental Risk Information Services (ERIS). The database report includes up-to-date information from local, state and federal agencies. Records compiled are consistent with standards outlined in ASTM E1527-21 for records that are:

- Within the approximate minimum search distance
- Reasonably ascertainable and are from standard sources
- Provide records under reasonable time and cost constraints

A copy of the database search report is provided in **Appendix A**. The comprehensive list of the reviewed local, state and federal regulatory databases is included in the report.

C&S reviewed the attached database search report to assess which properties or conditions, if any, might result in creating a REC with respect to the Subject Property. Properties that are located within the search distances and were deemed to be significant are described in the subsections below.

The following table lists those databases that produced results that were identified as the most critical to evaluating potential onsite and off-site conditions.

Table 6-1
Environmental Database Review

Database	Search Distance (miles)	Subject Property Listings	Sites Within Radius
LTANKS	0.5	0	4
HIST LTANKS	0.5	0	0
NY SPILLS	0.125	0	1
NY Brownfields	0.5	0	0
UST	0.25	0	0
RCRA	0.25	0	1
AST	0.25	0	0
CBS	0.25	0	0
CERCLIS NFRAP	0.5	0	4
NY SHWS	1.0	0	2
NPL	1.0	0	0

6.1.1. Subject Property Listings

The Subject Property was not identified in any local, state or federal databases.

6.1.2. Adjoining Property Listings

There were no adjoining listings mapped.

6.1.3. Proximate Property Listings

The following site(s) are mapped at distances or elevations that are notable with respect to the Subject Property. However, these sites are not anticipated to have negatively impacted the environmental integrity of the Subject Property based on various factors such as distance, relative elevation, groundwater flow, or regulatory status.

Table 6-2
Proximate Property Listings

Site Name	Database(s)	Distance / Gradient / Elevation Relative to the SP
3400 Niagara Falls Blvd	NY SPILLS	583 ft / Higher
Leo Brenan Tank – 254 Tonawanda Creek Rd	LST	987 ft / Lower
Occidental Chemical Corp – 168 Tonawanda Creek Rd	RCRA NON GEN	1350 ft / Lower
Creekside Golf Course – 170 Tonawanda Creek Rd	SEMS ARCHIVE/ SHWS/ CERCLIS/ CERCLIS NFRAP	1350 ft / Lower
Amherst WWTP – 55 Tonawanda Creek Rd	LST	1,687 ft / Lower
North Tonawanda LF – Walck Rd & Old Falls Blvd	CERCLIS/ CERCLIS NFRAP/ SEMS ARCHIVE	2,132 ft / Lower
Louisa St & Old Falls Blvd	LST	2,341 ft / Lower
Kwik Fill – 3945 Niagara Falls Blvd	LST	2,458 ft / Higher

Site Name	Database(s)	Distance / Gradient / Elevation Relative to the SP
Botanical Gardens – Old Falls Blvd	SHWS	2,499 ft / Lower

6.1.4. Unmapped Sites

C&S also reviewed the Orphan List at the rear of the database report. An "Orphan Site" is a record that has insufficient information to be mapped by the GIS system. The review of the Orphan Site List of 73 sites consisted of a comparison of the identified "Orphan" address to roadway mapping of the area surrounding the Subject Property. While the following orphan site a significant entry, based on distance, hydrological conditions and regulatory status, it not a REC at the Subject Property:

Site Name	Direction / Distance	Database(s)	Description	REC?
West Canal Marina	1,719 ft NNE	LST	A 1,000-gallon UST began leaking after digging around it for preparation for removal. Another 500-gallon UST was also uncovered. Contaminated soils were tested and discovered to contain gasoline and #4 fuel.	No, remediation efforts took place; contaminated soil was removed, and groundwater was pumped out for an extended time in the attempt to lower levels of contaminates. Testing was done to determine contaminate levels had lowered. Spill closed on 2/11/2000. Site is also located across Tonawanda Creek from the SP, and is therefore not considered a REC.

6.2. Vapor Encroachment Screening

A vapor encroachment condition (VEC) is defined as "the presence or likely presence of contaminant of concern (COC) vapors in the sub-surface of the target property caused by a release of vapors from contaminated soil or groundwater either on or near the target property". The review for potential VECs was performed in accordance with the practices prescribed in ASTM Practice E2600-15, entitled *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. For the purposes of this assessment, a Tier 1 screening has been performed. The scoped and purpose of a Tier 1 screening is to conduct a screen for vapor encroachment using information collected in the Phase I ESA to determine if a VEC exists at the target property.

ASTM Practice E2600-15 recommends the following search distances around the subject site for use in the Tier 1 Vapor Encroachment Screening process:

ENVIRONMENTAL DATABASE	SEARCH DISTANCE (MILES)	
	Chlorinated COCs	Petroleum Hydrocarbon COCs
Federal NPL Site List	1/3 mile	1/10 mile
Federal CERCLIS / SEMS List	1/3 mile	1/10 mile
Federal CORRACTS Facilities List	1/3 mile	1/10 mile
Federal non-CORRACTS TSD Facilities List	1/3 mile	1/10 mile
Federal RCRA Generators List	Property Only	Property Only
Federal Institutional/Engineering Controls	Property Only	Property Only
Federal ERNS List	Property Only	Property Only
State-Equivalent NPL List	1/3 mile	1/10 mile
State-Equivalent CERCLIS List	1/3 mile	1/10 mile
State Solid Waste Landfill or Solid Waste Disposal Sites	1/3 mile	1/10 mile
State Leaking Storage Tanks Sites	1/3 mile	1/10 mile
State Registered Storage Tank Sites	Property Only	Property Only
State Institutional/Engineering Controls	Property Only	Property Only
State Voluntary Cleanup Sites	1/3 mile	1/10 mile
State Brownfield Sites	1/3 mile	1/10 mile

The database report included several NY SPILLS, RCRA NO GENS, SHWS, CERCLIS, CERCLIS NFRAP, and LST listings in proximity to the Subject Property. However, as detailed above, these sites are not believed to pose a concern due to the nature of the spill (product spilled, volume, remedial response), distance from the Subject Property, topography, and regulatory status.

6.3. State and Local Regulatory Environmental Records

A Freedom of Information Law (FOIL) request was sent electronically to NYSDEC Region 9 on June 27, 2023. As of the date of this report, the NYSDEC has not responded indicating if they maintain any files related to the Subject Property. However, sufficient information is available via the database report, and this review suggests that any relevant environmental conditions with respect to the Subject Property have been reported. Therefore, the lack of response is not considered a significant data gap.

A FOIL request was sent electronically to the Town of Amherst Building Department on June 27, 2023. On June 28, 2023, the Town responded indicating that they do not maintain files related to the Subject Property. The Town review consisted of Building Permit History for tank installations, Fire Prevention Permits for tank removals, Fire Incident file, Fire Complaint file, and Hazardous Materials Release file. The response do not indicate a REC with respect to the Subject Property.

A Freedom of Information Law (FOIL) request was sent electronically to the Erie County Department of Environment and Planning on June 27, 2023. As of the date of this report, the Erie County Department of Environment and Planning has not responded indicating if they maintain any files related to the Subject Property. However, sufficient information is available via the database report, and this review suggests that any relevant environmental conditions with respect to the Subject Property have been reported. Therefore, the lack of response is not considered a significant data gap.

6.4. Records Review Summary

As indicated in the tables above, the information reviewed is not indicative of a REC with respect to the Subject Property.

The information generated from the FOIL process was not indicative of a REC with respect to the Subject Property.

7.0 INTERVIEWS

The objective of conducting interviews is to obtain information indicating RECs in connection with the Subject Property, and other pertinent current and historical information. During the course of the Phase I ESA, C&S conducted interviews with the following persons:

Table 7-1
Interview Log

Name	Affiliation	Date
Bryan Parnell	Town of Amherst Building Department	6/28/2023
Jeffrey Szatkowski	Client / User	7/20/2023
N/A	Owner / Key Site Manager	6/26/2023
N/A	NYSDEC Region 9 FOIL Department	6/27/2023
N/A	Erie County Department of Env. and Planning	6/27/2023

Summaries of these interviews are provided below:

7.1.1. Interview with Client / User

In accordance with ASTM E1527-21, a "User" is defined as the party seeking to complete an environmental site assessment of the Subject Property. If the user is aware of any specialized knowledge or experience that is material to RECs in connection with the Subject Property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional.

Mr. Jeffrey Szatkowski of the Town of Amherst returned a completed user questionnaire on July 20, 2023. The completed user questionnaire is available in **Appendix B.** Mr. Szatkowski summarized information previously provided by the user to C&S in regards to the Subject Property's historical use as a portion of a golf course. He indicated that another portion of the same golf course approximately 2,000 feet away along Tonawanda Creek is a superfund site. Further information on this remediated and closed superfund site is available in **Section 6.0** and **Appendix D**. Furthermore, Mr. Szatkowski referenced the historical use of pesticides and herbicides that are consistent with golf course uses, further discussed in **Section 5.0**, and the deed restriction related to the 100-ft NYSDEC wetland buffer.

7.1.2. Interview with Owner

On June 26, 2023 and July 13, 2023, C&S contacted Mr. Sean Hopkins, a partner with Hopkins, Sorgi & McCarthy PLLC, the attorney for the owner, Cimato Enterprises, Inc., via email to attempt an electronic owner interview.

On July 19, 2023, Mr. Hopkins indicated via telephone that the owner declined to be interviewed. Based on the quantity of information reviewed in this assessment and the information obtained from the User, the Town of Amherst, the lack of owner interview is not considered a significant data gap.

7.1.3. Interviews with State and Local Government Officials

Freedom of Information Law (FOIL) requests were sent to NYSDEC, the Erie County Department of Environment and Planning, and the Town of Amherst Building Department, as indicated in Section 6.3. The FOIL process did not reveal RECs.

7.1.4. Interview Conclusion

Information obtained from the individuals interviewed did not indicate that a REC exists with respect to the Subject Property.

8.0 SUBJECT PROPERTY RECONNAISSANCE

8.1. Methodology and Limiting Conditions

Mr. Jon Ericksen and Mrs. Alayna Pliszka, representing C&S, performed a reconnaissance of the Subject Property on July 19, 2023 and recorded their observations. Photographs of the Subject Property are provided in **Appendix C**.

The objective of the Subject Property walkover was to identify physical and/or visual evidence indicative of an obviously recognizable environmental condition, such as:

- Soil discoloration
- Stained surfaces
- Stressed and / or dead vegetation
- Spills, leaks, leachate, and / or discolored surface waters
- Evidence of previous fire damage
- Evidence of waste disposal
- Barrels, drums, or other containers
- Areas of subsidence or fill

In addition, there are a variety of physical and visual signs that may potentially indicate the presence of an obviously recognizable subsurface condition, such as:

- Vent pipes or fill ports associated with underground storage tanks (UST)
- Aboveground storage tanks (AST)
- Pipelines
- Electrical transformers and abandoned pads
- Rail yards
- Well casings or riser pipes associated with groundwater monitoring wells
- Landfills or dumps
- Surface impoundments or lagoons

8.2. Subject Property Reconnaissance Observations

Consistent with ASTM E1527-21, the items listed in the following table were documented during the course of the reconnaissance. This includes visual verification or evidence of the feature (e.g. fill ports for a UST). Affirmative responses (designated by an "X") are discussed in detail in the following table.

Table 8-1
Subject Property Reconnaissance Observations

Category	Item or Feature	Observed?
Hazardous Substance or Petroleum Product Containers	Aboveground Storage Tanks	
	Underground Storage Tanks	
	Bulk Containers (drums / totes)	
	Non-Bulk Containers	
	Hydraulic Equipment	
	Suspect PCB-Containing Equipment	
	Pipeline	
Olfactory / Visual Evidence of Releases	Odors	
	Pools of Liquid	
	Stains or Corrosion	
	Stained Soil or Pavement	
	Stressed Vegetation	
Water, Wastewater, and Waste Management	Drains or Sumps	
	Pits, Ponds, Lagoons	
	Solid Waste	
	Wastewater Sources	
	Septic Systems or Dry Wells	
	Wells	
Other	Fill Materials	
	Construction / Demolition Debris	X

8.3. Subject Property Reconnaissance Summary

The Subject Property is 1.69-acre primarily vacant lot, but is improved with a small portion of Tupelo Lane, which dead-ends on the Subject Property. The property contains dense vegetation throughout the central and northern portions of the property, with more sparse vegetation and gravel in the southern portion of the Subject Property near the adjacent bowling alley parking lot. The Subject Property abuts wooded areas and wetlands to the west and south, a bowling alley to the east and southeast, and residences to the north and east.

8.3.1. Exterior Observations

The following bullets provide additional detail regarding the items noted during the Subject Property reconnaissance:

- Minimal construction debris was observed in several locations within the Subject Property boundaries. Leftover debris, likely related to the development of the subdivision, includes a broken wooden road blockade, two silt sleeves, and a tarp with a small pile of sand on top. There is also a small pile of mulch that was dumped on the Subject Property, but it is

unknown whether this is also left over from construction activities or if it was left there by a nearby resident.

8.3.2. Interior Observations

There are no buildings on the Subject Property, and therefore no interior inspection was warranted.

8.3.3. Subject Property Reconnaissance Conclusion

The construction debris and pile of mulch are not RECs. Therefore, based on the reconnaissance of the Subject Property, there was no visual evidence of a REC.

9.0 FINDINGS AND OPINIONS

C&S Engineers, Inc. completed this Phase I Environmental Site Assessment consistent with the scope and limitations of ASTM E 1527-21. Based on information gathered during the course of this Phase I Environmental Site Assessment of the Subject Property, including a database search report, the site reconnaissance, and interviews documented in this report, the following has been identified:

- The Subject Property is identified as Amherst Tax Map ID No(s). 26.06-8-33, which is located at 75 Tupelo Lane, Amherst, NY 14228. The Subject Property is 1.69 acres and is currently owned by Cimato Enterprises, Inc.

- The Subject Property was first developed for agricultural uses in a primarily agricultural area bounded by Tonawanda Creek by 1927. Aerial photographs indicate that the area surrounding the Subject Property began to develop with residential uses in the 1950s. By 1961, according to the 2011 Phase II ESA prepared by Barron & Associates, PC, the agricultural land northeast of the Subject Property had been converted into a golf course, and a bowling alley had been constructed near the southeastern boundary of the Subject Property. The Subject Property appears to be located on the western boundary of the golf course, but partially within landscaped / maintained areas. This information is confirmed in the 1963 aerials reviewed in this assessment. By 1972, residential development had become somewhat denser in the surrounding areas according to aerial photographs. The Subject Property and surrounding areas remained largely unchanged until 2013, when development of a subdivision began.

- By 2022, the Evergreen Landing subdivision appears to be almost completely developed except for a small portion in the northern part of the neighborhood along Tonawanda Creek. Tupelo Avenue has been constructed and appears to dead-end just within the eastern Subject Property boundary.

- The Subject Property and adjoining properties are not listed in any local, state or federal databases. A portion of the Evergreen Golf Course, approximately 1,500-ft north from the Subject Property along Tonawanda Creek, was the subject of a successful superfund remediation. The contamination is not expected to have impacted the Subject Property.

- The 2011 Barron & Associates PC Phase II ESA did include sampling efforts in the vicinity but not directly on the Subject Property. Sample results did not exceed Residential and Restricted Residential SCOs. While the presence of any elevated analytes over Unrestricted Use SCOs may be cause for concern depending on the intended future use of the Subject Property, in this scenario the possible contamination from historical operations is considered a De Minimis Condition by definition and not a REC.

- Regarding the historical use of pesticides and herbicides as it relates to both agricultural land and golf course operations, it has been assumed that the use of those chemicals, if

any such use ever occurred at the Subject Property, was in conformance with the manufacturer's instructions. The ASTM E1527-21 standard includes a "pesticide exemption", defined as:

  - The purpose of CERCLA's pesticide exemption is "to prevent the typical pesticide user from incurring CERCLA liability when he has done nothing more than to have purchased and applied a pesticide in the customary manner…The pesticide must have been applied in accordance with the labeling requirements established for that pesticide product at the place where the pesticide product was to be applied."

- Mr. Jeffrey Szatkowski of the Town of Amherst returned a completed user questionnaire on July 20, 2023. Mr. Szatkowski summarized information provided by the User to C&S in regards to the Subject Property's historical use as a portion of a golf course. He indicated that another portion of the same golf course approximately 2,000 feet away along Tonawanda Creek is a closed superfund site. Furthermore, Mr. Szatkowski referenced the historical use of pesticides and herbicides that are consistent with golf course uses, and the deed restriction related to the 100-ft NYSDEC wetland buffer. The historical information provided by the Town of Amherst is attached as **Appendix D.**

- The Subject Property reconnaissance was performed on July 19, 2023. Minimal construction debris (road blockade, silk fence debris, and gravel/sand) and dumped mulch were observed at the Subject Property, but were not at quantities that would cause concern.

9.1. Data Failure

ASTM E1527-21 defines a data failure as a failure to achieve the historical research objectives of all appropriate inquiries even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Specifically, the historical research objectives include identifying all obvious uses of the Subject Property from the present, back to the Subject Property's first developed use, or back to 1940, whichever is earlier. A data failure was not encountered during this assessment.

9.2. Data Gap

A data gap is a lack or inability to obtain information required despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required, including but not limited to Subject Property reconnaissance and interviews. C&S encountered data gaps from being unable to interview the site owner and not receiving FOIL responses from the NYSDEC and Erie County, however, based on the quantity of information reviewed in this assessment and the information obtained from the User, the Town of Amherst, the lack of these items despite good faith efforts do not hinder C&S' ability to form an opinion on RECs. Therefore, during the course of this Phase I Environmental

Site Assessment, no significant data gaps that impaired C&S' ability to formulate opinions were encountered.

10.0 CONCLUSIONS

C&S Engineers, Inc. performed this Phase I Environmental Site Assessment consistent with the scope and limitations of ASTM E1527-21 on the Subject Property identified on various figures located at the rear of this report. Any exceptions to or deletions from ASTM E1527-21 are described in Section 12.2. As described in this document, this Phase I ESA has revealed no evidence of a REC, including CRECs, or significant data gaps at the Subject Property.

10.1. Opinion on Additional Investigation

Based on the results of the 2011 Barron & Associates PC Phase II ESA, the presence of analytes with concentrations exceeding Unrestricted Use SCOs but below Residential or Restricted Residential SCOs is possible on the Subject Property. This may be cause for concern depending on the intended future use of the Subject Property. In the Subject Property's current state, the possible contamination from historical operations is considered a De Minimis Condition by definition and not a REC. Therefore, based on the results of this Phase I ESA, no further investigation is necessary. Depending on the intended future use of the property, the Town of Amherst may consider additional surface soil investigation at that time for their records.

11.0 REFERENCES

American Society of Testing Materials (ASTM) E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*.

Environmental Risk Information Services (ERIS), database report, topographic maps, aerial photographs, and city directory report, June 2023.

12.0 LIMITATIONS, EXCEPTIONS, ASSUMPTIONS, AND SPECIAL CONDITIONS

12.1. Limitations and Exceptions

C&S has prepared this Phase I ESA consistent with the contract scope of services, using reasonable efforts to identify areas of potential liability associated with RECs at the Subject Property. The conclusions in this report were based solely on a visual review of the Subject Property and on readily available records, interviews, and other secondary sources as cited within this report. C&S has made no independent investigation of the accuracy of these secondary sources and has assumed them to be accurate and complete. C&S does not warrant the accuracy or completeness of the information provided by the secondary sources. C&S does not warrant that contamination that may exist on the Subject Property has been discovered, that the Subject Property is suitable for any particular purpose, or that the Subject Property is clean or free of liability.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, and this practice recognizes reasonable limits of time and cost.

All appropriate inquiries does not mean an exhaustive assessment of a property. There is a point at which the cost of the information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an environmental site assessment and the reduction of uncertainty about unknown conditions resulting from additional information.

ASTM E1527-21 defines limiting conditions as limitations imposed by physical obstructions such as adjacent buildings, bodies of water, asphalt or other paved areas, and other physical constraints (for example, rain, snow, flooding etc.). As noted during the Subject Property reconnaissance, there were no limiting conditions imposed on this assessment.

12.2. Non-Scope Items

Consistent with ASTM E1527-21, the following items are beyond the scope of Phase I Environmental Site Assessments:

- Asbestos Containing Materials
- Industrial Hygiene
- Health and Safety
- Ecological Resources
- Endangered Species
- Indoor Air Quality (unrelated to releases of hazardous substances or

petroleum products into the environment)
- Biological Agents
- Mold
- Radon
- Lead-Based Paint
- Lead in Drinking Water
- Wetlands
- Regulatory Compliance
- Cultural and Historical Resources
- Substances not currently defined as hazardous substances (including some substances sometimes generally referred to as emerging contaminants, such as per- and polyfluoroalkyl substances (PFAs)

The Phase I ESA also does not include sampling or chemical analysis of soils, surface water, or groundwater or an intensive examination of facility hazards (compliance audit).

12.3. Significant Assumptions

C&S' conclusions are based on conditions that existed on the Subject Property on July 19, 2023. Past and present conditions that could not be observed were established on the basis of documents. C&S cannot attest to the completeness of accuracy of these materials. The report speaks only as of the date issued. C&S has no responsibility for updating the information herein, and therefore, do not assume that any information contained herein in this Phase I Environmental Site Assessment continues to be accurate subsequent to 180 days from the date of the issuance of this document.

Except where specifically stated to the contrary, the information contained herein was provided to C&S by others and has not been verified independently or otherwise examined to determine accuracy, completeness, or feasibility. In addition, C&S may have had to rely upon the assumptions, especially as to future conditions and events. Accordingly, neither C&S nor any person acting on C&S' behalf (a) makes any warranty or representation, whether expressed or implied, concerning the usefulness of the information contained in this report, or (b) assumes liabilities with respect to the use of or for damages resulting from the use of any information contained in this Environmental Site Assessment report. Further, C&S cannot promise that any assumed conditions will come to pass.

It would be expensive, and perhaps not possible, to conduct an investigation that would ensure the detection of environmental impacts at the Subject Property, which now are, or in the future might be, considered hazardous. This investigation does not guarantee that C&S discovered all the environmental impacts at the Subject Property. Similarly, a property which, in fact, is unaffected by environmental impacts at the time of the assessment may later, due to natural phenomena or other intervention, become contaminated.

Except where stated to be the contrary, this Environmental Site Assessment has been prepared solely on the basis of readily available visual observation. Except where stated to be the contrary, no demolition or removal by C&S has been accomplished to reveal hidden conditions. No testing such as the testing of materials, equipment, or systems has been performed to verify current conditions or to predict future conditions.

Future regulatory modifications, agency interpretation, or policy changes may affect the compliance status of the property.

12.4. Special Terms and Conditions

Besides the standard contractual terms between C&S and the Town of Amherst, this Phase I Environmental Site Assessment was conducted, in C&S' opinion, with no impeding special terms and conditions that would alter the scope and / or effectiveness of ASTM E1527-21.

13.0 SIGNATURES AND QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the Subject Property. To the best of our knowledge and belief, C&S Engineers Inc. has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Alayna Pliszka
Project Environmental Scientist

Figures

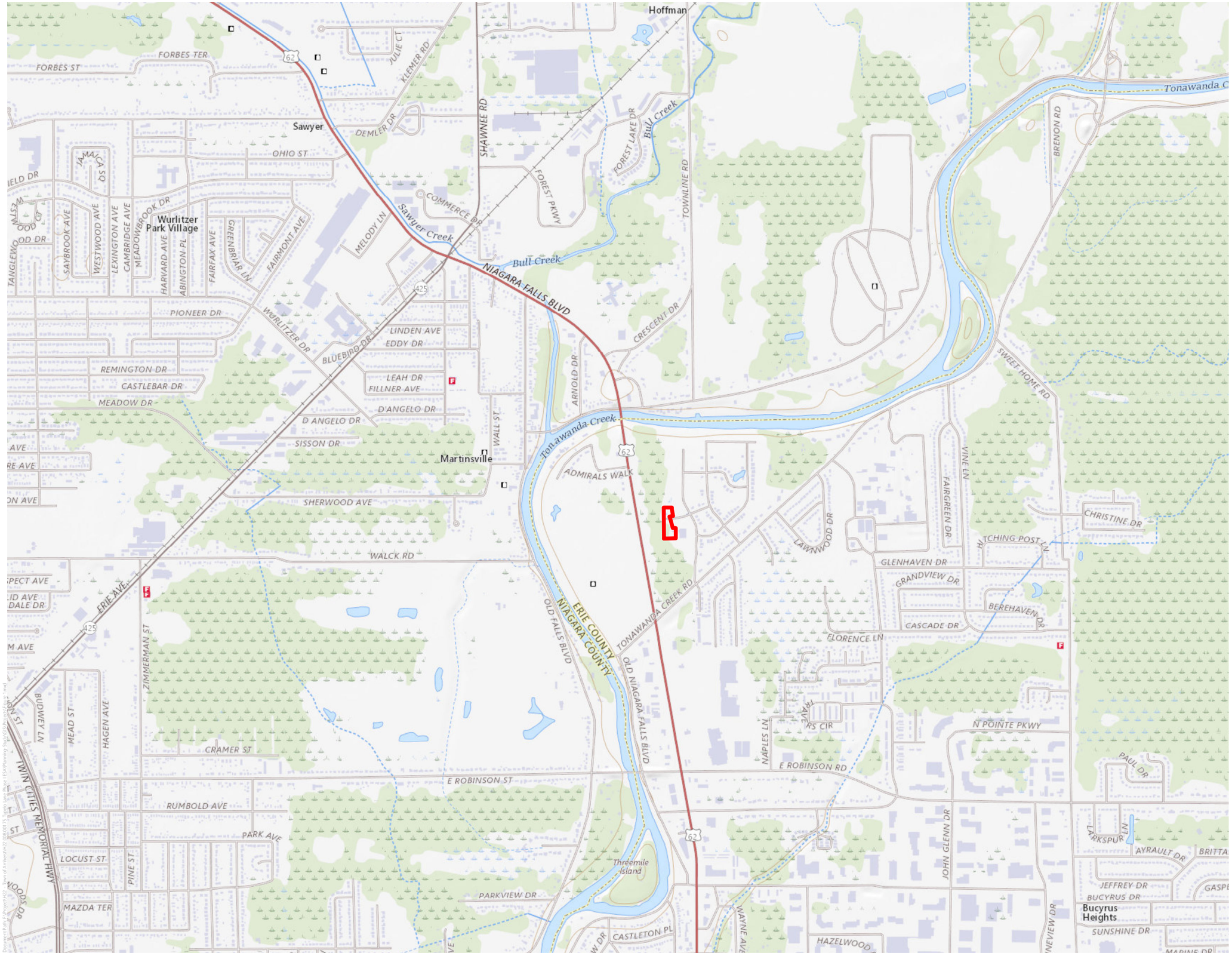

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Figure 1

Subject Property Location

Legend

Subject Property

N

0 1,000 2,000 4,000 Feet

1 inch = 2,000 feet

When printed at 11 in. by 17 in.

75 Tupelo Lane Phase I ESA

Sources: . Created by C&S Engineers, Inc.

Date Saved: 7/20/2023 3:44:57 PM
User Name: jericksen

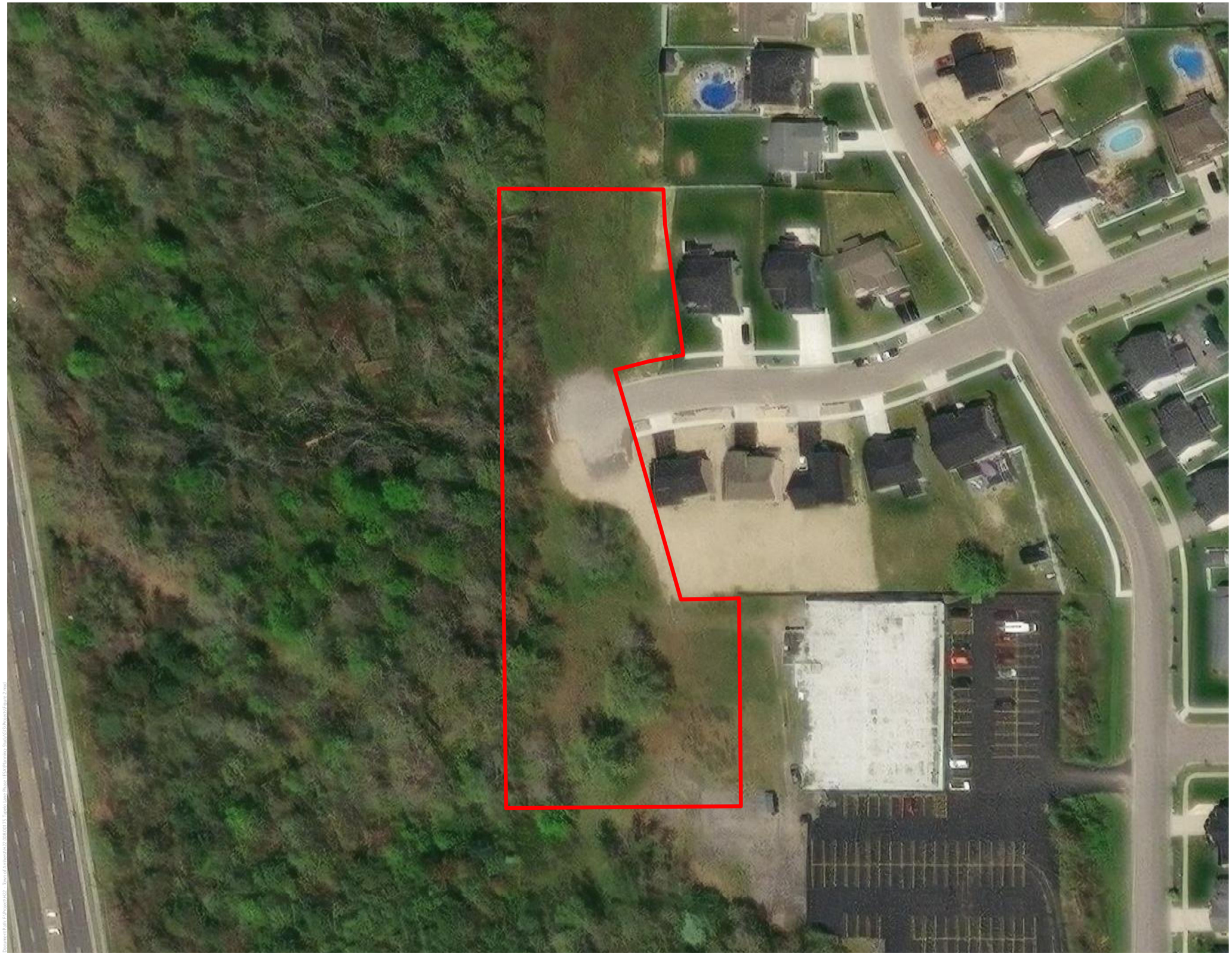

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Figure 2

Subject Property Detail

Legend

Subject Property

N

0 50 100 200 Feet

1 inch = 100 feet

When printed at 11 in. by 17 in.

75 Tupelo Lane Phase I ESA

Sources: . Created by C&S Engineers, Inc.

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User Name: jericksen

Appendix A

Environmental Database Provider Documents

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:		23062600676p
Date Completed:		June 26, 2023
Project Number:		H22.008.001
Project Property:		75 Tupelo Lane Phase I ESA 75 Tupelo Lane Buffalo NY
Coordinates:		
	Latitude:	43.04699403
	Longitude:	-78.82391199
	UTM Northing:	4768331.43516 Meters
	UTM Easting:	677237.088497 Meters
	UTM Zone:	UTM Zone 17T
	Elevation:	577.91 ft
	Slope Direction:	S

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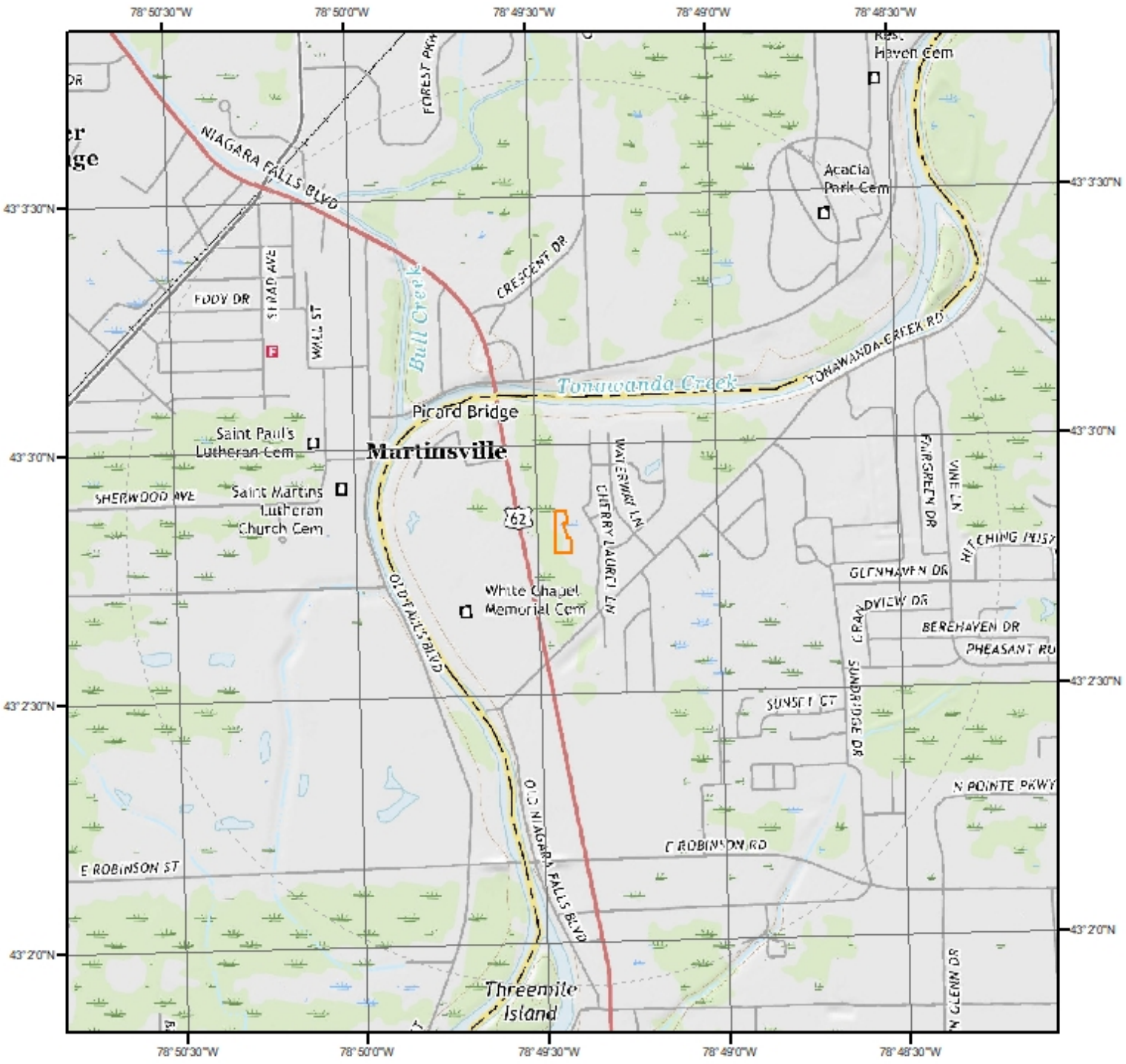
The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Current USGS Topo (2019)

0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Tonawanda East,NY

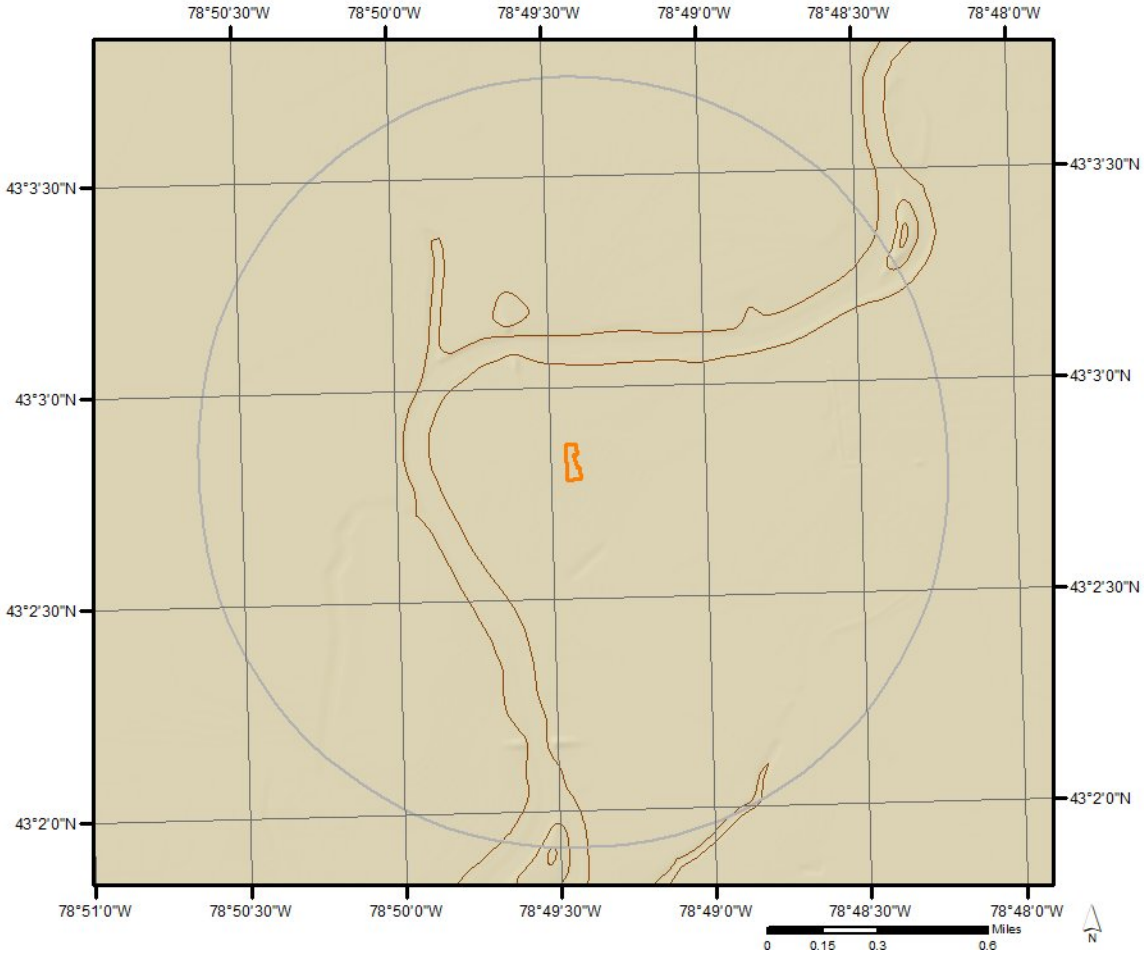
Source: USGS 7.5 Minute Topographic Map

Topographic Information

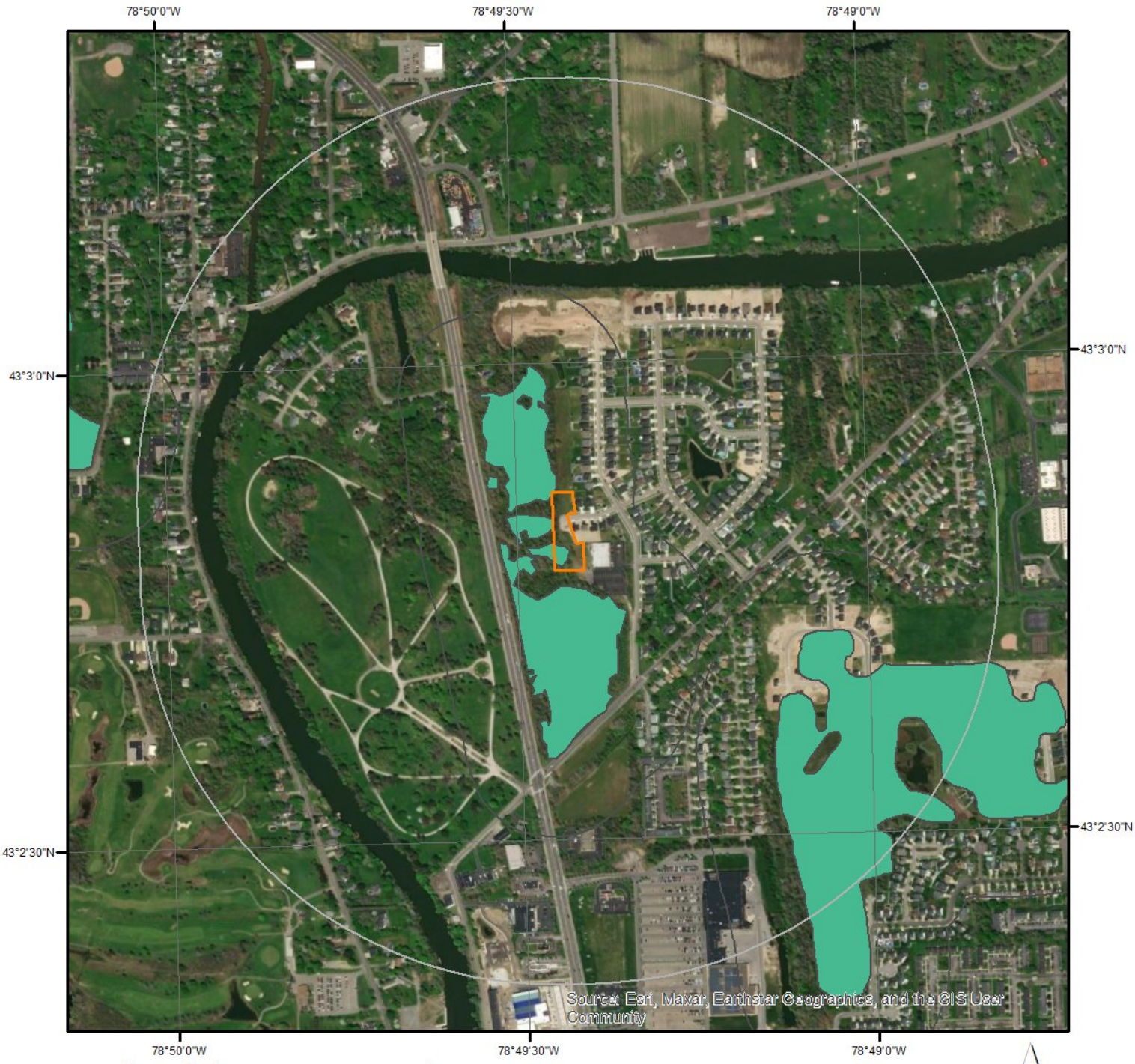
The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	577.91 ft
Slope Direction:	S



Hydrologic Information



Wetland (State Source)

0 0.075 0.15 0.3 Miles

N

This data shows only those wetlands that are currently mapped or officially proposed for addition to the wetland maps and currently regulated under the New York State Freshwater Wetlands Act.

DEC

- Class I
- Class II
- Class III
- Class IV
- Check Zone

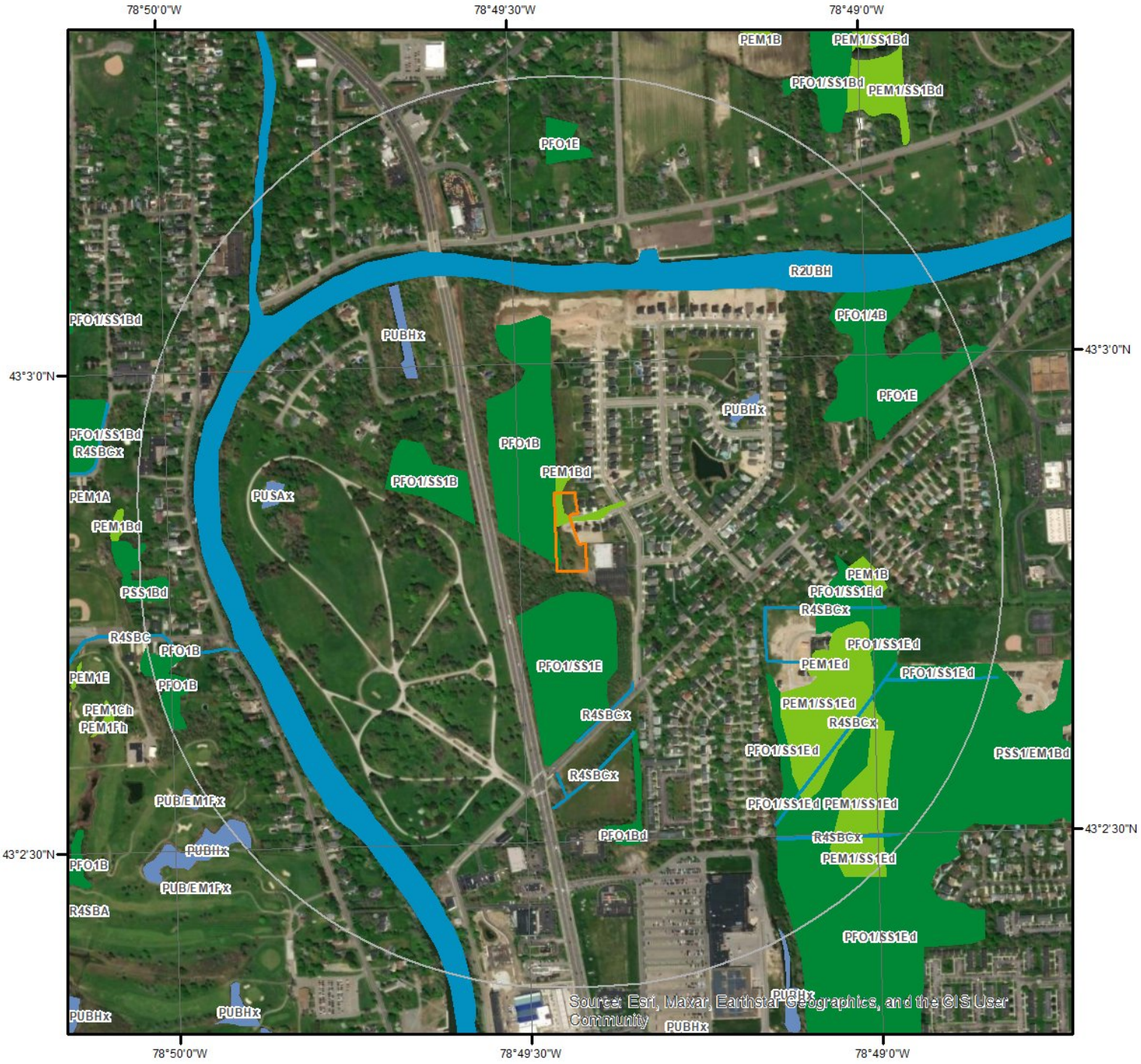
APA

- Aquatic Bed Rooted Vascular
- Emergent Non-persistent
- Emergent Persistent
- Forested Broad-leaf Deciduous
- Forested Dead
- Forested Needle-leaf Deciduous
- Forested Needle-leaf Evergreen
- Open Water
- Scrub Shrub Broad-leaf Deciduous
- Scrub Shrub Broad-leaf Evergreen
- Scrub Shrub Dead
- Scrub Shrub Needle-leaf Deciduous
- Scrub Shrub Needle-leaf Evergreen
- Streambed Cobble/Gravel
- Streambed Rubble
- Unconsolidated Bottom Cobble/Gravel
- Unconsolidated Bottom Mud
- Unconsolidated Bottom Sand
- Unconsolidated Shore Cobble/Gravel
- Unconsolidated Shore Sand

Source and Category Description:
DEC: New York State Department of Environmental COnservation; http://www.dec.ny.gov/gis/erm/wetlands.html
APA: Adirondack Park Agency; https://www.apa.ny.gov/gis/index.html

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

Hydrologic Information



Wetland

0 0.075 0.15 0.3 Miles

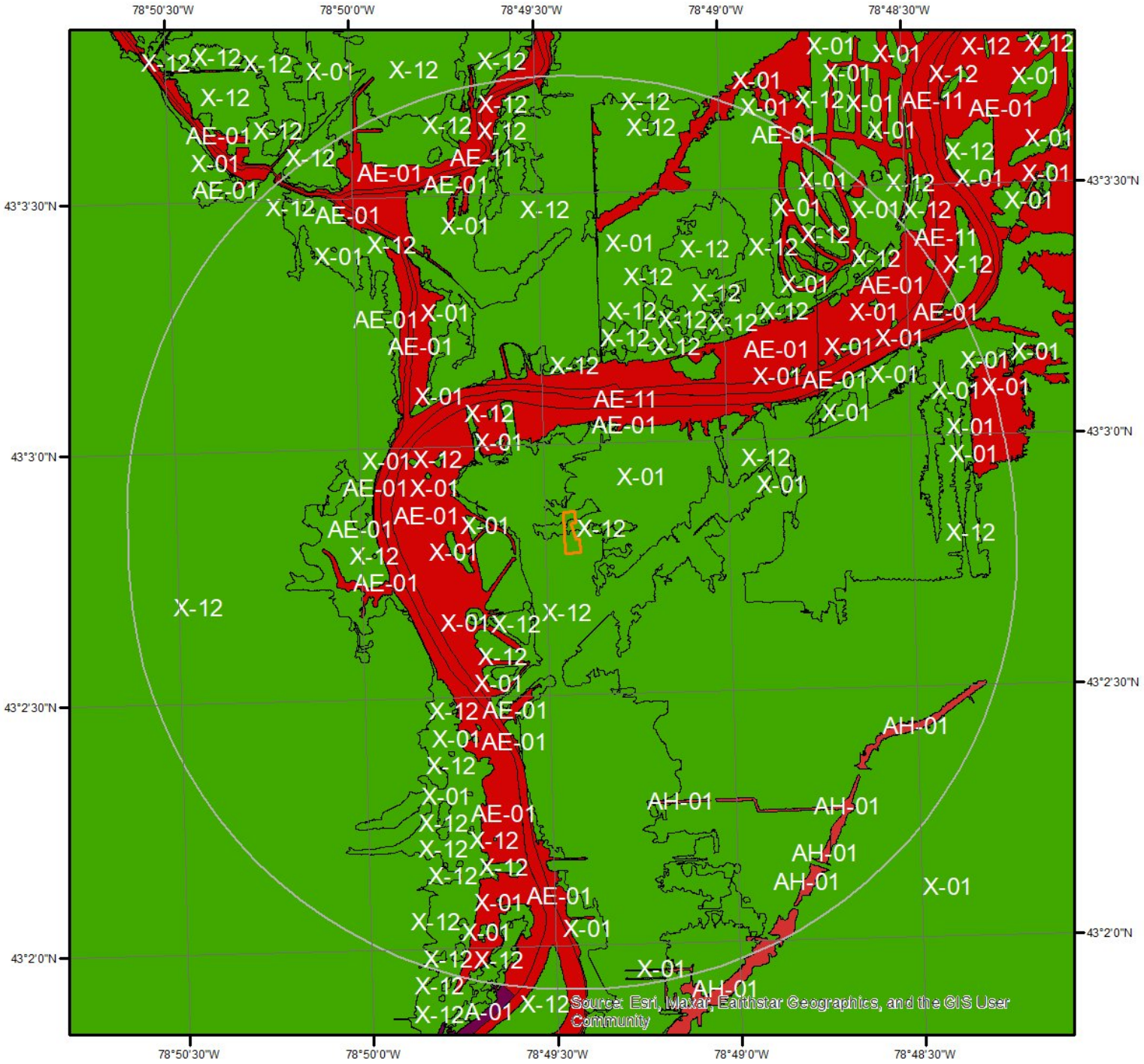
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information

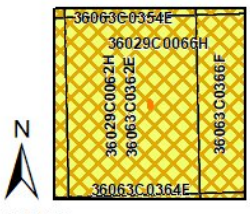


Flood Hazard Zones

Miles
0 0.2 0.4

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED



Quadrangle(s): Tonawanda East,NY

ERIS

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	36029C0066H(effective:2019-06-07) 36029C0062H(effective:2019-06-07) 36063C0362E(effective:2010-09-17) 36063C0361E(effective:2010-09-17) 36063C0366F(effective:2017-11-03)

Flood Zone AE-01

Zone:	AE
Zone subtype:	

Flood Zone AE-11

Zone:	AE
Zone subtype:	FLOODWAY

Flood Zone AH-01

Zone:	AH
Zone subtype:	

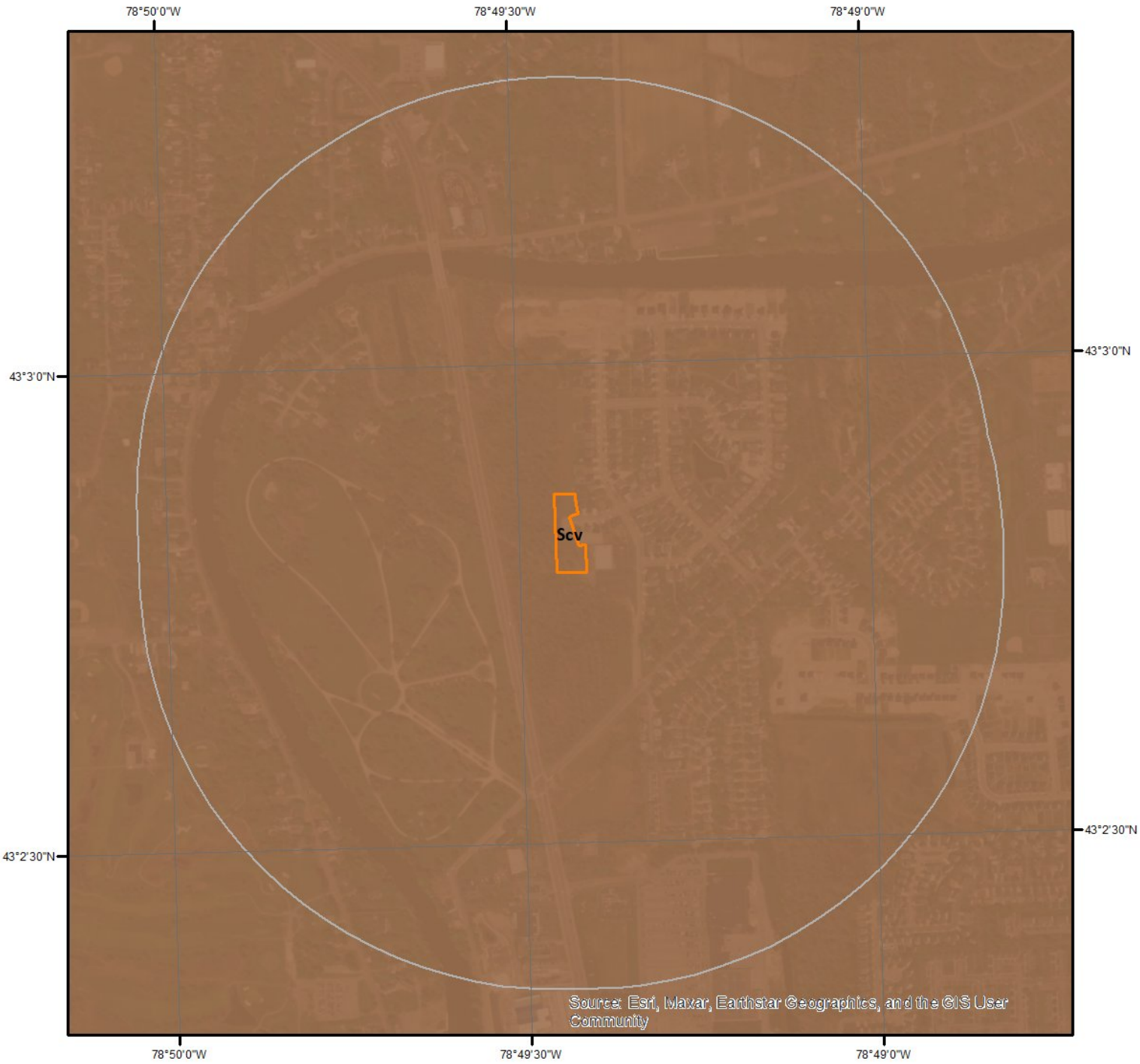
Flood Zone X-01

Zone:	X
Zone subtype:	0.2 PCT ANNUAL CHANCE FLOOD HAZARD

Flood Zone X-12

Zone:	X
Zone subtype:	AREA OF MINIMAL FLOOD HAZARD

Geologic Information



Miles
0 0.225 0.45

N

Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Miles
0 0.3 0.6

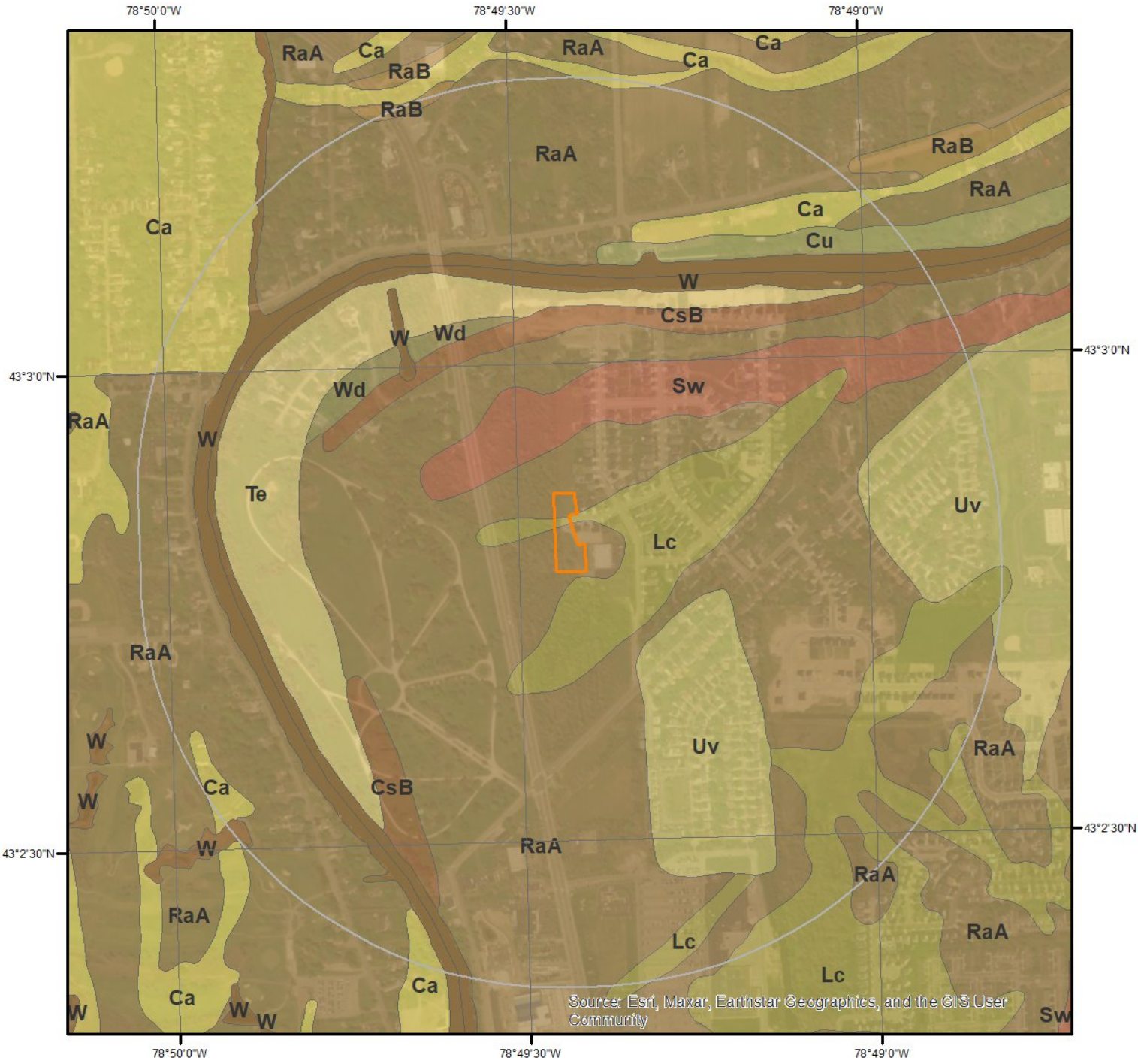
Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit Scv

Unit Name:	Camillus, Syracuse, and Vernon Formations
Unit Age:	Upper Silurian
Primary Rock Type:	shale
Secondary Rock Type:	dolostone (dolomite)
Unit Description:	Camillus, Syracuse, and Vernon Formations - shale, dolostone, salt, and gypsum.

Soil Information



SSURGO Soils

N

0 0.2 0.4 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit Ca (18.59%)

Map Unit Name:	Canandaigua silt loam
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Very poorly drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Canandaigua(75%)

horizon H1(0cm to 18cm)	Silt loam
horizon H2(18cm to 61cm)	Silty clay loam
horizon H3(61cm to 152cm)	Stratified loamy fine sand to silt to clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Ca - Canandaigua silt loam

Component: Canandaigua (75%)
The Canandaigua component makes up 75 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 10 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Component: Rhinebeck (5%)
Generated brief soil descriptions are created for major components. The Rhinebeck soil is a minor component.

Component: Raynham (5%)
Generated brief soil descriptions are created for major components. The Raynham soil is a minor component.

Component: Appleton (4%)
Generated brief soil descriptions are created for major components. The Appleton soil is a minor component.

Component: Madalin (4%)
Generated brief soil descriptions are created for major components. The Madalin soil is a minor component.

Component: Lakemont (4%)
Generated brief soil descriptions are created for major components. The Lakemont soil is a minor component.

Component: Sun (3%)
Generated brief soil descriptions are created for major components. The Sun soil is a minor component.

Map Unit CsB (0.13%)

Map Unit Name:	Collamer silt loam, 3 to 8 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	54cm
Drainage Class - Dominant:	Moderately well drained

Soil Information

Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Collamer(75%)

horizon H1(0cm to 25cm)	Silt loam
horizon H2(25cm to 38cm)	Silt loam
horizon H3(38cm to 81cm)	Silty clay loam
horizon H4(81cm to 152cm)	Stratified silt loam to very fine sand to silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: CsB - Collamer silt loam, 3 to 8 percent slopes

Component: Collamer (75%)
The Collamer component makes up 75 percent of the map unit. Slopes are 3 to 8 percent. This component is on proglacial lake plains. The parent material consists of silty and clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during March, April, May. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Scio (5%)
Generated brief soil descriptions are created for major soil components. The Scio soil is a minor component.

Component: Schoharie (5%)
Generated brief soil descriptions are created for major soil components. The Schoharie soil is a minor component.

Component: Hudson (5%)
Generated brief soil descriptions are created for major soil components. The Hudson soil is a minor component.

Component: Canandaigua (5%)
Generated brief soil descriptions are created for major soil components. The Canandaigua soil is a minor component.

Component: Niagara (5%)
Generated brief soil descriptions are created for major soil components. The Niagara soil is a minor component.

Map Unit Cu (0.18%)

Map Unit Name:	Cut and fill land
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	137cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Udorthents(80%)

horizon H1(0cm to 25cm)	Gravelly sandy loam
horizon H2(25cm to 183cm)	Very gravelly sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Cu - Cut and fill land

Component: Udorthents (80%)
The Udorthents component makes up 80 percent of the map unit. Slopes are 0 to 15 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is

moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Canandaigua (5%)
Generated brief soil descriptions are created for major components. The Canandaigua soil is a minor component.

Component: Odessa (5%)
Generated brief soil descriptions are created for major components. The Odessa soil is a minor component.

Component: Hudson (5%)
Generated brief soil descriptions are created for major components. The Hudson soil is a minor component.

Component: Cayuga (5%)
Generated brief soil descriptions are created for major components. The Cayuga soil is a minor component.

Map Unit Lc (0.84%)

Map Unit Name:	Lamson very fine sandy loam
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	7cm
Drainage Class - Dominant:	Very poorly drained
Hydrologic Group - Dominant:	A/D - These soils have low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Lamson(75%)

horizon H1(0cm to 23cm)	Very fine sandy loam
horizon H2(23cm to 102cm)	Fine sandy loam
horizon H3(102cm to 152cm)	Loamy very fine sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Lc - Lamson very fine sandy loam

Component: Lamson (75%)
The Lamson component makes up 75 percent of the map unit. Slopes are 0 to 3 percent. This component is on depressions. The parent material consists of deltaic or glaciolacustrine deposits with a high content of fine and very fine sand. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Component: Canandaigua (5%)
Generated brief soil descriptions are created for major soil components. The Canandaigua soil is a minor component.

Component: Halsey (5%)
Generated brief soil descriptions are created for major soil components. The Halsey soil is a minor component.

Component: Minoa (5%)
Generated brief soil descriptions are created for major soil components. The Minoa soil is a minor component.

Component: Cheektowaga (5%)
Generated brief soil descriptions are created for major soil components. The Cheektowaga soil is a minor component.

Component: Elnora (5%)
Generated brief soil descriptions are created for major soil components. The Elnora soil is a minor component.

Soil Information

Map Unit RaA (13.47%)

Map Unit Name:	Raynham silt loam, 0 to 2 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	20cm
Drainage Class - Dominant:	Poorly drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Raynham(50%)	
horizon H1(0cm to 20cm)	Silt loam
horizon H2(20cm to 64cm)	Silt loam
horizon H3(64cm to 152cm)	Very fine sandy loam
Raynham(30%)	
horizon H1(0cm to 20cm)	Silt loam
horizon H2(20cm to 64cm)	Silt loam
horizon H3(64cm to 152cm)	Very fine sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: RaA - Raynham silt loam, 0 to 2 percent slopes

Component: Raynham (50%)
The Raynham, poorly drained component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on proglacial lake plains. The parent material consists of glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 8 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

Component: Raynham (30%)
The Raynham, somewhat poorly drained component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on proglacial lake plains. The parent material consists of glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

Component: Canandaigua (5%)
Generated brief soil descriptions are created for major components. The Canandaigua soil is a minor component.

Component: Rhinebeck (5%)
Generated brief soil descriptions are created for major components. The Rhinebeck soil is a minor component.

Component: Minoa (5%)
Generated brief soil descriptions are created for major components. The Minoa soil is a minor component.

Component: Unnamed soils (5%)
Generated brief soil descriptions are created for major components. The Unnamed soils soil is a minor component.

Map Unit RaB (0.01%)

Map Unit Name:	Raynham silt loam, 2 to 6 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	20cm

Soil Information

Drainage Class - Dominant:	Poorly drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Raynham(50%)	
horizon H1(0cm to 20cm)	Silt loam
horizon H2(20cm to 64cm)	Silt loam
horizon H3(64cm to 152cm)	Very fine sandy loam
Raynham(30%)	
horizon H1(0cm to 20cm)	Silt loam
horizon H2(20cm to 64cm)	Silt loam
horizon H3(64cm to 152cm)	Very fine sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: RaB - Raynham silt loam, 2 to 6 percent slopes

Component: Raynham (50%)
The Raynham, poorly drained component makes up 50 percent of the map unit. Slopes are 2 to 6 percent. This component is on proglacial lake plains. The parent material consists of glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 8 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

Component: Raynham (30%)
The Raynham, somewhat poorly drained component makes up 30 percent of the map unit. Slopes are 2 to 6 percent. This component is on proglacial lake plains. The parent material consists of glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

Component: Galen (4%)
Generated brief soil descriptions are created for major components. The Galen soil is a minor component.

Component: Niagara (4%)
Generated brief soil descriptions are created for major components. The Niagara soil is a minor component.

Component: Wayland (4%)
Generated brief soil descriptions are created for major components. The Wayland soil is a minor component.

Component: Canandaigua (4%)
Generated brief soil descriptions are created for major components. The Canandaigua soil is a minor component.

Component: Collamer (4%)
Generated brief soil descriptions are created for major components. The Collamer soil is a minor component.

Map Unit Sw (0.73%)

Map Unit Name:	Swormville clay loam
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	31cm
Drainage Class - Dominant:	Somewhat poorly drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Soil Information

Major components are printed below

Swormville(75%)

horizon H1(0cm to 20cm)	Clay loam
horizon H2(20cm to 51cm)	Clay loam
horizon H3(51cm to 66cm)	Loamy fine sand
horizon H4(66cm to 152cm)	Sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Sw - Swormville clay loam

Component: Swormville (75%)
The Swormville component makes up 75 percent of the map unit. Slopes are 0 to 3 percent. This component is on proglacial lake plains. The parent material consists of silty glaciolacustrine deposits overlying sandy glaciolacustrine, deltaic, or glaciofluvial deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Component: Niagara (5%)
Generated brief soil descriptions are created for major soil components. The Niagara soil is a minor component.

Component: Getzville (5%)
Generated brief soil descriptions are created for major soil components. The Getzville soil is a minor component.

Component: Lamson (5%)
Generated brief soil descriptions are created for major soil components. The Lamson soil is a minor component.

Component: Raynham (5%)
Generated brief soil descriptions are created for major soil components. The Raynham soil is a minor component.

Component: Minoa (5%)
Generated brief soil descriptions are created for major soil components. The Minoa soil is a minor component.

Map Unit Te (0.33%)

Map Unit Name:	Teel silt loam
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	54cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	B/D - These soils have moderately low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Teel(80%)

horizon H1(0cm to 23cm)	Silt loam
horizon H2(23cm to 122cm)	Silt loam
horizon H3(122cm to 152cm)	Stratified very fine sandy loam to silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Te - Teel silt loam

Component: Teel (80%)
The Teel component makes up 80 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent

material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Tioga (5%)
Generated brief soil descriptions are created for major soil components. The Tioga soil is a minor component.

Component: Hamlin (5%)
Generated brief soil descriptions are created for major soil components. The Hamlin soil is a minor component.

Component: Wayland (5%)
Generated brief soil descriptions are created for major soil components. The Wayland soil is a minor component.

Component: Middlebury (5%)
Generated brief soil descriptions are created for major soil components. The Middlebury soil is a minor component.

Map Unit Uv (1.15%)

Map Unit Name:	Urban land-Swormville complex
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	31cm
Drainage Class - Dominant:	null
Hydrologic Group - Dominant:	null
Major components are printed below	
Swormville(25%)	
horizon H1(0cm to 20cm)	Clay loam
horizon H2(20cm to 51cm)	Clay loam
horizon H3(51cm to 66cm)	Loamy fine sand
horizon H4(66cm to 152cm)	Sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Uv - Urban land-Swormville complex

Component: Urban land (70%)
Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Swormville (25%)
The Swormville component makes up 25 percent of the map unit. Slopes are 0 to 3 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Component: Udorthents (2%)
Generated brief soil descriptions are created for major soil components. The Udorthents soil is a minor component.

Component: Getzville (2%)
Generated brief soil descriptions are created for major soil components. The Getzville soil is a minor component.

Component: Raynham (1%)
Generated brief soil descriptions are created for major soil components. The Raynham soil is a minor component.

Map Unit W (64.53%)

Soil Information

Map Unit Name:	Water

No more attributes available for this map unit

Component Description:

Minor map unit components are excluded from this report.

Map Unit: W - Water

Component: Water (100%)
Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Map Unit Wd (0.03%)

Map Unit Name:	Wayland soils complex, 0 to 3 percent slopes, frequently flooded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Poorly drained
Hydrologic Group - Dominant:	B/D - These soils have moderately low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Wayland(60%)	
horizon A(0cm to 15cm)	Silt loam
horizon Bg1(15cm to 30cm)	Silt loam
horizon Bg2(30cm to 46cm)	Silt loam
horizon C1(46cm to 117cm)	Silt loam
horizon C2(117cm to 183cm)	Silty clay loam
Wayland(30%)	
horizon A(0cm to 15cm)	Mucky silt loam
horizon Bg1(15cm to 30cm)	Silt loam
horizon Bg2(30cm to 46cm)	Silt loam
horizon C1(46cm to 117cm)	Silt loam
horizon C2(117cm to 183cm)	Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Wd - Wayland soils complex, 0 to 3 percent slopes, frequently flooded

Component: Wayland (60%)
The Wayland component makes up 60 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on valleys. The parent material consists of silty and clayey alluvium derived from interbedded sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 9 percent. This component is in the F139XY009OH Wet Floodplain ecological site. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

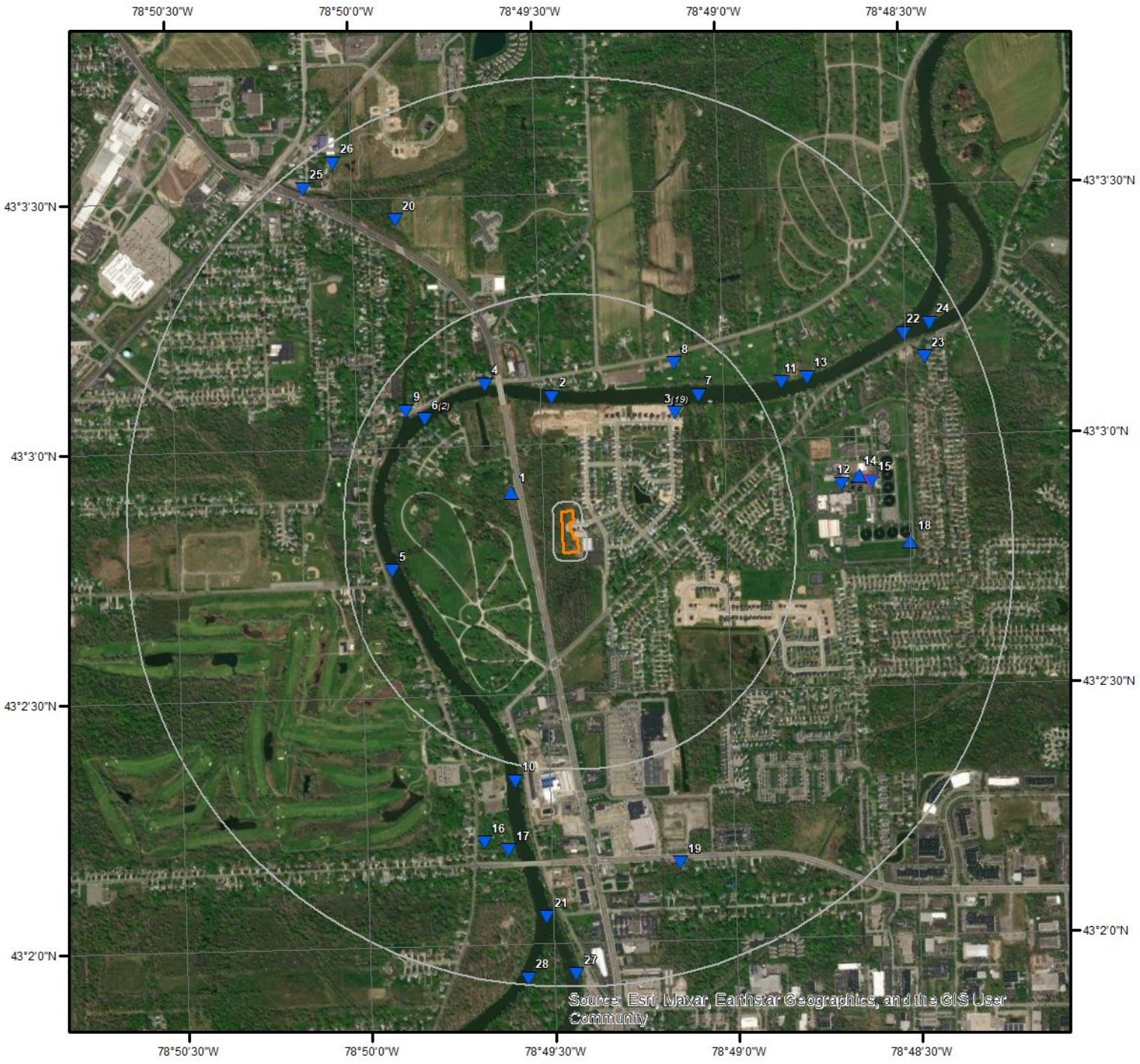
Component: Wayland (30%)
The Wayland, very poorly drained component makes up 30 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on valleys. The parent material consists of silty and clayey alluvium derived from interbedded sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. Organic matter content in the surface horizon is about 15 percent. This component is in the F139XY009OH Wet Floodplain ecological site. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Component: Wakeville (10%)

Soil Information

Generated brief soil descriptions are created for major soil components. The Wakeville soil is a minor component.

Wells and Additional Sources



Wells & Additional Sources

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	ID	Distance (ft)	Direction
	No records found		

Safe Drinking Water Information System (SDWIS)

Map Key	ID	Distance (ft)	Direction
	No records found		

USGS National Water Information System

Map Key	Site Number	Distance (ft)	Direction
1	USGS-430254078493601	635.87	NW
2	USGS-430305078492801	1381.78	N
3	USGS-430303078490904	1719.91	NE
3	USGS-430303078490903	1719.91	NE
3	USGS-430303078490907	1719.91	NE
3	USGS-430303078490910	1719.91	NE
3	USGS-430303078490913	1719.91	NE
3	USGS-430303078490919	1719.91	NE
3	USGS-430303078490902	1719.91	NE
3	USGS-430303078490912	1719.91	NE
3	USGS-430303078490905	1719.91	NE
3	USGS-430303078490917	1719.91	NE
3	USGS-430303078490916	1719.91	NE
3	USGS-430303078490909	1719.91	NE
3	USGS-430303078490920	1719.91	NE
3	USGS-430303078490915	1719.91	NE
3	USGS-430303078490918	1719.91	NE
3	USGS-430303078490914	1719.91	NE
3	USGS-430303078490908	1719.91	NE
3	USGS-430303078490906	1719.91	NE
3	USGS-430303078490911	1719.91	NE
4	USGS-430307078494001	1788.03	NNW
5	USGS-430245078495501	2082.79	WSW
6	USGS-0421824003	1993.24	NW
6	USGS-0421829208	1993.24	NW
7	USGS-430305078490401	2073.20	NE
8	USGS-430309078490901	2173.05	NNE
9	USGS-0421829205	2234.13	NW
10	USGS-430219078493501	2854.74	SSW
11	USGS-430307078485101	2976.91	NE
12	USGS-420254078484201	3274.35	E
13	USGS-430307078484601	3282.51	ENE
14	USGS-420255078483901	3511.78	E
16	USGS-430212078494201	3667.03	SSW
17	USGS-430211078493801	3693.06	S
18	USGS-430247078483101	4039.28	E
19	USGS-04218293	3987.09	SSE
20	USGS-430327078495401	4063.08	NNW
21	USGS-430203078493101	4449.38	S
22	USGS-430312078483001	4568.90	ENE
23	USGS-430309078482801	4667.60	ENE

24	USGS-430313078482601	4900.03	ENE
25	USGS-430331078500901	5010.21	NW
26	USGS-430334078500401	5049.11	NNW
27	USGS-430156078492701	5143.51	S
28	USGS-430156078493401	5211.96	S

Wells from NWIS

Map Key	ID	Distance (ft)	Direction
	No records found		

State Sources

Oil and Gas Wells

Map Key	API Well No	Distance (ft)	Direction
15	31029156390000	3627.45	E

Underground Injection Control Wells

Map Key	ID	Distance (ft)	Direction
	No records found		

Water Wells Database

Map Key	ID	Distance (ft)	Direction
	No records found		

Wells and Additional Sources Detail Report

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	NW	0.12	635.87	579.55	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430254078493601
Station Name:	E 790
Site Type:	Well: Test hole not completed as a well
Latitude:	43.04839040000000
Longitude:	-78.8264244000000
Date Drilled:	
Well Depth:	
Well Depth Unit:	
Well Hole Depth:	75
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	N	0.26	1,381.78	566.44	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430305078492801
Station Name:	TC-10, Tonawanda Creek
Site Type:	Stream
Latitude:	43.05152778000000
Longitude:	-78.8245056000000
Date Drilled:	
Well Depth:	
Well Depth Unit:	
Well Hole Depth:	
W Hole Depth Unit:	
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490904
Station Name:	NI 997
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624

Well Depth: 112
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490903
Station Name: NI 996
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 95
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490907
Station Name: NI1000
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 143
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490910
Station Name: NI1003
Site Type: Land: Soil hole

Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 185
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490913
Station Name: NI1006
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 264
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490919
Station Name: NI1012
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 372
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center

Wells and Additional Sources Detail Report

Site Number:	USGS-430303078490902
Station Name:	NI 995
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	88
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490912
Station Name:	NI1005
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	230
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490905
Station Name:	NI 998
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	121
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Wells and Additional Sources Detail Report

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490917
Station Name:	NI1010
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	333
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490916
Station Name:	NI1009
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	318
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490909
Station Name:	NI1002
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	170
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Wells and Additional Sources Detail Report

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490920
Station Name:	NI1013
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	387
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490915
Station Name:	NI1008
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	296
Well Depth Unit:	ft
Well Hole Depth:	393.0
W Hole Depth Unit:	ft
Formation Type:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430303078490918
Station Name:	NI1011
Site Type:	Land: Soil hole
Latitude:	43.05089045000000
Longitude:	-78.8189241000000
Date Drilled:	19880624
Well Depth:	350
Well Depth Unit:	ft

Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490914
Station Name: NI1007
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 289
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490908
Station Name: NI1001
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 158
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490906
Station Name: NI 999
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000

Date Drilled: 19880624
Well Depth: 138
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	NE	0.33	1,719.91	572.41	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430303078490911
Station Name: NI1004
Site Type: Land: Soil hole
Latitude: 43.05089045000000
Longitude: -78.8189241000000
Date Drilled: 19880624
Well Depth: 205
Well Depth Unit: ft
Well Hole Depth: 393.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	NNW	0.34	1,788.03	572.35	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430307078494001
Station Name: NI 23
Site Type: Well: Test hole not completed as a well
Latitude: 43.05200150000000
Longitude: -78.8275356000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth: 65
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	WSW	0.39	2,082.79	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430245078495501
Station Name: TC-09, Tonawanda Creek

Site Type: Stream
Latitude: 43.04586944000000
Longitude: -78.8319556000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	NW	0.38	1,993.24	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-0421824003
Station Name: TONAWANDA CREEK ABOVE BULL CREEK AT MARTINSVILLE
Site Type: Stream
Latitude: 43.05089038000000
Longitude: -78.8303134000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	NW	0.38	1,993.24	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-0421829208
Station Name: TONAWANDA CREEK BELOW BULL CREEK AT MARTINSVILLE
Site Type: Stream
Latitude: 43.05089038000000
Longitude: -78.8303134000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
7	NE	0.39	2,073.20	566.44	FED USGS

Wells and Additional Sources Detail Report

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430305078490401
Station Name: TC-11, Tonawanda Creek
Site Type: Stream
Latitude: 43.05145556000000
Longitude: -78.8178417000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
8	NNE	0.41	2,173.05	574.62	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430309078490901
Station Name: NI 868
Site Type: Well
Latitude: 43.05255710000000
Longitude: -78.8189241000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type: Silurian, Middle

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	NW	0.42	2,234.13	568.56	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-0421829205
Station Name: BULL CREEK AT MOUTH AT MARTINSVILLE NY
Site Type: Stream
Latitude: 43.05116815000000
Longitude: -78.8311467900000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

10	SSW	0.54	2,854.74	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430219078493501
Station Name: TC-08, Tonawanda Creek
Site Type: Stream
Latitude: 43.03874167000000
Longitude: -78.8266138900000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
11	NE	0.56	2,976.91	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430307078485101
Station Name: TC-11.4, Tonawanda Creek
Site Type: Stream
Latitude: 43.05181667000000
Longitude: -78.8140638900000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
12	E	0.62	3,274.35	575.70	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-420254078484201
Station Name: NI 1
Site Type: Well: Test hole not completed as a well
Latitude: 43.04839050000000
Longitude: -78.8114237800000
Date Drilled: 19730302
Well Depth:
Well Depth Unit:
Well Hole Depth: 55.0
W Hole Depth Unit: ft

Wells and Additional Sources Detail Report

Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	ENE	0.62	3,282.51	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430307078484601
Station Name: TONAWANDA CR AT WEST CANAL PARK NR N TONAWANDA
Site Type: Stream
Latitude: 43.05198056000000
Longitude: -78.8128806000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
14	E	0.67	3,511.78	578.21	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-420255078483901
Station Name: NI 2
Site Type: Well
Latitude: 43.04866829000000
Longitude: -78.8105904000000
Date Drilled: 19730223
Well Depth: 41.0
Well Depth Unit: ft
Well Hole Depth: 43.2
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	SSW	0.69	3,667.03	571.38	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430212078494201
Station Name: NI 53
Site Type: Well
Latitude: 43.03672380000000
Longitude: -78.8280909000000
Date Drilled:
Well Depth:

Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
17	S	0.70	3,693.06	569.30	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430211078493801
Station Name: NI 14
Site Type: Well
Latitude: 43.03644600000000
Longitude: -78.8269798000000
Date Drilled: 19790531
Well Depth: 20.0
Well Depth Unit: ft
Well Hole Depth: 20.0
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	E	0.77	4,039.28	579.40	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430247078483101
Station Name: E 788
Site Type: Well: Test hole not completed as a well
Latitude: 43.04644609000000
Longitude: -78.8083680800000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
19	SSE	0.76	3,987.09	574.64	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-04218293
Station Name: TONAWANDA CREEK NEAR TONAWANDA NY
Site Type: Stream
Latitude: 43.03589050000000

Longitude: -78.8192016900000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
20	NNW	0.77	4,063.08	577.05	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430327078495401
Station Name: NI 28
Site Type: Well: Test hole not completed as a well
Latitude: 43.05755700000000
Longitude: -78.8314247000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth: 57
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
21	S	0.84	4,449.38	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430203078493101
Station Name: TC-07, Tonawanda Creek
Site Type: Stream
Latitude: 43.03419167000000
Longitude: -78.8253388900000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
22	ENE	0.87	4,568.90	566.44	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430312078483001

Station Name: TC-12, Tonawanda Creek
Site Type: Stream
Latitude: 43.05335278000000
Longitude: -78.8084306000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
23	ENE	0.88	4,667.60	576.06	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430309078482801
Station Name: E 799
Site Type: Well: Test hole not completed as a well
Latitude: 43.05255717000000
Longitude: -78.8075348000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth: 57
W Hole Depth Unit: ft
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
24	ENE	0.93	4,900.03	566.36	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430313078482601
Station Name: TONAWANDA CR AT END OF UNNAMED ISL NR N TONAWANDA
Site Type: Stream
Latitude: 43.05368056000000
Longitude: -78.8072694000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
25	NW	0.95	5,010.21	574.64	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430331078500901
Station Name: NI 31
Site Type: Well
Latitude: 43.05866809000000
Longitude: -78.8355915000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
26	NNW	0.96	5,049.11	574.97	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430334078500401
Station Name: NI 32
Site Type: Well: Test hole not completed as a well
Latitude: 43.05950140000000
Longitude: -78.8342026000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
27	S	0.97	5,143.51	567.57	FED USGS

Reporting Agency: USGS New York Water Science Center
Site Number: USGS-430156078492701
Station Name: TC-06b8, Tonawanda Creek
Site Type: Stream
Latitude: 43.03225830000000
Longitude: -78.8240583000000
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
W Hole Depth Unit:
Formation Type:

Wells and Additional Sources Detail Report

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
28	S	0.99	5,211.96	566.44	FED USGS

Reporting Agency:	USGS New York Water Science Center
Site Number:	USGS-430156078493401
Station Name:	TC-06a6, Tonawanda Creek
Site Type:	Stream
Latitude:	43.03215000000000
Longitude:	-78.8262472000000
Date Drilled:	
Well Depth:	
Well Depth Unit:	
Well Hole Depth:	
W Hole Depth Unit:	
Formation Type:	

Oil and Gas Wells

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
15	E	0.69	3,627.45	576.36	OGW

API Well No:	31029156390000	Operator No:	736
Well Compl Dt:		Financial Security:	False
Original Well Type:	NL	State Lease:	NA
General Well Stat:	Plugged Well	Hole:	15639
General Well Type:	Other Well	Slant:	Vertical
Date Well Plugged:	4/11/1984	Elevation:	578
Well Confid Dt:		Side Trck:	0
Date Status:	4/11/1984	Completion:	0
Dt Hearing:		Kick Off:	0
Dt Mod:	12/16/2022	Surface Location:	SURF
Permit Appl Dt:		Surface Longitude:	-78.810100000000006
Permit Issued:		Surface Latitude:	43.048459999999999
Permit Fee:	0	Bottom Hole Loc:	BH
Date Spudded:		Bottom Hole Long.:	-78.810100000000006
Date Total Depth:		Bottom Hole Lat.:	43.048459999999999
Measured Depth:	0	Spacing Acres:	
Drilled Depth:	0	Quad:	Tonawanda East
Proposed Depth:	0	Quad Description:	E
True Verticl Depth:	0	County:	Erie
Depth Fee:	0	Cnty:	29
Producing Name:	Tonawanda	Region:	9
Produc Formation:	Not Applicable	Location Verified:	NO
Obj Formation:	Not Applicable		
Company Name:	Town of Amherst		
Map Symbol Code:	OP		

Wells and Additional Sources Detail Report

Map Symbol:	Other Well Plugged*. *Other includes: Injection, Stratigraphic, Geothermal, and Not Listed well types
Well Status Code:	PA
Well Status:	Plugged and Abandoned
Well Type Code:	NL
Well Type:	Not Listed
Integration:	
Confidential:	Pre-1989 Well (N/A)
Spacing:	
Link:	http://www.dec.ny.gov/cfmx/extapps/GasOil/search/wells/index.cfm?api=31029156390000

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *ERIE* County: **1**
Federal EPA Radon Zone for *NIAGARA* County: **2**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *NIAGARA* County

No Measures/Homes:	712
Geometric Mean:	2.2
Arithmetic Mean:	1.7
Median:	1
Standard Deviation:	1
Maximum:	17.3
% >4 pCi/L:	8
% >20 pCi/L:	0
Notes on Data Table:	Table 1. Screening indoor radon data compiled by the New York State Department of Health. Data represent 1-7 day charcoal canister measurements from the lowest level of each home tested.

Federal Area Radon Information for *ERIE* County

No Measures/Homes:	4671
Geometric Mean:	14.2
Arithmetic Mean:	4.4
Median:	1.1
Standard Deviation:	1.3
Maximum:	371.9
% >4 pCi/L:	18
% >20 pCi/L:	4
Notes on Data Table:	Table 1. Screening indoor radon data compiled by the New York State Department of Health. Data represent 1-7 day charcoal canister measurements from the lowest level of each home tested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

List of drinking water violations and enforcement actions from the Safe Drinking Water Information System (SDWIS) made available by the Drinking Water Protection Division of the US EPA's Office of Groundwater and Drinking Water. Enforcement sensitive actions are not included in the data released by the EPA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

The Safe Drinking Water Information System (SDWIS) contains information about public water systems as reported to US Environmental Protection Agency (EPA) by the states. Addresses may correspond with the location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey (USGS)'s National Water Information System (NWIS) is the nation's principal repository of water resources data. This database includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data.

Wells from NWIS — **FED USGS**

The U.S. Geological Survey's National Water Information System (NWIS) is the nation's principal repository of water resources data. The NWIS includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIW dataset contains select Site Types from the overall NWIS Sites data, limited to the following Group Site Types only: Groundwater Group Site Types: Well, Collector or Ranney type well, Hyporheic-zone well, Interconnected Wells, Multiple wells; Spring Group Site Type: Spring; and Other Group Site Types: Aggregate groundwater use, Cistern.

Appendix

State Sources

Oil and Gas Wells **OGW**

The Division of Mineral Resources maintains a data management system on wells regulated under the Oil, Gas and Solution Mining Law (OGSML). To assist the Division in the regulation of wells subject to the OGSML, a database of the wells was created in the early 1980's and significantly upgraded in 1998 by the adoption of the Risk Based Data Management System. This system provides information on well ownership, well owners and operators, registered driller, pluggers and companies that provide financial security instruments.

Regulatory Freshwater Wetlands **WETLAND**

The Regulatory Freshwater Wetlands data are a set of ARC/INFO coverages composed of polygonal and linear features. Coverages are based on official New York State Freshwater Wetlands Maps as described in Article 24-0301 of the Environmental Conservation Law. Coverages are not, however, a legal substitute for the official maps. Coverages are available on a county basis for all areas of New York State outside the Adirondack Park. This dataset is provided by New York State Department of Environmental Conservation.

Underground Injection Control Wells **UIC**

A well permit is required from the Division of Mineral Resources for any brine disposal well deeper than 500 feet. This includes any operation to drill, deepen, plug back or convert a well. Regardless of well depth, the NYSDEC Division of Water must be contacted for a determination of whether a SPDES permit is necessary to operate any brine disposal well.

Water Wells Database **WATER WELLS**

The New York State Department of Environmental Conservation (DEC) Bureau of Water Resource Management works to protect, manage, and conserve New York State's groundwater and surface water supply sources, develop management strategies to enhance and protect these waters, and protect both the groundwater and surface water quality in the New York City Watershed and other major watersheds. This dataset does not include information on wells located in Nassau, Suffolk, Kings, and Queens counties.

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Reliance on information in Report: The Physical Setting Report (PSR) DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a review of environmental databases and physical characteristics for the site or adjacent properties.

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FIRE INSURANCE MAPS

Project Property:	75 Tupelo Lane Phase I ESA 75 Tupelo Lane Buffalo NY
Project No:	H22.008.001
Requested By:	C&S Companies
Order No:	23062600676
Date Completed:	June 26, 2023

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

TOPOGRAPHIC MAPS

Project Property:	75 Tupelo Lane Phase I ESA 75 Tupelo Lane Buffalo NY None
Project No:	H22.008.001
Requested By:	C&S Companies
Order No:	23062600676
Date Completed:	June 26, 2023

Environmental Risk Information Services
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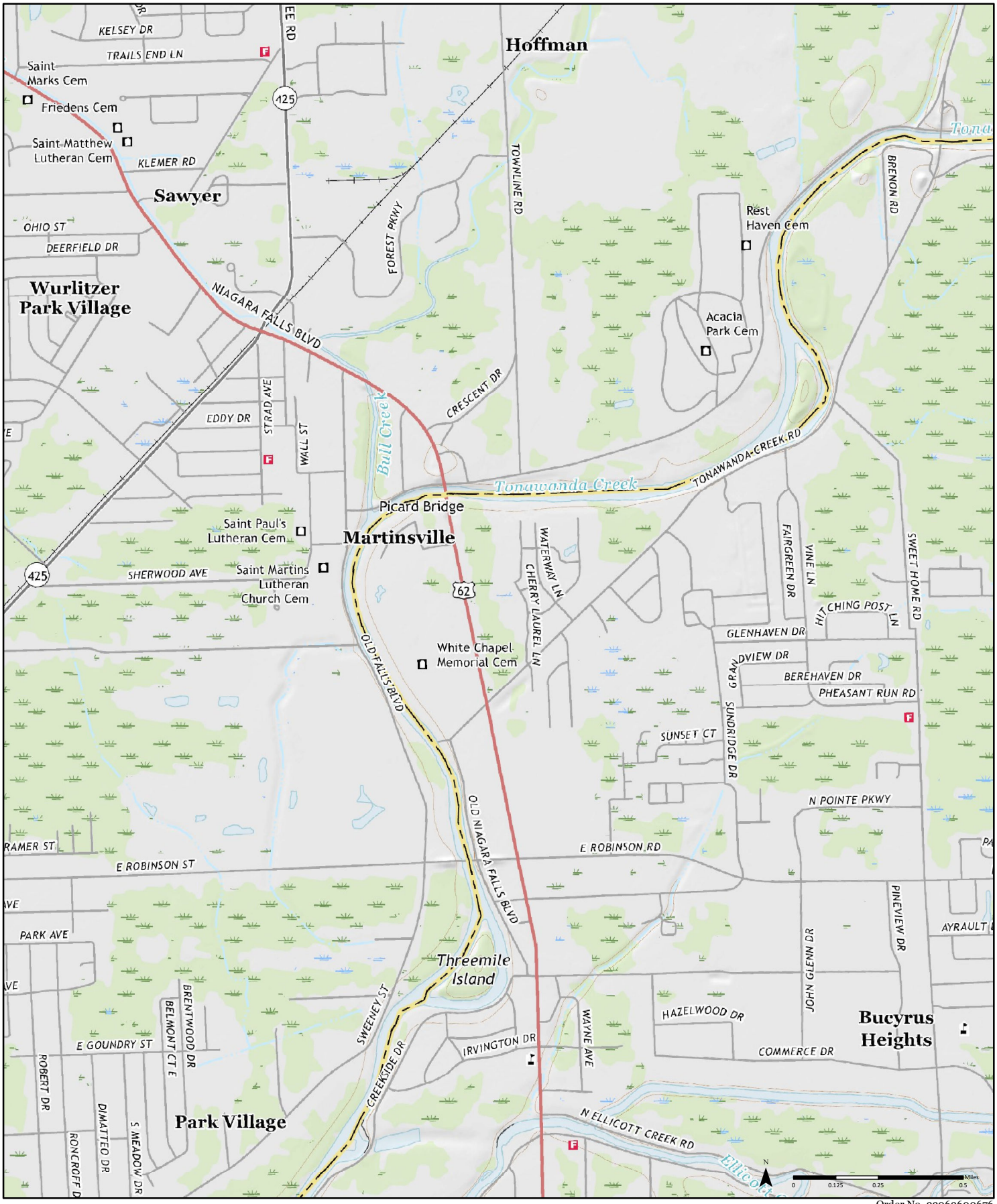
1.866.517.5204 | info@erisinfo.com | erisinfo.com

We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

Year	Map Series
2019	7.5
2016	7.5
2013	7.5
1980	7.5
1965	7.5
1950	7.5
1948	15
1901	15
1900	15
1897	15

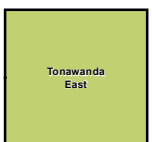
Topographic Map Symbology for the maps may be available in the following documents:
Pre-1947
Page 223 of 1918 Topographic Instructions
Page 130 of 1928 Topographic Instructions
1947-2009
Topographic Map Symbols
2009-present
US Topo Map Symbols

Topographic Maps included in this report are produced by the USGS and are to be used for research purposes including a phase I report. Maps are not to be resold as commercial property.
No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc.(in the US) and ERIS Information Limited Partnership (in Canada), both doing business as 'ERIS', using Topographic Maps produced by the USGS. This maps contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.



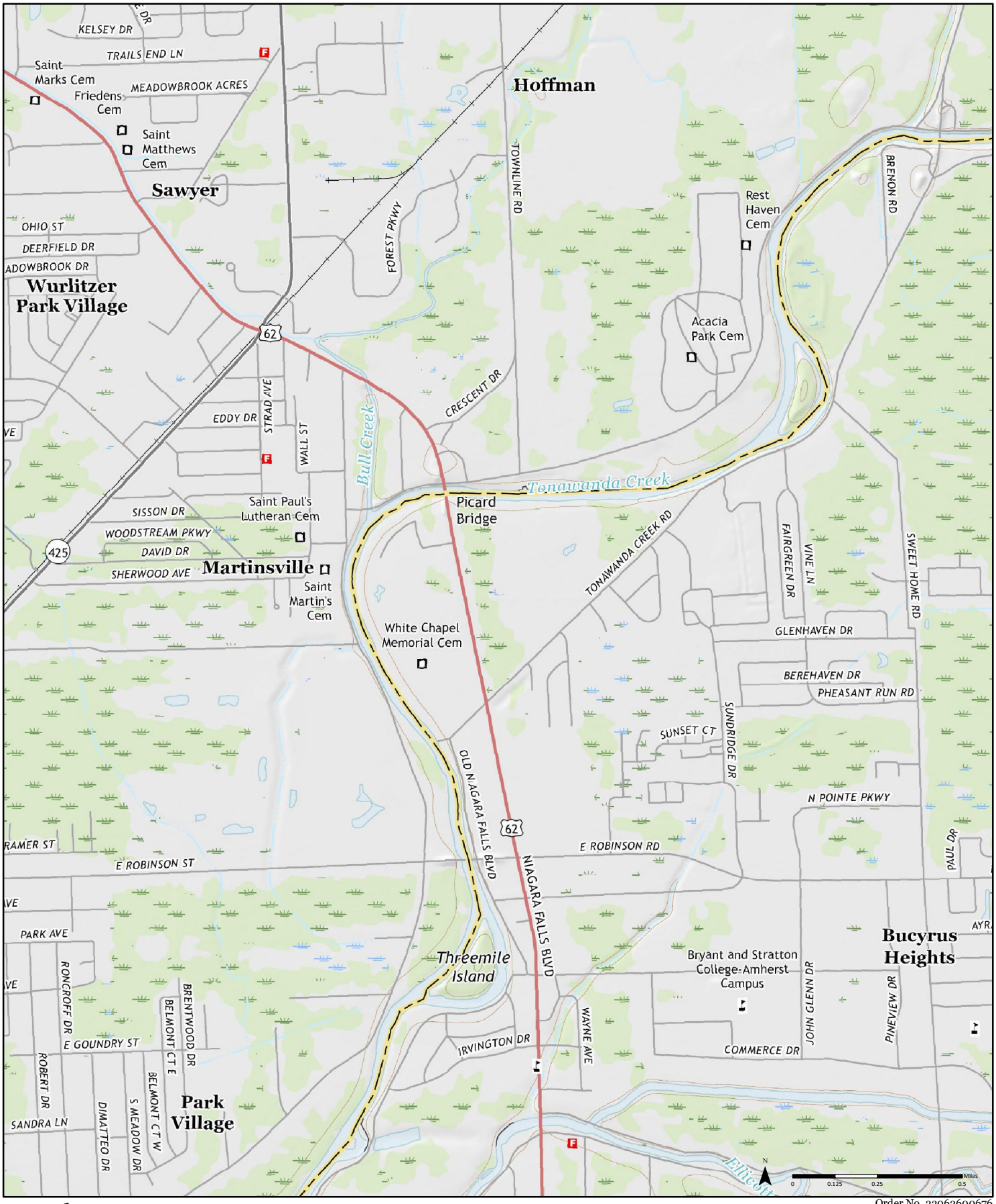
Order No. 23062600676

2019



Available Quadrangle(s): Tonawanda East, NY

Source: USGS 7.5 Minute Topographic Map



Order No. 23062600676

2016

Available Quadrangle(s): Tonawanda East, NY



Source: USGS 7.5 Minute Topographic Map



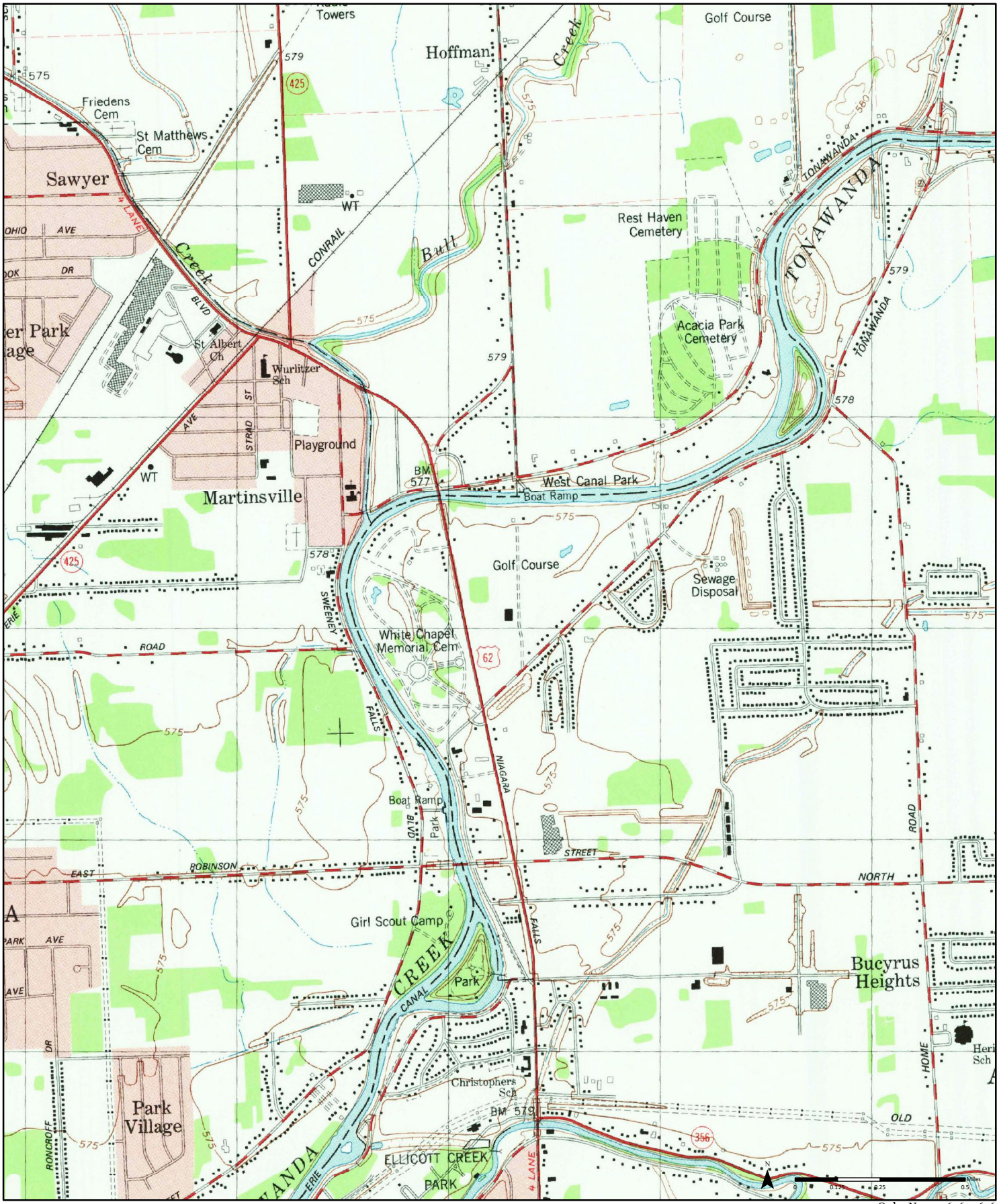
Order No. 23062600676

2013

Available Quadrangle(s): Tonawanda East, NY



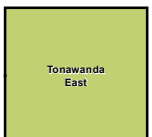
Source: USGS 7.5 Minute Topographic Map



1980 (1-1980)
Aerial Photo Year: 1972

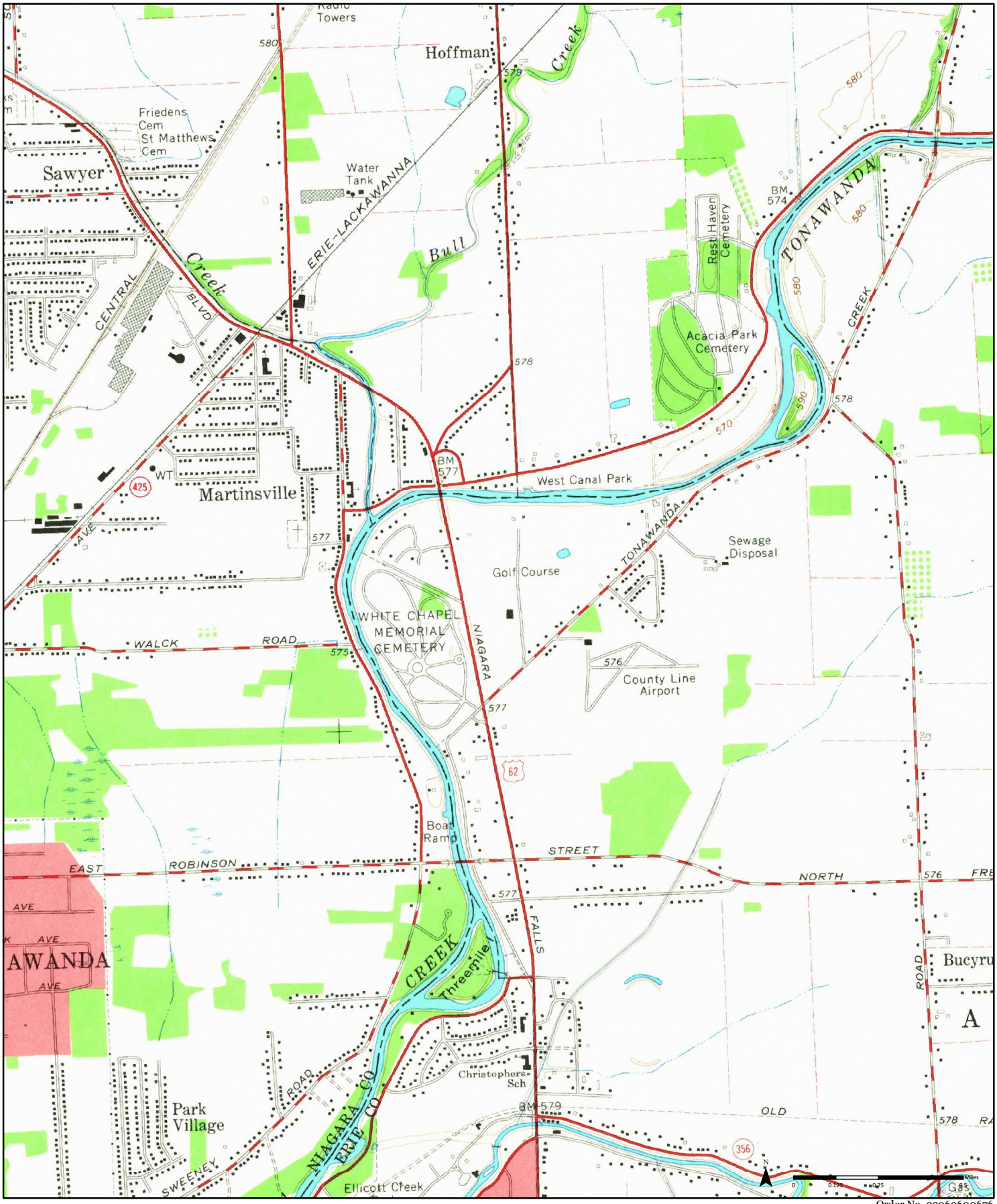
Order No. 23062600676

Available Quadrangle(s): Tonawanda East, NY(1-1980)



Source: USGS 7.5 Minute Topographic Map

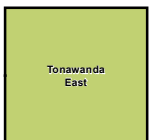
ERIS



1965 (1-1965)
Aerial Photo Year: 1942

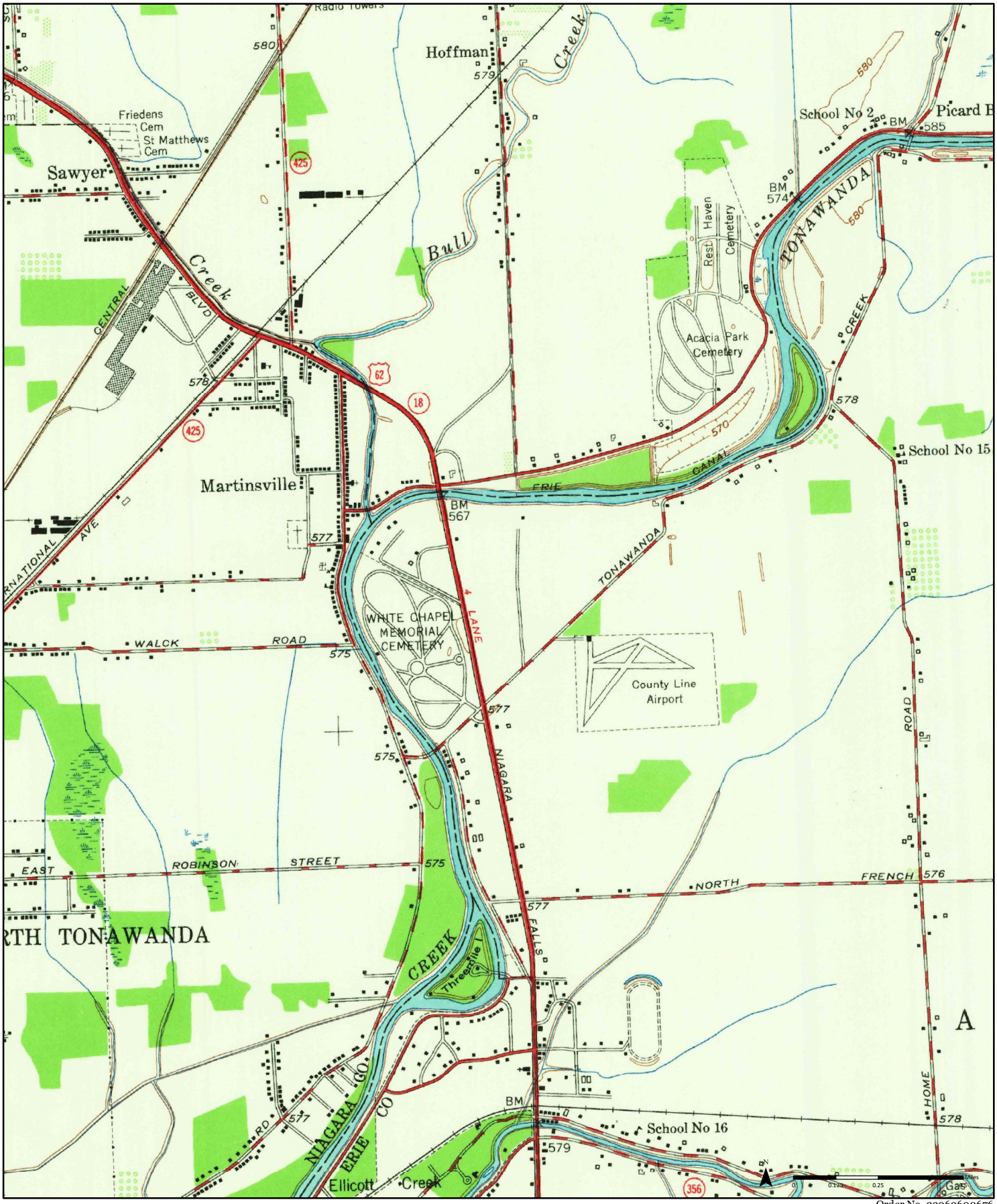
Order No. 23062600676

Available Quadrangle(s): Tonawanda East, NY(1-1965)



Source: USGS 7.5 Minute Topographic Map

ERIS



1950 (1-1950)

Aerial Photo Year: 1942

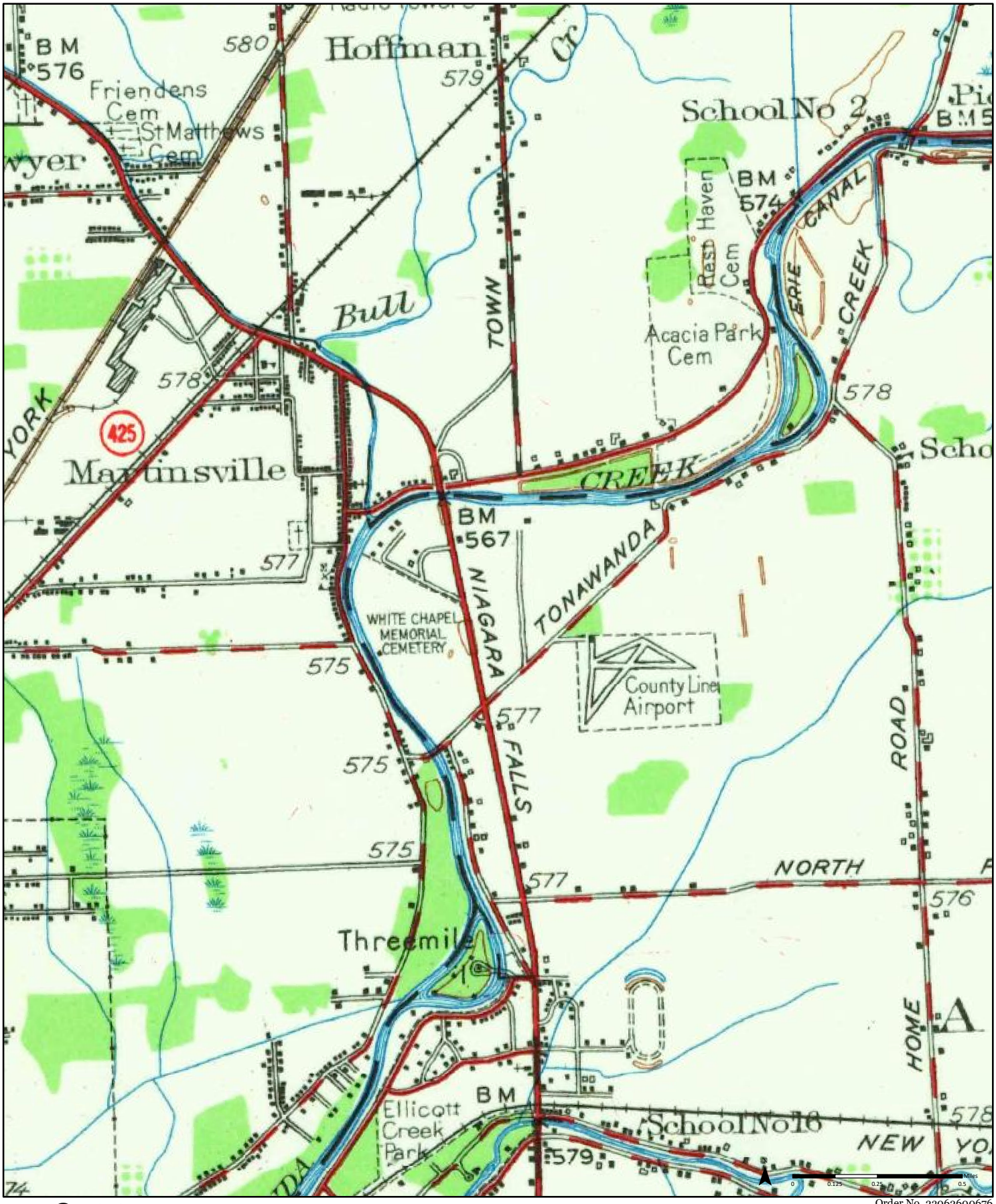
Order No. 23062600676

Available Quadrangle(s): Tonawanda East, NY(1-1950)



Source: USGS 7.5 Minute Topographic Map

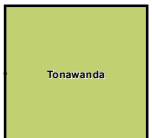
ERIS



1948 (1-1948)
Aerial Photo Year: 1942

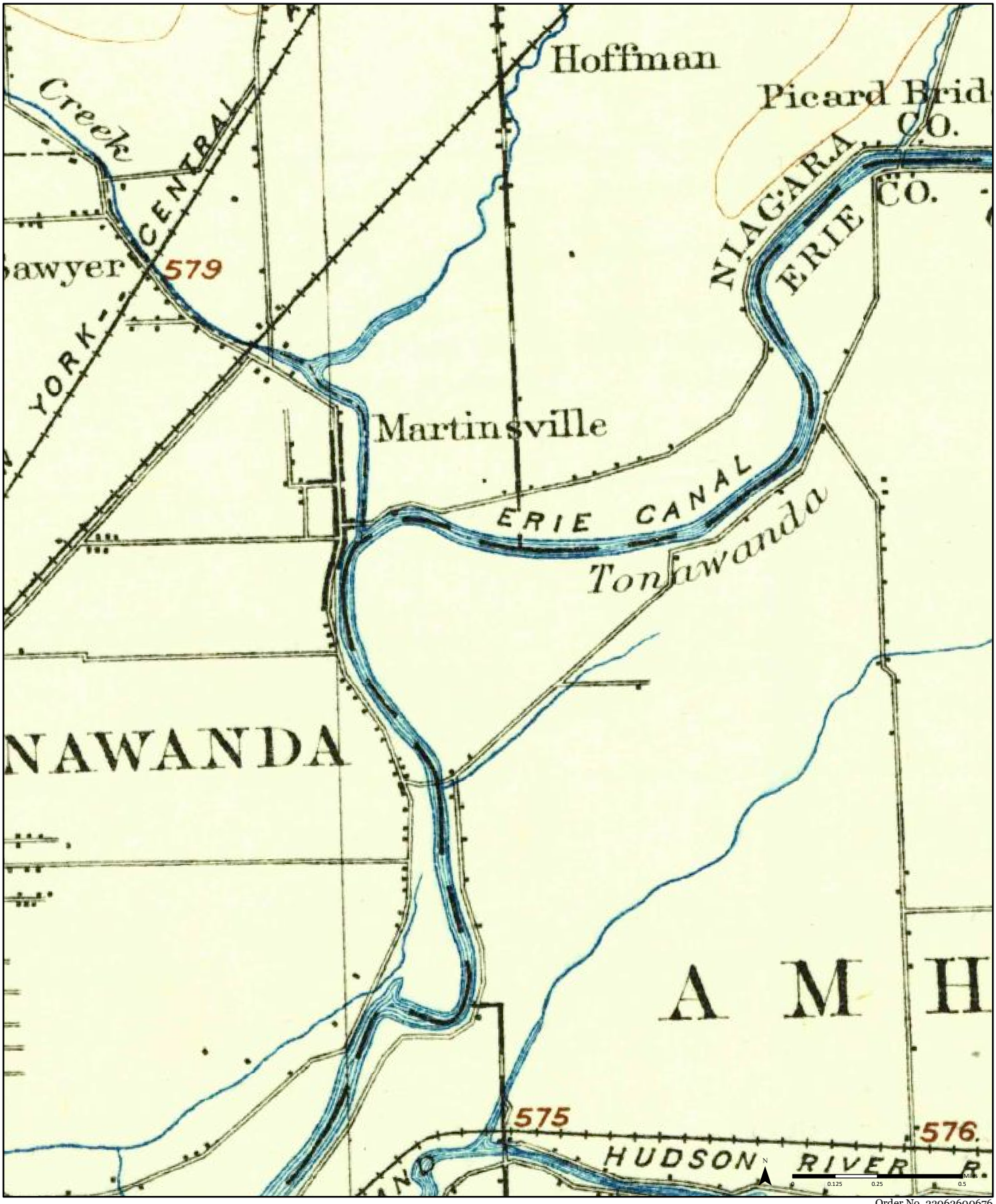
Order No. 23062600676

Available Quadrangle(s): Tonawanda, NY(1-1948)



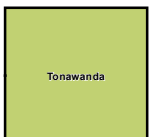
Source: USGS 15 Minute Topographic Map

ERIS



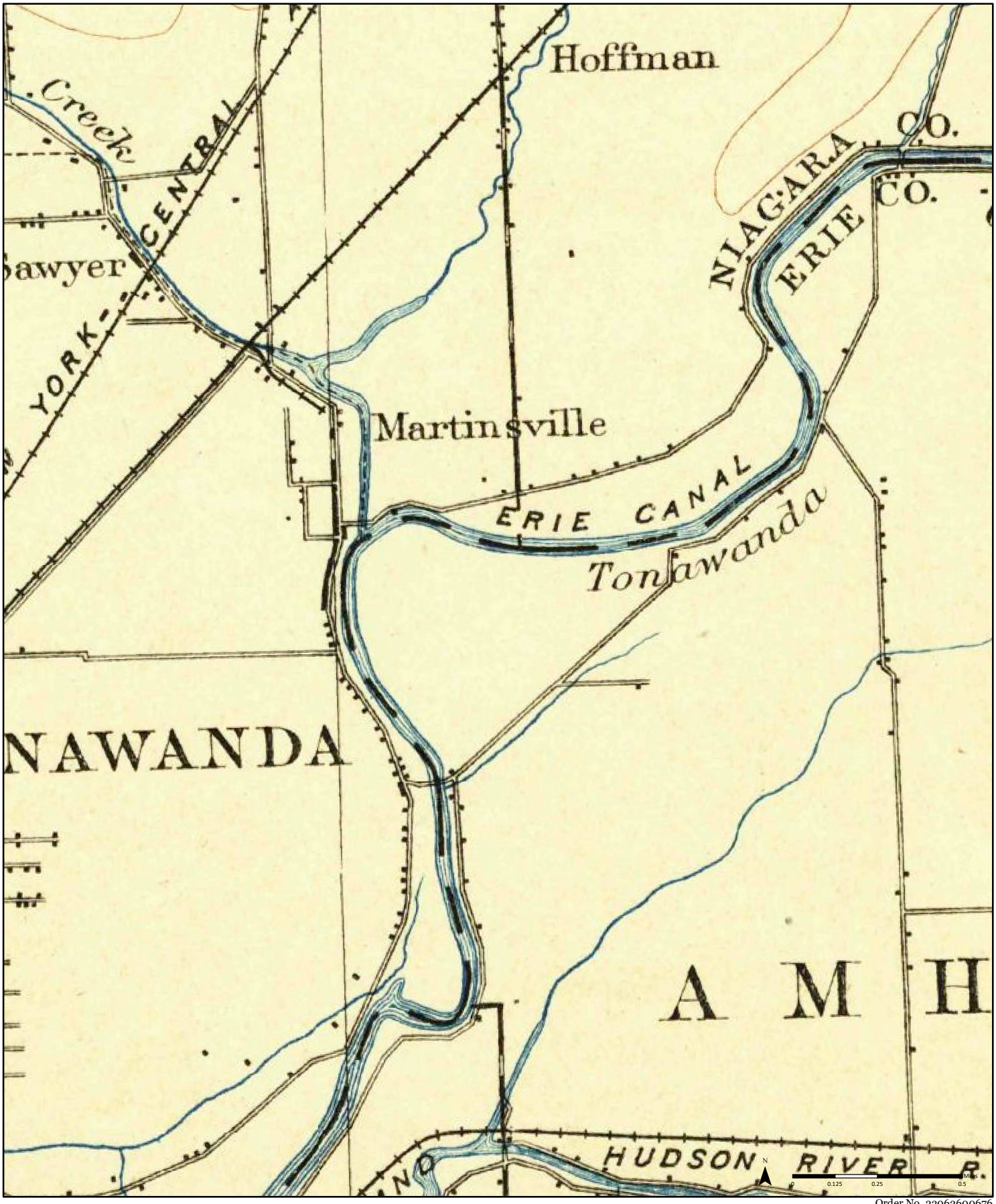
Order No. 23062600676

1901



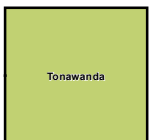
Available Quadrangle(s): Tonawanda, NY

Source: USGS 15 Minute Topographic Map



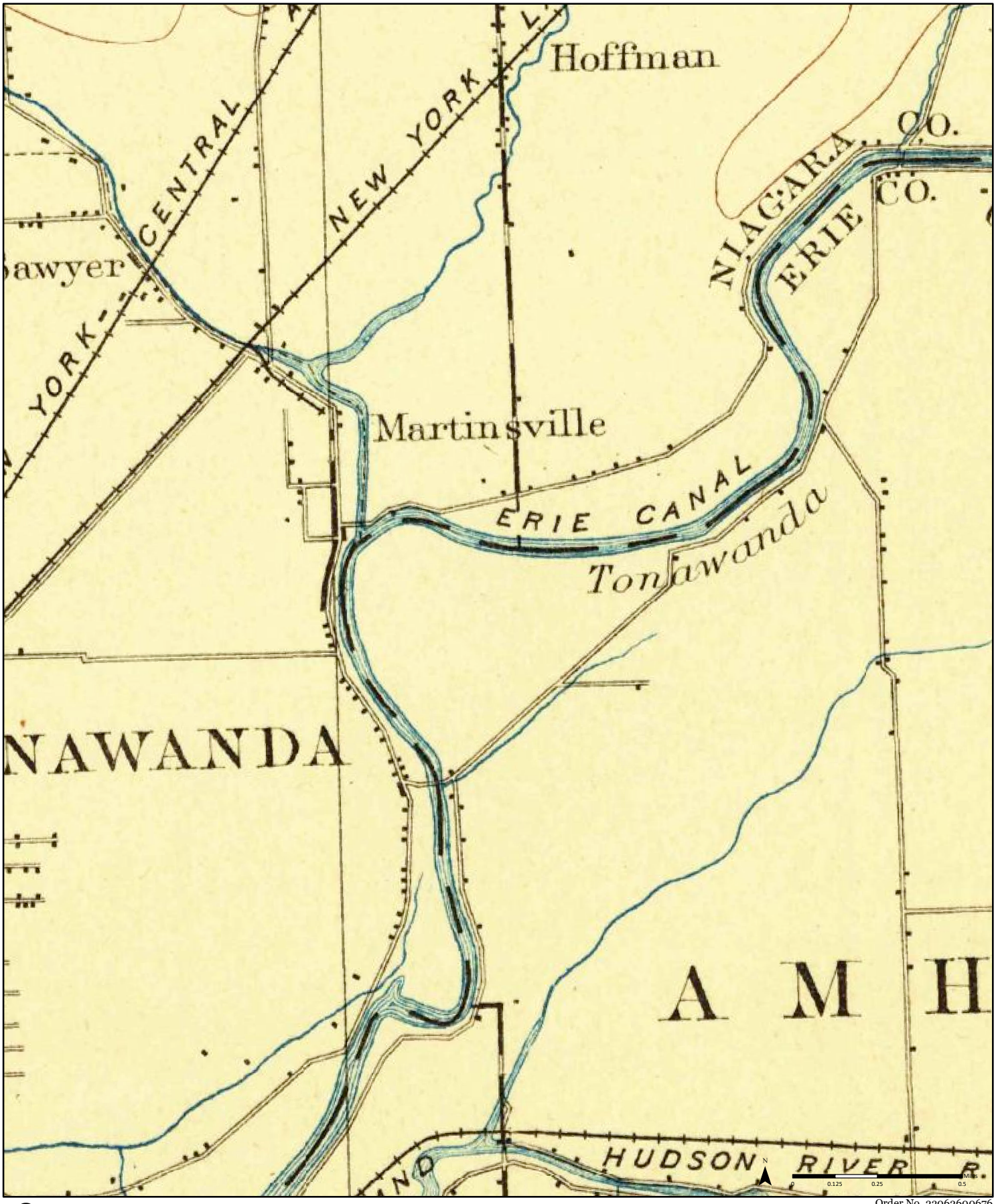
Order No. 23062600676

1900



Available Quadrangle(s): Tonawanda, NY

Source: USGS 15 Minute Topographic Map



Order No. 23062600676

1897

Available Quadrangle(s): Tonawanda, NY



Source: USGS 15 Minute Topographic Map

CITY DIRECTORY

Project Property:	*75 Tupelo Lane Phase I ESA* *75 Tupelo Lane* *Buffalo,NY*
Project No:	*H22.008.001*
Requested By:	*C&S Companies*
Order No:	*23062600676*
Date Completed:	*June 29, 2023*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

June 29, 2023
RE: CITY DIRECTORY RESEARCH
75 Tupelo Lane
Buffalo,NY

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:
BEG-500 of Tonawanda Creek Rd
ALL of Tupelo Ln
Search Notes:

Search Results Summary

Date	Source	Comment
2022	DIGITAL BUSINESS DIRECTORY	
2020	DIGITAL BUSINESS DIRECTORY	
2016	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2008	DIGITAL BUSINESS DIRECTORY	
2003	DIGITAL BUSINESS DIRECTORY	
2000	DIGITAL BUSINESS DIRECTORY	
1996	HAINES	
1990	HAINES	
1985	HAINES	
1980	HAINES	
1976	HAINES	
1971	HAINES	
1968	POLKS	
1963	POLKS	

2022 TONAWANDA CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

168 **EVERGREEN GOLF COURSE**...*GOLF COURSES*
168 **EVERGREEN GOLF COURSE**...*GOLF PRACTICE RANGES*
170 **MANOR LANES II**...*BOWLING CENTERS*
175 **BARBARA CUMMINS**...*RESIDENTIAL*
181 **REBECCA STEIGER**...*RESIDENTIAL*
187 **LANIQUE NETTLES**...*RESIDENTIAL*
187 **SHERRIL NETTLES**...*RESIDENTIAL*
193 **ROBIN SAGER**...*RESIDENTIAL*
194 **ROBERT WELLS**...*RESIDENTIAL*
204 **KATHRYN DORNEY**...*RESIDENTIAL*
207 **WILLIAM FITZSIMMONS**...*RESIDENTIAL*
213 **WAYNE LINDAHL**...*RESIDENTIAL*
214 **DAWOUD ADEYOLA**...*RESIDENTIAL*
234 **NICHOLAS KOLPACK**...*RESIDENTIAL*
239 **T OOFT**...*RESIDENTIAL*
244 **KENNETH HALLGREN**...*RESIDENTIAL*
259 **CECELIA LIGNOS**...*RESIDENTIAL*
259 **THOMAS LIGNOS**...*RESIDENTIAL*
267 **DOUGLAS EBERHARDT**...*RESIDENTIAL*
275 **KATIE POMARANSKI**...*RESIDENTIAL*
275 **SCOTT WOODRUFF**...*RESIDENTIAL*
291 **HOWARD DAVIS**...*RESIDENTIAL*
292 **RICHARD RYAN**...*RESIDENTIAL*
330 **BRADLEY JACKSON**...*RESIDENTIAL*
338 **MATTHEW KOZEL**...*RESIDENTIAL*
338 **RONALD PETERSON**...*RESIDENTIAL*
343 **MICHAEL WEXLER**...*RESIDENTIAL*
346 **WILLIAM SCHNIREL**...*RESIDENTIAL*
351 **LIOUBOV KOROTCHKINA**...*RESIDENTIAL*
360 **WILLIAM HERRMANN**...*RESIDENTIAL*
367 **PERRY ABBARNO**...*RESIDENTIAL*
375 **LEONARD RANALLO**...*RESIDENTIAL*
381 **AMY ZIEMBA**...*RESIDENTIAL*
385 **MICHAEL HANES**...*RESIDENTIAL*
389 **SHARON BROWNROUT**...*RESIDENTIAL*
390 **NATALYA FAYNSHTEYN**...*RESIDENTIAL*
403 **DEBRA BLAZYNSKI**...*RESIDENTIAL*
410 **EDMOND GICEWICZ**...*RESIDENTIAL*
411 **WILLIAM LIVINGSTON**...*RESIDENTIAL*
427 **SCOTT HARDING**...*RESIDENTIAL*
430 **LUCILLE QUINLAN**...*RESIDENTIAL*
445 **JENNIE FASO**...*RESIDENTIAL*
445 **RALPH PUTT**...*RESIDENTIAL*
450 **PAUL TUITE**...*RESIDENTIAL*
455 **AMHERST WASTE WATER TREATMENT**...*TELEPHONE COMPANIES*
455 **AMHERST WASTE WATER TREATMENT**...*CITY GOVT-REGULATION/ADM-COMMS/UTILITIES*
455 **ENVIRONMENTAL CONTROL**...*GARBAGE COLLECTION*
455 **ENVIRONMENTAL CONTROL**...*CITY GOVERNMENT-ENVIRONMENTAL PROGRAMS*
468 **MICHAEL SNYDER**...*RESIDENTIAL*
480 **JAMES BAUER**...*RESIDENTIAL*

2022 TUPELO LN

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2020 TONAWANDA CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

168 **EVERGREEN GOLF COURSE**...*GOLF COURSES*
168 **EVERGREEN GOLF COURSE**...*GOLF PRACTICE RANGES*
170 **MANOR LANES II**...*BOWLING CENTERS*
175 **BARBARA CUMMINS**...*RESIDENTIAL*
181 **MAMIE EDWARDS**...*RESIDENTIAL*
181 **REBECCA STEIGER**...*RESIDENTIAL*
187 **LANIQUE NETTLES**...*RESIDENTIAL*
193 **ROBIN SAGER**...*RESIDENTIAL*
194 **BRYAN WELLS**...*RESIDENTIAL*
204 **KATHRYN DORNEY**...*RESIDENTIAL*
207 **WILLIAM FITZSIMMONS**...*RESIDENTIAL*
213 **MICHELE LINDAHL**...*RESIDENTIAL*
214 **AMEERA ADEYOLA**...*RESIDENTIAL*
234 **ANDREA KOLPACK**...*RESIDENTIAL*
239 **T OOFT**...*RESIDENTIAL*
244 **GRACE HALLGREN**...*RESIDENTIAL*
259 **CECELIA LIGNOS**...*RESIDENTIAL*
267 **DOUGLAS EBERHARDT**...*RESIDENTIAL*
272 **EVELYN WEXLER**...*RESIDENTIAL*
275 **KATIE POMARANSKI**...*RESIDENTIAL*
275 **SCOTT WOODRUFF**...*RESIDENTIAL*
291 **HOWARD DAVIS**...*RESIDENTIAL*
292 **RICHARD RYAN**...*RESIDENTIAL*
300 **DANIEL CARNEVALE**...*RESIDENTIAL*
322 **LUISE MOE**...*RESIDENTIAL*
338 **RONALD PETERSON**...*RESIDENTIAL*
343 **MICHAEL WEXLER**...*RESIDENTIAL*
350 **EVELYN ORLOWSKI**...*RESIDENTIAL*
351 **LIOUBOV KOROTCHKINA**...*RESIDENTIAL*
360 **JULIANA HERRMANN**...*RESIDENTIAL*
367 **MICHELE ABBARNO**...*RESIDENTIAL*
375 **LEONARD RANALLO**...*RESIDENTIAL*
385 **DEBORAH HANES**...*RESIDENTIAL*
389 **GERALD BROWNROUT**...*RESIDENTIAL*
390 **NATALYA FAYNSHTEYN**...*RESIDENTIAL*
395 **BARBARA CARPENTER**...*RESIDENTIAL*
410 **CONSTANCE GICEWICZ**...*RESIDENTIAL*
410 **EDMOND GICEWICZ**...*RESIDENTIAL*
411 **PATRICIA LIVINGSTON**...*RESIDENTIAL*
427 **ADAM HARDING**...*RESIDENTIAL*
430 **LUCILLE QUINLAN**...*RESIDENTIAL*
445 **JENNIE FASO**...*RESIDENTIAL*
445 **RALPH PUTT**...*RESIDENTIAL*
450 **MELISSA TUITE**...*RESIDENTIAL*
455 **AMHERST WASTE WATER TREATMENT**...*TELEPHONE COMPANIES*
455 **AMHERST WASTE WATER TREATMENT**...*CITY GOVT-REGULATION/ADM-COMMS/UTILITIES*
468 **MICHAEL SNYDER**...*RESIDENTIAL*
480 **BARBARA BAUER**...*RESIDENTIAL*

2020 TUPELO LN

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2016 TONAWANDA CREEK RD
SOURCE: DIGITAL BUSINESS DIRECTORY

75 total records. Part 1 of 2

0 **CREEKSIDE ASSEMBLY-GOD**...*CHURCHES*
0 **NORTHWIND TRADITIONAL ARCHERY**...*ARCHERY EQUIPMENT & SUPPLIES*
168 **EVERGREEN GOLF COURSE**...*GOLF COURSES*
175 **BARBARA CUMMINS**...*RESIDENTIAL*
181 **MAMIE EDWARDS**...*RESIDENTIAL*
187 **LANIQUE NETTLES**...*RESIDENTIAL*
187 **SHERRIL NETTLES**...*RESIDENTIAL*
193 **ROBIN SAGER**...*RESIDENTIAL*
194 **BRYAN WELLS**...*RESIDENTIAL*
194 **KRISTEN WELLS**...*RESIDENTIAL*
194 **ROBERT WELLS**...*RESIDENTIAL*
204 **KATHRYN DORNEY**...*RESIDENTIAL*
207 **BARBARA PORTER**...*RESIDENTIAL*
207 **JAMES HELDWEIN**...*RESIDENTIAL*
207 **ROSE HELDWEIN**...*RESIDENTIAL*
207 **WILLIAM FITZSIMMONS**...*RESIDENTIAL*
213 **MICHELE LINDAHL**...*RESIDENTIAL*
213 **WAYNE LINDAHL**...*RESIDENTIAL*
214 **DAWOUD ADEYOLA**...*RESIDENTIAL*
229 **CARMELLA IOZZIA**...*RESIDENTIAL*
239 **T OOFT**...*RESIDENTIAL*
244 **JILL HALLGREN**...*RESIDENTIAL*
244 **KENNETH HALLGREN**...*RESIDENTIAL*
254 **JOSEPH RIFE**...*RESIDENTIAL*
254 **KIMBERLY RIFE**...*RESIDENTIAL*
267 **DOUGLAS EBERHARDT**...*RESIDENTIAL*
267 **JUDITH EBERHARDT**...*RESIDENTIAL*
267 **JULIA EBERHARDT**...*RESIDENTIAL*
272 **EVELYN WEXLER**...*RESIDENTIAL*
275 **KATIE POMARANSKI**...*RESIDENTIAL*
275 **SCOTT WOODRUFF**...*RESIDENTIAL*
275 **WENDY WOODRUFF**...*RESIDENTIAL*
291 **HOWARD DAVIS**...*RESIDENTIAL*
291 **JENNIFER DAVIS**...*RESIDENTIAL*
292 **RICHARD RYAN**...*RESIDENTIAL*
300 **DANIEL CARNEVALE**...*RESIDENTIAL*
322 **LUISE MOE**...*RESIDENTIAL*
330 **BRADLEY JACKSON**...*RESIDENTIAL*
338 **RONALD PETERSON**...*RESIDENTIAL*
338 **VERONICA PETERSON**...*RESIDENTIAL*
343 **MICHAEL WEXLER**...*RESIDENTIAL*
350 **MARK ORLOWSKI**...*RESIDENTIAL*
351 **LIOUBOV KOROTCHKINA**...*RESIDENTIAL*
367 **MICHELE ABBARNO**...*RESIDENTIAL*
367 **PERRY ABBARNO**...*RESIDENTIAL*
375 **LEONARD RANALLO**...*RESIDENTIAL*
375 **SUSAN RANALLO**...*RESIDENTIAL*
385 **DEBORAH HANES**...*RESIDENTIAL*
385 **MARK HANES**...*RESIDENTIAL*
385 **MICHAEL HANES**...*RESIDENTIAL*
389 **GERALD BROWNROUT**...*RESIDENTIAL*
389 **IRIS BROWNROUT**...*RESIDENTIAL*
389 **SHARON BROWNROUT**...*RESIDENTIAL*
395 **BARBARA CARPENTER**...*RESIDENTIAL*
410 **CONSTANCE GICEWICZ**...*RESIDENTIAL*
410 **EDMOND GICEWICZ**...*RESIDENTIAL*
410 **GREGORY GICEWICZ**...*RESIDENTIAL*
411 **PATRICIA LIVINGSTON**...*RESIDENTIAL*
411 **WILLIAM LIVINGSTON**...*RESIDENTIAL*
427 **ADAM HARDING**...*RESIDENTIAL*
427 **AMANDA HARDING**...*RESIDENTIAL*
427 **GLORIA HARDING**...*RESIDENTIAL*
427 **KATELYN HARDING**...*RESIDENTIAL*
427 **SCOTT HARDING**...*RESIDENTIAL*
430 **LUCILLE QUINLAN**...*RESIDENTIAL*
430 **PATRICK QUINLAN**...*RESIDENTIAL*
445 **RALPH PUTT**...*RESIDENTIAL*

Part 2 of 2

450 **IDC CONSULTING INC**...*COMPUTER & EQUIPMENT DEALERS*
455 **AMHERST WASTE WATER TREATMENT**...*CITY GOVT-REGULATION/ADM-COMMS/UTILITIES*
468 **MICHAEL SNYDER**...*RESIDENTIAL*
468 **MICHELE SNYDER**...*RESIDENTIAL*
468 **W SNYDER**...*RESIDENTIAL*
480 **BARBARA BAUER**...*RESIDENTIAL*
480 **JAMES BAUER**...*RESIDENTIAL*

2016 TUPELO LN

SOURCE: DIGITAL BUSINESS DIRECTORY

16 **TAMMY WAGNER**...*RESIDENTIAL*

2012 TONAWANDA CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

85 total records. Part 1 of 2

168 **EVERGREEN GOLF COURSE**...*GOLF COURSES*
181 **MARIE ROTELLA**...*RESIDENTIAL*
194 **KRISTEN WELLS**...*RESIDENTIAL*
199 **CA KUSLIK**...*RESIDENTIAL*
199 **CHERYL KUSLIK**...*RESIDENTIAL*
199 **JA KUSLIK**...*RESIDENTIAL*
199 **JOSEPH KUSLIK**...*RESIDENTIAL*
199 **JOSEPH SKOMSKI**...*RESIDENTIAL*
199 **NICHOLE KUSLIK**...*RESIDENTIAL*
204 **A DORNEY**...*RESIDENTIAL*
213 **CHARLES PRIBEK**...*RESIDENTIAL*
213 **MICHELE LINDAHL**...*RESIDENTIAL*
214 **DAWOUD ADEYOLA**...*RESIDENTIAL*
214 **MARYAM ADEYOLA**...*RESIDENTIAL*
214 **NAFEEZA ADEYOLA**...*RESIDENTIAL*
214 **SABU ADEYOLA**...*RESIDENTIAL*
224 **GLENN HETTINGER**...*RESIDENTIAL*
224 **STEVEN WILHELM**...*RESIDENTIAL*
229 **CARMELLA IOZZIA**...*RESIDENTIAL*
229 **GARY BRANT**...*RESIDENTIAL*
234 **CARRIE OLARI**...*RESIDENTIAL*
234 **LARRY ACKER**...*RESIDENTIAL*
234 **MARTIN OLARI**...*RESIDENTIAL*
234 **W OLARI**...*RESIDENTIAL*
244 **JULIE HALLGREN**...*RESIDENTIAL*
244 **LOREN WEHLING**...*RESIDENTIAL*
259 **CECELIA LIGNOS**...*RESIDENTIAL*
259 **THOMAS LIGNOS**...*RESIDENTIAL*
267 **JUDITH EBERHARDT**...*RESIDENTIAL*
275 **JOHN POMARANSKI**...*RESIDENTIAL*
275 **KATIE POMARANSKI**...*RESIDENTIAL*
282 **HELDWEIN ROSE**...*RESIDENTIAL*
282 **MELISSA HELDWEIN**...*RESIDENTIAL*
282 **ROBERT HELDWEIN**...*RESIDENTIAL*
282 **ROSE HELDWEIN**...*RESIDENTIAL*
291 **HOWARD DAVIS**...*RESIDENTIAL*
292 **JAMES RYAN**...*RESIDENTIAL*
292 **RICHARD RYAN**...*RESIDENTIAL*
300 **DANIEL CARNEVALE**...*RESIDENTIAL*
330 **BRADLEY JACKSON**...*RESIDENTIAL*
330 **L MOE**...*RESIDENTIAL*
338 **MATTHEW KOZEL**...*RESIDENTIAL*
338 **RICHARD KOZEL**...*RESIDENTIAL*
338 **RON PETERSON**...*RESIDENTIAL*
338 **RONALD PETERSON**...*RESIDENTIAL*
338 **VERONICA KOZEL**...*RESIDENTIAL*
343 **CYNTHIA WEXLER**...*RESIDENTIAL*
343 **MICHAEL WEXLER**...*RESIDENTIAL*
350 **MARY ORLOWSKI**...*RESIDENTIAL*
351 **ALEXA ARTIOUCHKINE**...*RESIDENTIAL*
351 **ALEXANDRE ARTIOUCHKIN**...*RESIDENTIAL*
351 **ALEXANDRE KOROTCHKINA**...*RESIDENTIAL*
359 **EVELYN MERLINO**...*RESIDENTIAL*
360 **JULIANA HERRMANN**...*RESIDENTIAL*
367 **MICHELE ABBARNO**...*RESIDENTIAL*
367 **MICHELLE ABBARNO**...*RESIDENTIAL*
375 **SUSAN RANALLO**...*RESIDENTIAL*
385 **CHRISTINE FERRERI**...*RESIDENTIAL*
385 **DEBORAH HANES**...*RESIDENTIAL*
385 **JOSEPH FERRERI**...*RESIDENTIAL*
385 **MICHAEL HANES**...*RESIDENTIAL*
389 **G BROWNROUT**...*RESIDENTIAL*
389 **MOTORSPORTS BROWNROUT**...*RESIDENTIAL*
389 **S BROWNROUT**...*RESIDENTIAL*
389 **SHARON BROWNROUT**...*RESIDENTIAL*
390 **PAVEL FAYNSHTEYN**...*RESIDENTIAL*
410 **CONSTANCE GICEWICZ**...*RESIDENTIAL*
411 **PATRICIA LIVINGSTON**...*RESIDENTIAL*

2012 TONAWANDA CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 2

427 **AMANDA HARDING**...*RESIDENTIAL*
427 **GLORIA HARDING**...*RESIDENTIAL*
427 **SCOTT HARDING**...*RESIDENTIAL*
430 **CARRIE QUINLAN**...*RESIDENTIAL*
430 **PATRICK QUINLAN**...*RESIDENTIAL*
445 **RALPH PUTT**...*RESIDENTIAL*
445 **ROSE PUTT**...*RESIDENTIAL*
450 **DIANE FRONCKOWIAK**...*RESIDENTIAL*
450 **DIANE STRAKA**...*RESIDENTIAL*
450 **JOHN FRONCKOWIAK**...*RESIDENTIAL*
455 **AMHERST WASTE WATER TREATMENT**...*CITY GOVT-REGULATION/ADM-COMMS/UTILITIES*
468 **MICHAEL SNYDER**...*RESIDENTIAL*
468 **WW SNYDER**...*RESIDENTIAL*
480 **JAMES BAUER**...*RESIDENTIAL*
490 **DAVID ECKEL**...*RESIDENTIAL*
491 **MICHAEL WOODWARD**...*RESIDENTIAL*

2012 TUPELO LN

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2008 TONAWANDA CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

168 **EVERGREEN GOLF CLUB**...*GOLF COURSES-PUBLIC*
175 **B A CUMMINS**...*RESIDENTIAL*
175 **K M NAYLOR**...*RESIDENTIAL*
181 **J W ROTELLA**...*RESIDENTIAL*
193 **JOHN R JR BOROWIEC**...*RESIDENTIAL*
193 **PETER SPINKS**...*RESIDENTIAL*
194 **ROBERT C WELLS**...*RESIDENTIAL*
199 **JA & CA KUSLIK**...*RESIDENTIAL*
199 **M SKOMSKI**...*RESIDENTIAL*
201 **S GERS**...*RESIDENTIAL*
204 **A J DORNEY**...*RESIDENTIAL*
207 **BARBARA PORTER**...*RESIDENTIAL*
213 **CHARLES M PRIBEK**...*RESIDENTIAL*
214 **NAFEEZA ADEYOLA**...*RESIDENTIAL*
219 **KEVIN YOUNG**...*RESIDENTIAL*
224 **ERIC WILHELM**...*RESIDENTIAL*
224 **T JR SINATRA**...*RESIDENTIAL*
229 **C M IOZZIA**...*RESIDENTIAL*
245 **BRIGENE KOWALSKI**...*RESIDENTIAL*
251 **BETH GARIGEN**...*RESIDENTIAL*
254 **JAMES PALINSKI**...*RESIDENTIAL*
259 **COMPLETE PAINTING CO INC**...*PAINTING/PAPER HANGING CONTRACTOR*
259 **JAMES FRANGOS**...*RESIDENTIAL*
272 **IRVING & EVELYN WEXLER**...*RESIDENTIAL*
282 **JAMES R HELDWEIN**...*RESIDENTIAL*
291 **HOWARD DAVIS**...*RESIDENTIAL*
292 **JAMES J RYAN**...*RESIDENTIAL*
300 **DAN J CARNEVALE**...*RESIDENTIAL*
330 **L MOE**...*RESIDENTIAL*
343 **MIKE WEXLER**...*RESIDENTIAL*
351 **BENNY F ALVAREZ**...*RESIDENTIAL*
360 **JOHN L TUFILLARO**...*RESIDENTIAL*
375 **LEONARD J RANALLO**...*RESIDENTIAL*
385 **MICHAEL HANES**...*RESIDENTIAL*
389 **BROWNROUT MOTORSPORTS MKTNG**...*MARKETING CONSULTANTS*
411 **WILLIAM J LIVINGSTON**...*RESIDENTIAL*
419 **N H DAVIS**...*RESIDENTIAL*
427 **GLORIA & SCOTT HARDING**...*RESIDENTIAL*
430 **FRANKLIN EVRETT**...*RESIDENTIAL*
430 **PATRICK A QUINLAN**...*RESIDENTIAL*
445 **RALPH J PUTT**...*RESIDENTIAL*
455 **AMHERST WASTE WATER TREATMENT**...*CITY GOVT-REGULATION/ADM-COMMS/UTILITIES*
480 **BARBARA & JAMES BAUER**...*RESIDENTIAL*
480 **HENRY G HESS**...*RESIDENTIAL*
490 **DAVID C ECKEL**...*RESIDENTIAL*
490 **DAVID C ECKEL**...*LEGAL SERVICES OFFICE*

2008 TUPELO LN

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2003 TONAWANDA CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

168 **EVERGREEN GOLF CLUB**
193 **KEITH HAHN**...*RESIDENTIAL*
193 **L JONES**...*RESIDENTIAL*
204 **A J DORNEY**...*RESIDENTIAL*
207 **WILLIAM STAAF**...*RESIDENTIAL*
219 **BRIAN MELLETT**...*RESIDENTIAL*
224 **W WALGATE**...*RESIDENTIAL*
239 **ARNOLD & ANN SHINDER**...*RESIDENTIAL*
239 **L LAWSON-LINGENFELTER**...*RESIDENTIAL*
245 **E & J PALMER**...*RESIDENTIAL*
245 **REBECCA & GLENN MOORE**...*RESIDENTIAL*
251 **A FEHR**...*RESIDENTIAL*
338 **DONALD A COUTTS**...*RESIDENTIAL*
375 **LEONARD J RANALLO**...*RESIDENTIAL*
389 **BROWNROUT MOTORSPORTS MKTNG**
455 **AMHERST WASTE WATER TREATMENT**...*REGULATION, ADMINISTRATION OF UTILITIES, LEVEL OF GOVERNMENT*

2003 TUPELO LN

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2000 TONAWANDA CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

168 **EVERGREEN GOLF CLUB**
193 **KEITH HAHN**...*RESIDENTIAL*
193 **L JONES**...*RESIDENTIAL*
204 **A J DORNEY**...*RESIDENTIAL*
219 **BRIAN MELLETT**...*RESIDENTIAL*
239 **L LAWSON-LINGENFELTER**...*RESIDENTIAL*
245 **E & J PALMER**...*RESIDENTIAL*
245 **REBECCA & GLENN MOORE**...*RESIDENTIAL*
251 **A FEHR**...*RESIDENTIAL*
338 **DONALD A COUTTS**...*RESIDENTIAL*
375 **LEONARD J RANALLO**...*RESIDENTIAL*
389 **BROWNROUT MOTORSPORTS MKTNG**
455 **AMHERST WASTE WATER TREATMENT**...*REGULATION, ADMINISTRATION OF UTILITIES, LEVEL OF GOVERNMENT*

2000 TUPELO LN

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

1996 TONAWANDA CREEK RD

SOURCE: HAINES

TONAWANDA CRK RD
14228 AMHERST

WEALTH CODE 4.4

X WINDSOR CT

168	★EVERGREEN GOLF CLUB	688-6204
170	★MANOR LANES 2	691-6664
175	●CUMMINS B A	691-0562
181	ROTELLA J W	691-7033
187	XXXX	00
193	JONES L	691-9590
194	WELLS Robert C	691-7326
199	KUSLIK C A	691-6790
	KUSLIK J A	691-6790
	SKOMSKI M	691-6835
201	BLUM Darren	564-0714 +6
	QUODOMINE Richard D	691-1976 +6
204	●DORNEY A J	691-6674
207	★AGILE COMPUTERS	691-0724
	OGBONNA Damian	691-3544
213	SCHROTT Wm J	691-6149
214	●WAWRZYNEK Richd	691-8859
219	MELLETT Brian	691-8328
	SHELDON Joanne	564-6303 +6
	SHELDON Ronald	564-6303 +6
224	BENNER M	691-6374
229	GILCHRIST D J	691-8349

X SUMMERSET LN E

239	LAWSON L	691-3039
244	WEHLING Loren A	691-6045
245	MOORE Glenn	691-5056
	MOORE Rebecca	691-5056
	PALMER E	691-0059
	PALMER J	691-0059
251	LOWERY A	691-9659 +6
254	★BRENON LEO TOP SOIL	691-8623
259	FRANGOS James	691-4785
267	EBERHARDT Douglas	691-2857
275	CHUNG S	691-9468 +6
282	●HELDWEIN James R	691-3849
283	XXXX	00
291	KOBUS Danelle	691-8279 +6
	KOBUS Noel	691-8279 +6
292	RYAN Jas J	691-8452
300	CARNEVALE Dan J	691-5461

X CREEKSIDE DR

319	PEARSON C	691-6996
330	MOE Carl E	691-6180

X LAWNWOOD DR

338	COUTTS Donald A	691-5889
343	WEXLER Mike	691-3495
346	XXXX	00
350	●ORLOWSKI E J	691-8777
351	ALVAREZ Benny F	691-7521
359	MERLINO Vincent	691-9322
360	TUFILLARO John L	691-6742
367	AGNELLO Chas J	691-7508
375	RANALLO Leonard J	691-7617
381	XXXX	00
385	HANES Michael	691-4211
389	BROWNROUT Gerald I	691-7456
	TESTA S	691-7456
395	XXXX	00
403	XXXX	00
410	MOFFAT Rusl	691-9457
411	LIVINGSTON Wm J	691-7420
419	VAUGHT Bill	691-9543 +6
427	FIX Frederick A	691-6902
445	PUTT Ralph J	691-9001
455	★AMHRST TWN ENGR SWR	691-9771
	★AMHRST TWN ENGR SWR	691-9776
468	●SMERNO John	691-6042
480	BAUER Barbara	691-4787
	BAUER James	691-4787
	WALSH J T	691-9574 +6
481	FAIRBAIRN E A	691-6431
490	ECKEL David C	691-5205
491	XXXX	00
507	●KRYWALSKI Gerard	691-6777
523	●JONES Linda	691-4933
	★PINNACLE PROP MNG	564-1015 +6
535	HOBLER M J	691-8800
545	MARSHALL Robt L	691-7006
555	HEILEMANN Albert L	691-6708
575	BELL Robert L	691-0334
615	●FALIVENO Vincent T	691-5839

1996 TUPELO LN

SOURCE: HAINES

STREET NOT LISTED

1990 TONAWANDA CREEK RD

SOURCE: HAINES

TONAWANDA CRK RD
14120 N TONAWANDA

X	WINDSOR CT		
168	★EVERGREEN GOLF CLUB	688-6204	7
170	★MANOR LANES 2	691-6664	8
175	XXXX	00	
181	ROTELLA J W	691-7033	5
	SCHROEDER Gary H	691-9518	9
187	PRIOR Helene M	691-3674	+0
193	MENDOZA Bernardo	691-9564	8
194	WELLS Robert C	691-7326	
199	KUSLIK C A	691-6790	
	KUSLIK J A	691-6790	
	SKOMSKI M	691-6835	5
201	GORTON D	691-7730	9
204	REIFEL David	691-6674	
207	THURMOND Nicholls	691-8665	9
213	SCHROTT Wm J	691-6149	8
214	WAWRZYNEK Richd	691-8659	
219	GORE S	691-5434	+0
	YOUNG James	691-4656	3
224	BENNER M	691-6374	9
	PASTERNACK A	691-4347	7
229	GILCHRIST D J	691-8349	
	GUILI J	691-4282	+0
X	SUMMERSET LN E		
239	REIMER D M	691-7707	
244	WEHLING Loren A	691-6045	
245	STEINHAUSER Dennis	691-5418	3
251	HLOLAND Regis	691-4673	+0
254	BRENON Leo H	691-6625	
	★BRENON LEO TOP SOIL	691-8623	
282	HELDWEIN James R	691-3849	8
292	RYAN Jas J	691-8452	
300	CARNEVALE Dan J	691-5461	
X	CREEKSIDE DR		
319	PEARSON C	691-6996	8
330	MOE Carl E	691-6180	
X	LAWNWOOD DR		
343	WEXLER M J	691-3495	
346	KUMAR Stanley F	691-8120	
350	ORLOWSKI E J	691-8777	
351	ALVAREZ Benny F	691-7521	
359	MERLINO Vincent	691-9322	
360	TUFILLARO John L	691-6742	
367	AGNELLO Chas J	691-7508	
375	VANGHEL Edward	691-6061	
381	XXXX	00	
385	HANES Michael	691-4211	1
389	BROWNROUT Gerald I	691-7456	1
	TESTA S	691-7456	
395	XXXX	00	
403	XXXX	00	
410	MOFFAT Rusl	691-9457	
411	LIVINGSTON Wm J	691-7420	3
419	PELS Rollin K	691-8842	
427	FIX Fredk A	691-6902	
445	PUTT Ralph J	691-9001	
455	★AMHRST TWN ENGR SWR	691-9771	6
	★AMHRST TWN ENGR SWR	691-9776	+0
468	SMERNO John	691-6042	
480	BAUER James W	691-4195	+0
	BLACK Wm	691-5261	8
481	FAIRBAIRN E A	691-6431	
490	ECKEL David C	691-5205	
491	BROOKS Richard	691-6953	9
507	KRYWALSKI Gerard	691-6777	
523	BENEVENTO Daniel N	691-5880	
535	HOBLER M J	691-8800	
545	MARSHALL Robt L	691-7006	
555	HEILEMANN Albert L	691-6708	
575	GARBART Hadley	691-9558	6

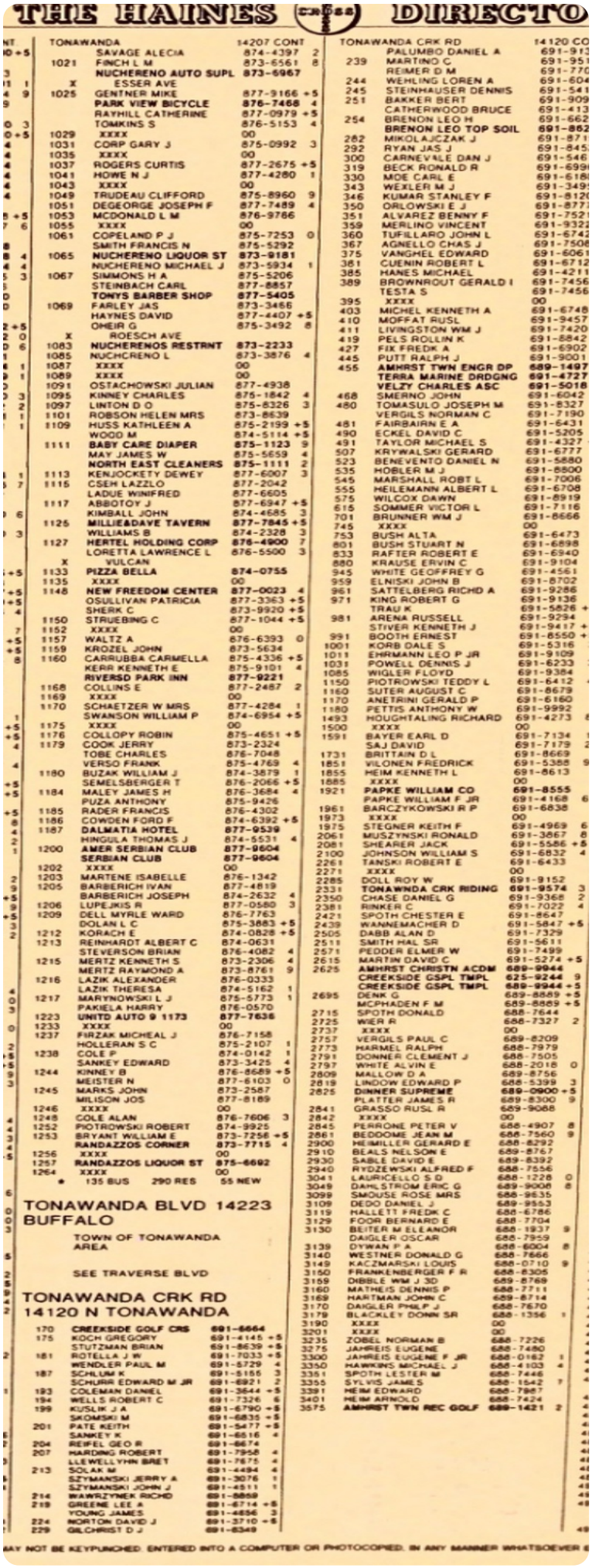
1990 TUPELO LN

SOURCE: HAINES

STREET NOT LISTED

1985 TONAWANDA CREEK RD

SOURCE: HAINES



THE HAINES DIRECTO

TONAWANDA 14207 CONT

SAVAGE ALECIA 874-4397 2
1021 FINCH L M 873-6561 8
NUCHERENO AUTO SUPL 873-6967
X ESSER AVE
1025 GENTNER MIKE 877-9166 +5
PARK VIEW BICYCLE 876-7468 4
RAYHILL CATHERINE 877-0979 +5
TOMKINS S 876-5153 4
1029 XXXX 00
1031 CORP GARY J 875-0992 3
1035 XXXX 00
1037 ROGERS CURTIS 877-2675 +5
1041 HOWE N J 877-4280 1
1043 XXXX 00
1049 TRUDEAU CLIFFORD 875-8960 9
1051 DEGEORGE JOSEPH F 877-7489 4
1053 MCDONALD L M 876-9786
1055 XXXX 00
1061 COPELAND P J 875-7253 0
SMITH FRANCIS N 875-5292
1065 NUCHERENO LIQUOR ST 873-9181
NUCHERENO MICHAEL J 873-5934 1
1067 SIMMONS H A 875-5206
STEINBACH CARL 877-8857
TONYS BARBER SHOP 877-5405
1069 FARLEY JAS 873-3466
HAYNES DAVID 877-4407 +5
OHEIR G 875-3492 8
X ROESCH AVE
1083 NUCHERENOS RESTRNT 873-2233
1085 NUCHCRENO L 873-3876 4
1087 XXXX 00
1089 XXXX 00
1091 OSTACHOWSKI JULIAN 877-4938
1095 KINNEY CHARLES 875-1842 4
1097 LINTON D O 875-8326 3
1101 ROBSON HELEN MRS 873-8639
1109 HUSS KATHLEEN A 875-2199 +5
WOOD M 874-5114 +5
1111 BABY CARE DIAPER 875-1123 9
MAY JAMES W 875-5659 4
NORTH EAST CLEANERS 875-1111 2
1113 KENJOCKETY DEWEY 877-6007 3
1115 CSEH LAZZLO 877-2042
LADUE WINIFRED 877-6605
1117 ABBOTOY J 877-6947 +5
KIMBALL JOHN 874-4685 3
1125 MILLIE&DAVE TAVERN 877-7845 +5
WILLIAMS B 874-2328 3
1127 HERTEL HOLDING CORP 875-4900 7
LORETTA LAWRENCE L 876-5500 3
X VULCAN
1133 PIZZA BELLA 874-0755
1135 XXXX 00
1148 NEW FREEDOM CENTER 877-0023 4
OSULLIVAN PATRICIA 877-3363 +5
SHERK C 873-9920 +5
1150 STRUEBING C 877-1044 +5
1152 XXXX 00
1157 WALTZ A 876-6393 0
1159 KROZEL JOHN 873-5634
1160 CARRUBBA CARMELLA 875-4336 +5
KERR KENNETH E 875-9101 4
RIVERSD PARK INN 877-9221
1168 COLLINS E 877-2487 2
1169 XXXX 00
1170 SCHAETZER W MRS 877-4284 1
SWANSON WILLIAM P 874-6954 +5
1175 XXXX 00
1176 COLLOPY ROBIN 875-4651 +5
1179 COOK JERRY 873-2324
TOBE CHARLES 876-7048
VERSO FRANK 875-4769 4
1180 BUZAK WILLIAM J 874-3879 1
SEMELSBERGER T 876-2066 +5
1184 MALEY JAMES H 876-3684 4
PUZA ANTHONY 875-9426
1185 RADER FRANCIS 876-4302
1186 COWDEN FORD F 874-6392 +5
1187 DALMATIA HOTEL 877-9539
HINGULA THOMAS J 874-5531 4
1200 AMER SERBIAN CLUB 877-9604
SERBIAN CLUB 877-9604
1202 XXXX 00
1203 MARTENE ISABELLE 876-1342
1205 BARBERICH IVAN 877-4819
BARBERICH JOSEPH 874-2632 4
1206 LUPEJKIS R 877-0580 3
1209 DELL MYRLE WARD 876-7763
DOLAN L C 875-3883 +5
1212 KORACH E 874-0828 +5
1213 REINHARDT ALBERT C 876-0631
STEVERSON BRIAN 876-4082 4
1215 MERTZ KENNETH S 873-2306 4
MERTZ RAYMOND A 873-8761 9
1216 LAZIK ALEXANDER 876-0333
LAZIK THERESA 874-5162 1
1217 MARYNOWSKI L J 875-5773 1
PAKIELA HARRY 876-0570
1223 UNITD AUTO 9 1173 877-7636
1233 XXXX 00
1237 FIRZAK MICHEAL J 876-7158
HOLLERAN S C 875-2107 1
1238 COLE P 874-0142 1
SANKEY EDWARD 873-3425 4
1244 KINNEY B 876-6689 +5
MEISTER N 877-6103 0
1245 MARKS JOHN 873-2587
MILISON JOS 877-8189
1246 XXXX 00
1248 COLE ALAN 876-7606 3
1252 PIOTROWSKI ROBERT 874-9925
1253 BRYANT WILLIAM E 873-7256 +5
RANDAZZOS CORNER 873-7715 4
1256 XXXX 00
1257 RANDAZZOS LIQUOR ST 875-6692
1264 XXXX 00
* 135 BUS 290 RES 55 NEW

TONAWANDA BLVD 14223
BUFFALO

TOWN OF TONAWANDA AREA

SEE TRAVERSE BLVD

TONAWANDA CRK RD
14120 N TONAWANDA

170 CREEKSIDE GOLF CRS 691-6664
175 KOCH GREGORY 691-4145 +5
STUTZMAN BRIAN 691-8639 +5
181 ROTELLA J W 691-7033 +5
WENDLER PAUL M 691-5729 4
187 SCHLUM K 691-5155 3
SCHURR EDWARD M JR 691-6921 2
193 COLEMAN DANIEL 691-3644 +5
194 WELLS ROBERT C 691-7326 6
199 KUSLIK J A 691-6790 +5
SKOMSKI M 691-6835 +5
201 PATE KEITH 691-5477 +5
SANKEY K 691-6516 4
204 REIFEL GEO R 691-6674
207 HARDING ROBERT 691-7958 4
LLEWELLYNN BRET 691-7675 4
213 SOLAK M 691-4494 4
SZYMANSKI JERRY A 691-3076 1
SZYMANSKI JOHN J 691-4511 1
214 WAWRZYNEK RICHD 691-8859
219 GREENE LEE A 691-6714 +5
YOUNG JAMES 691-4856 3
224 NORTON DAVID J 691-3710 +6
229 GILCHRIST D J 691-8349

TONAWANDA CRK RD 14120 CO

PALUMBO DANIEL A 691-91
239 MARTINO C 691-95
REIMER D M 691-77
244 WEHLING LOREN A 691-60
245 STEINHAUSER DENNIS 691-54
251 BAKKER BERT 691-90
CATHERWOOD BRUCE 691-41
254 BRENON LEO H 691-66
BRENON LEO TOP SOIL 691-86
262 MIKOLAJCZAK J 691-87
292 RYAN JAS J 691-84
300 CARNEVALE DAN J 691-54
319 BECK RONALD R 691-69
330 MOE CARL E 691-61
343 WEXLER M J 691-34
346 KUMAR STANLEY F 691-81
350 ORLOWSKI E J 691-87
351 ALVAREZ BENNY F 691-75
359 MERLINO VINCENT 691-93
360 TUFILLARO JOHN L 691-67
367 AGNELLO CHAS J 691-75
375 VANGHEL EDWARD 691-60
381 CUENIN ROBERT L 691-67
385 HANES MICHAEL 691-42
389 BROWNROUT GERALD I 691-74
TESTA S 691-74
395 XXXX 00
403 MICHEL KENNETH A 691-67
410 MOFFAT RUSL 691-94
411 LIVINGSTON WM J 691-74
419 PELS ROLLIN K 691-88
427 FIX FREDK A 691-69
445 PUTT RALPH J 691-90
455 AMHRST TWN ENGR DP 689-14
TERRA MARINE DRDGNG 691-47
VELZY CHARLES ASC 691-50
468 SMERNO JOHN 691-60
480 TOMASULO JOSEPH M 691-83
VERGILS NORMAN C 691-71
481 FAIRBAIRN E A 691-64
490 ECKEL DAVID C 691-52
491 TAYLOR MICHAEL S 691-43
507 KRYWALSKI GERARD 691-67
523 BENEVENTO DANIEL N 691-58
535 HOBLER M J 691-88
545 MARSHALL ROBT L 691-70
555 HEILEMANN ALBERT L 691-67
575 WILCOX DAWN 691-89
615 SOMMER VICTOR L 691-71
701 BRUNNER WM J 691-86
745 XXXX 00
753 BUSH ALTA 691-64
801 BUSH STUART N 691-68
833 RAFTER ROBERT E 691-69
880 KRAUSE ERVIN C 691-91
945 WHITE GEOFFREY G 691-45
959 ELNISKI JOHN B 691-87
961 SATTELBERG RICHD A 691-92
971 KING ROBERT G 691-91
TRAU K 691-58
981 ARENA RUSSELL 691-92
STIVER KENNETH J 691-94
991 BOOTH ERNEST 691-85
1001 KORB DALE S 691-53
1011 EHRMANN LEO P JR 691-91
1031 POWELL DENNIS J 691-62
1085 WIGLER FLOYD 691-93
1150 PIOTROWSKI TEDDY L 691-64
1160 SUTER AUGUST C 691-86
1170 ANETRINI GERALD P 691-61
1180 PETTIS ANTHONY W 691-99
1493 HOUGHTALING RICHARD 691-42
1500 XXXX 00
1591 BAYER EARL D 691-71
SAJ DAVID 691-71
1731 BRITTAIN D L 691-86
1851 VILONEN FREDRICK 691-53
1855 HEIM KENNETH L 691-86
1885 XXXX 00
1921 PAPKE WILLIAM CO 691-85
PAPKE WILLIAM F JR 691-41
1961 BARCZYKOWSKI R P 691-68
1973 XXXX 00
1975 STEGNER KEITH F 691-49
2061 MUSZYNSKI RONALD 691-38
2081 SHEARER JACK 691-55
2100 JOHNSON WILLIAM S 691-68
2261 TANSKI ROBERT E 691-64
2271 XXXX 00
2285 DOLL ROY W 691-91
2331 TONAWNDA CRK RIDING 691-95
2350 CHASE DANIEL G 691-93
2381 RINKER C 691-70
2421 SPOTH CHESTER E 691-86
2439 WANNEMACHER D 691-58
2505 DABB ALAN D 691-73
2511 SMITH HAL SR 691-56
2571 PEDDER ELMER W 691-74
2615 MARTIN DAVID C 691-52
2625 AMHRST CHRISTN ACDM 689-99
CREEKSIDE GSPL TMPL 625-92
CREEKSIDE GSPL TMPL 689-99
2695 DENK G 689-88
MCPHADEN F M 689-88
2715 SPOTH DONALD 688-76
2725 WIER R 688-73
2737 XXXX 00
2757 VERGILS PAUL C 689-82
2773 HARMEL RALPH 688-79
2791 DONNER CLEMENT J 688-75
2797 WHITE ALVIN E 688-20
2809 MALLOW D A 689-87
2819 LINDOW EDWARD P 688-53
2825 DINNER SUPREME 689-09
PLATTER JAMES R 689-83
2841 GRASSO RUSL R 689-90
2842 XXXX 00
2845 PERRONE PETER V 688-49
2861 BEDDOME JEAN M 688-75
2900 HEIMILLER GERARD E 688-82
2910 BEALS NELSON E 689-87
2930 SABLE DAVID E 689-83
2940 RYDZEWSKI ALFRED F 688-75
3041 LAURICELLO S D 688-12
3049 DAHLSTROM ERIC G 689-90
3099 SMOUSE ROSE MRS 688-96
3109 DEDO DANIEL J 689-95
3119 HALLETT FREDK C 688-67
3129 FOOR BERNARD E 688-77
3130 BEITER M ELEANOR 688-19
DAIGLER OSCAR 688-79
3139 DYWAN P A 688-60
3140 WESTNER DONALD G 688-76
3149 KACZMARSKI LOUIS 688-07
3150 FRANKENBERGER F R 688-83
3159 DIBBLE WM J 3D 689-87
3160 MATHEIS DENNIS P 688-77
3169 HARTMAN JOHN C 689-87
3170 DAIGLER PHILP J 688-76
3179 BLACKLEY DONN SR 688-13
3190 XXXX 00
3201 XXXX 00
3235 ZOBEL NORMAN B 688-72
3275 JAHREIS EUGENE 688-74
3300 JAHREIS EUGENE F JR 688-01
3350 HAWKINS MICHAEL J 688-41
3351 SPOTH LESTER M 688-74
3355 SYLVIS JAMES 688-15
3391 HEIM EDWARD 688-79
3401 HEIM ARNOLD 688-74
3575 AMHRST TWN REC GOLF 689-14

MAY NOT BE KEYPUNCHED, ENTERED INTO A COMPUTER OR PHOTOCOPIED, IN ANY MANNER WHATSOEVER

1985 TUPELO LN

SOURCE: HAINES

STREET NOT LISTED

1980 TONAWANDA CREEK RD

SOURCE: HAINES

TONAWANDA CRK RD
14120 N TONAWANDA

170	★ CREEKSIDE GOLF	691-6664
	★ CREEKSIDE LANES	691-6664
175	LOONEY CARL A	691-7599
	STILWELL MICHAEL	691-9065
181	NOWAK S M	691-7687
	PEZZANITE LARRY J	691-3466
187	CASEY TIMOTHY P	691-6684
	WEAVER P	691-5342
193	HERRINGTON N	691-7559
194	WELLS ROBERT C	691-7326
199	FRIZELLE P S	691-9618
201	BRAUTLACHT RICHD C	691-6971
	ROSE RICHARD J	691-5333
204	REIFEL GEO R	691-6674
207	BIBBY D	691-5372
	GARUS L	691-8706
213	MONTGOMERY THOMAS	691-5086
	SWINEFORD DOUGLAS	691-5097
214	WAWRZYNEK RICHD	691-8859
219	CRAWFORD JOHN W	691-8354
	PAYNE DOUGLAS B	691-4066
224	BECKER E	691-6786
229	GILCHRIST D J	691-8349
239	MAZUR J C	691-8116
	REIMER D M	691-7707
244	WEHLING LOREN A	691-6045
245	DEBRANGO S A	691-8526
251	BLANDFOR RANDAL	691-4079
	HYDE EDWARD C	691-5981
254	BRENON LEO H	691-6625
	★ BRENON TOP SOIL	691-8623
282	MIKOLAJCZAK FRANK	691-8715
292	RYAN JAS J	691-8452
300	CARNEVALE DAN J	691-5461
	CARNEVALE R	691-6862
319	BECK RONALD R	691-6996
330	MOE CARL E	691-6180
343	WEXLER M J	691-3495
346	KUMAR STANLEY F	691-8120
360	ORLOWSKI E J	691-8777
351	ALVAREZ BENNY F	691-7521
359	MERLINO VINCENT	691-9322
360	TUFILLARO JOHN L	691-6742
367	AGNELLO CHARLES J	691-7508
375	VANGHEL EDWARD	691-6061
381	CUENIN ROBERT L	691-6712

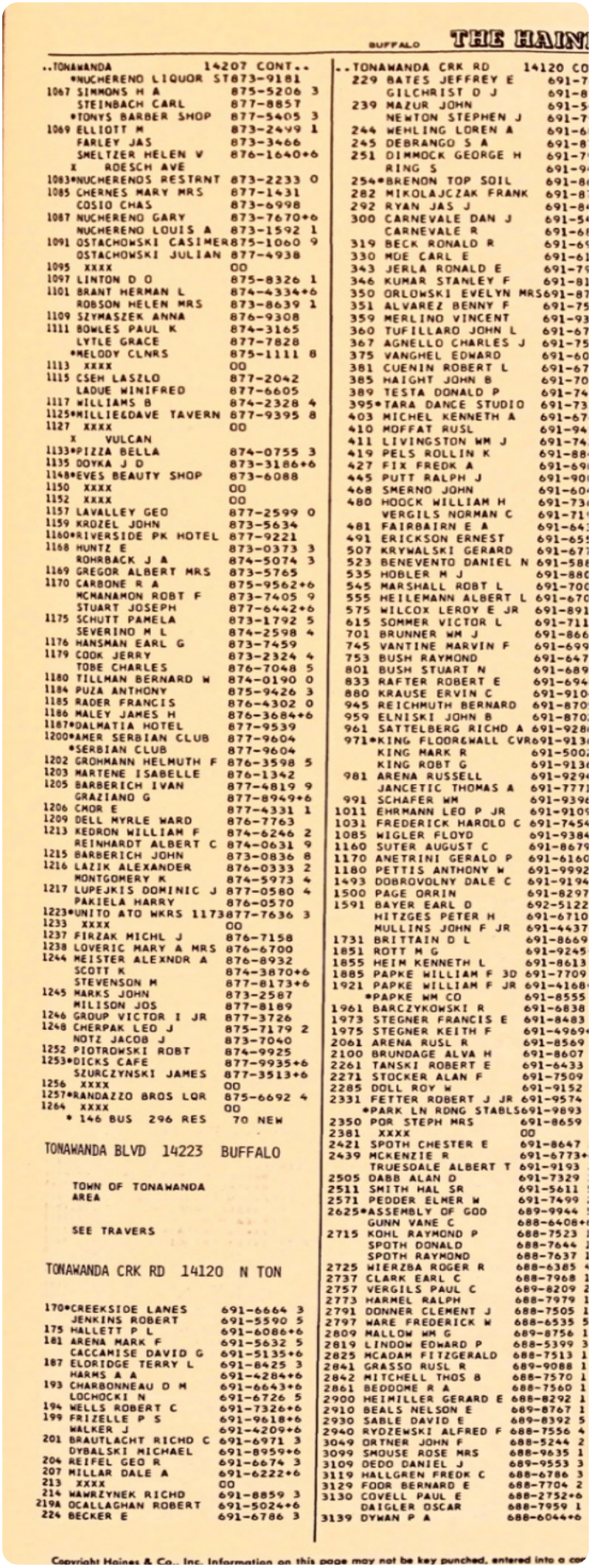
1980 TUPELO LN

SOURCE: HAINES

STREET NOT LISTED

1976 TONAWANDA CREEK RD

SOURCE: HAINES



BUFFALO THE HAIN

..TONAWANDA 14207 CONT..
*NUCHERENO LIQUOR ST873-9181
1067 SIMMONS H A 875-5206 3
STEINBACH CARL 877-8857
*TONYS BARBER SHOP 877-5405 3
1069 ELLIOTT M 873-2499 1
FARLEY JAS 873-3466
SMELTZER HELEN V 876-1640+6
X ROESCH AVE
1083*NUCHERENOS RESTRNT 873-2233 0
1085 CHERNES MARY MRS 877-1431
COSIO CHAS 873-6998
1087 NUCHERENO GARY 873-7670+6
NUCHERENO LOUIS A 873-1592 1
1091 OSTACHOWSKI CASIMER 875-1060 9
OSTACHOWSKI JULIAN 877-4938
1095 XXXX 00
1097 LINTON D O 875-8326 1
1101 BRANT HERMAN L 874-4334+6
ROBSON HELEN MRS 873-8639 1
1109 SZYMASZEK ANNA 876-9308
1111 BOWLES PAUL K 874-3165
LYTLE GRACE 877-7828
*MELODY CLNRS 875-1111 8
1113 XXXX 00
1115 CSEH LASZLO 877-2042
LADUE WINIFRED 877-6605
1117 WILLIAMS B 874-2328 4
1125*MILLIE&DAVE TAVERN 877-9395 8
1127 XXXX 00
X VULCAN
1133*PIZZA BELLA 874-0755 3
1135 DOYKA J D 873-3186+6
1148*EVES BEAUTY SHOP 873-6088
1150 XXXX 00
1152 XXXX 00
1157 LAVALLEY GEO 877-2599 0
1159 KROZEL JOHN 873-5634
1160*RIVERSIDE PK HOTEL 877-9221
1168 HUNTZ E 873-0373 3
ROHRBACK J A 874-5074 3
1169 GREGOR ALBERT MRS 873-5765
1170 CARBONE R A 875-9562+6
MCNAMAMON ROBT F 873-7405 9
STUART JOSEPH 877-6442+6
1175 SCHUTT PAMELA 873-1792 5
SEVERINO M L 874-2598 4
1176 HANSMAN EARL G 873-7459
1179 COOK JERRY 873-2324 4
TOBE CHARLES 876-7048 5
1180 TILLMAN BERNARD W 874-0190 0
1184 PUZA ANTHONY 875-9426 3
1185 RADER FRANCIS 876-4302 0
1186 MALEY JAMES H 876-3684+6
1187*DALMATIA HOTEL 877-9539
1200*AMER SERBIAN CLUB 877-9604
*SERBIAN CLUB 877-9604
1202 GROHMANN HELMUTH F 876-3598 5
1203 MARTENE ISABELLE 876-1342
1205 BARBERICH IVAN 877-4819 9
GRAZIANO G 877-8949+6
1206 CHOR E 877-4331 1
1209 DELL MYRLE WARD 876-7763
1213 KEDRON WILLIAM F 874-6246 2
REINHARDT ALBERT C 874-0631 9
1215 BARBERICH JOHN 873-0836 8
1216 LAZIK ALEXANDER 876-0333 2
MONTGOMERY K 874-5973 4
1217 LUPEJKIS DOMINIC J 877-0580 4
PAKIELA HARRY 876-0570
1223*UNITO ATO WKRS 1173 877-7636 3
1233 XXXX 00
1237 FIRZAK MICHL J 876-7158
1238 LOVERIC MARY A MRS 876-6700
1244 MEISTER ALEXNDR A 876-8932
SCOTT K 874-3870+6
STEVENSON M 877-8173+6
1245 MARKS JOHN 873-2587
MILISON JOS 877-8189
1246 GROUP VICTOR I JR 877-3726
1248 CHERPAK LEO J 875-7179 2
NOTZ JACOB J 873-7040
1252 PIOTROWSKI ROBT 874-9925
1253*DICKS CAFE 877-9935+6
SZURCZYNSKI JAMES 877-3513+6
1256 XXXX 00
1257*RANDAZZO BROS LQR 875-6692 4
1264 XXXX 00
* 146 BUS 296 RES 70 NEW

TONAWANDA BLVD 14223 BUFFALO

TOWN OF TONAWANDA
AREA

SEE TRAVERS

TONAWANDA CRK RD 14120 N TON

170*CREEKSIDE LANES 691-6664 3
JENKINS ROBERT 691-5590 5
175 HALLETT P L 691-6086+6
181 ARENA MARK F 691-5632 5
CACCAMISE DAVID G 691-5135+6
187 ELDRIDGE TERRY L 691-8425 3
HARMS A A 691-4284+6
193 CHARBONNEAU D M 691-6643+6
LOCHOCKI N 691-6726 5
194 WELLS ROBERT C 691-7326+6
199 FRIZELLE P S 691-9618+6
WALKER J 691-4209+6
201 BRAUTLACHT RICHD C 691-6971 3
DYBALSKI MICHAEL 691-8959+6
204 REIFEL GEO R 691-6674 3
207 MILLAR DALE A 691-6222+6
213 XXXX 00
214 MAWRZYNEK RICHD 691-8859 3
219A OCALLAGHAN ROBERT 691-5024+6
224 BECKER E 691-6786 3

..TONAWANDA CRK RD 14120 CO
229 BATES JEFFREY E 691-7
GILCHRIST D J 691-8
239 MAZUR JOHN 691-5
NEWTON STEPHEN J 691-7
244 WEHLING LOREN A 691-6
245 DEBRANGO S A 691-8
251 DIMMOCK GEORGE H 691-7
RING S 691-9
254*BRENON TOP SOIL 691-8
282 MIKOLAJCZAK FRANK 691-8
292 RYAN JAS J 691-8
300 CARNEVALE DAN J 691-5
CARNEVALE R 691-6
319 BECK RONALD R 691-6
330 MOE CARL E 691-6
343 JERLA RONALD E 691-7
346 KUMAR STANLEY F 691-8
350 ORLOWSKI EVELYN MRS 691-8
351 ALVAREZ BENNY F 691-7
359 MERLINO VINCENT 691-9
360 TUFILLARO JOHN L 691-6
367 AGNELLO CHARLES J 691-7
375 VANGHEL EDWARD 691-6
381 CUENIN ROBERT L 691-6
385 HAIGHT JOHN B 691-7
389 TESTA DONALD P 691-7
395*TARA DANCE STUDIO 691-7
403 MICHEL KENNETH A 691-6
410 MOFFAT RUSL 691-9
411 LIVINGSTON WM J 691-7
419 PELS ROLLIN K 691-8
427 FIX FREDK A 691-6
445 PUTT RALPH J 691-9
468 SMERNO JOHN 691-6
480 HOOCK WILLIAM H 691-7
VERGILS NORMAN C 691-7
481 FAIRBAIRN E A 691-6
491 ERICKSON ERNEST 691-6
507 KRYWALSKI GERARD 691-6
523 BENEVENTO DANIEL N 691-5
535 HOBLER M J 691-8
545 MARSHALL ROBT L 691-7
555 HEILEMANN ALBERT L 691-6
575 WILCOX LEROY E JR 691-8
615 SOMMER VICTOR L 691-7
701 BRUNNER WM J 691-8
745 VANTINE MARVIN F 691-6
753 BUSH RAYMOND 691-6
801 BUSH STUART N 691-6
833 RAFTER ROBERT E 691-6
880 KRAUSE ERVIN C 691-9
945 REICHMUTH BERNARD 691-8
959 ELNISKI JOHN B 691-8
961 SATTELBERG RICHD A 691-9
971*KING FLOOR&WALL CVR 691-9
KING MARK R 691-5
KING ROBT G 691-9
981 ARENA RUSSELL 691-9
JANCETIC THOMAS A 691-7
991 SCHAFER WM 691-9
1011 EHRMANN LEO P JR 691-9
1031 FREDERICK HAROLD C 691-7
1085 WIGLER FLOYD 691-9
1160 SUTER AUGUST C 691-8
1170 ANETRINI GERALD P 691-6
1180 PETTIS ANTHONY W 691-9
1493 DOBROVOLNY DALE C 691-9
1500 PAGE ORRIN 691-8
1591 BAYER EARL D 692-5
HITZGES PETER H 691-6
MULLINS JOHN F JR 691-4
1731 BRITTAIN D L 691-8
1851 ROTT M G 691-9
1855 HEIM KENNETH L 691-8
1885 PAPKE WILLIAM F 3D 691-7
1921 PAPKE WILLIAM F JR 691-6
*PAPKE WM CO 691-8
1961 BARCZYKOWSKI R 691-6
1973 STEGNER FRANCIS E 691-8
1975 STEGNER KEITH F 691-4
2061 ARENA RUSL R 691-8
2100 BRUNDAGE ALVA H 691-8
2261 TANSKI ROBERT E 691-6
2271 STOCKER ALAN F 691-7
2285 DOLL ROY W 691-9
2331 FETTER ROBERT J JR 691-9
*PARK LN RDNG STABLS 691-9
2350 POR STEPH MRS 691-8
2381 XXXX 00
2421 SPOTH CHESTER E 691-8
2439 MCKENZIE R 691-6
TRUESDALE ALBERT T 691-9
2505 DABB ALAN D 691-7
2511 SMITH HAL SR 691-5
2571 PEDDER ELMER W 691-7
2625*ASSEMBLY OF GOD 689-9
GUNN VANE C 688-6
2715 KOHL RAYMOND P 688-7
SPOTH DONALD 688-7
SPOTH RAYMOND 688-7
2725 WIERZBA ROGER R 688-6
2737 CLARK EARL C 688-7
2757 VERGILS PAUL C 689-8
2773 HARMEL RALPH 688-7
2791 DONNER CLEMENT J 688-7
2797 WARE FREDERICK W 688-6
2809 MALLOW WM G 689-8
2819 LINDOW EDWARD P 688-5
2825 MCADAM FITZGERALD 688-7
2841 GRASSO RUSL R 689-9
2842 MITCHELL THOS B 688-7
2861 BEDDOME R A 688-7
2900 HEIMILLER GERARD E 688-8
2910 BEALS NELSON E 689-8
2930 SABLE DAVID E 689-8
2940 RYDZEWSKI ALFRED F 688-7
3049 ORTNER JOHN F 688-5
3099 SMOUSE ROSE MRS 688-9
3109 DEDO DANIEL J 689-9
3119 HALLGREN FREDK C 688-6
3129 FOOR BERNARD E 688-7
3130 COVELL PAUL E 688-2
DAIGLER OSCAR 688-7
3139 DYMAN P A 688-6

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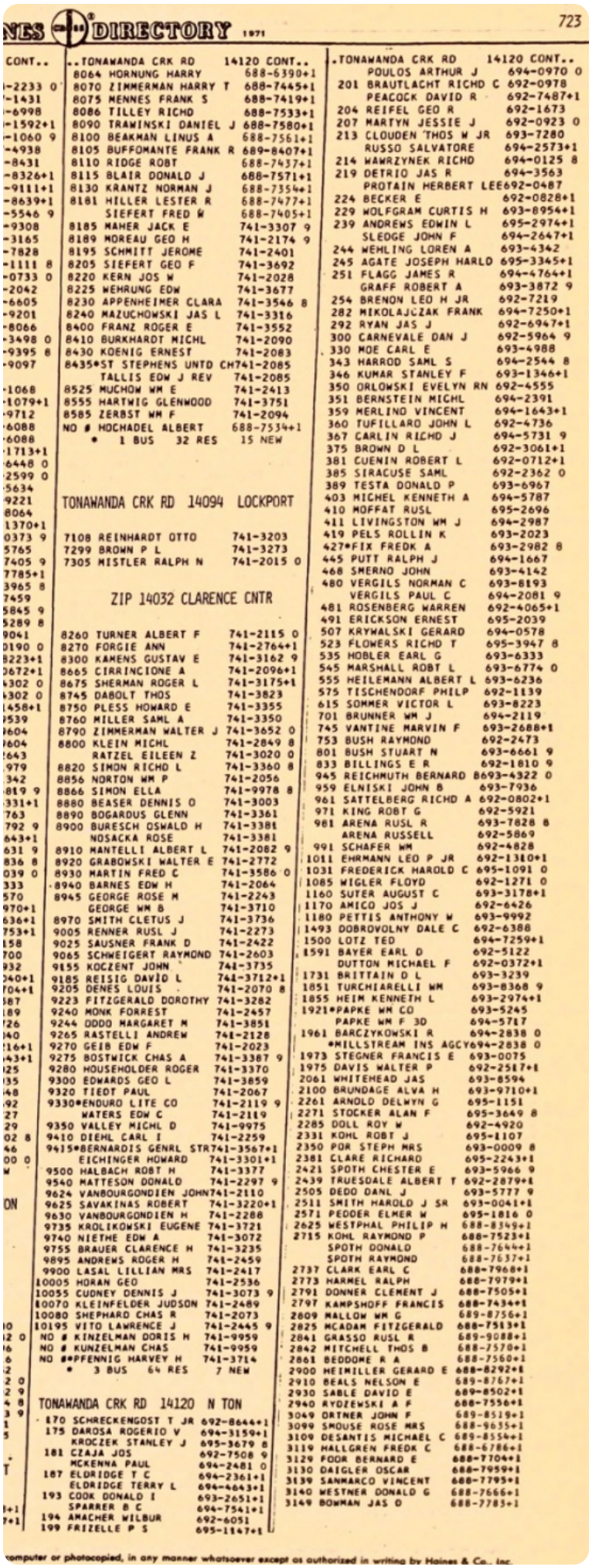
1976 TUPELO LN

SOURCE: HAINES

STREET NOT LISTED

1971 TONAWANDA CREEK RD

SOURCE: HAINES



NES DIRECTORY 1971 723

CONT.. ..TONAWANDA CRK RD 14120 CONT..

8064 HORNUNG HARRY 688-6390+1
8070 ZIMMERMAN HARRY T 688-7445+1
8075 MENNES FRANK S 688-7419+1
8086 TILLEY RICHD 688-7533+1
8090 TRAWINSKI DANIEL J 688-7580+1
8100 BEAKMAN LINUS A 688-7561+1
8105 BUFFOMANTE FRANK R 689-8407+1
8110 RIDGE ROBT 688-7437+1
8115 BLAIR DONALD J 688-7571+1
8130 KRANTZ NORMAN J 688-7354+1
8181 HILLER LESTER R 688-7477+1
SIEFERT FRED W 688-7405+1
8185 MAHER JACK E 741-3307 9
8189 MOREAU GEO H 741-2174 9
8195 SCHMITT JEROME 741-2401
8205 SIEFERT GEO F 741-3692
8220 KERN JOS W 741-2028
8225 WEHRUNG EDW 741-3677
8230 APPENHEIMER CLARA 741-3546 8
8240 MAZUCHOWSKI JAS L 741-3316
8400 FRANZ ROGER E 741-3552
8410 BURKHARDT MICHL 741-2090
8430 KOENIG ERNEST 741-2083
8435*ST STEPHENS UNTD CH741-2085
TALLIS EDW J REV 741-2085
8525 MUCHOW WM E 741-2413
8555 HARTWIG GLENWOOD 741-3751
8585 ZERBST WM F 741-2094
ND # HOCHADEL ALBERT 688-7534+1
* 1 BUS 32 RES 15 NEW

TONAWANDA CRK RD 14094 LOCKPORT

7108 REINHARDT OTTO 741-3203
7299 BROWN P L 741-3273
7305 MISTLER RALPH N 741-2015 0

ZIP 14032 CLARENCE CNTR

8260 TURNER ALBERT F 741-2115 0
8270 FORGIE ANN 741-2764+1
8300 KAMENS GUSTAV E 741-3162 9
8665 CIRRINCIONE A 741-2096+1
8675 SHERMAN ROGER L 741-3175+1
8745 DABOLT THOS 741-3823
8750 PLESS HOWARD E 741-3355
8760 MILLER SAML A 741-3350
8790 ZIMMERMAN WALTER J 741-3652 0
8800 KLEIN MICHL 741-2849 8
RATZEL EILEEN Z 741-3020 0
8820 SIMON RICHD L 741-3360 8
8856 NORTON WM P 741-2056
8866 SIMON ELLA 741-9978 8
8880 BEASER DENNIS O 741-3003
8890 BOGARDUS GLENN 741-3361
8900 BURESCH OSWALD H 741-3381
NOSACKA ROSE 741-3381
8910 MANTELLI ALBERT L 741-2082 9
8920 GRABOWSKI WALTER E 741-2772
8930 MARTIN FRED C 741-3586 0
8940 BARNES EDW H 741-2064
8945 GEORGE ROSE M 741-2243
GEORGE WM B 741-3710
8970 SMITH CLETUS J 741-3736
9005 RENNER RUSL J 741-2273
9025 SAUSNER FRANK D 741-2422
9065 SCHWEIGERT RAYMOND 741-2603
9155 KOCZENT JOHN 741-3735
9185 REISIG DAVID L 741-3712+1
9205 DENES LOUIS 741-2070 8
9223 FITZGERALD DOROTHY 741-3282
9240 MONK FORREST 741-2457
9244 ODDO MARGARET M 741-3851
9265 RASTELLI ANDREW 741-2128
9270 GEIB EDW F 741-2023
9275 BOSTWICK CHAS A 741-3387 9
9280 HOUSEHOLDER ROGER 741-3370
9300 EDWARDS GEO L 741-3859
9320 TIEDT PAUL 741-2067
9330*ENDURO LITE CO 741-2119 9
WATERS EDW C 741-2119
9350 VALLEY MICHL D 741-9975
9410 DIEHL CARL I 741-2259
9415*BERNARDIS GENRL STR741-3567+1
EICHINGER HOWARD 741-3301+1
9500 HALBACH ROBT H 741-3377
9540 MATTESON DONALD 741-2297 9
9624 VANBOURGONDIEN JOHN741-2110
9625 SAVAKINAS ROBERT 741-3220+1
9630 VANBOURGONDIEN H 741-2288
9735 KROLIKOWSKI EUGENE 741-3721
9740 NIETHE EDW A 741-3072
9755 BRAUER CLARENCE H 741-3235
9895 ANDREWS ROGER H 741-2459
9900 LASAL LILLIAN MRS 741-2417
10005 HORAN GEO 741-2536
10055 CUDNEY DENNIS J 741-3073 9
10070 KLEINFELDER JUDSON 741-2489
10080 SHEPHARD CHAS R 741-2073
10195 VITO LAWRENCE J 741-2445 9
ND # KINZELMAN DORIS H 741-9959
ND # KUNZELMAN CHAS 741-9959
ND #*PFENNIG HARVEY H 741-3714
* 3 BUS 64 RES 7 NEW

TONAWANDA CRK RD 14120 N TON

170 SCHRECKENGOST T JR 692-8644+1
175 DAROSA ROGERIO V 694-3159+1
KROCZEK STANLEY J 695-3679 8
181 CZAJA JOS 692-7508 9
MCKENNA PAUL 694-2481 0
187 ELDRIDGE T C 694-2361+1
ELDRIDGE TERRY L 694-4643+1
193 COOK DONALD I 693-2651+1
SPARRER B C 694-7541+1
194 AMACHER WILBUR 692-6051
199 FRIZELLE P S 695-1147+1

.TONAWANDA CRK RD 14120 CONT..

POULOS ARTHUR J 694-0970 0
201 BRAUTLACHT RICHD C 692-0978
PEACOCK DAVID R 692-7487+1
204 REIFEL GEO R 692-1673
207 MARTYN JESSIE J 692-0923 0
213 CLOUDEN THOS W JR 693-7280
RUSSO SALVATORE 694-2573+1
214 WAWRZYNEK RICHD 694-0125 8
219 DETRIO JAS R 694-3563
PROTAIN HERBERT LEE692-0487
224 BECKER E 692-0828+1
229 WOLFGRAM CURTIS H 693-8954+1
239 ANDREWS EDWIN L 695-2974+1
SLEDGE JOHN F 694-2647+1
244 WEHLING LOREN A 693-4342
245 AGATE JOSEPH HARLD 695-3345+1
251 FLAGG JAMES R 694-4764+1
GRAFF ROBERT A 693-3872 9
254 BRENON LEO H JR 692-7219
282 MIKOLAJCZAK FRANK 694-7250+1
292 RYAN JAS J 692-6947+1
300 CARNEVALE DAN J 692-5964 9
330 MOE CARL E 693-4988
343 HARROD SAML S 694-2544 8
346 KUMAR STANLEY F 693-1346+1
350 ORLOWSKI EVELYN RN 692-4555
351 BERNSTEIN MICHL 694-2391
359 MERLINO VINCENT 694-1643+1
360 TUFILLARO JOHN L 692-4736
367 CARLIN RICHD J 694-5731 9
375 BROWN D L 692-3061+1
381 CUENIN ROBERT L 692-0712+1
385 SIRACUSE SAML 692-2362 0
389 TESTA DONALD P 693-6967
403 MICHEL KENNETH A 694-5787
410 MOFFAT RUSL 695-2696
411 LIVINGSTON WM J 694-2987
419 PELS ROLLIN K 693-2023
427*FIX FREDK A 693-2982 8
445 PUTT RALPH J 694-1667
468 SMERNO JOHN 693-4142
480 VERGILS NORMAN C 693-8193
VERGILS PAUL C 694-2081 9
481 ROSENBERG WARREN 692-4065+1
491 ERICKSON ERNEST 695-2039
507 KRYWALSKI GERARD 694-0578
523 FLOWERS RICHD T 695-3947 8
535 HOBLER EARL G 693-6333
545 MARSHALL ROBT L 693-6774 0
555 HEILEMANN ALBERT L 693-6236
575 TISCHENDORF PHILP 692-1139
615 SOMMER VICTOR L 693-8223
701 BRUNNER WM J 694-2119
745 VANTINE MARVIN F 693-2688+1
753 BUSH RAYMOND 692-2473
801 BUSH STUART N 693-6661 9
833 BILLINGS E R 692-1810 9
945 REICHMUTH BERNARD B693-4322 0
959 ELNISKI JOHN B 693-7936
961 SATTELBERG RICHD A 692-0802+1
971 KING ROBT G 692-5921
981 ARENA RUSL R 693-7828 8
ARENA RUSSELL 692-5869
991 SCHAFER WM 692-4828
1011 EHRMANN LEO P JR 692-1310+1
1031 FREDERICK HAROLD C 695-1091 0
1085 WIGLER FLOYD 692-1271 0
1160 SUTER AUGUST C 693-3178+1
1170 AMICO JOS J 692-6426
1180 PETTIS ANTHONY W 693-9992
1493 DOBROVOLNY DALE C 692-6388
1500 LOTZ TED 694-7259+1
1591 BAYER EARL D 692-5122
DUTTON MICHAEL F 692-0372+1
1731 BRITTAIN D L 693-3239
1851 TURCHIARELLI WM 693-8368 9
1855 HEIM KENNETH L 693-2974+1
1921*PAPKE WM CO 693-5245
PAPKE WM F 3D 694-5717
1961 BARCZYKOWSKI R 694-2838 0
*MILLSTREAM INS AGCY694-2838 0
1973 STEGNER FRANCIS E 693-0075
1975 DAVIS WALTER P 692-2517+1
2061 WHITEHEAD JAS 693-8594
2100 BRUNDAGE ALVA H 693-9710+1
2261 ARNOLD DELWYN G 695-1151
2271 STOCKER ALAN F 695-3649 8
2285 DOLL ROY W 692-4920
2331 KOHL ROBT J 695-1107
2350 POR STEPH MRS 693-0009 8
2381 CLARE RICHARD 695-2243+1
2421 SPOTH CHESTER E 693-5966 9
2439 TRUESDALE ALBERT T 692-2879+1
2505 DEDO DANL J 693-5777 9
2511 SMITH HAROLD J SR 693-0041+1
2571 PEDDER ELMER W 695-1816 0
2625 WESTPHAL PHILIP H 688-8349+1
2715 KOHL RAYMOND P 688-7523+1
SPOTH DONALD 688-7644+1
SPOTH RAYMOND 688-7637+1
2737 CLARK EARL C 688-7968+1
2773 HARMEL RALPH 688-7979+1
2791 DONNER CLEMENT J 688-7505+1
2797 KAMPSHOFF FRANCIS 688-7434+1
2809 MALLOW WM G 689-8756+1
2825 MCADAM FITZGERALD 688-7513+1
2841 GRASSO RUSL R 689-9088+1
2842 MITCHELL THOS B 688-7570+1
2861 BEDDOME R A 688-7560+1
2900 HEIMILLER GERARD E 688-8292+1
2910 BEALS NELSON E 689-8767+1
2930 SABLE DAVID E 689-8502+1
2940 RYDZEWSKI A F 688-7556+1
3049 ORTNER JOHN F 689-8519+1
3099 SMOUSE ROSE MRS 688-9635+1
3109 DESANTIS MICHAEL C 689-8554+1
3119 HALLGREN FREDK C 688-6786+1
3129 FOOR BERNARD E 688-7704+1
3130 DAIGLER OSCAR 688-7959+1
3139 SANMARCO VINCENT 688-7795+1
3140 WESTNER DONALD G 688-7666+1
3149 BOWMAN JAS O 688-7785+1

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1971 TUPELO LN

SOURCE: HAINES

STREET NOT LISTED

1968 TONAWANDA CREEK RD

SOURCE: POLKS

STREET NOT LISTED

1968 TUPELO LN

SOURCE: POLKS

STREET NOT LISTED

1963 TONAWANDA CREEK RD

SOURCE: POLKS

STREET NOT LISTED

1963 TUPELO LN

SOURCE: POLKS

STREET NOT LISTED

HISTORICAL AERIALS

Project Property: 75 Tupelo Lane Phase I ESA
75 Tupelo Lane
Buffalo NY

Project No: H22.008.001

Requested By: C&S Companies

Order No: 23062600676

Date Completed: June 28,2023

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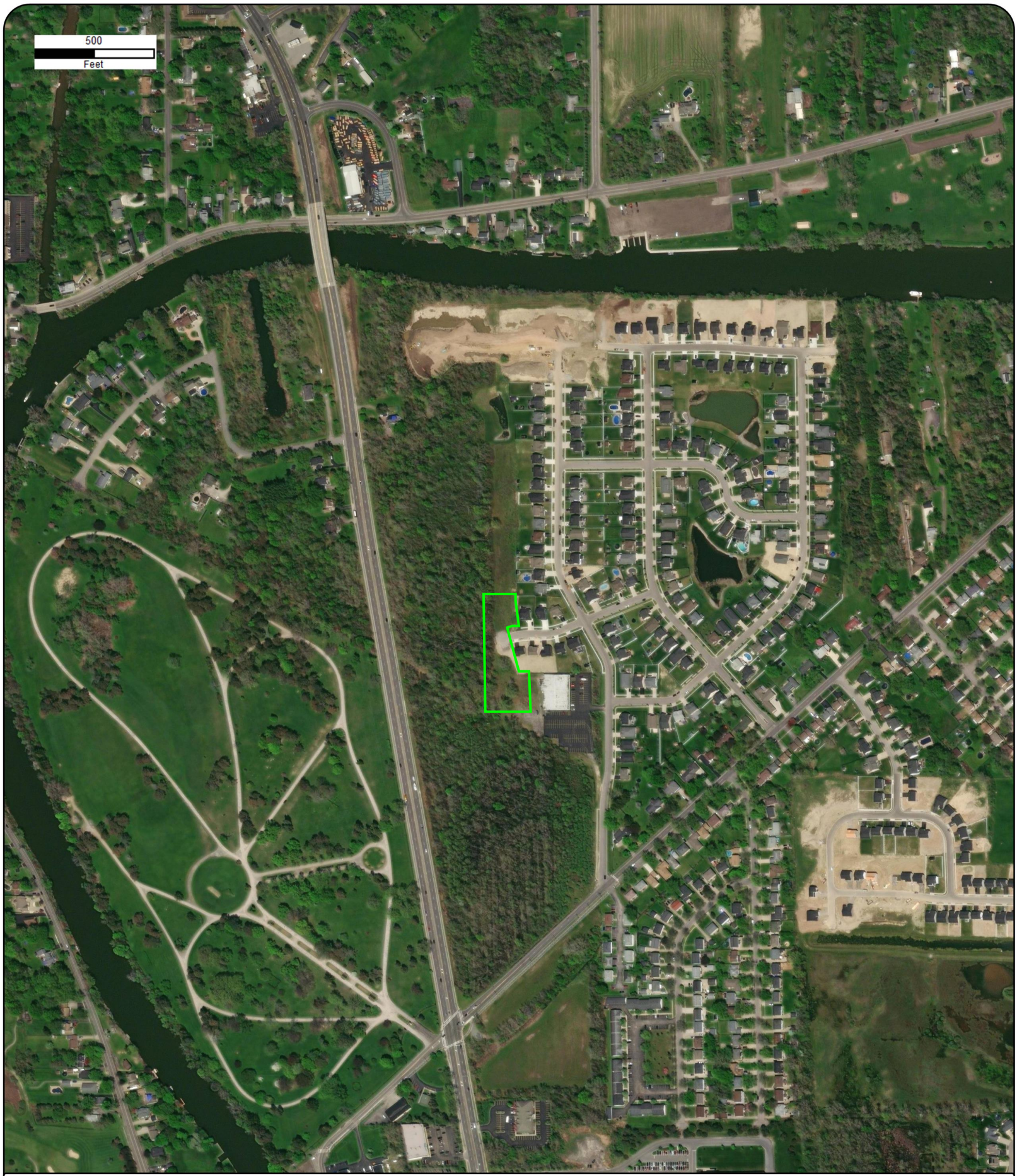
Date	Source	Scale	Comments
2022	MAXAR TECHNOLOGIES	1" = 500'	
2021	United States Department of Agriculture	1" = 500'	
2019	United States Department of Agriculture	1" = 500'	
2017	United States Department of Agriculture	1" = 500'	
2015	United States Department of Agriculture	1" = 500'	
2013	United States Department of Agriculture	1" = 500'	
2011	United States Department of Agriculture	1" = 500'	
2009	United States Department of Agriculture	1" = 500'	
2008	United States Department of Agriculture	1" = 500'	
2006	United States Department of Agriculture	1" = 500'	
1995	United States Geological Survey	1" = 500'	
1981	United States Geological Survey	1" = 500'	Best Copy Available
1972	United States Geological Survey	1" = 500'	
1963	United States Geological Survey	1" = 500'	
1958	Army Mapping Service	1" = 500'	Best Copy Available
1951	Agricultural Stabilization & Conserv. Service	1" = 500'	Adjacent Frame Unavailable
1927	FAIRCHILD	1" = 500'	



Year: 2022
Source: MAXAR
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS

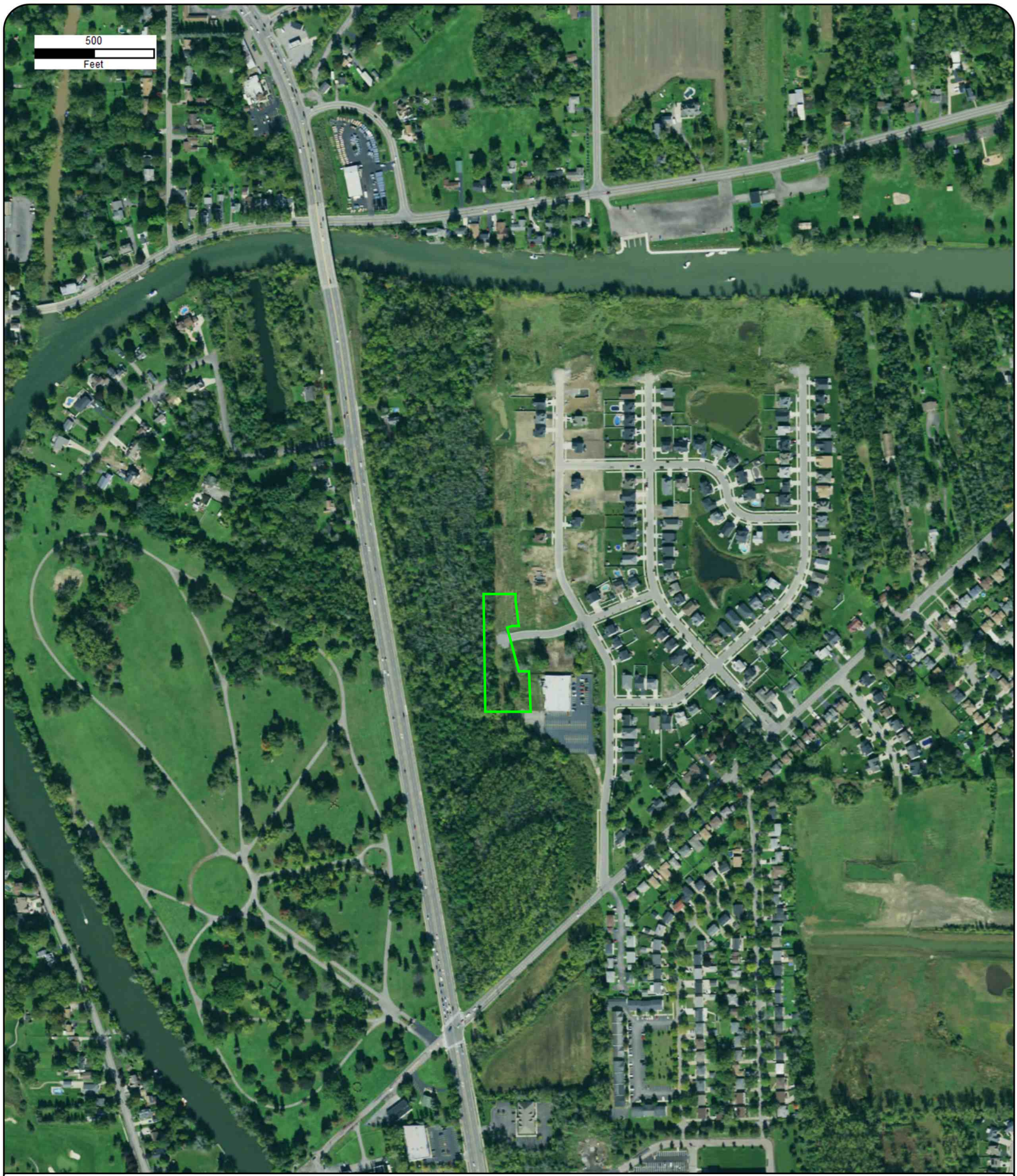


Year: 2021
Source: USDA
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



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Source: USDA
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Comment:

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Approx Center: -78.82391199,43.04699403

Order No: 23062600676

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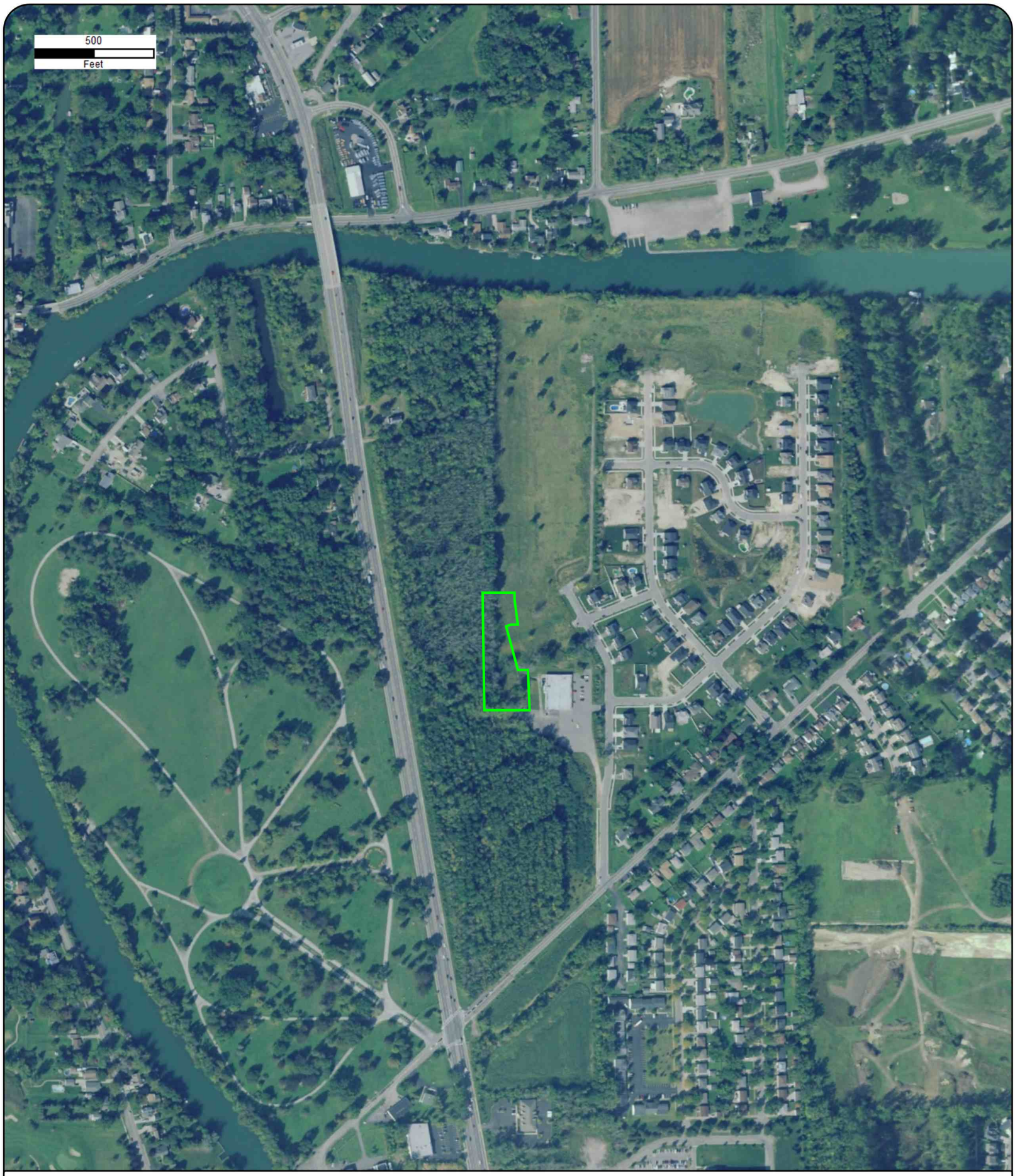

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Comment:

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Order No: 23062600676

ERIS



Year: 2015
Source: USDA
Scale: 1" = 500'
Comment:

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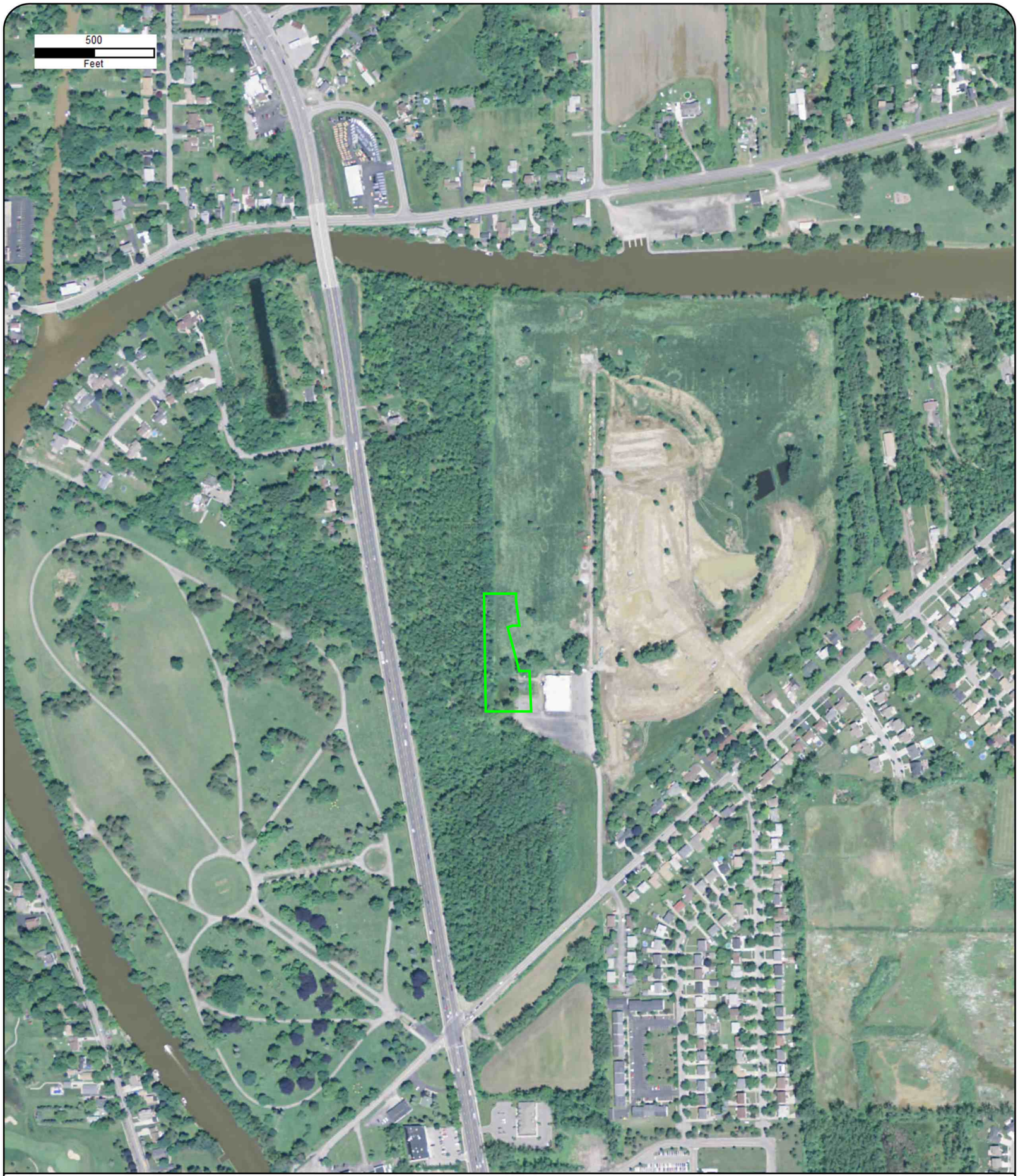
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



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Source: USDA
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



Year: 2011
Source: USDA
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



Year: 2009
Source: USDA
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



Year: 2008
Source: USDA
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



Year: 2006
Source: USDA
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



Year: 1995
Source: USGS
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

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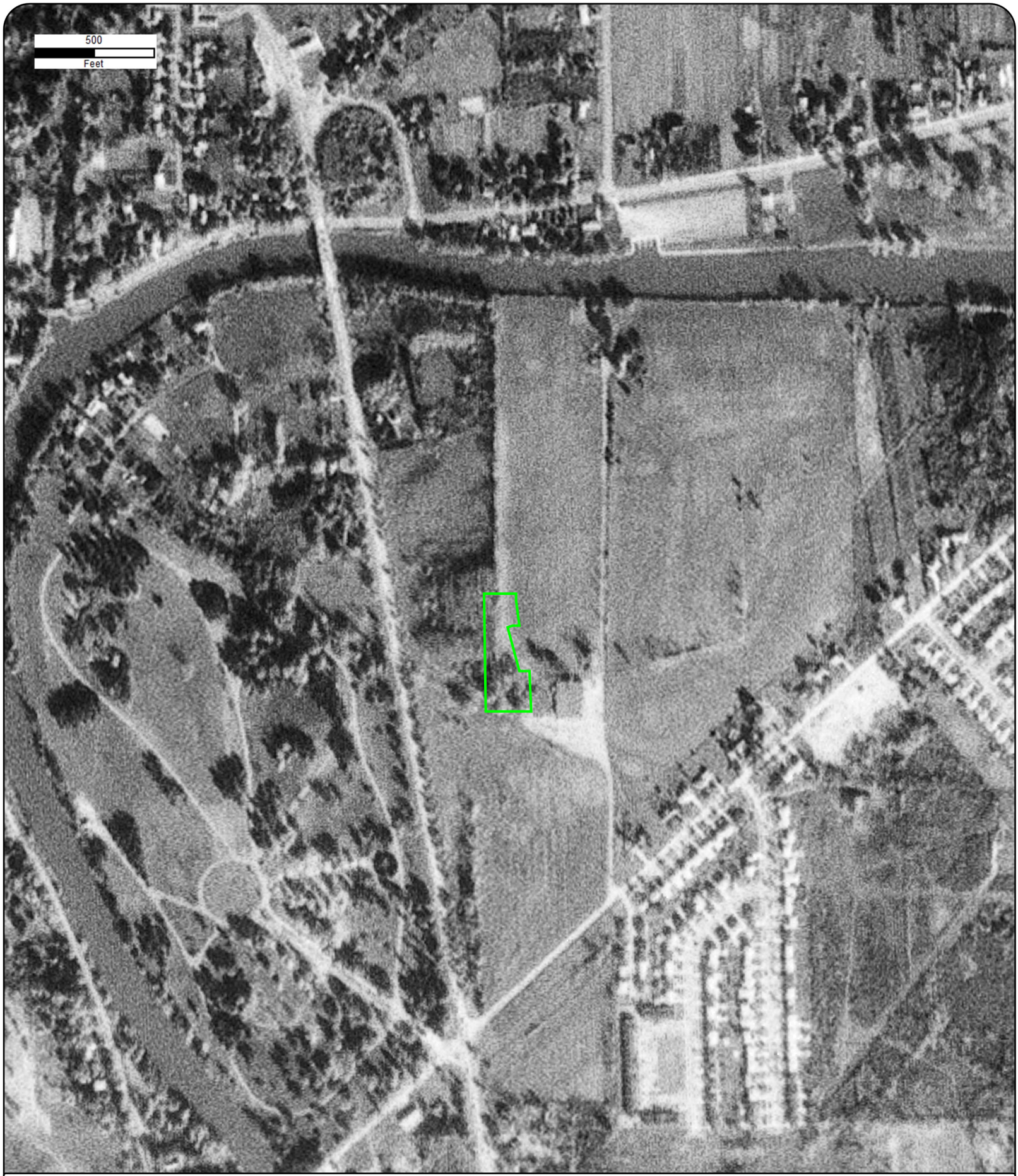

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Scale: 1" = 500'
Comment: Best Copy Available

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Approx Center: -78.82391199,43.04699403

Order No: 23062600676

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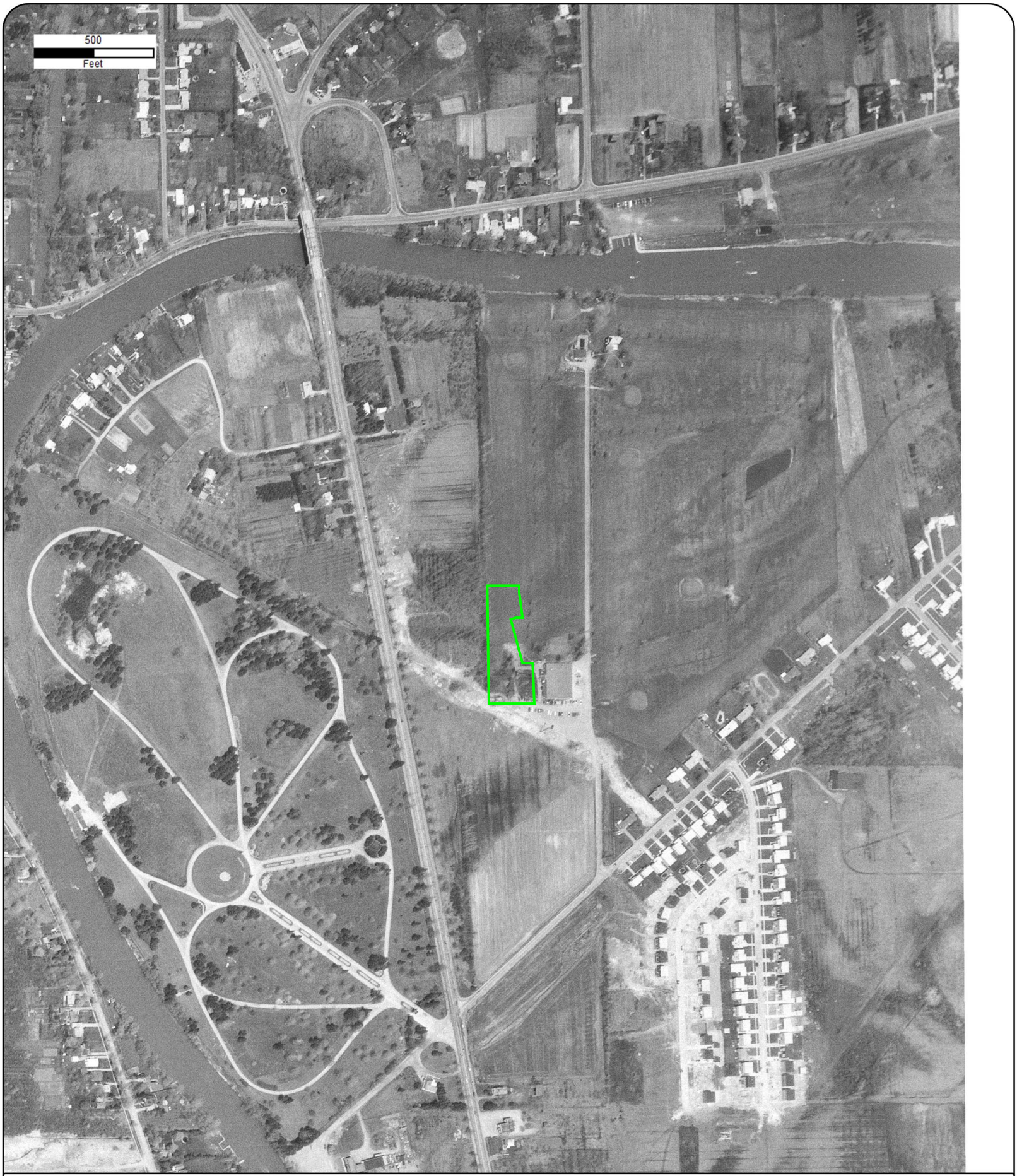

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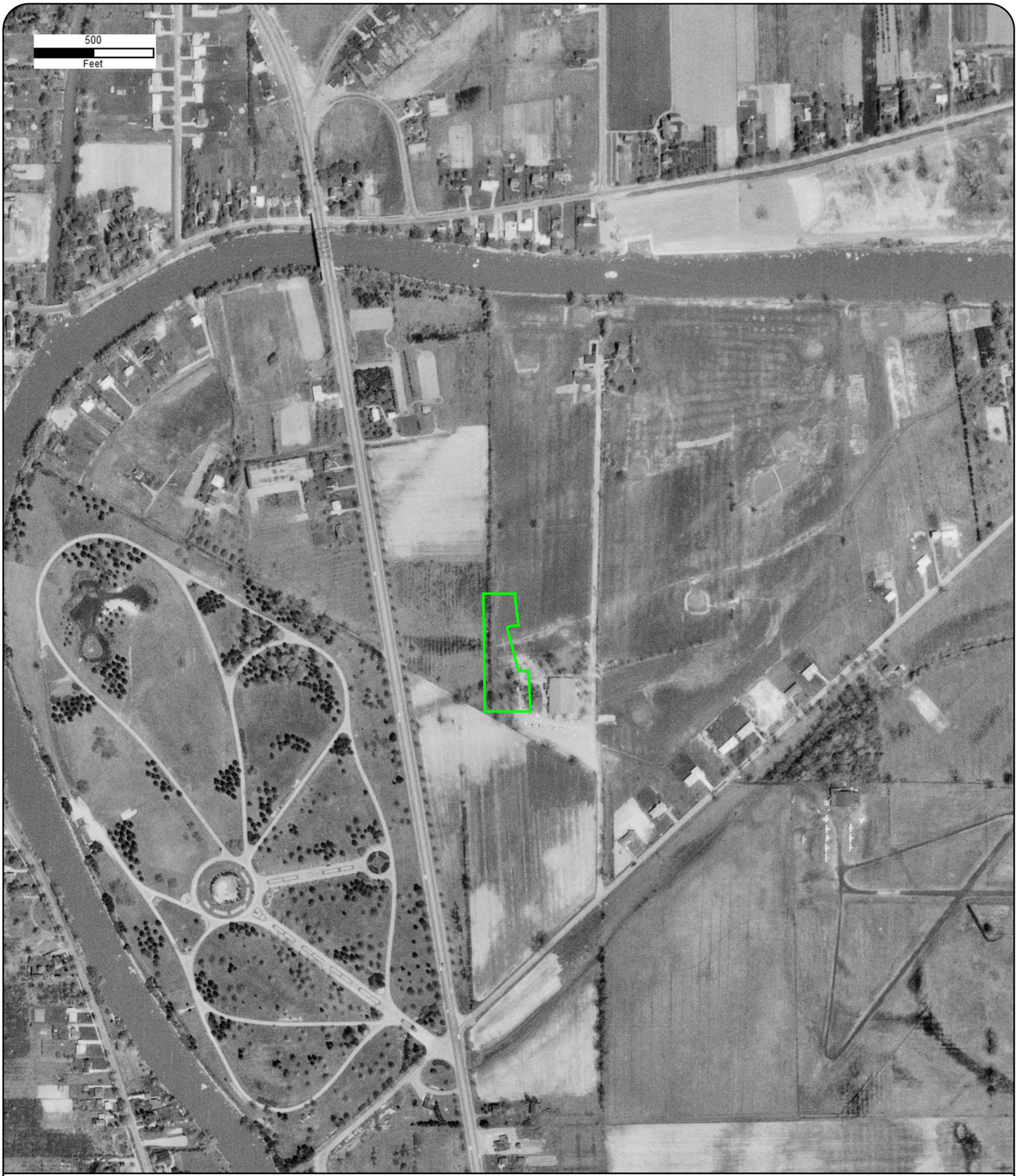
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



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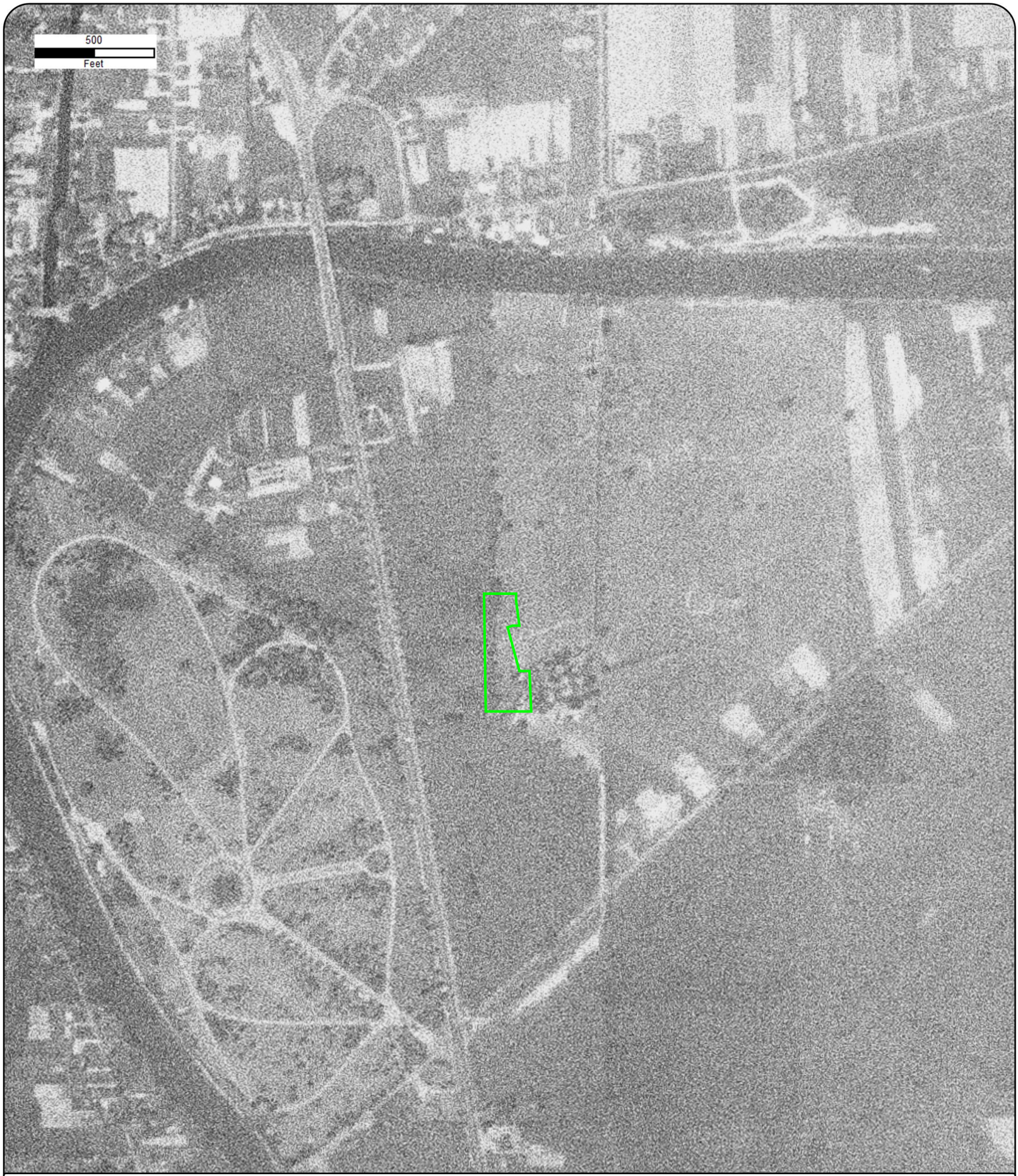
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



Year: 1958
Source: AMS
Scale: 1" = 500'
Comment: Best Copy Available

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS

500
Feet



Year: 1951
Source: ASCS
Scale: 1" = 500'
Comment: Adjacent Frame Unavailable

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS



Year: 1927
Source: FAIRCHILD
Scale: 1" = 500'
Comment:

Address: 75 Tupelo Lane, Buffalo, NY
Approx Center: -78.82391199,43.04699403

Order No: 23062600676

ERIS

DATABASE REPORT

Project Property:	*75 Tupelo Lane Phase I ESA* *75 Tupelo Lane* *Buffalo NY*
Project No:	*H22.008.001*
Report Type:	*Database Report*
Order No:	*23062600676*
Requested by:	*C&S Companies*
Date Completed:	*June 26, 2023*

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Executive Summary

Property Information:

Project Property:		*75 Tupelo Lane Phase I ESA* *75 Tupelo Lane Buffalo NY*
Project No:		*H22.008.001*
Coordinates:		
	Latitude:	*43.04699403*
	Longitude:	*-78.82391199*
	UTM Northing:	*4,768,331.44*
	UTM Easting:	*677,237.09*
	UTM Zone:	*UTM Zone 17T*
Elevation:		*578 FT*

Order Information:

Order No:	*23062600676*
Date Requested:	*June 26, 2023*
Requested by:	*C&S Companies*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
City Directory Search	*CD - 2 Street Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*
Vapor Screening Tool	*Vapor Screening Tool*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	**1**	**1**	-	**2**
CERCLIS	Y	0.5	0	0	**1**	**1**	-	**2**
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	**1**	**1**	-	**2**
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	0	**1**	-	-	**1**
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
DOE FUSRAP	Y	1	0	0	0	0	0	0
State								
SHWS	Y	1	0	0	**1**	**1**	0	**2**
DELISTED SHWS	Y	1	0	0	0	0	0	0
HSWDS	Y	1	0	0	0	0	0	0
VAPOR	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
LANDFILL INACTIVE	Y	0.5	0	0	0	0	-	0
WASTE TIRE	Y	0.5	0	0	0	0	-	0
RECYCLING	Y	0.5	0	0	0	0	-	0
LST	Y	0.5	0	0	**1**	**3**	-	**4**
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	0	0	-	-	0
TANKS	Y	0.25	0	0	0	-	-	0
MOSF	Y	0.5	0	0	0	0	-	0
CBS	Y	0.25	0	0	0	-	-	0
DELISTED TANKS	Y	0.25	0	0	0	-	-	0
DELISTED COUNTY	Y	0.25	0	0	0	-	-	0
ENG	Y	0.5	0	0	0	0	-	0
INST	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
ERP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0
County	***No County databases were selected to be included in the search.***							
Additional Environmental Records								
Federal								
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
ERNS PFAS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0
PFAS IND	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
MRDS	Y	1	0	0	0	0	0	0
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
UIC	Y	PO	0	-	-	-	-	0
MGP	Y	1	0	0	0	0	0	0
NY SPILLS	Y	0.125	0	**1**	-	-	-	**1**
PFAS CONTAM	Y	0.5	0	0	0	0	-	0
PFAS	Y	0.5	0	0	0	0	-	0
PFAS LANDFILL	Y	0.5	0	0	0	0	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
NY MANIFEST	Y	0.125	0	0	-	-	-	0
REC MANIFEST	Y	0.25	0	0	0	-	-	0
GEN MANIFEST	Y	0.125	0	0	-	-	-	0
E DESIGNATION	Y	0.125	0	0	-	-	-	0
COOLING TOWERS	Y	0.125	0	0	-	-	-	0
TIER 2	Y	0.125	0	0	-	-	-	0
PROJECTS	Y	0.25	0	0	0	-	-	0
AIR PERMITS	Y	0.25	0	0	0	-	-	0
LIEN	Y	PO	0	-	-	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County	***No County additional environmental record sources available for this State.***							
	Total:		0	**1**	**6**	**7**	0	**14**

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

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

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	NY SPILLS	ON THE SOIL	3400 NIAGARA FALLS BLVD WEST AMHERST NY 14228 ***Spill No* | *Close Date:*** 1602875 | 2017-04-03 00:00:00	NW	0.11 / 582.81	2	19
2	RCRA NON GEN	OCCIDENTAL CHEMICAL CORP	168 TONAWANDA CRK RD AMHERST NY 14228-1209 ***EPA Handler ID:*** NYD986890010	SSE	0.15 / 798.40	-3	20
3	SHWS	Creekside Golf Course	170 Tonawanda Creek Road Amherst NY 14120	SSE	0.15 / 801.00	-3	22
3	SEMS ARCHIVE	CREEKSIDE GOLF COURSE	170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120 ***EPA ID:*** NYD981560733	SSE	0.15 / 801.00	-3	25
4	CERCLIS	CREEKSIDE GOLF COURSE	170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120 ***Site EPA ID:*** NYD981560733	SSE	0.15 / 801.60	-3	26
4	CERCLIS NFRAP	CREEKSIDE GOLF COURSE	170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120 ***Site EPA ID:*** NYD981560733	SSE	0.15 / 801.60	-3	28
5	LST	LEO BRENON TANK	254 TONAWANDA CREEK ROAD AMHERST NY ***Spill No* | *Close Date:*** 9516836 | 1996-04-29 00:00:00	ESE	0.19 / 986.48	-3	29
6	LST	AMHERST WWTP	55 TONAWANDA CREEK ROAD AMHERST NY ***Spill No* | *Close Date:*** 9404539 | 1994-10-25 00:00:00	SSW	0.32 / 1,687.16	-4	30
7	CERCLIS	NORTH TONAWANDA LF	WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120 ***Site EPA ID:*** NYD000514182	WSW	0.40 / 2,131.50	-7	31
7	CERCLIS NFRAP	NORTH TONAWANDA LF	WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120 ***Site EPA ID:*** NYD000514182	WSW	0.40 / 2,131.50	-7	33
7	SEMS ARCHIVE	NORTH TONAWANDA LF	WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120	WSW	0.40 / 2,131.50	-7	33

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			EPA ID: NYD000514182				
8	LST	IN CONSTRUCTION ZONE	LOIUSA ST @ OLD FALLS BLVD. NORTH TONAWANDA NY ***Spill No	Close Date:*** 0650619 | 2007-01-09 00:00:00	WNW	0.44 / 2,341.12	-3	34
9	LST	KWIK FILL	3945 NIAGARA FALLS BLVD WHEATFIELD NY ***Spill No	Close Date:*** 8804278 | 1989-02-06 00:00:00	NNW	0.47 / 2,457.96	2	35
10	SHWS	Botanical Gardens	Old Falls Boulevard North Tonawanda NY 14120		SW	0.47 / 2,499.38	-8	36

Executive Summary: Summary by Data Source

Standard

Federal

SEMS ARCHIVE - SEMS List 8R Archive Sites

A search of the SEMS ARCHIVE database, dated Jan 25, 2023 has found that there are 2 SEMS ARCHIVE site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
CREEKSIDE GOLF COURSE	170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120 ***EPA ID**: NYD981560733*	SSE	0.15 / 801.00	3
NORTH TONAWANDA LF	WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120 ***EPA ID**: NYD000514182*	WSW	0.40 / 2,131.50	7

CERCLIS - Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS

A search of the CERCLIS database, dated Oct 25, 2013 has found that there are 2 CERCLIS site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
CREEKSIDE GOLF COURSE	170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120 ***Site EPA ID**: NYD981560733*	SSE	0.15 / 801.60	4
NORTH TONAWANDA LF	WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120 ***Site EPA ID**: NYD000514182*	WSW	0.40 / 2,131.50	7

CERCLIS NFRAP - CERCLIS - No Further Remedial Action Planned

A search of the CERCLIS NFRAP database, dated Oct 25, 2013 has found that there are 2 CERCLIS NFRAP site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
CREEKSIDE GOLF COURSE	170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120 ***Site EPA ID**: NYD981560733*	SSE	0.15 / 801.60	4
NORTH TONAWANDA LF	WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120 ***Site EPA ID**: NYD000514182*	WSW	0.40 / 2,131.50	7

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Apr 24, 2023 has found that there are 1 RCRA NON GEN site(s) within

approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
OCCIDENTAL CHEMICAL CORP	168 TONAWANDA CRK RD AMHERST NY 14228-1209	SSE	0.15 / 798.40	2
	***EPA Handler ID**: NYD986890010*			

State

SHWS - Registry of Inactive Hazardous Waste Disposal Sites in New York State

A search of the SHWS database, dated Mar 27, 2023 has found that there are 2 SHWS site(s) within approximately 1.00 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Creekside Golf Course	170 Tonawanda Creek Road Amherst NY 14120	SSE	0.15 / 801.00	3
Botanical Gardens	Old Falls Boulevard North Tonawanda NY 14120	SW	0.47 / 2,499.38	10

LST - Leaking Storage Tanks

A search of the LST database, dated May 3, 2023 has found that there are 4 LST site(s) within approximately 0.50 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
KWIK FILL	3945 NIAGARA FALLS BLVD WHEATFIELD NY	NNW	0.47 / 2,457.96	9
	***Spill No**	**Close Date**: 8804278	1989-02-06 00:00:00*	

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
LEO BRENON TANK	254 TONAWANDA CREEK ROAD AMHERST NY	ESE	0.19 / 986.48	5
	***Spill No**	**Close Date**: 9516836	1996-04-29 00:00:00*	
AMHERST WWTP	55 TONAWANDA CREEK ROAD AMHERST NY	SSW	0.32 / 1,687.16	6
	***Spill No**	**Close Date**: 9404539	1994-10-25 00:00:00*	
IN CONSTRUCTION ZONE	LOIUSA ST @ OLD FALLS BLVD. NORTH TONAWANDA NY	WNW	0.44 / 2,341.12	8
	***Spill No**	**Close Date**: 0650619	2007-01-09 00:00:00*	

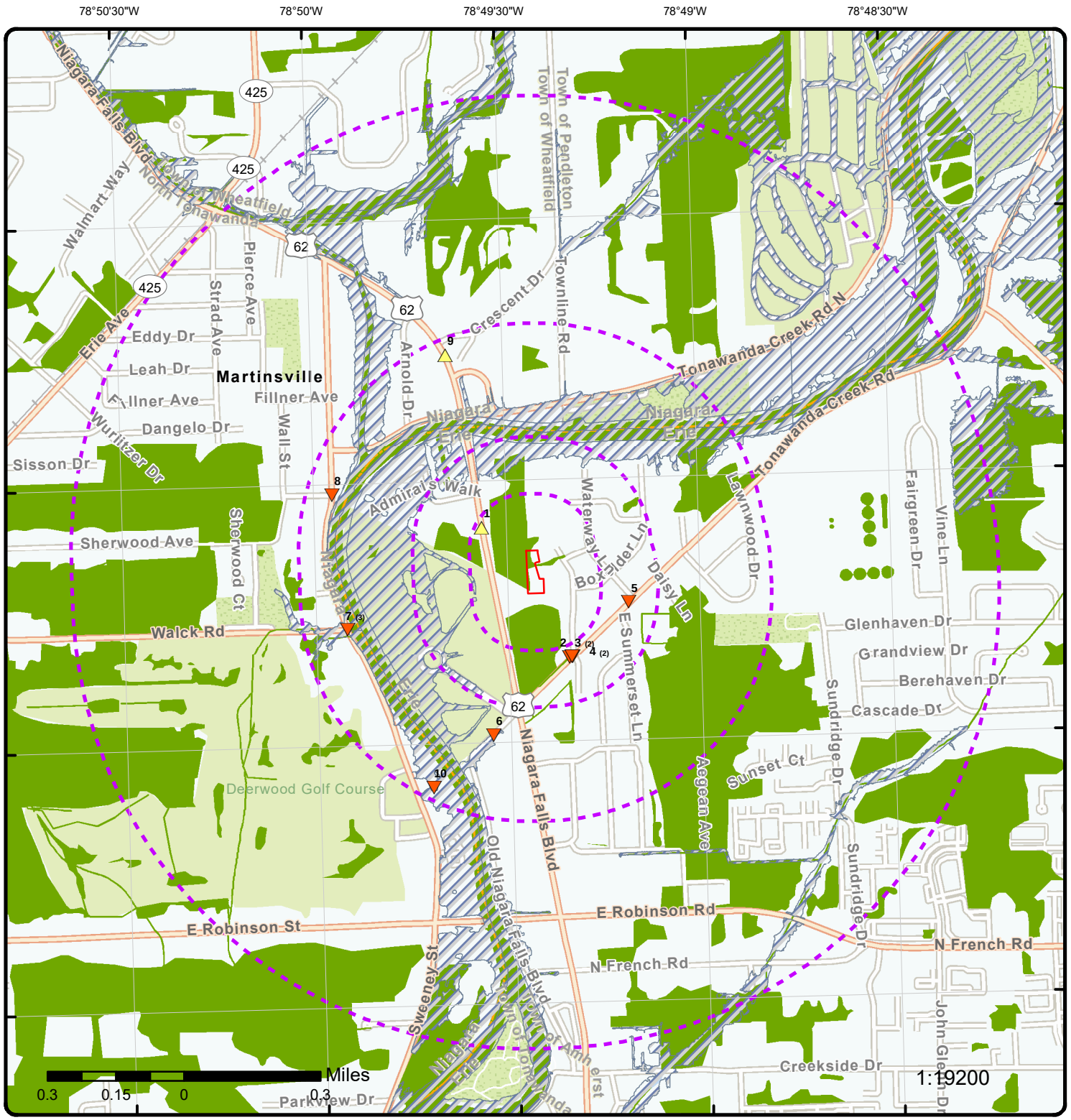
Non Standard

State

NY SPILLS - Spill Incidents Database

A search of the NY SPILLS database, dated May 3, 2023 has found that there are 1 NY SPILLS site(s) within approximately 0.12 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ON THE SOIL	3400 NIAGARA FALLS BLVD WEST AMHERST NY 14228	NW	0.11 / 582.81	1
	Spill No* | *Close Date: *1602875 | 2017-04-03 00:00:00*			



Map: 1.0 Mile Radius

Order Number: 23062600676

Address: 75 Tupelo Lane, Buffalo, NY

ERIS

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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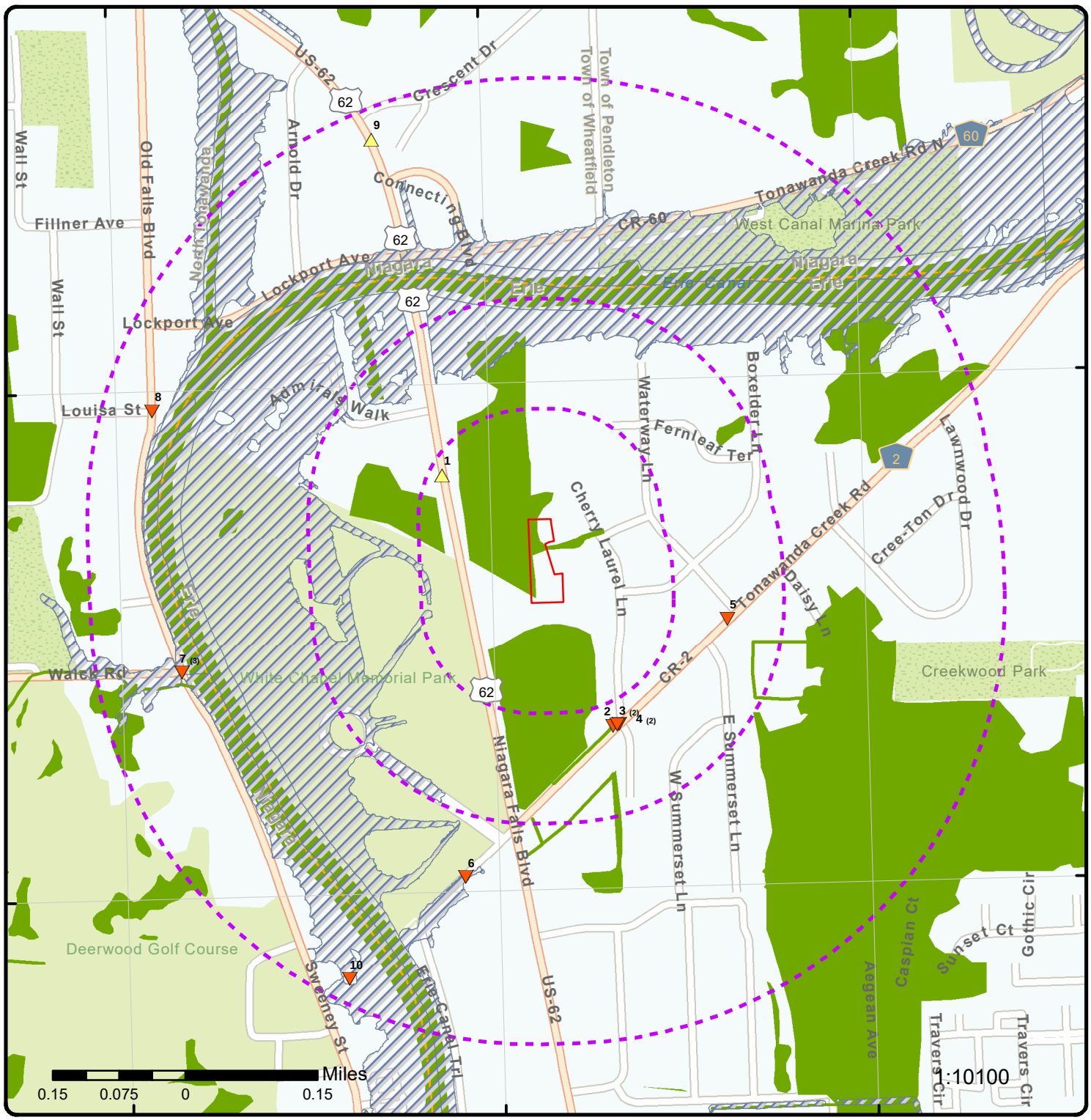

Map: 0.5 Mile Radius

Order Number: 23062600676

Address: 75 Tupelo Lane, Buffalo, NY

ERIS

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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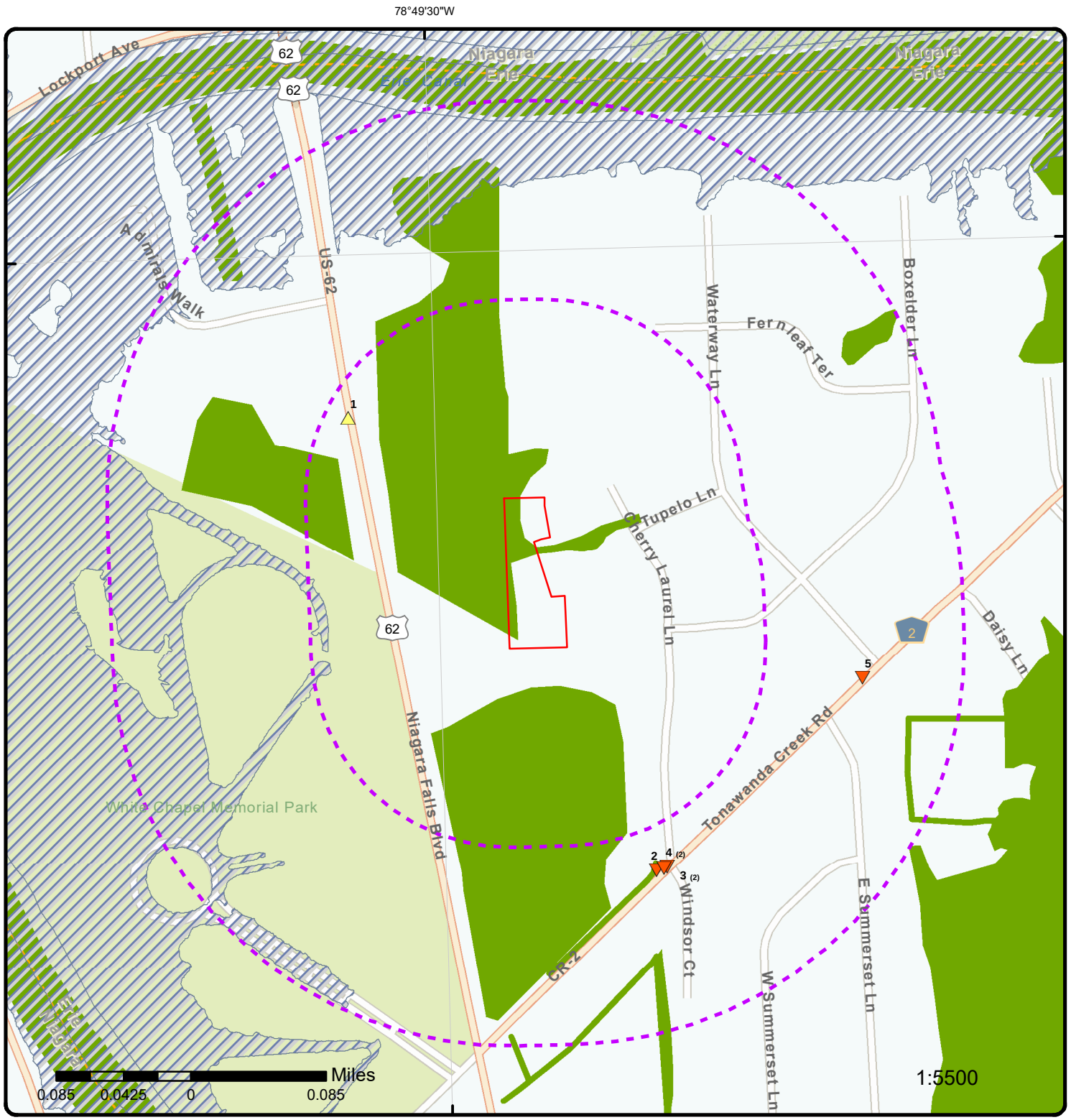

Map: 0.25 Mile Radius

Order Number: 23062600676

Address: 75 Tupelo Lane, Buffalo, NY

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

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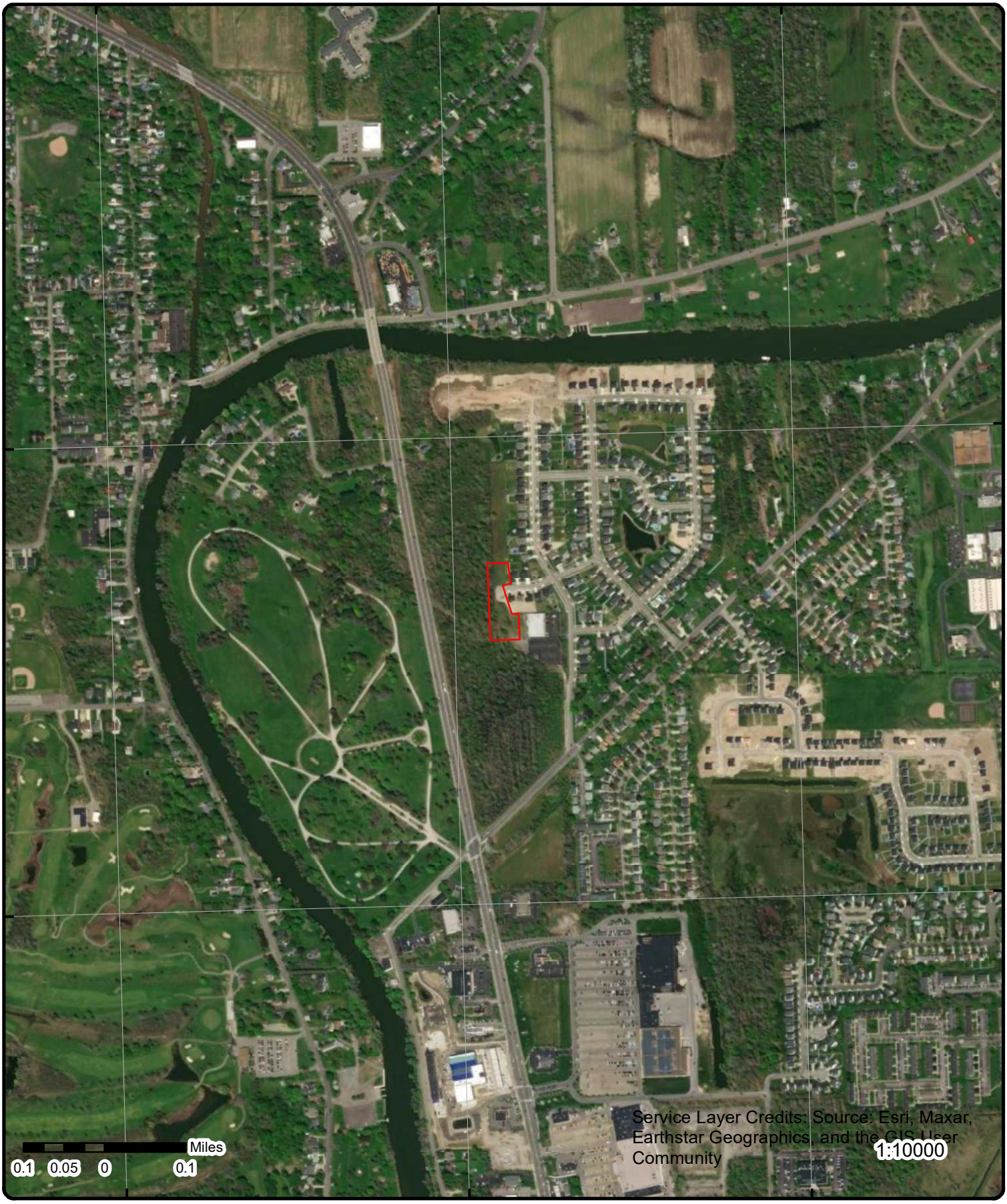

Aerial **Year: 2022**

Order Number: 23062600676

Address: 75 Tupelo Lane, Buffalo, NY

Source: ESRI World Imagery

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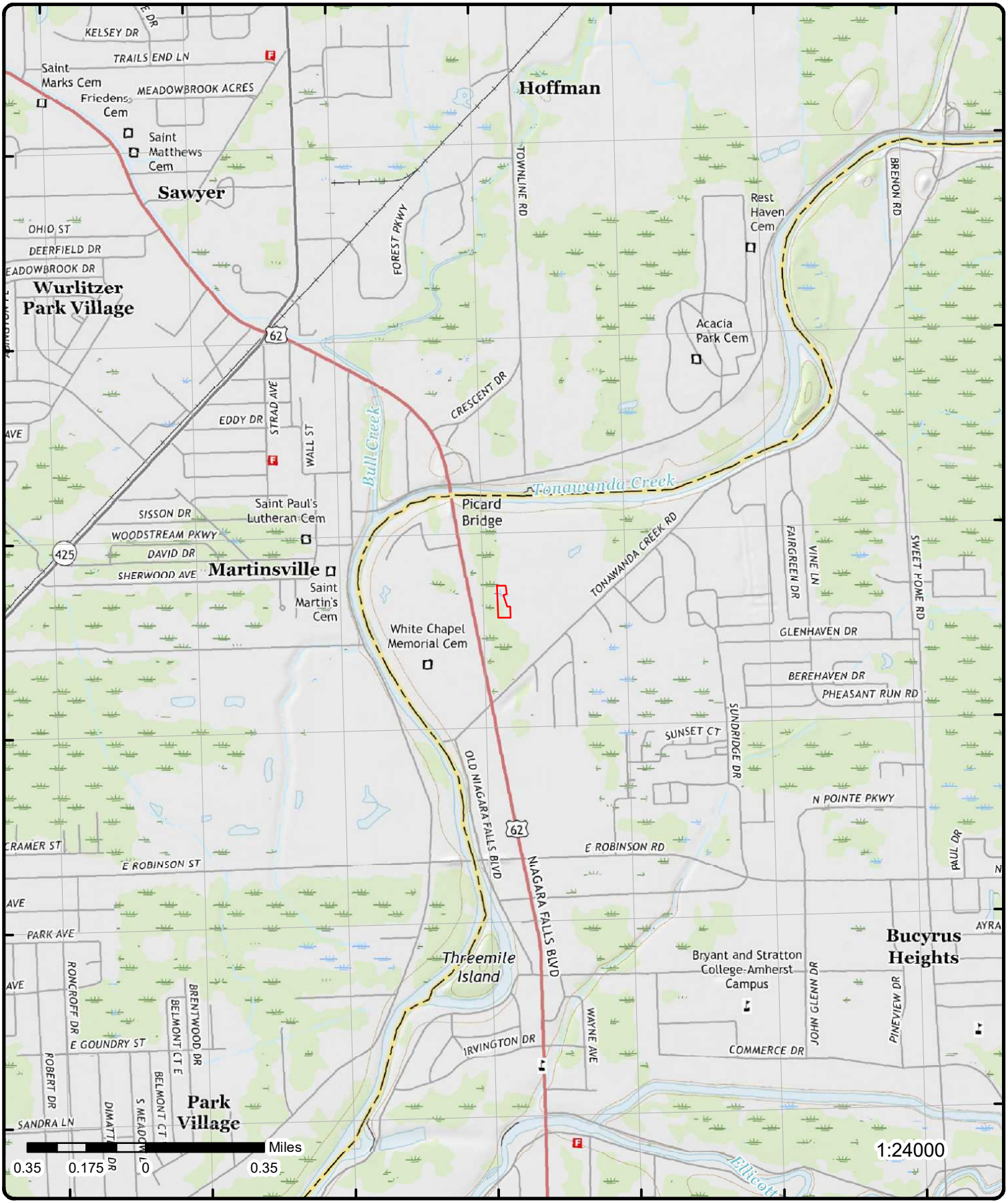

Topographic Map

Year: 2016

Order Number: 23062600676

Address: 75 Tupelo Lane, NY

Quadrangle(s): Tonawanda East, NY

Source: USGS Topographic Map

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Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 1	NW	0.11 / 582.81	579.58 / 2	ON THE SOIL 3400 NIAGARA FALLS BLVD WEST AMHERST NY 14228	NY SPILLS

Spill No:	1602875	**UST Trust:**	False
Site ID:	529304	**Spill Date:**	2016-06-22 12:46:00
DER Facility ID:	483429	**Received Date:**	2016-06-22 14:21:00
CID:		**CAC Date:**	
Program Type:	ER	**Insp Date:**	
SWIS Code:	1522	**Close Date:**	2017-04-03 00:00:00
Water Body:		**Create Date:**	2016-06-22 14:26:00
Class:	C3	**Update Date:**	2017-04-03 12:37:05.173000000
Meets Std:	False	**DEC Region:**	9
Penalty:	False	**Lead DEC:**	RJJONAK
REM Phase:	0	**After Hours:**	False
County:	Erie		
Contributing Factor:	Equipment Failure		
Reported by:	Other		
Referred to:			
Source:	Private Dwelling		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"Spill from a leaking oil tank. Unknown amount leaked but there was at least 100 gallons but probably more. Unknown on clean up. 275 Above ground tank. Is now empty. Filled 5/2/16 and tank took 200 gallons."

DEC Remark:

"6/22/16:SAC TELECON ADRIAN PILLIOD - DISPATCHER #52, ERIE COUNTY EMERGENCY SERVICES NOTIFYING THE COUNTY OF THE SPILL. 6/22/2016: RJJ AT SITE AT 1445...BEHIND THE HOUSE THERE IS A 275 #2 FUEL OIL TANK WHICH IS EMPTY...THERE IS EVIDENCE OF STAINED SOIL UNDERNEATH IT,HOWEVER THERE ARE NO PETROLEUM ODORS...MEET WITH TED GIUSTI,PROPERTY OWNER,AND DISCUSSED HIS OPTIONS...I TOLD HIM THAT HE WILL HAVE TO CONTACT AN ENVIRONMENTAL COMPANY TO EXCAVATE/DISPOSE THIS CONTAMINATED SOIL AND OBTAIN CONFIRMATORY SOIL SAMPLES...HE SAID THAT HE WILL CONTACT A FEW COMPANIES AND OBTAIN QUOTES TO PERFORM THIS WORK...IT DOES APPEAR THAT THIS HAS LEAKED BETWEEN 5/2/16 AND TODAY...MR. GIUSTI WILL CONTACT ME...I DID TELL HIM THAT THIS WILL HAVE TO BEGIN SOON. 6/27/2016: RJJ AT SITE AT 0945...SATURDAY,6/25, MR. GIUSTI HIRED A CONTRACTOR TO EXCAVATE THE PETROLEUM IMPACTED SOIL...THEY EXCAVATED/REMOVED ~75 TONS OF SOIL WHICH IS STAGED ON-SITE...THE EXCAVATION ~ 6'X8'X20' DEEP...WITH HEAVY RAIN LAST NIGHT,THERE IS WATER AT THE BOTTOM OF THIS EXCAVATION WITH A REDDISH COLOR...I INFORMED MR. GUISTI THAT THEY WILL HAVE TO PUMP-OUT/DISPOSE THIS WATER,WHICH HE WILL LATER TODAY...THE EASTWALL IS RIGHT UP TO THE FOUNDATION...THE WESTWALL AND SOUTHWALL APPEAR TO STILL HAVE SOME STAINED SOIL...THE NORTHWALL APPEARS TO HAVE NO STAINING... HOWEVER SINCE THE BOTTOM STILL HAS WATER IN IT,I DID NOT OBSERVE THE FLOOR...MR. GUISTI HAS HIRED APPLUS RTD(ANDY KUSARICK) TO OBTAIN CONFIRMATORY SOIL SAMPLES,WHICH THEY WILL OBTAIN AFTER THE WATER IS PUMPED-OUT, AND ANDY WILL ALSO OVERSEE THE ADDITIONAL EXCAVATION OF THE IMPACTED SOIL AND DISPOSAL. 7/26/16:SAC TELECON ANDY KUCSERIK. MR. KUCSERIK SAID HE CONTACTED THE RP REGARDING THE ADDITIONAL WORK. WHEN HE CONTACTED HIM, THE RP SAID HE HAD ALREADY COMPLETED THE WORK, TOOK THE CONFIRMATORY SAMPLES AND BACKFILLED THE EXCAVATION. MR. KUCSERIK SAID HE RECEIVED THE SAMPLES AND SUBMITTED THEM FOR ANALYTICAL TESTING. 8/17/2016: RECEIVED THE CONFIRMATORY ANALYTICAL RESULTS FROM THE EXCAVATION...ALL THE RESULTS ARE ALL BELOW OUR CP-51 GUIDANCE VALUES..I WILL DISCUSS THIS WITH SAC. 8/18/2016; AFTER DISCUSSING THIS WITH SAC,HE SAID THAT SINCE THE SOIL SAMPLES WERE NOT OBTAINED IN OCCORDANCE WITH OUR SAMPLING REQUIREMENTS,THEY WILL NEED TO DIG 2-12' DEEP,TEST PITS ON THE 2 SIDES OF THIS,AND OBTAIN 1 BOTTOM SOIL SAMPLE FROM EACH PIT...I WILL INFORM THE PROPERTY OWNER. 9/20/2016: ANDY KUCSERIK TELECON RJJ,HE SAID THAT YESTERDAY,THEY GEO-PROBED 2 BORINGS,PER MY INSTRUCTIONS,ON THE PROPERTY...ONE WAS ~12' WEST OF THE HOUSE AND THE OTHER WAS ~4' SOUTH OF THE HOUSE...ANDY SENT IN 2 SOIL SAMPLES AND WILL SEND ME THE ANALYTICAL RESULTS. 10/11/2016: RECEIVED THE ANALYTICAL/REPORT FROM THE 2 SOIL BORINGS...B-2,WHICH IS ~4' SOUTH OF THE EXCAVATION/HOUSE,HAS VOC EXCEEDENCES...AFTER DISCUSSING THIS WITH SAC,HE SAID THAT FURTHER EXCAVATION WILL BE NEEDED...(ALSO INCLUDED IN THIS REPORT ARE THE DISPOSAL RECEIPTS OF THE 24.7 TONS OF PETROLEUM IMPACTED SOIL TAKEN TO THE ENSOL,INC. LANDFILL.)...I HAVE DRAFTED AND SENT A LETTER TO MR. GIUSTI EXPLAINING THE ABOVE AND REQUEST A REPLY BY 11/4/2016. 10/31/2016: TED GIUSTI TELECON RJJ,HE SAID THAT HE WILL OBTAIN QUOTES FROM A FEW ENVIRONMENTAL COMPANIES TO EXCAVATE/DISPOSE ADDITIONAL PETROLEUM IMPACTED SOIL,SOUTH OF THE HOUSE AND WILL KEEP ME INFORMED. 2/21/2017: TED GIUSTI TELECON RJJ,HE SAID THAT HE WILL HIRE ANDY KUCSERIK AS HIS ENVIRONMENTAL CONSULTANT AND USE PARISO TRUCKING TO HAUL/DISPOSE THE CONTAMINATED SOIL,WHEN THEY START EXCAVATING...TED WILL KEEP ME INFORMED. 3/8/2017: ANDY KUCSERIK TELECON RJJ,HE SAID THAT THEY HAVE FINISHED EXCAVATING THE CONTAMINATED SOIL AND THAT HE HAS OBTAINED

THEIR CONFIRMATORY SOIL SAMPLES,PER MY INSTRUCTIONS(1-EASTWALL,1-SOUTHWALL,& 1-BOTTOM,SINCE WE ALREADY HAVE A CLEAN NORTH & WESTWALL SAMPLE)...RJJ AT SITE AT 1100...THE EXCAVATION ~14'x14'x 10' DEEP AND APPEARS TO NOW HAVE NO STAINED SOIL OR ANY PETROLEUM ODORS OF ANY KIND...THEY EXCAVATED SOUTHWARD AND A LITTLE EASTWARD FROM WHERE THEY EXCAVATED BEFORE...ANDY WILL SEND ME THEIR REPORT. 3/23/2017: RECEIVED THE FINAL REPORT FROM ANDY KUCSERIK, WHICH INCLUDES THE DISPOSAL RECEIPTS FOR THE 52.28 TONS OF PETROLEUM IMPACTED SOIL TAKEN TO THE TONAWANDA LANDFILL AND THE CONFIRMATORY ANALYTICAL RESULTS FROM THE EXCAVATION(ALL THE RESULTS ARE ALL BELOW OUR CP-51 GUIDANCE VALUES)...I WILL HAVE SAC REVIEW THIS DATA. 4/3/2017: AFTER REVIEWING THE ANALYTICAL RESULTS/SPILL FILE,SAC SAID THAT WE CAN MAKE THIS SITE 'INACTIVE'...DRAFTED & SENT AN 'INACTIVE' LETTER TO PROPERTY OWNER...SPILL CLOSED OUT."

Material Information

OP Unit ID:	1278136	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	2283017	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	100.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	100.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0001A		
Material Name:	#2 fuel oil		

Spiller Information

Spiller Name:	TED GIUSTI
Spiller Company:	HOMEOWNER
Spiller Address:	265 SMITH RD.
Spiller City:	WEST AMHERST
Spiller State:	NY
Spiller Zip:	14228
Spiller Country:	001
Contact Name:	TED GIUSTI
Contact Phone:	716-435-8568
Contact Ext:	
Latitude:	
Longitude:	

2	***1 of 1***	***SSE***	***0.15 / 798.40***	***575.40 / -3***	***OCCIDENTAL CHEMICAL CORP 168 TONAWANDA CRK RD AMHERST NY 14228-1209***	***RCRA NON GEN***

EPA Handler ID:	NYD986890010
Gen Status Universe:	No Report
Contact Name:	
Contact Address:	WALCK RD , , NORTH TONAWANDA , NY, 14120 , US
Contact Phone No and Ext:	
Contact Email:	
Contact Country:	US
County Name:	ERIE
EPA Region:	02
Land Type:	
Receive Date:	20070101
Location Latitude:	43.044282
Location Longitude:	-78.822367

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2023, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 3
Receive Date: 20070101
Handler Name: OCCIDENTAL CHEMICAL CORP
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19990708
Handler Name: OCCIDENTAL CHEMICAL CORP
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Hazardous Waste Handler Details

Sequence No: 2
Receive Date: 20060101
Handler Name: OCCIDENTAL CHEMICAL CORP
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19900329
Handler Name: OCCIDENTAL CHEMICAL CORP
Source Type: Notification
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator

Waste Code Details

Hazardous Waste Code: X003
Waste Code Description: DESCRIPTION

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Street No:
Street 1: NOT REQUIRED

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Name:	EVERGREEN GOLF COURSE INC	**Street 2:**	
Date Became Current:		**City:**	NOT REQUIRED
Date Ended Current:		**State:**	WY
Phone:	212-555-1212	**Country:**	US
Source Type:	Implementer	**Zip Code:**	99999
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Private	**Street 1:**	NOT REQUIRED
Name:	EVERGREEN GOLF COURSE INC	**Street 2:**	
Date Became Current:		**City:**	NOT REQUIRED
Date Ended Current:		**State:**	WY
Phone:	212-555-1212	**Country:**	
Source Type:	Notification	**Zip Code:**	99999
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Private	**Street 1:**	NOT REQUIRED
Name:	EVERGREEN GOLF COURSE INC	**Street 2:**	
Date Became Current:		**City:**	NOT REQUIRED
Date Ended Current:		**State:**	WY
Phone:	212-555-1212	**Country:**	US
Source Type:	Implementer	**Zip Code:**	99999

Historical Handler Details

Receive Dt:	19900329
Generator Code Description:	Large Quantity Generator
Handler Name:	OCCIDENTAL CHEMICAL CORP
Receive Dt:	20060101
Generator Code Description:	Not a Generator, Verified
Handler Name:	OCCIDENTAL CHEMICAL CORP
Receive Dt:	19990708
Generator Code Description:	Not a Generator, Verified
Handler Name:	OCCIDENTAL CHEMICAL CORP

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
3	1 of 2	SSE	0.15 / 801.00	575.36 / -3	Creekside Golf Course 170 Tonawanda Creek Road Amherst NY 14120	SHWS

Site Code:	56620
HW Code:	915123
Program:	HW
Site Class:	C
Site Name:	Creekside Golf Course
Site Address:	170 Tonawanda Creek Road
City:	Amherst
Zip:	14120
County:	Erie
Region:	9
Town:	Amherst
Latitude:	43.051300000
Longitude:	-78.820772222
SWIS:	1522
Acres:	0.500
Record Added:	1999-11-18 12:00:00
Record Update:	2013-12-03 11:25:00
Updated by:	GPSUTTON
Site Code (Web):	915123
Program Type (Web):	HW
Site Name (Web):	Creekside Golf Course
Site Class (Web):	C
Address1 (Web):	170 Tonawanda Creek Road
Address2 (Web):	
Locality (Web):	Amherst
Zip Code (Web):	14120
County (Web):	Erie

Longitude (Web):	-78.820772222
Latitude (Web):	43.051300000
Site Code (GIS):	915123
Site Name (GIS):	Creekside Golf Course
Program (GIS):	HW
Site Class (GIS):	C
Address1 (GIS):	170 Tonawanda Creek Road
Address2 (GIS):	
Locality (GIS):	Amherst
Zip Code (GIS):	14120
County (GIS):	Erie
Site Class Desc:	Complete: The classification used for sites where the Department has determined that remediation has been satisfactorily completed under a remedial program (i. e., State Superfund, Brownfield Cleanup Program, Environmental Restoration Program, Voluntary Cleanup Program, and RCRA Corrective Action Program). State Superfund (Registry) sites must have completed all active operation, maintenance, or monitoring requirements before they can be delisted and made class C. Non-registry sites may be made a class C after successful completion of all required construction or after a no further action remedy has been selected by the Department. These sites will be issued a Certificate of Completion (COC), but may still require ongoing maintenance and periodic certification of institutional/engineering controls (IC/ECs).
Site Class Desc (Web):	Complete: The classification used for sites where the Department has determined that remediation has been satisfactorily completed under a remedial program (i. e., State Superfund, Brownfield Cleanup Program, Environmental Restoration Program, Voluntary Cleanup Program, and RCRA Corrective Action Program). State Superfund (Registry) sites must have completed all active operation, maintenance, or monitoring requirements before they can be delisted and made class C. Non-registry sites may be made a class C after successful completion of all required construction or after a no further action remedy has been selected by the Department. These sites will be issued a Certificate of Completion (COC), but may still require ongoing maintenance and periodic certification of institutional/engineering controls (IC/ECs).
Assess DOH:	The remediation, which included removal of waste filled drums, drum fragments, and associated soil and sediments, is complete. The removal of drums and associated contaminated soils and creek sediments has eliminated potential public exposures to contamination which existed at the site.

Description:

Location: The site is approximately 1000 feet east of the Niagara Falls Blvd bridge over Tonawanda Creek/Barge Canal and is located in a mixed commercial/residential area directly along the south bank of the Erie Barge Canal in the Town of Amherst. Site Features: The 0.5 acre site is located adjacent to Tonawanda Creek, along the north edge of the third fairway at the former Creekside Golf Course (now known as the Evergreen Golf Course), in the Town of Amherst, Erie County. The site is approximately 700 feet long and extends from the top of the creek bank to approximately 30 feet into the creek. This section of Tonawanda Creek is maintained as part of the New York State Barge canal System and is periodically dredged. To the north, across the creek, is the Niagara County West Canal Park and also private property with several houses. Historical Uses: From During the period 1946-1953, the site reportedly received a few hundred drums. The drums were placed along the Barge Canal and a number of drums (approx. 170) were visible along the bank. Most of the drums reportedly originated from the Occidental Chemical Co.(OCC)-Durez Plant in North Tonawanda, and contained phenolic tars and residues. Other types of scrap metal were also reportedly hauled to this site. In 1982 the U.S.G.S. installed three monitoring wells along the canal bank, and obtained water and soil samples as part of The Niagara River Toxics Investigation. A March 1985 analysis by New York State Dept. of Health of a soft resin tar sample obtained from a barrel lodged in the riprap of the bank yielded a dioxin level of 333 parts per trillion. The 170 (approx) surficial (visible) drums, were removed and eventually transported to a licensed hazardous waste facility by OCC in April of 1991 for disposal. A Phase II Investigation was done on the site in June, 1986. The results of study indicated that no chemicals of interest had migrated to the south, into the site, nor to the point of the wells. The study also identified four discrete areas containing ferrous materials. Upon completion of the Remedial Investigation/ Feasibility Study (RI/FS) by OCC a Record of Decision (ROD) was signed in March of 1991. Remediation was completed in January 1993. The completed remedy included removal of all drums in the creek bank and on the creek bottom, and the dredging of contaminated sediments adjacent the site. The site has been satisfactorily remediated and was removed from the Registry in March 1994. Geology/Hydrogeology: Soil at the creek bank is comprised of fill overlying native clay. The fill is variable and irregularly layered. Contents of the fill range from crushed stone, used to fill the Phase I drum removal, to silty topsoil. The fill is relatively permeable and free draining. It is within this fill that the creek bank drums are buried. The clay beneath the fill is divided stratigraphically into three sub-units. The top unit is 6 to 10 feet thick and consists of a stiff, brown clay and silt. The middle unit is 0.5 to 5 feet thick and consists of a "soupy" grey silty layer with very fine sand seams. The bottom unit is a soft, reddish grey to reddish brown silty clay. The native clay soil below the fill has a very low permeability and acts as a barrier to groundwater movement. Tonawanda Creek is part of the New York State Barge Canal. The water in the creek adjacent to the site gradually deepens to 8' at a distance of 30' from the shore. Beyond this distance the creek bottoms drops off due to the dredging that is part of the maintenance of the Barge Canal. The sediments in the creek adjacent to the site consist primarily of clays, silts and fine sands. These are overlain by a layer of organic material (approximately 2 to 3 inches) consisting of leaves and sticks. The depth to the underlying glaciolacustrine clay ranges from 7" to 1.5 Groundwater at the site tends to flow toward the creek and volumes in the clay tend to be low, due to its low permeability.

Assessment:

All of the barrels and contaminated sediments have been removed from the site. There is no longer a significant threat. The site has been satisfactorily remediated, there are no environmental problems associated with the disposal of hazardous waste remaining at this site.

Materials Information

Waste Name:	PHENOLIC TARS AND RESIDUES (F020 WASTE)
Waste Quantity:	631 DRUMS

Waste Code:

Owner Information

Owner Op: 01
Sub Type: NNN
Owner Name:
Owner Company: Evergreen Golf Course Inc.
Owner Street: 168 Tonawanda Creek Road
Owner Street 2:
Owner City: West Amherst
Owner State: NY
Owner Zip: 14120
Country: United States of America

Owner Op: 04
Sub Type: E
Owner Name:
Owner Company: TENNIS SCHRECKENGOST
Owner Street: 170 TONAWANDA CREEK RD.
Owner Street 2:
Owner City: AMHERST
Owner State: NY
Owner Zip:
Country: United States of America

Owner Op: 04
Sub Type: NNN
Owner Name:
Owner Company: Tennis Schreckengost
Owner Street: 170 Tonawanda Creek Road
Owner Street 2:
Owner City: Amherst
Owner State: NY
Owner Zip:
Country: United States of America

Owner Op: 03
Sub Type: NNN
Owner Name:
Owner Company: TENNIS SCHRECKENGOST
Owner Street:
Owner Street 2:
Owner City:
Owner State: ZZ
Owner Zip:
Country: United States of America

Owner Op: 01
Sub Type: E
Owner Name: BRENDA TURCHIARELLI
Owner Company: TENNIS SCHRECKENGOST
Owner Street: 168 TONAWANDA CREEK RD.
Owner Street 2:
Owner City: WEST AMHERST
Owner State: NY
Owner Zip: 14120
Country: United States of America

HW Extra Information

Dump:	False	***Record Added:***	1999-11-18 12:00:00
Structure:	False	***Record Updated:***	1999-11-18 12:00:00
Lagoon:	False	***Disposal Start:***	about 1946
Landfill:	True	***Disposal Terminate:***	1953
Pond:	False	***Latitude:***	43:03:02:0
Dell:	False	***Longitude:***	78:49:05:0

Updated By: INITIAL

Projects Information

Project Code: 02
Project Desc: Remedial Investigation
Project Refer Name:
End Date: 1991-03-01 00:00:00
End Status: ACT
Operable Unit ID: 3117
Operable Unit: 01
Operable Unit Desc: SITE REMEDIATION
Code Name: Remedial Investigation

Project Code: 05
Project Desc: Remedial Action
Project Refer Name:
End Date: 1993-02-01 00:00:00
End Status: ACT
Operable Unit ID: 3117
Operable Unit: 01
Operable Unit Desc: SITE REMEDIATION
Code Name: Remedial Action

Project Code: 05
Project Desc: Remedial Action
Project Refer Name:
End Date: 1985-11-01 00:00:00
End Status: ACT
Operable Unit ID: 3118
Operable Unit: 01A
Operable Unit Desc: IRM DRUM REMOVAL
Code Name: Remedial Action

Project Code: 04
Project Desc: Remedial Design
Project Refer Name:
End Date: 1992-08-01 00:00:00
End Status: ACT
Operable Unit ID: 3117
Operable Unit: 01
Operable Unit Desc: SITE REMEDIATION
Code Name: Remedial Design

Environmental Remediation

Operable Unit: 00
Contaminants:

Operable Unit: 01A
Contaminants:

Operable Unit: 01
Contaminants:

3	2 of 2	SSE	0.15 / 801.00	575.36 / -3	CREEKSIDE GOLF COURSE 170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120	SEMS ARCHIVE

Site ID: 0202342
EPA ID: NYD981560733
Superfund Alt Agmt: No
Federal Facility: No
FF Docket: No
FIPS Code: 36063
Cong District: 32
Region: 02
County: NIAGARA
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Action Information

Operable Units:	00	***Qual:***	
Action Code:	VS	***SEQ:***	1
Action Name:	ARCH SITE	***FF:***	N
Start Actual:		***FF Docket:***	N
Finish Actual:	09/22/1987	***Region:***	02
Curr Action Lead:	EPA Perf In-Hse		

Operable Units:	00	***Qual:***	L
Action Code:	PA	***SEQ:***	1
Action Name:	PA	***FF:***	N
Start Actual:		***FF Docket:***	N
Finish Actual:	09/29/1986	***Region:***	02
Curr Action Lead:	St Perf		

Operable Units:	00	***Qual:***	
Action Code:	DS	***SEQ:***	1
Action Name:	DISCVRY	***FF:***	N
Start Actual:	09/19/1986	***FF Docket:***	N
Finish Actual:	09/19/1986	***Region:***	02
Curr Action Lead:	St Perf		

Operable Units:	00	***Qual:***	N
Action Code:	SI	***SEQ:***	1
Action Name:	SI	***FF:***	N
Start Actual:	09/21/1987	***FF Docket:***	N
Finish Actual:	09/22/1987	***Region:***	02
Curr Action Lead:	EPA Perf		

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4 ***1 of 2*** ***SSE*** ***0.15 / 801.60*** ***575.29 / -3*** ***CREEKSIDE GOLF COURSE***
170 TONAWANDA CREEK RD
TOWN OF AMHERST NY 14120 ***CERCLIS***

Site ID:	0202342	***RNPL Status Code:***	N
Site EPA ID:	NYD981560733	***NPL Status:***	Not on the NPL
Site Street Address 2:		***RFED Facility Code:***	N
Site County Name:	NIAGARA	***RFED Facility Desc:***	Not a Federal Facility
Site FIPS Code:	36063	***USGS Hydro Unit No.:***	04120104
Region Code:	02	***Site Cong. Dist. Code:***	32
Site SMSA No.:	1280	***ROT Desc:***	Other
Site Prim. Latitude:	+43.110927	***FR NPL Update No.:***	
Site Prim. Longitude:	-077.92	***RFRA Code:***	
Lat Long Source:			
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS Assess History

OU ID:	00	***RALT Short Name:***	EPA In-House
Act Code ID:	001	***Act Start Date:***	
RAT Code:	VS	***Act Complete Date:***	9/22/1987 00:00:00
RAT Short Name:	ARCH SITE	***AGT Order No.:***	1500
RAT Name:	ARCHIVE SITE	***SH OU:***	
RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:	B	***SH Seq:***	
RAT Level:	1	***SH Start Date:***	
RAT DEF OU:	00	***SH Complete Date:***	
RFBS Code:		***SH Lead:***	
SPA Code:	13		
RAT Def:	The decision is made that no further activity is planned at the site.		
Site Desc:			
Site Alias:			

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	State (Fund)
Act Code ID:	001	**Act Start Date:**	
RAT Code:	PA	**Act Complete Date:**	9/29/1986 00:00:00
RAT Short Name:	PA	**AGT Order No.:**	130
RAT Name:	PRELIMINARY ASSESSMENT	**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:	B	**SH Seq:**	
RAT Level:	1	**SH Start Date:**	
RAT DEF OU:	00	**SH Complete Date:**	
RFBS Code:	P	**SH Lead:**	
SPA Code:	13		

RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.

Site Desc:

Site Alias:

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	
Act Code ID:		**Act Start Date:**	
RAT Code:		**Act Complete Date:**	
RAT Short Name:		**AGT Order No.:**	0
RAT Name:		**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:		**SH Seq:**	
RAT Level:		**SH Start Date:**	
RAT DEF OU:		**SH Complete Date:**	
RFBS Code:		**SH Lead:**	
SPA Code:			

RAT Def:

Site Desc: DIOXIN(2,3,7,8-TETRACHLORODIBENZO-P-KIOXIN) IN DRUMS. DIBUTYLPHTHALATE IN GRNDWTR OR SOIL SUBSTRATE. DRUMS LINE SORELINE OF TONAWANDA CREEK & ARE VISIBLY DAMAGED MANY MORE ARE SUSPECTED TO BE BURIED DANGER OF RELEASE TO SURFACE WTR &/OR GRW

.

Site Alias: No alias data available

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	State (Fund)
Act Code ID:	001	**Act Start Date:**	
RAT Code:	DS	**Act Complete Date:**	9/19/1986 00:00:00
RAT Short Name:	DISCVRY	**AGT Order No.:**	10
RAT Name:	DISCOVERY	**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:	B	**SH Seq:**	
RAT Level:	1	**SH Start Date:**	
RAT DEF OU:	00	**SH Complete Date:**	
RFBS Code:		**SH Lead:**	
SPA Code:	13		

RAT Def: The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.

Site Desc:

Site Alias:

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	EPA Fund
Act Code ID:	001	**Act Start Date:**	9/21/1987 00:00:00
RAT Code:	SI	**Act Complete Date:**	9/22/1987 00:00:00
RAT Short Name:	SI	**AGT Order No.:**	160
RAT Name:	SITE INSPECTION	**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:	B	**SH Seq:**	
RAT Level:	1	**SH Start Date:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

RAT DEF OU:	00	**SH Complete Date:**	
RFBS Code:	P	**SH Lead:**	
SPA Code:	13		
RAT Def:	The process of collecting site data and samples to characterize the severity of the hazard for the hazard ranking score and/or enforcement support.		
Site Desc:			
Site Alias:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	2 of 2	SSE	0.15 / 801.60	575.29 / -3	CREEKSIDE GOLF COURSE 170 TONAWANDA CREEK RD TOWN OF AMHERST NY 14120	CERCLIS NFRAP

Site ID:	202342	**Site FIPS Code:**	36063
Site EPA ID:	NYD981560733	**Region Code:**	2
Site Parent ID:		**Site Cong. Dist. Code:**	32
Site County Name:	NIAGARA	**Federal Facility:**	
Parent Site Name:			

CERCLIS-NFRAP Assess History

OU ID:	0	**Act Start Date:**	
Act Code ID:	1	**Act Complete Date:**	9/19/1986
RAT Code:	DS	**AGT Order No.:**	10
RAT Short Name:	DISCVRY	**SH OU:**	
RAT Name:	DISCOVERY	**SH Code:**	
RAT Hist. Only Flag:		**SH Seq:**	
RAT NSI Indicator:	B	**SH Start Date:**	
RAT Level:	1	**SH Complete Date:**	
RAT DEF OU:	00	**SH Lead:**	
RFBS Code:		**SH Qual:**	
SPA Code:	13	**RAQ Act. Qual Short:**	
RALT Short Name:	State (Fund)	**RNPL Status Code:**	N
RAT Def:	The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	**Act Start Date:**	
Act Code ID:	1	**Act Complete Date:**	9/22/1987
RAT Code:	VS	**AGT Order No.:**	1500
RAT Short Name:	ARCH SITE	**SH OU:**	
RAT Name:	ARCHIVE SITE	**SH Code:**	
RAT Hist. Only Flag:		**SH Seq:**	
RAT NSI Indicator:	B	**SH Start Date:**	
RAT Level:	1	**SH Complete Date:**	
RAT DEF OU:	00	**SH Lead:**	
RFBS Code:		**SH Qual:**	
SPA Code:	13	**RAQ Act. Qual Short:**	
RALT Short Name:	EPA In-House	**RNPL Status Code:**	N
RAT Def:	The decision is made that no further activity is planned at the site.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	**Act Start Date:**	
Act Code ID:	1	**Act Complete Date:**	9/29/1986
RAT Code:	PA	**AGT Order No.:**	130
RAT Short Name:	PA	**SH OU:**	
RAT Name:	PRELIMINARY ASSESSMENT	**SH Code:**	
RAT Hist. Only Flag:		**SH Seq:**	
RAT NSI Indicator:	B	**SH Start Date:**	
RAT Level:	1	**SH Complete Date:**	
RAT DEF OU:	00	**SH Lead:**	
RFBS Code:	P	**SH Qual:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

SPA Code:	13	**RAQ Act. Qual Short:**	Low priority
RALT Short Name:	State (Fund)	**RNPL Status Code:**	N
RAT Def:	Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	**Act Start Date:**	9/21/1987
Act Code ID:	1	**Act Complete Date:**	9/22/1987
RAT Code:	SI	**AGT Order No.:**	160
RAT Short Name:	SI	**SH OU:**	
RAT Name:	SITE INSPECTION	**SH Code:**	
RAT Hist. Only Flag:		**SH Seq:**	
RAT NSI Indicator:	B	**SH Start Date:**	
RAT Level:	1	**SH Complete Date:**	
RAT DEF OU:	00	**SH Lead:**	
RFBS Code:	P	**SH Qual:**	
SPA Code:	13	**RAQ Act. Qual Short:**	NFRAP
RALT Short Name:	EPA Fund	**RNPL Status Code:**	N
RAT Def:	The process of collecting site data and samples to characterize the severity of the hazard for the hazard ranking score and/or enforcement support.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

5	***1 of 1***	***ESE***	***0.19 / 986.48***	***574.81 / -3***	***LEO BRENON TANK 254 TONAWANDA CREEK ROAD AMHERST NY***	***LST***

Spill No:	9516836	**REM Phase:**	0
Site ID:	231412	**UST Trust:**	False
DER Facility ID:	190719	**Spill Date:**	1996-03-01 12:00:00
CID:	323	**Rcvd Date:**	1996-03-28 15:45:00
Program Type:	ER	**CAC Date:**	1996-04-26 00:00:00
SWIS Code:	1522	**Insp Date:**	1996-04-10 00:00:00
Contribute Factor:	Tank Failure	**Close Date:**	1996-04-29 00:00:00
Water Body:		**Create Date:**	1996-03-29 00:00:00
Class:	C3	**Update Date:**	1996-05-06 00:00:00
Meets Std:	False	**DEC Region:**	9
Penalty:	False	**Lead DEC:**	COOKE
County:	Erie	**After Hours:**	False
Referred to:			
Reported by:	DEC		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"TANK PULL WITH CONTAMINATION AROUND THE FILL PORT"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 3/28/96: JDC MET W/ RP LEE BRENON AT 245 TONAWANDA CREEK RD AND OBSERVED TANK REMOVED W/ NO INDICATIONS OF OF SOIL/ GROUNDWATER CONTAMINATION. ADVISED ON SAMPLING REQUIREMENTS AND TANK CLEANING PRODICAL. HE WILL PUMP OFF TANK PIT WATER INTO DRUMS AND SAMPLE WATER PRIOR TO BACKFILLING EXCAVATION. 4/1/96: JDC ON SITE AND FOUND EXCAVATED SOILS REMOVED AND FOUR DRUMS OF WATER STAGED ON PATIO AT BACK OF HOUSE. MONITORING WELL WAS PLACED IN THE EXCAVATION. 4/2/96: REVIEWD GW TEST RESULTS DATED 3/29/96 AND FOUND BTEX LEVELS HIGH. WILL SEND LETTER TO RP REQUESTING GROUNDWATER REMEDIATION. 4/9/96: TEST RESULTS DATED 3/28/96, INDICATE A SIGNIFICANT REDUCTION OF BTEX IN WELL WATER, HOWEVER, GLUES AND CLEANERS USED BY RP TO SECURE WELL END CAP MAY HAVE AFFECTED SAMPLE TO CAUSE CURRENT LEVELS. RP WILL CONTACT EXPRESS LABS FOR AN OPION. 4/10/96: EXPRESS LABS REPORTED THAT GULES USED TO CEMENT WELL WOULD NOT AFFECT LAB RESULTS. 4/25/96: RECEIVED LAB RESULTS FOR GROUNDWATER SAMPLE COLLECTED ON 4/22/96 IN TANK PIT. LEVELS ACCEPTABLE FOR INACTIVE STATUS. WILL MAKE FILE INACTIVE WHEN DISPOSAL RECEIPTS FOR DRUMMED OIL AND WATER IS RECEIVED. 4/26/96: RECEIVED RECEIPTS FOR DRUMMED WASTE, WILL SEND RP INACTIVE LETTER. NO FURTHER ACTION REQUIRED AT THIS TIME."

Material Information

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

OP Unit ID:	1027717	**Med in Air:**	False
OU:	01	**Med GW:**	False
Material ID:	566867	**Med SW:**	False
CAS No:		**Med DW:**	False
Material Family:	Petroleum	**Med Sewer:**	False
Quantity:	.00	**Med Surf:**	False
Units:	G	**Med Subway:**	False
Recovered:	.00	**Med Utility:**	False
Med Soil:	True	**Oxygenate:**	
Med Air:	False		
Material Code:	0009		
Material Name:	gasoline		

Spiller Information

Spiller Name:	
Spiller Company:	LEO BRENON
Spiller Address:	254 TONAWANDA CREEK ROAD
Spiller City:	AMHERST
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.046027050
Longitude:	-78.819872340

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6 | ***1 of 1*** | ***SSW*** | ***0.32 / 1,687.16*** | ***573.98 / -4*** | ***AMHERST WWTP***
55 TONAWANDA CREEK ROAD
AMHERST NY | ***LST***

Spill No:	9404539	**REM Phase:**	0
Site ID:	137334	**UST Trust:**	False
DER Facility ID:	117495	**Spill Date:**	1994-06-30 16:00:00
CID:		**Rcvd Date:**	1994-06-30 16:15:00
Program Type:	ER	**CAC Date:**	1994-08-17 00:00:00
SWIS Code:	1522	**Insp Date:**	1994-07-01 00:00:00
Contribute Factor:	Tank Test Failure	**Close Date:**	1994-10-25 00:00:00
Water Body:		**Create Date:**	1994-07-05 00:00:00
Class:	C3	**Update Date:**	1994-11-14 00:00:00
Meets Std:	True	**DEC Region:**	9
Penalty:	False	**Lead DEC:**	COOKE
County:	Erie	**After Hours:**	False
Referred to:			
Reported by:	Other		
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"TANK TEST WOULD NOT HOLD ON 10K FUEL OIL"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 07/01/94: JDC ON SITE AND MET W/ SUSPECT BAD SEAL AT TANK TOP MANWAY. TANK SCHEDUALED FOR RETEST. SENT LETTER TO RP. 07/01/94: JDC ON SITE AND MET W/ ANTHONY CANNA, PLT SUPER. SUSPECT BAD SEAL AT TANK TOP MANWAY. TANK SCHEDUALED FOR RETEST. SENT LETTER TO RP. 07/06/94: JDC TELCON/ A CANNA, TANK FAILED SECOND TEST, WILL ISOLATE AND RETEST TANK ONLY. 07/15/94: TANK FAILED THIRD TANK TEST 7/14/94, CRACK IN TANK TOP. DECISION TO BE MADE ON REPAIR OR REMOVAL AS PER DAVE HENNING, AWTP. 09/29/94: JDC TELCON W/ KEN TERANOVA, AMHESRT WWTP, TANK RETESTED (3) TIMES PASSED AFTER REPAIR WAS MADE TO TANK TOP. REQUESTED TEST RESULTS TO CLOSE FILE. 10/25/94: RECIEVED TANK TEST RESULTS AND FOUND TO MET LIMITS. NO FURTHER ACTION REQUIRED. "

Material Information

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

OP Unit ID:	998643	**Med in Air:**	False
OU:	01	**Med GW:**	True
Material ID:	381150	**Med SW:**	False
CAS No:		**Med DW:**	False
Material Family:	Petroleum	**Med Sewer:**	False
Quantity:	.00	**Med Surf:**	False
Units:	G	**Med Subway:**	False
Recovered:	.00	**Med Utility:**	False
Med Soil:	False	**Oxygenate:**	
Med Air:	False		
Material Code:	0001A		
Material Name:	#2 fuel oil		

Spiller Information

Spiller Name:	
Spiller Company:	TOWN OF AMHERST
Spiller Address:	455 TONAWANDA CREEK ROAD
Spiller City:	AMHERST
Spiller State:	NY
Spiller Zip:	14228
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.041887160
Longitude:	-78.825740410

Tank Test Information

Spill Tank ID:	1542920	**Source:**	
Tank No:		**Leak Rate:**	.00
Tank SIze:	0	**Gross Fail:**	
Material:	0001	**Modified by:**	Spills
EPA UST:		**Last Modified:**	2004-10-01 04:00:45.140000000
UST:		**Test Method:**	00
Cause:			
Alt Test Method:	Unknown		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
7	1 of 3	WSW	0.40 / 2,131.50	571.24 / -7	NORTH TONAWANDA LF WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120	CERCLIS

Site ID:	0201263	**RNPL Status Code:**	N
Site EPA ID:	NYD000514182	**NPL Status:**	Not on the NPL
Site Street Address 2:		**RFED Facility Code:**	N
Site County Name:	NIAGARA	**RFED Facility Desc:**	Not a Federal Facility
Site FIPS Code:	36063	**USGS Hydro Unit No.:**	04120104
Region Code:	02	**Site Cong. Dist. Code:**	36
Site SMSA No.:	1280	**ROT Desc:**	Other
Site Prim. Latitude:	+43.104840	**FR NPL Update No.:**	
Site Prim. Longitude:	-077.93	**RFRA Code:**	
Lat Long Source:			
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	EPA Fund
Act Code ID:	001	**Act Start Date:**	
RAT Code:	DS	**Act Complete Date:**	6/7/1986 00:00:00
RAT Short Name:	DISCVRY	**AGT Order No.:**	10
RAT Name:	DISCOVERY	**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:	B	**SH Seq:**	
RAT Level:	1	**SH Start Date:**	

RAT DEF OU:	00	**SH Complete Date:**	
RFBS Code:		**SH Lead:**	
SPA Code:	13		
RAT Def:	The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.		
Site Desc:			
Site Alias:			

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	EPA In-House
Act Code ID:	001	**Act Start Date:**	
RAT Code:	VS	**Act Complete Date:**	9/29/1986 00:00:00
RAT Short Name:	ARCH SITE	**AGT Order No.:**	1500
RAT Name:	ARCHIVE SITE	**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:	B	**SH Seq:**	
RAT Level:	1	**SH Start Date:**	
RAT DEF OU:	00	**SH Complete Date:**	
RFBS Code:		**SH Lead:**	
SPA Code:	13		
RAT Def:	The decision is made that no further activity is planned at the site.		
Site Desc:			
Site Alias:			

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	EPA Fund
Act Code ID:	001	**Act Start Date:**	
RAT Code:	PA	**Act Complete Date:**	9/29/1986 00:00:00
RAT Short Name:	PA	**AGT Order No.:**	130
RAT Name:	PRELIMINARY ASSESSMENT	**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:	B	**SH Seq:**	
RAT Level:	1	**SH Start Date:**	
RAT DEF OU:	00	**SH Complete Date:**	
RFBS Code:	P	**SH Lead:**	
SPA Code:	13		
RAT Def:	Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.		
Site Desc:			
Site Alias:			

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	
Act Code ID:		**Act Start Date:**	
RAT Code:		**Act Complete Date:**	
RAT Short Name:		**AGT Order No.:**	0
RAT Name:		**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:		**SH Seq:**	
RAT Level:		**SH Start Date:**	
RAT DEF OU:		**SH Complete Date:**	
RFBS Code:		**SH Lead:**	
SPA Code:			
RAT Def:			
Site Desc:	PHENOLS, TOTAL HALOGENATED ORGANICS, DIBUTYL PHTHALATE. TRACE AMOUNTS OF ORGANICS FOUND IN GROUND WATER, SOIL SAMPLES, AND 1 SURFACE WATER. POTENTIAL HAZARDS DO EXIST DUE TO PROXIMITY OF DEERWOOD GOLF COURSE.		
Site Alias:	. HOLIDAY PARK (NYD980531834),,,NY,;		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
7	2 of 3	WSW	0.40 / 2,131.50	571.24 / -7	NORTH TONAWANDA LF WALCK RD & OLD FALL BLVD NORTH TONAWANDA NY 14120	CERCLIS NFRAP

Site ID: 201263
Site EPA ID: NYD000514182
Site Parent ID:
Site County Name: NIAGARA
Parent Site Name:
Site FIPS Code: 36063
Region Code: 2
Site Cong. Dist. Code: 36
Federal Facility:

CERCLIS-NFRAP Assess History

OU ID: 0
Act Code ID: 1
RAT Code: DS
RAT Short Name: DISCVRY
RAT Name: DISCOVERY
RAT Hist. Only Flag:
RAT NSI Indicator: B
RAT Level: 1
RAT DEF OU: 00
RFBS Code:
SPA Code: 13
RALT Short Name: EPA Fund
Act Start Date:
Act Complete Date: 6/7/1986
AGT Order No.: 10
SH OU:
SH Code:
SH Seq:
SH Start Date:
SH Complete Date:
SH Lead:
SH Qual:
RAQ Act. Qual Short:
RNPL Status Code: N
RAT Def: The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.
RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID: 0
Act Code ID: 1
RAT Code: PA
RAT Short Name: PA
RAT Name: PRELIMINARY ASSESSMENT
RAT Hist. Only Flag:
RAT NSI Indicator: B
RAT Level: 1
RAT DEF OU: 00
RFBS Code: P
SPA Code: 13
RALT Short Name: EPA Fund
Act Start Date:
Act Complete Date: 9/29/1986
AGT Order No.: 130
SH OU:
SH Code:
SH Seq:
SH Start Date:
SH Complete Date:
SH Lead:
SH Qual:
RAQ Act. Qual Short: NFRAP
RNPL Status Code: N
RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.
RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID: 0
Act Code ID: 1
RAT Code: VS
RAT Short Name: ARCH SITE
RAT Name: ARCHIVE SITE
RAT Hist. Only Flag:
RAT NSI Indicator: B
RAT Level: 1
RAT DEF OU: 00
RFBS Code:
SPA Code: 13
RALT Short Name: EPA In-House
Act Start Date:
Act Complete Date: 9/29/1986
AGT Order No.: 1500
SH OU:
SH Code:
SH Seq:
SH Start Date:
SH Complete Date:
SH Lead:
SH Qual:
RAQ Act. Qual Short:
RNPL Status Code: N
RAT Def: The decision is made that no further activity is planned at the site.
RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
7	3 of 3	WSW	0.40 / 2,131.50	571.24 / -7	NORTH TONAWANDA LF WALCK RD & OLD FALL BLVD	SEMS ARCHIVE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					NORTH TONAWANDA NY 14120	

Site ID:	0201263	**FIPS Code:**	36063
EPA ID:	NYD000514182	**Cong District:**	36
Superfund Alt Agmt:	No	**Region:**	02
Federal Facility:	No	**County:**	NIAGARA
FF Docket:	No		
NPL:	Not on the NPL		
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information		

Action Information

Operable Units:	00	**Qual:**	
Action Code:	VS	**SEQ:**	1
Action Name:	ARCH SITE	**FF:**	N
Start Actual:		**FF Docket:**	N
Finish Actual:	09/29/1986	**Region:**	02
Curr Action Lead:	EPA Perf In-Hse		

Operable Units:	00	**Qual:**	
Action Code:	DS	**SEQ:**	1
Action Name:	DISCVRY	**FF:**	N
Start Actual:	06/07/1986	**FF Docket:**	N
Finish Actual:	06/07/1986	**Region:**	02
Curr Action Lead:	EPA Perf		

Operable Units:	00	**Qual:**	N
Action Code:	PA	**SEQ:**	1
Action Name:	PA	**FF:**	N
Start Actual:		**FF Docket:**	N
Finish Actual:	09/29/1986	**Region:**	02
Curr Action Lead:	EPA Perf		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	1 of 1	WNW	0.44 / 2,341.12	575.32 / -3	IN CONSTRUCTION ZONE LOIUSA ST @ OLD FALLS BLVD. NORTH TONAWANDA NY	LST

Spill No:	0650619	**REM Phase:**	0
Site ID:	367124	**UST Trust:**	True
DER Facility ID:	317142	**Spill Date:**	2006-07-17 08:00:00
CID:		**Rcvd Date:**	2006-07-17 08:30:00
Program Type:	ER	**CAC Date:**	
SWIS Code:	3212	**Insp Date:**	
Contribute Factor:	Tank Failure	**Close Date:**	2007-01-09 00:00:00
Water Body:		**Create Date:**	2006-07-17 08:42:00
Class:	C3	**Update Date:**	2007-01-09 07:43:18.297000000
Meets Std:	True	**DEC Region:**	9
Penalty:	False	**Lead DEC:**	RJJONAK
County:	Niagara	**After Hours:**	False
Referred to:			
Reported by:	Responsible Party		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"CALLER STATES THAT ONE OF THEIR VEHICLES DIESEL FUEL TANK LEAKED OUT,SPILLING ~10-20 GAL OF DIESEL FUEL ALL ON THE GROUND...THEY WILL SCRAPE UP THE AFFECTED AREA THEN DISPOSE THE CONTAMINATED SOIL AT A LANDFILL."

Dec Remark:

"7/17/2006: NICK YARUSSI,YARUSSI CONSTRUCTION CO.,TELECON RJJ,HE SAID THAT A DIESEL FUEL TANK ON ONE OF THEIR WATER TRUCKS LEAKED ~10-20 GAL OF DIESEL FUEL,ALL ON THE GROUND,DUE TO A TANK FAILURE...THEY WILL SCRAPE UP THE AFFECTED SOIL,THEN DISPOSE IT AT A LANDFILL...NONE OF THE FUEL REACHED ANY RECEIVERS OR WATERWAYS...NICK WILL SEND ME THE DISPOSAL RECEIPTS...RJJ AT SITE AT 1400...YARUSSI CONSTRUCTION SCRAPED UP AN AREA ~ 20'4'1',INCLUDING THE SIDEWALK,AND HAVE STAGED THE CONTAMINATED SOIL ON THEIR PROPERTY,AWAITING DISPOSAL(THEY WILL ALSO REPLACE THE SIDEWALK)...THE EXCAVATION APPEARS TO HAVE NO VISIBLE STAINING OR ANY PETROLEUM ODORS...SINCE THIS WAS A SURFACE SPILL,I DID NOT

REQUIRE ANY ANALYTICAL OF THE EXCAVATION. 12/15/2006: SINCE WE STILL HAVE NOT RECEIVED THE DISPOSAL RECEIPTS FROM THE CONTAMINATED SOIL,I DRAFTED AND SENT A LETTER TO 'RP'REQUESTING THE RECEIPTS BE SENT TO US BY 1/5/2007. 12/27/2006: NICK YARUSSI TELECON RJJ,HE SAID THAT THEY AWAITING THE WASTE CHARACTERISTIC ANALYTICAL RESULTS,THEN THEY WILL HAVE THE SOIL DISPOSED OF. 1/9/2007: RECEIVED THE DISPOSAL RECEIPTS FOR 6.76 TONS OF DIESEL-FUEL CONTAMINATED SOIL TAKEN TO THE NIAGARA FALLS LANDFILL...THE SPILL HAS BEEN CLEANED UP AND PROPERLY DISPOSED OF...NO FURTHER ACTION NEEDED...SPILL CLOSED OUT."

Material Information

OP Unit ID:	1125047	***Med in Air:***	False
OU:	01	***Med GW:***	False
Material ID:	2114558	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	20.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	20.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	False
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	NICK YARUSSI
Spiller Company:	YARUSSI CONSTRUCTION CO.
Spiller Address:	OLD FALLS BLVD.
Spiller City:	NORTH TONAWANADA
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	NICK YARUSSI
Contact Phone:	(716) 283-7055
Contact Ext:	
Latitude:	43.049664930
Longitude:	-78.832588874

9	***1 of 1***	***NNW***	***0.47 / 2,457.96***	***579.49 / 2***	***KWIK FILL 3945 NIAGARA FALLS BLVD WHEATFIELD NY***	***LST***

Spill No:	8804278	***REM Phase:***	0
Site ID:	81729	***UST Trust:***	True
DER Facility ID:	75561	***Spill Date:***	1988-08-12 16:00:00
CID:		***Rcvd Date:***	1988-08-12 16:10:00
Program Type:	ER	***CAC Date:***	1989-02-06 00:00:00
SWIS Code:	3240	***Insp Date:***	1988-11-12 00:00:00
Contribute Factor:	Tank Test Failure	***Close Date:***	1989-02-06 00:00:00
Water Body:		***Create Date:***	1988-08-15 00:00:00
Class:		***Update Date:***	1989-02-16 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	COOKE
County:	Niagara	***After Hours:***	False
Referred to:			
Reported by:	Responsible Party		
Source:	Gasoline Station or other PBS Facility		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"TANK TEST FAILER AT .13 AND .12 GPH 12,000 GALLON SYSTEMS"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 08/15/88: TANKS TO REMOVED AND REPLACED. 10/27/88: JDC

CONTACTED MR STAROHMEYER, UNITED REFINING AND REQUESTED STATUS ON FAILED TANK. HE WILL BE FORWARDING WRITTEN STATUS REPORT. 11/02/88: JDC AT BAILED WELLS AT KWIIK FILL SITE AND FOUND NO PRODUCT. REQUESTED LETTER FROM KWIK FILL OUTLINING TANK EXCAVATION OBSERVATIOINS. 12/02/88: JDC SPOKE W/ MR SPOON AND REQUESTED LETTER OUTLINING REMEDIAL WORK DO TO REMOVE FAILED TANKS. 01/31/89: JDC CONTACTED BILL SPOON AND REQUESTED LETTER CONFIRMING THE ABSENCE OF PETROLEUM CONTAMINATION. 02/06/89: JDC RECIEVED LETTER AS REQUESTED DESCRIBING EXCAVATION CONDITION DURING TANK REMOVAL. NO FURTHER ACTION WILL BE REQUIRED AT THIS TIME. "

Material Information

OP Unit ID:	919283	***Med in Air:***	False
OU:	01	***Med GW:***	True
Material ID:	456230	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0009		
Material Name:	gasoline		

Spiller Information

Spiller Name:	
Spiller Company:	UNITED REFINING
Spiller Address:	PO BOX 599
Spiller City:	WARREN
Spiller State:	PA
Spiller Zip:	13365
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.058062950
Longitude:	-78.834716050

Tank Test Information

Spill Tank ID:	1534455	***Source:***	
Tank No:		***Leak Rate:***	.00
Tank SIze:	0	***Gross Fail:***	
Material:	0009	***Modified by:***	Spills
EPA UST:		***Last Modified:***	2004-10-01 04:00:45.140000000
UST:		***Test Method:***	00
Cause:			
Alt Test Method:	Unknown		

10	*1 of 1*	*SW*	*0.47 / 2,499.38*	*570.08 / -8*	***Botanical Gardens*** ***Old Falls Boulevard*** ***North Tonawanda NY 14120***	***SHWS***

Site Code:	57898
HW Code:	932068
Program:	HW
Site Class:	N
Site Name:	Botanical Gardens
Site Address:	Old Falls Boulevard
City:	North Tonawanda
Zip:	14120
County:	Niagara
Region:	9
Town:	North Tonawanda (c)
Latitude:	43.040273785

Longitude:	-78.828474579
SWIS:	3212
Acres:	11.000
Record Added:	1999-11-18 12:00:00
Record Update:	2018-04-18 15:26:00
Updated by:	BXANDERS
Site Code (Web):	932068
Program Type (Web):	HW
Site Name (Web):	Botanical Gardens
Site Class (Web):	N
Address1 (Web):	Old Falls Boulevard
Address2 (Web):	
Locality (Web):	North Tonawanda
Zip Code (Web):	14120
County (Web):	Niagara
Longitude (Web):	-78.828474579
Latitude (Web):	43.040273785
Site Code (GIS):	932068
Site Name (GIS):	Botanical Gardens
Program (GIS):	HW
Site Class (GIS):	N
Address1 (GIS):	Old Falls Boulevard
Address2 (GIS):	
Locality (GIS):	North Tonawanda
Zip Code (GIS):	14120
County (GIS):	Niagara
Site Class Desc:	No Further Action at this Time: Sites are given a classification of "N" when: a. the investigation and evaluation of a Class P site results in a determination that contamination at the site does not warrant placing the site on the Registry or it is being addressed under a brownfield program; b. a site was in a brownfield program (BCP, ERP or VCP) or other non-Registry program, remediation was not completed, and the site did not otherwise qualify for listing on the Registry. As an example, this occurs when a volunteer begins a brownfield project and then for economic or other reasons, determines they cannot complete the work and the brownfield project is terminated. If the contamination at the brownfield site qualifies it for placement on the Registry, the Department acts to do so. If the site re-enters a brownfield program, it can be reclassified to Class A (active) to indicate that work has recommenced; c. a site was identified simply as the location(s) where a drum(s) or other discrete waste was at one time present and subsequently removed by DEC or others and, based on the resulting conditions, no need for additional work was apparent; or d. an application to the BCP, ERP or VCP was submitted, and was then withdrawn or terminated before any actions were taken to investigate or remediate the site.
Site Class Desc (Web):	No Further Action at this Time: Sites are given a classification of "N" when: a. the investigation and evaluation of a Class P site results in a determination that contamination at the site does not warrant placing the site on the Registry or it is being addressed under a brownfield program; b. a site was in a brownfield program (BCP, ERP or VCP) or other non-Registry program, remediation was not completed, and the site did not otherwise qualify for listing on the Registry. As an example, this occurs when a volunteer begins a brownfield project and then for economic or other reasons, determines they cannot complete the work and the brownfield project is terminated. If the contamination at the brownfield site qualifies it for placement on the Registry, the Department acts to do so. If the site re-enters a brownfield program, it can be reclassified to Class A (active) to indicate that work has recommenced; c. a site was identified simply as the location(s) where a drum(s) or other discrete waste was at one time present and subsequently removed by DEC or others and, based on the resulting conditions, no need for additional work was apparent; or d. an application to the BCP, ERP or VCP was submitted, and was then withdrawn or terminated before any actions were taken to investigate or remediate the site.
Assess DOH:	The site was covered and graded prior to development as a public botanical garden and park with parking lot and boat launch. It is accessible at all times with heaviest usage from April to October. No public or private wells are known to exist within five miles. Exposures via drinking water are not expected because public water serves the area. Surface water flows to the east into Tonawanda Creek/Erie Barge Canal which is used for fishing, swimming, boating and lawn irrigation. Leachate has been noted by the Niagara County Health Department. As a result of a complaint, NYSDEC and NYSDOH collected soil and sediment samples in 1992 at the site to evaluate whether contaminants were present at the surface. Some low levels of semi-volatile organic compounds were detected, however, those levels do not represent a health concern.

Description:

Location: The Botanical Gardens site is an 11 acre site in a residential area. The site address is 1825 Sweeney Street, North Tonawanda, NY. The site is bound by residential properties to the north, Tonawanda Creek to the east, a residential property and East Robinson Street to the south, and Sweeney Street to the west. Site Features: The site is relatively flat and includes a boat ramp, parking lot, greenhouses, and numerous flower beds and picnic/recreational areas. A majority of the site is open, public parkland consisting of grass with small shrubs or trees. Tonawanda Creek is adjacent to the site, and is used for boating, kayaking, and fishing. Current Zoning and Land Use: The site is zoned for use as a public park and other recreational use. The site is owned by the State of New York, and is operated by the City of North Tonawanda as a public park and boat launch. Past Use of the Site: In the 1950s, the City of North Tonawanda Department of Public Works was granted permission by the Canal Commission to fill a low area along the canal with refuse. This area is presently the southern portion of the Botanical Gardens Site. In 1964, the State Health Department reported violations including the disposal of putrescible material at the site and that inadequate material was used to cover the refuse. The City was then ordered to apply daily cover to wastes and to restrict the width of the working face to 50 feet. The City disposed of refuse at this location until approximately 1965, when other disposal facilities opened in the area. NYSDEC files indicate that the Durez Division of Hooker Chemical used this site in 1958 and 1959 to dispose of industrial wastes, including 125 tons of phenolic resins and molding compounds. The United States Geological Survey (USGS) collected groundwater samples in 1982 and 1983. A Phase I and Phase II Investigation were completed in 1983 and 1986 respectively. A Preliminary Site Assessment (PSA), in conjunction with the Holiday Park site (#932033), was completed in 1999. Buried drums were not found during the PSA and concentrations of phenolic compounds that were detected in some samples were not high enough to indicate the presence of a significant amount of hazardous waste at this site. The site was delisted from the registry of inactive hazardous waste sites on May 24, 2001. On July 10, 2015 the NYSDEC was notified that a tar like substance was observed seeping out of the ground in the southern portion of the site. This area of the site was not previously investigated. Focused investigations surrounding the seep were unable to locate any significant source material and the tar seep appears to have been an anomalous occurrence. Geology: The overburden at the site is comprised of glaciolacustrine silt and clay deposits with lesser amounts of sand and gravel. Where fill materials have been placed, the fill appeared to be reworked native material mixed with municipal refuse. Bedrock has not been encountered, but is expected to consist of Camillus Shale at a depth of approximately 25 feet below grade. The depth to the water table is approximately 6 feet below grade and slopes to the northeast toward the canal at a relatively flat gradient.

Assessment:

The 1999 Preliminary Site Assessment (PSA) collected subsurface soil, surface water, and groundwater samples from the site. Samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals. Surface soil samples were also collected, and analyzed for SVOCs. PCBs were not detected during the PSA in any environmental media. Nine VOCs and SVOCs were detected in subsurface soil samples, with none exceeding the TAGM 4046 soil cleanup standards. The metals beryllium, calcium, chromium, copper, iron, magnesium, nickel, and zinc were detected in subsurface soil at levels that exceed TAGM 4046 standards, but were determined to not be indicative of hazardous waste disposal. Two surface water samples were collected during the PSA, one from a surface depression and the other from the fountain/pond that is part of the Botanical Gardens. Results from the surface depression indicate that phenol, 4-methylphenol, iron, manganese, and sodium are present at levels that exceed standards. Results from the fountain/pond indicate that 1,2-dichloroethene, vinyl chloride, bis (2-ethylhexyl)phthalate, iron, and manganese are present at levels that exceed standards. Surface water was noted as being distinctly rust colored. Monitoring well sampling results indicate that groundwater is impacted by carbon disulfide, benzene, 4,4-DDT, and several metals at levels that exceed standards. The PSA determined that hazardous waste was not documented to have been disposed at this site. The site did not meet the regulatory requirements for inclusion on the Registry, and was delisted in 2001. A tar seep from surface soil was observed in the southern portion of the site in July 2015. A sample was collected from the tar and analyzed for VOCs, SVOCs, pesticides, PCBs, and metals. Results show that the tar contains methylene chloride, tetrachloroethene (PCE), gamma-chlordane, PCBs, barium, cadmium, and lead. Further investigations were unable to locate a source of the tar. Two subsurface soil/fill samples were collected and analyzed for VOCs, SVOCs, PCBs, and metals. No analytes were detected above commercial soil cleanup objectives (SCOs). The investigations surrounding the tar seep do not indicate that hazardous waste was disposed in this area.

Owner Information

Owner Op:	01
Sub Type:	NNN
Owner Name:	
Owner Company:	CITY OF NORTH TONAWANDA
Owner Street:	CITY HALL / 216 PAYNE AVENUE
Owner Street 2:	
Owner City:	NORTH TONAWANDA
Owner State:	NY
Owner Zip:	14120
Country:	United States of America

Owner Op:	01
Sub Type:	C01
Owner Name:	
Owner Company:	CITY OF NORTH TONAWANDA
Owner Street:	216 PAYNE AVE
Owner Street 2:	
Owner City:	NORTH TONAWANDA
Owner State:	NY
Owner Zip:	14120
Country:	United States of America

Owner Op: 04
Sub Type: NNN
Owner Name:
Owner Company: CITY OF NORTH TONAWANDA
Owner Street: CITY HALL / 216 PAYNE AVENUE
Owner Street 2:
Owner City: NORTH TONAWANDA
Owner State: NY
Owner Zip: 14120
Country: United States of America

Owner Op: 04
Sub Type: C01
Owner Name:
Owner Company: CITY OF NORTH TONAWANDA
Owner Street: OLIVER ST.
Owner Street 2:
Owner City: NORTH TONAWANDA
Owner State: NY
Owner Zip:
Country: United States of America

Owner Op: 03
Sub Type: NNN
Owner Name:
Owner Company: CITY OF NORTH TONAWANDA
Owner Street:
Owner Street 2:
Owner City:
Owner State: NY
Owner Zip:
Country: Unknown

Projects Information

Project Code: 01
Project Desc: Site Caracterization
Project Refer Name: Tar Seep Investigation
End Date: 2015-11-27 00:00:00
End Status: ACT
Operable Unit ID: 3387
Operable Unit: 01
Operable Unit Desc: REMEDIAL PROGRAM
Code Name: Site Characterization

Project Code: 01
Project Desc: Site Caracterization
Project Refer Name: City Additional Investigation
End Date: 2018-04-10 00:00:00
End Status: ACT
Operable Unit ID: 3387
Operable Unit: 01
Operable Unit Desc: REMEDIAL PROGRAM
Code Name: Site Characterization

Project Code: 01
Project Desc: Site Caracterization
Project Refer Name:
End Date: 1999-03-01 00:00:00
End Status: ACT
Operable Unit ID: 3388
Operable Unit: 02
Operable Unit Desc: Previous Preliminary Site Assessment
Code Name: Site Characterization

Project Code: 01
Project Desc: Site Caracterization
Project Refer Name:

End Date: 1986-01-01 00:00:00
End Status: ACT
Operable Unit ID: 3387
Operable Unit: 01
Operable Unit Desc: REMEDIAL PROGRAM
Code Name: Site Characterization

Environmental Remediation

Operable Unit: 01
Contaminants:

Operable Unit: 02
Contaminants:

Unplottable Summary

Total: 73 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
CERCLIS NFRAP	TOWN OF NIAGARA LANDFILL	OFF OF LOCKPORT RD ***Site EPA ID:*** NYD000514364	NIAGARA FALLS NY	14301	805486603
CERCLIS NFRAP	RUFOLF WURLITZER	NIAGARA FALLS BLVD ***Site EPA ID:*** NYD000911339	NORTH TONAWANDA NY	14120	805482252
CERCLIS NFRAP	LOCKPORT ROAD SITE	LOCKPORT ROAD ***Site EPA ID:*** NYD982531295	WHEATFIELD NY	14150	805463487
GEN MANIFEST	NYSDEC (WURLITZER PARK)	NIAGARA FALLS BOULEVARD	NORTH TONAWANDA NY	14120	874649231
HSWDS	Leshner Junk	U Niagara Falls	NY		863415352
HSWDS	Leshner Junk	U Niagara Falls	NY		863416278
HSWDS	Lockport Rd/ Struzik Property	South of Lockport Rd. Wheatfield 14304	NY		863416281
HSWDS	Leshner Junk	U Niagara Falls	NY		863416407
LST	AFRES	NIAGARA FALLS (C) ***Spill No*** **|** ***Close Date:*** 8600643 | 1986-04-26 00:00:00	NIAGARA FALLS NY		814042999
LST	WARDELL BOAT YARD	SWEENEY STREET ***Spill No*** **|** ***Close Date:*** 9000205 | 1991-12-05 00:00:00	NORTH TONAWANDA NY		813996650
LST	NIAGARA FALLS AIR FORCE	LOCKPORT ROAD ***Spill No*** **|** ***Close Date:*** 9600620 | 1997-07-01 00:00:00	NIAGARA FALLS NY		814021621

LST	ELLICOTT CREEK PARK	NIAGARA FALLS BLVD.	TONAWANDA NY		814017068
		Spill No* | *Close Date: 9875092 | 2000-03-10 00:00:00			
LST	HI SKIPPER MARINE	SWEENEY STREET	NORTH TONAWANDA NY		813996758
		Spill No* | *Close Date: 9310692 | 1993-12-09 00:00:00			
LST	WEST CANAL MARINA	TONAWANDA CREEK ROAD	PENDLETON NY		814010110
		Spill No* | *Close Date: 9875289 | 2000-02-11 00:00:00			
LST	FIRESTONE TIRE	NIAGARA FALLS BOULEVARD	AMHERST NY		814037119
		Spill No* | *Close Date: 8605722 | 1986-12-12 00:00:00			
LST	GREAT LAKE CARBON	NIAGARA FALLS BLVD	NIAGARA FALLS NY		814036706
		Spill No* | *Close Date: 8806521 | 1988-11-09 00:00:00			
LST	CUMBERLANDS FARMS	NIAGARA FALLS BLVD	AMHERST NY		814028605
		Spill No* | *Close Date: 8908977 | 1990-02-14 00:00:00			
LST	AFRES	NIAGARA FALLS	NIAGARA FALLS NY		814003057
		Spill No* | *Close Date: 8600757 | 1986-04-30 00:00:00			
LST	KWIK-FILL	NIAGARA FALLS BOULEVARD	WHEATFIELD NY		814001645
		Spill No* | *Close Date: 8900825 | 1989-10-24 00:00:00			
NY SPILLS	AFRES	NIAGARA FALLS	NIAGARA FALLS NY		813883156
		Spill No* | *Close Date: 8600682 | 1986-04-28 00:00:00			
NY SPILLS	ALLIED WASTE LANDFILL	NIAGARA FALLS BLVD	NIAGARA FALLS NY	14094	865730418
		Spill No* | *Close Date: 1707621 | 2017-11-20 00:00:00			
NY SPILLS	ALLIED WASTE LANDFILL	NIAGARA FALLS BLVD	NIAGARA FALLS NY	14304	864784371
		Spill No* | *Close Date: 1706631 | 2017-10-10 00:00:00			
NY SPILLS	ELLICOTT CREEK PARK	NIAGARA FALLS BLVD	TONAWANDA NY		813973231
		Spill No* | *Close Date: 8800804 | 1988-05-05 00:00:00			
NY SPILLS	FUNK LAWN CARE TRUCK	NIAGARA FALLS BLVD	TONAWANDA NY		813967337
		Spill No* | *Close Date: 0075290 | 2000-08-10 00:00:00			
NY SPILLS	CECOS INTERNATIONAL	NIAGARA FALLS BLVD	NIAGARA FALLS NY		813964215
		Spill No* | *Close Date: 8903943 | 1989-08-01 00:00:00			

NY SPILLS	CAYUGA VILLAGE TRAILER PARK	NIAGARA FALLS	WHEATFIELD NY	813959380
		Spill No* | *Close Date: 0812382 | 2009-02-12 00:00:00		
NY SPILLS	ESTATE OF GILBERT BRUSS	NIAGARA FALLS BLVD.	WHEATFIELD NY	813958739
		Spill No* | *Close Date: 9501628 | 1995-05-09 00:00:00		
NY SPILLS	NIAGARA MOHAWK	NIAGARA FALLS BLVD.	WHEATFIELD NY	813952780
		Spill No* | *Close Date: 9407213 | 1995-02-22 00:00:00		
NY SPILLS	ELDERWOOD AFFILIATES	NIAGARA FALLS BLVD.	WHEATFIELD NY	813938972
		Spill No* | *Close Date: 9405785 | 1995-02-22 00:00:00		
NY SPILLS	TRUCK AT BOSTON MARKET	NIAGARA FALLS BLVD (RT62)	NIAGARA FALLS NY	813895455
		Spill No* | *Close Date: 9707861 | 1998-03-09 00:00:00		
NY SPILLS	NYSDOT / REID	NIAGARA FALLS BOULEVARD	NORTH TONAWANDA NY	813888309
		Spill No* | *Close Date: 9608323 | 1996-11-15 00:00:00		
NY SPILLS	NFAFB	NIAGARA FALLS BOULEVARD	NIAGARA FALLS NY	813884335
		Spill No* | *Close Date: 8710816 | 1988-03-26 00:00:00		
NY SPILLS	Spill Number 8502954	NIAGARA FALLS BLVD.	AMHERST NY	813881356
		Spill No* | *Close Date: 8502954 | 1985-12-01 00:00:00		
NY SPILLS	OAKGROVE CONSTRUCTION	NIAGARA FALLS BOULEVARD	AMHERST NY	813878261
		Spill No* | *Close Date: 8700094 | 1987-10-19 00:00:00		
NY SPILLS	CECOS INTERNATIONAL	NIAGARA FALLS BLVD	NIAGARA FALLS NY	813878001
		Spill No* | *Close Date: 8805411 | 1988-11-10 00:00:00		
NY SPILLS	NIAGARA MOHAWK POLE 158 N	NIAGARA FALLS BLVD	TONAWANDA NY	813874301
		Spill No* | *Close Date: 0002522 | 2000-05-31 00:00:00		
NY SPILLS	S G L CARBON GROUP	NIAGARA FALLS BOULEVARD	NIAGARA FALLS NY	813872056
		Spill No* | *Close Date: 9804427 | 1998-07-08 00:00:00		
NY SPILLS	BFI	NIAGARA FALLS BOULEVARD	NIAGARA FALLS NY	813870691
		Spill No* | *Close Date: 9609826 | 1996-11-18 00:00:00		

NY SPILLS	M.L. YOUNG	NIAGARA FALLS BLVD	WHEATFIELD NY	813869965
		Spill No* | *Close Date: 8910341 | 1990-05-25 00:00:00		
NY SPILLS	WURLITZER INDUSTRIAL PARK	NIAGARA FALLS BOULEVARD	NORTH TONAWANDA NY	813846250
		Spill No* | *Close Date: 9304399 | 1993-07-06 00:00:00		
NY SPILLS	ROCK BLASTING	NIAGARA FALLS BLVD.	WHEATFIELD NY	813840183
		Spill No* | *Close Date: 9307121 | 1993-10-13 00:00:00		
NY SPILLS	SANTAROSA	NIAGARA FALLS BLVD	NIAGARA FALLS NY	813835402
		Spill No* | *Close Date: 8903973 | 1989-08-01 00:00:00		
NY SPILLS	NIAGARA MOHAWK	NIAGARA FALLS BLVD.	WHEATFIELD NY	813834682
		Spill No* | *Close Date: 9403560 | 1994-07-08 00:00:00		
NY SPILLS	NIAGARA RIVER	NIAGARA FALLS PARKWAY	NIAGARA FALLS NY	813820402
		Spill No* | *Close Date: 0603359 | 2006-06-27 00:00:00		
NY SPILLS	OPPENHEIM PARK	NIAGARA FALLS BLVD	WHEATFIELD NY	813801799
		Spill No* | *Close Date: 0551319 | 2006-02-24 00:00:00		
NY SPILLS	AUTOMATIC ROLLS/NORTHEAST	NIAGARA FALLS BLVD - MALL	AMHERST NY	813792228
		Spill No* | *Close Date: 9406936 | 1995-06-06 00:00:00		
NY SPILLS	SAWYER CREEK OIL	NIAGARA FALLS BLVD RT 62	WHEATFIELD NY	813753257
		Spill No* | *Close Date: 8903991 | 1989-07-25 00:00:00		
NY SPILLS	CAYUGA CREEK	NIAGARA FALLS BOULEVARD	NIAGARA FALLS NY	813734907
		Spill No* | *Close Date: 8800214 | 1988-05-04 00:00:00		
NY SPILLS	SGL INC.	NIAGARA FALLS BLVD	NIAGARA FALLS NY	813721100
		Spill No* | *Close Date: 9506890 | 1995-09-06 00:00:00		
NY SPILLS	DUMPING NEXT TO TOPS	NIAGARA FALLS BLVD	AMHERST NY	813716618
		Spill No* | *Close Date: 9206877 | 1992-09-15 00:00:00		
NY SPILLS	NFTA	NIAGARA FALLS BLVD	NIAGARA FALLS NY	813704609
		Spill No* | *Close Date: 9501480 | 1995-05-02 00:00:00		
NY SPILLS	Spill Number 8504732	NIAGARA FALLS BOUL.	AMHERST NY	813703757
		Spill No* | *Close Date: 8504732 | 1986-03-22 00:00:00		

NY SPILLS	NYSDOT HIGHWAY PROJECT	NIAGARA FALLS BLVD.	WHEATFIELD NY	813703500
		Spill No* | *Close Date: 9806509 | 1998-09-30 00:00:00		
NY SPILLS	NY POWER AUTHORITY	NIAGARA FALLS	NIAGARA FALLS NY	813682938
		Spill No* | *Close Date: 0550523 | 2005-07-15 00:00:00		
NY SPILLS	914TH AIRLIFT GROUP	NIAGARA FALLS BLVD	NIAGARA FALLS NY	813666057
		Spill No* | *Close Date: 9304924 | 1993-07-19 00:00:00		
NY SPILLS	KAUFMANN - BOULEVARD MALL	NIAGARA FALLS BLVD.	AMHERST NY	813665837
		Spill No* | *Close Date: 9300420 | 1993-04-15 00:00:00		
NY SPILLS	OIL IN RECEIVER	NIAGARA FALLS BLVD.	TONAWANDA NY	813664358
		Spill No* | *Close Date: 9305760 | 1993-08-10 00:00:00		
NY SPILLS	MODERN DISPOSAL SERVICE	NIAGARA FALLS BLVD.	AMHERST NY	813664295
		Spill No* | *Close Date: 9208927 | 1993-02-22 00:00:00		
NY SPILLS	AIR FORCE RESERVE BASE	NIAGARA FALLS BLVD	NIAGARA FALLS NY	813663877
		Spill No* | *Close Date: 9301782 | 1993-05-05 00:00:00		
NY SPILLS	CECOS	NIAGARA FALLS BOULEVARD	NIAGARA FALLS NY	813659412
		Spill No* | *Close Date: 8800791 | 1988-04-29 00:00:00		
NY SPILLS	CECOS INTERNATIONAL	NIAGARA FALLS BOULEVARD	NIAGARA FALLS NY	813659163
		Spill No* | *Close Date: 8805412 | 1988-11-10 00:00:00		
NY SPILLS	ATLANTIC	NIAGARA FALLS BOULEVARD	TONAWANDA NY	813657818
		Spill No* | *Close Date: 8902034 | 1989-06-16 00:00:00		
NY SPILLS	CHEMLAWN	NIAGARA FALLS BLVD.	AMHERST NY	813651228
		Spill No* | *Close Date: 9001548 | 1990-05-09 00:00:00		
NY SPILLS	ASSOC RETARDED CHILDREN	NIAGARA FALLS BLVD	WHEATFIELD NY	813650934
		Spill No* | *Close Date: 9100516 | 1991-06-20 00:00:00		
NY SPILLS	WAL-MART	NIAGARA FALLS BLVD.	AMHERST NY	813646189
		Spill No* | *Close Date: 9309521 | 1993-11-10 00:00:00		

NY SPILLS	PAINT CANS IN DUMPSTER	NIAGARA FALLS BOULEVARD	AMHERST NY		813638826
		Spill No* | *Close Date: 9315170 | 1994-03-25 00:00:00			
NY SPILLS	BARAGE CANAL	NIAGARA FALLS BLVD	WHEATFIELD NY		813638521
		Spill No* | *Close Date: 9003597 | 1990-08-23 00:00:00			
NY SPILLS	OIL ON PAVEMENT	NIAGARA FALLS BOULEVARD	AMHERST NY		813637061
		Spill No* | *Close Date: 9304884 | 1993-07-19 00:00:00			
NY SPILLS	DRUM AT SAWYER CREEK	NIAGARA FALLS BOULEVARD	NORTH TONAWANDA NY		813636798
		Spill No* | *Close Date: 9607273 | 2000-11-06 00:00:00			
SEMS ARCHIVE	TOWN OF NIAGARA LANDFILL	OFF OF LOCKPORT RD	NIAGARA FALLS NY	14301	828872427
		EPA ID: NYD000514364			
SEMS ARCHIVE	RUFOLF WURLITZER	NIAGARA FALLS BLVD	NORTH TONAWANDA NY	14120	828876193
		EPA ID: NYD000911339			
SEMS ARCHIVE	LOCKPORT ROAD SITE	LOCKPORT ROAD	WHEATFIELD NY	14150	828882085
		EPA ID: NYD982531295			
VAPOR	Frontier Chemical - Pendleton	Townline Road	North Tonawanda NY	14120	804358691

Unplottable Report

Site: ***TOWN OF NIAGARA LANDFILL***
OFF OF LOCKPORT RD NIAGARA FALLS NY 14301

CERCLIS NFRAP

Site ID:	201268	***Site FIPS Code:***	36063
Site EPA ID:	NYD000514364	***Region Code:***	2
Site Parent ID:		***Site Cong. Dist. Code:***	36
Site County Name:	NIAGARA	***Federal Facility:***	
Parent Site Name:			

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	9/29/1986
RAT Code:	PA	***AGT Order No.:***	130
RAT Short Name:	PA	***SH OU:***	
RAT Name:	PRELIMINARY ASSESSMENT	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:	P	***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	NFRAP
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N
RAT Def:	Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	9/29/1986
RAT Code:	VS	***AGT Order No.:***	1500
RAT Short Name:	ARCH SITE	***SH OU:***	
RAT Name:	ARCHIVE SITE	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:		***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	
RALT Short Name:	EPA In-House	***RNPL Status Code:***	N
RAT Def:	The decision is made that no further activity is planned at the site.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	4/1/1980
RAT Code:	DS	***AGT Order No.:***	10
RAT Short Name:	DISCVRY	***SH OU:***	
RAT Name:	DISCOVERY	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:		***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	
RALT Short Name:	EPA Fund	***RNPL Status Code:***	N
RAT Def:	The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can		

occur through the use of several mechanisms such as a phone call or referral by another government agency.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

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Site: ***RUFOLF WURLITZER***
NIAGARA FALLS BLVD NORTH TONAWANDA NY 14120

CERCLIS NFRAP

Site ID:	201311	***Site FIPS Code:***	36063
Site EPA ID:	NYD000911339	***Region Code:***	2
Site Parent ID:		***Site Cong. Dist. Code:***	36
Site County Name:	NIAGARA	***Federal Facility:***	
Parent Site Name:			

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	3/1/1986
Act Code ID:	1	***Act Complete Date:***	3/7/1986
RAT Code:	PA	***AGT Order No.:***	130
RAT Short Name:	PA	***SH OU:***	
RAT Name:	PRELIMINARY ASSESSMENT	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:	P	***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	NFRAP
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N

RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	3/1/1986
Act Code ID:	1	***Act Complete Date:***	3/7/1986
RAT Code:	SI	***AGT Order No.:***	160
RAT Short Name:	SI	***SH OU:***	
RAT Name:	SITE INSPECTION	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:	P	***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	NFRAP
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N

RAT Def: The process of collecting site data and samples to characterize the severity of the hazard for the hazard ranking score and/or enforcement support.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	4/1/1992
Act Code ID:	2	***Act Complete Date:***	6/16/1992
RAT Code:	SI	***AGT Order No.:***	160
RAT Short Name:	SI	***SH OU:***	
RAT Name:	SITE INSPECTION	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:	P	***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	NFRAP
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N

RAT Def: The process of collecting site data and samples to characterize the severity of the hazard for the hazard ranking score and/or enforcement support.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	6/16/1992
RAT Code:	VS	***AGT Order No.:***	1500
RAT Short Name:	ARCH SITE	***SH OU:***	
RAT Name:	ARCHIVE SITE	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:		***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	
RALT Short Name:	EPA In-House	***RNPL Status Code:***	N
RAT Def:	The decision is made that no further activity is planned at the site.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	3/1/1986
RAT Code:	DS	***AGT Order No.:***	10
RAT Short Name:	DISCVRY	***SH OU:***	
RAT Name:	DISCOVERY	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:		***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N
RAT Def:	The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

Site: ***LOCKPORT ROAD SITE***
LOCKPORT ROAD WHEATFIELD NY 14150

CERCLIS NFRAP

Site ID:	202805	***Site FIPS Code:***	36029
Site EPA ID:	NYD982531295	***Region Code:***	2
Site Parent ID:		***Site Cong. Dist. Code:***	32
Site County Name:	ERIE	***Federal Facility:***	
Parent Site Name:			

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	3/21/1986
RAT Code:	DS	***AGT Order No.:***	10
RAT Short Name:	DISCVRY	***SH OU:***	
RAT Name:	DISCOVERY	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:		***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N
RAT Def:	The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	2/1/1992
Act Code ID:	1	***Act Complete Date:***	2/1/1992
RAT Code:	SI	***AGT Order No.:***	160
RAT Short Name:	SI	***SH OU:***	
RAT Name:	SITE INSPECTION	***SH Code:***	

RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:	P	***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	NFRAP
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N

RAT Def: The process of collecting site data and samples to characterize the severity of the hazard for the hazard ranking score and/or enforcement support.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	2/1/1992
RAT Code:	VS	***AGT Order No.:***	1500
RAT Short Name:	ARCH SITE	***SH OU:***	
RAT Name:	ARCHIVE SITE	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:		***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	
RALT Short Name:	EPA In-House	***RNPL Status Code:***	N

RAT Def: The decision is made that no further activity is planned at the site.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	3/28/1988
RAT Code:	PA	***AGT Order No.:***	130
RAT Short Name:	PA	***SH OU:***	
RAT Name:	PRELIMINARY ASSESSMENT	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:	P	***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	NFRAP
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N

RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

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Site: ***NYSDEC (WURLITZER PARK)***
NIAGARA FALLS BOULEVARD NORTH TONAWANDA NY 14120

GEN MANIFEST

RCRA ID:	NYD000911339	***Mailing State:***	NY
District Name:	NYSDEC (WURLITZER PARK)	***Mailing ZIP:***	14120
Contact Name:	LORI SECKER	***Mailing ZIP Ext:***	
Business Phone No:	7166676664	***Mailing Country:***	USA
Mailing Street 1:	NIAGARA FALLS BOULEVARD	***Location ZIP Ext:***	
Mailing Street 2:		***Location Country:***	USA
Mailing City:	NORTH TONAWANDA	***Location County:***	NIAGARA

Manifest Information

Waste Code(s):

D001: IGNITABLE WASTE (Waste Code Description from EPA Hazardous Waste Identification)

Waste Amounts By Year:

1998: 1000 Pounds

Manifest Information

Waste Code(s):

D005: BARIUM (Waste Code Description from EPA Hazardous Waste Identification)

Waste Amounts By Year:

1998: 1000 Pounds

Manifest Information

Waste Code(s):

D008: LEAD (Waste Code Description from EPA Hazardous Waste Identification)

Waste Amounts By Year:

2004: 60140 Pounds; 62260 Pounds; 68780 Pounds; 64960 Pounds; 59040 Pounds; 65140 Pounds; 62700 Pounds; 56960 Pounds; 46080 Pounds; 47840 Pounds; 48660 Pounds; 63640 Pounds; 64220 Pounds; 59860 Pounds; 59280 Pounds; 65100 Pounds; 46080 Pounds; 53040 Pounds; 54360 Pounds; 71180 Pounds; 64180 Pounds; 70800 Pounds; 75940 Pounds; 72940 Pounds; 75800 Pounds; 80920 Pounds; 68300 Pounds; 71060 Pounds; 58420 Pounds; 66920 Pounds; 74620 Pounds; 64100 Pounds; 62940 Pounds; 64880 Pounds; 72100 Pounds; 63240 Pounds; 57680 Pounds; 60100 Pounds; 63820 Pounds; 67940 Pounds; 66680 Pounds; 73700 Pounds; 56060 Pounds; 70020 Pounds; 58620 Pounds; 48460 Pounds; 44040 Pounds; 34240 Pounds; 54280 Pounds; 62440 Pounds; 65040 Pounds; 57760 Pounds; 66280 Pounds; 61600 Pounds; 62120 Pounds; 52980 Pounds; 40140 Pounds; 74080 Pounds; 70760 Pounds; 62540 Pounds; 51400 Pounds; 75120 Pounds; 69860 Pounds; 57720 Pounds; 57960 Pounds; 63780 Pounds; 61620 Pounds; 66600 Pounds

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Site: ***Leshner Junk***
U Niagara Falls NY

HSWDS

Reg Site ID:	N	***VOCs:***	No
Site No:	HS9037	***Semi VOCs:***	Yes
EPA ID:	New	***PCBs:***	Yes
Is Site Active?:	Unknown	***Pesticides:***	No
Registry:	N	***Metals:***	Yes
Years of Operation:	U to 1920's	***Asbestos:***	No
RCRA:	Unknown	***County:***	Niagara
HRS Score:	U	***Region:***	9
HRS Date:	U	***Latitude:***	U
Acres:	0.43	***Longitude:***	U
Site Code:	1	***Quadrangle:***	Niagara Falls

Site Code Desc:	Industrial Site
Owner:	P
Owner Name:	Leshner Junk
Owner Address:	U Niagara Falls, NY
Owner Telephone:	U
Operator:	P
Operator Name:	U
Operator Address:	U
Operator Telephone:	U
Completed Investigation:	unknown
Samples Collected:	Surface Soil
Threat to Env/Public Health?:	E/P
Surface Water Contamination?:	Unknown
Groundwater Contamination?:	Unknown
Drinking Water Contam?:	Unknown
Surface Water Class:	U
Groundwater Class:	U
Active Drinking Water Supply?:	Unknown
Hazard Substance Exposed?:	Unknown
Controlled Site Access?:	Unknown
Ambient Air Contamination?:	U
Threat of Direct Contact?:	Unknown
Doc Fish/Wildlife Mortality?:	Unknown
Impact on Special Status?:	Unknown
TCLP:	

Surface Water:
Groundwater:
Drinking Water:
Fish or Wildlife Mortality:
Fish or Wildlife Resource:
Building:
Hazard Substance Disposed: Metals
Air:
Surface Water:
Surface Soil: Several VOCs found in concentrations above standards (i.e. phenathrene 21,000 ug/kg, fluoranthene 28,000 ug/kg), Aroclor 1254 2700 ug/kg, several metals are over NYS background (i.e. mercury 35 mg/kg, lead 2893 mg/kg, zinc 3159 mg/kg). Additional site-specific data is on file at NYSDEC.
Waste:
EP Toxicity:
Groundwater:
Sediment:
Subsurface Soil:
Leachate:
Regulatory Agencies Involved: US EPA
Preparer: Julia Slack, JW
Engineering Aide
May 19, 1994
Nominated by:
Describe the Site: The site is located in a highly industrial and commercial section of Niagara Falls. It has been operating as a scrap metal dealer since the 1920's. Approx.
94 drums, containing scrap metal are on site.
Describe the Threat:

The potential threat of this site is unknown.

Site: ***Leshner Junk***
U Niagara Falls NY HSWDS

Reg Site ID:	N	***VOCs:***	
Site No:	HS9037	***Semi VOCs:***	
EPA ID:	New	***PCBs:***	
Is Site Active?:		***Pesticides:***	
Registry:	N	***Metals:***	
Years of Operation:		***Asbestos:***	
RCRA:		***County:***	Niagara
HRS Score:		***Region:***	9
HRS Date:		***Latitude:***	
Acres:		***Longitude:***	
Site Code:	1	***Quadrangle:***	
Site Code Desc:	Industrial Site		
Owner:	Leshner Junk		
Owner Name:			
Owner Address:			
Owner Telephone:			
Operator:	U		
Operator Name:			
Operator Address:			
Operator Telephone:			
Completed Investigation:			
Samples Collected:			
Threat to Env/Public Health?:			
Surface Water Contamination?:			
Groundwater Contamination?:			
Drinking Water Contam?:			
Surface Water Class:			
Groundwater Class:			
Active Drinking Water Supply?:			
Hazard Substance Exposed?:			
Controlled Site Access?:			
Ambient Air Contamination?:			
Threat of Direct Contact?:			
Doc Fish/Wildlife Mortality?:			
Impact on Special Status?:			
TCLP:			

Surface Water:
Groundwater:
Drinking Water:
Fish or Wildlife Mortality:
Fish or Wildlife Resource:
Building:
Hazard Substance Disposed: Metals
Air:
Surface Water:
Surface Soil:
Waste:
EP Toxicity:
Groundwater:
Sediment:
Subsurface Soil:
Leachate:
Regulatory Agencies Involved:
Preparer:
Nominated by:
Describe the Site: The site is located in a highly industrial and commercial section of Niagara Falls. It has been operating as a scrap metal dealer since the 1920's. Approx. 94 drums, containing scrap metai are on site.
Describe the Threat:

The potential threat of this site is unknown.

Site: ***Lockport Rd/ Struzik Property***
South of Lockport Rd. Wheatfield 14304 NY HSWDS

Reg Site ID:	932094	***VOCs:***	
Site No:	HS9039	***Semi VOCs:***	
EPA ID:	None	***PCBs:***	
Is Site Active?:		***Pesticides:***	
Registry:	D	***Metals:***	
Years of Operation:		***Asbestos:***	
RCRA:		***County:***	Niagara
HRS Score:		***Region:***	9
HRS Date:		***Latitude:***	
Acres:		***Longitude:***	
Site Code:	3B	***Quadrangle:***	

Site Code Desc: Industrial Landfill
Owner: Niagara Falls Church of God
Owner Name:
Owner Address:
Owner Telephone:
Operator: Same
Operator Name:
Operator Address:
Operator Telephone:
Completed Investigation:
Samples Collected:
Threat to Env/Public Health?:
Surface Water Contamination?:
Groundwater Contamination?:
Drinking Water Contam?:
Surface Water Class:
Groundwater Class:
Active Drinking Water Supply?:
Hazard Substance Exposed?:
Controlled Site Access?:
Ambient Air Contamination?:
Threat of Direct Contact?:
Doc Fish/Wildlife Mortality?:
Impact on Special Status?:
TCLP:
Surface Water:
Groundwater:
Drinking Water:
Fish or Wildlife Mortality:

Fish or Wildlife Resource:
Building:
Hazard Substance Disposed: Metals
Air:
Surface Water:
Surface Soil:
Waste:
EP Toxicity:
Groundwater:
Sediment:
Subsurface Soil:
Leachate:
Regulatory Agencies Involved:
Preparer:
Nominated by:
Describe the Site: An open dump received carbon dust, graphite waste, and paper from Carborundum. The site was used by Bell Aerospace and Carborundum for disposal of scrapwood, flyash, and clay. Mr. Edward Struzik was the property owner at this time.
Describe the Threat:

2000 cu yd (carbon dust, graphite waste, and paper), solid and industrial wastes, unauthorized dumping occurred. A minimal threat is posed by the site due to possible direct contact with low levels of metals in the surface soils.

Site: ***Leshner Junk***
U Niagara Falls NY HSWDS

Reg Site ID:	N	***VOCs:***	No
Site No:		***Semi VOCs:***	Yes
EPA ID:	NY New Site	***PCBs:***	Yes
Is Site Active?:	Unknown	***Pesticides:***	No
Registry:	N	***Metals:***	Yes
Years of Operation:	U to 1920's	***Asbestos:***	No
RCRA:	Unknown	***County:***	Niagara
HRS Score:	U	***Region:***	9
HRS Date:	U	***Latitude:***	U
Acres:	0.43	***Longitude:***	U
Site Code:	1	***Quadrangle:***	Niagara Falls

Site Code Desc: Industrial Site
Owner: P
Owner Name: Leshner Junk
Owner Address: U
Niagara Falls, NY
Owner Telephone: U
Operator: P
Operator Name: U
Operator Address: U
Operator Telephone: U
Completed Investigation: unknown
Samples Collected: Surface Soil
Threat to Env/Public Health?: E/P
Surface Water Contamination?: Unknown
Groundwater Contamination?: Unknown
Drinking Water Contam?: Unknown
Surface Water Class: U
Groundwater Class: U
Active Drinking Water Supply?: Unknown
Hazard Substance Exposed?: Unknown
Controlled Site Access?: Unknown
Ambient Air Contamination?: U
Threat of Direct Contact?: Unknown
Doc Fish/Wildlife Mortality?: Unknown
Impact on Special Status?: Unknown
TCLP:
Surface Water:
Groundwater:
Drinking Water:
Fish or Wildlife Mortality:
Fish or Wildlife Resource:

Building:
Hazard Substance Disposed: Metals
Air:
Surface Water:
Surface Soil: Several VOCs found in concentrations above standards (i.e. phenathrene 21,000 ug/kg, fluoranthene 28,000 ug/kg), Aroclor 1254 2700 ug/kg, several metals are over NYS background (i.e. mercury 35 mg/kg, lead 2893 mg/kg, zinc 3159 mg/kg). Additional site-specific data is on file at NYSDEC.
Waste:
EP Toxicity:
Groundwater:
Sediment:
Subsurface Soil:
Leachate:
Regulatory Agencies Involved: US EPA
Preparer: Julia Slack, JW
Engineering Aide
May 19, 1994
Nominated by:
Describe the Site: The site is located in a highly industrial and commercial section of Niagara Falls. It has been operating as a scrap metal dealer since the 1920's. Approx.
94 drums, containing scrap metal are on site.
Describe the Threat:

The potential threat of this site is unknown.

Site: ***AFRES***
NIAGARA FALLS (C) NIAGARA FALLS NY LST

Spill No:	8600643	***REM Phase:***	0
Site ID:	290876	***UST Trust:***	False
DER Facility ID:	235536	***Spill Date:***	1986-04-26 17:20:00
CID:		***Rcvd Date:***	1986-04-26 17:25:00
Program Type:	ER	***CAC Date:***	1986-04-26 00:00:00
SWIS Code:	3211	***Insp Date:***	
Contribute Factor:	Tank Overfill	***Close Date:***	1986-04-26 00:00:00
Water Body:		***Create Date:***	1986-05-19 00:00:00
Class:		***Update Date:***	1987-03-10 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	LEARY
County:	Niagara	***After Hours:***	True
Referred to:			
Reported by:	Responsible Party		
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"AIRCRAFT-EXPANSION FROM HEAT"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RNL / / : LAID DOWN SPEEDY-DRI TO ABSORB FUEL. "

Material Information

OP Unit ID:	896906	***Med in Air:***	False
OU:	01	***Med GW:***	False
Material ID:	480790	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	2.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0011		
Material Name:	jet fuel		

Spiller Information

Spiller Name:	
Spiller Company:	AFRES 914 TAG
Spiller Address:	
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***WARDELL BOAT YARD***
SWEENEY STREET NORTH TONAWANDA NY LST

Spill No:	9000205	***REM Phase:***	0
Site ID:	164682	***UST Trust:***	True
DER Facility ID:	138851	***Spill Date:***	1990-04-06 10:30:00
CID:		***Rcvd Date:***	1990-04-06 10:45:00
Program Type:	ER	***CAC Date:***	1991-12-05 00:00:00
SWIS Code:	3212	***Insp Date:***	1991-06-24 00:00:00
Contribute Factor:	Tank Failure	***Close Date:***	1991-12-05 00:00:00
Water Body:		***Create Date:***	1990-04-10 00:00:00
Class:		***Update Date:***	1999-05-21 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	COOKE
County:	Niagara	***After Hours:***	False
Referred to:			
Reported by:	Other		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"TANKS UNCOVERED TO RETEST, CONTAMINATION FOUND AT TANK TOPS."

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 04/09/90: CANTAMINATED SOILS BEING STAGED FOR DISPOSAL AND ALL 3 TANKS WILL BE RETESTED. DRAFTED LETTER TO MR WARDELL REGARDING REMEDIAL ACTION FOR FAILED TANK SYSTEMS. 04/10/90: JDC INSPECTED SITE AND FOUND 2000 GALLON DIESEL FAILED TANK TEST. 3000 GALLON TANK PASSED. ARRANGEMENTS BEING MADE FOR PRODUCT REMOVAL ON FAILED TEST. 2000 GASOLINE TANK TO BE TESTED LATE WEEK OR EARL. 04/13/90: (1) 2,000 GALLON GASOLINE TANK FAILS AND (1) 2,000 GALLON DIESEL TANK FAILS PETROTITE TEST. DENNIS WARDELL, OWNER IS HAVING TANKS REMOVED. 07/20/90: SOIL YET TO BE DISPOSED OF. SAMPLES TAKEN BY SLC ACCORDING TO MR WARDELL STILL OUTSTANDING. DENNIS WARDELL, OWNER IS HAVING TANKS REMOVED. 07/20/90: WAITING FOR DISPOSAL TO BE COMPLETED BEFORE CLOSING FILE. 07/20/90: DISPOSAL OF SOIL NOT COMPLETED. WARDELLS WAITING ON LAB ANALYSIS. DO NOT EXPECT DISPOSAL TO TAKE PLACE SOON. MR WARDELL HAS TAKEN LEGAL ACTION AGAINST THE DEPT. 08/30/90: SENT DISPOSAL LETTER REQUESTING RECIEPTS. 12/06/90: MJH TELCON W/ DENNIS WARDELL SOIL STILL PRESENT TEST RESULTS LOST WILL REDO. 06/24/91: REQUESTED SOIL TO BE TESTED FOR PETROLEUM PRO TO VARIFY SOIL CONTAMINATION. 12/05/91: FINAL SOIL ANALYSIS SATISFACTORY, REVIEWD FILE NO FURHER ACTION REQUIRED. "

Material Information

OP Unit ID:	939432	***Med in Air:***	False
OU:	01	***Med GW:***	True
Material ID:	438614	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	L	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0009		

Material Name: gasoline

OP Unit ID:	939432	***Med in Air:***	False
OU:	01	***Med GW:***	True
Material ID:	438613	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		

Material Code: 0008
Material Name: diesel

Spiller Information

Spiller Name:
Spiller Company: WARDELL BOAT YARD
Spiller Address: SWEENEY STREET
Spiller City: NORTH TONAWANDA
Spiller State: NY
Spiller Zip:
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude: 43.023482993
Longitude: -78.861149023

Site: ***NIAGARA FALLS AIR FORCE***
LOCKPORT ROAD NIAGARA FALLS NY

LST

Spill No:	9600620	***REM Phase:***	0
Site ID:	98324	***UST Trust:***	True
DER Facility ID:	87494	***Spill Date:***	1996-04-12 16:43:00
CID:	196	***Rcvd Date:***	1996-04-12 16:39:00
Program Type:	ER	***CAC Date:***	
SWIS Code:	3211	***Insp Date:***	1996-04-17 00:00:00
Contribute Factor:	Tank Failure	***Close Date:***	1997-07-01 00:00:00
Water Body:		***Create Date:***	1996-04-12 00:00:00
Class:	C3	***Update Date:***	1998-12-10 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
County:	Niagara	***After Hours:***	True

Referred to: NIAGARA CNTY HEALTH DEPT
Reported by: Responsible Party
Source: Institutional, Educational, Gov., Other
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"CONTRACTOR EXCAVATION AROUND WATER LINE ON BASE AT INTERSECTION OF OTTIS AND MCGUIRE ST BROKE JP-4 FUEL LINE. FIRM REMOVED UST CAUSING 1 GALLION OF PRODUCT TO SPILL ONTO G.W. IN EXCAVTION."

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 4/17/96: JDC ON SITE AND INSPECTED TRENCH AREA W/ BILL NIVER AND JIM MATHEWS. NO SHEEN OR PRODUCT OBSERVED, 8-55 GALLON DRUMS WITH SORBENT AND LIQUID DEBRIS FROM TRENCH. MORE FUEL LINE WILL BE ENCOUNTERD AS SEWER PROJECT MOVES CLOSURE TO FLIGHTLINE. PLAN BEING DEVELOPED TO REMOVED POSSIBLE FUEL FROM LINES. COLLECTED WASTE WILL BE CONSOLIDATED FOR DISPOSAL UNDER LQG PERMIT. SENT FORM LETTER. 5/30/96: JDC TELCON WILL BILL NIVER, SOIL AND WATER IS BEING TESTED, STATUS LETTER WILL BE SENT BY RP. 6/10/96: RECEIVED STATUS UPDATE FROM AFRES, FLOW OF LIQUID HAS STOPPED, SAMPLE OF LIQUID TAKEN. 7/26/96:RECEIVED STATUS UPDATE FROM AFRES, ENDS OF PIPE HAVE BEEN SEALED, 8 INCHES HAVE BEEN EXCAVATED FOR DISPOSAL, SAMPLES WERE TAKEN FOR DISPOSAL CHARACTERIZATION. 9/3/96:RECEIVED STATUS REPORT FROM AFRES, SOIL HAS BEEN STAGED, RECEIVED ANALYTICAL INDICATING SOIL WAS CONTAMINATED AND NON-HAZARDOUS, CONSIDERING BOTH BIOREMEDIATION AND THERMAL DESTRUCTION. 6/5/97: SAC,RNL MEETING W/ELLEN MARIEN, BILL NIVER & GERRY HROMOWYK, SOIL REMAINS ON-SITE BUT DISPOSAL HAS BEEN ARRANGED, WILL SEND IN DISPOSAL RECEIPTS ONCE COMPLETED. 6/24/97: RECEIVED DISPOSAL RECEIPTS."

Material Information

OP Unit ID:	1032054	***Med in Air:***	False
OU:	01	***Med GW:***	True
Material ID:	354016	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0011		
Material Name:	jet fuel		

Spiller Information

Spiller Name:	ELLEN MARIEN
Spiller Company:	AFRES - AIR RESERVE
Spiller Address:	2405 FRANKLIN DRIVE
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	14304-5063
Spiller Country:	001
Contact Name:	BILL NIVER
Contact Phone:	(716) 236-2552
Contact Ext:	
Latitude:	43.122695993
Longitude:	-78.978912029

Site: ***ELLICOTT CREEK PARK***
NIAGARA FALLS BLVD. TONAWANDA NY LST

Spill No:	9875092	***REM Phase:***	0
Site ID:	294615	***UST Trust:***	True
DER Facility ID:	275055	***Spill Date:***	1998-10-02 12:00:00
CID:		***Rcvd Date:***	1998-10-07 13:00:00
Program Type:	ER	***CAC Date:***	
SWIS Code:	1500	***Insp Date:***	
Contribute Factor:	Tank Failure	***Close Date:***	2000-03-10 00:00:00
Water Body:		***Create Date:***	1998-10-07 13:05:00
Class:	C3	***Update Date:***	2000-03-13 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SORGI
County:	Erie	***After Hours:***	False
Referred to:			
Reported by:	Responsible Party		
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"DURING REMOVAL OF 1K DIESEL UST, CONTAMINATION DISCOVERED DUE TO LEAK IN PIPING."

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJS 10/07/98: RMC TELECON WITH BURT LYON, ERIE COUNTY. HE STATED THAT COUNTY IS REMOVING A NUMBER OF TANKS AND WILL CONSOLIDATE CONTAMINATED SOILS FOR DISPOSAL/TREATMENT. 11/10/98: MJS RECEIVED COPY OF POST-EXCAVATION SAMPLE RESULTS. ALL PARAMETERS WITHIN GUIDANCE VALUES FOR BOTH GASOLINE AND FUEL OIL TANK EXCAVATIONS. NEED DISPOSAL DOCUMENTATION FOR FILE CLOSURE. 03/03/00: MJS REVIEW FILE. RECALL RICK RUTKOWSKI STATING THAT SOILS TO BE BIOTREATED. MJS TELECON TO MR RUTKOWSKI AND HE ADVISED THAT SOILS WERE DISPOSED RATHER THAN TREATED. HE WILL FORWARD RECEIPTS. 03/10/00: MJS RECEIVED DISPOSAL RECEIPTS FROM MR RUTKOWSKI. 26.66 TONS SOIL DISPOSED AT MODERN LANDFILL ON 3/24/99. NO FURTHER ACTION REQUIRED. MJS CLOSE FILE."

Material Information

OP Unit ID:	1078376	***Med in Air:***	False

OU:	01	***Med GW:***	False
Material ID:	306675	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	RICK RUTKOWSKI
Spiller Company:	ERIE COUNTY PARKS DEPT.
Spiller Address:	95 FRANKLIN STREET
Spiller City:	BUFFALO
Spiller State:	NY
Spiller Zip:	14202
Spiller Country:	001
Contact Name:	BURT LYON
Contact Phone:	(716) 542-2330
Contact Ext:	
Latitude:	43.002559993
Longitude:	-78.868880023

Site: ***HI SKIPPER MARINE***
SWEENEY STREET NORTH TONAWANDA NY LST

Spill No:	9310692	***REM Phase:***	0
Site ID:	164685	***UST Trust:***	False
DER Facility ID:	138851	***Spill Date:***	1993-12-03 11:51:00
CID:		***Rcvd Date:***	1993-12-03 11:51:00
Program Type:	ER	***CAC Date:***	1993-12-09 00:00:00
SWIS Code:	3212	***Insp Date:***	1993-12-07 00:00:00
Contribute Factor:	Tank Failure	***Close Date:***	1993-12-09 00:00:00
Water Body:		***Create Date:***	1993-12-03 00:00:00
Class:	E6	***Update Date:***	1993-12-28 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
County:	Niagara	***After Hours:***	False
Referred to:			
Reported by:	Affected Persons		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"ABANDONED WASTE OIL TANK ON-SITE, NONE FOUND"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC 12/06/93: SAC/BOB BUZZELLI, NCHD/TELECON - HE WILL FOLLOW-UP. 12/09/93: SAC/BOB BUZZELLI, NCHD/TELECON - NO UNDERGROUND WASTE OIL OR GAS TANKS; DOESN'T SELL GAS. UST THAT HAS NEVER BEEN USED ON PREMISES. NO PRODUCT OR SHEEN COMING OUT. NO FURTHER ACTION REQUIRED. "

Material Information

OP Unit ID:	989488	***Med in Air:***	False
OU:	01	***Med GW:***	False
Material ID:	389778	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	

Med Air: False
Material Code: 0022
Material Name: waste oil/used oil

Spiller Information

Spiller Name:
Spiller Company: HI SKIPPER MARINE
Spiller Address: SWEENEY STREET
Spiller City: NORTH TONAWANDA
Spiller State: NY
Spiller Zip: 14150
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude: 43.023482993
Longitude: -78.861149023

Site: ***WEST CANAL MARINA***
TONAWANDA CREEK ROAD PENDLETON NY

LST

Spill No:	9875289	***REM Phase:***	0
Site ID:	274563	***UST Trust:***	True
DER Facility ID:	223313	***Spill Date:***	1998-12-14 12:19:00
CID:		***Rcvd Date:***	1998-12-14 12:19:00
Program Type:	ER	***CAC Date:***	
SWIS Code:	3232	***Insp Date:***	1999-03-12 00:00:00
Contribute Factor:	Tank Failure	***Close Date:***	2000-02-11 00:00:00
Water Body:		***Create Date:***	1998-12-14 12:23:00
Class:	B3	***Update Date:***	2000-02-14 00:00:00
Meets Std:	False	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
County:	Niagara	***After Hours:***	False

Referred to: NIAGARA CNTY HEALTH DEPT
Reported by: Responsible Party
Source: Institutional, Educational, Gov., Other
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"1000 GALLON UST BEGAN LEAKING AFTER DIGGING AROUND FOR REMOVAL PREP"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 12/14/98:JDC SITE INSPECTION, MET WITH DAVID MARTIN OF NCHD, 1000 GALLON GASOLINE UNCOVERED, GROUNDWATER IN EXCAVATION, NO SHEEN ON WATER, ACCORDING TO ED MCDONALD, NIAGARA PARKS, TANK IS 1/3 FULL OF WATER AND GASOLINE. THEY UNCOVERED TANK ANDD WILL CONTINUE WITH REMOVAL. THEY HIRED EP&S TO PUMP OUT TANK AND STAGE DRUMS WITH PRODUCT AND WATER ON SITE. EP&S WILL ALSO BE DOING TANK CLEANING. ADVISED ON POST TESTING REQUIREMENTS. ALSO MET TIM HORANBURG, COMMISSIONER, NIAGARA COUNTY PARKS, DISCUSSED CLEANUP REQUIREMENTS. 12/15/98: JDC SITE INSPECTION, MET WITH ED MCDONALD. SECOND TANK DISCOVERED, 500 GALLON FUEL. THEY HIRED EP&S TO EMPTY TANK, NIAGARA PARKS WILL DO TANK REMOVAL. ADVISED THAT EXCAVATION SAMPLING BE DONE TO INCLUDE BOTH EXCAVATIONS. APPROXIMATELY 30 YARDS OF CONTAMINATED SOILS FOUND WITH THE GASOLINE TANK. EXCAVATION SHOULD BEGIN ON THE FUEL OIL TANK TOMORROW. 12/18/98: SAC SITE INSPECTION, BOTH TANKS HAVE BEEN REMOVED AND EP&S ON SITE CLEANING TANKS, HOLES HAVE BEEN CUT INTO THE TANKS, ONE EXTRA TANK ON-SITE WHICH PER CARL CROSSEN OF EP&S IS FROM OPPENHEIM PARK ONE COMPOSITE BOTTOM SAMPLE WAS TAKEN AND A COMPOSITE SAMPLE FROM ALL FOUR SIDES WAS TAKEN, ODORS WERE NOTED IN SAMPLES, CONTAMINATED DIRT WAS STAGED ON PLASTIC, WHAT WAS CONSIDERED CLEAN DIRT WAS INSPECTED AND ODORS WERE NOTED FROM THIS PILE, A SAMPLE FROM THIS PILE WAS ALSO TAKEN. 01/13/99: SAC RECEIVED ANALYTICAL RESULTS FOR EXCAVATION, CONTAMINATED SOIL PILE, AND SOIL PILE THAT WAS CONSIDERED NOT CONTAMINATED, EXCAVATION SAMPLE RESULTS EXCEEDED GUIDANCE VALUES AND FURTHER WORK REQUIRED, CONTAMINATED SOIL PILE IS NON - HAZARDOUS BASED ON THE RESULTS, SOIL PILE THAT WAS CONSIDERED NOT CONTAMINATED WAS ANALYZED USING DOH METHOD 310-13, WHICH INDICATED THE PRESENCE OF GASOLINE AND #4 FUEL OIL, DISCUSSED RESULTS WITH RNL, THE SOIL PILE IS CONSIDERED NOT CONTAMINATED HAS BEEN DETERMONED CONTAMINATED BASED ON THESE RESULTS. 01/13/99: SAC TELECON CARL CROSSEN, BASED ON RESULTS, NIAGARA COUNTY PARKS WILL HAVE A SITE ASSESSMENT DONE TO DETERMINE THE EXTENT OF CONTAMINATION. ALSO CLAEN SOIL PILE IS CONSIDERED CONTAMINATED. 01/15/99: SAC FAXED COPY OF RESULTS TO DAVE MARTIN, NCHD. 01/20/99: SAC TELECON FROM CARL CROSSEN, SITE ASSESSMENT WORK WILL BEGIN ON MONDAY, SAC TELECON DAVE MARTIN OF NCHD NOTIFYING HIM OF THE WORK THAT WILL BEGIN ON MONDAY. 01/27/99: SAC TELECON CARL CROSSEN, BORINGS WERE COMPLETED AND ONLY OEN BORING SHOWED A RESONSE ON THE PID METER, THEY WILL ANALYZE 3 OR 4 SAMPLES FOR 8021 TO CHECK LEVELS OF CONTAMINATION. 02/03/99: SAC RECEIVED ANALYTICAL RESULTS FOR THE BORINGS, ONE SOIL SAMPLE ANALYZED AND ONLY PARAMETER DETECTED WAS BENZENE AT 33 ppb WHICH IS ABOVE STARS GUIDANCE VALUES, 3 GROUNDWATER SAMPLES

WERE TAKEN AND THE RESULTS FOR THE PARAMETERS WERE BELOW GROUNDWATER STANDARDS, BORING LOGS INDICATED ONLY ONE BORING (B-1) HAD PETRO ODORS. 02/19/99: SAC SITE INSPECTION, MET WITH ED MCDONALD AND TIM HORANBURG OF NIAGARA COUNTY PARKS, DAVE MARTIN OF NCHD AND CARL CROSSEN OF EP&S, DISCUSSED NEXT STEPS IN CLEANUP, DISCUSSED REQUIREMENT TO CONTINUE TO CLEANUP SITE, BASED ON ANALYTICAL RESULTS OF THE BORING SAMPLES & OBSERVATIONS AND PID READINGS, EXTENT OF CONTAMINATION APPEARS TO BE DEFINED AND IT MAY BE POSSIBLE TO EXCAVATE REST OF THE CONTAMINATED SOIL, WORK TO BE SCHEDULED IN THE NEXT COUPLE OF WEEKS, ALL SOIL THAT HAS BEEN STAGED ON-SITE PRESENTLY WILL BE DISPOSED. 03/11/99: SAC TELECON CARL CROSSEN, THEY EXCAVATED OUT ANOTHER 14 TRUCKLOADS OF SOIL AND ATTEMPTED TO CLEAN OUT HOLE, THEY CONCENTRATED ON THE AREA AROUND THE BORE HOLE THAT EXHIBITED ODORS FROM THE SITE INVESTIGATION BUT THEY DID EXCAVATE AROUND THE ENTIRE HOLE ATTEMPTING TO DIG OUT THE REMAINING CONTAMINATED SOIL, THERE WERE ODORS THROUGHOUT THE EXCAVATION WORK, GROUNDWATER DID INFILTRATE THE EXCAVATION AGREED THAT A GROUND WATER SAMPLE WILL BE TAKEN AND TWO SIDE WALL SAMPLES WILL BE TAKEN WHERE ONE SAMPLE WILL COMPOSITE TWO SIDES OF THE EXCAVATION AND THE OTHER SAMPLE COMPOSITING THE OTHER TWO SIDES. 03/11/99: SAC TELECON DAVE MARTIN NOTIFYING HIM THAT THE EXCAVATION WAS COMPLETED, HE WILL INSPECT THE SITE. 03/12/99: SAC SITE INSPECTION, EXCAVATION WAS 3/4 FILLED WITH WATER THAT WAS FROZEN OVER THE TOP, NO ODORS APPARENT FROM STANDING NEXT TO EXCAVATION, EXCAVATION WAS ENLARGED ESPECIALLY TOWARD TONAWANDA CREEK ROAD, CONTAMINATED SOIL WAS NO LONGER STAGED ON-SITE. 03/24/99: SAC TELECON ED MCDONALD, HE INDICATED CONFIRMATORY SAMPLE RESULTS WERE FAXED TO MY ATTENTION BY EP&S AND INQUIRED IF WE HAD REVIEWED THE RESULTS, SAC INDICATED HE HAD NOT SEEN THEM AS OF YET, SAC TELECON CHARISSE FROM EP&S WHO INDICATED SHE DID FAX COPY OF RESULTS TO SAC, SAC FOUND RESULTS & REVIEWED THEM WITH RNL, SIDE SOIL SAMPLE RESULTS WERE ABOVE STARS GUIDANCE LEVELS BUT AT A LOW LEVEL TO ALLOW FOR I STATUS, GROUNDWATER SAMPLE RESULTS WERE ABOVE THE GW STANDARDS AND FURTHER WORK IS REQUIRED, THROUGH DISCUSSIONS WITH RNL, CARL CROSSEN, AND ED MCDONALD, AGREED THAT THE PARKS DEPT WILL PUMP OUT THE WATER FOR THE NEXT WEEK AND SEND TO THE SANITARY SEWER WITH FRANK NERONE'S APPROVAL (MR. NERONE IS SUPERINTENDENT FOR COUNTY SEWER DISTRICT), ONCE THIS WORK IS COMPLETED THEY WILL RESAMPLE AND REANALYZE THE GROUNDWATER. SAC TELEPHONED DAVE MARTIN NOTIFYING HIM OF THE PLAN OF ACTION, FAXED COPY OF RESULTS TO HIM. 04/06/99: SAC RECEIVED RESAMPLED GROUNDWATER RESULTS FROM THE EXCAVATION, PARAMETERS WERE STILL GREATER THAN GUIDANCE VALUES BUT ALL PARAMETER LEVELS EXCEPT 1,2,4 TRIMETHYLBENZENE & N-PROPYLBENZENE WERE REPORTED LOWER THAN LEVELS THAT WERE PREVIOUSLY REPORTED SAC DISCUSSED LEVELS WITH RNL, ONCE ALL DOCUMENTATION IS RECEIVED I PER RNL, SAC TELECON CARL CROSSEN, REQUESTED ANY FIELD NOTES FROM THE EXCAVATION WORK TO FURTHER CHARACTERIZE THE SITE. 08/30/99: SAC RECEIVED NCHD INSPECTION REPORT FROM DAVE MARTIN. 02/11/00: SAC RECEIVED DISPOSAL RECEIPTS, DRAFTED I LETTER."

Material Information

OP Unit ID:	1078566	***Med in Air:***	False
OU:	01	***Med GW:***	False
Material ID:	306902	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0009		
Material Name:	gasoline		

Spiller Information

Spiller Name:	TIM HORANBURG
Spiller Company:	NIAGARA COUNTY PARKS DEPT
Spiller Address:	314 DAVISON ROAD
Spiller City:	LOCKPORT
Spiller State:	NY
Spiller Zip:	14094-
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***FIRESTONE TIRE***
NIAGARA FALLS BOULEVARD AMHERST NY

LST

Spill No:	8605722	***REM Phase:***	0
Site ID:	247776	***UST Trust:***	True
DER Facility ID:	203460	***Spill Date:***	1986-12-09 09:30:00
CID:		***Rcvd Date:***	1986-12-09 10:00:00
Program Type:	ER	***CAC Date:***	1986-12-12 00:00:00

SWIS Code:	1522	***Insp Date:***	1986-12-12 00:00:00
Contribute Factor:	Tank Failure	***Close Date:***	1986-12-12 00:00:00
Water Body:		***Create Date:***	1986-12-12 00:00:00
Class:		***Update Date:***	1987-01-05 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	ROSS
County:	Erie	***After Hours:***	False
Referred to:			
Reported by:	Tank Tester		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

""

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was LQR / / : LQR SITE INSPECTION 12/09/86, CLEANUP UNDERWAY, TANKS BEING REMOVED, SOIL TO MODERN. / / : LQR SITE INSPECTION 12/09/86, CLEANUP UNDERWAY, TANKS BEING REMOVED, SOIL TO MODERN;LQR TELCON ELMWOOD TANK 12/12/86 TANK REMOVED COMPLT. "

Material Information

OP Unit ID:	902660	***Med in Air:***	False
OU:	01	***Med GW:***	True
Material ID:	474885	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0009		
Material Name:	gasoline		

Spiller Information

Spiller Name:	
Spiller Company:	FIRESTONE TIRE
Spiller Address:	NIAGARA FALLS BOULEVARD
Spiller City:	AMHERST
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***GREAT LAKE CARBON***
NIAGARA FALLS BLVD NIAGARA FALLS NY LST

Spill No:	8806521	***REM Phase:***	0
Site ID:	167057	***UST Trust:***	True
DER Facility ID:	140747	***Spill Date:***	1988-11-03 16:30:00
CID:		***Rcvd Date:***	1988-11-03 16:40:00
Program Type:	ER	***CAC Date:***	1988-11-09 00:00:00
SWIS Code:	3211	***Insp Date:***	
Contribute Factor:	Tank Test Failure	***Close Date:***	1988-11-09 00:00:00
Water Body:		***Create Date:***	1988-11-09 00:00:00
Class:		***Update Date:***	1988-11-21 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
County:	Niagara	***After Hours:***	True
Referred to:			

Reported by: Tank Tester
Source: Commercial/Industrial
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"FAILED TANK TEST LEAK RATE 0.290 GPH TANK NO FO3, SEE SPILL 8707795 FOR FURTHER INFORMATION"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 11/09/88: SAME AS SPILL NO 8707795 THIS FILE TO BE CLOSED. "

Material Information

OP Unit ID:	921682	***Med in Air:***	False
OU:	01	***Med GW:***	True
Material ID:	454856	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	
Spiller Company:	GREAT LAKES CARBON
Spiller Address:	NIAGARA FALLS BLVD
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Tank Test Information

Spill Tank ID:	1534851	***Source:***	
Tank No:		***Leak Rate:***	.00
Tank SIze:	0	***Gross Fail:***	
Material:	0008	***Modified by:***	Spills
EPA UST:		***Last Modified:***	2004-10-01 04:00:45.140000000
UST:		***Test Method:***	00
Cause:			
Alt Test Method:	Unknown		

Site: ***CUMBERLANDS FARMS***
NIAGARA FALLS BLVD AMHERST NY

LST

Spill No:	8908977	***REM Phase:***	0
Site ID:	288477	***UST Trust:***	True
DER Facility ID:	233654	***Spill Date:***	1989-12-11 08:30:00
CID:		***Rcvd Date:***	1989-12-11 08:30:00
Program Type:	ER	***CAC Date:***	1990-02-14 00:00:00
SWIS Code:	1522	***Insp Date:***	1990-01-18 00:00:00
Contribute Factor:	Tank Failure	***Close Date:***	1990-02-14 00:00:00
Water Body:		***Create Date:***	1989-12-12 00:00:00
Class:		***Update Date:***	1990-03-06 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	ROSS

County:	Erie	***After Hours:***	False
Referred to:			
Reported by:	Responsible Party		
Source:	Gasoline Station or other PBS Facility		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"TANKS REMOVED CONTAMINATED SOIL FPOUND"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was LQR 12/11/89: LQR ON SITE SOIL STAGED ON SITE,LETTER TO FOLLOW. 01/18/90: JDC AND CAF ON SITE SOIL STAGED TO BE DISPOSED OF. 02/05/90: LETTER TO SPILLER FOR DISPOSAL RECIEPT. 02/14/90: DISPOSAL RECIEPT REC. LETTER TO TOWN. 09/29/95: This is additional information about material spilled from the translation of the old spill file: CONTAMINATED SOIL."

Material Information

OP Unit ID:	934016	***Med in Air:***	False
OU:	01	***Med GW:***	True
Material ID:	442161	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0009		
Material Name:	gasoline		

Spiller Information

Spiller Name:	
Spiller Company:	CUMBERLANDS FARM
Spiller Address:	PO BOX 152
Spiller City:	WYOMING
Spiller State:	NY
Spiller Zip:	14591
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***AFRES***
NIAGARA FALLS NIAGARA FALLS NY LST

Spill No:	8600757	***REM Phase:***	0
Site ID:	294133	***UST Trust:***	False
DER Facility ID:	238031	***Spill Date:***	1986-04-30 17:41:00
CID:		***Rcvd Date:***	1986-04-30 18:10:00
Program Type:	ER	***CAC Date:***	1986-04-30 00:00:00
SWIS Code:	3211	***Insp Date:***	
Contribute Factor:	Tank Overfill	***Close Date:***	1986-04-30 00:00:00
Water Body:		***Create Date:***	1986-05-27 00:00:00
Class:		***Update Date:***	1986-06-20 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
County:	Niagara	***After Hours:***	True
Referred to:			
Reported by:	Fire Department		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"FUEL EXPANSION-AIRCRAFT"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH / / : USED ABSORBENT PADS. "

Material Information

OP Unit ID:	897091	***Med in Air:***	False
OU:	01	***Med GW:***	False
Material ID:	480894	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	1.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0011		
Material Name:	jet fuel		

Spiller Information

Spiller Name:	
Spiller Company:	AFRES 914 TAG
Spiller Address:	NIAGARA FALLS AF BASE
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***KWIK-FILL***
NIAGARA FALLS BOULEVARD WHEATFIELD NY LST

Spill No:	8900825	***REM Phase:***	0
Site ID:	96975	***UST Trust:***	True
DER Facility ID:	86446	***Spill Date:***	1989-04-26 17:30:00
CID:		***Rcvd Date:***	1989-04-26 14:30:00
Program Type:	ER	***CAC Date:***	1989-04-26 00:00:00
SWIS Code:	3240	***Insp Date:***	1989-04-26 00:00:00
Contribute Factor:	Tank Overfill	***Close Date:***	1989-10-24 00:00:00
Water Body:		***Create Date:***	1989-05-01 00:00:00
Class:		***Update Date:***	1989-11-21 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	COOKE
County:	Niagara	***After Hours:***	False
Referred to:			
Reported by:	Police Department		
Source:	Gasoline Station or other PBS Facility		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"OVERFILL OF BOAT"

Dec Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 10/23/89: DRAFTED LETTER TO SPILLER REQUESTING DISPOSAL RECIEPTS AS SOON AS POSSIBLE. 10/23/89: JDC RECIEVED COMMUNICATION FROM MR PAUL GRIENERT, ST JOHNSBURY FIRE DEPT. HAS NOT RECIEVED DRUM REPLACEMENTS OF THOSE USED BY CECOS IN THE CLEANUP. CONTACTED MR PATRICK, CECOS AND REQUESTED ACTION. 10/24/89: JDC TELCON W/ MR VENDETTI REQUESTING DISPOSAL RECIEPT. REFERRED ME TO INSURANCE CO, WIEMER OVER. THEY WILL BE FORWARDING RECIEPT. WILL CLOSE FILE UPON RECIEPT OF DISPOSAL PAPERWORK. 10/26/89: JDC

RECIEVED DISPOSAL PAPERWORK REQUESTED IN 10/24/89 LETTER TO SPILLER. NO FURTHER ATION WILL BE REQUIRED BY THIS UNIT. "

Material Information

OP Unit ID:	927387	***Med in Air:***	False
OU:	01	***Med GW:***	False
Material ID:	452151	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	125.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	125.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0009		
Material Name:	gasoline		

Spiller Information

Spiller Name:	
Spiller Company:	JOHN VENDETTI
Spiller Address:	93 SEBRING DRIVE
Spiller City:	DEPEW
Spiller State:	NY
Spiller Zip:	14043
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***AFRES***
NIAGARA FALLS NIAGARA FALLS NY

NY SPILLS

Spill No:	8600682	***UST Trust:***	False
Site ID:	294132	***Spill Date:***	1986-04-28 17:40:00
DER Facility ID:	238031	***Received Date:***	1986-04-28 19:53:00
CID:		***CAC Date:***	1986-04-28 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1986-04-28 00:00:00
Water Body:		***Create Date:***	1986-05-21 00:00:00
Class:		***Update Date:***	1986-06-20 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	LEARY
REM Phase:	0	***After Hours:***	True
County:	Niagara		
Contributing Factor:	Other		
Reported by:	Responsible Party		
Referred to:			
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"OTH.SPILLER-107TH NATIONAL GUARD SITE-ABSORBENT PADS PUT DOWN-ACTUAL AMOUNT SPILLED-2 1/2 GALS."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RNL / / : NO ACTION NECESSARY. "

Material Information

OP Unit ID:	898470	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	480826	***Med SW:***	False

CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	3.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0011		
Material Name:	jet fuel		

Spiller Information

Spiller Name:	
Spiller Company:	AFRES 914 TAG
Spiller Address:	LOCKPORT RD.
Spiller City:	
Spiller State:	ZZ
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***ALLIED WASTE LANDFILL***
NIAGARA FALLS BLVD NIAGARA FALLS NY 14094

NY SPILLS

Spill No:	1707621	***UST Trust:***	False
Site ID:	563988	***Spill Date:***	2017-11-08 19:01:00
DER Facility ID:	517587	***Received Date:***	2017-11-08 17:37:00
CID:		***CAC Date:***	
Program Type:	ER	***Insp Date:***	2017-11-09 00:00:00
SWIS Code:	3230	***Close Date:***	2017-11-20 00:00:00
Water Body:		***Create Date:***	2017-11-08 19:03:00
Class:	C3	***Update Date:***	2017-11-20 12:11:51.197000000
Meets Std:	False	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	RMCROSSE
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Unknown		
Reported by:	Affected Persons		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"Heavy a strong sickening odor from the landfill. Caller stated someone from the DEC told him to call whenever this occurs."

DEC Remark:

"11/20/17 RMC/FILE. INSPECTED THE SITE AT THE TIME OF THE COMPLAINT. FOUND CONDITIONS AS DESCRIBED BY THE SPILL CALLER. INFORMED DOA, CLOSE AS A SPILLS ISSUE. "

Material Information

OP Unit ID:	1311942	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	2319147	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:		***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:		***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	True		
Material Code:	0064A		

Material Name: unknown material

Spiller Information

Spiller Name:
Spiller Company: ALLIED WASTE LANDFILL
Spiller Address: NIAGARA FALLS BLVD
Spiller City: NIAGARA FALLS
Spiller State: NY
Spiller Zip:
Spiller Country: 999
Contact Name: RON LISCT
Contact Phone: (716) 579-5842
Contact Ext:
Latitude:
Longitude:

Site: ***ALLIED WASTE LANDFILL***
NIAGARA FALLS BLVD NIAGARA FALLS NY 14304

NY SPILLS

Spill No:	1706631	***UST Trust:***	False
Site ID:	560953	***Spill Date:***	2017-10-07 07:00:00
DER Facility ID:	514635	***Received Date:***	2017-10-07 17:05:00
CID:		***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	2017-10-10 00:00:00
Water Body:		***Create Date:***	2017-10-07 17:08:00
Class:	D4	***Update Date:***	2017-10-10 09:53:10.793000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	RMCROSSE
REM Phase:	0	***After Hours:***	True

County: Niagara
Contributing Factor: Unknown
Reported by: Other
Referred to: SW
Source: Commercial/Industrial
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"caller reports smell of gasoline in the morning."

DEC Remark:

"10/07/17 RMC/RAY CRACKNELL, SPILL CALLER/PHONE. MR CRACKNELL REPORTS HE IS OFTEN AT KMART IN THE EARLY MORNING. FOR YEARS HE HAS SMELLED CHEMICALS AND PETROLEUM COMING FROM THE LAND FILL. 10/10/17 RMC/FILE. REFERRED TO SOLID WASTE AND DOA, CLOSE AS A SPILLS ISSUE."

Material Information

OP Unit ID:	1308940	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	2315970	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:		***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:		***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	True		

Material Code: 0066A
Material Name: unknown petroleum

Spiller Information

Spiller Name:
Spiller Company: ALLIED WASTELANDFILL

Spiller Address:	NIAGARA FALLS BLVD
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	RAY CRACKNELL
Contact Phone:	(716) 371-2623
Contact Ext:	
Latitude:	
Longitude:	

Site: ***ELLICOTT CREEK PARK***
NIAGARA FALLS BLVD TONAWANDA NY

NY SPILLS

Spill No:	8800804	***UST Trust:***	False
Site ID:	288476	***Spill Date:***	1988-04-23 12:00:00
DER Facility ID:	280767	***Received Date:***	1988-04-26 13:40:00
CID:		***CAC Date:***	1988-05-05 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	1564	***Close Date:***	1988-05-05 00:00:00
Water Body:	ELLICOTT CREEK	***Create Date:***	1988-04-29 00:00:00
Class:		***Update Date:***	1988-05-19 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	COOKE
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Other		
Reported by:	Citizen		
Referred to:			
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"NYSDOT CONTRACTOR WORKING ON BRIDGE CREATED TURBULENCE AND STIRRED UP SEDIMENTS IN CREEK"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 05/05/88: JDC SPOKE W/ GREG SUTTON, MUNICIPAL SECTION, DEC - HE STATED PER AN INSPECTION BY MR WONTUCK TH ESEWAGE WAS IDENTIFIED AS TURBID WATER DUE TO CONSTRUCTION IN THE AREA. NO FURTHER ACTION WILL BE REQUIR. "

Material Information

OP Unit ID:	917789	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	568007	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0062A		
Material Name:	raw sewage		

Spiller Information

Spiller Name:	
Spiller Company:	NONE
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	

Contact Ext:
Latitude: 43.002559993
Longitude: -78.868880023

Site: ***FUNK LAWN CARE TRUCK***
NIAGARA FALLS BLVD TONAWANDA NY

NY SPILLS

Spill No:	0075290	***UST Trust:***	False
Site ID:	288475	***Spill Date:***	2000-08-10 13:30:00
DER Facility ID:	280767	***Received Date:***	2000-08-10 13:45:00
CID:		***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	1564	***Close Date:***	2000-08-10 00:00:00
Water Body:		***Create Date:***	2000-08-10 13:45:00
Class:	D4	***Update Date:***	2000-09-11 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	RMCROSSE
REM Phase:	0	***After Hours:***	False

County: Erie
Contributing Factor: Traffic Accident
Reported by: Police Department
Referred to:
Source: Commercial/Industrial
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"FUNK LAWN CARE TRUCK INVOLVED IN ACCIDENT DEVELOPED SLOW LEAK IN TANK CONTAINING FERTILIZERS. SPILLAGE OF APPROXIMATELY 1 GAL. TO ROADWAY."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RMC 08/10/00: KAB TELECON LT. PECK, HE INDICATED THAT ALL THAT HE WAS CONCERNED WITH IS WHETHER OR NOT IT IS SAFE TO CLEAN UP THE GALLON OF SPILLAGE TO THE ROADWAY SO THAT HE CAN GET THE VEHICLE OUT OF THE INTERSECTION. KAB TRANSFERRED CALL TO GLENN REINHARDT, PESTICIDES, TO DISCUSS CONTENTS OF TRUCK WITH LT. PECK. 08/10/00: RMC NOTE TO FILE, SPILL REFERED TO PESTICIDES, CLOSE OUT"

Material Information

OP Unit ID:	836647	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	538844	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	1.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		

Material Code: 0049A
Material Name: fertilizers

Spiller Information

Spiller Name: KEVIN PETRINEC
Spiller Company: FUNK LAWN CARE
Spiller Address: 330 FILLMORE AVENUE
Spiller City: TONAWANDA
Spiller State: NY
Spiller Zip: -
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude: 43.002559993
Longitude: -78.868880023

Site: ***CECOS INTERNATIONAL***
NIAGARA FALLS BLVD NIAGARA FALLS NY

NY SPILLS

Spill No:	8903943	***UST Trust:***	False
Site ID:	167058	***Spill Date:***	1989-07-20 14:15:00
DER Facility ID:	140747	***Received Date:***	1989-07-20 15:00:00
CID:		***CAC Date:***	1989-08-01 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1989-08-01 00:00:00
Water Body:		***Create Date:***	1989-07-21 00:00:00
Class:		***Update Date:***	1989-08-08 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Human Error		
Reported by:	DEC		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"DRIVER OVERFILLED TRANSPORT TRUCK"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 07/21/89: CECOS CREWS CLEANED UP SPILL DEC SITE MONITOR TO FOLLOWUP. 08/01/89: MJH TELECON WITH NYSDEC MONITOR, THEY WILL FOLLOWPU, SPILL UNIT COMPLETE. "

Material Information

OP Unit ID:	931728	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	448010	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	30.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	30.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	
Spiller Company:	CECOS INTERNATIONAL
Spiller Address:	NIAGARA FALLS BLVD
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***CAYUGA VILLAGE TRAILER PARK***
NIAGARA FALLS WHEATFIELD NY

NY SPILLS

Spill No:	0812382	***UST Trust:***	
Site ID:	410000	***Spill Date:***	2009-02-12 00:00:00
DER Facility ID:	359249	***Received Date:***	2009-02-12 00:00:00
CID:		***CAC Date:***	
Program Type:	ER	***Insp Date:***	

SWIS Code:	3230	***Close Date:***	2009-02-12 00:00:00
Water Body:	CAYUGA CREEK	***Create Date:***	2009-02-12 15:20:00
Class:	D5	***Update Date:***	2009-02-12 15:43:15.300000000
Meets Std:	False	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	TDJOHNSO
REM Phase:	0	***After Hours:***	True
County:	Niagara		
Contributing Factor:	Deliberate		
Reported by:	Affected Persons		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"Trailer park is pumping sewage from underground into Cayuga Creek. Caller has water in their driveway and has raw sewage from same pumping before."

DEC Remark:

"02/12/09 TDJ SPOKE WITH TAMARA ABOUT POSSIBLE SEWAGE DUMPING AND REFERRED THE COMPLAINT TO THE WATER DIVISION. NO FURTHER ACTION FILE CLOSED TO ELECTRONIC ONLY"

Material Information

OP Unit ID:	1166495	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	2157951	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:		***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:		***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	1876A		
Material Name:	waste fluids		

Spill Data

Material Name:	waste fluids
Material Family:	Other
Quantity:	0
Units:	
Recovered:	0

Site: ***ESTATE OF GILBERT BRUSS***
NIAGARA FALLS BLVD. WHEATFIELD NY

NY SPILLS

Spill No:	9501628	***UST Trust:***	False
Site ID:	205030	***Spill Date:***	1995-05-01 12:00:00
DER Facility ID:	366195	***Received Date:***	1995-05-08 15:20:00
CID:		***CAC Date:***	1995-05-09 00:00:00
Program Type:	ER	***Insp Date:***	1995-05-09 00:00:00
SWIS Code:	3240	***Close Date:***	1995-05-09 00:00:00
Water Body:		***Create Date:***	1995-05-10 00:00:00
Class:	E6	***Update Date:***	2009-07-30 10:46:01.660000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Housekeeping		
Reported by:	Citizen		
Referred to:	NIAGARA CNTY HEALTH DEPT		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"CALLER CLAIMS POSSIBLE UST'S ON-SITE. PROPERTY LEASED TO PAINT SHOP. SPILLAGE IN YARD."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 05/08/95: KAH/PAUL DICKY, NCHD/TELECON - HE WILL FOLLOW-UP. 06/23/95: RECEIVED NCHD INSPECTION REPORT FROM PAUL DICKY,ANONYMOUS COMPLAINT OF SLOPPY OPERATIONS WAS NOT SUBSTANTIATED. "

Material Information

OP Unit ID:	1016031	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	366701	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0066A		
Material Name:	unknown petroleum		

Spiller Information

Spiller Name:	
Spiller Company:	NONE
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***NIAGARA MOHAWK***
NIAGARA FALLS BLVD. WHEATFIELD NY

NY SPILLS

Spill No:	9407213	***UST Trust:***	False
Site ID:	205027	***Spill Date:***	1994-08-28 23:40:00
DER Facility ID:	366195	***Received Date:***	1994-08-29 06:08:00
CID:		***CAC Date:***	1995-02-22 00:00:00
Program Type:	ER	***Insp Date:***	1994-08-29 00:00:00
SWIS Code:	3240	***Close Date:***	1995-02-22 00:00:00
Water Body:		***Create Date:***	1994-10-26 00:00:00
Class:	C3	***Update Date:***	2009-08-03 07:36:00.997000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	True
County:	Niagara		
Contributing Factor:	Equipment Failure		
Reported by:	Responsible Party		
Referred to:	NIAGARA CNTY HEALTH DEPT		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"POLE FELL OVER DUE TO HIGH WINDS SPILLING NON-PCB OIL."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 08/29/94: SAC/BOB BUZZELLI, NCHD/TELECON - HE WILL FOLLOW-UP. 12/16/94: RECEIVED DISPOSAL RECEIPT,WAITING FOR INSPECTION REPORT FROM B.BUZZELLI/NCHD. 01/20/95: RECEIVED DISPOSAL

RECEIPT,1/19/95 NCHD MEETING-PAUL DICKEY TO SEND REPORT FOR CLOSEOUT. 02/22/95: RECEIVED DISPOSAL RECEIPT,RECEIVED NCHD INSPECTION REPORT AND DISPOSAL RECEIPT FROM PAUL DICKY. "

Material Information

OP Unit ID:	1004644	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	380227	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	35.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	35.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0016A		
Material Name:	non PCB oil		

Spiller Information

Spiller Name:	
Spiller Company:	NIAGARA MOHAWK
Spiller Address:	144 KENSINGTON AVENUE
Spiller City:	BUFFALO
Spiller State:	NY
Spiller Zip:	14214
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***ELDERWOOD AFFILIATES***
NIAGARA FALLS BLVD. WHEATFIELD NY

NY SPILLS

Spill No:	9405785	***UST Trust:***	False
Site ID:	205026	***Spill Date:***	1994-07-18 12:00:00
DER Facility ID:	366195	***Received Date:***	1994-07-25 11:30:00
CID:		***CAC Date:***	1995-02-22 00:00:00
Program Type:	ER	***Insp Date:***	1994-07-25 00:00:00
SWIS Code:	3240	***Close Date:***	1995-02-22 00:00:00
Water Body:		***Create Date:***	1994-07-28 00:00:00
Class:	C3	***Update Date:***	2009-08-03 07:32:47.597000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Abandoned Drums		
Reported by:	Other		
Referred to:	NIAGARA CNTY HEALTH DEPT		
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"ABANDONED DRUMS IN FIELD."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 07/25/94: SAC/BOB BUZZELLI, NCHD/TELECON - HE WILL FOLLOW-UP. 02/22/95: RECEIVED NCHD INSPECTION REPORT AND DISPOSAL RECEIPTS FROM BOB BUZZELLI. "

Material Information

OP Unit ID:	1000090	***Med Ind Air:***	False

OU:	01	***Med GW:***	False
Material ID:	382368	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		

Material Code: 0064A
Material Name: unknown material

Spiller Information

Spiller Name:
Spiller Company: ELDERWOOD AFFILIATES
Spiller Address: 7 LIMESTONE DRIVE
Spiller City: WILLIAMSVILLE
Spiller State: NY
Spiller Zip: 14221
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude:
Longitude:

Site: ***TRUCK AT BOSTON MARKET***
NIAGARA FALLS BLVD (RT62) NIAGARA FALLS NY

NY SPILLS

Spill No:	9707861	***UST Trust:***	False
Site ID:	275792	***Spill Date:***	1997-10-03 09:30:00
DER Facility ID:	224225	***Received Date:***	1997-10-03 10:00:00
CID:	999	***CAC Date:***	
Program Type:	ER	***Insp Date:***	1997-10-02 00:00:00
SWIS Code:	3211	***Close Date:***	1998-03-09 00:00:00
Water Body:		***Create Date:***	1997-10-03 00:00:00
Class:	C3	***Update Date:***	1998-03-12 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False

County: Niagara
Contributing Factor: Equipment Failure
Reported by: Responsible Party
Referred to: NIAGARA CNTY HEALTH DEPT
Source: Commercial Vehicle
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"HYDRAULIC LINE ON GARBAGE TRUCK FAILED. THEY ARE CLEANING UP RIGHT NOW. SMALL AMOUNT MAY HAVE GOTTEN INTO SEWERS."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 10/3/97:KAH NOTIFIED DAVE MARTIN,NCHD REGARDING SPILL, FAXED COPY OF REPORT TO NCHD,MR.MARTIN IS FOLLOWING UP. 1/21/98:MEETING W/NCHD-DAVE MARTIN WILL SEND IN REPORT FOR CLOSEOUT. 3/6/98:RECEIVED NCHD INSPECTION REPORT FROM DAVE MARTIN CONFIRMING CLEANUP AND INCLUDING DISPOSAL RECEIPT. "

Material Information

OP Unit ID:	1054367	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	329848	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	30.00	***Med Surf:***	False

Units:	G	***Med Subway:***	False
Recovered:	30.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0010		
Material Name:	hydraulic oil		

Spiller Information

Spiller Name:	GARY STROH
Spiller Company:	WASTE MANAGEMENT OF NY
Spiller Address:	70 NORHT GATES AVENUE
Spiller City:	BUFFALO
Spiller State:	NY
Spiller Zip:	14218-
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***NYSDOT / REID***
NIAGARA FALLS BOULEVARD NORTH TONAWANDA NY

NY SPILLS

Spill No:	9608323	***UST Trust:***	False
Site ID:	167064	***Spill Date:***	1996-08-01 12:00:00
DER Facility ID:	366370	***Received Date:***	1996-08-15 12:00:00
CID:	233	***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	3212	***Close Date:***	1996-11-15 00:00:00
Water Body:		***Create Date:***	1996-10-03 00:00:00
Class:	D6	***Update Date:***	2009-07-30 15:25:09.480000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Unknown		
Reported by:	Health Department		
Referred to:	NIAGARA CNTY HEALTH DEPT		
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"NYSDOT SITE ASSESSMENT INDICATES CONTAIMINATIONN ABOVE STARS GUISANCE VALUES "

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 11/15/96:SAC,RNL MEETING AT DOT TO DISCUSS PROJECT,SAME AS SPILL NUMBER 9608321,ANY FURTHER FOLLOW WILL BE W/REID PETROLEUM"

Material Information

OP Unit ID:	1039366	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	344064	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0066A		
Material Name:	unknown petroleum		

Spiller Information

Spiller Name:	
Spiller Company:	NYSDOT
Spiller Address:	125 MAIN STREET
Spiller City:	BUFFALO
Spiller State:	NY
Spiller Zip:	-
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.052034993
Longitude:	-78.826820021

Site: ***NFAFB***
NIAGARA FALLS BOULEVARD NIAGARA FALLS NY

NY SPILLS

Spill No:	8710816	***UST Trust:***	False
Site ID:	96971	***Spill Date:***	1988-03-26 17:45:00
DER Facility ID:	278538	***Received Date:***	1988-03-26 17:46:00
CID:		***CAC Date:***	1988-03-26 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3200	***Close Date:***	1988-03-26 00:00:00
Water Body:		***Create Date:***	1988-03-28 00:00:00
Class:		***Update Date:***	1988-03-29 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	ROSS
REM Phase:	0	***After Hours:***	True

County:	Niagara
Contributing Factor:	Equipment Failure
Reported by:	Fire Department
Referred to:	
Source:	Commercial/Industrial
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"US AIR DC-9 LEAKED"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was LQR 03/26/88: BASE CFR CLEANED UP. "

Material Information

OP Unit ID:	915585	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	462573	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	30.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	30.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		

Material Code:	0011
Material Name:	jet fuel

Spiller Information

Spiller Name:	
Spiller Company:	US AIR
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999

Contact Name:
Contact Phone:
Contact Ext:
Latitude: 43.093439993
Longitude: -79.008960030

Site: ***Spill Number 8502954***
NIAGARA FALLS BLVD. AMHERST NY

NY SPILLS

Spill No:	8502954	***UST Trust:***	False
Site ID:	294609	***Spill Date:***	1985-11-19 00:00:00
DER Facility ID:	238440	***Received Date:***	
CID:		***CAC Date:***	1985-12-01 00:00:00
Program Type:	ER	***Insp Date:***	1985-11-20 00:00:00
SWIS Code:	1522	***Close Date:***	1985-12-01 00:00:00
Water Body:		***Create Date:***	
Class:		***Update Date:***	2004-02-19 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False

County: Erie
Contributing Factor: Unknown
Reported by: Other
Referred to:
Source: Unknown
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"OIL FOUND IN SANITARY SEWER."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 2004/02/19 - Both Spill_Time and RCVD_Time were previously blank and replaced with 00:00 to fix a data translation problem... Bob Corcoran *****PAPER FILE NO LONGER EXISTS****"

Material Information

OP Unit ID:	895503	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	479474	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	L	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		

Material Code: 0633A
Material Name: oil based sealer

Spiller Information

Spiller Name:
Spiller Company: KNOWN, SEE FILE
Spiller Address:
Spiller City:
Spiller State: ZZ
Spiller Zip:
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude:
Longitude:

Site: ***OAKGROVE CONSTRUCTION***

NIAGARA FALLS BOULEVARD AMHERST NY NY SPILLS

Spill No:	8700094	***UST Trust:***	False
Site ID:	247777	***Spill Date:***	1987-04-03 12:00:00
DER Facility ID:	203460	***Received Date:***	1987-04-03 15:00:00
CID:		***CAC Date:***	1987-10-19 00:00:00
Program Type:	ER	***Insp Date:***	1987-10-19 00:00:00
SWIS Code:	1522	***Close Date:***	1987-10-19 00:00:00
Water Body:		***Create Date:***	1987-04-08 00:00:00
Class:		***Update Date:***	1987-10-26 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Equipment Failure		
Reported by:	Responsible Party		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"RUPTURED HYDRAULIC LINE ON CONSTRUCTION EQUIPMENT"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH / / : MJH SITE INSPECTION DITCH IS CLEAR NO VISABLE PRODUCT FILE TO REMAIN OPEN TO END OF CONSTRUCTION PROJECT. / / : MJH SITE INSP. 04/03/87, CLEANUP UNDERWAY BY SPILLER AND IS SATISFACTORY. / / : CLEANUP SATISFACTORY. / / : MJH SITE INSP. 10/19/87, CLEANUP SATISFACTORY, SITE COMPLETE. 09/29/95: This is additional information about material spilled from the translation of the old spill file: HYDRAULIC FLUID"

Spiller Information

Spiller Name:	
Spiller Company:	OAKGROVE CONSTRUCTION
Spiller Address:	6900 SENECA STREET
Spiller City:	ELMA
Spiller State:	NY
Spiller Zip:	14059
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***CECOS INTERNATIONAL***
NIAGARA FALLS BLVD NIAGARA FALLS NY NY SPILLS

Spill No:	8805411	***UST Trust:***	False
Site ID:	167056	***Spill Date:***	1988-09-13 14:05:00
DER Facility ID:	140747	***Received Date:***	1988-09-23 09:00:00
CID:		***CAC Date:***	1988-11-10 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1988-11-10 00:00:00
Water Body:		***Create Date:***	1988-09-27 00:00:00
Class:		***Update Date:***	1988-11-21 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Equipment Failure		
Reported by:	Responsible Party		
Referred to:			
Source:	Commercial Vehicle		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"FUEL LINE ON TRUCK RUPTURED"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 09/27/88: SPILL CLEANED UP BY CECOS PERSONAL. "

Material Information

OP Unit ID:	922421	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	457315	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	20.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	20.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	
Spiller Company:	CECOS INTERNATIONAL
Spiller Address:	NIAGARA FALLS BLVD
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***NIAGARA MOHAWK POLE 158 N***
NIAGARA FALLS BLVD TONAWANDA NY

NY SPILLS

Spill No:	0002522	***UST Trust:***	False
Site ID:	288474	***Spill Date:***	2000-05-30 17:00:00
DER Facility ID:	280767	***Received Date:***	2000-05-30 18:47:00
CID:	282	***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	1564	***Close Date:***	2000-05-31 00:00:00
Water Body:		***Create Date:***	2000-05-30 00:00:00
Class:	D4	***Update Date:***	2000-06-01 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	RJJONAK
REM Phase:	0	***After Hours:***	True
County:	Erie		
Contributing Factor:	Equipment Failure		
Reported by:	Responsible Party		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"THEY HAVE A TRANSFORMER THAT LEAKED. UNKNOWN WHY IT LEAKED. NON PCB "

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RJJ 05/31/2000: RJJ TELECON NIAGARA MOHAWK, A TRANSFORMER SPILLED ABOUT 1 PINT OF OIL TO THE BLACKTOP, 5/30/2000...THEIR OWN SPILL RESPONSE TEAM CLEANED UP THE OIL AND DISPOSED IT AT THEIR TRANSFORMER PLANT...JIM ERICKSON FAXED OVER THEIR REPORT ON THIS SPILL...SINCE THE OIL WAS CLEANED UP AND DISPOSED OF PROPERLY, NO FURTHER ACTION NEEDED...SPILL CLOSED OUT."

Material Information

OP Unit ID:	824457	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	550879	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	1.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	1.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0020A		
Material Name:	transformer oil		

Spiller Information

Spiller Name:	JAMES ERICKSON
Spiller Company:	NIAGARA MOHAWK
Spiller Address:	300 ERIE BLVD WEST
Spiller City:	SYRACUSE
Spiller State:	NY
Spiller Zip:	13202-
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.002559993
Longitude:	-78.868880023

Site: ***S G L CARBON GROUP***
NIAGARA FALLS BOULEVARD NIAGARA FALLS NY

NY SPILLS

Spill No:	9804427	***UST Trust:***	False
Site ID:	96978	***Spill Date:***	1998-07-08 09:00:00
DER Facility ID:	366202	***Received Date:***	1998-07-08 14:02:00
CID:	266	***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1998-07-08 00:00:00
Water Body:		***Create Date:***	1998-07-08 00:00:00
Class:	D5	***Update Date:***	2009-07-28 10:16:10.693000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	FXGALLEG
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Unknown		
Reported by:	Federal Government		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"WHITE SMOKE THAT SMELLS LIKE BURNING PLASTIC IS COMING FROM SPILLER'S SMOKE STACK. PAUL DAVEY, BUNDY'S AUTO REPAIR, (716) 283-7430, IS THE AFFECTED PERSON THAT CALLER THE NRC. SPILLER IS LISTED IN THE EPA'S TOXIC RELEASE INVENTORY."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was FG 7/8/98 THIS IS AN AIR COMPLAINT. SITE REFERRED BY MEMO TO AIR. SITE CAN BE CLOSED."

Material Information

OP Unit ID:	1065296	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	560872	***Med SW:***	False

CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	True		
Material Code:	0064A		
Material Name:	unknown material		

Spiller Information

Spiller Name:	
Spiller Company:	S G L CARBON GROUP
Spiller Address:	NIAGARA FALLS BOULEVARD
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***BFI***
NIAGARA FALLS BOULEVARD NIAGARA FALLS NY

NY SPILLS

Spill No:	9609826	***UST Trust:***	False
Site ID:	96977	***Spill Date:***	1996-11-05 08:50:00
DER Facility ID:	366202	***Received Date:***	1996-11-05 13:00:00
CID:	266	***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1996-11-18 00:00:00
Water Body:		***Create Date:***	1996-11-06 00:00:00
Class:	D6	***Update Date:***	2009-07-30 15:29:35.193000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Unknown		
Reported by:	Citizen		
Referred to:			
Source:	Unknown		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"GREENISH FLUID BEING PUMPED OUT ON THE GROUND."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC 11/5/96:SAC TELECON BILL BOLAN,NIAGARA FALLS SEWER DEPT,ASKED IF SEWERS WERE BEING DYE TESTED,MR.BOLAN KNEW OF NO WORK BEING DONE BUT WOULD CHECK. 11/5/96:SAC TELECON AL ZAEPFEL NIAGARA FALLS SEWER DEPT.,MR. ZAEPFEL INSPECTED AREA COULD NOT FIND PROBLEM,HE CONTACTED CECOS AND THEY INDICATED THEY WERE NOT DOING ANY WORK IN THE AREA,MR. ZAEPFEL WILL CHECK W/GREAT LAKES CARBON BUT HE SUSPECTS A PLUMBER WAS WORKING IN THE AREA AND DID NOT ACQUIRE A PERMIT FROM THE CITY,MR.ZAEPFEL WILL SEND A REPORT OF HIS FINDINGS. 11/18/96:RECEIVED LETTER FROM ALBERT ZAEPFEL,NIAGARA FALLS WWTP, CONFIRMING THAT CECOS AND GREAT LAKES DID NOT HAVE ANY WORK GOING ON,NOR COULD THEY FIND THE SOURCE OF THE RELEASE."

Material Information

OP Unit ID:	1037766	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	342039	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False

Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0064A		
Material Name:	unknown material		

Spiller Information

Spiller Name:	
Spiller Company:	UNKNOWN
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***M.L. YOUNG***
NIAGARA FALLS BLVD WHEATFIELD NY

NY SPILLS

Spill No:	8910341	***UST Trust:***	False
Site ID:	167060	***Spill Date:***	1990-01-29 08:00:00
DER Facility ID:	284871	***Received Date:***	1990-01-29 08:57:00
CID:		***CAC Date:***	1990-05-25 00:00:00
Program Type:	ER	***Insp Date:***	1990-01-29 00:00:00
SWIS Code:	3240	***Close Date:***	1990-05-25 00:00:00
Water Body:		***Create Date:***	1990-01-31 00:00:00
Class:		***Update Date:***	1990-05-29 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Traffic Accident		
Reported by:	DEC		
Referred to:			
Source:	Commercial Vehicle		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"SPILL FROM SADDLE TANK ON TRUCK INVOLVED INTRAFFIC ACCIDENT"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 01/31/90: SPILLER HIRED GREEN ENVIROMENT TO ASSIST IN SPILL CLEANUP NCHD TO FOLLOWUP ON CLEANUP. 05/25/90: M.L. YOUNG PROVIDED COPY OF DISPOASAL RECEIPTS NO FURTHER ACTION NEEDED. "

Material Information

OP Unit ID:	935435	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	443442	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	200.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	200.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	
Spiller Company:	M.L. YOUNG
Spiller Address:	800 WALCK RD PO BOX 180
Spiller City:	NORTH TONAWANDA
Spiller State:	NY
Spiller Zip:	14120
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***WURLITZER INDUSTRIAL PARK***
NIAGARA FALLS BOULEVARD NORTH TONAWANDA NY

NY SPILLS

Spill No:	9304399	***UST Trust:***	False
Site ID:	96976	***Spill Date:***	1993-05-29 10:00:00
DER Facility ID:	275894	***Received Date:***	1993-07-02 12:00:00
CID:		***CAC Date:***	1993-07-06 00:00:00
Program Type:	ER	***Insp Date:***	1993-05-24 00:00:00
SWIS Code:	3200	***Close Date:***	1993-07-06 00:00:00
Water Body:	SAWYER CREEK	***Create Date:***	1993-07-12 00:00:00
Class:	D5	***Update Date:***	1993-07-20 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False

County:	Niagara
Contributing Factor:	Other
Reported by:	Health Department
Referred to:	
Source:	Commercial/Industrial
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"DISCOLORATION IN SAWYER CREEK."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC 07/06/93: SAC RECEIVED REPORT FROM NCHD. TOWN OF NORTH TONAWANDA FLUSHED OUT SEWER. NO FURTHER ACTION NECESSARY. 09/29/95: This is additional information about material spilled from the translation of the old spill file: MILKY SUBSTANCE."

Material Information

OP Unit ID:	982813	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	397903	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		

Material Code:	0066A
Material Name:	unknown petroleum

Spiller Information

Spiller Name:	
Spiller Company:	WURLITZER INDUSTRIAL PARK
Spiller Address:	908 NIAGARA FALLS BLVD.
Spiller City:	NORTH TONAWANDA

Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.052034993
Longitude:	-78.826820021

Site: ***ROCK BLASTING***
NIAGARA FALLS BLVD. WHEATFIELD NY

NY SPILLS

Spill No:	9307121	***UST Trust:***	False
Site ID:	205024	***Spill Date:***	1993-09-11 12:00:00
DER Facility ID:	277707	***Received Date:***	1993-09-11 09:42:00
CID:		***CAC Date:***	1993-10-13 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3200	***Close Date:***	1993-10-13 00:00:00
Water Body:		***Create Date:***	1993-10-13 00:00:00
Class:	E6	***Update Date:***	1993-10-22 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	True
County:	Niagara		
Contributing Factor:	Other		
Reported by:	Responsible Party		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"ROCK BLASTING TO OCCUR AT NOON."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC 10/12/93: SAC - REPORT FILED FOR NOTIFICATION PURPOSES ONLY. NO ACTION REQUIRED. "

Material Information

OP Unit ID:	988203	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	393393	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0064A		
Material Name:	unknown material		

Spiller Information

Spiller Name:	
Spiller Company:	NONE
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***SANTAROSA***
NIAGARA FALLS BLVD NIAGARA FALLS NY

NY SPILLS

Spill No:	8903973	***UST Trust:***	False
Site ID:	167059	***Spill Date:***	1989-07-21 09:00:00
DER Facility ID:	140747	***Received Date:***	1989-07-21 09:30:00
CID:		***CAC Date:***	1989-08-01 00:00:00
Program Type:	ER	***Insp Date:***	1989-07-21 00:00:00
SWIS Code:	3211	***Close Date:***	1989-08-01 00:00:00
Water Body:		***Create Date:***	1989-07-21 00:00:00
Class:		***Update Date:***	1989-08-08 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Human Error		
Reported by:	DEC		
Referred to:			
Source:	Commercial Vehicle		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"DRIVER ERROR CAUSED SPILL OF FUEL"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 07/21/89: SANTAROSA AND CECOS CREWS CLEANED UP SPILL. 08/01/89: MJH TELECON 08/01/89, NYSDEC MONITOR TO FOLLOWUP WITH SPILL, SPILL UNIT COMPLETE. "

Material Information

OP Unit ID:	931756	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	448045	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	
Spiller Company:	SANTAROSA TRUCKING
Spiller Address:	2445 ALLEN AVENUE
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	14303
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***NIAGARA MOHAWK***
NIAGARA FALLS BLVD. WHEATFIELD NY

NY SPILLS

Spill No:	9403560	***UST Trust:***	False
Site ID:	205025	***Spill Date:***	1994-06-13 13:30:00
DER Facility ID:	366195	***Received Date:***	1994-06-13 17:36:00

CID:		***CAC Date:***	1994-07-08 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3240	***Close Date:***	1994-07-08 00:00:00
Water Body:		***Create Date:***	1994-07-08 00:00:00
Class:	D4	***Update Date:***	2009-08-03 07:29:13.790000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	BRENNAN
REM Phase:	0	***After Hours:***	False

County: Niagara
Contributing Factor: Traffic Accident
Reported by: Responsible Party
Referred to:
Source: Passenger Vehicle
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"VEHICLE KNOCKED DOWN POWER POLE SPILLING APPROX. 1 QT. OF TRANSFORMER OIL TO GROUND."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was KAH 07/08/94: KAH - SMALL QUANTITY OF TRANSFORMER OIL SPILLED (APPROX. 1 QT.). SPILL WAS CLEANED UP BY NIAGARA MOHAWK. NO FURTHER ACTION NECESSARY. "

Material Information

OP Unit ID:	997300	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	383735	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	1.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	1.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		

Material Code: 0016A
Material Name: non PCB oil

Spiller Information

Spiller Name:
Spiller Company: NIAGARA MOHAWK
Spiller Address: 144 KENSINGTON AVE.
Spiller City: BUFFALO
Spiller State: NY
Spiller Zip:
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude:
Longitude:

Site: ***NIAGARA RIVER***
NIAGARA FALLS PARKWAY NIAGARA FALLS NY

NY SPILLS

Spill No:	0603359	***UST Trust:***	False
Site ID:	366070	***Spill Date:***	2006-06-27 11:49:00
DER Facility ID:	316156	***Received Date:***	2006-06-27 11:49:00
CID:	444	***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	2006-06-27 00:00:00
Water Body:	NIAGARA RIVER	***Create Date:***	2006-06-27 12:08:00
Class:	D5	***Update Date:***	2006-06-27 16:01:57.420000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False

County: Niagara
Contributing Factor: Other
Reported by: Other
Referred to: U.S. COAST GUARD
Source: Unknown
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"BETWEEN TORONTO POWER AND CANANDA POWER: BELIVES IN MIGHT BE FROM HEAVY RAINS: IT MAY NOT MAKE IT TO THE AMERICAN SIDE:"

DEC Remark:

"6/27/06:SAC NOTIFIED US COAST GUARD REGARDING REPORT. NO FURTHER WORK REQUIRED. COMPUTER FILE ONLY - NO PAPER FILE."

Material Information

OP Unit ID:	1124029	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	2113511	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		

Material Code: 0066A
Material Name: unknown petroleum

Spiller Information

Spiller Name: JOHN LOCK
Spiller Company: NIAGARA RIVER
Spiller Address: NIAGARA FALLS PARKWAY
Spiller City: NIAGARA FALLS
Spiller State: NY
Spiller Zip:
Spiller Country: 001
Contact Name: JOHN LOCK
Contact Phone: (416) 325-3000
Contact Ext:
Latitude:
Longitude:

Site: ***OPPENHEIM PARK***
NIAGARA FALLS BLVD WHEATFIELD NY

NY SPILLS

Spill No:	0551319	***UST Trust:***	False
Site ID:	355980	***Spill Date:***	2005-11-23 10:30:00
DER Facility ID:	306041	***Received Date:***	2005-11-23 14:00:00
CID:		***CAC Date:***	
Program Type:	ER	***Insp Date:***	2005-11-30 00:00:00
SWIS Code:	3240	***Close Date:***	2006-02-24 00:00:00
Water Body:		***Create Date:***	2005-11-23 14:06:00
Class:	D3	***Update Date:***	2006-02-27 11:42:34.030000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False

County: Niagara
Contributing Factor: Equipment Failure
Reported by: Responsible Party
Referred to: NIAGARA COUNTY HEALTH DEP
Source: Commercial Vehicle
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"BROKEN PART ON THE FUEL GENERATOR. WHILE FILLING, NOCO SPILLED 5 GALLONS OF DIESEL TO THE GROUND. SKY WORKS, OWNER OF THE EQUIPMENT, REPAIRED GENERATOR AND CLEANED UP SPILL. JERRY RHINEHART IS THE CONTACT AT SKYWORKS, 822-5438."

DEC Remark:

"11/25/05:SAC SPOKE TO FG. FG TOOK CALL AND SAID BASED ON REPORT SHE TOOK, SPILL APPEARED TO BE MINOR. 11/28/05:SAC NOTIFIED PAUL DICKY - NCHD. MR. DICKY WILL FOLLOW UP ON COMPLAINT. FAXED COPY OF REPORT TO HIM. 11/28/05:SAC TELECON GREG WEBER - NATURE'S WAY. NATURE'S WAY HAS BEEN HIRED TO CLEAN UP SPILL. THEY WILL SCRAPE AFFECTED AREA TOMORROW. 11/29/05:SAC TELECON PAUL DICKY. MR. DICKY WAS CONTACTED BY RUSS SAVAGE - NATURE'S WAY THAT CLEANUP HAS BEEN COMPLETED. MR. DICKY WOULD INSPECT THE SITE. 2/21/06:SAC TELECON GREG WEBER. MR. WEBER WILL SEND IN THE DISPOSAL RECEIPTS. 2/23/06:RECEIVED DISPOSAL RECEIPTS FROM NATURE'S WAY. NEED NCHD INSPECTION REPORT FOR CLOSEOUT. 2/24/06:RECEIVED NCHD INSPECTION REPORT FROM PAUL DICKY. 2/27/06:DRAFTED CLOSURE LETTER. NO FURTHER WORK REQUIRED."

Material Information

OP Unit ID:	1113310	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	2103371	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	5.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	5.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	False
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	MR. THOMAS KACZMAREK
Spiller Company:	SKY WORKS EQUIPMENT RENTAL
Spiller Address:	100 THEILMAN DR
Spiller City:	BUFFALO
Spiller State:	NY
Spiller Zip:	14206
Spiller Country:	001
Contact Name:	JERRY RHINEHART
Contact Phone:	(716) 822-5438
Contact Ext:	
Latitude:	
Longitude:	

Site: ***AUTOMATIC ROLLS/NORTHEAST***
NIAGARA FALLS BLVD - MALL AMHERST NY

NY SPILLS

Spill No:	9406936	***UST Trust:***	False
Site ID:	259191	***Spill Date:***	1994-08-22 20:30:00
DER Facility ID:	212057	***Received Date:***	1994-08-22 20:35:00
CID:		***CAC Date:***	1995-06-06 00:00:00
Program Type:	ER	***Insp Date:***	1995-08-23 00:00:00
SWIS Code:	1522	***Close Date:***	1995-06-06 00:00:00
Water Body:		***Create Date:***	1994-08-23 00:00:00
Class:	C2	***Update Date:***	1995-07-07 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SORGI
REM Phase:	0	***After Hours:***	True
County:	Erie		
Contributing Factor:	Traffic Accident		
Reported by:	Fire Department		
Referred to:			
Source:	Commercial Vehicle		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"ROAD DEBRIS RUPTURED SADDLE TANK."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJS 08/22/94: 2130 HRS - MJS/JIM ZYMANEK SITE. LEAK STOPPED. SPILLAGE ON NIAGARA FALLS BLVD AND PARKING LOT. SPEEDI DRI APPLIED BY F.D. MINOR AMOUNT IN STORM SEWER. COULD NOT REACH ANYONE AT RP PHONE. HIRED EPS. 08/23/94: 0900 HRS - MJS/JIM ZYMANEK/EPS SITE. EPS DRUMMED SPEEDI DRI. PRODUCT PADDED OUT OF STORM RECEIVERS. 3 DRUMS WASTE GENERATED. STAGED ON SITE. CLEANUP COMPLETE. 08/31/94: RECEIVED PAY- PACK FROM EPS FOR INITIAL RESPONSE. 09/16/94: RECEIVED PAY- PACK FROM LAB FOR ANALYTICAL. 09/30/94: RECEIVED PAY- PACK FROM EPS FOR DISPOSAL. 10/03/94: MJS REVIEW FILE. RESPONSIBILITY LETTER SENT TO RP. 10/11/94: MJS TELECON FROM RON WAWRZASZEK FROM RP. HE WANTS TO PAY BILL. MJS EXPLAINED TO HIM THAT BILL WILL COME FROM AG'S OFFICE. 05/18/95: MJS REVIEW FILE. NEED DISPOSAL RECEIPT FOR CLOSURE OF FILE. MJS TELECON TO LINDA CARR(EPS). SHE WILL HAVE RECEIPT FORWARDED. "

Material Information

OP Unit ID:	1004365	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	379960	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	60.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	60.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0008		
Material Name:	diesel		

Spiller Information

Spiller Name:	
Spiller Company:	AUTOMATIC ROLLS/NORTHEAST
Spiller Address:	2 CORCORAN DRIVE
Spiller City:	AUBURN
Spiller State:	NY
Spiller Zip:	13021
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***SAWYER CREEK OIL***
NIAGARA FALLS BLVD RT 62 WHEATFIELD NY

NY SPILLS

Spill No:	8903991	***UST Trust:***	False
Site ID:	71753	***Spill Date:***	1989-07-25 09:00:00
DER Facility ID:	67851	***Received Date:***	1989-07-25 11:15:00
CID:		***CAC Date:***	1989-07-25 00:00:00
Program Type:	ER	***Insp Date:***	1989-07-25 00:00:00
SWIS Code:	3240	***Close Date:***	1989-07-25 00:00:00
Water Body:	SAYWER CREEK	***Create Date:***	1989-08-08 00:00:00
Class:		***Update Date:***	1989-08-15 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	COOKE
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Unknown		
Reported by:	Citizen		
Referred to:			
Source:	Unknown		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"OIL FOUND IN SAYWER CREEK BY CITIZEN"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 07/25/89: INSPECTED BOTH SIDES OF BRIDGE AND CREEK BED AND FOUND NO CONTAMINATION, UNUSUAL COLORS OR ODORS. NO FRUTHER ACTION WILL BE REQUIRED AT THIS TIME. "

Material Information

OP Unit ID:	929407	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	448063	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0066A		
Material Name:	unknown petroleum		

Spiller Information

Spiller Name:	
Spiller Company:	NONE
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***CAYUGA CREEK***
NIAGARA FALLS BOULEVARD NIAGARA FALLS NY

NY SPILLS

Spill No:	8800214	***UST Trust:***	False
Site ID:	96972	***Spill Date:***	1988-04-07 11:00:00
DER Facility ID:	278538	***Received Date:***	1988-04-07 11:30:00
CID:		***CAC Date:***	1988-05-04 00:00:00
Program Type:	ER	***Insp Date:***	1988-04-07 00:00:00
SWIS Code:	3200	***Close Date:***	1988-05-04 00:00:00
Water Body:	CAYUGA CREEK	***Create Date:***	1988-04-21 00:00:00
Class:		***Update Date:***	1988-05-04 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Unknown		
Reported by:	Citizen		
Referred to:			
Source:	Unknown		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"SHEEN OBSERVED IN CAYUGA CREEK"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 04/21/88: SHEEN TRACED TO NIGARA FALLS BLVD BY NCHD NO OBVIOUS SOURCE CITY OF NIAGARA FALLS PLACED BOOM AT REQUEST OF NCHD SOTE TO BE MONITORED FOR REOCCURANCE. 05/03/88: MJH TELECON NCHD 05/03/88, CREEK CLEAN, NO REOCCURRANCE OF SHEEN, PROPABLY FROM ROAD RUNOFF. "

Material Information

OP Unit ID:	917068	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	462934	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0009		
Material Name:	gasoline		

Spiller Information

Spiller Name:	
Spiller Company:	UNKNOWN
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***SGL INC.***
NIAGARA FALLS BLVD NIAGARA FALLS NY

NY SPILLS

Spill No:	9506890	***UST Trust:***	False
Site ID:	205031	***Spill Date:***	1995-09-06 12:29:00
DER Facility ID:	140747	***Received Date:***	1995-09-06 12:29:00
CID:		***CAC Date:***	1995-09-06 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1995-09-06 00:00:00
Water Body:		***Create Date:***	1995-09-06 00:00:00
Class:	D5	***Update Date:***	1995-09-18 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	BRENNAN
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Unknown		
Reported by:	Affected Persons		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"YELLOWISH WHITE SMOKE COMING FROM STACKS."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was KAH 09/06/95: KAH REFERRED TO DIVISION OF AIR RESOURCES. NO FURTHER ACTION NECESSARY BY SPILLS. "

Material Information

OP Unit ID:	1021650	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	364849	***Med SW:***	False
CAS No:		***Med DW:***	False

Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	True		
Material Code:	0064A		
Material Name:	unknown material		

Spiller Information

Spiller Name:	
Spiller Company:	SGL, INC.
Spiller Address:	NIAGARA FALLS BLVD.
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***DUMPING NEXT TO TOPS NIAGARA FALLS BLVD AMHERST NY***

NY SPILLS

Spill No:	9206877	***UST Trust:***	False
Site ID:	288478	***Spill Date:***	1992-09-01 12:00:00
DER Facility ID:	233654	***Received Date:***	1992-09-11 14:45:00
CID:		***CAC Date:***	1992-09-15 00:00:00
Program Type:	ER	***Insp Date:***	1992-09-15 00:00:00
SWIS Code:	1522	***Close Date:***	1992-09-15 00:00:00
Water Body:		***Create Date:***	1992-09-15 00:00:00
Class:	E6	***Update Date:***	1992-09-28 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	DGP
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Deliberate		
Reported by:	Citizen		
Referred to:			
Source:	Unknown		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"DUMPING AT NIGHT NEXT TO TOPS PLAZA ON LEFT."

DEC Remark:

""

Material Information

OP Unit ID:	970665	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	407564	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0064A		
Material Name:	unknown material		

Spiller Information

Spiller Name:
Spiller Company: NONE
Spiller Address:
Spiller City:
Spiller State: NY
Spiller Zip:
Spiller Country: 999
Contact Name:
Contact Phone:
Contact Ext:
Latitude:
Longitude:

Site: ***NFTA***
NIAGARA FALLS BLVD NIAGARA FALLS NY

NY SPILLS

Spill No:	9501480	***UST Trust:***	False
Site ID:	205029	***Spill Date:***	1995-05-02 11:15:00
DER Facility ID:	140747	***Received Date:***	1995-05-02 12:00:00
CID:		***CAC Date:***	1995-05-02 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1995-05-02 00:00:00
Water Body:		***Create Date:***	1995-05-05 00:00:00
Class:	D4	***Update Date:***	1995-05-08 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	BRENNAN
REM Phase:	0	***After Hours:***	False

County: Niagara
Contributing Factor: Equipment Failure
Reported by: Responsible Party
Referred to:
Source: Institutional, Educational, Gov., Other
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"GASKET LEAK CAUSING SPILLAGE OF APPROXIMATELY 2 GALS. OF JET FUEL."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was KAH 05/02/95: KAH - GASKET LEAK CAUSED APPROX. 2 GALS. OF JET FUEL TO SPILL TO PAVEMENT. SPILL WAS CLEANED UP BY NFTA. NO FURTHER ACTION NECESSARY. "

Material Information

OP Unit ID:	1012378	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	370089	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	2.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	2.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		

Material Code: 0011
Material Name: jet fuel

Spiller Information

Spiller Name:
Spiller Company: NFTA AIRPORT
Spiller Address: NIAGARA FALLS BLVD.
Spiller City: NIAGARA FALLS
Spiller State: NY

Spiller Zip:
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude: 43.093439993
Longitude: -79.008960030

Site: ***Spill Number 8504732***
NIAGARA FALLS BOUL. AMHERST NY

NY SPILLS

Spill No:	8504732	***UST Trust:***	False
Site ID:	131364	***Spill Date:***	1986-03-22 00:00:00
DER Facility ID:	113179	***Received Date:***	
CID:		***CAC Date:***	1986-03-22 00:00:00
Program Type:	ER	***Insp Date:***	1986-03-22 00:00:00
SWIS Code:	1522	***Close Date:***	1986-03-22 00:00:00
Water Body:		***Create Date:***	
Class:		***Update Date:***	2004-02-19 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	LEARY
REM Phase:	0	***After Hours:***	False

County: Erie
Contributing Factor: Unknown
Reported by: Other
Referred to:
Source: Unknown
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

""

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RNL 2004/02/19 - Both Spill_Time and RCVD_Time were previously blank and replaced with 00:00 to fix a data translation problem... Bob Corcoran "

Material Information

OP Unit ID:	897753	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	480100	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		

Material Code: 0009
Material Name: gasoline

Spiller Information

Spiller Name:
Spiller Company: KNOWN, SEE FILE
Spiller Address:
Spiller City:
Spiller State: ZZ
Spiller Zip:
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude:
Longitude:

Site: ***NYSDOT HIGHWAY PROJECT***
NIAGARA FALLS BLVD. WHEATFIELD NY

Spill No:	9806509	***UST Trust:***	False
Site ID:	205032	***Spill Date:***	1998-08-25 12:00:00
DER Facility ID:	366195	***Received Date:***	1998-08-26 11:05:00
CID:	999	***CAC Date:***	
Program Type:	ER	***Insp Date:***	1998-09-18 00:00:00
SWIS Code:	3240	***Close Date:***	1998-09-30 00:00:00
Water Body:		***Create Date:***	1998-08-26 00:00:00
Class:	C3	***Update Date:***	2009-07-28 09:36:02.177000000
Meets Std:	False	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Other		
Reported by:	Responsible Party		
Referred to:	NIAGARA CNTY HEALTH DEPT		
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"DISCOVERED ABANDONED UST WHILE INSTALLING WATER LINE."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC-NCHD 8/28/98:SAC, PAUL DICKY,NCHD INSPECT SITE MET W/TOM VAN SPLENDOR - NYSDOT, TANK FOUND IN RIGHT OF WAY ON THE DIAGONAL CORNER, TANK AND ANY CONTAMINATED SOIL WILL BE REMOVED NEXT WEEK, DOT TO NOTIFY DEC WHEN TANK WILL BE REMOVED. 9/2/98:DRAFTED REMOVAL AND TREATMENT OPTION LETTER. 9/18/98:JDC ONSITE AND MET W/ TOM VAN SPLENDOR, DOT - OBSERVED THE REMOVAL OF (1) 500 GAL TANK AND (1) 1000 GAL TANK. NO FREE PRODUCT OBSERVED IN EXCAVATION, NO CONTAMINATED SOILS BY METER AT 10 ppm AS STANDARD. BOTH TANKS WERE PRODUCT FREE, SOIL COMPOSITE COLLECTED FROM SIDEWALLS AND BOTTOM OF EXCAVATION. 9/29/98:RECEIVED ANALYTICAL RESULTS FOR CONFIRMATORY SAMPLES, BOTTOM SAMPLE EXCEEDED FOR m,p-XYLENE AT 10 ppb FOR TCLP ANALYSIS, SPILL TO BE GIVEN I DUE TO GUIDANCE VALUES BEING EXCEEDED AT A LOW LEVEL. 9/30/98:DRAFTED I LETTER."

Material Information

OP Unit ID:	1064127	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	317663	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0066A		
Material Name:	unknown petroleum		

Spiller Information

Spiller Name:	
Spiller Company:	NYSDOT
Spiller Address:	125 MAIN STREET
Spiller City:	BUFFALO
Spiller State:	NY
Spiller Zip:	-
Spiller Country:	001
Contact Name:	TOM VAN SPLENDOR
Contact Phone:	(716) 731-1122
Contact Ext:	
Latitude:	
Longitude:	

Site: ***NY POWER AUTHORITY***

NIAGARA FALLS NIAGARA FALLS NY

NY SPILLS

Spill No:	0550523	***UST Trust:***	False
Site ID:	348232	***Spill Date:***	2005-06-24 15:00:00
DER Facility ID:	238031	***Received Date:***	2005-06-24 15:15:00
CID:		***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	2005-07-15 00:00:00
Water Body:		***Create Date:***	2005-06-24 15:34:00
Class:	C4	***Update Date:***	2005-07-15 11:35:04.700000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Equipment Failure		
Reported by:	Responsible Party		
Referred to:			
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"caller said that one of their heat exchangers leaked about 150 gal of turbine oil all in their containment area then into their oil water skimmer...all the oil will be recovered."

DEC Remark:

"6/24/05:SAC TELECON KEVIN COURIN - NYPA. SPILL IS IN THE TURBINE AREA OF THE PLANT SO OIL IS COLLECTING IN CONTAINMENT AREA. INSPECTION WOULD BE DIFFICULT SINCE AREA IS NOT VERY ACCESSIBLE. 6/24/05:SAC TELECON RON GWOZDEK - NCHD. NCHD WAS NOTIFIED OF SPILL BY THE POWER AUTHORITY. 6/27/05:SAC RECEIVED PHONE MESSAGE FROM SUE KOSIKOWSKI - NYPA. THERE ARE NO DISPOSAL RECEIPTS SINCE ALL THE OIL THAT IS COLLECTED FROM THE SKIMMER WILL BE SENT OUT IN A BULK SHIPMENT. 6/27/05:SAC CALLED SUE KOSIKOWSKI. LEFT MESSAGE REQUESTING COMPANY REPORT. 7/15/05:RECEIVED COMPANY REPORT. NO FURTHER WORK REQUIRED."

Material Information

OP Unit ID:	1105890	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	1968385	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	150.00	***Med Surf:***	True
Units:	G	***Med Subway:***	False
Recovered:	150.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	False
Med Air:	False		
Material Code:	1836		
Material Name:	turbine oil		

Spiller Information

Spiller Name:	
Spiller Company:	
Spiller Address:	
Spiller City:	
Spiller State:	
Spiller Zip:	
Spiller Country:	
Contact Name:	KEVIN COURIN
Contact Phone:	(716) 286-6767
Contact Ext:	
Latitude:	
Longitude:	

Site: ***914TH AIRLIFT GROUP***
NIAGARA FALLS BLVD NIAGARA FALLS NY

NY SPILLS

Spill No:	9304924	***UST Trust:***	False

Site ID:	205023	***Spill Date:***	1993-06-25 15:30:00
DER Facility ID:	140747	***Received Date:***	1993-07-15 12:00:00
CID:		***CAC Date:***	1993-07-19 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1993-07-19 00:00:00
Water Body:		***Create Date:***	1993-07-20 00:00:00
Class:	D4	***Update Date:***	1993-07-23 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False

County: Niagara
Contributing Factor: Human Error
Reported by: Responsible Party
Referred to:
Source: Major Facility (MOSF) > 400,000 gal
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"MONTHLY REPORT - TANK OVERFILL ON HELICOPTER."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC 07/19/93: SAC RECEIVED INCIDENT REPORT. ABSORBENTS USED BY SPILLER TO CLEAN UP SPILL. NO FURTHER ACTION NECESSARY. "

Material Information

OP Unit ID:	986599	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	398397	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	10.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	10.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		

Material Code: 0011
Material Name: jet fuel

Spiller Information

Spiller Name:
Spiller Company: 914 TAG NFAFB
Spiller Address:
Spiller City: NIAGARA FALLS
Spiller State: NY
Spiller Zip:
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude: 43.093439993
Longitude: -79.008960030

Site: ***KAUFMANN - BOULEVARD MALL***
NIAGARA FALLS BLVD. AMHERST NY

NY SPILLS

Spill No:	9300420	***UST Trust:***	False
Site ID:	294612	***Spill Date:***	1993-04-08 17:35:00
DER Facility ID:	238440	***Received Date:***	1993-04-08 17:35:00
CID:		***CAC Date:***	1993-04-15 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	1522	***Close Date:***	1993-04-15 00:00:00
Water Body:		***Create Date:***	1993-04-12 00:00:00
Class:	D3	***Update Date:***	1993-05-10 00:00:00
Meets Std:	True	***DEC Region:***	9

Penalty:	False	***Lead DEC:***	RMCROSSE
REM Phase:	0	***After Hours:***	True
County:	Erie		
Contributing Factor:	Other		
Reported by:	Citizen		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"OVERHEARD 2 EMPLOYEES IN MALL. 3 BINS OUTSIDE WITH ASBESTOS"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RMC 04/15/93: RMC/ERIA COUNTY NOTIFIED, NO SPILL ACTION REQUIRED AS IT IS A HEALTH AND SAFETY MATTER....CLOSE OUT. "

Material Information

OP Unit ID:	979095	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	401180	***Med SW:***	False
CAS No:	01332214	***Med DW:***	False
Material Family:	Hazardous Material	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0026A		
Material Name:	asbestos		

Spiller Information

Spiller Name:	
Spiller Company:	KAUFMANN
Spiller Address:	NIAGARA FALLS BLVD
Spiller City:	AMHERST
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***OIL IN RECEIVER***
NIAGARA FALLS BLVD. TONAWANDA NY

NY SPILLS

Spill No:	9305760	***UST Trust:***	False
Site ID:	294613	***Spill Date:***	1993-08-09 18:00:00
DER Facility ID:	275055	***Received Date:***	1993-08-10 10:20:00
CID:		***CAC Date:***	1993-08-10 00:00:00
Program Type:	ER	***Insp Date:***	1993-08-10 00:00:00
SWIS Code:	1500	***Close Date:***	1993-08-10 00:00:00
Water Body:	TONAWANDA CREEK	***Create Date:***	1993-08-10 00:00:00
Class:	D3	***Update Date:***	1993-08-11 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SORGI
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Unknown		
Reported by:	Citizen		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"GENERATOR USED TO SUPPLY POWER DURING CARNIVAL LEFT RECEIVER FULL OF OIL."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJS 08/10/93: MJS/SITE - FOUND AFFECTED SEWER; DIESEL ODOR. REMOVED SEWER GATE AND APPLIED ONE SORBENT PAD. SHEEN LEFT IN SEWER. NO FURTHER ACTION REQUIRED. MJS TO CLOSE FILE. "

Material Information

OP Unit ID:	983919	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	395667	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0022		
Material Name:	waste oil/used oil		

Spiller Information

Spiller Name:	
Spiller Company:	UNKNOWN VENDOR
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.002559993
Longitude:	-78.868880023

Site: ***MODERN DISPOSAL SERVICE***
NIAGARA FALLS BLVD. AMHERST NY

NY SPILLS

Spill No:	9208927	***UST Trust:***	False
Site ID:	294611	***Spill Date:***	1992-11-02 21:15:00
DER Facility ID:	238440	***Received Date:***	1992-11-02 22:22:00
CID:		***CAC Date:***	1993-02-22 00:00:00
Program Type:	ER	***Insp Date:***	1993-12-29 00:00:00
SWIS Code:	1522	***Close Date:***	1993-02-22 00:00:00
Water Body:		***Create Date:***	1992-11-04 00:00:00
Class:	B3	***Update Date:***	1993-02-23 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	RMCROSSE
REM Phase:	0	***After Hours:***	True
County:	Erie		
Contributing Factor:	Human Error		
Reported by:	Affected Persons		
Referred to:			
Source:	Commercial Vehicle		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"DUMPSTER CAUGHT OVERHEAD WIRES AND PULLED DOWN 2 POLES W/TRANSFORMERS.AREA DIKED AND SPEEDY-DRI USED."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RMC 11/05/92: RMC/SITE REQUIRES ADDITIONAL CLEANUP, SIGNIFICANT AMOUNT OF OIL AT BLACKTOPS EDGE IN 20*10 FOOT AREA. ADVISED KEN LAGINER NIAGARA MOHAWK WILL BEGIN CLEANUP TODAY. 11/10/92: RMC/TELECON W/LINDA CAR - WILL MAINTAIN PADS IN EXCAVATION UNTIL FURTHER NOTICE. ASKED FOR ANALYTICAL RESULTS. DISPOSAL RECEIPTS DUE 1/1/93. CLEANUP TODAY. 12/29/92: RMC/SITE - AREA CLEAR OF OIL, NO SHEEN NOTED. 7 DRUMS STAGED FOR DISPOSAL. RECEIPT FOR LAB & DISPOSAL DUE 1/30/93. 02/22/93: RMC/RECEIVED DISPOSAL RECEIPT...NON HAZARDOUS.... OK...CLOSE OUT. "

Material Information

OP Unit ID:	972465	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	405998	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	20.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	15.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0016A		
Material Name:	non PCB oil		

Spiller Information

Spiller Name:	
Spiller Company:	MODERN DISPOSAL SERVICE
Spiller Address:	476 MODEL CITY ROAD
Spiller City:	MODEL CITY
Spiller State:	NY
Spiller Zip:	14107
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***AIR FORCE RESERVE BASE***
NIAGARA FALLS BLVD NIAGARA FALLS NY

NY SPILLS

Spill No:	9301782	***UST Trust:***	False
Site ID:	205021	***Spill Date:***	1993-04-21 09:00:00
DER Facility ID:	140747	***Received Date:***	1993-05-05 12:00:00
CID:		***CAC Date:***	1993-05-05 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3211	***Close Date:***	1993-05-05 00:00:00
Water Body:		***Create Date:***	1993-05-11 00:00:00
Class:	C4	***Update Date:***	2005-06-06 17:25:14.480000000
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SACALAND
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Equipment Failure		
Reported by:	Responsible Party		
Referred to:			
Source:	Major Facility (MOSF) > 400,000 gal		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"BOTTOM SEAM HAD SLIGHT SEPARATION."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was SAC 04/21/93: SAC - PER MONTHLY SPILL REPORT FROM BILL NIVER, CLEANED AREA, PADS PLACED IN DRUM AND OVERPACED. NO FURTHER ACTION NECESSARY. "

Material Information

OP Unit ID:	980237	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	398947	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	1.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0012A		
Material Name:	kerosene		

OP Unit ID:	980237	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	398946	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:		***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0011		
Material Name:	jet fuel		

Spiller Information

Spiller Name:	
Spiller Company:	AFRES
Spiller Address:	
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***CECOS***
NIAGARA FALLS BOULEVARD NIAGARA FALLS NY

NY SPILLS

Spill No:	8800791	***UST Trust:***	False
Site ID:	96973	***Spill Date:***	1988-04-26 09:30:00
DER Facility ID:	278538	***Received Date:***	1988-04-26 10:35:00
CID:		***CAC Date:***	1988-04-29 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3200	***Close Date:***	1988-04-29 00:00:00
Water Body:		***Create Date:***	1988-05-02 00:00:00
Class:		***Update Date:***	1988-05-02 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Equipment Failure		
Reported by:	DEC		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"PLUGGED TRANSFER LINS RUPTURED AND SPRAYED WASTE MATERIAL ON VEHICLES AND GROUND"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 05/02/88: CECOS PERSONAL CLEANED UP SPILL POWERED WASHED EQUIPMENT SENT CLEANUP WATER THROUGH WATER TREATMENT SYSTEM. 09/29/95: This is additional information about material spilled from the translation of the old spill file: BARIUM WASTE."

Spiller Information

Spiller Name:	
Spiller Company:	WIZARD METHODS
Spiller Address:	
Spiller City:	BUFFALO
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***CECOS INTERNATIONAL***
NIAGARA FALLS BOULEVARD NIAGARA FALLS NY

NY SPILLS

Spill No:	8805412	***UST Trust:***	False
Site ID:	96974	***Spill Date:***	1988-09-17 13:30:00
DER Facility ID:	278538	***Received Date:***	1988-09-23 09:00:00
CID:		***CAC Date:***	1988-11-10 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3200	***Close Date:***	1988-11-10 00:00:00
Water Body:		***Create Date:***	1988-09-27 00:00:00
Class:		***Update Date:***	1988-11-21 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False

County:	Niagara
Contributing Factor:	Human Error
Reported by:	Responsible Party
Referred to:	
Source:	Commercial Vehicle
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"HYDRAULIC HOSE RUPTURED SPILLING PRODUCT"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 09/27/88: SPILL CLEANED UP BY CECOS PERSONAL. 09/29/95: This is additional information about material spilled from the translation of the old spill file: HYDRAULIC FLUID"

Spiller Information

Spiller Name:	
Spiller Company:	HASELY CONSTRUCTION
Spiller Address:	LOCKPORT ROAD
Spiller City:	NIAGARA FALLS
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.093439993
Longitude:	-79.008960030

Site: ***ATLANTIC***

NY SPILLS

NIAGARA FALLS BOULEVARD TONAWANDA NY

Spill No:	8902034	***UST Trust:***	True
Site ID:	247778	***Spill Date:***	1989-05-13 17:52:00
DER Facility ID:	275142	***Received Date:***	1989-05-30 08:45:00
CID:		***CAC Date:***	1989-06-16 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	1500	***Close Date:***	1989-06-16 00:00:00
Water Body:		***Create Date:***	1989-05-30 00:00:00
Class:		***Update Date:***	1989-06-26 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MXFRANKS
REM Phase:	0	***After Hours:***	False

County: Erie
Contributing Factor: Equipment Failure
Reported by: Citizen
Referred to:
Source: Gasoline Station or other PBS Facility
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"PUMP DID NOT SHUT OFF AT STATION"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MF 06/16/89: MF LETTER SENT TO JOHN MALINOWSKI REGARDING REPORTING. NO FUTHER ACTION NECESSARY ON THIS SPILL. "

Material Information

OP Unit ID:	927899	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	449755	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	True
Quantity:	7.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		

Material Code: 0009
Material Name: gasoline

Spiller Information

Spiller Name:
Spiller Company: ATLANTIC REFINING
Spiller Address: PO BOX 1260
Spiller City: SOUTHEASTERN
Spiller State: PA
Spiller Zip: 19398
Spiller Country: 001
Contact Name:
Contact Phone:
Contact Ext:
Latitude: 43.002559993
Longitude: -78.868880023

Tank Test Information

Spill Tank ID:	1535523	***Source:***	
Tank No:		***Test Method:***	00
Tank Size:	0	***Leak Rate:***	.00
Material:	0009	***Gross Fail:***	
EPA UST:		***Modified by:***	Spills
UST:		***Last Modified:***	2004-10-01 04:00:45.140000000
Cause:			

Alt Test Method: Unknown

Site: ***CHEMLAWN***
NIAGARA FALLS BLVD. AMHERST NY

NY SPILLS

Spill No:	9001548	***UST Trust:***	False
Site ID:	294610	***Spill Date:***	1990-05-09 13:40:00
DER Facility ID:	238440	***Received Date:***	1990-05-09 14:30:00
CID:		***CAC Date:***	1990-05-09 00:00:00
Program Type:	ER	***Insp Date:***	1990-05-09 00:00:00
SWIS Code:	1522	***Close Date:***	1990-05-09 00:00:00
Water Body:		***Create Date:***	1990-05-11 00:00:00
Class:		***Update Date:***	1990-06-08 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	COOKE
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Traffic Accident		
Reported by:	Responsible Party		
Referred to:			
Source:	Commercial Vehicle		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"TANK TRUCK HIT GUARD RAIL IN CONVIENT FOOD MART PARKING LOT AND SPILLED FERT AND PEST TO GROUND"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 05/09/90: SPILLAGE CLEANUP AND DISPOSED OF BY CHEMLAWN, DISPOSAL MADE TO DUMPSTER AT THIER FACILITY. 09/29/95: This is additional information about material spilled from the translation of the old spill file: FERTILIZER & PEST. "

Material Information

OP Unit ID:	939860	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	439882	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	10.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	9.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0066A		
Material Name:	unknown petroleum		

Spiller Information

Spiller Name:	
Spiller Company:	CHEMLAWN
Spiller Address:	AMHERST INDUSTRIAL PK
Spiller City:	AMHERST
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***ASSOC RETARDED CHILDREN***
NIAGARA FALLS BLVD WHEATFIELD NY

NY SPILLS

Spill No:	9100516	***UST Trust:***	False

Site ID:	167062	***Spill Date:***	1991-04-10 12:00:00
DER Facility ID:	284871	***Received Date:***	1991-04-12 09:40:00
CID:		***CAC Date:***	1991-06-20 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3240	***Close Date:***	1991-06-20 00:00:00
Water Body:		***Create Date:***	1991-04-16 00:00:00
Class:		***Update Date:***	1991-06-20 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	MJHINTON
REM Phase:	0	***After Hours:***	False
County:	Niagara		
Contributing Factor:	Deliberate		
Reported by:	Citizen		
Referred to:			
Source:	Institutional, Educational, Gov., Other		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"CALLER OBSERVED SOLVENTS AND WASTE OIL BEING DUMPED INTO DUMPSTER"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJH 04/16/91: FOLLOW UP REFERRED TO DSW. 06/20/91: JIM GROBE BECI UNIT INVESTIGATED NOTHING FOUND TO SUPPORT COMPLAINT. 09/29/95: This is additional information about material spilled from the translation of the old spill file: SOLVENTS AND OILS."

Material Information

OP Unit ID:	951513	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	426707	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0066A		
Material Name:	unknown petroleum		

Spiller Information

Spiller Name:	
Spiller Company:	ASSOC RETARDED CHILDREN
Spiller Address:	
Spiller City:	
Spiller State:	ZZ
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***WAL-MART***
NIAGARA FALLS BLVD. AMHERST NY

NY SPILLS

Spill No:	9309521	***UST Trust:***	False
Site ID:	294614	***Spill Date:***	1993-11-01 12:00:00
DER Facility ID:	238440	***Received Date:***	1993-11-04 11:40:00
CID:		***CAC Date:***	1993-11-10 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	1522	***Close Date:***	1993-11-10 00:00:00
Water Body:		***Create Date:***	1993-11-05 00:00:00
Class:	E6	***Update Date:***	2003-03-25 00:00:00

Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SORGI
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Deliberate		
Reported by:	Citizen		
Referred to:			
Source:	Commercial/Industrial		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"BLACK ASHY MATERIAL BEING USED FOR FILL FOR BUILDING AND PARKING LOT."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJS 11/04/93: MJS GAVE COPY OF REPORT TO MARK HANS. 11/10/93: DENNIS WEISS INSPECTED SIE ON 11/5/93 AND FOUND MATERIAL TO BE BOTTOM ASH. USE OF THIS MATERIAL ALLOWED UNDER 360-1.15(B)(16). NO FURTHER ACTION NECESSARY. MJS TO CLOSE FILE. "

Material Information

OP Unit ID:	991068	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	392177	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	L	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0064A		
Material Name:	unknown material		

Spiller Information

Spiller Name:	
Spiller Company:	WALMART
Spiller Address:	NIAGARA FALLS BLVD.
Spiller City:	AMHERST
Spiller State:	NY
Spiller Zip:	
Spiller Country:	001
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***PAINT CANS IN DUMPSTER***
NIAGARA FALLS BOULEVARD AMHERST NY

NY SPILLS

Spill No:	9315170	***UST Trust:***	False
Site ID:	247780	***Spill Date:***	1994-03-01 12:00:00
DER Facility ID:	203460	***Received Date:***	1994-03-23 12:00:00
CID:		***CAC Date:***	1994-03-25 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	1522	***Close Date:***	1994-03-25 00:00:00
Water Body:		***Create Date:***	1994-03-28 00:00:00
Class:	D4	***Update Date:***	1994-03-31 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	LEARY
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Deliberate		
Reported by:	Citizen		
Referred to:			

Source: Unknown
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"DUMPING OF PAINT CANS, COMPLAINANT BELIEVES THEY ARE HAZARDOUS WASTE"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RNL 03/25/94: RNL REFERRED TO FRANK SHATTUCK'S DIVISION. BECAUSE PAINT CANS ARE IN DUMPSTER, NO ACTION REQUIRED BY SPILLS UNIT. 09/29/95: This is additional information about material spilled from the translation of the old spill file: PAINT CANS."

Spiller Information

Spiller Name:
Spiller Company: UNKNOWN
Spiller Address:
Spiller City:
Spiller State: NY
Spiller Zip:
Spiller Country: 999
Contact Name:
Contact Phone:
Contact Ext:
Latitude:
Longitude:

Site: ***BARAGE CANAL***
NIAGARA FALLS BLVD WHEATFIELD NY

NY SPILLS

Spill No:	9003597	***UST Trust:***	False
Site ID:	167061	***Spill Date:***	1990-06-28 10:15:00
DER Facility ID:	284871	***Received Date:***	1990-06-29 10:20:00
CID:		***CAC Date:***	1990-08-23 00:00:00
Program Type:	ER	***Insp Date:***	
SWIS Code:	3240	***Close Date:***	1990-08-23 00:00:00
Water Body:	BARGAE CANAL	***Create Date:***	1990-07-05 00:00:00
Class:		***Update Date:***	1990-08-31 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	COOKE
REM Phase:	0	***After Hours:***	False

County: Niagara
Contributing Factor: Unknown
Reported by: Citizen
Referred to:
Source: Unknown
Source File: NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

""

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was JDC 07/02/90: COAST GUARD AND NCHD INSPECTED AND FOUND NO SOURCE TO OIL SLICK. NO RECOVERY POSSIBLE OIL DISAPATED QUICKLY. WILL CLOSE UPON RECEIPT OF COUNTY AND COAST GUARD REPORT. 08/23/90: RECD COUNTY AND COAST GUARD REPORT, NO FURTHER ACTION WILL BE REQUIRED. 09/29/95: This is additional information about material spilled from the translation of the old spill file: OILY SLICK."

Material Information

OP Unit ID:	941479	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	438287	***Med SW:***	True
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False

Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	False	***Oxygenate:***	
Med Air:	False		
Material Code:	0066A		
Material Name:	unknown petroleum		

Spiller Information

Spiller Name:	
Spiller Company:	UNKNOWN
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***OIL ON PAVEMENT***
NIAGARA FALLS BOULEVARD AMHERST NY

NY SPILLS

Spill No:	9304884	***UST Trust:***	False
Site ID:	247779	***Spill Date:***	1993-07-16 12:00:00
DER Facility ID:	203460	***Received Date:***	1993-07-16 12:35:00
CID:		***CAC Date:***	1993-07-19 00:00:00
Program Type:	ER	***Insp Date:***	1993-07-19 00:00:00
SWIS Code:	1522	***Close Date:***	1993-07-19 00:00:00
Water Body:		***Create Date:***	1993-07-20 00:00:00
Class:	D6	***Update Date:***	1993-08-23 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SORGI
REM Phase:	0	***After Hours:***	False
County:	Erie		
Contributing Factor:	Equipment Failure		
Reported by:	Citizen		
Referred to:			
Source:	Passenger Vehicle		
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data		

Caller Remark:

"CAR HIT BUMP CAUSING HOLE IN OIL PAN; OIL LEAKED ONTO PAVEMENT IN PARKING LOT."

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJS 07/19/93: MJS/SITE - PETROLEUM STAIN ON ASPHALT (APPROX. 6' X 6'). NO CLEANUP REQUIRED. MJS TO CLOSE FILE. "

Material Information

OP Unit ID:	986571	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	398361	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Petroleum	***Med Sewer:***	False
Quantity:	1.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		
Material Code:	0022		
Material Name:	waste oil/used oil		

Spiller Information

Spiller Name:	
Spiller Company:	UNKNOWN
Spiller Address:	
Spiller City:	
Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	
Longitude:	

Site: ***DRUM AT SAWYER CREEK***
NIAGARA FALLS BOULEVARD NORTH TONAWANDA NY

NY SPILLS

Spill No:	9607273	***UST Trust:***	False
Site ID:	167063	***Spill Date:***	1996-09-09 14:38:00
DER Facility ID:	275894	***Received Date:***	1996-09-09 14:10:00
CID:	312	***CAC Date:***	
Program Type:	ER	***Insp Date:***	
SWIS Code:	3200	***Close Date:***	2000-11-06 00:00:00
Water Body:		***Create Date:***	1996-09-09 00:00:00
Class:	D4	***Update Date:***	2001-01-11 00:00:00
Meets Std:	True	***DEC Region:***	9
Penalty:	False	***Lead DEC:***	SORGI
REM Phase:	0	***After Hours:***	False

County:	Niagara
Contributing Factor:	Abandoned Drums
Reported by:	Responsible Party
Referred to:	
Source:	Commercial/Industrial
Source File:	NYSDEC - Environmental Remediation Data Files - Spill Data

Caller Remark:

"oxbow power installing/repairing steam line and found buried drum by sawyer creek across from wurlitzer plant - drum sampled by urs consultants"

DEC Remark:

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was MJS 11/06/00: MJS NOTE TO FILE, CANNOT FIND FILE, NO NOTES. MJS PREVIOUS TELECON WAYNE MCCREADY (NYSDOT) AT TIME OF INCIDENT. HE WAS GOING TO HAVE DRUM DISPOSED. MJS NOT TO PURSUE DISPOSAL RECEIPT AT THIS TIME, FILE IS FOUR YEARS OLD. MJS CLOSE FILE"

Material Information

OP Unit ID:	1035234	***Med Ind Air:***	False
OU:	01	***Med GW:***	False
Material ID:	346542	***Med SW:***	False
CAS No:		***Med DW:***	False
Material Family:	Other	***Med Sewer:***	False
Quantity:	.00	***Med Surf:***	False
Units:	G	***Med Subway:***	False
Recovered:	.00	***Med Utility:***	False
Med Soil:	True	***Oxygenate:***	
Med Air:	False		

Material Code:	0064A
Material Name:	unknown material

Spiller Information

Spiller Name:	
Spiller Company:	UNKNOWN
Spiller Address:	
Spiller City:	

Spiller State:	NY
Spiller Zip:	
Spiller Country:	999
Contact Name:	
Contact Phone:	
Contact Ext:	
Latitude:	43.052034993
Longitude:	-78.826820021

Site: ***TOWN OF NIAGARA LANDFILL***
OFF OF LOCKPORT RD NIAGARA FALLS NY 14301

SEMS ARCHIVE

Site ID:	0201268	***FIPS Code:***	36063
EPA ID:	NYD000514364	***Cong District:***	36
Superfund Alt Agmt:	No	***Region:***	02
Federal Facility:	No	***County:***	NIAGARA
FF Docket:	No		
NPL:	Not on the NPL		
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information		

Action Information

Operable Units:	00	***Qual:***	
Action Code:	VS	***SEQ:***	1
Action Name:	ARCH SITE	***FF:***	N
Start Actual:		***FF Docket:***	N
Finish Actual:	09/29/1986	***Region:***	02
Curr Action Lead:	EPA Perf In-Hse		

Operable Units:	00	***Qual:***	
Action Code:	DS	***SEQ:***	1
Action Name:	DISCVRY	***FF:***	N
Start Actual:	04/01/1980	***FF Docket:***	N
Finish Actual:	04/01/1980	***Region:***	02
Curr Action Lead:	EPA Perf		

Operable Units:	00	***Qual:***	N
Action Code:	PA	***SEQ:***	1
Action Name:	PA	***FF:***	N
Start Actual:		***FF Docket:***	N
Finish Actual:	09/29/1986	***Region:***	02
Curr Action Lead:	St Perf		

Site: ***RUFOLF WURLITZER***
NIAGARA FALLS BLVD NORTH TONAWANDA NY 14120

SEMS ARCHIVE

Site ID:	0201311	***FIPS Code:***	36063
EPA ID:	NYD000911339	***Cong District:***	36
Superfund Alt Agmt:	No	***Region:***	02
Federal Facility:	No	***County:***	NIAGARA
FF Docket:	No		
NPL:	Not on the NPL		
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information		

Action Information

Operable Units:	00	***Qual:***	
Action Code:	VS	***SEQ:***	1
Action Name:	ARCH SITE	***FF:***	N
Start Actual:		***FF Docket:***	N
Finish Actual:	06/16/1992	***Region:***	02
Curr Action Lead:	EPA Perf In-Hse		

Operable Units:	00	***Qual:***	N
Action Code:	PA	***SEQ:***	1
Action Name:	PA	***FF:***	N
Start Actual:	03/01/1986	***FF Docket:***	N

Finish Actual:	03/07/1986	***Region:***	02
Curr Action Lead:	St Perf		

Operable Units:	00	***Qual:***	N
Action Code:	SI	***SEQ:***	2
Action Name:	SI	***FF:***	N
Start Actual:	04/01/1992	***FF Docket:***	N
Finish Actual:	06/16/1992	***Region:***	02
Curr Action Lead:	St Perf		

Operable Units:	00	***Qual:***	N
Action Code:	SI	***SEQ:***	1
Action Name:	SI	***FF:***	N
Start Actual:	03/01/1986	***FF Docket:***	N
Finish Actual:	03/07/1986	***Region:***	02
Curr Action Lead:	St Perf		

Operable Units:	00	***Qual:***	
Action Code:	DS	***SEQ:***	1
Action Name:	DISCVRY	***FF:***	N
Start Actual:	03/01/1986	***FF Docket:***	N
Finish Actual:	03/01/1986	***Region:***	02
Curr Action Lead:	St Perf		

Site: ***LOCKPORT ROAD SITE***
LOCKPORT ROAD WHEATFIELD NY 14150

SEMS ARCHIVE

Site ID:	0202805	***FIPS Code:***	36029
EPA ID:	NYD982531295	***Cong District:***	32
Superfund Alt Agmt:	No	***Region:***	02
Federal Facility:	No	***County:***	ERIE
FF Docket:	No		
NPL:	Not on the NPL		
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information		

Action Information

Operable Units:	00	***Qual:***	
Action Code:	VS	***SEQ:***	1
Action Name:	ARCH SITE	***FF:***	N
Start Actual:		***FF Docket:***	N
Finish Actual:	02/01/1992	***Region:***	02
Curr Action Lead:	EPA Perf In-Hse		

Operable Units:	00	***Qual:***	N
Action Code:	SI	***SEQ:***	1
Action Name:	SI	***FF:***	N
Start Actual:	02/01/1992	***FF Docket:***	N
Finish Actual:	02/01/1992	***Region:***	02
Curr Action Lead:	St Perf		

Operable Units:	00	***Qual:***	
Action Code:	DS	***SEQ:***	1
Action Name:	DISCVRY	***FF:***	N
Start Actual:	03/21/1986	***FF Docket:***	N
Finish Actual:	03/21/1986	***Region:***	02
Curr Action Lead:	St Perf		

Operable Units:	00	***Qual:***	N
Action Code:	PA	***SEQ:***	1
Action Name:	PA	***FF:***	N
Start Actual:		***FF Docket:***	N
Finish Actual:	03/28/1988	***Region:***	02
Curr Action Lead:	St Perf		

Site: ***Frontier Chemical - Pendleton***
Townline Road North Tonawanda NY 14120

VAPOR

Site Code:	932043	***Town:***	Pendleton
Vapor Ins Eval Stat:	Complete (No Further Action)	***X Coordinate:***	188949.06459
Program:	State Superfund Program	***Y Coordinate:***	4777620.25929
Site Class:	04	***Method:***	4.3
Accuracy:	variab	***County:***	Niagara
Accuracy Unit:			

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. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

Sites on the United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 23, 2023

National Priority List - Proposed: PROPOSED NPL

Sites proposed by the United States Environmental Protection Agency (EPA), the state agency, or concerned citizens for addition to the National Priorities List (NPL) due to contamination by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 23, 2023

Deleted NPL: DELETED NPL

Sites deleted from the United States Environmental Protection Agency (EPA)'s National Priorities List. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 23, 2023

SEMS List 8R Active Site Inventory: SEMS

The U.S. Environmental Protection Agency's (EPA) Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. This data includes SEMS sites from the List 8R Active file as well as applicable sites from the SEMS GIS/REST file layer obtained from EPA's Facility Registry Service.

Government Publication Date: Jan 25, 2023

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. This data includes sites from the List 8R Archived site file.

Government Publication Date: Jan 25, 2023

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Apr 24, 2023

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by RCRA.

Government Publication Date: Apr 24, 2023

RCRA Generator List: RCRA LQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Apr 24, 2023

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Apr 24, 2023

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Apr 24, 2023

RCRA Non-Generators: RCRA NON GEN

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Apr 24, 2023

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Apr 24, 2023

Federal Engineering Controls-ECs: FED ENG

This list of Engineering controls (ECs) is provided by the United States Environmental Protection Agency (EPA). ECs encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. The EC listing includes remedy component data from Superfund decision documents issued in fiscal years 1982-2020 for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Feb 23, 2023

Federal Institutional Controls- ICs: FED INST

This list of Institutional controls (ICs) is provided by the United States Environmental Protection Agency (EPA). ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site. The IC listing includes remedy component data from Superfund decision documents issued in fiscal years 1982-2020 for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Feb 23, 2023

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Institutional Control Boundaries at NPL sites: NPL IC

Boundaries of Institutional Control areas at sites on the United States Environmental Protection Agency (EPA)'s National Priorities List, or Proposed or Deleted, made available by the EPA's Shared Enterprise Geodata and Services (SEGS). United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.

Government Publication Date: Mar 23, 2023

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Jan 16, 2023

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This data is provided by the United States Environmental Protection Agency (EPA) and includes Brownfield sites from the Cleanups in My Community (CIMC) web application.

Government Publication Date: Sep 13, 2022

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

This listing contains facilities that have submitted Facility Response Plans (FRPs) to the U.S. Environmental Protection Agency (EPA). Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit FRPs. Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments. This listing includes FRP facilities from an applicable EPA FOIA file and Homeland Infrastructure Foundation-Level Data (HIFLD) data file.

Government Publication Date: Aug 8, 2022

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Aug 8, 2022

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Aug 30, 2022

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Jun 29, 2022

LIEN on Property: SEMS LIEN

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) provides Lien details on applicable properties, such as the Superfund lien on property activity, the lien property information, and the parties associated with the lien.

Government Publication Date: Jan 25, 2023

Superfund Decision Documents: SUPERFUND ROD

This database contains a list of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include completed Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD) for active and archived sites stored in the Superfund Enterprise Management System (SEMS), along with other associated memos and files. This information is maintained and made available by the U.S. Environmental Protection Agency.

Government Publication Date: Mar 23, 2023

Formerly Utilized Sites Remedial Action Program: DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

State

Registry of Inactive Hazardous Waste Disposal Sites in New York State: SHWS

State-and tribal- equivalent CERCLIS. State Superfund Program (Inactive Hazardous Waste Disposal Site Remedial Program) (IHWDS) - Oversees the identification, investigation and cleanup of sites where consequential amounts of hazardous waste exist. These sites go through a process of investigation, evaluation, cleanup and monitoring that has several distinct stages. This list is made available by New York State Department of Environmental Conservation's State Superfund Program.

Government Publication Date: Mar 27, 2023

Delisted Registry of Inactive Hazardous Waste Disposal Sites in New York: DELISTED SHWS

This database contains a Registry of Inactive Hazardous Waste Disposal sites which have been removed from New York Department of Environmental Conservation's Environmental Site Remediation database.

Government Publication Date: Mar 27, 2023

Hazardous Substance Waste Disposal Sites: HSWDS

A list of sites included in Hazardous Substance Waste Disposal Site Study reports made available by the New York Department of Environmental Conservation Division of Hazardous Waste Remediation. Provides information regarding the evolving status of hazardous substance waste disposal sites in New York.

Government Publication Date: Oct 24, 2003

Vapor Intrusion Legacy Site List: VAPOR

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion. This list is made available by Department of Environmental Conservation's Vapor Intrusion Legacy Site List. This database is state equivalent CERCLIS.

Government Publication Date: Dec 29, 2022

Solid Waste Facilities and Landfills: SWF/LF

Solid Waste Information Management System (SWIMS) is an inventory containing active and inactive facilities throughout the state. This list is made available by Department of Environmental Conservation's Solid Waste Information Management System (SWIMS).

Government Publication Date: Dec 22, 2021

Inactive Landfill Facilities: LANDFILL INACTIVE

List of inactive landfills in the State of New York. This data is made available by the New York State Department of Environmental Conservation (DEC). DEC notes that these are preliminary data and should not be regarded as a complete inventory of all landfills in the State, and also that site locations and attributes are preliminary and should not be relied upon without independent verification.

Government Publication Date: Sep 21, 2022

Waste Tire Facilities: WASTE TIRE

This list of active Waste Tire Facilities is maintained by the New York State Department of Environmental Conservation. Waste tire storage facilities (WTSF) store waste tires or portions of waste tires. Most of these facilities require Part 360 permits, but under certain conditions a registration maybe available.

Government Publication Date: Apr 7, 2022

Recycling Facilities: RECYCLING

The Department of Environmental Conservation (DEC), Division of Materials Management (DMM), Bureau of Permitting and Planning regulates solid waste management facilities in accordance with 6 NYCRR Part 360. Information pertaining to those facilities is maintained with the Division's Solid Waste Information Management System (SWIMS) database. The Facility List is a dataset related to solid waste management facilities operating in the state, and includes such information as facility location, contact names and associated information, waste types managed, and regulatory information.

Government Publication Date: Apr 7, 2022

Leaking Storage Tanks: LST

This database contains records of chemical and petroleum spill incidents. They include leaking aboveground storage tanks or leaking underground storage tanks, with incidents of tank test failures, tank failures and tank overfill. This list is made available by New York State Department of Environmental Conservation's Spill Response Program.

Government Publication Date: May 3, 2023

Delisted Leaking Storage Tanks: DELISTED LST

List of Leaking Storage Tank sites which has been removed from New York Department of Environmental Conservation's Spill Response Program

Government Publication Date: May 3, 2023

Underground Storage Tanks- UST-Petroleum Bulk Storage (PBS): UST

Facilities within the Petroleum Bulk Storage (PBS) that have underground storage tanks. Underground petroleum storage facilities with a combined storage capacity over eleven hundred (1,100) gallons. This list is made available by NewYork Department of Environmental Conservation's Environmental Site Database Search.

Government Publication Date: May 17, 2023

The Bulk Storage Program Database - AST: AST

Facilities within the Petroleum Bulk Storage (PBS) that have aboveground storage tanks. Aboveground petroleum storage facilities with a combined storage capacity over eleven hundred (1,100) gallons. This list is made available by New York State Department of Environmental conservation's Petroleum Bulk Storage (PBS) program.

Government Publication Date: May 17, 2023

Petroleum Bulk Storage: TANKS

The Bulk Storage Program Database maintains the registrations of active and inactive bulk storage sites statewide. This database includes Petroleum Bulk Storage (PBS) tanks where no information is available on whether they are ASTs or USTs. This list is made available by Department of Environmental Conservation's Petroleum Bulk Storage (PBS) program.

Government Publication Date: May 17, 2023

Major Oil Storage Facilities (MOSF): MOSF

In 1977, the New York State Legislature passed the "Oil Spill Prevention, Control and Compensation Act" (Article 12 of the Navigation Law). This law regulates all oil terminals and transport vessels operating in the waters of the State which have a storage capacity of 400,000 gallons or more. (Terminals and vessels with a capacity of 400,000 gallons or more are commonly referred to as major oil storage facilities or MOSFs). This list is made available by Department of Environmental Conservation's Major Oil Storage Facility (MOSF) Program.

Government Publication Date: May 17, 2023

Chemical Bulk Storage (CBS): CBS

Facilities that store regulated hazardous substances in underground tanks . "Hazardous substance" means any substance listed as hazardous or acutely hazardous in 6 NYCRR Part 597 or a mixture thereof. This list is made available by Department of Environmental Conservation's Chemical Bulk Storage (CBS) Program.

Government Publication Date: May 17, 2023

Delisted Storage Tanks: DELISTED TANKS

List of Storage Tank sites which has been removed from New York Department of Environmental Conservation's Environmental Site Database.

Government Publication Date: May 17, 2023

Delisted County Records: DELISTED COUNTY

Records removed from county databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Feb 9, 2023

Registry of Engineering Controls in New York State: ENG

Registry of Engineering Controls in New York State taken from the Environmental Site Remediation Database.

Government Publication Date: Mar 27, 2023

Registry of Institutional Controls in New York State: INST

Registry of Institutional Controls in New York State taken from the Environmental Site Remediation Database.

Government Publication Date: Mar 27, 2023

Voluntary Cleanup Agreements: VCP

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites. This list is made available by Department of Environmental Conservation's Voluntary Cleanup Program.

Government Publication Date: Mar 27, 2023

Environmental Restoration Program Listing: ERP

Environmental Restoration Program - Provides municipalities with financial assistance for site investigation and remediation at eligible brownfield sites. In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a $200 million Environmental Restoration Fund as part of the $1.75 billion Clean Water/Clean Air Bond Act of 1996 (Bond Act). Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. This list is made available by Department of Environmental Conservation's Environmental Restoration Program.

Government Publication Date: Mar 27, 2023

Brownfields Site List (Subset of Site Remediation): BROWNFIELDS

Brownfield Cleanup Program was developed to enhance private-sector cleanups of brownfields and to reduce development pressure on "Greenfields". A Brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant. Contaminants include hazardous waste and/or petroleum. This list is made available by Department of Environmental Conservation's Brownfield Cleanup Program.

Government Publication Date: Mar 27, 2023

Tribal

Leaking Underground Storage Tanks (LUSTs) on Tribal/Indian Lands: INDIAN LUST

This list of leaking underground storage tanks (LUSTs) on Tribal/Indian Lands in Region 2, which includes New York, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 28, 2016

Underground Storage Tanks (USTs) on Indian Lands: INDIAN UST

This list of underground storage tanks (USTs) on Tribal/Indian Lands in Region 2, which includes New York, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Apr 04, 2016

Delisted Tribal Leaking Storage Tanks: DELISTED INDIAN LST

Leaking Underground Storage Tank (LUST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian LUST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Apr 26, 2023

Delisted Tribal Underground Storage Tanks: DELISTED INDIAN UST

Underground Storage Tank (UST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian UST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Apr 26, 2023

County

No County databases were selected to be included in the search.

Additional Environmental Record Sources

Federal

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Aug 18, 2022

Toxics Release Inventory (TRI) Program: TRIS

The U.S. Environmental Protection Agency's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of toxic chemicals from U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. There are currently 770 individually listed chemicals and 33 chemical categories covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual reporting forms for each chemical. Note that the TRI chemical list does not include all toxic chemicals used in the U.S. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Oct 19, 2022

PFOA/PFOS Contaminated Sites: PFAS NPL

List of National Priorities List (NPL) and related Superfund Alternative Agreement (SAA) sites where PFOA or PFOS contaminants have been found in water and/or soil. The site listing is provided by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Mar 28, 2023

Federal Agency Locations with Known or Suspected PFAS Detections: PFAS FED SITES

List of Federal agency locations with known or suspected detections of Per- and Polyfluoroalkyl Substances (PFAS), made available by the U.S. Environmental Protection Agency (EPA) in their PFAS Analytic Tools data. EPA outlines that these data are gathered from several federal entities, such as the Federal Superfund program, Department of Defense (DOD), National Aeronautics and Space Administration, Department of Transportation, and Department of Energy. The dates this data was extracted for the PFAS Analytic Tools range from March 2022 to April 2023. Sites on this list do not necessarily reflect the source/s of PFAS contamination and detections do not indicate level of risk or human exposure at the site. Agricultural notifications in this data are limited to DOD sites only. At this time, the EPA is aware that this list is not comprehensive of all Federal agencies.
Government Publication Date: Apr 24, 2023

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Locations for the Known PFAS Contamination Sites are sourced from the PFAS Sites and Community Resources Map, credited to the Northeastern University's PFAS Project Lab, Silent Spring Institute, and the PFAS-REACH team. Disclaimer: The source conveys the data undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Access the following source link for the most current information: https://pfasproject.com/pfas-sites-and-community-resources/
Government Publication Date: Oct 9, 2022

National Response Center PFAS Spills: ERNS PFAS

This Per- and Poly-Fluoroalkyl Substances (PFAS) Spills dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The National Response Center (NRC), operated by the U.S. Coast Guard, serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the "Material Involved" or "Incident Description" fields. Limitations: The data from the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Keyword searches may misidentify some incident reports that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS spills/release incidents.
Government Publication Date: Apr 15, 2023

PFAS NPDES Discharge Monitoring: PFAS NPDES

This list of National Pollutant Discharge Elimination System (NPDES) permitted facilities with required monitoring for Per- and Polyfluoroalkyl (PFAS) Substances is made available via the U.S. Environmental Protection Agency (EPA)'s PFAS Analytic Tools. Any point-source wastewater discharger to waters of the United States must have a NPDES permit, which defines a set of parameters for pollutants and monitoring to ensure that the discharge does not degrade water quality or impair human health. This list includes NPDES permitted facilities associated with permits that monitor for Per- and Polyfluoroalkyl Substances (PFAS), limited to the years 2007 - present. EPA further advises the following regarding these data: currently, fewer than half of states have required PFAS monitoring for at least one of their permittees, and fewer states have established PFAS effluent limits for permittees. For states that may have required monitoring, some reporting and data transfer issues may exist on a state-by-state basis.
Government Publication Date: Feb 19, 2023

Perfluorinated Alkyl Substances (PFAS) from Toxic Release Inventory: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a per- or polyfluoroalkyl (PFAS) substance included in the U.S. Environmental Protection Agency's (EPA) consolidated PFAS Master List of PFAS Substances. Encompasses Toxics Release Inventory records included in the EPA PFAS Analytic Tools. The EPA's TRI database currently tracks information on disposal or releases of 770 individually listed toxic chemicals and 33 chemical categories from thousands of U.S. facilities and details about how facilities manage those chemicals through recycling, energy recovery, and treatment.
Government Publication Date: Oct 19, 2022

Perfluorinated Alkyl Substances (PFAS) Water Quality: PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated Master List of PFAS Substances.
Government Publication Date: Jul 20, 2020

PFAS TSCA Manufacture and Import Facilities: PFAS TSCA

The U.S. Environmental Protection Agency (EPA) issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. This list is specific only to TSCA Manufacture and Import Facilities with reported per- and poly-fluoroalkyl (PFAS) substances. Data file is sourced from EPA's PFAS Analytic Tools TSCA dataset which includes CDR/Inventory Update Reporting data from 1998 up to 2020. Disclaimer: This data file includes production and importation data for chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. Note that some regulations have specific chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard. Reporting information on manufactured or imported chemical substance amounts should not be compared between facilities, as some companies claim Chemical Data Reporting Rule data fields for PFAS information as Confidential Business Information.

Government Publication Date: Jan 5, 2023

PFAS Waste Transfers from RCRA e-Manifest : PFAS E-MANIFEST

This Per- and Poly-Fluoroalkyl Substances (PFAS) Waste Transfers dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. Every shipment of hazardous waste in the U.S. must be accompanied by a shipment manifest, which is a critical component of the cradle-to-grave tracking of wastes mandated by the Resource Conservation and Recovery Act (RCRA). According to the EPA, currently no Federal Waste Code exists for any PFAS compounds. To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: • PFAS • PFOA • PFOS • PERFL • AFFF • GENX • GEN-X (plus the Vermont state-specific waste codes). Limitations: Amount or concentration of PFAS being transferred cannot be determined from the manifest information. Keyword searches may misidentify some manifest records that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS waste transfers.

Government Publication Date: Apr 9, 2023

PFAS Industry Sectors: PFAS IND

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The EPA developed the dataset from various sources that show which industries may be handling PFAS including: EPA's Enforcement and Compliance History Online (ECHO) records restricted to potential PFAS-handling industry sectors; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meet certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile, but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

Government Publication Date: Apr 16, 2023

Hazardous Materials Information Reporting System: HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Sep 1, 2020

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department"), Drug Enforcement Administration (DEA), provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Feb 8, 2023

Toxic Substances Control Act: TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Apr 11, 2019

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.
Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the site cleanup process, the U.S. Environmental Protection Agency (EPA) conducts a search to find the Potentially Responsible Parties (PRPs). The EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site. This listing contains PRPs, Noticed Parties, at sites in the EPA's Superfund Enterprise Management System (SEMS).
Government Publication Date: Jan 25, 2023

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.
Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online system incorporates data from the Integrated Compliance Information System - National Pollutant Discharge Elimination System (ICIS-NPDES). ICIS-NPDES is an information management system maintained by the Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES under the Clean Water Act. This data includes permit, inspection, violation and enforcement action information for applicable ICIS records.
Government Publication Date: Oct 15, 2022

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. The EPA tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.
Government Publication Date: Dec 11, 2022

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).
Government Publication Date: Dec 11, 2022

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for an environmental restoration. The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is compiled from the USACE's Geospatial FUDS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) FUDS dataset.
Government Publication Date: Jul 12, 2022

FUDS Munitions Response Sites: FUDS MRS

Boundaries of Munitions Response Sites (MRS), published with the Formerly Used Defense Sites (FUDS) Annual Report to Congress (ARC) by the U.S. Army Corps of Engineers (USACE). An MRS is a discrete location within a Munitions response area (MRA) that is known to require a munitions response. An MRA means any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). This data is compiled from the USACE's Geospatial MRS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) MRS dataset.

Government Publication Date: Jul 12, 2022

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

Government Publication Date: Mar 31, 2021

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) is provided by the United State Department of Labor, Mine Safety and Health Administration (MSHA). This file, which was originally created in the 1970's, contained many Mine-IDs that were invalid. MSHA removes invalid IDs from the MIF upon discovery. MSHA applicable data includes the following: all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970; mine addresses for all mines in the database except for Abandoned mines prior to 1998 from MSHA's legacy system (addresses may or may not correspond with the physical location of the mine itself); violations that have been assessed penalties as a result of MSHA inspections beginning on 1/1/2000; and violations issued as a result of MSHA inspections conducted beginning on 1/1/2000.

Government Publication Date: Nov 7, 2022

Surface Mining Control and Reclamation Act Sites: SMCRA

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of Abandoned Mine Land (AML) impacts, as well as information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Government Publication Date: Aug 18, 2022

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

DOE Legacy Management Sites: LM SITES

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) currently manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The LM manages sites with diverse regulatory drivers (statutes or programs that direct cleanup and management requirements at DOE sites) or as part of internal DOE or congressionally-recognized programs, such as but not limited to: Formerly Utilized Sites Remedial Action Program (FUSRAP), Uranium Mill Tailings Radiation Control Act (UMTRCA Title I, Tile II), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Decontamination and Decommissioning (D&D), Nuclear Waste Policy Act (NWPA). This site listing includes data exported from the DOE Office of LM's Geospatial Environmental Mapping System (GEMS). GEMS Data disclaimer: The DOE Office of LM makes no representation or warranty, expressed or implied, regarding the use, accuracy, availability, or completeness of the data presented herein.

Government Publication Date: Dec 1, 2022

Alternative Fueling Stations: ALT FUELS

This list of alternative fueling stations is sourced from the Alternative Fuels Data Center (AFDC). The U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data, which provides a wealth of information and data on alternative and renewable fuels, advanced vehicles, fuel-saving strategies, and emerging transportation technologies. The data includes Biodiesel (B20 and above), Compressed Natural Gas (CNG), Electric, Ethanol (E85), Hydrogen, Liquefied Natural Gas (LNG), Propane (LPG), and Renewable Diesel (R20 and above) fuel type locations.

Government Publication Date: Mar 23, 2023

Superfunds Consent Decrees: CONSENT DECREES

This list of Superfund consent decrees is provided by the Department of Justice, Environment & Natural Resources Division (ENRD) through a Freedom of Information Act (FOIA) applicable file. This listing includes Consent Decrees for CERCLA or Superfund Sites filed and/or as proposed within the ENRD's Case Management System (CMS) since 2010. CMS may not reflect the latest developments in a case nor can the agency guarantee the accuracy of the data. ENRD Disclaimer: Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA; response is limited to those records that are subject to the requirements of the FOIA; however, this should not be taken as an indication that excluded records do, or do not, exist.

Government Publication Date: Apr 19, 2023

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: Mar 30, 2022

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Nov 3, 2022

State

Underground Injection Control Wells: UIC

A well permit is required from the Division of Mineral Resources for any brine disposal well deeper than 500 feet. This includes any operation to drill, deepen, plug back or convert a well. Regardless of well depth, the NYSDEC Division of Water must be contacted for a determination of whether a SPDES permit is necessary to operate any brine disposal well.

Government Publication Date: Aug 6, 2018

Manufactured Gas Plants: MGP

A list of former Manufactured Gas Plants (MGP) made available by the New York Department of Environmental Conservation (NYSDEC). From the late 1800's to the mid 1900's, hundreds of manufactured gas plants across New York State supplied homes and industry with fuel. Former MGP structures such as gas holders, tar separators, wells, and tanks were often susceptible to spills and leaks. As a result, these structures were a significant source of contamination from the release of tar and other toxic by-products.

Government Publication Date: Jan 9, 2023

Spill Incidents Database: NY SPILLS

Spill Incidents Database has records dating back to 1978. This database contains records of chemical and petroleum spill incidents. The DEC Spill Response program receives and compiles reports of hazardous material spills occurring anywhere in New York State. These reports are submitted through the Spill Hotline and other mechanisms, and entered by DEC spill response staff into the state's official data base of Spill Incidents Reports. This list is made available by New York State Department of Environmental Conservation's Spill Response Program.

Government Publication Date: May 3, 2023

PFAS Remedial Sites: PFAS CONTAM

List of sites being addressed under one of the New York Department of Environmental Conservation (DEC) Division of Environmental Remediation (DER)'s remedial programs, where the waste or contaminant of concern is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Mar 27, 2023

Per- and Polyfluoroalkyl Substances (PFAS): PFAS

A list of sites surveyed by the New York Department of Environmental Conservation to determine locations that manufacture, use, store, or release into the environment materials containing Per- and Polyfluoroalkyl Substances (PFAS). Per- and Polyfluoroalkyl Substances (PFAS) are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. Some PFAS are difficult to break down and persist in the environment that may cause harm to the public. This list is made available by the Department of Environmental Conservation of New York State.

Government Publication Date: Jan 16, 2019

Landfill Investigations PFAS Sampling Results: PFAS LANDFILL

A list of inactive landfill sites that have been investigated for Per- and Polyfluoroalkyl Substances (PFAS) in the state of New York made available by the New York State Department of Environmental Conservation.

Government Publication Date: Jun 30, 2020

Registed Dry Cleaner Facilities: DRYCLEANERS

The Division of Air Resources of the Department of Environmental Conservation (DEC) tracks all registered dry cleaner facilities.

Government Publication Date: May 9, 2023

Delisted Dry Cleaner Facilities: DELISTED DRYCLEANERS

Sites removed from the list of dry cleaner facilities registered with the Department of Environmental Conservation (DEC)'s Division of Air Resources.

Government Publication Date: May 9, 2023

Hazardous Waste Manifest - Facilities: NY MANIFEST

List of facilities located in New York that are included in the Hazardous Waste Manifest Data Downloads Location Address data file made available by the New York Department of Environmental Conservation (DEC), with which no manifests are associated. The Hazardous Waste Manifest Data made available by the NY DEC is compiled from hazardous waste manifest shipments to, from, or within New York State. The Bureau of Program Management, in the Division of Environmental Remediation, is responsible for maintaining hazardous waste manifest records.

Government Publication Date: Mar 14, 2023

Receivers from Hazardous Waste Manifests: REC MANIFEST

List of receiver facilities located in New York that are included in the Hazardous Waste Manifest Data Downloads Location Address data file made available by the New York Department of Environmental Conservation (DEC), which are identified as a receiver in associated manifests. The Hazardous Waste Manifest Data made available by the NY DEC is compiled from hazardous waste manifest shipments to, from, or within New York State. The Bureau of Program Management, in the Division of Environmental Remediation, is responsible for maintaining hazardous waste manifest records. Hazardous Waste Code Descriptions are from NY Part 371.4 (6 CRR-NY 371.4) Identification and Listings of Hazardous Waste, unless otherwise noted.

Government Publication Date: Mar 14, 2023

Generators from Hazardous Waste Manifests: GEN MANIFEST

List of generator facilities located in New York that are included in the Hazardous Waste Manifest Data Downloads Location Address data file made available by the New York Department of Environmental Conservation (DEC), which are identified as a generator in associated manifests. The Hazardous Waste Manifest Data made available by the NY DEC is compiled from hazardous waste manifest shipments to, from, or within New York State. The Bureau of Program Management, in the Division of Environmental Remediation, is responsible for maintaining hazardous waste manifest records. Hazardous Waste Code Descriptions are from NY Part 371.4 (6 CRR-NY 371.4) Identification and Listings of Hazardous Waste, unless otherwise noted.

Government Publication Date: Mar 14, 2023

New York City E-Designated Sites: E DESIGNATION

A list of sites with an (E) Designation, described as a New York City (NYC) zoning map designation that indicates the presence of an environmental requirement pertaining to potential hazardous materials contamination, window/wall noise attenuation, or air quality impacts on a particular tax lot. The NYC Office of Environmental Remediation administers the E-Designation Environmental Review Program to avoid significant adverse impacts to human health or the environment through exposure to these hazards. The data is provided by the NYC Department of City Planning (DCP).

Government Publication Date: Nov 28, 2022

Registered Cooling Towers: COOLING TOWERS

Locations of cooling towers registered with New York State, made available by the Center for Environmental Health. In August 2015, the New York State Department of Health released emergency regulations requiring the owners of cooling towers to register them with New York State. These data are self-reported by owners and/or property managers of cooling towers in service in New York State.

Government Publication Date: Aug 2, 2022

Tier 2 Report: TIER 2

A list of Tier 2 facilities in the state of New York. This is a list of facilities which have reported hazardous substances provided by Homeland Security and Emergency Services.

Government Publication Date: Sep 28, 2022

NY DEC Projects of Interest: PROJECTS

A list of permits for notable projects - permit applications that have received a lot of public attention - made available by the New York Department of Environmental Conservation (DEC).

Government Publication Date: Nov 26, 2021

Air Permitted Facilities: AIR PERMITS

This list of issued state facility air permits is maintained by the New York State Department of Environmental Conservation (NYDEC). The listing includes Air State Facility Permits (ASF) and Air Title V Facility Permits (ATV). ASF permits may be required by medium-sized commercial or industrial facilities or larger facilities that have agreed to limit emissions. ATV permits may be required at the largest facilities statewide, or at facilities located in those areas where state implementation plans are in place to improve air quality. Please note: An Issued permit is valid for a stated period of time. Modifications may be made to an issued permit for the remainder of the active permit.

Government Publication Date: Dec 30, 2022

Liens Listing: LIEN

New York Environmental Protection and Spill Compensation Fund (Oil Spill Fund) places liens on properties that are sites of oil spills when the owners are responsible parties and fail to pay for cleanup. The Office of the State Comptroller provides this listing of liens information from the Oil Spill Fund.

Government Publication Date: Oct 5, 2021

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental record sources available for this State.

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.

VAPOR SCREENING

Project Property:	*75 Tupelo Lane Phase I ESA* *75 Tupelo Lane* *Buffalo NY*
Project No:	*H22.008.001*
Report Type:	*Vapor Report*
Order No:	*23062600676v*
Requested by:	*C&S Companies*
Date Completed:	*July 21, 2023*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

This Report was produced through the ERIS Vapor Screening Tool. The ERIS Vapor Screening Tool and this report output are designed to help those in conducting a Vapor Encroachment Screening on a Property Involved in Real Estate Transactions under the ASTM Standard Designation E2600 – 15.

The following table lists the data sources searched and any hits in the Area of Concern (AOC) that have been included in the report. The search distances listed are based on search distances used in the Database Report and the search results are grouped based on the minimum default search distances for Chemicals of Concern (COCs) and Petroleum Hydrocarbon Chemicals of Concern (PHCOCs) as outlined in E2600-15. The default AOC may be expanded or reduced by the environmental professional (adjusted AOC) using experience and professional judgment.

Standard Environmental Sources	***Search Distance (miles)****	***Project Property***	***Within 1/10***	***1/10 plus***	***Total***
Federal NPL site list	1.0	0	0	0	0
Federal Delisted NPL site list	0.5	0	0	0	0
Federal CERCLIS list	1.0	0	0	0	0
Federal CERCLIS NFRAP site list	0.5	0	0	0	0
Federal RCRA CORRACTS facilities list	1.0	0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list	0.5	0	0	0	0
Federal RCRA generators list	0.25	0	0	0	0
Federal institutional control/engineering control registries	0.5	0	0	0	0
Federal ERNS list	PO	0	0	0	0
State and tribal equivalent NPL	1.0	0	0	0	0
State and tribal equivalent CERCLIS	1.0	0	0	0	0
State and tribal landfill and/or solid waste disposal site lists	0.5	0	0	0	0
State and tribal leaking storage tank lists	0.5	0	0	0	0
State and Tribal registered storage tank lists	0.5	0	0	0	0
State and tribal institutional control/engineering control registries	0.5	0	0	0	0
State and tribal voluntary cleanup sites	0.5	0	0	0	0
State and tribal Brownfield sites	0.5	0	0	0	0
Others	0.5	0	0	0	0
Non Standard Environmental Sources					
Federal Spill sites list	0.125	0	0	0	0
Federal Drycleaner Facilities	0.5	0	0	0	0
State and tribal equivalent CERCLIS	1.0	0	0	0	0
State and Tribal Spill sites list	0.125	0	0	0	0
State and Tribal Dry Cleaner Facilities	0.25	0	0	0	0
Others	1.0	0	0	0	0
Federal PFAS sites list	0.5	0	0	0	0
State and Tribal PFAS site list	0.5	0	0	0	0

** Please refer to the Appendix of this report to view specific databases searched within each category. Search distances within each category may vary by database - the largest search radius per category will be displayed.*

Executive Summary: Report Summary

Project Property:	75 Tupelo Lane Phase I ESA 75 Tupelo Lane Buffalo NY	**PO No:**	H22.008.001
		Order No:	23062600676v
Coordinates:	43.04699403, -78.82391199	**Elevation:**	577.91 ft

Project Property - Results

Map Key	DB	Company/Site Name	Address	Direction	Distance (m/ft)	Elev Diff (ft)	Page Number

No records for the project property.

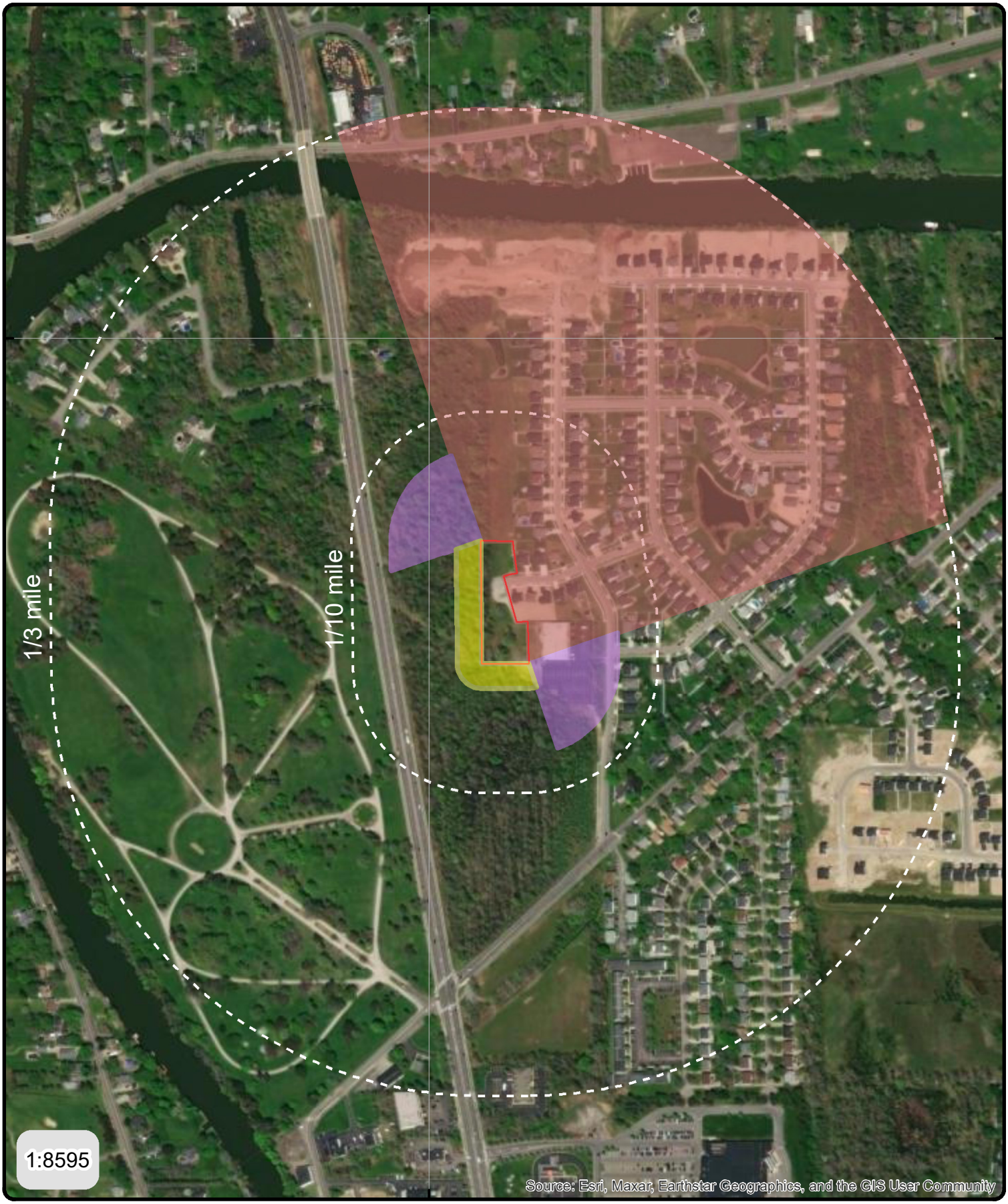
Surrounding Properties - Results

Map Key	DB	Company/Site Name	Address	Direction	Distance (m/ft)	Elev Diff (ft)	Page Number

No records for the surrounding properties.

78°49'30"W

43°3'N



43°3'N

Address: 75 Tupelo Lane,Buffalo,NY

Order No: 23062600676v

Up-gradient

Down-gradient

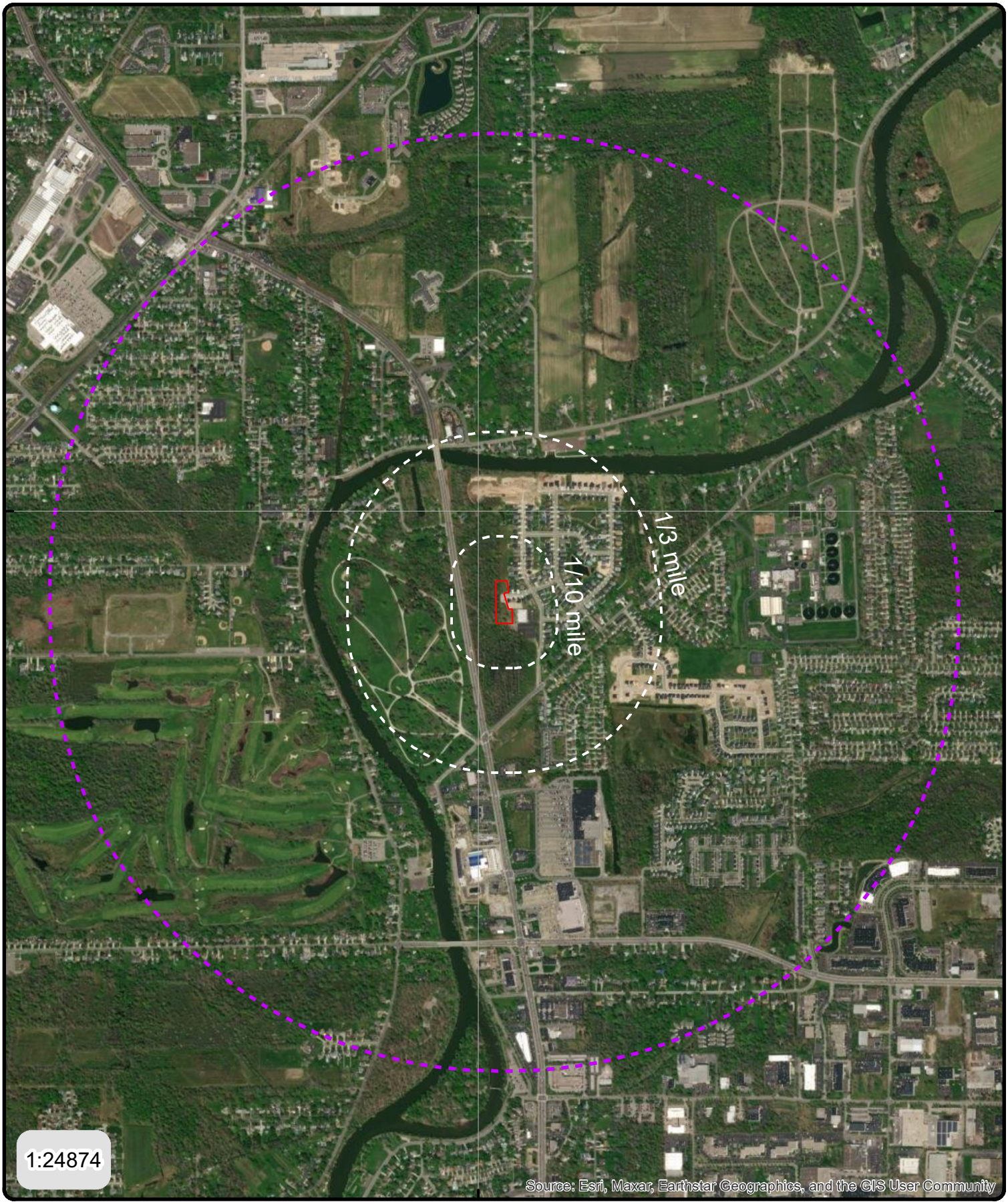
Cross-gradients

© ERIS Information Inc.

78°49'30"W

43°3'N

43°3'N



Address: 75 Tupelo Lane,Buffalo,NY

Order No: 23062600676v

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Detail Report

No details.

Appendix: Database Descriptions

The following are data source listings found in the attached report. For full descriptions, please refer to the associated ERIS Database Report.

DB	Database Name	Publication Date	Source	Classification	ASTM Category

Appendix B

Client / User Questionnaire

Client/User Questionnaire

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the Client/User must conduct the following inquiries and provide the following information (if available) to C & S Engineers, Inc. Failure to provide this information could result in a determination that "all appropriate inquiries" is not complete.

(1) **Environmental cleanup liens that are filed or recorded against the Subject Property/Properties (40 CFR §312.25).** Are you aware of any environmental cleanup liens against the Subject Property/properties that are filed or recorded under federal, tribal, state, or local law?

☐ YES ☒ NO

Explain:

(2) **Activity and land use limitations (AULs) that are in place on the Subject Property/Properties or that have been filed or recorded against the Subject Property/Properties in a registry (40 CFR §312.26).** Are you aware of any AULs, such an engineering controls, land use restrictions, or institutional controls that are in place at the Subject Property/Properties and/or have been filed or recorded against the Subject Property/Properties in a registry under federal, tribal, state, or local law?

☐ YES ☐ NO

Explain: There is a deed restriction on the property. The NYSDEC 100 foot wetland buffer is identified on map cover 3533. The deed restriction shall be in accordance with the declaration of protective covenant included in the NYSDEC permit.

(3) **Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR §312.28).** As the Client/User of this Phase I Environmental Site Assessment, do you have any specialized knowledge or experience related to the Subject Property/Properties or adjoining properties? For example, are you involved in the same line of business as the current or former occupants of the Subject Property/Properties or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☐ YES ☒ NO

Explain: The owner of the property is a developer and the client or user is the Town, which is a municipality. Historically, the property operated as a golf course. The current land use is a vacant parcel in a a residential subdivision. The NYDEC has record of a remediation site within 2,000 feet of the subject parcel (#915123) which contained phenolic tars and residues (F020 waste).

(4) **Relationship of the purchase price to the fair market value of the Subject Property/Properties if they were not contaminated (40 CFR §312.39).** Does the purchase price being paid for this property/these properties reasonably reflect the fair market value of the Subject Property/Properties?

☐ YES ☐ NO

If you answered "No", and the price(s) is/are below fair market value, have you considered that the lower price(s) is/are due to known or presumed contamination at the Subject Property/Properties?

☐ YES ☐ NO

Explain: There is no purchase price. The subject parcel is considered a donation to the Town of Amherst.

Client/User Questionnaire

(5) **Commonly known or reasonably ascertainable information about the Subject Property/Properties (40 CFR §312.30).** Are you aware of commonly known or reasonably ascertainable information about the Subject Property/Properties that would help C & S Engineers, Inc., to identify conditions indicative of releases or threatened releases? For example:

(a) Do you know of the past uses of the Subject Property/Properties? ☒ YES ☐ NO

Explain: The subject parcel is formerly operated as a golf course. The NYDEC has record of a remediation site within 2,000 feet of the subject parcel (#915123).

(b) Do you know of specific chemicals that are or once were present at the Subject Property/Properties? ☒ YES ☐ NO

Explain: The type of chemicals are related to golf course operations and maintenance. The NYSDEC site #915123 is documented to have phenolic tars and residues (F020 waste) within 2,000 feet of the subject parcel.

(c) Do you know of spills or other chemical releases that have taken place at the Subject Property/Properties?

☐ YES ☐ NO

Explain:

(d) Do you know of any environmental cleanups that have taken place at the Subject Property/Properties?

☒ YES ☐ NO

Explain: Within 2,000 feet of the subject parcel is a superfund site along the creek. All of the barrels and contaminated sediments have been removed from the site. There is no longer a significant threat. The site has been satisfactorily remediated, there are no environmental problems associated with the disposal of hazardous waste remaining at this site.

(6) **The degree of obviousness of the presence or likely presence of contamination at the Subject Property/Properties, and the ability to detect the contamination by appropriate investigation (40 CFR §312.31).** As the Client/User of this Phase I Environmental Site Assessment and based upon your knowledge and experience related to the Subject Property/Properties, are there any obvious indicators that point to the presence or likely presence of contamination at the Subject Property/properties?

☒ YES ☐ NO

Explain: The subject parcel is formerly operated as a golf course.

Questionnaire Completed By:

Jeffrey Szatkowski
Print Name

Signature

7/20/2023
Date

Appendix C

Site Photographs

75 Tupelo Ln. J. Ericksen 7/19/2023









75 Tupelo Ln. J. Ericksen 7/19/2023









Appendix D

Historical Reports

NEW YORK STATE DEPARTMENT OF TAXATION AND FINANCE
OFFICE OF REAL PROPERTY TAX SERVICES
PROPERTY RECORD CARD

SWIS 142289 TAX MAP No. 26.06-8-33

OWNER Cimato Enterprises

LOCATION 75 Tupelo Ln Amherst 14228

PROP CLASS 311 SCHOOL DIST 142207

SALE PRICE SALE DATE

Site Info.	SWIS/SBL 142289	0260600008033000			Card No. 1
		Site No. 1	Property Class		311
Route No.					
Nbhd. Code:	600			Val Dist:	0
Sewer Type:	1=None	2=Private	3=Comm/Public		3
Water Supply:	1=None	2=Private	3=Comm/Public		3
Utilities:	1=No Public	2=Gas	3=Electric	4=Gas and Electric	4
Site Desirability:	1=Inferior	2=Typical	3=Superior		2
Nbhd Type:	1=Rural	2=Suburban	3=Urban	4=Commercial	2
Nbhd Rating:	1=Below Avg.	2=Average	3=Above Avg.		2
Road Type:	1=None	2=Unimproved	3=Improved	4=Right-of-Way	3
DC Entry Type:	1=Inter Inspec	2=Inter Refuse	3=Total Refusal	4=Est	5=No Entry
Zoning Code:					

NOTES

Audit Control Section

Collector	Date(mmddyy)	Time	Activity	Source
	/ /	:		
	/ /	:		

Audit Control Codes	Source	Sales Information Codes	Valuation Useable
Activity	1=Owner	Sales Type	
	2=Relative		0=No
N=None	3=Tenant	1=Land Only	1=Yes
M=Measured Only	4=Other	2=Bldg. Only	
L=Listed	5=NOAH	3=Land and Bldg	
	6=Assess. Data	4=Right-of-Way	

Reappraisal Cycle Section

Date of Last Phy Insp. Date of Reappraisal 2/23/2022

Sales Information Section

Sale Date	Sale Price	Sale Type	Valuation Useable

Land Breakdown Section

Waterfront Type: 1=Pond 2=River 3=Lake 4=Canal 5=Ocean 6=Bay

Land Type

01=Primary	05=Tillable	09=Muck	13=Vineyard
02=Secondary	06=Pasture	10=Waterfront	14=Wetland
03=Undeveloped	07=Woodland	11=Orchard	15=Leased Land
04=Residual	08=Wasteland	12=Rear	

Soil Rating

P Poor	(05) 01-10	(09) 01-04	
N Normal	(06) 01-10	(11) 01-10	
G Good	(07) 01-04	(13) 01-10	

Influence Code

1=Topog	5=View
2=Location	6=Wetness
3=Shape	7=Environmental
4=Restricted Use	8=Other

Land Type	Front Feet	Depth	Acres	Square Feet	Soil Rating	Water Type	Depth Factor	Infl %	Infl Cd1	Infl Cd2	Infl Cd3
01	0.00	0.00	1.50	0			0	0			
14	0.00	0.00	.19	0			0	0			

Signature below does not mean contents verified, only that data was collected in your presence.

SIGNATURE _____

Residential Building Section

Building Style

01=Ranch	07=Mansion	13=Bungalow
02=Raised Ranch	08=Old Style	14=Other
03=Split Level	09=Cottage	15=Town House
04=Cape Cod	10=Row	16=A-Frame
05=Colonial	11=Log Home	17=Manf. Housing
06=Contemporary	12=Duplex	

No. of Stories

Ext. Wall Mat.

01=Wood	04=Composition	07=Stone
02=Brick	05=Concrete	08=Synthetic
03=Aluminmim/Vinyl	06=Stucco	

Actual Yr. Built

Effective Yr. Built

Yr. Remodeled

No. Kitchens

Kitchen Qual: 1=Poor 2=Fair 3=Normal 4=Good 5=Excellent

No. Full Baths **No. Half Baths**

Bath Qual: 1=Poor 2=Fair 3=Normal 4=Good 5=Excellent

No. Bedrooms

No. Rooms

No. Fireplaces **Firpl Type** 1=Masonry 2=Zero Clearance

Heat Type 1=No Central 2=Hot Air 3=Hot Water/Stream 4=Electric

Fuel Type 1=None 2=Gas 3=Elec. 4=Oil 5=Wood 6=Solar 7=Coal 8=Geo 9=Pro

Central Air Blank=No 1=Yes

Basement Type 1=Pier/Slab 2=Crawl 3=Partial 4=Full

Basement Garage Capacity

Overall Cond 1=Poor 2=Fair 3=Normal 4=Good 5=Excellent

Exterior Cond 1=Poor 2=Fair 3=Normal 4=Good 5=Excellent

Interior Cond 1=Poor 2=Fair 3=Normal 4=Good 5=Excellent

Constr. Grade A=Excellent B=Good C=Average D=Economy E=Min

Grade Adjust Pct:

Pct Good: **Func OBS Pct.**

Residential Building Area Section

First Story	
Second Story:	
Addl Story:	
Half Story:	
Three Qtr Story:	
Fin Over Garage:	
Fin Attic:	
Fin Basement:	
Unfin Half Story:	
Unfin 3 Qtr Story:	
Unfin Room:	
Unfin Over Garage	
SFLA:	
Fin Rec Room:	

MEAS. CODE:	CONST. GRADE	CONDITION
1=Quantity	A=Excellent	1=Poor
2=Dimensions	B=Good	2=Fair
3=Square Feet	C=Average	3=Normal
4=Dollars	D=Economy	4=Good
	E=Minimum	5=Excellent

Structure Codes

Garages

RC1=Carport	RG4=Gar-1.0 det
RG1=Gar-1.0 att	RG5=Gar-1.5 det
RG2=Gar-1.5 att	RG6=Gar-2.0 det
RG3=Gar-2.0 att	RG7=Garage/wApt

Pools

LS1=St/Vnyl
LS2=Fibgls
LS3=Concrete
LS4=Gunite
LS5=Abv Grn

Barns

FB1=1.0 Dry	FB5=1.5 Gen
FB2=1.5 Dry	FB6=2.0 Gen
FB3=2.0 Dry	FB7=Pole
FB4=1.0 Gen	FB8=Horse

Miscellaneous

GH2=Grnhse-res
TC1=Tennis Court

CANOPIES

CP5=Roof Only
CP6=W/Slab
CP7=W/Screen

Sheds

FC1=Shed
FC2=Aluminum
FC3=Galvanized
FC4= Finshd

Mobile Home

MH1=Basement
MH2=Roof
MH5=Mobile Home
MH6=7x12 Room
MH7=7x24 Room
MH8=Tip-Out Room
MH9=Wood Addon

Porch Type

RP1=Open	RP5=Up Op
RP2=Cover	RP6=Up Cov
RP3=Screen	RP7=Up Scr
RP4=Enclsd	RP8=Up Enc

IMPROVEMENT SECTION

Structure Code	MC	Dimension 1	Dimension 2	SQFT (MISC)	Quantity	Grade	COND.	Actual Yr. Built	Effective Yr. Built	PCT. GOOD

RECEIVED
OCT 21 2011
TOWN OF AMHERST
PLANNING DEPT.

Phase II
Environmental Site Assessment

100 Tonawanda Road
Amherst, New York 14228
Tax IDs: # 26.00-1-6.1

Job No.: 11-543A

Report was written by:

BARRON & ASSOCIATES, P.C.
10440 Main Street
Clarence, New York 14031
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Emily O'Mahony
Senior Geologist

for
James S. Barron, P.E.
President

On behalf of:

Mr. Jeffrey Palumbo
9276 Main Street, Suite 3
Clarence, NY 14031
Phone: (716) 308-7211

October, 2011

Phase II Environmental Site Assessment
100 Tonawanda Creek Road
Amherst, New York 14228
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Figure 4 1953 Survey Map
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Table 1 Detectable Soil Analytical Data

Attachment 1: Soil Probe Logs

Attachment 2: Laboratory "Analytical Data Report"

Attachment 3: Records (On CD)

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Tel.: (716) 759-7821
Fax: (716) 759-7823

Job No: 11-543A
Date: October, 2011

1.0 Overview

This Phase II Environmental Site Assessment (ESA) subsurface investigation was completed by Barron & Associates, P.C (B&A) on behalf of Jeffrey Palumbo to investigate potential recognized environmental conditions (RECs) associated with former environmental remedial activities at 100 Tonawanda Creek Road, New York (the property). This Phase II ESA included record review, hollow stem auger advancement, soil probe logging, photo-ionization detector (PID) screening, soil sample collection and soil laboratory analysis at TestAmerica Buffalo (Test America) of Amherst, New York. The following report sections discuss available historic records, field methodology, field observations, soil analytical results, conclusions and recommendations.

A USGS Site Location Plan is included as Figure 1 and a Direct Push Probe Location Plan is included as Figure 2. Figures 3 through 6 were generated utilizing available public records and property surveys:

1. "Survey of Part of Lot 1-T.13-R.8 & LOT 47-T.13-R.7 & Lot 17-T.12-R.8 & Lot 47-T.12-R.7 Holland Land Company Survey, Town of Amherst, Erie Co., NY" by Charles W. Janke, Tonawanda, NY, Land Surveyor Lic. No. 9981, May 20, 1953 and
2. "100 Tonawanda Creek Road, Boundary, Wetland and Topographic Survey" by W. M. Schutt Associates, March 8, 2011.

Site Photographs follow Figure 6. PID results were not detected above background. Detectable soil analytical data are summarized in Table 1. Soil Probe Logs are included as Attachment 1, Laboratory "Analytical Data Report" is included as Attachment 2 and available public records are included on CD as Attachment 3.

Property Summary

The property currently referred to as SBL: #26.00-1-6.1 is located at 100 Tonawanda Creek, Amherst, New York. In 1960, available records indicate the property was referred to as 170 Tonawanda Creek Road Tax ID 1-20-100 and in 1980 as 1-20-50. A farm house and outbuildings were erected in the center of the northern third of the property in approximately 1880 and burned in approximately 1982. Drums of phenolic tar resins containing tetrachlorinateddibenzo-p-dioxins and dibenzofuran generated by the Durez plant that was later owned by Occidental Chemical Cooperation (OCC) were transported to the site in the 1950's. The drums were apparently placed in the creekbank in an effort to provide resistance to fluvial erosion along the creek bank. Corrosion of the drums through the years caused contamination of the creek bank. Drum removal, remedial excavation and placement of rip-rap on the embankment was completed in 1985 and 1993. The site was delisted from New York State Department of Environmental Conservation (NYSDEC) hazardous waste disposal list in approximately 1995.

2.0 Phase II ESA Summary

On September 6 and 7, 2011, B&A oversaw Phase II ESA activities on the property (Figures 1 and 2). Twenty-four soil probes were advanced with a direct push soil sampler to depths ranging from four to 30 feet below grade (ftbg). One petroleum above ground storage tank (AST) was observed in the vicinity of the garage. Soil probe locations are shown on Figure 2. This AST was apparently utilized to fuel vehicles associated with golf course operations. Property photographs are included following Figure 6.

3.0 Potential RECs

This Phase II ESA was completed to investigate and confirm that former environmental remediation activities on the property were adequately completed to ensure compliance with Official Compilation of New York Codes, Rules and Regulations (6 NYCRR) Part 375 Restricted Residential Use and Residential Use Soil Cleanup Objectives (Part 375 RU and RRU SCOs) effective December 14, 2006 and NYSDEC CP-51 Supplemental SCOs, effective October 21, 2010.

4.0 Subsurface Investigation Methodology

4.1 Direct Push Probe Soil Sampling Methodology

On September 6 and 7, 2011, *B&A* oversaw *Buffalo Drilling Company, Inc., (BDC)* of Clarence, New York, advance and sample 24 soil probes with a track-mounted direct push rig (refer to Figure 2). The soil probes were advanced in the vicinity of potential RECs (Section 6.0). Soil samples were obtained from grade to a depth of between four and thirty-two feet below grade (ftbg) dependent on field conditions and the location of potential AOCs. Continuous soil samples were obtained by direct push sampling using a four-foot long Macro-Core sampler.

Each Macro-Core sampler contained a dedicated inner acetate sleeve. Upon retrieval, each soil sample was visually classified for soil type and evidence of contamination (i.e., anomalous staining/odors). Each soil sample was screened, while still in the opened sample sleeve, with a MiniRAE, Model PGM 7613 photo-ionization detector (PID) for the potential presence of total volatile organic compounds (VOCs). A portion of each soil sample was removed and placed into a food-quality storage bag, sealed and allowed to stand/warm for approximately 10 minutes. The probe of the PID was inserted into the air space above the soil sample immediately upon breaking the seal of the storage bag. The description of each sample's visual characterization is presented on Soil Probe Logs, Attachment 1.

To avoid cross-contamination between samples, a pre-cleaned Macro-Core sampler was used for each sample. The Macro-Core sampler was cleaned using Alconox detergent and potable water with a final potable water rinse. A new acetate sleeve was then placed into the pre-cleaned Macro-Core sampler. Between probes, the drill rods and Macro-Core samplers were thoroughly cleaned following the aforementioned cleaning procedure. The completed probe holes were abandoned using soil samples that were obtained from each soil probe. The description of each sample's visual characterization is included in Soil Probe Logs, Attachment 1.

5.0 Potential AOCs Summary

The subsurface conditions of the following potential areas of concern (AOCs) were investigated:

1. Soil probe locations DP-1 through DP-6 and DP-24 were selected to investigate a rumor that a pit of chemicals and/or drums may have existed under the 9th green. Subsurface conditions indicate fill from zero to four ftbg and clean native fine sand and clay to 30 ftbg. Fill from DP-24 from 3-4' had some minor blackish discoloration. A sample was collected and submitted for analysis from DP-1 and DP-24 (Sections 6.0 and 7.0). The appropriate COCs for fill containing black discoloration are SVOCs.

2. Soil probe locations DP-7 and DP-8 were advanced to investigate the subsurface conditions of the drainage ditch from parallel to the 9th green, north towards Tonawanda Creek.

3. Soil probe locations DP-9, DP-10, DP-11 DP-12 and DP-13 were advanced to investigate the subsurface conditions of in the vicinity of the garage.

4. Soil probe locations DP-16, DP-17, DP-18, DP-19 and DP-20 were advanced to investigate the subsurface conditions of the former drum storage area and analyze for the presence of potential COCs. The COCs historically were TCDD (Section 10.5).

5. Soil probe locations DP-14, DP-15, DP-21, DP-22 and DP-23 were advanced to investigate the subsurface conditions of the area south of the drum storage area and analyze the topsoil for the presence of potential SVOCs. The topsoil was not an actual COC, but analysis of topsoil for SVOCs was determined to be prudent should there ever be future concerns associated with gulf course operations.

6.0 Soil Sampling Methodology

To confirm the presence of visual impacts, soil samples were submitted to TestAmerica in pre-cleaned laboratory containers in a cooler under chain-of-custody for analysis. The selected samples were analyzed for semi-volatile organic compounds (SVOCs) by USEPA Method 8270 target compound list (TCL), and/or PCBs by USEPA Method 8082 and or Polychlorinated dioxins/Furans (PCDD/PDCFs) by USEPA Method 8280. PCDD is the appropriate analysis for what was previously referred to as TCDD. Potential RECs and the associated soil analytical methodology are summarized below.

- To quantify potential SVOCs observed in the field as slight visual discoloration, grab soil sample DP-1 0-4', composite samples C COMPOSITE 4-8', and C COMPOSITE 8-12' were submitted to TestAmerica for analysis of SVOCs and tentatively identified compounds (TICs).

- Though no PCBs were suspected onsite, select soil samples were selected for analysis of PCBs to ensure that PCBs were not a COC in the area. From the 9th green, composite soil samples DP-1 0-4'/DP-24 3-4' COMP and soil samples composited from along the creek bank, C COMP 4-8'/C COMP 8-12' COMP were submitted for PCBs by USEPA Method 8082.

- To analyze for any potential remaining dioxins and/or furans after the remedial cleanup along the creek bank and any potentially related fill under the 9th green, one composite sample COMP 02-05, a composite of soil samples C COMPOSITE 4-8', C COMPSITE 8-12', SOIL COMPOSITE 0-.5' and DP-24 3-4' were analyzed for PCDD/PDCFs by USEPA Method 8280A.

6.1 AOC Summary

The analytical program specific for each selected soil sample and sample location is summarized below.

#	Potential REC	Sample Name and Location	Sample Matrix	Selected Laboratory Analysis
1	9th Green	**DP-1 0-4' and DP-24 3-4'**	Soil	SVOCs by USEPA Method 8270 TCL + TICs
		DP-1 0-4'/DP-24 3-4' COMP	Soil	PCBs by USEPA Method 8082
2	Topsoil	**SOIL COMPOSITE 0-0.5'** (DP-14 0-0.5', DP-21 0-0.5', DP-22 0-0.5' and DP-23' 0-0.5')	Soil	SVOCs by USEPA Method 8270 TCL + TICs
				PCBs by USEPA Method 8082
3	Creek banks, 9th Green and topsoil	**COMP 02-05** (DP-16, DP-17, DP-18, DP-19 and DP-20 4-8' and DP-16, DP-17, DP-18 and DP-20 8-12' and DP-14 0-0.5', DP-21 0-0.5', DP-22 0-0.5', DP-23' 0-0.5' and DP-24 3-4')	Soil	PCDD/PDCFs by USEPA 8280A
4	Creek banks	**C COMPOSITE 4-8'** (DP-16, DP-17, DP-18, DP-19 and DP-20 4-8')	Soil	SVOCs by USEPA Method 8270 TCL + TICs
		C COMPOSITE 8-12' (DP-16, DP-17, DP-18 and DP-20 8-12')		
		C COMP 4-8'/ C COMP 8-12' COMP		PCBs by USEPA Method 8082

Soil analytical results were compared to Official Compilation of New York Codes, Rules and Regulations (6 NYCRR) Part 375 Restricted Residential Use, Residential Use Soil Cleanup Objectives (Part 375 RU and RRU SCOs) effective December 14, 2006 and NYSDEC CP-51 SCOs, effective October 21, 2010.

7.0 Subsurface Conditions

Soil boring logs are included in Attachment 1 and observed subsurface conditions in the potential area of concern (AOC) are discussed below.

7.1 Field Observations and AOCs

No PID readings above background were observed in subsurface conditions on the property. Saturated subsurface conditions were generally encountered at approximately seven ftbg.

1. Soil probes DP-1 through DP-6 and DP-24 were advanced in and in the vicinity of the 9th green. Sand and silt fill was generally observed in the vicinity of the 9th green form 0 to 4 ftbg followed by native sand and silt to eight ftbg. Slight blackish discoloration was observed in DP-24 from three to four feet followed by clean native sand and silt to 23.5'. Between 23.5 and 28', grey to brown plastic clay was encountered followed by grey fine sand and silt from 28 to 32'.

2. Soil probes DP-7 and DP-8 were advanced in the drainage ditch to investigate potential RECs associated with potential drainage associated with the 9th green. Subsurface conditions indicated topsoil from zero to one ftbg followed by clean native fine brown sand and silt to eight ftbg. No discoloration or odors were observed.

3. Soil probes DP-9 through DP-13 were advanced on a mound in the center of the northern third of the property that a garage and equipment affiliated with the golf course operations is located. The mound was observed during Phase II ESA field activities and is also indicated on Figures 3 through 5. According to Figures 4 and 5 this fill mound is also associated with historic structures on the property including the current garage, former farm house and former outbuildings. According to Town of Amherst records (Section 10.1) the farm house burned in approximately 1982. North of the garage, soil probe DP-13 encountered refusal at 4.5 ftbg. This would generally indicate the potential for an abandoned petroleum underground storage tank (UST), but according to Gulf Course grounds personnel there was a former underground pool that was abandoned in the vicinity. This suggestion is reinforced by Town of Amherst records that report a steel pool formerly on the property associated with the former house and garage. Soil probes DP-9 and DP-13 have between six inches and five feet of brown silt and sand and fine to medium angular gravel fill that is consistent with the topographic mound in the center of the northern third of the property indicated by Figures 3 through 6. This suggests that prior to the construction of the historic buildings indicated by Figure 4, angular gravel with variable quantities of silt and sand was brought onto the property to raise the elevation. No discoloration or odors were observed associated with this fill and it is not considered a REC for the property.

4. Soil probes DP-16 through DP-20 were advanced in the creek bank to investigate a potential REC associated with the former remedial activities discussed in Section 10.0. In DP-16 through DP-19 brown silt and fine to medium angular gravel was encountered from 0 to 4 ftbg. No PID odors, discoloration or odors were observed associated with the fill along the creek from 0 to 4 ftbg and it is not considered a REC for the property. Native silt and sand was observed below four ftbg in soil probe DP-15. Fill with mild to some odor and/ or some blackish discoloration was observed in soil probes DP-17 and DP-18 between five and ten ftbg. Soil samples collected from 4-8' were interpreted as reflective of the location of the former 55-gallon drums and samples from 8-12' were interpreted as reflective of the subsurface conditions under the location of the former drums. Soil samples were collected for analysis as outlined in Section 6.0.

5. Subsurface conditions on the green (soil probes DP-14, DP-15, DP-21, DP-22 and DP-23) were investigated to observe subsurface conditions south of the creek bank. No discoloration or odors were observed and subsurface conditions consisted of clean native brown silt and sand. A composite topsoil sample was collected for analysis as discussed in Section 6.0.

7.2 Soil Analytical Results

Soil analytical results are included in Attachment 2. Detected soil analytical results are listed in Table 1 and are summarized below.

- PCBs in all soil samples were below laboratory detection limits.

- PCDD/furans in soil sample COMP 02-05 were below laboratory detection limits.

- All analyzed compounds were below laboratory detection limits in soil samples DP-1 0-4', COMP 02-05, DP-1 0-4/DP-24 3-4' COMP and C COMP 4-8'/C COMP 8-12' COMP.

- SVOCs were detected above laboratory detection limits in soil samples C COMPOSITE 4-8', C COMPOSITE 8-12', SOIL COMPOSITE 0-0.5' and DP-24 3-4'. Quantities detected in all of these soil samples are labeled by TestAmerica with the qualifier "J" that indicates the result is less than the reliance limit, but greater than or equal to the method of detection limit and the concentration is an approximate value. All of the detected SVOCs were below NYSDEC 375 Restricted Residential , Residential and CP-51 SCOs and are not considered RECs for the property. The tentatively identified compounds (TICs) are estimates of potentially identified trace compounds, do not have SCOs and are not considered RECs for the property.

8.0 Summary

No soil analytical results exceeded NYSDEC 375 Restricted Residential, Residential SCOs or CP-51 SCOs. The only compounds detected above laboratory detection limits were SVOCs and TICs, reported with a designation of "J", that indicates the soil analytical results were below the reliance level. These soil analytical results are negligible. The tentatively identified compounds (TICs) are estimates of potentially identified trace compounds, do not have SCOs and are not considered RECs for the property. B&A did not encounter any significant COC on the property detected by visual, olfactory or laboratory results.

9.0 Discussion, Conclusions and Recommendations

Detected trace SVOCs and TICs may be from organics and/or petroleum operations on the property including former agricultural machinery and/or former and current lawn care equipment. These operations are considered less of a concern than RECs associated with equipment affiliated with currently operating agricultural farms and is deemed suitable for residential landuse.

Based on the Phase II ESA results and according to NYSDEC 375 Restricted Residential or Residential SCOs, B&A concludes that the remedial activities that removed and over-excavated drums of liquid and solid tars containing phenolic tar residues with TCDDs/PCDDs and dibenzofuran were effective at successfully remediating this site adequately for residential landuse. Should any impacted groundwater or soil or any petroleum storage or dispensing equipment be encountered on the property during future development activities, it should be handled according to local, state, and federal guidelines.

10.0 Additional Records

10.1 Town of Amherst Records

- Source: Town of Amherst Assessor's Office
- Date(s): September 14, 2011

On September 14, 2011, B&A collected property records from Town of Amherst Assessor's Office. Available assessor records for the assessed property are included in Attachment 3 and are summarized below.

RPS Version 3, August 2, 2007
Owner: Evergreen Golf Course, Inc.
Location: 100 Tonawanda Creek Road, Amherst, New York
Property Class: 552, Golf Course
Utilities: community public sewer, community public water and gas and electric utilities
Effective Yr Built: 1956 (former)
Effective Yr Built: 1996

100 Tonawanda Creek Road (formerly Tonawanda Creek Road) Assessor Notes and Records

Owner	Purchase Date	Liber	Page	Mortgage Amt ($)	Price ($)
Creekside Gulf & Lanes, Inc.	09/1961	6704	131	97,810.00	268,810.00
Anthony M. Palumbo	10/1977	8574	167		320,000.00
Creekside Gulf Course, Inc.	01/1978	8609	547	229.590.00	387,590.00
Tennis Schreckengost	08/1985	9476	44	Referees Deed	
Evergreen Gulf Course, Inc.	08/1985	9476	42	Quit claim	

- On October 7, 1969 the property included tees, fairways, a garage and a clubhouse on the 9 hole golf course.
- In 1982 the house burned, assessment = $ 63,000.00.
- In 1985, economic obsolescence added due to dioxin stored on property. When removed, assessment will revert to original (potential), assessment = $ 50,000.00.
- In 1989, assessment = $450,000.00.
- In 1990, the assessment was reviewed due to toxic chemicals, assessment = $ 225,000.00.
- In 2000, the assessment was updated, assessment = $ 312,500.00.
- In 2002, the assessment review determined, assessment = $ 275,000.00.
- In 2009, the assessment was updated, assessment = $ 769,800.00.
- In 2009, BAR, the assessment was updated, assessment = $ 725,000.00.
- On June 9, 2011, WM Schutt Associates (WMSA) of Lancaster, New York forwarded a letter containing proposed street names to Town of Amherst Planning Department.

100 Tonawanda Creek Road (formerly 4391 Tonawanda Creek Road) Building Department Permits

- On December 21, 1994 electrical permit #2245-1994 was issued to Evergreen Golf Course.

170 Tonawanda Creek Road (formerly 1 Tonawanda Creek Road) Assessor notes

Owner	Purchase Date	Liber	Page
Tarr Tara Country Club	08/1945		
Anthony M. Palumbo	10/1977	8574	167

- The lot size was 200' x 200' with no frontage.
- Two story house with basement, Detached garage and steel pool (20' x 40'), replacement value $ 31,395.00
- House burned
- In 1980 the property referred to as 1-20-50 and 1-20-100, 1 Tonawanda Creek Road was merged into 1-20-50.

170 Tonawanda Creek Road (formerly 4391 Tonawanda Creek Road) Building Department Permits

- On September 19, 1960, commercial permit # 894-1960 was issued to Tennis Schreckengost.
- On May 8, 1961, commercial permit # 296-1961 was issued to Tennis Schreckengost.
- On October 30, 1961, commercial permit # 980-1961 was issued to Creekside Bowling Lanes.
- On August 5, 1994, electrical permit 1339-1994 was issued to Manor Lanes II.

10.3 County Records

Erie County Property Description

- Source: Erie County On-line Mapping System
- Date(s): September 2, 2011

A 2008 aerial photograph and property description of the assessed property are included in Attachment 3 and parcel records are summarized below.

Address	Parcel SBL	Property Class	Property Desc.	Owner	Deed Date	Deed Book	Deed Page
100 Tonawanda Creek Road	26.00-1-6.1	552	C – Golf course	Evergreen Golf Course, Inc. C/O Attn: Brenda Turchiarelli	08/15/1985	00042	00042

10.4 Erie County Property Information

- Source: Erie County Real Property Information
- Date(s): September 27, 2011

Property records are included in Attachment 3 and parcel records are summarized below.
SBL: 26.00-1-6.1
Owner: Evergreen Golf Course, INC.
Location: 100 Tonawanda Creek Road
Property Class: 552 Golf Course

Reputed Owner	Date Purchased	Liber	Page
Creekside Golf Course, Inc.	09/01/1961	6704	131
Schreckengost Tennis	08/15/1985	9476	44
Evergreen Golf Course, Inc.	08/15/1985	9476	42

10.5 NYSDEC Records

Available NYSDEC property records are included in Attachment 3 and are summarized below.

Between approximately 1948 and 1953, Tennis Schreckengost Sr. owned and operated Schreck's Scrap Services (Inc.). During the time Mr. Schreckengost owned and used the property. It is alleged that Mr. Schreckengost ordered truck drivers in his employ to transport drums containing industrial waste from the North Tonawanda facility, Durez Plastics and Chemicals, Inc. of which OCC is the successor, to the property.

On May 17, 1985, Brehm Laboratory of Wright State University of Dayton, Ohio forwarded analytical results from soil, liquid resin tar and solid resin tar samples collected by New York State Department of Health (NYSDOH) from Creekside gulf course to NYSDEC. Analytical results indicated samples C-2-A, C-2-B, C-3-A and C-3-B had concentrations between 10 and 214 parts per billion (ppb) of total tetrachlorinateddibenzo-p-dioxins (TCDDs).

On August 30, 1985, NYSDEC accepted a bid for remedial activities at Creekside Gulf Course from Clean Harbours, Inc. On November 12 through 27, 1985, remedial activities at the property including the removal and over-excavation of 120 drums and riprap placement were completed.

By January 25, 1993, an additional 631 drums were removed and over-excavated from the creek bank and by February 19, 1993 backfilling activities were completed. NYSDEC delisted the property from NYSDEC inactive hazardous waste disposal list.

Figures and Photographs

Figure 1	USGS Site Location Plan
Figure 2	Direct Push Probe Location Plan
Figure 3	Tax Map
Figure 4	1953 Survey Map
Figure 5	1963 Site Map
Figure 6	2008 Site Map
September 6 and 7, 2011	Site Photographs

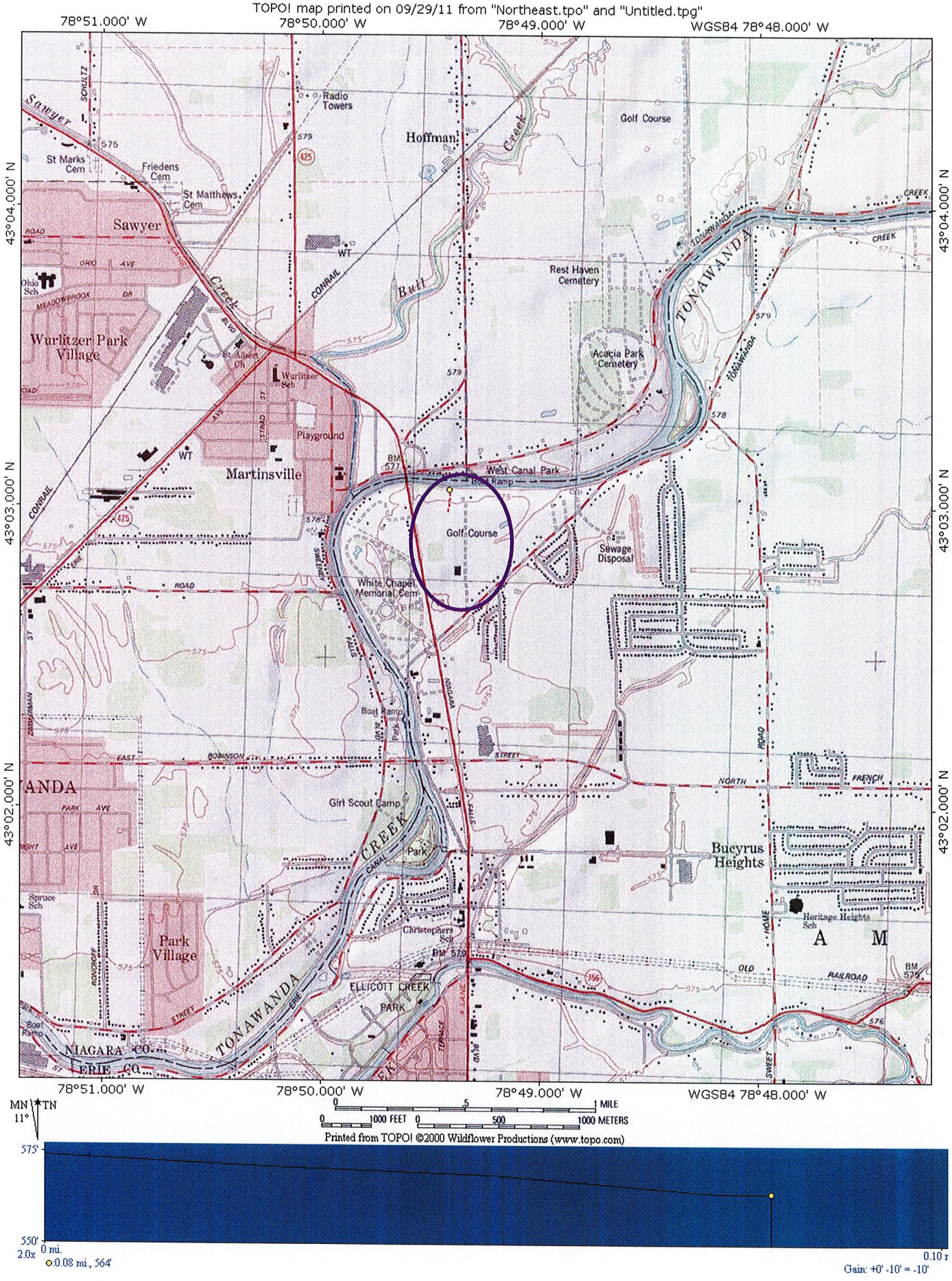
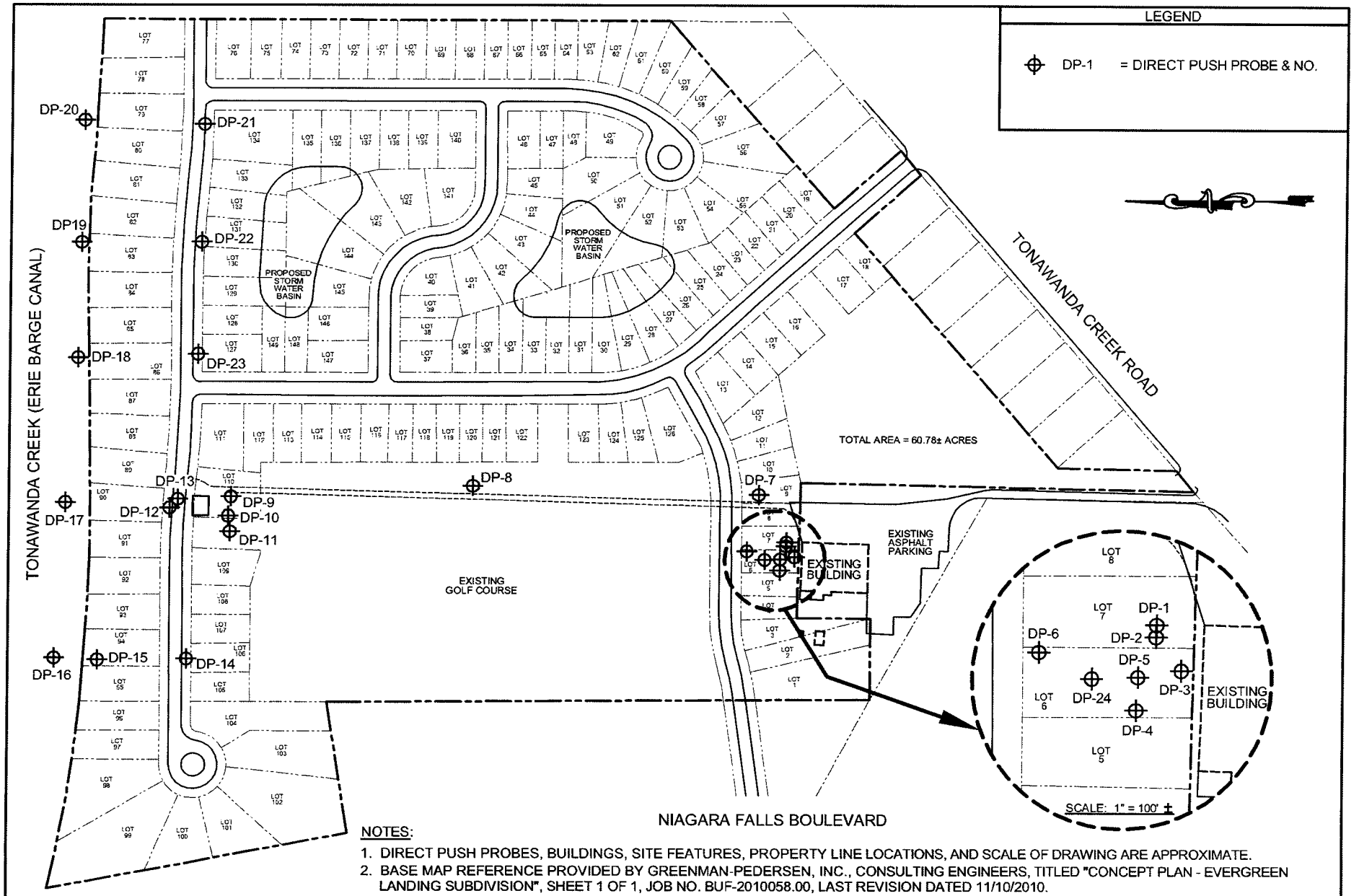


Figure 1 USGS Site Location Plan



NOTES:

1. DIRECT PUSH PROBES, BUILDINGS, SITE FEATURES, PROPERTY LINE LOCATIONS, AND SCALE OF DRAWING ARE APPROXIMATE.
2. BASE MAP REFERENCE PROVIDED BY GREENMAN-PEDERSEN, INC., CONSULTING ENGINEERS, TITLED "CONCEPT PLAN - EVERGREEN LANDING SUBDIVISION", SHEET 1 OF 1, JOB NO. BUF-2010058.00, LAST REVISION DATED 11/10/2010.

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DRAWN: DAN KASPROWICZ

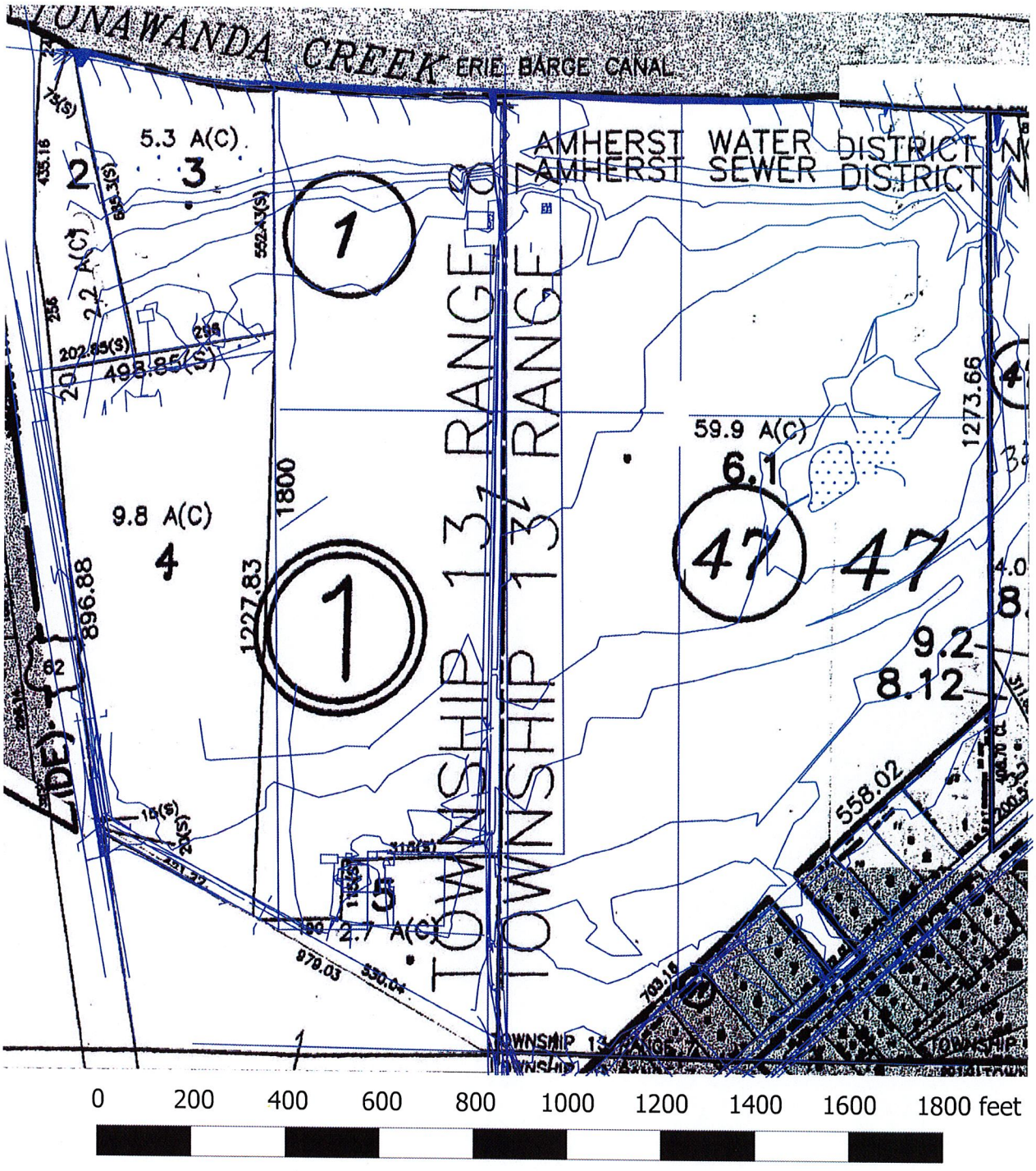
CLIENT: MR. JEFFREY PALUMBO
9276 MAIN STREET, SUITE 3
CLARENCE, NEW YORK 14031

PROJECT: PHASE II ENVIRONMENTAL SITE ASSESSMENT
100 TO 168 TONAWANDA CREEK ROAD
TOWN OF AMHERST, ERIE, CO. NEW YORK 14228

DIRECT PUSH PROBE LOCATION PLAN

0 150 300 600

JOB NO.: 11-543A	SCALE: 1" = 300' ±
DATE: 9/12/2011	FIGURE NO. 2



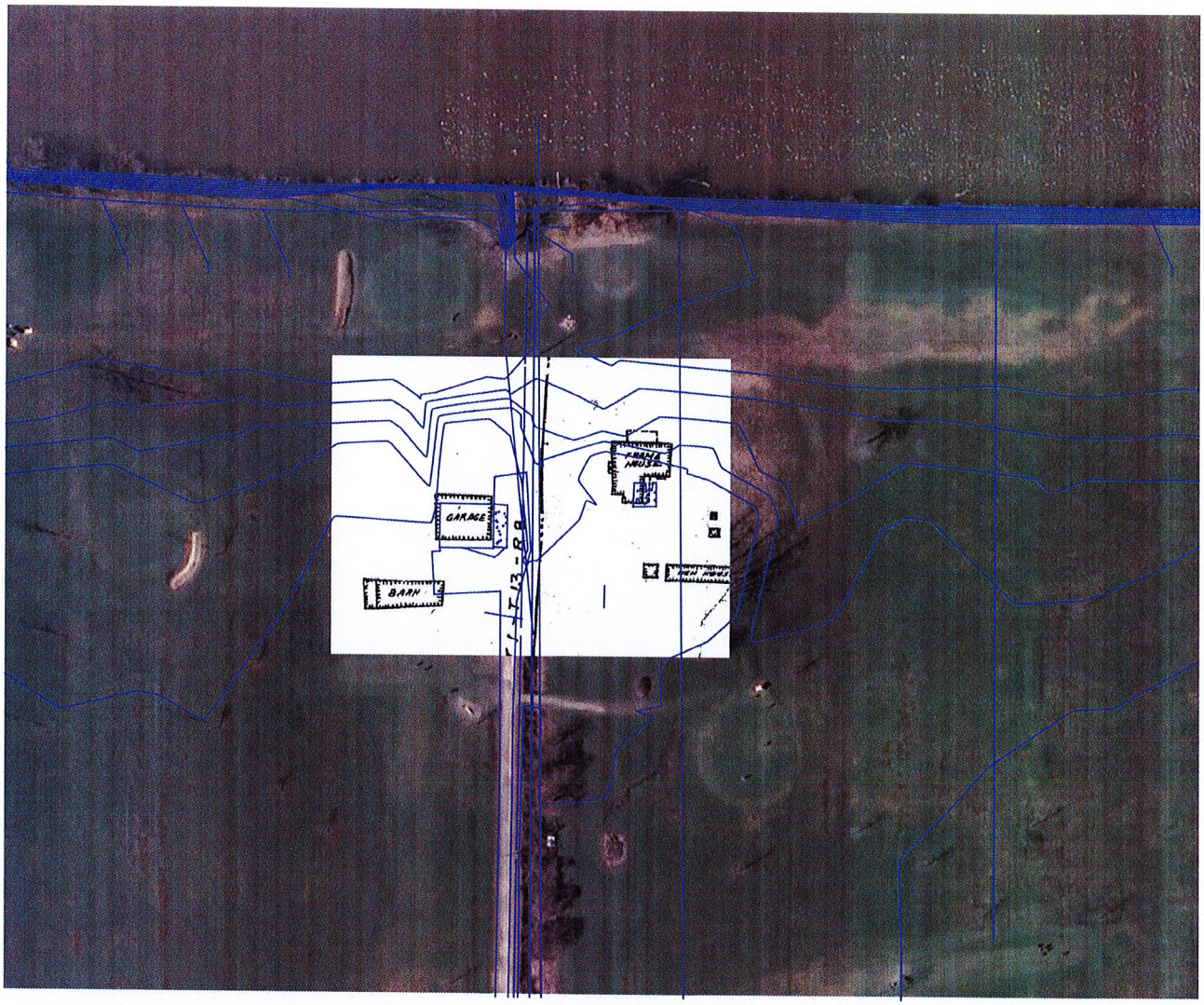
Legend

W. M. Schutt, 03/08/2011

Approx. Location of Town of Amherst Tax Map

Figure 3 generated by: Geological Assessments
www.geological-assessments.com

Figure 3 Tax Map



Legend

W. M. Schutt Associates, 03/08/2011

Approx. location of C.W. Janke, 05/20/1953

NYSGIS 2008 Orthophoto

Figure 4 generated by Geological Assessments
www.geological-assessments.com

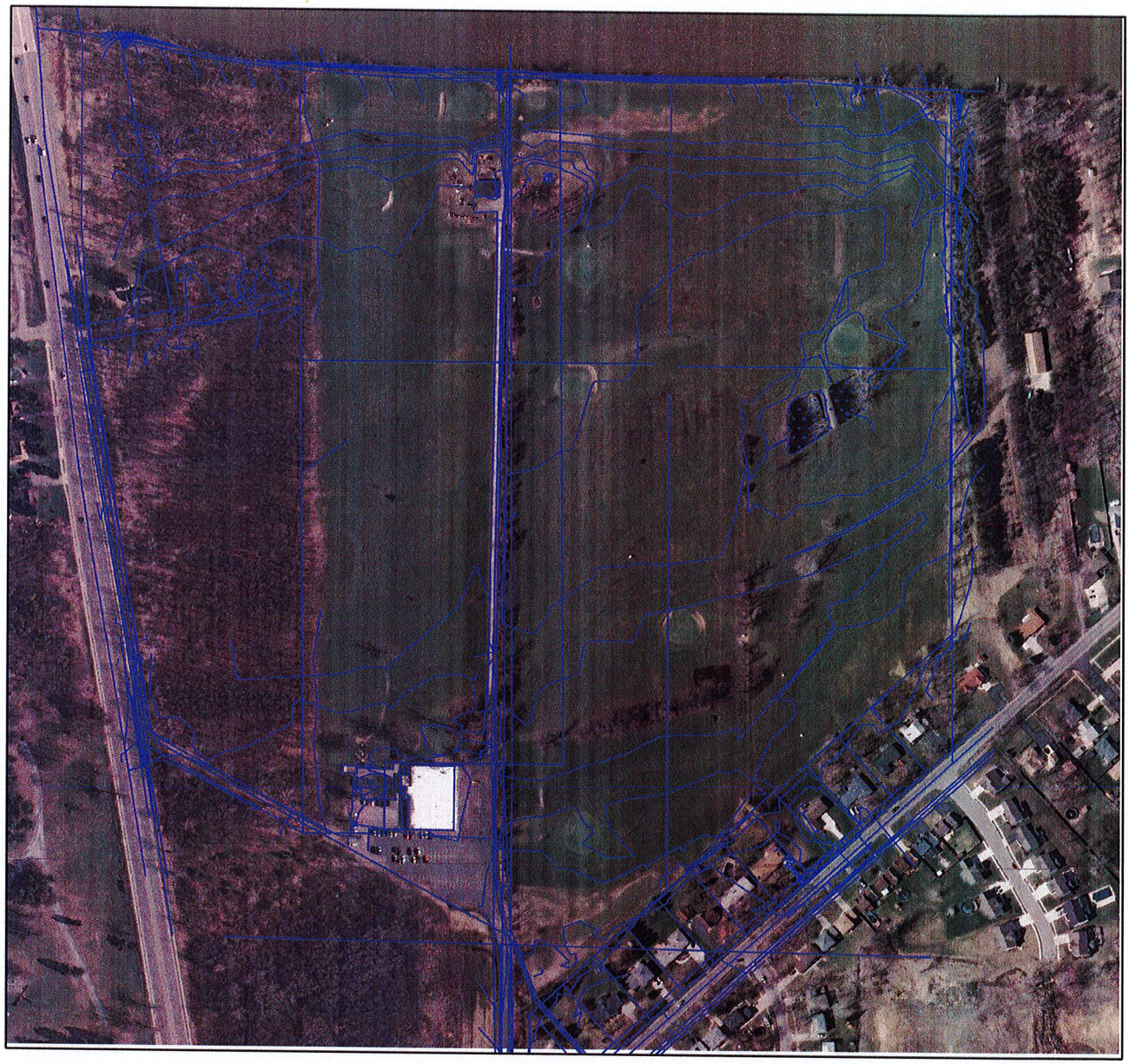
Figure 4 1953 Survey Map



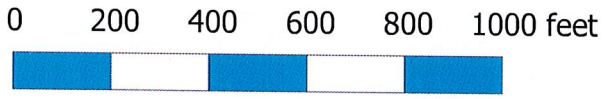
Figure 5 generated by: Geological Assessments

www.geological-assessments.com

Figure 5 1963 Site Map







Legend

W. M. Schutt Associates, 03/08/2011

USGS 2008 Orthophoto

Figure 6 generated by: Geological Assessments
www.geological-assessments.com

Figure 6 2011 Site Map






EVERGREEN
GOLF
MANOR
LANES














RC-85
POSI TRACK





Tables

Table 1 Detectable Soil Analytical Data

Table 1
Detectable Soil Analytical Data
100 Tonawanda Creek Road
Amherst, New York

Detectable Semi-volatile Compounds	Conc. Unit	6NYCRR PART 375-6.8(b)[1]	6NYCRR PART 375-6.8(b)[2]	DP-1 0-4'	C Composite 4-8'	C Composite 8-12'	Soil Composite 0-0.5'	DP-24 3-4'
Depth (feet)				0-4'	4-8	8-12	0-0.5	3-4
Date				9/6/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011
benzo (a) anthracene	ppb	1,000	1,000	ND	ND	ND	22 J	7.7 J
benzo(a) pyrene	ppb	1,000	1,000	ND	ND	ND	27 J	ND
benzo (b) flouranthene	ppb	1,000	1,000	ND	ND	ND	32 J	ND
benzo (k) flouranthene	ppb	1,000	3,900	ND	ND	ND	23 J	ND
chrysene	ppb	1,000	3,900	ND	ND	ND	28 J	6.3 J
Diethylphthalate	ppb	100,000[3]	NA	ND	20 J	27 J	26 J	21 J
fluoranthene	ppb	100,000	100,000	ND	ND	ND	43 J	9.5 J
indeno (1,2,3-cd) pyrene	ppb	500	500	ND	ND	ND	19 J	ND
napthalene	ppb	100,000	100,000	ND	ND	ND	ND	ND
phenanthrene	ppb	100,000	100,000	ND	ND	ND	19 J	ND
pyrene	ppb	100,000	100,000	ND	ND	ND	34 J	7.8 J
Total SVOCs	**ppb**	**NC**	**NC**	**ND**	**20 J**	**27 J**	**273**	**52**

Notes:
ND - Not detected above laboratory method of detection limit (MDL)
NC - No criteria
J - Result is less than the reporting limit, but greater than or equal to the method of detection limit and the concentration is an approximate value.
N - Presumptive evidence of material.
T - Result is a tentatively identified compound (TIC) and is an estimated value.

1. 6NYCRR PART 375 Residential Use Soil Cleanup Objectives (SCOs), effective December 14, 2006.
2. Restricted Residential Use
3. CP-51 Supplemental SCOs, effective October 21, 2010

Table 1
Detectable Soil Analytical Data
100 Tonawanda Creek Road
Amherst, New York

Detectable Semi-volatile Compounds	Conc. Unit	6NYCRR PART 375-6.8(b)[1]	6NYCRR PART 375-6.8(b)[2]	DP-1 0-4'	C Composite 4-8'	C Composite 8-12'	Soil Composite 0-0.5'	DP-24 3-4'
Depth (feet)				0-4'	4-8	8-12	0-0.5	3-4
Date				9/6/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011
azulene	ppb	NC	NC	ND	ND	ND	ND	240 T J N
Unknown	ppb	NC	NC	ND	ND	ND	910 T J	330 T J
Unknown	ppb	NC	NC	ND	ND	ND	4,400 T J	970 T J
Unknown	ppb	NC	NC	ND	ND	ND	6,200 T J	320 T J
Unknown	ppb	NC	NC	ND	ND	ND	510 T J	430 T J
Unknown	ppb	NC	NC	ND	ND	ND	510 T J	160 T J
Unknown	ppb	NC	NC	630 T J	220 T J	320 T J	590 T J	270 T J
Unknown	ppb	NC	NC	ND	170 T J	270 T J	500 T J	ND
1-Docosene	ppb	NC	NC	750 T J N	ND	ND	ND	ND
.gamma.-Sitosterol	ppb	NC	NC	410 T J N	ND	ND	ND	ND
VOA Target	ppb	NC	NC	ND	420 T J	340 T J	540 T J	330 T J
VOA Target	ppb	NC	NC	ND	680 T J	490 T J	ND	710 T J
Octadecane	ppb	NC	NC	ND	ND	220 T J N	ND	ND
Nonadecane	ppb	NC	NC	ND	ND	220 T J N	ND	ND
Unknown alkane	ppb	NC	NC	ND	ND	220 T J N	580 T J	ND
Unknown alkane	ppb	NC	NC	ND	ND	180 T J	ND	ND
Unknown alkane	ppb	NC	NC	ND	ND	170 T J	ND	ND
Octacosane	ppb	NC	NC	ND	ND	200 T J N	ND	ND
1-Eicosanol	ppb	NC	NC	ND	ND	ND	580 T J N	ND
1,2,3,5,6,7,8,8a-octahydro-1,4-Hop-22(29)-en-3.beta.-ol	ppb	NC	NC	ND	ND	ND	ND	300 T J N

Notes:
ND - Not detected above laboratory method of detection limit (MDL)
NC - No criteria
J - Result is less than the reporting limit, but greater than or equal to the method of detection limit and the concentration is an approximate value.
N - Presumptive evidence of material.
T - Result is a tentatively identified compound (TIC) and is an estimated value.

1. 6NYCRR PART 375 Residential Use Soil Cleanup Objectives (SCOs), effective December 14, 2006.
2. Restricted Residential Use
3. CP-51 Supplemental SCOs, effective October 21, 2010

Attachment 1

Soil Probe Logs

BARRON & ASSOCIATES, P.C. &
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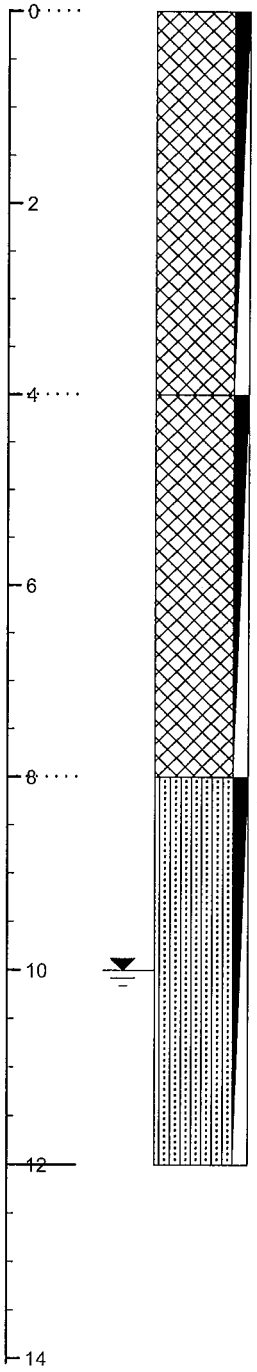
10440 MAIN STREET
CLARENCE, NEW YORK 14031
(716) 759-7821 FAX: (716) 759-7823

SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-1

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 10'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	60	49.0	Fill: Brown silt, fine sand and some clay fill, some wood, no petroleum odor, moist
		S-2 : 4.0' - 8.0'	0	0.0	No recovery
		S-3 : 8.0' - 12.0'	100	0.0	Brown fine Sand and Silt, saturated (SM) ... grades grey
					Depth to Bottom of Hole: 12.0 feet

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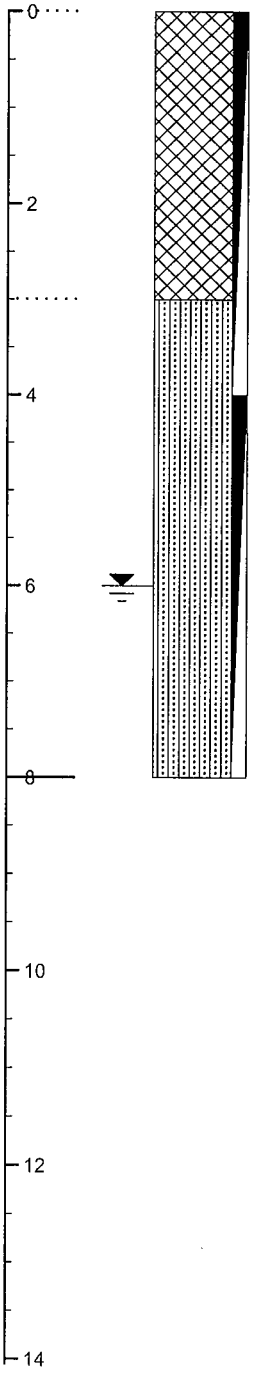
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-2

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 6'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	60	0.0	Fill: Brown silt, fine sand and some clay fill, some wood, moist
					Brown Silt and fine Sand, moist (SM)
		S-2 : 4.0' - 8.0'	100	0.0	grades..little clay, slight plasticity, saturated
					Depth to Bottom of Hole: 8.0 feet

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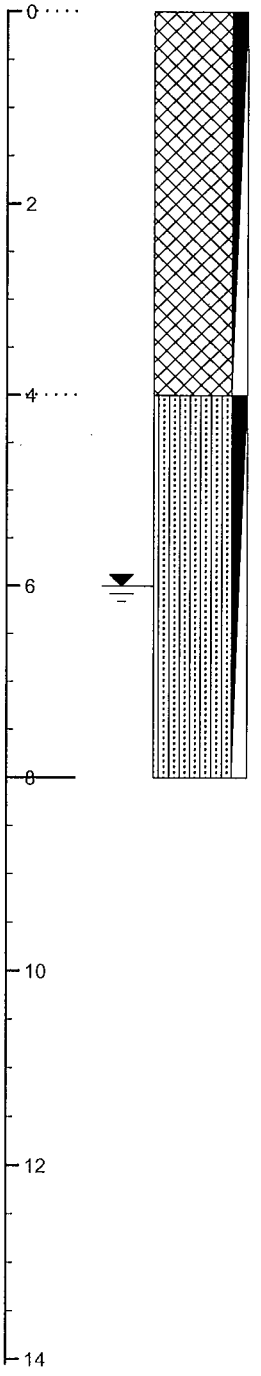
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-3

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 6'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
					Fill: Brown silt and sand, some organics, moist
		S-1 : 0.0' - 4.0'	95	0.0	
					Brown fine Sand and Silt, little clay, slight plasticity, saturated (SM)
		S-2 : 4.0' - 8.0'	100	0.0	
					Depth to Bottom of Hole: 8.0 feet

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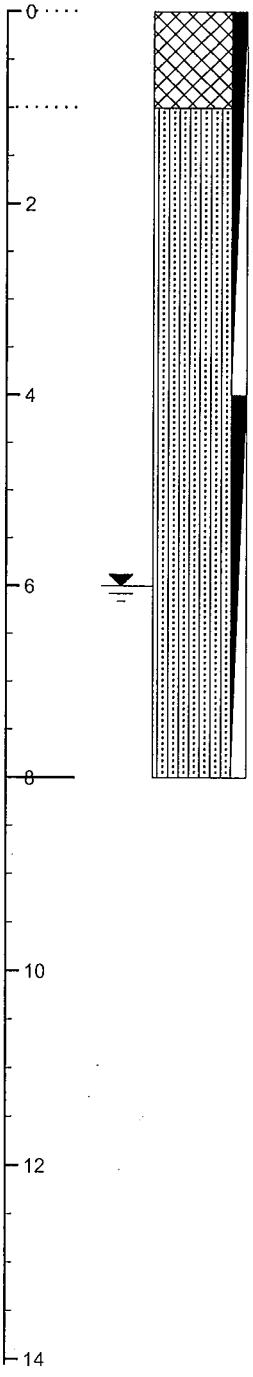
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-4

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 6'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
					Fill: Brown silt and sand fill, some organics, moist
					Brown fine Sand and Silt, moist (SM)
		S-1 : 0.0' - 4.0'	95	0.0	
					..grades little Clay, slight plasticity, saturated
		S-2 : 4.0' - 8.0'	95	0.0	
					Depth to Bottom of Hole: 8.0 feet

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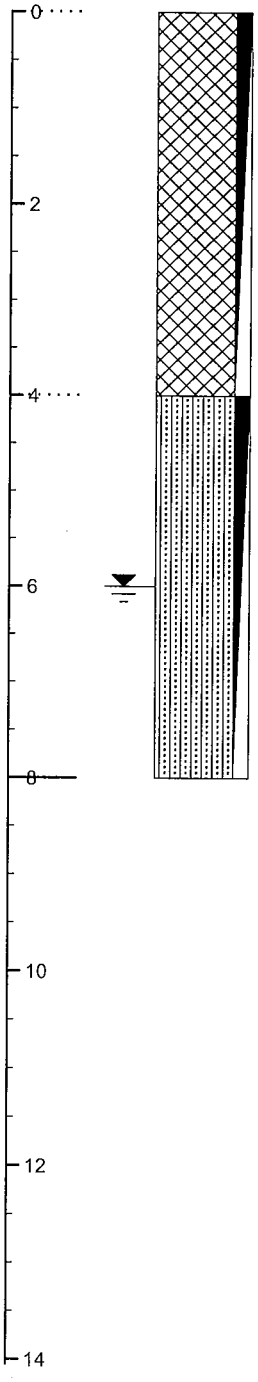
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-5

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 6'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	97	0.0	Fill: Brown silt and sand, some fine to medium angular gravel, trace asphalt, moist
		S-1 : 4.0' - 8.0'	100	0.0	Brown fine Sand and Silt, saturated (SM)
					Depth to Bottom of Hole: 8.0 feet

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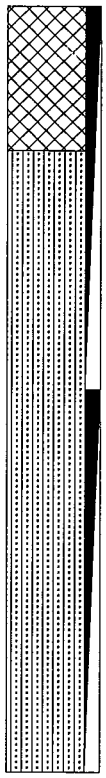
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-6

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0					Fill: Brown silt and sand, some organics, moist
					...grades silty clay, some plasticity, moist
2		S-1 : 0.0' - 4.0'	95	0.0	Light Brown Silt and fine Sand, moist (SM)
4					...grades: Brown fine Sand and Silt, little Clay, slight plasticity, saturated
6		S-1 : 4.0' - 8.0'	95	0.0	
8					Depth to Bottom of Hole: 8.0 feet
10					
12					
14					

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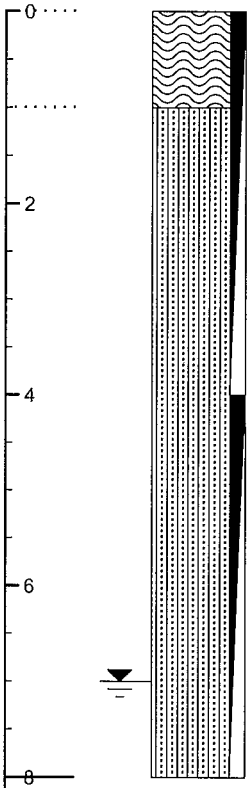
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-7

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 7'
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0					Brown silt and sand, some organics, low plasticity, moist (OL)
2		S-1 : 0.0' - 4.0'	95	0.0	Brown fine Sand and Silt, moist (SM)
4					SAA
6		S-1 : 4.0' - 8.0'	95	0.0	...grades Grey fine Sand and Silt, little Clay, slight plasticity, saturated
8					Depth to Bottom of Hole: 8.0 feet
10					
12					
14					

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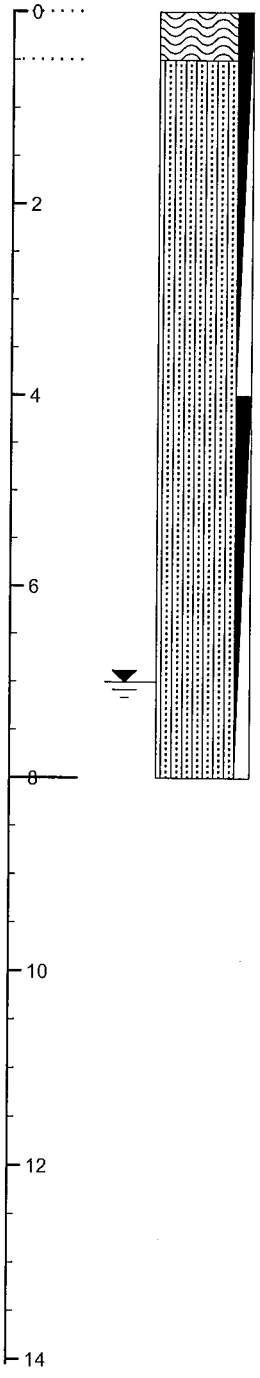
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-8

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 7'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
					Brown silt, some organics, low plasticity, moist (OL)
					Brown fine Sand and Silt, moist (SM)
		S-1 : 0.0' - 4.0'	80	0.0	
		S-1 : 4.0' - 8.0'	100	0.0	Same as above ...grades Grey fine Sand and Silt, little Clay, slight plasticity, saturated
					Depth to Bottom of Hole: 8.0 feet

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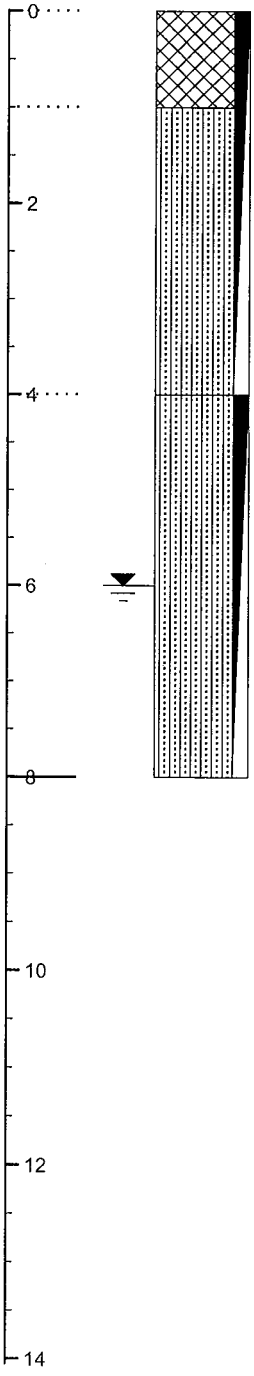
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-9

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 6'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
					Fill: Dark brown silt and medium angular gravel, moist
					...grades drak brown silt
					Light Brown Silt and fine Sand, moist (SM)
		S-1 : 0.0' - 4.0'	98	0.0	
					...grades: saturated
		S-1 : 4.0' - 8.0'	95	0.0	
					Depth to Bottom of Hole: 8.0 feet

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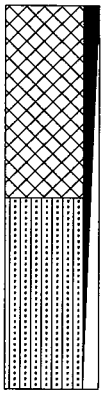
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-10

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0					Fill: Brown silt and fine to medium angular gravel, moist
2		S-1 : 0.0' - 4.0'	95	0.0	Light Brown fine Sand and Silt, moist (SM)
4					Depth to Bottom of Hole: 4.0 feet
6					
8					
10					
12					
14					

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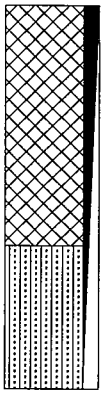
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-11

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 6, 2011
DATE COMPLETED: September 6, 2011

TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0		S-1 : 0.0' - 4.0'	100	0.0	Fill: Brown silt and fine to medium angular gravel, moist
2					Light Brown fine Sand and Silt, moist (SM)
4					Depth to Bottom of Hole: 4.0 feet
6					
8					
10					
12					
14					

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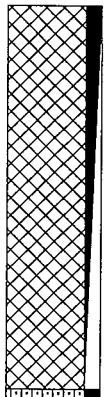
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-12

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0		S-1 : 0.0' - 4.0'	95	0.0	Fill: Brown silt, some organics, moist ...grades: some fine to medium angular gravel, moist ..grades: Light brown fine sand, some organics, moist
4		S-1 : 4.0' - 8.0'	95	0.0	Brown fine Sand and Silt, moist (SM) ...grades: grey to brown fine Sandand Silt, little Clay,slight plasticity, saturated
8					Depth to Bottom of Hole: 8.0 feet
10					
12					
14					

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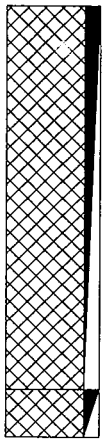
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-13

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0		S-1 : 0.0' - 4.0'	95	0.0	Fill: Brown silt and reworked grey medium sand, trace glass, moist
2					
4		S-2 : 4.0' - 4.5'	95	0.0	No recovery
					Depth to Bottom of Hole: 4.5 feet
6					
8					
10					
12					
14					

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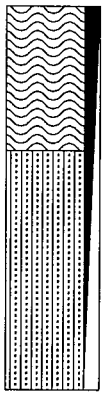
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-14

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0					Brown silt, some organics, low plasticity, moist (OL)
2		S-1 : 0.0' - 4.0'	95	0.0	Light brown fine Sand, some Silt, moist (SM)
4					Depth to Bottom of Hole: 4.0 feet
6					
8					
10					
12					
14					

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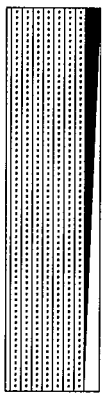
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-15

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0		S-1 : 0.0' - 4.0'	100	0.0	Light Brown fine Sand, some Silt, moist (SM)
2					
4					Depth to Bottom of Hole: 4.0 feet
6					
8					
10					
12					
14					

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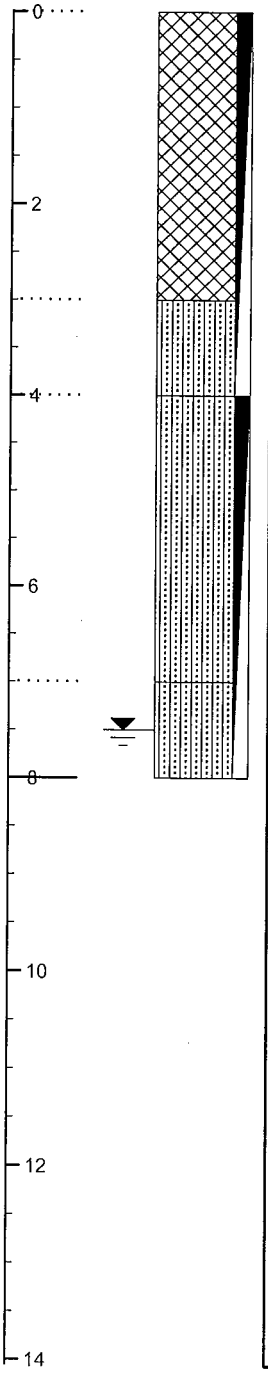
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-16

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 7.5'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	75	0.0	Fill: Brown silt, moist ...grades: Brown silt and fine to medium angular gravel, moist
		S-2 : 4.0' - 8.0'	95	0.0	Brown fine Sand, some Silt, moist (SM) Same as above, little Clay, slight plasticity, moist ...grades: Grey fine Sand, some Silt, little Clay, slight plasticity, wet
					Depth to Bottom of Hole: 8.0 feet

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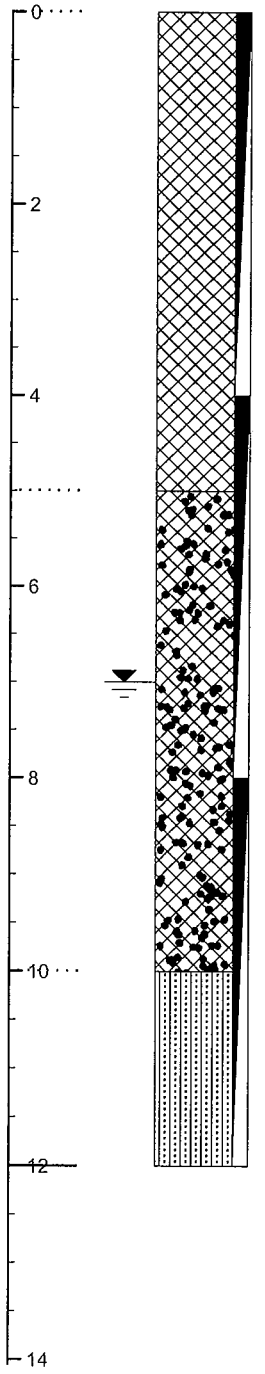
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-17

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 7'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	95	0.0	Fill: Brown silt, fine sand and fine to medium angular gravel, moist
		S-2 : 4.0' - 8.0'	90	0.0	Same as above Fill: Grey fine to coarse sand and fine rounded gravel, some silt, little clay, saturated, mild odor
		S-3 : 8.0' - 12.0'	95	0.0	Grey fine Sand and Silt, some Clay, slight plasticity, saturated (SM)
					Depth to Bottom of Hole: 12.0 feet

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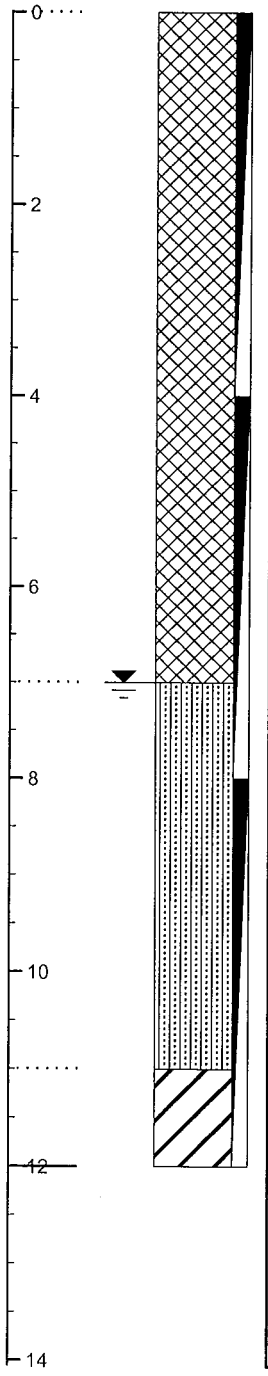
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-18

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 7'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	50	0.0	Fill: Brown silt, fine sand and fine to medium angular gravel, moist
		S-2 : 4.0' - 8.0'	50	0.0	Same as above ...grades: some black discoloration, some odor
		S-3 : 8.0' - 12.0'	75	0.0	Brown fine Sand, some Silt, little Clay, slight plasticity, wet (SM) Reddish brown soft Clay, high plasticity, saturated (CL)
					Depth to Bottom of Hole: 12.0 feet

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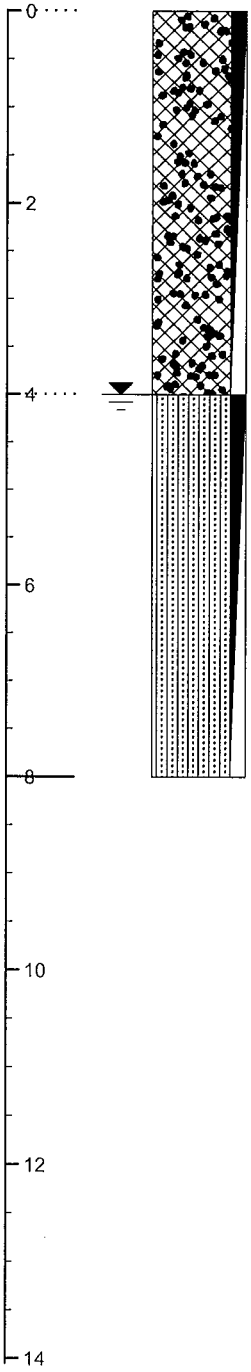
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-19

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 4'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	75	0.0	Fill: Brown silt and sand and fine to medium angular gravel, moist
		S-2 : 4.0' - 8.0'	100	0.0	Brown fine Sand and Silt, saturated (SM) ...grades: fine brown to grey Sand, saturated
					Depth to Bottom of Hole: 8.0 feet

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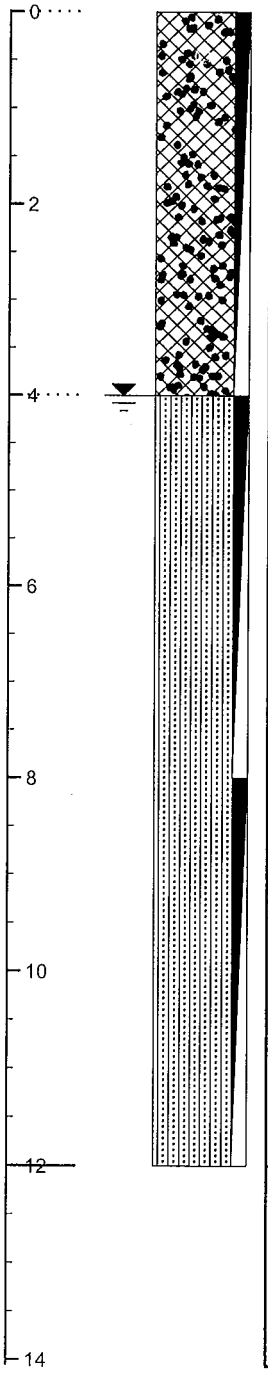
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-20

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 4'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	80	0.0	Fill: Brown silt and sand and fine to medium angular gravel, moist
		S-2 : 4.0' - 8.0'	95	0.0	Brown fine Sand and Silt, saturated (SM) ...grades: fine brown to grey Sand, saturated
		S-3 : 8.0' - 12.0'	50	0.0	SAA
					Depth to Bottom of Hole: 12.0 feet

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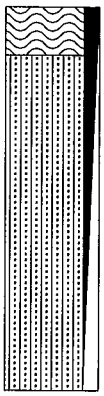
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-21

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT):
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0					Brown silt, some organics, low plasticity, moist (OL)
2		S-1 : 0.0' - 4.0'	95	0.0	Brown to orange fine Sand and Silt, moist (SM)
4					Depth to Bottom of Hole: 4.0 feet
6					
8					
10					
12					
14					

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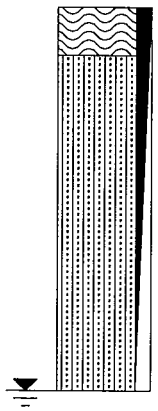
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-22

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 4'
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0					Brown silt, some organics, low plasticity, moist (OL)
					Brown to orange fine Sand and Silt, little Clay, slight plasticity wet (SM)
2		S-1 : 0.0' - 4.0'	95	0.0	
4					Depth to Bottom of Hole: 4.0 feet
6					
8					
10					
12					
14					

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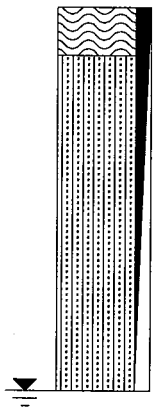
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-23

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: **Direct Push**
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 4'
(measured at completion unless indicated below)

Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
0					Brown silt, some organics, low plasticity, moist (OL)
					Brown to orange fine Sand and Silt, little Clay, slight plasticity wet (SM)
2		S-1 : 0.0' - 4.0'	95	0.0	
4					Depth to Bottom of Hole: 4.0 feet
6					
8					
10					
12					
14					

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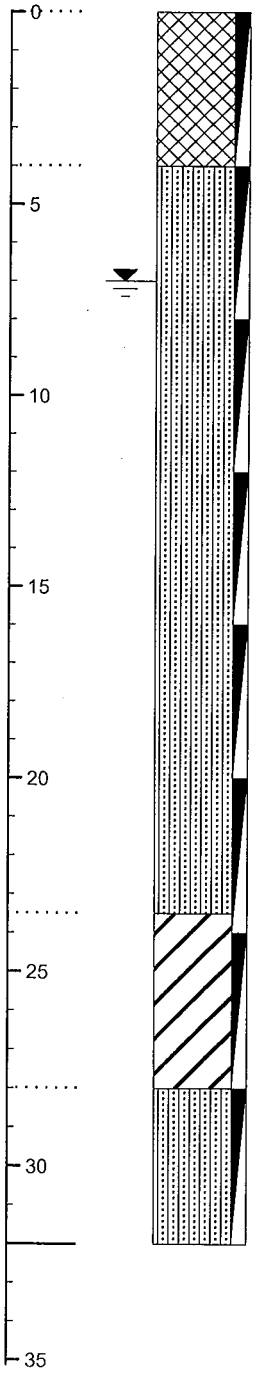
SOIL PROBE LOG

JOB No.: 11-543A **BORING No.:** DP-24

PROJECT: Phase II Environmental Site Assessment
100 Tonawanda Creek Road, Amherst, New York

DRILLER: Jeff Hubert
DATE STARTED: September 7, 2011
DATE COMPLETED: September 6, 2011
TYPE OF DRILL RIG: Direct Push
SURFACE ELEVATION (FT):
GROUNDWATER DEPTH (FT): 7'
(measured at completion unless indicated below)



Elevation/ Depth	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	% REC (RQD)	PID (ppm)	Soil and Rock Description / Remarks
		S-1 : 0.0' - 4.0'	75	0.0	Fill: Brown silt and sand fill, some fine to medium angular gravel, trace asphalt, moist
		S-1 : 4.0' - 8.0'	100	0.0	Brown fine Sand and Silt, (SM) ....grades: saturated
		S-3 : 8.0' - 12.0'	100	0.0	
		S-4 : 12.0' - 16.0'	100	0.0	
		S-5 : 16.0' - 20.0'	100	0.0	
		S-6 : 20.0' - 24.0'	100	0.0	
		S-7 : 24.0' - 28.0'	100	0.0	Grey to brown Clay, high plasticitiy, saturated (CL) SAA
		S-8 : 28.0' - 32.0'	100	0.0	Grey fine Sand and Silt, saturated (SM)
					Depth to Bottom of Hole: 32.0 feet

Attachment 2

Laboratory "Analytical Data Report"

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-9485-1
Client Project/Site: Barron & Associates

For:
Barron & Associates
10440 Main Street
Clarence, New York 14031

Attn: Ms. Emily M O'Mahony

Authorized for release by:
09/27/2011 12:12:48 PM

Brian Fischer
Project Manager II
brian.fischer@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Client Sample ID: DP-1 0-4 — Lab Sample ID: 480-9485-1

No Detections

Client Sample ID: C COMPOSITE 4-8 — Lab Sample ID: 480-9485-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	20	J	200	5.9	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: C COMPOSITE 8-12 — Lab Sample ID: 480-9485-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	27	J	200	5.9	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: SOIL COMPOSITE 0-0.5 — Lab Sample ID: 480-9485-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	22	J	200	3.5	ug/Kg	1	☼	8270C	Total/NA
Benzo(a)pyrene	27	J	200	4.8	ug/Kg	1	☼	8270C	Total/NA
Benzo(b)fluoranthene	32	J	200	3.9	ug/Kg	1	☼	8270C	Total/NA
Benzo(k)fluoranthene	23	J	200	2.2	ug/Kg	1	☼	8270C	Total/NA
Chrysene	28	J	200	2.0	ug/Kg	1	☼	8270C	Total/NA
Diethyl phthalate	26	J	200	6.0	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	43	J	200	2.9	ug/Kg	1	☼	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	19	J	200	5.5	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	19	J	200	4.2	ug/Kg	1	☼	8270C	Total/NA
Pyrene	34	J	200	1.3	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: DP-24 3-4 — Lab Sample ID: 480-9485-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	7.7	J	190	3.2	ug/Kg	1	☼	8270C	Total/NA
Chrysene	6.3	J	190	1.9	ug/Kg	1	☼	8270C	Total/NA
Diethyl phthalate	21	J	190	5.6	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	9.5	J	190	2.7	ug/Kg	1	☼	8270C	Total/NA
Pyrene	7.8	J	190	1.2	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: COMP -02 - -05 — Lab Sample ID: 480-9485-6

No Detections

Client Sample ID: DP-1 0-4/DP-24 3-4 COMP — Lab Sample ID: 480-9485-7

No Detections

Client Sample ID: C COMP 4-8/C COMP 8-12 COMP — Lab Sample ID: 480-9485-8

No Detections

Client Sample ID: DP-1 0-4
Date Collected: 09/06/11 12:30
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-1
Matrix: Solid
Percent Solids: 84.3

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	12	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
bis (2-chloroisopropyl) ether	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2,4,5-Trichlorophenol	ND		200	43	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2,4,6-Trichlorophenol	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2,4-Dichlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2,4-Dimethylphenol	ND		200	53	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2,4-Dinitrophenol	ND		390	69	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2,4-Dinitrotoluene	ND		200	31	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2,6-Dinitrotoluene	ND		200	48	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2-Chloronaphthalene	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2-Chlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2-Methylnaphthalene	ND		200	2.4	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2-Methylphenol	ND		200	6.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2-Nitroaniline	ND		390	63	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
2-Nitrophenol	ND		200	9.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
3,3'-Dichlorobenzidine	ND		200	170	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
3-Nitroaniline	ND		390	45	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4,6-Dinitro-2-methylphenol	ND		390	68	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4-Bromophenyl phenyl ether	ND		200	63	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4-Chloro-3-methylphenol	ND		200	8.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4-Chloroaniline	ND		200	58	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4-Chlorophenyl phenyl ether	ND		200	4.2	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4-Methylphenol	ND		390	11	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4-Nitroaniline	ND		390	22	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
4-Nitrophenol	ND		390	48	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Acenaphthene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Acenaphthylene	ND		200	1.6	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Acetophenone	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Anthracene	ND		200	5.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Atrazine	ND		200	8.8	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Benzaldehyde	ND		200	22	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Benzo(a)anthracene	ND		200	3.4	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Benzo(a)pyrene	ND		200	4.8	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Benzo(b)fluoranthene	ND		200	3.8	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Benzo(g,h,i)perylene	ND		200	2.4	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Benzo(k)fluoranthene	ND		200	2.2	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Bis(2-chloroethoxy)methane	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Bis(2-chloroethyl)ether	ND		200	17	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Bis(2-ethylhexyl) phthalate	ND		200	64	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Butyl benzyl phthalate	ND		200	53	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Caprolactam	ND		200	85	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Carbazole	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Chrysene	ND		200	2.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Di-n-butyl phthalate	ND		200	68	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Di-n-octyl phthalate	ND		200	4.6	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Dibenz(a,h)anthracene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Dibenzofuran	ND		200	2.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Diethyl phthalate	ND		200	6.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Dimethyl phthalate	ND		200	5.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Fluoranthene	ND		200	2.9	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1

Client Sample ID: DP-1 0-4
Date Collected: 09/06/11 12:30
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-1
Matrix: Solid
Percent Solids: 84.3

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		200	4.5	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Hexachlorobenzene	ND		200	9.8	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Hexachlorobutadiene	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Hexachlorocyclopentadiene	ND		200	60	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Hexachloroethane	ND		200	15	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Indeno(1,2,3-cd)pyrene	ND		200	5.5	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Isophorone	ND		200	9.9	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
N-Nitrosodi-n-propylamine	ND		200	16	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
N-Nitrosodiphenylamine	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Naphthalene	ND		200	3.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Nitrobenzene	ND		200	8.7	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Pentachlorophenol	ND		390	68	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Phenanthrene	ND		200	4.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Phenol	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1
Pyrene	ND		200	1.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*630*	*T J*	*ug/Kg*	☼	*13.86*		*09/12/11 11:09*	*09/14/11 18:17*	*1*
1-Docosene	*750*	*T J N*	*ug/Kg*	☼	*14.41*	*1599-67-3*	*09/12/11 11:09*	*09/14/11 18:17*	*1*
.gamma.-Sitosterol	*410*	*T J N*	*ug/Kg*	☼	*16.83*	*83-47-6*	*09/12/11 11:09*	*09/14/11 18:17*	*1*

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*112*		*39 - 146*	*09/12/11 11:09*	*09/14/11 18:17*	*1*
2-Fluorobiphenyl	*94*		*37 - 120*	*09/12/11 11:09*	*09/14/11 18:17*	*1*
2-Fluorophenol	*81*		*18 - 120*	*09/12/11 11:09*	*09/14/11 18:17*	*1*
Nitrobenzene-d5	*79*		*34 - 132*	*09/12/11 11:09*	*09/14/11 18:17*	*1*
p-Terphenyl-d14	*92*		*58 - 147*	*09/12/11 11:09*	*09/14/11 18:17*	*1*
Phenol-d5	*89*		*11 - 120*	*09/12/11 11:09*	*09/14/11 18:17*	*1*

Client Sample ID: C COMPOSITE 4-8
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-2
Matrix: Solid
Percent Solids: 84.7

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	12	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
bis (2-chloroisopropyl) ether	ND		200	20	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2,4,5-Trichlorophenol	ND		200	43	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2,4,6-Trichlorophenol	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2,4-Dichlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2,4-Dimethylphenol	ND		200	53	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2,4-Dinitrophenol	ND		380	69	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2,4-Dinitrotoluene	ND		200	30	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2,6-Dinitrotoluene	ND		200	48	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2-Chloronaphthalene	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2-Chlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2-Methylnaphthalene	ND		200	2.4	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2-Methylphenol	ND		200	6.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2-Nitroaniline	ND		380	63	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
2-Nitrophenol	ND		200	9.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
3,3'-Dichlorobenzidine	ND		200	170	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
3-Nitroaniline	ND		380	45	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4,6-Dinitro-2-methylphenol	ND		380	68	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4-Bromophenyl phenyl ether	ND		200	62	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4-Chloro-3-methylphenol	ND		200	8.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4-Chloroaniline	ND		200	57	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4-Chlorophenyl phenyl ether	ND		200	4.2	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4-Methylphenol	ND		380	11	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4-Nitroaniline	ND		380	22	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
4-Nitrophenol	ND		380	47	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Acenaphthene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Acenaphthylene	ND		200	1.6	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Acetophenone	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Anthracene	ND		200	5.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Atrazine	ND		200	8.7	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Benzaldehyde	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Benzo(a)anthracene	ND		200	3.4	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Benzo(a)pyrene	ND		200	4.7	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Benzo(b)fluoranthene	ND		200	3.8	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Benzo(g,h,i)perylene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Benzo(k)fluoranthene	ND		200	2.2	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Bis(2-chloroethoxy)methane	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Bis(2-chloroethyl)ether	ND		200	17	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Bis(2-ethylhexyl) phthalate	ND		200	63	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Butyl benzyl phthalate	ND		200	53	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Caprolactam	ND		200	85	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Carbazole	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Chrysene	ND		200	2.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Di-n-butyl phthalate	ND		200	68	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Di-n-octyl phthalate	ND		200	4.6	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Dibenz(a,h)anthracene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Dibenzofuran	ND		200	2.0	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Diethyl phthalate	20	J	200	5.9	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Dimethyl phthalate	ND		200	5.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Fluoranthene	ND		200	2.8	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1

Client Sample ID: C COMPOSITE 4-8
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-2
Matrix: Solid
Percent Solids: 84.7

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		200	4.5	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Hexachlorobenzene	ND		200	9.7	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Hexachlorobutadiene	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Hexachlorocyclopentadiene	ND		200	59	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Hexachloroethane	ND		200	15	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Indeno(1,2,3-cd)pyrene	ND		200	5.4	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Isophorone	ND		200	9.8	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
N-Nitrosodi-n-propylamine	ND		200	16	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
N-Nitrosodiphenylamine	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Naphthalene	ND		200	3.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Nitrobenzene	ND		200	8.7	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Pentachlorophenol	ND		380	67	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Phenanthrene	ND		200	4.1	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Phenol	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1
Pyrene	ND		200	1.3	ug/Kg	☼	09/12/11 11:09	09/14/11 18:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Voa Target	*420*	*T J*	*ug/Kg*	☼	*2.55*		*09/12/11 11:09*	*09/14/11 18:41*	*1*
Voa Target	*680*	*T J*	*ug/Kg*	☼	*4.61*		*09/12/11 11:09*	*09/14/11 18:41*	*1*
Unknown	*330*	*T J*	*ug/Kg*	☼	*12.40*		*09/12/11 11:09*	*09/14/11 18:41*	*1*
Unknown	*170*	*T J*	*ug/Kg*	☼	*14.98*		*09/12/11 11:09*	*09/14/11 18:41*	*1*

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*112*		*39 - 146*	*09/12/11 11:09*	*09/14/11 18:41*	*1*
2-Fluorobiphenyl	*95*		*37 - 120*	*09/12/11 11:09*	*09/14/11 18:41*	*1*
2-Fluorophenol	*102*		*18 - 120*	*09/12/11 11:09*	*09/14/11 18:41*	*1*
Nitrobenzene-d5	*85*		*34 - 132*	*09/12/11 11:09*	*09/14/11 18:41*	*1*
p-Terphenyl-d14	*86*		*58 - 147*	*09/12/11 11:09*	*09/14/11 18:41*	*1*
Phenol-d5	*94*		*11 - 120*	*09/12/11 11:09*	*09/14/11 18:41*	*1*

Client Sample ID: C COMPOSITE 8-12
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-3
Matrix: Solid
Percent Solids: 84.4

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	12	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
bis (2-chloroisopropyl) ether	ND		200	20	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2,4,5-Trichlorophenol	ND		200	43	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2,4,6-Trichlorophenol	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2,4-Dichlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2,4-Dimethylphenol	ND		200	53	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2,4-Dinitrophenol	ND		380	68	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2,4-Dinitrotoluene	ND		200	30	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2,6-Dinitrotoluene	ND		200	48	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2-Chloronaphthalene	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2-Chlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2-Methylnaphthalene	ND		200	2.4	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2-Methylphenol	ND		200	6.0	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2-Nitroaniline	ND		380	63	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
2-Nitrophenol	ND		200	8.9	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
3,3'-Dichlorobenzidine	ND		200	170	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
3-Nitroaniline	ND		380	45	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4,6-Dinitro-2-methylphenol	ND		380	68	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4-Bromophenyl phenyl ether	ND		200	62	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4-Chloro-3-methylphenol	ND		200	8.0	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4-Chloroaniline	ND		200	57	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4-Chlorophenyl phenyl ether	ND		200	4.2	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4-Methylphenol	ND		380	11	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4-Nitroaniline	ND		380	22	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
4-Nitrophenol	ND		380	47	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Acenaphthene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Acenaphthylene	ND		200	1.6	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Acetophenone	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Anthracene	ND		200	5.0	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Atrazine	ND		200	8.7	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Benzaldehyde	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Benzo(a)anthracene	ND		200	3.4	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Benzo(a)pyrene	ND		200	4.7	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Benzo(b)fluoranthene	ND		200	3.8	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Benzo(g,h,i)perylene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Benzo(k)fluoranthene	ND		200	2.2	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Bis(2-chloroethoxy)methane	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Bis(2-chloroethyl)ether	ND		200	17	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Bis(2-ethylhexyl) phthalate	ND		200	63	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Butyl benzyl phthalate	ND		200	53	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Caprolactam	ND		200	85	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Carbazole	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Chrysene	ND		200	2.0	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Di-n-butyl phthalate	ND		200	68	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Di-n-octyl phthalate	ND		200	4.6	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Dibenz(a,h)anthracene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Dibenzofuran	ND		200	2.0	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Diethyl phthalate	27	J	200	5.9	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Dimethyl phthalate	ND		200	5.1	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Fluoranthene	ND		200	2.8	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1

Client Sample ID: C COMPOSITE 8-12
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-3
Matrix: Solid
Percent Solids: 84.4

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		200	4.5	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Hexachlorobenzene	ND		200	9.7	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Hexachlorobutadiene	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Hexachlorocyclopentadiene	ND		200	59	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Hexachloroethane	ND		200	15	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Indeno(1,2,3-cd)pyrene	ND		200	5.4	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Isophorone	ND		200	9.8	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
N-Nitrosodi-n-propylamine	ND		200	15	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
N-Nitrosodiphenylamine	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Naphthalene	ND		200	3.3	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Nitrobenzene	ND		200	8.7	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Pentachlorophenol	ND		380	67	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Phenanthrene	ND		200	4.1	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Phenol	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1
Pyrene	ND		200	1.3	ug/Kg	☼	09/12/11 11:09	09/14/11 19:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Voa Target	*340*	*T J*	*ug/Kg*	☼	*2.55*		*09/12/11 11:09*	*09/14/11 19:05*	*1*
Voa Target	*490*	*T J*	*ug/Kg*	☼	*4.61*		*09/12/11 11:09*	*09/14/11 19:05*	*1*
Unknown	*320*	*T J*	*ug/Kg*	☼	*11.06*		*09/12/11 11:09*	*09/14/11 19:05*	*1*
Octadecane	*220*	*T J N*	*ug/Kg*	☼	*11.45*	*593-45-3*	*09/12/11 11:09*	*09/14/11 19:05*	*1*
Nonadecane	*220*	*T J N*	*ug/Kg*	☼	*11.88*	*629-92-5*	*09/12/11 11:09*	*09/14/11 19:05*	*1*
Unknown alkane	*220*	*T J*	*ug/Kg*	☼	*12.64*		*09/12/11 11:09*	*09/14/11 19:05*	*1*
Unknown	*270*	*T J*	*ug/Kg*	☼	*13.37*		*09/12/11 11:09*	*09/14/11 19:05*	*1*
Unknown alkane	*180*	*T J*	*ug/Kg*	☼	*13.87*		*09/12/11 11:09*	*09/14/11 19:05*	*1*
Unknown alkane	*170*	*T J*	*ug/Kg*	☼	*14.41*		*09/12/11 11:09*	*09/14/11 19:05*	*1*
Octacosane	*200*	*T J N*	*ug/Kg*	☼	*14.97*	*630-2-4*	*09/12/11 11:09*	*09/14/11 19:05*	*1*

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*104*		*39 - 146*	*09/12/11 11:09*	*09/14/11 19:05*	*1*
2-Fluorobiphenyl	*93*		*37 - 120*	*09/12/11 11:09*	*09/14/11 19:05*	*1*
2-Fluorophenol	*83*		*18 - 120*	*09/12/11 11:09*	*09/14/11 19:05*	*1*
Nitrobenzene-d5	*80*		*34 - 132*	*09/12/11 11:09*	*09/14/11 19:05*	*1*
p-Terphenyl-d14	*82*		*58 - 147*	*09/12/11 11:09*	*09/14/11 19:05*	*1*
Phenol-d5	*89*		*11 - 120*	*09/12/11 11:09*	*09/14/11 19:05*	*1*

Client Sample ID: SOIL COMPOSITE 0-0.5
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-4
Matrix: Solid
Percent Solids: 83.5

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	12	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
bis (2-chloroisopropyl) ether	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2,4,5-Trichlorophenol	ND		200	44	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2,4,6-Trichlorophenol	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2,4-Dichlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2,4-Dimethylphenol	ND		200	54	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2,4-Dinitrophenol	ND		390	70	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2,4-Dinitrotoluene	ND		200	31	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2,6-Dinitrotoluene	ND		200	49	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2-Chloronaphthalene	ND		200	13	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2-Chlorophenol	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2-Methylnaphthalene	ND		200	2.4	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2-Methylphenol	ND		200	6.1	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2-Nitroaniline	ND		390	64	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
2-Nitrophenol	ND		200	9.1	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
3,3'-Dichlorobenzidine	ND		200	180	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
3-Nitroaniline	ND		390	46	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4,6-Dinitro-2-methylphenol	ND		390	69	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4-Bromophenyl phenyl ether	ND		200	64	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4-Chloro-3-methylphenol	ND		200	8.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4-Chloroaniline	ND		200	59	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4-Chlorophenyl phenyl ether	ND		200	4.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4-Methylphenol	ND		390	11	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4-Nitroaniline	ND		390	22	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
4-Nitrophenol	ND		390	48	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Acenaphthene	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Acenaphthylene	ND		200	1.6	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Acetophenone	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Anthracene	ND		200	5.1	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Atrazine	ND		200	8.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Benzaldehyde	ND		200	22	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Benzo(a)anthracene	22	J	200	3.5	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Benzo(a)pyrene	27	J	200	4.8	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Benzo(b)fluoranthene	32	J	200	3.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Benzo(g,h,i)perylene	ND		200	2.4	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Benzo(k)fluoranthene	23	J	200	2.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Bis(2-chloroethoxy)methane	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Bis(2-chloroethyl)ether	ND		200	17	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Bis(2-ethylhexyl) phthalate	ND		200	64	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Butyl benzyl phthalate	ND		200	54	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Caprolactam	ND		200	86	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Carbazole	ND		200	2.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Chrysene	28	J	200	2.0	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Di-n-butyl phthalate	ND		200	69	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Di-n-octyl phthalate	ND		200	4.7	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Dibenz(a,h)anthracene	ND		200	2.4	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Dibenzofuran	ND		200	2.1	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Diethyl phthalate	26	J	200	6.0	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Dimethyl phthalate	ND		200	5.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Fluoranthene	43	J	200	2.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1

Client Sample ID: SOIL COMPOSITE 0-0.5
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-4
Matrix: Solid
Percent Solids: 83.5

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		200	4.6	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Hexachlorobenzene	ND		200	9.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Hexachlorobutadiene	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Hexachlorocyclopentadiene	ND		200	60	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Hexachloroethane	ND		200	15	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Indeno(1,2,3-cd)pyrene	19	J	200	5.5	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Isophorone	ND		200	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
N-Nitrosodi-n-propylamine	ND		200	16	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
N-Nitrosodiphenylamine	ND		200	11	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Naphthalene	ND		200	3.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Nitrobenzene	ND		200	8.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Pentachlorophenol	ND		390	69	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Phenanthrene	19	J	200	4.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Phenol	ND		200	21	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1
Pyrene	34	J	200	1.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Voa Target	*540*	*T J*	*ug/Kg*	☼	*4.59*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
1-Eicosanol	*580*	*T J N*	*ug/Kg*	☼	*13.84*	*629-96-9*	*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown	*910*	*T J*	*ug/Kg*	☼	*14.39*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown	*4400*	*T J*	*ug/Kg*	☼	*14.79*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown	*6200*	*T J*	*ug/Kg*	☼	*14.97*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown	*510*	*T J*	*ug/Kg*	☼	*15.41*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown alkane	*580*	*T J*	*ug/Kg*	☼	*15.59*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown	*510*	*T J*	*ug/Kg*	☼	*15.62*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown	*590*	*T J*	*ug/Kg*	☼	*16.44*		*09/12/11 11:09*	*09/15/11 15:31*	*1*
Unknown	*500*	*T J*	*ug/Kg*	☼	*16.80*		*09/12/11 11:09*	*09/15/11 15:31*	*1*

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*104*		*39 - 146*	*09/12/11 11:09*	*09/15/11 15:31*	*1*
2-Fluorobiphenyl	*93*		*37 - 120*	*09/12/11 11:09*	*09/15/11 15:31*	*1*
2-Fluorophenol	*74*		*18 - 120*	*09/12/11 11:09*	*09/15/11 15:31*	*1*
Nitrobenzene-d5	*85*		*34 - 132*	*09/12/11 11:09*	*09/15/11 15:31*	*1*
p-Terphenyl-d14	*92*		*58 - 147*	*09/12/11 11:09*	*09/15/11 15:31*	*1*
Phenol-d5	*90*		*11 - 120*	*09/12/11 11:09*	*09/15/11 15:31*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		210	41	ug/Kg	☼	09/15/11 12:29	09/16/11 09:45	1
PCB-1221	ND		210	41	ug/Kg	☼	09/15/11 12:29	09/16/11 09:45	1
PCB-1232	ND		210	41	ug/Kg	☼	09/15/11 12:29	09/16/11 09:45	1
PCB-1242	ND		210	46	ug/Kg	☼	09/15/11 12:29	09/16/11 09:45	1
PCB-1248	ND		210	42	ug/Kg	☼	09/15/11 12:29	09/16/11 09:45	1
PCB-1254	ND		210	45	ug/Kg	☼	09/15/11 12:29	09/16/11 09:45	1
PCB-1260	ND		210	99	ug/Kg	☼	09/15/11 12:29	09/16/11 09:45	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*102*		*34 - 148*	*09/15/11 12:29*	*09/16/11 09:45*	*1*
Tetrachloro-m-xylene	*111*		*35 - 134*	*09/15/11 12:29*	*09/16/11 09:45*	*1*

Client Sample ID: DP-24 3-4
Date Collected: 09/07/11 14:45
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-5
Matrix: Solid
Percent Solids: 89.5

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		190	12	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
bis (2-chloroisopropyl) ether	ND		190	20	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2,4,5-Trichlorophenol	ND		190	41	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2,4,6-Trichlorophenol	ND		190	12	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2,4-Dichlorophenol	ND		190	9.8	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2,4-Dimethylphenol	ND		190	51	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2,4-Dinitrophenol	ND		370	65	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2,4-Dinitrotoluene	ND		190	29	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2,6-Dinitrotoluene	ND		190	46	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2-Chloronaphthalene	ND		190	13	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2-Chlorophenol	ND		190	9.5	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2-Methylnaphthalene	ND		190	2.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2-Methylphenol	ND		190	5.8	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2-Nitroaniline	ND		370	60	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
2-Nitrophenol	ND		190	8.5	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
3,3'-Dichlorobenzidine	ND		190	160	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
3-Nitroaniline	ND		370	43	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4,6-Dinitro-2-methylphenol	ND		370	65	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4-Bromophenyl phenyl ether	ND		190	59	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4-Chloro-3-methylphenol	ND		190	7.7	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4-Chloroaniline	ND		190	55	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4-Chlorophenyl phenyl ether	ND		190	4.0	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4-Methylphenol	ND		370	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4-Nitroaniline	ND		370	21	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
4-Nitrophenol	ND		370	45	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Acenaphthene	ND		190	2.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Acenaphthylene	ND		190	1.5	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Acetophenone	ND		190	9.6	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Anthracene	ND		190	4.8	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Atrazine	ND		190	8.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Benzaldehyde	ND		190	21	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Benzo(a)anthracene	7.7	J	190	3.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Benzo(a)pyrene	ND		190	4.5	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Benzo(b)fluoranthene	ND		190	3.6	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Benzo(g,h,i)perylene	ND		190	2.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Benzo(k)fluoranthene	ND		190	2.1	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Bis(2-chloroethoxy)methane	ND		190	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Bis(2-chloroethyl)ether	ND		190	16	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Bis(2-ethylhexyl) phthalate	ND		190	60	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Butyl benzyl phthalate	ND		190	50	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Caprolactam	ND		190	81	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Carbazole	ND		190	2.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Chrysene	6.3	J	190	1.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Di-n-butyl phthalate	ND		190	65	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Di-n-octyl phthalate	ND		190	4.4	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Dibenz(a,h)anthracene	ND		190	2.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Dibenzofuran	ND		190	1.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Diethyl phthalate	21	J	190	5.6	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Dimethyl phthalate	ND		190	4.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Fluoranthene	9.5	J	190	2.7	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1

Client Sample ID: DP-24 3-4
Date Collected: 09/07/11 14:45
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-5
Matrix: Solid
Percent Solids: 89.5

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		190	4.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Hexachlorobenzene	ND		190	9.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Hexachlorobutadiene	ND		190	9.6	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Hexachlorocyclopentadiene	ND		190	57	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Hexachloroethane	ND		190	14	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Indeno(1,2,3-cd)pyrene	ND		190	5.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Isophorone	ND		190	9.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
N-Nitrosodi-n-propylamine	ND		190	15	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
N-Nitrosodiphenylamine	ND		190	10	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Naphthalene	ND		190	3.1	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Nitrobenzene	ND		190	8.3	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Pentachlorophenol	ND		370	64	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Phenanthrene	ND		190	3.9	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Phenol	ND		190	20	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1
Pyrene	7.8	J	190	1.2	ug/Kg	☼	09/12/11 11:09	09/15/11 15:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Voa Target	*330*	*T J*	*ug/Kg*	☼	*2.52*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Voa Target	*710*	*T J*	*ug/Kg*	☼	*4.59*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Unknown	*330*	*T J*	*ug/Kg*	☼	*10.16*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Unknown	*970*	*T J*	*ug/Kg*	☼	*10.23*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Unknown	*320*	*T J*	*ug/Kg*	☼	*13.84*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Unknown	*430*	*T J*	*ug/Kg*	☼	*14.39*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Unknown	*160*	*T J*	*ug/Kg*	☼	*14.97*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Unknown	*270*	*T J*	*ug/Kg*	☼	*16.80*		*09/12/11 11:09*	*09/15/11 15:55*	*1*
Azulene, 1,2,3,5,6,7,8,8a-octahydro-1,4-Hop-22(29)-en-3.beta.-ol	*240*	*T J N*	*ug/Kg*	☼	*17.22*	*3691-11-0*	*09/12/11 11:09*	*09/15/11 15:55*	*1*
	300	*T J N*	*ug/Kg*	☼	*17.37*	*58801-23-3*	*09/12/11 11:09*	*09/15/11 15:55*	*1*

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*106*		*39 - 146*	*09/12/11 11:09*	*09/15/11 15:55*	*1*
2-Fluorobiphenyl	*93*		*37 - 120*	*09/12/11 11:09*	*09/15/11 15:55*	*1*
2-Fluorophenol	*96*		*18 - 120*	*09/12/11 11:09*	*09/15/11 15:55*	*1*
Nitrobenzene-d5	*84*		*34 - 132*	*09/12/11 11:09*	*09/15/11 15:55*	*1*
p-Terphenyl-d14	*98*		*58 - 147*	*09/12/11 11:09*	*09/15/11 15:55*	*1*
Phenol-d5	*97*		*11 - 120*	*09/12/11 11:09*	*09/15/11 15:55*	*1*

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Client Sample ID: DP-1 0-4/DP-24 3-4 COMP
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-7
Matrix: Solid
Percent Solids: 87.4

5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	46	ug/Kg	☼	09/15/11 12:29	09/16/11 10:33	1
PCB-1221	ND		240	46	ug/Kg	☼	09/15/11 12:29	09/16/11 10:33	1
PCB-1232	ND		240	46	ug/Kg	☼	09/15/11 12:29	09/16/11 10:33	1
PCB-1242	ND		240	51	ug/Kg	☼	09/15/11 12:29	09/16/11 10:33	1
PCB-1248	ND		240	46	ug/Kg	☼	09/15/11 12:29	09/16/11 10:33	1
PCB-1254	ND		240	50	ug/Kg	☼	09/15/11 12:29	09/16/11 10:33	1
PCB-1260	ND		240	110	ug/Kg	☼	09/15/11 12:29	09/16/11 10:33	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*103*		*34 - 148*	*09/15/11 12:29*	*09/16/11 10:33*	*1*
Tetrachloro-m-xylene	*106*		*35 - 134*	*09/15/11 12:29*	*09/16/11 10:33*	*1*

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Client Sample ID: C COMP 4-8/C COMP 8-12 COMP
Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Lab Sample ID: 480-9485-8
Matrix: Solid
Percent Solids: 84.5

5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		230	44	ug/Kg	☼	09/15/11 12:29	09/16/11 10:48	1
PCB-1221	ND		230	44	ug/Kg	☼	09/15/11 12:29	09/16/11 10:48	1
PCB-1232	ND		230	44	ug/Kg	☼	09/15/11 12:29	09/16/11 10:48	1
PCB-1242	ND		230	49	ug/Kg	☼	09/15/11 12:29	09/16/11 10:48	1
PCB-1248	ND		230	44	ug/Kg	☼	09/15/11 12:29	09/16/11 10:48	1
PCB-1254	ND		230	48	ug/Kg	☼	09/15/11 12:29	09/16/11 10:48	1
PCB-1260	ND		230	110	ug/Kg	☼	09/15/11 12:29	09/16/11 10:48	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*102*		*34 - 148*	*09/15/11 12:29*	*09/16/11 10:48*	*1*
Tetrachloro-m-xylene	*96*		*35 - 134*	*09/15/11 12:29*	*09/16/11 10:48*	*1*

Surrogate Summary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPH	PHL
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(58-147)	(11-120)
480-9485-1	DP-1 0-4	112	94	81	79	92	89
480-9485-2	C COMPOSITE 4-8	112	95	102	85	86	94
480-9485-3	C COMPOSITE 8-12	104	93	83	80	82	89
480-9485-4	SOIL COMPOSITE 0-0.5	104	93	74	85	92	90
480-9485-5	DP-24 3-4	106	93	96	84	98	97
LCS 480-30841/2-A	Lab Control Sample	109	98	86	88	101	93
MB 480-30841/1-A	Method Blank	95	96	89	88	103	95

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPH = p-Terphenyl-d14
PHL = Phenol-d5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(34-148)	(35-134)
480-9485-4	SOIL COMPOSITE 0-0.5	102	111
480-9485-4 MS	SOIL COMPOSITE 0-0.5	114	111
480-9485-4 MSD	SOIL COMPOSITE 0-0.5	115	119
480-9485-7	DP-1 0-4/DP-24 3-4 COMP	103	106
480-9485-8	C COMP 4-8/C COMP 8-12 COMP	102	96
LCS 480-31421/2-A	Lab Control Sample	120	129
MB 480-31421/1-A	Method Blank	109	114

Surrogate Legend

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-30841/1-A
Matrix: Solid
Analysis Batch: 30945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30841

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	10	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
bis (2-chloroisopropyl) ether	ND		170	17	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2,4-Dichlorophenol	ND		170	8.7	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2,4-Dinitrophenol	ND		330	58	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2-Chloronaphthalene	ND		170	11	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2-Chlorophenol	ND		170	8.5	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2-Methylphenol	ND		170	5.1	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2-Nitroaniline	ND		330	53	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
2-Nitrophenol	ND		170	7.6	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
3-Nitroaniline	ND		330	38	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4-Chloroaniline	ND		170	49	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4-Methylphenol	ND		330	9.3	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4-Nitroaniline	ND		330	19	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
4-Nitrophenol	ND		330	40	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Acenaphthene	ND		170	2.0	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Acenaphthylene	ND		170	1.4	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Acetophenone	ND		170	8.6	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Anthracene	ND		170	4.3	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Atrazine	ND		170	7.4	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Benzaldehyde	ND		170	18	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Butyl benzyl phthalate	ND		170	45	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Caprolactam	ND		170	72	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Carbazole	ND		170	1.9	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Chrysene	ND		170	1.7	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Di-n-butyl phthalate	ND		170	58	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Dibenzofuran	ND		170	1.7	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Diethyl phthalate	ND		170	5.0	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Dimethyl phthalate	ND		170	4.4	ug/Kg		09/12/11 11:09	09/13/11 08:23	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-30841/1-A
Matrix: Solid
Analysis Batch: 30945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30841

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		170	2.4	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Fluorene	ND		170	3.8	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Hexachlorobenzene	ND		170	8.3	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Hexachlorobutadiene	ND		170	8.5	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Hexachlorocyclopentadiene	ND		170	50	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Hexachloroethane	ND		170	13	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Isophorone	ND		170	8.3	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
N-Nitrosodiphenylamine	ND		170	9.1	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Naphthalene	ND		170	2.8	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Nitrobenzene	ND		170	7.4	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Pentachlorophenol	ND		330	57	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Phenanthrene	ND		170	3.5	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Phenol	ND		170	18	ug/Kg		09/12/11 11:09	09/13/11 08:23	1
Pyrene	ND		170	1.1	ug/Kg		09/12/11 11:09	09/13/11 08:23	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*09/12/11 11:09*	*09/13/11 08:23*	*1*

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*39 - 146*	*09/12/11 11:09*	*09/13/11 08:23*	*1*
2-Fluorobiphenyl	*96*		*37 - 120*	*09/12/11 11:09*	*09/13/11 08:23*	*1*
2-Fluorophenol	*89*		*18 - 120*	*09/12/11 11:09*	*09/13/11 08:23*	*1*
Nitrobenzene-d5	*88*		*34 - 132*	*09/12/11 11:09*	*09/13/11 08:23*	*1*
p-Terphenyl-d14	*103*		*58 - 147*	*09/12/11 11:09*	*09/13/11 08:23*	*1*
Phenol-d5	*95*		*11 - 120*	*09/12/11 11:09*	*09/13/11 08:23*	*1*

Lab Sample ID: LCS 480-30841/2-A
Matrix: Solid
Analysis Batch: 30945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30841

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,4-Dinitrotoluene	3270	3490		ug/Kg		107	55 - 125
2-Chlorophenol	3270	2820		ug/Kg		86	38 - 120
4-Chloro-3-methylphenol	3270	3290		ug/Kg		101	49 - 125
4-Nitrophenol	3270	3180		ug/Kg		97	43 - 137
Acenaphthene	3270	3280		ug/Kg		100	53 - 120
Bis(2-ethylhexyl) phthalate	3270	3140		ug/Kg		96	61 - 133
Fluorene	3270	3380		ug/Kg		103	63 - 126
Hexachloroethane	3270	2310		ug/Kg		71	41 - 120
N-Nitrosodi-n-propylamine	3270	3050		ug/Kg		93	46 - 120
Pentachlorophenol	3270	2580		ug/Kg		79	33 - 136
Phenol	3270	2930		ug/Kg		90	36 - 120
Pyrene	3270	3050		ug/Kg		93	51 - 133

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*109*		*39 - 146*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-30841/2-A
Matrix: Solid
Analysis Batch: 30945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30841

Surrogate	LCS % Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	98		37 - 120
2-Fluorophenol	86		18 - 120
Nitrobenzene-d5	88		34 - 132
p-Terphenyl-d14	101		58 - 147
Phenol-d5	93		11 - 120

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-31421/1-A
Matrix: Solid
Analysis Batch: 31416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		210	41	ug/Kg		09/15/11 12:29	09/15/11 21:46	1
PCB-1221	ND		210	41	ug/Kg		09/15/11 12:29	09/15/11 21:46	1
PCB-1232	ND		210	41	ug/Kg		09/15/11 12:29	09/15/11 21:46	1
PCB-1242	ND		210	46	ug/Kg		09/15/11 12:29	09/15/11 21:46	1
PCB-1248	ND		210	41	ug/Kg		09/15/11 12:29	09/15/11 21:46	1
PCB-1254	ND		210	44	ug/Kg		09/15/11 12:29	09/15/11 21:46	1
PCB-1260	ND		210	98	ug/Kg		09/15/11 12:29	09/15/11 21:46	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	109		34 - 148	09/15/11 12:29	09/15/11 21:46	1
Tetrachloro-m-xylene	114		35 - 134	09/15/11 12:29	09/15/11 21:46	1

Lab Sample ID: LCS 480-31421/2-A
Matrix: Solid
Analysis Batch: 31416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
PCB-1016	2290	2980		ug/Kg		130	59 - 154
PCB-1260	2290	2760		ug/Kg		121	51 - 179

Surrogate	LCS % Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	120		34 - 148
Tetrachloro-m-xylene	129		35 - 134

Lab Sample ID: 480-9485-4 MS
Matrix: Solid
Analysis Batch: 31524

Client Sample ID: SOIL COMPOSITE 0-0.5
Prep Type: Total/NA
Prep Batch: 31421

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
PCB-1016	ND		2660	2960		ug/Kg	☼	111	59 - 154
PCB-1260	ND		2660	2970		ug/Kg	☼	112	51 - 179

Surrogate	MS % Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	114		34 - 148
Tetrachloro-m-xylene	111		35 - 134

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-9485-4 MSD
Matrix: Solid
Analysis Batch: 31524

Client Sample ID: SOIL COMPOSITE 0-0.5
Prep Type: Total/NA
Prep Batch: 31421

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
PCB-1016	ND		2870	3330		ug/Kg	☼	116	59 - 154	12	50
PCB-1260	ND		2870	3220		ug/Kg	☼	112	51 - 179	8	50

Surrogate	*MSD % Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*115*		*34 - 148*
Tetrachloro-m-xylene	*119*		*35 - 134*

QC Association Summary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

GC/MS Semi VOA

Prep Batch: 30841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9485-1	DP-1 0-4	Total/NA	Solid	3550B	
480-9485-2	C COMPOSITE 4-8	Total/NA	Solid	3550B	
480-9485-3	C COMPOSITE 8-12	Total/NA	Solid	3550B	
480-9485-4	SOIL COMPOSITE 0-0.5	Total/NA	Solid	3550B	
480-9485-5	DP-24 3-4	Total/NA	Solid	3550B	
LCS 480-30841/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-30841/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 30945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-30841/2-A	Lab Control Sample	Total/NA	Solid	8270C	30841
MB 480-30841/1-A	Method Blank	Total/NA	Solid	8270C	30841

Analysis Batch: 31150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9485-1	DP-1 0-4	Total/NA	Solid	8270C	30841
480-9485-2	C COMPOSITE 4-8	Total/NA	Solid	8270C	30841
480-9485-3	C COMPOSITE 8-12	Total/NA	Solid	8270C	30841

Analysis Batch: 31329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9485-4	SOIL COMPOSITE 0-0.5	Total/NA	Solid	8270C	30841
480-9485-5	DP-24 3-4	Total/NA	Solid	8270C	30841

GC Semi VOA

Analysis Batch: 31416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-31421/2-A	Lab Control Sample	Total/NA	Solid	8082	31421
MB 480-31421/1-A	Method Blank	Total/NA	Solid	8082	31421

Prep Batch: 31421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9485-4	SOIL COMPOSITE 0-0.5	Total/NA	Solid	3550B	
480-9485-4 MS	SOIL COMPOSITE 0-0.5	Total/NA	Solid	3550B	
480-9485-4 MSD	SOIL COMPOSITE 0-0.5	Total/NA	Solid	3550B	
480-9485-7	DP-1 0-4/DP-24 3-4 COMP	Total/NA	Solid	3550B	
480-9485-8	C COMP 4-8/C COMP 8-12 COMP	Total/NA	Solid	3550B	
LCS 480-31421/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-31421/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 31524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9485-4	SOIL COMPOSITE 0-0.5	Total/NA	Solid	8082	31421
480-9485-4 MS	SOIL COMPOSITE 0-0.5	Total/NA	Solid	8082	31421
480-9485-4 MSD	SOIL COMPOSITE 0-0.5	Total/NA	Solid	8082	31421
480-9485-7	DP-1 0-4/DP-24 3-4 COMP	Total/NA	Solid	8082	31421
480-9485-8	C COMP 4-8/C COMP 8-12 COMP	Total/NA	Solid	8082	31421

QC Association Summary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

General Chemistry

Analysis Batch: 30656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9485-1	DP-1 0-4	Total/NA	Solid	Moisture	
480-9485-2	C COMPOSITE 4-8	Total/NA	Solid	Moisture	
480-9485-3	C COMPOSITE 8-12	Total/NA	Solid	Moisture	
480-9485-4	SOIL COMPOSITE 0-0.5	Total/NA	Solid	Moisture	
480-9485-5	DP-24 3-4	Total/NA	Solid	Moisture	

Analysis Batch: 31066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-9485-4	SOIL COMPOSITE 0-0.5	Total/NA	Solid	Moisture	
480-9485-7	DP-1 0-4/DP-24 3-4 COMP	Total/NA	Solid	Moisture	
480-9485-8	C COMP 4-8/C COMP 8-12 COMP	Total/NA	Solid	Moisture	

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Lab Chronicle

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Client Sample ID: DP-1 0-4

Lab Sample ID: 480-9485-1
Date Collected: 09/06/11 12:30
Matrix: Solid
Date Received: 09/07/11 16:50
Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30841	09/12/11 11:09	MRB	TAL BUF
Total/NA	Analysis	8270C		1	31150	09/14/11 18:17	MP	TAL BUF
Total/NA	Analysis	Moisture		1	30656	09/09/11 13:34	ZLR	TAL BUF

Client Sample ID: C COMPOSITE 4-8

Lab Sample ID: 480-9485-2
Date Collected: 09/07/11 00:00
Matrix: Solid
Date Received: 09/07/11 16:50
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30841	09/12/11 11:09	MRB	TAL BUF
Total/NA	Analysis	8270C		1	31150	09/14/11 18:41	MP	TAL BUF
Total/NA	Analysis	Moisture		1	30656	09/09/11 13:34	ZLR	TAL BUF

Client Sample ID: C COMPOSITE 8-12

Lab Sample ID: 480-9485-3
Date Collected: 09/07/11 00:00
Matrix: Solid
Date Received: 09/07/11 16:50
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30841	09/12/11 11:09	MRB	TAL BUF
Total/NA	Analysis	8270C		1	31150	09/14/11 19:05	MP	TAL BUF
Total/NA	Analysis	Moisture		1	30656	09/09/11 13:34	ZLR	TAL BUF

Client Sample ID: SOIL COMPOSITE 0-0.5

Lab Sample ID: 480-9485-4
Date Collected: 09/07/11 00:00
Matrix: Solid
Date Received: 09/07/11 16:50
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30841	09/12/11 11:09	MRB	TAL BUF
Total/NA	Analysis	8270C		1	31329	09/15/11 15:31	MP	TAL BUF
Total/NA	Prep	3550B			31421	09/15/11 12:29	DE	TAL BUF
Total/NA	Analysis	8082		1	31524	09/16/11 09:45	DB	TAL BUF
Total/NA	Analysis	Moisture		1	30656	09/09/11 13:34	ZLR	TAL BUF
Total/NA	Analysis	Moisture		1	31066	09/13/11 14:56	ZLR	TAL BUF

Client Sample ID: DP-24 3-4

Lab Sample ID: 480-9485-5
Date Collected: 09/07/11 14:45
Matrix: Solid
Date Received: 09/07/11 16:50
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30841	09/12/11 11:09	MRB	TAL BUF
Total/NA	Analysis	8270C		1	31329	09/15/11 15:55	MP	TAL BUF
Total/NA	Analysis	Moisture		1	30656	09/09/11 13:34	ZLR	TAL BUF

Lab Chronicle

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Client Sample ID: DP-1 0-4/DP-24 3-4 COMP

Lab Sample ID: 480-9485-7
Matrix: Solid
Percent Solids: 87.4

Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			31421	09/15/11 12:29	DE	TAL BUF
Total/NA	Analysis	8082		1	31524	09/16/11 10:33	DB	TAL BUF
Total/NA	Analysis	Moisture		1	31066	09/13/11 14:56	ZLR	TAL BUF

Client Sample ID: C COMP 4-8/C COMP 8-12 COMP

Lab Sample ID: 480-9485-8
Matrix: Solid
Percent Solids: 84.5

Date Collected: 09/07/11 00:00
Date Received: 09/07/11 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			31421	09/15/11 12:29	DE	TAL BUF
Total/NA	Analysis	8082		1	31524	09/16/11 10:48	DB	TAL BUF
Total/NA	Analysis	Moisture		1	31066	09/13/11 14:56	ZLR	TAL BUF

Laboratory References:
TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC Secondary AB	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	West Virginia	West Virginia DEP	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

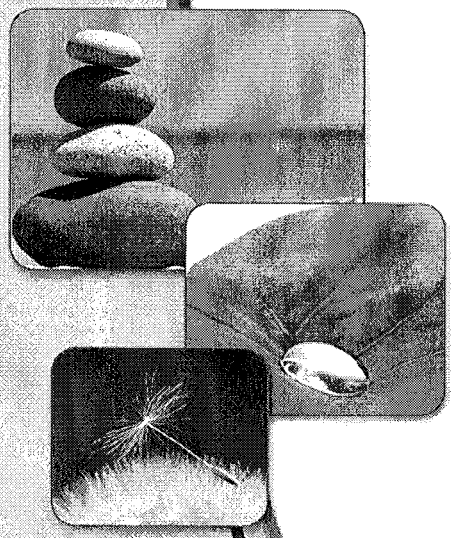
TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Barron & Associates
Project/Site: Barron & Associates

TestAmerica Job ID: 480-9485-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-9485-1	DP-1 0-4	Solid	09/06/11 12:30	09/07/11 16:50
480-9485-2	C COMPOSITE 4-8	Solid	09/07/11 00:00	09/07/11 16:50
480-9485-3	C COMPOSITE 8-12	Solid	09/07/11 00:00	09/07/11 16:50
480-9485-4	SOIL COMPOSITE 0-0.5	Solid	09/07/11 00:00	09/07/11 16:50
480-9485-5	DP-24 3-4	Solid	09/07/11 14:45	09/07/11 16:50
480-9485-6	COMP -02 - -05	Solid	09/07/11 00:00	09/07/11 16:50
480-9485-7	DP-1 0-4/DP-24 3-4 COMP	Solid	09/07/11 00:00	09/07/11 16:50
480-9485-8	C COMP 4-8/C COMP 8-12 COMP	Solid	09/07/11 00:00	09/07/11 16:50



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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: G1I090440
Client Project/Site: 480-9485-1
Client Project Description: Barron & Associates

For:
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228

Attn: Brian Fischer

Bryanna Vandenberg

Authorized for release by:
09/26/2011 11:01:37 AM
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Designee for

Jeremy Sadler
Project Manager
jeremyr.sadler@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

TestAmerica West Sacramento Project Number G1I090440

General Comments

The samples were received by the laboratory at 1 degree Celsius. Wet ice was used as a cooling agent.

There were no other anomalies associated with this project.

Detection Summary

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Client Sample ID: COMP-02- -05 (480-9485-6) **Lab Sample ID: G1I090440001**

No Detections

Client Sample Results

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Client Sample ID: COMP-02- -05 (480-9485-6)
Date Collected: 09/07/11 00:00
Date Received: 09/09/11 09:25

Lab Sample ID: G1I090440001
Matrix: Solid

Method: 8280A - Dioxins/Furans, HRGC/LRMS (8280A)

Analyte	Result	Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.60	0.013	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total TCDD	ND		0.60	0.40	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,7,8-PeCDD	ND		1.5	0.024	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total PeCDD	ND		1.5	0.027	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,4,7,8-HxCDD	ND		1.5	0.018	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,6,7,8-HxCDD	ND		1.5	0.018	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,7,8,9-HxCDD	ND		1.5	0.020	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total HxCDD	ND		1.5	0.025	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,4,6,7,8-HpCDD	ND		1.5	0.026	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total HpCDD	ND		1.5	0.030	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
OCDD	ND		3.0	0.025	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
2,3,7,8-TCDF	ND		0.60	0.010	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total TCDF	ND		0.60	0.010	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,7,8-PeCDF	ND		1.5	0.011	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
2,3,4,7,8-PeCDF	ND		1.5	0.0078	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total PeCDF	ND		1.5	0.014	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,4,7,8-HxCDF	ND		1.5	0.012	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,6,7,8-HxCDF	ND		1.5	0.014	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
2,3,4,6,7,8-HxCDF	ND		1.5	0.013	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,7,8,9-HxCDF	ND		1.5	0.011	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total HxCDF	ND		1.5	0.017	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,4,6,7,8-HpCDF	ND		1.5	0.037	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
1,2,3,4,7,8,9-HpCDF	ND		1.5	0.018	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
Total HpCDF	ND		1.5	0.042	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96
OCDF	ND		3.0	0.034	ng/g	¤	09/14/11 16:00	09/17/11 06:29	0.96

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
37Cl4-2,3,7,8-TCDD	*76*		*25 - 150*	*09/14/11 16:00*	*09/17/11 06:29*	*0.96*

Internal Standard	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*63*		*25 - 150*	*09/14/11 16:00*	*09/17/11 06:29*	*0.96*
13C-2,3,7,8-TCDF	*61*		*25 - 150*	*09/14/11 16:00*	*09/17/11 06:29*	*0.96*
13C-1,2,3,6,7,8-HxCDD	*62*		*25 - 150*	*09/14/11 16:00*	*09/17/11 06:29*	*0.96*
13C-1,2,3,4,6,7,8-HpCDF	*61*		*25 - 150*	*09/14/11 16:00*	*09/17/11 06:29*	*0.96*
13C-OCDD	*52*		*25 - 150*	*09/14/11 16:00*	*09/17/11 06:29*	*0.96*

Surrogate Summary

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Method: 8280A - Dioxins/Furans, HRGC/LRMS (8280A)

Matrix: Solid

Prep Type: Total

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	37TCDD (25-150)
G1I090440001	COMP-02- -05 (480-9485-6)	76
G1I140000195B	Method Blank	86
G1I140000195C	Lab Control Sample	82

Surrogate Legend

37TCDD = 37Cl4-2,3,7,8-TCDD

Internal Standard Summary

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Method: 8280A - Dioxins/Furans, HRGC/LRMS (8280A)

Matrix: Solid

Prep Type: Total

		Percent Internal Standard Recovery (Acceptance Limits)				
Lab Sample ID	Client Sample ID	TCDD (25-150)	TCDF (25-150)	HxCDD2 (25-150)	HpCDF1 (25-150)	OCDD (25-150)
G1I090440001	COMP-02- -05 (480-9485-6)	63	61	62	61	52
G1I140000195B	Method Blank	68	64	69	73	65
G1I140000195C	Lab Control Sample	56	55	58	58	44

Internal Standard Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

QC Sample Results

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Method: 8280A - Dioxins/Furans, HRGC/LRMS (8280A)

Lab Sample ID: G1I140000195B
Matrix: Solid
Analysis Batch: 1257195

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 1257195_P

Analyte	MB Result	MB Qualifier	ML	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		0.50	0.011	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total TCDD	ND		0.50	0.32	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,7,8-PeCDD	ND		1.2	0.011	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total PeCDD	ND		1.2	0.027	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,4,7,8-HxCDD	ND		1.2	0.012	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,6,7,8-HxCDD	ND		1.2	0.013	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,7,8,9-HxCDD	ND		1.2	0.018	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total HxCDD	ND		1.2	0.021	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,4,6,7,8-HpCDD	ND		1.2	0.013	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total HpCDD	ND		1.2	0.021	ng/g		09/14/11 16:00	09/17/11 01:43	1
OCDD	ND		2.5	0.027	ng/g		09/14/11 16:00	09/17/11 01:43	1
2,3,7,8-TCDF	ND		0.50	0.0042	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total TCDF	ND		0.50	0.0042	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,7,8-PeCDF	ND		1.2	0.0059	ng/g		09/14/11 16:00	09/17/11 01:43	1
2,3,4,7,8-PeCDF	ND		1.2	0.0067	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total PeCDF	ND		1.2	0.0093	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,4,7,8-HxCDF	ND		1.2	0.0046	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,6,7,8-HxCDF	ND		1.2	0.0058	ng/g		09/14/11 16:00	09/17/11 01:43	1
2,3,4,6,7,8-HxCDF	ND		1.2	0.0069	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,7,8,9-HxCDF	ND		1.2	0.0063	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total HxCDF	ND		1.2	0.0079	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,4,6,7,8-HpCDF	ND		1.2	0.018	ng/g		09/14/11 16:00	09/17/11 01:43	1
1,2,3,4,7,8,9-HpCDF	ND		1.2	0.014	ng/g		09/14/11 16:00	09/17/11 01:43	1
Total HpCDF	ND		1.2	0.019	ng/g		09/14/11 16:00	09/17/11 01:43	1
OCDF	ND		2.5	0.011	ng/g		09/14/11 16:00	09/17/11 01:43	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
37Cl4-2,3,7,8-TCDD	*86*		*25 - 150*	*09/14/11 16:00*	*09/17/11 01:43*	*1*

Internal Standard	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*68*		*25 - 150*	*09/14/11 16:00*	*09/17/11 01:43*	*1*
13C-2,3,7,8-TCDF	*64*		*25 - 150*	*09/14/11 16:00*	*09/17/11 01:43*	*1*
13C-1,2,3,6,7,8-HxCDD	*69*		*25 - 150*	*09/14/11 16:00*	*09/17/11 01:43*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*73*		*25 - 150*	*09/14/11 16:00*	*09/17/11 01:43*	*1*
13C-OCDD	*65*		*25 - 150*	*09/14/11 16:00*	*09/17/11 01:43*	*1*

Lab Sample ID: G1I140000195C
Matrix: Solid
Analysis Batch: 1257195

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 1257195_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3,7,8-TCDD	2.50	2.44		ng/g		98	65 - 125
1,2,3,7,8-PeCDD	6.25	5.63		ng/g		90	62 - 132
1,2,3,4,7,8-HxCDD	6.25	6.04		ng/g		97	61 - 121
1,2,3,6,7,8-HxCDD	6.25	6.00		ng/g		96	62 - 125
1,2,3,7,8,9-HxCDD	6.25	6.13		ng/g		98	59 - 128
1,2,3,4,6,7,8-HpCDD	6.25	5.87		ng/g		94	57 - 130
OCDD	12.5	12.2		ng/g		98	62 - 124
2,3,7,8-TCDF	2.50	2.42		ng/g		97	63 - 123

Method: 8280A - Dioxins/Furans, HRGC/LRMS (8280A) (Continued)

Lab Sample ID: G1I140000195C
Matrix: Solid
Analysis Batch: 1257195

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 1257195_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
1,2,3,7,8-PeCDF	6.25	5.93		ng/g		95	66 - 126
2,3,4,7,8-PeCDF	6.25	5.39		ng/g		86	56 - 129
1,2,3,4,7,8-HxCDF	6.25	5.09		ng/g		82	54 - 130
1,2,3,6,7,8-HxCDF	6.25	5.04		ng/g		81	55 - 135
2,3,4,6,7,8-HxCDF	6.25	5.97		ng/g		95	56 - 132
1,2,3,7,8,9-HxCDF	6.25	5.95		ng/g		95	53 - 135
1,2,3,4,6,7,8-HpCDF	6.25	6.09		ng/g		97	62 - 127
1,2,3,4,7,8,9-HpCDF	6.25	5.66		ng/g		91	57 - 134
OCDF	12.5	12.1		ng/g		97	62 - 125

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
37Cl4-2,3,7,8-TCDD	*82*		*25 - 150*

Internal Standard	*LCS % Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*56*		*25 - 150*
13C-2,3,7,8-TCDF	*55*		*25 - 150*
13C-1,2,3,6,7,8-HxCDD	*58*		*25 - 150*
13C-1,2,3,4,6,7,8-HpCDF	*58*		*25 - 150*
13C-OCDD	*44*		*25 - 150*

QC Association Summary

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

DIOXIN

Analysis Batch: 1257195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G1I090440001	COMP-02- -05 (480-9485-6)	Total	Solid	8280A	
G1I140000195B	Method Blank	Total	Solid	8280A	
G1I140000195C	Lab Control Sample	Total	Solid	8280A	

Prep Batch: 1257195_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G1I090440001	COMP-02- -05 (480-9485-6)	Total	Solid	8280A	
G1I140000195B	Method Blank	Total	Solid	8280A	
G1I140000195C	Lab Control Sample	Total	Solid	8280A	

General Chemistry

Analysis Batch: 1252138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
G1I070424006X	Duplicate	Total	Solid	D 2216-90	
G1I090440001	COMP-02- -05 (480-9485-6)	Total	Solid	D 2216-90	

Lab Chronicle

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Client Sample ID: COMP-02- -05 (480-9485-6)
Date Collected: 09/07/11 00:00
Date Received: 09/09/11 09:25

Lab Sample ID: G1I090440001
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total	Prep	8280A			1257195_P	09/14/11 16:00		TAL WSC
Total	Analysis	8280A		0.96	1257195	09/17/11 06:29	MO	TAL WSC
Total	Analysis	D 2216-90		1	1252138	09/12/11 02:05	KG	TAL WSC

Laboratory References:
TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Certification Summary

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica West Sacramento		USEPA UCMR		CA00044
TestAmerica West Sacramento	A2LA	DoD ELAP		2928-01
TestAmerica West Sacramento	Alaska	Alaska UST	10	UST-055
TestAmerica West Sacramento	Arizona	State Program	9	AZ0708
TestAmerica West Sacramento	Arkansas	State Program	6	88-0691
TestAmerica West Sacramento	California	NELAC	9	1119CA
TestAmerica West Sacramento	Colorado	State Program	8	N/A
TestAmerica West Sacramento	Connecticut	State Program	1	PH-0691
TestAmerica West Sacramento	Florida	NELAC	4	E87570
TestAmerica West Sacramento	Georgia	State Program	4	960
TestAmerica West Sacramento	Guam	State Program	9	N/A
TestAmerica West Sacramento	Hawaii	State Program	9	N/A
TestAmerica West Sacramento	Illinois	NELAC	5	200060
TestAmerica West Sacramento	Kansas	NELAC	7	E-10375
TestAmerica West Sacramento	Louisiana	NELAC	6	30612
TestAmerica West Sacramento	Michigan	State Program	5	9947
TestAmerica West Sacramento	Nevada	State Program	9	CA44
TestAmerica West Sacramento	New Jersey	NELAC	2	CA005
TestAmerica West Sacramento	New Mexico	State Program	6	N/A
TestAmerica West Sacramento	New York	NELAC	2	11666
TestAmerica West Sacramento	Oregon	NELAC	10	CA200005
TestAmerica West Sacramento	Pennsylvania	NELAC	3	68-01272
TestAmerica West Sacramento	South Carolina	State Program	4	87014
TestAmerica West Sacramento	Texas	NELAC	6	T104704399-08-TX
TestAmerica West Sacramento	US Fish & Wildlife	US Fish & Wildlife		LE148388-0
TestAmerica West Sacramento	USDA	USDA		P330-09-00055
TestAmerica West Sacramento	Utah	NELAC	8	QUAN1
TestAmerica West Sacramento	Virginia	State Program	3	178
TestAmerica West Sacramento	Washington	State Program	10	C581
TestAmerica West Sacramento	West Virginia	West Virginia DEP	3	334
TestAmerica West Sacramento	West Virginia	West Virginia DHHR (DW)	3	9930C
TestAmerica West Sacramento	Wisconsin	State Program	5	998204680
TestAmerica West Sacramento	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Method	Method Description	Protocol	Laboratory
8280A	Dioxins/Furans, HRGC/LRMS (8280A)	SW846	TAL WSC
D 2216-90	Moisture, Percent (D2216-90) - AFCEE	ASTM	TAL WSC

Protocol References:

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: TestAmerica Buffalo
Project/Site: 480-9485

TestAmerica Job ID: G1I090440

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
G1I090440001	COMP-02- -05 (480-9485-6)	Solid	09/07/11 00:00	09/09/11 09:25

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Fischer, Brian	Carrier Tracking No(s):	COC No: 480-1425.1
Client Contact: Shipping/Receiving	Phone	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #: 480-9485-1
Address: 880 Riverside Parkway,	Due Date Requested: 9/19/2011			Preservation Codes:
City: West Sacramento	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel)	PO #:			
Email:	WO #:			Other:
Project Name: Barron & Associates	Project #: 48004738			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8280A/Auto_Prep_Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
COMP -02 - -05 (480-9485-6)	9/7/11	Eastern		Solid			X	1	

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09/26/2011
09/27/2011

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 9/9/11 1250	Company: TAL	Received by:	Date/Time: 9/9/11 0945	Company: TAL-SAC
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: △ Yes △ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT TAL Buffalo PM JS LOG # 72752

LOT# (QUANTIMS ID) G-I-I090440 QUOTE# 35404 LOCATION W24D

DATE RECEIVED 9-9-11 TIME RECEIVED 9:35 Checked (✓)

DELIVERED BY ☒ FEDEX ☐ ON TRAC ☐ OTHER ☑

☐ GOLDENSTATE ☐ UPS ☐ EZ PARCEL

☐ TAL COURIER ☐ TAL SF ☐ CLIENT ☑

SHIPPPING CONTAINER(S) ☒ TAL ☐ CLIENT ☐ N/A ☑

CUSTODY SEAL STATUS ☒ INTACT ☐ BROKEN ☐ N/A ☑

CUSTODY SEAL #(S) 792865

COC #(S) 480-142511 ☑

TEMPERATURE BLANK Observed: n/a Corrected:

SAMPLE TEMPERATURE - (TEMPERATURES ARE IN °C)

Observed: 1 Average 1 Corrected Average 1

LABORATORY THERMOMETER ID:

IR UNIT: #4 ☒ #5 ☐ ☐ OTHER ☑

Initials: LV Date: 9/9/11

pH MEASURED ☐ YES ☐ ANOMALY ☒ N/A ☑

LABELED BY ☑

LABELS CHECKED BY ☑

PEER REVIEW ☒ NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING ☑

WETCHEM ☒ N/A ☑

VOA-ENCORES ☒ N/A ☑

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☒ N/A ☑

☐ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☒ N/A ☑

☒ CLOUSEAU ☒ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☐ N/A

☒ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☑ ☐ PM NOTIFIED

Initials: JS Date: 9-9-11

Notes

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

09/26/2011
09/27/2011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: GII090440

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
____CGJ	/																			
500CGJ																				
250CGJ																				
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
____*CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD-Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid s = sulfuric acid na = sodium hydroxide n = nitric acid zn = zinc acetate

*Number of VOAs with air bubbles present / total number of VOA's



09/26/2011
09/27/2011

[redacted]

Chain of Custody Record

Temperature on Receipt ___

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Barron & Associates, PC	Project Manager: ~~Tony~~ Emily O'Mahony	Date: 9/7/11	Chain of Custody Number: 199580
Address: Main St	Telephone Number (Area Code)/Fax Number: 716-759-7821 x111	Lab Number:	Page 1 of 1
City: Clarence; State: NY; Zip Code: 14031	Site Contact: Emily; Lab Contact: Tony Bogolin		
Project Name and Location (State): Tonawanda Crk, Amherst, NY	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: eomahony@barronandassociatespc.com			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Matrix: Aqueous	Matrix: Sed.	Matrix: Soil	Containers & Preservatives: Cyanide	Containers & Preservatives: Hg/CrO4	Containers & Preservatives: NaOH	Containers & Preservatives: HCl	Containers & Preservatives: NaOH	Containers & Preservatives: Zinc Acetate	Containers & Preservatives: Ice	8270 TCL + TICS	8280 PCDD/PDCFs	Special Instructions/Conditions of Receipt
1 DP-1 0-4'	9/6/11	12:30				X							X	X		8270 4oz
2 C composite 4-8'	9/7/11					X								X		
3 C composite 8-12'	9/7/11					X								X		8280 - cup
4 Soil composite 0-.5'	9/7/11					X								X		2-5 FOX
5 DP-24 3-4'	9/7/11	14:45				X								X		SUB - 2 oz
Composite 2-5 with (2-3) provided extra jars	9/7/11														X	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other LUBD

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Emily O'Mahony	9/7/11	4:50	1. Received By: [signature] TABUFFALO	9/7/11	1650
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments:

4.8°C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Barron & Associates

Job Number: 480-9485-1

Login Number: 9485
List Number: 1
Creator: Kinecki, Kenneth

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	MISSING SOME TIMES
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	False	COMP 2-5 FOR 8280
Sampling Company provided.	True	BARRON
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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Clarence, New York 14031

Tel: (716) 759-7821 www.barronandassociatespc.com Fax: (716) 759-7823

May 24, 2011

Job No: 11-543

Cimato Enterprises, Inc.
9220 Transit Road
East Amherst, New York 14051

ATTN: Mr. Anthony Cimato

RE: Subsurface Exploration and
Geotechnical Engineering Report
Proposed Evergreen Landing Subdivison
100 to 168 Tonawanda Creek Road
Town of Amherst, Erie Co., New York 14228

Gentlemen:

This report presents findings of the subsurface investigation program and geotechnical engineering recommendations for the above referenced project. The geographic orientation of the project site is presented on the U.S. Geologic Survey (USGS) site location map in Figure No. 1. The project site is illustrated in Figure No. 2, entitled "Test Boring Location Plan", which includes: the approximate location of 20 test borings drilled by Buffalo Drilling Company, Inc. (BDC); relative ground surface elevations; and additional site details. Test borings B-1 to B-9 are from a previous Barron & Associates, P.C. - Buffalo Drilling Company, Inc. (B&A-BDC) investigation (Job No. 07-545). This previous report was prepared for Evergreen Golf Course, Inc. and it is B&A-BDCs understanding that Cimato Enterprises, Inc. is entitled to its use. The current report is an update of the previous report and incorporates the previous pertinent data and content.

EXPLORATION METHODS

Sampling Method: An all-terrain vehicle mounted CME 55, CME 550 and a track mounted Diedrich D-50 rotary drill rigs were used to drill borings to depths ranging from 20 to 41 feet below ground surface. The borings were advanced with 2-1/4 inch inside diameter (ID), continuous flight hollow stem augers. Soil samples were recovered by driving a standard split-spoon sampler (2-foot long by 1-3/8 inch inside diameter) 24 inches with a 140-pound hammer falling 30 inches per blow (ASTM D1586). The number of blows from six to 18 inches of penetration is defined as the Standard Penetration Test (SPT) N-value.

RECEIVED
JUN - 1 2011
TOWN OF AMHERST
PLANNING DEPT

Classification: Retrieved soil samples were logged in the field by the driller and a portion of each sample was placed and sealed in a glass jar. The boring logs, included in Appendix A, were based upon the field logs and a second visual classification in the laboratory by a geologist. Classification of soil samples, as noted on the boring logs, is based on the Unified Soil Classification System (USCS) in the ASTM D2487/D2488. Refer to Appendix B entitled, "Geotechnical Reference Standards", for an explanation of the terminology that is used for soil and rock descriptions.

SITE AND SUBSURFACE CONDITIONS

General: The proposed site includes several parcels that encompass some 60.78 +/- acres. The parcels are addressed as 100 to 168 Tonawanda Creek Road in Amherst, New York. Approximately 23 acres of the site is occupied by a golf course. Five acres adjacent to the northwest corner of the golf course is heavily wooded. The majority of the site is relatively level with ground surface elevations varying by less than one foot across the boring locations, however the north east portion of the site slopes downward toward Tonawanda Creek by more than four feet.

Subsurface Soil Conditions: In general, subsurface conditions beneath a variably thick layer of topsoil, consist of variably thick sections of silty sand, and clay/silt soils overlying soft clay and hard cohesive glacial till. At boring locations B-2 and B-3, a two foot thick layer of relatively stiff, moderately plastic, and moist clay fill exists beneath an existing unimproved golf course roadway. Based on Erie County internet mapping, the significant portions of the site are presently at or below the 100 year floodplain elevation.

Beneath topsoil and/or upper cohesive fill, naturally deposited clay and silt occurs at borings B-2, 3, 4, 5, 8, and 10 to 20 and extend to depths of 12 to 16 feet below ground surface. This soil is generally characterized as medium to very stiff, slightly plastic, and moist to wet. At the remaining boring locations, a variably thick layer of silty sand that exists either atop, below, or interrupts the above described clay and silt layer. This silty sand layer, which ranges from four to 14 feet in thickness, is typically in a loose to medium dense state. Moisture contents of samples retrieved from this layer range from moist to saturated conditions.

Relatively soft and plastic clay soils occur beneath the upper clay/silt and silty sand soils. This unit ranges from 13 to 28 feet or more in thickness. Moisture content within the unit typically ranges from moist to wet.

Naturally deposited cohesive glacial till was encountered beneath lacustrine clay at borings B-1, 2, 3, 4, 5, 8, 15, 16, 17 and 19 and extended the remaining depth of these test borings. This moderately

plastic soil consists of silty clay intermixed with lesser amounts of subrounded sand and gravel. The soil has a very stiff consistency and was in a moist to wet state at the time of this investigation.

Bedrock: Auger refusal, which can indicate bedrock contact, was not encountered during subsurface exploration. Based upon regional geology, Camillus Shale bedrock is expected to be in close proximity.

Groundwater: Groundwater was not encountered during subsurface exploration efforts. Note that groundwater readings are taken at completion of drilling efforts and, therefore, an adequate amount of time for the groundwater level to recharge to static conditions is probably not allowed. Fluctuations in the groundwater level may occur due to other factors than those present during field operations.

EARTHQUAKE/SEISMIC CONSIDERATIONS

Site Definition: For the given site conditions, the most applicable site definition is Site Class E, as noted in Table 1615.1.1 of the Building Code of New York State (BCNYS).

Design Acceleration Parameters: The design spectral response acceleration parameters (i.e.: S_{Ds} and S_{D1}) at 0.2 seconds and one second are 0.37 g and 0.12 g (g = 32.2 feet/sec^2), respectively, for this part of Erie County, New York. These values have a two percent probability of being exceeded in 50 years. Based upon the above conditions and an approximate magnitude VI earthquake on the Richter Scale, the potential for liquefaction or settlement of overburden soils is considered negligible.

FOUNDATION DESIGN AND CONSTRUCTION RECOMMENDATIONS

General: This section will present and discuss general recommendations for conventional foundation design and construction, placement of controlled fills, and subgrade and base layer requirements for concrete floor slabs. Specific site development plans were not provided for the preparation of this report. It is believed that significant portions of the site are at or below the 100 year flood plain elevation and that some fill placement will be required for development. Design recommendations presented herein are based upon a maximum fill thickness of two feet on any given development site. If more than a net total of two feet of fill above existing site grade is required for development, the geotechnical engineer should be engaged to determine what, if any, additional ground improvement measures may be necessary.

Site Preparation and Earthwork: General site preparation will include, as applicable, the demolition and complete removal of any encountered foundations and floor slabs, unsuitable surficial material (i.e., asphalt pavement, concrete, brick, construction/demolition fill, organics, topsoil, or other deleterious matter) to a depth where firm, granular or cohesive fills or naturally occurring soils are encountered.

Proposed development may include the demolition of four relatively small existing structures and appurtenances. It is unknown if remnants of other former structures may be buried at the proposed site. All known and otherwise encountered structural remnants, including foundations, basements, septic tanks, or other substructures must be properly removed and remaining cavities be backfilled with approved structural fill material. Structural fill should be placed upon stable native subgrade soil, installed in loose lifts not to exceed 12 inches in thickness, and compacted to at least 95 percent of the maximum dry density as determined by ASTM D-1557 prior to the placement of additional fill material.

Upon completion of demolition and site stripping, the proposed development area should be proofrolled with a fully loaded ten-wheel dump truck. Any encountered soft and disturbed zones should be undercut and stabilized with granular fill placed in compacted lifts prior to the placement of additional fill materials above. Refer to Appendix E entitled "General Earthwork Specification" for definition of fill types and gradation, recommended minimum compaction requirements for various site developments, and placement and compaction methods.

Foundation Type: Conventional use light commercial or residential structures are recommended to be founded on shallow footings that bear upon stable natural clay soils or approved engineered fill that extends to native soils. A 42-inch minimum footing depth (or as required by local code) is required to provide adequate protection from frost for exterior footings. Interior footings, if applicable, should bear at two and one half feet or lower below finish floor on conditions similar to exterior footings.

Wall footings should have a minimum two-foot width and column footings should have a minimum three-foot width. Based on the above described conditions, and a maximum fill thickness of two feet above existing ground surface elevation to raise development sites to design grade, the recommended maximum net allowable foundation bearing pressure is 1,000 pounds per square foot (psf). All footings for a specific building are recommended to be designed near the same contact pressure. The recommended maximum net allowable foundation bearing pressure is based on generally accepted design methods for cohesive soil conditions. Based on the provisions of the above recommendations, estimated design requirements, and utilization of proper construction procedures, total and differential settlements are estimated to be less than one inch and 3/4's inch, respectively. Refer to the engineering notes in Appendix D for additional foundation design and construction details.

Backfill Materials: Imported granular fill material may be used for foundation backfill material in accordance with the provisions stipulated in the BCNYS. On-site excavated soils may also be considered for placement as wall backfill and for raising site grades, if the following conditions are met:

a) Upper sand is non-expansive. Upper clay soils are estimated to have an Expansion Index ranging between 10 and 20 with a low to medium swell potential. Clay soils should be suitable

for us as balanced foundation backfill material. Excavated sand should be segregated from upper clay for use as basement wall backfill.

b) Based on experience with similar soils, excavated materials are expected to be near or slightly wet of optimum moisture content needed to achieve satisfactory compaction. If excavated soils become wet (i.e. during stockpiling), some drying efforts may be necessary for soils to be reused as compacted structural fill.

c) If the excavated materials are substantially contaminated with organic or other deleterious matter, cannot be properly moisture conditioned, are in a wet to saturated state, these materials are only acceptable for use in green or non-structural areas.

Additional Foundation Considerations: In addition to the above, the following recommendations will provide additional assurances with regard to proper foundation construction.

a) Backfill of foundations must be completed prior to placement of substantial superstructure loads, except for basement walls or substructure areas that may additionally require superstructure loads and possibly internal bracing.

b) Step footings, if utilized, should have a rise to run ratio of 1:2, with a two-foot maximum rise and a four-foot minimum run between steps or as recommended by the design structural engineer.

c) The recommended at rest (rigid wall), active, and passive earth pressure coefficients for select granular sandy gravel fill against an earth retaining structure/wall, if applicable, are 0.76, 0.24, and 2.8, respectively. The respective equivalent lateral fluid pressures are recommended to be 90, 30 and 330 psf per foot depth, which are based upon a moist, compacted unit backfill weight of 120 pcf. The at-rest value would account for the average expected compaction induced stresses and/or the potential influences of hydrostatic pressure. If a moist, compacted granular sandy silt or silty sand fill is used, the recommended active earth pressure coefficient is 0.33 and equivalent lateral fluid pressure is 45 psf per foot depth, which is based upon a unit backfill weight of 135 pounds per cubic foot (pcf). The lateral fluid pressures can be directly proportioned for other unit weights.

d) Long term dewatering of the foundation backfill, as is customarily applied in practice for substructure conditions (i.e., basements) would consist of a minimum four-inch diameter drain tile or perforated/slotted pipe with the invert placed near the footing elevation (exterior backfill side and interior basement side). These pipes would be protected by an open/uniformly graded granular backfill filter with a minimum six-inch thickness. The collected groundwater and infiltrated surface water would ultimately be conveyed by gravity drainage to a sump pit and pump or other appropriate water conveyance system.

Floor Slab: Above stabilized in-situ subgrade conditions, a minimum eight-inch select granular fill (i.e., number two crusher run stone or equal) layer is recommended as the base course for concrete floor slabs. At the existing site grades, the recommended subgrade modulus for a concrete slab bearing on a compacted base layer and prepared soil/fill subgrade (i.e., minimum 92 percent compaction) is recommended not to exceed 150 pounds per cubic inch (pci), with a Poisson Ratio of 0.4. Isolation of the floor slab from the footings-piers-columns and is recommended. Slab thickness, reinforcement schedule, and use of a polyethylene vapor barrier are to be determined by the design engineer or architect.

Parking and Roadway Facilities: The characteristics of the silt and clay soils/fills and the known frost penetration in Western New York requires that specific attention is provided to the design and construction of paved roadway and parking areas.

It is recommended that the subgrade surface is adequately graded and/or underdrains are installed to prevent water accumulation. Above the approved subgrade surface, a minimum eight-inch thick select granular layer is recommended as the base course for lightly traveled roadway and parking areas (standard duty section). Geotextile filter and strength fabric and a minimum 12-inch thick base course are recommended for all truck routes and heavily traveled roadways (heavy duty section).

The thickness of top and binder course layers should be determined in accordance with AASHTO methods. In summary, the minimum recommended asphalt thickness for heavy duty section and standard duty section is three and one-half inches and three inches, respectively. The top and binder course layers are recommended to be designed and constructed in accordance with New York State Department of Transportation Standard Specification.

Limitations, Field Inspections and Monitoring: This report is based on the preliminary information that is provided by project representatives and the subsurface conditions that were encountered at the test boring locations. Due to the nature of the investigation method, test pit excavation will provide a greater level of delineation of the subsurface soil/fill/rock conditions than can be defined by the test boring data alone. As detailed in Appendix F "Limitations", modification regarding proposed building/structure locations and other site developments can result in changes to provided recommendations. It is recommended that the geotechnical engineer be provided the opportunity to generally review the final detailed design and contract specifications. Required earthwork and foundation construction should be done under the supervision of experienced construction personnel and in a manner consistent with proven methods. All site work should be carefully monitored and tested by experienced geotechnical personnel to assure compliance with earthwork and foundation construction specifications.

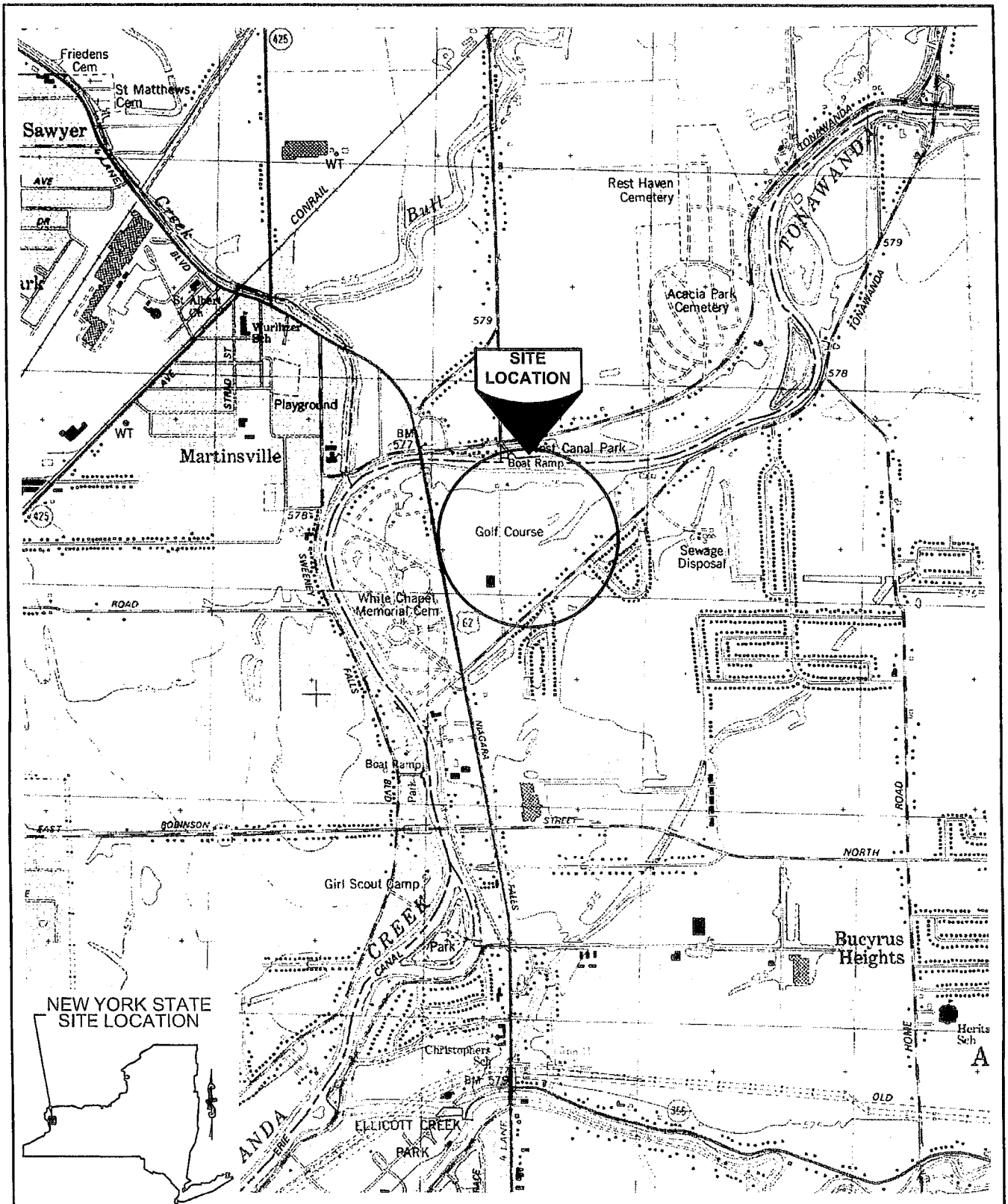
Thank you for the opportunity to assist on this project. Please call with any questions or comments.

Very truly yours,
BARRON & ASSOCIATES, INC.
and
BUFFALO DRILLING COMPANY, INC.

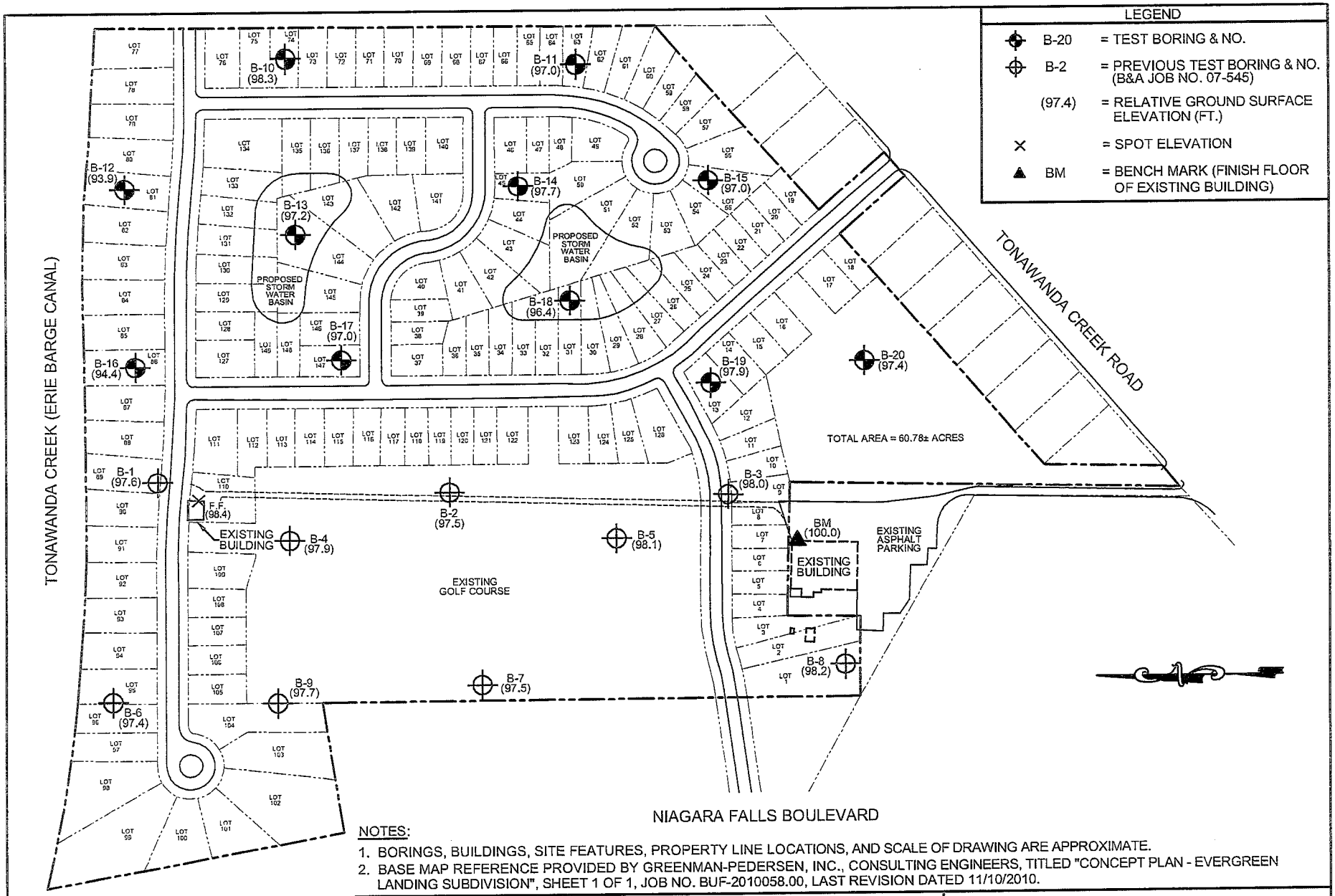
James S. Barron, P.E.
President



5.25.11



BARRON & ASSOCIATES, P.C. & BUFFALO DRILLING COMPANY 10440 MAIN ST. CLARENCE, NY 14031 (716)759-7821 FAX (716)759-7823 INFO@BUFFALODRILLING.COM INFO@BARRONANDASSOCIATESPC.COM	CLIENT: CIMATO ENTERPRISES, INC. 9220 TRANSIT ROAD EAST AMHERST, NEW YORK 14051	USGS SITE LOCATION PLAN TONAWANDA EAST, N.Y. QUAD 1980
DRAWN: DAN KASPROWICZ	PROJECT: PROPOSED EVERGREEN LANDING SUBDIVISION 100 TO 168 TONAWANDA CREEK ROAD TOWN OF AMHERST, ERIE, CO. NEW YORK 14228	JOB NO.: 11-543 / SCALE: 1" = 2083' ± DATE: 5/17/2011 / FIGURE NO. 1



NOTES:

1. BORINGS, BUILDINGS, SITE FEATURES, PROPERTY LINE LOCATIONS, AND SCALE OF DRAWING ARE APPROXIMATE.
2. BASE MAP REFERENCE PROVIDED BY GREENMAN-PEDERSEN, INC., CONSULTING ENGINEERS, TITLED "CONCEPT PLAN - EVERGREEN LANDING SUBDIVISION", SHEET 1 OF 1, JOB NO. BUF-2010058.00, LAST REVISION DATED 11/10/2010.

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DRAWN: DAN KASPROWICZ

CLIENT: CIMATO ENTERPRISES, INC.
9220 TRANSIT ROAD
EAST AMHERST, NEW YORK 14051

PROJECT: PROPOSED EVERGREEN LANDING SUBDIVISION
100 TO 168 TONAWANDA CREEK ROAD
TOWN OF AMHERST, ERIE, CO. NEW YORK 14228

TEST BORING LOCATION PLAN

0 150 300 600

JOB NO.: 11-543	SCALE: 1" = 300' ±
DATE: 5/17/2011	FIGURE NO. 2

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info@barronandassociatespc.com

B&A JOB NO: 11-543
CLIENT: Cimato Enterprises, Inc.
PROJECT: Proposed Residential Subdivision
100 to 168 Tonawanda Creek Road
Amherst, Erie Co., New York 14228

TABLE NO. 1
CURRENT LABORATORY PHYSICAL SOIL TEST RESULTS

Boring No.	Sample No.	Depth	Moisture Content ASTM D2216	Organic Matter Content ASTM D2974	Unconfined Compressive Strength ASTM D2166	Wet Density ASTM D2166	Grain Size Analysis ASTM D422				Atterberg Limits ASTM D4318			USCS Soil Classification ASTM D2487 / ASTM D2488 *
							Gravel	Sand	Silt	Clay	LL	PL	PI	
		(ft.)	(%)	(%)	(psf)	(pcf)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(-)
B-10	S-1	0-2	20.2	-	-	-	-	-	-	-	-	-	-	CL
	S-2	2-4	23.5	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-3	4-6	24.3	-	-	-	0.0	11.3	88.7		-	-	-	CL-ML
	S-4	6-8	26.1	-	-	-					-	-	-	CL-ML
	S-5	8-10	26.3	-	-	-					-	-	-	CL-ML
	S-6	10-12	24.8	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-7	14-16	45.0	-	-	-	-	-	-	-	-	-	-	CH
	S-8	18-20	47.2	-	-	-	-	-	-	-	-	-	-	CH
B-15	S-1	0-2	22.1	-	-	-	-	-	-	-	-	-	-	CL
	S-2	2-4	21.7	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-3	4-6	24.3	-	-	-	0.0	9.9	90.1		-	-	-	CL-ML
	S-4	6-8	25.4	-	-	-					-	-	-	CL-ML
	S-5	8-10	26.6	-	-	-					-	-	-	CL-ML
	S-6	10-12	24.5	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-7	14-16	42.3	-	-	-	-	-	-	-	-	-	-	CH
	S-8	19-21	43.3	-	-	-	-	-	-	-	-	-	-	CH
	S-9	24-25.9	8.7	-	-	-	-	-	-	-	-	-	-	CL-Till
B-16	S-1	0-2	24.9	-	-	-	-	-	-	-	-	-	-	CL
	S-2	2-4	19.1	-	-	-	-	-	-	-	-	-	-	CL
	S-3	4-6	22.7	-	-	-	-	-	-	-	-	-	-	CL
	S-4	6-8	20.7	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-5	8-10	24.6	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-6	10-12	25.7	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-7	14-16	44.4	-	-	-	-	-	-	-	44	21	23	CL
	S-8	19-21	45.0	-	-	-	-	-	-	-	-	-	-	CH
	S-9	24-26	41.8	-	-	-	-	-	-	-	-	-	-	CH
	S-10	29-31	13.6	-	-	-	-	-	-	-	-	-	-	CH
	S-11	34-36	11.2	-	-	-	-	-	-	-	-	-	-	CH
	S-12	38-39.8	19.3	-	-	-	-	-	-	-	-	-	-	ML-Till

* Soil classification based on visual identification and soil classification of adjacent samples (as applicable).

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B&A JOB NO: 11-543
CLIENT: Cimato Enterprises, Inc.
PROJECT: Proposed Residential Subdivision
100 to 168 Tonawanda Creek Road
Amherst, Erie Co., New York 14228

TABLE NO. 2
PREVIOUS LABORATORY PHYSICAL SOIL TEST RESULTS (B&A JOB NO.: 07-545)

Boring No.	Sample No.	Depth	Moisture Content ASTM D2216	Organic Matter Content ASTM D2974	Unconfined Compressive Strength ASTM D2166	Wet Density ASTM D2166	Grain Size Analysis ASTM D422				Atterberg Limits ASTM D4318			USCS Soil Classification ASTM D2487 / ASTM D2488 *
							Gravel	Sand	Silt	Clay	LL	PL	PI	
		(ft.)	(%)	(%)	(psf)	(pcf)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(-)
B-4	S-1	0-2	13.2	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-2	2-4	21.8	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-3	4-6	23.5	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-4	6-8	25.7	-	-	-	0.0	3.3	93.1	3.6	24	17	7	CL-ML
	S-5	8-10	24.6	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-6	10-12	25.1	-	-	-	-	-	-	-	-	-	-	CL-ML
	S-7	14-16	44.0	-	-	-	-	-	-	-	-	-	-	CH
	S-8	19-21	45.0	-	-	-	-	-	-	-	-	-	-	CH
	S-9	24-26	48.4	-	-	-	-	-	-	-	55	23	32	CH
	S-10	29-31	41.0	-	-	-	-	-	-	-	-	-	-	CH
	S-11	34-36	11.0	-	-	-	-	-	-	-	-	-	-	CH
	S-12	36-38	7.4	-	-	-	-	-	-	-	-	-	-	CL-Till

* Soil classification based on visual identification and soil classification of adjacent samples (as applicable).

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APPENDIX A

CURRENT AND PREVIOUS TEST BORING LOGS

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CLARENCE, NEW YORK 14031
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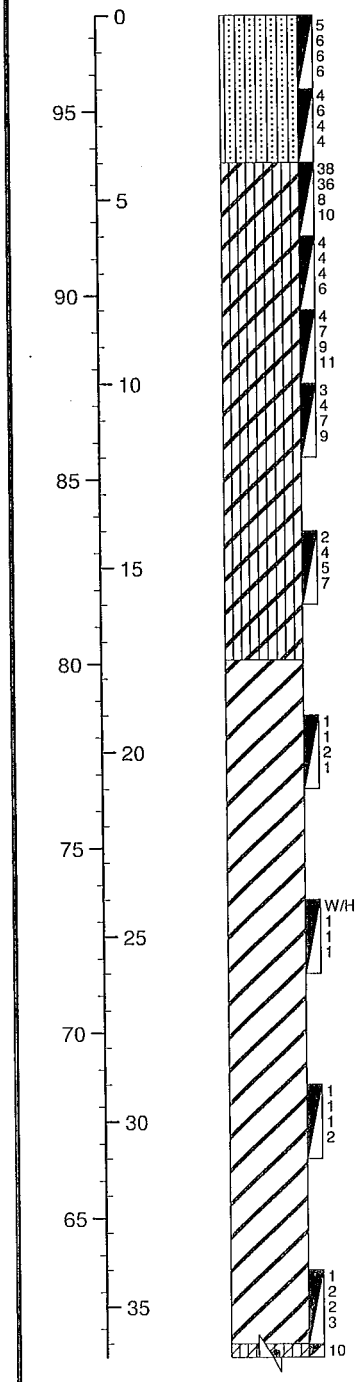
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-1

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	CME 55 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/12/07	**SURFACE ELEVATION (ft.):**	97.6
DATE COMPLETED:	4/12/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Brown, m. dense f/m SAND, little Silt, tr. Gravel, moist (SM)
S-1 : 0.0'- 2.0'	12	30	Same as S-1
S-2 : 2.0'- 4.0'	10	40	Brown, hard CLAY and SILT, some f. Sand, sl. plastic, moist (CL-ML)
S-3 : 4.0'- 6.0'	44	30	...grade: stiff
S-4 : 6.0'- 8.0'	8	80	...grade: v. stiff
S-5 : 8.0'- 10.0'	16	0	...grade: Gray/brown, stiff
S-6 : 10.0'- 12.0'	11	80	Same as S-6
S-7 : 14.0'- 16.0'	9	30	Brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-8 : 19.0'- 21.0'	3	100	Same as S-8
S-9 : 24.0'- 26.0'	2	00	Same as S-8
S-10 : 29.0'- 31.0'	2	100	...grade: tr. Gravel
S-11 : 34.0'- 36.0'	4	100	

Logged by: B. Smith

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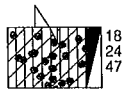
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-1

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60 / 40 / 55 / 45 / 50 / 50 / 45 / 55 / 40 / 60 / 35 / 65 / 30 / 70 / 25 / 75 / 20 / 80		S-12 : 36.0'- 38.0'	42	100	Brown, hard CLAY, some Silt, little Gravel, tr. f/c Sand, mod. plastic, moist (CL-Till)
					Depth to Bottom of Hole: 38.0 feet

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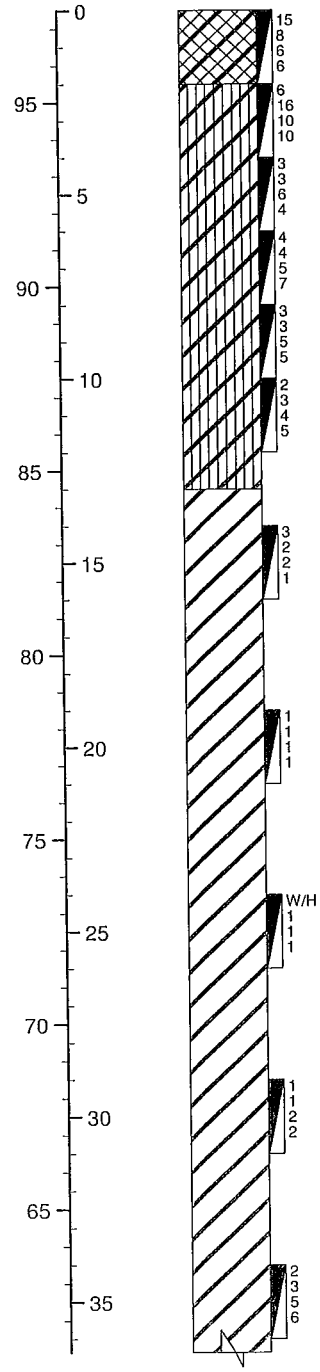
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-2

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	CME 55 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/13/07	**SURFACE ELEVATION (ft.):**	97.5
DATE COMPLETED:	4/13/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
S-1 : 0.0'- 2.0'	14	40	Dk. brown, stiff Clay, some Silt, little f. Sand, tr. Gravel, tr. Asphalt, mod. plastic, moist (CL-Fill)
S-2 : 2.0'- 4.0'	26	35	Brown, v. stiff CLAY and SILT, some f. Sand, sl. plastic, moist (CL-ML)
S-3 : 4.0'- 6.0'	9	80	...grade: stiff
S-4 : 6.0'- 8.0'	9	90	Same as S-3
S-5 : 8.0'- 10.0'	8	75	...grade: Gray/brown, m. stiff
S-6 : 10.0'- 12.0'	7	5	Same as S-5
S-7 : 14.0'- 16.0'	4	90	Brown, soft CLAY, some Silt, tr. f. Sand, plastic, wet (CH)
S-8 : 19.0'- 21.0'	2	100	Same as S-7
S-9 : 24.0'- 26.0'	2	100	Same as S-7
S-10 : 29.0'- 31.0'	3	100	Same as S-7
S-11 : 34.0'- 36.0'	8	100	...grade: m. stiff

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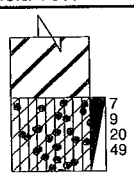
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-2

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60 / 40	 7 9 20 49				
		S-12 : 38.0'- 40.0'	29	100	Brown, v. stiff CLAY, some Silt, little Gravel, tr. f/c Sand, mod. plastic, wet (CL-Till)
					Depth to Bottom of Hole: 40.0 feet

55 / 45
50 / 50
45 / 55
40 / 60
35 / 65
30 / 70
25 / 75
20 / 80

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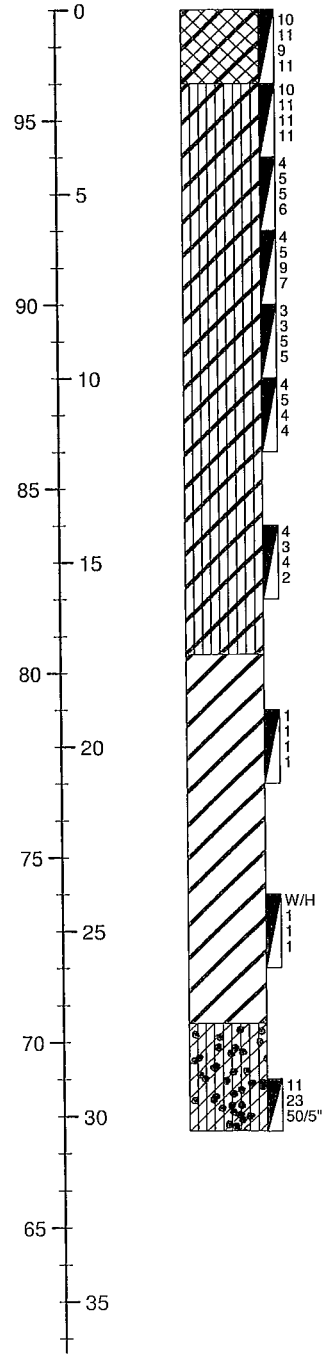
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-3

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	CME 55 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/16/07	**SURFACE ELEVATION (ft.):**	98.0
DATE COMPLETED:	4/16/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
		S-1 : 0.0'- 2.0'	20	40	Dk. brown, v. stiff Clay, some Silt, little f/m Sand, tr. Gravel, tr. Organic matter, mod. plastic, moist (CL-Fill)
		S-2 : 2.0'- 4.0'	22	30	Brown, v. stiff CLAY and SILT, some f. Sand, sl. plastic, wet (CL-ML)
		S-3 : 4.0'- 6.0'	10	50	...grade: stiff
		S-4 : 6.0'- 8.0'	14	70	Same as S-3
		S-5 : 8.0'- 10.0'	8	75	...grade: Gray/brown
		S-6 : 10.0'- 12.0'	9	70	Same as S-5
		S-7 : 14.0'- 16.0'	7	60	...grade: m. stiff
		S-8 : 19.0'- 21.0'	2	100	Brown, soft CLAY, some Silt, tr. f. Sand, mod. plastic, wet (CL)
		S-9 : 24.0'- 26.0'	2	100	Same as S-8
		S-10 : 29.0'- 30.4'	73+	75	Brown, hard CLAY, some Silt, little Gravel, tr. f/c Sand, mod. plastic, moist (CL-Till)
					Depth to Bottom of Hole: 30.4 feet

Logged by: B. Smith

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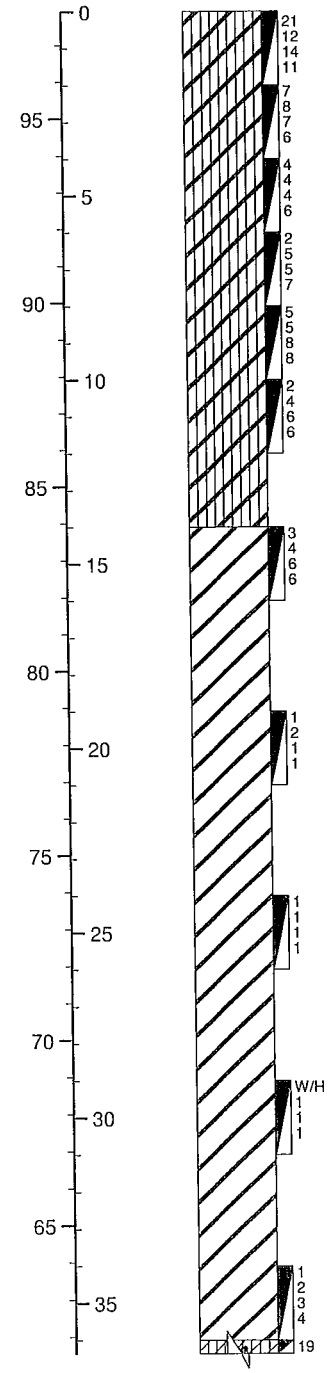
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-4

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	CME 55 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/13/07	**SURFACE ELEVATION (ft.):**	97.9
DATE COMPLETED:	4/13/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
		S-1 : 0.0'- 2.0'	26	60	Brown, v. stiff CLAY and SILT, little f. Sand, tr. Gravel, tr. Roots, sl. plastic, moist (CL-ML)
		S-2 : 2.0'- 4.0'	15	40	...grade: stiff, some f. Sand
		S-3 : 4.0'- 6.0'	8	70	Same as S-2
		S-4 : 6.0'- 8.0'	10	80	Same as S-2
		S-5 : 8.0'- 10.0'	13	70	...grade: Gray/brown
		S-6 : 10.0'- 12.0'	10	60	Same as S-5
		S-7 : 14.0'- 16.0'	10	75	Brown, stiff CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
		S-8 : 19.0'- 21.0'	3	100	...grade: soft
		S-9 : 24.0'- 26.0'	2	100	Same as S-8
		S-10 : 29.0'- 31.0'	2	95	Same as S-8
		S-11 : 34.0'- 36.0'	5	60	...grade: m. stiff, moist

Logged by: B. Smith

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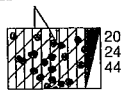
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-4

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60 / 40 / 55 / 45 / 50 / 50 / 45 / 55 / 40 / 60 / 35 / 65 / 30 / 70 / 25 / 75 / 20 / 80		S-12 : 36.0'- 38.0'	44	70	Brown, hard CLAY, some Silt, little Gravel, tr. f/c Sand, mod. plastic, moist (CL-Till)
					Depth to Bottom of Hole: 38.0 feet

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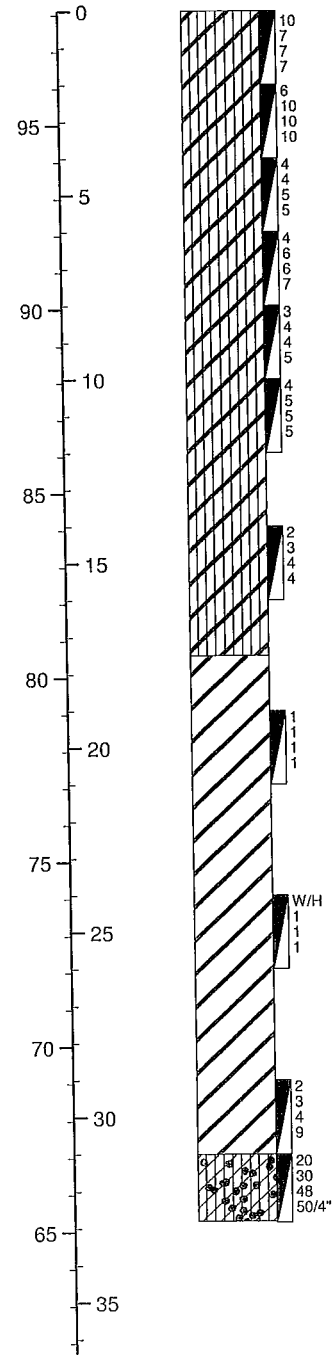
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-5

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	CME 55 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/16/07	**SURFACE ELEVATION (ft.):**	98.1
DATE COMPLETED:	4/16/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
		S-1 : 0.0'- 2.0'	14	50	Brown, stiff CLAY and SILT, little f. Sand, sl. plastic, moist (CL-ML)
		S-2 : 2.0'- 4.0'	20	40	...grade: v. stiff, some f. Sand
		S-3 : 4.0'- 6.0'	9	50	...grade: stiff
		S-4 : 6.0'- 8.0'	12	60	Same as S-3
		S-5 : 8.0'- 10.0'	8	50	...grade: Gray/brown
		S-6 : 10.0'- 12.0'	10	55	Same as S-5
		S-7 : 14.0'- 16.0'	7	90	...grade: m. stiff
		S-8 : 19.0'- 21.0'	2	100	Brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
		S-9 : 24.0'- 26.0'	2	100	Same as S-8
		S-10 : 29.0'- 31.0'	7	60	...grade: m. stiff, tr. Gravel
		S-11 : 31.0'- 32.8'	78	50	Brown, hard CLAY, some Silt, little Gravel, tr. f/c Sand, mod. plastic, moist (CL-Till)
					Depth to Bottom of Hole: 32.8 feet

Logged by: B. Smith

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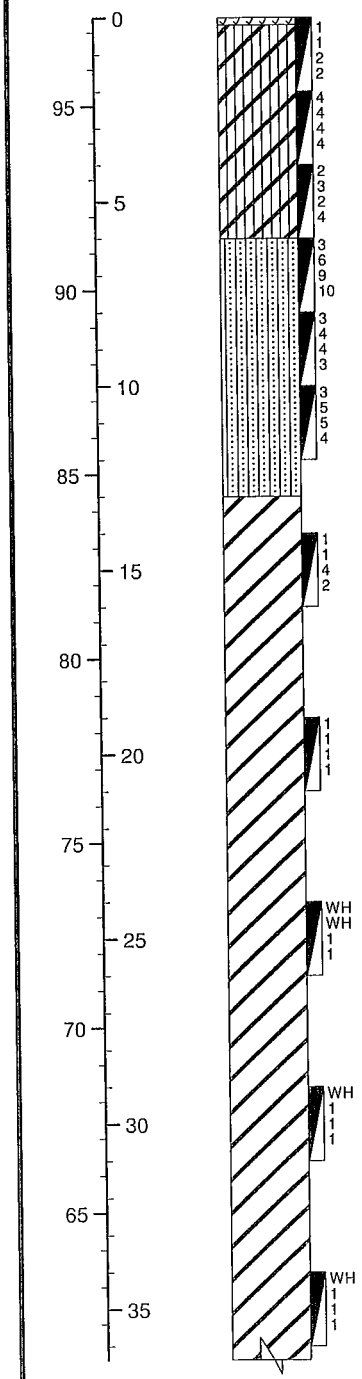
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-6

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/24/07	**SURFACE ELEVATION (ft.):**	97.4
DATE COMPLETED:	4/24/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (2")
S-1 : 0.0'- 2.0'	3	50	Brown, soft CLAY and SILT, little f. Sand, tr. Roots, sl. plastic, moist (CL-ML)
S-2 : 2.0'- 4.0'	8	60	...grade: m. stiff
S-3 : 4.0'- 6.0'	5	75	...grade: and f. Sand
S-4 : 6.0'- 8.0'	15	60	Brown, m. dense f. SAND, some Silt, moist (SM)
S-5 : 8.0'- 10.0'	8	60	...grade: Gray/brown, loose, wet
S-6 : 10.0'- 12.0'	10	75	Same as S-5
S-7 : 14.0'- 16.0'	5	65	Gray/brown, m. stiff CLAY, some Silt, little f. Sand, plastic, moist (CH)
S-8 : 19.0'- 21.0'	2	80	...grade: Red/brown, soft, little Silt, wet
S-9 : 24.0'- 26.0'	1	90	...grade: soft
S-10 : 29.0'- 31.0'	2	100	Same as S-9
S-11 : 34.0'- 36.0'	2	100	Same as S-9

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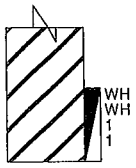
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-6

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60 / 40					
		S-12 : 38.0'- 40.0'	1	100	Same as S-9
55 / 45					
50 / 50					Depth to Bottom of Hole: 40.0 feet
45 / 55					
40 / 60					
35 / 65					
30 / 70					
25 / 75					
20 / 80					

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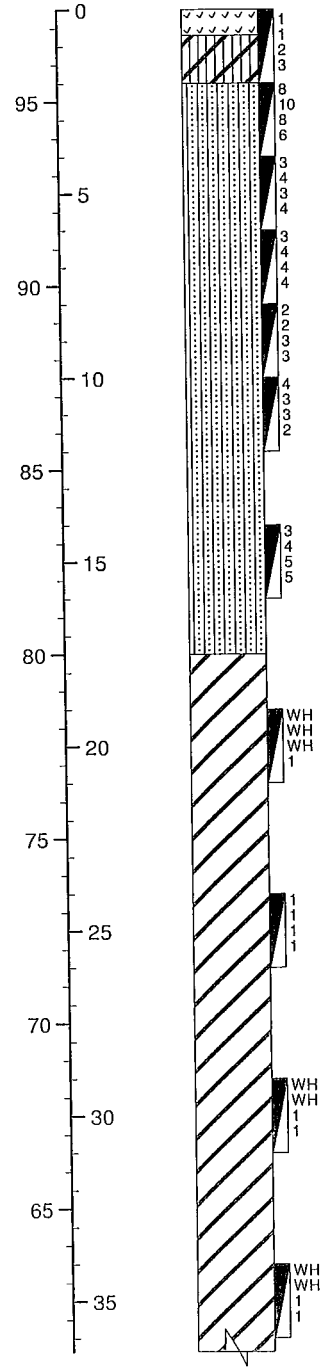
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-7

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/23/07	**SURFACE ELEVATION (ft.):**	97.5
DATE COMPLETED:	4/23/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (8")
S-1 : 0.0'- 2.0'	3	50	Brown, soft CLAY and SILT, little f. Sand, tr. Roots, sl. plastic, moist (CL-ML)
S-2 : 2.0'- 4.0'	18	30	Brown, m. dense f. SAND, some Silt, moist (SM)
S-3 : 4.0'- 6.0'	7	80	...grade: loose, wet
S-4 : 6.0'- 8.0'	8	70	Same as S-3
S-5 : 8.0'- 10.0'	5	60	...grade: Gray/brown
S-6 : 10.0'- 12.0'	6	0	Same as S-5
S-7 : 14.0'- 16.0'	9	40	...grade: little Silt, saturated
S-8 : 19.0'- 21.0'	WH	100	Red/brown, v. soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-9 : 24.0'- 26.0'	2	100	Same as S-8
S-10 : 29.0'- 31.0'	1	100	Same as S-8
S-11 : 34.0'- 36.0'	1	100	Same as S-8

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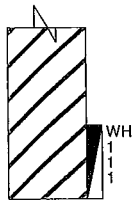
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-7

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60 / 40		S-12 : 39.0'- 41.0'	2	100	Same as S-8
55 / 45					Depth to Bottom of Hole: 41.0 feet
50 / 50					
45 / 55					
40 / 60					
35 / 65					
30 / 70					
25 / 75					
20 / 80					

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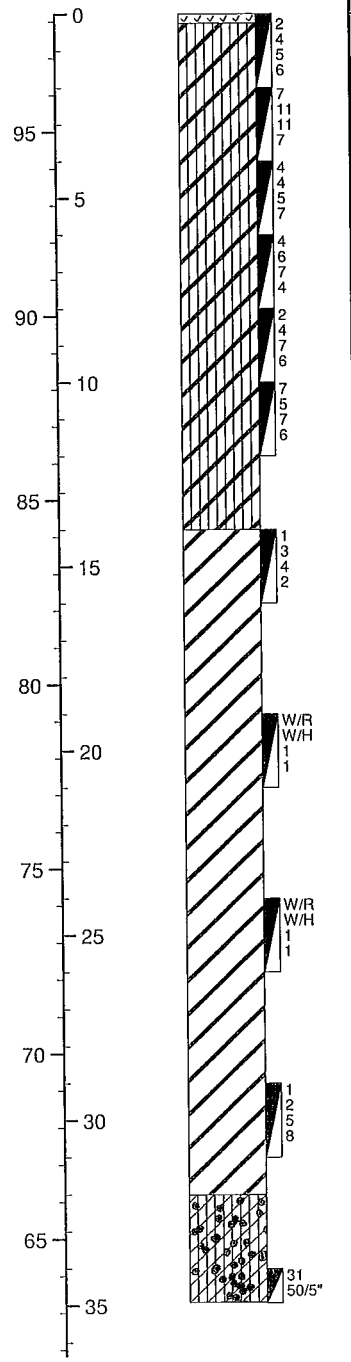
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-8

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	CME 55 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/12/07	**SURFACE ELEVATION (ft.):**	98.2
DATE COMPLETED:	4/12/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
					Topsoil (3")
		S-1 : 0.0'- 2.0'	9	50	Brown, stiff CLAY and SILT, little f. Sand, tr. Gravel, tr. Roots, sl. plastic, moist (CL-ML)
		S-2 : 2.0'- 4.0'	22	40	...grade: v. stiff, some f. Sand
		S-3 : 4.0'- 6.0'	9	60	...grade: stiff
		S-4 : 6.0'- 8.0'	13	40	Same as S-3
		S-5 : 8.0'- 10.0'	11	90	...grade: Gray/brown
		S-6 : 10.0'- 12.0'	12	40	Same as S-5
		S-7 : 14.0'- 16.0'	7	30	Brown, m. stiff CLAY, little Silt, tr. f. Sand, plastic, saturated (CH)
		S-8 : 19.0'- 21.0'	1	90	...grade: v. soft, wet
		S-9 : 24.0'- 26.0'	1	100	Same as S-8
		S-10 : 29.0'- 31.0'	7	40	...grade: m. stiff, tr. Gravel
		S-11 : 34.0'- 34.9'	50+	10	Brown, hard CLAY, some Silt, little Gravel, tr. f/c Sand, mod. plastic, moist (CL-Till)

Logged by: B. Smith

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TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-8

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60 – 40 55 – 45 50 – 50 45 – 55 40 – 60 35 – 65 30 – 70 25 – 75 20 – 80					Depth to Bottom of Hole: 34.9 feet

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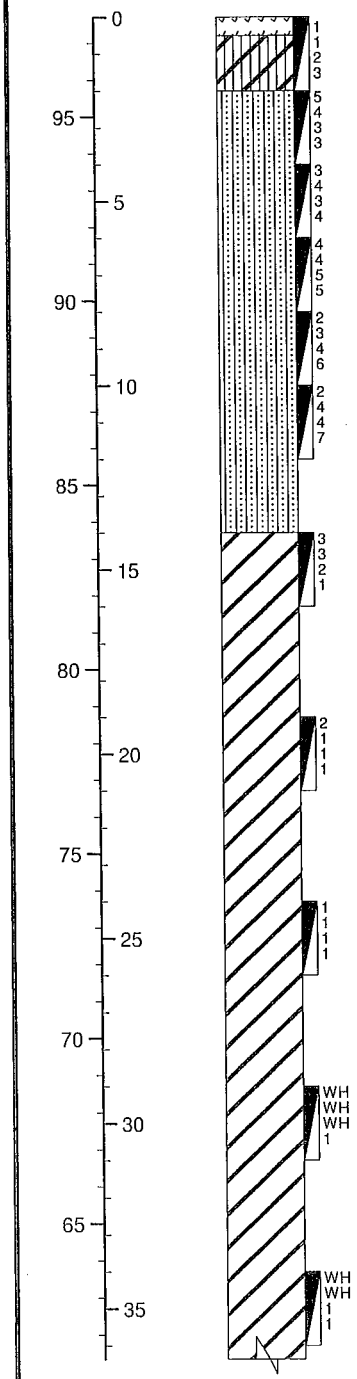
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-9

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	4/23/07	**SURFACE ELEVATION (ft.):**	97.7
DATE COMPLETED:	4/23/07	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
					Topsoil (6")
		S-1 : 0.0'- 2.0'	3	65	Brown, soft CLAY and SILT, little f. Sand, tr. Roots, sl. plastic, moist (CL-ML)
		S-2 : 2.0'- 4.0'	7	60	Brown, loose f. SAND, some Silt, moist (SM)
		S-3 : 4.0'- 6.0'	7	50	Same as S-2
		S-4 : 6.0'- 8.0'	9	70	Same as S-2
		S-5 : 8.0'- 10.0'	7	75	...grade: Gray/brown, wet
		S-6 : 10.0'- 12.0'	8	70	Same as S-5
		S-7 : 14.0'- 16.0'	5	30	Red/brown, m. stiff CLAY, little Silt, tr. f. Sand, plastic, saturated (CH)
		S-8 : 19.0'- 21.0'	2	75	...grade: v. soft CLAY, wet
		S-9 : 24.0'- 26.0'	2	100	Same as S-8
		S-10 : 29.0'- 31.0'	WH	00	Same as S-8
		S-11 : 34.0'- 36.0'	1	100	Same as S-8

Logged by: B. Smith

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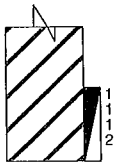
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-9

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60 / 40		S-12 : 38.0'- 40.0'	2	100	Same as S-8
					Depth to Bottom of Hole: 40.0 feet

55 / 45
50 / 50
45 / 55
40 / 60
35 / 65
30 / 70
25 / 75
20 / 80

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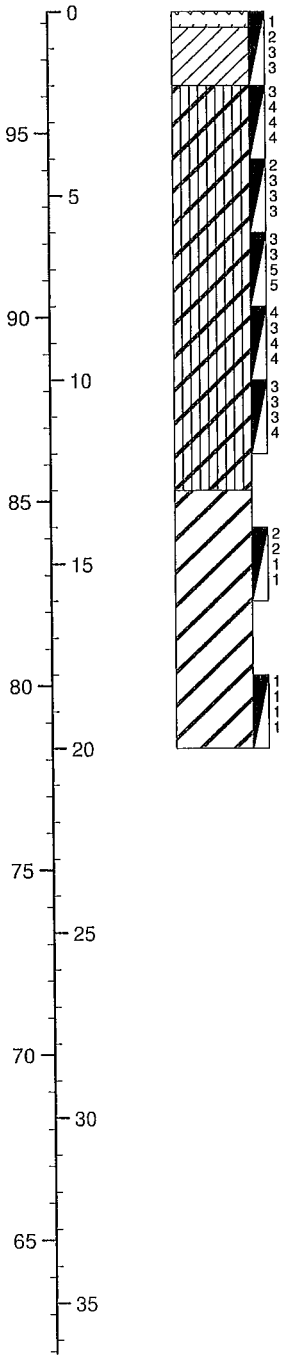
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-10

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	CME 550 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/10/11	**SURFACE ELEVATION (ft.):**	98.3
DATE COMPLETED:	5/10/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (5")
S-1 : 0.0'- 2.0'	5	50	Dk. brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	8	50	Grayish brown, m. stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-3 : 4.0'- 6.0'	6	70	Same as S-2
S-4 : 6.0'- 8.0'	8	80	Same as S-2
S-5 : 8.0'- 10.0'	7	80	...grade: Gray
S-6 : 10.0'- 12.0'	6	100	Same as S-5
S-7 : 14.0'- 16.0'	3	80	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-8 : 18.0'- 20.0'	2	100	Same as S-7
			Depth to Bottom of Hole: 20.0 feet

Logged by: B. Smith

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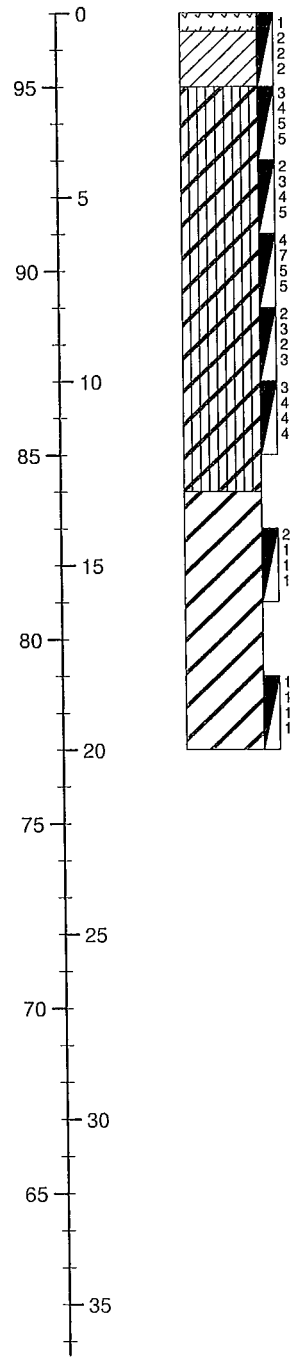
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-11

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	CME 550 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/10/11	**SURFACE ELEVATION (ft.):**	97.0
DATE COMPLETED:	5/10/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (6")
S-1 : 0.0'- 2.0'	4	35	Dk. brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	9	50	Grayish brown, stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-3 : 4.0'- 6.0'	7	75	...grade: m. stiff
S-4 : 6.0'- 8.0'	12	70	...grade: stiff
S-5 : 8.0'- 10.0'	5	50	...grade: Gray, m. stiff, wet
S-6 : 10.0'- 12.0'	8	100	Same as S-5
S-7 : 14.0'- 16.0'	2	100	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-8 : 18.0'- 20.0'	2	100	Same as S-7
			Depth to Bottom of Hole: 20.0 feet

Logged by: B. Smith

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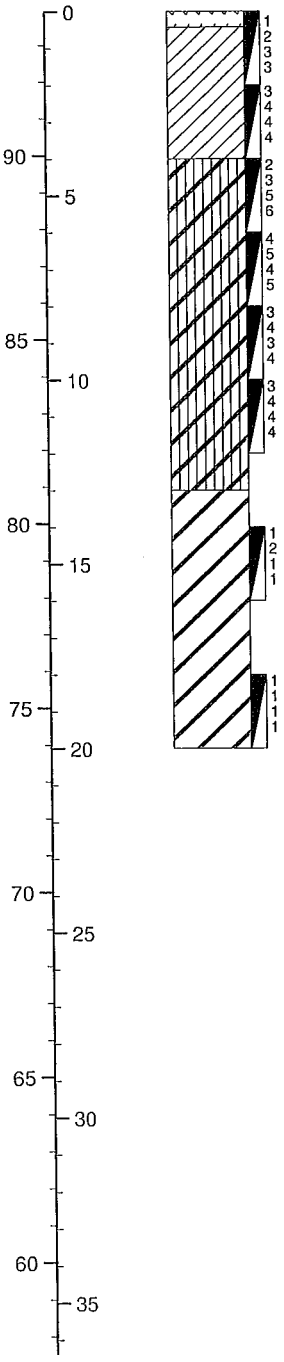
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-12

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	CME 550 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	93.9
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (5")
S-1 : 0.0'- 2.0'	5	50	Brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	8	65	Same as S-1
S-3 : 4.0'- 6.0'	8	75	Grayish brown, stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-4 : 6.0'- 8.0'	9	75	...grade: Gray
S-5 : 8.0'- 10.0'	7	60	...grade: m. stiff
S-6 : 10.0'- 12.0'	8	100	Same as S-5
S-7 : 14.0'- 16.0'	3	100	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-8 : 18.0'- 20.0'	2	100	Same as S-7
			Depth to Bottom of Hole: 20.0 feet

Logged by: B. Smith

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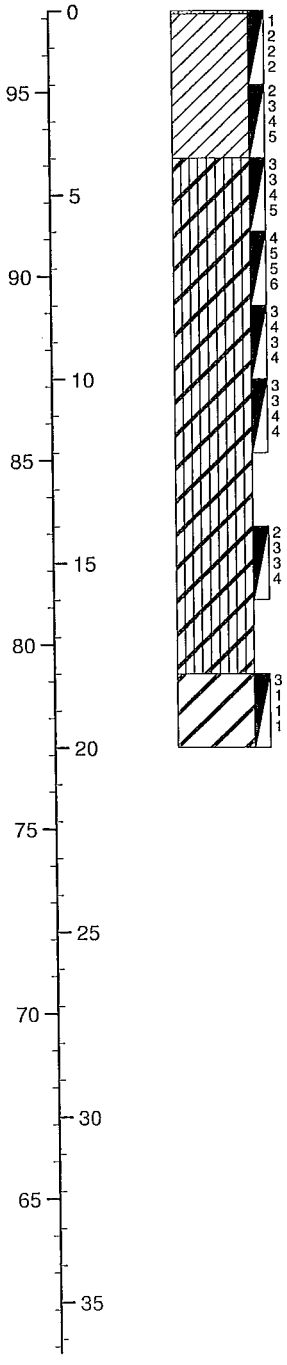
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-13

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	CME 550 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	97.2
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (1")
S-1 : 0.0'- 2.0'	4	60	Dk. brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	7	50	...grade: Brown
S-3 : 4.0'- 6.0'	7	75	Grayish brown, m. stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-4 : 6.0'- 8.0'	10	90	...grade: stiff
S-5 : 8.0'- 10.0'	7	60	...grade: Gray, m. stiff
S-6 : 10.0'- 12.0'	7	100	Same as S-5
S-7 : 14.0'- 16.0'	6	80	Same as S-5
S-8 : 18.0'- 20.0'	2	0	...grade: soft, (CH) (No Sample)
			Depth to Bottom of Hole: 20.0 feet

Logged by: B. Smith

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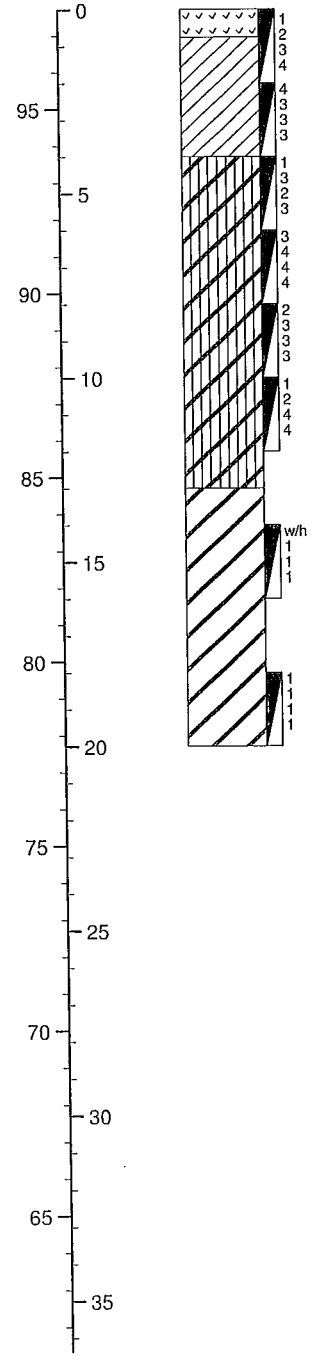
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-14

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	97.7
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (9")
S-1 : 0.0'- 2.0'	5	60	Brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	6	50	Same as S-1
S-3 : 4.0'- 6.0'	5	90	Grayish brown, m. stiff CLAY and SILT, little f. Sand, tr. Gravel, moist (CL-ML)
S-4 : 6.0'- 8.0'	8	80	Same as S-3
S-5 : 8.0'- 10.0'	6	60	...grade: Gray
S-6 : 10.0'- 12.0'	6	50	Same as S-5
S-7 : 14.0'- 16.0'	2	100	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-8 : 18.0'- 20.0'	2	90	Same as S-7
			Depth to Bottom of Hole: 20.0 feet

Logged by: B. Smith

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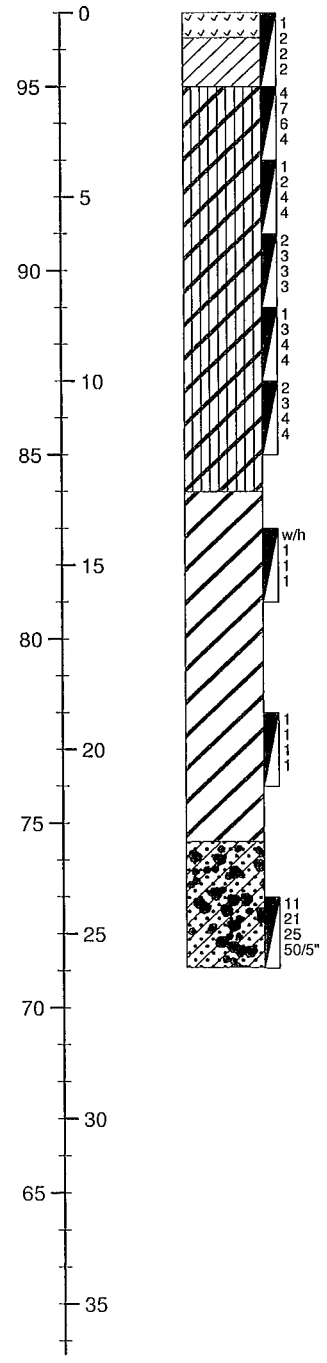
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-15

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	97.0
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (8")
S-1 : 0.0'- 2.0'	4	50	Dk. brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	13	60	Grayish brown, stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-3 : 4.0'- 6.0'	6	70	...grade: m. stiff
S-4 : 6.0'- 8.0'	6	80	...grade: Gray
S-5 : 8.0'- 10.0'	7	30	Same as S-4
S-6 : 10.0'- 12.0'	7	50	Same as S-4
S-7 : 14.0'- 16.0'	2	90	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-8 : 19.0'- 21.0'	2	100	Same as S-7
S-9 : 24.0'- 25.9'	46	75	Grayish brown, hard CLAY, some Silt, little Gravel, little f/c Sand, mod. plastic, moist (CL-Till)
			Depth to Bottom of Hole: 25.9 feet

Logged by: B. Smith

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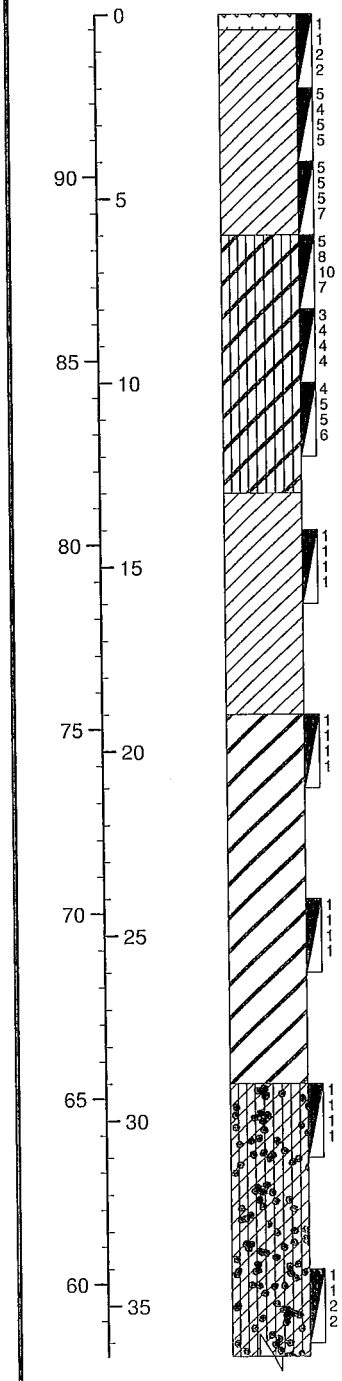
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-16

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	CME 550 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	94.4
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (5")
S-1 : 0.0'- 2.0'	3	35	Dk. brown, soft CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	9	30	...grade: Brown, stiff
S-3 : 4.0'- 6.0'	10	50	Same as S-2
S-4 : 6.0'- 8.0'	18	100	Grayish brown, v. stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-5 : 8.0'- 10.0'	8	40	...grade: Gray, stiff
S-6 : 10.0'- 12.0'	10	100	Same as S-5
S-7 : 14.0'- 16.0'	2	100	Grayish brown, soft CLAY, little Silt, tr. f. Sand, mod. plastic, wet (CL)
S-8 : 19.0'- 21.0'	2	100	...grade: plastic, (CH)
S-9 : 24.0'- 26.0'	2	100	Same as S-7
S-10 : 29.0'- 31.0'	2	100	Gray/brown, soft CLAY, some Silt, little f/c Sand, tr. Gravel, mod. plastic, moist (CL-Till)
S-11 : 34.0'- 36.0'	3	100	Same as S-10

Logged by: B. Smith

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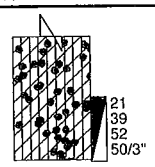
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-16

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
55 – 40	 21 39 52 50/3"				
		S-12 : 38.0'- 39.8'	89+	50	...grade: and Silt, sl. plastic
50 – 45					
45 – 50					Depth to Bottom of Hole: 39.7 feet
40 – 55					
35 – 60					
30 – 65					
25 – 70					
20 – 75					
15 – 80					

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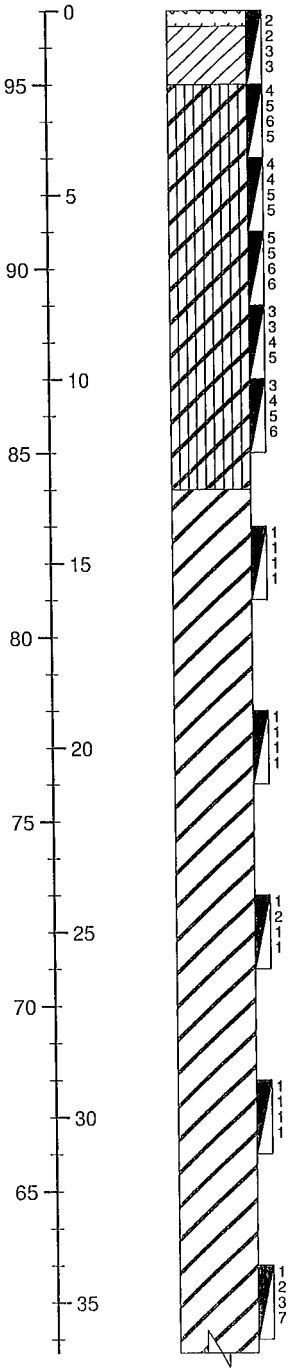
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-17

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	L. Schroeder	**TYPE OF DRILL RIG:**	CME 550 (ATV)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	97.0
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
					Topsoil (5")
		S-1 : 0.0'- 2.0'	5	50	Dk. brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
		S-2 : 2.0'- 4.0'	11	65	Grayish brown, stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
		S-3 : 4.0'- 6.0'	9	80	Same as S-2
		S-4 : 6.0'- 8.0'	11	95	Same as S-3
		S-5 : 8.0'- 10.0'	7	80	...grade: Gray, m. stiff
		S-6 : 10.0'- 12.0'	9	100	...grade: stiff
		S-7 : 14.0'- 16.0'	2	100	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
		S-8 : 19.0'- 21.0'	2	100	Same as S-7
		S-9 : 24.0'- 26.0'	3	100	Same as S-7
		S-10 : 29.0'- 31.0'	2	100	Same as S-7
		S-11 : 34.0'- 36.0'	5	50	...grade: m. stiff, little f/c Sand, tr. Gravel

Logged by: B. Smith

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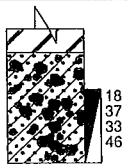
TEST BORING LOG (CONTINUATION)

JOB No.: 11-543 **BORING No.:** B-17

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Elevation/ Depth (feet)	Soil Symbols Sampler Symbols Field Test Data	Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
60					
40		S-12 : 38.0'- 40.0'	70	80	Grayish brown, hard CLAY, some Silt, little Gravel, little f/c Sand, mod. plastic, moist (CL-Till)
55					Depth to Bottom of Hole: 40.0 feet
45					
50					
50					
45					
55					
40					
60					
35					
65					
30					
70					
25					
75					
20					
80					

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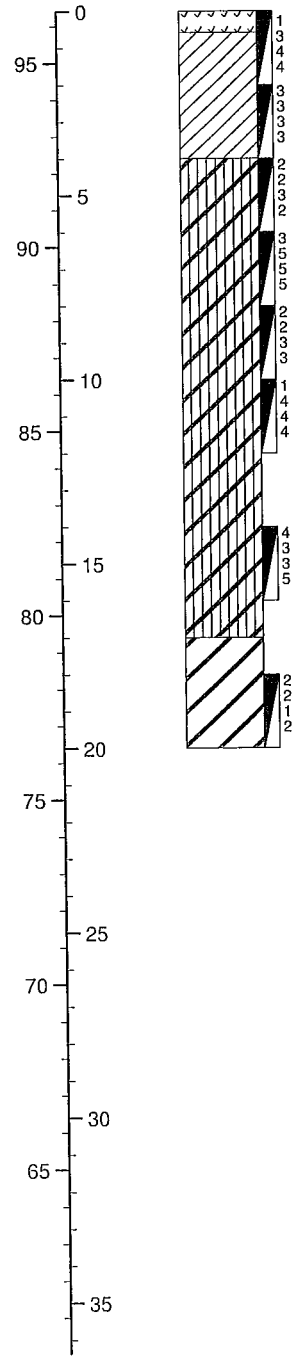
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-18

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	96.4
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (7")
S-1 : 0.0'- 2.0'	7	50	Brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	6	50	Same as S-1
S-3 : 4.0'- 6.0'	5	75	Grayish brown, m. stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-4 : 6.0'- 8.0'	10	100	...grade: stiff
S-5 : 8.0'- 10.0'	5	50	...grade: Gray, m. stiff
S-6 : 10.0'- 12.0'	8	40	Same as S-5
S-7 : 14.0'- 16.0'	6	100	...grade: wet
S-8 : 18.0'- 20.0'	3	75	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
			Depth to Bottom of Hole: 20.0 feet

Logged by: B. Smith

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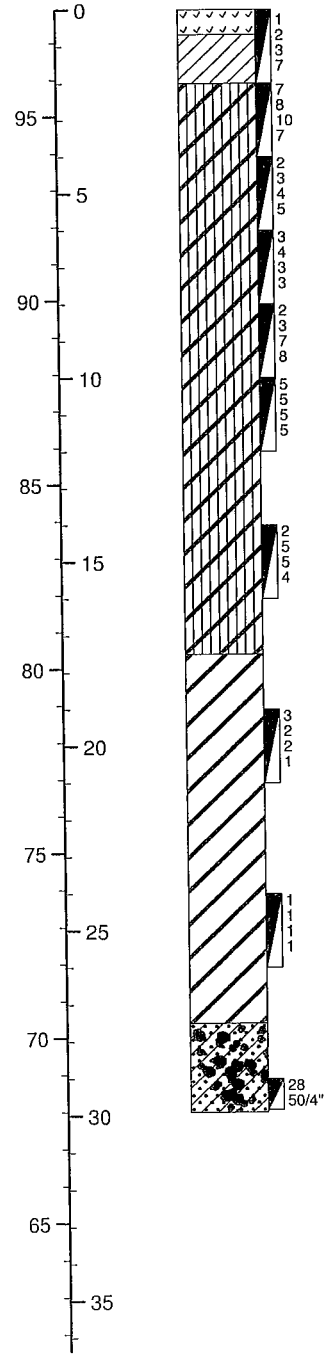
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-19

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	97.9
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
			Topsoil (8")
S-1 : 0.0'- 2.0'	5	60	Dk. brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	18	25	Grayish brown, v. stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-3 : 4.0'- 6.0'	7	90	...grade: Gray, m. stiff
S-4 : 6.0'- 8.0'	7	100	Same as S-3
S-5 : 8.0'- 10.0'	10	70	...grade: stiff
S-6 : 10.0'- 12.0'	10	50	...grade: wet
S-7 : 14.0'- 16.0'	10	60	...grade: moist
S-8 : 19.0'- 21.0'	4	100	Grayish brown, soft CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
S-9 : 24.0'- 26.0'	2	80	Same as S-8
S-10 : 29.0'- 29.8'	50+	50	Grayish brown, hard CLAY, some Silt, little Gravel, little f/c Sand, mod. plastic, moist (CL-Till)
			Depth to Bottom of Hole: 29.9 feet

Logged by: B. Smith

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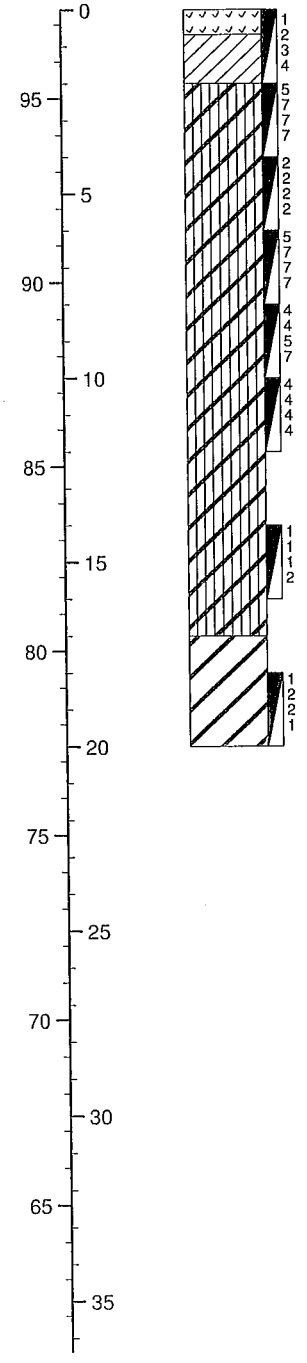
TEST BORING LOG

JOB No.: 11-543 **BORING No.:** B-20

PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

DRILLER:	J. Gardner	**TYPE OF DRILL RIG:**	Diedrich D-50 (Track)
SAMPLING METHODS:	ASTM D1586	**SIZE AND TYPE OF BIT:**	2 1/4" Hollow Stem Auger
DATE STARTED:	5/9/11	**SURFACE ELEVATION (ft.):**	97.4
DATE COMPLETED:	5/9/11	**GROUNDWATER DEPTH (ft.):** (measured at completion unless indicated below)	None



Sample No. : Range	N-Value	% REC (RQD)	Soil and Rock Description / Remarks
S-1 : 0.0'- 2.0'	5	60	Topsoil (8") Dk. brown, m. stiff CLAY, some Silt, little f. Sand, tr. Gravel, tr. Roots, mod. plastic, moist (CL)
S-2 : 2.0'- 4.0'	14	80	Grayish brown, stiff CLAY and SILT, little f. Sand, tr. Gravel, sl. plastic, moist (CL-ML)
S-3 : 4.0'- 6.0'	4	90	...grade: m. stiff
S-4 : 6.0'- 8.0'	14	90	...grade: stiff
S-5 : 8.0'- 10.0'	9	90	...grade: Gray
S-6 : 10.0'- 12.0'	8	100	Same as S-5
S-7 : 14.0'- 16.0'	2	100	...grade: soft, wet
S-8 : 18.0'- 20.0'	4	100	Grayish brown, m. stiff CLAY, little Silt, tr. f. Sand, plastic, wet (CH)
			Depth to Bottom of Hole: 20.0 feet

Logged by: B. Smith

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APPENDIX B

GEOTECHNICAL REFERENCE STANDARDS

GEOTECHNICAL REFERENCE STANDARDS
SUMMARY OF LOGGING TECHNIQUES

Depth (ft.)	Blows per .5 ft.	Sample No.	N	% REC (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS

Depth- The depth column provides the vertical scale of the boring log in feet below ground surface.

The number of blows obtained from each of the 0.5 ft. intervals of sampler penetration.

NOTE: WR represents the static weight of drill rods. WH represents the static weight of rods and hammer.

Sample Identification Number- Disturbed samples are identified with "S" preceding the sample number. Undisturbed samples (shelby tube) samples are identified with "U" preceding the sample number. Rock core samples are identified with "C" preceding the core run.

% Recovery- The length of sample recovered divided by the total length sampled. The result is numerically expressed as percent.

(RQD)- The "Rock Quality Designation". The total length of pieces>4 inches divided by the total length of core run.

N-value- The Standard Penetration Test N-value, as specified by ASTM D1586 is defined as the number of blows required by a 140-pound hammer falling 30 inches each blow to drive a 2 inch outside diameter split spoon sampler 12 inches.

TERMINOLOGY USED FOR SOIL DESCRIPTION

Density Description of Granular Soil

Number of Blows per ft., N.	Relative Density
0-4	Very loose
4-10	Loose
10-30	Medium
30-50	Dense
Over 50	Very dense

Consistency Description of Cohesive Soil

Number of Blows per ft., N.	Consistency
Below 2	Very soft
2-4	Soft
4-8	Medium
8-15	Stiff
15-30	Very stiff
Over 30	Hard

Grain Size

Boulder - greater than 12 inch diameter
Cobble - passing 12 inch, retained on 3 inch
Gravel - passing 3 inch, retained on No. 4 sieve
Sand - Coarse - passing No. 4 sieve, retained on No. 10 sieve
Medium - passing No. 10 sieve, retained on No. 40 sieve
Fine - passing No. 40 sieve, retained on No. 200 sieve
Silt - 0.074 mm to 0.005 mm
Clay - smaller than 0.005 mm

Description of Percentage or Proportions Used in Soil Sample Classification

Trace	0-10%
Little	10-20%
Some	20-35%
And	35-50%

Abbreviations Used In Soil Sample Classification

f - fine	v - very
m - medium	gr - grey
c - coarse	bn - brown
f/m - fine to medium	yel - yellow
f/c - fine to coarse	sl - slight
tr - trace	

Plasticity

Non-plastic - A 1/8 inch thread cannot be rolled at any water content.
Slight plasticity - The thread can barely be rolled.
Moderate Plasticity - Thread is easy to roll and little time is required to reach plastic limit.
Plastic - Considerable time is required to reach plastic limit. Thread can be re-rolled several times after reaching the plastic limit.

Moisture

Dry - Absence of moisture, dusty, dry to the touch.
Moist - Small quantity of moisture. Soil usually above groundwater level.
Wet - Moisture noticeable to the touch. Soil may be below groundwater level.
Saturated - Visible free water, usually soil is below groundwater level.

TERMINOLOGY USED FOR ROCK DESCRIPTION

Bedding

Parting	Less than 0.02 ft.
Band	0.02 to 0.2 ft.
Thin bed	0.2 to 0.5 ft.
Medium bed	0.5 to 1.0 ft.
Thick bed	1.0 to 2.0 ft.
Massive	Over 2.0 ft.

Hardness

Very Soft or Plastic	- Can be indented w/ thumb
Soft	- Can be scratched with fingernail
Moderately Hard	- Can be scratched easily with knife; cannot be scratched with fingernail
Hard	- Difficulty to scratch with knife
Very Hard	- Cannot be scratched with knife

Crystallinity or Texture

Dense - Crystals are so small they cannot be distinguished with the naked eye.

Very Fine Crystalline - Crystals barely discernible with the naked eye.

Crystalline - Crystals are medium size -up to 1/8 inch diameter.

Very Coarsely Crystalline - Crystals larger than 1/8 inch diameter.

Voids

Pourous - Smaller than a pinhead. Their presence is indicated by the degree of absorbancy.
Pitted - Pinhead size to 1/4 inch. If only thin walls separate the individual pits, the core may be described as honeycombed.
Vug - 1/4 inch to the diameter of the core. The upper limit will vary with core size.
Cavity - Larger than the diameter of the core.

Remarks - Denotes exact depth of recovery and general documentation of drilling efforts.

Notes - Description and classification are based on visual inspection of samples and boring operations.

The stratum lines shown on the boring logs are based upon interpretation and may not represent precise subsurface conditions.

Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the water level may occur due to other factors than those present at the time measurements taken.

SOIL CLASSIFICATION CHART
(Unified Soil Classification System)

MAJOR DIVISIONS			GRAPH SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS More than 50% of material larger than No. 200 sieve	GRAVELS- More than 50% of coarse fraction larger than No. 4 sieve	Clean Gravels (little or no fines)		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
		Gravels with appreciable amounts of fines		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS- Less than 50% of coarse fraction larger than No. 4 sieve	Clean sands (little or no fines)		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
		Sand with appreciable amounts of fines		SM	Silty sands, silt-sand mixtures
				SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS Less than 50% of material larger than No. 200 sieve	SILTS AND CLAYS Low plasticity Liquid Limit < 50%			ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS High plasticity Liquid limit > 50%			MH	Inorganic silts, micaceous or diatomaceous fine sand or silty soils
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic clays of medium to high plasticity, organic silts
	Highly Organic Soils			Pt	Peat, humus, swamp soils with organic contents
	Miscellaneous Fill			FILL	Miscellaneous fill may belong in any division but is identified as FILL

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APPENDIX C

CURRENT AND PREVIOUS LABORATORY SOIL TEST RESULTS

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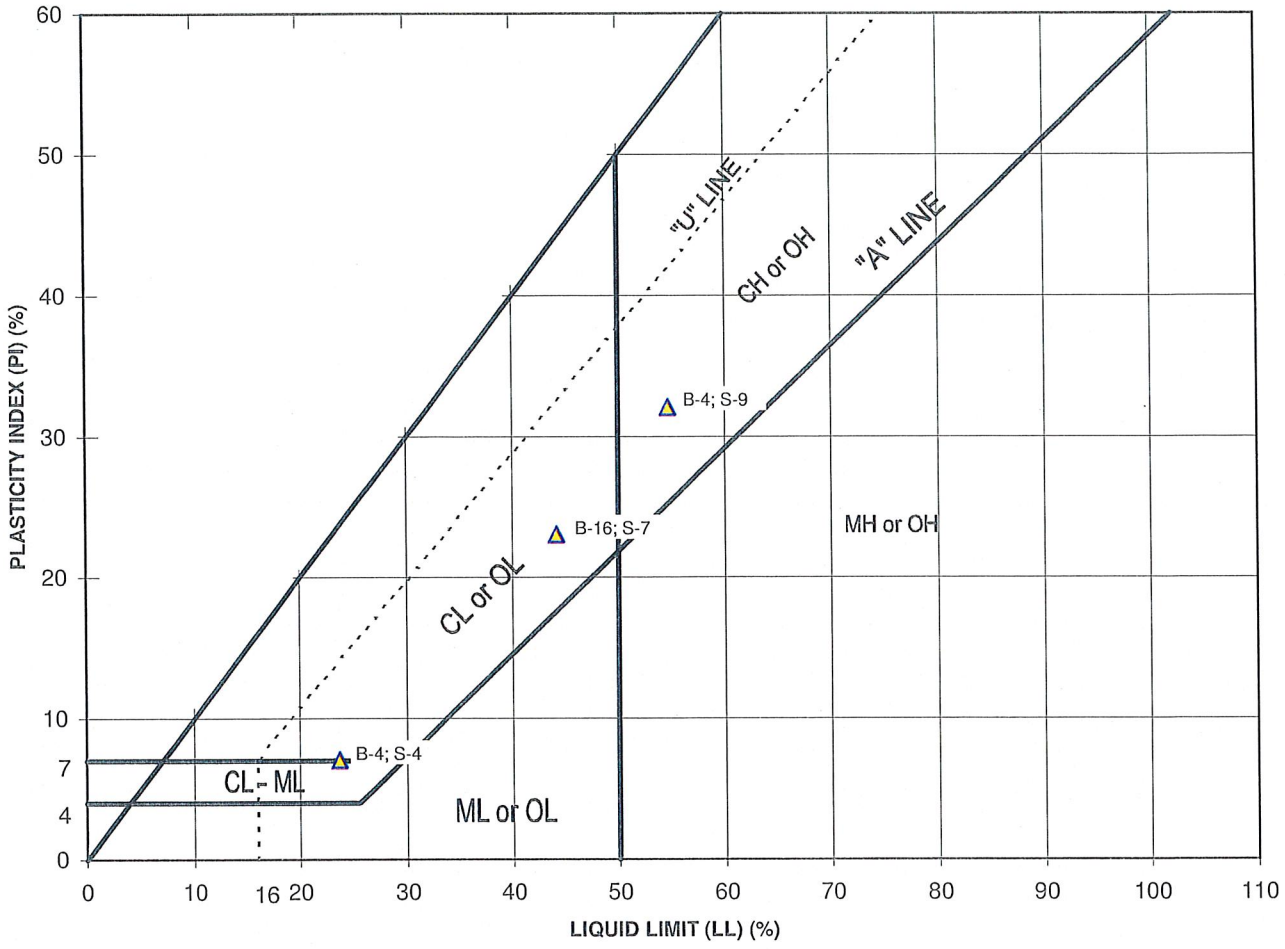
info@barronandassociatespc.com

Job No: 11-543
Project: Proposed Residential Subdivision
100 to 168 Tonawanda Creek Road
Amherst, Erie Co., New York 14228

Plasticity Chart

ASTM D4318 & D2487



Boring No.	Sample No.	Depth (ft.)	LL (%)	PL (%)	PI (%)
B-4	S-4	6-8	24	17	7
B-4	S-9	24-26	55	23	32
B-16	S-7	14-16	44	21	23

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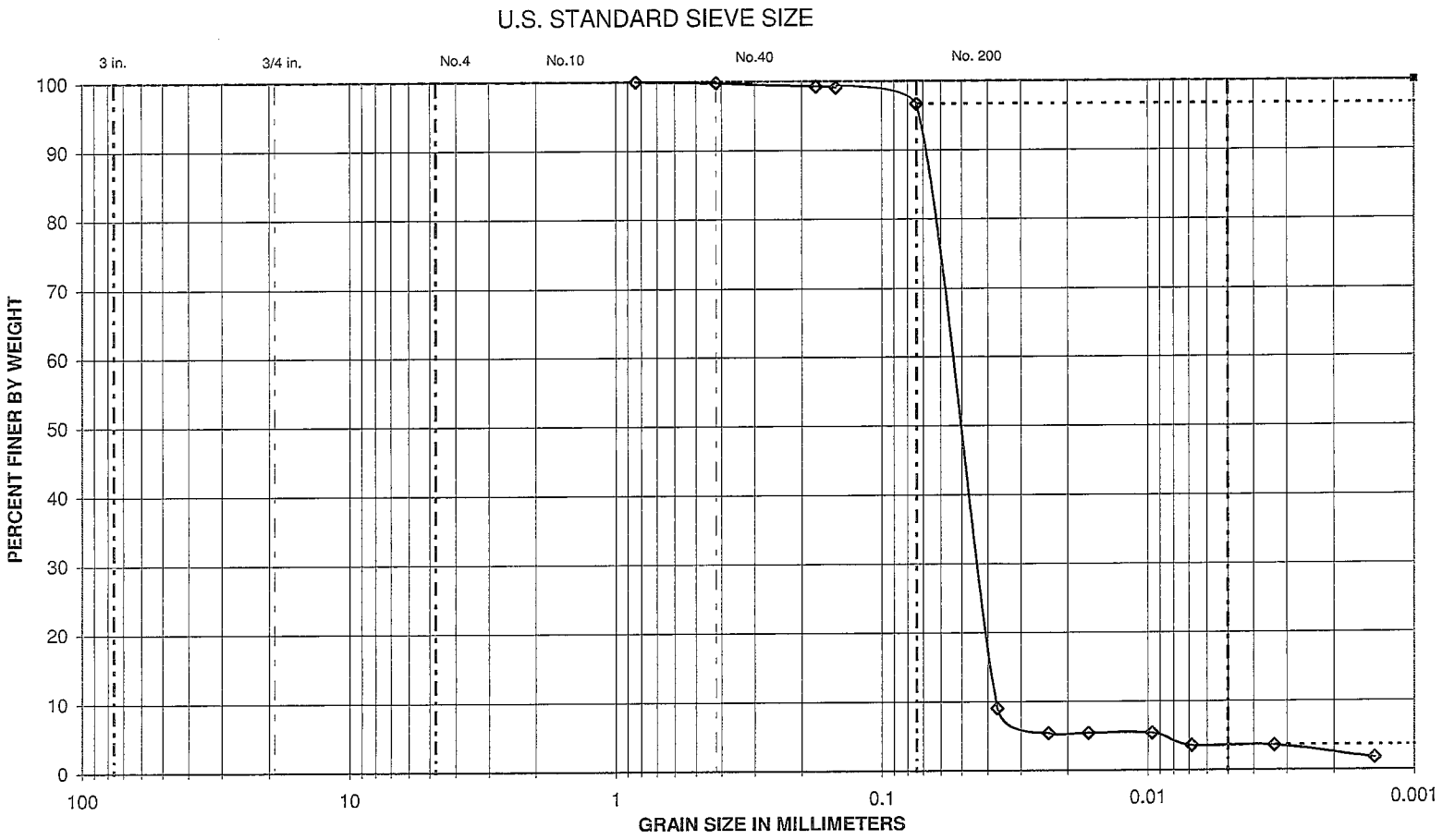
GRAIN SIZE ANALYSIS ASTM D-421/D-422

Job No: 11-543
Project: Proposed Residential Subdivision
100 to 168 Tonawanda Creek Road
Amherst, Erie Co., New York 14228

C_C= NA **C_U= NA** **LL= 24** **PL= 17** **PI= 7** **USCS= CL-ML**



0.0 % Gravel
3.3 % Sand

D_{60}= NA

93.1 % Silt

D_{30}= NA

D_{10}= NA

3.6 % Clay

COBBLES	GRAVEL		SAND			SILT	CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE		

Date Tested: May 4, 2007 **Boring No.: B-4** **Sample No.: S-4** **Depth: 6 to 8 ft.**

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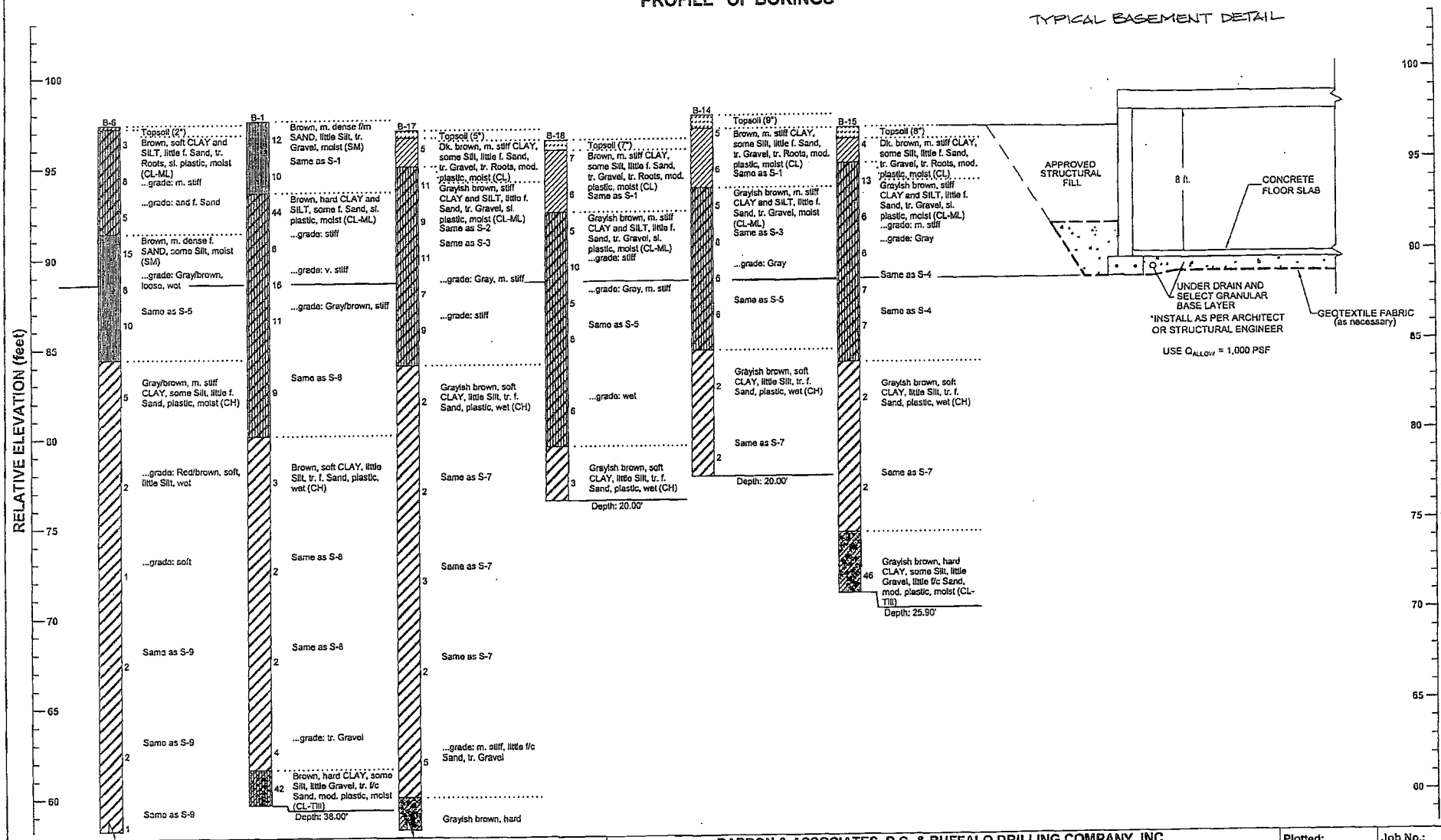
APPENDIX D

ENGINEERING COMPUTATIONS AND SCHEMATICS

"PROFILE" OF BORINGS



TYPICAL BASEMENT DETAIL

Topsoil | Silty sand | Clayey glacial till | Low plasticity clay | Description not given for: "O6GB" | Boring continues
Silty low plasticity clay | High plasticity clay

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PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road, Amherst, Erie Co., New York 14228

Plotted:	Job No.:
5/24/2011	11-543
Page No.:	Figure No.:
1 of 3	P-1

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DATA INPUT BY: Andrew J. Camping
B&A JOB NO.: 11-543
CLIENT: Cimato Enterprises, Inc.
PROJECT: Proposed Evergreen Landing Subdivision
100 to 168 Tonawanda Creek Road
Town of Amherst, Erie Co., New York 14228

BUILDING CODE OF NEW YORK STATE © - 2010: USGS 2008 ACCELERATIONS at 2% IN 50 YEARS CALCULATED BY LATITUDE AND LONGITUDE

Site Latitude (○) = +43.0489

Site Longitude (○) = -78.8214

Seismic Site Class = E

Building/Structure with Shallow Foundation

S_s = 0.2 sec acceleration value for Class B (in g's)

Acceleration Values Below are S_s

LAT. =	LONG. = -78.8500	-78.8214	-78.8000
43.0000	0.21993		0.22071
+43.0489	0.21894	0.21924	0.21947
43.0500	0.21892		0.21944

S_1 = 1.0 sec acceleration value for Class B (in g's)

Acceleration Values Below are S_1

LAT. =	LONG. = -78.8500	-78.8214	-78.8000
43.0000	0.05086		0.05105
+43.0489	0.05084	0.05094	0.05102
43.0500	0.05084		0.05102

SEISMIC SITE CLASS	Site Coefficient and Design Spectral Response Acceleration Values			
	0.2 Second		1.0 Second	
	F_a	$S_{ds} = 0.6667 * F_a * S_s$	F_v	$S_{d1} = 0.6667 * F_v * S_1$
A	0.8000	0.1169 g	0.8000	0.0272 g
B	1.0000	0.1462 g	1.0000	0.0340 g
C	1.2000	0.1754 g	1.7000	0.0577 g
D	1.6000	0.2339 g	2.4000	0.0815 g
E	2.5000	0.3654 g	3.5000	0.1189 g
F	2.5000	0.3654 g	3.5000	0.1189 g

Only residential buildings in Town of Amherst, Erie Co., N.Y.
Sds = 0.365 g Seismic Design Category = C

<<------- USE THESE VALUES FOR SHALLOW FOUNDATIONS

NOTE: F_a and F_v values are linearly interpolated, for the above S_s and S_s values, respectively, within the appropriate range of the mapped spectral response accelerations.
(Gridded data at 0.05 degree increments from: http://earthquake.usgs.gov/research/hazmaps/products_data/2008/data/)

Created By: Carmen M. Panuccio

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B&A JOB NO.: 11-543

DATE: 05/19/11

LATERAL EARTH PRESSURE ON GENERIC BLOCK FOUNDATIONS FOR SIGNS, FREE-STANDING RETAINING WALLS, OR BELOW GRADE/BASEMENT/TANK/POOL RETAINING WALLS (Less Than 20 Feet High)

a) Porous filter media, in contact with the basement/below grade foundation wall or retaining walls, protects and is in contact with a minimum 4 inch diameter perforated drainage pipes at the footing/base of the foundation/structural wall (exterior backfill side and interior basement side) and/or weep pipes through the wall, as needed and as applicable.

b) Where recommended, a geotextile filter fabric will protect the gravel filter media from the earth backfill. Overlap unsewn seams as per the manufacturer's recommendations.

c) Waterproof earth side of wall, as is customarily provided in practice.

d) Drainage pipes are connected to an appropriately designed collector pipe, conveyance, and/or sump pump system as is applicable for the intended purpose of the wall and as customarily provided/installed in practice.

e) For potential groundwater table conditions above the top of the basement slab-on-grade condition, install continuous waterstops (with no joints in stop) at wall and floor construction joints, as is customarily provided in practice. Interior intermediate drainage pipes beneath the slab, that are spaced on-center and in both directions, do appear to be needed.

f) Assume a uniformly graded, clean coarse sand or sandy gravel backfills:
* equivalent N-value in a dense state: $(N_1)_{60}$ = 40 blows/foot
* friction angle: ϕ' = 38 degrees {Teng, pg. 12}
* average in-place densities: moist - γ_m = 120 pcf
saturated - γ_{sat} = 132 pcf submerged - $\gamma' = (\gamma_{sat} - \gamma_w)$ = 70 pcf

g) Assume at base of wall/footing, coefficient of friction against sliding (f_s) at base of wall (Refer to Teng, pg. 320-1):
$f_s = \tan(0.58 \times \phi') = 0.40$ (AREA silty soil to silty coarse-grained soil)

h) Use equivalent fluid pressure design approach {Hough, pg. 249 and NAVFAC pg. 7.1-9}:
* at rest pressure coefficient - $K_0 = 1 - \sin(\phi') = 0.38$
* effective lateral pressure of soil - $\gamma'_l = K_o \times \gamma' = 26.6$ pcf
* hydrostatic pressure - γ_w = 62.4 pcf
* equivalent fluid pressure with water level at the top of the grade at the wall - $\gamma_{eo} = \gamma'_l + \gamma_w$ = 89 pcf (say 90 pcf)
* equivalent fluid pressure with compaction induced lateral stress increase (W&F, pg 409) - $\gamma_{eo} = 2 \times K_o \times \gamma_m$ = 91 pcf (say 90 pcf)
* active pressure case - $K_a = [1 - \sin(\phi')] / [1 + \sin(\phi')] = 0.24$
$\gamma_{ea} = K_a \times \gamma_m$ = 29 pcf (say 30 pcf)
* passive pressure case - $K_p = [1 + \sin(\phi')] / [1 - \sin(\phi')] = 4.2$
$\gamma_{ep} = K_p \times \gamma_m$ = 504 pcf (say 330 pcf with a F.S. = 1.5)

Thoroughly Compacted ⇒⇒			Uniformly Graded & Clean Coarse Sand or Sandy Gravel Fill	Non-Plastic Silty Sand or Sandy Silt Fill	
USE: Earth Pressure Coefficient	Static Active	=	0.24	0.33	
	Static At-Rest	=	0.76	1.00	
	Static Passive	=	2.80	2.00	(with F.S. = 1.5)
	Static Passive	=	4.20	3.00	(with F.S. = 1.0)
USE: Equivalent Fluid Pressure	Static Active	=	30 pcf		
	Static At-Rest	=	90 pcf (for rigid walls)		
	Static Passive	=	330 pcf (with F.S. = 1.5)	[500 pcf with (with F.S. = 1.0)]	

[For earthquakes, structural engineer may elect to use the above Static Passive case instead of the below Earthquake Lateral Load for Non-Yielding Wall movement into the soil backfill.]

USE: Simplified Model for Earthquake Lateral Load/Ft. Wall Length @ 0.6 H_{bw} above base. Loads for Non-Yielding Wall.
H_{bw} = Earth Height Behind Wall (feet)
Reduce load by 33% for Yielding Wall (active case) = (6.8 psf / foot) x H_{bw}^2 (NYS, S_{ds} = 0.25 g)
(γ_m = 120 pcf for S_{ds} value. Add to Static At Rest/ Active Pressure/Load for unsaturated backfill case) = (13.5 psf / foot) x H_{bw}^2 (NYS, S_{ds} = 0.50 g)
= (17.5 psf / foot) x H_{bw}^2 (NEern NYS, $S_{ds} \leq 0.65$ g)
[Above for Site Class C to E soils. Interpolate for other S_{ds} values.
Use 1.75 x values for walls on Class B/A rock or on rigid foundation base. (FEMA NEHRP Guidelines)]
Saturated/Liquified Soil During Earthquake = 132 pcf
(Equivalent Fluid Pressure. Add to inertial hydrodynamic pressure, not presented here.)
{For looser/denser backfills, adjust above pressures by the ratio = new density / 120 pcf or / 132 pcf (for saturated case)}

USE: Coefficient of Friction Against Sliding (f_s) = 0.45 (on compacted NYSDOT Item #304.12 or #304.14 gravels)
(use lowest f_s with no underlying weaker layers) = 0.35 (on compacted granular soil & non-plastic silt)
= 0.20 (slab-on-grade on polyethylene on granular fill)
[with a F.S. = 1.0] = 0.60/0.50 (on clean, rough, & sound bedrock/smooth bedrock)
Min. Factor of Safety Against Sliding = 1.5 *[Rev.9-30-09]*

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APPENDIX E

GENERAL EARTHWORK SPECIFICATION

Barron & Associates, P.C.
GENERAL EARTHWORK SPECIFICATION

PART 1 GENERAL

1.1 SITE AND SUBSURFACE CONDITIONS

1.1.1 Overview

This specification is included as a courtesy to the clients of Barron & Associates, P.C, and addresses earthwork site preparation. Additions and modifications are necessary to create a job-specific specification. This specification may serve as a basis for the development for a technical specification under Division 2, *Site Work.*

1.1.2 Site Conditions

The site-specific conditions are described under separate cover or may be available from the OWNER.

1.1.3 Subsurface Conditions

The site-specific subsurface conditions are described under separate cover or may be available from the OWNER.

1.2 REFERENCES

American Standard for Testing and Measurement (ASTM):

ASTM C136	Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM C2922	Density for Soil and Soil-Aggregate in Place by Nuclear Methods
ASTM D422	Test Method for Particle-Size Analysis of Soils
ASTM D1140	Amount of Material in Soils Finer Than the No. 200 Sieve
ASTM D1557	Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/ft^3)
ASTM D2216	Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock
ASTM D2487	1990 Classification of Soils for Engineering Purposes
ASTM D4318	Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

1.3 DEFINITIONS

1.3.1 Unacceptable Material

Soil material containing debris, wood, scrap material, vegetation, refuse, soft unsound particles, and other organic, frozen, deleterious, or objectionable materials. Contaminated soils shall be properly documented and removed or remediated on site. If necessary, remediation procedure will be defined by the OWNER.

1.3.2 Unsuitable Material

Brown, organic topsoil and underlying soft pockets of organic silt or wet, reworked silty clay.

1.3.3 Ordinary Fill

Friable soil containing no stone greater than two-thirds loose lift thickness and no unacceptable or unsuitable materials. In general, existing random fill is expected to be acceptable for reuse as ordinary fill given proper sorting, blending, drying, and controlled placement methods.

1.3.4 Granular Fill

Ordinary fill meeting the designation of ASTM D2487 classification of GW with a maximum of 10 percent by weight passing ASTM D1140, No. 200 sieve.

1.3.5 Select Granular Fill

Clean, uncoated soil which contains no unacceptable materials and conforms to the gradation requirements defined in Table A: Select Granular Fill.

Table A: Select Granular Fill	
Sieve Size	Percent Finer by Weight
2/3 of the loose lift thickness	100
No. 10	30 - 95
No. 40	10 - 70
No. 200	0 - 15

1.3.6 Sand and Gravel

Clean, hard, durable, uncoated particle of sand and gravel, free from lumps of clay, containing no unacceptable matter, and conforming to gradation requirements of *Table B : Sand and Gravel*

Table B: Sand and Gravel	
Sieve	Percent Finer by Weight
*	100
No. 4	50 - 85
No. 10	--
No. 40	10 - 35
No. 100	--
No. 200	0 - 8

* Job-Specific. To be determined by the ENGINEER

1.3.7 Crushed Stone

Clean, durable, sharp-angled fragments of rock or crushed gravel stone of uniform quality, containing no unacceptable matter, free from coatings, and conforming to gradation requirements of *Table C: Crushed Stone*

Table C: Crushed Stone		
	Percent Passing	
Sieve Size	¾-inch Stone	1 ¼-inch Stone
1 ½-inch	---	100
1 ¼-inch	---	85-100
1- inch	100	---
¾-inch	90-100	10-40
5/8-inch	---	---
½-inch	10-50	0-8
3/8-inch	0-20	---
#4	0-5	---

1.3.8 Flowable Fill

Also known as Controlled Low Strength Material – Controlled Density Fill (CLSM-CDF), this material is available under a variety of producer names (e.g., K-Krete©, M-Crete, Flash Fill©, Flowable Mortar, Unshrinkable Fill, etc.). This non-settling backfill mixture is most commonly used for its flowable characteristics, its support strength under traffic loads, and its removability at a later date. The material may be produced on-site or off-site. In either case, the producer of such materials and the product must meet certain certification criteria. Such information is beyond the scope of this specification and will be considered on a site-specific basis.

Flowable fill may be acceptable for use as a backfill for utility trenches of other low-lying areas which require a compacted granular fill. Its use and warranty of performance is left to the CONTRACTOR in such applications.

The use of flowable fill under load-bearing structural components in place of properly placed and compacted granular fill is NOT common and is questionable. The localized use of such material may have profound affects on the performance of a foundation system. Site-specific conditions and the extent of anticipated use of flowable fill must be examined by geotechnical engineer. Cost of such consultation shall be borne by the CONTRACTOR unless specifically directed by the OWNER to seek such consultation. Without such consultation, warranty of performance for such use is left to the CONTRACTOR.

1.4 SUBMITTALS

The following submittals shall be provided in accordance with approved submittals procedures.

1. Fill Source: Provide name and source locations of fill material.

2. Field Test Reports: Field tests will be performed by OWNER's Representative as needed. CONTRACTOR may be required to perform such tests on proposed off-site fill materials.
a. Fill material grain size analyses per ASTM C136, D422, D1140, D2487
b. Moisture/Density test results per ASTM D2216
c. Liquid limit, plastic limit, and plasticity index per ASTM D4318
d. Compaction/Density test results per ASTM C2922 and D1557

3. Sample: Geotextile fabric

PART 2 PRODUCTS

Geotextile Fabric: Mirafi 600X or equal. (Also referred to as synthetic fabric).

PART 3 EXECUTION

3.1 PROTECTION

3.1.1 General

Manner of excavation shall minimize disturbance of underlying natural ground. If deemed necessary by the Engineer, alter construction procedures to reduce subgrade disturbance. Excavate areas which have been excessively disturbed to firm ground and backfill with properly compacted granular fill.

3.1.2 Roads and Walks

Keep roads and walks free of dirt and debris at all times.

3.1.3 Trees, Shrubs, and Existing Facilities

Protect from any damage all vegetation and facilities identified to remain.

3.1.4 Utility Lines

Locate all utilities within the area of disturbance prior to the start of work. Show locations on initial plans. Protect utility lines from damage. Notify the ENGINEER immediately of damage to or an encounter with an unknown utility. Damage to utility lines are to be repaired by the CONTRACTOR at no additional cost. The CONTRACTOR shall have underground utility owners stake out utility locations prior to the start of clearing and excavation operations.

3.2 VERIFICATION OF CONDITIONS/PROOF-ROLLING

Prior to placement of the initial layer of fill over the natural ground, proof-roll the exposed natural ground above the groundwater table elevation by making two passes with a fully-loaded ten-wheel truck. Excavate unstable areas detected by this process and replace with compacted granular fill.

3.3 PREPARATION

3.3.1 Surface Preparation

Within the site limits indicated on the drawings, excavate all unsuitable material to firm natural ground in the manner specified herein. Follow a construction procedure which permits visual identification of firm natural ground. In the even that groundwater is encountered, the ENGINEER may require that the size of the open excavation be limited to that which can be handled by open pumping to allow visual inspection of the excavation bottom and the performance of backfill operations to be conducted in a dry state.

Excavation of unsuitable material shall be limited to the greater of the following:

- A distance of 5 feet beyond building lines or
- The area defined by a one-horizontal to one-vertical line sloping down from the outside bottom edge of exterior footings to firm natural ground.

3.4 PLACEMENT AND COMPACTION

3.4.1 General

Place fill in accordance with *Table D: Compaction Alternatives.* These alternatives are provided as minimum compaction
standards only and in no way relieve the CONTRACTOR of his obligation to achieve any specified degree of compaction by whatever means may be necessary.

Grade to provide positive drainage and a smooth surface which will readily shed water. To the extent practicable, compact each layer to the specified density on the same day placed. Place fill in horizontal layers. Where horizontal layers meet a natural slope, key layer into slope by cutting a bench.

Fill that is too wet for proper compaction: Disc, harrow, or otherwise dry to proper moisture content for compaction to the required density.

Fill that is too dry for proper compaction: Uniformly apply water over the surface of the loose layer in sufficient quantity to allow compaction to the required density.

Table D: Compaction Alternatives					
Compaction Method	Max. Stone Size	Maximum Loose Lift Thickness (inches)		Maximum Number of Passes	
		Below Structure and Pavements	Less Critical Areas	Below Structure and Pavements	Less Critical Areas
Hand operated vibratory plate of light roller in confined areas	3	4	4	4	4
Hand operated vibratory drum rollers weighing at least 1,000 pounds in confined areas	4	6	8	4	4
Loaded 10-wheel truck or D-8 crawler	6	10	12	4	2
Light vibratory drum roller; Min. weight at drum 8,000lbs; Min. dynamic force 10,000lbs.	8	12	12	6	2
Minimum vibratory drum; Min. weight at drum 10,000lbs; Min. dynamic force 20,000lbs.	8	18	18	6	4

3.4.2 Dewatering

Provide adequate pumping and drainage facilities to keep excavated areas sufficiently dry of groundwater and surface run-off. Dewatering shall avoid adversely affection construction procedures or causing excessive disturbance of underlying natural ground. Drain all pumped water in such a manner as to avoid damage to adjacent property.

If requested by the ENGINEER, place a 6-inch to 12-inch layer of sand and gravel or crushed stone over the natural underlying soil to stabilize area which have been disturbed due to groundwater seepage pressures and to expedite dewatering operations. Particular attention shall be given areas under proposed foundations.

3.5 FIELD QUALITY CONTROL

3.5.1 Compaction Requirements

Allow the ENGINEER sufficient time to make necessary observations and tests. Base the degree of compaction on maximum dry density as determined by ASTM D1557. The minimum degree of compaction for placed fill shall be as indicated *in Table E: Compaction Requirements.*

Table E: Compaction Requirements	
Area	Minimum Degree of Compaction (%)
Below foundation	95
Pavement and building subbase and base courses	95
Below building slab base course and above bottom of foundation	92
Below pavement subbase and base courses	90
Trench backfill outside of building	90
Trench backfill inside of building	Refer to one of the above-listed categories
Ordinary fill within 5 feet of grade	90
Vegetated areas below 5 feet of grade	85

3.5.2 Testing

Site work should be monitored and tested by geotechnical ENGINEER or his representative and in accordance with requirements of the design team to assure compliance with earthwork and foundation construction specifications.

The owner will retain a geotechnical ENGINEER or his representative to perform on-site observations and testing during this phase of construction operations. The geotechnical ENGINEER or his representative will:

- Observe excavation and dewatering of building and controlled fill areas;
- Observe backfill and compaction within building and controlled fill areas;
- Laboratory test and analyze fill material; and
- Observe construction – and performing water content, gradation, and compaction tests.

On a timely basis, the CONTRACTOR will receive copies of test results submitted to the OWNER. In addition, during construction the geotechnical ENGINEER will advise the OWNER and CONTRACTOR in writing of conditions which fail to conform to the Contract Documents. The CONTRACTOR shall take immediate action to remedy indicated deficiencies.

The geotechnical ENGINEER or his representative will not supervise or direct the actual work of the CONTRACTOR or employees and representatives of the CONTRACTOR. The presence of, observations by, and testing performed by the geotechnical ENGINEER or his representatives shall not excuse the CONTRACTOR from defects discovered in the work.

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APPENDIX F

LIMITATIONS

LIMITATIONS

1. This report is based on the data that was obtained from the subsurface explorations and on the design of the proposed residential subdivision as submitted to the geotechnical engineer. A geotechnical engineer, who is experienced in foundation construction and earthwork, should be engaged to review the final design and specifications in order to determine whether any change in concept may have any effect on the validity of the conclusions presented herein, and whether these conclusions have, in fact, been implemented in the design and specifications.

2. The subsurface conditions, including thickness, between the exploration locations are approximate and simplified representations of the strata and transitions. There is the possibility that variations in soil and rock conditions and boundaries will be encountered during construction. In order to permit correlation between the exploratory soil data and the actual soil conditions encountered during construction and so as to assess conformance with the plans and specifications as originally contemplated, it is recommended that a geotechnical engineer, who is experienced in foundation construction and earthwork monitoring, should be retained to perform continuous construction review during the site preparation and foundation construction operations.

3. The subsurface exploration logs and subsurface conditions may aid in estimating material quality and quantities, such as topsoil/organic matter, fills, natural soils, and rock, but are not to be relied upon as the exclusive means for bid preparation purposes. It is the responsibility of the contractor to perform any additional site examinations and explorations and to prepare an accurate bid.

4. Disclaimers:

   a. In the event that any changes in the nature, design or location of the structure are planned, the conclusions that are contained in this report shall not be considered valid unless the changes are reviewed and the conclusions of this report are modified or verified in writing.

   b. The geotechnical engineering report has been prepared for this project by Barron & Associates, P.C. This report is for assistance in design only and is not a sufficient basis on which to prepare an accurate bid.

   c. This report has been prepared for the exclusive use of Cimato Enterprises, Inc., their clients and their designated design representatives, for specific application to the construction of a residential subdivision at 100 to 168 Tonawanda Creek Road in the Town of Amherst, New York and in accordance with generally accepted geotechnical engineering practice. No other warranty, expressed or implied, is made.

Traffic Impact Study

for the proposed

Evergreen Landing Subdivision

Town of Amherst
Erie County, New York

April 2011

Project No. 30058

Prepared For:

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LIST OF REFERENCES

1. Special Report 209: Highway Capacity Manual. Transportation Research Board. National Research Council, Washington, DC. 2000.
2. Trip Generation, Eighth Edition. Institute of Transportation Engineers. Washington, DC. 2008.
3. NCHRP Report 279, Intersection Channelization Design Guide. Transportation Research Board. 1985.
4. Manual on Uniform Traffic Control Devices for Street and Highways (MUTCD). Federal Highway Administration. 2009.
5. Traffic Volume Report. NYSDOT. Albany, New York. 2008.
6. New York State Department of Transportation Traffic Data Viewer. 2009. Retrieved from https://www.nysdot.gov/portal/page/portal/divisions/engineering/applications/traffic-data-viewer.htm

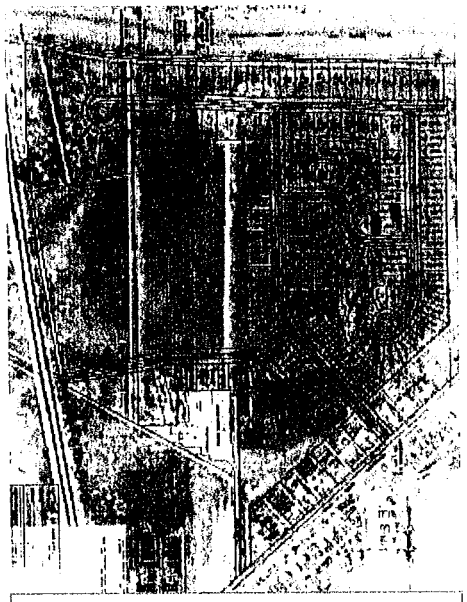
EXECUTIVE SUMMARY

OVERVIEW

This study evaluates the existing and projected traffic demands on the highway network surrounding the proposed Evergreen Landing Subdivision development situated along the east side of Niagara Falls Blvd, north of the Tonawanda Creek Road in the Town of Amherst, New York. The proposed development consists of 150 single family residential units and a potential apartment development consisting of approximately 180 units on 66 acres of land located along Tonawanda Creek. The proposed site is currently occupied by a seasonal 9 hole golf course. Access to the site will be provided by two new driveways; one driveway on Niagara Falls Blvd and one on Tonawanda Creek Road.

Existing traffic conditions were established by performing traffic counts and observations at the Niagara Falls Blvd/ Tonawanda Creek Road intersections. Vehicular turning movement counts were obtained on December 2nd and 3rd, 2010 between 7:00-9:00 AM and 4:00-6:00 PM at the study intersection. The peak hours of traffic at the study intersections are generally between 7:00-8:00 AM and 4:30-5:30 PM.

The proposed Evergreen Landing Subdivision development is expected to be completed within ten years. The Town of Amherst was contacted in an effort to include traffic generated from other developments in the area that are currently approved or under construction. A growth rate of 1% per year, used to project background traffic conditions, was derived by considering historical traffic growth and the construction of other developments near the proposed Evergreen Landing Subdivision development.



Site plan depicting the proposed development

The proposed development is expected to generate approximately 205 driveway trips during the weekday AM peak hour and 264 driveway trips during the PM peak hour using two driveways on Niagara Falls Blvd and Tonawanda Creek Road. Site generated traffic volumes for the proposed development are projected and distributed to the network based on existing travel patterns, population centers and future highway conditions.

The operating characteristics of the access drives and impacts to the adjacent roadway network are identified and mitigating measures are provided to minimize any capacity or safety concerns.

CONCLUSIONS & RECOMMENDATIONS

This study addresses the transportation impact that can be expected from the proposed Evergreen Landing Subdivision development in the Town of Amherst as described in this report. The results indicate that the existing transportation network can accommodate the projected traffic volumes without a significant adverse impact on traffic operations in the area with the recommended mitigation measures in place.

The following list details specific recommendations to be considered as a result of this development:

1. The proposed site driveways on Niagara Falls Blvd and Tonawanda Creek Road should be constructed with one lane exiting and one lane entering and should be stop sign controlled.

2. Conduct a post-development study to re-evaluate the need for an eastbound left turn lane in the future at the intersection of Tonawanda Creek Rd and Site driveway. The study should be conducted after the construction of the single family units and before the apartment units are built or a combination of the two that reaches 50% build out.

I. INTRODUCTION

The purpose of this report is to identify the traffic impact that the proposed Evergreen Landing Subdivision development would have on the adjacent highway network. The proposed development consists of 150 single family residential units and a potential apartment development consisting of approximately 180 units on 66 acres of land located along Tonawanda Creek. The proposed site is currently occupied by a seasonal 9 hole golf course. Access to the site will be provided by two driveways; one driveway on Niagara Falls Blvd and one on Tonawanda Creek Road.

In an effort to define traffic impact, this analysis establishes existing traffic conditions, future background traffic conditions including growth, and determines the traffic operations that would result from the proposed development. Future traffic volumes and operating conditions are then evaluated.

II. LOCATION

The proposed development site is situated along the east side of Niagara Falls Blvd, north of Tonawanda Creek Road in the Town of Amherst, New York. The proposed site is currently occupied by a seasonal 9 hole golf course. The location of the site within the Town of Amherst is illustrated in **Figure 1 - Site Location and Study Area.**

III. EXISTING HIGHWAY SYSTEM

The study area consists of the Niagara Falls Blvd/Tonawanda Creek Road intersection, in the Town of Amherst, Erie County, New York. The site location is depicted in **Figure 1** - Site Location and Study Area. A comprehensive inventory of the existing roadway network operations was developed and peak period traffic volume data were collected by SRF & Associates (SRF).

Niagara Falls Blvd (NY Route 62) is a north/south highway and is functionally classified as a principal arterial within the limits of the highway network analyzed. The posted speed limit along Route 62 throughout the study area is 55 mph. The Annual Average Daily Traffic (AADT) on the section of NY Route 62 was 31,070 vehicles per day (vpd) in 2007 between CR 299 E Robinson Road and the Niagara County Line.

Tonawanda Creek Road is an east–west county collector route that runs parallel to the Tonawanda Creek. The highway consists of one travel lane in each direction with auxiliary left turn lanes at the Niagara Falls Blvd intersection. The posted speed limit is 45 MPH and the ADT Between Niagara Falls Blvd and Sweet Home Road was approximately 6,275 vpd in 2009 (the most recent machine count data available from the Erie County Department Of Transportation).

Figure 2 illustrates the lane configuration and ADT volumes on the study roadways.

IV. EXISTING TRAFFIC CONDITIONS

A. Peak Intervals for Analysis

Given the functional characteristics of the roadways within the study area and the land use proposed for the site (residential development), the peak hours selected for analysis are the weekday AM and PM peak hours. The combination of site generated traffic and adjacent through traffic produces the greatest demand during these peak periods.

B. Existing Traffic Volume Data

Peak hour turning movement counts were collected by SRF & Associates on Friday December 3rd, 2010 between 7:00–9:00AM and Thursday December 2nd, 2010 between 4:00–6:00PM at the Niagara Falls Blvd/Tonawanda Creek Road intersection, as shown in **Figure 3**. These counts identified the peak hours to be between 7:00 to 8:00 AM and 4:30 to 5:30 PM.

C. Field Observations

The study intersection was observed during both peak intervals to assess current traffic operations. Signal timing information was collected to determine peak hour phasing plans and phase durations during each interval.

D. Accident Investigation

An accident investigation was completed to assess the safety history at the Niagara Falls Blvd/Tonawanda Creek Road intersection from December 2007 through December 2010. The data was provided by the Amherst Police Department through a Freedom of Information request.

A total of 22 accidents were documented during the investigation period (3 years). The severity of the 22 documented accidents is as follows:

- 疥 7 – Reportable – Injury
- 疥 8 – Reportable – Non Injury
- 疥 7 – Unknown Severity

Therefore, the total number of accidents included in the rate calculations is 22.

Accident rates were also computed for the project study intersection and compared with the NYSDOT average accident rates for similar intersections, as summarized in the following table. Intersection rates are listed as accidents per million entering vehicles (Acc/MEV).

TABLE I
INTERSECTION ACCIDENT RATES

Intersection	Number of Accidents	Actual Project Rate Acc/MEV	NYSDOT Average Rate Acc/MEV
Niagara Falls Blvd/ Tonawanda Creek Road	22	0.60	0.26

As shown in the table above, the study intersection has an accident rate that is higher than the state wide average accident rate for similar intersections. The majority of accidents involved rear-end (12) collisions; which could be associated with vehicle queuing and the current intersection geometry. The remaining accidents were categorized as left turn (5), right angle (3), fixed object (1) and side swipe (1). Notable accident clusters at this location include:

- 6 Rear end collisions on southbound approach
- 4 Rear end collisions on northbound approach
- 2 Rear end collisions on westbound approach

There are no discernable accident patterns that would require mitigation.

V. FUTURE AREA DEVELOPMENT AND LOCAL GROWTH

The proposed Evergreen Landing Subdivision development is expected to be completed within ten (10) years. The Town of Amherst was contacted to discuss current projects in the vicinity the project study area that are currently under construction and/or approved. The proposed Key Bank, located to the south of the Niagara Falls Blvd/Tonawanda Creek Road intersection is the only development that is currently approved and/or under construction in the study area and were included in the growth rate.

A review of historical NYSDOT traffic volume data on Niagara Falls Blvd in the vicinity of the site indicates that traffic has decreased at approximately 0.6% per year between 2001 and 2007. To account for normal increases in background traffic growth, including proposed Key Bank and any unforeseen developments in the project study area, a growth rate of 1.0% per year has been applied to the existing traffic volumes in the study area for the ten year build-out period. The background traffic volumes anticipated at the time of full development are depicted in **Figure 4**. Supporting documentation is included in the appendix of this Study.

VI. PROPOSED DEVELOPMENT

A. Description

The proposed development consists of 150 single family residential units and a potential apartment development consisting of approximately 180 units on 66 acres of land located along Tonawanda Creek. The proposed site is currently occupied by a

seasonal 9 hole golf course. Access to the site will be provided by two new driveways; one driveway on Niagara Falls Blvd and one on Tonawanda Creek Road.

B. *Site Traffic*

The next step in the evaluation is to determine the additional traffic attributable to the development as defined, vehicle trips entering and exiting the site. Trip Generation, 8th Edition is used as a reference for this information. The trip rate for the peak hour of the generator may or may not coincide in time or volume with the trip rate for the peak hour of adjacent street traffic. Volumes generated during the peak hour of adjacent street traffic, in this case, the weekday AM and PM peaks, represent a more critical volume when analyzing the capacity of the system; those intervals will provide the basis of this analysis.

The volume of traffic generated by a site is based on the land use and size of the development. Trip generation is an estimate of the number of trips generated by a specific building or land use. These trips represent the volume of traffic entering and exiting the driveways. Trip generation estimates, based on data contained in the Institute of Traffic Engineers (ITE) Trip Generation were used to derive trip generation estimates for the proposed residential site. Table II summarizes the volume of projected trips for the weekday AM and PM peak hour. All trip generation calculations are included in Appendix A2 of this report.

TABLE II
SITE GENERATED TRIPS

DESCRIPTION	SIZE	AM PEAK		PM PEAK	
		ENTER	EXIT	ENTER	EXIT
Single Family	150 units	29	84	96	56
Apartments	180 units	18	74	72	40
Total Site Generated Volumes		**47**	**158**	**168**	**96**

C. *Site Traffic Distribution*

The cumulative effect of site traffic on the transportation network is dependent on the origins and destinations of that traffic and the location of the access drives serving the site.

The proposed arrival/departure distribution of traffic to be generated at this site is considered a function of several parameters, including the following:

- Existing travel patterns adjacent to the site
- Existing highway network
- Existing traffic conditions and controls
- Proposed access locations and on-site circulation

The anticipated trip distribution pattern percentages for the proposed development are shown in **Figures 5**. The site generated traffic assigned to the site driveway and study area intersections for both AM and PM peak hour periods is shown in **Figure 6**.

VII. FULL DEVELOPMENT VOLUMES

Proposed design hour traffic volumes are developed for each peak by combining the background traffic conditions and the new site-generated traffic volumes. The resulting design hour volumes for the proposed development are illustrated in **Figure 7**.

VIII. CAPACITY ANALYSIS

Capacity analysis is a technique used for determining a measure of effectiveness for a section of roadway and/or intersection based on the number of vehicles during a specific time period. The measure of effectiveness used for the capacity analysis is referred to as a Level of Service (LOS). Levels of Service are calculated to provide an indication of the amount of delay that a motorist experiences while traveling along a roadway or through an intersection. Since the most amount of delay to motorists usually occurs at intersections, capacity analysis typically focuses on intersections, as opposed to highway segments.

Six Levels of Service are defined for analysis purposes. They are assigned letter designations, from "A" to "F", with LOS "A" representing the best conditions and LOS "F" the worst. Suggested ranges of service capacity and an explanation of Levels of Service are included in the Appendix.

The standard procedure for capacity analysis of signalized and unsignalized intersections is outlined in the Highway Capacity Manual (HCM 2000) published by the Transportation Research Board. Traffic analysis software, Synchro 8, which is based on procedures and methodologies contained in the HCM 2000, was used to analyze operating conditions at study area intersections. The procedure yields a Level of Service (LOS) based on the HCM 2000 as an indicator of how well intersections operate.

Existing operating conditions during the peak study periods are evaluated to determine a basis for comparison with the projected future conditions. The future traffic conditions generated by the development were analyzed to assess the operations of the intersections in the study area. Capacity results for existing, background, and full development conditions are listed in Table III. The discussion following the table summarizes capacity conditions. All capacity analysis calculations are included in the Appendix.

TABLE III: CAPACITY ANALYSIS RESULTS

INTERSECTION	EXISTING CONDITIONS		BACKGROUND CONDITIONS		FULL DEVELOPMENT CONDITIONS	
	AM	PM	AM	PM	AM	PM
Tonawanda Creek Road/ Niagara Falls Blvd (S)						
EB Left - Tonawanda Creek Rd	C	F	C	F	C	F
EB Thru/Right - Tonawanda Creek Rd	B	D	B	D	B	D
WB Left - Tonawanda Creek Rd	D	F	D	F	D	F
WB Thru/Right - Tonawanda Creek Rd	B	D	B	E	B	E
NB Left - Niagara Falls Blvd	A	A	A	A	A	A
NB Thru/Right - Niagara Falls Blvd	A	B	A	C	A	C
SB Left - Niagara Falls Blvd	A	B	B	C	B	C
SB Thru/Right - Niagara Falls Blvd	B	A	B	A	B	A
Overall LOS/Delay in sec/veh	B(11.4)	C(30.7)	B(13.7)	D(38.8)	B(16.1)	D(44.5)
Tonawanda Creek Road/Site Driveway (U)	NA					
EB Left - Tonawanda Creek Rd					A	A
SB - Site Driveway					B	B
Niagara Falls Blvd/Site Driveway (U)	NA					
WB - Site Driveway					F(*)	F(*)
SB Left - Niagara Falls Blvd					A	D

** Delay exceeds two minutes*

Tonawanda Creek Road/ Niagara Falls Blvd

The Tonawanda Creek Road/Niagara Falls Blvd intersection operates at LOS "C" or better on the northbound and southbound (Niagara Falls Blvd) approaches during the AM and PM peak hours under existing, background and full development conditions. The eastbound and westbound (Tonawanda Creek Road) approaches operate at LOS "D" or better during the AM peak hour. However, during the PM peak hour since the signal green time is given preference on the northbound and southbound approaches, the eastbound and the westbound approaches operate with long delays. No changes in LOS are anticipated on any of the movements between the background and full development conditions. As such, no mitigation is recommended at this intersection. However, the NYSDOT should consider adjusting the signal timings to better accommodate increasing traffic volumes on Tonawanda Creek Road.

Tonawanda Creek Road/Site Driveway

All approaches of this intersection are expected to operate at level of service (LOS) "B" or better during the AM and PM peak hours under full development conditions. As such, no mitigation is recommended at this driveway.

Niagara Falls Blvd/Site Driveway

The driveway approach is expected to operate at LOS "F" during the AM and PM peak hours, respectively. Moderate to long delays will be experienced by motorists exiting this driveway during peak time periods.

A review of the NYS MUTCD Traffic Signal Warrants explained in the section below indicates that a traffic signal is not warranted at this location. No mitigation is recommended at this driveway.

IX. TRAFFIC SIGNAL WARRANT INVESTIGATION

A traffic signal warrant analysis was conducted at the proposed site driveway/Niagara Falls Blvd intersection as part of this report. The need for a traffic signal is determined by comprehensive investigation of existing and projected traffic conditions and physical characteristics at the location. The *Standard Specifications Update for the adoption of the National MUTCD (FHWA) and the New York State Supplement* were reviewed to investigate the need for a traffic control signal at this location. There are nine (9) warrants and they are as follows:

Warrant 1	Eight-Hour vehicular volume
Warrant 2	Four-Hour vehicular volume
Warrant 3	Peak Hour
Warrant 4	Pedestrian Volume
Warrant 5	School Crossing
Warrant 6	Coordinated Signal System
Warrant 7	Crash Experience
Warrant 8	Roadway Network
Warrant 9	Intersection Near a Grade Crossing

Detailed signal warrant calculations are attached. Prior to applying warrants, the MUTCD suggests consideration of the effects of right turn volumes on the minor street approach, and a reduction taken in the number of right turning vehicles, where appropriate. A certain number of right turn vehicles will execute a right turn on the red indication without actuating a traffic signal (if one were in place). For purposes of this analysis, no reductions in right turn movements were made. The post speed limit on Niagara Falls Blvd is 45 miles per hour and therefore, 70 percent thresholds in Table 4C-1, Figure 4C-2 and Figure 4C-4 are used as a basis for analysis.

Warrant 1 is subdivided into Condition A and Condition B. The Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal. The Interruption of Continuous Traffic, Condition B, is intended for application at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. These conditions are satisfied when, for each of any eight hours of an average day, anticipated volumes on the artery and side road are in excess of the minimum values presented in Tables 4C-1 in the MUTCD. Hourly traffic volumes along Niagara Falls Blvd at the proposed driveway were projected based on the hourly traffic distribution measured by NYSDOT along Niagara Falls Blvd in October 2007. Hourly traffic volumes expected to exit the proposed site drive were projected based on hourly traffic volume fluctuations documented at a residential development in Webster, NY. Based upon these calculations, neither Conditions A nor B for Warrant 1 are satisfied.

Warrant 2, the Four-Hour Vehicular Volume signal warrant conditions, are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal. This warrant stipulates that for any four hours of a day, minimum threshold volumes are met on the artery and side road. Based on the projected hourly traffic volumes on site drive, this warrant is not met under future conditions.

Warrant 3 is intended for application where minor street traffic suffers undue delay in entering or crossing the major street for one hour of the day. It stipulates that the warrant shall be

applied in unusual cases (such as office complexes) where a large number of vehicles discharge over a short period of time. Based on the current uses (multi-use), and the projected traffic volumes this warrant does not apply and is not met.

Warrant 4 is met when pedestrians experience excessive delay in crossing the major street (Niagara Falls Blvd) because the traffic volumes are so heavy. The intersection is expected to have low pedestrian activity. This warrant is not met.

Warrant 5 is met when a sufficient number of gaps in traffic do not exist for certain size and frequency of school children to cross the major roadway. Based on the current conditions and low pedestrian activity, this warrant is not applicable at this location.

Warrant 6 is met when a traffic signal is needed to maintain progressive movement and vehicle platooning in a coordinated signal system. Based on the current signal system along Niagara Falls Blvd, this warrant is not met.

Warrant 7 is met when the severity, frequency, and types of crashes are such that it is a condition susceptible to correction by a traffic signal. As the proposed driveway is not yet built, accident data cannot be reviewed. Therefore, this warrant is not met.

Warrant 8 is met when a traffic signal might encourage concentration and organization of traffic flow on a roadway network. This warrant primarily focuses on two major intersecting roadways, which is not the case at the driveway. Therefore, this warrant is not met.

Warrant 9 is applicable when an intersection is located near and At-grade rail crossing. This warrant is not applicable at this location.

TABLE IV
SIGNAL WARRANT RESULTS

WARRANT #	DESCRIPTION	RESULT
1	*Eight-Hour vehicular volume*	NOT MET
2	*Four-Hour vehicular volume*	NOT MET
3	*Peak Hour*	NOT MET
4	*Pedestrian Volume*	NOT MET
5	*School Crossing*	NOT APPLICABLE
6	*Coordinated Signal System*	NOT MET
7	*Crash Experience*	NOT STUDIED
8	*Roadway Network*	NOT MET
9	*Intersection Near a Grade Crossing*	NOT APPLICABLE

Based on the traffic signal warrant investigation, none of the warrants are met at the proposed site driveway/Niagara Falls Blvd intersection. Based upon this traffic signal warrant investigation, a traffic signal is not recommended at this intersection.

X. SIGHT DISTANCE ANALYSIS

Sight distances were investigated at the proposed site driveways on Niagara Falls Blvd and Tonawanda Creek Road. Sight distance is provided at intersections to allow drivers to perceive the presence of potentially conflicting vehicles. This should occur in sufficient time for a motorist to stop or adjust their speed, as appropriate, to avoid a collision at the intersection. Sight distance is also provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersecting highway to anticipate and avoid potential incidents. If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road.

A Policy on Geometric Design of Highways and Streets published by the American Association of State Highway and Transportation Officials (AASHTO), 2004, was used as a reference to establish the required stopping sight distance and desirable intersection sight distance for the proposed site driveway.

Required stopping distances and desirable intersection sight distances are based on the design speed for a given section of roadway; generally the design speed is the posted speed limit plus 5 mph. For example, the posted speed limit along Niagara Falls Blvd and Tonawanda Creek Road is 55 mph and 45 mph in the vicinity of the site. Hence design speeds of 60 and 50 mph were used. The required stopping distance and desirable intersection sight distance based on the design speed are shown in Table V.

TABLE V
SIGHT DISTANCE REQUIREMENT AND MEASUREMENTS

INTERSECTION	Posted Speed Limit	Design Speed	Desirable Intersection Sight Distance for Left Turn from Stop (ft)	Required Stopping Sight Distance (ft)	Available Sight Distance (ft) to the:	
					Left	Right
Proposed Site Drive / Niagara Falls Blvd	55	60	665'	495'	>1000'	>1,000'
Proposed Site Drive / Tonawanda Creek Road	45	50	555'	425'	>1000'	>1,000'

The available sight distance is in excess of the desirable intersection sight distances and required stopping sight distance at the proposed driveways on Niagara Falls Blvd and Tonawanda Creek Road.

XI. LEFT TURN LANE WARRANT INVESTIGATION

Volume warrants for a left turn lane at the proposed site driveway on Tonawanda Creek Rd were investigated using the Transportation Research Board's NCHRP Report 279, Intersection Channelization Design Guide, 1985. Provisions for left turn lane facilities should be established

where traffic volumes are high enough and safety considerations are sufficient to warrant the additional lane.

Capacity analysis results indicate that there are no significant adverse impacts as a result of the proposed build out conditions. Although warrants are theoretically met for the left turn treatment at the site driveway intersection with Tonawanda Creek Road during the PM peak hour, no improvements are recommended after considering the following points:

- No improvements are required from a capacity standpoint (Southbound left turn movement operates, and will continue to operate, at efficient LOS "B").
- Given the capacity analysis results and the volumes projected on Tonawanda Creek Road, vehicles turning left will not experience significant delays.
- The warrant for a left-turn lane is only met during one peak period (PM peak).

Based on the combined information above, no exclusive left turn treatment is recommended at this time. However a post-developme nt study should be conducted to re-evaluate the need for an eastbound left turn lane in the future at the intersection of Tonawanda Creek Rd and Site driveway. The study should be conducted after the construction of the single family units and before the apartment units are built or a combin ation of the two that reaches 50% build out.

XII. TRAFFIC SAFETY BOARD COMMENTS

The Town of Amherst Traffic Safety Board provided comments during the Sketch Plan Review process in a letter dated November 5th, 2010. These comments are outlined below with responses.

1. *Consider connection of the southerly cul-de-sac to the north/south spine road for greater connectivity within the subdivision, better emergency response and to ensure school bussing service for the future residents.*

   Changes to the site plan, such as this, will be addressed during the site plan process. Any changes would not have a significant impact on the traffic analysis.

2. *The intersection of the north/south spine road and the roadway from Niagara Falls Blvd is located on a curve which is not optimal and may present sight distance issues.*

   The roadway from Niagara Falls Blvd intersects the north/south spine road on the outside of the curve. In addition, the curve is very gradual and sight distance is not expected to be an issue at this location as long as vegetation is cleared to maintain appropriate sight triangles at the intersection.

3. *A Traffic Impact Statement (TIS) should be completed for the proposed development that evaluates the proposed subdivision along with the future use of the MFR-5 and GB zoned lands indicated on the plan. As part of this TIS, there should be an evaluation of dual lefts at the Niagara Falls Blvd entrance to the subdivision and future development of the other lands.*

   This traffic study includes future apartments to be builton MFR-5zonedlands.The GB zoned land fronting on Niagara Falls Blvd is approximately 10 acres and is not included in this traffic study.

   The projected future traffic volume for southbound left turn movement from Niagara Falls Blvd to Tonawanda Creek Road is 137 and 83 vehicles during the AM and PM peak

hour. NYSDOT guidelines indicate that a dual left turn movement is considered when left turn volumes exceed 300 vph. Since the projected volumes are less than 50% of the recommended guidelines, a dual left turn movement should not be considered at this location. Dual left turn movements require special signal control which reduces the capacity for other movements at the intersection.

4. *It is preferred that the northerly east/west roadway be designed to provide a stub street to lands easterly or, if not possible, redesigned to form a 90 degree intersection with the easterly most north/south roadway.*

   Changes to the site plan, such as this, will be addressed during the site plan process. Any changes would not have a significant impact on the traffic analysis.

5. *The length of the cul-de-sac in the northwest portion of the site appears to exceed the maximum allowable under the Zoning Ordinance and may adversely impact emergency response vehicles without a second means of access.*

   Changes to the site plan, such as this, will be addressed during the site plan process. Any changes would not have a significant impact on the traffic analysis.

6. *Recommend that sidewalks be provided along both sides of all roadways within the proposed subdivision.*

   Changes to the site plan, such as this, will be addressed during the site plan process. Any changes would not have a significant impact on the traffic analysis.

XIII. CONCLUSIONS & RECOMMENDATIONS

This study addresses the transportation impact that can be expected from the proposed Evergreen Landing Subdivision development in the Town of Amherst as described in this report. The results indicate that the existing transportation network can accommodate the projected traffic volumes without a significant adverse impact on traffic operations in the area with the recommended mitigation measures in place.

The following list details specific recommendations to be considered as a result of this development:

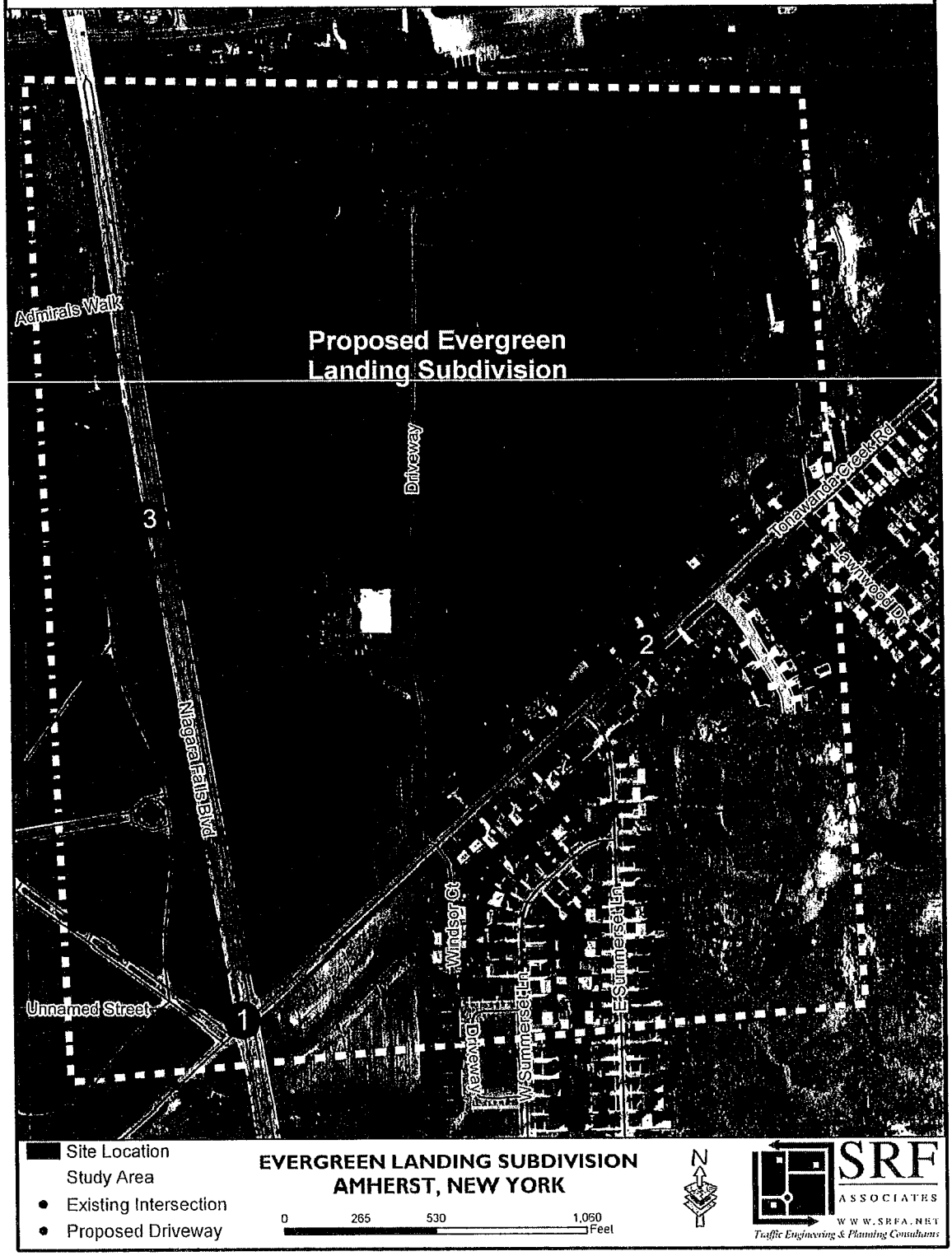
1. The proposed site driveways on Niagara Falls Blvd and Tonawanda Creek Road should be constructed with one lane exiting and one lane entering and should be stop sign controlled.

2. Conduct a post-development study to re-evaluate the need for an eastbound left turn lane in the future at the intersection of Tonawanda Creek Rd and Site driveway. The study should be conducted after the construction of the single family units and before the apartment units are built or a combination of the two that reaches 50% build out.

XIV. FIGURES

Figures 1 through 7 are included on the following pages.

FIGURE 1 - SITE LOCATION AND STUDY AREA



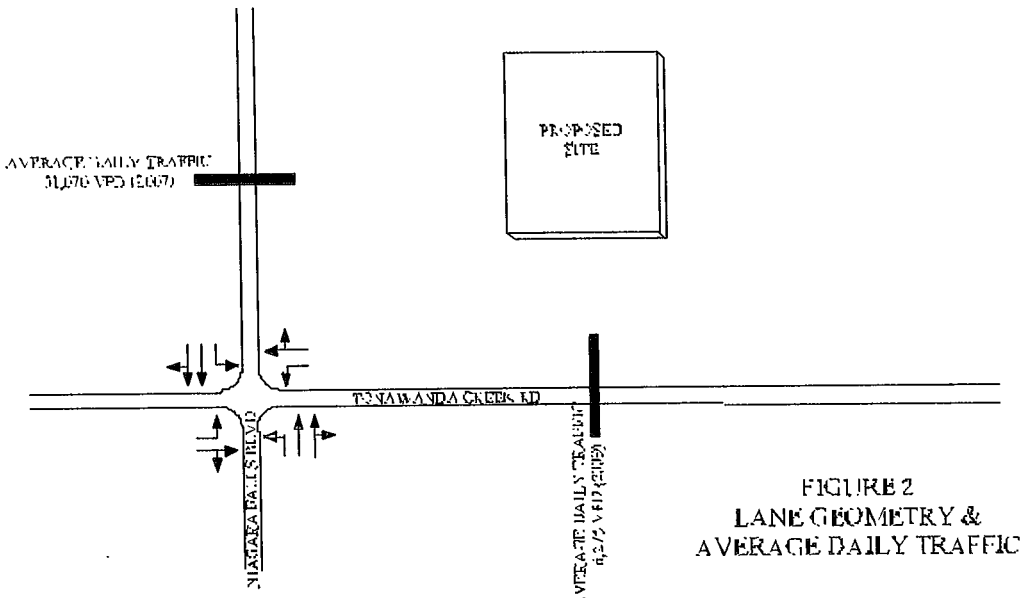


FIGURE 2
LANE GEOMETRY &
AVERAGE DAILY TRAFFIC

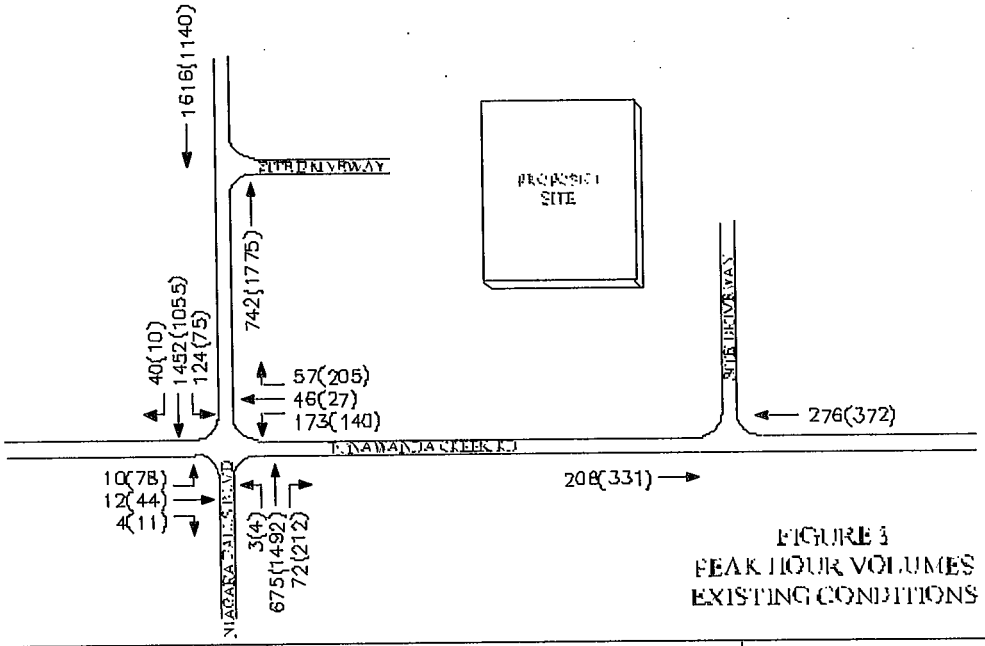


FIGURE 3
PEAK HOUR VOLUMES
EXISTING CONDITIONS

N

00(00) = AM(PM)

EVERGREEN LANDING

TOWN OF AMHERST
ERIE COUNTY, NEW YORK

SRF ASSOCIATES

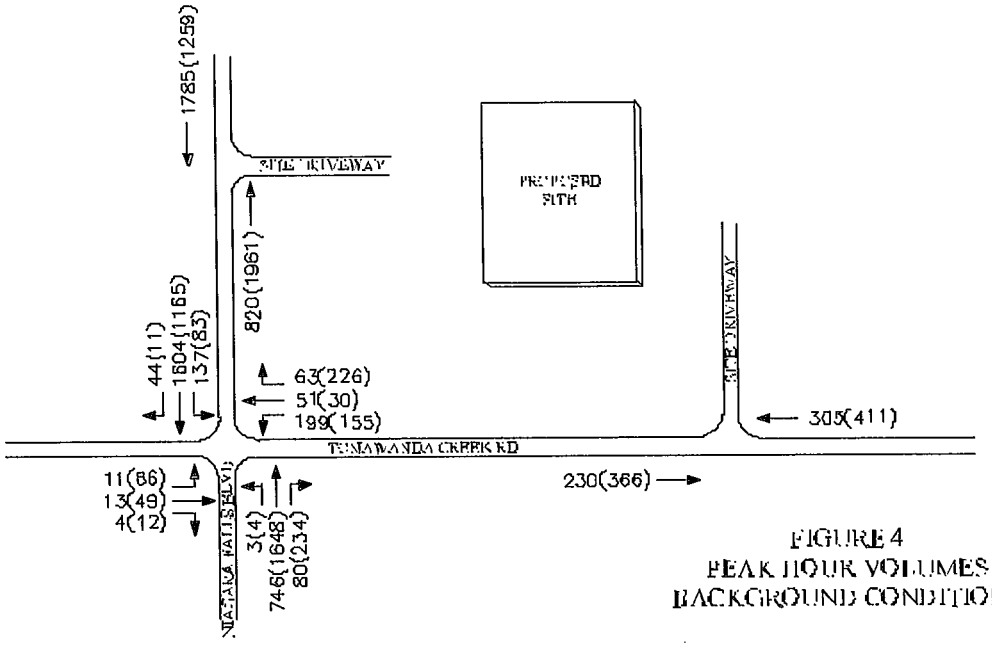


FIGURE 4
PEAK HOUR VOLUMES
BACKGROUND CONDITIONS

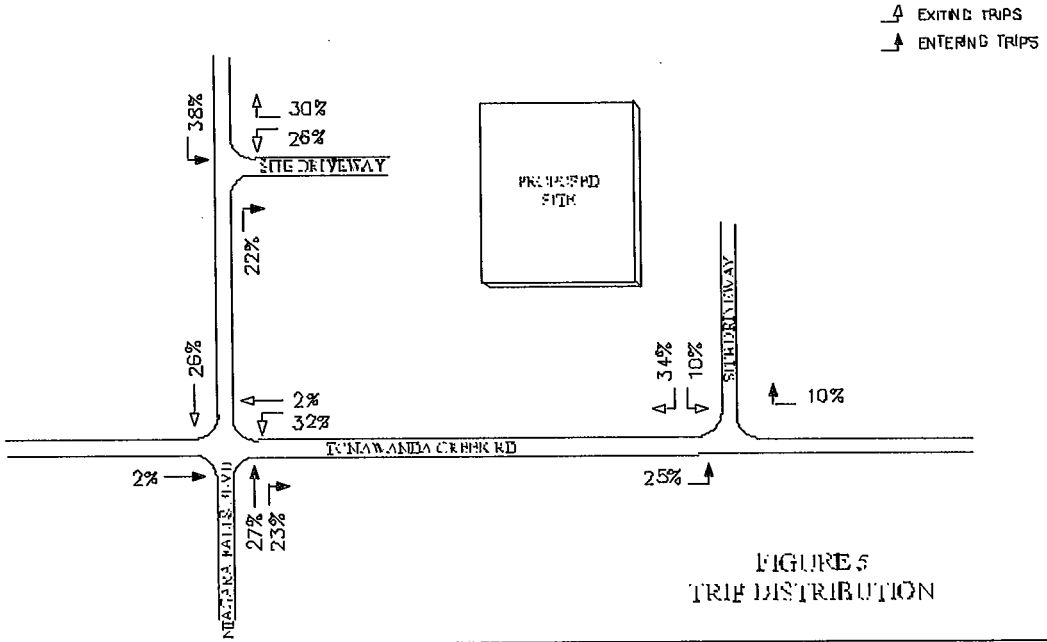


FIGURE 5
TRIP DISTRIBUTION

N

00(00) = AM(PM)

EVERGREEN LANDING

TOWN OF AMHERST
ERIE COUNTY, NEW YORK

SRF ASSOCIATES

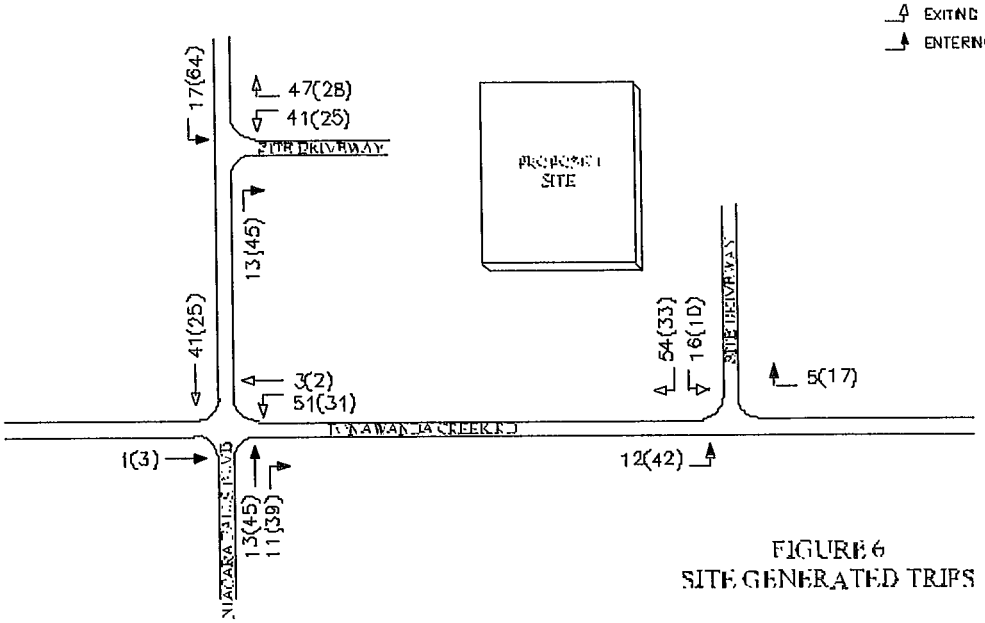


FIGURE 6
SITE GENERATED TRIPS

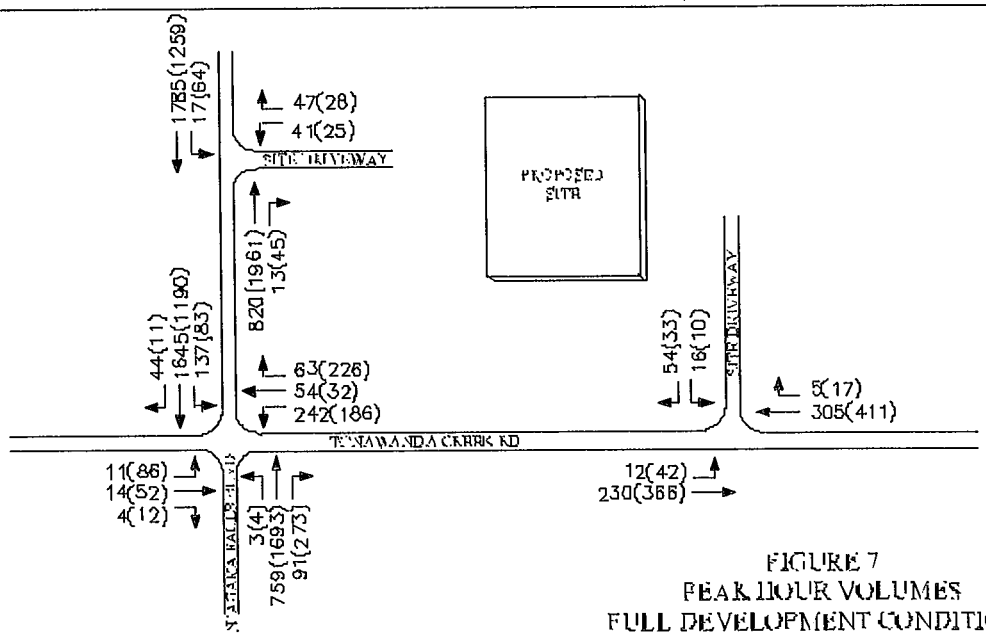


FIGURE 7
PEAK HOUR VOLUMES
FULL DEVELOPMENT CONDITIONS

N

00(00) = AM(PM)

EVERGREEN LANDING

TOWN OF AMHERST
ERIE COUNTY, NEW YORK

SRF ASSOCIATES

APPENDICES

A1

Collected Traffic Volume Data

SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : NiagFallsBlvd_ TonawandaCrkRd_A M
Site Code : 22222222
Start Date : 12/3/2010
Page No : 1

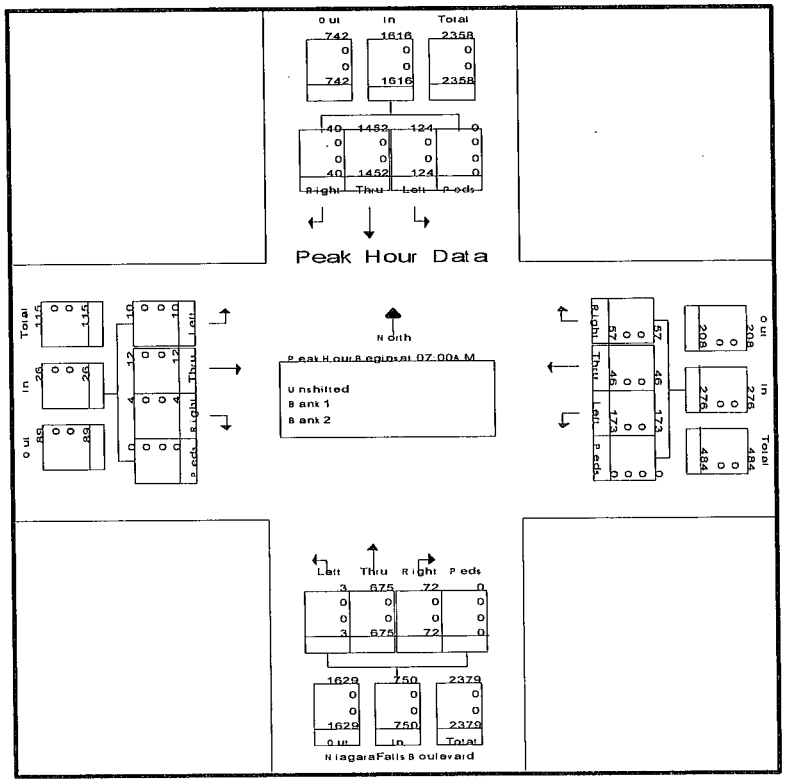
Groups Printed- Unshifted - Bank 1 - Bank 2

	Niagara Falls Boulevard				Tonawanda Creek Road				Niagara Falls Boulevard				Tonawanda Creek Road				
	Southbound				Westbound				Northbound				Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	1	373	17	0	15	9	41	0	17	156	0	0	0	2	2	0	633
07:15 AM	14	396	46	0	16	16	43	0	15	167	1	0	3	4	2	0	723
07:30 AM	17	367	33	0	14	12	49	0	24	176	2	0	1	3	4	0	702
07:45 AM	8	316	28	0	12	9	40	0	16	176	0	0	0	3	2	0	610
Total	40	1452	124	0	57	46	173	0	72	675	3	0	4	12	10	0	2668
08:00 AM	10	276	22	0	23	2	39	0	16	163	1	0	2	2	1	0	557
08:15 AM	2	336	22	0	18	2	43	0	20	182	1	0	1	5	1	0	633
08:30 AM	10	268	17	0	18	2	32	0	16	154	1	0	3	3	1	0	525
08:45 AM	4	312	20	0	15	2	40	0	20	1755	1	0	1	5	1	0	2176
Total	26	1192	81	0	74	8	154	0	72	2254	4	0	7	15	4	0	3891
Grand Total	66	2644	205	0	131	54	327	0	144	2929	7	0	11	27	14	0	6559
Apprch %	2.3	90.7	7	0	25.6	10.5	63.9	0	4.7	95.1	0.2	0	21.2	51.9	26.9	0	
Total %	1	40.3	3.1	0	2	0.8	5	0	2.2	44.7	0.1	0	0.2	0.4	0.2	0	
Unshifted	66	2644	205	0	131	54	327	0	144	2929	7	0	11	27	14	0	6559
% Unshifted	100	100	100	0	100	100	100	0	100	100	100	0	100	100	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : NiagFallsBlvd_ TonawandaCrkRd_A M
Site Code : 22222222
Start Date : 12/3/2010
Page No : 2

	Niagara Falls Boulevard					Tonawanda Creek Road					Niagara Falls Boulevard					Tonawanda Creek Road					
	Southbound					Westbound					Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	373	17	0	391	15	9	41	0	65	17	156	0	0	173	0	2	2	0	4	633
07:15 AM	14	396	46		456	16	16	43	0	75	15	167	1	0	183	3	4	2	0	9	723
07:30 AM	17							49			24	176	2		202	1	3	4			
07:45 AM	8	316	28	0	352	12	9	40	0	61	16	176	0	0	192	0	3	2	0	5	610
Total Volume	40	1452	124	0	1616	57	46	173	0	276	72	675	3	0	750	4	12	10	0	26	2668
% App. Total	2.5	89.9	7.7	0		20.7	16.7	62.7	0		9.6	90	0.4	0		15.4	46.2	38.5	0		
PHF	.488	.917	.674	.000	.886	.891	.719	.883	.000	.920	.750	.959	.375	.000	.928	.333	.750	.625	.000	.722	.923
Unshifted	40	1452																			
% Unshifted	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : NiagFallsBlvd_ TonawandaCrkRd_P M
Site Code : 11111111
Start Date : 12/2/2010
Page No : 1

Groups Printed- Unshifted - Bank 1 - Bank 2

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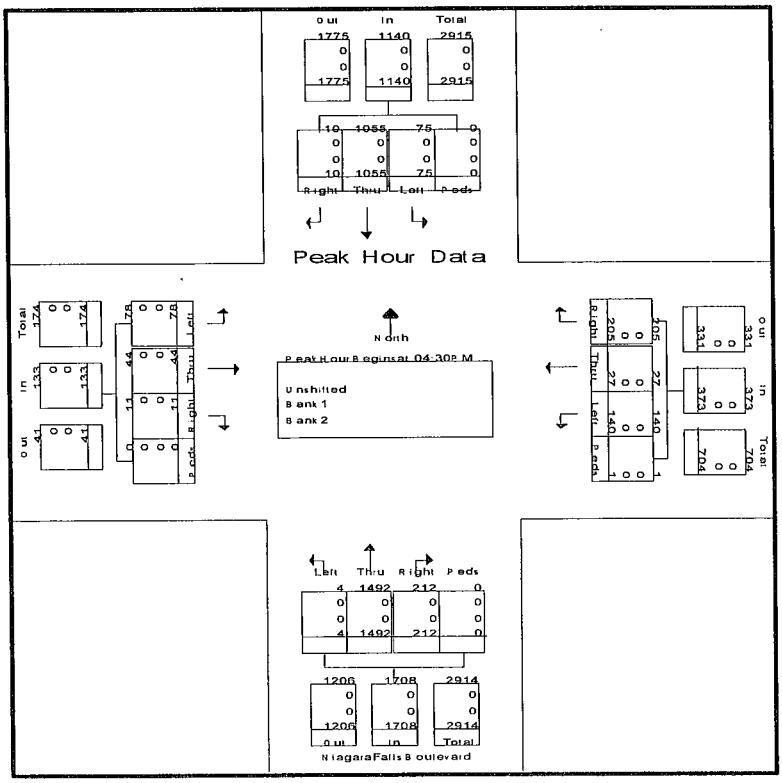
	Southbound				Westbound				Northbound				Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	5	289	16	0	32	3	26	0	47	328	4	0	2	10	13	0	775
04:15 PM	4	288	16	0	31	4	33	0	62	365	2	0	4	10	9	0	828
04:30 PM	4	302	16	0	39	5	42	0	49	348	0	0	3	17	21	0	846
04:45 PM	5	225	16	0	41	5	27	0	57	367	1	0	2	12	23	0	781
Total	18	1104	64	0	143	17	128	0	215	1408	7	0	11	49	66	0	3230
05:00 PM	1	260	23	0	53	10	31	1	47	364	1	0	5	9	18	0	843
05:15 PM	0	248	20	0	72	7	40	0	59	413	2	0	1	6	16	0	884
05:30 PM	1	271	23	0	53	9	31	1	45	358	1	0	5	8	17	0	823
05:45 PM	0	245	19	0	88	7	87	0	54	402	2	0	2	5	14	0	905
Total	2	1044	85	0	246	33	189	2	205	1537	6	0	13	28	65	0	3455
Grand Total	20	2148	149	0	389	50	317	2	420	2945	13	0	24	77	131	0	6685
Apprch %	0.9	92.7	6.4	0	51.3	6.6	41.8	0.3	12.4	87.2	0.4	0	10.3	33.2	56.5	0	
Total %	0.3	32.1	2.2	0	5.8	0.7	4.7	0	6.3	44.1	0.2	0	0.4	1.2	2	0	
Unshifted	20	2148	149	0	389	50	317	2	420	2945	13	0	24	77	131	0	6685
% Unshifted	100	100	100	0	100	100	100	100	100	100	100	0	100	100	100	0	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SRF & Associates
3495 Winton Place, Bldg E, Suite 110
Rochester, NY 14623

File Name : NiagFallsBlvd_ TonawandaCrkRd_P M
Site Code : 11111111
Start Date : 12/2/2010
Page No : 2

	Niagara Falls Boulevard					Tonawanda Creek Road					Niagara Falls Boulevard					Tonawanda Creek Road					
	Southbound					Westbound					Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	4	302	16	0	322	39	5	42									17	21	0	41	846
04:45 PM	5																	23			
05:00 PM	1	280	23	0	304	53	10	31	1	95	47	364	1	0	412	5	9	18	0	32	843
05:15 PM	0	248	20	0	268	72	7	40	0	119	59	413	2	0	474	1	6	16	0	23	884
Total Volume	10	1055	75	0	1140	205	27	140	1	373	212	1492	4	0	1708	11	44	78	0	133	3354
% App. Total	0.9	92.5	6.6	0		55	7.2	37.5	0.3		12.4	87.4	0.2	0		8.3	33.1	58.6	0		
PHF	500	873	815	000	885	712	675	833	250	784	898	903	500	000	901	550	647	848	000	811	949
Unshifted	10	1055										1492									
% Unshifted	100	100	100	0	100	100	100	100	100	100	100	100	100	0	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



A2

Miscellaneous Traffic Data and Calculations

Summary of Multi-Use Trip Generation
Average Weekday Driveway Volumes
December 02, 2010

Land Use	Size	24 Hour Two-Way Volume	AM Pk Hour Enter	AM Pk Hour Exit	PM Pk Hour Enter	PM Pk Hour Exit
Single Family Detached Housing	150 Dwelling Units	1436	29	84	96	56
Apartments	180 Dwelling Units	1197	18	74	72	40
Total Driveway Volume		2633	47	158	168	96
Total Peak Hour Pass-By Trips			0	0	0	0
Total Peak Hour Vol. Added to Adjacent Streets			47	158	168	96

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Summary of Multi-Use Trip Generation
Saturday and Sunday Driveway Volumes
December 02, 2010

		Saturday			Sunday		
Land Use	Size	24 Hr 2-Way Vol.	Peak Hour Enter	Peak Hour Exit	24 Hr 2-Way Vol.	Peak Hour Enter	Peak Hour Exit
Single Family Detached Housing	150 Dwelling Units	1512	74	66	1316	69	60
Apartments	180 Dwelling Units	1150	0	0	1055	0	0
Total Driveway Volume		2662	74	66	2371	69	60
Total Peak Hour Pass-By Trips			0	0			
Total Pk Hr Vol Added to Adjacent Streets			74	66			

Note: A zero indicates no data available.

PROPOSED EVERGREEN LANDING, AMHERST, NY

AM PEA K

Num of yrs
10

LOCATION NUMBER	INTERSECTION DESCRIPTION	Existing Volume	Bkgd Volume 1.0%	Proposed Evergreen Landing				Total Site Trips	Full Build Volumes
				Enter Dist. %	Exit Dist. %	Trips IN 47	Trips OUT 158		
1	Tonawanda Creek Rd/ Niagara Falls Blvd								
	SR	40	44			0	0	0	44
	ST	1452	1604		26%	0	41	41	1645
	SL	124	137			0	0	0	137
	WR	57	63			0	0	0	63
	WT	46	51		2%	0	3	3	54
	WL	173	191		32%	0	51	51	242
	NR	72	80	23%		11	0	11	91
	NT	675	746	27%		13	0	13	759
	NL	3	3			0	0	0	3
	ER	4	4			0	0	0	4
	ET	12	13	2%		1	0	1	14
	EL	10	11			0	0	0	11
2	Tonawanda Creek Rd/ Site Driveway								
	SR				34%	0	54	54	54
	ST					0	0	0	0
	SL				10%	0	16	16	16
	WR			10%		5	0	5	5
	WT	276	305			0	0	0	305
	WL					0	0	0	0
	NR					0	0	0	0
	NT					0	0	0	0
	NL					0	0	0	0
	ER					0	0	0	0
	ET	208	230			0	0	0	230
	EL			25%		12	0	12	12
3	Niagara Falls Blvd/ Site Driveway								
	SR					0	0	0	0
	ST	1616	1785			0	0	0	1785
	SL			38%		18	0	18	18
	WR				30%	0	47	47	47
	WT					0	0	0	0
	WL				26%	0	41	41	41
	NR			27%		13	0	13	13
	NT	742	820			0	0	0	820
	NL					0	0	0	0
	ER					0	0	0	0
	ET					0	0	0	0
	EL					0	0	0	0

PROPOSED EVERGREEN LANDING, AMHERST, NY

PM PEA K

Num of yrs
10

LOCATION NUMBER	INTERSECTION DESCRIPTION	Existing Volume	Bkgd Volume 1.0%	Proposed Evergreen Landing				Total Site Trips	Full Build Volumes
				Enter Dist. %	Exit Dist. %	Trips IN 168	Trips OUT 96		
1	Tonawanda Creek Rd/ Niagara Falls Blvd								
	SR	10	11			0	0	0	11
	ST	1055	1165		26%	0	25	25	1190
	SL	75	83			0	0	0	83
	WR	205	226			0	0	0	226
	WT	27	30		2%	0	2	2	32
	WL	140	155		32%	0	31	31	186
	NR	212	234	23%		39	0	39	273
	NT	1492	1648	27%		45	0	45	1693
	NL	4	4			0	0	0	4
	ER	11	12			0	0	0	12
	ET	44	49	2%		3	0	3	52
	EL	78	86			0	0	0	86
2	Tonawanda Creek Rd/ Site Driveway								
	SR				34%	0	33	33	33
	ST					0	0	0	0
	SL				10%	0	10	10	10
	WR			10%		17	0	17	17
	WT	372	411			0	0	0	411
	WL					0	0	0	0
	NR					0	0	0	0
	NT					0	0	0	0
	NL					0	0	0	0
	ER					0	0	0	0
	ET	331	366			0	0	0	366
	EL			25%		42	0	42	42
3	Niagara Falls Blvd/ Site Driveway								
	SR					0	0	0	0
	ST	1140	1259			0	0	0	1259
	SL			38%		64	0	64	64
	WR				30%	0	29	29	29
	WT					0	0	0	0
	WL				26%	0	25	25	25
	NR			27%		45	0	45	45
	NT	1775	1961			0	0	0	1961
	NL					0	0	0	0
	ER					0	0	0	0
	ET					0	0	0	0
	EL					0	0	0	0

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'green Landing, Amherst, NY

of Ambient Traffic Volume Growth

Roadway	Segment end description	2001	2004	2007	Annual Growth
Niagara Falls Blvd	NIAGARA CO LINE	32,200	34,020	31,070	-0.6%
				Average	-0.6%

Guideline for determining left-turn Lane at a two-way stop-controlled intersection
TWO LANE ROADWAY

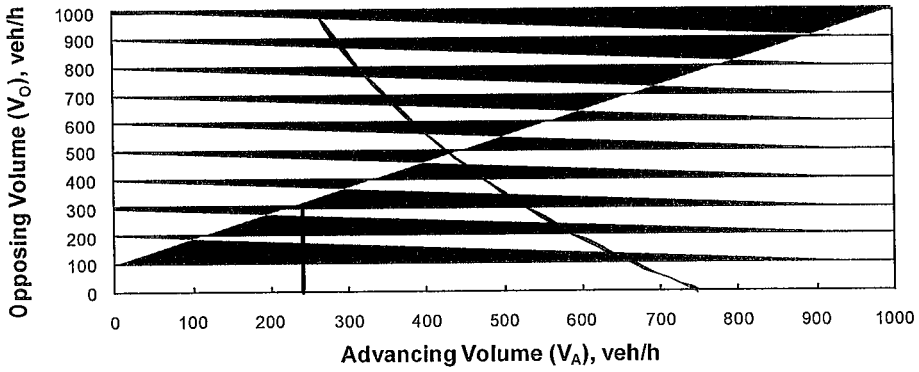
INPUT

Variable	Value
Major Approach	Tonawanda Creek Road/Driveway(AM)
Approach	Eastbound
Design Speed Limit - MPH	45
Percent of left-turns in advancing volume (V_A), %:	5%
Advancing volume (V_A), veh/h:	242
Opposing volume (V_O), veh/h:	310

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

PLOT - LINE 1		PLOT - LINE 2	
0	310	242	0
242	310	242	310



OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	524
Guidance for determining the need for a major-road left-turn bay:	
Eastbound Left-turn treatment NOT warranted at Tonawanda Creek Road/Driveway(AM) Intersections	

Guideline for determining left-turn Lane at a two-way stop-controlled intersection
TWO LANE ROADWAY

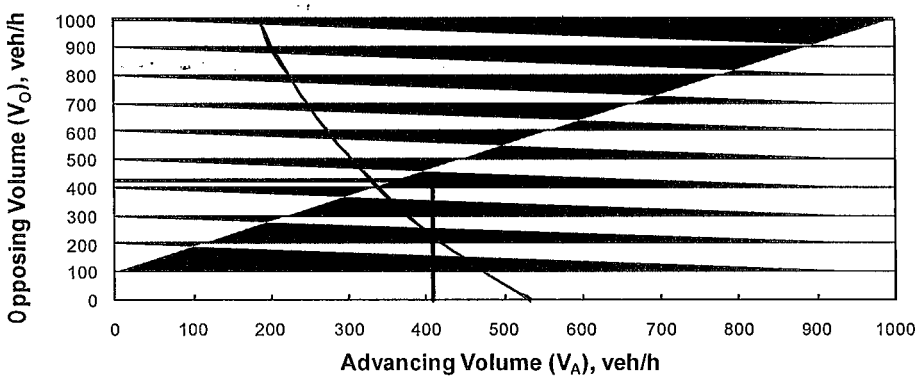
INPUT

Variable	Value
Major Approach	Tonawanda Creek Road/Driveway(PM)
Approach	Eastbound
Design Speed Limit - MPH	45
Percent of left-turns in advancing volume (V_A), %:	10%
Advancing volume (V_A), veh/h:	408
Opposing volume (V_O), veh/h:	428

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

PLOT - LINE 1		PLOT - LINE 2	
0	428	408	0
408	428	408	428



OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	330
Guidance for determining the need for a major-road left-turn bay:	
Eastbound Left-turn treatment warranted at Tonawanda Creek Road/Driveway(PM) Intersections	

Traffic Signal Warrant Analysis

NYS Route 62 - Proposed Site Drive/Niagara Falls Blvd

Town of Amherst, Erie County

Hour			Existing Fluctuation in Artery Volumes				**Full Development Artery Volume on Route 252 at Site/NYSDOT Driveway**	Hourly Fluctuation of residential driveway traffic*	**Total Hourly Volumes Exiting Proposed Office Development**
			per NYSDOT count on US 62	per NYSDOT count on US 62	per NYSDOT count on US 62	Hourly Fluctuation			
			NB	SB	Two-Way	Two-Way	**Total**	**Exiting**	
7:00 AM	to	8:00 AM	749	1441	2190	7.05%	**2968**	2.82%	**20**
8:00 AM	to	9:00 AM	702	1174	1876	6.04%	**2542**	7.68%	**54**
9:00 AM	to	10:00 AM	659	1079	1738	5.59%	**2355**	6.74%	**47**
10:00 AM	to	11:00 AM	724	990	1714	5.52%	**2323**	3.29%	**23**
11:00 AM	to	12:00 PM	858	1038	1896	6.10%	**2569**	6.11%	**43**
12:00 PM	to	1:00 PM	1024	1159	2183	7.03%	**2958**	4.55%	**32**
1:00 PM	to	2:00 PM	960	1115	2075	6.68%	**2812**	6.11%	**43**
2:00 PM	to	3:00 PM	1009	1057	2066	6.65%	**2800**	8.78%	**62**
3:00 PM	to	4:00 PM	1146	1143	2289	7.37%	**3102**	6.90%	**49**
4:00 PM	to	5:00 PM	1215	1192	2407	7.75%	**3262**	5.17%	**36**
5:00 PM	to	6:00 PM	1276	1151	2427	7.81%	**3289**	7.52%	**53**
6:00 PM	to	7:00 PM	1075	1122	2197	7.07%	**2977**	8.15%	**57**
7:00 PM	to	8:00 PM	948	861	1809	5.82%	**2452**	8.78%	**62**
8:00 PM	to	9:00 PM	792	622	1414	4.55%	**1916**	5.96%	**42**
9:00 PM	to	10:00 PM	646	484	1130	3.64%	**1531**	4.55%	**32**
10:00 PM	to	11:00 PM	411	356	767	2.47%	**1039**	3.45%	**24**
					31,072		42,108		**704**

* based on hourly traffic volumes at a residential development in Webster, NY

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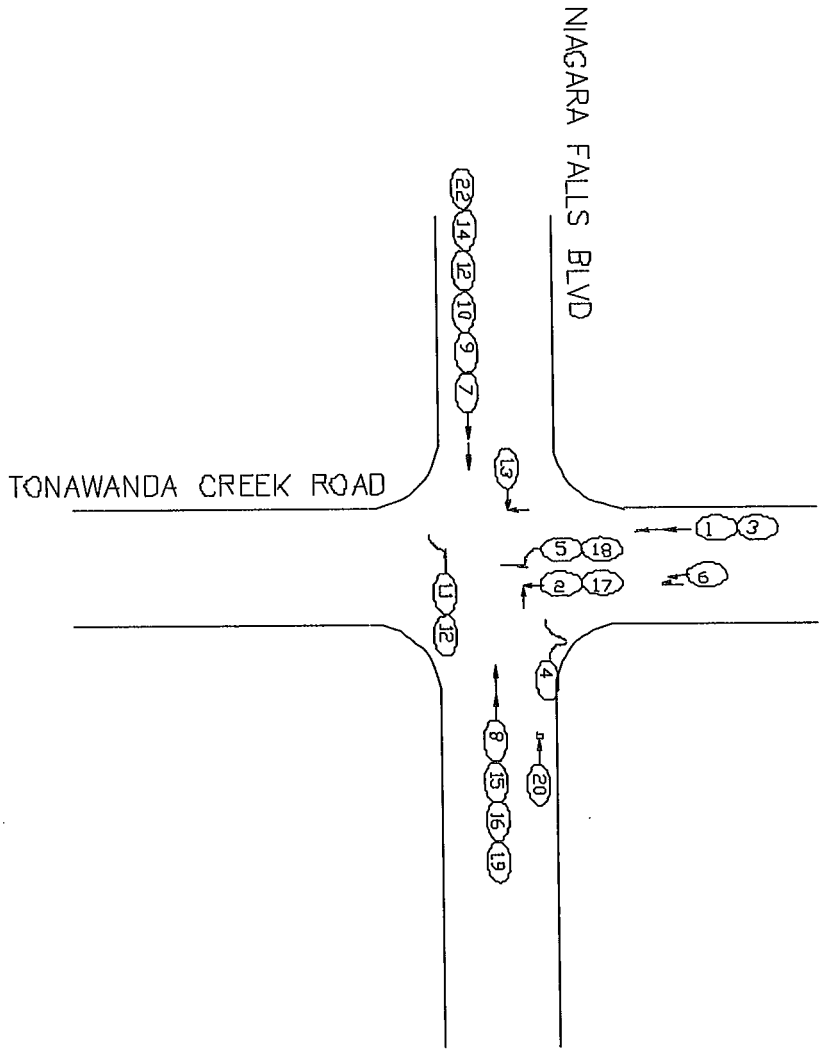

ACCIDENT DETAIL

TYPE OF ACCIDENT (SEE LEGEND)

KEY NUMBER

SYMBOLS

- MOVING VEHICLE
- BACKING VEHICLE
- FIXED OBJECT
- RIGHT ANGLE
- REAR END
- RIGHT TURN
- HEAD ON
- PEDESTRIAN
- BICYCLE
- MOTORCYCLE
- DEER HIT
- OVERTAKING
- LEFT TURN
- SIDESWIPE

KEY

N

ACCIDENT DIAGRAM

TOWN OF AMHERST,
ERIE COUNTY, NEW YORK

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INTERSECTION ACCIDENT RATE CALCULATIONS

$$\text{Rate per MEV} = \frac{\text{\# of Accidents} \times 1{,}000{,}000}{\text{Total No. of Entering Vehicles}} =$$

$$\text{Rate} = \frac{\text{\# of Accidents} \times 1{,}000{,}000}{\text{Veh./Day} \times \text{Duration of Study}} =$$

Accidents per million entering vehicles (Acc / MEV)

---

1 Niagara Falls Blvd / Tonawanda Creek Road

ADT = Peak hour entering volume / k factor

ADT = 3353 VPH / 0.10 = 33530 VPD

$$\text{Rate} = \frac{22 \text{ Acc.} \times 1{,}000{,}000}{33530 \text{ VPD} \times 365 \text{ Days} \times 3.000 \text{ Yrs.}} = 0.60 \text{ Acc / MEV}$$

A3

Level of Service:
Criteria and Definitions

Level of Service Criteria

Highway Capacity Manual 2000

SIGNALIZED INTERSECTIONS

Level of Service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. Level of Service for signalized intersections is defined in terms of delay specifically, average total delay per vehicle for a 15 minute analysis period. The ranges are as follows:

Level of Service	Control Delay per vehicle (seconds)
A	< 10
B	10 – 20
C	20 – 35
D	35 – 55
E	55 – 80
F	>80

UNSIGNALIZED INTERSECTIONS

Level of Service for unsignalized intersections is also defined in terms of delay. However, the delay criteria are different from a signalized intersection. The primary reason for this is driver expectation that a signalized intersection is designed to carry higher volumes than an unsignalized intersection. The total delay threshold for any given Level of Service is less for an unsignalized intersection than for a signalized intersection. The ranges are as follows:

Level of Service	Control Delay per vehicle (seconds)
A	< 10
B	10 – 15
C	15 – 25
D	25 – 35
E	35 - 50
F	>50

A4

Level of Service Calculations: Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	12	4	173	46	57	3	675	72	124	1452	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		0	250		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.961			0.917			0.986			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1790	0	1770	1708	0	1770	3490	0	1770	3525	0
Flt Permitted	0.685			0.742			0.093			0.331		
Satd. Flow (perm)	1276	1790	0	1382	1708	0	173	3490	0	617	3525	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			62			30			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			1984			284			1554	
Travel Time (s)		9.6			45.1			6.5			35.3	
Peak Hour Factor	0.72	0.72	0.72	0.92	0.92	0.92	0.93	0.93	0.93	0.89	0.89	0.89
Adj. Flow (vph)	14	17	6	188	50	62	3	726	77	139	1631	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	23	0	188	112	0	3	803	0	139	1676	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

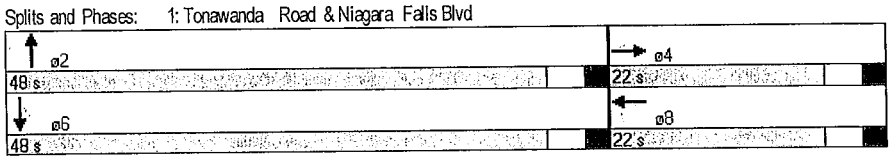
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		21.0	21.0		21.0	21.0	
Total Split (s)	22.0	22.0	0.0	22.0	22.0	0.0	48.0	48.0	0.0	48.0	48.0	0.0
Total Split (%)	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%
Maximum Green (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	13.4	13.4		13.4	13.4		43.1	43.1		43.1	43.1	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.65	0.65		0.65	0.65	
v/c Ratio	0.05	0.06		0.67	0.28		0.03	0.35		0.35	0.73	
Control Delay	21.1	17.6		37.1	13.4		6.0	6.1		9.3	11.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.1	17.6		37.1	13.4		6.0	6.1		9.3	11.0	
LOS	CB			DB			AA			AB		
Approach Delay		19.0			28.3			6.1			10.8	
Approach LOS		B			C			A			B	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 66.6
Natural Cycle: 60
Control Type: Actuated-Uncoord inated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 11.4
Intersection Capacity Utilization 73.5%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service D

Splits and Phases: 1: Tonawanda Road & Niagara Falls Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	44	11	140	27	205	4	1492	212	75	1055	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		0	250		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.969			0.868			0.981			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1805	0	1770	1617	0	1770	3472	0	1770	3536	0
Flt Permitted	0.200			0.713			0.219			0.060		
Satd. Flow (perm)	373	1805	0	1328	1617	0	408	3472	0	112	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			141			25			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			1984			284			1554	
Travel Time (s)		9.6			45.1			6.5			35.3	
Peak Hour Factor	0.81	0.81	0.81	0.78	0.78	0.78	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	96	54	14	179	35	263	4	1658	236	84	1185	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	68	0	179	298	0	4	1894	0	84	1196	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	

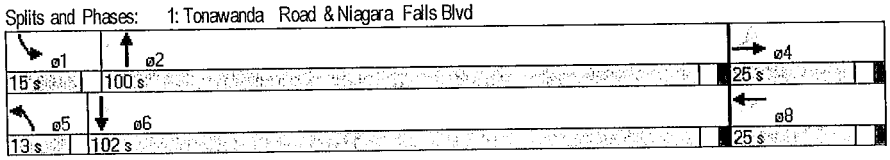
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		24.0	24.0		8.0	21.0		8.0	21.0	
Total Split (s)	25.0	25.0	0.0	25.0	25.0	0.0	13.0	100.0	0.0	15.0	102.0	0.0
Total Split (%)	17.9%	17.9%	0.0%	17.9%	17.9%	0.0%	9.3%	71.4%	0.0%	10.7%	72.9%	0.0%
Maximum Green (s)	20.0	20.0		20.0	20.0		10.0	95.0		12.0	97.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	3.0	5.0	4.0	3.0	5.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	20.0	20.0		20.0	20.0		102.6	95.0		107.5	103.8	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.76	0.70		0.79	0.77	
v/c Ratio	1.75	0.25		0.91	0.83		0.01	0.78		0.47	0.44	
Control Delay	430.6	48.2		101.8	49.2		3.0	16.1		15.9	6.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	430.6	48.2		101.8	49.2		3.0	16.1		15.9	6.4	
LOS	FD			FD			AB			BA		
Approach Delay		272.0			68.9			16.1			7.1	
Approach LOS		F			E			B			A	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 135.5
Natural Cycle: 90
Control Type: Actuated-Uncoord inated
Maximum v/c Ratio: 1.75
Intersection Signal Delay: 30.7
Intersection Capacity Utilization 86.4%
Analysis Period (min) 15

Intersection LOS: C
ICU Level of Service E

Splits and Phases: 1: Tonawanda Road & Niagara Falls Blvd



A5

Level of Service Calculations: Background Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	13	4	199	51	63	3	746	80	137	1604	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		0	250		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.962			0.917			0.985			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1792	0	1770	1708	0	1770	3486	0	1770	3525	0
Flt Permitted	0.678			0.742			0.093			0.294		
Satd. Flow (perm)	1263	1792	0	1382	1708	0	173	3486	0	548	3525	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			68			30			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			1984			284			1554	
Travel Time (s)		9.6			45.1			6.5			35.3	
Peak Hour Factor	0.72	0.72	0.72	0.92	0.92	0.92	0.93	0.93	0.93	0.89	0.89	0.89
Adj. Flow (vph)	15	18	6	216	55	68	3	802	86	154	1802	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	24	0	216	123	0	3	888	0	154	1851	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

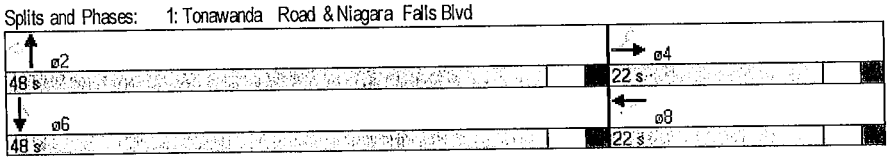
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		21.0	21.0		21.0	21.0	
Total Split (s)	22.0	22.0	0.0	22.0	22.0	0.0	48.0	48.0	0.0	48.0	48.0	0.0
Total Split (%)	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%
Maximum Green (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	14.3	14.3		14.3	14.3		43.1	43.1		43.1	43.1	
Actuated g/C Ratio	0.21	0.21		0.21	0.21		0.64	0.64		0.64	0.64	
v/c Ratio	0.06	0.06		0.74	0.30		0.03	0.40		0.44	0.82	
Control Delay	21.2	17.6		40.7	13.3		6.0	6.7		11.9	14.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.2	17.6		40.7	13.3		6.0	6.7		11.9	14.0	
LOS	CB			DB			AA			BB		
Approach Delay		19.0			30.8			6.7			13.9	
Approach LOS		B			C			A			B	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 67.4
Natural Cycle: 60
Control Type: Actuated-Uncoord inated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 13.7
Intersection Capacity Utilization 79.3%
Analysis Period (min) 15

Intersection LOS: B
ICU Level of Service D

Splits and Phases: 1: Tonawanda Road & Niagara Falls Blvd



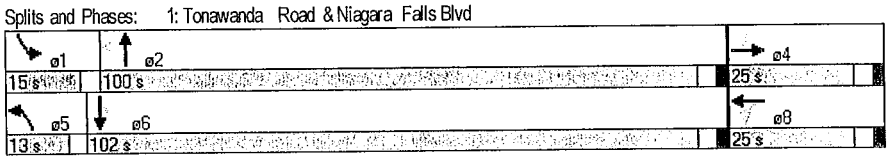
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	49	12	155	30	226	4	1648	234	83	1165	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		0	250		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.970			0.867			0.981			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1807	0	1770	1615	0	1770	3472	0	1770	3536	0
Flt Permitted	0.200			0.702			0.188			0.040		
Satd. Flow (perm)	373	1807	0	1308	1615	0	350	3472	0	75	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			129			25			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			1984			284			1554	
Travel Time (s)		9.6			45.1			6.5			35.3	
Peak Hour Factor	0.81	0.81	0.81	0.78	0.78	0.78	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	106	60	15	199	38	290	4	1831	260	93	1309	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	106	75	0	199	328	0	4	2091	0	93	1321	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		24.0	24.0		8.0	21.0		8.0	21.0	
Total Split (s)	25.0	25.0	0.0	25.0	25.0	0.0	13.0	100.0	0.0	15.0	102.0	0.0
Total Split (%)	17.9%	17.9%	0.0%	17.9%	17.9%	0.0%	9.3%	71.4%	0.0%	10.7%	72.9%	0.0%
Maximum Green (s)	20.0	20.0		20.0	20.0		10.0	95.0		12.0	97.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	3.0	5.0	4.0	3.0	5.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	20.0	20.0		20.0	20.0		102.6	95.0		108.5	104.8	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.75	0.70		0.79	0.77	
v/c Ratio	1.93	0.28		1.04	0.95		0.01	0.86		0.56	0.49	
Control Delay	513.6	49.8		131.6	71.3		3.2	20.9		34.5	6.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	513.6	49.8		131.6	71.3		3.2	20.9		34.5	6.8	
LOS	F	D		F	E		A	C		C	A	
Approach Delay		321.4			94.1			20.8			8.7	
Approach LOS		F			F			C			A	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 136.5
Natural Cycle: 100
Control Type: Actuated-Uncoord inated
Maximum v/c Ratio: 1.93
Intersection Signal Delay: 38.8 Intersection LOS: D
Intersection Capacity Utilization 93.7% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 1: Tonawanda Road & Niagara Falls Blvd



A6

Level of Service Calculations: Full Development Conditions

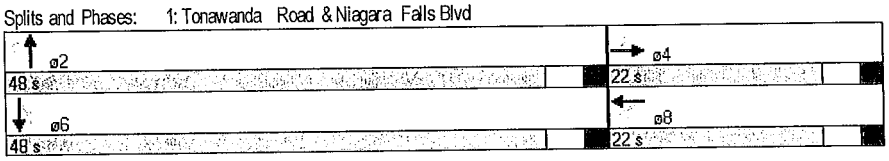
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	14	4	242	54	63	3	759	91	137	1645	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		0	250		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.964			0.920			0.984			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1796	0	1770	1714	0	1770	3483	0	1770	3525	0
Flt Permitted	0.676			0.741			0.093			0.280		
Satd. Flow (perm)	1259	1796	0	1380	1714	0	173	3483	0	522	3525	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			68			34			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			1984			284			1554	
Travel Time (s)		9.6			45.1			6.5			35.3	
Peak Hour Factor	0.72	0.72	0.72	0.92	0.92	0.92	0.93	0.93	0.93	0.89	0.89	0.89
Adj. Flow (vph)	15	19	6	263	59	68	3	816	98	154	1848	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	25	0	263	127	0	3	914	0	154	1897	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	19.0	19.0		19.0	19.0		21.0	21.0		21.0	21.0	
Total Split (s)	22.0	22.0	0.0	22.0	22.0	0.0	48.0	48.0	0.0	48.0	48.0	0.0
Total Split (%)	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%
Maximum Green (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	15.7	15.7		15.7	15.7		43.0	43.0		43.0	43.0	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.62	0.62		0.62	0.62	
v/c Ratio	0.05	0.06		0.83	0.29		0.03	0.42		0.47	0.86	
Control Delay	21.0	17.5		49.3	13.3		6.0	7.2		13.3	16.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.0	17.5		49.3	13.3		6.0	7.2		13.3	16.2	
LOS	CB			DB			AA			BB		
Approach Delay		18.8			37.5			7.2			16.0	
Approach LOS		B			D			A			B	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 68.8
Natural Cycle: 60
Control Type: Actuated-Uncoord inated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 16.1 Intersection LOS: B
Intersection Capacity Utilization 82.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1: Tonawanda Road & Niagara Falls Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	12	230	305	5	16	54
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.92	0.92	0.90	0.90
Hourly flow rate (vph)	17	319	332	5	18	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	337				687	334
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	337				687	334
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				96	92
cM capacity (veh/h)	1222				407	708

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	336	337	78
Volume Left	17	0	18
Volume Right	0	5	60
cSH	1222	1700	605
Volume to Capacity	0.01	0.20	0.13
Queue Length 95th (ft)	1	0	11
Control Delay (s)	0.5	0.0	11.8
Lane LOS	A		B
Approach Delay (s)	0.5	0.0	11.8
Approach LOS			B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	32.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	41	47	820	13	17	1785
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.93	0.93	0.89	0.89
Hourly flow rate (vph)	46	52	882	14	19	2006
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1930	448			896	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1930	448			896	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	20	91			97	
cM capacity (veh/h)	57	558			753	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	98	588	308	19	1003	1003
Volume Left	46	0	0	19	0	0
Volume Right	52	0	14	0	0	0
cSH	109	1700	1700	753	1700	1700
Volume to Capacity	0.90	0.35	0.18	0.03	0.59	0.59
Queue Length 95th (ft)	135	0	0	2	0	0
Control Delay (s)	132.7	0.0	0.0	9.9	0.0	0.0
Lane LOS	F			A		
Approach Delay (s)	132.7	0.0		0.1		
Approach LOS	F					

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	52	12	186	32	226	4	1693	273	83	1190	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		0	250		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.972			0.869			0.979			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1811	0	1770	1619	0	1770	3465	0	1770	3536	0
Flt Permitted	0.200			0.689			0.182			0.040		
Satd. Flow (perm)	373	1811	0	1283	1619	0	339	3465	0	75	3536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			127			29			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			1984			284			1554	
Travel Time (s)		9.6			45.1			6.5			35.3	
Peak Hour Factor	0.81	0.81	0.81	0.78	0.78	0.78	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	106	64	15	238	41	290	4	1881	303	93	1337	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	106	79	0	238	331	0	4	2184	0	93	1349	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	

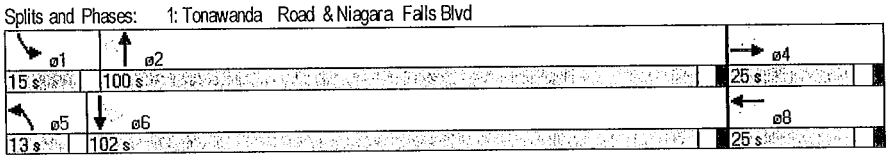
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		24.0	24.0		8.0	21.0		8.0	21.0	
Total Split (s)	25.0	25.0	0.0	25.0	25.0	0.0	13.0	100.0	0.0	15.0	102.0	0.0
Total Split (%)	17.9%	17.9%	0.0%	17.9%	17.9%	0.0%	9.3%	71.4%	0.0%	10.7%	72.9%	0.0%
Maximum Green (s)	20.0	20.0		20.0	20.0		10.0	95.0		12.0	97.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	3.0	5.0	4.0	3.0	5.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	20.0	20.0		20.0	20.0		102.6	95.0		108.5	104.8	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.75	0.70		0.79	0.77	
v/c Ratio	1.93	0.29		1.27	0.96		0.01	0.90		0.56	0.50	
Control Delay	513.6	51.1		200.5	74.3		3.2	23.7		34.5	6.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	513.6	51.1		200.5	74.3		3.2	23.7		34.5	6.9	
LOS	F	D		F	E		A	C		C	A	
Approach Delay		316.1			127.1			23.7			8.7	
Approach LOS		F			F			C			A	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 136.5
Natural Cycle: 130
Control Type: Actuated-Uncoord inated
Maximum v/c Ratio: 1.93
Intersection Signal Delay: 44.5
Intersection Capacity Utilization 96.3%
Analysis Period (min) 15

Intersection LOS: D
ICU Level of Service F

Splits and Phases: 1: Tonawanda Road & Niagara Falls Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	42	366	411	17	10	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.896	
Flt Protected		0.995			0.989	
Satd. Flow (prot)	0	1853	1853	0	1651	0
Flt Permitted		0.995			0.989	
Satd. Flow (perm)	0	1853	1853	0	1651	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1984	664		536	
Travel Time (s)		45.1	15.1		12.2	
Peak Hour Factor	0.72	0.72	0.92	0.92	0.90	0.90
Adj. Flow (vph)	58	508	447	18	11	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	566	465	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 57.6% ICU Level of Service B
Analysis Period (min) 15

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	42	366	411	17	10	33
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.92	0.92	0.90	0.90
Hourly flow rate (vph)	58	508	447	18	11	37
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	465				1081	456
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	465				1081	456
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				95	94
cM capacity (veh/h)	1096				228	604

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	567	465	48
Volume Left	58	0	11
Volume Right	0	18	37
cSH	1096	1700	437
Volume to Capacity	0.05	0.27	0.11
Queue Length 95th (ft)	4	0	9
Control Delay (s)	1.4	0.0	14.2
Lane LOS	A		B
Approach Delay (s)	1.4	0.0	14.2
Approach LOS			B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	25	28	1961	45	64	1259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	150	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25	25		25	25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt	0.929		0.997			
Flt Protected	0.977				0.950	
Satd. Flow (prot)	1691	0	3529	0	1770	3539
Flt Permitted	0.977				0.950	
Satd. Flow (perm)	1691	0	3529	0	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	905		1554			595
Travel Time (s)	20.6		35.3			13.5
Peak Hour Factor	0.90	0.90	0.93	0.93	0.89	0.89
Adj. Flow (vph)	28	31	2109	48	72	1415
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	2157	0	72	1415
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 65.6%
ICU Level of Service C
Analysis Period (min) 15

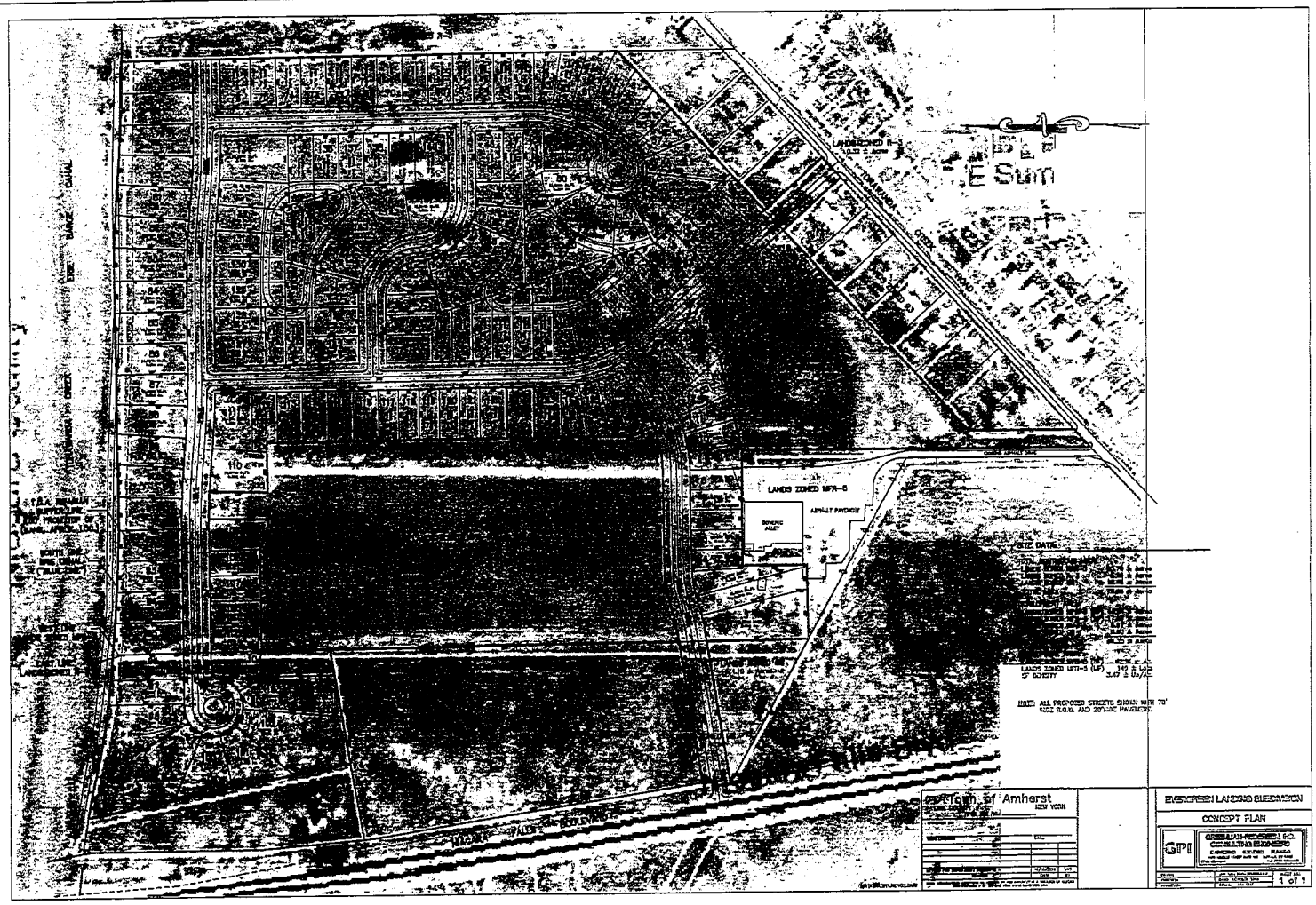
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	25	28	1961	45	64	1259
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.93	0.93	0.89	0.89
Hourly flow rate (vph)	28	31	2109	48	72	1415
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2984	1078			2157	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2984	1078			2157	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	85			71	
cM capacity (veh/h)	8	214			245	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	59	1406	751	72	707	707
Volume Left	28	0	0	72	0	0
Volume Right	31	0	48	0	0	0
cSH	16	1700	1700	245	1700	1700
Volume to Capacity	3.76	0.83	0.44	0.29	0.42	0.42
Queue Length 95th (ft)	Err	0	0	29	0	0
Control Delay (s)	Err	0.0	0.0	25.6	0.0	0.0
Lane LOS	F			D		
Approach Delay (s)	Err	0.0		1.2		
Approach LOS	F					

Intersection Summary			
Average Delay	159.5		
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		

A7

Site Plan


LANDS ZONED MFR-5
ASPHALT PAVEMENT
SITE DATA
LANDS ZONED MFR-5 (UF) 149 ± Lots
5' DENSITY 3.47 ± Ua/AC
NOTE: ALL PROPOSED STREETS SHOWN WITH 70' WIDE R.O.W. AND 20' WIDE PAVEMENT.
Town of Amherst
NEW YORK
EMERGREEN LANDING SUBDIVISION
CONCEPT PLAN
GPI
1 of 1

PHASE I CULTURAL RESOURCE INVESTIGATION

FOR THE

EVERGREEN LANDING SUBDIVISION

TOWN OF AMHERST,

ERIE COUNTY, NEW YORK

May 31, 2011

Prepared For:

Cimato Enterprises, Inc.
9220 Transit Road
East Amherst, New York 14051

ccrg COMMONWEALTH CULTURAL RESOURCES GROUP, INC.

N531

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JUN - 1 2011
TOWN OF AMHERST
PLANNING DEPT.

PHASE I CULTURAL RESOURCE INVESTIGATION

FOR THE

EVERGREEN LANDING SUBDIVISION

TOWN OF AMHERST,

ERIE COUNTY, NEW YORK

By

Robert J. Peltier, M.A.
Principal Investigator,

Todd Harrington, B.A.
Field Director

and

Martin Boratin, B.A.
Crew Chief

May 31, 2011

Prepared For:

Cimato Enterprises, Inc.
9220 Transit Road
East Amherst, New York 14051

N-531

Commonwealth Cultural Resources Group, Inc. o 2495 Main Street, Suite 448 o Buffalo, New York 14214

MANAGEMENT SUMMARY

SHPO Project Review Number: _____

Involved Agencies: State Environmental Quality Review Act (SEQRA)

Phase of Survey: Phase I

Location: 100 Tonawanda Creek Road
Town of Amherst
Erie County, New York

Surveyed Area: Overall Project – 37± Acres; Area Tested – 37± Acres
Length: N/A
Width: N/A
Depth: N/A
Acres Surveyed: 37± Acres

Archaeological Survey Overview:

No. and Interval of Shovel Tests:	637 (15 m / 50 ft)
No. and Size of Test Units:	N/A
Width of Plowed Strips:	N/A
No. of Acres Surface Surveyed	N/A

Results of Archeological Survey:

No. and Name of Prehistoric Sites Identified:	none
No. and Name of Historic Sites Identified:	none (1 MDS)
No. and Name of Sites Recommended for Phase 2:	none

Results of Architectural Survey:

No. of Structures in Project Area:	none
No. of Known NR Listed/Eligible Structures/Districts:	none
No. of Recommended Eligible Structures/Districts:	none
No. of Listed/Eligible Structures/Districts That May Be Impacted:	none

Report Author(s): Robert J. Peltier, M.A., Todd Harrington, B.A., and Martin Boratin, B.A.

Date of Report: May 31, 2011

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PHOTO 2. AREA B: View Within Project Area, Facing Southeast.

PHOTO 3. AREA A: View Within Project Area Showing Adjacent Housing, Facing Southeast.

PHOTO 4. AREA A: View Along Eastern Boundary, Facing North.

PHOTO 5. AREA A: View Along Eastern Boundary, Facing South.

PHOTO 6. Riprap Along Tonawanda Creek (Erie Barge Canal), Facing Northeast.

PHOTO 7. View of Tonawanda Creek (Erie Barge Canal) From Project Area, Facing North.

PHOTO 8. AREA A: View Along Northern Boundary, Facing East.

PHOTO 9. AREA A: View of Project Area, Facing South.

PHOTO 10. AREA A: Location of Map Documented Structure, Facing South.

PHOTO 11 AREA A: View of Poured Concrete Foundation Near MDS.

PHOTO 12. AREA A: View of Poured Concrete Foundation Near MDS, Facing East.

ARCHAEOLOGICAL SITE FILE/LITERATURE SEARCH REPORT

PREPARED BY: Robert J. Peltier, M.A., Todd Harrington, B.A., and Martin Boratin, B.A.

AFFILIATION: Commonwealth Cultural Resources Group, Inc.
2495 Main Street, Suite 448
Buffalo, New York 14214
716/831-9003

DATE: May 31, 2011

1.0 PROJECT INFORMATION

Location of Proposed Action: Located within the existing Evergreen Golf Course, the project parcel is located at 100 Tonawanda Creek Road, Town of Amherst, Erie County, New York. The project parcel is further delineated as being part of Lot 47, Township 12, and Range 8 of the Holland Land Company survey (Figures 1 and 2).

Description of Undertaking: In 2007, Commonwealth Cultural Resources Group, Inc. (CCRG) completed a Phase I cultural resources survey for the parcel located immediately adjacent to, and west of, the current project (Pierce and Peltier 2007 - OPRHP No. 07PR02101). The parcel to the west was never developed and is included, along with the current parcel, in the proposed undertaking. The parcel to the west and the current parcel combined constitute the proposed Evergreen Landing Subdivision. The proposed development consists of the construction of a 126-lot housing subdivision.

Estimated Size of Impact Area (37± Acres): Since the proposed subdivision's western portion has already been subjected to a Phase I cultural resources survey (Pierce and Peltier 2007), the Area of Potential Effect (APE) for the current project includes the entire eastern portion. The APE is somewhat irregular in shape and consists of approximately 37 acres. It is bounded to the north by Tonawanda Creek (Erie Barge Canal); to the west by the portioned surveyed in 2007 and Manor Lanes bowling alley (170 Tonawanda Creek Road); to the east by a privately owned wooded lot; and to the south by Tonawanda Creek Road and houses fronting Tonawanda Creek Road (Figures 1 and 2).

For the ease of field investigations and reporting, the project area was divided in two smaller, more manageable study areas (Area A and B).

> **Area A.** Constituting the main portion of the APE, Area A is somewhat rectangular in shape and is comprised of about 28 acres. It is bounded to the north by Tonawanda Creek (Erie Barge Canal); to the west by the parcel surveyed in 2007; to the east by a privately owned wooded lot; and to the south by Area B (Attachment A, Photos 3 through 5 and 8 through 12).
>
> **Area B.** Area B is somewhat triangular in shape and is comprised of about 9 acres. It is bounded to the north by Area A; to the west by the parcel surveyed in 2007 and Manor Lanes bowling alley (170 Tonawanda Creek Road); to the east and south by Tonawanda Creek Road and houses fronting Tonawanda Creek Road (Attachment A, Photos 1 and 2).

Description of Impact: Proposed development plans include the construction of approximately 126 residential structures to be located along several cul-de-sac-type roads. The proposed subdivision will be accessed by Tonawanda Creek Road to the south and Niagara Falls Boulevard to the west. Additional impacts to the project area include the excavation of several storm water basins and other impacts typically associated with such undertakings. These impacts may include, but may not necessarily be limited to, select clearing of vegetation, installation of subsurface utilities (e.g., gas, sewer, electric, water, storm water, telephone, fiber optic cable), possible grading and filling, and landscaping subsequent to subdivision development (Figure 2).

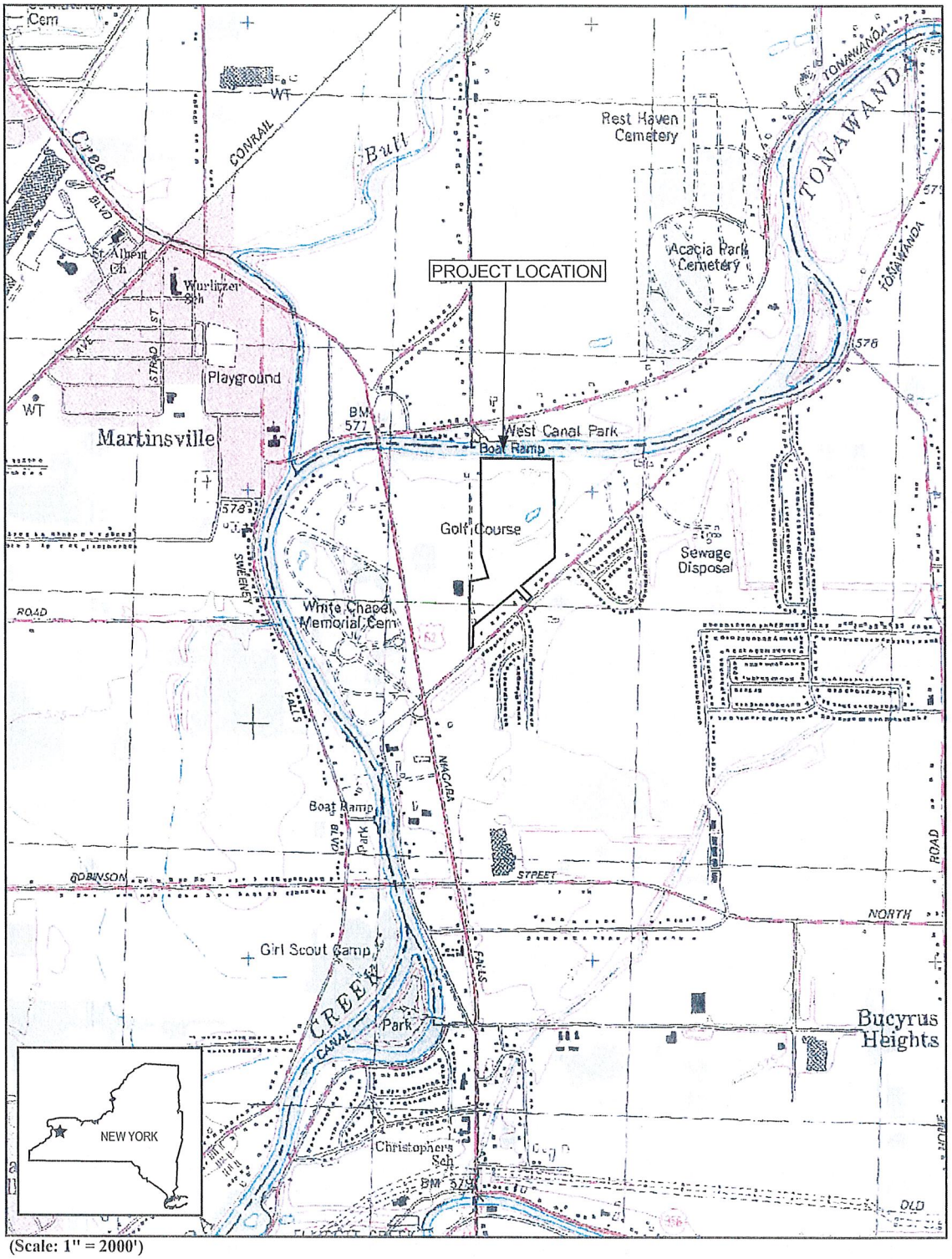


FIGURE 1. Project Area on Tonawanda East, *NY* USGS 7.5 Minute Series Quadrangle.

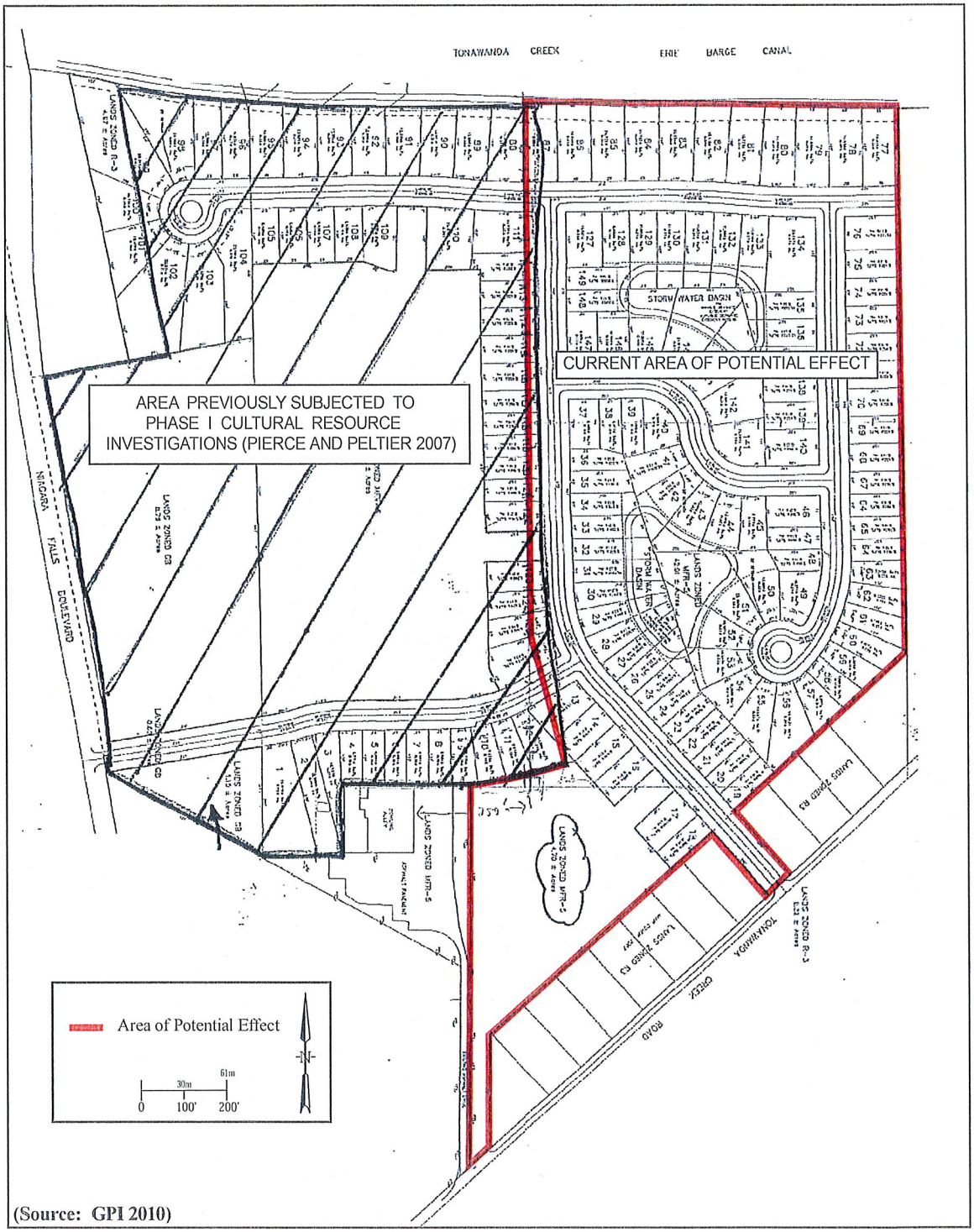


FIGURE 2. Evergreen Landing Subdivision Development Plans

2.0 ENVIRONMENTAL INFORMATION

Topography: The project area is located on extremely level terrain within the Erie-Ontario Lake Plain physiographic region at an elevation of approximately 575 ft (175m) above mean sea level (Figure 1). Except for a modest amount of fill associated with the construction of the golf course, there is virtually no noticeable relief within the project area.

Geology: Bedrock geology within the project area consists of Camillus Shale Formation. This Upper Silurian Unconformity varies from thinly-bedded shales to massive mudstones, which are generally gray or brownish gray in color with some red or greenish tinge. Gypsum and anhydride are often present in this rock (Buehler and Tesmer 1963). In the vicinity of the project area, bedrock is generally 5 ft (1.5m) or more below the surface (USDA 1986). Nowhere within the project was bedrock observed.

Soils: According to the USDA (1986), soils within the project area consist of those within the Niagara-Canandaigua-Cosad Association. Soils in this association are characterized as dominantly nearly level, deep, somewhat poorly-drained to very poorly-drained and medium-textured; they are found on lowland plains with nearly no gravel found within the soil. Five specific soil types were identified within the project boundaries: Collamer Silt Loam (3-8% slope) [CsB]; Lamson Very Fine Sand Loam (0-3% slope) [Lc]; Raynham Silt Loam (0-3% slope) [RaA]; Swormville Clay Loam (0-2% slope) [Sw]; and Teel Silt Loam (0-3% slope) [Te] (Figure 3; Table 1).

FIGURE 3. Mapped Soils within the Project Area (NRCS 2011)



TABLE 1. Soil Descriptions for the Project Area (USDA 1986, NRCS 2011)

Soil Type	Depth (in/cm)	Horizon/Texture	Slope	Drainage	Landform
CsB	0-10/0-18	Ap/Silt Loam	3-8%	MWD	Convex shoulders of drainageways
	10-12/18-74	A2/Silt Loam			
	12-15/74-102	B&A/Silt Loam			
	15-20/	B21t/Heavy Silt Loam			
	20-32	B22tGravelly Silt Clay Loam			
Lc	0-9/0-20	Ap/Very Fine Sand Loam	0-3%	PD	Nearly flat areas of lowland glacial lake plains
	9-14/20-53	A2G/Very Fine Sand			
	14-24/53-79	B21g/Fine Sand Loam			
	24-40/	B22g/Fine Sand Loam			
	40-50/	C/Very fine Sand			
RaA	0-8/0-10	Ap/Silty Loam	0-3%	SPD	Broad Plains in lowlands
	8-26/10-51	B2/Silty Loam			
	26-42/51-64	C1/Silty Loam			
	42-60	IIC2/Fine Sand			
Sw	0-8/0-20	Ap/Clay Loam	0-2%	SPD	Lowland Plain (mainly), isolated pockets elsewhere
	8-13/20-86	B21t/ Clay Loam			
	13-20/86-152	B22t/ Silt Loam			
	20-26/	IIB3/Fine Sand			
	26-60	IIC/Gravelly Sand			
Te	0-9/0-23	Ap/Silt Loam	0-3%	MWD – SPD	Flood plains along major streams
	9-17/23-71	B21/Silt Loam			
	17-26/	B22/Silt Loam			
	26-48/	B23/Silt Loam			
	48-60	C/Very Fine Sand Loam			

Key: MWD – moderately well drained; PD – poorly drained; SPD – somewhat poorly drained

Drainage: The project area is located within the Tonawanda Creek Watershed. The primary drainage in the vicinity is Tonawanda Creek itself, which is located along the APE's northern boundary. In addition, Ellicott Creek, a major tributary of Tonawanda Creek, is located about 1.5 miles to the south. Soils within the project area are somewhat poorly-drained (Table 1), while a few locations of standing water was observed at the time of the Phase I study.

Vegetation: Prior to Euroamerican settlement in this portion of the town of Amherst, primeval forests were dominated by a beech-maple biome, which occurs throughout the less-drained locations on the Erie-Ontario Lake Plain. Well-drained area would have supported greater numbers of oak, chestnut, hickory and conifer species (Miller 1973). As stated above, the project area is located on an existing golf course and consists of manicure grasses (Attachment A, Photos 1 through 12).

Manmade Features and Alterations: Initial impacts to the vicinity of the project area may have been related to early Euroamerican land clearing and agricultural activities (e.g., plowing, discing and planting). Although settlement of the town of Amherst began as early as 1803, the portion of the town in which the project lies was not settled until 1810 and progressed slowly because the land is low-lying and wet (Smith 1884). In general, the northern part of town was not drained until 1868 when funding from the state, and money from taxes, financed the

digging of drainage ditches (Smith 1884). Interest in the vicinity for farming increased following the opening of the Erie Canal in 1825 (Young 1965). The Erie Barge Canal (Tonawanda Creek) is located along the northern boundary of the project area.

Recent disturbances to the project area include the construction of the Evergreen Golf Course, which includes possible grading and filling. Impacts to the project area also include those associated with the construction and maintenance of the Erie Barge Canal (Attachment A, Photos 6 through 8).

3.0 DOCUMENTARY RESEARCH

Site Files: Site file and map research for the project area was conducted at the Archaeological Survey, State University of New York at Buffalo (SUNYAB) (Amherst, New York), the Office of Parks, Recreation, and Historic Preservation (OPRHP) (Waterford, New York), and the New York State Museum (NYSM) (Waterford, New York). Research included a review of the New York State Inventory and Register, the National Register of Historic Places (NRHP), and the NRHP-eligible and State/NRHP-proposed lists.

National Register of Historic Places: The closest property listed on or eligible for the NRHP or State/NRHP is the Erie Barge Canal. As described above, the canal forms the northern boundary of the project area. No other cultural resources listed on or eligible for the State or NRHP or the State/NRHP-proposed lists were recorded within, or immediately adjacent to, the project area.

Prehistoric Archaeological Sites: The project area was considered to be in an archaeologically sensitive area because of its proximity to other known prehistoric sites, as well as its proximity to Tonawanda Creek. At least eight (n=8) prehistoric archaeological sites are located within two miles (3.2 km) of the project area (Table 2). Many more are located just beyond this distance, most along Ellicott Creek or Tonawanda Creek, or adjacent to wetlands or marshes.

Historic Archaeological Sites: One historic archaeological site was recorded within two miles (3.2 km) of the project area – the Tonawanda Burying Ground/French Cemetery. This historic burial ground is located approximately 6,864 ft (2,092 m) from the project area. All burials associated with the historic cemetery have since been removed.

Table 2. Prehistoric Archaeological Sites Recorded Within 2 mi (3.2 km) of the Project Area

Site Name	Site Number	Site Type	Time Period	Distance From Project
UDC 1	A-029-02-0027; UB 1513; NYSM 2054	camp	Archaic/Brewerton	8,448 ft (2575 m)
ACP-Erie	NYSM 3256	Traces of occupation	Unidentified prehistoric	2,168 ft (966 m)
ACP Niagara 8	NYSM 4077	camp	Unidentified prehistoric	4,752 ft (1448 m)
ACP-Niagara 9	A-063-07-0053; NYSM 4078	burial	Unidentified prehistoric	7,392 ft (2253 m)
UDC 2	A029-02-0028; UB 1514; NYSM 20151	No information	Unidentified prehistoric	8,448 ft (2575 m)
Audubon 4	A029-02-0026; UB 1295; NYSM 2055	lithic scatter	Unidentified prehistoric	9,504 ft (2897 m)
ACP-Niagara	NYSM 4107	Traces of occupation, Indian Trail	Unidentified prehistoric	2,640 ft (805 m)
Indian Hill	UB 273; NYSM 2306	No information	Unidentified prehistoric	8,448 ft (2575 m)

Historic Structures: As indicated by historic map, atlas, and literature research (Beers 1880; Geil 1855; New Century Atlas 1909; Stone and Stewart 1866; *Tonawanda, NY* Quadrangle 1948), a Map Documented Structure (MDS) was once located within the northwestern portion of the APE. Although the structure is not evident on the Geil 1855 atlas or Stone and Stewart 1866 atlas, there are a couple of indicators that suggest that the building may have been a canal era structure, perhaps dating to the first half of the nineteenth century (Figures 4 and 5). Evergreen Golf Course Caretaker Butch Schreck informed CCRG archaeologist Martin Boratin that the structure was still standing perhaps as late as the 1980s. He recollects that an older section of the structure was of log construction and likely present during the canal era. In addition, a 1940s aerial view of this location was obtained from the Amherst Museum which clearly indicates a somewhat large structure with several outbuildings and barns (Figure 6). A structure in this location is present on the Beers 1880 atlas (Figure 7), yet the New Century Atlas (1909) shows no structure (Figure 8). Once again, in 1948 a structure is present in this location (Figure 9). Perhaps it is possible that the structure was utilized as a warehouse or outbuilding and was once associated with shipment of commercial goods along the canal. It is also entirely possible that early surveyors missed this structure due to the fact that it is located nearly 2,000 ft (610 m) north of Tonawanda Creek Road. Regardless, the APE contains a MDS that is present on the Beers 1880 atlas, the 1948 USGS *Tonawanda, NY* 15 Minute Series Quadrangle, and a 1978 aerial photograph (Figure 10).

Previous Surveys: The project area is within a region studied by early archaeologists (Beauchamp 1901; Squire 1849; Benedict 1901; Houghton 1909; and Parker 1922), as well as later researchers (Ritchie 1980; Ritchie and Funk 1973). Within the past 25+ years several cultural resource surveys have been conducted within the general vicinity of the project area. As described above, CCRG carried out a Phase I cultural resource investigation for the western portion of the Evergreen Landing Subdivision in 2007 (Pierce and Peltier 2007). Other cultural resource studies carried out in the vicinity include surveys associated with such undertakings as development projects (Hartner and Herold 1994; Pierce 2004, 2002a, 2001, 1998b; and Pierce, Taylor, and Robertson 2001); and several infrastructure projects (Pierce 2002b and 1998a). Only one project identified an archaeological resource. Cultural resource investigations carried out for the John Muir Development, about 1.75 miles to the southeast identified a small lithic scatter (Pierce 2001; Pierce, Taylor, and Robertson 2001).

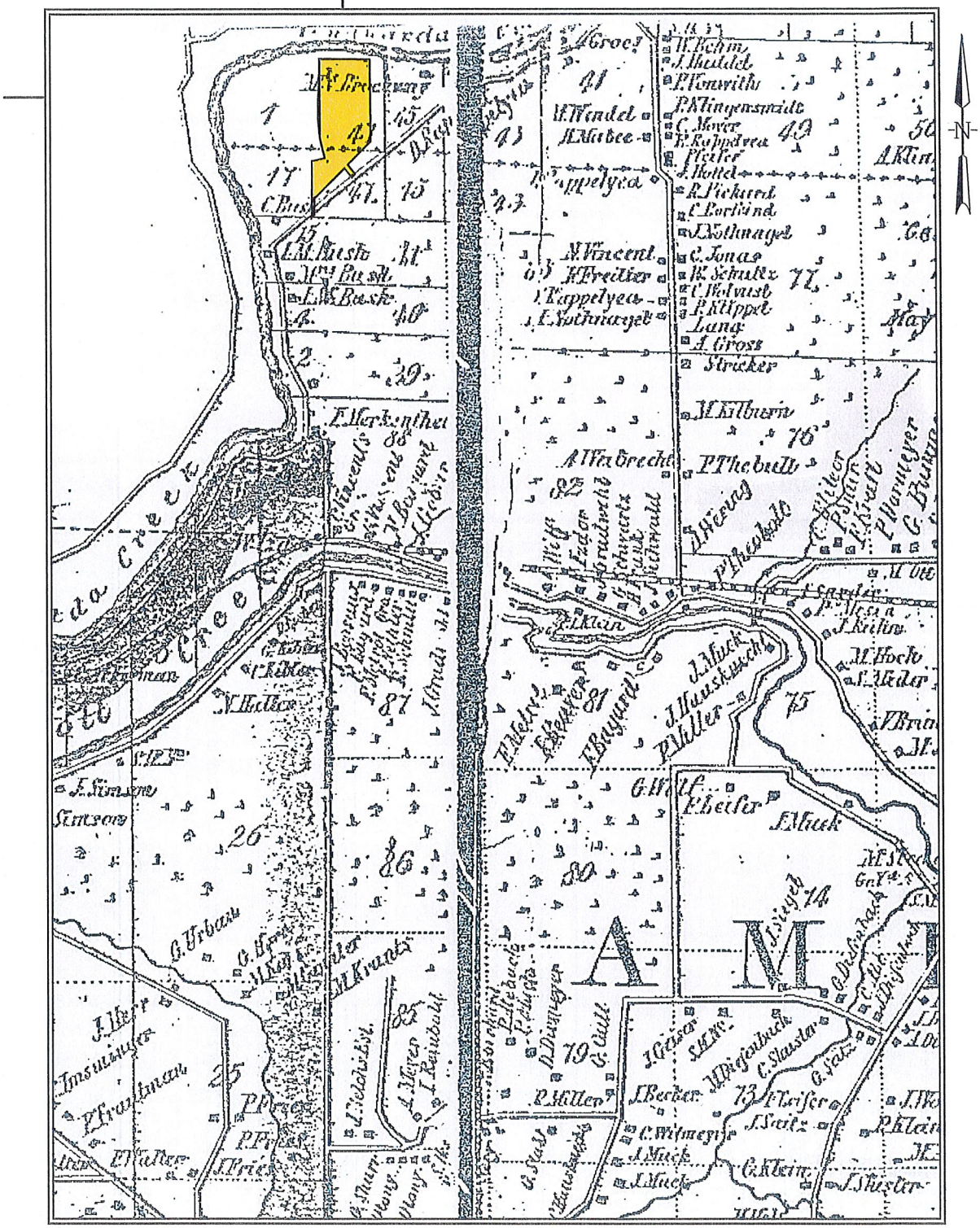
Sensitivity Assessment/Prediction:

Prehistoric: Based on background literature and site file research, the project area is considered to have a high sensitivity for the location of previously unrecorded prehistoric archaeological sites. The project area, as well as the general vicinity, contains environmental and topographic features that would have been attractive to prehistoric populations (i.e., within the general vicinity of Tonawanda Creek and Ellicott Creek and various wetland areas).

Historic: A review of available historic maps, atlases, and site file literature (Beers 1880; Geil 1855; New Century Atlas 1909; Stone and Stewart 1866; *Tonawanda, NY* Quadrangle 1948) indicated that the APE contained a MDS. Therefore, the project area contains a high sensitivity for locating historic resources such as foundation remains and a moderate sensitivity for finding peripheral activity areas such as historic middens.

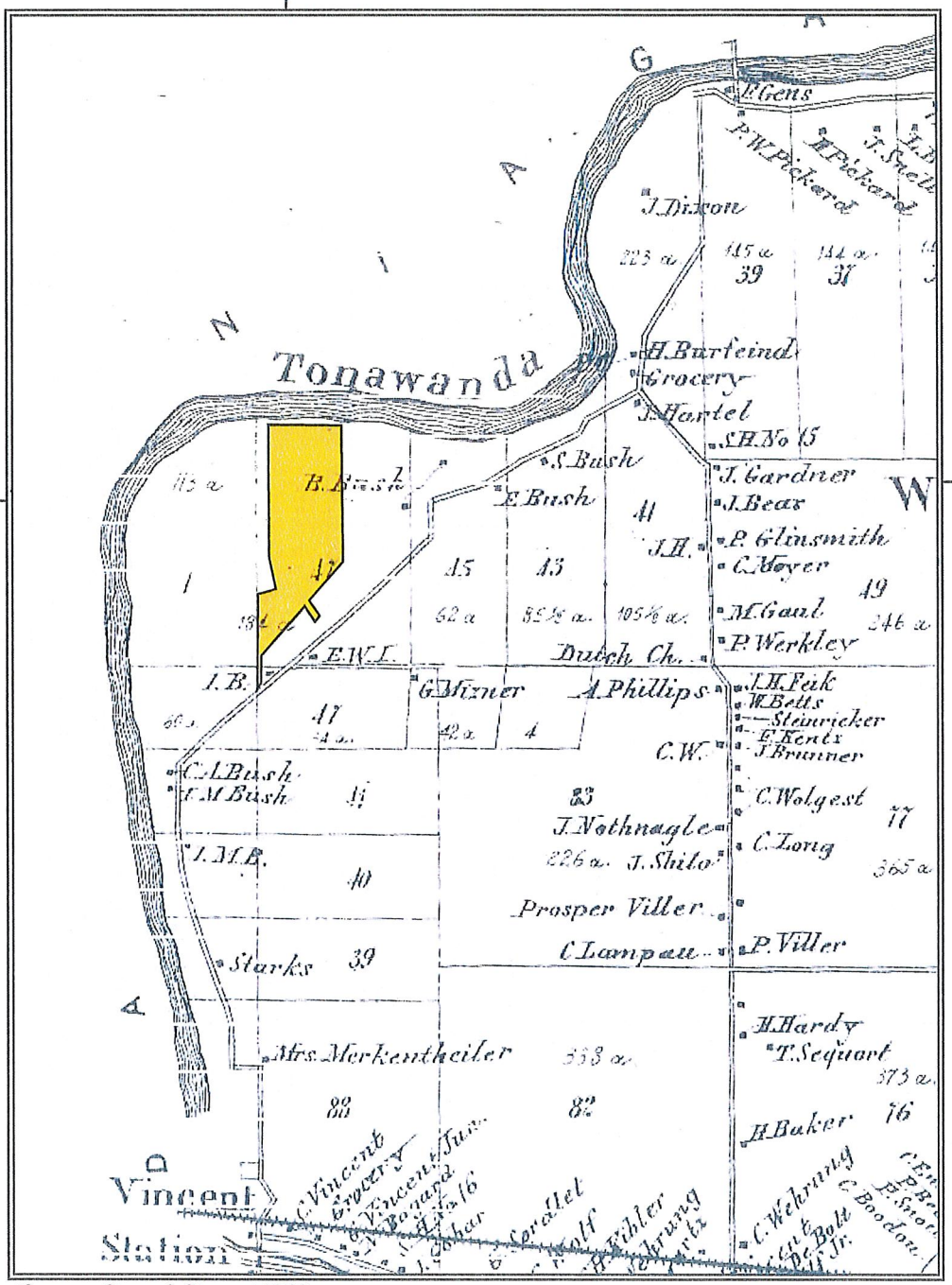
4.0 RECOMMENDATIONS

A Phase I cultural resource investigation was recommended for the project area because of its proximity to previously recorded archaeological site(s).



(Source: Geil 1855)

FIGURE 4. Project Location in 1855



(Source: Stone & Stewart 1866)

HISTORIC MAP 5. Project Location in 1866



(Photograph Courtesy of the Amherst Museum)

FIGURE 6. 1940s Aerial View of Map Documented Structure

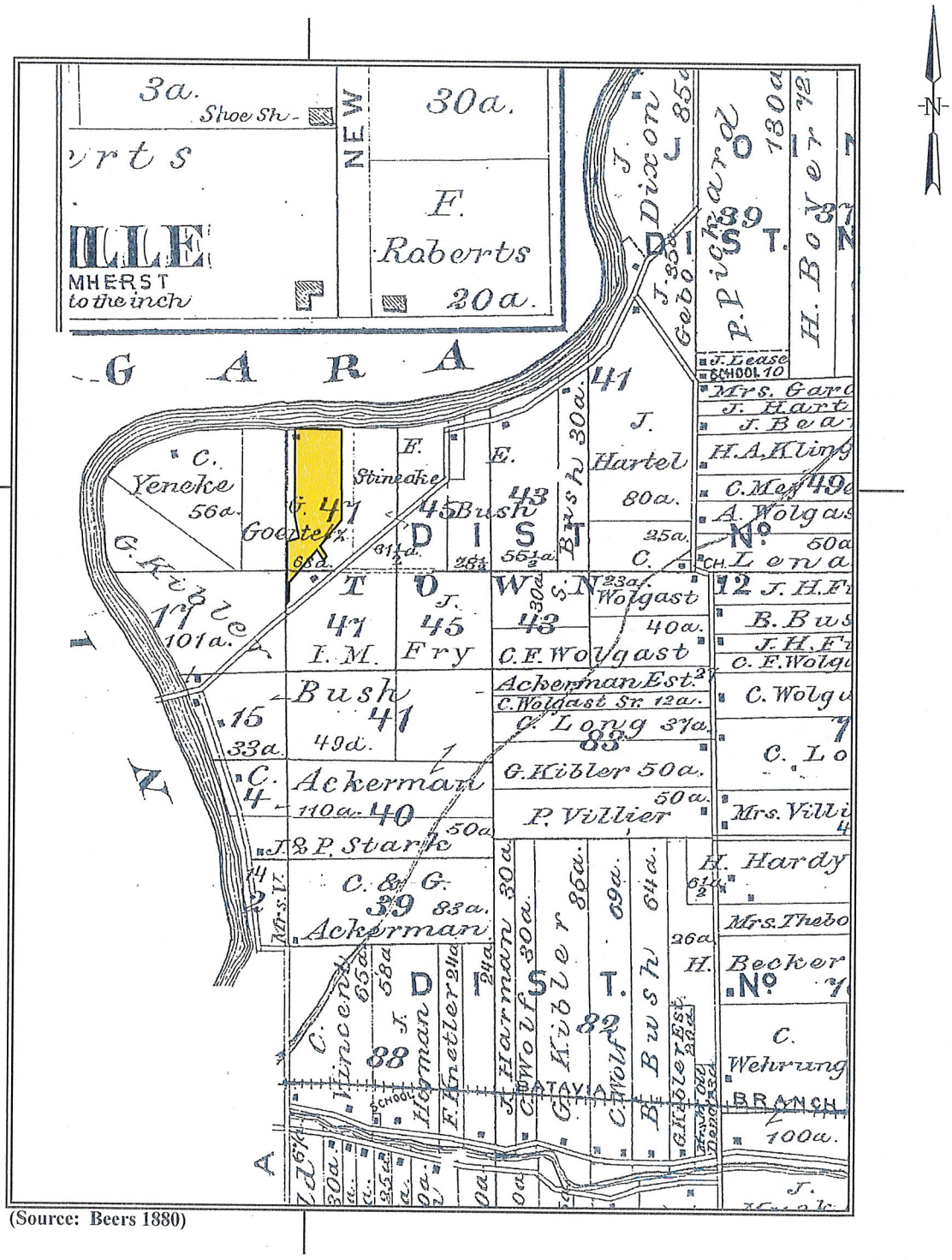
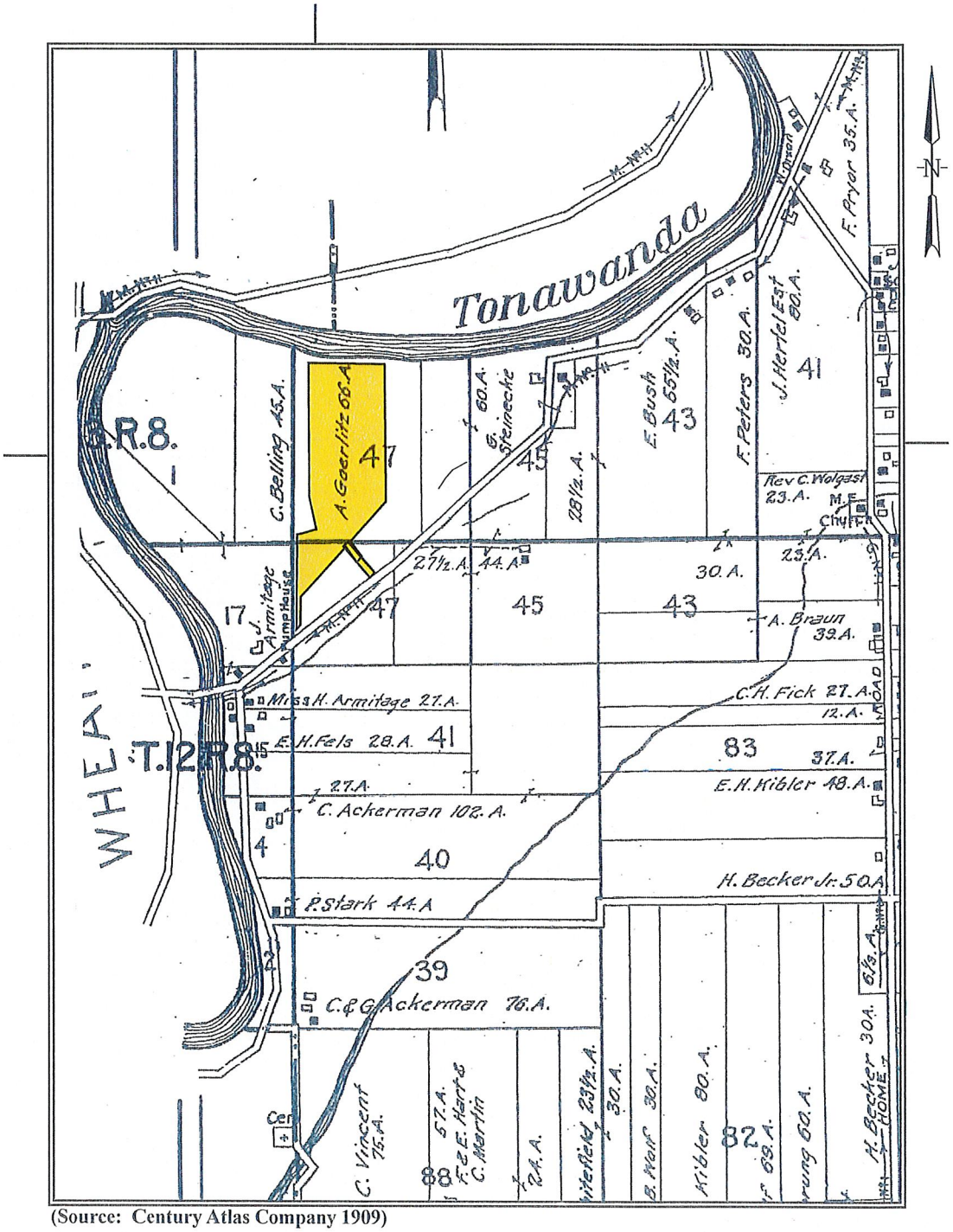
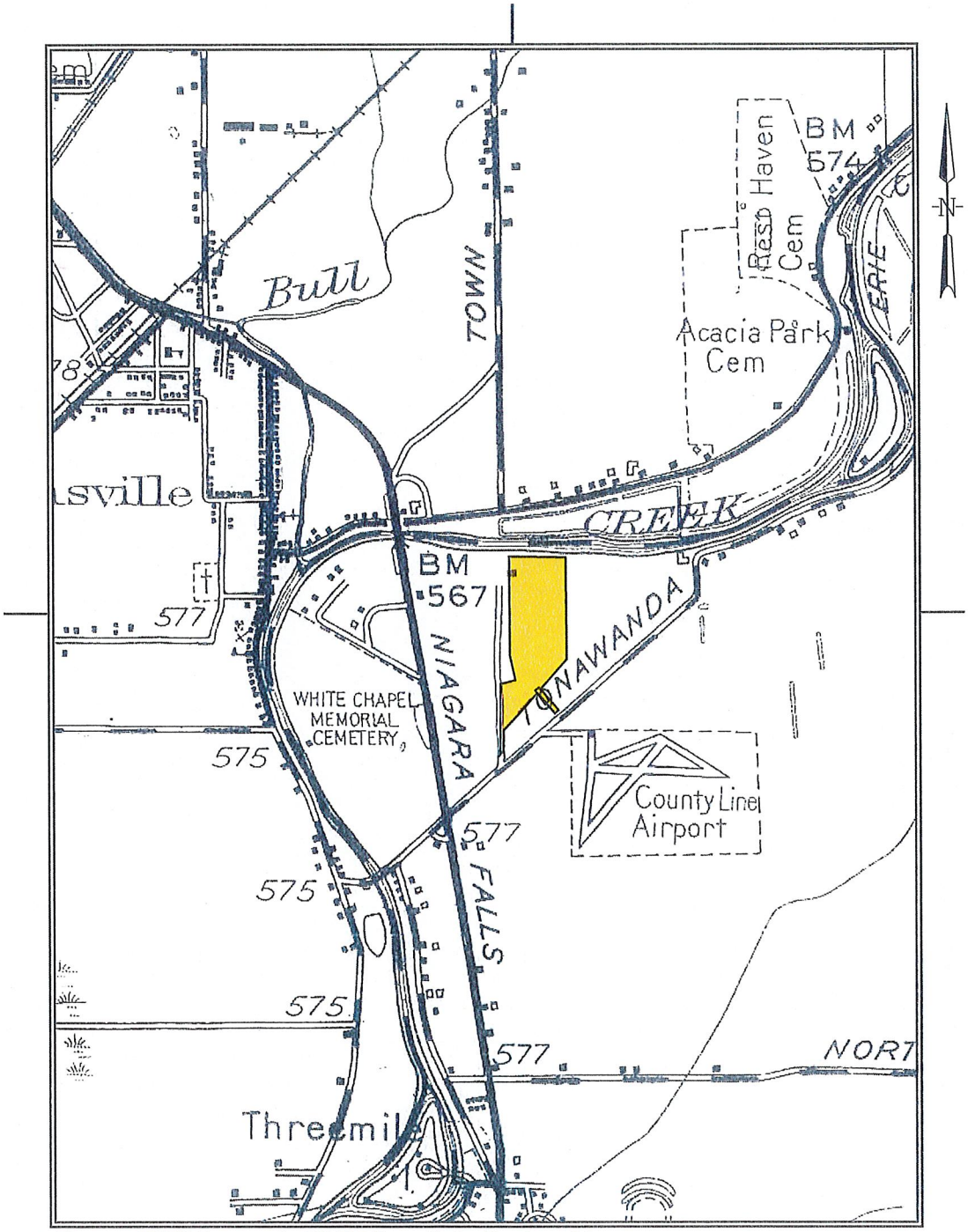


FIGURE 7. Project Location in 1880



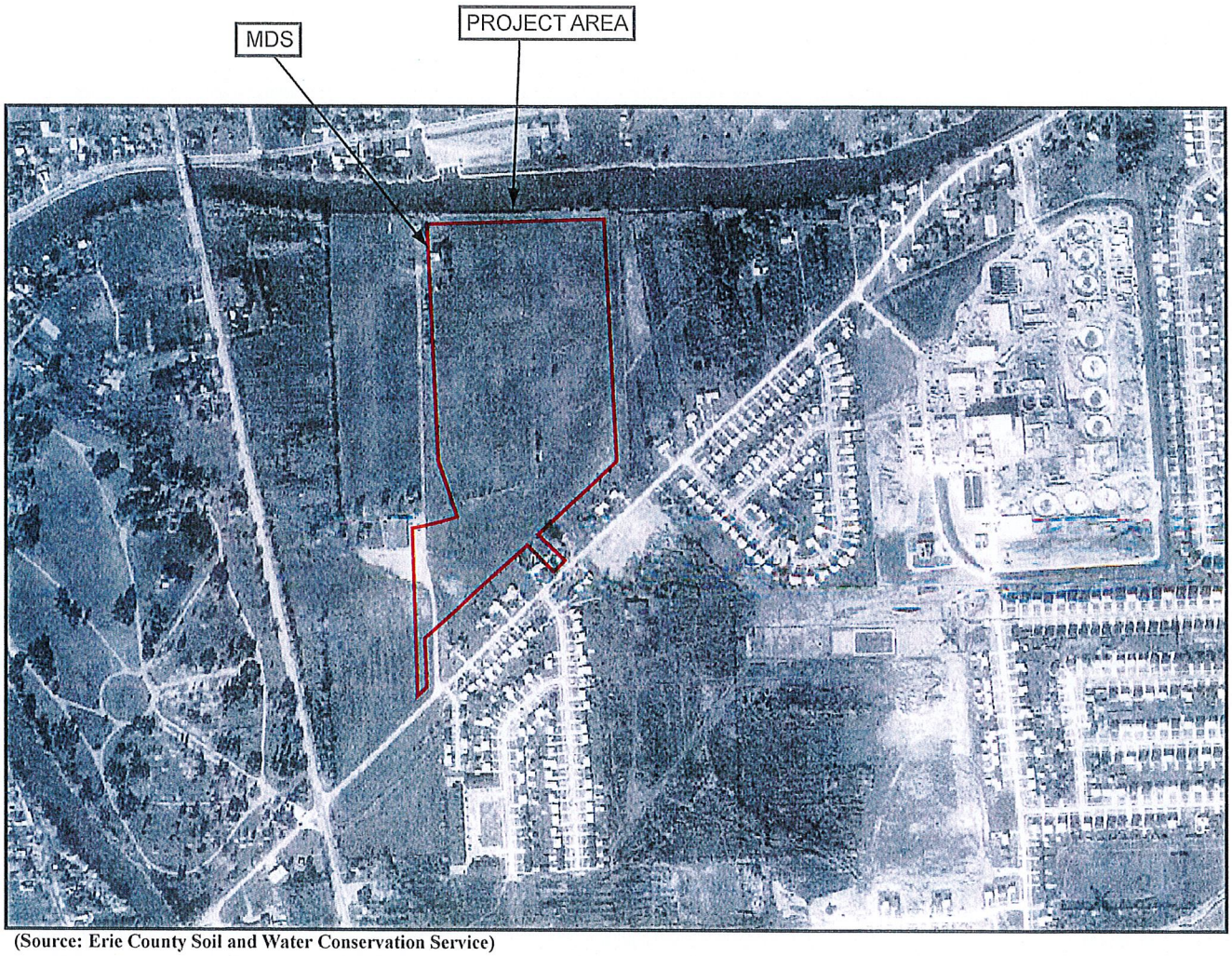
(Source: Century Atlas Company 1909)

FIGURE 8. Project Location in 1909



(Source: USGS *Tonawanda, NY* 15 Minute Series Quadrangle)

FIGURE 9. Project Location in 1948



(Source: Erie County Soil and Water Conservation Service)

FIGURE 10. 1978 Aerial View of Project Area and MDS

REPORT OF FIELD RECONNAISSANCE

PERMIT APPLICATION:	Cimato Enterprises, Inc. 9220 Transit Road East Amherst, New York 14051
LOCATION:	Town of Amherst Erie County, New York

REPORT PREPARED BY: Robert J. Peltier, M.A., Todd Harrington, B.A., and Martin Boratin, B.A.

AFFILIATION: Commonwealth Cultural Resources Group, Inc.
2495 Main Street, Suite 448
Buffalo, New York 14214
716/831-9003

DATE: May 31, 2011

5.0 FIELD INVESTIGATIONS/METHODOLOGY

Description of Structure of Survey Team: The survey team for the Phase IB cultural resource investigation for the project area was composed of Principal Investigator Robert J. Peltier, M.A., Field Director Todd Harrington, Crew Chief Martin Boratin, and four archaeological field technicians (Josh Marriott, Aaron Klute, Kyle Brock, and Tony Bonn).

Date of Survey and Description of General Surface and Subsurface Conditions: Pre-field reconnaissance was conducted on several occasions in early May 2011 by Field Director Todd Harrington and Crew Chief Martin Boratin. The purpose of these walk-over inspections, in addition to determining whether favorable field conditions existed, was to look for surface indications of archaeological sites and standing structures within or directly adjacent to the project parcel. At this time, the project was visually inspected in order to identify areas of at least 75% ground surface visibility that would warrant a surface inspection (in addition to shovel testing) and areas of ground disturbance that would not be conducive to shovel testing. No surficial evidence of archaeological sites (prehistoric or historic) were identified.

Phase IB field investigations were conducted on May 9th, 10th, 11th, and 12th, 2011. Weather conditions consisted of sunny to partly cloudy skies with temperatures reaching the mid 60s by the afternoon. Soils were found to be somewhat poorly-drained, with a few areas of standing water.

Description of Intensity of Coverage and Rationale for Excluding Areas From Survey: Limited ground surface visibility across the parcel precluded the possibility of conducting a surface inspection. Shovel testing was the only field methodology employed. Phase IB shovel testing was conducted at 50 ft (15 m) intervals across the entire 37± acre APE, wherever possible. Tests were placed in questionable locations in order to either document the amount of disturbance there or to located undisturbed soils. Figure 11 indicates the location of each test, while Attachment B summarizes the results of shovel testing across the APE.

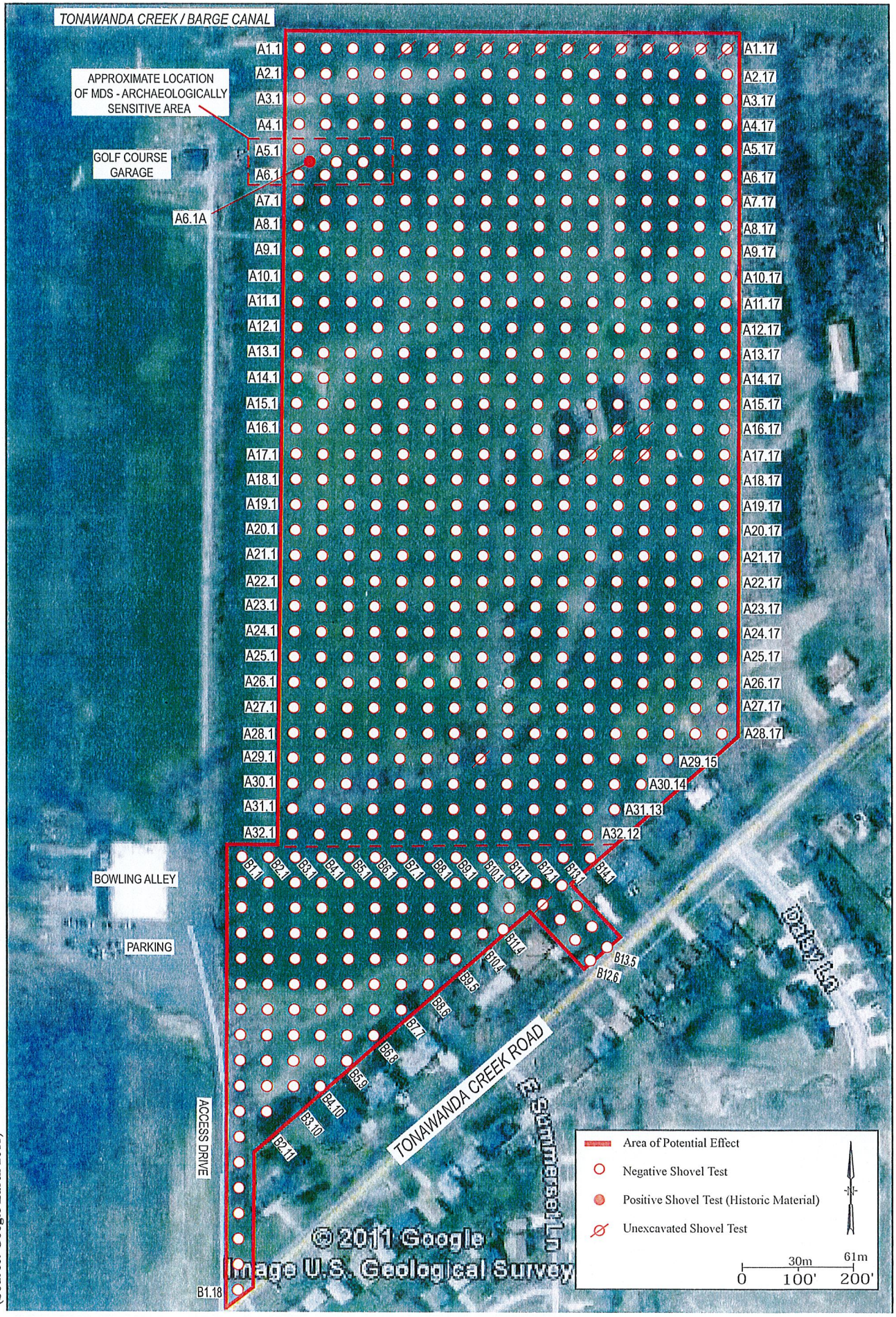


FIGURE 10. Map Showing Results of Phase IB Shovel Testing

Outline of Field Testing Strategy (Sampling Techniques, Surface Inspection Techniques, Subsurface Techniques, Remote Sensing Techniques): Zero ground surface visibility across the APE precluded the possibility of conducting a surface inspection. Shovel testing was the only field methodology employed. A total of 637 shovel test were proposed for excavation across the APE (Areas A and B). Of the 637 proposed tests, 3.1% (n=20) were not excavated, either due to either the presence of standing water or disturbed soils located along Tonawanda Creek.

Shovel tests were excavated with shovels and hand trowels. Soils in all shovel tests were screened through ¼-inch mesh hardware cloth and examined for the presence or absence of cultural material. Pertinent information for each shovel test (i.e., depth, soil type, color [Munsell] and texture) was recorded in field notebooks. All shovel tests were back-filled upon completion.

Area A. A total of 530 shovel tests was proposed for excavation across Area A. Tests were placed at 50 ft (15 m) intervals along 32 transects that ran east of, and perpendicular to the area's western boundary, which served as a baseline. In addition to the original 50 ft (15 m) shovel test grid excavated across Area A, three 50 ft (15 m) interval tests were excavated offset from the original grid within the vicinity of the MDS. Of the 530 proposed tests, 3.6% (n=19) were not excavated, either due to the presence of standing water or disturbed soils located along Tonawanda Creek (Figure 11; Attachment B).

Area B. A total of 104 shovel tests was proposed for excavation across Area B. Tests were placed at 50 ft (15 m) intervals along 14 transects that ran south of, and perpendicular to Transect A32, which served as a baseline. Of the 104 proposed tests, 0.9% (n=1) were not excavated, due to the presence of a manmade drainage ditch (Figure 11; Attachment B).

Description of General Soil Characteristics (Including Texture and Depth to Sterile Soil): Soils across the project area were somewhat consistent with those expected for the vicinity (USDA 1986; NRCS 2011) (Table 1; Attachment B). In general, soils from shovel testing across the project area ranged from of dark gray (10YR 4/1) to dark grayish brown (10 YR 4/2) silty loam to an average depth of 28 cm (11 in) below the surface. Some A-horizon soils, mainly along the project's boundaries, exhibited some disturbances (i.e., gravel fill). A-horizon soils were underlain by soils ranging from yellowish brown (10YR 5/4) to pale brown (10YR 6/3) often mottled with brownish yellow (10YR 6/8) silty clay loam to sandy loam. Shovel tests were excavated to an average depth of 40 cm (15.7 in) below surface.

Description of Problems Encountered During Survey Which May Have Influenced Results: No problems were encountered during field investigations which would have influenced the results of the study.

6.0 RESULTS OF FIELD INVESTIGATION

Phase IB shovel testing produced no evidence of foundation remains, possible sheet middens, or any other potential archaeological remains associated with the sole MDS located within the project's northwestern portion. A poured concrete foundation measuring approximately 15 ft by 20 ft (5 m by 6 m) was identified near the location of the MDS. Evergreen Golf Course Caretaker Butch Schreck informed CCRG archaeologist Martin Boratin that the slab foundation likely belonged to either a picnic shelter or a an outbuilding once associated with the original structure. Although several historic artifacts were recovered within the vicinity of the MDS (shovel test A6.1A contained a bicycle pedal and several unidentifiable metal objects) they don't appear to be very old or to be associated with the former nineteenth century MDS. It is possible that when the structure was raised (1980s), that any archaeological deposits or other indications of the former structure were completely removed at the time, in order to satisfactorily clear the area for golf course operations.

No prehistoric artifacts were recovered from the Evergreen Landing Subdivision project area.

7.0 RECOMMENDATIONS AND RATIONALE

Phase IB field investigations at the Evergreen Landing Subdivision project area failed to identify evidence of prehistoric archaeological sites. However, situated within the APE's northwestern corner, a former MDS was identified. This location measures approximately 75 ft (23 m) north-south by 250 ft (76 m) east-west. Although archaeological investigations carried out within the vicinity of the MDS yielded only a few historic artifacts, it did, nevertheless identify a concrete slab foundation. Only further field investigations in this location will determine if archaeological deposits associated with the former structure are present and if the structure can indeed be dated to the canal era.

It is recommended that this location be subject to a Phase II Archaeological Site Evaluation. Additional archaeological investigations at the site should, at a minimum, consist of a close-interval shovel test grid as well as several 1m by 1m test units. Additional archaeological investigations at the site have the potential to produce information relating to the broad theme of regional development and settlement throughout the nineteenth century, as well as information regarding the shipment of commercial goods along the Erie Canal. Potential archaeological deposits associated with the former structure should be evaluated for possible inclusion in the State or National Register of Historic Places under Criteria D in that they may provide important information regarding local and regional history. The criteria for eligibility for cultural resources are set forth in the *Code of Federal Regulations* (35 CFR 60.6 and 800.1):

> "The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a) that are associated with the events that have made a significant contribution to the broad patterns of our history, or
>
> b) that are associated with the lives of persons significant in our past, or
>
> c) that embody the distinctive characteristics of a type, period or method of construction, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
>
> d) that have yielded, or may be likely to yield, information important in prehistory or history." (36 CFR 800.16)

Due to its research potential, possible National or State register eligibility, and the fact that most of the site would be negatively affected by the proposed development, CCRG recommends a Phase II Archaeological Site Evaluation in this location.

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SUPPORTING DATA

ATTACHMENT A. Photographs Showing Project Area (with Photo Angle Map)

ATTACHMENT B. Phase IB Shovel Test Summary

Certification: I certify that I directed the cultural resource investigation reported here, that my observations and methods are fully reported and that this report is complete and accurate to the best of my knowledge.

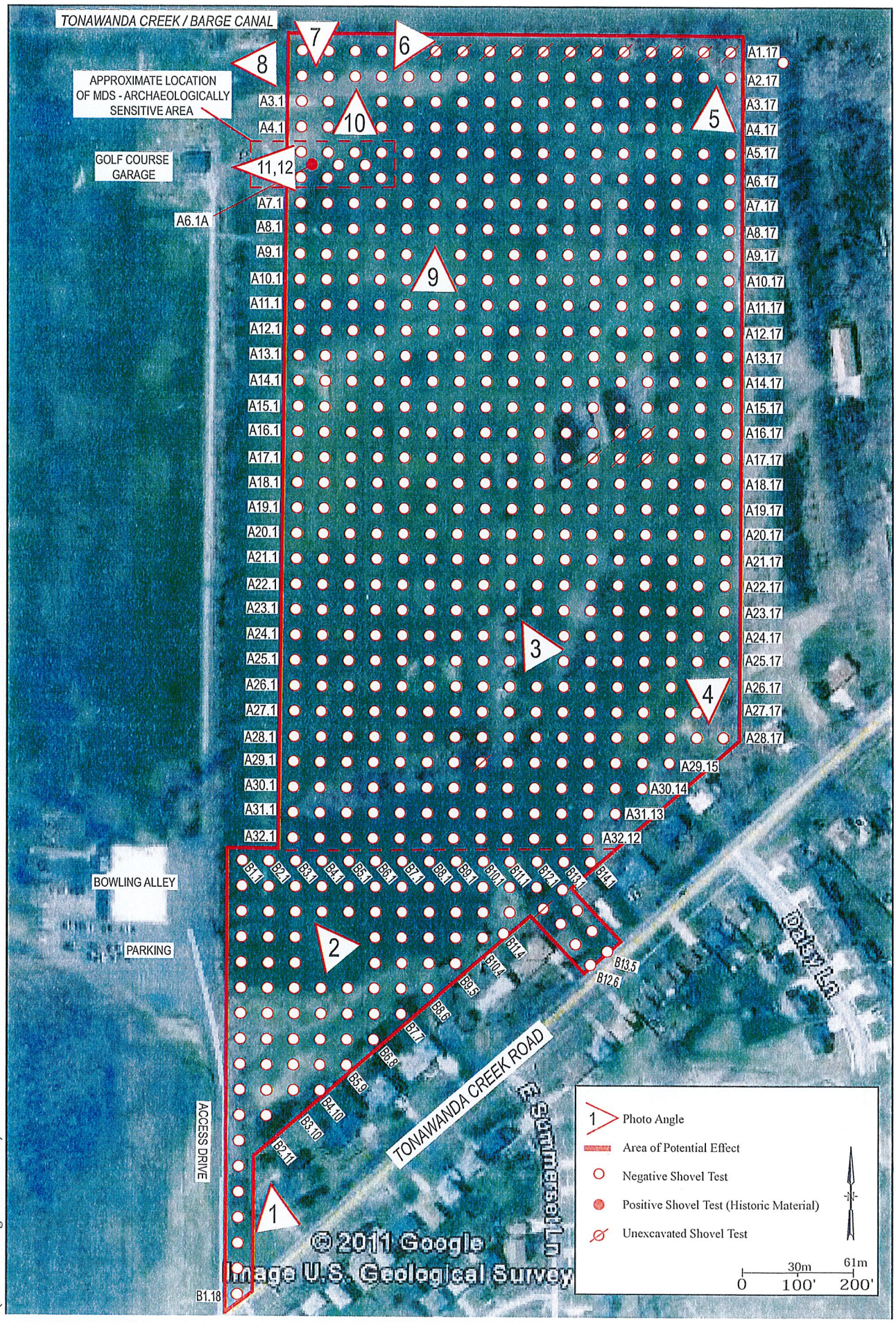
5/31/2011

Date

Signature of Preparer

ATTACHMENT A

Photographs Showing Project Area (with Photograph Angle Map)



(Source: Google Earth 2011)

ATTACHMENT A. Map Showing Photo Angles



PHOTO 1. View at Tonawanda Creek Road Showing Adjacent Housing, Facing South.



PHOTO 2. AREA B: View Within Project Area, Facing Southeast.



PHOTO 3. AREA A: View Within Project Area Showing Adjacent Housing, Facing Southeast.



PHOTO 4. AREA A: View Along Eastern Boundary, Facing North.



PHOTO 5. AREA A: View Along Eastern Boundary, Facing South.



PHOTO 6. Riprap Along Tonawanda Creek (Erie Barge Canal), Facing Northeast.



PHOTO 7. View of Tonawanda Creek (Erie Barge Canal) From Project Area, Facing North.



PHOTO 8. AREA A: View Along Northern Boundary, Facing East.



PHOTO 9. AREA A: View of Project Area, Facing South.



PHOTO 10. AREA A: Location of Map Documented Structure, Facing South.



PHOTO 11. AREA A: View of Poured Concrete Foundation Near MDS.



PHOTO 12. AREA A: View of Poured Concrete Foundation Near MDS, Facing East.

ATTACHMENT B

Phase IB Shovel Test Summary

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A1.1	0-30	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	30-50	Light Brownish Gray//Brownish Yellow Silt Clay w/rocks and gravel	---
A1.2	0-50	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
A1.3	0-8	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	8+	Rock Impasse	---
A1.4	0-8	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	8+	Rock Impasse	---
A1.5		Not Excavated – Filled Area	
A1.6		Not Excavated – Filled Area	
A1.7		Not Excavated – Filled Area	
A1.8		Not Excavated – Filled Area	
A1.9		Not Excavated – Filled Area	
A1.10		Not Excavated – Filled Area	
A1.11		Not Excavated – Filled Area	
A1.12		Not Excavated – Filled Area	
A1.13		Not Excavated – Filled Area	
A1.14		Not Excavated – Filled Area	
A1.15		Not Excavated – Filled Area	
A1.16		Not Excavated – Filled Area	
A1.17		Not Excavated – Filled Area	
A2.1	0-24	Dark Grayish Brown Silt Loam	---
	24+	Rock impasse	
A2.2	0-35	Dark Grayish Brown Silt Loam	---
	35-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.3	0-43	Dark Grayish Brown Silt Loam	---
	43-53	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.4	0-35	Dark Grayish Brown Silt Loam	---
	35+	Rock/Gravel Fill impasse	
A2.5	0-32	Dark Grayish Brown Silt Loam	---
	32+	Rock/Gravel Fill impasse	

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A2.6	0-45	Dark Grayish Brown Silt Loam	---
	45-55	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.7	0-20	Dark Grayish Brown Silt Loam	---
	20+	Rock/Gravel Fill impasse	
A2.8	0-38	Dark Grayish Brown Silt Loam	---
	38-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.9	0-26	Dark Grayish Brown Silt Loam	---
	26-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.10	0-32	Dark Grayish Brown Silt Loam	---
	32-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.11	0-33	Dark Grayish Brown Silt Loam	---
	33-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.12	0-45	Dark Grayish Brown Silt Loam	---
	45-55	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.13	0-36	Dark Grayish Brown Silt Loam	---
	36-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.14	0-32	Dark Grayish Brown Silt Loam	---
	32-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.15	0-35	Dark Grayish Brown Silt Loam	---
	35-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.16	0-40	Dark Grayish Brown Silt Loam	---
	40-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A2.17	0-29	Dark Grayish Brown Silt Loam	---
	29-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A3.1	0-50	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
A3.2	0-29	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	29-50	Pale Brown//Brownish Yellow Silt Clay	---
A3.3	0-39	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	39-50	Pale Brown//Brownish Yellow Silt Clay	---
A3.4	0-38	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	38-50	Pale Brown//Brownish Yellow Silt Clay	---
A3.5	0-35	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	35-50	Pale Brown//Brownish Yellow Silt Clay	---
A3.6	0-36	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
	36-50	Pale Brown//Brownish Yellow Silt Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A3.7	0-50	Dark Grayish Brown Silt Loam// Pale Brown Silt Clay w/ rocks, gravel	---
A3.8	0-58	Dark Grayish Brown Silt Loam	---
	58-68	Pale Brown//Brownish Yellow Silt Clay	---
A3.9	0-43	Dark Grayish Brown Silt Loam	---
	43-53	Pale Brown//Brownish Yellow Silt Clay	---
A3.10	0-41	Dark Gray Silt Loam	---
	41-51	Gray//Brownish Yellow Clay	---
A3.11	0-44	Dark Gray Silt Loam	---
	44-54	Gray//Brownish Yellow Clay	---
A3.12	0-42	Dark Gray Silt Loam	---
	42-52	Gray//Brownish Yellow Clay	---
A3.13	0-45	Dark Gray Silt Loam	---
	45-55	Gray//Brownish Yellow Clay	---
A3.14	0-37	Dark Grayish Brown Silt Loam	---
	37-50	Light Brownish Gray//Brownish Yellow Silt Clay	---
A3.15	0-30	Dark Grayish Brown Silt Loam	---
	30-50	Light Brownish Gray//Brownish Yellow Silt Clay	---
A3.16	0-31	Dark Grayish Brown Silt Loam	---
	31-50	Light Brownish Gray//Brownish Yellow Silt Clay	---
A3.17	0-30	Dark Grayish Brown Silt Loam	---
	30-50	Light Brownish Gray//Brownish Yellow Silt Clay	---
A4.1	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---
A4.2	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Yellowish Brown Sand Clay	---
A4.3	0-45	Dark Grayish Brown Silt Loam	---
	45-55	Pale Brown Sand Clay	---
A4.4	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown Sand Clay	---
A4.5	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sand Clay	---
A4.6	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown Sand Clay	---
A4.7	0-45	Dark Grayish Brown Silt Loam	---
	45-55	Pale Brown Sand Clay	---
A4.8	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sand Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A4.9	0-40	Dark Grayish Brown Silt Loam	---
	40-50	Yellowish Brown Sand Clay	---
A4.10	0-45	Dark Grayish Brown Silt Loam	---
	45-57	Pale Brown Sand Clay	---
A4.11	0-43	Dark Grayish Brown Silt Loam	---
	43-55	Yellowish Brown Sand Clay	---
A4.12	0-45	Dark Grayish Brown Silt Loam	---
	45-55	Yellowish Brown Sand Clay	---
A4.13	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Sand Clay	---
A4.14	0-44	Dark Grayish Brown Silt Loam	---
	44-54	Yellowish Brown Sand Clay	---
A4.15	0-45	Dark Grayish Brown Silt Loam	---
	45-58	Pale Brown Sand Clay	---
A4.16	0-30	Dark Grayish Brown Silt Loam	---
	30-45	Yellowish Brown Sand Clay	---
A4.17	0-40	Dark Grayish Brown Silt Loam	---
	40-50	Yellowish Brown Sand Clay	---
A5.1	0-39	Dark Grayish Brown Silt Loam	---
	39-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.2	0-41	Dark Grayish Brown Silt Loam	---
	41-52	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.3	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.4	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.5	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.6	0-24	Dark Grayish Brown Silt Loam	---
	24-34	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.7	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.8	0-24	Dark Grayish Brown Silt Loam	---
	24-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.9	0-26	Dark Grayish Brown Silt Loam	---
	26-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.10	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Pale Brown//Brownish Yellow Silty Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A5.11	0-29	Dark Grayish Brown Silt Loam	---
	29-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.12	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.13	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.14	0-22	Dark Grayish Brown Silt Loam	---
	22-35	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.15	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.16	0-23	Dark Grayish Brown Silt Loam	---
	23-35	Pale Brown//Brownish Yellow Silty Clay Loam	---
A5.17	0-39	Dark Grayish Brown Silt Loam	---
	39-50	Pale Brown//Brownish Yellow Silty Clay Loam	---
A6.1	0-40	Dark Grayish Brown Silt Loam	---
	40-53	Pale Brown//Brownish Yellow Sand Silt	---
A6.2	0-38	Dark Grayish Brown Silt Loam	---
	38-49	Pale Brown//Brownish Yellow Sand Silt	---
A6.3	0-25	Dark Grayish Brown Silt Loam	---
	25-45	Pale Brown//Brownish Yellow Sand Clay	---
A6.4	0-27	Dark Grayish Brown Silt Loam	---
	27-48	Pale Brown//Brownish Yellow Sand Clay	---
A6.5	0-29	Dark Grayish Brown Silt Loam	---
	29-49	Pale Brown//Brownish Yellow Sand Clay	---
A6.6	0-24	Dark Grayish Brown Silt Loam	---
	24-45	Pale Brown//Brownish Yellow Sand Clay	---
A6.7	0-27	Dark Grayish Brown Silt Loam	---
	27-43	Pale Brown//Brownish Yellow Sand Clay	---
A6.8	0-29	Dark Grayish Brown Silt Loam	---
	29-47	Pale Brown//Brownish Yellow Sand Clay	---
A6.9	0-28	Dark Grayish Brown Silt Loam	---
	28-48	Pale Brown//Brownish Yellow Sand Clay	---
A6.10	0-29	Dark Grayish Brown Silt Loam	---
	29-49	Pale Brown//Brownish Yellow Sand Clay	---
A6.11	0-31	Dark Grayish Brown Silt Loam	---
	31-48	Pale Brown//Brownish Yellow Sand Clay	---
A6.12	0-26	Dark Grayish Brown Silt Loam	---
	26-46	Pale Brown//Brownish Yellow Sand Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A6.13	0-28	Dark Grayish Brown Silt Loam	---
	28-44	Pale Brown//Brownish Yellow Sand Clay	---
A6.14	0-31	Dark Grayish Brown Silt Loam	---
	31-48	Pale Brown//Brownish Yellow Sand Clay	---
A6.15	0-30	Dark Grayish Brown Silt Loam	---
	30-51	Pale Brown//Brownish Yellow Sand Clay	---
A6.16	0-25	Dark Grayish Brown Silt Loam	---
	25-47	Pale Brown//Brownish Yellow Sand Clay	---
A6.17	0-27	Dark Grayish Brown Silt Loam	---
	27-44	Pale Brown//Brownish Yellow Sand Clay	---
A6.1A	0-30	Dark Grayish Brown Silt Loam	Bicycle pedal, misc metal
	30-40	Pale Brown//Brownish Yellow Sand Clay Loam	---
A6.2A	0-4	Dark Grayish Brown Silt Loam	---
	4+	Concrete slab – impasse	
A6.3A	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Pale Brown//Brownish Yellow Sand Clay Loam	---
A7.1	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Yellowish Brown Sand Clay	---
A7.2	0-30	Dark Grayish Brown Silt Loam	---
	30-41	Yellowish Brown Sand Clay	---
A7.3	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Yellowish Brown Sand Clay	---
A7.4	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---
A7.5	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---
A7.6	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Yellowish Brown Sand Clay	---
A7.7	0-30	Dark Grayish Brown Silt Loam	---
	30-42	Yellowish Brown Sand Clay	---
A7.8	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Yellowish Brown Sand Clay	---
A7.9	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Yellowish Brown Sand Clay	---
A7.10	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---
A7.11	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A7.12	0-30	Dark Grayish Brown Silt Loam	---
	30-41	Yellowish Brown Sand Clay	---
A7.13	0-28	Dark Grayish Brown Silt Loam	---
	28-39	Yellowish Brown Sand Clay	---
A7.14	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---
A7.15	0-31	Dark Grayish Brown Silt Loam	---
	31-42	Yellowish Brown Sand Clay	---
A7.16	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Yellowish Brown Sand Clay	---
A7.17	0-26	Dark Grayish Brown Silt Loam	---
	26-37	Yellowish Brown Sand Clay	---
A8.1	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.2	0-23	Dark Grayish Brown Silt Loam	---
	23-35	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.3	0-25	Dark Grayish Brown Silt Loam	---
	25-36	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.4	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.5	0-30	Dark Grayish Brown Silt Loam	---
	30-45	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.6	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.7	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.8	0-27	Dark Grayish Brown Silt Loam	---
	27-38	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.9	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.10	0-20	Dark Grayish Brown Silt Loam w/ gravel fill	---
	20+	Gravel Fill Impasse	---
A8.11	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.12	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.13	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Silt Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A8.14	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.15	0-31	Dark Grayish Brown Silt Loam	---
	31-43	Light Brown Gray//Brownish Yellow Silt Clay	---
A8.16	0-25	Dark Grayish Brown Silt Loam	---
	25-36	Yellowish Brown Silt Sandy Loam	---
A8.17	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A9.1	0-30	Dark Grayish Brown Silt Loam	---
	30-43	Pale Brown//Brownish Yellow Silty Clay	---
A9.2	0-30	Dark Grayish Brown Silt Loam	---
	30-42	Pale Brown//Brownish Yellow Silty Clay	---
A9.3	0-33	Dark Grayish Brown Silt Loam	---
	33-44	Pale Brown//Brownish Yellow Silty Clay	---
A9.4	0-32	Dark Grayish Brown Silt Loam	---
	32-45	Pale Brown//Brownish Yellow Silty Clay	---
A9.5	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Pale Brown//Brownish Yellow Silty Clay	---
A9.6	0-29	Dark Grayish Brown Silt Loam	---
	29-41	Pale Brown//Brownish Yellow Silty Clay	---
A9.7	0-31	Dark Grayish Brown Silt Loam	---
	31-44	Pale Brown//Brownish Yellow Silty Clay	---
A9.8	0-28	Dark Grayish Brown Silt Loam	---
	28-45	Pale Brown//Brownish Yellow Silty Clay	---
A9.9	0-28	Brown Silt Loam	---
	28-45	Pale Brown//Brownish Yellow Silty Clay	---
A9.10	0-32	Dark Grayish Brown Silt Loam	---
	32-45	Pale Brown//Brownish Yellow Sand Clay	---
A9.11	0-31	Dark Grayish Brown Silt Loam	---
	31-43	Pale Brown//Brownish Yellow Sand Clay	---
A9.12	0-29	Dark Grayish Brown Silt Loam	---
	29-41	Pale Brown//Brownish Yellow Sand Clay	---
A9.13	0-32	Dark Grayish Brown Silt Loam	---
	32-44	Pale Brown//Brownish Yellow Sand Clay	---
A9.14	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Pale Brown//Brownish Yellow Sand Clay	---
A9.15	0-30	Dark Grayish Brown Silt Loam	---
	30-43	Pale Brown//Brownish Yellow Sand Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A9.16	0-33	Dark Grayish Brown Silt Loam	---
	33-46	Pale Brown//Brownish Yellow Sand Clay	---
A9.17	0-29	Dark Grayish Brown Silt Loam	---
	29-46	Pale Brown//Brownish Yellow Sand Clay	---
A10.1	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---
A10.2	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Yellowish Brown Sand Clay	---
A10.3	0-35	Dark Grayish Brown Silt Loam	---
	35-45	Yellowish Brown Sand Clay	---
A10.4	0-27	Dark Grayish Brown Silt Loam	---
	27-38	Yellowish Brown Sand Clay	---
A10.5	0-40	Dark Grayish Brown Silt Loam	---
	40-50	Yellowish Brown Sand Clay	---
A10.6	0-35	Dark Grayish Brown Silt Loam	---
	35-45	Yellowish Brown Sand Clay	---
A10.7	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Yellowish Brown Sand Clay	---
A10.8	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Yellowish Brown Sand Clay	---
A10.9	0-30	Dark Grayish Brown Silt Loam	---
	30-41	Yellowish Brown Sand Clay	---
A10.10	0-28	Dark Grayish Brown Silt Loam	---
	28-37	Yellowish Brown Sand Clay	---
A10.11	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sand Clay	---
A10.12	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Yellowish Brown Sand Clay	---
A10.13	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Yellowish Brown Sand Clay	---
A10.14	0-30	Dark Grayish Brown Silt Loam	---
	30-41	Yellowish Brown Sand Clay	---
A10.15	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sand Clay	---
A10.16	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Yellowish Brown Sand Clay	---
A10.17	0-29	Dark Grayish Brown Silt Loam	---
	29-42	Yellowish Brown Sand Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A11.1	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.2	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.3	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.4	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.5	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.6	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.7	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.8	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.9	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.10	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.11	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.12	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.13	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.14	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.15	0-29	Dark Grayish Brown Silt Loam	---
	29-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.16	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Pale Brown//Brownish Yellow Silty Clay Loam	---
A11.17	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A12.1	0-26	Dark Grayish Brown Silt Loam	---
	26-39	Pale Brown//Brownish Yellow Silty Clay Loam	---
A12.2	0-30	Dark Grayish Brown Silt Loam	---
	30-45	Pale Brown//Brownish Yellow Silty Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A12.3	0-31	Dark Grayish Brown Silt Loam	---
	30-43	Pale Brown//Brownish Yellow Silty Clay Loam	---
A12.4	0-29	Dark Grayish Brown Silt Loam	---
	29-44	Pale Brown//Brownish Yellow Sandy Clay	---
A12.5	0-31	Dark Grayish Brown Silt Loam	---
	31-43	Pale Brown//Brownish Yellow Sandy Clay	---
A12.6	0-27	Dark Grayish Brown Silt Loam	---
	27-41	Pale Brown//Brownish Yellow Sandy Clay	---
A12.7	0-30	Dark Grayish Brown Silt Loam	---
	30-45	Pale Brown//Brownish Yellow Sandy Clay	---
A12.8	0-17	Dark Grayish Brown Silt Loam	---
	17-30	Pale Brown//Brownish Yellow Sandy Clay	---
A12.9	0-32	Dark Grayish Brown Silt Loam	---
	32-44	Pale Brown//Brownish Yellow Sandy Clay	---
A12.10	0-33	Dark Grayish Brown Silt Loam	---
	33-45	Pale Brown//Brownish Yellow Sandy Clay	---
A12.11	0-30	Dark Grayish Brown Silt Loam	---
	30-41	Pale Brown//Brownish Yellow Sandy Clay	---
A12.12	0-31	Dark Grayish Brown Silt Loam	---
	31-44	Pale Brown//Brownish Yellow Sandy Clay	---
A12.13	0-29	Dark Grayish Brown Silt Loam	---
	29-44	Pale Brown//Brownish Yellow Sandy Clay	---
A12.14	0-28	Dark Grayish Brown Silt Loam	---
	28-42	Pale Brown//Brownish Yellow Sandy Clay	---
A12.15	0-26	Dark Grayish Brown Silt Loam	---
	26-39	Pale Brown//Brownish Yellow Sandy Clay	---
A12.16	0-28	Dark Grayish Brown Silt Loam	---
	28-41	Pale Brown//Brownish Yellow Sandy Clay	---
A12.17	0-26	Dark Grayish Brown Silt Loam	---
	26-38	Pale Brown//Brownish Yellow Sandy Clay	---
A13.1	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sandy Loam	---
A13.2	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sandy Loam	---
A13.3	0-28	Dark Grayish Brown Silt Loam	---
	28-44	Yellowish Brown Sandy Loam	---
A13.4	0-27	Dark Grayish Brown Silt Loam	---
	27-44	Yellowish Brown Sandy Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A13.5	0-23	Dark Grayish Brown Silt Loam	---
	23-47	Yellowish Brown Sandy Loam	---
A13.6	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sandy Loam	---
A13.7	0-31	Dark Grayish Brown Silt Loam	---
	31-46	Yellowish Brown Sandy Loam	---
A13.8	0-31	Dark Grayish Brown Silt Loam	---
	31-46	Yellowish Brown Sandy Loam	---
A13.9	0-29	Dark Grayish Brown Silt Loam	---
	29-44	Yellowish Brown Sandy Loam	---
A13.10	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Yellowish Brown Sandy Loam	---
A13.11	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sandy Loam	---
A13.12	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Yellowish Brown Sandy Loam	---
A13.13	0-30	Dark Grayish Brown Silt Loam	---
	30-45	Yellowish Brown Sandy Loam	---
A13.14	0-24	Dark Grayish Brown Silt Loam	---
	24-40	Yellowish Brown Sandy Loam	---
A13.15	0-21	Dark Grayish Brown Silt Loam	---
	21-36	Yellowish Brown Sandy Loam	---
A13.16	0-26	Dark Grayish Brown Silt Loam	---
	26-39	Yellowish Brown Sandy Loam	---
A13.17	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Yellowish Brown Sandy Loam	---
A14.1	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Silty Clay	---
A14.2	0-27	Dark Grayish Brown Silt Loam	---
	27-38	Yellowish Brown Silty Clay	---
A14.3	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Yellowish Brown Silty Clay	---
A14.4	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Silty Clay	---
A14.5	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Yellowish Brown Silty Clay	---
A14.6	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Pale Brown//Yellowish Brown Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A14.7	0-30	Dark Grayish Brown Silt Loam	---
	30-42	Yellowish Brown Silty Clay	---
A14.8	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Pale Brown//Yellowish Brown Silty Clay	---
A14.9	0-22	Dark Grayish Brown Silt Loam	---
	22-32	Yellowish Brown Silty Clay	---
A14.10	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Yellowish Brown Silty Clay	---
A14.11	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Yellowish Brown Silty Clay	---
A14.12	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Yellowish Brown Silty Clay	---
A14.13	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Pale Brown//Yellowish Brown Silty Clay	---
A14.14	0-22	Dark Grayish Brown Silt Loam	---
	22-32	Yellowish Brown Silty Clay	---
A14.15	0-25	Dark Grayish Brown Silt Loam	---
	25-36	Yellowish Brown Silty Clay	---
A14.16	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Yellowish Brown Silty Clay	---
A14.17	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Yellowish Brown Silty Clay	---
A15.1	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.2	0-20	Dark Grayish Brown Silt Loam	---
	20-35	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.3	0-25	Dark Grayish Brown Silt Loam	---
	25-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.4	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.5	0-27	Dark Gray Silt Loam	---
	27-42	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.6	0-30	Dark Gray Silt Loam	---
	30-45	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.7	0-35	Dark Gray Silt Loam	---
	35-50	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.8	0-32	Dark Gray Silt Loam	---
	232-47	Light Brown Gray//Brownish Yellow Silt Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A15.9	0-30	Dark Gray Silt Loam	---
	30-45	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.10	0-29	Dark Gray Silt Loam	---
	29-44	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.11	0-30	Dark Gray Silt Loam	---
	30-45	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.12	0-26	Dark Gray Silt Loam	---
	26-42	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.13	0-26	Dark Gray Silt Loam	---
	26-41	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.14	0-27	Dark Gray Silt Loam	---
	27-42	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.15	0-24	Dark Gray Silt Loam	---
	24-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.16	0-25	Dark Gray Silt Loam	---
	25-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A15.17	0-24	Dark Gray Silt Loam	---
	24-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A16.1	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.2	0-14	Dark Gray Silt Loam w/ gravel fill	---
	14-32	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.3	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.4	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.5	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.6	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.7	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.8	0-33	Dark Gray Silt Loam	---
	33-43	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.9	0-27	Dark Gray Silt Loam	---
	27-38	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.10	0-26	Dark Gray Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Silt Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A16.11	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.12	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.13		Not Excavated – Standing Water	---
A16.14		Not Excavated – Standing Water	---
A16.15	0-28	Dark Gray Silt Loam	---
	28-45	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.16	0-29	Dark Gray Silt Loam	---
	29-42	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A16.17	0-26	Dark Gray Silt Loam	---
	26-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.1	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.2	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.3	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.4	0-26	Dark Gray Silt Loam	---
	26-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.5	0-28	Dark Gray Silt Loam	---
	28-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.6	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.7	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.8	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.9	0-28	Dark Gray Silt Loam	---
	28-38	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.10	0-29	Dark Gray Silt Loam	---
	29-42	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.11	0-27	Dark Gray Silt Loam	---
	27-38	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.12		Not Excavated – Standing Water	---
A17.13		Not Excavated – Standing Water	---
A17.14		Not Excavated – Standing Water	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A17.15	0-35	Dark Gray Silt Loam	---
	35-45	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.16	0-29	Dark Gray Silt Loam	---
	29-42	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A17.17	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A18.1	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Sandy Loam	---
A18.2	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Yellowish Brown Sandy Loam	---
A18.3	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sandy Loam	---
A18.4	0-26	Dark Grayish Brown Silt Loam	---
	26-43	Yellowish Brown Sandy Loam	---
A18.5	0-22	Dark Grayish Brown Silt Loam	---
	22-37	Yellowish Brown Sandy Loam	---
A18.6	0-24	Dark Grayish Brown Silt Loam	---
	24-39	Yellowish Brown Sandy Loam	---
A18.7	0-26	Dark Grayish Brown Silt Loam	---
	26-41	Yellowish Brown Sandy Loam	---
A18.8	0-30	Dark Grayish Brown Silt Loam	---
	30-45	Yellowish Brown Sandy Loam	---
A18.9	0-31	Dark Grayish Brown Silt Loam	---
	31-46	Yellowish Brown Sandy Loam	---
A18.10	0-28	Dark Grayish Brown Silt Loam	---
	28-46	Yellowish Brown Sandy Loam	---
A18.11	0-30	Dark Grayish Brown Silt Loam	---
	30-49	Yellowish Brown Sandy Loam	---
A18.12	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Sandy Loam	---
A18.13	0-35	Dark Grayish Brown Silt Loam	---
	35-46	Yellowish Brown Sandy Loam	---
A18.14	0-27	Dark Grayish Brown Silt Loam	---
	27-43	Yellowish Brown Sandy Loam	---
A18.15	0-28	Dark Grayish Brown Silt Loam	---
	28-44	Yellowish Brown Sandy Loam	---
A18.16	0-29	Dark Grayish Brown Silt Loam	---
	29-44	Yellowish Brown Sandy Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A18.17	0-27	Dark Grayish Brown Silt Loam	---
	27-43	Yellowish Brown Sandy Loam	---
A19.1	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Pale Brown Sandy Clay	---
A19.2	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown Sandy Clay	---
A19.3	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown Sandy Clay	---
A19.4	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown Sandy Clay	---
A19.5	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Pale Brown Sandy Clay	---
A19.6	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Pale Brown Sandy Clay	---
A19.7	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Pale Brown Sandy Clay	---
A19.8	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown Sandy Clay	---
A19.9	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown//Yellowish Brown Silty Clay	---
A19.10	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Silty Clay	---
A19.11	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Yellowish Brown Silty Clay	---
A19.12	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Silty Clay	---
A19.13	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Silty Clay	---
A19.14	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Yellowish Brown Silty Clay	---
A19.15	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Yellowish Brown Silty Clay	---
A19.16	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Silty Clay	---
A19.17	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Yellowish Brown Silty Clay	---
A20.1	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Sandy Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A20.2	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Sandy Clay	---
A20.3	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.4	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Sandy Clay	---
A20.5	0-28	Dark Grayish Brown Silt Loam	---
	28-50	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.6	0-27	Dark Grayish Brown Silt Loam	---
	27-46	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.7	0-27	Dark Grayish Brown Silt Loam	---
	27-45	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.8	0-29	Dark Grayish Brown Silt Loam	---
	29-47	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.9	0-26	Dark Grayish Brown Silt Loam	---
	26-48	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.10	0-27	Dark Grayish Brown Silt Loam	---
	27-44	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.11	0-29	Dark Grayish Brown Silt Loam	---
	29-49	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.12	0-30	Dark Grayish Brown Silt Loam	---
	30-48	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.13	0-28	Dark Grayish Brown Silt Loam	---
	28-45	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.14	0-29	Dark Grayish Brown Silt Loam	---
	29-44	Light Brown Gray//Brownish Yellow Silty Clay	---
A20.15	0-26	Brown Silt Loam	---
	26-39	Light Gray//Brownish Yellow Sandy Clay	---
A20.16	0-24	Brown Silt Loam	---
	24-37	Light Gray//Brownish Yellow Sandy Clay	---
A20.17	0-27	Dark Grayish Brown Silt Loam	---
	27-41	Light Gray//Brownish Yellow Silty Clay	---
A21.1	0-25	Dark Gray Silt Loam	---
	25-36	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.2	0-29	Dark Gray Silt Loam	---
	29-39	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.3	0-24	Dark Gray Silt Loam	---
	24-35	Light Brown Gray//Brownish Yellow Silt Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A21.4	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.5	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.6	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.7	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.8	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.9	0-29	Dark Gray Silt Loam	---
	29-42	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.10	0-29	Dark Gray Silt Loam	---
	29-39	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.11	0-27	Dark Gray Silt Loam	---
	27-39	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.12	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.13	0-28	Dark Gray Silt Loam	---
	28-44	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.14	0-27	Dark Gray Silt Loam	---
	27-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.15	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.16	0-28	Dark Gray Silt Loam	---
	28-38	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A21.17	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay Loam	---
A22.1	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Brownish Yellow Silty Clay	---
A22.2	0-28	Dark Grayish Brown Silt Loam	---
	28-41	Brownish Yellow Silty Clay	---
A22.3	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Brownish Yellow Silty Clay	---
A22.4	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Brownish Yellow Silty Clay	---
A22.5	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A22.6	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Brownish Yellow Silty Clay	---
A22.7	0-37	Dark Grayish Brown Silt Loam	---
	37-50	Brownish Yellow Silty Clay	---
A22.8	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Brownish Yellow Silty Clay	---
A22.9	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Brownish Yellow Silty Clay	---
A22.10	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Brownish Yellow Silty Clay	---
A22.11	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Brownish Yellow Silty Clay	---
A22.12	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Brownish Yellow Silty Clay	---
A22.13	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Brownish Yellow Silty Clay	---
A22.14	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Brownish Yellow Silty Clay	---
A22.15	0-29	Dark Grayish Brown Silt Loam	---
	29-42	Brownish Yellow Silty Clay	---
A22.16	0-29	Dark Grayish Brown Silt Loam	---
	29-41	Brownish Yellow Silty Clay	---
A22.17	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Brownish Yellow Silty Clay	---
A23.1	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sandy Clay	---
A23.2	0-40	Dark Grayish Brown Silt Loam	---
	40-50	Yellowish Brown Sandy Clay	---
A23.3	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Yellowish Brown Sandy Clay	---
A23.4	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Yellowish Brown Sandy Clay	---
A23.5	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Sandy Clay	---
A23.6	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sandy Clay	---
A23.7	0-27	Dark Grayish Brown Silt Loam	---
	27-40	Yellowish Brown Sandy Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A23.8	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sandy Clay	---
A23.9	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Sandy Loam	---
A23.10	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Yellowish Brown Sandy Loam	---
A23.11	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Yellowish Brown Sandy Loam	---
A23.12	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sandy Loam	---
A23.13	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Yellowish Brown Sandy Loam	---
A23.14	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Sandy Loam	---
A23.15	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Yellowish Brown Sandy Loam	---
A23.16	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Yellowish Brown Sandy Loam	---
A23.17	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Yellowish Brown Sandy Loam	---
A24.1	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.2	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.3	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.4	0-29	Dark Grayish Brown Silt Loam	---
	29-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.5	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.6	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.7	0-26	Dark Grayish Brown Silt Loam	---
	26-39	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.8	0-30	Dark Grayish Brown Silt Loam	---
	30-45	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.9	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A24.10	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.11	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.12	0-29	Dark Grayish Brown Silt Loam	---
	29-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.13	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.14	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.15	0-28	Dark Grayish Brown Silt Loam	---
	28-39	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.16	0-31	Dark Grayish Brown Silt Loam	---
	31-45	Pale Brown//Brownish Yellow Silty Clay Loam	---
A24.17	0-32	Dark Grayish Brown Silt Loam	---
	32-45	Pale Brown//Brownish Yellow Silty Clay Loam	---
A25.1	0-30	Dark Gray Silt Loam	---
	30-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.2	0-29	Dark Gray Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.3	0-32	Dark Gray Silt Loam	---
	32-42	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.4	0-30	Dark Gray Silt Loam	---
	30-41	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.5	0-29	Dark Gray Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.6	0-26	Dark Gray Silt Loam	---
	26-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.7	0-28	Dark Gray Silt Loam	---
	28-39	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.8	0-29	Dark Gray Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.9	0-26	Dark Gray Silt Loam	---
	26-36	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.10	0-28	Dark Gray Silt Loam	---
	28-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.11	0-30	Dark Gray Silt Loam	---
	30-41	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A25.12	0-27	Dark Gray Silt Loam	---
	27-37	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.13	0-26	Dark Gray Silt Loam	---
	26-36	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.14	0-29	Dark Gray Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.15	0-25	Dark Gray Silt Loam	---
	25-46	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.16	0-27	Dark Gray Silt Loam	---
	27-38	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A25.17	0-9	Dark Gray Silt Loam	---
	9-42	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A26.1	0-27	Dark Grayish Brown Silt Loam	---
	27-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.2	0-27	Dark Grayish Brown Silt Loam	---
	27-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.3	0-24	Dark Grayish Brown Silt Loam	---
	24-34	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.4	0-27	Dark Grayish Brown Silt Loam	---
	27-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.5	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.6	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.7	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.8	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.9	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.10	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.11	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.12	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.13	0-24	Dark Grayish Brown Silt Loam	---
	24-36	Light Brownish Gray//Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A26.14	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.15	0-27	Dark Grayish Brown Silt Loam	---
	27-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.16	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray//Brownish Yellow Silty Clay	---
A26.17	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray//Brownish Yellow Silty Clay	---
A27.1	0-28	Dark Gray Silt Loam	---
	28-38	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.2	0-27	Dark Gray Silt Loam	---
	27-39	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.3	0-29	Dark Gray Silt Loam	---
	29-39	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.4	0-28	Dark Gray Silt Loam	---
	28-41	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.5	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.6	0-24	Dark Gray Silt Loam	---
	24-35	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.7	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.8	0-26	Dark Gray Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.9	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.10	0-34	Dark Gray Silt Loam	---
	34-46	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.11	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.12	0-29	Dark Gray Silt Loam	---
	29-39	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.13	0-28	Dark Gray Silt Loam	---
	28-41	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.14	0-31	Dark Gray Silt Loam	---
	31-44	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.15	0-32	Dark Gray Silt Loam	---
	32-45	Light Brown Gray//Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A27.16	0-32	Dark Gray Silt Loam	---
	32-42	Light Brown Gray//Brownish Yellow Silty Clay	---
A27.17	0-31	Dark Gray Silt Loam	---
	31-44	Light Brown Gray//Brownish Yellow Silty Clay	---
A28.1	0-26	Dark Gray Silt Loam	---
	26-36	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.2	0-29	Dark Gray Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.3	0-26	Dark Gray Silt Loam	---
	26-37	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.4	0-28	Dark Gray Silt Loam	---
	28-39	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.5	0-29	Dark Gray Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.6	0-10	Dark Gray Silt Loam	---
	10-30	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.7	0-12	Dark Gray Silt Loam	---
	12-32	Light Brownish Gray//Brownish Yellow Sand	---
A28.8	0-10	Dark Gray Silt Loam	---
	10-36	Light Brownish Gray//Brownish Yellow Sand	---
A28.9	0-27	Dark Gray Silt Loam	---
	27-38	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.10	0-32	Dark Gray Silt Loam	---
	32-42	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.11	0-27	Dark Gray Silt Loam	---
	27-37	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.12	0-28	Dark Gray Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.13	0-30	Dark Gray Silt Loam	---
	30-41	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.14	0-29	Dark Gray Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.15	0-28	Dark Gray Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.16	0-26	Dark Gray Silt Loam	---
	26-36	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
A28.17	0-27	Dark Gray Silt Loam	---
	27-37	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A29.1	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Brownish Yellow Silty Clay	---
A29.2	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Brownish Yellow Silty Clay	---
A29.3	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Brownish Yellow Silty Clay	---
A29.4	0-31	Dark Grayish Brown Silt Loam	---
	31-43	Brownish Yellow Silty Clay	---
A29.5	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Brownish Yellow Silty Clay	---
A29.6	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Brownish Yellow Silty Clay	---
A29.7	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Brownish Yellow Silty Clay	---
A29.8		Not Excavated – Standing Water	
A29.9	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Brownish Yellow Silty Clay	---
A29.10	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Brownish Yellow Silty Clay	---
A29.11	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Brownish Yellow Silty Clay	---
A29.12	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Brownish Yellow Silty Clay	---
A29.13	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Brownish Yellow Silty Clay	---
A29.14	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Brownish Yellow Silty Clay	---
A29.15	0-26	Dark Grayish Brown Silt Loam	---
	26-38	Brownish Yellow Silty Clay	---
A30.1	0-24	Dark Gray Silt Loam	---
	24-35	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.2	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.3	0-27	Dark Gray Silt Loam	---
	27-38	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.4	0-24	Dark Gray Silt Loam	---
	24-36	Light Brown Gray//Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A30.5	0-26	Dark Gray Silt Loam	---
	26-38	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.6	0-28	Dark Gray Silt Loam	---
	28-41	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.7	0-24	Dark Gray Silt Loam	---
	24-35	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.8	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.9	0-27	Dark Gray Silt Loam	---
	27-39	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.10	0-26	Dark Gray Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.11	0-30	Dark Gray Silt Loam	---
	30-43	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.12	0-33	Dark Gray Silt Loam	---
	33-45	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.13	0-26	Dark Gray Silt Loam	---
	26-38	Light Brown Gray//Brownish Yellow Silty Clay	---
A30.14	0-27	Dark Gray Silt Loam	---
	27-38	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.1	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.2	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.3	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.4	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.5	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.6	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.7	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.8	0-25	Dark Grayish Brown Silt Loam	---
	25-40	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.9	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
A31.10	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.11	0-45	Dark Grayish Brown Silt Loam	---
	45-55	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.12	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
A31.13	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silty Clay	---
A32.1	0-23	Dark Gray Silt Loam	---
	23-33	Light Brown Gray//Brownish Yellow Sand Loam	---
A32.2	0-26	Dark Gray Silt Loam	---
	26-36	Light Brown Gray//Brownish Yellow Sand Clay Loam	---
A32.3	0-10	Dark Gray Silt Loam	---
	10-30	Light Brown Gray//Brownish Yellow Sand Clay Loam	---
A32.4	0-28	Dark Gray Silt Loam	---
	28-38	Light Brown Gray//Brownish Yellow Sand Clay Loam	---
A32.5	0-38	Dark Gray Silt Loam	---
	38-48	Light Brown Gray//Brownish Yellow Silt Clay	---
A32.6	0-32	Dark Gray Silt Loam	---
	32-42	Light Brown Gray//Brownish Yellow Silt Clay	---
A32.7	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silt Clay	---
A32.8	0-28	Dark Gray Silt Loam	---
	28-38	Light Brown Gray//Brownish Yellow Silt Clay	---
A32.9	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silt Clay	---
A32.10	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silt Clay	---
A32.11	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silt Clay	---
A32.12	0-22	Dark Gray Silt Loam	---
	22-32	Light Brown Gray//Brownish Yellow Silt Clay	---
B1.1	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.2	0-29	Dark Gray Silt Loam	---
	29-39	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.3	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
B1.4	0-27	Dark Gray Silt Loam	---
	27-39	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.5	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.6	0-31	Dark Gray Silt Loam	---
	31-41	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.7	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.8	0-24	Dark Gray Silt Loam	---
	24-34	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.9	0-27	Dark Gray Silt Loam	---
	27-40	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.10	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.11	0-40	Dark Gray Silt Loam	---
	40-55	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.12	0-25	Dark Gray Silt Loam	---
	25-35	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.13	0-35	Dark Gray Silt Loam	---
	35-45	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.14	0-37	Dark Gray Silt Loam	---
	37-47	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.15	0-15	Dark Gray Silt Loam	---
	15+	Gravel Fill Impasse	
B1.16	0-27	Dark Gray Silt Loam	---
	27-40	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.17	0-25	Dark Gray Silt Loam	---
	25-37	Light Brown Gray//Brownish Yellow Silty Clay	---
B1.18	0-24	Dark Gray Silt Loam	---
	24-38	Light Brown Gray//Brownish Yellow Silty Clay	---
B2.1	0-27	Dark Gray Silt Loam	---
	27-38	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.2	0-31	Dark Gray Silt Loam	---
	31-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.3	0-27	Dark Gray Silt Loam	---
	27-38	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.4	0-26	Dark Gray Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
B2.5	0-30	Dark Gray Silt Loam	---
	30-41	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.6	0-26	Dark Gray Silt Loam	---
	26-37	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.7	0-42	Dark Gray Silt Loam	---
	42-52	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.8	0-32	Dark Gray Silt Loam	---
	32-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.9	0-36	Dark Gray Silt Loam	---
	36-46	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.10	0-29	Dark Gray Silt Loam	---
	29-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
B2.11	0-26	Dark Gray Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay Loam	---
B3.1	0-29	Dark Grayish Brown Silt Loam	---
	29-41	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.2	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.3	0-25	Dark Grayish Brown Silt Loam	---
	25-37	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.4	0-35	Dark Grayish Brown Silt Loam	---
	35-45	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.5	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.6	0-22	Dark Grayish Brown Silt Loam	---
	22-33	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.7	0-19	Dark Grayish Brown Silt Loam	---
	19-30	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.8	0-23	Dark Grayish Brown Silt Loam	---
	23-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.9	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B3.10	0-20	Dark Grayish Brown Silt Loam	---
	20-32	Light Brownish Gray//Brownish Yellow Silty Clay	---
B4.1	0-26	Dark Gray Silt Loam	---
	26-46	Pale Brown//Brownish Yellow Silty Clay	---
B4.2	0-12	Dark Gray Silt Loam	---
	12-25	Pale Brown//Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
B4.3	0-13	Dark Gray Silt Loam	---
	13-25	Pale Brown//Brownish Yellow Silty Clay	---
B4.4	0-29	Dark Gray Silt Loam	---
	29-40	Pale Brown//Brownish Yellow Silty Clay	---
B4.5	0-26	Dark Gray Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay	---
B4.6	0-26	Dark Gray Silt Loam	---
	26-40	Pale Brown//Brownish Yellow Silty Clay	---
B4.7	0-21	Dark Gray Silt Loam	---
	21-31	Pale Brown//Brownish Yellow Silty Clay	---
B4.8	0-16	Dark Gray Silt Loam	---
	16-30	Pale Brown//Brownish Yellow Silty Clay	---
B4.9	0-29	Dark Gray Silt Loam	---
	29-40	Pale Brown//Brownish Yellow Silty Clay	---
B4.10	0-24	Dark Gray Silt Loam	---
	24-34	Pale Brown//Brownish Yellow Silty Clay	---
B5.1	0-28	Dark Grayish Brown Silt Loam	---
	28-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.2	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.3	0-37	Dark Grayish Brown Silt Loam	---
	37-50	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.4	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.5	0-23	Dark Grayish Brown Silt Loam	---
	23-33	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.6	0-28	Dark Grayish Brown Silt Loam	---
	28-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.7	0-23	Dark Grayish Brown Silt Loam	---
	23-34	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.8	0-22	Dark Grayish Brown Silt Loam	---
	22-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B5.9	0-32	Dark Grayish Brown Silt Loam	---
	32-43	Light Brownish Gray//Brownish Yellow Silty Clay	---
B6.1	0-31	Dark Gray Silt Loam	---
	31-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
B6.2	0-29	Dark Gray Silt Loam	---
	29-40	Pale Brown//Brownish Yellow Silty Clay Loam	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
B6.3	0-31	Dark Gray Silt Loam	---
	31-42	Pale Brown//Brownish Yellow Silty Clay Loam	---
B6.4	0-27	Dark Gray Silt Loam	---
	27-38	Pale Brown//Brownish Yellow Silty Clay Loam	---
B6.5	0-26	Dark Gray Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay Loam	---
B6.6	0-30	Dark Gray Silt Loam	---
	30-40	Pale Brown//Brownish Yellow Silty Clay Loam	---
B6.7	0-45	Dark Gray Silt Loam	---
	45-56	Pale Brown//Brownish Yellow Silty Clay Loam	---
B6.8	0-26	Dark Gray Silt Loam	---
	26-36	Pale Brown//Brownish Yellow Silty Clay Loam	---
B7.1	0-35	Dark Gray Silt Loam	---
	35-45	Light Brown Gray//Brownish Yellow Silty Clay	---
B7.2	0-32	Dark Gray Silt Loam	---
	32-42	Light Brown Gray//Brownish Yellow Silty Clay	---
B7.3	0-39	Dark Gray Silt Loam	---
	39-49	Light Brown Gray//Brownish Yellow Silty Clay	---
B7.4	0-27	Dark Gray Silt Loam	---
	27-47	Light Brown Gray//Brownish Yellow Silty Clay	---
B7.5	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silty Clay	---
B7.6	0-35	Dark Gray Silt Loam	---
	35-45	Light Brown Gray//Brownish Yellow Silty Clay	---
B7.7	0-33	Dark Gray Silt Loam	---
	33-45	Light Brown Gray//Brownish Yellow Silty Clay	---
B8.1	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray Silty Clay	---
B8.2	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Light Brownish Gray Silty Clay	---
B8.3	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray Silty Clay	---
B8.4	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray Silty Clay	---
B8.5	0-27	Dark Grayish Brown Silt Loam	---
	27-39	Light Brownish Gray Silty Clay	---
B8.6	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
B9.1	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
B9.2	0-28	Dark Grayish Brown Silt Loam	---
	28-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
B9.3	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
B9.4	0-26	Dark Grayish Brown Silt Loam	---
	26-37	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
B9.5	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray//Brownish Yellow Silty Clay Loam	---
B10.1	0-24	Dark Grayish Brown Silt Loam	---
	24-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B10.2	0-28	Dark Grayish Brown Silt Loam	---
	28-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B10.3	0-22	Dark Grayish Brown Silt Loam	---
	22-33	Light Brownish Gray//Brownish Yellow Silty Clay	---
B10.4	0-28	Dark Grayish Brown Silt Loam	---
	28-35	Light Brownish Gray//Brownish Yellow Silty Clay	---
B11.1	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
B11.2	0-30	Dark Gray Silt Loam	---
	30-40	Light Brown Gray//Brownish Yellow Silty Clay	---
B11.3	0-27	Dark Gray Silt Loam	---
	27-37	Light Brown Gray//Brownish Yellow Silty Clay	---
B11.4	0-29	Dark Gray Silt Loam	---
	29-40	Light Brown Gray//Brownish Yellow Silty Clay	---
B12.1	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Brownish Yellow Silty Clay	---
B12.2	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Brownish Yellow Silty Clay	---
B12.3		Not Excavated – Drainage Ditch	---
B12.4	0-15	Dark Grayish Brown Silt Loam w/ gravel fill	---
	15+	Gravel Impasse	
B12.5	0-8	Dark Grayish Brown Silt Loam w/ gravel fill	---
	8+	Gravel Impasse	
B12.6	0-15	Dark Grayish Brown Silt Loam w/ gravel fill	---
	15+	Gravel Impasse	

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
B13.1	0-32	Dark Gray Silt Loam	---
	32-43	Light Brown Gray//Brownish Yellow Silty Clay	---
B13.2	0-5	Dark Gray Silt Loam w/ gravel fill	---
	5+	Gravel Impasse	
B13.3	0-2	Dark Gray Silt Loam w/ gravel fill	---
	2+	Gravel Impasse	
B13.4	0-4	Dark Gray Silt Loam w/ gravel fill	---
	4+	Gravel Impasse	
B13.5	0-8	Dark Gray Silt Loam w/ gravel fill	---
	8+	Gravel Impasse	
B14.1	0-19	Dark Grayish Brown Silt Loam	---
	19-29	Brownish Yellow Silty Clay	---

WETLAND DELINEATION REPORT
PROPOSED EVERGREEN SUBDIVISION
Town of Amherst

Prepared for
Cimato Enterprises

RECEIVED
JUN - 2 2011
TOWN OF AMHERST
PLANNING DEPT.

CLIENT:
CIMATO ENTERPRISES
9220 TRANSIT ROAD
EAST AMHERST, NEW YORK 14051

PROJECT NAME:
PROPOSED EVERGREEN SUBDIVISION

PROJECT LOCATION:
EAST OF TO NIAGARA FALLS BOULAVARD
SOUTH OF AND ADJACENT TO TONAWANDA CREEK
TOWN OF AMHERST
ERIE COUNTY, NEW YORK

ACTION:
SECTION 404 WETLAND DELINEATION REPORT

PREPARED BY:
WILSON ENVIRONMENTAL TECHNOLOGIES, INC.
2805 WHERLE DRIVE, SUITE 12
WILLIAMSVILLE, NEW YORK 14221
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DATE:
June 2, 2011

WET PROJECT NO.: 311.027

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EXECUTIVE SUMMARY

Wilson Environmental Technologies, Inc. (WET) has been retained by Mr. Anthony Cimato, Cimato Enterprises, 9220 Transit Road, East Amherst, New York 14051, to evaluate and define wetlands subject to jurisdiction under Section 404 of the Clean Water Act on approximately 48.0± acre parcel in the Town of Amherst, Erie County, New York.

WET conducted the Federal Wetlands Delineation of the site during May 5th and 6th of 2011. The result of the wetland delineation shows three (3) wetlands totaling approximately 1.05 acres within the site. The wetlands were flagged at the time of the field work and the location of the wetland surveyed by a licensed land surveying firm. The following technical report addresses the site wetland. The wetland delineation results were based on the presence of hydric soils, hydrophytic vegetation and wetland hydrology found within the site boundaries as depicted on the attached Wetlands Survey prepared by the firm of WM Schutt Associates, 37 Central Ave., Lancaster, New York, 14086.

This report is intended for the use of the property owner(s), their agents and assigns as a planning aid in the development of this parcel. Results of the Federal Wetlands Delineation are subject to the review of the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act, and the New York State Department of Environmental Conservation as the Regulatory Agencies, along with the Town of Amherst. This Wetland Delineation Report is a representation of Federal Wetlands only, as the New York State Department of Environmental Conservation is solely responsible for the delineation of wetlands under Article 24 of the New York State Freshwater Wetlands Act. The review of this document by the U.S. Army Corps of Engineers could produce alterations to the delineated boundary as determined by WET. The wetlands, as delineated by WET, were completed to the best of our ability and in compliance with the guidelines presented in the Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1 (U.S. Army Corps Waterways Experiment Station, 1987), and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, dated October, 2009 as accepted as the current methodology.

1.0 INTRODUCTION

Wilson Environmental Technologies, Inc. (WET) has been retained by Anthony Cimato, Cimato Enterprises, 9220 Transit Road, East Amherst, New York, 14051, to evaluate and define wetlands subject to jurisdiction under Section 404 of the Clean Water Act on an approximately 48.0± acre parcel in the Town of Amherst, Erie County, New York. (Figure 1). This report presents the results of the on-site field investigation which was conducted to determine if a United States Army Corps of Engineers (USACE) permit relative to Section 404 of the Clean Water Act would be required for any proposed development within the parcel. Based on the results of the investigation, WET determined that three (3) wetlands totaling approximately 1.05 acres are located within the site. The determination was based on the presence of hydric soils, hydrophytic vegetation and wetland hydrology.

The result of the wetlands delineation was surveyed by the firm of WM Schutt Associates, 37 Central Ave., Lancaster, New York, 14086, and contained in Appendix D of this report.

The site is located east of Niagara Falls Boulevard, north of Tonawanda Creek Road, and south of Tonawanda Creek. , Town of Amherst, Erie County, New York. The site is proposed for development of a residential subdivision.

1.1 Current Regulations

The Code of Federal Regulations defines a wetland as an area having hydric soils, wetland hydrology and supporting vegetation dominated by hydrophytes. All three of these criteria must be present for an area to qualify as a wetland. Hydrophytic vegetation has been defined as species which due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions. These species have been given an indicator status defining their probability of occurring in a wetland. These indicator statuses are defined as Obligate Wetland (OBL), Facultative Wetland (FACW) and Facultative (FAC). Non-hydrophytic species are assigned an indicator status of Facultative Upland (FACU) or Obligate Upland (UPL).

2.0 AGENCY RESOURCE INFORMATION

Prior to initiation of the on-site investigation, available environmental information was gathered and reviewed. The results of the review are summarized as follows:

2.1 USGS Quadrangle Map (Figure 1)

The U.S. Geological Service has produced geological maps for every county of the United States. These maps are useful in wetland delineation for the purposes of identifying areas of concern within a parcel. In addition to civil works and boundaries, indicators of marshes, swamps, perennial and intermittent streams, and contours are depicted. Tonawanda Creek is shown north of the site. The Amherst, New York (7.5 minute) quadrangle map was referenced for this parcel.

2.2 National Wetlands Inventory Map (Figure 2)

NWI maps were produced by the U.S. Department of the Interior, Fish and Wildlife Service in the years 1977 to present day. These maps provide the approximate configurations and community types of suspected Federal wetlands. Although they serve as useful guidelines, they are incomplete due to compilation methods primarily utilizing aerial photography which contain an inherent margin of error, only reflect conditions the year in which they were taken and some wetland areas too small or obscured by dense forest may not be depicted. The Amherst, New York (1978) NWI map was referenced for this parcel. Updated mapping has been included into the Erie County GIS System. A Federal regulated wetland is indicated within the limits of the site. The Erie County GIS Web Viewer NWI 2008 aerial photograph with wetland is included as Figure 2.

2.3 NYSDEC Freshwater Wetlands Map (Figure 3)

The New York State Department of Environmental Conservation (DEC) has developed criterion for wetland identification based on vegetation cover with minimum acreage requirements. Identified wetlands have been promulgated with the production and distribution of Freshwater Wetlands Maps (FWW). The boundaries of identified wetlands are approximations and require surveying of a field delineation performed by a DEC representative to determine exact boundaries and acreage. Updated mapping has been included into the Erie County GIS System. The Amherst, New York (1978) FWW map was referenced for this parcel. No State FWW are shown within the site nor the immediate vicinity. The Erie County GIS Web Viewer FWW 2008 aerial photograph is included as Figure 3.

2.4 NRCS Soils Map (Figure 4)

The Natural Resources Conservation Service (former U.S. Soil Conservation Service) has performed a soils identification study on a county by county basis. Aerial photography plates have been utilized in conjunction with field testing to identify soil types and locations within various counties. The results have been

compiled and published in County-Specific Soil Surveys. Also included in the surveys is information pertaining to the various soils identified within the county which includes, but is not limited to, texture, range of chroma colors, range of mottle colors, subgroup and drainage classification. Most counties in New York State have been completed and published though a few are still in progress. The NRCS Web Series - Soil Survey of Erie County, was referenced to determine the likelihood of encountering soils with hydric characteristics or which may contain hydric inclusions. The following soil series are mapped within the limits of delineation project:

SYMBOL	SERIES	SUBGROUP	DRAINAGE CLASS
Lc	Lamson very fine sandy loam	Aeric Haplaquepts	Poorly drained
RaA	Raynham silt loam	Aeric Haplaquepts	Somewhat poorly drained
Sw	Swormville clay loam	Aeric Ochraqualfs	Somehwhat poorly drained

The site is located within the Niagara-Canandaigua-Cosad soil map unit. This soils unit is defined as dominantly nearly level, deep, somewhat poorly drained to very poorly drained, medium textured soils; on lowland plains. The landscape is mainly nearly level. Slope ranges from 0 to 8 percent.

The soil symbols associated with the detailed soils map indicates the soil series and the slope associated with that mapped unit. For example, FbA identifies the soil series as Farnham. The last capital letter of any symbol (A) identifies the slope ranging for that soil unit, 0 to 3 percent slope. B represents 3 to 8 percent slope, C represents 8 to 15 percent, D – 15 to 25 percent and E represents a slope of 25 to 35 percent. No third letter designation indicates a nearly level landscape.

The Lamson series consists of deep, poorly drained soils formed in depressions on glacial lake plains. These soils formed in sandy lake-laid deposits. Slopes range from 0 to 3 percent. Soil colorations in the B Horizon are a brown 7.5YR4/2 with many fine and medium distinct strong brown 10YR5/6 and few faint brown 7.5YR4/4 mottles. The B2 Horizon of these soils has a hue ranging from 2.5Y to 7.5YR, value of 4 through 6, and chroma of 1 through 2.Texture is a fine sandy loam. The Ap Horizon is a very dark brown 10YR3/1 silt loam. Associated soils include Arkport, Galen, Minoa, Elnora, and Canandaigua soils.

The Raynham series consists of deep, somewhat poorly drained soils formed in nearly flat areas of glacial lake plains. These soils formed in lacustrine calcareous, silty sediments. Slopes range from 0 to 3 percent. Soil colorations in the B Horizon are a light olive brown 2.5Y5/4 with many fine, distinct grayish brown

2.5Y5/2 and coarse, distinct grayish brown 10YR5/6 mottles. The B2 Horizon of these soils has a hue ranging from 5Y to 7.5YR, value of 4 through 5, and chroma of 2 through 4. Texture is a silt loam. The Ap Horizon is a very dark grayish brown 10YR3/2 silt loam. Associated soils include Canandaigua, Rhinebeck and Minoa soils.

The Swormville series consists of deep, somewhat poorly drained soils formed in nearly flat areas of glacial lake plains. These soils formed in lacustrine or old alluvial deposits high in clay content and underlain with sandy lake-laid sediments. Slopes range from 0 to 3 percent. Soil colorations in the B Horizon are a yellowish brown 10Y5/4 with many common distinct gray 7.5YR5/8 mottles. The B2 Horizon of these soils has a hue ranging from 7.5YR to 5Y, value of 3 through 6, and chroma of 2 through 4. Texture is a clay loam. The Ap Horizon is a very dark grayish brown 10YR3/2 clay loam. Associated soils include Raynham, Minoa, Niagara, Lamson and Wayland soils.

2.5 Agency Resource Conclusions

The mapping of poorly drained soil, indicted the necessity to perform a field investigation at the site to ascertain the extent to which, if any, federally protected wetland exist on the parcel. The wetlands delineation was performed in accordance with the Corps of Engineers Wetlands Delineation Manual (January 1987). Procedures, results and conclusions of the wetlands delineation field study are presented in the remainder of this report.

3.0 SITE DESCRIPTION

The subject site consists of approximately 48 acres situated east of Niagara Falls Boulevard and north of Tonawanda Creek Road, within the Town of Amherst. The balance of the site holds an active golf course that is regularly mowed and maintained. Many, if not all, of the landscape features appear man-made. There are several shallow ditches running throughout the course for improved drainage; many of these ditches flow north, into Tonawanda Creek. Residential homes exist south of the parcel, along Tonawanda Creek Road. In addition, there is a mature woodlot to the west of the golf course, within which reside the bulk of the wetlands. Much of the southern portion of this woodlot was previously delineated in 2006. The area of the parcel as shown on the Wetlands Delineation Survey contained in Appendix D of this report.

The topography of the site is relatively flat. The area of wetlands total approximately 1.05 acres.

3.1 SITE ECOLOGY

The ecology of the woodlot consists of a mixed forested and shrub/scrub upland and forested wetland communities. The woodlot occupies the western portion of the site. The wetland communities occupy the balance of the woodlot in the north-central and southern regions. East of the woodlot is dominated by upland grasses which are mowed and maintained as an existing, active public golf course. A man made shallow and deep water pond exist in the east-central region where acting as a water hazard and irrigation pondwithin the golf course.

The upland woodlot vegetation community is best defined as a mature vegetation community dominated by second growth trees over somewhat poorly drained soils. Dominant tree and sapling species include red pine (*Pinus resinosa,* FACU), red maple (*Acer rubrum,* FAC), and box elder (*Acer negundo*, FAC) with common buckthorn (*Rhamnus cathartica*, FAC), gray dogwood (*Cornus foemina*, FAC), and rose mulitflora (*Multiflora rosa*, FAC) in the shrub strata. Herbaceous species include Virginia creeper (*Parthenocissus quinquefolia*, FACU), garlic mustard (*Alliaria petiolata*, FACU), common strawberry (*Fragaria virginiana*, FACU), and white avens (*Geum canadensis*, FACU).

Three (3) wetlands were found on this parcel. Wetland A and B are best defined as mixed forested and emergent marsh wetland components. The wetlands occupy the lower portions of the landscape. Wetland B continues off site to the south. Dominant species identified in the wetlands would include green ash (*Fraxinus pennsylvanica*, FACW) eastern cottonwood (*Populus deltoides*, FAC), and silver maple (*Acer saccharinum*, FACW) in the tree strata with silky dogwood (*Cornus amonum*, FACW) in the shrub strata. Herbaceous species were found to include sensitive fern (*Onoclea sensibilis*, FACW), melic manna grass (*Glyceria melicaria*, OBL), creeping jennie (*Lysinachia nummularia* (FACW) and others.

Wetland C is best defined as a permanently flooded open water and emergent cattail marsh, containing narrowleaf cattail (*Typha angustifolia*, OBL).

A complete list of all vegetation at this site is found in Table One of this report.

4.0 METHODS

The Code of Federal Regulations defines a wetland as an area having hydric soils, wetland hydrology and supporting vegetation dominated by hydrophytes. All three of these criteria must be present for an area to qualify as a wetland. The Routine On-site Method for areas greater than five acres in size described in Section D of Chapter IV in the USACE 1987 manual was determined appropriate to delineate jurisdictional wetlands on the site. The areal dominance method described in the USACE 1989 manual was used to generate vegetation data.

Prior to initiating sampling, a site walk-over was performed to identify the general site topography relative to drainage patterns, major plant communities, and potential areas of disturbance. Wetlands were marked in the field with survey flags and labeled as A1, A2 etc. for those flags demarcating "Wetland Area A" and shown on the Routine Wetlands Determination Forms as the Station ID number. Sampling points which support the location of the demarcation flags were marked in the field along the upland/wetland boundary with survey flags and labeled as W1U (W1U for Upland Sample and W1W for Wetland Sample, W2. etc.) along the wetland/upland perimeter and identified on the Routine Wetlands Determination Forms as Plot W1.

The Data Forms are contained in Appendix B of this report.

Vegetation units were sampled using standard quadrat analysis procedures. Herbaceous and bryophyte species were identified within a five foot radius of the soil boring. Trees, saplings, shrubs and woody vines, were sampled within a 30 foot radius of the soil boring. Vegetation data was recorded for all strata at each data point. Dominance was measured by visually estimating the per cent areal coverage occupied by each species. Each species was ranked in order by decreasing value of percent areal cover.

The dominant species for each strata category are defined as those plants with the highest ranking which, when cumulatively totaled, immediately exceed 50 percent of the total dominance measure for the category; plus any additional plant species comprising 20 per cent or more of the total dominance measure for the category. The Federal Indicator status of each species was determined by referencing the National List of Plant Species That Occur in Wetlands: Northeast (Region I) (Reed 1988). A data point was considered to have wetland vegetation if 50 per cent or more of all dominant species were assigned facultative (FAC), facultative wetland (FACW), or obligate (OBL) indicator status.

Soil samples and hydrology information were also collected at each data point. Soil samples were obtained through the use of a stainless steel drain spade. The borings were examined to depths of at least 16 inches. The soil samples were inspected for the presence of hydric soil indicators; introduced in the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region.* The presence of one or more hydric soil

indicator would identify the soil as hydric, while the absence of any indicators would conclude that the soil is non-hydric. Hydrology information was visually assessed during the soils investigation and included, but was not limited to, observations of inundation, soil saturation, water marks on trees, wetland drainage patterns, drift lines, water-stained leaves, and oxidized root channels within the Ap Horizon.

5.0 RESULTS

Field work for the Federal delineation was conducted during May 2011. A total of 10 field data sample points were sampled and recorded which delineated the wetland/upland boundary. Based on the results of the sampling, three (3) wetlands were identified on the subject parcel.

Wetland A is best defined as a permanently flooded, forested marsh, wetland component. The depressional landscape of Wetlands A appears to be from excavation many years ago. Hydrology appears to be derived from a combination of drainage received from run-off from surrounding uplands, and precipitation. Positive hydrology in this wetland was indicated by primary and secondary indicators such reduced soil conditions and inundated conditions. Species identified in the wetland include eastern cottonwood (*Populus deltoids*, FAC), green ash (*Fraxinus pennslyvanica*, FACW), and silver maple (*Acer sacharinum*, FACW) in the tree strata; with creeping jennie (*Lysimachia nummularia*, FACW) in the herbaceous strata. The wetland appears to be isolated. Total acreage for the wetland is 0.38+/- acres.

Wetland B is best defined as a mixed forested wetland shrub and emergent marsh wetland component. The wetland occupies the lower portion of the landscape and continues off site to the south, connecting with a larger wetland complex that was previously delineated in 2009. Hydrology appears to be derived from a combination of run-off from surrounding uplands, and precipitation. Positive hydrology in this wetland was indicated by primary and secondary indicators such water-marks on trees, water stained leaves, reduced soil conditions, oxidized rhizospheres on living roots, and inundated soil conditions. Species identified in this wetland would include green ash (*Fraxinus pennsylvanica*, FACW) in the tree strata with silky dogwood (*Cornus amomum*, FACW) in the shrub strata. Herbaceous species were found to included panicled aster (*Aster simplex*, FACW), sensitive fern (*Onoclea sensibilis*, FACW), rough avens (*Geum laciniatum*, FAC) and others. Wetland B is considered isolated and totals 0.19± acres, on site.

Wetland C is found on the east-central area of the golf course and is best defined as an open water pond with an emergent cattail marsh component. Wetland C is considered to be a man-made pond, created to be water hazard while serving as a source for irrigation water for the golf course. A shallow man-made ditch on the north side of the pond carries excess water from the course towards Tonawanda Creek to the north. Hydrology appears to be derived from a combination of run-off from surrounding uplands, ground water and precipitation. The only species identified within Wetland C are narrowleaf cattail (*Typha angustifolia*, OBL). Wetland C has a potential drainage point via the shallow ditch that runs north toward Tonawanda Creek. Total acreage for the wetland is 0.48± acres.

Soil series which were identified on site were closely related to those units mapped in the Soil Survey of Erie County. Soils sampled in the wetland areas were found to correspond to the poorly drained Canandaigua series. The Canandaigua series

consists of deep, poorly drained and very poorly drained, medium textured to moderately fine textured soils formed in lacustrine deposits of silt, very fine sand and clay. These soils are level or depressional and occupy areas where water ponds or runs off very slowly. Slopes range from 0 to 3 percent. Soil colorations in the B Horizon are a olive gray 2.5Y5/2 with many common distinct yellowish brown 10YR5/6 mottles. The B2 Horizon of these soils has a hue ranging from 5YR to 5Y, value of 4 through 6, and chroma of 1 through 2. Texture is a silty clay loam. The Ap Horizon is a very dark grayish brown 10YR3/2 silt loam. Associated soils include Collamer, Niagara, Lakemont and Madalin soils.

Soils identified within the upland areas of the site were found to be consistent with the Swormville series. The Swormville series consists of deep, somewhat poorly drained soils formed in nearly flat areas of glacial lake plains. These soils formed in lacustrine or old alluvial deposits high in clay content and underlain with sandy lake-laid sediments. Slopes range from 0 to 3 percent. Soil colorations in the B Horizon are a yellowish brown 10Y5/4 with many common distinct gray 7.5YR5/8 mottles. The B2 Horizon of these soils has a hue ranging from 7.5YR to 5Y, value of 3 through 6, and chroma of 2 through 4. Texture is a clay loam. The Ap Horizon is a very dark grayish brown 10YR3/2 clay loam. Associated soils include Raynham, Minoa, Niagara, Lamson and Wayland soils.

6.0 CONCLUSIONS and RECOMMENDATIONS

6.1 Conclusions

Based on the results of the field investigation, three (3) wetlands have been identified on the parcel. The wetland areas are best defined as:

WETLAND AREA	SIZE (ACRES)	FEDERAL DESIGNATION
Wetland Area A	0.38 +/-	PFO1H/EM2H
Wetland Area B	0.19 +/-	PFO1E/PSS1E/PEM1E
Wetland Area C	0.48 +/-	PEM1H

The depressional nature of Wetland A is presumed to be derived from past excavation. Wetland A is classified as a palustrine, forested/emergent, broad-leaved deciduous wetland marsh that is permanently flooded. The hydrology appears to be derived from a combination of run-off from surrounding uplands, and precipitation. The wetland is isolated to the site and is not part of a larger system. Total acreage for the wetland is 0.38± acres.

Wetland B is depressional in nature and has hydrology derived from surface flow from surrounding uplands, and precipitation. This wetland is classified as a palustrine, forested/shrub-scrub/emergent, broad-leaved deciduous, seasonally flooded wetland. The wetland is part of a larger wetland component that continues off site to the south. A delineation in 2006 and verified by the USACE in 2009 concluded that the wetlands to the south are "*isolated, non-navigable, intrastate waters with no substantial nexus to interstate or foreign commerce and therefore are not regulated under the CWA.*"– *Lesta Ammons;* Jurisdictional Determination Letter, dated January 19, 2009 - Wetland B totals 0.19± acres.

Jurisdictional Determination Letter, dated January 19, 2009, is contained in Appendix D of this report.

Wetland C is a man-made pond in the midst of a golf course. This wetland can be classified as an emergent, palustrine wetland with persistent vegetation that is permanently flooded. This wetland has the potential to drain north to Tonawanda Creek by means of a shallow ditch that is also man-made. Total wetland acreage is 0.48± acres.

The total wetland area on site is considerably less than 12.4 acres, which is required for the New York State Department of Environmental Conservation to regulate under Article 24 of the Freshwater Wetlands Act.

6.2 Recommendations

With the issuance of Federal Register Vol. 65, No. 47, pp. 12818-12899, the U.S. Army Corps of Engineers amended its Nationwide Permit program (NWP). The reason for the amendment was to reduce the impacts to wetlands as well as reduce the regulatory effort expended in governing the activities associated with minimal environmental impacts. These amendments went into effect on March 9, 2007 when the Corps of Engineers reissued the existing NWPs.

The NWP most often utilized by the public is the Nationwide permit (NWP 39) for the discharge of dredged or fill material waters of the United States including wetlands. This permit allows for the placement of fill material into "waters of the United States including wetlands" as long as that discharge does not result in the loss (negative impact) of greater than ½ acre, nor cause the loss of waters of the United State for a distance of greater than 300 linear feet of stream bed. An application must be submitted to the USACE for approval prior to any disturbance of jurisdictional areas. On January 9, 2001, the U.S. Supreme Court issued a ruling that affected the Corps of Engineers authority to regulate isolated, non-navigable, intrastate waters under the Clean Water Act (Solid Waste Agency of Northern Cook County vs. the U.S. Army Corps of Engineers, No.99-1178). Specifically, the case involved statutory and constitutional challenges to the assertion of the Clean Water Act jurisdiction over isolated, non-navigable, intrastate waters where use of the site by migratory birds alone is **not** sufficient to establish Federal jurisdiction over isolated wetlands, and that such areas are not waters of the United States and are **not** subject to regulation under Section 404 of the Clean Water Act.

No significant nexus was observed between Wetland A and B and other waters of the United States. A connection was found between Wetland C and Tonawanda Creek; however, due to its man-made nature and environment it is our professional opinion that these wetland will **not** fall under federal jurisdiction. It is the U.S. Army Corps of Engineers (USACE) responsibility to make this jurisdictional determination.

Should you elect to submit this report to the U.S. Army Corps of Engineers (USACE) for review, a site visit may be scheduled to verify the report findings. If the USACE agrees with the results of the delineation, a letter of agreement will then be forwarded to you which you can use to satisfy a portion of the Federal wetland regulatory concerns of the Town of Amherst. This release from USACE jurisdiction does not relieve you from the necessity of complying with other Federal, State or local regulations that may be applicable at the site.

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FIGURE 1

USGS QUADRANGLE MAP

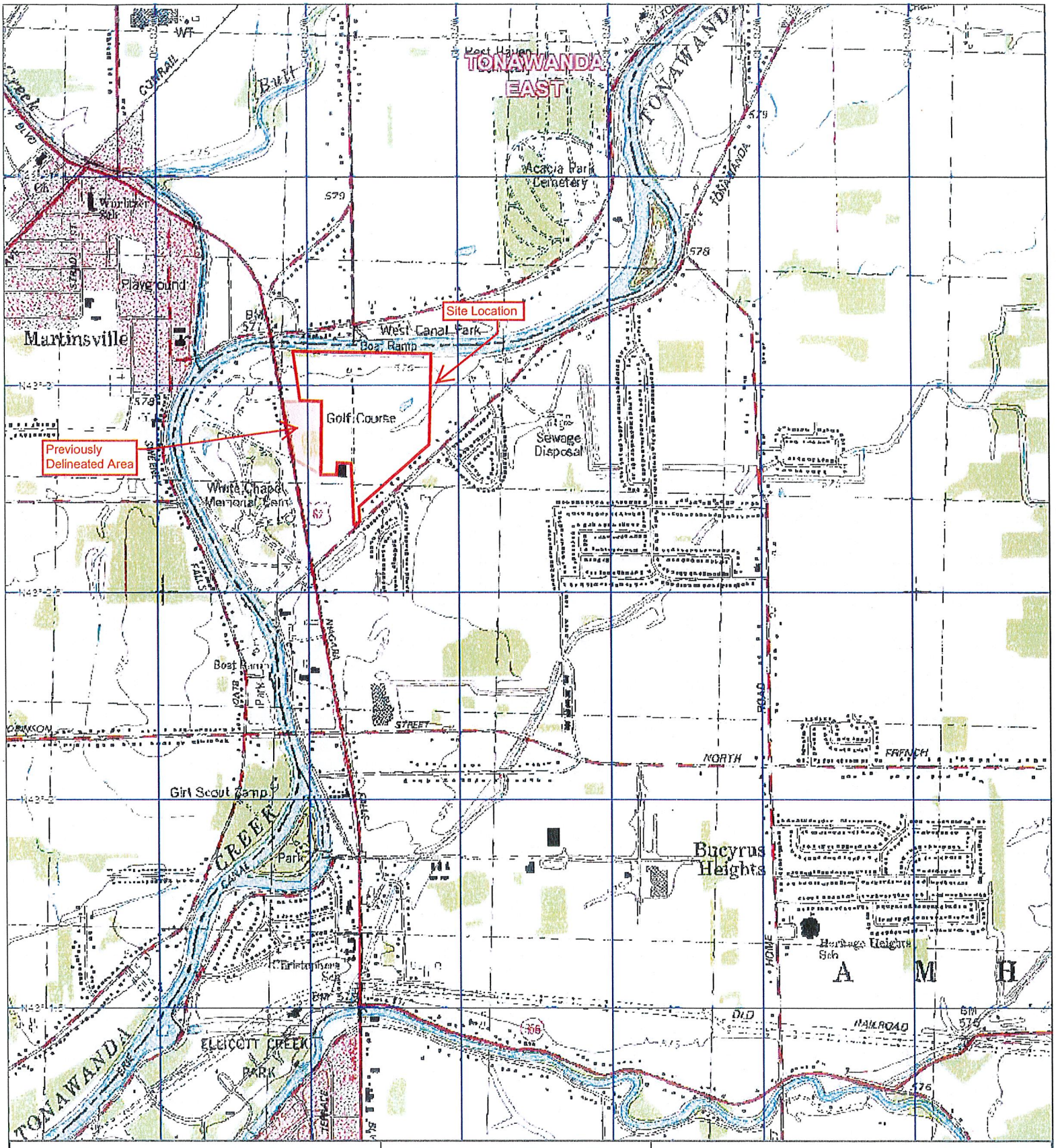


Figure 1: USGS Quadrangle

Amherst, NY Quadrangle
Scale 1:24,000

Project Location:
North of Tonwanada Creek Road
Town of Amherst
Erie County, New York

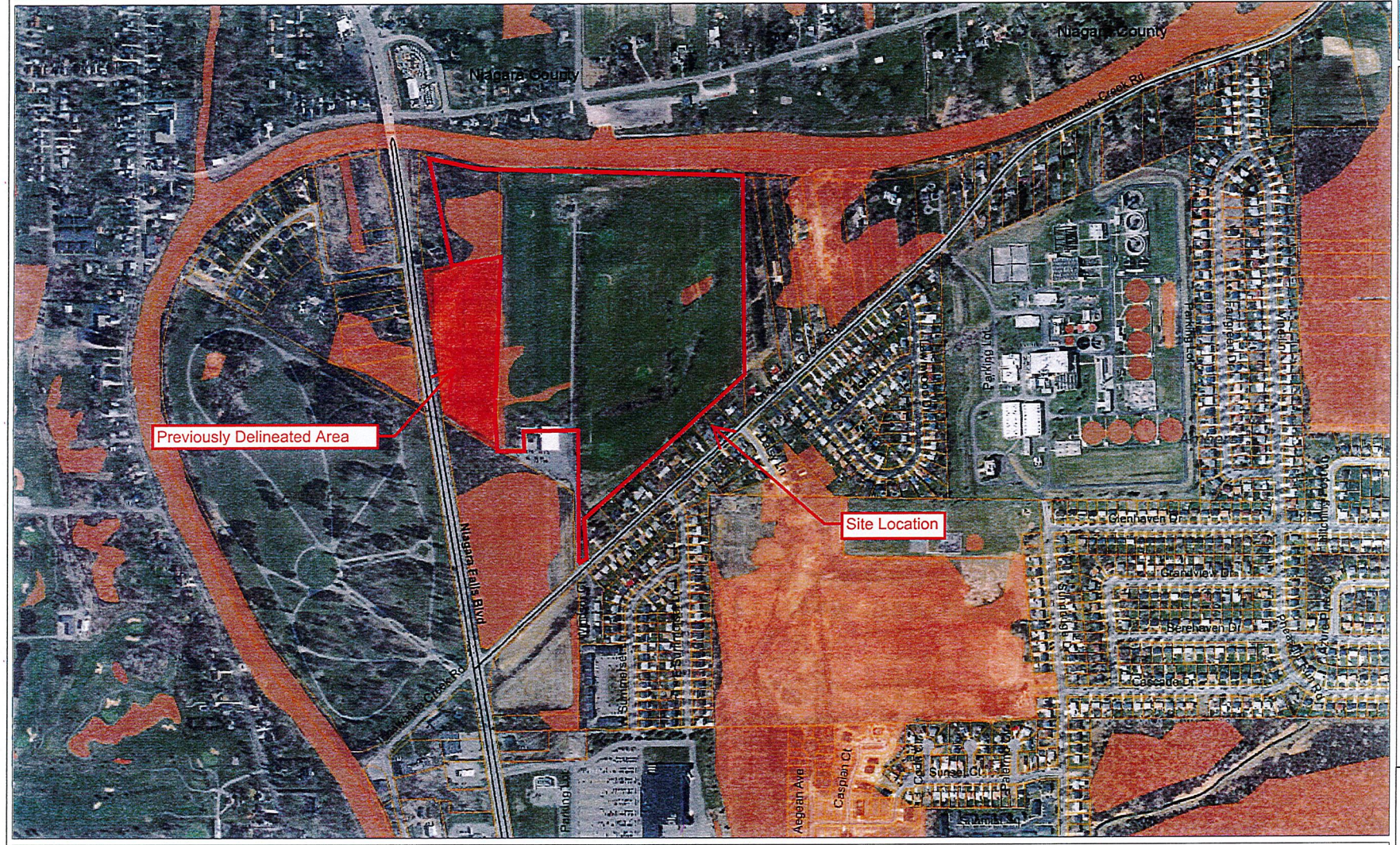
Prepared For:
Cimato Enterprises

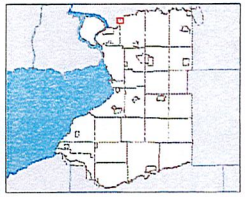
FIGURE 2

NATIONAL WETLANDS INVENTORY MAP

Figure 2: National Wetland Inventory Map

Erie County On-Line Mapping System





Legend

Streets and Highways
- Interstate
- Primary State Road
- Secondary State Road
- County Road
- Local Road

Parcels

National Wetlands Inventory
- Wetlands
- No Digital Data

1ft Color Orthos
- Red: Band_1
- Green: Band_2
- Blue: Band_3

2ft Color Orthos
- Red: Band_1
- Green: Band_2
- Blue: Band_3

N

1:7,144

0.2 0 0.11 0.2 Miles

Erie County and its officials and employees assume no responsibility or legal liability for the accuracy, completeness, reliability, timeliness, or usefulness of any information provided. Tax parcel data was prepared for tax purposes only and is not to be reproduced or used for surveying or conveyancing.

ERIE COUNTY, NEW YORK
DEPARTMENT OF ENVIRONMENT & PLANNING
OFFICE OF GEOGRAPHIC INFORMATION SERVICES

WILSON ENVIRONMENTAL TECHNOLOGIES, INC.

FIGURE 3

NYSDEC FRESHWATER WETLANDS MAP

Figure 3: NYSDEC Freshwater Wetlands Map

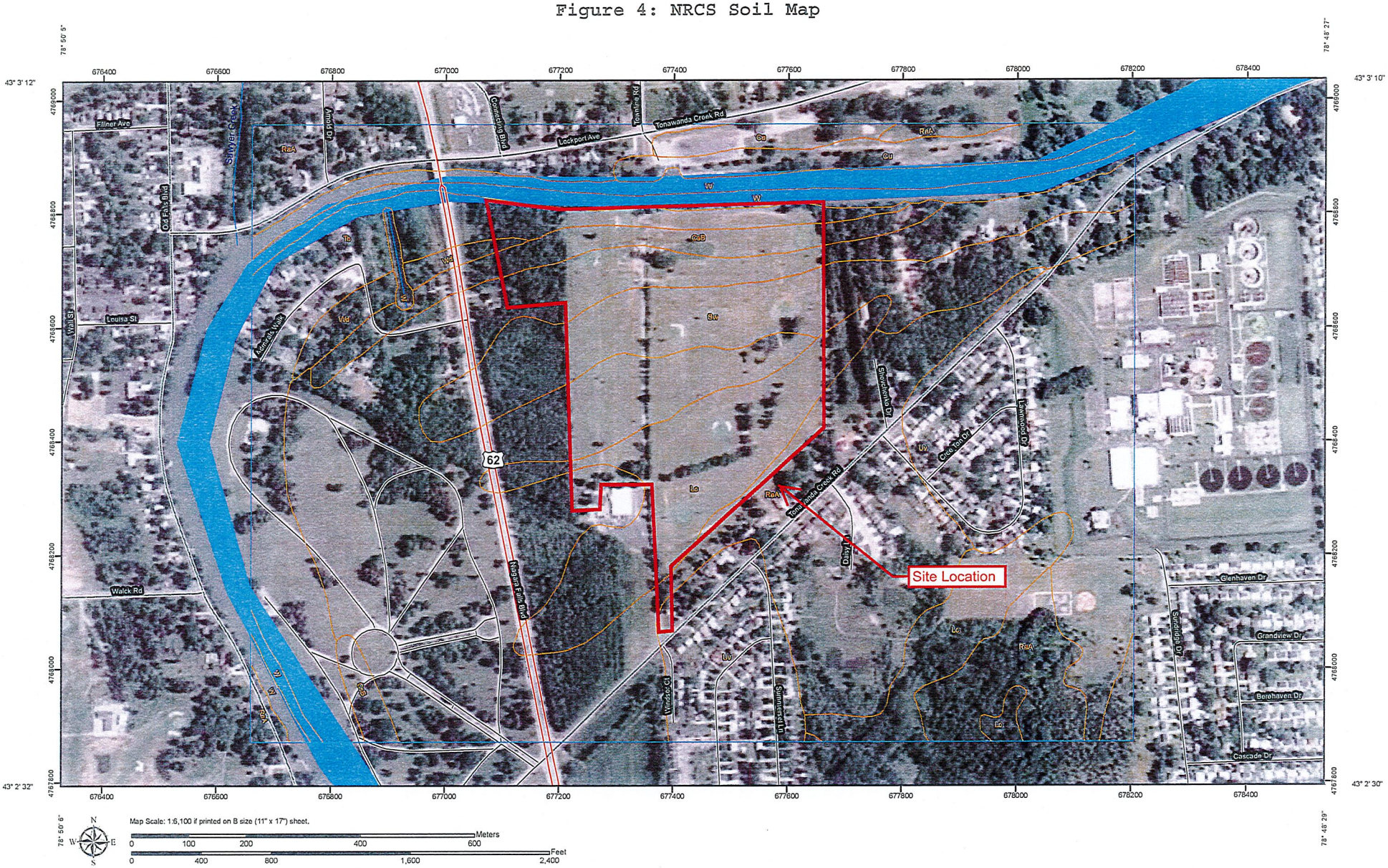
Erie County On-Line Mapping System


Niagara County
Niagara County
Previously Delineated Area
Site Location
Parking Lot
Parking Lot
Glenhaven Dr
Grandview Dr
Pinehaven Dr
Cascade Dr
Tonawanda Creek Rd
Tonawanda Creek Rd
Fairground Dr
Fairground Dr
Fairground Dr

FIGURE 4

NRS SOIL MAP

Figure 4: NRCS Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:6,100 if printed on B size (11" × 17") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Erie County, New York
Survey Area Data: Version 10, Feb 8, 2010

Soil Survey Area: Niagara County Area, New York
Survey Area Data: Version 9, Jul 9, 2010

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Date(s) aerial images were photographed: 6/21/2006; 8/5/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Erie County, New York (NY029)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CsB	Collamer silt loam, 3 to 8 percent slopes	14.3	3.5%
Lc	Lamson very fine sandy loam	41.0	9.9%
RaA	Raynham silt loam, 0 to 3 percent slopes	165.1	39.9%
Sw	Swormville clay loam	31.5	7.6%
Te	Teel silt loam	34.9	8.4%
Uv	Urban land-Swormville complex	64.6	15.6%
W	Water	12.0	2.9%
Wd	Wayland silt loam	4.4	1.1%
Subtotals for Soil Survey Area		**367.8**	**88.8%**
Totals for Area of Interest		**414.1**	**100.0%**

Niagara County Area, New York (NY664)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Ca	Canandaigua silt loam	4.0	1.0%
Cu	Cut and fill land	10.5	2.5%
RaA	Raynham silt loam, 0 to 2 percent slopes	20.1	4.9%
W	Water	11.6	2.8%
Subtotals for Soil Survey Area		**46.2**	**11.2%**
Totals for Area of Interest		**414.1**	**100.0%**

TABLE 1

VEGETATION LIST

TABLE 1
Vegetation Identified
During the Wetland Delineation

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS
HERBACEOUS VEGETATION		
Alliaria petiolata	Garlic mustard	FACU
Aster simplex	Panicled aster	FACW
Fragaria virginiana	Common strawberry	FACU
Geum canadensis	White avens	FACU
Geum laciniatum	Rough avens	FAC
Glyceria melicaria	Melic manna grass	OBL
Lysimachia nummulana	Creeping jennie	FACW
Onoclea sensibilis	Sensitive fern	FACW
Pathenocissus quinquefolia	Virginia creeper	FACU
Solidago rugosa	Rough goldenrod	FAC
Taraxacum officinale	Common dandelion	FACU
Toxicondendron radicans	Poison ivy	FAC
Typha angustifolia	Narrowleaf cattail	OBL
SHURBS		
Cornus amomum	Silky dogwood	FACW
Cornus foemina	Gray dogwood	FAC
Crategus spp.	Hawthorn	FACU
Lonicera tatarica	Tartarian honeysuckle	FACU
Rhmanus catharitca	Common buckthorn	FAC
Rosa multiflora	Multiflora rose	FAC
Viburnum recognitum	Northern arrow-wood	FACW
TREE		
Acer negundo	Box elder	FAC
Acer rubrum	Red maple	FAC
Acer saccharinum	Silver maple	FACW
Fraxinus pennslyvanica	Green ash	FACW
Pinus resinosa	Red pine	FACU
Populus deltoides	Eastern cottonwood	FAC
Quercus rubra	Red oak	FACU
Salix nigra	Black willow	FACW

APPENDIX B

DATA FORMS

Wilson Environmental Technologies, Inc.

2805 Wehrle Dr. Suite 12 - Williamsville, NY 14221

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Evergreen Subdivision City/County: Erie Sampling Date: 5/6/11

Applicant/Owner: Palumbo / Cimato State: NY Sampling Point: A6U1

Investigator(s): D. Wilson & R. Feickert Section, Township, Range: Amherst

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: 43°, 02' N Long: 78° 49' W Datum: _____

Soil Map Unit Name: Niagara-Canandaigua-Cosad NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Very rainy spring.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: A6U1

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus pennsylvanica	30	X	FACW
2. Acer rubrum	10		FAC
3.			
4.			
5.			
6.			
7.			
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. Cornus foemina	60	X	FAC
2. Cornus amomum	20		FACW
3. Rosa mulitflora	5		FAC
4.			
5.			
6.			
7.			
	85	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Fragaria virginiana	15		FACU
2. Glyceria melicaria	15		OBL
3. Lysimachia nummularia	10		FACW
4. Solidago rugosa	10		FAC
5. Alliaria petiolata	10		FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (Include photo numbers here or on a separate sheet.)

Mirginal upland adjacent to Golf course.

SOIL

Sampling Point: A6U1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 16	10YR 3/2	100					Clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

APPENDIX C

SITE PHOTOS

Visual Documentation



West, from the eastern boundary of Wetland C.



North, from the southern boundary of Wetland C.



East, from the western boundary of Wetland C.



South, from the northern boundary of wetland C.



North, from northern boundary of Wetland C.



East, north of Wetland C. Noted shallow man-made drainage ditch.



East, from the eastern boundary of Wetland A. Golf course in background.



West, from eastern boundary of Wetland A.



Soil sample taken at point A6W1.



North, from northeast boundary of Wetland A.



South, from northeast boundary of Wetland A.



West, from the east-central area of Wetland A.



North, from the southwest boundary of Wetland A.



South, from the southwestern boundary of Wetland A.



East, from the western boundary of Wetland A.



West, from the western boundary of wetland A.



Soil sample taken at point A16U2



Soil sample taken at point B10W3.



East, from the northeast boundary of wetland B.



Southwest, from the northeast boundary of Wetland B.



North, from central area of Wetland B.



West, from central area of Wetland B.



Soil sample taken at point B10U3.



North, from eastern edge of woodlot.



East, from eastern edge of woodlot.



South, from eastern edge of woodlot.

APPENDIX D

WETLAND DELINEATION MAP

APPENDIX E

JURISDICTIONAL DETERMINATION LETTER, 2009

DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199

PC # RECEIVED
JAN 21 2009
EARTH DIMENSIONS, INC.

REPLY TO

January 19, 2009

Regulatory Branch

SUBJECT: Jurisdictional Determination, Department of Army Application No. 2008-00861

Mr. Scott Livingstone
Earth Dimensions, Inc.
1091 Jamison Road
Elma, NY 14059

Dear Mr. Livingstone:

This pertains to your request for a determination of federal jurisdiction over waters located on a 15.46 acre parcel of land with the address of 3455 and 3505 Niagara Falls Boulevard. The parcel is located near Tonawanda Creek and is situated north of Tonawanda Creek Road and east of Niagara Falls Boulevard near the intersection of Tonawanda Creek Road and Niagara Falls Boulevard, (west of the Evergreen Golf Course) in the Town of Amherst, Erie County, New York.

The Corps of Engineers regulatory responsibilities under Section 404 of the Clean Water Act (CWA) establishes jurisdiction over the discharge of dredged or fill material into waters of the United States, including wetlands. A Department of the Army authorization is required for the discharge of fill material in waters of the U.S.

This delineation verification determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. My review of the delineation report dated December 1, 2006 and observations made during an April 29, 2008 site visit indicate that the site contains six wetlands identified as Wetland 1 (0.15 acres), Wetland 2 (0.43 acres), Wetland 3 (1.66 acres), Wetland 4 (0.46 acres), Wetland 5 (1.02 acres), and Wetland 6 (0.27 acres) in the wetland delineation report and on the attached drawings. During the April site visit, no clear surface water connection or ecological continuum was observed between Wetlands 1, 2, 3, 4, 5, or 6 and a surface tributary system to a navigable water of the United States; therefore, these waters are considered to be isolated, non-navigable, intrastate waters with no substantial nexus to interstate or foreign commerce and therefore are not regulated under the CWA. Accordingly, you do not need Department of the Army authorization to commence work in this area.

This determination will remain valid for a period of 5 years from the date of this correspondence unless new information warrants revision of the delineation before the expiration. At the end of this period, a new delineation may be required.

I encourage you to contact the appropriate state and local governmental officials to insure that the proposed work complies with their requirements.

Finally, this letter contains an approved jurisdictional determination for the subject parcel. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal the above determination, you must submit a completed RFA form within 60 days of the date on this letter to the Great Lakes/Ohio River Division Office at the following address:

Mr. Mike Montone, Regulatory Review Officer
Great Lakes and Ohio River Division
CELRD-PDS-O
550 Main Street, Room 10032
Cincinnati, Ohio 45202-3222
Phone: 513-684-6212

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by March 20, 2009.

It is not necessary to submit an RFA to the Division office if you do not object to the determination in this letter.

Questions pertaining to this matter should be directed to me at (716) 879-4247, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: lesta.m.ammons@usace.army.mil

Sincerely,

Lesta Ammons
Biologist

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL			
Applicant: Renaldo & Palumbo		File Number: 2008-00861	Date: January 19, 2009
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I: The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg/or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Lesta Ammons U.S. Army Corps of Engineers 1776 Niagara Street Buffalo, New York 14207 (716) 879-4247 lesta.m.ammons@usace.army.mil	Mr. Michael Montone U.S. Army Corps of Engineers Great Lakes and Ohio River Division 550 Main Street, Room 10032 Cincinnati, OH 45202-3222 (513) 684-6212;FAX(513) 684-2460 michael.g.montone@lrdor.usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): April 29, 2009

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Buffalo District LRB; Renaldo & Palumbo, 2008-00861; Form 1 of 1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: NY County/parish/borough: Erie City: Town of Amherst
Center coordinates of site (lat/long in degree decimal format): Lat. 43.0487° N, Long. -78.8250° W.
Universal Transverse Mercator: NA
Name of nearest waterbody: Erie Canal
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Erie Canal
Name of watershed or Hydrologic Unit Code (HUC): 04120104
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): April 29, 2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are no *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There Are no *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: 1987 Delineation Manual
      Elevation of established OHWM (if known):Not applicable.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **All wetlands on the site Wetland 1(0.15 acres), Wetland 2 (0.43 acres), Wetland 3 (1.66 acres), Wetland 4 (0.46 acres), Wetland 5 (1.02 acres), and Wetland 6 (0.27 acres) were found to be isolated. The definitions listed at 33 CFR 328.3(a)(3)(i-iii) were considered and the determination was made that there is no substantial nexus to interstate or foreign commerce). .**

---

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) General Area Conditions:
   Watershed size: acres
   Drainage area: acres
   Average annual rainfall: inches
   Average annual snowfall: inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☐ Tributary flows through Pick List tributaries before entering TNW.

   Project waters are Pick List river miles from TNW.
   Project waters are Pick List river miles from RPW.
   Project waters are Pick List aerial (straight) miles from TNW.
   Project waters are Pick List aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: No.

   Identify flow route to TNW[5]:

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain:
☐ Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: Pick List.

Primary tributary substrate composition (check all that apply):
☐ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: The tributary is culverted for 60 percent of its length.

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Pick List
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: Pick List
Estimate average number of flow events in review area/year: Pick List
Describe flow regime:
Other information on duration and volume: Field observations (see above).

Surface flow is: Pick List. Characteristics:

Subsurface flow: Pick List. Explain findings:
☐ Dye (or other) test performed:

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list): Above characteristics are for small portions of the tributary where it daylights at the stormwater detention basin and just above the confluence with the perrenial RPW.
☐ Discontinuous OHWM.[7] Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☒ High Tide Line indicated by: ☒ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges
☐ other (list):

(iii) **Chemical Characteristics:**
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain:
Identify specific pollutants, if known:

---

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**
- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:
Properties:
Wetland size: acres
Wetland type. Explain:.
Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:
Flow is: Pick List. Explain:

Surface flow is: Pick List
Characteristics: The wetland directly abuts the unnamed tributary.

Subsurface flow: Unknown. Explain findings:
- ☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:
- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain:
  - ☐ Ecological connection. Explain:
  - ☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW
Project wetlands are Pick List river miles from TNW.
Project waters are Pick List aerial (straight) miles from TNW.
Flow is from: Pick List.
Estimate approximate location of wetland as within the Pick List floodplain.

(ii) **Chemical Characteristics:**
Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Surface water when observed in Wetland 1 was clear.
Identify specific pollutants, if known: No confined surface water inputs were noted for Wetland 1 and the surface water runoff drainage area is not expected to be much larger than 50-75 acres.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**
- ☐ Riparian buffer. Characteristics (type, average width):.
- ☐ Vegetation type/percent cover. Explain: 100%, the entire wetland area is well vegetated. 100% would be characterized as palustrine forest.
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings:
  - ☐ Fish/spawn areas. Explain findings:
  - ☐ Other environmentally-sensitive species. Explain findings:
  - ☐ Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**
All wetland(s) being considered in the cumulative analysis: Pick List
Approximately (see note below*) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

.

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☒ TNWs: linear feet width (ft), Or, acres.
   - ☒ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☒ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: linear feet width (ft).
☒ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☒ Tributary waters: linear feet width (ft).
☒ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☒ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☒ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☒ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: **6.36 (Wetland 1)** acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☒ Demonstrate that impoundment was created from "waters of the U.S.," or
☒ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☒ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. **ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]**
☒ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☒ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☒ which are or could be used for industrial purposes by industries in interstate commerce.
☒ Interstate isolated waters. Explain: .

---

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

☒ Other factors. Explain:

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: linear feet width (ft).
☒ Other non-wetland waters: acres.
Identify type(s) of waters:
☒ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☒ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☒ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
☒ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☒ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☒ Lakes/ponds: acres.
☒ Other non-wetland waters: acres. List type of aquatic resource:
☒ Wetlands: 3.99 acres total - Wetland 1 - 0.15 acres; Wetland 2 - 0.43 acres; Wetland 3 - 1.66 acres; Wetland 4 - 0 46 acres; Wetland 5 - 1.02 acres; Wetland 6 - 0.27 acres.

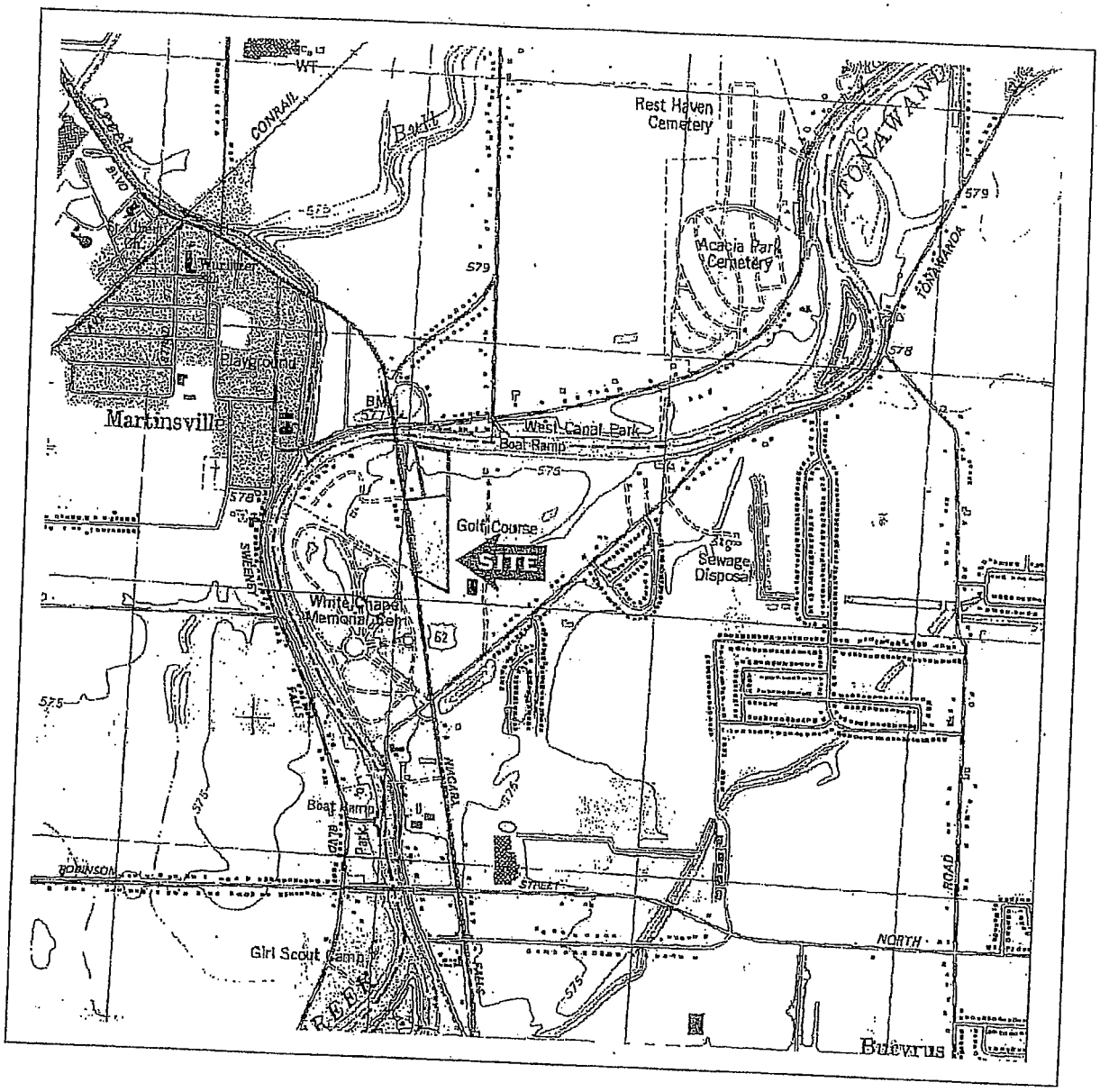
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☒ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☒ Lakes/ponds: acres.
☒ Other non-wetland waters: acres. List type of aquatic resource:
☒ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland delineation report submitted by applicant and dated December 1, 2006 .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☒ Data sheets prepared by the Corps: .
☒ Corps navigable waters' study:
☒ U.S. Geological Survey Hydrologic Atlas:
☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: NY - Tonawanda East.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Erie County, NY.
☒ National wetlands inventory map(s). Cite name: Erie County Interactive Mapping Service web site.
☒ State/Local wetland inventory map(s): New York Freshwater Wetlands, Erie County Interactive Mapping Service web site .
☒ FEMA/FIRM maps:
☒ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): 2004-2005 orthoimagery, available on ORM2; online "Live Search" website (date unknown) .
or ☐ Other (Name & Date):
☒ Previous determination(s). File no. and date of response letter:
☒ Applicable/supporting case law:
☒ Applicable/supporting scientific literature:
☒ Other information (please specify):1907 Historic Quadrangle; Eden, NY.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

W18C91c Parcel West of Evergreen Golf Course - Niagara Falls Boulevard



Renaldo & Palumbo
D/A Processing No. 2008-00861
Erie County, New York
Quad: Tonawanda East
Sheet 1 of 2

Figure 1: USGS 7.5 Minute Topographical Map
Tonawanda East Quadrangle

Niagara Falls Boulevard
Town of Amherst, Erie County, New York

Scale: 1" = 2000'

EARTH DIMENSIONS, INC.

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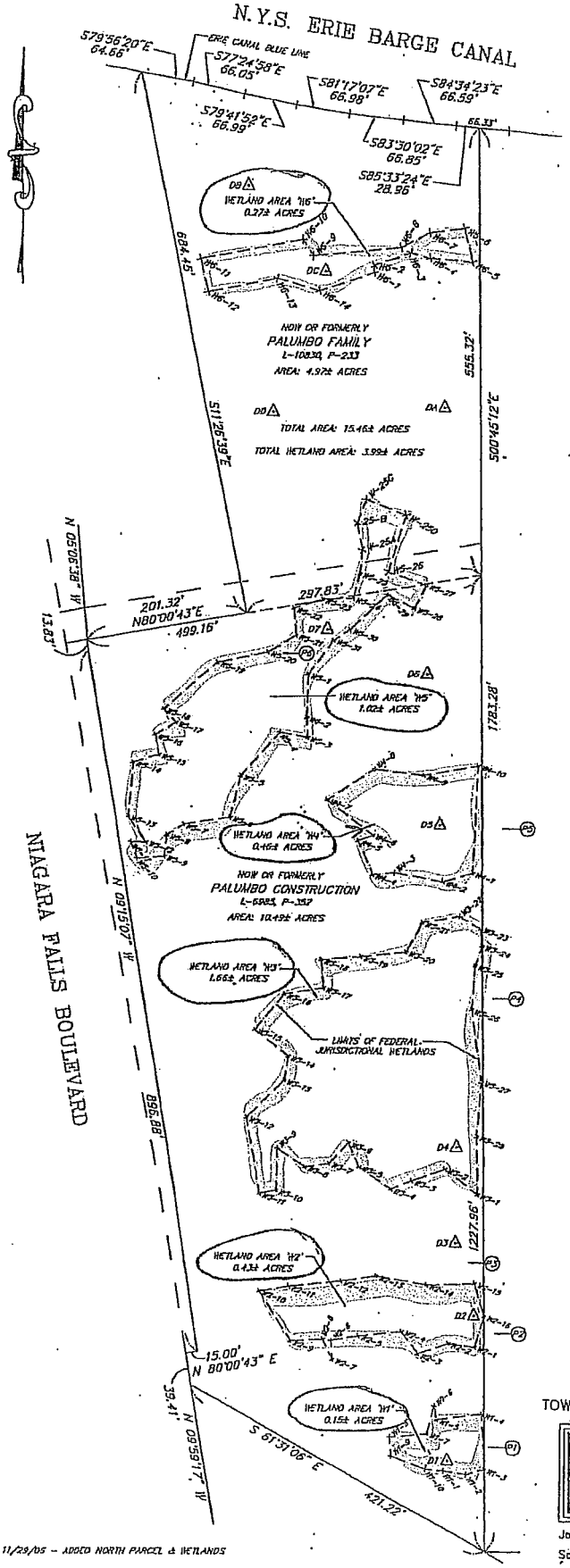
Figure 7: Wetland Delineation Map

Parcel West of Evergreen Golf Course - Niagara Falls Boulevard
Town of Amherst — Erie County, New York

EARTH DIMENSIONS, INC.
* Soil and Hydrogeologic Investigations
* Wetland Delineations
1091 Jamison Road * Elma, NY 14059
(716) 655-1717 * Fax (716) 655-9915

Scale: 1"=200'
Map Date:9/26/06,KMB for EDI
Revised: 12/1/06, KMB for EDI
Base Map provided by:
GPI Engineering & Surveying, LLP
File name: 94091-EDIrev.dwg
EDI Project Code:W18C91b



REVISED 11/29/06 – ADDED NORTH PARCEL & WETLANDS

Wetland 1: 0.15± ac.
Wetland 2: 0.43± ac.
Wetland 3: 1.66± ac.
Wetland 4: 0.46± ac.
Wetland 5: 1.02± ac.
Wetland 6: 0.27± ac.
Total Wetland Area: 3.99± ac.

Total Site Area: 15.46± ac.

All Non-Jurisdictional

NOTE: WETLANDS SHOWN AS FLAGGED BY EARTH DIMENSIONS, INC. ON JULY, 2006 & NOVEMBER, 2006.

△ D1 DENOTES TRANSECT POINT
(P1)— DENOTES PHOTO NUMBER & DIRECTION
WET-4 DENOTES WETLAND POINT

REFERENCE: SEE SURVEY PREPARED BY PRATT & HUTH ASSOCIATES, JOB No. 94091 DATED DECEMBER, 1994

WETLAND DELINEATION MAP OF
PART OF LOT 1, TOWNSHIP 13, RANGE 8
HOLLAND LAND SURVEY
TOWN OF AMHERST, ERIE COUNTY, NEW YORK

GPI ENGINEERING & SURVEYING, LLP
FORMERLY PRATT & HUTH ASSOCIATES, LLP
ENGINEERING • SURVEYING • PLANNING
4950 CENESEE STREET, SUITE 165
BUFFALO, NEW YORK 14225
(716) 633-4844 FAX 633-4940

Job No. 94091 Date: AUGUST 16, 2006
Scale 1" = 120' Tax No.

Renaldo & Palumbo
D/A Processing No. 2008-00861
Erie County, New York
Quad: Tonawanda East
Sheet 2 of 2



DRAWING REVISIONS

ITEM	DATE	DESCRIPTION

DESIGNED BY: PMB
DRAWN BY: SMK
CHECKED BY: WES
DATE: AUGUST 2011

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EVERGREEN LANDING SUBDIVISION
TOWN OF AMHERST
ERIE COUNTY - NEW YORK

OVERALL SUBDIVISION PLAN

THIS SHEET ISSUED AUGUST 8, 2011

OSP

DRAWING SCALE: 1"=100'

WSA PROJECT NO. 11070

Sub-2010-91 PP