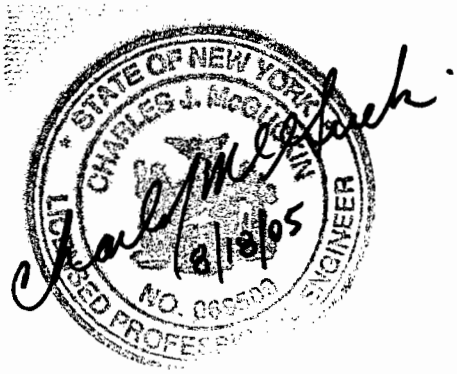
August 17, 2005
Revised 9/1/05

SITE MANAGEMENT PLAN

Buffalo Outer Harbor/Radio Tower Area
Buffalo, New York



Prepared for:

HONEYWELL INTERNATIONAL, INC.
101 Columbia Road
Morristown, New Jersey 07962

Remedial Engineering, P.C.
Environmental Engineers

Remedial *209 Shafter Street, Islandia, New York 11749 ♦ 631-232-2600*

From: Chris Burns

CHA
CLOUGH HARBOUR & ASSOCIATES LLP

441 South Salina Street
Syracuse, NY 13202
Tel: 315-471-3920 Fax: 315-471-3569

LETTER OF TRANSMITTAL

Date: September 1, 2005

1 3 2 5 8 | | | | | 1 1 0 2
13 digit CHA project #

Project Name: Honeywell Buffalo Area Sites

Client Project No.:

RE:

To: NYSDEC - Region 9
270 Michigan Ave.
Buffalo NY 14203

Attention: David Locey

We Are Transmitting to You:

- ☐ Under Separate Cover VIA _____
- ☐ Attached

- ☒ Plans
- ☐ Approval of Subcontractor
- ☐ Copy of Letter
- ☐ Specifications
- ☐ Order on Contract
- ☐ Photographs
- ☐ Report
- ☐ Original Drawings
- ☐ Proposal
- ☐ Form _____
- ☐ Other _____

Number of Copies	DWG./Revision Date	Drawing Number	Description
1			Plan showing Institutional Control Area being a portion of property N/F

These are Transmitted as Noted Below:

- ☐ For Approval
- ☐ Approved as Submitted
- ☐ Resubmit ____ Copies for Approval
- ☒ For Information
- ☐ Approved as Noted
- ☐ Resubmit ____ Copies for Distribution
- ☐ For Action
- ☐ For Corrections
- ☐ Return ____ Corrected Prints
- ☐ As Requested
- ☐ For Review and Comments
- ☐ _____

Remarks: _____

Copies To

Melissa Wells
(Signature)

By:

Note: If Enclosures are not as noted, please notify us at once.

White: Addressee Yellow: Project Notebook Pink: Main File

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FIGURES

APPENDICES

1.0 INTRODUCTION

On behalf of Honeywell International Inc. (Honeywell), this Site Management Plan (SMP) has been prepared for the Buffalo Outer Harbor/Radio Tower Area in the City of Buffalo, Erie County, New York (Site) by Remedial Engineering, P.C. (Remedial Engineering) and Roux Associates, Inc. (Roux Associates). The Outer Harbor/Radio Tower area is located in the southeast corner of a larger parcel of land known as the Buffalo Outer Harbor (Figure 1) in the vicinity of the Niagara Frontier Transportation Authority (NFTA) communications radio tower. The Site is generally bordered to the east by Fuhrmann Boulevard and to the west by Lake Erie (Figure 2).

1.1 Overview and Objectives

The Site is a 0.896-acre parcel of vacant property currently owned by the NFTA. The location of the portion of the Site subject to the requirement of this SMP is provided in Appendix A. The Site consists of the soil cover system that was installed pursuant to a Remedial Order on Consent (Index No. B9-0233-88-07) (NYSDEC, 2003a) entered into by Honeywell with the New York State Department of Environmental Conservation (NYSDEC) and in accordance with the approved Remedial Design/Remedial Action (RD/RA) Work Plan (Remedial Engineering, 2003).

As discussed in the Remediation Action Completion Report (RACR) (Remedial Engineering, 2005), remedial activities were conducted at the Site from June 23, 2003 through December 21, 2003 and August 31, 2004 to September 13, 2004. The remedial activities consisted of two *in situ* chemical oxidation injection rounds using potassium permanganate ($KMnO_4$) to treat the nitrobenzene-impacted soil approximately 8 to 20 feet below land surface (bls). Following the *in situ* chemical oxidation injection rounds, *in situ* stabilization was used to immobilize any residual soil (following the two rounds of *in situ* chemical oxidation) that contained nitrobenzene concentrations above 14 ppm (mg/kg).

The final remedial activity consisted of the installation of a soil cover system. The soil cover system is 24 inches thick and consists of 20 inches of imported clean fill overlain by 4 inches of topsoil. An as-built drawing of the soil cover system is provided in Appendix A. The remedial activities are described in more detail in the RACR (Remedial Engineering, 2005).

The objective of this SMP is to set guidelines for the management of soil during future construction/excavation activities which would disturb the soil cover system or disturb soil within the institutional control area but not under the soil cover system. These activities may include, but are not limited to:

- utility installation; and
- redevelopment/construction of temporary and permanent structures.

The soil sampling and handling requirements to be incorporated into future construction design plans are provided in this document. This SMP is not intended to serve as a remedial action work plan or take the place of future remedial action work plans. Sampling performed in accordance with this SMP will support any construction/excavation activities for the contemplated use of the Site.

The Site is subject to a Declaration of Covenants and Restrictions (institutional control). Site usage limitations that exist as a result of this control are set forth in Section 3.0.

2.0 NATURE AND EXTENT OF CONTAMINATION

To characterize environmental conditions at the Buffalo Outer Harbor Site, a Remedial Investigation and Feasibility Study (RI/FS) was completed by the NYSDEC in two phases, May through November 1994 and June 1995 (Dvirka and Bartilucci Engineers, 1995). The RI/FS found elevated concentrations of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) at depth, as well as metals in the soil. The soil contamination was associated with a zone of stained subsurface soils that were encountered at an approximate depth from 8 to 20 feet bls. The contaminant of concern found in the stained subsurface soils is nitrobenzene, which was detected at concentration levels as high as 13,000 milligrams per kilogram (mg/kg), or parts per million (ppm). Toxicity Characteristic Leaching Procedure (TCLP) testing results indicated that these soils would be a characteristic hazardous waste, based upon the leachable concentrations of nitrobenzene measured. The RI/FS also found slightly elevated levels of select VOCs and SVOCs in groundwater.

As discussed in Section 1.1, the remedy, in part, consisted of treating and stabilizing the nitrobenzene impacted soil where nitrobenzene exceeded the Site cleanup goal of 14 ppm. Traces of nitrobenzene may remain in the soil at concentrations below 14 ppm cleanup goal but above the TAGM 4046-unrestricted use cleanup objective of 0.2 ppm. This would include soil at depths greater than 8 feet bls within the institutional control area but not under the soil cover system. A more detailed discussion of the nature and extent of contamination can be found in the RI/FS (Dvirka and Bartilucci Engineers, 1995) and the RACR (Remedial Engineering, 2005).

3.0 FUTURE USE OF SITE

Future use of the Site will be limited to commercial or industrial purposes. Residential development, schools, playgrounds, and other similar uses will not be permitted per the Declaration of Covenants and Restrictions. It is anticipated that the soil cover system will be integrated into future development plans for the Site (i.e., parking lot).

4.0 PURPOSE AND DESCRIPTION OF SOIL COVER SYSTEM

The purpose of the soil cover system is to eliminate the potential for direct contact with the treated/stabilized material. The soil cover system consists of 4 inches of top soil and 20 inches of clean fill underlain by a 12-ounce non-woven geotextile fabric. Beyond the boundaries of the geotextile fabric, common fill at the edges of the soil cover system were "feathered" into the existing landscape. As part of the stormwater management controls, the soil cover system was sloped to allow for proper drainage. The soil cover system was seeded with a hydro-seed mix of local grasses. The hydro-seed included a tack coat with mulch and fertilizer. The cap is subject to long-term maintenance and monitoring. An as-built of the soil cover system is provided in Appendix B.

5.0 MANAGEMENT OF SOIL

The purpose of this section is to provide the appropriate protocol for soil management for such activities that require disturbance of the soil cover system and/or soil within the institutional control area but not under the soil cover system. The analytical testing of designated soils required prior to handling, and disposal or reuse requirements is also discussed in this section. This SMP is to be implemented during all future development and maintenance/repair activities undertaken by any person that requires subsurface activities at the Site. Health and safety precautions, discussed further in Section 7.0, will be implemented during all handling of designated soils. The maintenance of the soil cover system is discussed in Section 6.0. This SMP may be updated in the future, as necessary, to provide guidance on new conditions encountered and/or as different equipment, technologies, etc., become available.

5.1 Disturbance of Soil Cover System

The soil cover system must be replaced to its original condition or, if necessary, repaired using clean fill from an acceptable borrow source, if any future intrusive work (i.e., construction or utility work) disturbs the soil cover system. The fill used to repair the soil cover system must meet the NYSDEC recommend soil cleanup objectives included in TAGM 4046. The disturbed area must be re-seeded to maintain Site drainage, prevent erosion, and maintain the appropriate cover over the treated/stabilized material.

All excavation work below the soil cover system must be performed under the direction of a licensed professional engineer in the State of New York. The licensed professional engineer will also provide a stamped/signed certification that excavation work below the soil cover system and subsequent repair/replacement of the soil cover system was conducted in a manner consistent with this SMP. The professional engineering certification must be included in the annual certification report discussed in Section 8.0.

5.2 Excavation of Soils at Depths of 8 to 20 Feet Below Land Surface

As discussed in Section 2.0, there is a potential to encounter soil outside the capped area that exceeds the NYSDEC recommended soil cleanup level for nitrobenzene during excavation/construction activities at depths of 8 to 20 feet bls. The Site soil at depths from land surface to 20 feet bls within the institutional control area, but not under the soil cover system,

that is excavated and intended to be removed from the Site must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.

Excavated soil from land surface to 20 feet bls within the institutional control area will be sampled to determine if it may be reused at the Site or if it requires proper offsite disposal at a permitted facility. For excavated soil with visual evidence of contamination (i.e., staining or elevated photoionization detector [PID] measurements), one composite sample and a duplicate sample will be collected for each 100 cubic yards of stockpiled soil. For excavated soil that does not exhibit visual evidence of contamination, one composite sample and a duplicate sample will be collected for 2,000 cubic yards of stockpiled soil, and a minimum of one sample will be collected for volumes less than 2,000 cubic yards.

The composite sample will be collected from five locations within each stockpile. A duplicate composite sample will also be collected. PID measurements (PID with a 10.6 eV [photon energy] lamp) will be recorded for each of the five individual locations. A grab sample will be collected from one of the five individual locations used to make the composite sample with the highest PID measurement. If none of the five individual sample locations exhibit PID readings, one location will be selected at random. A total of three samples will be collected from each stockpile. The samples will be analyzed by a New York State Department of Health (NYSDOH) ELAP-certified laboratory for nitrobenzene using USEPA Method 8270.

Soil samples will be composited by placing equal portions of soil from each of the five composite sample locations into a pre-cleaned, stainless steel mixing bowl. The mixing bowl will be covered between the addition of each soil-sub sample to minimize potential volatilization. The soil will be thoroughly homogenized using a stainless steel scoop or trowel and transferred to pre-cleaned jars provided by the laboratory. Sample jars will then be labeled and a chain-of-custody form will be prepared.

All soil exhibiting visual evidence of contamination or determined to exceed the TAGM 4046 soil cleanup level for nitrobenzene will be placed in roll-off containers or stockpiled away from the construction activities on flat terrain on double layers of polyethylene sheeting, each with a minimum 8 mil thickness between the excavated soils and ground or pavement surface. The

excavated soils will be managed in approximate 100 cubic yard stockpiles. The stockpiles will be constructed with a 2-foot perimeter berm to contain any leachate or runoff from the impacted soil and to prevent the migration of the impacted soil to other portions of the construction area. Polyethylene sheeting will also be placed over the stockpiled soil and anchored to prevent precipitation from entering the soil pile. Impacted soil will remain covered and segregated on the polyethylene sheeting to await proper disposal. Any spillage during the loading of the stockpiled soil for offsite disposal will be cleaned up immediately.

5.3 Disposal of Excavated and Stockpiled Impacted Soil

Excavated or existing stockpiled soil that exceeds TAGM 4046 soil cleanup levels may not be reused onsite and will be transported offsite to a permitted disposal or recycling facility.

In addition to the nitrobenzene analysis described in Section 5.2, sampling and analysis for waste characterization purposes may be required by the waste disposal facility prior to offsite disposal. This analysis may include toxicity characteristics using TCLP of SVOCs and metals, and other RCRA characteristics. Soil determined to be hazardous will be disposed offsite at a permitted facility within 90 days of excavation. All impacted soil will be dewatered or stabilized, if necessary, loaded into transport containers and covered to prevent airborne migration during transportation. Waste will be transported in accordance with New York State Department of Transportation (NYSDOT) requirements. All necessary waste documentation (e.g., waste manifests) will be supplied by the waste facility and retained for recordkeeping.

5.4 Erosion Control Measures

During activities that require disturbance of the soil cover system or excavations within the institutional control area but not under the soil cover system, temporary erosion and sediment control measures, including hay bales, silt fencing, and temporary berms will be used, as necessary, to control the migration of soil to other portions Site. Silt fences will be provided and installed in accordance with the New York Guidelines for Urban Erosion and Sediment Control.

A Storm Water Pollution Prevention Plan (SWPPP) will be prepared, as appropriate, in accordance with the NYSDEC document titled, *Reducing Impacts of Storm Water Runoff from New Development* (NYSDEC, 1993) for land disturbance of one acre or more and will include

discussion of site planning, physical site characterization, erosion prevention, sedimentation controls, and hydraulic loading.

5.5 Dust Control

Dust emissions may occur during excavation and loading activities. Therefore, dust control measures will be implemented during all excavation/construction activities in accordance with NYSDEC TAGM 4031–Fugitive Dust Suppression and Particulate Monitoring program at Inactive Hazardous Waste Sites (NYSDEC, 1989) and the HASP. TAGM 4031 provides guidance on developing a particulate monitoring and fugitive dust suppression program. Dust control measures that may be implemented include, but are not limited to, spraying water mist on accessways and equipment during loading activities, transporting waste loads in properly covered and watertight containers, and limiting areas of soil to be disturbed at any one time. Any subgrade material left exposed prior to the placement of the surface cover for more than 90 days will be covered with a temporary cover (e.g., tarp). The HASP will provide the protocol for air monitoring for particulates in the work zones and identify the level of personal protective equipment required, action levels for the work zones, and engineering controls that correspond to action level exceedances. The HASP is further discussed in Section 7.0.

5.6 Construction Wastewater Management

Construction wastewater may be generated from the following activities:

- personnel and equipment decontamination;
- runoff/run-on control operations in areas of impacted soil; and
- groundwater removed from excavations.

Construction wastewater will be collected and stored onsite in leaktight drums or temporary storage tanks. An in-line bag filter, or equivalent, will be used to remove any particulate from the pumped wastewater prior to discharge to the temporary storage tanks. When a temporary storage tank is full, the wastewater will be sampled and submitted for target analyte list (TAL) metals using USEPA Method 6000-7000 Series and nitrobenzene using USEPA Method 8270 (base neutral extractable hydrocarbons) for disposal/discharge characterization. Any solids recovered from the in-line bag filters or temporary containers will be sampled for nitrobenzene.

Based on the laboratory analytical results, the construction wastewater and any solids will be properly disposed of.

Temporary construction wastewater storage containers will conform to both New York State and Federal requirements. Appropriate controls will be used to prevent spills and overflows, including monitoring, gauging, quick-close shut off valves, and secondary containment. The storage containers, filters, and pumps will be installed within secondary containment. All storage containers will be decontaminated following disposal or discharge activities.

5.7 Access Controls

During any intrusive work, temporary construction fencing will be installed around the area to be disturbed. Any open excavations will be barricaded with temporary controls (e.g., caution tape and traffic cones). The parking lot adjacent to the soil cover system provides sufficient access to the Site. A 6-foot chain link fence runs along the asphalt parking lot and separates the parking lot from the Site. Access to the Site will be controlled and limited to authorized personnel during any intrusive work.

5.8 Institutional Controls

Institutional controls will be in place that will limit future Site use to commercial or industrial use, restrict the disturbance of the soil cover system and soil at depths greater than 8 feet bls within the institutional control area but not under the soil cover system without the NYSDEC consent; prohibit the use of groundwater from beneath the Site without the NYSDEC consent; provide for yearly vegetation inspection and maintenance of the soil cover system capped area as described in Section 6.0.

6.0 MAINTENANCE AND MONITORING OF SOIL COVER SYSTEM

This section describes the site inspection and maintenance activities that will be performed at the Site to monitor the integrity of the soil cover system.

6.1 Inspection

Inspection of the soil cover system will be performed on an annual basis with more frequent inspections following significant storm events and periods of drought. Visual observations will be performed to determine the occurrence of any of the following conditions:

- areas of subsidence or inadequate stormwater runoff;
- areas of desiccation, poor vegetative cover, or erosion; and
- indications of animal, rodent, or insect disturbance.

6.2 Maintenance

Grass on the soil cover system will mowed annually. The recommended mowing height of the soil cover grass is 4 inches and not more than 8 inches. The mowing height should be increased during periods of drought. Areas of the soil cover system (in excess of 100 square feet), which may become desiccated, should be raked out and re-seeded (with import and placement of certified clean topsoil for cracks greater than 3 inches deep or 2 inches wide at the surface) to prevent erosion and deterioration of the soil cover system. Areas of settlement should be promptly filled to design grade and re-seeded as previously described. Damage to the soil cover system from burrowing animals should consist of removing the animal, if necessary, and repairing the soil cover to its original condition using methods previously discussed. Special attention and care shall be used when mowing the soil cover grass to prevent rutting. As such, it is recommended that the soil cover system grass not be mowed or "weed whacked" when wet and equipment turning radii be sufficient to prevent the formation of divots.

7.0 HEALTH AND SAFETY

All intrusive activities will be performed in accordance with all applicable federal, state, and local regulations. Construction/excavation activities to be performed beneath the soil cover system or within the institutional control area will be performed by health and safety trained personnel in accordance with 29 CFR 1910 and 1926. While conducting invasive work at the Site, the Contractor shall provide safe and healthful working conditions. The Contractor shall comply with all New York State Department of Labor regulations and published recommendations and regulations promulgated under the Federal Occupational Safety and Health Act of 1970 and the Construction Safety Act of 1969, as amended, and with laws, rules, and regulations of other authorities having jurisdiction. Compliance with governmental requirements is mandated by law and considered only a minimum level of safety performance. The Contractor shall insure that all work is performed in accordance with recognized safe work practices.

A task-specific HASP will be prepared in accordance with 29 CFR 1926.65 for construction/excavation activities to be performed in suspected areas of impacted soil and/or below the soil cover system. The HASP will include detailed instructions regarding emergency procedures, required training, communications, appropriate personal protection equipment (PPE), air monitoring requirements and action levels, and PPE upgrades and engineering controls that correspond to action level exceedances. The HASP will be available at the Site for personnel reference during all construction/excavation activities.

7.1 Air Monitoring

An ambient air monitoring program will be conducted on a continuous basis (every 15 minutes) during all construction/excavation activities to measure the concentration of particulates in ambient air in the work zone and at the perimeter of the institutional control area. Monitoring will be performed both upwind and downwind of the construction/excavation activities. The monitoring will be conducted using a Dataram 2000™ particulate monitor (manufactured by MIE, Inc.). All measurements will be recorded in a field notebook and available for review by the NYSDEC and NYSDOH. If particulate measurements exceed the action levels provided in the HASP, work will be discontinued and appropriate dust controls measures will be implemented.

A Community Air Monitoring Plan (CAMP) that specifies the components of the ambient air monitoring program will be developed in accordance with the NYSDOH Generic Community Air Monitoring Plan contained in Appendix A1 of the Draft DER-10 (NYSDEC, 2002) and the NYSDEC TAGM 4031 - Fugitive Dust Suppression and Particulate Monitoring Program (NYSDEC, 1989).

8.0 NOTIFICATION AND REPORTING

The NYSDEC shall be notified of activity which threatens the integrity of the soil cover system, or management of soils within the institutional control area that would result in human exposure to soils at depths of 8 to 20 feet bls, unless prior written approval by the NYSDEC is obtained. Therefore, notification of NYSDEC at the address below should precede any such work by at least 60 days, to allow time for review and any necessary revisions of a work plan.

Notification contact is as follows:

David P. Locey
New York State Department of Environmental Conservation
Division of Environmental Remediation
Region 9
270 Michigan Avenue
Buffalo, New York 14203

If buried drums or underground storage tanks are encountered during soil excavation activities, excavation will cease and the NYSDEC will be immediately notified (within a maximum of two hours).

An annual report shall be submitted to the NYSDEC by January 15th of each year. Such annual report shall contain certification by a licensed New York State professional engineer that the institutional controls put in place, pursuant to the Declaration of Covenants and Restrictions, are still in place, have not been altered and are still effective; that the soil cover system has been maintained (as discussed in Section 6.0); and that the conditions at the Site are fully protective of public health and the environment.

If the soil cover system has been breached during the year covered by that Annual Report, the following shall be included in that annual report:

- A certification that all work was performed in conformance with this SMP;
- Plans showing areas and depth of fill removal;
- Copies of daily inspection reports for soil-related issues; and

- A text narrative describing the excavation activities performed, health and safety monitoring performed, quantities and locations of soil/fill excavated, disposal locations for the soil/fill, soil sampling locations and results, a description of any problems encountered, location and acceptability test results for backfill sources, and other pertinent information necessary to document that the site activities were carried out properly.

9.0 REFERENCES

Dvirka and Bartilucci Engineers, Phase 1/ Phase 2 Remedial Investigation Report – Buffalo Outer Harbor Site, December 1995.

NYSDEC, 1989. Technical and Administrative Guidance Memorandum 4031 – Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites, October 1989.

NYSDEC, 1992. "Chapter 4: Storm Water Management and Erosion Control Plan" in Reducing the Impacts of Stormwater Runoff from New Development, April 1992.

NYSDEC, 1994. Technical and Administrative Guidance Memorandum 4046 – Determination of Soil Cleanup Objectives and Cleanup Levels, January 1994.

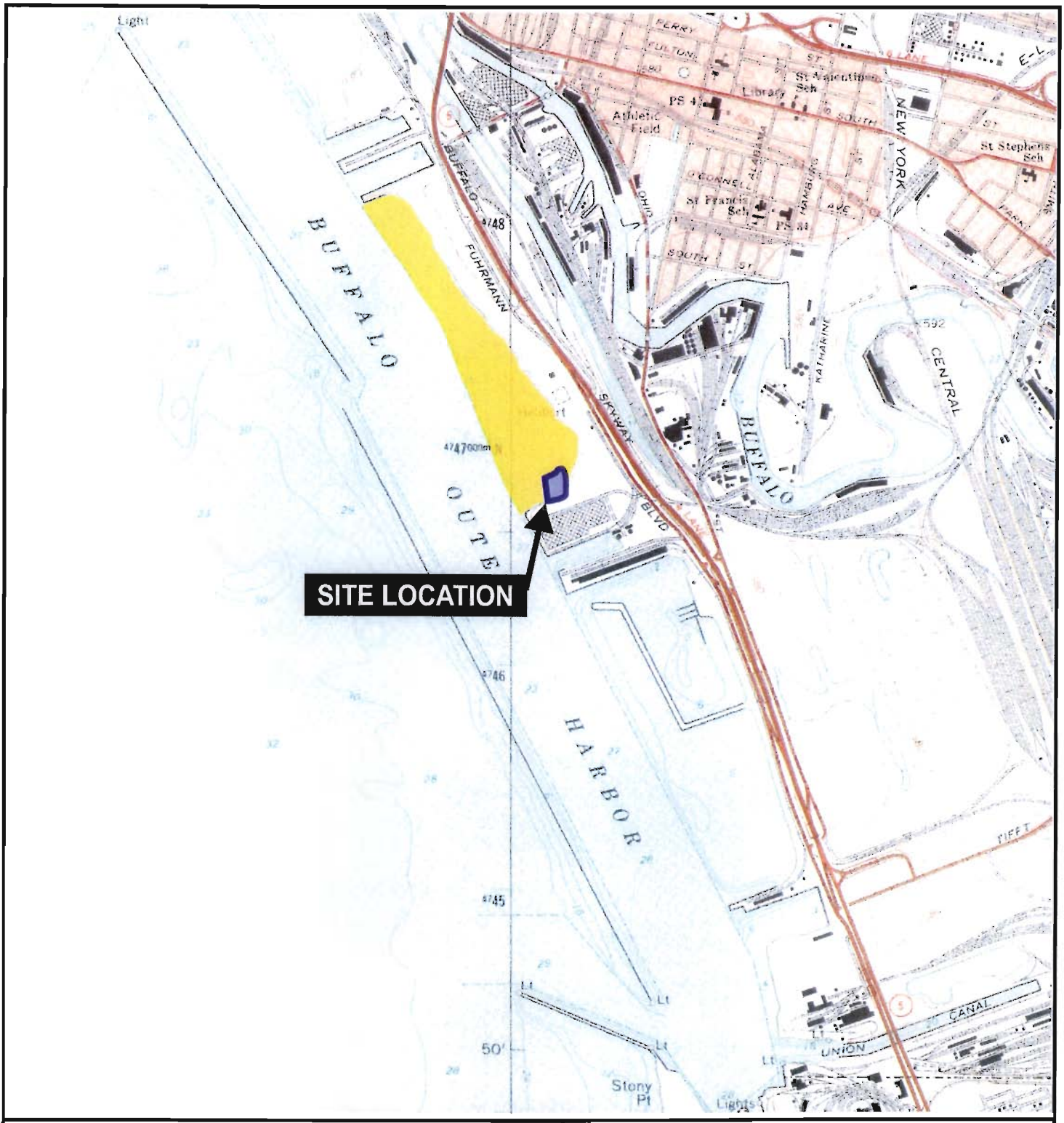
NYSDEC. 1999. Record of Decision, Buffalo Outer Harbor/Radio Tower Area Site, City of Buffalo, Erie County, Site No. 9-15-026, Buffalo, New York. March 1999.

NYSDEC, 2002. Draft DER-10 Technical Guidance for Site Investigation and Remediation, December 2002.

NYSDEC. 2003b. Record of Decision, Buffalo Outer Harbor/Radio Tower Area Site, City of Buffalo, Erie County, Site No.B9-0233-88-07, Buffalo, New York. May 2003.

Remedial Engineering, P.C., March 2003. Remedial Design/Remedial Action Work Plan, Buffalo, New York.

Remedial Engineering, P.C., August 2005. Remedial Action Completion Report, Buffalo, New York.



QUADRANGLE LOCATION

SOURCE:
USGS; 1965. Buffalo, NY
7.5 Minute Topographic Quadrangle

N

0 2000'

Title:

SITE LOCATION MAP

BUFFALO OUTER HARBOR/RADIO TOWER AREA

Prepared for:

HONEYWELL

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: W.S.	Date: 11FEB03	FIGURE
Prepared by: R.K.	Scale: 1:25000	1
Project Mgr.: G.N.	Office: NY	
File No.: AI0310903.CDR	Project No.: 25203Y02	

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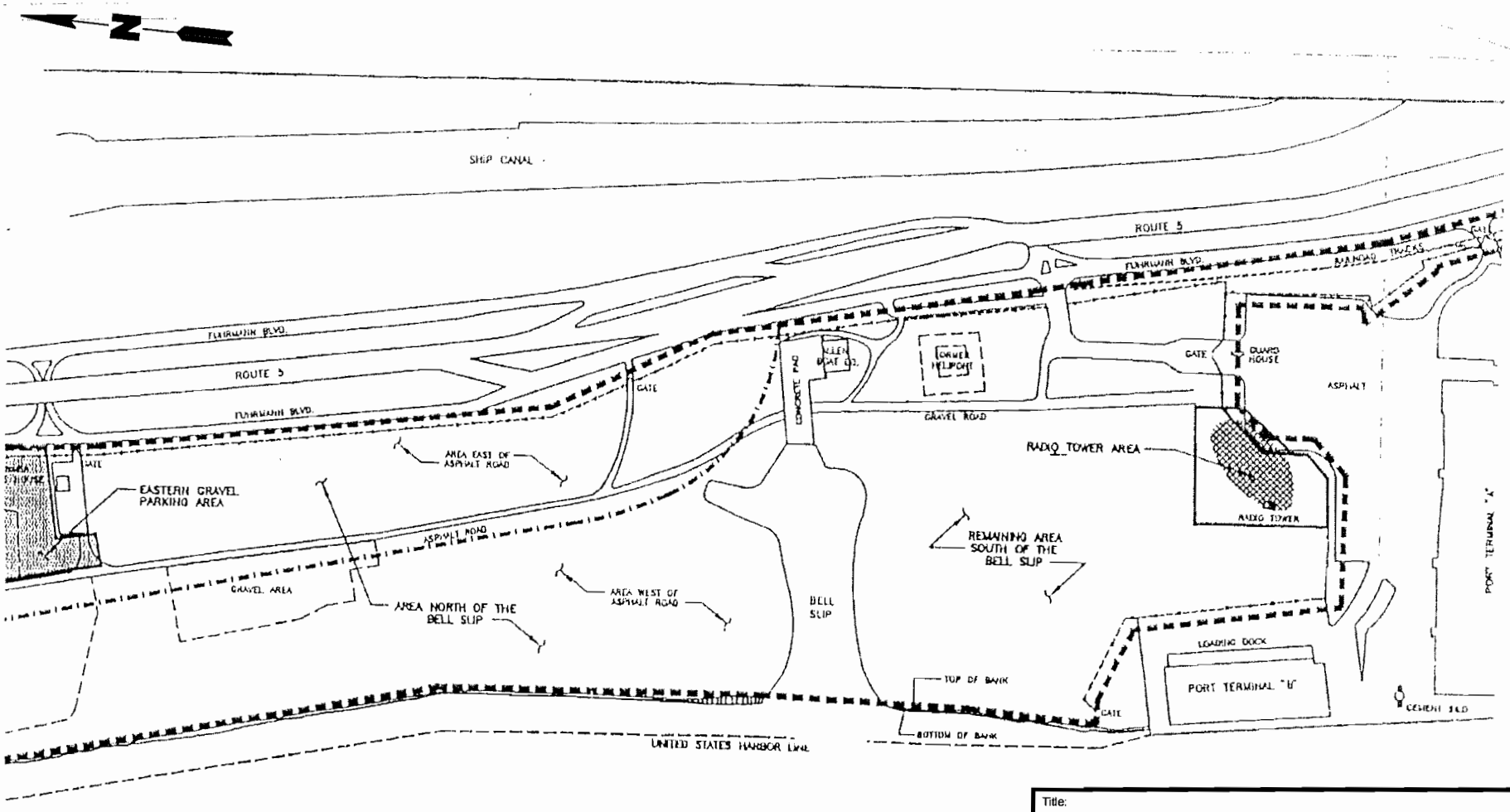

LEGEND

- INVESTIGATION AREA BOUNDARY
- FENCE LINES
- SITE BOUNDARY RTA
- APPROXIMATE DELINEATION OF FUHRMANN BLVD. LANDFILL
- GRAVEL PARKING AREA

Title:

SITE MAP

Prepared for:

HONEYWELL INTERNATIONAL, INC.

ROUX ASSOCIATES, INC. *Environmental Consulting & Management*	Compiled by: W.S.	Date: 11FEB03	FIGURE 2
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr.: G.N.	Office: NY	
	File No.: AI0313205.CDR	Project No.: 25203Y02	

APPENDIX A

Institutional Control Area Plan

MON WELL
GW–20
GROUND=586.07
TOP OF CAP=588.27

LANDS N/F
NIAGARA FRONTIER TRANSPORTATION AUTHORITY
TMP# 122.17–1–1
L.6434 P.43

N 1041144.28
E 1070954.37

N79°26'09"W
106.97'

N63°56'28"W
34.66'

6' CHAIN LINK FENCE

CC–2
PK NAIL
N: 1041161.17
E: 1071297.92
ELEV.=585.64'

MON WELL
GW–18R
GROUND=585.77
TOP OF CAP=588.55
SEAM OF CAP=588.21

CC–2
PK NAIL
N: 1041098.60
E: 1071109.17
ELEV.=585.70'

EDGE OF PAVEMENT

S28°58'36"W
179.04'

AREA:
39,016 SQ.FT.
0.896± ACRES

N25°14'12"E
121.63'

MON WELL
GW–22
GROUND=583.33
TOP OF CAP=586.24
SEAM OF CAP=585.89

CHA #1
PK NAIL
N 1040999.22
E 1071060.99
ELEV.=585.52'

MON WELL
GW–21
GROUND=584.73
TOP OF CAP=586.94

N21°11'57"W
45.89'

LIGHT

MON WELL
GW–23
GROUND=583.70
TOP OF CAP=586.62
SEAM OF CAP=586.27

EDGE OF PAVEMENT

N43°36'11"E
41.53'

S24°26'10"E
164.87'

N38°46'30"E
45.15'

POINT OF BEGINNING

N49°20'15"E
82.58'

MON WELL
GW–19
GROUND=584.95
TOP OF CAP=587.33

6' CHAIN LINK FENCE

N 1040837.61
E 1070935.97

HIGHWAY BOUNDARY LINE

FUHRMANN BOULEVARD

N20°15'55"W
1115.50'

S20°15'55"E
1.65'

S69°12'31"W
100.31'

CAPPED REBAR FND.
N 1040172.57
E 1072347.92

993.90'

POINT OF COMMENCEMENT

S69°44'05"W

LANDS N/F
FREEZER QUEEN FOOS, INC.
TMP# 132.06–1–1.1
L.9547 P.579

LEGEND

MON WELL	MONITORING WELL
CAPPED REBAR	PROPERTY MONUMENTATION (CAPPED REBAR)
LIGHT	LIGHT POLE
	HIGHWAY BOUNDARY LINE
	PARCEL BOUNDARY LINE
	CHAIN LINK FENCE
	EDGE OF PAVEMENT

REFERENCES:

1. DEED DESCRIBING THE LANDS N/F OF "NIAGARA FRONTIER PORT AUTHORITY", FILED IN THE ERIE COUNTY CLERK'S OFFICE (E.C.C.O.) IN LIBER 6434 OF DEEDS, PAGE 43.
2. DEED DESCRIBING THE LANDS N/F OF "FREEZER QUEEN FOODS, INC.", FILED IN ERIE COUNTY CLERK'S OFFICE (E.C.C.O.) IN LIBER 9547 OF DEEDS, PAGE 579.
3. NGS MONUMENT INFORMATION.

NOTES:

1. PLANTIMENTRICS SHOWN HEREON ARE PREPARED BY CLOUGH, HARBOUR & ASSOCIATES, L.L.P FROM AN APRIL 2005 FIELD SURVEY. REF. "ROCH" FB.75, P.67
2. ELEVATIONS ARE BASED ON N.A.V.D. 1988 DATUM REFERENCING NATIONAL GEODETIC SURVEY MONUMENT MONUMENT Q 388, ELEV. = 581.66', USING DIFFERENTIAL LEVELING TECHNIQUES.
3. NORTH ORIENTATION AND COORDINATES SHOWN HEREON BASED ON N.Y.S. PLANE WEST ZONE, NAD 83, REFERENCING MONUMENTS;

BUFFALO R IMPROVEMENT CORP TK	LEHR
N:1040703.604	N:1030094.885
E:1076485.685	E:1076447.880

4. NO BOUNDARY DETERMINATION PERFORMED IN THE PREPARATION OF THIS PLAN.
5. OWNER'S INFORMATION BASED ON TAX INFORMATION.
6. ADDITIONAL FIELDWORK PERFORMED ON JULY 19, 2005. REF. "ROCH" FB.95, P.1

GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft.

I HEREBY CERTIFY THAT THIS PLAN WAS COMPLETED ON JULY 21 2005 USING LISTED REFERENCES AND FIELD NOTES FROM AN ACTUAL FIELD SURVEY COMPLETED ON JULY 19, 2005

DAVID L. STANDINGER NYSPLS. #050107 DATE 8/25/05

STATE OF NEW YORK · DAVID L STANDINGER · 050107 · LICENSED LAND SURVEYOR
David L. Standinger NYSPLS # 050107

CLOUGH HARBOUR & ASSOCIATES LLP
Powers Building, 16 Main Street West, Suite 830,
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PHONE (585) 262-2640
FAX (585) 262-2642
www.cloughharbour.com

Revisions	Drawn By:	App'd. By:	Date:
1. REVISED DATE (JUNE TO JULY)	DLS		8/25/05
0. MAP ISSUED	DJH	DLS	7/22/05

Plan
showing
INSTITUTIONAL CONTROL AREA
being a portion of property N/F
NIAGARA FRONTIER TRANSPORTATION AUTHORITY
City of Buffalo County of Erie State of New York

Scale: 1"=50' | Date: JULY, 2005 | Sheet 1 OF 1

Dwg: I:\13258\survey\acad\VBASE-132582000.dwg Xref: NONE Dview: NONE CHA Project Number: 13258

I:\13258\survey\acad\VBASE-132582000.dwg, 8/25/2005 8:47:28 PM, 1165

APPENDIX B

As-Built Drawing of Soil Cover System

583.64
583.22
583.34
583.20
584.88
582.94
585.75
586.08
585.52
583.07
585.48
585.31
586.46
584.61
583.22
584.43
585.26
586.34
585.48
585.25
582.89
Site BM
TVCA Ex. PK
NAVD Elev. 585.53
Legend:
586.52 Topsc
585.52 Ex. Gro
584.51 Ex. Edg
582
584.80
583.09
582.56
584.22
585.54
585.75
584.85
583.26
585.36
584.99
Baseline
585.20
582.75
585.03
583.49
584.77
583.39
583.04
583.55
584.76
583.56
585.60

585.48

M
Ex. PK
Elev. 585.53

Grid North - NYS West

Legend:

586.52 Topsoil Elev.

585.52 Ex. Ground Elev.

584.51 Ex. Edge of Pavement Elev.

582 Topsoil Contour Line

General Notes

Notes:
This as - built drawing, dated March 17, 2005, was prepared from an instrument survey, with field work completed on September 13, 2004.

It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed surveyor, to alter an item in any way.

Only copies of this survey marked with an original signature and an original embossed or ink seal are the product of the land surveyor.

This map of As- Built data was prepared for vertical depth verification. Vertical datum based upon assumed elevation.
No boundary determination are made or implied.

Only visible utility services and/or encumbrances were located and shown.

Remove not the ancient landmark, which thy fathers have set. Prov. 22:28
Cursed be he that removeth his neighbor's landmark. And the people shall say Amen. Deuteronomy 27:17

Survey by William J Tucker, II PLS #50369
Clear Creek Land Surveying, L.L.C.
P.O. Box 435, Springville, N.Y. 14141
Phone 716-592-5800 Fax 716-592-5566

Revisions:
July 19, 2005 - Site translated to NAD 83 horizontal and NAVD 88 vertical datums.

STATE OF NEW YORK
WILLIAM J. TUCKER II
050369
LICENSED LAND SURVEYOR

583.56

583.19

583.42

585.60

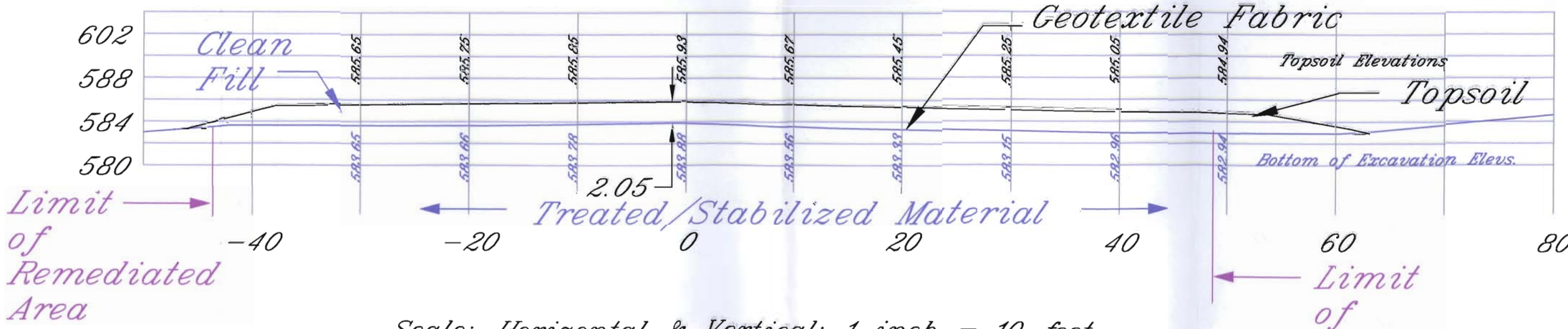
Existing Edge of Pavement

GRAPHIC SCALE

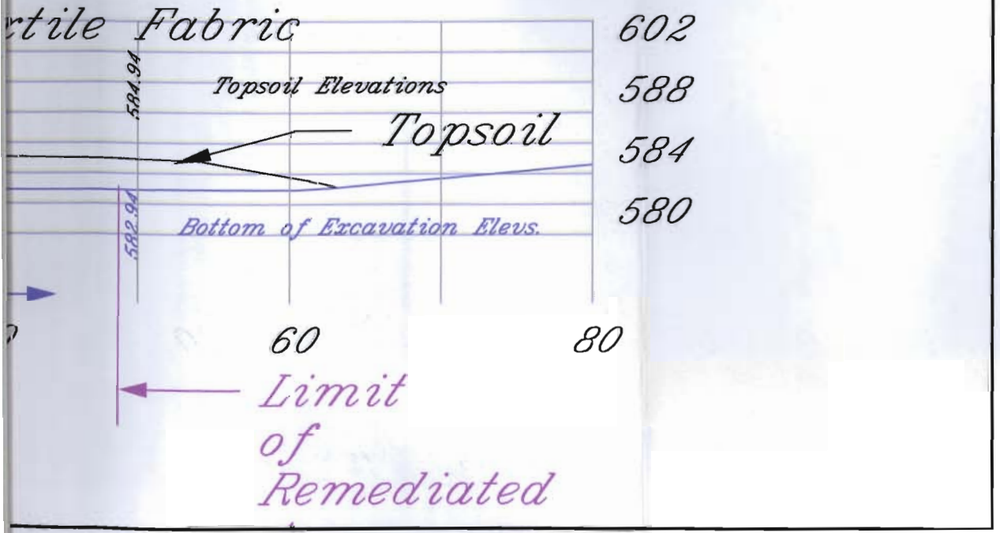
20 0 10 20 40

1 inch = 20 ft.

Typical Cross Section
1+00



Scale: Horizontal & Vertical: 1 inch = 10 feet



No.	Revision/Issue	Date

Firm Name and Address

Clear Creek Land Surveying, LLC
PO Box 435
Springville, NY 14141
ph. 716-592-5800
fax 716-592-5566

Project Name and Address

Outer Harbor Site
Finished Site Conditions
Tug Hill Construction Co.

Project	Sheet
All-Tift Landfill	*1 / 1*
Date: *March 17, 2005*	
Scale: *As shown*	