PERIODIC REVIEW REPORT

FORMER ALUMAX EXTRUSIONS, INC. FACILITY
320 AND 440 SOUTH ROBERTS ROAD, DUNKIRK NEW YORK

VCP SITE NUMBER V00589

Prepared for:

Chautauqua County Department of Public Facilities
454 North Work Street
Falconer, New York

Prepared by:

TVGA CONSULTANTS

ENGINEERING • LAND SURVEY • MAPPING • ENVIRONMENTAL

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2010.0128.07

September 2013

PERIODIC REVIEW REPORT
FORMER ALUMAX EXTRUSIONS, INC. FACILITY
320 SOUTH ROBERTS ROAD, DUNKIRK NEW YORK

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

A. Site Summary

The former Alumax Extrusions, Inc. Facility (hereinafter referred to as the "Site") consists of two adjoining parcels located at 440 and 320 South Roberts Road, Parcels A and B respectively, within the City of Dunkirk, New York (Figure 1). The Site is comprised of approximately 12 acres of land situated on the north side of South Roberts Road. Parcel A, located at 440 South Roberts Road and owned by the Cliffstar Corporation, contains an approximately 7,200-square-foot building currently used as office space while the remainder of the property consists of gravel covered parking areas used for truck trailer storage. Parcel B, located at 320 South Roberts Road and owned by Chautauqua County, formerly contained a 140,000-square-foot building that was demolished in early 2009, although the concrete floor slabs were left in place. Parcel B is currently vacant and undeveloped. An environmental investigation conducted at the site revealed that contamination, likely associated with historical operations, had impacted the property, necessitating remedial activities. Subsequent remedial activities conducted at the site included in-situ chemical treatment using zero valent iron (ZVI) in the residual source area (December 2004), removal and off-site disposal of sediments within two on-site catch basins (mid-2000) and installation of a sub-slab vapor (SSV) mitigation system (December 2003). The remedial efforts also included the development of deed restrictions and the June 2004 Combined Institution Control Plan and Operations and Maintenance Plan (CICP/OMP) which provides guidance concerning the surface cover, soil/fill excavation and management, groundwater use and routine monitoring for the groundwater within the residual source area. Additionally, Parcel B has remained vacant and undeveloped until recently. Construction of the Millennium Parkway is currently underway. The construction extends from South Roberts Road across the former Roblin Steel and Alumax sites to the western terminus of the reconstructed Progress Drive. To date, the only construction activities that have occurred on-site is the rubbleizing of the concrete floor slabs.

B. Effectiveness of Remedial Program

The results of the groundwater monitoring revealed that total VOC concentrations have generally decreased, with the exception of AL-2, during the recent sampling event performed in August 2013. The remedial program is viewed to be effective in achieving the remedial objectives of the site. TVGA will continue to monitor the site based on the CICP/OMP.

C. Compliance

No areas of non-compliance regarding the major elements of the CICP/OMP were identified during this Periodic Review Report (PRR).

D. Recommendations

No recommended changes to the CICP/OMP were identified during this PRR.

II. SITE OVERVIEW

A. Site Background

Industrial development of the project site was initiated around 1920, when the American Locomotive Company expanded its Dunkirk operations onto the project site. The site use has varied over time and uses have included a foundry, coal storage, locomotive manufacturing and finned heat exchanger fabrication. In 1976, the facility was acquired by Alumax Inc. (Alumax), which operated an aluminum extrusion business at the site until 1993, operating as Alumax Extrusions, Inc. Alcoa's acquisition of Alumax in 1998 included the idled Dunkirk facility. The property was subsequently purchased by Chautauqua County in 2008.

Parcel B has remained vacant and undeveloped until recently. In May 2013, a new highway construction project was initiated within the City called the Millennium Parkway Talcott Street Extension project. The alignment of the new roadway passes through the Site. Enclosed as Appendix F are three plan sheets from the roadway construction project (sheets ED-1, ED-2 and ED-3) which show the road alignment along with the environmental procedures that the construction contractor is required to follow during construction activities. The plans were developed in accordance with the CICP/OMP. To date, the only construction activities that have occurred on-site is the rubbleizing of the concrete floor slabs.

The project site consists of two adjoining parcels located at 440 and 320 South Roberts Road, Parcels A and B respectively, within the City of Dunkirk, New York (Figure 1). The project site is comprised of approximately 12 acres of land situated on the north side of South Roberts Road. Parcel A, located at 440 South Roberts Road and owned by the Cliffstar Corporation, contains an approximately 7,200-square-foot building currently used as office space while the remainder of the property consists of gravel covered parking areas used for truck trailer storage. Parcel B, located at 320 South Roberts Road and owned by Chautauqua County, formerly contained a 140,000-square-foot building that was demolished in early 2009, although the concrete floor slabs were left in place. These parcels are identified in the November 2004 Deed Restriction (Appendix A) and are depicted on Figure 2. Figure 2 also identifies section, block and lot (SBL) numbers for these parcels.

B. Remedial Program Overview

An environmental investigation conducted at the site revealed that contamination, likely associated with historical operations, had impacted the property, necessitating remedial

activities. Constituents of potential concern (COPCs) identified in site soil/fill consisted primarily of chlorinated hydrocarbons (specifically trichloroethene (TCE) and its degradation products), Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs) and metals. A residual source area containing concentrations of TCE and its degradation products was identified in the northwestern portion of the site. Figure 7 from the April 2004 VCP Interim Remedial Measures (IRM) Completion Report depicts the approximate areal extent of this residual source area. The source area impacted site groundwater in this area. With the exception of the chlorinated hydrocarbons, groundwater had not shown impacts from COPCs identified in the soil/fill.

Subsequent remedial activities conducted at the site included in-situ chemical treatment using zero valent iron (ZVI) in the residual source area (December 2004), removal and off-site disposal of sediments within two on-site catch basins (mid-2000) and installation of a sub-slab vapor (SSV) mitigation system (December 2003). The remedial efforts also included the development of deed restrictions and the June 2004 Combined Institution Control Plan and Operations and Maintenance Plan (CICP/OMP) which provides guidance concerning the surface cover, soil/fill excavation and management, groundwater use and routine monitoring for the groundwater within the residual source area.

Additionally, as indicated previously, the 140,000-square foot building formerly located on Parcel B was demolished in early 2009. TVGA prepared the contract documents and specifications for the demolition project. The project was publicly bid by the Chautauqua County Department of Public Facilities (CCDPF) Procurement Department. Cambria Contracting, Inc. of Lockport New York, as the low bidder was awarded the work. Construction observation was provided by TVGA on behalf of the CCDPF. Prior to the demolition the asbestos containing materials (ACMs) within the former on-site building were abated in accordance with the requirements outlined in 12 NYCRR Part 56 or New York State Department of Labor (NYSDOL) Industrial Code Rule 56 (ICR 56). The abatement work was completed between November and December 2008. Following the asbestos abatement the demolition of the building occurred in January and February 2009.

III. EFFECTIVENESS OF THE REMDIAL PROGRAM

Remedial goals were accomplished through in-situ chemical treatment using zero valent iron (ZVI) in the residual source area; the removal and off-site disposal of sediments within two on-site catch basins; the installation of a sub-slab venting system; and the development of deed restrictions and the June 2004 Combined Institution Control Plan and Operations and Maintenance Plan (CICP/OMP) which provides guidance concerning the surface cover, soil/fill excavation and management, groundwater use and routine monitoring for the groundwater within the residual source area.

Based on the comparison of the pre-remedial and the post-remedial analytical results, the enhanced natural attenuation appears to be achieving the goal of reducing the concentrations of chlorinated solvents in the groundwater.

IV. IC/EC PLAN COMPLIANCE REPORT

A. Institutional Controls

1. Site Use Restrictions

In accordance with the deed restrictions and the CICP/OMP, the site is to be used for restricted commercial or restricted industrial uses only. The CICP/OMP presents the following definitions for these use categories:

- Restricted Commercial – Residential Uses are not allowed under this category. Commercial uses are allowed but require engineering controls and/or institutional controls. Some types of "commercial" uses that could create "residential" types of exposures are excluded, such as day-care and health care facilities. Retail stores, warehouse/distribution centers, service facilities and offices would be included in the commercial definition.

- Restricted Industrial – Residential and commercial uses are not allowed. Industrial uses are allowed but they require engineering controls and/or institutional controls. Metal working, manufacturing and other industrial uses are included in this category.

The Cliffstar Corporation operates the building in the northwest corner of Parcel A as office space with the remainder of the property being used for tractor trailer parking; therefore, this use meets the definition of Restricted Commercial use. Parcel B is currently vacant and undeveloped; however, the construction of the new roadway (The Millennium Parkway Project) has commenced and when completed the road will traverse the site from the southwest to the northeast. The roadway construction project will conform to all requirements listed in the CICP/OMP. TVGA has been contracted by Chautauqua County to perform the environmental oversight for the project. TVGA personnel will be present for all intrusive work completed on the site.

2. Groundwater Use Restrictions

Previous investigations conducted at the site and adjacent sites have determined that groundwater resources are limited, particularly within the uppermost

groundwater-bearing zone at the site. Groundwater is not generally used in the vicinity of the site, nor would it be expected to be used in the future, given the industrial character of the area, the availability of municipal water supply in the area and the construction of the new road. The clayey soils and shale bedrock have low hydraulic conductivity and produce limited quantities of water. The most productive zone is the top five feet of the shale bedrock, which is fractured and weathered. This zone is also considered to be perched and may be laterally limited. Groundwater in the north-central portion of the site (i.e., residual source area) is impacted with chlorinated hydrocarbons. Low concentrations of petroleum related constituents were encountered in other wells. The residual source area was addressed via in-situ treatment technology; however, low-level impacts to groundwater may linger due to the low conductivity and the potential dissolution of chlorinated constituents adsorbed to the clayey soils. Therefore, groundwater use restrictions were implemented at the site to limit potential exposure to impacted groundwater and are identified in the deed restrictions recorded with property deed.

Although groundwater use is not prohibited, it is restricted. Should a future owner or operator determine that groundwater use is beneficial to their operations, permission from NYSDEC must be obtained. Additionally, the owner or operator must conduct an evaluation of the suitability for the potential use of the groundwater and define the ultimate point of discharge (e.g., sanitary sewer, surface water, or reinjection) for any once-through water or blowdown from any recirculation system(s). Use of groundwater may require appropriate treatment to meet water quality requirements for use and discharge. Groundwater extracted for testing, monitoring, and remediation, while excluded from the provisions of this groundwater use restriction, must still meet local, state and federal disposal requirements.

3. Soils Management Plan

The Soils Management Plan (SMP) was prepared to identify environmental guidelines for the management of subsurface soil/fill and long-term maintenance of the cover system. The SMP includes requirements that address the following key components:

- Any breach of the surface cover system
- Surface erosion and storm water runoff control
- Management of excavated soil/fill
- Allowable reuse of excavated soil/fill
- Requirements for off-site fill and grading materials
- Notification requirements
- Annual reporting and certification requirements

The site is currently undergoing construction of the new roadway. The roadway was designed to conform with the CICP/OMP and a cover system will be installed over all disturbed areas of the project. Additionally, no soil excavations have occurred on the site at the time of the inspection; however, all excavation activities and soil reuse will be performed according to the CICP/OMP and will be overseen by a qualified TVGA inspector.

4. Groundwater Monitoring

Groundwater monitoring is required for evaluating the efficacy of ZVI application in the residual source area that was completed in December 2004. This monitoring consists of sampling and analysis of groundwater collected from monitoring wells AL-1, AL-2 and AL-7. Figure 2 depicts the locations of the sampled monitoring wells. The samples are analyzed for USEPA Target Compound List (TCL) volatile organic compounds (VOCs). Annual groundwater monitoring is performed in conjunction with the annual review of the institutional control plan. In accordance with the CICP/OMP, this annual monitoring will occur until total concentrations of chlorinated VOCs fall below 100 µg/L in AL-1 and AL-7. The collection of samples from these wells in 2012 revealed that total VOC concentrations in these wells exceeded the 100 ug/L concentration threshold. Therefore, groundwater samples were collected during the reporting period and the results, which are compared with pre-remedial analytical results, are summarized in Section V.B. of this report.

B. Engineering Controls

1. Surface Cover System

The long history of industrial use of the site has resulted in widespread, low level impacts to site-wide soils. To limit casual exposure to site soils, a soil surface cover system consisting of clean soil, pavement, and/or concrete will be constructed as the site is developed. The purpose of the surface cover system will be to eliminate the potential for human contact with fill material and eliminate the potential for contaminated runoff from the property. The cover system will consist of one or more of the following types of clean material:

- Soil: 12 inches of vegetated soil cover underlain by a demarcation layer in outdoor vegetated areas.
- Asphalt: a minimum of six inches of material (asphalt and subbase material) in areas that will become roads, sidewalks, and parking lots.

- Concrete: a minimum of 6 inches of material (concrete and subbase material) in areas that will become slab-on-grade structures or for roads, sidewalks, and parking lots in lieu of asphalt.

On August 15, 2013, Ms. Jessica Gostomski conducted the annual site inspection, which included traversing the site on-foot to observe the current conditions throughout the site. Parcel A contains an approximately 7,200-square-foot building currently used as office space while the remainder of the property consists of gravel covered parking areas. Parcel B is currently vacant and undeveloped. Construction of the Millennium Parkway is currently underway. The construction extends from South Roberts Road across the former Roblin Steel and Alumax sites to the western terminus of the reconstructed Progress Drive. The construction area is surrounded by silt fence. Approximately 3,000 cubic yards of asphalt millings and gravel sub-base material generated from the Progress Drive reconstruction project in 2011 is being stored on the northwestern portion of the former Alumax building footprint. Chautauqua County has been utilizing the stockpiled millings and gravel for backfill on portion of the project off the Alumax site. The majority of the concrete floor slabs that were previously left in place have been rubblized and are being left in place. All rubblized concrete areas will be covered by either the new highway or a minimum one-foot, vegetated soil cover system. Construction activities include the clearing of shrubs and grasses and the excavation and site grading for the proposed roadway and associated drainage. The roadway was designed and is being constructed in accordance with the CICP/OMP. All disturbed portions of the soil cover system will be reestablished. Any materials removed below the cover system will be inspected for visual or olfactory evidence of contamination and are either stockpiled on-site or disposed of off-site. A TVGA representative will be on-site equipped with a photoionization detector (PID) during all intrusive activities.

Appendix B includes photographs taken during the site inspection. Appendix C includes the NYSDEC "Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form."

2. Sub-Slab Vapor Mitigation

The former building that occupied the site contained a sub-slab venting system that was located over the residual source area. As previously indicated the building, including the sub slab vapor venting system, was demolished in early 2009. Therefore, the continued maintenance and operation of this vent system is no longer required.

For slab-on-grade structures, an 8-mil polyethylene vapor barrier will be placed beneath the concrete for new structures built in the portion of the site identified as the residual source area. The vapor barrier requirement is not required in

areas other than the residual source area because volatile organic compounds were not found in significant quantities on any other portions of the site.

V. MONITORING PLAN COMPLIANCE REPORT

A. Requirements

The Operations and Maintenance Plan is included in Section 3.0 of the CICP/OMP and includes groundwater monitoring requirements associated with the performance monitoring of the in situ remedial measures for the chlorinated hydrocarbons, the maintenance of the sub-slab vent system, and the annual certification of the implementation of the Institutional Control Plan.

B. Groundwater Monitoring

Groundwater monitoring is required for evaluating the efficacy of ZVI application in the residual source area that was completed in December 2004. In accordance with the CICP/OMP, this annual monitoring will occur until total concentrations of chlorinated VOCs fall below 100 µg/L in AL-1 and AL-7.

Sampling Procedure

The three groundwater monitoring wells were purged and sampled in general accordance with the procedures detailed in the July 15, 2003 IRM Workplan and the October 6 and 24, 2003 addendums. All monitoring well sampling activities were recorded on groundwater sampling logs, which are included in Appendix D. Other observations (e.g., well integrity, etc.) were also noted on the well sampling logs. Prior to the initiation of groundwater sampling, groundwater levels were measured with an electronic water level indicator to determine the static water level below the top of the riser. The groundwater levels were used to determine the volume of standing water in the wells.

Well purging consisted of the evacuation of a minimum of three well volumes or, in the case of wells with slow recharge rates, until the well was evacuated to dryness using dedicated polyethylene bailers. After the completion of development, the monitoring wells were allowed to recharge. The samples were collected within three hours of completion of well development using dedicated bailers and clean sample bottles containing preservatives provided by the laboratory. The groundwater samples were submitted for analysis of TCL VOCs.

Sample Preservation and Handling

Immediately after collection, all samples were placed in a cooler and chilled with ice. To ensure sample integrity, a Chain-of-Custody (COC) sample record was

established and kept with the samples to document each person that handled the samples. The samples were transported to Paradigm Environmental Services, Inc. (PES) which is a New York State Department of Health Environmental Laboratory Approval Program (ELAP) certified environmental laboratory, for analytical testing. The COC records established for the collected samples were maintained throughout laboratory handling. Copies of the COCs and complete analytical laboratory report are included as Appendix E.

Quality Assurance/Quality Control Samples

In addition to field samples, Quality Assurance/Quality Control (QA/QC) samples were collected to evaluate the effectiveness of the QA/QC procedures implemented during the field and laboratory activities associated with the project. The QA/QC sample included blind field duplicate (collected from AL-1) and trip blank samples that were analyzed for TCL VOCs.

Analytical Results

The following section summarizes and discusses the analytical results generated during the aforementioned monitoring event. For discussion purposes, this data is compared with the Standards Criteria and Guidance values (SCGs) applicable to groundwater: NYSDEC's June 1998 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations in the Technical and Operational Guidance Series (TOGS) 1.1.1.

Table 1 summarizes the groundwater pre- and post-remedial sampling results and compares the results to the applicable water quality standards. Figure 2 depicts the locations of the monitoring wells as well as the post-remedial analytical results from this sampling event.

Groundwater flow is generally to the north/northwest. However, flow conditions in the vicinity of these wells is generally to the southwest which is similar to hydrologic conditions identified in Section 1.6 CICP/OMP which indicated a localized flow to the southwest. As stated in this section, the water levels in these wells are likely unreliable due to the influence of building foundations and subsurface utilities. It should be noted that foundations and utilities were not removed during the building demolitions; therefore, flow conditions in this area would still be considered unreliable. Based on the fact that flow conditions have not significantly changed since the implementation remedial program, it is unlikely that impacts affecting the remedial effectiveness of the groundwater remedial action have occurred.

As indicated in Table 1, three or more VOCs were detected in each of the samples above the SCGs during this sampling event. The VOCs detected in the monitoring wells primarily consisted of chlorinated solvents.

C. Comparisons with Remedial Objectives

The VOC concentrations in AL-1 have all decreased or were reported as non-detect since the last sampling event with the exception of trichloroethene, which was detected at a slightly higher concentration. Overall, the total VOC concentrations are the lowest they have been at this location.

The VOC concentrations in AL-2 have increased since the last sampling event with the exception of benzene and cyclohexane, which have decreased or were reported as non-detect. Cis-1,2-Dichloroethene was detected at a concentration higher than the previous sampling event. Vinyl chloride has been non-detected since the February 2009 post-remedial sampling event and was detected during this sampling event. The total VOC concentration has increased at this location when compared to the pre-remedial and previous sampling event. TVGA will continue to monitor AL-2 during future sampling events to evaluate if this increase is anomalous or continues to be a trend.

The VOC concentrations in AL-7 have been generally decreasing since the pre-remedial sampling event, with the exception of a few parameters. Cis-1,2-Dichloroethene, trichloroethene and vinyl chloride were detected during this sampling event at concentrations slightly higher than the previous sampling event. However, these concentrations remain within the ranges of concentrations observed at this well. Acetone was detected during this sampling event and was previously non-detect. The total VOC concentration has decreased at this location from the pre-remedial sampling results from February 2004.

A comparison of the results from AL-1 with the blind field duplicate indicates that the data generally coincide (i.e. all concentrations for the dupe was within 1.5 times of the detected concentrations of the original sample).

D. Monitoring Deficiencies

No monitoring deficiencies were noted during this sampling event.

E. Conclusions and Recommendations

Groundwater monitoring is required for evaluating the efficacy of ZVI application in the residual source area that was completed in December 2004. In accordance with the CICP/OMP, this annual monitoring will occur until total concentrations of chlorinated VOCs fall below 100 µg/L in AL-1 and AL-7.

The detected VOC concentrations in the samples collected from AL-1 and AL-7 have generally decreased since the pre-remedial results for their respective locations. The VOC concentrations in AL-2 have indicated an increase during this sampling event. TVGA will continue to monitor AL-2 during future sampling events to evaluate if this increase is anomalous. AL-1 and AL-7 total concentrations of chlorinated VOCs remain above 100 µg/L; therefore, sampling of the three wells will be performed during the next monitoring period. No changes to the Monitoring Plan or the CICP/OMP are recommended at this time.

VI. CONCLUSIONS AND RECOMMENDATIONS

At the time of the site inspection, the Former Alumax Extrusions, Inc. Facility was in compliance with the CICP/OMP. All disturbances to the road subgrade during construction activities at the site are being monitored as described in the Soil Management Plan (SMP). Based on the analytical results from this sampling event, total VOC concentrations in AL-1 and AL-7 have decreased overall since the pre-remedial sample results for their respective locations. The VOC concentrations in AL-2 have increased overall at this location. TVGA will continue to monitor AL-2 during future sampling events to evaluate if this increase is anomalous. Based on the fact that total VOC concentrations have generally decreased in AL-1 and AL-7, it appears that natural attenuation is occurring at the site and the remedial objectives are being achieved.

No changes to the CICP/OMP or the PRR frequency are recommended at this time. The next groundwater monitoring event and PRR will be completed in 2014.

VII. LIMITATIONS

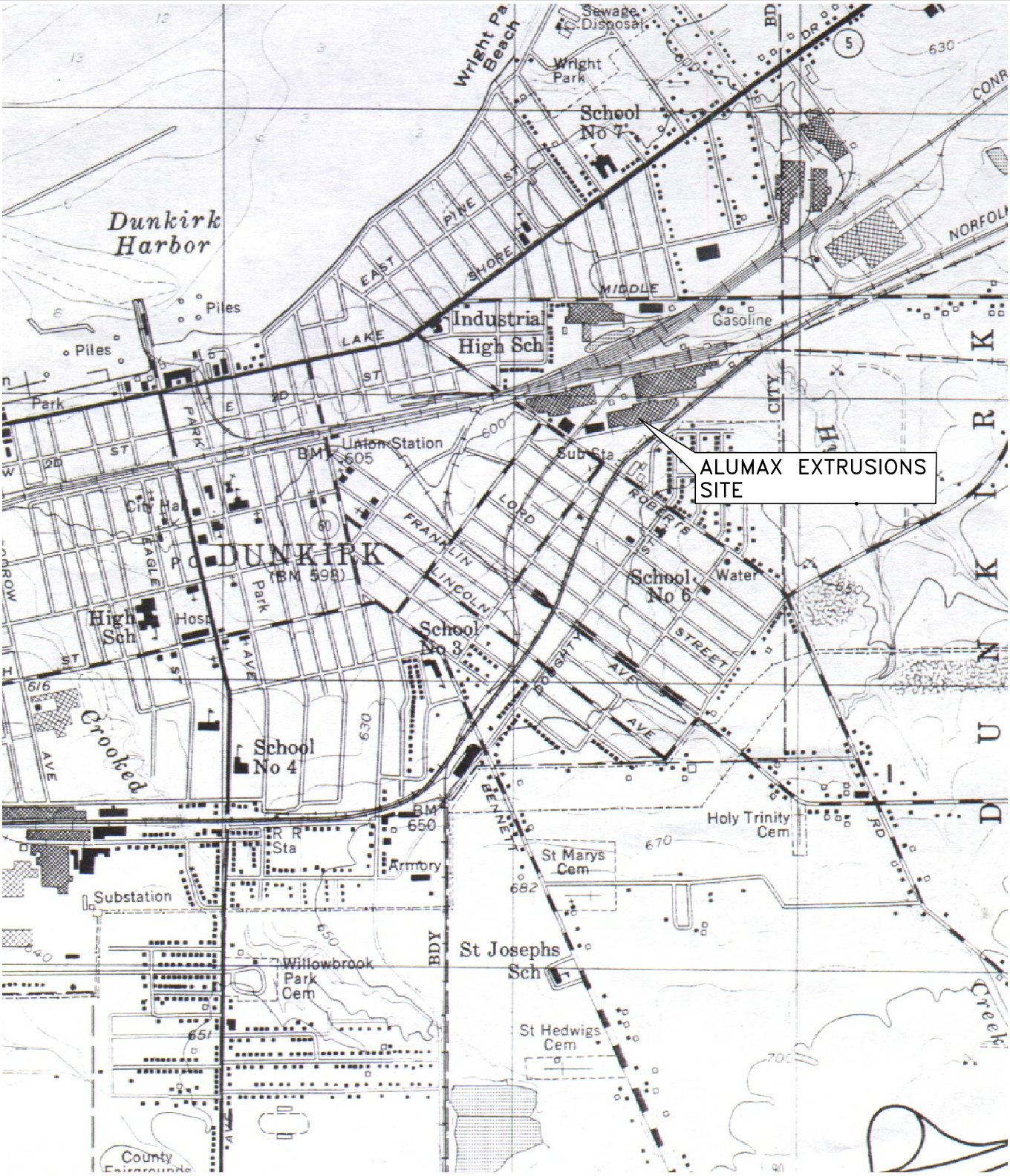
The conclusions presented in this report are based on information gathered in accordance generally accepted professional consulting principles and practices. All conclusions reflect observable conditions existing at the time of the site inspection. Information provided by outside sources (individuals, agencies, laboratories, etc.), as cited herein, was used in the assessment of the site. The accuracy of the conclusions drawn from this assessment is, therefore, dependent upon the accuracy of information provided by these sources. Furthermore, TVGA is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to the performance of services.

This report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based upon the facts currently available within the limits of the existing data, scope of services, budget, and schedule. To the extent that more definitive conclusions are desired by the Client than are warranted by the current

available facts, it is specifically TVGA's intent that the conclusions and recommendations stated herein will be intended as guidance and not necessarily a firm course of action except where explicitly stated as such. TVGA makes no warranties, expressed or implied including without limitation, warranties as to merchantability or fitness of a particular purpose. Furthermore, the information provided in this report is not to be construed as legal advice.

This assessment and report have been completed and prepared on behalf of and for the exclusive use of Chautauqua County. Any reliance on this report by a third party is at such party's sole risk. Furthermore, nothing contained in this report shall be construed as a warranty or affirmation by TVGA that the subject property described in this report are suitable collateral for any loan or that acquisition of such property by any lender through foreclosure proceedings or otherwise will pose no risk of potential environmental liability on the part of such lender.

FIGURES



SITE LOCATION MAP

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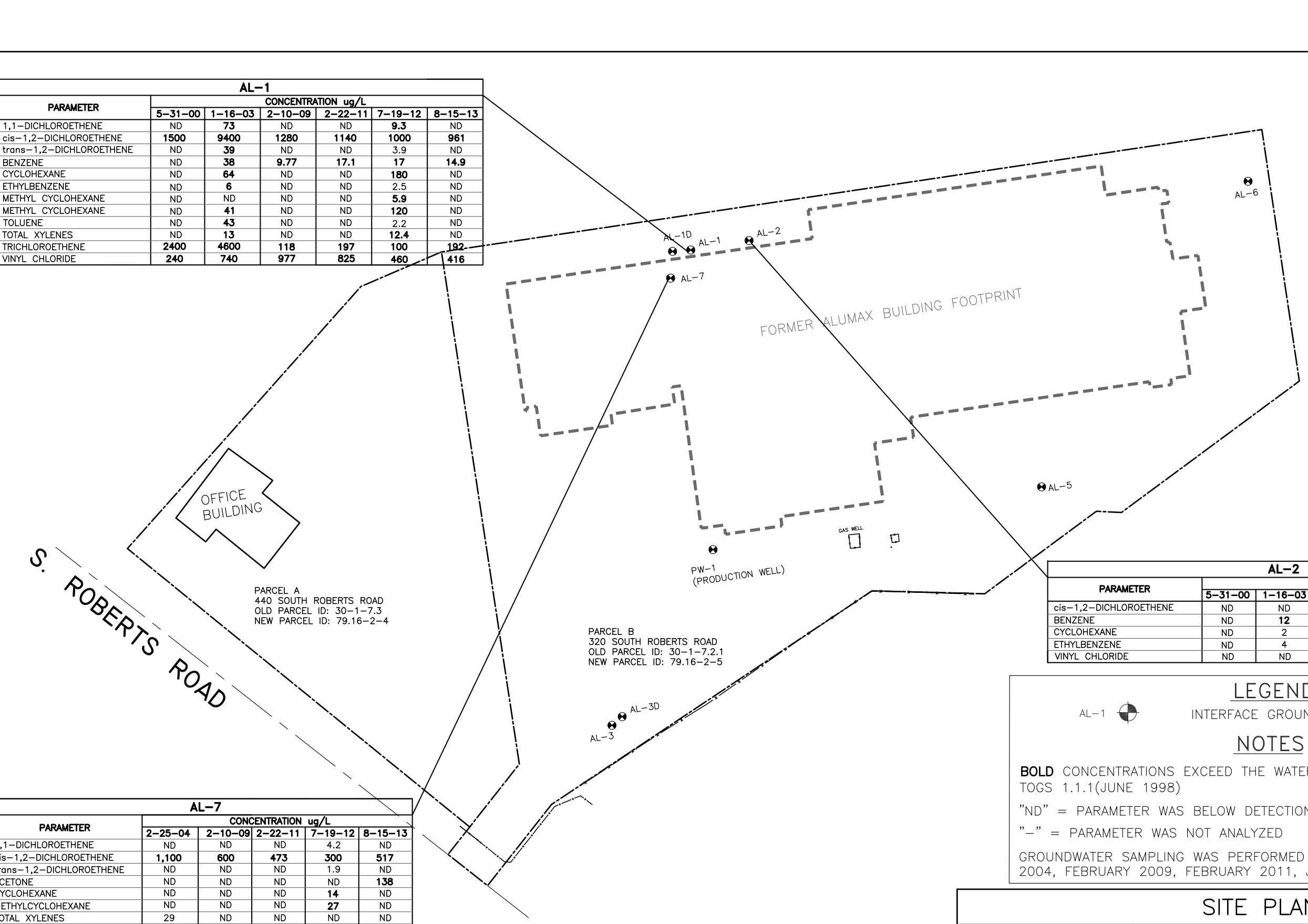
FORMER ALUMAX EXTRUSIONS SITE
DUNKIRK, CHAUTAUQUA CO., N.Y.

PROJ. NO. 2010.0128.07	SCALE: 1" = 2000'	DATE: SEPTEMBER 2013	FIGURE NO. 1

File: N:\2010 Projects\2010.0128.07 Alumax and Roblin\4 - Technical Data\CADD Drawings\FIGURE 1 ALUMAX LOCATION MAP.dwg, Plot Date: 8/15/2013, By: BENKLEMAN ANDREW T., Plot Style: FULL-BLACK.CTB

N

AL-1						
PARAMETER	CONCENTRATION ug/L					
	5-31-00	1-16-03	2-10-09	2-22-11	7-19-12	8-15-13
1,1-DICHLOROETHENE	ND	**73**	ND	ND	**9.3**	ND
cis-1,2-DICHLOROETHENE	**1500**	**9400**	**1280**	**1140**	**1000**	**961**
trans-1,2-DICHLOROETHENE	ND	**39**	ND	ND	3.9	ND
BENZENE	ND	**38**	**9.77**	**17.1**	**17**	**14.9**
CYCLOHEXANE	ND	**64**	ND	ND	**180**	ND
ETHYLBENZENE	ND	**6**	ND	ND	2.5	ND
METHYL CYCLOHEXANE	ND	ND	ND	ND	**5.9**	ND
METHYL CYCLOHEXANE	ND	**41**	ND	ND	**120**	ND
TOLUENE	ND	**43**	ND	ND	2.2	ND
TOTAL XYLENES	ND	**13**	ND	ND	**12.4**	ND
TRICHLOROETHENE	**2400**	**4600**	**118**	**197**	**100**	**192**
VINYL CHLORIDE	**240**	**740**	**977**	**825**	**460**	**416**



AL-2						
PARAMETER	CONCENTRATION ug/L					
	5-31-00	1-16-03	2-10-09	2-22-11	7-19-12	8-15-13
cis-1,2-DICHLOROETHENE	ND	ND	**9.36**	**6.94**	2.3	**394**
BENZENE	ND	**12**	**6.1**	**16.1**	**13**	**5.47**
CYCLOHEXANE	ND	2	ND	ND	**34**	ND
ETHYLBENZENE	ND	4	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	**3.7**	ND	ND	**246**

AL-7					
PARAMETER	CONCENTRATION ug/L				
	2-25-04	2-10-09	2-22-11	7-19-12	8-15-13
1,1-DICHLOROETHENE	ND	ND	ND	4.2	ND
cis-1,2-DICHLOROETHENE	**1,100**	**600**	**473**	**300**	**517**
trans-1,2-DICHLOROETHENE	ND	ND	ND	1.9	ND
ACETONE	ND	ND	ND	ND	**138**
CYCLOHEXANE	ND	ND	ND	**14**	ND
METHYLCYCLOHEXANE	ND	ND	ND	**27**	ND
TOTAL XYLENES	29	ND	ND	ND	ND
TRICHLOROETHENE	**3000**	**154**	**138**	**55**	**109**
VINYL CHLORIDE	**160**	**331**	**271**	**190**	**247**

LEGEND

AL-1 ⊕ INTERFACE GROUNDWATER MONITORING WELL

NOTES

BOLD CONCENTRATIONS EXCEED THE WATER QUALITY STANDARDS LISTED IN TOGS 1.1.1(JUNE 1998)

"ND" = PARAMETER WAS BELOW DETECTION LIMIT

"-" = PARAMETER WAS NOT ANALYZED

GROUNDWATER SAMPLING WAS PERFORMED JANUARY 2003, FEBRUARY, 2004, FEBRUARY 2009, FEBRUARY 2011, JULY 2012 AND AUGUST 2013.

SITE PLAN

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620 MAIN STREET
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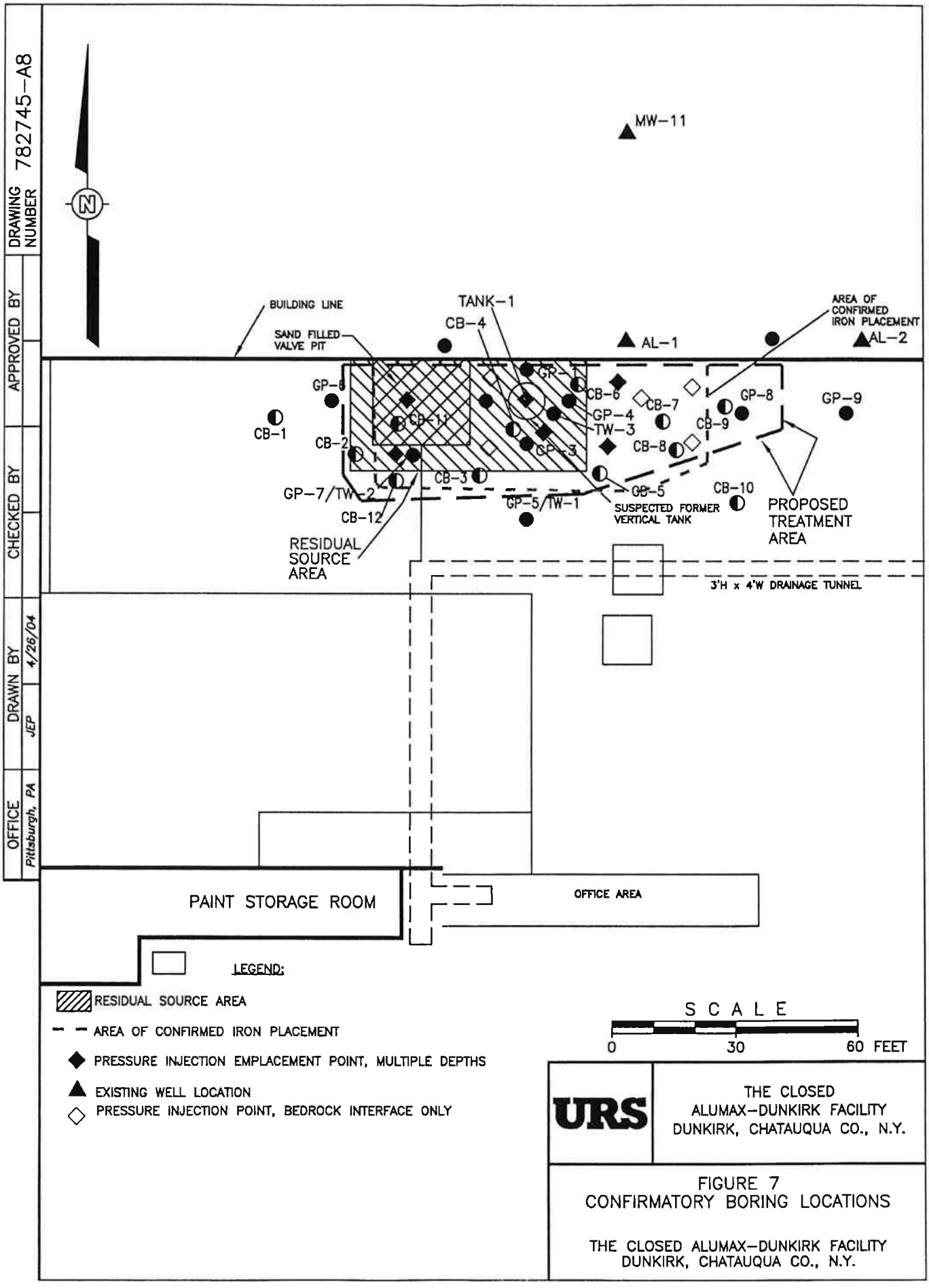
FORMER ALUMAX EXTRUSIONS SITE
DUNKIRK, CHAUTAUQUA CO., N.Y.

PROJ. NO. 2010.0128.07 | SCALE: 1" = 100' | DATE: SEPTEMBER 2013 | FIGURE NO. 2


DRAWING NUMBER 782745-A8
APPROVED BY
CHECKED BY
DRAWN BY JEP 4/26/04
OFFICE Pittsburgh, PA
N
MW-11
BUILDING LINE
SAND FILLED VALVE PIT
TANK-1
CB-4
AL-1
AREA OF CONFIRMED IRON PLACEMENT
AL-2
GP-6
GP-1
CB-6
GP-8
GP-9
CB-1
CB-11
GP-4
TW-3
CB-7
CB-9
CB-2
GP-3
CB-8
CB-3
GP-7/TW-2
GP-5
CB-10
GP-5/TW-1
SUSPECTED FORMER VERTICAL TANK
PROPOSED TREATMENT AREA
CB-12
RESIDUAL SOURCE AREA
3'H x 4'W DRAINAGE TUNNEL
PAINT STORAGE ROOM
OFFICE AREA
LEGEND:
RESIDUAL SOURCE AREA
AREA OF CONFIRMED IRON PLACEMENT
PRESSURE INJECTION EMPLACEMENT POINT, MULTIPLE DEPTHS
EXISTING WELL LOCATION
PRESSURE INJECTION POINT, BEDROCK INTERFACE ONLY
SCALE
0
30
60 FEET
URS
THE CLOSED ALUMAX-DUNKIRK FACILITY
DUNKIRK, CHATAUQUA CO., N.Y.
FIGURE 7
CONFIRMATORY BORING LOCATIONS
THE CLOSED ALUMAX-DUNKIRK FACILITY
DUNKIRK, CHATAUQUA CO., N.Y.

TABLES

Table 1
Former Alumax Extrusions Site
Summary of Analytical Results
Groundwater Samples

PARAMETER	REGULATORY VALUE [1]	AL-1						AL-2						AL-7				
Collection Date		5/31/00	1/16/03	2/10/09	2/22/2011	7/19/2012	8/15/2013	5/31/00	1/16/03	2/10/09	2/22/2011	7/19/2012	8/15/2013	2/25/04	2/10/09	2/22/2011	7/19/2012	8/15/2013
		Pre-Remedial Results		Post-Remedial Results				Pre-Remedial Results		Post-Remedial Results				Pre-Remedial Results	Post-Remedial Results			
Volatile Organic Compounds (ug/L)																		
1,1-Dichloroethene	5		73			9.3											4.2	
cis-1,2-Dichloroethene	5	1,500	9,400	1,280	1,140	1,000	961			9.36	6.94	2.3	394	1,100	600	473	300	517
trans-1,2-Dichloroethene	5		39			3.9											1.9	
Acetone	50																	138
Benzene	1		38	9.77	17.1	17	14.9		12	6.1	16.1	13	5.47					
Cyclohexane	5		64			180			2			34					14	
Ethylbenzene	5		6			2.5			4									
Isopropylbenzene	5					5.9												
Methylcyclohexane	5		41			120											27	
Toluene	5		43			2.2												
m,p-Xylene	5					4.5												
o-Xylene	5					7.9												
Total Xylenes	5		13			12.4								29				
Trichloroethene	5	2,400	4,600	118	197	100	192							3,000	154	138	55	109
Vinyl chloride	2	240	740	977	825	460	416			3.7			246	160	331	271	190	247
BTEX Compounds	-	0	87	10	17	34	15	0	16	6	16	13	5	0	0	0	0	0
Total VOCs	-	4,140	15,057	2,385	2,179	1,913	1,584	0	18	19	23	49	645	4,289	1,085	882	592	1,011

Notes:

1. Regulatory values are derived from NYS Ambient Water Quality Standards TOGS 1.1.1 (Source of Drinking Water, groundwater).
2. Guidance value was used when standard was not available.
3. (-) = No regulatory value is associated with this compound.
4. Shaded values represent exceedances of the regulatory value.
5. ug/L = micrograms per Liter (equivalent to parts per billion (ppb)).
6. Only compounds with one or more detections are shown.
7. Blank spaces indicate that the analyte was not detected.
8. "NA" = parameter was not analyzed

APPENDIX A

NOVEMBER 2004 DEED RESTRICTIONS / PROPERTY INFORMATION

Chautauqua County Clerk

Return To:

PUBLIC ABSTRACT CORPORATION
DEFAULT SERVICES
31 E MAIN ST 3RD FL
ROCHESTER NY 14614

Index DEED BOOK

Book 02560 Page 0509

No. Pages 0007

Instrument DECLAR-DEEDS

Date : 11/22/2004

Time : 2:20:53

Control # 200411220133

INST# DE 2004 007426

ALCOA INC

NEW YORK STATE DEPARTMENT OF E
NVIRONMENTAL CONSERV ATION

Employee ID LORENZOT

COUNTY	$	27.00
	$	.00
ST ED DEPT	$	4.75
	$	.00
	$	.00
	$	.00
	$	.00
CEA	$	14.25
	$	.00
Total:	$	46.00

STATE OF NEW YORK
Chautauqua County Clerk

WARNING: THIS SHEET CONSTITUTES THE CLERK'S ENDORSEMENT, REQUIRED BY SECTION 316-a(5) & SECTION 319 OF THE REAL PROPERTY LAW OF THE STATE OF NEW YORK. DO NOT DETACH.

Sandra K. Sopak
County Clerk

TRANSFER TAX

CONSIDERATN $ .00

Transfer Tax $ .00

D025600509

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 3rd day of November 2004, by ALCOA INC., a Pennsylvania corporation, as successor in interest to Alumax Inc., a Delaware corporation, whose address is Alcoa Corporate Center, 201 Isabella Street, Pittsburgh, Pennsylvania 15212-5858 ("Alcoa").

WHEREAS Alcoa is the subject of Voluntary Agreement Index No. B9-0616-02-06, dated 08 August 2002 (the "Agreement") executed by Robert S. Bear (on behalf of Alcoa) and Susan I. Taluto, Deputy Commissioner – NYSDEC Water Quality and Environmental Remediation as part of the New York State Department of Environmental Conservation's (the "Department's) Voluntary Cleanup Program, namely that parcel of real property located at 320 South Roberts Road in the City of Dunkirk, County of Chautauqua, State of New York, which is part of lands conveyed by:

Warranty Deed made by Alumax Inc. to Alcoa, dated November 3, 2004 and recorded on November 22, 2004 in Liber 2540 of Deeds at page 505;

and being more particularly described in Appendix "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Alcoa, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Appendix "B" and made a part hereof, and consists of:

PARCEL A

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Dunkirk, County of Chautauqua and State of New York and more particularly described as follows:

BEGINNING on the centerline of Roberts Road at the point located 601.13

feet northwesterly along said centerline from the northerly line of lands of the Norfolk and Western Railroad, (former New York, Chicago and St. Louis Railroad); thence north 40° 28' east (assumed bearing) a distance of 396.0 feet to a point; thence north 81° 31' east a distance of 95.9 feet to a point; thence south 8° 39' east a distance of 514.37 feet to an iron pin; thence south 38° 16' west a distance of 114.28 feet to said centerline of Roberts Road; thence north 51° 44' west a distance of 456.6 feet along said centerline to the point or place of beginning.

PARCEL B

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Dunkirk, County of Chautauqua and State of New York and more particularly described as follows:

BEGINNING in the center line of the existing 30.3 foot pavement in Roberts Road at a point located 94.53 feet northwesterly along said centerline from the northwesterly line of lands of the New York, Chicago & St. Louis Railroad Company; thence north 51° 44' west along said centerline a distance of 50 feet to a point on line of lands now or formerly of Plymouth Tube Company; thence north 38° 16' east a distance of 114.28 feet to an iron pin and passing through an iron pin located 33 feet northeasterly along the last described course from the centerline of Roberts Road; thence north 8° 39' west a distance of 514.37 feet to an iron pin on point of lands now or formerly of Roblin Industries, Inc.; thence continuing along line of lands of Roblin Industries, north 81° 31' east a distance of 822 feet to an iron pin and south 8° 29' east 251.95 feet to a point on line of lands now or formerly of said Railroad Company; thence south 53° 33' west 219.15 feet to a monument; thence north 87° 18' west 24.88 feet to a monument; thence south 53° 33' west 137.59 feet to an iron pin; thence north 88° 30' west 111.6 feet to an iron pin; thence south 56° 19' 32" west 381.7 feet to a monument; thence south 38° 16' west, 102.49 feet to the point or place of beginning, and passing through an iron pin located 33 feet northeasterly along the last described course from the place of beginning.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, there shall be no construction, use or occupancy; disturbance or excavation of the Property that is inconsistent with the approved "Combined Institutional Control Plan and Operations and Maintenance Plan – Former Alumax Extrusions Site," Site No. V00589-9 (Combined Plan) and that results in unacceptable human exposure to contaminated soils.

Third, the owner of the Property shall be responsible to implement the Combined Plan or implementing any modifications to the Combined Plan after obtaining the written approval of the Relevant Agency.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for restricted industrial or restricted commercial use without the express written waiver of such prohibition by the Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Relevant Agency.

Sixth, the owner of the Property shall continue in full force and effect the prohibition against uses other than restricted commercial and/or industrial uses, and shall assure that any construction, use, occupancy, disturbance or excavation on the property shall be in conformance with the "Combined Plan" as institutional and engineering controls required under the Agreement, and shall continue to implement and annually report on the status, results and effectiveness of the operation, monitoring and maintenance requirements to the Relevant Agency unless the owner first obtains permission to discontinue to do so.

Seventh, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Relevant Agency of the prohibitions, restrictions and requirements set out in this Covenant, the Agreement, and the Combined Plan, and hereby covenant not to contest the authority of the Relevant Agency to seek enforcement.

Eighth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day first above written.

ALCOA INC.

By: Russell W Porter Jr

Russell W. Porter, Jr.
Vice President

Date: November 3, 2004

STATE OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

Personally appeared before me, the undersigned authority in and for the said county and state, on this 3rd day of November, 2004, within my jurisdiction, the within named Russell W. Porter, Jr., who acknowledged that he is a Vice President of Alcoa Inc., a Pennsylvania corporation, and that for and on behalf of the said corporation, and as its act and deed, he executed the above and foregoing instrument, after first having been duly authorized by said corporation so to do.

Jacqueline L. Murtha
Notary Public

My Commission Expires:

Notarial Seal
Jacqueline L. Murtha, Notary Public
City Of Pittsburgh, Allegheny County
My Commission Expires Jan. 24, 2007
Member, Pennsylvania Association Of Notaries

(SEAL)

APPENDIX "A"

PARCEL A

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Dunkirk, County of Chautauqua and State of New York and more particularly described as follows:

BEGINNING on the centerline of Roberts Road at the point located 601.13 feet northwesterly along said centerline from the northerly line of lands of the Norfolk and Western Railroad, (former New York, Chicago and St. Louis Railroad); thence north 40° 28' east (assumed bearing) a distance of 396.0 feet to a point; thence north 81° 31' east a distance of 95.9 feet to a point; thence south 8° 39' east a distance of 514.37 feet to an iron pin; thence south 38° 16' west a distance of 114.28 feet to said centerline of Roberts Road; thence north 51° 44' west a distance of 456.6 feet along said centerline to the point or place of beginning.

PARCEL B

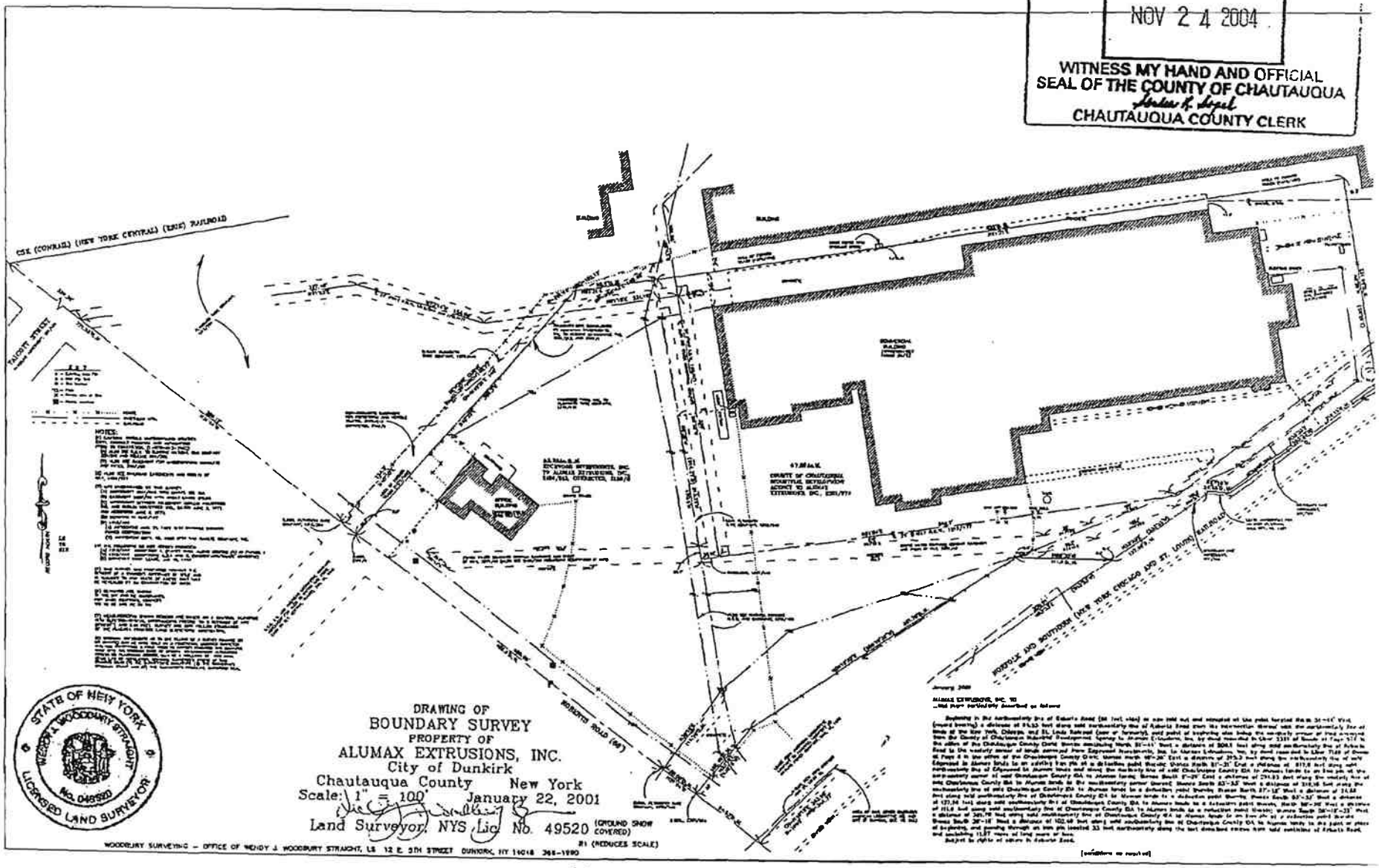
ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Dunkirk, County of Chautauqua and State of New York and more particularly described as follows:

BEGINNING in the center line of the existing 30.3 foot pavement in Roberts Road at a point located 94.53 feet northwesterly along said centerline from the northwesterly line of lands of the New York, Chicago & St. Louis Railroad Company; thence north 51° 44' west along said centerline a distance of 50 feet to a point on line of lands now or formerly of Plymouth Tube Company; thence north 38° 16' east a distance of 114.28 feet to an iron pin and passing through an iron pin located 33 feet northeasterly along the last described course from the centerline of Roberts Road; thence north 8° 39' west a distance of 514.37 feet to an iron pin on point of lands now or formerly of Roblin Industries, Inc.; thence continuing along line of lands of Roblin Industries, north 81° 31' east a distance of 822 feet to an iron pin and south 8° 29' east 251.95 feet to a point on line of lands now or formerly of said Railroad Company; thence south 53° 33' west 219.15 feet to a monument; thence north 87° 18' west 24.88 feet to a monument; thence south 53° 33' west 137.59 feet to an iron pin; thence north 88° 30' west 111.6 feet to an iron pin; thence south 56° 19' 32" west 381.7 feet to a monument; thence south 38° 16' west, 102.49 feet to the point or place of beginning, and passing through an iron pin located 33 feet northeasterly along the last described course from the place of beginning.

STATE OF NEW YORK, COUNTY OF CHAUTAUQUA, A TRUE COPY OF THE ORIGINAL FILED OR RECORDED IN THIS OFFICE

NOV 24 2004

WITNESS MY HAND AND OFFICIAL SEAL OF THE COUNTY OF CHAUTAUQUA
Andrea K. Legel
CHAUTAUQUA COUNTY CLERK



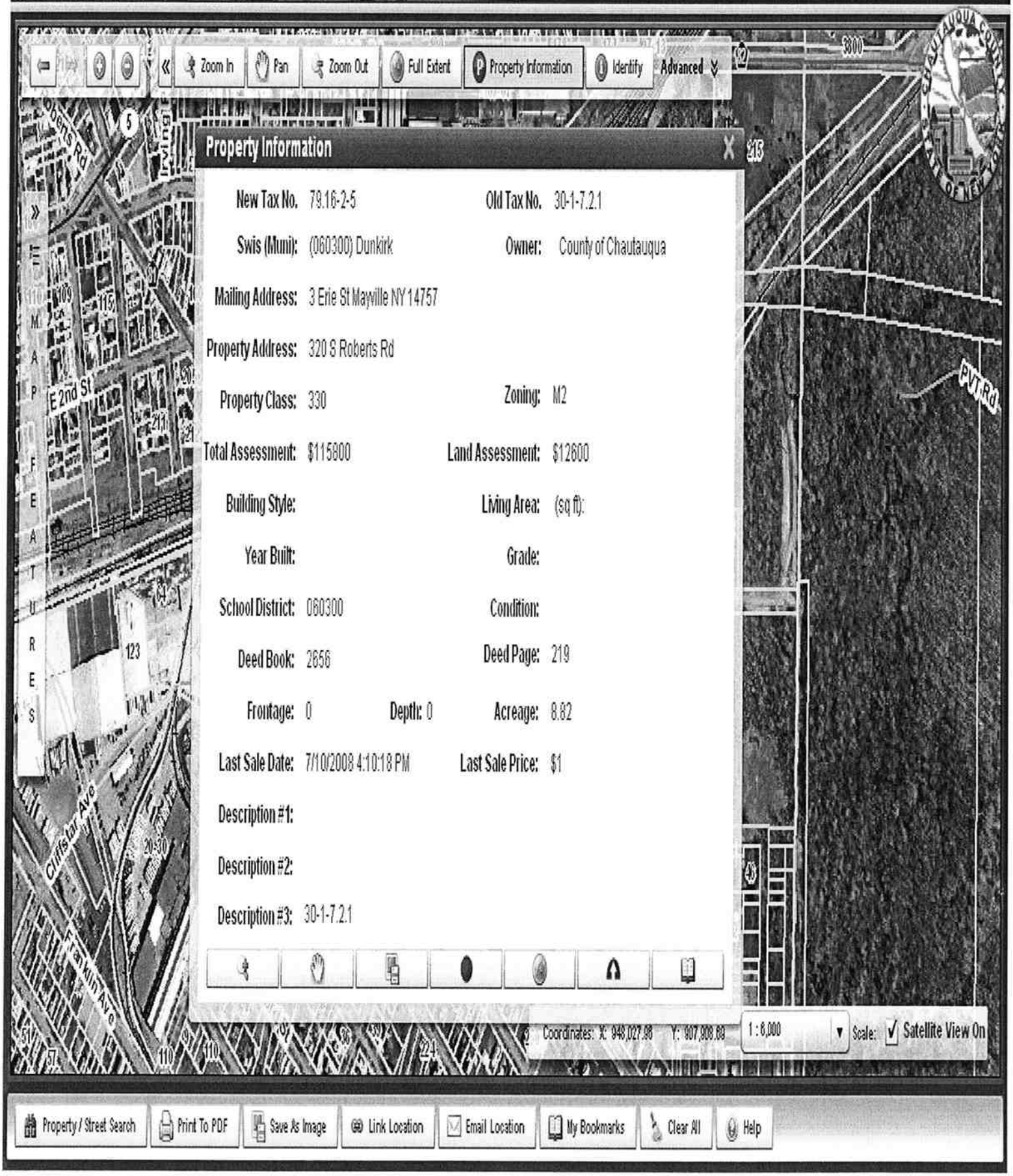
DRAWING OF
BOUNDARY SURVEY
PROPERTY OF
ALUMAX EXTRUSIONS, INC.
City of Dunkirk
Chautauqua County New York
Scale: 1" = 100' January 22, 2001

Land Surveyor, NYS Lic. No. 49520 (GROUND SNOW COVERED)

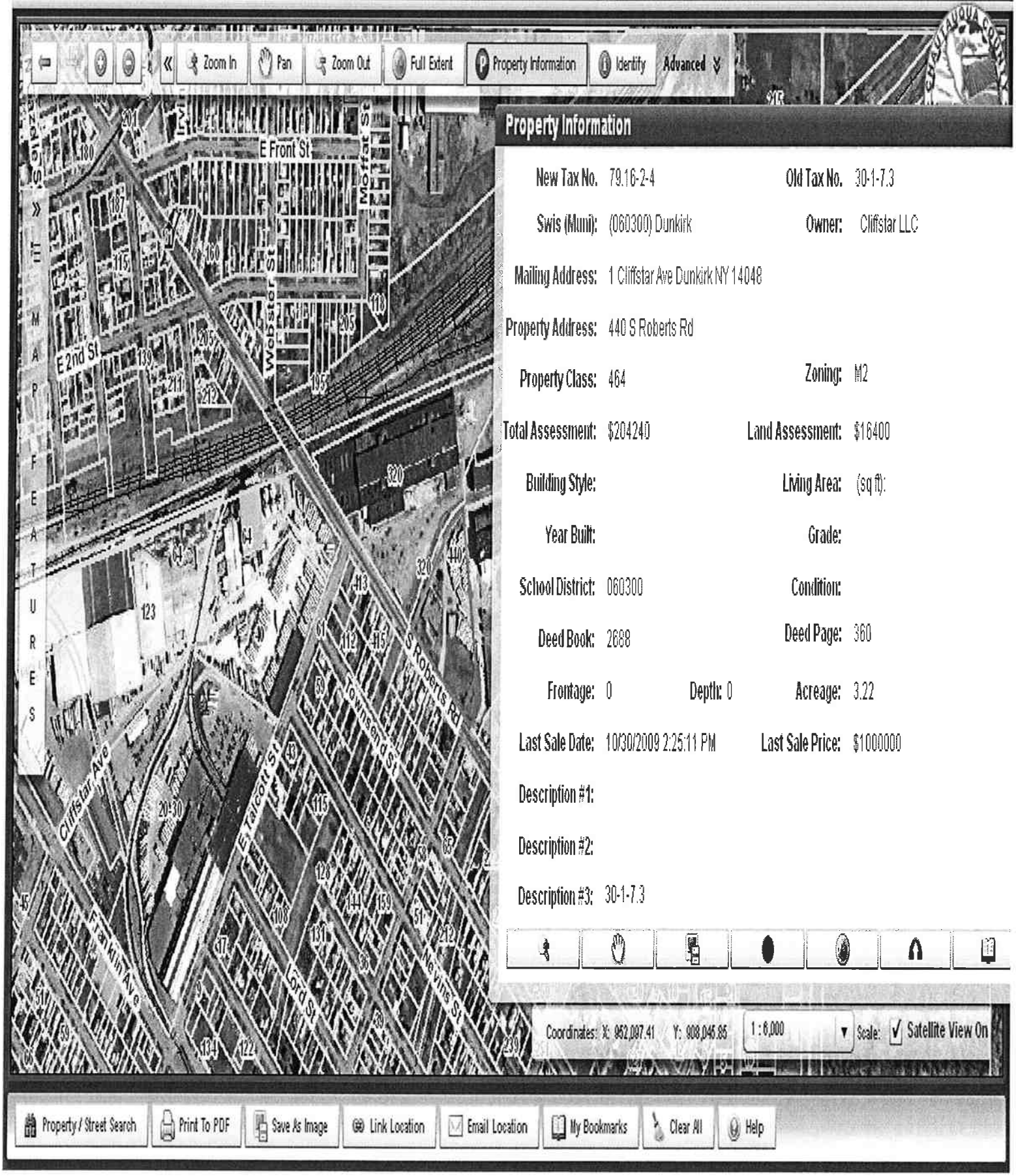
#1 (REDUCES SCALE)

WOODBURY SURVEYING – OFFICE OF WENDY J. WOODBURY STRAIGHT, LS 12 E. 5TH STREET DUNKIRK, NY 14048 366-1990

Chautauqua County, NEW YORK Web Mapping



Chautauqua County, NEW YORK Web Mapping



Online Assessment Roll System

Created By: PROSERVE

City of Dunkirk, NY

OARS Main Page

- Click to go to GIS map
- Photo of property is available, click to view.

Improvements
Exemptions
Tax Bill

** Commercial Property **

PROPERTY INFORMATION

Current Owner Name CLIFFSTAR LLC
Property Address 440 ROBERTS RD
Town Name Dunkirk
Total Assessed Value $204,240
(85.44% of Market Value)
Full Market Value $239,000
Land Assessed Value $16,400
Property Type 464 - Office bldg.
Lot Size Acres: 3.22 Front: 0 Depth: 0
Mailing Address 1 1 CLIFFSTAR AVE
Mailing Address 2
Mailing City, State DUNKIRK, NY
Mailing Zip Code 14048

Section, Block Lot # 79.16-2-4
Neighborhood Code 200
School District 60300
Swiss Code 060300
Parcel Status Active
County Taxable $204,240
Town Taxable $204,240
School Taxable $204,240
Village Taxable $0
Tax Code
Bank Code

PHYSICAL INFORMATION

# of Bedrooms 0
# of Baths 0
# of Fireplaces 0
# of Kitchens 0

HISTORICAL SALE INFORMATION

Owner History	Deed Book	Deed Page	Sale Date	Valid Sale	Sale Price
CLIFFSTAR LLC	2705	426	8/17/2010	NO	$1
Cliffstar Corporation,	2688	360	10/30/2009	NO	$1,000,000
Star Wine LLC,	2587	453	11/16/2005	YES	$400,000

COMMERCIAL INFORMATION

Property Class 464 - Office bldg.
Building Sq. Footage 5,902
Assessment Per Sq. Foot $34.61

Property Use	USED AS	RENTABLE SQ. FT.
	E03 - Profssnl off	5,902
	F04 - Cold storage	5,902

Site No. 1
Bldg No. 1

Actual Year Built 1990
Effective Year Built 0

Site No.	1	**Rent Type**	-
Use No.	1	**Lease Begin**	
Used As	E03 - Profssnl off	**Lease Length**	0 yrs
Acres	3.22	**Total Eff / 1 Bed Sq. Ft.**	
Valuation Dist	0	**Number Of 1 Bed Units**	
Rentable Sq. Ft.	5,902	**Total 2 Bedroom Sq. Ft.**	
Unit Code	-	**Number Of 2 Bed Units**	
Total Number Of Units		**Total 3 Bedroom Sq. Ft.**	
Total Rent	$0	**Number Of 3 Bed Units**	

Site No.	1	**Rent Type**	-
Use No.	2	**Lease Begin**	
Used As	F04 - Cold storage	**Lease Length**	0 yrs
Acres	3.22	**Total Eff / 1 Bed Sq. Ft.**	
Valuation Dist	0	**Number Of 1 Bed Units**	
Rentable Sq. Ft.	5,902	**Total 2 Bedroom Sq. Ft.**	
Unit Code	-	**Number Of 2 Bed Units**	
Total Number Of Units		**Total 3 Bedroom Sq. Ft.**	
Total Rent	$0	**Number Of 3 Bed Units**	

Created By:

PROSERVE

Online Assessment Roll System

City of Dunkirk, NY

OARS Main Page

- Click to go to GIS map
- Photo of property is available, click to view.

Improvements
Exemptions
Tax Bill

** Commercial Property **

PROPERTY INFORMATION

Current Owner Name	COUNTY OF CHAUTAUQUA	**Section, Block Lot #**	79.16-2-5
Property Address	320 ROBERTS RD	**Neighborhood Code**	200
Town Name	Dunkirk	**School District**	60300
Total Assessed Value (85.44% of Market Value)	$115,800	**Swiss Code**	060300
		Parcel Status	Active
Full Market Value	$135,500	**County Taxable**	$0
Land Assessed Value	$12,600	**Town Taxable**	$0
Property Type	330 - Vacant comm	**School Taxable**	$0
Lot Size	Acres: 8.82 Front: 0 Depth: 0	**Village Taxable**	$0
Mailing Address 1	3 ERIE ST	**Tax Code**	
Mailing Address 2		**Bank Code**	
Mailing City, State	MAYVILLE, NY		
Mailing Zip Code	14757		

PHYSICAL INFORMATION

# of Bedrooms	0
# of Baths	0
# of Fireplaces	0
# of Kitchens	0

HISTORICAL SALE INFORMATION

Owner History	Deed Book	Deed Page	Sale Date	Valid Sale	Sale Price
COUNTY OF CHAUTAUQUA	2656	219	7/10/2008	NO	$1
Alcoa, Inc.,	2560	505	11/3/2004	YES	$700,000

COMMERCIAL INFORMATION

Property Class	330 - Vacant comm
Building Sq. Footage	
Assessment Per Sq. Foot	$0.00

Property Use	**USED AS**	**RENTABLE SQ. FT.**
	F09 - Light mfg	153,993

Site No.	1	**Rent Type**	-
Use No.	1	**Lease Begin**	
Used As	F09 - Light mfg	**Lease Length**	0 yrs
Acres	8.82	**Total Eff / 1 Bed Sq. Ft.**	

Valuation Dist	0	**Number Of 1 Bed Units**	
Rentable Sq. Ft.	153,993	**Total 2 Bedroom Sq. Ft.**	
Unit Code	10 - Bays	**Number Of 2 Bed Units**	
Total Number Of Units	12	**Total 3 Bedroom Sq. Ft.**	
Total Rent	$0	**Number Of 3 Bed Units**	

APPENDIX B

PHOTOGRAPHS

Photograph 1: Northwest on 79.16-2-5 property facing south/southeast

Photograph 2: Southern portion of 79.16-2-5 property facing south/southeast.

Photograph 3: Southeast corner of 79.16-2-5 property facing northwest

Photograph 4: Western edge of 79.16-2-5 property facing south

Photograph 6: Property 79.16-2-4 facing southwest

APPENDIX C

SITE MANAGEMENT PERIODIC REVIEW REPORT NOTICE – INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **V00589**

Site Name Closed Alumax Extrusions, Inc. Facility

Site Address: 320 South Roberts Road Zip Code: 14048-
City/Town: Dunkirk (C)
County: Chautauqua
Site Acreage: 12.0

Reporting Period: August 02, 2012 to August 02, 2013

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☒	☐

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. V00589 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
79.16-2-4	Cliffstar Corp.	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan O&M Plan

Combined Institutional Control Plan/ Operations and Maintenance Plan (6/23/2004)and Deed Restriction (filed 11/3/2004):

1) Landuse Restiction: Restricted Industrial or Restricted Commercial.
2) Ground water use restriction.
3) Soils Management Plan.
4) Surface Cover System.
5) Ground water monitoring.
6) Sub-Slab venting system.

79.16-2-5	Chautauqua County	Ground Water Use Restriction Landuse Restriction Soil Management Plan Monitoring Plan O&M Plan

Combined Institutional Control Plan/ Operations and Maintenance Plan (6/23/2004)and Deed Restriction (filed 11/3/2004):

1) Landuse Restiction: Restricted Industrial or Restricted Commercial.
2) Ground water use restriction.
3) Soils Management Plan.
4) Surface Cover System.
5) Ground water monitoring.
6) Sub-Slab venting system.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
79.16-2-4	Vapor Mitigation Cover System
79.16-2-5	Vapor Mitigation Cover System

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00589

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Edward H. Schiller, PE (print name) 620 Main Street (print business address) Buffalo, NY 14202 am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

9/26/13
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Edward M. Schiller, P.E. at 620 Main St. Buffalo, NY 14202
print name print business address

am certifying as a Professional Engineer for the Remedial Party
(Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

9/26/13
Stamp (Required for PE)

Date

APPENDIX D

GROUNDWATER SAMPLING LOGS

TVGA CONSULTANTS

WELL SAMPLING LOG

WELL ID: AL-1

Project Name: Annual Sampling for the Alumax Site
Project Location: South Roberts Road, Dunkirk NY

Project No: **2010.0128.07**
Date: **8/15/2013**

Purge Information: [Well Riser=Casing (C); all measurements to TOC] Casing Diameter (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): 19.9 Water Level (ft): 8.1 Height of Water Column (ft): 11.8

1 Well Volume [WV] (gal): 1.88 3 Well Volumes (gal): 5.6

Method of Purging: Bailer / Submersible / Peristaltic w/ dedicated tubing / Other:

Purge Field Parameters Purge Start Time: 930

Volume (gal) / WV	ORP/Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= gal] Characteristics
Initial / 0	-8	7.54	17.53	1.00	0.9	clear
1.8 / 1	-31	7.33	15.39	1.12	48.9	slightly turbid
/ 2	Dry @					
/ 3				3.6		

Total Volume Purged (gal): 4.3 Purge Complete Time: 1000 [Water Level (ft.):]

Sampling Information: Date:

Sample Time: 1650 Water Level(ft): Sample Analysis: **TCL VOCs** No. of Bottles: **2**

Sampling Method: **Bailer-** VOCs ; All // **Peristaltic w/dedicated tubing-** Remainder ; All //
Submersible- Remainder ; All // **Manual grab w/-** S/S Pitcher ; Sample Cont's

Sample Field Parameters

ORP/Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
-47	7.92	17.24	0.908	5.0	clear

Other Comments:

Dup here [2] 1100

Sampler's Signature: Jessica Gostomski

TVGA CONSULTANTS

WELL SAMPLING LOG

WELL ID: AL-2

Project Name: Annual Sampling for the Alumax Site
Project Location: South Roberts Road, Dunkirk NY

Project No: **2010.0128.07**
Date: **8 / 15 /2013**

Purge Information: [Well Riser=Casing (C); all measurements to TOC] Casing Diameter (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): 19.5 Water Level (ft): 7.87 Height of Water Column (ft): 11.63

1 Well Volume [WV] (gal): 1.8 3 Well Volumes (gal): 5.58

Method of Purging: (Bailer) / Submersible / Peristaltic w/ dedicated tubing / Other:

Purge Field Parameters Purge Start Time: 830

Volume (gal) / WV	ORP/Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= gal] Characteristics
Initial / 0	-3	7.03	17.90	1.00	10.3	clear
1.8 / 1	-33	7.22	16.58	1.06	15.3	"
3.6 / 2	-33	7.39	15.17	1.08	27.1	" Sulfur Odor
5.2 / 3	DRY @	4.1	gal			

Total Volume Purged (gal): 4.1 Purge Complete Time: 930 [Water Level (ft.): -]

Sampling Information: Date: 8/15/13

Sample Time: 1045 Water Level(ft): - Sample Analysis: **TCL VOCs** No. of Bottles: **2**

Sampling Method: **Bailer-** VOCs ; All // **Peristaltic w/dedicated tubing-** Remainder ; All //
Submersible- Remainder ; All // **Manual grab w/-** S/S Pitcher ; Sample Cont's

Sample Field Parameters

ORP/Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
-58	7.35	17.79	1.04	23.8	Clear

Other Comments:

* Bees in well

Sampler's Signature: Jessica Gostomski

TVGA CONSULTANTS

WELL SAMPLING LOG

WELL ID: AL-7

Project Name: Annual Sampling for the Alumax Site
Project Location: South Roberts Road, Dunkirk NY

Project No: **2010.0128.07**
Date: **8/15/2013**

Purge Information: [Well Riser=Casing (C); all measurements to TOC] Casing Diameter (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): 11.3 Water Level (ft): 4.4 Height of Water Column (ft): 6.9

1 Well Volume [WV] (gal): 1.104 3 Well Volumes (gal): 3.3

Method of Purging: Bailer / Submersible / Peristaltic w/ dedicated tubing / Other:

Purge Field Parameters Purge Start Time: 1000

Volume (gal) / WV	ORP/Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= gal] Characteristics
Initial / 0	-16	7.06	18.11	0.348	238	Turbid
1.1 / 1	-10	7.08	16.01	0.433	910	Dark/black w/a very turbid
/ 2	Dry @	1.1 gal				
/ 3						

Total Volume Purged (gal): 1.1 Purge Complete Time: 1030 [Water Level (ft.): -]

Sampling Information: Date: 8/15/13

Sample Time: 1710 Water Level(ft): Sample Analysis: **TCL VOCs** No. of Bottles: **2**

Sampling Method: **Bailer-** VOCs ; All // **Peristaltic w/dedicated tubing-** Remainder ; All //
Submersible- Remainder ; All // **Manual grab w/-** S/S Pitcher ; Sample Cont's

Sample Field Parameters

ORP/Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
-33	8.00	16.81	0.436	8.8	Clear

Other Comments:

- well burned again - uncovered
- water inside well w/ a sheen observed.

Sampler's Signature: Jessica Gostomski

APPENDIX E

ANALYTICAL LABORATORY REPORT AND CHAIN OF CUSTODY

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

TVGA Engineering, Surveying

For Lab Project ID

133219

Referencing

Alumax, 2010.0128.07

Prepared

Monday, August 26, 2013

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: AL - 2
Lab Sample ID: 133219-01
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 16:45
Date Received: 8/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 4.00	ug/L		8/22/2013 14:29
1,1,2,2-Tetrachloroethane	< 4.00	ug/L		8/22/2013 14:29
1,1,2-Trichloroethane	< 4.00	ug/L		8/22/2013 14:29
1,1-Dichloroethane	< 4.00	ug/L		8/22/2013 14:29
1,1-Dichloroethene	< 4.00	ug/L		8/22/2013 14:29
1,2,3-Trichlorobenzene	< 10.0	ug/L		8/22/2013 14:29
1,2,4-Trichlorobenzene	< 10.0	ug/L		8/22/2013 14:29
1,2-Dibromo-3-Chloropropane	< 20.0	ug/L		8/22/2013 14:29
1,2-Dibromoethane	< 4.00	ug/L		8/22/2013 14:29
1,2-Dichlorobenzene	< 4.00	ug/L		8/22/2013 14:29
1,2-Dichloroethane	< 4.00	ug/L		8/22/2013 14:29
1,2-Dichloropropane	< 4.00	ug/L		8/22/2013 14:29
1,3-Dichlorobenzene	< 4.00	ug/L		8/22/2013 14:29
1,4-Dichlorobenzene	< 4.00	ug/L		8/22/2013 14:29
1,4-dioxane	< 40.0	ug/L		8/22/2013 14:29
2-Butanone	< 20.0	ug/L		8/22/2013 14:29
2-Hexanone	< 10.0	ug/L		8/22/2013 14:29
4-Methyl-2-pentanone	< 10.0	ug/L		8/22/2013 14:29
Acetone	< 20.0	ug/L		8/22/2013 14:29
Benzene	**5.47**	ug/L		8/22/2013 14:29
Bromochloromethane	< 10.0	ug/L		8/22/2013 14:29
Bromodichloromethane	< 4.00	ug/L		8/22/2013 14:29
Bromoform	< 10.0	ug/L		8/22/2013 14:29
Bromomethane	< 4.00	ug/L		8/22/2013 14:29
Carbon disulfide	< 4.00	ug/L		8/22/2013 14:29
Carbon Tetrachloride	< 4.00	ug/L		8/22/2013 14:29
Chlorobenzene	< 4.00	ug/L		8/22/2013 14:29
Chloroethane	< 4.00	ug/L		8/22/2013 14:29

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: AL - 2
Lab Sample ID: 133219-01
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 16:45
Date Received: 8/21/2013

Chloroform	< 4.00	ug/L	8/22/2013 14:29
Chloromethane	< 4.00	ug/L	8/22/2013 14:29
cis-1,2-Dichloroethene	**394**	ug/L	8/22/2013 14:29
cis-1,3-Dichloropropene	< 4.00	ug/L	8/22/2013 14:29
Cyclohexane	< 20.0	ug/L	8/22/2013 14:29
Dibromochloromethane	< 4.00	ug/L	8/22/2013 14:29
Dichlorodifluoromethane	< 4.00	ug/L	8/22/2013 14:29
Ethylbenzene	< 4.00	ug/L	8/22/2013 14:29
Freon 113	< 4.00	ug/L	8/22/2013 14:29
Isopropylbenzene	< 4.00	ug/L	8/22/2013 14:29
m,p-Xylene	< 4.00	ug/L	8/22/2013 14:29
Methyl acetate	< 4.00	ug/L	8/22/2013 14:29
Methyl tert-butyl Ether	< 4.00	ug/L	8/22/2013 14:29
Methylcyclohexane	< 4.00	ug/L	8/22/2013 14:29
Methylene chloride	< 10.0	ug/L	8/22/2013 14:29
o-Xylene	< 4.00	ug/L	8/22/2013 14:29
Styrene	< 10.0	ug/L	8/22/2013 14:29
Tetrachloroethene	< 4.00	ug/L	8/22/2013 14:29
Toluene	< 4.00	ug/L	8/22/2013 14:29
trans-1,2-Dichloroethene	< 4.00	ug/L	8/22/2013 14:29
trans-1,3-Dichloropropene	< 4.00	ug/L	8/22/2013 14:29
Trichloroethene	< 4.00	ug/L	8/22/2013 14:29
Trichlorofluoromethane	< 4.00	ug/L	8/22/2013 14:29
Vinyl chloride	**246**	ug/L	8/22/2013 14:29

Method Reference(s): EPA 8260B
EPA 5030
Data File: x07783.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: AL - 1
Lab Sample ID: 133219-02
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 16:50
Date Received: 8/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 20.0	ug/L		8/22/2013 14:52
1,1,2,2-Tetrachloroethane	< 20.0	ug/L		8/22/2013 14:52
1,1,2-Trichloroethane	< 20.0	ug/L		8/22/2013 14:52
1,1-Dichloroethane	< 20.0	ug/L		8/22/2013 14:52
1,1-Dichloroethene	< 20.0	ug/L		8/22/2013 14:52
1,2,3-Trichlorobenzene	< 50.0	ug/L		8/22/2013 14:52
1,2,4-Trichlorobenzene	< 50.0	ug/L		8/22/2013 14:52
1,2-Dibromo-3-Chloropropane	< 100	ug/L		8/22/2013 14:52
1,2-Dibromoethane	< 20.0	ug/L		8/22/2013 14:52
1,2-Dichlorobenzene	< 20.0	ug/L		8/22/2013 14:52
1,2-Dichloroethane	< 20.0	ug/L		8/22/2013 14:52
1,2-Dichloropropane	< 20.0	ug/L		8/22/2013 14:52
1,3-Dichlorobenzene	< 20.0	ug/L		8/22/2013 14:52
1,4-Dichlorobenzene	< 20.0	ug/L		8/22/2013 14:52
1,4-dioxane	< 200	ug/L		8/22/2013 14:52
2-Butanone	< 100	ug/L		8/22/2013 14:52
2-Hexanone	< 50.0	ug/L		8/22/2013 14:52
4-Methyl-2-pentanone	< 50.0	ug/L		8/22/2013 14:52
Acetone	< 100	ug/L		8/22/2013 14:52
Benzene	**14.9**	ug/L		8/22/2013 14:52
Bromochloromethane	< 50.0	ug/L		8/22/2013 14:52
Bromodichloromethane	< 20.0	ug/L		8/22/2013 14:52
Bromoform	< 50.0	ug/L		8/22/2013 14:52
Bromomethane	< 20.0	ug/L		8/22/2013 14:52
Carbon disulfide	< 20.0	ug/L		8/22/2013 14:52
Carbon Tetrachloride	< 20.0	ug/L		8/22/2013 14:52
Chlorobenzene	< 20.0	ug/L		8/22/2013 14:52
Chloroethane	< 20.0	ug/L		8/22/2013 14:52

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: AL - 1
Lab Sample ID: 133219-02
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 16:50
Date Received: 8/21/2013

Chloroform	< 20.0	ug/L	8/22/2013	14:52
Chloromethane	< 20.0	ug/L	8/22/2013	14:52
cis-1,2-Dichloroethene	**961**	ug/L	8/22/2013	14:52
cis-1,3-Dichloropropene	< 20.0	ug/L	8/22/2013	14:52
Cyclohexane	< 100	ug/L	8/22/2013	14:52
Dibromochloromethane	< 20.0	ug/L	8/22/2013	14:52
Dichlorodifluoromethane	< 20.0	ug/L	8/22/2013	14:52
Ethylbenzene	< 20.0	ug/L	8/22/2013	14:52
Freon 113	< 20.0	ug/L	8/22/2013	14:52
Isopropylbenzene	< 20.0	ug/L	8/22/2013	14:52
m,p-Xylene	< 20.0	ug/L	8/22/2013	14:52
Methyl acetate	< 20.0	ug/L	8/22/2013	14:52
Methyl tert-butyl Ether	< 20.0	ug/L	8/22/2013	14:52
Methylcyclohexane	< 20.0	ug/L	8/22/2013	14:52
Methylene chloride	< 50.0	ug/L	8/22/2013	14:52
o-Xylene	< 20.0	ug/L	8/22/2013	14:52
Styrene	< 50.0	ug/L	8/22/2013	14:52
Tetrachloroethene	< 20.0	ug/L	8/22/2013	14:52
Toluene	< 20.0	ug/L	8/22/2013	14:52
trans-1,2-Dichloroethene	< 20.0	ug/L	8/22/2013	14:52
trans-1,3-Dichloropropene	< 20.0	ug/L	8/22/2013	14:52
Trichloroethene	**192**	ug/L	8/22/2013	14:52
Trichlorofluoromethane	< 20.0	ug/L	8/22/2013	14:52
Vinyl chloride	**416**	ug/L	8/22/2013	14:52

Method Reference(s): EPA 8260B
EPA 5030
Data File: x07784.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: DUP
Lab Sample ID: 133219-03
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 17:00
Date Received: 8/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 20.0	ug/L		8/22/2013 15:15
1,1,2,2-Tetrachloroethane	< 20.0	ug/L		8/22/2013 15:15
1,1,2-Trichloroethane	< 20.0	ug/L		8/22/2013 15:15
1,1-Dichloroethane	< 20.0	ug/L		8/22/2013 15:15
1,1-Dichloroethene	< 20.0	ug/L		8/22/2013 15:15
1,2,3-Trichlorobenzene	< 50.0	ug/L		8/22/2013 15:15
1,2,4-Trichlorobenzene	< 50.0	ug/L		8/22/2013 15:15
1,2-Dibromo-3-Chloropropane	< 100	ug/L		8/22/2013 15:15
1,2-Dibromoethane	< 20.0	ug/L		8/22/2013 15:15
1,2-Dichlorobenzene	< 20.0	ug/L		8/22/2013 15:15
1,2-Dichloroethane	< 20.0	ug/L		8/22/2013 15:15
1,2-Dichloropropane	< 20.0	ug/L		8/22/2013 15:15
1,3-Dichlorobenzene	< 20.0	ug/L		8/22/2013 15:15
1,4-Dichlorobenzene	< 20.0	ug/L		8/22/2013 15:15
1,4-dioxane	< 200	ug/L		8/22/2013 15:15
2-Butanone	< 100	ug/L		8/22/2013 15:15
2-Hexanone	< 50.0	ug/L		8/22/2013 15:15
4-Methyl-2-pentanone	< 50.0	ug/L		8/22/2013 15:15
Acetone	< 100	ug/L		8/22/2013 15:15
Benzene	**13.8**	ug/L		8/22/2013 15:15
Bromochloromethane	< 50.0	ug/L		8/22/2013 15:15
Bromodichloromethane	< 20.0	ug/L		8/22/2013 15:15
Bromoform	< 50.0	ug/L		8/22/2013 15:15
Bromomethane	< 20.0	ug/L		8/22/2013 15:15
Carbon disulfide	< 20.0	ug/L		8/22/2013 15:15
Carbon Tetrachloride	< 20.0	ug/L		8/22/2013 15:15
Chlorobenzene	< 20.0	ug/L		8/22/2013 15:15
Chloroethane	< 20.0	ug/L		8/22/2013 15:15

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: DUP
Lab Sample ID: 133219-03
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 17:00
Date Received: 8/21/2013

Chloroform	< 20.0	ug/L	8/22/2013	15:15
Chloromethane	< 20.0	ug/L	8/22/2013	15:15
cis-1,2-Dichloroethene	**895**	ug/L	8/22/2013	15:15
cis-1,3-Dichloropropene	< 20.0	ug/L	8/22/2013	15:15
Cyclohexane	< 100	ug/L	8/22/2013	15:15
Dibromochloromethane	< 20.0	ug/L	8/22/2013	15:15
Dichlorodifluoromethane	< 20.0	ug/L	8/22/2013	15:15
Ethylbenzene	< 20.0	ug/L	8/22/2013	15:15
Freon 113	< 20.0	ug/L	8/22/2013	15:15
Isopropylbenzene	< 20.0	ug/L	8/22/2013	15:15
m,p-Xylene	< 20.0	ug/L	8/22/2013	15:15
Methyl acetate	< 20.0	ug/L	8/22/2013	15:15
Methyl tert-butyl Ether	< 20.0	ug/L	8/22/2013	15:15
Methylcyclohexane	< 20.0	ug/L	8/22/2013	15:15
Methylene chloride	< 50.0	ug/L	8/22/2013	15:15
o-Xylene	< 20.0	ug/L	8/22/2013	15:15
Styrene	< 50.0	ug/L	8/22/2013	15:15
Tetrachloroethene	< 20.0	ug/L	8/22/2013	15:15
Toluene	< 20.0	ug/L	8/22/2013	15:15
trans-1,2-Dichloroethene	< 20.0	ug/L	8/22/2013	15:15
trans-1,3-Dichloropropene	< 20.0	ug/L	8/22/2013	15:15
Trichloroethene	**174**	ug/L	8/22/2013	15:15
Trichlorofluoromethane	< 20.0	ug/L	8/22/2013	15:15
Vinyl chloride	**365**	ug/L	8/22/2013	15:15

Method Reference(s): EPA 8260B
EPA 5030
Data File: x07785.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: AL - 7
Lab Sample ID: 133219-04
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 17:10
Date Received: 8/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 20.0	ug/L		8/21/2013 22:47
1,1,2,2-Tetrachloroethane	< 20.0	ug/L		8/21/2013 22:47
1,1,2-Trichloroethane	< 20.0	ug/L		8/21/2013 22:47
1,1-Dichloroethane	< 20.0	ug/L		8/21/2013 22:47
1,1-Dichloroethene	< 20.0	ug/L		8/21/2013 22:47
1,2,3-Trichlorobenzene	< 50.0	ug/L		8/21/2013 22:47
1,2,4-Trichlorobenzene	< 50.0	ug/L		8/21/2013 22:47
1,2-Dibromo-3-Chloropropane	< 100	ug/L		8/21/2013 22:47
1,2-Dibromoethane	< 20.0	ug/L		8/21/2013 22:47
1,2-Dichlorobenzene	< 20.0	ug/L		8/21/2013 22:47
1,2-Dichloroethane	< 20.0	ug/L		8/21/2013 22:47
1,2-Dichloropropane	< 20.0	ug/L		8/21/2013 22:47
1,3-Dichlorobenzene	< 20.0	ug/L		8/21/2013 22:47
1,4-Dichlorobenzene	< 20.0	ug/L		8/21/2013 22:47
1,4-dioxane	< 200	ug/L		8/21/2013 22:47
2-Butanone	< 100	ug/L		8/21/2013 22:47
2-Hexanone	< 50.0	ug/L		8/21/2013 22:47
4-Methyl-2-pentanone	< 50.0	ug/L		8/21/2013 22:47
Acetone	**138**	ug/L		8/21/2013 22:47
Benzene	< 7.00	ug/L		8/21/2013 22:47
Bromochloromethane	< 50.0	ug/L		8/21/2013 22:47
Bromodichloromethane	< 20.0	ug/L		8/21/2013 22:47
Bromoform	< 50.0	ug/L		8/21/2013 22:47
Bromomethane	< 20.0	ug/L		8/21/2013 22:47
Carbon disulfide	< 20.0	ug/L		8/21/2013 22:47
Carbon Tetrachloride	< 20.0	ug/L		8/21/2013 22:47
Chlorobenzene	< 20.0	ug/L		8/21/2013 22:47
Chloroethane	< 20.0	ug/L		8/21/2013 22:47

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133219

Client: **TVGA Engineering, Surveying**

Project Reference: Alumax, 2010.0128.07

Sample Identifier: AL - 7
Lab Sample ID: 133219-04
Matrix: Groundwater

Date/Time Sampled: 8/15/2013 17:10
Date Received: 8/21/2013

Chloroform	< 20.0	ug/L	8/21/2013	22:47
Chloromethane	< 20.0	ug/L	8/21/2013	22:47
cis-1,2-Dichloroethene	**517**	ug/L	8/21/2013	22:47
cis-1,3-Dichloropropene	< 20.0	ug/L	8/21/2013	22:47
Cyclohexane	< 100	ug/L	8/21/2013	22:47
Dibromochloromethane	< 20.0	ug/L	8/21/2013	22:47
Dichlorodifluoromethane	< 20.0	ug/L	8/21/2013	22:47
Ethylbenzene	< 20.0	ug/L	8/21/2013	22:47
Freon 113	< 20.0	ug/L	8/21/2013	22:47
Isopropylbenzene	< 20.0	ug/L	8/21/2013	22:47
m,p-Xylene	< 20.0	ug/L	8/21/2013	22:47
Methyl acetate	< 20.0	ug/L	8/21/2013	22:47
Methyl tert-butyl Ether	< 20.0	ug/L	8/21/2013	22:47
Methylcyclohexane	< 20.0	ug/L	8/21/2013	22:47
Methylene chloride	< 50.0	ug/L	8/21/2013	22:47
o-Xylene	< 20.0	ug/L	8/21/2013	22:47
Styrene	< 50.0	ug/L	8/21/2013	22:47
Tetrachloroethene	< 20.0	ug/L	8/21/2013	22:47
Toluene	< 20.0	ug/L	8/21/2013	22:47
trans-1,2-Dichloroethene	< 20.0	ug/L	8/21/2013	22:47
trans-1,3-Dichloropropene	< 20.0	ug/L	8/21/2013	22:47
Trichloroethene	**109**	ug/L	8/21/2013	22:47
Trichlorofluoromethane	< 20.0	ug/L	8/21/2013	22:47
Vinyl chloride	**247**	ug/L	8/21/2013	22:47

Method Reference(s): EPA 8260B
EPA 5030
Data File: x07770.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"V" = Sample concentration is >10 times the spike. No meaningful Spike Recovery can be calculated.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"C" = Concentration differs by more than 40% between the primary and secondary analytical columns.

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

133219 ~~133181~~ SSL 8/21

REPORT TO:	INVOICE TO:	LAB PROJECT ID
CLIENT: TVGA Consultants	CLIENT:	2010.0128.07
ADDRESS: 620 Main St.	ADDRESS: ← SAME	Quotation #:
CITY: Buffalo STATE: NY ZIP: 14202	CITY: STATE: ZIP:	Email:
PHONE: 716-849-8739	PHONE:	
ATTN: Terry Reid	ATTN:	

PROJECT REFERENCE: Alumax

Matrix Codes:
AQ - Aqueous Liquid, NQ - Non-Aqueous Liquid, WA - Water, WG - Groundwater, DW - Drinking Water, WW - Wastewater, SO - Soil, SL - Sludge, SD - Solid, PT - Paint, WP - Wipe, CK - Caulk, OL - Oil, AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL VOCs	REMARKS	PARADIGM LAB SAMPLE NUMBER (EE SSL 8/21)
1	8/15/13	1645		G	AL-2	WG	2	X		01
2	↓	1650		G	AL-1	↓	2	X		02
3	↓	1700		G	DUP	↓	2	X		03
4	↓	1710		G	AL-7	↓	2	X		04
5	~~8/15/13~~				~~Trip Blank~~					
6										
7										
8										
9										
10										

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☑	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other please indicate:	☐	Other please indicate:	☐	Other EDD please indicate:	☐

	Signature	Date/Time
Sampled By	Jessica L. Fortoni	8/15/13 / 1800
Relinquished By	Jessica L. Fortoni	8/16/13 / 1:00
Received By	[signature]	8/16/13 1:00
Received @ Lab By	[signature]	8/19/13 1056

Total Cost:

P.I.F.

PARADIGM

Chain of Custody Supplement

Client: TVGA **Completed by:** SSL

Lab Project ID: 133219 **Date:** 8/21/13

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt Yes	No	N/A
Container Type	X		
Comments	2V		
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		
Comments	3° temp blank		
Sufficient Sample Quantity	X		
Comments			

APPENDIX F

MILLENNIUM PARKWAY
ENVIRONMENTAL CONSTRUCTION PLANS

ENVIRONMENTAL NOTES

GENERAL

1. THIS CONTRACT IS DESIGNED IN GENERAL ACCORDANCE WITH THE SITE MANAGEMENT PLAN AND COMBINED INSTITUTIONAL CONTROL PLAN / OPERATIONS AND MAINTENANCE PLANS FOR THE FORMER ROBLIN STEEL AND ALUMAX SITES RESPECTIVELY. HOWEVER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE REQUIREMENTS OF EACH OF THESE PLANS. ADDITIONAL GUIDANCE IS PROVIDED IN THE NOTES THAT FOLLOW, WITH REFERENCE TO WHERE COPIES OF THE MANAGEMENT PLANS AND ASSOCIATED GUIDANCE MATERIALS CAN BE OBTAINED.

2. CHAUTAUQUA COUNTY DEPARTMENT OF PUBLIC FACILITIES (CCDPF) WILL HAVE A DESGINATED ENVIRONMENTAL INSPECTOR ON-SITE TO ASSIST, MONITOR, AND APPROVE ALL ACTIVITIES ON BOTH OF THE BROWNFIELD SITES. THE CONTRACTOR SHALL PROVIDE WEEKLY SCHEDULES OF ANTICIPATED ACTIVITIES ON THESE SITES. ANY CHANGES TO THIS SCHEDULE SHALL BE MADE WITH PROPER ADVANCE NOTICE TO THE CCDPF.

3. WORK SHALL NOT BE PERFORMED ON THESE BROWNFIELD SITES WITHOUT PROPER NOTIFICATION.

FORMER ROBLIN STEEL (NYSDEC SITE #B-00173-9):

1. ALL WORK CONDUCTED AT THE FORMER ROBLIN STEEL SITE SHALL BE CONDUCTED IN CONFORMANCE WITH THE *NOVEMBER 2010 SITE MANAGEMENT PLAN (SMP)* A COPY OF WHICH CAN BE OBTAINED FROM THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) - DIVISION OF ENVIRONMENTAL REMEDIATION - REGION 9 AT 270 MICHIGAN AVENUE, BUFFALO, NY 14203, (716)-851-7220.

2. THE NYSDEC REQUIRES A 60 DAY CHANGE OF USE NOTIFICATION PRIOR TO ANY WORK AT THIS SITE. NOTIFICATION PROCEDURES ARE CONTAINED IN SECTION 1.4 OF NYSDEC'S DER-10 MAY 3, 2010 AVAILABLE AT: HTTP://WWW.DEC.NY.GOV/REGULATIONS/2393.HTML. ADDITIONAL NOTIFICATION PROCEDURES ARE INCLUDED IN THE EXCAVATION WORK PLAN WHICH IS INCLUDED IN THE SITE MANAGEMENT PLAN.

3. A COVER SYSTEM CONSISTING OF A VEGETATED SOIL LAYER (12-INCH) WITH AN UNDERLYING DEMARCATION LAYER (AN ORANGE PLASTIC MESH) HAS PREVIOSLY BEEN INSTALLED ACROSS THE ENTIRE FORMER ROBLIN STEEL SITE. SOIL LOCATED ABOVE THE EXISTING DEMARCATION LAYER CAN REUSED WITHOUT SAMPLING.

4. FOLLOWING ANY SOIL COVER REMOVAL AND/OR OTHER INVASIVE ACTIVITIES, THIS COVER SYSTEM MUST BE REPLACED. THE COVER SYSTEM SHALL CONSIST OF A MINIMUM OF 12-INCHES OF SOIL COVER (CAPABLE OF SUPPORTING VEGETATION) WITH AN UNDERLYING DEMARCATION LAYER. NON-VEGETATED AREAS (I.E. BUILDINGS ROADWAYS, PARKING LOTS, ETC.) MUST BE COVERED BY A PAVING SYSTEM OR CONCRETE OF AT LEAST 6-INCHES IN THICKNESS.

5. ANY INTRUSIVE WORK THAT WILL PENETRATE THE SOIL COVER SYSTEM, OR ENCOUNTER OR DISTURB THE REMAINING CONTAMINATION, INCLUDING ANY MODIFICATIONS OR REPAIRS TO THE EXISTING SOIL COVER, SHALL BE PERFORMED IN COMPLIANCE WITH THE EXCAVATION WORK PLAN.

6. THE EXCAVATION WORK PLAN DETAILS INCLUDE: SOIL SCREENING (INITIAL FIELD TESTING), STOCKPILING, EXCAVATION/LOAD OUT, OFF SITE TRANSPORT AND DISPOSAL, POTENTIAL MATERIAL REUSE, FLUIDS MANAGEMENT, COVER RESTORATION, AND PROCEDURES FOR USE OF OFF-SITE BACKFILL. THE EXCAVATION WORK PLAN ALSO IDENTIFIES THE STORMWATER, COMMUNITY AIR MONITORING, ODOR AND DUST CONTROL REQUIREMENTS, AND THE CONTINGENCY PLAN THAT MUST BE FOLLOWED.

7. STORMWATER MANAGEMENT MUST FOLLOW THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

FORMER ALUMAX SITE (NYSDEC #VCP V00589-9):

1. ALL WORK CONDUCTED AT THE FORMER ALUMAX SITE SHALL BE CONDUCTED IN CONFORMANCE WITH THE *JUNE 23, 2004 COMBINED INSTITUTIONAL CONTROL PLAN / OPERATIONS AND MAINTENANCE PLAN*, A COPY OF WHICH CAN BE OBTAINED FROM THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) - DIVISION OF ENVIRONMENTAL REMEDIATION - REGION 9 AT 270 MICHIGAN AVENUE, BUFFALO, NY 14203, (716)-851-7220.

2. THE NYSDEC REQUIRES A 60 DAY CHANGE OF USE NOTIFICATION PRIOR TO ANY WORK ON THIS SITE. NOTIFICATION PROCEDURES ARE CONTAINED IN SECTION 1.4 OF NYSDEC'S DER-10 MAY 3, 2010 AVAILABLE AT: HTTP://WWW.DEC.NY.GOV/REGULATIONS/2393.HTML.

3. CURRENTLY THERE IS NO COVER SYSTEM ACROSS THE FORMER ALLUMAX SITE.

4. ALL PROJECT DISTURBANCE AREAS WITHIN THIS SITE MUST HAVE A COVER SYSTEM INSTALLED IN ACCORDANCE WITH THE SITE MANAGEMENT PLAN. THE COVER SYSTEM SHALL CONSIST OF ONE OF THE FOLLOWING:
   a) SOIL: 12-INCHES OF VEGETATED SOIL UNDERLAIN BY A DEMARCATION LAYER IN OUTDOOR AREAS; PAYMENT ITEM 207.21 PER SECTION 737.0101
   b) ASPHALT: A MINIMUM OF 6 INCHES OF MATERIAL (ASPHALT AND SUBBASE MATERIAL) IN AREAS THAT WILL BECOME ROADS SIDEWALKS AND PARKING LOTS.
   c) CONCRETE: A MINIMUM OF 6 INCHES OF MATERIAL (CONCRETE AND SUBBASE MATERIAL IN AREAS THAT WILL BECOME SLAB-ON-GRADE STRUCTURES, ROADS SIDEWALKS AND PARKING LOTS IN LIEU OF ASPHALT.

100 - 123 RUGGLES STREET (TALCOTT STREET RIGHT-OF-WAY (ROW) - NORTH OF RUGGLES STREET AND EAST OF TALCOTT STREET) NYSDEC SPILL NO. 0901423

1. PETROLEUM-DISPENSING FACILITIES (EG: A DISPENSING PUMP, FILL PORT AND VENT PIPES) WERE FORMERLY LOCATED IN THIS PORTION OF THE TALCOTT ROW. THESE FACILITIES WERE REMOVED IN 2011, HOWEVER, PETROLEUM CONTAMINATION MAY STILL BE LOCATED UNDER THE ADJACENT PAVEMENT AT DEPTHS GREATER THAN 4 TO 5 FEET.

2. IF PETROLEUM CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION, NOTIFY THE NEW YORK STATE SPILL HOTLINE IMMEDIATELY (WITHIN 2 HOURS OF DISCOVERY) AT (800) 457-7362. NEW YORK STATE DEPARTMENT OF CONSERVATION REGION 9 SPILLS DIVISION CAN BE REACHED AT (716) 851-7220. REFERENCE NYSDEC SPILL NO. 0901423.

3. LABORATORY ANALYSIS REQUIRED BY THE NYSDEC SHALL BE PAID UNDER ITEM 205.0401.

BROWNFIELD SITE EXCAVATION PROCEDURES AND GUIDELINES

1. PROCEDURES, METHODS, AND PAY ITEMS ASSOCIATED WITH EXCAVATIONS AND RE-USE OF, OR DISPOSAL OF, EXISTING SOILS/MATERIALS ON THE FORMER ROBLIN STEEL AND ALLUMAX SITES ARE PROVIDED HERE FOR GENERAL GUIDANCE AND FOR BIDDING PURPOSES. REFER TO THE NOTED SPECIFICATIONS FOR A FULL UNDERSTANDING OF THE WORK TO BE PERFORMED. NO SEPARATE OR ADDITIONAL PAYMENTS WILL BE MADE FOR OTHER INCIDENTAL WORK REQUIRED TO BE IN COMPLIANCE WITH THE SITE MANAGEMENT PLANS FOR THESE SITES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND, AND TO BE IN FULL COMPLIANCE WITH THESE SITE MANAGEMENT PLANS.

   a) ALL EXCAVATIONS (ITEM 203.02 OR 206.02) OF EXISTING SOILS/MATERIALS ON THESE SITES SHALL BE INSPECTED BY THE CCDPF ENVIRONMENTAL INSPECTOR DURING THE EXCAVATION. THE CONTRACTOR SHALL PROVIDE THE ENVIRONMENTAL INSPECTOR WITH PROPER ACCESS TO THESE MATERIALS FOR BASIC CONTAMINATION FIELD TESTING. AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR:
      i. EXCAVATED SOILS/MATERIALS (ITEM 203.02 AND 206.02) THAT ARE NOT VISIBLY STAINED, DISCOLORED, OR THAT PRODUCE ELEVATED PHOTOIONIZATION DETECTOR (PID) READINGS (SUSTAINED READINGS OF 5 PPM OR GREATER) CAN BE IMMEDIATELY REUSED (ITEM 203.03) ON-SITE WITHOUT ANY FURTHER TESTING.
      ii. EXCAVATED SOILS/MATERIALS (ITEM 203.02 AND 206.02) THAT ARE DETERMINED TO BE STAINED, DISCOLORED, OR THAT PRODUCES ELEVATED PID READINGS (SUSTAINED READINGS OF 5 PPM OR GREATER) SHALL BE STOCKPILED ON-SITE FOR SAMPLING AND LABORATORY TESTING. SEGREGATION AND STOCKPILING SHALL BE PAID FOR UNDER ITEM 205.02NN. LABORATORY ANALYSIS SHALL BE PAID UNDER ITEMS 205.040X. THE RESULTS OF THE LAB TESTING WILL DETERMINE IF THE SOIL/MATERIAL IS:
         1. TO BE REUSED ON-SITE UNDER ITEM 205.06NN
         2. CONTAMINATED NON-HAZARDOUS WASTE SOIL TO BE DISPOSED OF OFF-SITE UNDER ITEM 205.0502NN
         3. CONTAMINATED HAZARDOUS WASTE SOIL TO BE DISPOSED OF OFF-SITE UNDER ITEM 205.0501NN

   b) ANY EXCAVATIONS DEFINED UNDER SECTION (a) DETERMINED TO BE RE-USABLE ON-SITE SHALL:
      i. ONLY BE USED ON THE BROWNFIELD SITE FROM WHICH IT WAS EXCAVATED.
      ii. BE PLACED BELOW THE PROPOSED COVER SOIL / DEMARCATION LAYER.
      iii. NOT BE USED WITHIN A COVER SOIL LAYER (TOP 12" OF SOIL), WITHIN LANDSCAPING BERMS, OR AS BACKFILL FOR SUBSURFACE UTILITY LINES.

2. THE EXISTING SOIL COVER MATERIAL (TOP 12" +/-) LOCATED ABOVE THE DEMARCATION LAYER ON THE FORMER ROBLIN STEEL SITE, IF EXCAVATED, CAN BE REUSED WITHOUT SAMPLING. HOWEVER, SINCE ALL AREAS ON THIS SITE REQUIRE A MINIMUM OF 12-INCHES OF SOIL COVER, THESE AREAS SHOULD REMAIN UNDISTURBED EXCEPT AS SPECIFICALLY NECESSARY TO CONSTRUCT COMPONENTS OF THIS PROJECT.

3. THE FOLLOWING TABLE SUMMARIZES BOTH THE ESTIMATE OF REQUIRED EXCAVATIONS ON EACH OF THE BROWNFIELD SITES, AND BASED UPON PREVIOUSLY PERFORMED TESTS BY CCDPF, QUANTITIES OF SAMPLING AND LABORATORY TESTING, AS WELL AS QUANTITIES OF OFF-SITE DISPOSAL. NOTE THAT THESE QUANTITIES ARE ESTIMATES ONLY AND THAT ONLY ACTUAL FIELD VERIFIED QUANTITIES WILL BE PAID.

BROWNFIELD SITE (REFER TO DWG. ED-2 FOR LOCATIONS AND BOUNDARIES)	SERIALIZATION (NN)	REQUIRED EXCAVATIONS (ITEMS 203.02 & 206.02)	ESTIMATE OF MATERIALS PASSING FIELD TEST (IMMEDIATE RE-USE UNDER ITEM 205.06NN)	ESTIMATE OF MATERIALS TO BE STOCKPILED (ITEM 205.02NN)	ESTIMATE OF LABORATORY ANALYSIS 205.040X	ESTIMATE OF MATERIALS THAT WILL PASS LAB TESTS (RE-USE UNDER ITEM 205.06NN)	ESTIMATE OF CONTAMINATED NON-HAZARDOUS MATERIALS THAT WILL REQUIRE OFF-SITE DISPOSAL (ITEM 205.0502NN)	ESTIMATE OF CONTAMINATED HAZARDOUS MATERIALS THAT WILL REQUIRE OFF-SITE DISPOSAL (ITEM 205.0501NN)
FORMER ROBLIN STEEL SITE	01	325 CY	125 CY	200 CY	2	0 CY	255 TONS (180 CY)	30 TONS (20 CY)
FORMER ALUMAX SITE	02	6000 CY	3500 CY	2500 CY	6	500 CY	2100 TONS (1500 CY)	700 TONS (500 CY)

4. THE CONTRACTOR SHOULD TAKE NOTE THAT ALL SOILS/MATERIALS EXCAVATED FROM EITHER OF THESE BROWNFIELD SITES MUST EITHER BE:
   a) USED ON-SITE IN AN APPROVED LOCATION PER ITEM 205.06NN.
   b) PROPERLY DISPOSED OF AS PER ITEM 205.0501NN OR ITEM 205.0502NN

5. IF THE CONTRACTOR ELECTS TO PERFORM ANY WORK/OPERATIONS ON THESE SITES NOT SPECIFICALLY CALLED FOR ON THE PLANS, OR REQUIRED AS DETERMINED BY THE ENGINEER, HE/SHE SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE WORK AND FOR BEING IN COMPLIANCE WITH THE SITE MANAGEMENT PLANS. ANY DEVIATIONS FROM THE CONTRACT PLANS SHOULD BE DISCUSSED AND APPROVED WITH THE ENGINEER AND/OR THE CCDPF ENVIRONMENTAL INSPECTOR BEFOREHAND.

STOCKPILING / SAMPLING / LABORATORY TESTING NOTES

1. ANY SOILS/MATERIALS FAILING THE INITIAL FIELD TESTING SHALL BE STOCKPILED ON-SITE. SEGREGATION AND STOCKPILING WILL BE DONE ON A TIERED APPROACH, AS IDENTIFIED UNDER ITEM 205.02NN, BUT GENERALLY WILL NOT BE REQUIRED AT A GREATER FREQUENCY THAN ONE (1) SAMPLE LAB TEST FOR EVERY 500 CY.

2. STOCKPILES SHALL BE SEPARATED IF THE SOILS/MATERIALS SOURCE/LOCATION, AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR, IF DEEMED TO BE DIFFERENT FROM OTHER STOCKPILES.

3. ALL SAMPLING WILL BE DONE BY THE CCDPF ENVIRONMENTAL INSPECTOR WHOM WILL ALSO BE RESPONSIBLE FOR COORDINATING WITH THE LABORATORY FOR TESTING.

4. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE LABORATORY TESTING AS IDENTIFIED UNDER ITEM 205.040X.

5. THE CONTRACTOR MAY SELECT THE LABORATORY OF HIS CHOICE PROVIDED THEY ARE APPROVED AS PER ITEM 205.040X.

STOCKPILING / SAMPLING / LABORATORY TESTING NOTES (CONTINUED)

6. ALL SOILS/MATERIALS SHALL REMAIN IN THEIR STOCKPILES UNTIL THE CCDPF ENVIRONMENTAL INSPECTOR HAS RECEIVED THE RESULTS OF THE LAB TESTING AND DETERMINED IF:
   a) THE MATERIALS WILL BE USED AS FILL ON-SITE.
   b) THE MATERIALS MUST BE DISPOSED OFF OFF-SITE.

7. IF THE CCDPF ENVIRONMENTAL INSPECTOR APPROVES ANY SOILS/MATERIALS EITHER THROUGH THE INITIAL FIELD TESTING, OR AFTER LABORATORY TESTING, IT IS EXPECTED THAT THESE MATERIALS WILL BE USED IN AN APPROPRIATE LOCATION ON-SITE.

8. CONTAMINATED NON-HAZARDOUS WASTE SOILS APPROVED FOR OFF-SITE DISPOSAL UNDER ITEM 205.0502NN SHALL BE SENT TO AN APPROVED SOLID WASTE LANDFILL. APPROVAL OF THIS FACILITY SHALL BE COORDINATED WITH THE CCDPF ENVIRONMENTAL INSPECTOR. QUANTITY OF LABORATORY ANALYSIS (ITEMS 205.040X) REQUIRED PRIOR TO DISPOSAL SHALL BE DETERMINED BY THE SOLID WASTE ANALYST.

9. CONTAMINATED HAZARDOUS WASTE SOILS APPROVED FOR OFF-SITE DISPOSAL UNDER ITEM 205.0501NN SHALL BE SENT TO AN APPROVED PART 360 HAZARDOUS WASTE LANDFILL. APPROVAL OF THIS FACILITY SHALL BE COORDINATED WITH THE CCDPF ENVIRONMENTAL INSPECTOR. PROPER WASTE MANIFESTS SHALL BE SUBMITTED ON ALL WASTE SOIL MATERIAL DISPOSED OF UNDER ITEM 205.0501NN. QUANTITY OF LABORATORY ANALYSIS (ITEMS 205.040X) SHALL BE DETERMINED BY THE HAZARDOUS WASTE LANDFILL PRIOR TO DISPOSAL.

10. IF THE CONTRACTOR ELECTS ON HIS OWN TO DISPOSE OF ANY SOILS/MATERIALS THAT HAVE OTHERWISE BEEN APPROVED OR ARE PENDING APPROVAL, HE SHALL DO SO BOTH AT HIS OWN COSTS, AND IN ACCORDANCE WITH THE SITE MANAGEMENT PLAN.

11. THE CONTRACTOR SHALL INCORPORATE THE NECESSARY STEPS AND TIMEFRAMES INTO HIS CONSTRUCTION SCHEDULE.
   a) ALL FIELD TESTING WILL BE DONE THE DAY OF (DURING) EXCAVATION.
   b) IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE STOCKPILING SAMPLING, AND LABORATORY TESTING WITH THE CCDPF ENVIRONMENTAL INSPECTOR.
   c) IT IS ESTIMATED THAT SAMPLING / LAB TESTING WILL TAKE APPROXIMATELY ONE (1) WEEK, THOUGH THIS WAY VARY FROM LAB TO LAB. EXPEDITED TESTING MAY BE AVAILABLE AT SOME LABS.

12. THE ESTIMATED QUANTITIES FOR ITEMS 203.03, 205.0501NN, 205.0502NN AND 205.06NN, IN THE TABLE CONTAINED IN THESE NOTES ARE APPROXIMATE AND FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL MAKE NO CLAIM FOR EXTRA PAYMENTS OR DELAYS IF THESE ESTIMATED QUANTITIES ARE LATER DETERMINED TO BE INACCURATE. THE PROCEDURES OUTLINED IN THE PLANS AND CONTRACT BOOK SHALL BE FOLLOWED FOR ALL EXCAVATIONS ON THESE SITES AND COMPENSATION TO THE CONTRACTOR WILL BE MADE ONLY UNDER THE IDENTIFIED SPECIFICATIONS AT THE BID PRICES IN THE CONTRACT.

REVISION	DESCRIPTION	DATE	BY

TVGA CONSULTANTS
620 MAIN STREET
BUFFALO, NEW YORK 14202-1906
P. 716.849.8739
F. 716.856.0981
WWW.TVGA.COM

CHAUTAUQUA COUNTY DEPT. OF PUBLIC FACILITIES
454 NORTH WORK STREET - FALCONER, NEW YORK 14733

DESIGNED BY ETF	DATE 10/2012	SHEET TITLE ENVIRONMENTAL NOTES	
DRAWN BY TJB	DATE 10/2012		
CHECKED BY GMW	DATE 10/2012		
APPROVED BY ETF	DATE 11/2012	PROJECT TITLE CONSTRUCTION MILLENNIUM PARKWAY TALCOTT STREET EXTENSION P.I.N. : 5757.55	DRAWING ED-1
PROJECT NO. 2006.0006.01	SCALE NA		SHEET 23 OF 141

ENGINEERING DIVISION

...\575755 ED 1.dan 10/18/2012 9:40:08 AM

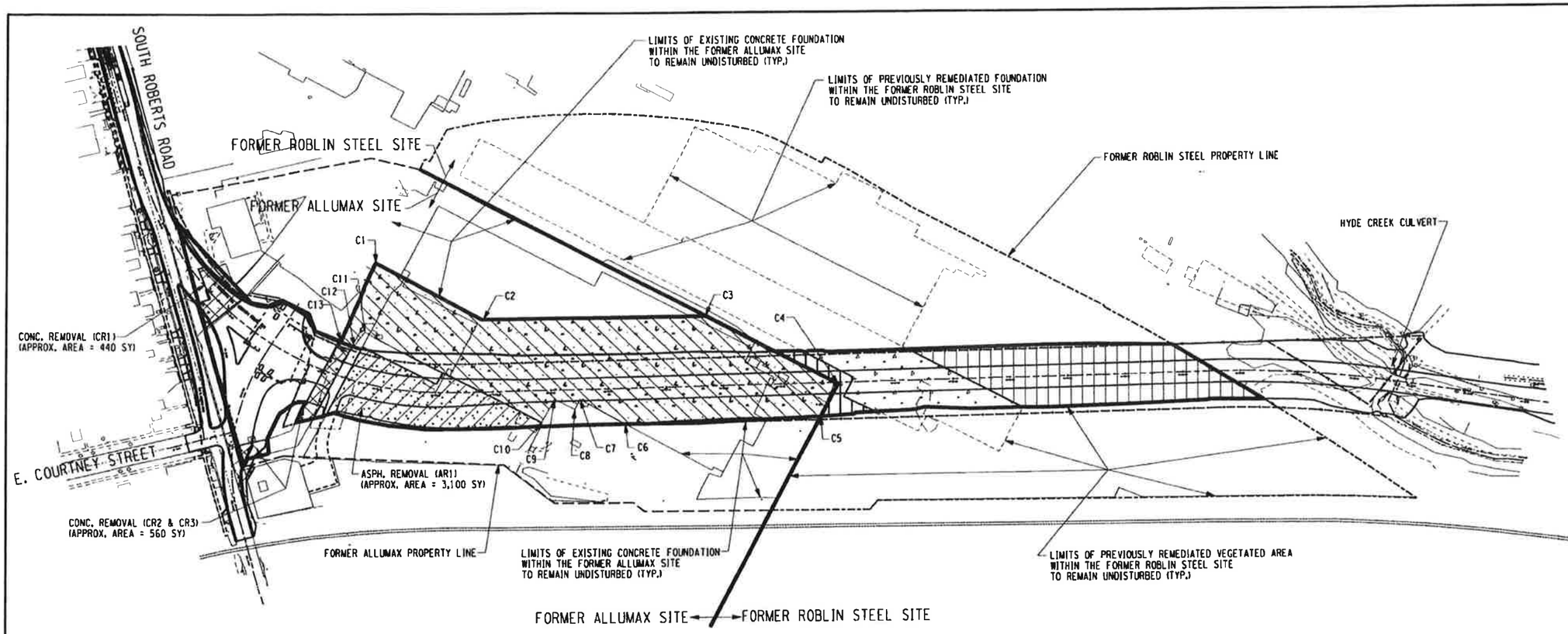


TABLE OF COORDINATES		
PNT. NO.	NORTHING	EASTING
C1	906619.38	950428.13
C2	906655.32	950633.34
C3	906902.33	950933.54
C4	906952.32	951190.9
C5	906888.67	951202.87
C6	906666.76	950944.73
C7	906651.51	950855.44
C8	906631.87	950859.43
C9	906624.34	950820.93
C10	906578.9	950829.13
C11	906512.22	950489.7
C12	906481.18	950490.51
C13	906473.63	950467.64

LIMITS OF DISTURBED AREA WITHIN THE BROWNFIELD SITES

FORMER ALLUMAX SITE

A-1 EXISTING CONCRETE FOUNDATION AREAS OF THE FORMER ALLUMAX SITE TO BE RUBBLIZED (PLAN AREA = 13,500 SY) (SEE GRADING PLAN ON DWG. FOR PROPOSED GRADING)

A-2 EXISTING CONCRETE DRIVEWAY / PARKING AREAS ON THE FORMER ALLUMAX SITE TO BE REMOVED (PLAN AREA = 3,660 SY)

A-3 EXISTING ASPHALT CONCRETE PARKING LOT FOR THE FORMER ALLUMAX SITE TO BE REMOVED (PLAN AREA = 3,100 SY)

NOT DEPICTED BY A PATTERN A-4 EXISTING VEGETATED AREAS ON THE FORMER ALLUMAX SITE (WORK PERFORMED ONLY AS REQUIRED WITHIN R.O.W.)

FORMER ROBLIN STEEL SITE

R-1 CONCRETE FOUNDATION OF THE FORMER ROBLIN STEEL SITE THAT HAS BEEN PREVIOUSLY REMEDIATED. (RUBBLIZED/ CRUSHED CONCRETE, DEMARCATION LAYER PLACED WITH 1' (MIN.) FILL OVER TOP). (SHOWN FOR INFORMATION PURPOSES ONLY)

R-2 VEGETATED AREAS ON THE FORMER ROBLIN STEEL SITE THAT HAS BEEN PREVIOUSLY BEEN REMEDIATED. (DEMARCATION LAYER PLACED WITH 1' (MIN.) FILL OVER TOP). (SHOWN FOR INFORMATION PURPOSES ONLY)

	AREA	FINISHED SECTION	DESCRIPTION OF WORK	ITEM 502.75960005	ITEM 207.21
FORMER ALLUMAX SITE	A-1	FILL > 1'	RUBBLIZE CONCRETE, PLACE ACCEPTED SITE EXCAVATED BACKFILL, AND BUILD PER PLANS (DEMARCATION LAYER REQUIRED)	13,500	13,500
		CUT OR FILL < 1'	RUBBLIZE CONCRETE, EXCAVATE TO 1' BELOW FINISHED GRADE, AND BUILD PER PLANS (DEMARCATION LAYER REQUIRED)		
	A-2	FILL > 1'	REMOVE CONCRETE, AND BUILD PER PLANS (DEMARCATION LAYER REQUIRED)	-	3,660
		CUT OR FILL < 1'	REMOVE CONCRETE, EXCAVATE TO 1' BELOW FINISHED GRADE, AND BUILD PER PLANS (DEMARCATION LAYER REQUIRED)		
	A-3	FILL > 1'	REMOVE ASPHALT CONCRETE, AND BUILD PER PLANS (DEMARCATION LAYER REQUIRED)	-	3,100
		CUT OR FILL < 1'	REMOVE ASPHALT CONCRETE, EXCAVATE TO 1' BELOW FINISHED GRADE, AND BUILD PER PLANS (DEMARCATION LAYER REQUIRED)		
	A-4	FILL > 1'	BUILD PER PLANS (DEMARCATION LAYER REQUIRED)	-	5,400
		CUT OR FILL < 1'	EXCAVATE TO 1' BELOW FINISHED GRADE, AND BUILD PER PLANS (DEMARCATION LAYER REQUIRED)		
FORMER ROBLIN STEEL	R-1	FILL	BUILD PER PLANS	-	920
	R-2	CUT	EXCAVATE TO 1' BELOW FINISHED GRADE, PLACE NEW DEMARCATION LAYER AT BOTTOM OF EXCAVATION, AND BUILD PER PLANS		

NOTES:

1. ALL WORK DONE ON THE BROWNFIELD SITES (THE FORMER ALLUMAX AND ROBLIN STEEL PROPERTIES) SHALL BE DONE IN CONFORMANCE WITH THE ASSOCIATED INDIVIDUAL SITE MANAGEMENT PLANS. SEE ENVIRONMENTAL NOTES ON DWG. ED-1 AND CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING THE REQUIREMENTS OF THESE SITE MANAGEMENT PLANS.
2. THE WORK SHOWN ON THIS DRAWING DESCRIBES THE WORK NECESSARY TO BE IN GENERAL CONFORMANCE WITH THE BROWNFIELD SITE MANAGEMENT PLANS. HOWEVER IT IS THE CONTRACTORS RESPONSIBILITY TO UNDERSTAND THE ENTIRE SITE MANAGEMENT PLANS AND TO PERFORM HIS ACTIVITIES IN COMPLIANCE.
3. DRAINAGE EXCAVATIONS AND BACKFILLS WITHIN THESE BROWNFIELD SITES SHALL CONFORM TO THE INFORMATION SHOWN ON THIS DRAWING AND THE DETAILS ON ED-3.

   SEE DWG. ED-3 FOR ADDITIONAL DETAILS, AND FOR GRADING OUTSIDE ROW.
4. RUBBLIZATION AREA (OUTSIDE ROW) IS SHOWN AS APPROXIMATE AND IS REQUIRED PER THE PROJECT'S SWPPP. LAYOUT OF THESE AREAS TO BE VERIFIED BY THE ENGINEER.
5. QUANTITES SHOWN IN THE TABLE ON THIS DRAWING ARE ESTIMATED AND SHALL BE FIELD MEASURED FOR ACTUAL PAYMENT.

NO.	REVISION	DESCRIPTION	DATE	BY

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454 NORTH WORK STREET - FALCONER , NEW YORK 14733

DESIGNED BY	ETF	DATE	11/2012
DRAWN BY	TJB	DATE	11/2012
CHECKED BY	AAS	DATE	11/2012
APPROVED BY	ETF	DATE	11/2012
PROJECT NO.	2006.0006.01	SCALE	1"=200'

SHEET TITLE: ENVIRONMENTAL PLANS AND DETAILS

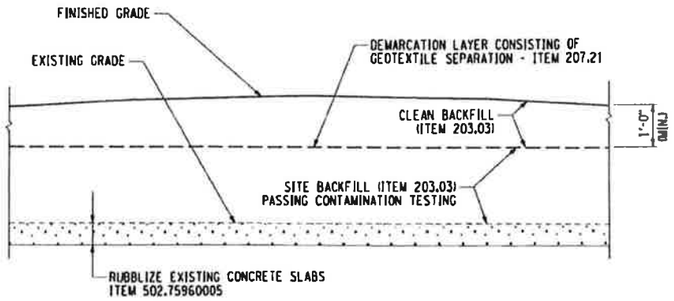
PROJECT TITLE: CONSTRUCTION MILLENNIUM PARKWAY TALCOTT STREET EXTENSION P.I.N. : 5757.55

ENGINEERING DIVISION

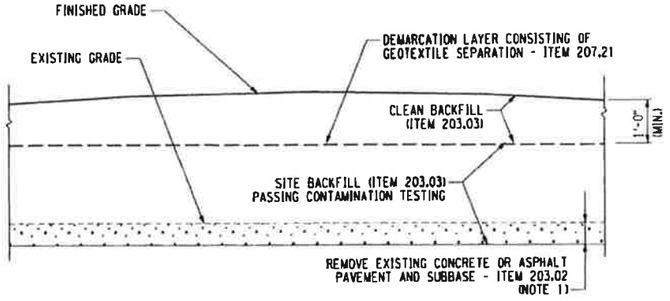
DRAWING: ED-2

SHEET 24 OF 141

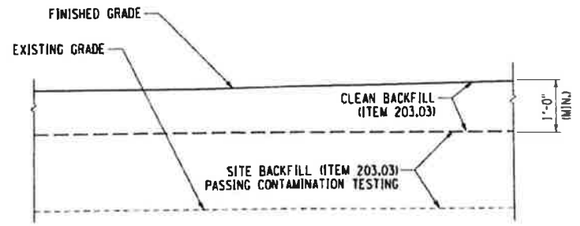
\5757.55_ED_2.dgn 11/15/2012 4:16:39 PM



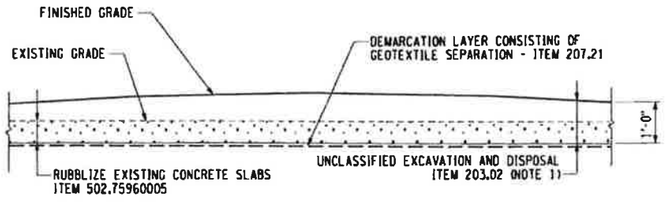
RUBBLIZATION DETAIL - AREA A-1
(FILL > 1'-0")
N.T.S.



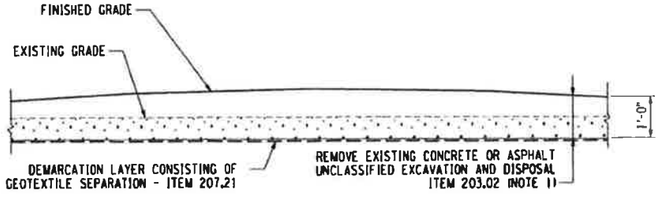
CONCRETE AND ASPHALT REMOVAL DETAIL - AREAS A-2 AND A-3
(FILL > 1'-0")
N.T.S.



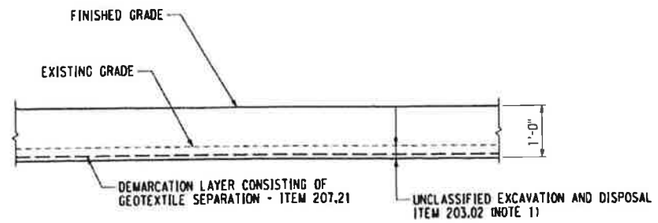
VEGETATED AREAS DETAIL - AREA A-4
(FILL > 1'-0")
N.T.S.



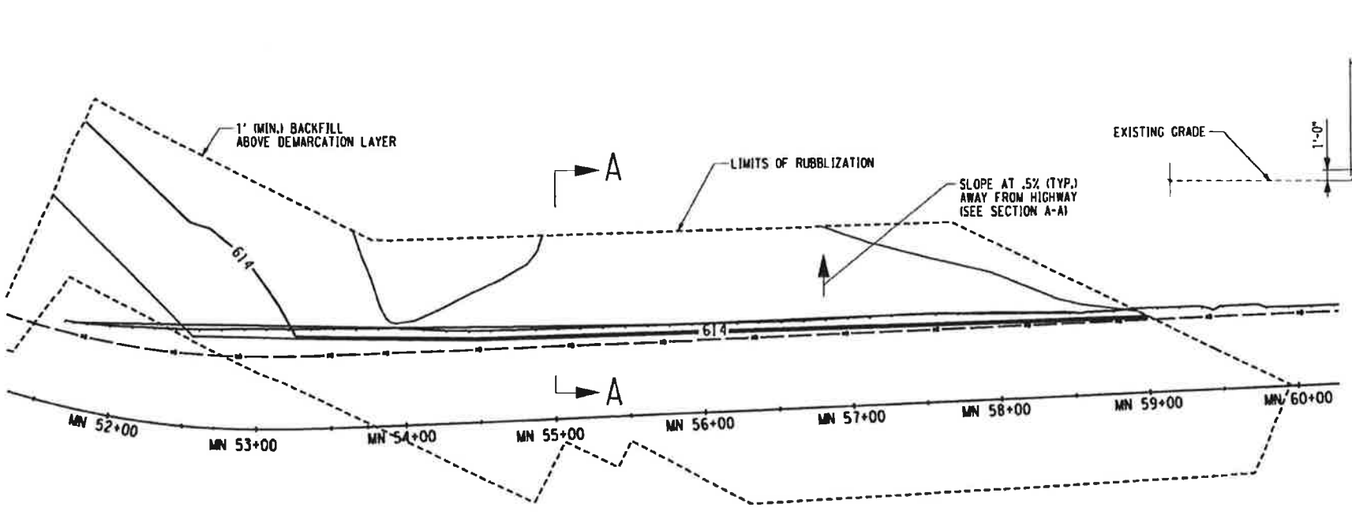
RUBBLIZATION DETAIL - AREA A-1
(CUT OR FILL < 1'-0")
N.T.S.



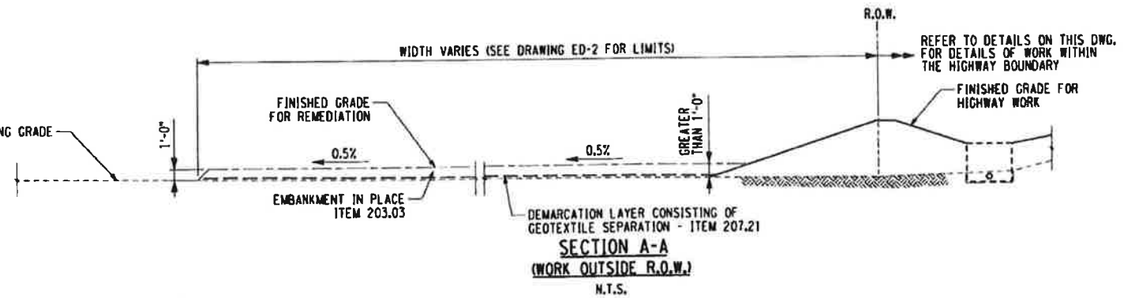
CONCRETE AND ASPHALT REMOVAL - AREAS A-2 AND A-3
(CUT OR FILL < 1'-0")
N.T.S.



VEGETATED AREAS DETAIL - AREA A-4
(CUT OR FILL < 1'-0")
N.T.S.



GRADING PLAN
N.T.S.



SECTION A-A
(WORK OUTSIDE R.O.W.)
N.T.S.

FORMER ALLUMAX SITE DETAILS

NOTES:

1. TEST AND REMEDIATE EXCAVATED SOIL/ASPHALT PER SOIL FILL MANAGEMENT PLAN.

REVISION	DESCRIPTION	DATE	BY

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454 NORTH WORK STREET - FALCONER, NEW YORK 14733
ENGINEERING DIVISION

DESIGNED BY	GMW	DATE	10/2012
DRAWN BY	TJB	DATE	10/2012
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APPROVED BY	ETF	DATE	11/2012
PROJECT NO.	2006.0006.01	SCALE	N.T.S.

SHEET TITLE: ENVIRONMENTAL DETAILS
PROJECT TITLE: CONSTRUCTION MILLENNIUM PARKWAY TALCOTT STREET EXTENSION P.I.N. : 5757.55
DRAWING: ED-3
SHEET 25 OF 141