

Report

Remedial Construction Report
Farwell Road Landfill Remediation
Project

Cattaraugus County, New York

March 2003



Stearns & Wheler, LLC

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March 4, 2003

Mr. David Locey
Environmental Engineer
NYSDEC - Region 9
270 Michigan Avenue
Buffalo, New York 14202

Re: Farwell Road Landfill Remediation
NYSDEC Site No. 9-05-024
Remedial Construction Report
S&W No. 10010.5

RECEIVED

MAR 5 2003

INFORMATION
REL UNREL

Dear Mr. Locey:

The remediation of the Farwell Road Landfill has been completed in accordance with the Department-approved remedial design, as described in the enclosed report. The remedial action that has occurred at the site follows the remedy recommended in the March 2000 NYSDEC Record of Decision. Five copies of this Remediation Construction Report, including this certification letter, final engineering report, and record drawings are submitted on behalf of Cattaraugus County for your review and approval.

With approval of this report, we anticipate that the site remediation activities will be complete. If you have any questions, please feel free to contact our office.

Sincerely,

STEARNS & WHEELER, LLC



Robert A. Armstrong
Principal

RAA/rbc/tld

Enclosures

pc: Mr. David Rivet - Cattaraugus County (w/1 enc.)
Mr. Allan Ormond - Cattaraugus County (w/1 enc.)



certification letter.doc

Stearns & Wheler
Companies

Connecticut Maryland Massachusetts New Hampshire New York North Carolina Virginia

REMEDIAL CONSTRUCTION REPORT
FARWELL ROAD LANDFILL REMEDIATION PROJECT
CATTARAUGUS COUNTY, NEW YORK

Prepared for
CATTARAUGUS COUNTY



A handwritten signature in black ink that reads "Robert Armstrong".

Prepared by

STEARNS & WHEELER, LLC
Environmental Engineers and Scientists
University Centre, Suite 100
415 North French Road
Amherst, New York 14228

March 2003

Project No. 10010.30

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INTRODUCTION

The purpose of this Remedial Construction Report is to document the completion of the remedial program for the Farwell Road Landfill located in the Town of Ischua, Cattaraugus County, New York. This report consists of a certification letter, a final engineering report and record drawings. The certification letter verifies that the program was completed in accordance with the New York State Department of Environmental Conservation-approved remedial design, as modified during construction and detailed in the Final Engineering Report and record drawings.

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- Introduction
- Certification Letter
- Final Engineering Report
- Record Drawings

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CHAPTER 1

INTRODUCTION

1.1 PURPOSE OF REPORT

The purpose of this final engineering report is to document the implementation of New York State Department of Environmental Conservation (NYSDEC) approved remedial design for the Farwell Road Landfill, Town of Ischua, Cattaraugus County, New York. The remedial work was selected to eliminate the significant threats to the environment at the Farwell Landfill. The remedy included repair to the settled sections of the existing landfill cover in order to reduce the potential for groundwater contamination. The final engineering report provides information on this remedial action (RA), including changes to and deviations from the approved remedial design.

1.2 SITE LOCATION

The Farwell Landfill is located on Farwell Road, off of Route 16, in the Town of Ischua, Cattaraugus County, NY. The landfill occupies approximately 16-acres of the northern portion of property owned by the County, located along the western wall of the Ischua Creek Valley. Farwell Road passes along the southern side of the site, while the western side is bounded by a narrow strip of trees and fields. The northern and eastern sides are bounded by a bend in Ischua Creek and an active Norfolk and Southern railroad line (Figure 1). At its closest point, the creek is approximately 400 feet from the landfill.

The scarcely populated area surrounding the landfill is primarily rural and agricultural. The closest off site structure to the landfill is a former schoolhouse located 600 feet from the landfill on the northwest corner of Route 16 and Farwell Road. There are nine residences located with one mile downgradient of the landfill. All drinking water for the residences in the area is supplied by private wells or springs.

1.3 SITE HISTORY

The landfill was constructed in phases to form three contiguous areas. Phase I and II areas of the landfill are unlined. Active disposal of municipal solid wastes, resource recovery ash, and New York

State Department of Environmental Conservation (NYSDEC) approved non-hazardous industrial wastes took place in these areas until 1984, when these areas reached capacity. The Phase III area of the landfill was constructed with a compacted soil liner and leachate collection system. This particular area accepted only commercial, permitted industrial, C&D waste, and incinerator ash. The ash was used primarily as daily cover material. The Phase III portion of the landfill was utilized until 1989.

In 1989 the landfill was closed and capped with a minimum of 18-inches of compacted soil and 6-inches of topsoil following NYSDEC guidelines. Since closure, the cap has an established vegetative cover consisting of mixed grasses and shrubbery. Portions of this cap have settled and ponding has been observed in the depressions. During closure, leachate collection piping was added to the southeastern, eastern, and western sides of the landfill in areas where leachate outbreaks had been observed. Currently, leachate is collected in two 10,000-gallon storage tanks located on the eastern portion of the site, near the garage and transfer station. Leachate is pumped from the tanks as needed and transported off site to a permitted wastewater treatment facility.

South of the landfill, two buildings are present on the site. One building has been utilized for recycling operations since closure of the landfill. The other building is used by the Cattaraugus County Department of Public Works for vehicle storage. The water supply well at this site has been deemed non-potable and is accordingly posted.

A number of investigations have been completed over the years at the landfill in order to determine the extent of groundwater contamination. Water quality data from the monitoring wells and Ischua Creek is available from the 1970s to the present. Groundwater monitoring undertaken prior to the remedial investigation indicated the principal contaminants of concern at the Farwell Landfill are chlorinated volatile organic compounds (VOCs). These include trichloroethene (TCE), vinyl chloride (VC), chloroethane, 1,1-Dichloroethene (1,1-DCE), 1,1-Dichloroethane (1,1-DCA), 1,1,1-Trichloroethane (TCA), and the two isomeric forms of 1,2-Dichloroethene (1,2-DCE) (RI, Stearns & Wheler, 1999). The origin of these compounds is believed to be hazardous waste that was dumped into the landfill.

The following is a historic summary of actions to date.

- In 1975 the former farmland was developed and disposal operations on the Phase I and II areas begin. The landfill received residential, commercial and industrial wastes along with

incinerator ash, sewage treatment sludge, and construction debris until capacity was reached in 1985 and the Phase III area was opened.

- Between 1975 and 1980, according to Community Right to Know records, 8.5 tons of hazardous waste consisting of trichloroethene (TCE) sludge and sawdust were disposed of in the landfill, apparently in the Phase I and II areas.
- In October 1984, an Order on Consent (File # 84-106) was issued to the County to bring the landfill into compliance with New York State regulations (6NYCRR Part 360) for solid waste facilities. The order requires the County to begin hydrogeologic studies, install a groundwater monitoring system and close the landfill.
- In 1987 monitoring for USEPA pollutants is added to the groundwater monitoring program. Results show that groundwater downgradient of the landfill was polluted with chlorinated volatile organic compounds (VOCs), including trichloroethene.
- In 1988, the landfill stopped accepting waste, a closure plan and a quarterly groundwater monitoring plan was established.
- In 1989, closure of the landfill was completed in agreement with the consent order and closure plan. The landfill was capped with 18-inches of low permeability soil, 6-inches of topsoil and seeded. Two former leachate collection ponds are dredged and the debris disposed of in the landfill. One pond was permanently backfilled with clean soils and the other was lined with low permeability compacted soil in order to receive surface runoff from the landfill. The 1990 construction monitoring report certified that the landfill was closed in accordance to the closure plan.
- In 1989, an Order on Consent (File # 89-71) was issued to the County to uphold a 30-year post closure maintenance and monitoring program under New York State solid waste regulations.
- In 1996, the NYSDEC classified the landfill as a Class 2 inactive hazardous waste site following results from the post-closure monitoring data and documentation of hazardous waste disposal in Phase I and II areas of the landfill. Such a classification suggested that the site might represent a significant threat to the public health or environment, and that action might be required.

- An Order on Consent (File # B0489-96-02) was issued to the County in 1998 to complete a Remediation Investigation (RI) to supplement past site investigations and a Feasibility Study (FS) to examine remedial alternatives.
- In February 1999, the Remedial Investigation/Feasibility Study (RI/FS) was completed for Cattaraugus County by Stearns & Wheler, LLC.
- In March 2000, the NYSDEC issued a Record of Decision (ROD) which identified Alternative 3B, Repaired Cap, Institutional Controls and Natural Attenuation as the remedy for this site.
- In July 2001, Stearns & Wheler, LLC, was hired by Cattaraugus County to complete this remedial design and oversee the implementation of the remedial action.

The RI/FS (Stearns & Wheler, LLC, February 1999) defined the extent of on-site and off-site groundwater contamination in two phases. Chemical evidence of pollution was highest in monitoring wells closest to the waste mass. Results from monitoring further downgradient of the landfill showed decreased levels of contamination. The concentrations of chlorinated compounds decline from near the waste mass to areas downgradient at a rate that exceeds the decline of conservative tracer chloride. Geochemical indicators suggest that natural attenuation is occurring on-site. Sediment and surface water tests of the landfill pond, railroad pond and Ischua Creek showed no evidence of contamination impacts. Upstream and downstream samples of Ischua Creek showed similar results.

The FS (Stearns & Wheler, LLC, February 1999) identified possible remedial action technologies; then developed, evaluated, and recommended remedial action alternatives for the remediation of the Farwell site.

The recommended alternative chosen by the New York State Department of Environmental Conservation in the Record of Decision (ROD) included repair of the damaged or settled sections of the existing landfill cover to reduce the potential for infiltration and production of leachate.

CHAPTER 2

CONSTRUCTION PREPARATION

2.1 GENERAL

Prior to contractor mobilization, the following activities will have been completed and/or started:

1. Monitoring wells MW-19S and MW-20D and the three compliance boundary wells were added to the post-closure monitoring program as detailed in Chapter 10 of the Remedial Design Report.
2. Local agencies, including the Town of Ischua and the Citizen Advisory Committee were notified prior to the start of construction.
3. A pre-construction conference was held prior to construction. Attendance at this meeting included the Owner, Contractor, Engineer, and NYSDEC.

The next several sections will discuss construction operations at the site and the sequence in which they occurred.

2.2 PRE-BID MEETING

On May 23, 2002, a pre-bid meeting was held at the Farwell Road Landfill site, 1430 Farwell Road in the Town of Ischua, New York to allow potential bidders the opportunity to ask questions regarding the project. The meeting was attended by Cattaraugus County, NYSDEC, Stearns & Wheler and ten representatives from potential bidders. The meeting was followed by a site visit to allow potential bidders to see the site and the excavation limits.

Addendum Number 1 was issued by Stearns & Wheler on May 28, 2002. The addendum primarily provided clarifications to questions raised during the meeting and revised the Schedule of Bid Items. Addendum Number 1 is included in Appendix Number 1.

2.3 PRECONSTRUCTION CONFERENCE

A preconstruction conference was held on July 31, 2002, which included Cattaraugus County (Owner), Manno Construction (Contractor), NYSDEC, and Stearns & Wheler (Engineer). The work plan, roles and responsibilities and a list of required submittals were reviewed during the meeting. It was agreed the submittals would be sent for review and approval by the Engineer, County and NYSDEC. A copy of the preconstruction minutes are included in Appendix Number 1.

2.4 SITE MAINTENANCE

Prior to and during construction activities on the landfill the following actions were taken to maintain the site.

A. Established Working Areas.

The locations for staging equipment and was established at the northeast end of the landfill parking area. Landfill access was available at the foot of the southwestern access road to the various landfill lifts. The backfill stockpile area was established at the rear of the County Compost area, located across Farwell Road. The barrier hedge vegetation was stockpiled in a shaded area next to a County DPW storage barn, adjacent to the compost area.

B. Site Security.

During construction access to the work site was still available to County employees of the Refuse Collection program. Access to the barrier hedge vegetation stockpile and the backfill material stockpile was closed off by placing large logs across the entrances to these specific areas. A second access point to the barrier hedge vegetation stockpile area was a private road that was closed off with a chain. A continuous perimeter barrier of vegetation and fencing closed off access to the landfill. The south and east side of the landfill were fenced and the remaining portion of the site was bounded by tree line.

A new aluminum swing gate was installed as part of the construction. The days between where the existing gate was removed and the new gate installed represented the only access to the landfill. No incidents of intrusion were observed.

C. Storm water Control.

At no time during construction were any significant rain events observed. As such, storm water did not affect construction schedule.

D. Sedimentation and Erosion Control.

Measures taken to control sediment and erosion included the placement of hay over the repaired areas once they were seeded and fertilized. In addition, silt fences were installed where down chutes intercepted the work areas. Hay bales were placed on the up gradient side of the silt fences.

E. Fugitive Dust Monitoring.

Each day that work was conducted on the landfill a MIE data logger was placed downwind of work activities to monitor for fugitive dust particles. The only events that triggered spikes of the data were due to heavy fog in the morning and occasional wind gusts as reported by Genesis Environmental Management. Appendix Number 2 includes details of the Fugitive Dust Monitoring Program.

2.5 MOBILIZATION

Equipment and materials were stored at the staging area throughout the remediation construction. The staging area was located approximately 100 feet beyond the new aluminum swing gate and at the foot of the access drive to the landfill lifts. The equipment and materials that were stored at the staging area included one tracked Kobelco excavator, one new Holland LS170 skid steer, one tow-able vibratory roller, one dump body truck, one tri-axle trailer to haul equipment, one dresser TD-8E, one forklift attachment, one fiberglass 525 gallon water tank, and miscellaneous sets of tools.

CHAPTER 3

LANDFILL CAP REPAIR

3.1 GENERAL

The remedial objective was to excavate all topsoil in the settled areas of the landfill cap (within 6 inches of the surface grade) and supplement the areas with clean fill. The clean fill was obtained from an on-site source stockpiled after the initial landfill construction. The backfill was tested for specific compaction in each of the four settled areas. After each area passed the compaction tests, the excavated topsoil was then replaced over the backfilled areas. The areas were then seeded, fertilized and erosion control materials were installed.

3.2 EXCAVATION OF TOPSOIL

A total of 231 Cubic yards of topsoil was excavated for the four settled areas between Wednesday, September 11, 2002 and Monday September 16, 2002. From Areas 1, 2, 3, and 4, respectively, 46, 39, 37, and 109 cubic yards were excavated. During construction it was decided to excavate an additional 50 cubic yards from Area 4 in excess of the volume anticipated on the Contract Drawings.

The excavated topsoil was deposited adjacent to the settled area from which it was excavated. No intermixing of topsoil between zones occurred.

3.3 BACKFILL

Backfill material for this construction was obtained from a stockpile of material used in the original capping of the landfill. Analytical testing was performed on the stockpiled material per the approved Remedial Design Document (2001). The results of the sampling are further discussed in Chapter 5 and in Appendix Number 3.

3.4 COMPACTION

Backfill was compacted initially using the treads of the excavator. A vibratory roller was then applied to the backfill surfaces. In each remedial area, a total of four passes were made with the roller to ensure compaction.

On Thursday, September 19, 2002 the backfill was tested for compaction. All four remediation zones met compaction requirements as specified in the Contract Documents, Compaction results are available in the Appendix Number 5.

3.5 PLACEMENT OF TOPSOIL

Once compaction requirements on the cover material had been met, the topsoil was replaced on the remedial areas. Topsoil was graded over each remedial area using the grading blade of the excavator. The topsoil was shaped to ensure proper drainage of the remedial areas. This was confirmed by surveying the remediation zones after the topsoil was replaced.

3.6 SEEDING

A seed mixture of the following components was spread over the remediation areas:

VARIETY	SPREADING RATE LBS/ACRE
Empire Birdsfoot Trefoil	12 lbs/acre
Tall Fescue	12 lbs/acre
Perennial Ryegrass	8 lbs/acre

The seed mixture was spread using a mechanical spreader. Fertilizer using a 5-10-10 mixture was then spread over the seed in the same fashion. Seed mixture and fertilizer used were in conformance with the Contract Documents and approved remedial design document.

3.7 EROSION CONTROL

After seeding and fertilizing the remediation zones, hay was distributed by hand to cover the seed. At the entrance to the down chutes on the landfill, a barrier of silt fence and hay bales was installed to prevent sedimentation from being transported to other areas of the landfill.

CHAPTER 4

VEGETATIVE BARRIER HEDGE INSTALLATION

4.1 GENERAL

A barrier hedge was installed around portions of the southern and western perimeter of the landfill to supplement the existing fencing and provide increased security from trespassers. Two segments of hedge were planted, separated by the newly installed aluminum swing gate. The total length of hedge installed was 1,420 linear feet.

4.2 INSTALLATION OF BARRIER HEDGE

The barrier hedge was installed in accordance to the planting pattern shown on the Contract Drawings. In two locations a tree was not planted as specified on the Contract Drawings due to natural obstructions, in which these obstruction themselves provide the same protection from trespassers as the new tree would have.

Once the vegetation was installed, a layer of mulch consisting of straw was placed around the base of each tree.

In general, the vegetation conformed to the requirements of Contract Documents. The Cockspur Hawthorne and Honey Locust trees range from 1-inch to 1.5-inch caliber. The Red Cedars ranged from 4.5 feet to 6 feet tall. The following table indicates the species planted as the barrier hedge.

Table 4.1

COMMON NAME	BOTANICAL NAME	SIZE	CONTAINER REQUIREMENT
Cockspur Hawthorne	Crataegus Crus-Gali	1"-2" CAL.	Wire Basket
Honeylocust	Gleditsia Triacanthos	1"-2" CAL.	Wire Basket
Red Cedar	Juniperus Virginiana	4' TALL	Fiber Pot
Rugosa Rose	Rosa Rugosa	2 GAL.	Container
Blackberry	Rubus Alleghaniensis	2 GAL.	Container

CHAPTER 5

SAMPLING/ANALYSIS PROGRAM

5.1 GENERAL

The objectives of the sampling/analysis program during construction included confirmation that site activities did not create excessive amounts of airborne dust to migrate off-site. Prior to construction, sampling and analysis was performed on the on-site stockpile of backfill material per the remedial design document. The results of the stockpile sampling program are included in Appendix Number 3.

5.2 FUGITIVE DUST MONITORING

The approved remedial design called for the use of a Digital Dust Indicator aerosol system to monitor fugitive dust. Genesis Environmental Management was contracted by Manno Construction to perform the monitoring program. The approved MIE DataRam equipment was delivered to the site on September 11, 2002. The equipment was setup and calibrated by Genesis Environmental Management and continuous monitoring began at 8:00 A.M. September 11, 2002. The equipment was setup each morning prior to work commencing on the landfill cap. As a result of the different locations of site work, the dust monitor was placed in a downwind location as appropriate to the work activity. After calibration a minimum reading of 0.00 ug/m^3 was used as a baseline value. The site was monitored continuously and a recording made every 15 minutes. Over the entire week of site work, the site average value was 0.026 mg/m^3 . This value was well below the NYSDEC action level of 0.15 mg/m^3 . This equipment was sensitive to changes in temperature, humidity, and pollen, all of which tend to cause readings to drift higher over the course of the day. The average daily maximum of 0.161 mg/m^3 , was 0.010 mg/m^3 above the NYSDEC action level. The maximum recorded level of 0.249 mg/m^3 was observed at 4:26 PM on September 11, 2002. At the time of the maximum reading, site work was finished for the day and equipment was not being used. It was assumed a change in the weather and a high wind gust at the site was the reason for the elevated reading. Over the course of the week, the dust monitor levels were consistently recorded in the range of 0.025 mg/m^3 to 0.075 mg/m^3 . The dust monitoring was performed between September 11th and September 23, 2002. The site work pertaining to the landfill cap was completed on September 23rd and dust monitoring was not

performed after that date. Fugitive Dust Monitoring Reports are provided in Appendix Number 2.

5.3 SOIL SAMPLING/ANALYSIS

The on-site stockpile of soil to be used as backfill material was sampled and tested by Empire Geo-Services Incorporated on September 5, 2002. The sampling program consisted of grab samples of the stockpile material and preparing two composite samples for analytical testing. The composite samples were taken to SJB Services, Incorporated for geotechnical laboratory testing. The samples were analyzed for Target Compound List (TCL) Volatiles and Semi-Volatiles, and Target Analyte Listed (TAL) Metals as detailed in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) # 4046. The results of the testing indicated that no TCL Volatile or Semi-Volatile Organic Compounds were detected above laboratory analytical limits. Therefore the samples, meet the TAGM guidelines for these specific compounds. During the testing, two TAL Metals were identified in the composite samples as above the Eastern States background level objective as listed in the TAGM. Soil Sample Analytical results are provided in Appendix Number 3.

5.4 CHAIN-OF-CUSTODY RECORDS

Chain-of-custody forms for the samples taken of the stockpile material (for laboratory analysis) are provided in Appendix Number 4.

CHAPTER 6

ADDITIONAL INFORMATION

6.1 GENERAL

This chapter documents additional details from the remedial action.

6.2 ADDITIONAL WORK

A. Expansion of Post-Closure Groundwater Monitoring Program

A program had been established for collecting groundwater, surface water, and leachate samples under Cattaraugus County's landfill closure plan. The program provides a long-term monitoring strategy for the site that fulfills the requirements of 6 NYCRR Part 360 (December 1988). The August 2001 Comprehensive Document along with the July 31, 2001 Addendum I specifies this monitoring plan. As detailed in the August 2001 Comprehensive Document, the Part 360 Monitoring Program and the Supplemental Monitoring Program will be combined to form one Environmental Monitoring Program.

As part of the supplemental monitoring requirements of the Record of Decision (ROD), monitoring wells MW-19S and MW-20D were added to the list of wells sampled under the Monitoring Program. In addition to this work, three proposed monitoring wells, MW-21S, MW-22S, and MW-23S were installed in accordance with the site remedy described in the ROD. Two monitoring wells (MW-21S and MW-22S) were installed from August 28 through September 10, 2001. The third monitoring well (MW-23S) was installed further south of MW-21S and -22S adjacent to an active railroad line in October 2002. The three wells were installed at the compliance boundary, downgradient (south) of the landfill, to assure that natural attenuation maintains landfill impacts at or below applicable water quality standards before groundwater migrates off Cattaraugus County property. The groundwater samples will be analyzed for the VOCs, TAL metals, and various parameters required for evaluating the progress of natural attenuation.

The following is a description of the work associated with the well installation.

1. Soil Borings. The three soil borings referenced above were completed using rotary drilling methods. Generally speaking, a rotary drill bit is advanced into the sub-surface grinding away rock and soil from it's path. Simultaneously, a drilling fluid is passed through the drill bit, which carries drill cuttings to the surface. In addition, in each of the three borings, steel casing was advanced as drilling progressed. The steel casing helped to prevent sub-surface boring collapse and also to minimize the amount of drilling fluid that was lost to the geologic formation.

Soil borings for monitoring wells MW-21S and -22S were completed using a rotary drilling technique in which a bentonite "mud" is used as a drilling fluid. The soil boring for monitoring well MW-23S was completed using a wash rotary drilling technique in which only water is used as a drilling fluid.

As indicated on the soil boring logs, soil samples were collected using 2-inch, stainless steel split-spoon samplers. Initially, soil samples were collected at 5-foot intervals, however; the frequency was increased or decreased based on observations of the field geologist.

2. Monitoring Well Completion. Monitoring wells were constructed in each of the three soil borings using the following materials:

- 2-inch ID PVC riser
- 2-inch ID 0.01-inch slot PVC screen
- #00 choker sand pack (for MW-21S and -22S, only)
- #0 sand pack
- Bentonite pellets
- Grout
- steel guard pipe with locked cover (stick-up)

The PVC well screen and riser were inserted into the boring. A #0 sized silica sand pack was then placed in the annular space between the well casing and the boring wall, extending above the top of the well screen. A bentonite seal was placed above the sand pack to prevent the downward migration of fluids. The remaining space was filled with a cement-bentonite grout to ground surface. Specific well construction details can be found in Appendix Number 9.

Following monitoring well installation, each well was developed using a surge pump until a minimum of ten volumes of groundwater was removed. To determine the volume of groundwater to be removed, the following formula was used:

$(DTW - TDW) \times 0.164 \times 10 = \text{gallons of water to be removed from a 2-inch diameter well}$
where:

DTW is depth to water; TDW is total depth of well

In an attempt to improve (decrease) turbidity levels in each monitoring well greater than 10-well volumes of groundwater were removed from each well. In total, approximately 500 gallons were removed from MW-21S, 100 gallons were removed from MW-22S, and 200 gallons were removed from MW-23S.

B. Monitoring Well Decommissioning

On September 11, 2001, monitoring wells MW-2, MW-3, and MW-7 were decommissioned in accordance to the NYSDEC approved Comprehensive Document. Accordingly, each well was grouted in place using a bentonite/Portland® cement to within five feet of ground surface using a tremie pipe. The level of the grout mixture was carefully observed to ensure that it was static at approximately five-feet below grade. The top five feet of casing/riser was over drilled using 8 ¼ -inch hollow stem augers and removed. A cement/bentonite plug was placed in the upper five feet.

C. Installation of New Aluminum Swing Gate

A new aluminum swing gate was installed at a driveway on the southern side of the landfill site to supplement the vegetative barrier hedge bordering the property. This swing gate replaced an existing gate.

6.3 DAILY FIELD REPORTS

Daily field reports that document day-to-day construction activities are provided in Appendix Number 6.

6.4 HEALTH AND SAFETY

Due to the nature of the remedial action, the health and safety of on-site personnel and the public was important. The contractor developed a health and safety plan for this project. As a part of this plan, all personnel working at the site were required to have successfully completed a 40-hour hazardous waste operations course.

6.5 PHOTOGRAPHS

Site photographs taken by the Engineer, which document major construction activities, are provided in Appendix Number 7.

APPENDIX 1

**PRE-CONSTRUCTION CONFERENCE MINUTES
and
ADDENDUM NO. 1**

Preconstruction Meeting
FARWELL LANDFILL REMEDIAL CONSTRUCTION
Cattaraugus County, NY
S&W No. 10010
July 31, 2002

Attendees:

Paul McGarvey, P.E. – Stearns & Wheler, LLC
Robyn Cierniak – Stearns & Wheler, LLC
David Rivet – Cattaraugus County DPW
Allan Ormond – Cattaraugus County DPW
David Locey – NYS DEC
Dennis Cornell – Manno Construction
Bill Ricketts – Manno Construction
James Manno – Manno Construction

Copies to:

File 10010.9

1. Project Personnel.

Stearns & Wheler

- Project Manager – Paul McGarvey
- Project Engineer – Robyn Cierniak

Cattaraugus County

- Commissioner – David Rivet
- Refuse Division – Allan Ormond

NYS Dept. Environmental Conservation

- Engineer – David Locey

Manno Construction

- Owner – Jim Manno
- Superintendent – Dennis Cornell
- Estimator – Bill Ricketts
- Office Support – James Manno, Jr.

2. Summary of Work.

- Support Record of Decision
- Repair settled areas of landfill cap
- Install vegetative barrier hedge

3. Lines of Communications.

- All questions, request for clarifications, pay requests, shop drawings, written correspondence, etc. should be sent to Paul McGarvey at Stearns & Wheler.



- If Paul McGarvey is unavailable, then contact Robyn Cierniak.
- Direct all written correspondence to James Manno, Jr. at Manno Construction.
- Cattaraugus County Contact is David Rivet; NYS DEC Contact is David Locey – However, all requests should be made through Paul McGarvey.

4. Engineers Resident Project Representative.

- Serves as "eyes and ears" of owner and engineer.
- Does not have authority to make decisions that affect construction cost or time.
- Duties listed in Exhibit D, Supplementary Condition of the Contract Documents.

5. Preliminary Matters.

- A. Notice to Proceed – If signed documents are received 7/31/02, County will issue NTP week of 8/5/02.
- B. Schedules – Manno Construction to submit week of 8/5/02. Work four 10-hour days. County needs to approve prior to start of construction.
- C. Staging Area – North side of parking area available for staging area. Also area near barrels on the south side of parking lot. County to give S&W and Manno Construction access key to upper office, lavatory and telephone. Manno Construction wants to see results of the proctor soil tests. County to schedule soil tests as soon as possible.
- D. Contract Time – The contract time for this project is 60 days from Notice to Proceed for Substantial Completion and 120 days to Final Completion. NTP may be sent week of 8/5/02.
- E. Post Labor Information – Labor and prevailing rate schedule shall be posted at the job site. County requires certified payrolls with each request for payment. It is estimated that there will be two payment requests. County approves payment requests one time per month.
- F. Temporary Services – County is not providing any temporary services.

6. Procedural Items.

- A. Coordination Conferences – Meetings will be called by S&W. One addition construction conference is anticipated.
- B. Payment Procedures.
 - Review Process - Initial draft submittal to Engineer for review. Final three copies to S&W then to County. Need to include certified payrolls (1 original, 2 copies).
 - Payment Form – Contractor shall use standard AIA form.
 - Owner's Voucher Form – No form needed.
 - Retainage - Retainage for this project is 5%.



- C. Shop Drawings – Need to submit as required by specifications. Major submittals include Sedimentation and Erosion Control Plan, Vegetative Barrier Hedge Plan, Seeding Plan, and Health and Safety Plan. Submit seven copies of each shop drawing.
- D. Clarifications and Interpretations – Send RFI to S&W.
- E. Claims and Disputes – Procedures for resolving claims and disputes are listed in the General Conditions. Written claims are required. Claims must be submitted in a timely manner per specifications.
- F. Changes in Work (Field and Change Orders) – All changes affecting cost or schedule will be issued in writing.
- G. Record Drawings – Contractor required to prepare and keep “red-line” drawings up to date. Quantities will be measured in place.
- H. Safety - Contractor is responsible for site safety and shall obey all OSHA laws and requirements. Contractor responsible to submit Health and Safety Plan prior to start of construction.

7. Other Issues.

- A. A fugitive dust monitoring plan is required.
- B. Five copies of specifications were given to Manno Construction at the meeting.

Stearns & Wheeler, LLC

Environmental Engineers and Scientists

ADDENDUM NO. 1 TO CONTRACT DOCUMENTS

Project:	Farwell Road Landfill Remediation	Project No.:	10010
Owner:	Cattaraugus County DPW	Federal Project No.:	NA
Contract Nos.:	Bid No. 46	Date:	May 28, 2002


To All Contractors:

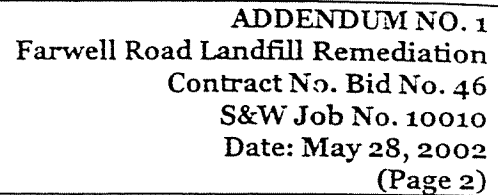
Contractors submitting proposals for the above-named project shall take note of the following changes, additions, deletions, clarifications, etc., in the Contract Documents, which shall become a part of and have precedence over anything contrarily shown or described in the Contract Documents, and all such shall be taken into consideration and be included in the Contractor's bid proposal.

Please see attached pages.

The return receipt requested with this communication is to be deemed evidence that the bidder has received this addendum and has followed the instructions outlined therein.




_____, P.E.
Robert A. Armstrong, Principal



Specification Section 00300 – Bid Proposal, **DELETE** Schedule of Bid Items and **ADD** the attached Schedule of Bid Items (Attachment No. 1) in its place.

Specification Section 02980 – Site Rehabilitation and Barrier Hedge Installation, ADD Pages 5 and 6 (Attachment No. 2). These pages may have been omitted from some copies of the bid package.

Specification Section 02980 – Site Rehabilitation and Barrier Hedge Installation, Part 3.07, ADD
 "F. Clearing and grubbing per Section 02110 – Site Clearing, may be required to install the barrier hedge along the southern border of the project site. Contractor shall include all cost associated with this work in Bid Item No. 4."

Specification Section 00500 – Agreement Article 4.02, **DELETE** Paragraph A in its entirety and **ADD** "A. The Work will be substantially completed within 60 calendar days after the date when the Contract Times commence to run as provided in paragraph 2.03 of the General Conditions. Planting associated with the barrier hedge can be completed after substantial completion, but prior to final completion. The Work will be ready for final payment in accordance with paragraph 14.07 of the General Conditions within 120 days after the date when the Contract Times commence to run."

Specification Section 02268 – Landfill Topsoil and Seeding and Barrier Hedge Installation, Part 2.01B,
~~DELETE~~ table and **ADD** table below:

COMMON NAME	BOTANICAL NAME	SIZE	Container Requirement
Cockspur Hawthorne	<i>Crataegus crus-gali</i>	1"-2" CAL.	Wire Basket
Honeylocust	<i>Gleditsia triacanthos</i>	1"-2" CAL.	Wire Basket
Red Cedar	<i>Juniperus virginiana</i>	4' TALL	Fiber Pot
Rugosa Rose	<i>Rosa rugosa</i>	2 GAL.	Container
Blackberry	<i>Rubus alleghaniensis</i>	2 GAL.	Container

BID PROPOSAL

SCHEDULE OF BID ITEMS

BID ITEM NO.	ESTIMATED QUANTITY	BID ITEM DESCRIPTION UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES DOLLARS CENTS	EXTENDED TOTAL IN FIGURES DOLLARS CENTS
1	275 CY	Excavation and Reuse of Topsoil and Rip-Rap in Remediation Areas, for _____ _____ Dollars _____ Cts/CY	\$ _____	\$ _____
2	175 CY	Subgrade Fill Using On-site Low Permeability Material, for _____ _____ Dollars _____ Cts/CY	\$ _____	\$ _____
3	70 CY	Additional Off-site Topsoil Material, for _____ _____ Dollars _____ Cts/CY	\$ _____	\$ _____
4	2050 LF	Installation of Barrier Hedge and Associated Work, for _____ _____ Dollars _____ Cts/LF	\$ _____	\$ _____

B. The Contractor shall reestablish all existing cultivated or landscape items, trees, shrubs, vines and ground covers as practicable.

1. He shall provide additional or modify existing vegetation, as shown on the Drawings.
2. Existing trees, plants, shrubs, saplings, ground cover, vines, etc., which are disturbed or damaged by the Contractor's operations shall be replaced with new plant materials.

3.04 TOPSOILING

A. In the event that site rehabilitation requires modifications to the existing topsoil, Contractor shall follow procedures as directed in Section 02268 Landfill Topsoil and Seeding.

3.05 FERTILIZING

A. The fertilizer shall be uniformly spread by a mechanical spreader using a 5-10-10 fertilizer, containing at least 5 percent nitrogen, 10 percent available phosphorus and 10 percent potash, with a spread rate of 600 lbs per acre..

1. The fertilizer shall be incorporated into the upper 2 inches of topsoil immediately after spreading.
2. Other commercial fertilizers, such as 20-10-10 or 12-6-6 may be used at rates adjusted to provide the same quantity of nitrogen per 1000 square feet.

3.06 SEEDING

A. In the event that site rehabilitation requires seeding applications, Contractor shall follow procedures as directed in Section 02268 Landfill Topsoil and Seeding.

3.07 PLANTING

A. All new plant materials which are to replace existing plant materials shall be of the same genus and species as the original, and shall be placed in the same location as the item being replaced. The size of the new plant materials shall, if practical, match that of the item being replaced, consistent with normally available sizes from nursery stock.

B. Depending on the size and type of material, and when ordered by the Engineer, guy wires, stakes, anchors and wrappings

shall be furnished and installed in a proper manner to brace and protect the plant.

C. The Contractor shall, as soon as practicable, water and maintain all reestablished, replaced or disturbed plant materials until final acceptance of total.

D. Plant shall be set plumb and true.

1. Shape area around saucer to form drainage grades as shown on the Contract Drawings.

E. For all trees of 2-inch caliber or larger, wrap with tree wrap.

1. Begin at base of tree and work upward to the first branches.

2. Tie the burlap wrap with cord (no synthetic cord nor wire) at 2-foot intervals and at the bottom and top.

3.08 MULCHING AND PROTECTION

A. The Contractor shall protect and maintain seeded areas to assure a full even stand of grass.

1. Immediately after seeding and rolling, the Contractor shall evenly apply hay/straw as an erosion control material over the entire area of the material at 0.5 lb/yd².

3.09 MAINTENANCE

A. Any portion of seeded areas failing to produce a full uniform stand of grass from any cause, shall be reseeded at full rate and re-fertilized at one-half rate and protected and maintained until such a full stand has been obtained.

B. Plantings to be maintained for one year.

3.10 RESTORATION OF UNCULTIVATED LANDS

A. Areas of uncultivated land shall be restored as follows:

1. The disturbed surfaces shall be rough-graded to the original elevations (+1 inch) and general appearance which existed prior to construction (or to the new elevations and grades which are required), all debris, loose stones over 1 inch, boulders, etc., being removed in the process.

APPENDIX 2
FUGITIVE DUST MONITORING REPORTS

Genesis Environmental Mgmt.

9/24/02

Manno Construction, Inc.
RR2, Box 2490
Ridgeway, Pa 15859
Attn: Jim Manno, Jr.

Subject: Air Monitoring Exceedences

Dear Mr. Manno

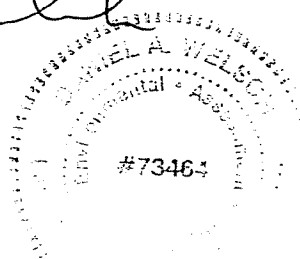
This letter is to explain any air monitoring exceedences that have occurred throughout the course of the Farwell Landfill project located in Cattaraugus County, NY. The items outlined in this letter were not considered to be particulate violations. These are referenced from the air monitoring data logs attached to the daily reports by date and sampling period for readings that exceeded the action limit of 150ug/m³. If there are any questions regarding this letter, please call me and I can explain them in detail.

<u>POINT LABEL</u>	<u>MAXIMUM CONCENTRATION</u>	<u>COMMENTS</u>
9/11/02 14:41	168.2 ug/m ³	High wind Gusts - No excavation being performed at this time
9/11/02 16:26	249.8 ug/m ³	Work activities completed for the day at this time - Very high wind gusts
9/13/02 8:28	181.8 ug/m ³	High humidity interference
9/13/02 8:43	154.5 ug/m ³	High humidity interference
9/18/02 7:41	450.8 ug/m ³	Very dense fog - High humidity interference
9/18/02 7:56	347.3 ug/m ³	Very dense fog - High humidity interference
9/18/02 8:11	351 ug/m ³	Very dense fog - High humidity interference
9/18/02 8:26	345.9 ug/m ³	Very dense fog - High humidity interference
9/18/02 8:41	282.3 ug/m ³	Very dense fog - High humidity interference
9/18/02 8:56	330.6 ug/m ³	Very dense fog - High humidity interference
9/18/02 9:11	204.4 ug/m ³	Very dense fog - High humidity interference
9/18/02 9:26	206.6 ug/m ³	Very dense fog - High humidity interference
9/19/02 7:09	163.2 ug/m ³	High humidity interference

Sincerely,



Daniel A. Welsch, CHMM, CEI, CES, CRS
Genesis Environmental Management



Fax - 1-716-676-9328

Tele. - 1-716-676-2417

e-mail -

daniel.welsch@eudoramail.com



GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	11 September 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Light rain - intermittent
		P.M.-	Overcast - No rain
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	6
Project QA / QC	Daniel A. Welsch	A.M.-	+/- 65° F
Project H&S O:	Daniel A. Welsch	P.M.-	+/- 70° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	10 - 22 mph / WNW
Site Pager:		P.M.-	10 - 35 mph / WNW

Description of work performed during this period:

- | |
|---|
| 1) Tailgate production meeting |
| 2) Monitoring Equipment setup & placement on landfill |
| 3) Standby to ensure correct operation |
| 4) Equipment collection |

Office Tasks (Offsite):

- | |
|--------------------------------------|
| 1) Download & review monitoring data |
| 2) Compile daily report |
| 3) Instrument calibration |

SubTotal Hours On Site: 5.0 Hrs.

SubTotal Hours Off Site: 1.5 Hrs.

Total Hours Combined: 6.5 Hrs.

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet

B: Daily Safety Meeting Attendance Log

C: Daily Shipment Log
W / Bill of Lading, Waste Manifest and/or Weight Ticket

D: Foreman's Daily Report

E: Equipment & Expendables Sheets

F: OSHA 200 Log & Backup Documentation

G: Subcontractors Daily Report

H: Confined Space Entry Logs

I: First Aid / Injury Log (not OSHA 200 log)

J: Air Monitoring Grid Sheet

K: Air Monitoring Data Printout

L: Instrument Calibration Log

M:

N:

Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Date:

09 / 11 / 2002

Page 2 of 2

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	September 12, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Clear skies, Foggy & High Humidity
		P.M.-	Partly Cloudy
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	
Project QA / QC	Daniel A. Welsch	A.M.-	54° F
Project H&S O:	Daniel A. Welsch	P.M.-	66° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	0 - 6 mph / NNW
Site Pager:		P.M.-	0 - 5 mph / NNW

Description of work performed during this period:

- 1) Tailgate production meeting. Air monitoring results review.
- 2) Monitoring Equipment setup & placement on landfill
- 3) Paperwork
- 4) Equipment collection

Office Tasks (Offsite):

- 1) Download & review monitoring data
- 2) Compile daily report
- 3) Instrument calibration

SubTotal Hours On Site: 1.25 Hrs.

SubTotal Hours Off Site: 1.50 Hrs.

Total Hours Combined: 2.75 Hrs. (*)

(*) = Four (4) Hour Minimum Applies

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet

B: Daily Safety Meeting Attendance Log

C: Daily Shipment Log
W / Bill of Lading, Waste Manifest and/or Weight Ticket

D: Foreman's Daily Report

E: Equipment & Expendables Sheets

F: OSHA 200 Log & Backup Documentation

G: Subcontractors Daily Report

H: Confined Space Entry Logs

I: First Aid / Injury Log (not OSHA 200 log)

J: Air Monitoring Grid Sheet

K: Air Monitoring Data Printout

L: Instrument Calibration Log

M:

N:

Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Date:
09 / 12 / 2002

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	September 13, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Partly Cloudy & Heavy Fog
		P.M.-	Clear Skies
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	
Project QA/QC:	Daniel A. Welsch	A.M.-	57° F
Project H&S O:	Daniel A. Welsch	P.M.-	70° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	0 - 1 mph / NNW
Site Pager:		P.M.-	0 - 3 mph / WNW

Description of work performed during this period:

- 1) Tailgate production meeting. Air monitoring results review.
- 2) Monitoring Equipment setup & placement on landfill
- 3) Equipment collection

Office Tasks (Offsite):

- 1) Download & review monitoring data
- 2) Compile daily report
- 3) Instrument calibration

SubTotal Hours On Site: 2.25 Hrs.

SubTotal Hours Off Site: 2.50 Hrs.

Total Hours Combined: 4.75 Hrs.

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet		H: Confined Space Entry Logs
B: Daily Safety Meeting Attendance Log		I: First Aid / Injury Log (not OSHA 200 log)
C: Daily Shipment Log W / Bill of Lading, Waste Manifest and/or Weight Ticket	X	J: Air Monitoring Grid Sheet
D: Foreman's Daily Report	X	K: Air Monitoring Data Printout
E: Equipment & Expendables Sheets	X	L: Instrument Calibration Log
F: OSHA 200 Log & Backup Documentation		M:
G: Subcontractors Daily Report		N:

Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Date:

09 / 13 / 2002

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	September 16, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Overcast with Light Rain
		P.M.-	Overcast
Project Manager:	Dermis Cornell / Jim Manno	Temperature:	
Project QA/QC	Daniel A. Welsch	A.M.-	61° F
Project H&S O:	Daniel A. Welsch	P.M.-	70° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	0 - 3 mph / NNW
Site Pager:		P.M.-	0 - 3 mph / NNW

Description of work performed during this period:	
1) Tailgate production meeting. Air monitoring results review.	
2) Monitoring Equipment setup & placement on landfill	
3) Equipment collection	
Office Tasks (Offsite):	
1) Download & review monitoring data	
2) Compile daily report	
3) Instrument calibration	
SubTotal Hours On Site: 1.50 Hrs.	
SubTotal Hours Off Site: 1.50 Hrs.	
Total Hours Combined: 3.00 Hrs. (*)	
(*) = Four (4) Hour Minimum Applies	

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet

H: Confined Space Entry Logs

B: Daily Safety Meeting Attendance Log

I: First Aid / Injury Log (not OSHA 200 log)

C: Daily Shipment Log
W / Bill of Lading, Waste Manifest and/or Weight Ticket

X

J: Air Monitoring Grid Sheet

D: Foreman's Daily Report

X

K: Air Monitoring Data Printout

E: Equipment & Expendables Sheets

X

L: Instrument Calibration Log

F: OSHA 200 Log & Backup Documentation

M:

G: Subcontractors Daily Report

N:

Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Date:

09 / 16 / 2002

Page 2 of 2

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	September 17, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Dense Fog
		P.M.-	Clear Skies
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	
Project QA/QC	Daniel A. Welsch	A.M.-	62° F
Project H&S O:	Daniel A. Welsch	P.M.-	76° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	0 - 2 mph / NNW
Site Pager:		P.M.-	5 - 10 mph / WNW

Description of work performed during this period:

- 1) Tailgate production meeting. Air monitoring results review.
- 2) Monitoring Equipment setup & placement on landfill
- 3) Equipment collection

Office Tasks (Offsite):

- 1) Download & review monitoring data
- 2) Compile daily report
- 3) Instrument calibration

SubTotal Hours On Site: 1.0 Hrs.

SubTotal Hours Off Site: 1.5 Hrs.

Total Hours Combined: 2.5 Hrs. (*)

(*) = Four (4) Hour Minimum Applies

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet

B: Daily Safety Meeting Attendance Log

C: Daily Shipment Log
W / Bill of Lading, Waste Manifest and/or Weight Ticket

D: Foreman's Daily Report

E: Equipment & Expendables Sheets

F: OSHA 200 Log & Backup Documentation

G: Subcontractors Daily Report

H: Confined Space Entry Logs

I: First Aid / Injury Log (not OSHA 200 log)

J: Air Monitoring Grid Sheet

K: Air Monitoring Data Printout

L: Instrument Calibration Log

M:

N:

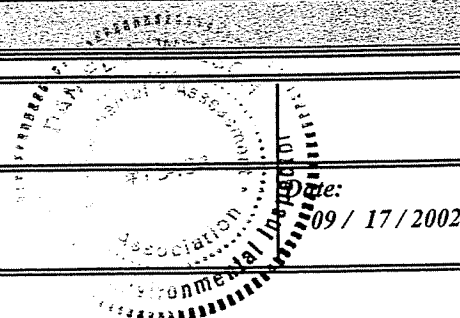
Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Page 2 of 2

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417



GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	September 18, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Very Dense Fog
		P.M.-	Partly Cloudy
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	
Project QA / QC	Daniel A. Welsch	A.M.-	59° F
Project H&S O:	Daniel A. Welsch	P.M.-	78° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	0 - 5 mph / NNW
Site Pager:		P.M.-	0 - 6 mph / WNW

Description of work performed during this period:

- 1) Tailgate production meeting. Air monitoring results review.
- 2) Monitoring Equipment setup & placement on landfill
- 3) Equipment collection

Office Tasks (Offsite):

- 1) Download & review monitoring data
- 2) Compile daily report
- 3) Instrument calibration

SubTotal Hours On Site: 1.5 Hrs.

SubTotal Hours Off Site: 1.75 Hrs.

Total Hours Combined: 3.25 Hrs. (*)

(*) = Four (4) Hour Minimum Applies

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet

B: Daily Safety Meeting Attendance Log

C: Daily Shippment Log
W / Bill of Lading, Waste Manifest and/or Weight Ticket

D: Foreman's Daily Report

E: Equipment & Expendables Sheets

F: OSHA 200 Log & Backup Documentation

G: Subcontractors Daily Report

H: Confined Space Entry Logs

I: First Aid / Injury Log (not OSHA 200 log)

J: Air Monitoring Grid Sheet

K: Air Monitoring Data Printout

L: Instrument Calibration Log

M:

N:

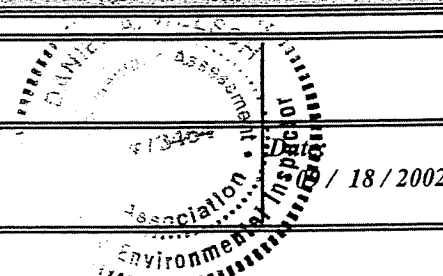
Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Page 2 of 2

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417



GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	September 19, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Clear Skies
		P.M.-	Heavy Showers
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	
Project QA/QC:	Daniel A. Welsch	A.M.-	67° F
Project H&S O:	Daniel A. Welsch	P.M.-	76° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	0 - 3 mph / NNW
Site Pager:		P.M.-	5 - 10 mph / WNW

Description of work performed during this period:

- 1) Tailgate production meeting. Air monitoring results review.
- 2) Monitoring Equipment setup & placement on landfill
- 3) Equipment collection

Office Tasks (Offsite):

- 1) Download & review monitoring data
- 2) Compile daily report
- 3) Instrument calibration
- 4) Instrument inspection & cleaning due to rain

SubTotal Hours On Site: 1.0 Hrs.

SubTotal Hours Off Site: 1.5 Hrs.

Total Hours Combined: 2.5 Hrs. (*)

(*) = Four (4) Hour Minimum Applies

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet

B: Daily Safety Meeting Attendance Log

C: Daily Shipment Log
W / Bill of Lading, Waste Manifest and/or Weight Ticket

D: Foreman's Daily Report

E: Equipment & Expendables Sheets

F: OSHA 200 Log & Backup Documentation

G: Subcontractors Daily Report

H: Confined Space Entry Logs

I: First Aid / Injury Log (not OSHA 200 log)

J: Air Monitoring Grid Sheet

K: Air Monitoring Data Printout

L: Instrument Calibration Log

M:

N:

Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Page 2 of 2

35 South Main Street Franklinville, New York 14737 Telephone: (716) 676-2417

Date: 19 / 2002

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report

Project No:	2000502-0802	Date:	Wednesday, September 23, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	Foggy & cool
		P.M.-	
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	
Project QA/QC	Daniel A. Welsch	A.M.-	52° F
Project H&S O:	Daniel A. Welsch	P.M.-	76° F
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	0 - 3 mph / NNW
Site Pager:		P.M.-	0 - 5 mph / WNW

Description of work performed during this period:

- | |
|--|
| 1) Tailgate production meeting. Air monitoring results review. |
| 2) Monitoring Equipment setup & placement on landfill |
| 3) Equipment collection |

Office Tasks (Offsite):

- | |
|--------------------------------------|
| 1) Download & review monitoring data |
| 2) Compile daily report |
| 3) Instrument calibration |

SubTotal Hours On Site: 1.25 Hrs.

SubTotal Hours Off Site: 2.5 Hrs.

Total Hours Combined:	3.75 Hrs. (*)
-----------------------	---------------

(*) = Four (4) Hour Minimum Applies

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

(X) YES

() NO

A: Daily Personnel Sign - in Sheet		H: Confined Space Entry Logs
B: Daily Safety Meeting Attendance Log		I: First Aid / Injury Log (not OSHA 200 log)
C: Daily Shipment Log W / Bill of Lading, Waste Manifest and/or Weight Ticket	X	J: Air Monitoring Grid Sheet
D: Foreman's Daily Report	X	K: Air Monitoring Data Printout
E: Equipment & Expendables Sheets	X	L: Instrument Calibration Log
F: OSHA 200 Log & Backup Documentation		M:
G: Subcontractors Daily Report		N:

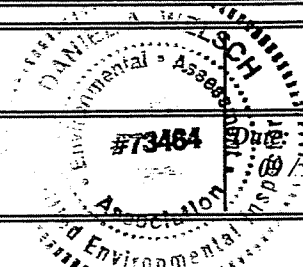
Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Page 2 of 2

35 South Main Street Franklinville, New York 14737 Telephone: (716) 676-2417



GENESIS ENVIRONMENTAL PARTNERSHIP

Daily Project Report

Project No:	2000502-0802	Date:	September 24, 2002
Site Name:	Farwell Landfill Project		
Location:	Farwell Road	Weather:	
	Cattaraugus County, NY	A.M.-	N/A
		P.M.-	N/A
Project Manager:	Dennis Cornell / Jim Manno	Temperature:	5
Project QA / QC	Daniel A. Welsch	A.M.-	N/A
Project H&S O:	Daniel A. Welsch	P.M.-	N/A
Site Phone:	1-716-560-7236	Wind:	
Site Fax:		A.M.-	N/A
Site Pager:		P.M.-	N/A

[illegible]

GENESIS ENVIRONMENTAL MANAGEMENT

Daily Project Report cont.

2. Milestones Achieved / Items of Concern

Not Applicable

X

4. Attachments to this Report:

() YES

(X) NO

A: Daily Personnel Sign - in Sheet

B: Daily Safety Meeting Attendance Log

C: Daily Shipment Log
W / Bill of Lading, Waste Manifest and/or Weight Ticket

D: Foreman's Daily Report

E: Equipment & Expendables Sheets

F: OSHA 200 Log & Backup Documentation

G: Subcontractors Daily Report

H: Confined Space Entry Logs

I: First Aid / Injury Log (not OSHA 200 log)

J: Air Monitoring Grid Sheet

K: Air Monitoring Data Printout

L: Instrument Calibration Log

M:

N:

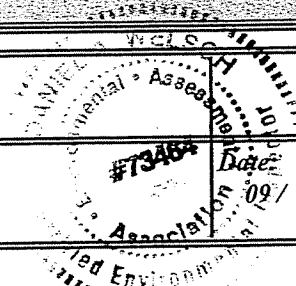
Client's Representative: Dennis Cornell - Cornell Contracting

Reviewed By: Daniel A. Welsch, CHMM

Genesis Environmental Management's Project Manager

Page 2 of 2

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417



GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

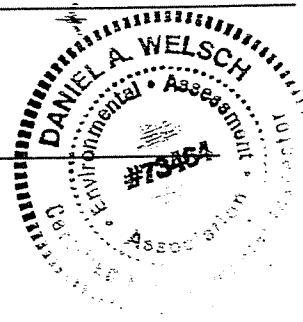
1. Recommended Calibration Frequency: Before each sampling event / Daily basis
2. Last Calibration Date: 09/10/2002
3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch ☐ _____
4. Calibration Standards Used: Self Calibrating / Purge & Zero

5. Source of Calibration Standard: Internal
6. Calibration Procedure Used: Per Manufacturer
7. Usage Date: 09/11/2002 Sample ID# Tag #1 - 09-11-02 / Tag #2 - 09-11-2002
Location: Farwell Landfill - Cattaragus County, New York
8. Comments and Notations: Not Applicable

Authorized Signature: _____

Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09 / 11 / 2002



GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

1. Recommended Calibration Frequency: Before each sampling event / Daily basis

2. Last Calibration Date: 09/11/2002

3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch ☐ _____

4. Calibration Standards Used: Self Calibrating / Purge & Zero

5. Source of Calibration Standard: Internal

6. Calibration Procedure Used: Per Manufacturer

7. Usage Date: 09/12/2002 Sample ID# Tag #1 - 09-12-02

Location: Farwell Landfill - Cattaraugus County, New York

8. Comments and Notations: Not Applicable

Authorized Signature: _____

Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09 / 12 / 2002



GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

1. Recommended Calibration Frequency: Before each sampling event / Daily basis

2. Last Calibration Date: 09/12/2002

3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch ☐

4. Calibration Standards Used: Self Calibrating / Purge & Zero

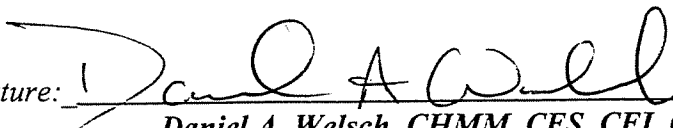
5. Source of Calibration Standard: Internal

6. Calibration Procedure Used: Per Manufacturer

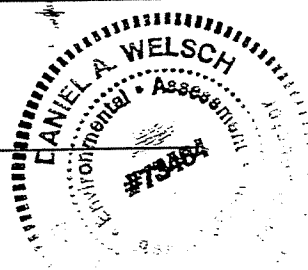
7. Usage Date: 09/13/2002 Sample ID# Tag #1 - 09-13-02

Location: Farwell Landfill - Cattaragus County, New York

8. Comments and Notations: Not Applicable

Authorized Signature: 
Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09 / 13 / 2002



GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

1. Recommended Calibration Frequency: Before each sampling event / Daily basis

2. Last Calibration Date: 09/13/2002

3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch ☐

4. Calibration Standards Used: Self Calibrating / Purge & Zero

5. Source of Calibration Standard: Internal

6. Calibration Procedure Used: Per Manufacturer

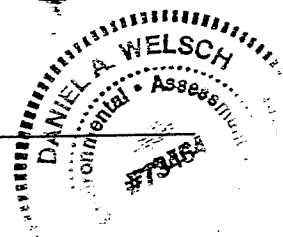
7. Usage Date: 09/16/2002 Sample ID# Tag #1 - 09-16-02

Location: Farwell Landfill - Cattaragus County, New York

8. Comments and Notations: Not Applicable

Authorized Signature: Daniel A. Welsch
Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09/16/ 2002



GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

1. Recommended Calibration Frequency: Before each sampling event / Daily basis

2. Last Calibration Date: 09/16/2002

3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch ☐ _____

4. Calibration Standards Used: Self Calibrating / Purge & Zero

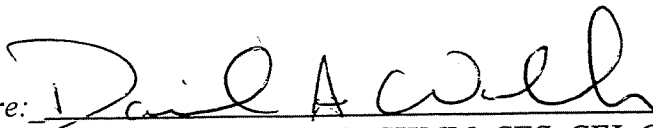
5. Source of Calibration Standard: Internal

6. Calibration Procedure Used: Per Manufacturer

7. Usage Date: 09/17/2002 Sample ID# Tag #1 - 09-17-02

Location: Farwell Landfill - Cattaraugus County, New York

8. Comments and Notations: Not Applicable

Authorized Signature: 
Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09/17/ 2002



GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

1. Recommended Calibration Frequency: Before each sampling event / Daily basis

2. Last Calibration Date: 09/17/2002

3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch ☐

4. Calibration Standards Used: Self Calibrating / Purge & Zero

5. Source of Calibration Standard: Internal

6. Calibration Procedure Used: Per Manufacturer

7. Usage Date: 09/18/2002 Sample ID# Tag #1 - 09-18-2002

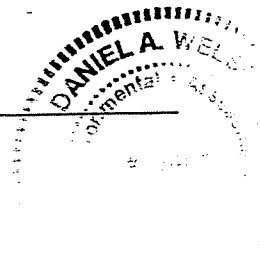
Location: Farwell Landfill - Cattaragus County, New York

8. Comments and Notations: Not Applicable

Authorized Signature: _____

Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09 / 18 / 2002



35 South Main Street * Franklinville, NY * 14737-1219

Tele. - (716) 676-2417 * Fax - (716) 676-9328

GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

1. Recommended Calibration Frequency: Before each sampling event / Daily basis

2. Last Calibration Date: 09/18/2002

3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch ☐

4. Calibration Standards Used: Self Calibrating / Purge & Zero

5. Source of Calibration Standard: Internal

6. Calibration Procedure Used: Per Manufacturer

7. Usage Date: 09/19/2002 Sample ID# Tag #1 - 09-19-2002

Location: Farwell Landfill - Cattaraugus County, New York

8. Comments and Notations: Not Applicable

Authorized Signature: 
Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09/19/2002



35 South Main Street * Franklinville, NY * 14737-1219

Tele. - (716) 676-2417 * Fax - (716) 676-9328

GENESIS ENVIRONMENTAL MANAGEMENT

Instrument Calibration Chart

Make: MIE DataRAM

Model # MIE DataRAM Aerosol Monitor

Serial # 2428

1. Recommended Calibration Frequency: Before each sampling event / Daily basis

2. Last Calibration Date: 09/19/2002

3. Calibrated By: ☒ Daniel Welsch ☐ Kathy Welsch

4. Calibration Standards Used: Self Calibrating / Purge & Zero

5. Source of Calibration Standard: Internal

6. Calibration Procedure Used: Per Manufacturer

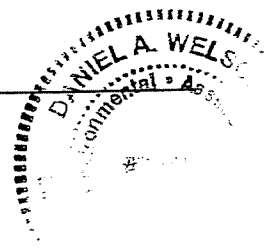
7. Usage Date: 09/23/2002 Sample ID# Tag #1 - 09-23-2002

Location: Farwell Landfill - Cattaraugus County, New York

8. Comments and Notations: Not Applicable

Authorized Signature: Daniel A. Welsch
Daniel A. Welsch, CHMM, CES, CEI, CRS

Date: 09 / 23 / 2002



GENESIS ENVIRONMENTAL MANAGEMENT

Sample Location Diagram
for field activities

GRID WORKSHEET

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower left corner of the diagram, or A19 for the upper corner of the diagram.

Enter the approximate time the reading was taken on the second table labeled Monitoring Log.

Enter the reason the reading was taken, i.e. "BG" for background, "IE" for initial entry, etc.

Under the appropriate instrument column, enter the reading taken. NOTE: enter "NND" (No Needle Deflection) if the instrument doesn't register a reading.

Enter the action taken, such as "evacuated" if reading warrants it.

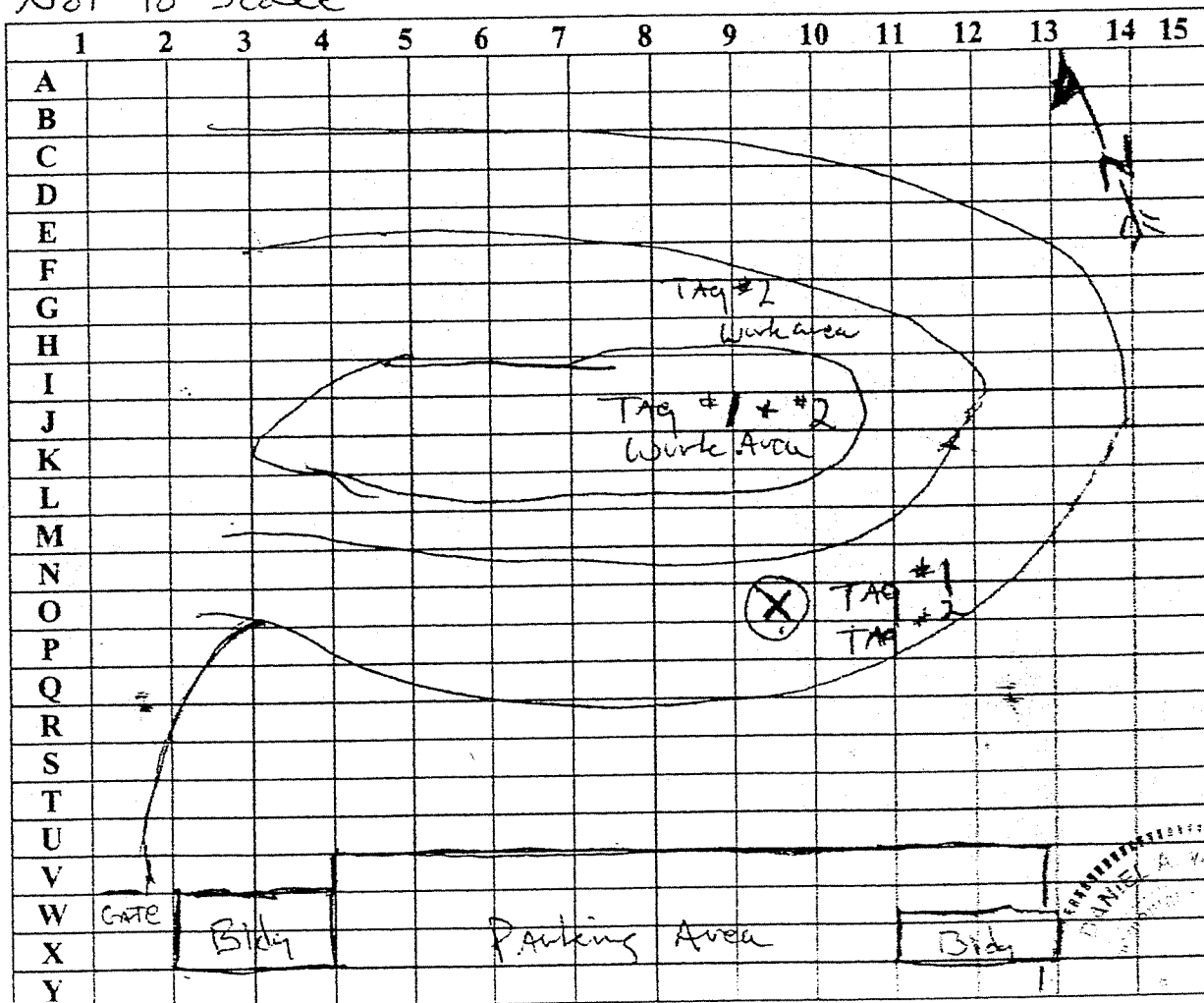
DATE: 09/11/2002

PROJECT: Farwell Landfill

LOCATION: Farwell Landfill Project - Cattaraugus Co., NY

MONITOR: Daniel A. Welsch, CHMM - QA/OC Officer JAW

* NOT TO Scale



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417

GENESIS ENVIRONMENTAL MANAGEMENT

Sample Location Diagram
for field activities

GRID WORKSHEET

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower left corner of the diagram, or A19 for the upper corner of the diagram.

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Enter the action taken, such as "evacuated" if reading warrants it.

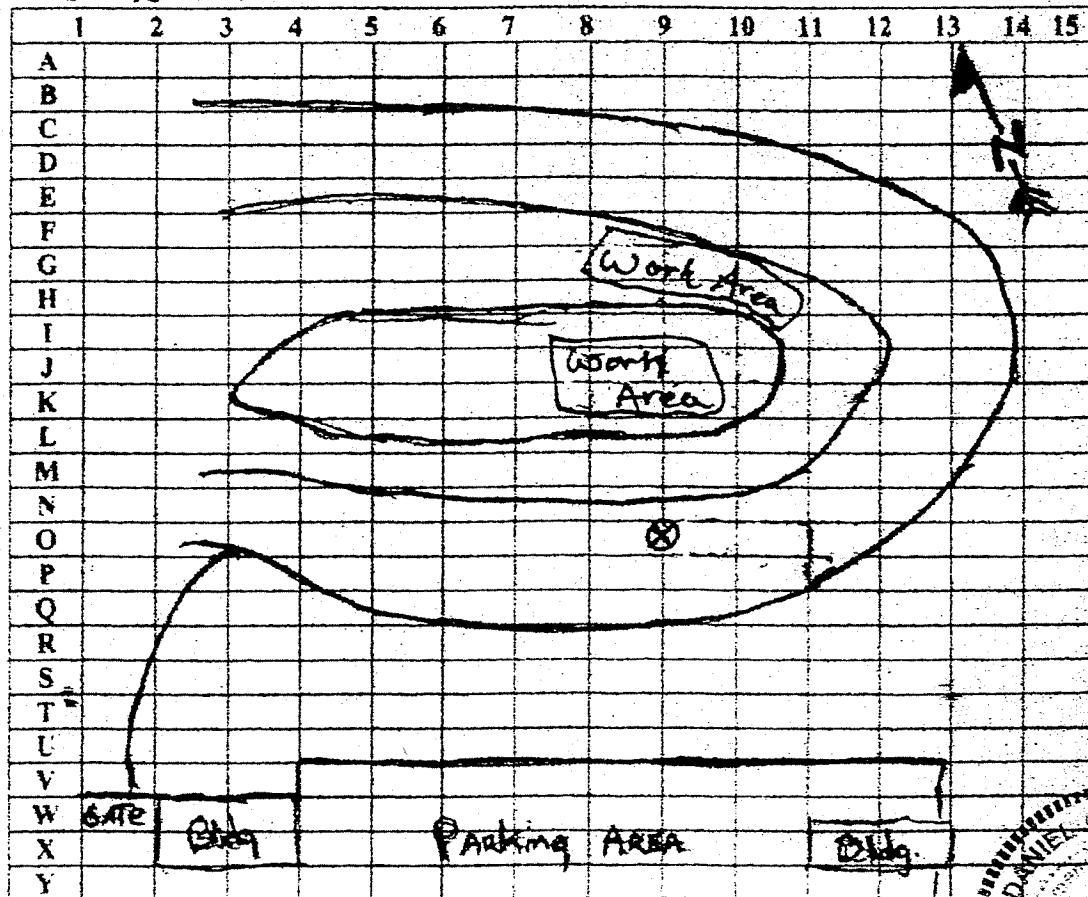
DATE: 09/12/2002

PROJECT: Farwell Landfill

LOCATION: Farwell Landfill Project - Cattaraugus Co., NY

MONITOR: Daniel A. Welsch, CHMM - QA / QC Officer

* NOT TO Scale



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417

GENESIS ENVIRONMENTAL MANAGEMENT

Sample Location Diagram
for field activities

GRID WORKSHEET

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower left corner of the diagram, or A19 for the upper corner of the diagram.

Enter the approximate time the reading was taken on the second table labeled Monitoring Log. Enter the reason the reading was taken, i.e. "BG" for background, "IE" for initial entry, etc. Under the appropriate instrument column, enter the reading taken, NOTE: enter "NND" (No Needle Deflection) if the instrument doesn't register a reading. Enter the action taken, such as "evacuated" if reading warrants it.

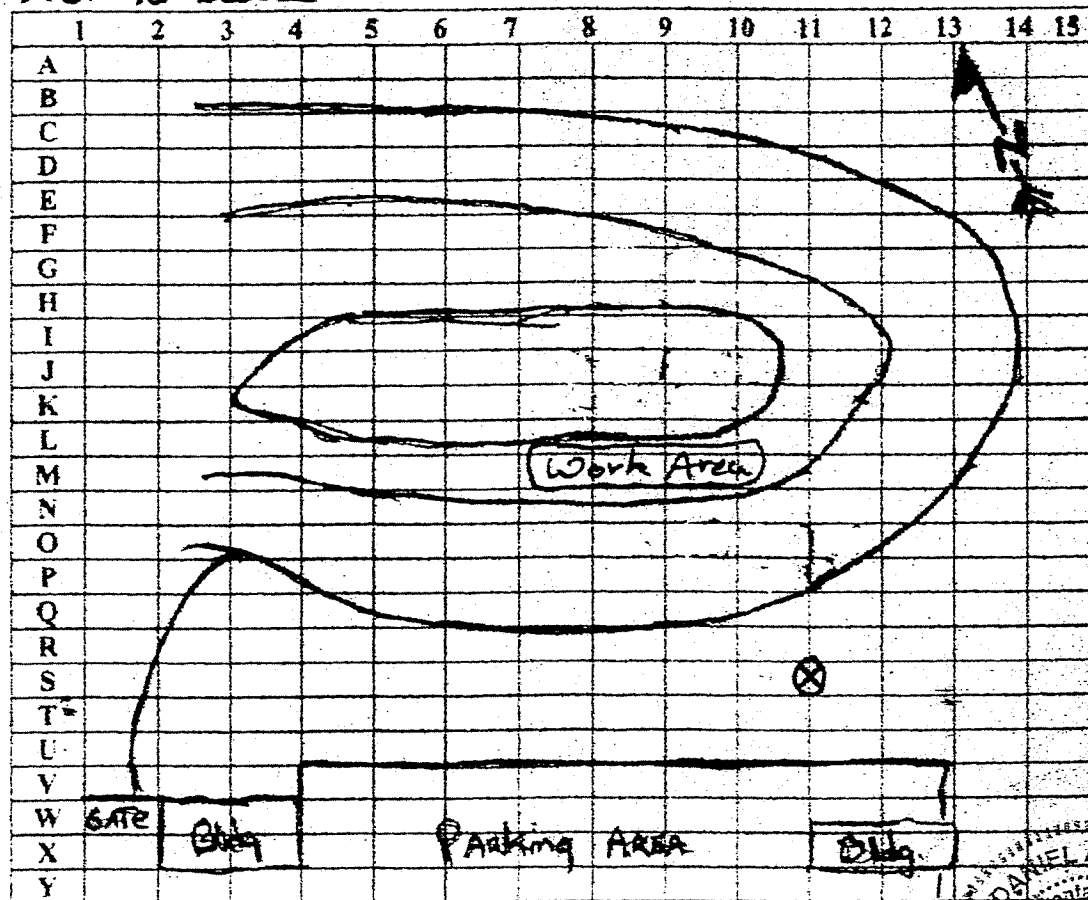
DATE: 09/13/2002

PROJECT: Farwell Landfill

LOCATION: Farwell Landfill Project - Catskills Co. NY

MONITOR: Daniel A. Welsh, CHMM - QA/QC Officer

* NOT TO Scale



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417

GENESIS ENVIRONMENTAL MANAGEMENT

Sample Location Diagram
for field activities

GRID WORKSHEET

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower left corner of the diagram, or A19 for the upper corner of the diagram.

Enter the approximate time the reading was taken on the second table labeled Monitoring Log. Enter the reason the reading was taken, i.e. "BG" for background, "IE" for initial entry, etc. Under the appropriate instrument column, enter the reading taken. NOTE: enter "NND" (No Needle Deflection) if the instrument doesn't register a reading. Enter the action taken, such as "evacuated" if reading warrants it.

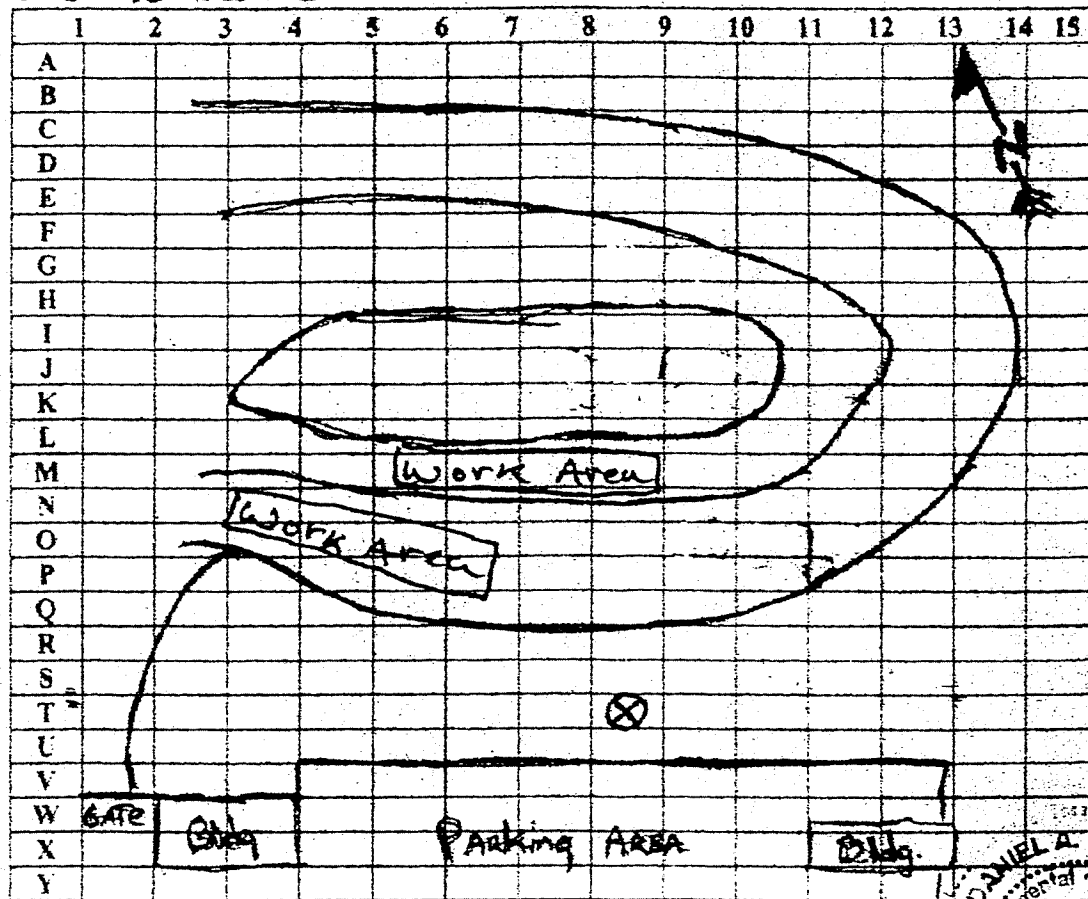
DATE: 07/16/2002

PROJECT: Farwell Landfill

LOCATION: Farwell Landfill Project - Canastota Co. NY

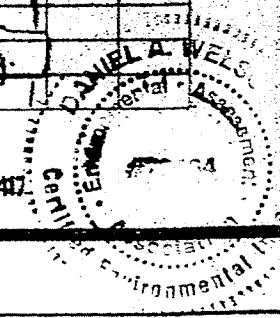
MONITOR: Daniel A. Welsch, CHMM - OA/OC Officer

* NOT TO Scale



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2412



GENESIS ENVIRONMENTAL MANAGEMENT

Sample Location Diagram
for field activities

GRID WORKSHEET

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower left corner of the diagram, or A19 for the upper corner of the diagram.

Enter the approximate time the reading was taken on the second table labeled Monitoring Log. Enter the reason the reading was taken, i.e. "BG" for background, "IE" for initial entry, etc. Under the appropriate instrument column, enter the reading taken. NOTE: enter "NND" (No Needle Deflection) if the instrument doesn't register a reading. Enter the action taken, such as "evacuated" if reading warrants it.

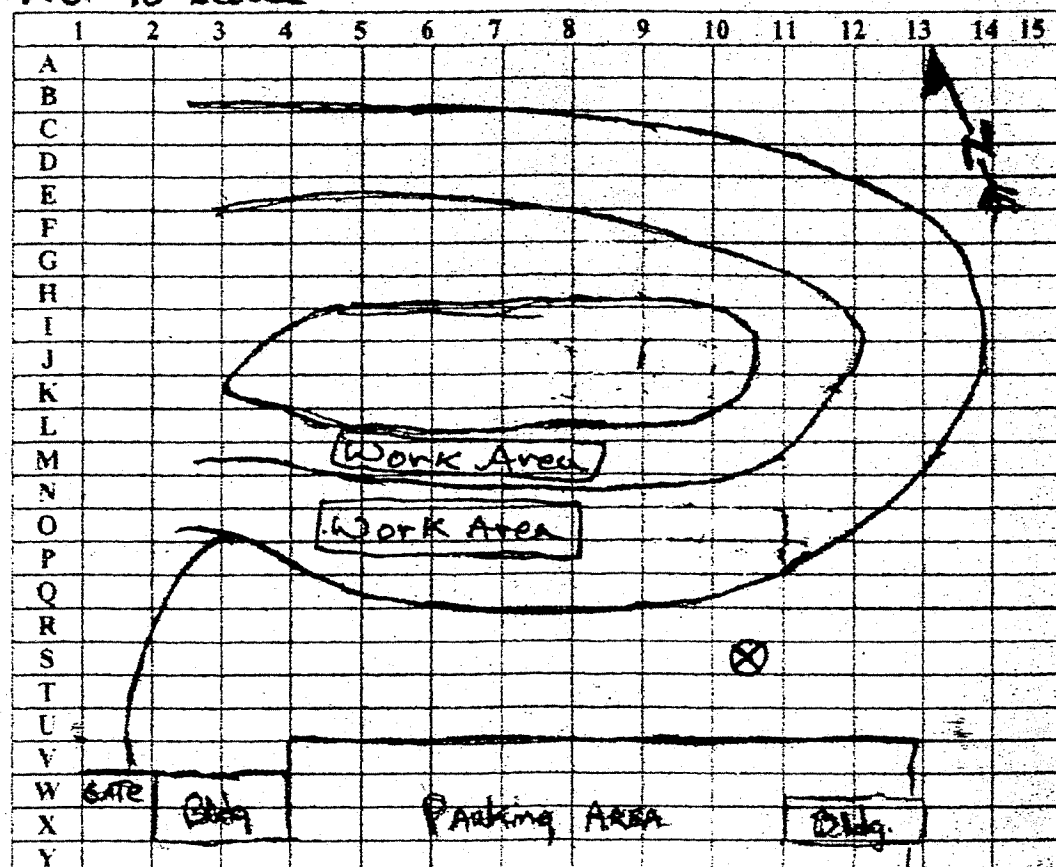
DATE: 09/17/2002 *TAW*

PROJECT: Farwell Landfill

LOCATION: Farwell Landfill Project - Genesee Co., NY

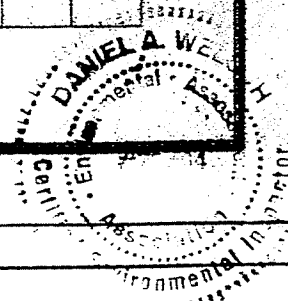
MONITOR: Daniel A. Welsh, CHMM - QA/QC Officer

* NOT TO Scale



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2407



GENESIS ENVIRONMENTAL MANAGEMENT

Sample Location Diagram
for field activities

GRID WORKSHEET

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower-left corner of the diagram, or A19 for the upper corner of the diagram.

Enter the approximate time the reading was taken on the second table labeled Monitoring Log.

Enter the reason the reading was taken, i.e. "BG" for background, "IE" for initial entry, etc.

Under the appropriate instrument column, enter the reading taken. NOTE: enter "NND" (No Needle Deflection) if the instrument doesn't register a reading.

Enter the action taken, such as "evacuated" if reading warrants it.

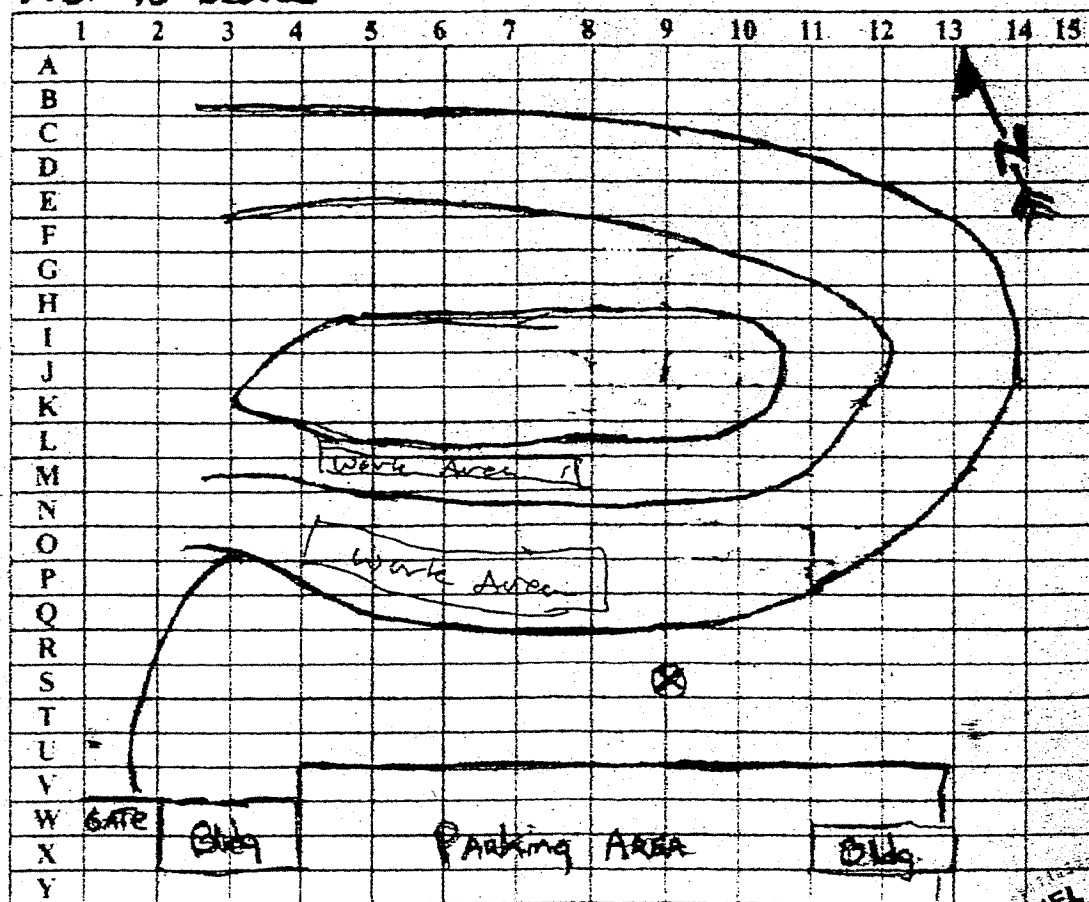
DATE: 09/18/2002 DW

PROJECT: Ferrell Landfill

LOCATION: Ferrell Landfill Project - Catskills Co., NY

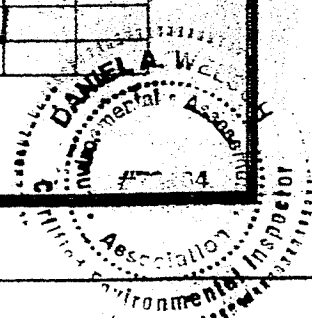
MONITOR: Daniel A. Welsh, CHMM - QA/QC Officer

* NOT TO Scale



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417



GENESIS ENVIRONMENTAL MANAGEMENT

Sample Location Diagram
for field activities

GRID WORKSHEET

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower left corner of the diagram, or A19 for the upper corner of the diagram.

Enter the approximate time the reading was taken on the second table labeled Monitoring Log. Enter the reason the reading was taken, i.e. "BG" for background, "IE" for initial entry, etc. Under the appropriate instrument column, enter the reading taken. NOTE: enter "NND" (No Needle Deflection) if the instrument doesn't register a reading. Enter the action taken, such as "evacuated" if reading warrants it.

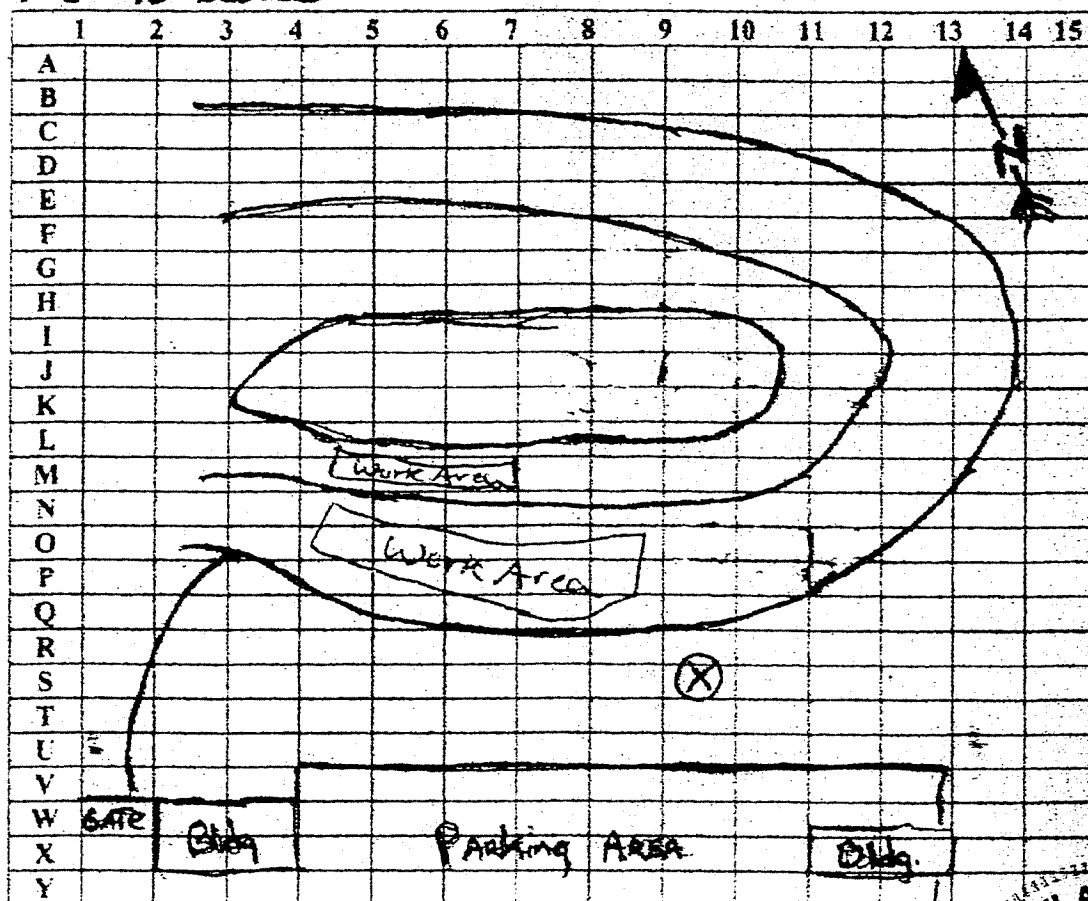
DATE: 09/19/2002 *DSW*

PROJECT: Farwell Landfill

LOCATION: Farwell Landfill Project - Camaragus Co. NY

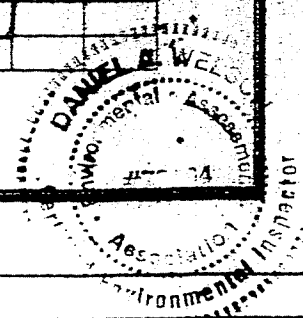
MONITOR: Daniel A. Welsch, CHMM - OA/OC Officer

* NOT TO Scale



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2447



Sample Location Diagram
for field activities

INSTRUCTIONS: Draw a rough diagram of the building interior, site, scene, etc on the grid below. Draw a North arrow if you so choose or if necessary. For the location of each reading taken, enter the quad number closest to your physical location, i.e. U1 for the lower left corner of the diagram, or A19 for the upper corner of the diagram.

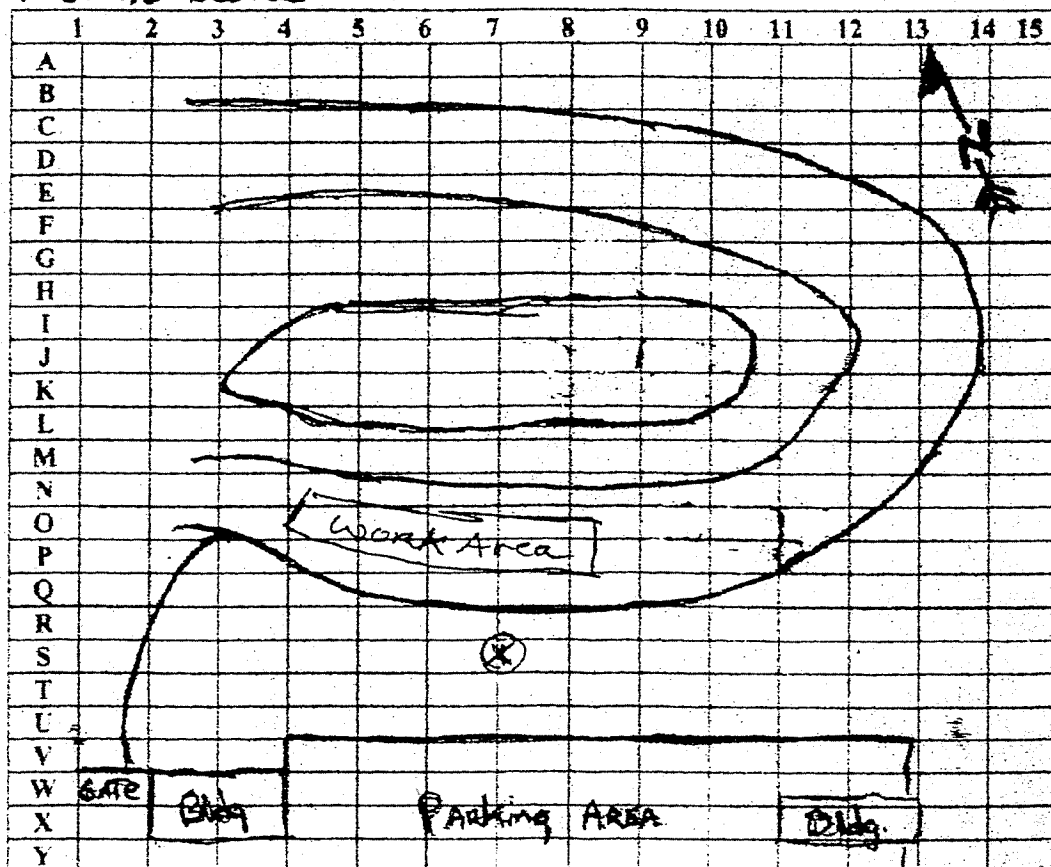
DATE: 09/23/2002

PROJECT: Farwell Landfill

LOCATION: Farwell Landfill Project - Camaricus Co., NY

MONITOR: Daniel A. Welsh, CHMM - OA / OC Officer

*** NOT TO Scale**



⊗ - Air Monitor Location

35 South Main Street Franklinville, New York 14737 Telephone (716) 676-2417

2407 DANIEL A WELSCH
Certified Environmental Inspector
Assoc. of Environmental Ins.

Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 37

Start time (hr:min:sec day/mon/yr)... 07:04:18 23-Sep-02

Elapsed time (hr:min:sec)..... 09:15:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

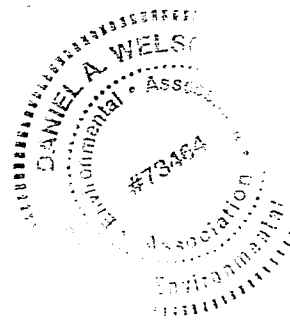
Overall AvgConc (ug/m3)..... 28.1

Overall MaxConc (ug/m3)..... 121.4 at Point#...5

Overall MinConc (ug/m3)..... 0.9 at Point#...34

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/23/02 7:19	18.5	33.4	56
9/23/02 7:34	34.8	46.7	77.5
9/23/02 7:49	48.8	59.6	106.3
9/23/02 8:04	52.3	68	108.3
9/23/02 8:19	64.6	72.3	121.4
9/23/02 8:34	67.4	73.1	95.2
9/23/02 8:49	65.3	71.3	84.7
9/23/02 9:04	64.2	71.6	79.8
9/23/02 9:19	65.2	71.6	79.1
9/23/02 9:34	58.2	65.9	76.3
9/23/02 9:49	57.2	60.7	70.1
9/23/02 10:04	46.6	53.7	63.1
9/23/02 10:19	37.1	42.5	51.3
9/23/02 10:34	27.2	32.5	38.7
9/23/02 10:49	20	25	31.2
9/23/02 11:04	14.2	19.8	25.5
9/23/02 11:19	12.2	15.3	21.1
9/23/02 11:34	9.3	12.6	23.2
9/23/02 11:49	8.3	10.7	17.7
9/23/02 12:04	7.5	10.1	21.5
9/23/02 12:19	6.1	9.1	28.7
9/23/02 12:34	4.8	7.8	54.1
9/23/02 12:49	5.2	7.4	15.1
9/23/02 13:04	4.8	7.7	22.3
9/23/02 13:19	5.2	7.5	15.8
9/23/02 13:34	4.8	6.8	13.6
9/23/02 13:49	4.6	6.6	13.3
9/23/02 14:04	2.3	6.8	18.6
9/23/02 14:19	5.5	7.6	15.6
9/23/02 14:34	5.2	7.4	18.5
9/23/02 14:49	5.1	6.8	10.7



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 37

Start time (hr:min:sec day/mon/yr)... 07:04:18 23-Sep-02

Elapsed time (hr:min:sec)..... 09:15:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

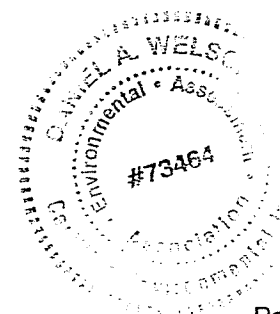
Overall AvgConc (ug/m3)..... 28.1

Overall MaxConc (ug/m3)..... 121.4 at Point#...5

Overall MinConc (ug/m3)..... 0.9 at Point#...34

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/23/02 15:04	4	6.7	11.3
9/23/02 15:19	4.2	7.4	14.2
9/23/02 15:34	0.9	7.6	21.6
9/23/02 15:49	5.9	7.7	11.7
9/23/02 16:04	4.2	7.1	10.6
9/23/02 16:19	4.4	7.4	16.2



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 25

Start time (hr:min:sec day/mon/yr)... 06:54:00 19-Sep-02

Elapsed time (hr:min:sec)..... 06:15:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

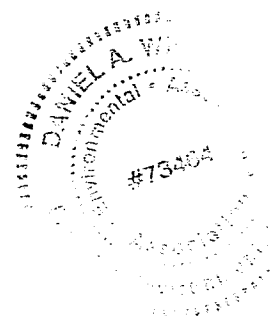
Overall AvgConc (ug/m3)..... 63.2

Overall MaxConc (ug/m3)..... 163.2 at Point#...1

Overall MinConc (ug/m3)..... 40.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/19/02 7:09	40	49.6	163.2
9/19/02 7:24	54.3	65.1	92.2
9/19/02 7:39	66.1	84.9	104.1
9/19/02 7:54	82.6	101.9	133.2
9/19/02 8:09	96.2	118.3	137.9
9/19/02 8:24	79.4	90.7	114.6
9/19/02 8:39	75	83.5	102.4
9/19/02 8:54	66	74.4	94.3
9/19/02 9:09	61	68.7	77.9
9/19/02 9:24	50.4	62.6	76.6
9/19/02 9:39	55.1	60.2	67.5
9/19/02 9:54	53.1	58	71.6
9/19/02 10:09	49.9	54.9	81
9/19/02 10:24	46.9	53.1	73.3
9/19/02 10:39	45.7	50.2	64.9
9/19/02 10:54	44.2	48.5	56.4
9/19/02 11:09	43.8	48.4	59.5
9/19/02 11:24	41.7	48.4	101.9
9/19/02 11:39	45.3	49.3	69.8
9/19/02 11:54	44.9	49	58.9
9/19/02 12:09	44.8	49.4	60.4
9/19/02 12:24	46.9	51.6	57.6
9/19/02 12:39	48.9	52.6	63.1
9/19/02 12:54	49.6	53.4	70.5
9/19/02 13:09	49.1	54.3	87



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 37

Start time (hr:min:sec day/mon/yr)... 07:04:18 17-Sep-02

Elapsed time (hr:min:sec)..... 09:15:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

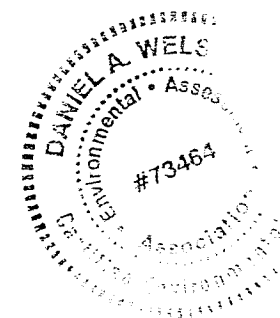
Overall AvgConc (ug/m3)..... 28.1

Overall MaxConc (ug/m3)..... 121.4 at Point#...5

Overall MinConc (ug/m3)..... 0.9 at Point#...29

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/17/02 7:19	18.5	33.4	56
9/17/02 7:34	34.8	46.7	77.5
9/17/02 7:49	48.8	59.6	106.3
9/17/02 8:04	52.3	68	108.3
9/17/02 8:19	64.6	72.3	121.4
9/17/02 8:34	67.4	73.1	95.2
9/17/02 8:49	65.3	71.3	84.7
9/17/02 9:04	64.2	71.6	79.8
9/17/02 9:19	65.2	71.6	79.1
9/17/02 9:34	58.2	65.9	76.3
9/17/02 9:49	57.2	60.7	70.1
9/17/02 10:04	46.6	53.7	63.1
9/17/02 10:19	37.1	42.5	51.3
9/17/02 10:34	27.2	32.5	38.7
9/17/02 10:49	20	25	31.2
9/17/02 11:04	14.2	19.8	25.5
9/17/02 11:19	12.2	15.3	21.1
9/17/02 11:34	9.3	12.6	23.2
9/17/02 11:49	8.3	10.7	17.7
9/17/02 12:04	7.5	10.1	21.5
9/17/02 12:19	6.1	9.1	28.7
9/17/02 12:34	5.9	7.7	11.7
9/17/02 12:49	5.2	7.4	15.1
9/17/02 13:04	4.8	7.7	22.3
9/17/02 13:19	5.2	7.5	15.8
9/17/02 13:34	4.8	6.8	13.6
9/17/02 13:49	4.6	6.6	13.3
9/17/02 14:04	2.3	6.8	18.6
9/17/02 14:19	0.9	7.6	21.6
9/17/02 14:34	5.1	6.8	10.7
9/17/02 14:49	4.8	7.8	54.1



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 37

Start time (hr:min:sec day/mon/yr)... 07:04:18 17-Sep-02

Elapsed time (hr:min:sec)..... 09:15:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

Overall AvgConc (ug/m3)..... 28.1

Overall MaxConc (ug/m3)..... 121.4 at Point#...5

Overall MinConc (ug/m3)..... 0.9 at Point#...29

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/17/02 15:04	4	6.7	11.3
9/17/02 15:19	4.2	7.4	14.2
9/17/02 15:34	5.5	7.6	15.6
9/17/02 15:49	5.2	7.4	18.5
9/17/02 16:04	4.2	7.1	10.6
9/17/02 16:19	4.4	7.4	16.2



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 38

Start time (hr:min:sec day/mon/yr)... 07:18:58 16-Sep-02

Elapsed time (hr:min:sec)..... 09:30:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

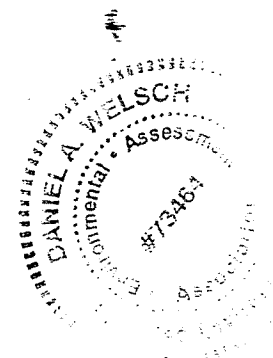
Overall AvgConc (ug/m3)..... 41.1

Overall MaxConc (ug/m3)..... 149.8 at Point#...1

Overall MinConc (ug/m3)..... 16.3 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/16/02 7:33	16.3	22	149.8
9/16/02 7:48	26.2	32.4	38.2
9/16/02 8:03	34.7	42.8	52.9
9/16/02 8:18	45.7	52.8	60
9/16/02 8:33	55.3	61.6	66.8
9/16/02 8:48	64.4	67.7	74.3
9/16/02 9:03	65.7	70.3	84
9/16/02 9:18	63.3	68.6	106.5
9/16/02 9:33	61.4	66.7	75.3
9/16/02 9:48	60.5	66.8	77.7
9/16/02 10:03	57.6	63.1	73.1
9/16/02 10:18	55.3	61.1	68.2
9/16/02 10:33	53.3	59.1	75.5
9/16/02 10:48	48.6	55.1	64.9
9/16/02 11:03	45	50.8	64
9/16/02 11:18	44.2	49	56
9/16/02 11:33	44.9	48.2	56.9
9/16/02 11:48	38.2	43.1	49.5
9/16/02 12:03	31	36.2	42.4
9/16/02 12:18	31.3	34.3	40.6
9/16/02 12:33	32.4	35.3	47.6
9/16/02 12:48	31	35.1	40.4
9/16/02 13:03	27.9	31.2	38
9/16/02 13:18	24.4	27.6	32.4
9/16/02 13:33	24.9	27.7	33.6
9/16/02 13:48	24.3	26.9	31.1
9/16/02 14:03	23.7	26.2	31.2
9/16/02 14:18	22.1	24.7	28.5
9/16/02 14:33	21.8	25.1	30.3
9/16/02 14:48	23.1	25.5	32.6
9/16/02 15:03	22.1	24.4	29.5



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 38

Start time (hr:min:sec day/mon/yr)... 07:18:58 16-Sep-02

Elapsed time (hr:min:sec)..... 09:30:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

Overall AvgConc (ug/m3)..... 41.1

Overall MaxConc (ug/m3)..... 149.8 at Point#...1

Overall MinConc (ug/m3)..... 16.3 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/16/02 15:18	22.5	25.9	29.8
9/16/02 15:33	24.2	27.1	33.7
9/16/02 15:48	25.6	28.4	32.9
9/16/02 16:03	23.4	28.4	30.8
9/16/02 16:18	27.2	29.6	37
9/16/02 16:33	27.3	30.7	34.8
9/16/02 16:48	29.3	32.2	39.7



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 2

Number of logged points..... 31

Start time (hr:min:sec day/mon/yr)... 08:13:03 13-Sep-02

Elapsed time (hr:min:sec)..... 07:45:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

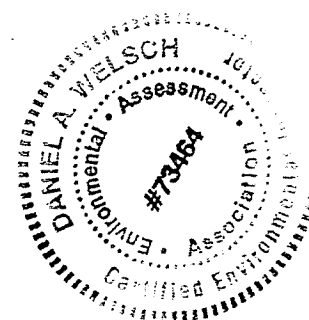
Overall AvgConc (ug/m3)..... 11.8

Overall MaxConc (ug/m3)..... 181.8 at Point#...1

Overall MinConc (ug/m3)..... 0.0 at Point#...11

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/13/02 8:28	38.2	87.4	181.8
9/13/02 8:43	32.9	63.5	154.5
9/13/02 8:58	27.4	34.9	79.4
9/13/02 9:13	22.8	27.8	34.8
9/13/02 9:28	18.1	22.6	31.4
9/13/02 9:43	12.2	16.1	21.6
9/13/02 9:58	10.1	14.3	25.1
9/13/02 10:13	8	10.4	19.1
9/13/02 10:28	5.9	9.1	39.1
9/13/02 10:43	0.9	4.9	21.4
9/13/02 10:58	0	4.3	44.2
9/13/02 11:13	0	2.9	13.8
9/13/02 11:28	0.5	3.2	28.8
9/13/02 11:43	0.1	3.1	46.4
9/13/02 11:58	0.1	3.6	20.2
9/13/02 12:13	0.2	3.1	52.9
9/13/02 12:28	0.1	2.7	12.8
9/13/02 12:43	0.2	3.7	26.6
9/13/02 12:58	0.1	3.6	30.5
9/13/02 13:13	0.9	4.9	36.5
9/13/02 13:28	0.2	4.5	61.4
9/13/02 13:43	0	2.9	9.9
9/13/02 13:58	0	3.3	22.8
9/13/02 14:13	0.3	4.2	55.2
9/13/02 14:28	0.1	3.8	27.9
9/13/02 14:43	1	3.2	11.2
9/13/02 14:58	0	3.6	16.2
9/13/02 15:13	0.1	4.5	83
9/13/02 15:28	0.5	3.3	12.2
9/13/02 15:43	1	3.3	22.6
9/13/02 15:58	0.5	3.8	13.9



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 39

Start time (hr:min:sec day/mon/yr)... 07:00:48 12-Sep-02

Elapsed time (hr:min:sec)..... 09:45:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

Overall AvgConc (ug/m3)..... 7.9

Overall MaxConc (ug/m3)..... 140.8 at Point#...1

Overall MinConc (ug/m3)..... 1.6 at Point#...14

ug/m3

Point Label	"Min"	"Avg"	"Max"
1	4	12.2	140.8
2	4.1	20.8	96.5
3	4.8	11.6	116.1
4	7.5	11.6	24.2
5	13	15.9	21.2
6	15.2	17	22.6
7	12.2	14.7	19
8	8.5	13.1	59.3
9	6.5	8.9	17.8
10	3.9	6.8	16.1
11	4.3	5.4	10.3
12	3.3	5	15.5
13	2.6	4.1	18.9
14	1.6	3.6	9.9
15	2.2	4.2	13.8
16	3.3	4.3	8.1
17	3.2	5.8	96.1
18	3.2	4.6	9.6
19	3.6	5	12.5
20	3.8	5.2	9.1
21	3.9	5.2	10.2
22	4.3	5.7	9.3
23	4.3	5.5	9.4
24	4.2	5.7	10.7
25	4.3	5.6	10.9
26	4.3	6.3	17.8
27	4.6	6.7	15.2
28	4.6	6.7	32
29	4.7	6.4	11.2
30	5	6.3	12.1
31	5.2	6.4	12.7



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 39

Start time (hr:min:sec day/mon/yr)... 07:00:48 12-Sep-02

Elapsed time (hr:min:sec)..... 09:45:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

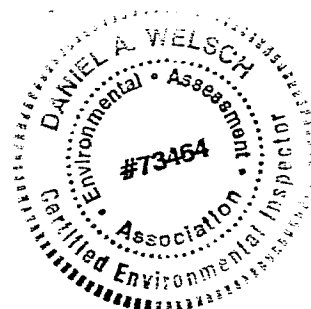
Overall AvgConc (ug/m3)..... 7.9

Overall MaxConc (ug/m3)..... 140.8 at Point#...1

Overall MinConc (ug/m3)..... 1.6 at Point#...14

ug/m3

Point Label	"Min"	"Avg"	"Max"
32	5.3	8.3	36.3
33	5.7	7.6	11.8
34	4.5	7.7	23.3
35	5.4	7.2	14
36	5.6	7.4	12.3
37	6.3	8.3	14.1
38	7.3	8.9	14.9
39	6.8	9	20.4



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 215

Start time (hr:min:sec day/mon/yr)... 08:04:18 11-Sep-02

Elapsed time (hr:min:sec)..... 00:35:50

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:00:10

CalFactor (%)..... 100

StelConc (ug/m3)..... 3.6

STEL occurrence after start (hr:min:sec)..... 00:34:09

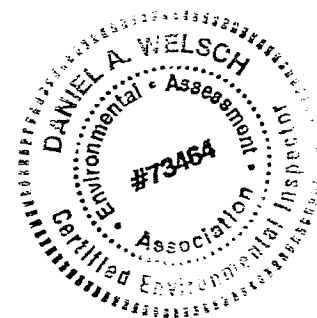
Overall AvgConc (ug/m3)..... 2.9

Overall MaxConc (ug/m3)..... 11.4 at Point#...9

Overall MinConc (ug/m3)..... 0.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:04	0	0	0
9/11/02 8:04	0	0	0
9/11/02 8:04	0	0	0
9/11/02 8:04	0	0	0.1
9/11/02 8:05	0	0	0.1
9/11/02 8:05	0	0	0
9/11/02 8:05	0	0	0
9/11/02 8:05	0	0	0
9/11/02 8:05	0	6.8	11.4
9/11/02 8:05	0	4.5	11.4
9/11/02 8:06	0	0.6	1.1
9/11/02 8:06	0	0.4	1.1
9/11/02 8:06	0	0.6	1.1
9/11/02 8:06	0.8	0.9	1.1
9/11/02 8:06	0	0.3	0.8
9/11/02 8:06	0	0.1	0.2
9/11/02 8:07	0.2	1.7	2.7
9/11/02 8:07	1.1	1.7	2.7
9/11/02 8:07	0.5	0.7	1.1
9/11/02 8:07	0.5	1.3	1.9
9/11/02 8:07	1.9	2.2	2.5
9/11/02 8:07	1.2	1.7	2.5
9/11/02 8:08	1.2	3.7	5.4
9/11/02 8:08	0	2.1	5.4
9/11/02 8:08	0	5.1	8.5
9/11/02 8:08	2.3	4.7	8.5
9/11/02 8:08	0	0.9	2.3
9/11/02 8:08	0	1.3	2.3
9/11/02 8:09	1.6	1.8	2.3
9/11/02 8:09	0.4	0.8	1.6
9/11/02 8:09	0.4	0.4	0.5



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 215

Start time (hr:min:sec day/mon/yr)... 08:04:18 11-Sep-02

Elapsed time (hr:min:sec)..... 00:35:50

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:00:10

CalFactor (%)..... 100

StelConc (ug/m3)..... 3.6

STEL occurrence after start (hr:min:sec)..... 00:34:09

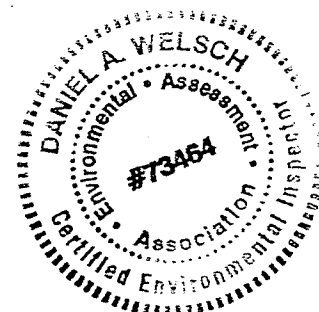
Overall AvgConc (ug/m3)..... 2.9

Overall MaxConc (ug/m3)..... 11.4 at Point#...9

Overall MinConc (ug/m3)..... 0.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:09	0.5	0.8	1
9/11/02 8:09	1	1.6	2
9/11/02 8:09	0.3	0.9	2
9/11/02 8:10	0.3	1.3	2
9/11/02 8:10	0	0.8	2
9/11/02 8:10	0	0	0
9/11/02 8:10	0	0.9	1.6
9/11/02 8:10	1.6	2.8	3.6
9/11/02 8:10	1.5	2.3	3.6
9/11/02 8:11	0.2	0.7	1.5
9/11/02 8:11	0.2	0.6	0.9
9/11/02 8:11	0.9	2.2	3.2
9/11/02 8:11	0.1	1.3	3.2
9/11/02 8:11	0.1	1.1	1.8
9/11/02 8:11	1.8	6.1	9.1
9/11/02 8:12	1.2	4.3	9.1
9/11/02 8:12	1.2	7	11
9/11/02 8:12	0.2	4.5	11
9/11/02 8:12	0.2	0.2	0.2
9/11/02 8:12	0.2	4	6.6
9/11/02 8:12	2.2	3.9	6.6
9/11/02 8:13	0	0.8	2.2
9/11/02 8:13	0	0.1	0.2
9/11/02 8:13	0.2	1.3	2.1
9/11/02 8:13	0.2	0.9	2.1
9/11/02 8:13	0.2	2	3.2
9/11/02 8:13	1.2	2	3.2
9/11/02 8:14	1.2	2.4	3.3
9/11/02 8:14	2.6	2.8	3.3
9/11/02 8:14	1.6	2	2.6
9/11/02 8:14	1.6	1.7	1.8



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 215

Start time (hr:min:sec day/mon/yr)... 08:04:18 11-Sep-02

Elapsed time (hr:min:sec)..... 00:35:50

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:00:10

CalFactor (%)..... 100

StelConc (ug/m3)..... 3.6

STEL occurrence after start (hr:min:sec)..... 00:34:09

Overall AvgConc (ug/m3)..... 2.9

Overall MaxConc (ug/m3)..... 11.4 at Point#...9

Overall MinConc (ug/m3)..... 0.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:14	1.8	1.9	2.1
9/11/02 8:14	2.1	2.7	3.1
9/11/02 8:15	1.8	2.3	3.1
9/11/02 8:15	1.8	3.1	4
9/11/02 8:15	1.6	2.5	4
9/11/02 8:15	1.6	4	5.7
9/11/02 8:15	3.5	4.3	5.7
9/11/02 8:15	2.2	2.7	3.5
9/11/02 8:16	2.2	3.3	4.1
9/11/02 8:16	3.7	3.8	4.1
9/11/02 8:16	3.7	3.9	4.1
9/11/02 8:16	3.2	3.5	4.1
9/11/02 8:16	1.5	2.1	3.2
9/11/02 8:16	1.5	1.6	1.7
9/11/02 8:17	1.7	2	2.3
9/11/02 8:17	2.3	3.2	3.8
9/11/02 8:17	1.2	2.2	3.8
9/11/02 8:17	1.2	1.2	1.2
9/11/02 8:17	1.2	3.1	4.4
9/11/02 8:17	2.2	3	4.4
9/11/02 8:18	2.2	2.8	3.2
9/11/02 8:18	3.2	5	6.2
9/11/02 8:18	3.4	4.5	6.2
9/11/02 8:18	3.4	3.8	4.2
9/11/02 8:18	4.1	4.1	4.2
9/11/02 8:18	3.5	3.7	4.1
9/11/02 8:19	3.5	4	4.4
9/11/02 8:19	4.3	4.3	4.4
9/11/02 8:19	3.3	3.7	4.3
9/11/02 8:19	1	1.9	3.3
9/11/02 8:19	1	1.4	1.7



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 215

Start time (hr:min:sec day/mon/yr)... 08:04:18 11-Sep-02

Elapsed time (hr:min:sec)..... 00:35:50

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:00:10

CalFactor (%)..... 100

StelConc (ug/m3)..... 3.6

STEL occurrence after start (hr:min:sec)..... 00:34:09

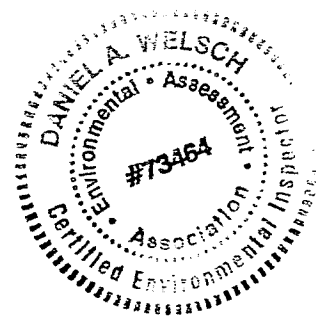
Overall AvgConc (ug/m3)..... 2.9

Overall MaxConc (ug/m3)..... 11.4 at Point#...9

Overall MinConc (ug/m3)..... 0.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:19	1.7	1.7	1.7
9/11/02 8:20	1.7	2.6	3.3
9/11/02 8:20	1.8	2.4	3.3
9/11/02 8:20	1.8	1.9	2
9/11/02 8:20	1.2	1.5	2
9/11/02 8:20	1.2	2.3	3.1
9/11/02 8:20	2.2	2.5	3.1
9/11/02 8:21	1.8	1.9	2.2
9/11/02 8:21	1.8	2.5	3
9/11/02 8:21	2.4	2.6	3
9/11/02 8:21	2.4	3	3.4
9/11/02 8:21	1.8	2.4	3.4
9/11/02 8:21	1.8	3.1	4
9/11/02 8:22	3.3	3.5	4
9/11/02 8:22	2.3	2.7	3.3
9/11/02 8:22	2.2	2.2	2.3
9/11/02 8:22	2.2	3.1	3.7
9/11/02 8:22	3.7	4.2	4.6
9/11/02 8:22	3.3	3.8	4.6
9/11/02 8:23	2.2	2.6	3.3
9/11/02 8:23	1.2	1.6	2.2
9/11/02 8:23	1.2	2.6	3.6
9/11/02 8:23	3.2	3.3	3.6
9/11/02 8:23	3.2	5.3	6.8
9/11/02 8:23	4.2	5.2	6.8
9/11/02 8:24	3.1	3.5	4.2
9/11/02 8:24	3.1	3.2	3.3
9/11/02 8:24	3.3	3.7	4.1
9/11/02 8:24	3.2	3.5	4.1
9/11/02 8:24	3.2	3.3	3.5
9/11/02 8:24	1.5	2.3	3.5



Project Name: Farwell Landfill - Cattaraugus Co., NY**Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management**

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 215

Start time (hr:min:sec day/mon/yr)... 08:04:18 11-Sep-02

Elapsed time (hr:min:sec)..... 00:35:50

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:00:10

CalFactor (%)..... 100

StelConc (ug/m3)..... 3.6

STEL occurrence after start (hr:min:sec)..... 00:34:09

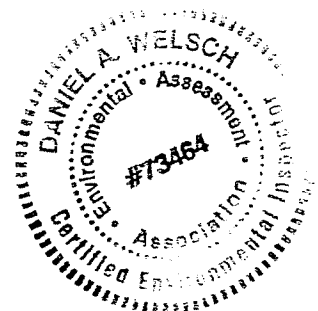
Overall AvgConc (ug/m3)..... 2.9

Overall MaxConc (ug/m3)..... 11.4 at Point#...9

Overall MinConc (ug/m3)..... 0.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:25	1.5	3.8	5.4
9/11/02 8:25	2.3	3.5	5.4
9/11/02 8:25	2.3	2.4	2.6
9/11/02 8:25	2.6	3	3.3
9/11/02 8:25	1.1	1.9	3.3
9/11/02 8:25	1.1	2.3	3.2
9/11/02 8:26	3.2	3.5	3.7
9/11/02 8:26	3.2	3.4	3.7
9/11/02 8:26	3.2	3.3	3.5
9/11/02 8:26	1.8	2.4	3.5
9/11/02 8:26	1.8	2.6	3.2
9/11/02 8:26	2.5	2.7	3.2
9/11/02 8:27	2.5	3.2	3.7
9/11/02 8:27	2.1	2.7	3.7
9/11/02 8:27	2.1	2.5	2.9
9/11/02 8:27	1.2	1.8	2.9
9/11/02 8:27	1.2	2.4	3.2
9/11/02 8:27	3	3	3.2
9/11/02 8:28	2.3	2.5	3
9/11/02 8:28	2.3	3.6	4.5
9/11/02 8:28	4.5	4.6	4.7
9/11/02 8:28	2.4	3.3	4.7
9/11/02 8:28	2.4	3.2	3.8
9/11/02 8:28	2.1	2.7	3.8
9/11/02 8:29	2.1	3.1	3.8
9/11/02 8:29	2.5	3	3.8
9/11/02 8:29	2.5	3.7	4.6
9/11/02 8:29	2.9	3.5	4.6
9/11/02 8:29	2.5	2.6	2.9
9/11/02 8:29	1.6	1.9	2.5
9/11/02 8:30	1.6	3.1	4.1



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 215

Start time (hr:min:sec day/mon/yr)... 08:04:18 11-Sep-02

Elapsed time (hr:min:sec)..... 00:35:50

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:00:10

CalFactor (%)..... 100

StelConc (ug/m3)..... 3.6

STEL occurrence after start (hr:min:sec)..... 00:34:09

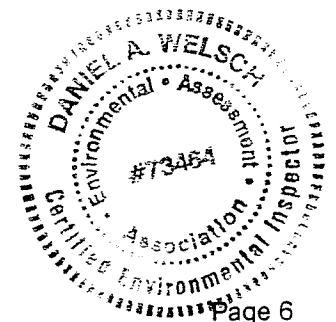
Overall AvgConc (ug/m3)..... 2.9

Overall MaxConc (ug/m3)..... 11.4 at Point#...9

Overall MinConc (ug/m3)..... 0.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:30	4.1	4.2	4.3
9/11/02 8:30	4.3	5	5.5
9/11/02 8:30	3.5	4.3	5.5
9/11/02 8:30	1.3	2.1	3.5
9/11/02 8:30	1.3	4.6	6.8
9/11/02 8:31	3.2	4.6	6.8
9/11/02 8:31	1.7	2.3	3.2
9/11/02 8:31	1.7	2.6	3.3
9/11/02 8:31	2.4	2.7	3.3
9/11/02 8:31	2.4	2.9	3.3
9/11/02 8:31	3.3	3.7	4
9/11/02 8:32	4	4.1	4.3
9/11/02 8:32	4.3	6.5	8.1
9/11/02 8:32	3.2	5.1	8.1
9/11/02 8:32	2.6	2.8	3.2
9/11/02 8:32	2.6	3.5	4.2
9/11/02 8:32	2.2	3	4.2
9/11/02 8:33	2.2	3.4	4.2
9/11/02 8:33	4.2	4.8	5.3
9/11/02 8:33	3.2	4	5.3
9/11/02 8:33	2	2.4	3.2
9/11/02 8:33	2	6	8.8
9/11/02 8:33	2.2	4.8	8.8
9/11/02 8:34	2.2	3.9	5.1
9/11/02 8:34	2.8	3.7	5.1
9/11/02 8:34	2.8	2.8	2.8
9/11/02 8:34	2.8	3.2	3.5
9/11/02 8:34	3.2	3.3	3.5
9/11/02 8:34	3.2	4.1	4.7
9/11/02 8:35	4.4	4.5	4.7
9/11/02 8:35	4.1	4.2	4.4



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 1

Number of logged points..... 215

Start time (hr:min:sec day/mon/yr)... 08:04:18 11-Sep-02

Elapsed time (hr:min:sec)..... 00:35:50

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:00:10

CalFactor (%)..... 100

StelConc (ug/m3)..... 3.6

STEL occurrence after start (hr:min:sec)..... 00:34:09

Overall AvgConc (ug/m3)..... 2.9

Overall MaxConc (ug/m3)..... 11.4 at Point#...9

Overall MinConc (ug/m3)..... 0.0 at Point#...1

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:35	4.1	4.1	4.2
9/11/02 8:35	4.2	5.7	6.8
9/11/02 8:35	4.6	5.4	6.8
9/11/02 8:35	4.6	4.9	5.2
9/11/02 8:36	4.2	4.6	5.2
9/11/02 8:36	4.2	4.9	5.5
9/11/02 8:36	4.2	4.7	5.5
9/11/02 8:36	3.3	3.6	4.2
9/11/02 8:36	3.3	3.9	4.3
9/11/02 8:36	4.2	4.2	4.3
9/11/02 8:37	3.3	3.6	4.2
9/11/02 8:37	3.3	3.9	4.4
9/11/02 8:37	3	3.5	4.4
9/11/02 8:37	3	3.3	3.5
9/11/02 8:37	3.5	3.5	3.6
9/11/02 8:37	3.6	4.1	4.5
9/11/02 8:38	2.3	3.1	4.5
9/11/02 8:38	2.3	4	5.2
9/11/02 8:38	4.6	4.8	5.2
9/11/02 8:38	3.2	3.7	4.6
9/11/02 8:38	3.2	3.9	4.5
9/11/02 8:38	3.6	3.9	4.5
9/11/02 8:39	3.6	3.9	4.1
9/11/02 8:39	4.1	5.9	7.2
9/11/02 8:39	4.2	5.4	7.2
9/11/02 8:39	3.6	3.8	4.2
9/11/02 8:39	3.6	4	4.4
9/11/02 8:39	3.2	3.6	4.4
9/11/02 8:40	2	2.4	3.2



Project Name: Farwell Landfill - Cattaraugus Co., NY**Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management**

DataRAM ID# 2428

Tag Number 2

Number of logged points..... 36

Start time (hr:min:sec day/mon/yr)... 08:41:00 11-Sep-02

Elapsed time (hr:min:sec)..... 09:00:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

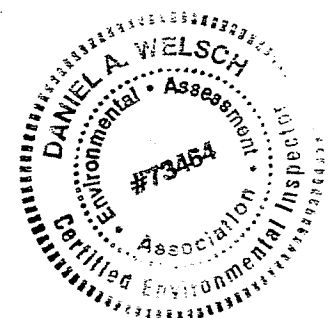
Overall AvgConc (ug/m3)..... 7.5

Overall MaxConc (ug/m3)..... 249.8 at Point#...31

Overall MinConc (ug/m3)..... 0.0 at Point#...2

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 8:56	2.2	6.9	46.7
9/11/02 9:11	0	8.7	43.9
9/11/02 9:26	4.6	9.6	43.4
9/11/02 9:41	5.3	9.4	20.1
9/11/02 9:56	0	7	23.3
9/11/02 10:11	3.2	5.6	14.4
9/11/02 10:26	2.5	5.7	16.2
9/11/02 10:41	1.9	5.6	74
9/11/02 10:56	0	4.5	22.3
9/11/02 11:11	2.4	5.1	14.4
9/11/02 11:26	2.2	5.6	22.8
9/11/02 11:41	2.5	5.2	13.5
9/11/02 11:56	0	6.8	98.9
9/11/02 12:11	0.3	4.6	9.5
9/11/02 12:26	0	4.8	12
9/11/02 12:41	2.7	5.2	34.4
9/11/02 12:56	2.3	6.9	91.7
9/11/02 13:11	1.5	6.9	99.1
9/11/02 13:26	3.1	6	18.5
9/11/02 13:41	1.6	6.2	14.7
9/11/02 13:56	3.1	7.1	41.1
9/11/02 14:11	3.5	9	104.2
9/11/02 14:26	4	9	120.8
9/11/02 14:41	3.8	9.5	168.2
9/11/02 14:56	4.4	7	17.3
9/11/02 15:11	5.2	9.2	80.5
9/11/02 15:26	3.8	7.5	20.1
9/11/02 15:41	0	7.8	41.8
9/11/02 15:56	4.6	7.7	28.3
9/11/02 16:11	3.4	9.8	43.8
9/11/02 16:26	0	14.5	249.8



Project Name: Farwell Landfill - Cattaraugus Co., NY

Operator: Daniel A. Welsch, CHMM - Genesis Environmental Management

DataRAM ID# 2428

Tag Number 2

Number of logged points..... 36

Start time (hr:min:sec day/mon/yr)... 08:41:00 11-Sep-02

Elapsed time (hr:min:sec)..... 09:00:00

Averaging Time (sec)..... 10

Logging period (hr:min:sec)..... 00:15:00

CalFactor (%)..... 100

StelConc (ug/m3)..... 0.0

STEL occurrence after start (hr:min:sec)..... 00:00:00

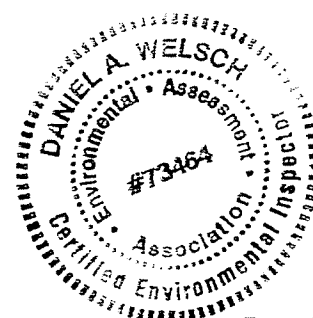
Overall AvgConc (ug/m3)..... 7.5

Overall MaxConc (ug/m3)..... 249.8 at Point#...31

Overall MinConc (ug/m3)..... 0.0 at Point#...2

ug/m3

Point Label	"Min"	"Avg"	"Max"
9/11/02 16:41	5.4	12.5	101.2
9/11/02 16:56	3.1	8.3	21.8
9/11/02 17:11	4.2	9.5	73.7
9/11/02 17:26	4.4	9.5	41.9
9/11/02 17:41	4.1	7.7	28.6



APPENDIX 3

SOIL SAMPLE ANALYTICAL DATA RESULTS



CATTARAUGUS COUNTY

DEPARTMENT OF PUBLIC WORKS
Engineering Division

8810 Rt. 242
Little Valley, NY 14755-9732

telephone (716) 938-9121 x2441
fax (716) 938-9056

LETTER OF TRANSMITTAL

TO: NYSDEC
Division of Environmental Remediation
270 Michigan Avenue
Buffalo, NY 14203-2999

DATE: 10/29/02
PROJECT NAME
PROJECT NUMBER
RE: Recycling Equipment

ATTN.: David P. Locey, Environmental Engineer I
FROM: Allan Ormond

WE ARE SENDING: ☒ ATTACHED UNDER SEPARATE COVER VIA:

☒ US MAIL CERTIFIED #
UPS FAX
OTHER COURIER

Copies	Date	Number	Description
1	10/08/02	BEV-02-026	Empire-GEO Services Stockpile sampling & testing report

THESE ARE TRANSMITTED as checked:

FOR APPROVAL
☒ FOR YOUR USE
FYI

☒ AS PER YOUR REQUEST
FOR REVIEW AND COMMENT

REMARKS:

Should you need anything further, please let me know.

Thank You.

Al Ormond

October 8, 2002
Project No. BEV-02-026

Cattaraugus County Department of Public Works
8810 NYS Route 242
Little Valley, New York 14755
Phone: 938-9121 / Fax: 938-9056

Attention: Mr. Al Ormond

Re: Stockpile Sampling and Testing
Farwell Road Landfill Remediation Site

Dear Mr. Ormond:

Empire Geo-Services, Inc. (Empire) is pleased to submit the Testing Summary Report, to Cattaraugus County Department of Public Works for the above referenced project.

This report presents the results of an environmental sampling and testing program completed by Empire Geo-Services, Inc. (Empire) at the Farwell Road Landfill Remediation site in the Town of Ischua, Cattaraugus County, New York. The approximate project site location is shown on Figure No. 1 located in Appendix A.

The environmental sampling and testing program consisted of obtaining grab samples from the on-site stockpiles and preparing composite samples for analytical testing. This report summarizes the analytical test results and presents the NYSDEC TAGM guidelines applicable for the compounds detected.

Site Background

The Farwell Road Landfill Remediation site is located off of Farwell Road just west of NY Route 16 in the Town of Ischua, Erie County, New York. Soil stockpiles are located on the site and are planned to be used as a backfill material for the landfill.

Environmental Sampling and Testing

An Empire Environmental Specialist was on site on September 5, 2002 to sample the stockpiles. Several grab samples were obtained from each of the stockpiles on site and placed into two separate stainless steel mixing bowls. Upon completion of grab sampling, the samples were thoroughly blended in each of the mixing bowls to produce a total of two (2) composite samples.

The composite samples were placed into precleaned 4 oz. glass vials with teflon septum caps. The glass vials were labeled with the date, time and location of the project, and placed

in an ice cooler at approximately 4-degrees Celsius for transport via courier to Paradigm Environmental Services, Inc., a New York State Department of Health (NYSDOH) Certified Analytical Testing Laboratory, located at 179 Lake Avenue, Rochester, New York 14608. Included with the samples was a chain-of custody record. The analytical test report prepared by Paradigm is presented in Appendix B and is summarized in the following section.

The two (2) composite samples obtained from the on-site stockpiles were analyzed for the presence of Target Compound Listed (TCL) Volatiles and Semi-Volatiles, and Target Analyte Listed (TAL) Metals. The environmental analytical results of these composite samples are summarized below.

No TCL Semi-Volatile or Volatile Organic Compounds were detected above the laboratory analytical detection limits in the composite sample submitted. Therefore, these samples would meet the NYSDEC STARS and TAGM guidelines for these compounds analyzed.

TAL Metals were identified in the two composite samples submitted and the analytical results are shown in the following table with comparison to the TAGM #4046 guidelines.

Table No. 2 TAL METALS DETECTED (SW 846 METHOD 6010) IN THE COMPOSITE SAMPLES SP-1 AND SP-2

COMPOSITE SAMPLE SP-1				
COMPOUND	TEST RESULT	UNITS (ppm)	Eastern USA Background (ppm)	Recommended Soil Cleanup Objective
Aluminum	15,800	mg/kg	33,000	SB
Arsenic	16.9	mg/kg	3-12	7.5 or SB
Barium	102	mg/kg	15-600	300 or SB
Cadmium	0.843	mg/kg	0.1-1	1 or SB
Calcium	1,100	mg/kg	130-35,000	SB
Chromium	15.7	mg/kg	1.5-40	10 or SB
Cobalt	12.3	mg/kg	2.5-60	30 or SB
Copper	14.3	mg/kg	1-50	25 or SB
Iron	32,700	mg/kg	2,000-550,000	2,000 or SB
Lead	14.7	mg/kg	4-61	SB
Magnesium	3,710	mg/kg	100-5,000	SB
Manganese	703	mg/kg	50-5,000	SB
Nickel	23.6	mg/kg	0.5-25	13 or SB
Potassium	2,000	mg/kg	8,500-43,000	SB
Silver	0.687	mg/kg	N/A	SB
Thallium	3.51	mg/kg	N/A	SB
Vanadium	24.4	mg/kg	1-300	150 or SB
Zinc	61.8	mg/kg	9-50	20 or SB

COMPOSITE SAMPLE SP-2				
COMPOUND	TEST RESULT	UNITS (ppm)	Eastern USA Background (ppm)	Rec. Soil Cleanup Objective
Aluminum	15,300	mg/kg	33,000	SB
Arsenic	18.1	mg/kg	3-12	7.5 or SB
Barium	107	mg/kg	15-600	300 or SB
Cadmium	0.865	mg/kg	0.1-1	1 or SB
Calcium	1,580	mg/kg	130-35,000	SB
Chromium	15.1	mg/kg	1.5-40	10 or SB
Cobalt	12.0	mg/kg	2.5-60	30 or SB
Copper	16.1	mg/kg	1-50	25 or SB
Iron	32,600	mg/kg	2,000-550,000	2,000 or SB
Lead	14.6	mg/kg	4-61	SB
Magnesium	3,990	mg/kg	100-5,000	SB
Manganese	714	mg/kg	50-5,000	SB
Nickel	23.6	mg/kg	0.5-25	13 or SB
Potassium	1,980	mg/kg	8,500-43,000	SB
Selenium	1.21	mg/kg	0.1-3.9	2 or SB
Silver	0.694	mg/kg	N/A	SB
Thallium	3.59	mg/kg	N/A	SB
Vanadium	23.6	mg/kg	1-300	150 or SB
Zinc	63.5	mg/kg	9-50	20 or SB

SB=Site Background

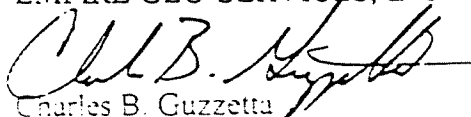
Concluding Remarks

The test results contained herein were reported for the exclusive use of the Cattaraugus County Department of Public Works for specific application of evaluating potential contaminants in the stockpiles explored. This report does not present a comprehensive environmental evaluation of the site, but is limited to testing of the sample locations as described herein. No warranties, expressed or implied are made.

If we can be of further assistance regarding this project, please do not hesitate to contact our office.

Respectfully Submitted:

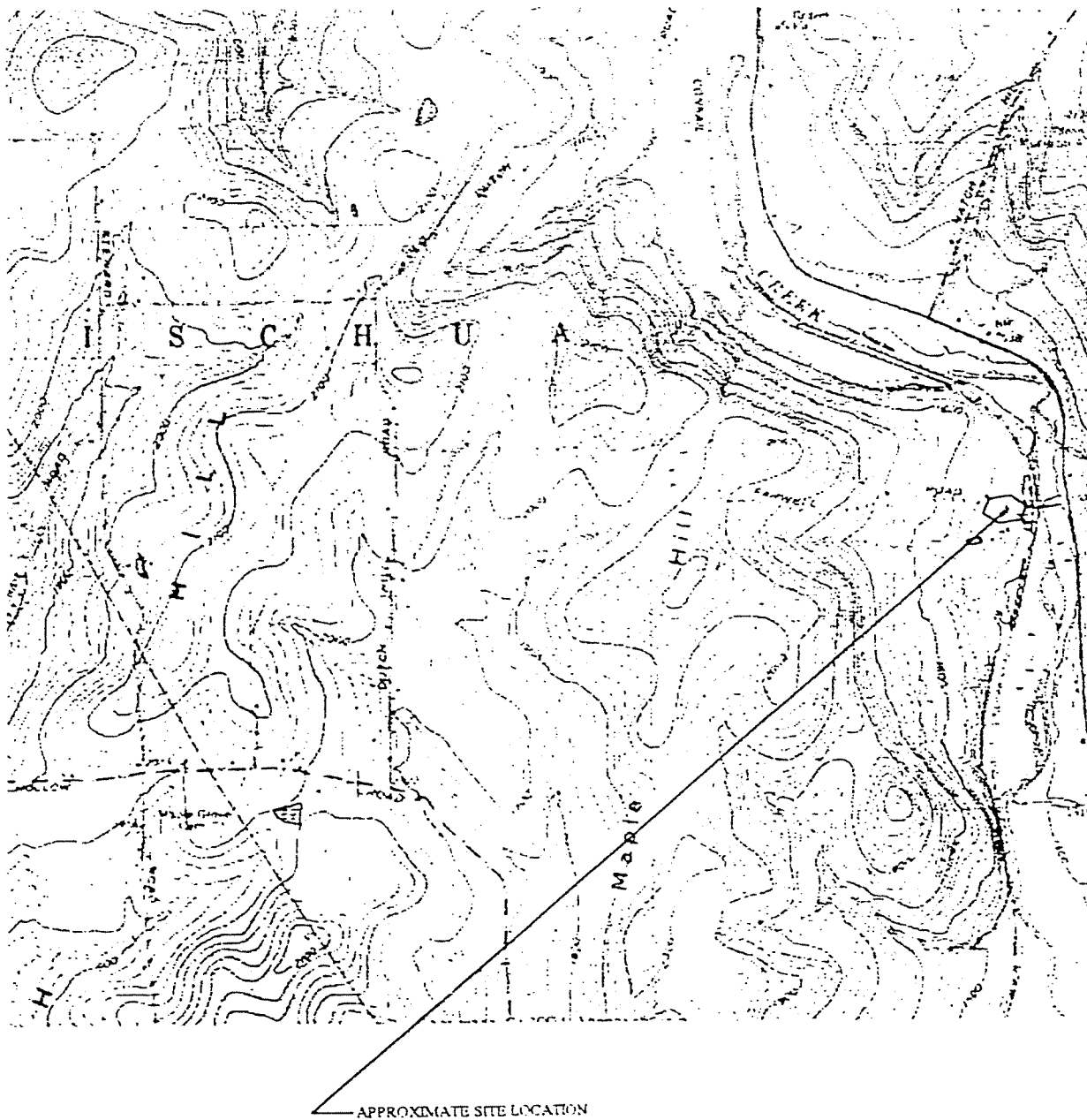
EMPIRE GEO-SERVICES, INC.


Charles B. Guzzetta

Geotechnical Environmental Specialist

EMPIRE GEO-SERVICES, INC.

APPENDIX A
FIGURE



EMPIRE
SERVICES, INC.
A SUBSIDIARY OF THE SERVICES, INC.

PROJECT
LOCATION MAP

FARWELL ROAD REMEDIATION SITE
TOWN OF ISCHUA, NEW YORK

DRAWN BY USGS

SCALE: NTS

PROJ. NO.: BEV-02-026

CHECKED BY: C.G.

DATE: SEP 2002

FIGURE NO. 1

APPENDIX B
ENVIRONMENTAL ANALYTICAL REPORT



PARADIGM

ENVIRONMENTAL SERVICES, INC.

79 Lake Avenue, Rochester, NY 14603 (585) 647-2530 FAX (585) 647-3311

Client: Empire GeoServices

Lab Project No.: 02-2269

Lab Sample No.: 8270

Client Job Site: Farwell Landfill
Remediation Site

Sample Type: Soil

Client Job No.: BEV-02-026

Date Sampled: 09/05/2002

Field Location: SP-1 Stockpile

Date Received: 09/06/2002

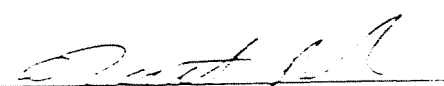
Field ID No.: N/A

Laboratory Report for TAL Metals Analysis in Soil

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	09/10/02	SW846 6010	15800
Antimony	09/10/02	SW846 6010	<6.16
Arsenic	09/12/02	SW846 6010	16.9
Barium	09/10/02	SW846 6010	102
Beryllium	09/10/02	SW846 6010	<0.513
Cadmium	09/10/02	SW846 6010	0.843
Calcium	09/12/02	SW846 6010	1100
Chromium	09/10/02	SW846 6010	15.7
Cobalt	09/10/02	SW846 6010	12.3
Copper	09/10/02	SW846 6010	14.3
Iron	09/12/02	SW846 6010	32700
Lead	09/10/02	SW846 6010	14.7
Magnesium	09/12/02	SW846 6010	3710
Manganese	09/10/02	SW846 6010	703
Mercury	09/13/02	SW846 7471	<0.107
Nickel	09/10/02	SW846 6010	23.6
Potassium	09/13/02	SW846 6010	2000
Selenium	09/10/02	SW846 6010	<0.513
Silver	09/10/02	SW846 6010	0.687
Sodium	09/12/02	SW846 6010	<103
Thallium	09/10/02	SW846 6010	3.51
Vanadium	09/10/02	SW846 6010	24.4
Zinc	09/10/02	SW846 6010	61.8

ELAP ID No.:10958

Comments:

Approved By: 

Bruce Hoogestegen, Technical Director



PARADIGM

ENVIRONMENTAL SERVICES, INC.

1 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Empire GeoServices

Lab Project No.: 02-2269

Lab Sample No.: 8271

Client Job Site: Farwell Landfill
Remediation Site

Sample Type: Soil

Client Job No.: BEV-02-026

Date Sampled: 09/05/2002

Date Received: 09/06/2002

Field Location: SP-2 Stockpile


Field ID No.: N/A

Laboratory Report for TAL Metals Analysis in Soil

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	09/10/02	SW846 6010	15300
Antimony	09/10/02	SW846 6010	<6.07
Arsenic	09/12/02	SW846 6010	18.1
Barium	09/10/02	SW846 6010	107
Beryllium	09/10/02	SW846 6010	<0.506
Cadmium	09/10/02	SW846 6010	0.865
Calcium	09/12/02	SW846 6010	1580
Chromium	09/10/02	SW846 6010	15.1
Cobalt	09/10/02	SW846 6010	12.0
Copper	09/10/02	SW846 6010	16.1
Iron	09/12/02	SW846 6010	32600
Lead	09/10/02	SW846 6010	14.6
Magnesium	09/12/02	SW846 6010	3990
Manganese	09/10/02	SW846 6010	714
Mercury	09/13/02	SW846 7471	<0.091
Nickel	09/10/02	SW846 6010	23.6
Potassium	09/13/02	SW846 6010	1980
Selenium	09/10/02	SW846 6010	1.21
Silver	09/10/02	SW846 6010	0.694
Sodium	09/12/02	SW846 6010	<101
Thallium	09/10/02	SW846 6010	3.59
Vanadium	09/10/02	SW846 6010	23.6
Zinc	09/10/02	SW846 6010	63.5

ELAP ID No.:10958

Comments:

Approved By: 
Bruce Hoogesteger, Technical Director

Volatile Analysis Report for Soils/Solids/Sludges

 Client: Empire Geo-Services

Client Job Site: Farwell Landfill
 Remediation Site
 Client Job Number: BEV-02-026
 Field Location: SP-1
 Field ID Number: N/A
 Sample Type: Soil

Lab Project Number: 02-2269
 Lab Sample Number: 8270
 Date Sampled: 09/05/2002
 Date Received: 09/06/2002
 Date Analyzed: 09/12/2002

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 8.21
Bromomethane	ND< 8.21
Bromoform	ND< 8.21
Carbon tetrachloride	ND< 8.21
Chloroethane	ND< 8.21
Chloromethane	ND< 8.21
2-Chloroethyl vinyl ether	ND< 8.21
Chloroform	ND< 8.21
Dibromochloromethane	ND< 8.21
1,1-Dichloroethane	ND< 8.21
1,2-Dichloroethane	ND< 8.21
1,1-Dichloroethene	ND< 8.21
cis-1,2-Dichloroethene	ND< 8.21
trans-1,2-Dichloroethene	ND< 8.21
1,2-Dichloropropane	ND< 8.21
cis-1,3-Dichloropropene	ND< 8.21
trans-1,3-Dichloropropene	ND< 8.21
Methylene chloride	ND< 20.5
1,1,2,2-Tetrachloroethane	ND< 8.21
Tetrachloroethene	ND< 8.21
1,1,1-Trichloroethane	ND< 8.21
1,1,2-Trichloroethane	ND< 8.21
Trichloroethene	ND< 8.21
Trichlorofluoromethane	ND< 8.21
Vinyl Chloride	ND< 8.21

Aromatics	Results in ug / Kg
Benzene	ND< 8.21
Chlorobenzene	ND< 8.21
Ethylbenzene	ND< 8.21
Toluene	ND< 8.21
m,p - Xylene	ND< 8.21
o - Xylene	ND< 8.21
Styrene	ND< 8.21
1,2-Dichlorobenzene	ND< 8.21
1,3-Dichlorobenzene	ND< 8.21
1,4-Dichlorobenzene	ND< 8.21

Ketones	Results in ug / Kg
Acetone	ND< 41.0
2-Butanone	ND< 20.5
2-Hexanone	ND< 20.5
4-Methyl-2-pentanone	ND< 20.5


Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 20.5
Vinyl acetate	ND< 20.5

ELAP Number 10958

Method: EPA 8260B

Data File: 61669.D

Comments: ND denotes Non Detect
 ug / Kg = microgram per Kilogram


 Bruce Hoogesteger Technical Director

Volatile Analysis Report for Soils/Solids/Sludges

 Client: Empire Geo-Services

Client Job Site: Farwell Landfill
 Remediation Site
 Client Job Number: BEV-02-026
 Field Location: SP-2
 Field ID Number: N/A
 Sample Type: Soil

Lab Project Number: 02-2269
 Lab Sample Number: 8271
 Date Sampled: 09/05/2002
 Date Received: 09/06/2002
 Date Analyzed: 09/12/2002

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 7.79
Bromomethane	ND< 7.79
Bromoform	ND< 7.79
Carbon tetrachloride	ND< 7.79
Chloroethane	ND< 7.79
Chloromethane	ND< 7.79
2-Chloroethyl vinyl ether	ND< 7.79
Chloroform	ND< 7.79
Dibromochloromethane	ND< 7.79
1,1-Dichloroethane	ND< 7.79
1,2-Dichloroethane	ND< 7.79
1,1-Dichloroethene	ND< 7.79
cis-1,2-Dichloroethene	ND< 7.79
trans-1,2-Dichloroethene	ND< 7.79
1,2-Dichloropropane	ND< 7.79
cis-1,3-Dichloropropene	ND< 7.79
trans-1,3-Dichloropropene	ND< 7.79
Methylene chloride	ND< 19.5
1,1,2,2-Tetrachloroethane	ND< 7.79
Tetrachloroethene	ND< 7.79
1,1,1-Trichloroethane	ND< 7.79
1,1,2-Trichloroethane	ND< 7.79
Trichloroethene	ND< 7.79
Trichlorofluoromethane	ND< 7.79
Vinyl Chloride	ND< 7.79

Aromatics	Results in ug / Kg
Benzene	ND< 7.79
Chlorobenzene	ND< 7.79
Ethylbenzene	ND< 7.79
Toluene	ND< 7.79
m,p - Xylene	ND< 7.79
o - Xylene	ND< 7.79
Styrene	ND< 7.79
1,2-Dichlorobenzene	ND< 7.79
1,3-Dichlorobenzene	ND< 7.79
1,4-Dichlorobenzene	ND< 7.79

Ketones	Results in ug / Kg
Acetone	ND< 38.9
2-Butanone	ND< 19.5
2-Hexanone	ND< 19.5
4-Methyl-2-pentanone	ND< 19.5

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 19.5
Vinyl acetate	ND< 19.5

ELAP Number 10958

Method: EPA 8250B

Data File: 61670.D

Comments: ND denotes Non Detect
 ug / Kg = microgram per Kilogram


 Bruce Hoogesteger Technical Director

Semi-Volatile Analysis Report for Soils/Solids/Sludges

 Client: Empire Geo-Services

Client Job Site: Farwell Landfill
 Remediation Site
 Client Job Number: BEV-02-026
 Field Location: SP-1
 Field ID Number: N/A
 Sample Type: Soil

Lab Project Number: 02-2269
 Lab Sample Number: 8270
 Date Sampled: 09/05/2002
 Date Received: 09/06/2002
 Date Analyzed: 09/12/2002

Base / Neutrals	Results in ug / Kg	Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 301	Dibenz (a,h) anthracene	ND< 301
Anthracene	ND< 301	Fluoranthene	ND< 301
Benzo (a) anthracene	ND< 301	Fluorene	ND< 301
Benzo (a) pyrene	ND< 301	Indeno (1,2,3-cd) pyrene	ND< 301
Benzo (b) fluoranthene	ND< 301	Naphthalene	ND< 301
Benzo (g,h,i) perylene	ND< 301	Phenanthrene	ND< 301
Benzo (k) fluoranthene	ND< 301	Pyrene	ND< 301
Chrysene	ND< 301	Acenaphthylene	ND< 301
Diethyl phthalate	ND< 301	1,2-Dichlorobenzene	ND< 301
Dimethyl phthalate	ND< 751	1,3-Dichlorobenzene	ND< 301
Butylbenzylphthalate	ND< 301	1,4-Dichlorobenzene	ND< 301
Di-n-butyl phthalate	ND< 301	1,2,4-Trichlorobenzene	ND< 301
Di-n-octylphthalate	ND< 301	Nitrobenzene	ND< 301
Bis (2-ethylhexyl) phthalate	ND< 301	2,4-Dinitrotoluene	ND< 301
2-Chloronaphthalene	ND< 301	2,6-Dinitrotoluene	ND< 301
Hexachlorobenzene	ND< 301	Bis (2-chloroethyl) ether	ND< 301
Hexachloroethane	ND< 301	Bis (2-chloroisopropyl) ether	ND< 301
Hexachlorocyclopentadiene	ND< 301	Bis (2-chloroethoxy) methane	ND< 301
Hexachlorobutadiene	ND< 301	4-Bromophenyl phenyl ether	ND< 301
N-Nitroso-di-n-propylamine	ND< 301	4-Chlorophenyl phenyl ether	ND< 301
N-Nitrosodiphenylamine	ND< 301	Benzidine	ND< 751
N-Nitrosodimethylamine	ND< 301	3,3'-Dichlorobenzidine	ND< 301
Isophorone	ND< 301	4-Chloroaniline	ND< 301
Benzyl alcohol	ND< 751	2-Nitroaniline	ND< 751
Dibenzofuran	ND< 301	3-Nitroaniline	ND< 751
2-Methylnaphthalene	ND< 301	4-Nitroaniline	ND< 751


Acids	Results in ug / Kg	Acids	Results in ug / Kg
Phenol	ND< 301	2-Methylphenol	ND< 301
2-Chlorophenol	ND< 301	4-Methylphenol	ND< 301
2,4-Dichlorophenol	ND< 301	2,4-Dimethylphenol	ND< 301
2,6-Dichlorophenol	ND< 301	2-Nitrophenol	ND< 301
2,4,5-Trichlorophenol	ND< 751	4-Nitrophenol	ND< 751
2,4,6-Trichlorophenol	ND< 301	2,4-Dinitrophenol	ND< 301
Pentachlorophenol	ND< 751	4,6-Dinitro-2-methylphenol	ND< 751
4-Chloro-3-methylphenol	ND< 301	Benzoic acid	ND< 751

ELAP Number 10958

Method: EPA 8270C

Data File: 5650.D

Comments: ND denotes Non Detect
 ug / Kg = microgram per Kilogram


 Bruce Hoogesteger Technical Director

Semi-Volatile Analysis Report for Soils/Solids/Sludges

 Client: Empire Geo-Services

Client Job Site: Farwell Landfill
 Remediation Site
 Client Job Number: BEV-02-026
 Field Location: SP-2
 Field ID Number: N/A
 Sample Type: Soil

Lab Project Number: 02-2269
 Lab Sample Number: 8271
 Date Sampled: 09/05/2002
 Date Received: 09/06/2002
 Date Analyzed: 09/12/2002

Base / Neutrals	Results in ug / Kg	Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 300	Dibenz (a,h) anthracene	ND< 300
Anthracene	ND< 300	Fluoranthene	ND< 300
Benzo (a) anthracene	ND< 300	Fluorene	ND< 300
Benzo (a) pyrene	ND< 300	Indeno (1,2,3-cd) pyrene	ND< 300
Benzo (b) fluoranthene	ND< 300	Naphthalene	ND< 300
Benzo (g,h,i) perylene	ND< 300	Phenanthrene	ND< 300
Benzo (k) fluoranthene	ND< 300	Pyrene	ND< 300
Chrysene	ND< 300	Acenaphthylene	ND< 300
Diethyl phthalate	ND< 300	1,2-Dichlorobenzene	ND< 300
Dimethyl phthalate	ND< 749	1,3-Dichlorobenzene	ND< 300
Butylbenzylphthalate	ND< 300	1,4-Dichlorobenzene	ND< 300
Di-n-butyl phthalate	ND< 300	1,2,4-Trichlorobenzene	ND< 300
Di-n-octylphthalate	ND< 300	Nitrobenzene	ND< 300
Bis (2-ethylhexyl) phthalate	ND< 300	2,4-Dinitrotoluene	ND< 300
2-Chloronaphthalene	ND< 300	2,6-Dinitrotoluene	ND< 300
Hexachlorobenzene	ND< 300	Bis (2-chloroethyl) ether	ND< 300
Hexachloroethane	ND< 300	Bis (2-chloroisopropyl) ether	ND< 300
Hexachlorocyclopentadiene	ND< 300	Bis (2-chloroethoxy) methane	ND< 300
Hexachlorobutadiene	ND< 300	4-Bromophenyl phenyl ether	ND< 300
N-Nitroso-di-n-propylamine	ND< 300	4-Chlorophenyl phenyl ether	ND< 300
N-Nitrosodiphenylamine	ND< 300	Benzidine	ND< 749
N-Nitrosodimethylamine	ND< 300	3,3'-Dichlorobenzidine	ND< 300
Isophorone	ND< 300	4-Chloroaniline	ND< 300
Benzyl alcohol	ND< 749	2-Nitroaniline	ND< 749
Dibenzofuran	ND< 300	3-Nitroaniline	ND< 749
2-Methylnaphthalene	ND< 300	4-Nitroaniline	ND< 749


Acids	Results in ug / Kg	Acids	Results in ug / Kg
Phenol	ND< 300	2-Methylphenol	ND< 300
2-Chlorophenol	ND< 300	4-Methylphenol	ND< 300
2,4-Dichlorophenol	ND< 300	2,4-Dimethylphenol	ND< 300
2,6-Dichlorophenol	ND< 300	2-Nitrophenol	ND< 300
2,4,5-Trichlorophenol	ND< 749	4-Nitrophenol	ND< 749
2,4,6-Trichlorophenol	ND< 300	2,4-Dinitrophenol	ND< 300
Pentachlorophenol	ND< 749	4,6-Dinitro-2-methylphenol	ND< 749
4-Chloro-3-methylphenol	ND< 300	Benzoic acid	ND< 749

ELAP Number 10958

Method: EPA 8270C

Data File: 5691.D

Comments: ND denotes Non Detect
 ug / Kg = microgram per Kilogram


 Bruce Hoogesteger, Technical Director

APPENDIX 4

SOIL SAMPLE CHAIN-OF-CUSTODY FORMS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Florence, NY 14060
(716) 647-2530 • (800) 724-1997
FAX: (716) 647-3311

CHAIN OF CUSTODY

REPORT TO: INVOICE TO:

COMPANY: EMPIRE GEO-SERVICES, INC.	LAB PROJECT #: 02-2209	CLIENT PROJECT #:
ADDRESS: 5167 S. PARK AVE	TURNAROUND TIME: (WORKING DAYS)	
CITY: HAMBURG NY	STATE: NY	ZIP: 14075
PHONE: (716) 649-8110	FAX: (716) 649-8051	STD <input checked="" type="checkbox"/> 5
ATTN: C. GUZZETTA	OTHER	

PROJECT NAME/SITE NAME:
LANDFILL LANDFILL /
HAMBURG SITE /
GEN 02-026

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRA	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS	REACTIVITY	REACTIVITY (PH)	PAINT FILTER	PCB	TCL VOLATILES	TCL SEMI VOLATILES	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	9-5-02 9:30 AM	X		70 DRUMS - CS-1 through CS-7 STOCKPILE - SP-1, SP-2	SOIL	24oz	X	X	X	X	X	X	AS PER QUOTE 12/25/01	82263
2	10:00 AM			CS-2			X	X	X	X	X	X		82264
3	10:30 AM			CS-3			X	X	X	X	X	X		82265
4	10:55 AM			CS-4			X	X	X	X	X	X		82266
5	11:20 AM			CS-5			X	X	X	X	X	X		82267
6	12:00 PM			CS-6			X	X	X	X	X	X		82268
7	2:00 PM			CS-7			X	X	X	X	X	X		82269
8	3:00 PM			SP-1 STOCKPILE		4oz								82270
9	3:00 PM			SP-2 STOCKPILE		4oz								82271
10														

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:	CONTAINER TYPE:	PRESERVATIONS:	HOLDING TIME:	TEMPERATURE:
--	-----------------	----------------	---------------	--------------

Sampled By: Chas R. Guzzetta	Date/Time: 9-5-02 9:30 AM	Relinquished By: EMPIRE GEO-SERVICES	Date/Time: 9-6-02	Total Cost:
Relinquished By: Chas R. Guzzetta	Date/Time: 9-5-02 3:00 PM	Received By: Chas R. Guzzetta	Date/Time: 9-6-02 1:00 PM	
Received By: EMPIRE GEO-SERVICES, INC.	Date/Time: 9-5-02 3:00 PM	Received By: Chas R. Guzzetta	Date/Time: 9-6-02 1:00 PM	

APPENDIX 5
BACKFILL COMPACTION TEST RESULTS

CUBA OFFICE
39 Water Street
Box 236
Cuba, NY 14727



Phone: (716)968-9686
Fax: (716)968-9688

CONTRACT DRILLING AND TESTING

APPROVED

10/11/02
[Signature]

INSPECTOR'S DAILY REPORT

<u>Project: Farwell Landfill</u>	<u>Date: 09-19-02</u>
<u>Client: Cornell Contracting</u>	<u>Day: Thursday</u>
<u>Contractor: Cornell Contracting</u>	<u>Weather:</u>
<u>Project No: CBT-02-053</u>	<u>Temp.:</u>
<u>Report No: FR-1</u>	<u>Wind:</u>

OBSERVATIONS:

The undersigned SJB representative was present at the above referenced site for compaction testing with Humboldt 5001B. All tests taken on this date met the required specifications. For details of tests, refer to the attached Field In-Place Density Test Report.
Dennis Cornell was notified of all test results.

TECHNICIAN: Gilbert Green

RESPECTFULLY SUBMITTED,
SJB SERVICES, INC.

CUBA OFFICE

39 Water Street

Box 236

Cuba, NY 14727



Phone: (716)968-9686

Fax: (716)968-9688

CONTRACT DRILLING AND TESTING

FIELD IN-PLACE DENSITY TEST REPORT

(NUCLEAR METHOD)

PROJECT: Farwell Landfill
 CLIENT: Cornell Contracting
 BLDG./AREA: Landfill levels 1,2,3
 CONTRACTOR: Cornell Contracting

LOCATION: Iachua, NY
 REPORT NO: ER-1
 PROJECT NO: CBT-02-053
 DATE: 09-19-02


TEST NO.	PROBE DEPTH	ELEV	IN-PLACE DENSITY (pcf)	IN-PLACE MOISTURE (%)	% COMPACTION	PASS Y/N	PROCTOR CODE	LOCATION AND REMARKS
1	6"	FG	123.8	7.9	97.5	Y	02-766	Area 2
2	6"	FG	114.6	8.2	90.2	Y	02-766	Area 2
3	6"	FG	125.1	8.1	98.5	Y	02-766	Area 3
4	6"	FG	117.7	9.4	97.2	Y	02-766	Area 3
5	6"	FG	117.0	7.8	92.1	Y	02-766	Area 3
6	6"	FG	117.8	11.7	92.0	Y	02-766	Area 4
7	6"	FG	114.7	8.2	98.4	Y	02-766	Area 4
8	6"	FG	115.1	9.9	90.6	Y	02-766	Area 4
9	6"	FG	114.7	9.1	90.3	Y	02-766	Area 4
10	6"	FG	119.7	9.0	94.3	Y	02-766	Area 1
11	6"	FG	116.2	12.0	91.5	Y	02-766	Area 1

PROCTOR CODE	MAXIMUM DENSITY (pcf)	OPTIMUM MOISTURE %	MATERIAL TYPE AND SOURCE
02-766	132.6	8.2	Brown silty sand & clay

REMARKS: Nuclear method used, direct transmissionTECHNICIAN: Gilbert Green

RESPECTFULLY SUBMITTED,
 SJB SERVICES, INC.

APPENDIX 6
DAILY FIELD REPORTS

 Stearns & Wheeler, LLC ENVIRONMENTAL ENGINEERS & SCIENTISTS		DAILY FIELD REPORT	
		REPORT NO.	1
DATE	9.10.02	CONTRACT NO.	BID No 46
JOB	Farwell Landfill Remediation		
CONTRACTOR	Manno Construction		
PROJECT REPRESENTATIVE	Robyn Cierniak		
SIGNATURE	<i>Robyn Cierniak</i>		

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)
 1. Mobilization of equipment
 2. layout of areas where work to be performed.
 - flags installed marking settled area limits
 - flags installed in 100ft intervals marking placement of barrier hedge. Hedge eliminated from East side of landfill. Approx. 1550 feet of hedge needed on south and west sides of landfill. layout approved by Al Ormond (Cutt C.)
 3. identified on-site stockpile of material.

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

1- supervisor

Equipment mobilized to site - NOT USED 9/10 :

 - 1- Kobelco excavator (tracked)*
 - 2 1- cat skid steer*
 - 1- roller (towable)*
 - 1- Dump body truck*
 - 1- triaxle trailer for equipment*

3. What special incidents happened?

☒ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☐ None

Equipment

4. What special instructions were given to the Contractor and what was Contractor's response?

☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☒ Other ☐ None

Quantities need to be measured with laser and rod.

5. Were there any damages to property? ☐ Yes ☒ No

If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	<i>none</i>	<i>clear</i>	<i>±70</i>	<i>dry</i>
Noon	<i>none</i>	<i>clear</i>	<i>±80</i>	<i>dry</i>
3:00 p.m.	<i>none</i>	<i>clear</i>	<i>±90</i>	<i>dry</i>

8. Who were the visitors that came to the site? List names.

☒ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None

At Ormond - Catt Co; Jim Manno Jr - Contractor; Dan - Dust Monitor @ AFCC

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

Picture #1-12

11. Additional Comments:

Decision to eliminate east barrier hedge planting

☐ Continued on separate page(s).



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

REPORT NO. 2

DATE 9/11/02

CONTRACT NO. Bid No 44

JOB Farwell Landfill Remediation

CONTRACTOR Manno Construction

PROJECT REPRESENTATIVE Robyn Cierniak

SIGNATURE

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

1. Excavation of remedial areas #3, #2. Areas have less than 6" topsoil. Gravel under sed - rocks 1"-6" in size. Rocks installed previously for flow of water. Excavated to rock level $\pm 2-6"$ cross sectional measurements taken prior to excavation and after excavation.
2. Silt fence installed over down chutes in areas of remediation (area #2, area #3)
3. Backfill of areas #2+3 with onsite material. (3 loads @ 3pm)
Additional needed (truck down 1/2 hour for repair).
4. started layout of hedge planting - marking areas where holes need to be dug

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

- 1- supervisor
- 1- laborer
- 1- Kobelco excavator
- 1- MIE DataRam Monitor
- 1- dump truck

3. What special incidents happened?
☐ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☒ None

4. What special instructions were given to the Contractor and what was Contractor's response?
☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None

5. Were there any damages to property? ☐ Yes ☒ No
If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.
☐ Changes ☐ Relocations ☐ Delays ☒ Quantities ☐ Other ☐ None
Less than anticipated topsoil depth.

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	<i>lt. rain</i>	<i>partly cloudy</i>	<i>± 50°</i>	<i>wet</i>
Noon	<i>none</i>	<i>partly cloudy</i>	<i>± 65°</i>	<i>dry</i>
3:00 p.m.	<i>none</i>	<i>partly cloudy</i>	<i>± 65°</i>	<i>dry</i>

8. Who were the visitors that came to the site? List names.
☐ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None
Dan - Dust Monitoring QA/QC (set up monitor)

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No
If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No
If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)
#13-48

11. Additional Comments:

☐ Continued on separate page(s).



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

REPORT NO. 3

DATE 9.12.02

CONTRACT NO. Bid No 46

JOB Farwell Landfill Remediation

CONTRACTOR Manno Construction

PROJECT REPRESENTATIVE Robyn Cierniak

SIGNATURE *Robyn Cierniak*

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

- finishing backfill of area #2 in AM.
- stakeout of planting locations for hedge
- finished backfill area #3.
- areas #2, #3 were not covered with topsoil until compaction tests are performed. scheduled (9/10/02).

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

- 1- supervisor
- 1- laborer
- 1- skid steer
- 1- excavator
- 1- dump truck
- 1- MIE datavam

3. What special incidents happened?
☐ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☒ None

4. What special instructions were given to the Contractor and what was Contractor's response?
☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None

5. Were there any damages to property? ☐ Yes ☒ No
If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.
☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/PAVEMENT MOISTURE
9:00 a.m.	none	clear	± 50°	dry
Noon	none	clear	± 60°	dry
3:00 p.m.	none	clear	± 70°	dry

8. Who were the visitors that came to the site? List names.
☒ Owner ☐ Engineer ☐ Photographer ☐ Other ☐ None
Al Ormond, Catt Co.

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No
If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No
If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)
#39 through

11. Additional Comments:

☐ Continued on separate page(s).

DATE:	9-16-02	CONTRACT NO.	Bid No 46	REPORT NO.	5
JOB:	Farwell Landfill Remediation				
CONTRACTOR:	Manno Construction				
PROJECT REPRESENTATIVE:	David Peterson				
SIGNATURE:	<i>David Peterson</i>				

1. What significant construction work was accomplished today and where (process unit, street, building, manhole (numbers), sewer, water main, etc.? Specifically, locate pipeline work by street name, length installed, stationing, or manholes, if applicable).

① Area #4 was excavated, survey points and area widths taken. Excavated soil stored abyside excavated area.

② A 24" auger was installed to a bobcat to core cut holes for the planting. 4 holes were cored as tests for the proficiency of the auger.

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

Manno Construction

- 1 - Bobcat w/ 24" diameter auger
- 1 - excavator
- 1 - supervisor
- 1 - laborer

3. What special incidents happened?

☐ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☒ None

4. What special instructions were given to the Contractor and what was Contractor's response?

☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None

5. Were there any damages to property? ☒ Yes ☐ No

If yes, explain and locate.

Minimal damage to grass by bobcat when coring holes for plants. The trucks on the wheels tore it up.



6. Claims (verbal or written) made by the Contractor. If written, attach.

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/PAVEMENT MOISTURE
9:00 a.m.	None	overcast; fog	mid-60's	very wet; puddles
Noon	None	cloudy	4-60's	wet
3:00 p.m.	None	cloudy	4-70's	mist

8. Who were the visitors that came to the site? List names.

☒ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None

Al Ormond, Cett Co.

Dan Welsch - Genesis Env. Management

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☐ Yes ☒ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

11. Additional Comments:

☐ Continued on separate page(s).

Stearns & Wheler, LLC

Environmental Engineers and Scientists

DAILY FIELD REPORT

DATE:	9-17-02	CONTRACT NO.	Bid No 46	REPORT NO.	6
JOB:	Farwell Landfill Remediation				
CONTRACTOR:	Manno Construction				
PROJECT REPRESENTATIVE:	David Peterson				
SIGNATURE:	<i>David Peterson</i>				
1. What significant construction work was accomplished today and where (process unit, street, building, manhole (numbers), sewer, water main, etc.? Specifically, locate pipeline work by street name, length installed, stationing, or manholes, if applicable).					
① 27 backfill loads were deposited on Area #4. A bulldozer was then used to flatten the piles out and distribute the soil on top of Area #4.					
2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)					
1 - Supervisor 1 - laborer 1 - excavator to fill dump trucks 2 - dump trucks which alternated loads 1 - bull dozer					
3. What special incidents happened?					
<input type="checkbox"/> Deliveries <input type="checkbox"/> Blasting <input type="checkbox"/> Strikes <input type="checkbox"/> Accidents <input type="checkbox"/> Other <input checked="" type="checkbox"/> None					
4. What special instructions were given to the Contractor and what was Contractor's response?					
<input type="checkbox"/> Tests <input type="checkbox"/> Defective Work <input type="checkbox"/> Schedules <input type="checkbox"/> Damages <input type="checkbox"/> Other <input checked="" type="checkbox"/> None					
5. Were there any damages to property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
If yes, explain and locate.					



7-17-02

6. Claims (verbal or written) made by the Contractor. If written, attach.

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/PAVEMENT MOISTURE
7:00 a.m.	Foggy None	Foggy	↓ 60's	wet with dew
Noon	None	Partly cloudy	↑ 70's	moist
3:00 p.m.	None	"	mid 70's	dry

8. Who were the visitors that came to the site? List names.

☐ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None
→ Dan Welsch - Haz Mat

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

Eight photographs were taken of Area #4 and of the core left by the auger. See field book for more specific photo notes.

11. Additional Comments:

Ponding still visible in Areas 1 and 2 - Contractors aware

☐ Continued on separate page(s).

DATE:	9-18-02	CONTRACT NO.	Bid No 46	REPORT NO.	7
JOB:	Farwell Landfill Remediation				
CONTRACTOR:	Cornell Contracting / Manno Construction				
PROJECT REPRESENTATIVE:	David Peterson				
SIGNATURE:	<i>David Peterson</i>				

- What significant construction work was accomplished today and where (process unit, street, building, manhole (numbers), sewer, water main, etc.)? Specifically, locate pipeline work by street name, length installed, stationing, or manholes, if applicable).
 - ① All hedges except for blackberry bushes were delivered by two truckloads. 1st at 700 AM and second around 1030 AM. Hedges were stockpiled across road from landfill near barn.
 - ② Plants were potted in the specified configuration for the first 170' or so (approximately 10% of entire length to plant).
 - ③ Bulldozer was used to compact each terrace row.
 - ④ Area #4 was further compacted w/ vibratory roller hitched to the plan.
 - ⑤ Planting cores were dug in plant areas 5+, as shown on plan.
- What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

Manno Construction -

 - 1 - supervisor
 - 2 - laborers
 - 1 - excavator
 - 1 - skid steer
 - 1 - bulldozer
 - 1 - vibratory roller - Ray Go
- What special incidents happened?

→ 2 16-wheelers delivered the majority of the plants

☒ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☐ None
- What special instructions were given to the Contractor and what was Contractor's response?

☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None
- Were there any damages to property? ☒ Yes ☒ No

If yes, explain and locate. An overhead wire running to the Co. garage was pulled down by the excavator. No damage was done to the wire's integrity. The wire was attached to a hitch in the side of the building by a bracket and screw. The contractor intends to put it back up tomorrow.



9-18-02

6. Claims (verbal or written) made by the Contractor. If written, attach.

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
700 9:00 a.m.	None	Very Foggy	+ 50's	very damp
Noon	None	Partly cloudy	+ 70's	dry
3:00 p.m.	None	Partly cloudy	mid - 70's	dry

8. Who were the visitors that came to the site? List names.

☐ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None
→ Dan Walsch - Haz Mat.

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

Took photos from disposable camera. Took 13 photos of plants before and after planting.
Took photos of remediation area #4 after contractor rolled over it with bulldozer.
Also took photos of plant stockpiling location (as seen from Area #4 on the landfill.)
More specific photo descriptions in field book.

11. Additional Comments:

☐ Continued on separate page(s).

DATE:	9-19-02	CONTRACT NO.:	Bid No. 46.	REPORT NO.:	8
JOB:	Fornell Landfill Remediation				
CONTRACTOR:	Manna Construction				
PROJECT REPRESENTATIVE:	David Peterson				
SIGNATURE:	<i>David Peterson</i>				

- What significant construction work was accomplished today and where (process unit, street, building, manhole (numbers), sewer, water main, etc.? Specifically, locate pipeline work by street name, length installed, stationing, or manholes, if applicable).
 - ① Blackberry bushes were delivered and stockpiled with other plants
 - ② Compaction tests were performed. All lifts passed
 - ③ Areas 1 thru 4 were surveyed for figuring volume of backfill
 - ④ Stockpiled and planted plants were watered.
 - ⑤ Topsoil in Areas 2 and 3 was replaced and leveled w/ plow
 - ⑥ Approximately 350' of barrier hedge was planted.
- What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)
 - 1- supervisor
 - 1- laborer
 - 1- skid steer
 - 1- excavator
 - 1- plow
- What special incidents happened?

☒ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents

☒ Other ^{→ compaction testing} ☐ None

↳ Blackberry bushes (~240)
- What special instructions were given to the Contractor and what was Contractor's response?

☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other

☒ None
- Were there any damages to property? ☐ Yes ☒ No

If yes, explain and locate. Note: wire that was pulled down on 9-18-02 was replaced and fixed by contractor

6. Claims (verbal or written) made by the Contractor. If written, attach.

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
2:00 a.m.	None	Slight fog	+ 50's	wet w/ dew
Noon	30 min showers @ 1:15 P	overcast/hazy	+ 60's	dry wet/ rain
3:00 p.m.	None	Clear	+ 70's	moist from rain

8. Who were the visitors that came to the site? List names.

☐ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None

→ Dan Welsch - Hartz Mat

↳ Comparison test: Truck

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

Pics of Area #2 and 3 after topsoil had been repland. Pics of blackberry bushes, and pic of water tank used to water plants.

11. Additional Comments:


Additional Comments: Compaction Test Results: (Moisture/Compaction/Density/Station # of Test)

Remediation Area	Test 1	Test 2	Test 3	Test 4
2	7.9/97.5/123.8/1+30	8.2/90.2/114.6/1+60		
3	8.1/93.5/125.1/2+00	7.4/97.2/117.7/1+25	7.8/92.1/117.0/1+40	
4	11.7/92.6/117.8/1+10	8.2/90.4/114.7/1+30	9.9/90.6/115.1/2+40	9.1/90.5/114.7/3+10
1	9.0/94.3/119.7/2+20	12.0/91.5/116.2/1+50		

☐ Continued on separate page(s).

Environmental Engineers and Scientists

DAILY FIELD REPORT

DATE:	9-23-02	CONTRACT NO.	Bid No 46	REPORT NO.	9
JOB:	Farwell Rd. Landfill Remediation				
CONTRACTOR:	Manno Construction				
PROJECT REPRESENTATIVE:	David Peterson				
SIGNATURE:					
<p>1. What significant construction work was accomplished today and where (process unit, street, building, manhole (numbers), sewer, water main, etc.? Specifically, locate pipeline work by street name, length installed, stationing, or manholes, if applicable).</p> <p>① Vegetation watered each day of weekend and today.</p> <p>② Topsoil in Areas 1 and 4 replaced</p> <p>③ Seed & Fertilizer spread with mechanical spreader on lifts 2, 3, and 4</p> <p>④ Hay placed down of lifts 2, 3, and part of 4 as erosion control</p>					
<p>2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)</p> <p>1- supervisor</p> <p>1- laborer</p> <p>1- excavator</p> <p>1- truck w/ water tank</p>					
<p>3. What special incidents happened?</p> <p><input type="checkbox"/> Deliveries <input type="checkbox"/> Blasting <input type="checkbox"/> Strikes <input type="checkbox"/> Accidents <input type="checkbox"/> Other <input checked="" type="checkbox"/> None</p>					
<p>4. What special instructions were given to the Contractor and what was Contractor's response?</p> <p><input type="checkbox"/> Tests <input type="checkbox"/> Defective Work <input type="checkbox"/> Schedules <input type="checkbox"/> Damages <input type="checkbox"/> Other <input checked="" type="checkbox"/> None</p>					
<p>5. Were there any damages to property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, explain and locate.</p>					



6. Claims (verbal or written) made by the Contractor. If written, attach.

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☒ Other ☐ None

Contractor proposed to replace silt fences with haybales once work on lifts complete.

7. What were the weather and site conditions?

	TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/PAVEMENT MOISTURE
7:00 AM	9:00 a.m.	None	very foggy	mid 40's	dew on ground
	Noon	None	partly cloudy	58°F	dry
4:00	3:00 p.m.	None	Mid- to 40's ← partly cloudy		dry

8. Who were the visitors that came to the site? List names.

→ Dan Welsch (Haz Mat)
☐ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

4 pictures of lifts 2 and 3 after the erosion control material was placed down.
Used digital camera

11. Additional Comments:


Today was the last day Dan Welsch would monitor the air for hazardous ~~ff~~ airborne particulates. This decision is based on the fact that the landfill topsoil will no longer be disturbed and the potential for release hazardous particles no longer exists.

Seed mixture verification tag retained by Engineer.

☐ Continued on separate page(s).

Environmental Engineers and Scientists

DAILY FIELD REPORT

DATE:	9-24-02	CONTRACT NO.	Bid No. 46	REPORT NO.	10
JOB:	Farwell Landfill Remediation				
CONTRACTOR:	Manno Construction				
PROJECT REPRESENTATIVE:	David Peterson				
SIGNATURE:					
<p>1. What significant construction work was accomplished today and where (process unit, street, building, manhole (numbers), sewer, water main, etc.? Specifically, locate pipeline work by street name, length installed, stationing, or manholes, if applicable).</p> <p>① Finished seeding/fertilizing and placing hay on Lifts 1 and 4</p> <p>② Planted Hawthorne, Lowb and red cedars to extent of Southern portion of perimeter (turned corner)</p> <p>③ watered all vegetation</p>					
<p>2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)</p> <p>1- Supervisor</p> <p>1- laborer</p> <p>1- excavator</p> <p>1- truck w/ water tank</p> <p>1- skid steer</p>					
<p>3. What special incidents happened?</p> <p><input type="checkbox"/> Deliveries <input type="checkbox"/> Blasting <input type="checkbox"/> Strikes <input type="checkbox"/> Accidents <input type="checkbox"/> Other <input checked="" type="checkbox"/> None</p>					
<p>4. What special instructions were given to the Contractor and what was Contractor's response?</p> <p><input type="checkbox"/> Tests <input type="checkbox"/> Defective Work <input type="checkbox"/> Schedules <input type="checkbox"/> Damages <input type="checkbox"/> Other <input checked="" type="checkbox"/> None <i>See additional comments</i></p>					
<p>5. Were there any damages to property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, explain and locate.</p>					



6. Claims (verbal or written) made by the Contractor. If written, attach.

~~Contractor claims silt fences will not protect surfs from settlement~~

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☒ Other ☐ None

Contractor claims silt fences are ineffective as they are 1-2" above grade. A hay bale will do a better job. I said it was acceptable to have the hay bale in front of the silt fence.

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
100 9:00 a.m.	None	Foggy	38° F	wet w/ dew
Noon	"	Clear	64° F	dry
3:00 p.m.	"	Clear	60's	dry

8. Who were the visitors that came to the site? List names.

☐ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None

→ Dan Welsch (Hazard) - to deliver data
loger results to
Contractor

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

Photos of Lifts 1 & 4

11. Additional Comments:

1. Asked contractor how they plan to meet elevations in plan. Contractor does not plan to meet elevations as long as the lifts drain down. This will be verified with survey of flowlines.
2. Told contractor to remove rocks of 12" + from topsoil. Will be done.
3. Told contractor to leave silt fences as already agreed upon (see claims above).
4. Gate will be delivered on Monday. County has already removed old gate.

☐ Continued on separate page(s).

DAILY FIELD REPORT

REPORT NO.

11

DATE

9-25-02

CONTRACT NO.

Bid No. 46

JOB

Farwell Landfill Remediation

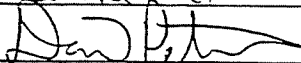
CONTRACTOR

Manno Construction

PROJECT REPRESENTATIVE

David Peterson

SIGNATURE



1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

① 4 repeating intervals of large trees (hawthorne, locust, cedar) were planted.

② All vegetation was watered.

③ Access road to landfill terraces had previously been torn up by tractor treads. This area was seeded, fertilized, and hay was placed over the area.

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

1- supervisor

1- laborer

1- excavator

1- skid steer

1- watering truck

3. What special incidents happened?
☐ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☒ None

4. What special instructions were given to the Contractor and what was Contractor's response?
☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☒ Other ☐ None
Told contractor to survey topsoil for final grade, and to establish slope exists as needed.

5. Were there any damages to property? ☐ Yes ☒ No
If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach. → see below
☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	None	Foggy	47°F	dew on ground
Noon	None	clear	64°F	dry
3:00 p.m.	None	hazy sky	63°F	dry

8. Who were the visitors that came to the site? List names.
☐ Owner ☐ Engineer ☐ Photographer ☐ Other ☒ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No
If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No
If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)
Photos 8-12 of area where cil. gate is to be installed.
Photos 13-18 of barrier hedge planted to date; showing proximity to treeing.

11. Additional Comments:
Contractor claims that aluminum gate needs to be installed level to ground. Because of irregular shape of ground at installation site, cut/fill may become necessary.

☐ Continued on separate page(s).



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

REPORT NO.

12

DATE

9-26-02

CONTRACT NO.

Bid No. 46

JOB

Farwell Landfill Remediation

CONTRACTOR

Manno Construction

PROJECT REPRESENTATIVE

David Peterson

SIGNATURE

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

- ① 5 intervals of large trees were planted (~260'), (of red cedar, hawthorne, locust)
- ② In anticipation of a large storm event, the remaining trees needed were transported to the end of the hedgerow, in an effort to prevent skidding on wet grass and ruining topsoil w/ the skid steer tracks.
- ③ Also in anticipation of a rain event, hay bales were pinned down with rebar along the flow lines on the terraces.

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

1- supervisor
1- laborer
1- skid steer
1- excavator

3. What special incidents happened?
☐ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☒ None

4. What special instructions were given to the Contractor and what was Contractor's response?
☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None

5. Were there any damages to property? ☐ Yes ☒ No
 If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.
☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

	TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
7:00	9:00 a.m.	None	Foggy	48° F	Wet with dew
1 PM	Noon	None	Overcast	62° F	dry
	3:00 p.m.	None	Overcast	60° F	dry

8. Who were the visitors that came to the site? List names. *someone from Manna Construction was at the site to talk to supervisor (2 P.M.)*
☐ Owner ☐ Engineer ☐ Photographer ☒ Other ☐ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No
 If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No
 If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)
 19 - Photo of red area in ground prior to backfill.
 20-21 - Photo of proposed location of aluminum fence.
 22-27 - Panorama of landfill from west slope, showing color changing in trees

11. Additional Comments: 28-36 - Pics of erosion control (28-Area 2; 29-30-Area 3; 31-34; Area 4; 35-36-A)

① Epoxy paint specified for Al. gate only comes in 5 gal buckets, which is much more than needed and is expensive.

② Al. fence would be better positioned if installed off road a bit. I called Al Omand to confer and had to leave him a message

☐ Continued on separate page(s).



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

REPORT NO.

13

DATE

September 30, 2002

CONTRACT NO.

Bid No. 46

JOB

Manno Construction

CONTRACTOR

Farwell Landfill Remediation

PROJECT REPRESENTATIVE

David Peterson

SIGNATURE

David Peterson

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

① Approximately 312 feet of large trees were planted to finish the hedge's large trees. 26 repeating intervals were planted in total (~1352 ft).

② Approximately 170 feet of small hedge (blackberry, rose) was planted on Southern edge of landfill

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

1- Supervisor

1- laborer

1- Kobelco Excavator

1- New Holland Skid Steer

3. What special incidents happened?

☐ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☒ None

4. What special instructions were given to the Contractor and what was Contractor's response?

☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None

5. Were there any damages to property? ☐ Yes ☒ No

If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.

☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
9:00 a.m.	None	very foggy	50°F	damp w/ rain/dew
Noon	"	clear	↓ 70s°F	dry
3:00 p.m.	"	clear	mid 70s	dry

8. Who were the visitors that came to the site? List names.

☐ Owner ☐ Engineer ☐ Photographer ☐ Other ☒ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No

If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☐ Yes ☒ No

If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

11. Additional Comments:

- ① Punching on Lists 1 & 4 after weekend rain storm. Contractor will reshape, reseed, & fertilize.
- ② Total hedge length carries about 26 intervals for 1,352 feet. This linear foot value will be measured more accurately.

☐ Continued on separate page(s).



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

REPORT NO.

14

DATE

October 1, 2002

CONTRACT NO.

Bid No. 46

JOB

Farwell Road Landfill Remediation

CONTRACTOR

Marino Construction

PROJECT REPRESENTATIVE

David Peterson

SIGNATURE

[Signature]

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

① Planted 10 intervals of shrub starting on the south edge of the landfill and working east, and then starting in the NW corner and working south. At the NW corner the hedge penetrates approximately 20-30' into the existing treeline.

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

1 - Supervisor
1 - laborer
1 - skid steer
1 - Excavator

3.	What special incidents happened? <input checked="" type="checkbox"/> Deliveries <input type="checkbox"/> Blasting <input type="checkbox"/> Strikes <input type="checkbox"/> Accidents <input type="checkbox"/> Other <input type="checkbox"/> None <i>→ The Aluminum gate was delivered.</i>				
4.	What special instructions were given to the Contractor and what was Contractor's response? <input type="checkbox"/> Tests <input type="checkbox"/> Defective Work <input type="checkbox"/> Schedules <input type="checkbox"/> Damages <input type="checkbox"/> Other <input checked="" type="checkbox"/> None				
5.	Were there any damages to property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain and locate.				
6.	Claims (verbal or written) made by the Contractor. If written, attach. <input type="checkbox"/> Changes <input type="checkbox"/> Relocations <input type="checkbox"/> Delays <input type="checkbox"/> Quantities <input type="checkbox"/> Other <input checked="" type="checkbox"/> None				
7.	What were the weather and site conditions?				
	TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
700	9:00 a.m.	None	Foggy	↓ 60's	damp w/ dew
	Noon	None	Partly cloudy	mid to ↑ 70's	dry
	3:00 p.m.	None	Partly cloudy	↑ 70's	dry
8.	Who were the visitors that came to the site? List names. <input type="checkbox"/> Owner <input type="checkbox"/> Engineer <input type="checkbox"/> Photographer <input type="checkbox"/> Other <input checked="" type="checkbox"/> None				
9.	Did observations reveal any work <i>not</i> in compliance with the Contract Documents? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain and describe actions taken.				
10.	Were photographs taken by project representative? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)				
11.	Additional Comments: 				

☐ Continued on separate page(s).



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

REPORT NO.

15

DATE

October 2nd, 2002

CONTRACT NO.

Bid No. 46

JOB

Farnell Landfill Remediation

CONTRACTOR

Manno Construction

PROJECT REPRESENTATIVE

David Peterson

SIGNATURE

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

- ① Continued to plant hedges. Have only about 100' remaining
- ② Taped length of hedge. Length is 1420 linear feet.
- ③ Surveyed Areas 2, 3, 4 for slope calculation. Generally, all terraces slope properly. Area 1 needs to be surveyed once it is fixed at silt fence.

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

1 - Supervisor

1 - Laborer

1 - Excavator

1 - Skid Steer

3. What special incidents happened?
☐ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☒ None

4. What special instructions were given to the Contractor and what was Contractor's response?
☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None

5. Were there any damages to property? ☐ Yes ☒ No
If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.
☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/PAVEMENT MOISTURE
7:00 9:00 a.m.	None	overcast	mid 60's	dew on ground
Noon	None	partly cloudy	74°F	dry
3:00 p.m.	scattered showers - (Broke one at site)	Cloudy	↑ 60's	wet w/ rain

8. Who were the visitors that came to the site? List names.
☐ Owner ☐ Engineer ☐ Photographer ☐ Other ☒ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No
If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☐ Yes ☒ No
If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)

11. Additional Comments:
DTP and Contractor reviewed quantities for Bal items, and agreed on their values:

<u>Topsoil</u> (cu. yds)		<u>Fill</u> (cu. yds)		<u>Barrier Hedge</u>
Area 1	45.9	Area 1	24.8	Length of hedge = 1420 ft.
Area 2	39.4	Area 2	43.1	
Area 3	37.2	Area 3	35.0	
Area 4	103.8	Area 4	119.0	

☐ Continued on separate page(s).



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DAILY FIELD REPORT

REPORT NO.

16

DATE

10-3-02

CONTRACT NO.

Bd No 46

JOB

Forwell Landfill Remediation

CONTRACTOR

Manno Construction

PROJECT REPRESENTATIVE

David Peterson

SIGNATURE

David Peterson

1. What significant construction work was accomplished today and where? (process unit, street, building, manhole (numbers), sewer, water main, etc. Specifically locate pipeline work by street name, length installed, stationing, or manholes, if applicable.)

- ① The fence bollards were installed today.
- Auger truck dug two holes, 4' deep, 2' diameter
 - Form was placed and concrete poured in form and around bollard.
 - Bollards filled with concrete
 - Concrete shaped.

- ② Area 1 was surveyed for slope calculation.

2. What manpower and equipment were used today? (total men each contractor, major power equipment, job superintendent)

1- Supervisor

1- laborer

1- Auger Truck (Jaw)

1- Concrete Mixer (Hanson)

3. What special incidents happened?
☒ Deliveries ☐ Blasting ☐ Strikes ☐ Accidents ☐ Other ☐ None
↳ concrete

4. What special instructions were given to the Contractor and what was Contractor's response?
☐ Tests ☐ Defective Work ☐ Schedules ☐ Damages ☐ Other ☒ None

5. Were there any damages to property? ☐ Yes ☒ No
If yes, explain and locate.

6. Claims (verbal or written) made by the Contractor. If written, attach.
☐ Changes ☐ Relocations ☐ Delays ☐ Quantities ☐ Other ☒ None

7. What were the weather and site conditions?

	TIME	PRECIPITATION	SKIES	AIR TEMPERATURE	GROUND/ PAVEMENT MOISTURE
7:00	9:00 a.m.	Rain	overcast	56°	wet
11:00	Noon	Rain	"	56°	wet
	3:00 p.m.	—	—	—	—

8. Who were the visitors that came to the site? List names.
☐ Owner ☐ Engineer ☐ Photographer ☐ Other ☒ None

9. Did observations reveal any work *not* in compliance with the Contract Documents? ☐ Yes ☒ No
If yes, explain and describe actions taken.

10. Were photographs taken by project representative? ☒ Yes ☐ No
If yes, then indicate specific location, description, and number of photos. (Developed prints to be sent to project engineer who will file with office copy of Daily Field Reports.)
Took photos of bollards being installed. 1 - Auger Truck 3 - Concrete in place
2 - Form used 4 - bollard cap

11. Additional Comments:
Rain prevented work w/ excavator. Otherwise, trend would tear up grassy slopes.

☐ Continued on separate page(s).

APPENDIX 7
SITE PHOTOGRAPHS



01 VIEW NE, LANDFILL SITE.JPG



02 VIEW NORTH, WESTERN SIDE LANDFILL SITE.JPG



03 VIEW NORTH, STOCKPILE TO BE USED.JPG



04 VIEW NORTH, EASTERN SIDE LANDFILL SITE.JPG



05 View East, Area 1 Before Remedial Work.JPG



06 View SW, Area 3 Before Remedial Work.JPG



07 View SW, Areas 1 & 4 Before Remedial Work.JPG



08 Site Sedimentation and Erosion Control.JPG



09 View NW, Area 2 Topsoil Excavation.JPG



10 View NW Area 2 After Backfill.JPG



11 View NE, Area 2 After Compaction.JPG



12 View NE, Area 2 After Seeding.JPG



13 View SW, Topsoil Excavation Remedial Area 3.JPG



14 View SW, Area 3 After Backfill.JPG



15 View SE, Area 3 After Compaction.JPG



16 View SW, Area 3 After Seeding.JPG



17 MIE DataRam for Fugitive Dust Monitoring.JPG



18 View West, Barrier Hedge Installation South Side Landfill.JPG



19 View West, Barrier Hedge West Side of Landfill.JPG



20 Example of Tree Installed in Barrier Hedge.JPG

APPENDIX 8

DECLARATION OF COVENANTS AND RESTRICTIONS

04700

FORM 581X N. Y. DEED—WARRANTY with Lien Covenant

This IndentureTUTTLAW REGISTERED U. S. PAT. OFFICE
TUTTLE LAW FIRM, PUBLISHED BY TUTTLE, NEW YORK, N. Y.Made the 25th day of September

Nineteen Hundred and Seventy-three,

Between DONALD R. FARWELL and ARLENE J. FARWELL, his wife,
R. D. # 1, Hinsdale, New York 14743 (no street address),THE COUNTY OF CATTARAUGUS, part ies of the first part, and
State of New York,

Witnesseth that the parties of the first part, in consideration of the second part,

ONE HUNDRED FIFTEEN THOUSAND-----Dollar s (\$115,000.00)
lawful money of the United States,
paid by the party of the second part, do hereby grant and release unto the
party of the second part, its successors
and assigns forever, all THAT TRACT OR PARCEL OF LAND, situate in the Town
of Ischua, County of Cattaraugus and State of New York, known and distinguished as a part of Lot number forty-four, Township Three, Range Three of the Holland Land Company's Survey and bounded and described as follows: Beginning at the northeast corner of said lot; thence south on the lot line to the southeast corner of lands deeded by John H. Farwell to Jonathan Davis and Abram Farwell for mill purposes; thence westerly along the south bounds of said lot to the center of the highway; thence northerly along the center of the highway to the north bounds of lot forty-four; and from thence east on lot line to the place of beginning, be the same more or less, excepting and reserving however, the part thereof owned by the heirs at law or grantees of said Jonathan Davis in said mill property.

ALSO, CONVEYING ALL THAT TRACT OR PARCEL OF LAND situate in the Town, County and State aforesaid, known and distinguished as the north part of lot forty-four, township, range and survey as aforesaid and bounded; north by lot forty-five, thirty-eight chains, forty-one links; east by lot number nine, fourteen chains, seventy-five links; west by lot line, fourteen chains, seventy-five links; and south by a line parallel to the north bounds of said lot, thirty-eight chains, thirty-five links, to the place of beginning, containing fifty-six and three-fourths acres, of land more or less. Excepting, however, therefrom all that part thereof which was deeded by John H. Farwell to Jonathan Davis and Abram M. Farwell for mill purposes.

ALSO CONVEYING ALL THAT TRACT OR PARCEL OF LAND situate in the Town, County and State aforesaid, known and distinguished as the north part of lot number thirty-six, Township Three, Range Three of said survey, bounded; north by lot thirty-seven, forty chains, sixty links; east by lot number twenty-eight, fourteen chains, seventy-five links; south by land deeded by the Holland Land Company to Jonathan Davis, forty chains, seventy-eight links; and west by lot number forty-four, fourteen chains, seventy-five links, containing sixty acres more or less.

ALSO CONVEYING ALL THAT TRACT OR PARCEL OF LAND, situate in the Town, County and State aforesaid and township and range aforesaid, bounded and described as follows: Beginning at the southwest corner of said lot, and thence north on lot line, thirty-four chains, sixty-three links to the southwest corner of lands formerly owned by Thaddeus Farwell; thence east on the south line of said Farwell's land to the center of the Ischua Creek; thence southerly along the center of said Ischua Creek to the south line of said lot; thence west on the lot line to the place of beginning, containing eighty-nine acres more or less.

County and State aforesaid, known and distinguished as part of Lot number forty-four, bounded and described as follows: Beginning at the southwest corner of the farm purchased by G. W. Bullard of Johnathan Davis, January 5th, 1865; running thence northerly on the West line of said Bullard's farm, thirty chains to land sold to John H. and A. M. Farwell thence easterly on the south line of land sold to said Farwells to the railroad lands; thence southerly on the west line of the railroad lands to the south bounds of said Bullard Farm; thence westerly on the south line of said Bullard Farm to the place of beginning, containing forty-six and forty-five one hundredths acres of land more or less, together with the privilege of the cattle pass described in the deed from said Bullard to John H. Farwell and others dated November 10th, 1884.

ALSO CONVEYING ALL THAT TRACT OR PARCEL OF LAND, situate in the Town, County and State aforesaid, bounded and described as follows: Beginning at the northwest corner of the farm purchased by one G. W. Bullard of Jonathan Davis by deed bearing date January 5th, 1865, and recorded in Liber 62 of deeds at page 74; running thence south on the west line of said farm, fourteen chains, ninety-six links to a stake; thence east on a line parallel to the north bounds of said farm, twenty-seven chains, seventy-six links to the west bank of the feeder, so-called; thence on a northerly direction on the west bank of said feeder and to a point in the creek, two chains and forty-six links; thence east on a line parallel to the north bounds of said farm, eight chains, fifty links to the center of the highway running from Hinsdale to Franklinville; thence northerly in the center of said highway to the north bounds of said farm, twelve chains, fifty links to Bullard's north line; thence westerly on the north line of said farm to the place of beginning, thirty-six chains, containing fifty-one and one-half acres more or less.

ALSO CONVEYING ALL THAT TRACT OR PARCEL OF LAND, situate in the Town, County and State aforesaid, distinguished as part of Lot number forty-five, township three, range three as aforesaid, bounded and described as follows: Commencing in the center of the Ischua Creek on the Section Line; thence up said Creek, north, five degrees west, eight chains, fifty links; thence north, eighty-five degrees west, five chains, thirty-three links up a ravine and a road to a stake; thence south, thirteen degrees west, eight chains eighty-seven links to the south line of lot number forty-five; thence east on said lot line eight chains, fifty links to the place of beginning, containing five and ninety-six one hundredths acres of land more or less.

ALSO CONVEYING ALL THOSE TWO CERTAIN TRACTS OR PIECES OF LAND, situate in the Town of Ischua, in the County of Cattaraugus and State of New York, bounded and described as follows, viz:

Number One: Beginning at a point in the middle of a former location of Ischua Creek at the distance of one hundred and twenty-five feet measured southwestwardly from a point in and radially to the line established as the center line of the railroad of the Western New York and Pennsylvania Railway Company; extending thence in a general southeasterly direction by other land of the said Railway Company on a line parallel with the aforesaid center line and one hundred and twenty-five feet distant southwestwardly therefrom, as follows, viz: First, on a line curving toward the left with a radius of two thousand four hundred and seventeen feet and one one-hundredth of a foot, a distance of one thousand two hundred and eighty-seven feet and two-tenths of a foot to a point; and Second, south sixty-five degrees, thirty-eight minutes east one thousand five hundred and ninety feet and ninety-two one-hundredths of a foot to a point in the former location of Ischua Creek aforesaid; thence along the middle of said Creek, by land now or formerly of Oakley W. Chamberlain and land of the said Eugene B. Farwell, as follows, viz: First, south eighty-five degrees, thirteen minutes west two hundred and ninety-three feet and thirteen one-hundredths of a foot to a point; second, north eighty-five degrees, seven minutes west five hundred and thirty feet and five-tenths of a foot to a point; Third, north sixty-five degrees, thirty-seven minutes west one thousand two hundred and eighty-six feet to a point; Fourth, north forty-five degrees west five hundred and eighty-eight feet and seven-tenths of a foot to a point;

and Fifth, north one degree, four minutes west five hundred and six feet and five one-hundredths of a foot to the place of beginning, containing seventeen acres and nine hundred and seventy-two one-thousandths of an acre, more or less.

NUMBER TWO: Beginning at a point in the dividing line between the original tracts of Fred J. Schrader and Eugene B. Farwell, et al., at the distance of one hundred and twenty-five feet measured southwestwardly from a point in and radially to said center line; extending thence along said original dividing line by land of the said Eugene B. Farwell, south eighty-eight degrees, seven minutes west six hundred and seventy-six feet and thirty-seven one-hundredths of a foot to a point; thence still by land of the said Eugene B. Farwell, north five degrees, thirty-two minutes east three hundred and sixty-six feet and thirteen one hundredths of a foot to a point; thence in a general southeasterly direction by other land of the said Railway Company on a line parallel with the aforesaid center line and one hundred and twenty-five feet distant southwestwardly therefrom, as follows, viz: First, south sixty-five degrees, thirty-eight minutes east two hundred and eighty-three feet and eighty-seven one-hundredths of a foot to a point; and Second, on a line curving toward the right with a radius of one thousand nine hundred and fifty-eight feet and sixty-eight one hundredths of a foot, a distance of four hundred and forty-six feet and eighty-eight one-hundredths of a foot to the place of beginning, containing three acres and seventy-three one-thousandths of an acre, more or less. EXCEPTING AND RESERVING from the above described premises those certain premises conveyed to the Western New York and Pennsylvania Railway Company.

Being the same premises conveyed by deed dated March 19, 1934, Eugene B. Farwell and Catherine W. Farwell to Clement H. Farwell and Olive B. Farwell recorded March 20, 1934 Liber 343 of Deeds at Page 541.

EXCEPTING AND RESERVING FROM ALL OF THE ABOVE DESCRIBED PREMISES, ALL THAT TRACT OR PARCEL OF LAND, SITUATE IN THE Town of Ischua, County of Cattaraugus and State of New York, known and distinguished as the north part of lot number thirty-six, town three, range three of said survey, bounded: North by lot thirty-seven, forty chains, sixty links; east by lot number twenty-eight, fourteen chains, seventy-five links; south by land deeded by the Holland Land Company to Jonathan Davis, forty chains, seventy-eight links; and west by lot number forty-four, fourteen chains, seventy-five links, containing sixty acres more or less.

All of the foregoing premises being the same premises described in deed dated May 4, 1973 Clement H. Farwell to Donald R. Farwell and Arlene J. Farwell recorded May 7, 1973 in Liber 738 of Deeds at Page 355.

EXCEPTING AND RESERVING FROM ALL OF THE FOREGOING PREMISES: ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Ischua, County of Cattaraugus and State of New York, known and distinguished as being part of Lot No. 45, township 3, range 3 of the Holland Land Company Survey bounded and described as follows: Beginning at a point in the centerline of Farwell Road on Lot No. 45 which said point is south $84^{\circ} 18' 30''$ east, measured along the centerline of Farwell Road a distance of 1024.25 feet from the intersection of the centerline of Farwell Road and the west boundary line of Lot No. 45; thence south $4^{\circ} 47' 30''$ west from the point of beginning 612.14 feet to a point; thence south $85^{\circ} 51' 30''$ east a distance of 637.84 feet to a point in the centerline of the Pennsylvania Railroad right of way and which said point is 91.5 feet northerly, measured along the centerline of said Railroad from the intersection of said Railroad and the south boundary of Lot No. 45; thence northeasterly along the centerline of the right of way of the Pennsylvania Railroad to the intersection of the centerline of said Railroad and the centerline of said Farwell Road; thence south $82^{\circ} 19' 30''$ west along the centerline of Farwell Road a distance of 313.94 feet to an angle point therein; thence north $64^{\circ} 51' 30''$ west along the centerline of said Farwell Road a distance of 253.62 feet to an angle point in said Farwell Road; thence north $84^{\circ} 18' 30''$ west along the centerline of Farwell Road a distance of 128.56 feet to the place and point of beginning containing 9.34 acres be the same more or less; all of the foregoing 9.34 acres more or less being a portion of the premises once described in a Deed dated May 4, 1973 Clement H. Farwell to Donald R. Farwell and Arlene J. Farwell recorded May 7, 1973 in Liber 738 of Deeds at Page 355.

FOREGOING PREMISES ARE ALSO BOUNDED AND DESCRIBED AS FOLLOWS:
ALL THAT TRACT OF PARCEL OF LAND, situate in the Town of Ischua, County of Cattaraugus and State of New York, being part of Lot 44 and 45, Township 3, Range 3 of the Holland Land Company's survey and bounded and described as follows:

Beginning at the southwest corner of Lot 45; thence North 0° 54' 30" east along the west bounds of Lot 45 a distance of 2285.58 feet to a point; thence south 89° 51' 30" east a distance of 835.42 feet to a point in the center of the Pennsylvania Railroad; thence southerly along the centerline of said Railroad to the centerline of Farwell Road; thence North 75° 13' 30" east along said centerline a distance of 79.6 feet to the center of Ischua Creek; thence southerly along center of said creek a distance of 660+ to the south bounds of Lot 45 and north bounds of Lot 44; thence south 89° 49' east along said Lot line a distance of 170 feet to a point; thence south 21° 29' east a distance 378.84 feet to a point; thence south 89° 49' east a distance of 419.1 feet to a point in the east bounds of Lot 44; thence south 0° 11' west along the east bounds of Lot 44 a distance of 676.5 feet to a point; thence north 89° 49' west a distance of 115.5 feet to the centerline of Route 16; thence South 0° 38' 30" east along the centerline of Route 16 a distance of 818.81 feet to a point; thence north 89° 28' west a distance of 561.0 feet to a point; thence south 0° 32' west a distance of 162.0 feet to a point; thence north 89° 54' west a distance of 710.26 feet to a point in the centerline of the Pennsylvania Railroad thence southerly along the centerline of said railroad to the south bounds of Lot 44; thence south 89° 34' west along the south bounds of Lot 44 a distance of 1212.88 feet to the west bounds of Lot 44; thence north 0° 54' 30" east a distance of 3940.86 feet to the north bounds of Lot 44 and the point of beginning containing 230.70 acres of land more or less.

EXCEPTING AND RESERVING ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Ischua, County of Cattaraugus and State of New York, known and distinguished as being part of Lot No. 45, township 3, range 3 of the Holland Land Company Survey bounded and described as follows: Beginning at a point in the centerline of Farwell Road on Lot No. 45 which said point is south 84° 18' 30" east, measured along the centerline of Farwell Road a distance of 1024.25 feet from the intersection of the centerline of Farwell Road and the west boundary line of Lot No. 45; thence south 4° 47' 30" west from the point of beginning 612.14 feet to a point; thence south 85° 51' 30" east a distance of 637.84 feet to a point in the centerline of the Pennsylvania Railroad right of way and which said point is 91.5 feet northerly, measured along the centerline of said Railroad from the intersection of said Railroad and the south boundary of Lot No. 45; thence northeasterly along the centerline of the right of way of the Pennsylvania Railroad to the intersection of the centerline of said Railroad and the centerline of said Farwell Road; thence south 82° 19' 30" west along the centerline of Farwell Road a distance of 313.94 feet to an angle point therein; thence north 64° 51' 30" west along the centerline of said Farwell Road a distance of 253.62 feet to an angle point in said Farwell Road; thence north 84° 18' 30" west along the centerline of Farwell Road a distance of 128.56 feet to the place and point of beginning containing 9.34 acres be the same more or less; all of the foregoing 9.34 acres more or less being a portion of the premises once described in a Deed dated May 4, 1973 Clement H. Farwell to Donald R. Farwell and Arlene J. Farwell recorded May 7, 1973 in Liber 738 of Deeds at Page 355.

The net acreage hereby described is calculated as follows:

Total-----	230.70
Less EXCEPTION-----	9.34
Net acres described-----	221.36 acres.

016182
CATTARAUGUS COUNTY
REAL ESTATE
TRANSFER TAX
STATE OF NEW YORK
Dept. of
Location OCT-1973
& Finance
00.00
PB.12219

Together with the appurtenances and all the estate and rights of the parties of the first part in and to said premises,

To have and to hold the premises herein granted unto the party of the second part, its successors, and assigns forever.

And said parties of the first part

First, That the party of the second part shall quietly enjoy the said premises; covenant s as follows:

Second, That said parties of the first part

will forever Warrant the title to said premises.

Third, That, in Compliance with Sec. 13 of the Lien Law, the grantor s will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

In Witness Whereof, the parties of the first part have hereunto set their hand s and seal s the day and year first above written.

In Presence of

Donald R. Farwell

DONALD R. FARWELL

Arlene J. Farwell

ARLENE J. FARWELL

State of New York ss. On this 25th day of September
County of Allegany ss. Nineteen Hundred and Seventy-three,
before me, the subscriber, personally appeared

Donald R. Farwell and Arlene J. Farwell

to me personally known and known to me to be the same person s described in and who executed the within Instrument, and they acknowledged to me that they executed the same.

Peter R. Sprague
Notary Public

PETER R. SPRAGUE
Notary Public, State of New York
Residing in Allegany Co. Clerk's No. 723
Commission Expires March 30, 1975

STATE OF NEW YORK SS.
COUNTY OF CATTARAUGUS
RECORDED Oct. 4, 1973
AT 11:36 AM IN LIBER 742
PAGE 937 OF Needs
AND EXAMINED

Memetta T. T. Clerk

Together with the appurtenances and all the estate and rights of the parties of the first part in and to said premises,
To have and to hold the premises herein granted unto the party of the second part, and assigns forever.

And said parties of the first part

First, That the party of the second part shall covenant as follows:
Second, That said parties of the first part

will forever warrant the title to said premises.

Third, That, in Compliance with Sec. 13 of the Lien Law, the grantor will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

In Witness Whereof, the parties of the first part have hereunto set their hand and seal the day and year first above written.

In Presence of

Donald R. Farwell
DONALD R. FARWELL

Arlene J. Farwell
ARLENE J. FARWELL

State of New York }
County of Cattaraugus } ss.

On this 19th day of May
Nineteen Hundred and Ninety

before me, the subscriber, personally appeared

DONALD R. FARWELL and ARLENE J. FARWELL

to me personally known and known to me to be the same person described in and
who executed the within Instrument, and they acknowledged
to me that they executed the same.

State of New York }
County of } ss.

On this
Nineteen Hundred and

Reginald W. Bulson
Notary Public 11/30/90
day of

before me, the subscriber, personally appeared

to me personally known and known to me to be the same person described in and
who executed the within Instrument, and he acknowledged
to me that he executed the same.

Notary Public

Deed

Warranty With Lien Covenant

DONALD R. FARWELL and
ARLENE J. FARWELL

45-3/3

TO

COUNTY OF CATTARAUGUS
Att: Beth Newman

19

STATE OF NEW YORK SS.
COUNTY OF CATTARAUGUS

RECORDED JUN 25, 1990

AT 2:03 PM IN LIBER 901

PAGE 804 OF 804

AND EXAMINED

CLERK

Glenn B. Banta

Raymond W. Bulson
Attorney at Law

6 South Main Street
Portville, New York 14770

**This Indenture,**

Between

May Nineteen Hundred and Ninety

19th

day of

DONALD R. FARWELL and ARLENE J. FARWELL, husband and wife, residing
at R.D. 1, Hinsdale, New York 14743

04283

parties of the first part, and

THE COUNTY OF CATTARAUGUS, a municipality with a place for the
transaction of buisness at Court Street, Little Valley, New York
14755

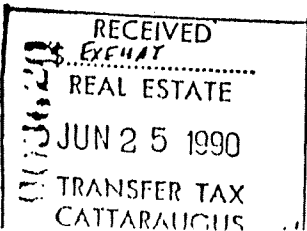
Witnesseth that the party of the first part, in consideration of

ONE

lawful money of the United States, ----- Dollar (\$ 1.00)
paid by the party of the second part, does hereby grant and release unto the
party of the second part, its successors and assigns forever, all

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Ischua,
County of Cattaraugus and State of New York, known and distinguished as being
part of Lot No. 45, Township 3, Range 3 of the Holland Land Company Survey
bounded and described as follows:

BEGINNING at a point in the centerline of Farwell Road on Lot No. 45
which said point is south 84° 18' 30" east, measured along the centerline of
Farwell Road a distance of 1024.25 feet from the intersection of the centerline
of Farwell Road and the west boundary line of Lot No. 45; thence south 4° 47' 30"
west from the point of beginning 612.14 feet to a point; thence south 85° 51' 30"
east a distance of 637.84 feet to a point in the centerline of the Pennsylvania
Railroad right of way and which said point is 91.5 feet northerly, measured along
the centerline of said Railroad from the intersection of said Railroad and the
south boundary of Lot No. 45; thence northeasterly along the centerline of the
right of way of the Pennsylvania Railroad to the intersection of the centerline
of said Railroad and the centerline of said Farwell Road; thence south 82° 19'
30" west along the centerline of Farwell Road a distance of 313.94 feet to an
angle point therein; thence north 64° 51' 30" west along the centerline of said
Farwell Road a distance of 253.62 feet to an angle point in said Farwell Road;
thence north 84° 18' 30" west along the centerline of Farwell Road a distance of
128.56 feet to the place and point of beginning. Containing 9.34 acres be the
same more or less; all of the foregoing 9.34 acres more or less being a portion
of the premises once described in a deed dated May 4, 1973 Clement H. Farwell to
Donald R. Farwell and Arlene J. Farwell recorded May 7, 1973 in Liber 738 of
Deeds at Page 355.



CATTARAUGUS COUNTY

DEPARTMENT OF PUBLIC WORKS

Development - Progress - Workmanship

RECEIVED
STEARNS & WHEELER LLC

DEC 5 2002

*David J. Rivet
Commissioner*

*Anthony D. Capito
Deputy Commissioner*

*Mark C. Burr, P.E.
Director of Engineering*



8810 Route 242
Little Valley, New York 14755
Phone (716) 938-9121
FAX (716) 938-9049

December 3, 2002

Paul J. McGarvey, P.E., Sr. Project Manager
Stearns & Wheeler, LLC
University Centre
415 French Road, Suite 100
Amherst, New York 14228

Re: Farwell Landfill - Construction Closeout Report

Dear Paul:

Attached is a copy of the Farwell Landfill property Declaration of Covenants and Restrictions as required by the Order on Consent for remedial investigation.

I spoke this date with David Locey, Environmental Engineer I, regarding what the DEC required to grant final acceptance that the work done fulfilled the Order on Consent. He stated that Stearns & Wheeler had to prepare the Construction Closeout Report, which would include the attached. As I did not know if this document had been previously forwarded to Stearns & Wheeler, I am doing so now. Mr. Locey also stated that the Construction Closeout Report should have first-round water sample testing results included. The Closeout Report would then have to be approved by the DEC.

As you are aware, the county has an agreement with Alcas under which we are paid \$150,000 upon their receipt of a bill from us and construction approval by the DEC for work completed under the Consent Order. Naturally, the county is eager to receive final payment from Alcas, as well as complete this project.

Thank you for your assistance with this project. If you have any questions or concerns, please contact me.

Sincerely,

DEPARTMENT OF PUBLIC WORKS

David J. Rivet
Commissioner

DJR:jaw
pc: Allan Ormond

DECLARATION OF COVENANTS AND RESTRICTIONS

The County of Cattaraugus, owner in fee simple of certain real property, as described below, in accordance with the Order on Consent issued by New York State Department of Environmental Conservation on July 23, 1998, hereby imposes the following covenants and restrictions on the described real estate (the "Property") which has been identified as Site Number 905024 in the New York State Department of Environmental Conservation's Registry of Inactive Hazardous Waste Disposal Sites and located in the Town of Ischua, County of Cattaraugus, New York (the "Site"):

The Property being part of deed descriptions attached hereto as Exhibits "B" and "C", the first parcel, in Deed identified as Exhibit B, dated September 25, 1973, recorded at Liber 742 of Deeds at Page 937, and identified as Tax Map No. 68.003-1-1; the second parcel, in Deed identified as Exhibit C, dated May 19, 1990, recorded at Liber 901 of Deeds at page 804, and identified as Tax Map No. 68-001-1-18.

The following covenants and restrictions are imposed on the Property, its present and any future owners, their authorized agents, assigns, employees or persons acting under their direction or control, for the purpose of protecting public health and the environment and preventing interference with remedial action work and maintenance work approved by the New York State Department of Environmental Conservation ("NYSDEC").

1. During the period of time for which the terms of the Order on Consent apply, any and all parties who may acquire any interest in any portion of the Property are hereby notified that on July 23, 1998 the NYSDEC entered an Order on Consent, a copy of which is attached hereto as Exhibit A, which requires that specific remedial work and other

requirements, as set forth in the Work Plan incorporated into the Order on Consent, be performed and completed at the Site.

2. During the period of time for which the terms of the Order on Consent apply, the Order on Consent runs with the Property and will follow the property should there be any transfer or conveyance of the Property to subsequent owners.

3. During the period of time for which the terms of the Order on Consent apply, any and all present and/or future owners of the Property wishing to transfer or convey the whole or any part of their ownership interest in the Property, must, not fewer than sixty (60) days of the date of transfer or conveyance, notify the NYSDEC in writing of the identity of the transferee and of the nature and proposed date of the conveyance and must notify the transferee in writing, with a copy to the NYSDEC, of the applicability of the Order on Consent.

All of the above restrictions shall run with the land and continue during the period of time for which the terms of the Order on Consent apply.

IN WITNESS WHEREOF, the Chair of the Legislature of the County of Cattaraugus has caused these Declarations of Covenant and Restrictions to be executed this 23rd day of September, 1998.

SUBSCRIBED AND SWORN TO
before me this 23rd day
of September, 1998.

Karen S Burch
NOTARY PUBLIC

Gerard J. Fitzpatrick
By: GERARD J. FITZPATRICK, Chair
Cattaraugus County Legislature

Authorized by Act 381-98 of the
Cattaraugus County Legislature

KAREN S BURCH
Notary Public #4720539
Cattaraugus County, New York
Commission Expires 11-30-99

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the
Development and Implementation
of a Remedial Investigation/Feasibility
Study for an Inactive Hazardous Waste
Disposal Site, Under Article 27, Title 13,
and Article 71, Title 27 of the
Environmental Conservation Law
of the State of New York by

ORDER
ON
CONSENT
INDEX # B9-0489-96-02

Cattaraugus County, Respondent
and Alcas Corporation, Settling Party

Site Code #905024

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, *inter alia*, ECL Article 27, Title 13, ECL 3-0301, and 42 U.S.C. 9601 *et seq.*
2. A. Cattaraugus County, is the owner and operator of the Site known as the Farwell Road Landfill (the "Site") located in the Town of Ischua, Cattaraugus County. A Site map is attached as Appendix "A" to this Order.

B. The Department alleges that Alcas Corporation is a corporation or a successor to a corporation which disposed of waste at the Site.

C. Cattaraugus County shall be known for purposes of this Order as the "Respondent."

Alcas Corporation has an agreement with Respondent concerning performance of the work

required by this Order and shall be known for purposes of this Order as the "Settling Party."

3. The Site is an inactive hazardous waste disposal site, as that term is defined at ECL 27-1301.2, and presents a significant threat to the public health or environment. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 905024. The Department has classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b.

4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order."

B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

C. The Department also has the power, *inter alia*, to provide for the prevention and abatement of all water, land, and air pollution. ECL 3-0301.1.i.

5. The Department, Respondent, and Settling Party agree that the goals of this Order are for Respondent to (i) implement a Remedial Investigation/Feasibility Study ("RI/FS") for the Site in accordance with the Department-approved Work Plan which is attached to and incorporated into this Order as Appendix B; and (ii) reimburse the State's administrative costs in accordance with

Paragraph IX of this Order.

6. Respondent and Settling Party, while neither admitting nor denying the allegations herein or the historical information contained in the Work Plan attached hereto, have affirmatively waived their rights to a hearing in this matter as provided for by law and have consented to the issuing and entering of this Order and agree to be bound by the terms, provisions, and conditions contained herein. Respondent and Settling Party consent to and agree not to contest the authority or jurisdiction of the Department to issue or enforce this Order and agree not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Initial Submittal

Within 60 days after the effective date of this Order, Respondent and Settling Party shall submit to the Department all data within Respondent's and/or Settling Party's possession or control regarding environmental conditions on-Site and off-Site, to the extent that such data have not previously been provided to the Department.

II. Performance and Reporting of Remedial Investigation

A. Respondent shall commence the Remedial Investigation in accordance with the schedule contained in Appendix "B."

B. Respondent shall perform the Remedial Investigation in accordance with Appendix "B."

C. During the performance of the Remedial Investigation, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

D. Within the time frame set forth in the Appendix "B", Respondent shall prepare a Remedial Investigation Report that shall:

1. include all data generated and all other information obtained during the Remedial Investigation;

2. provide all of the applicable assessments and evaluations required by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 USC 9601 et seq.], as amended, the National Contingency Plan ("NCP") of March 8, 1990 [40 CFR Part 300], the USEPA guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," dated October 1988, and any subsequent revisions to that guidance document in effect at the time the RI/FS is submitted, and appropriate USEPA and Department technical and administrative guidance documents;

3. identify any additional data that must be collected; and

4. include a certification by the individual or firm with primary responsibility for the day to day performance of the Remedial Investigation that all activities that comprised the Remedial Investigation were performed in full accordance with Appendix "B."

III. Feasibility Study

A. In accordance with the schedule contained in Appendix "B", Respondent shall submit a complete Feasibility Study evaluating on-Site and off-Site remedial actions to eliminate, to the maximum extent practicable, all health and environmental hazards and potential hazards at the Site. The Feasibility Study shall be prepared by and have the signature and seal of a professional engineer who shall certify that the Feasibility Study was prepared in accordance with this Order.

B. Respondent shall perform and prepare the Feasibility Study in accordance with Appendix "B" and in a manner consistent with CERCLA, the NCP, and the guidance documents identified in Subparagraph II.D.2.

C. After the Department's approval of the Feasibility Study, Respondent shall cooperate and assist the Department in soliciting public comment on the RI/FS and on the proposed remedial action plan, in accordance with CERCLA, the NCP, the guidance documents identified in Subparagraph II.D.2, and with any Department policy and guidance documents in effect at the time the public comment period is initiated. After the close of the public comment period, the Department shall select a final remedial alternative for the site in a Record of Decision ("ROD"). The ROD shall be incorporated into and become an enforceable part of this Order.

IV. Interim Remedial Measures

A. Respondent may propose one or more IRMs for the Site.

B. In proposing each IRM, Respondent shall submit to the Department a work plan that includes a chronological description of the anticipated IRM activities together with a schedule for performance of those activities (an "IRM Work Plan" for that Site).

C. Upon the Department's determination that the proposal is an appropriate IRM and upon the Department's approval of such work plan, the IRM Work Plan shall be incorporated into and become an enforceable part of this Order; and Respondent shall submit to the Department for its review and (as appropriate) approval, in accordance with the schedule contained in the Department-approved IRM Work Plan, detailed documents and specifications prepared, signed, and sealed by a professional engineer to implement the Department-approved IRM. Such documents shall include a health and safety plan, contingency plan, and (if the Department requires such) a citizen participation plan that incorporates appropriate activities outlined in the Department's publication, "New York State Inactive Hazardous Waste Citizen Participation Plan," dated August 30, 1988, and any subsequent revisions thereto, and 6 NYCRR Part 375. Respondent shall then carry out such IRM in accordance with the requirements of the

approved IRM Work Plan, detailed documents and specifications, and this Order. Respondent shall notify the Department of any significant difficulties that may be encountered in implementing the Department-approved work plan, detailed documents, or specifications and shall not modify any obligation unless first approved by the Department.

D. During implementation of all construction activities identified in the Department-approved IRM Work Plan, Respondent shall have on-Site a full-time representative who is qualified to supervise the work done.

E. Within the schedule contained in the Department-approved IRM Work Plan, Respondent shall submit to the Department a final engineering report prepared by a professional engineer that includes a certification by that individual that all activities that comprised the Department-approved IRM were completed in accordance with the Department-approved IRM Work Plan and this Order.

1. If the performance of the Department-approved IRM encompassed construction activities, the final engineering report also shall include a detailed post-remedial operation and maintenance plan ("IRM O&M Plan"); "as-built" drawings and a final engineering report (each including all changes made to the Remedial Design during construction); and a certification by a professional engineer that the IRM was implemented and all construction activities were completed in accordance with the Department-approved detailed documents and specifications for the IRM and all such activities were personally witnessed by him or her or by a person under his or her direct supervision. The IRM O&M Plan, "as built" drawings, final engineering report, and certification must be prepared, signed, and sealed by a professional engineer.

2. Upon the Department's approval of the IRM O&M Plan, Respondent shall implement the IRM O&M Plan in accordance with the requirements of the Department-approved

IRM O&M Plan.

F. After receipt of the final engineering report and certification, the Department shall notify Respondent in writing whether the Department is satisfied that the IRM was completed in compliance with the Department-approved IRM Work Plan and design.

G. If, after review, the Department determines that a proposal is not an appropriate IRM, or if the Department disapproves the final engineering report and certification, the Department shall inform Respondent in writing. Following such Department determination, Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to law unless Respondent invokes the procedures set forth in Paragraph XII of this Order.

V. Progress Reports

Respondent shall submit to the parties identified in Paragraph XIV in the numbers specified therein copies of written monthly progress reports that:

A. describe the actions which have been taken toward achieving compliance with this Order during the previous month;

B. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

C. identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month;

D. describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the

progress at the Site;

E. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays;

F. include any modifications to any work plans that Respondent has proposed to the Department or that the Department has approved; and

G. describe all activities undertaken in support of the Citizen Participation Plan during the previous month and those to be undertaken in the next month. Respondent shall submit these progress reports to the Department by the tenth day of every month following the effective date of this Order.

Respondent also shall allow the Department to attend, and shall provide the Department at least seven days advance notice of, any of the following: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

VI. Review of Submittals

A. 1. The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. a. If the Department disapproves a submittal, it shall so notify Respondent in writing and shall specify the reasons for its disapproval. Respondent shall be in violation of this

Order unless, within 20 days after receiving written notice that Respondent's submittal has been disapproved, Respondent either makes a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal or invokes the procedures set forth in Paragraph XII of this Order.

b. If Respondent elects to make a revised submittal and does so in accordance with Subparagraph VI.A.2.a, after receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval. If the Department disapproves the revised submittal, Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law unless Respondent invokes the procedures set forth in Paragraph XII of this Order. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Respondent shall modify and/or amplify and expand a submittal upon the Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

VII. Penalties

A. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action if Respondent cannot comply with any requirement hereof because of war, riot, or an unforeseeable disaster arising exclusively from natural causes which the exercise of ordinary human prudence could not have prevented. Respondent shall, within five days of

obtaining knowledge of any such condition, notify the Department in writing. Respondent shall include in such notice the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to compliance with this Order pursuant to this Subparagraph VII.B.

VIII. Entry upon Site

Respondent hereby consents to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondent by any duly designated employee, consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondent's compliance with this Order. The Department shall make reasonable efforts to provide reasonable notice in advance of any such entry. During any Remedial Construction, Respondent shall provide the Department with suitable office space at the Site, including access to a telephone, and shall permit the Department full access to all records relating to matters addressed by this Order and job meetings.

IX. Payment of State Costs

A. Within 45 days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent full reimbursement for the State's expenses, including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs, incurred by the State of New York for work related to the Site prior to the effective date of this Order, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order.

B. The total sum of money to be paid by Respondent pursuant to this Paragraph IX shall not exceed \$35,000.

C. Such payment shall be made by certified check payable to the Department of Environmental Conservation. Payment shall be sent to the Bureau of Program Management, Division of Environmental Remediation, N.Y.S.D.E.C., 50 Wolf Road, Albany, NY 12233-7010.

D. Itemization of the costs shall include an accounting of personal services indicating the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. This information shall be documented by reports of Direct Personal Service. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports.

X. Department Reservation of Rights

A. Except as otherwise provided in this Order, nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, or administrative rights or authorities including, but not limited to, the Department's right to recover natural resources damages.

B. Except as provided in Subparagraphs X.C and X.D, nothing in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting the Department's right to bring any action or proceeding against Respondent or Settling Party with respect to hazardous wastes and substances that are present at the Site or that have migrated from the Site.

C. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

D. As long as Respondent is in compliance with this Order, the Department will not bring any action against Respondent or Settling Party to require work at the Site which is duplicative of the work required pursuant to the terms of this Order.

XI. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns provided, however, that Respondent shall not be required to indemnify and hold the Department, State of New York or their representatives and employees harmless for any claims, suits, actions, damages and costs of every name and description arising out of or resulting from the gross negligence or willful misconduct of the Department, the State of New York and their representatives and employees.

XII. Dispute Resolution

A. Any dispute which arises under or with respect to any submittal pursuant to this Order shall in the first instance be the subject of informal negotiations between the Department and Respondent. The period for initiating such informal negotiations shall not exceed twenty days from the time the dispute arises, unless such time shall be extended by written agreement. The dispute shall be considered to have arisen when Respondent receives written notice from the Department of disapproval of a submittal or of additional requirements from the Department.

B. In the event that the Department and Respondent cannot resolve a dispute by informal negotiations under the preceding subparagraph, then Respondent may initiate a formal resolution of the dispute in accordance with the following dispute resolution procedure:

1. Respondent shall, within 10 days of the failure of informal negotiations, serve Department's Chief Administrative Law Judge with a written statement of the issues in dispute, the relevant facts upon which the dispute is based, and factual data, analysis or opinions supporting its position, and all supporting documentation upon which Respondent relies (hereinafter called the "Statement of Position") who shall assign an Administrative Law Judge ("ALJ") to decide the matter. The Department staff shall serve its Statement of Position on the ALJ, including supporting documentation, no later than twenty business days after receipt of the initiating Statement of Position. The time period for the exchange of Statements of Position may be shortened upon and in accordance with notice by the Department and agreement by Respondent.

2. An administrative record of a dispute under this Paragraph XII shall be maintained by the Department. The record shall include the Statement of Position of each party served pursuant to the preceding subparagraph, and any other relevant information. The record shall be available for review to all parties and to the public.

3. Upon review of the administrative record as developed pursuant to this paragraph, the ALJ shall issue a final decision and order resolving the dispute. Respondent shall then revise the submittal in dispute in accordance with the Department's specific comments except as may be modified by the ALJ and except for those comments withdrawn by the ALJ, and shall submit a revised submittal. The period of time within which the submittal must be revised shall be specified in the ALJ's final decision and order.

4. After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval of the revised submittal. If the revised submittal fails to address the Department's specific comments and the ALJ's final decision and

order, Respondent shall be in violation of this Order and the ECL.

5. In the review by the ALJ of any dispute raised in accordance with this paragraph, Respondent shall have the burden of proving that there is no rational basis for the Department's position.

6. The invocation of the procedures stated in this Paragraph XII shall not extend, postpone, or modify Respondent's obligations under this Order with respect to any disputed items, unless and until the Department agrees or a court determines otherwise.

XIII. Public Notice

A. Within 30 days after the effective date of this Order, Respondent shall file a Declaration of Covenants and Restrictions with the Clerk of Cattaraugus County to give all parties who may acquire any interest in the Site notice of this Order.

B. If Respondent proposes to convey the whole or any part of Respondent's ownership interest in the Site, Respondent shall, not fewer than 60 days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XIV. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondent shall be sent to:

Martin Doster, Region 9
Division of Environmental Remediation
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203

with copies to:

Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Albany, New York 12203

Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

Division of Environmental Enforcement
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203

2. Communication to be made from the Department to Respondent shall be sent to:

David J. Rivet
Commissioner
Cattaraugus County Department of Public Works
8810 Route 242
Little Valley, New York 14755

Craig A. Slater
Harter, Secrest & Emery
One Marine Midland Center
Suite 3550
Buffalo, New York 14203-2884

- B. Copies of work plans and reports shall be submitted as follows:

1. Four copies to Region 9
Division of Environmental Remediation.
2. Two copies to the Director, Bureau of Environmental Exposure Investigation.
3. One copy to Division of Environmental Enforcement

- C. 1. Within 30 days after the Department's approval of any report submitted pursuant to this Order, Respondent shall submit to Director, Division of Environmental

Remediation, a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

2. Within 30 days after the Department's approval of the RI/FS, Respondent shall submit to the Department one microfilm copy (16 millimeter roll film M type cartridge) of the Department-approved RI/FS as well as all other Department-approved submittals. Respondent shall submit such to the Site Project Manager.

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XV. Miscellaneous

A. All activities and submittals required by this Order shall address both on-Site and off-Site contamination resulting from the disposal of hazardous wastes at the Site.

B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and third party data validators acceptable to the Department to perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent shall be submitted to the Department within 30 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible. The Department's approval of any such individual or firm shall not be unreasonably withheld. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent, and the Department also shall have

the right to take its own samples. Respondent shall make available to the Department the results of all sampling and/or tests or other data generated by Respondent with respect to implementation of this Order and shall submit these results in the progress reports required by this Order.

D. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondent shall use its best efforts to obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order. The Department shall assist Respondent to the extent practicable in the event such assistance is requested or required by Respondent to secure any such necessary off-Site permits, easements, rights-of-ways, rights-of-entries, approvals or authorizations needed to perform this Order.

F. Respondent and Respondent's officers, directors, agents, servants, employees, successors, and assigns shall comply with the terms and conditions of this Order. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of designated duties on behalf of Respondent.

G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or

Respondent's contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

I. All references to "days" in this Order are to calendar days unless otherwise specified.

J. The Paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

K. 1. The terms of this Order constitute the complete and entire Order concerning the development of a Remedial Investigation and Feasibility Study for the Site. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.


2. If Respondent or Settling Party desires that any provision of this Order be changed, Respondent or Settling Party shall make timely written application, signed by Respondent or Settling Party, as the case may be, to the Commissioner setting forth reasonable

grounds for the relief sought. Copies of such written application shall be delivered or mailed to the Division of Environmental Enforcement and to the Site Project Manager.

L. The effective date of this Order is the date the Commissioner or his designee signs it.

DATED: , New York

7/23 (1998)


JOHN P. CAHILL
Commissioner
New York State Department
of Environmental Conservation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

CATTARAUGUS COUNTY

By: Gerard J. Fitzpatrick
(TYPE NAME OF SIGNER)
Gerard J. Fitzpatrick, Chairman
Cattaraugus County Legislature

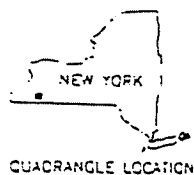
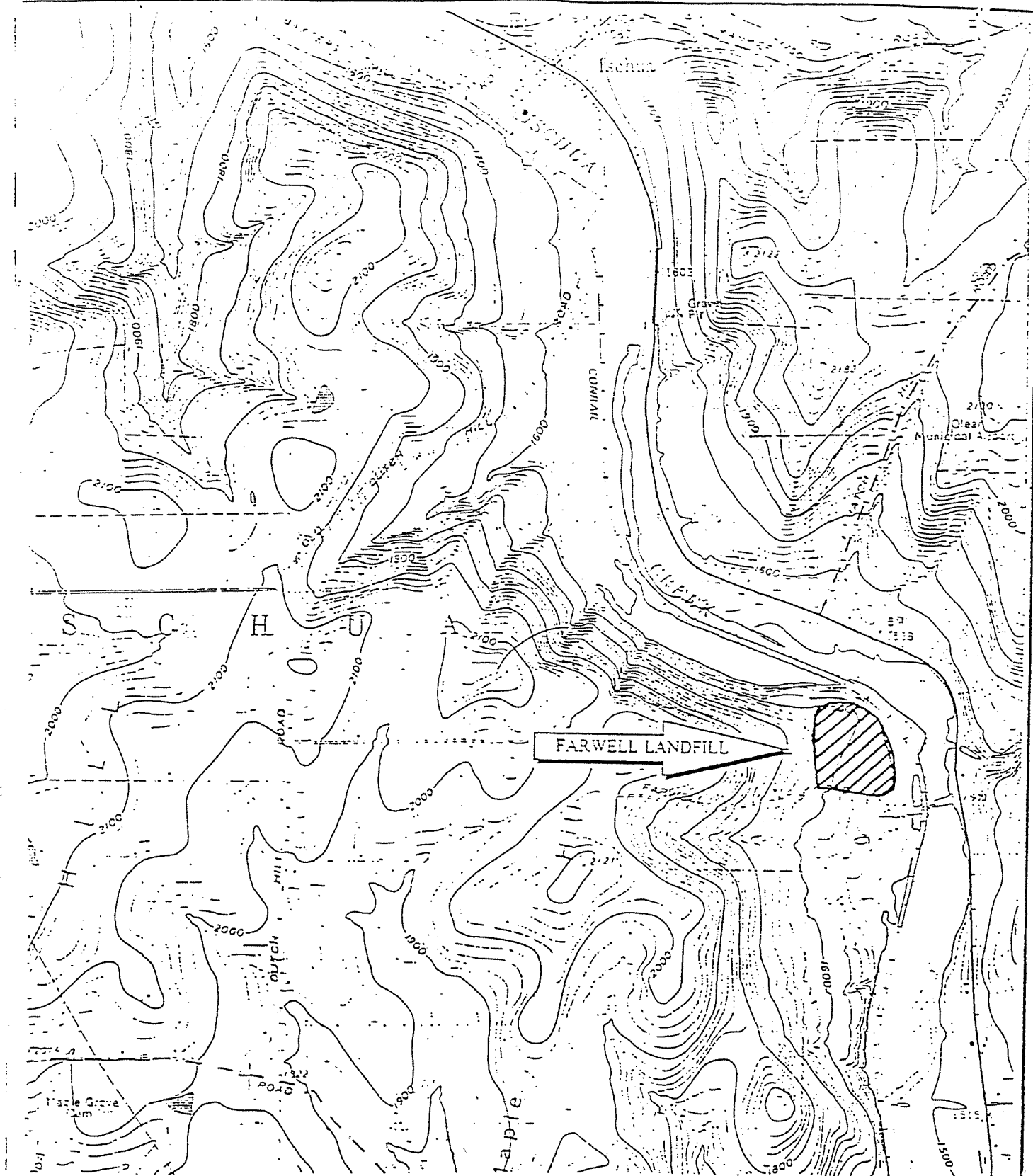
Date: July 7, 1998

STATE OF NEW YORK)
) s.s.:
COUNTY OF Cattaraugus

On this 7th day of July, 1998, before me personally came
Gerard J. Fitzpatrick, to me known, who being duly sworn, did depose and
say that he resides in Ellicottville, New York;
that he is the Chairman of the Cattaraugus
County Legislature, the municipality described in and which executed the
foregoing instrument; that he knew the seal of said municipality; that the seal affixed to said
instrument was such municipal seal; that it was so affixed by the order of the Legislature of said
municipality and that he signed his name thereto by like order.

Karen L. Birch

Notary Public
KAREN S. BURCH
Notary Public #4720539
Cattaraugus County, New York
Commission Expires 11/30/2018



QUADRANGLE LOCATION



Stearns & Wheeler, LLC
ENVIRONMENTAL ENGINEERS & SCIENTISTS

CATARAUGUS, NEW YORK

DATE: 10/97

JOB No: 70135FA

FARWELL LANDFILL
CATTARAUGUS COUNTY, NEW YORK
REMEDIAL INVESTIGATION WORK PLAN

FIGURE 1-1
SITE LOCATION, FARWELL LANDFILL

HINSDALE QUADRANGLE
NEW YORK - CATTARAUGUS CO
15 MINUTE SERIES (TOPOGRAPHIC)

CONSENT BY SETTLING PARTY

Settling Party hereby consents to the issuing and entering of this Order, waives Settling Party's right to a hearing herein as provided by law, and agrees to be bound by this Order.

ALCAS CORPORATION

By: James E. Stitt
(TYPE NAME OF SIGNER)

James E. Stitt

Title: Exec. V.P., Mfrg. & Engr.

Date: 7/7/1998

STATE OF NEW YORK)

COUNTY OF Albany) s.s.:

On this 7th day of July, 1998, before me personally came James E. Stitt, to me known, who being duly sworn, did depose and say that he resides in Albany, New York; that he is the Executive Vice President of Alcas Corporation, the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by the order of the Board of Directors of said corporation and that he signed his name thereto by like order.

Janet C. Wood
Notary Public

JANET C. WOOD
Notary Public, State of New York
Resident of Albany County
at time of appointment
Commission Expires April 30, 1999

APPENDIX 9

MONITORING WELL INSTALLATION DOCUMENTATION



Stearns & Wheeler, LLC
Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 124.0'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Mobile 3-56
Driller : Ron Bush
Drilling Method : Mud Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

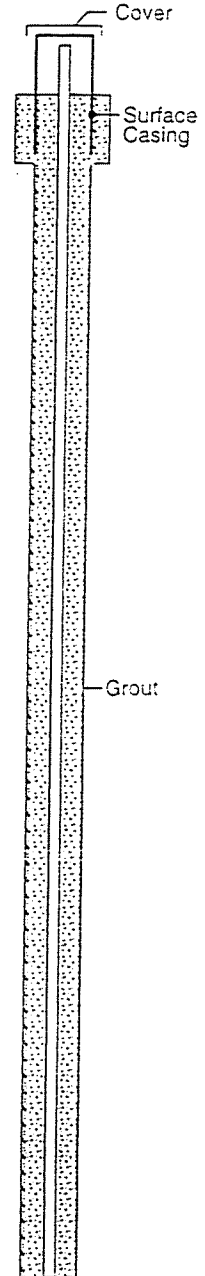
LOG OF BORING MW-21S

(Page 1 of 5)

Date Started : 8/25/01
Time : 7:40 AM
Date Completed : 9/5/01
Time : 5:00
Weather : clear/sunny, 75F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
0	2	25.3	14	dry brown silt w/ organics, little fine gravel pieces and trace pebbles mixed with fine sand	0	soils sampled at standard 5-foot intervals
1	4				1	
2	8				2	
4	11	27.6	12	dry brown medium dense fine silt with some fine gravel and little fine sand (Sandy brown till)	4	
6	7				6	
8	17				8	
10	19	27.4	16	fine brown dense silt with coarse gravel and many pebbles (Gravelly till)	10	Upper till
12	23				12	
14	33				14	
16	4	32.1	12	slightly moist brown dense silt with little sand and coarse gravel (Till)	16	
18	6				18	
20	9				20	
22	12	31.5	17	slightly moist brown dense silt with little sand and coarse gravel	22	Upper till
24	12				24	
26	15				26	
28	21	32.4	15	fine dense silt with sand and coarse gravel, many pebbles	28	
30	19				30	
	23					

Well: MW-21S
Elev.:



Notes:

LOG OF BORING MW-21S

(Page 1 of 5)



Stearns & Wheeler, LLC

Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 124.0'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Mobile B-36
Driller : Ron Bush
Drilling Method : Mud Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

LOG OF BORING MW-21S

(Page 2 of 5)

Date Started : 8/28/01
Time : 7:40 AM
Date Completed : 9/5/01
Time : 5:00
Weather : clear/sunny, 75F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PIV (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
30	19 23 27 19	36.4	6		30	
32					32	
34					34	
36	8 18 25 21	31.3	12	moist brown silt mixed with f/m sand; many pebbles with f/c gravel	36	Till Augers removed @ 36' 6" steel casing inserted; begin mud rotary
38					38	
40	30 23 17 13	31.7	14		40	
42				moist brown silt with many pebbles, m/c sand and coarse gravel pieces (Till)	42	
44					44	
46	16 20 23 23	30.5	14		46	
48					48	
50	16 18 18 12	31.0	12	moist slightly dense silt with m/c sand and fine gravel	50	Till
52					52	
54				f/m dense sand with silt and small pebbles, fine gravel	54	
56	23 25 50/3	38.3	15	moist dense brown silt mixed with fine gravel and rounded pebbles, Till	56	
58					58	5" steel casing inserted to 58.5'
60					60	

Well: MW-21S
Elev.:

Grout

Notes:

LOG OF BORING MW-21S

Page 2 of 5



Stearns & Wheeler, LLC
Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 124.0'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Mobile 3-56
Driller : Ron Bush
Drilling Method : Mud Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

LOG OF BORING MW-21S

(Page 3 of 5)

Date Started : 8/29/01
Time : 7:40 AM
Date Completed : 9/5/01
Time : 5:00
Weather : clear/sunny, 75F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS	Well: MW-21S Elev.:
60	25 25 50/5	35.2	10		60		
62				moist brown f/m sand with coarse gravel, Till	62		
64					64	Till	
66	20 24 50/3	21.2	8	moist brown silt with f/m sand with coarse gray gravel, many rock fragments, Till	66		
68					68		
70	50/3	27.3	4		70	Begin continuous sampling	
72	50/1	31.7	0	fine brown silt and sand with coarse gravel and rounded pebbles, Till	72		Grout
74	22 38 32	29.3	14		74	Till	
76	27 50 50 50/4	18.4	14	brown dense fine silt mixed with little clay; many pebbles with f/c gravel, Till	76		
78	50/4	13.6	4		78		
80	49 50/4	25.1	5	wet brown dense silt and sand with many pebbles and coarse gravel, Till	80		
82					82	End continuous sampling; begin sampling every 10'	
84					84		
86					86		Bentonite Seal
88					88		
90					90		

Notes:

LOG OF BORING MW-21S

(Page 3 of 5)



Stearns & Wheeler, LLC
Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 124.0'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Mobile B-55
Driller : Ron Bush
Drilling Method : Mud Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

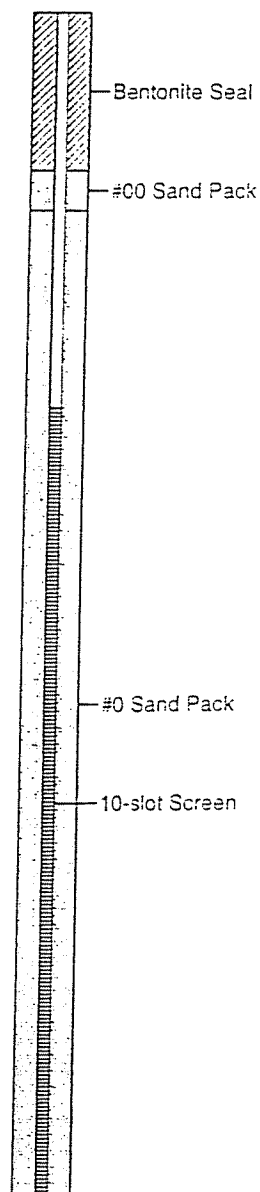
LOG OF BORING MW-21S

(Page 4 of 5)

Date Started : 8/29/01
Time : 7:40 AM
Date Completed : 9/5/01
Time : 5:00
Weather : clear/sunny, 75F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
90	30 50/4	28.7	7	wet brown dense silt with m/c sand, coarse gravel with many rounded pebbles, Till	90	
92					92	
94					94	
96					96	
98					98	
100	50/2	29.3	4	f/m dense sand with silt and small pebbles, fine gravel	100	
102					102	Resume 5' interval sampling
104					104	Glaciofluvial
106	31 50/2	31.3	12	brown dense m/c sand with trace pebbles	106	
108					108	
110	47 63	35.7	7	brown silt with coarse gravel and many pebbles, Till	110	
112					112	
114					114	
116	50/2	34.2	3	brown dense silt with many pebbles and little f/c gravel	116	Grading back to sandy till
118	50/2	33.5	4		118	Resume continuous sampling
120	29 30 50/3	38.4	10	wet brown dense silt with little fine sand and some pebbles	120	Glaciofluvial

Well: MW-21S
Elev.:



Notes:

LOG OF BORING MW-21S

(Page 4 of 5)



Stearns & Wheeler, LLC
Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 124.0'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Mobile B-56
Driller : Ron Bush
Drilling Method : Mud Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

LOG OF BORING MW-21S

(Page 5 of 5)

Date Started : 8/23/01
Time : 7:40 AM
Date Completed : 9/5/01
Time : 5:00
Weather : clear/sunny, 75F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
120					120	
122	50/4	33.5	4	wet dense brown/gray silt with pebbles and fine gravel	122	
124	50/1	31.8	3	brown dense fine silt with coarse gravel and many pebbles, Till	124	E.O.B. @ 124'
126					126	
128					128	
130					130	
132					132	
134					134	
136					136	
138					138	
140					140	
142					142	
144					144	
146					146	
148					148	
150					150	

Well: MW-21S
Elev.:

#0 Sand Pack

Notes:

LOG OF BORING MW-21S

(Page 5 of 5)



Stearns & Wheeler, LLC
Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 55.0'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Mobile B-56
Driller : Ron Bush
Drilling Method : Mud Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

LOG OF BORING MW-22S

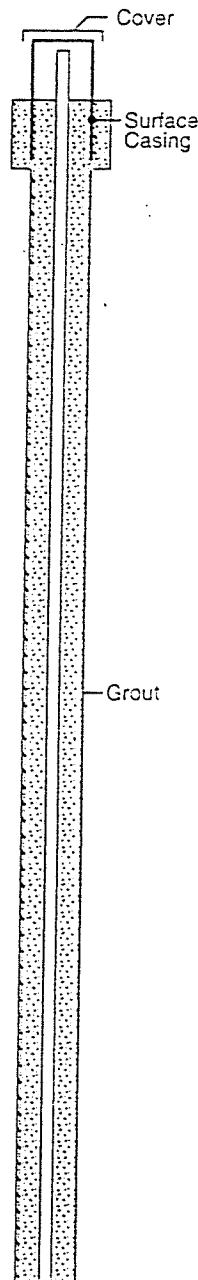
(Page 1 of 2)

Date Started : 9/8/01
Time : 7:45 AM
Date Completed : 9/10/01
Time : 5:30 PM
Weather : clear/sunny, 75F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
0					0	
2					2	
4					4	
6					6	
8					8	
10					10	
12					12	
14					14	
16				Sampling begun prior to anticipated screen depth of glaciofluvial unit (@ 50 ft)	16	
18					18	
20					20	
22					22	
24					24	
26					26	
28					28	
30					30	

Well: MW-22S

Elev.:



Notes:

Drilling was continuous until 50 feet, when continuous sampling began

LOG OF BORING MW-22S

(Page 1 of 2)



Stearns & Wheeler, LLC
Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 55.0'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Mobile 3-56
Driller : Ron Bush
Drilling Method : Mud Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

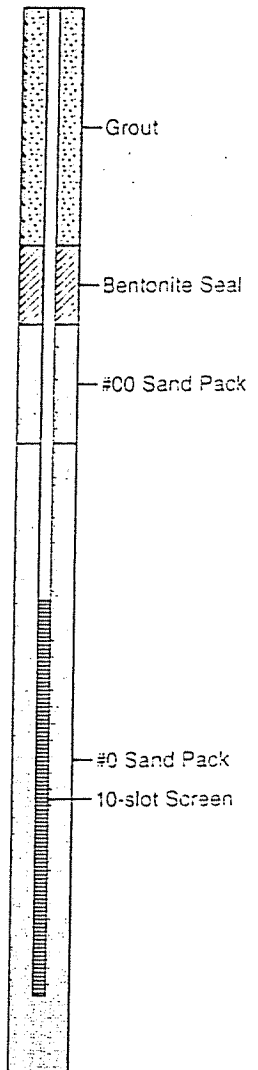
LOG OF BORING MW-22S

(Page 2 of 2)

Date Started : 9/6/01
Time : 7:45 AM
Date Completed : 9/10/01
Time : 5:30 PM
Weather : clear/sunny, 75F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
30					30	
32					32	
34					34	
36					36	
38					38	
40					40	
42					42	
44					44	
46					46	
48					48	
50	30			Begin continuous sampling	50	
52	25	32.4	14	moist brown m/c sand with many small pebbles and fine gravel	52	Glaciofluvial
54	28				54	
56	27	30.1	7	moist brown m/c sand with rounded pebbles and little silt with fine gravel	56	Grades to till
58	37				58	
60	48	32.6	15	Grades to Till: moist m/c sand with some silt and pebbles; gravel becoming coarse with dense silt and trace clay	60	E.O.B. @ 57'

Well: MW-22S
Elev.:



Notes:
Drilling was continuous until 50 feet, when continuous sampling began.

LOG OF BORING MW-22S

(Page 2 of 2)



Stearns & Wheeler, LLC

Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 54'
Drilling Contractor : Parratt Wolf
Drill Rig Type : Track Rig
Driller : Glen Lansing
Drilling Method : Wash Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

LOG OF BORING MW-23S

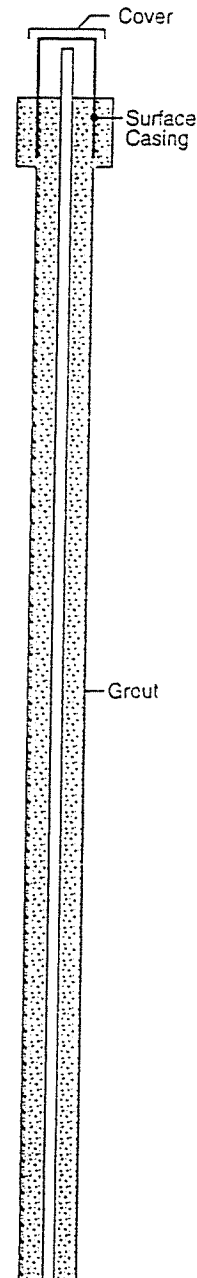
(Page 1 of 2)

Date Started : 10/15/02
Time : 1:15 PM
Date Completed : 10/17/02
Time : 10:00 AM
Weather : overcast, 45F
Boring Location : downgradient of landfill

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
0					0	
2					2	
4					4	
6				Drill using wash rotary method to 15' bgs. Will begin sampling 5-foot intervals @ 15' bgs	6	
8					8	
10					10	
12					12	
14					14	5" steel casing inserted to 15' bgs
16	10 10 12 11			moist gray/brown slightly dense silt with some clay and f-c gravel	16	
18					18	
20	40 43 23 30			moist dense silt and sand with coarse gravel	20	
22					22	
24					24	
26	8 9 10 8			wet dense silt and sand with coarse gravel	26	
28					28	
30				moist brown silt with sand and coarse gravel	30	

Well: MW-23S

Elev.:



Notes:

LOG OF BORING MW-23S

(Page 1 of 2)



Stearns & Wheeler, LLC
Environmental Engineers and Scientists

Cattaraugus County
Farwell Landfill
Compliance Monitoring Well Installation
Town of Ischua, New York

Job No. L10010.20.1400

Depth of Boring : 54'
Drilling Contractor : Parratt Wolff
Drill Rig Type : Track Rig
Driller : Glen Lansing
Drilling Method : Wash Rotary
Hammer Wt./Drop : 140 lb./30"
Sampling Method : Split Spoon 1-3/8" ID
Logged By : MSS
Surveyed By : Cattaraugus County

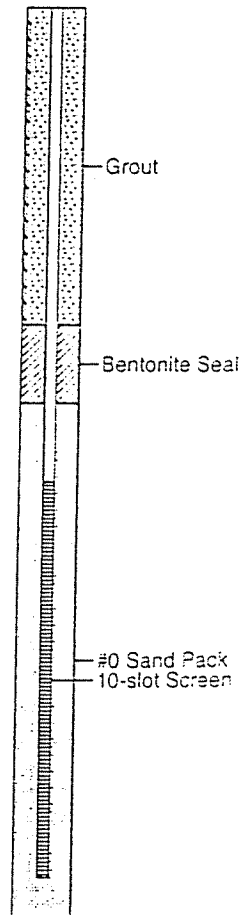
LOG OF BORING MW-23S

(Page 2 of 2)

Date Started : 10/15/02
Time : 1:15 PM
Date Completed : 10/17/02
Time : 10:00 AM
Weather : overcast, 45F
Boring Location : downgradient of landfill

Well: MW-23S
Elev.:

Depth in Feet	Blow Count	PID (ppm)	Recovery (inches)	DESCRIPTION	Depth in Feet	REMARKS
30	15			moist silt and sand with coarse gravel	30	
31	13				31	
32	11				32	
33	11				33	
34				Begin continuous sampling	34	5" steel casing inserted to 35' bgs
35					35	
36	13			moist dense gray silt and sand with coarse gravel	36	Till
37	14				37	
38	20				38	
39	18				39	
40	12				40	
41	10				41	
42	11				42	
43	13			moist dense gray silt and sand with f-c gravel with little clay	43	5" steel casing inserted to 45' bgs
44	13				44	
45	21				45	
46	13			moist gray m/c sand with silt and fine-coarse gravel	46	Glaciofluvial
47	18				47	
48	10				48	
49	14			moist gray sand with f-c gravel and rounded pebbles	49	5" steel casing inserted to 50' bgs
50	14				50	
51	16			moist gray dense silt with coarse gravel and little clay	51	
52	18				52	
53	22				53	
54	15			dense clayey silt with coarse gravel	54	Till E.O.B. @ 54'
55	15				55	
56	35				56	
57	23				57	
58	23				58	
59	14				59	
60	38				60	
	60					



Notes:

LOG OF BORING MW-23S

(Page 2 of 2)

FIGURE NUMBER 1

Site Location

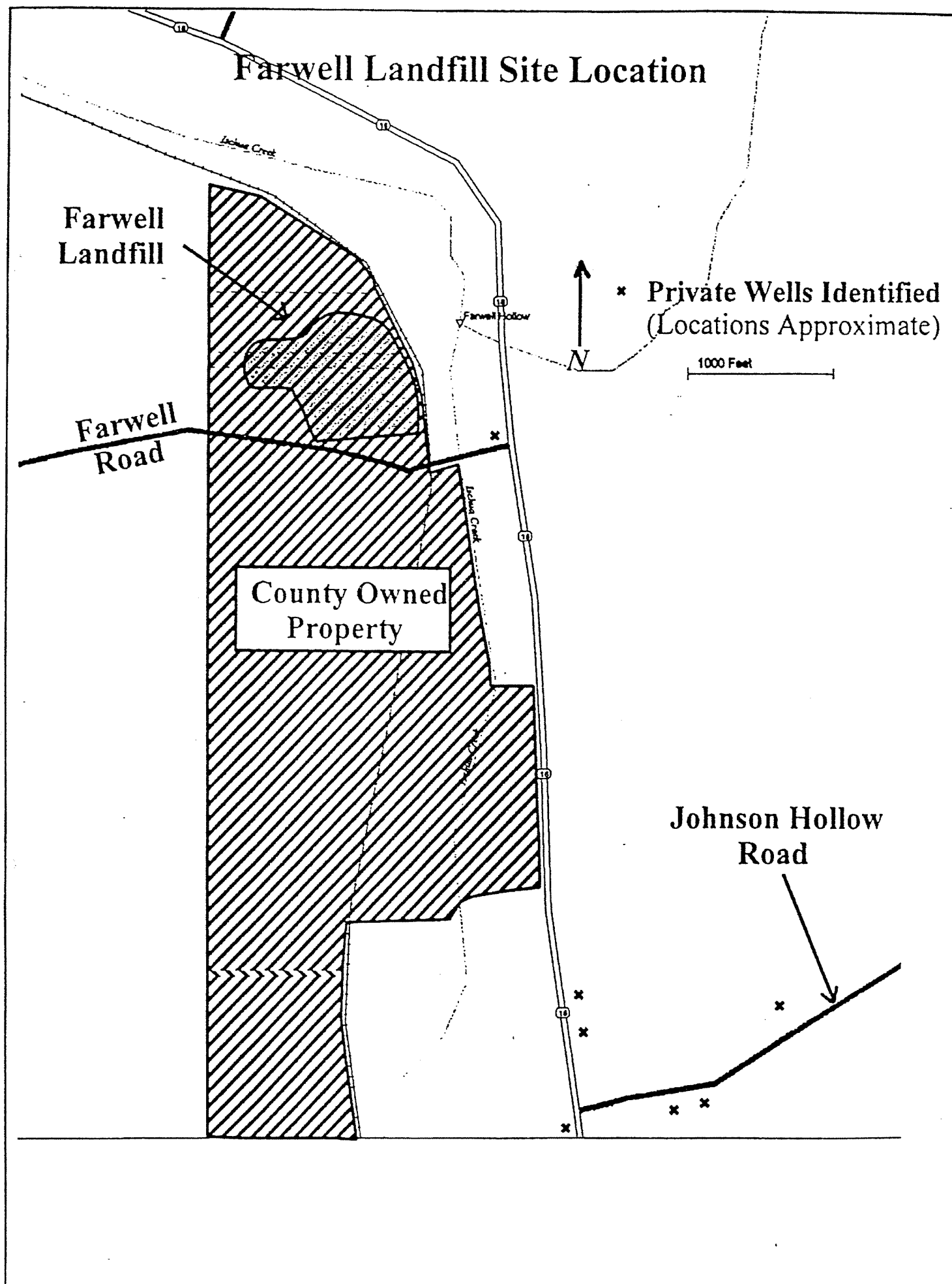
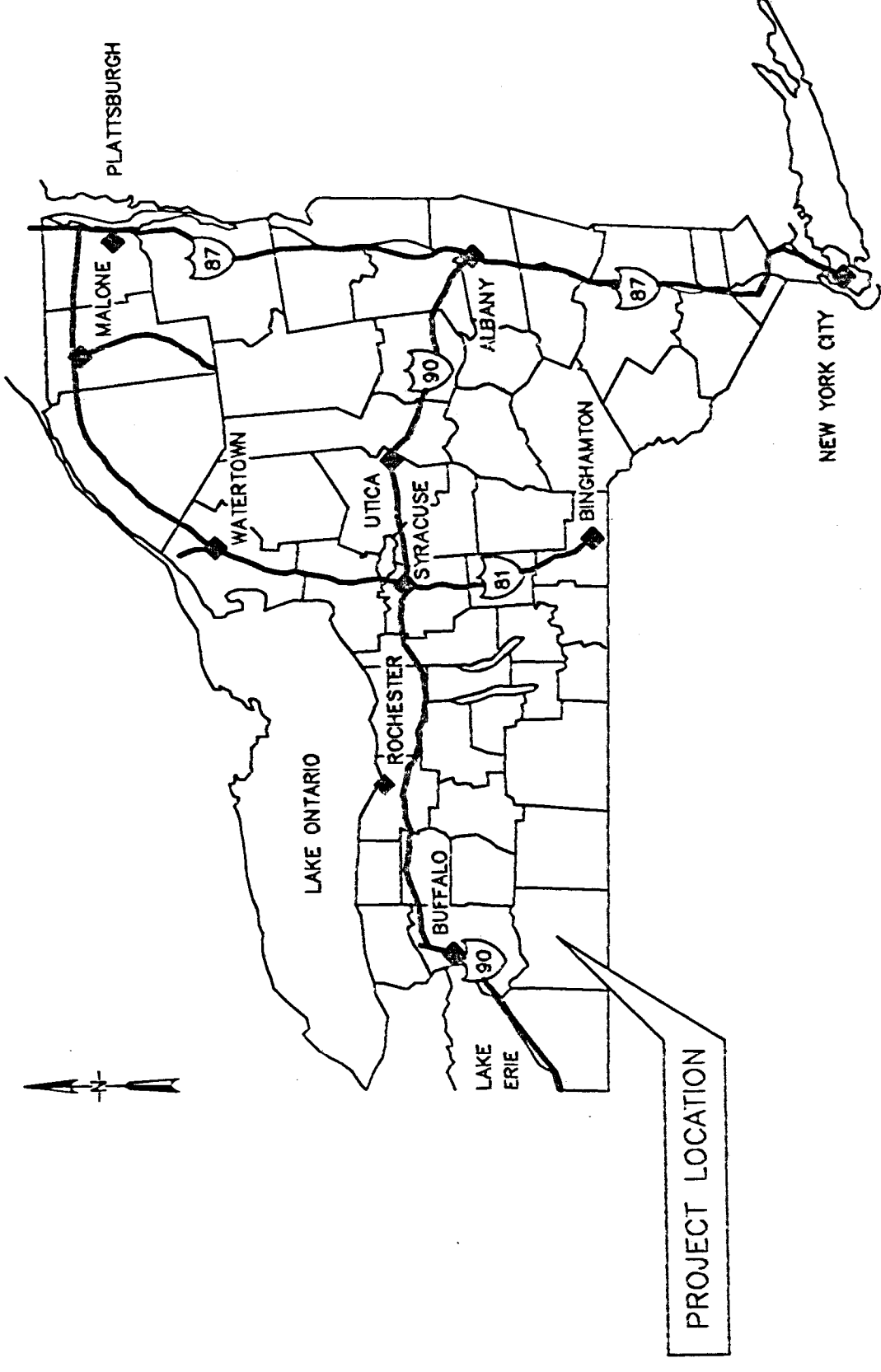


FIGURE NUMBER 2

Record Drawings

CONTRACT DRAWINGS
FARWELL ROAD LANDFILL REMEDIATION PROJECT
CATTARAUGUS COUNTY, NEW YORK

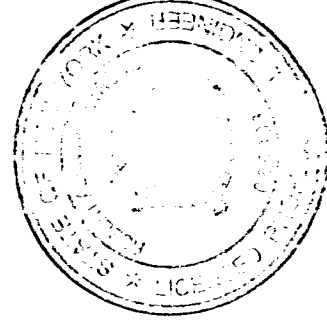
DPW BID #46
S&W JOB No. 10010
2002



AREA MAP
N.T.S.



Cazenovia, New York Hyannis, Massachusetts
Bowie, Maryland Burlington, Massachusetts Trumbull, Connecticut
Richmond, Virginia Amherst, New York Raleigh, North Carolina



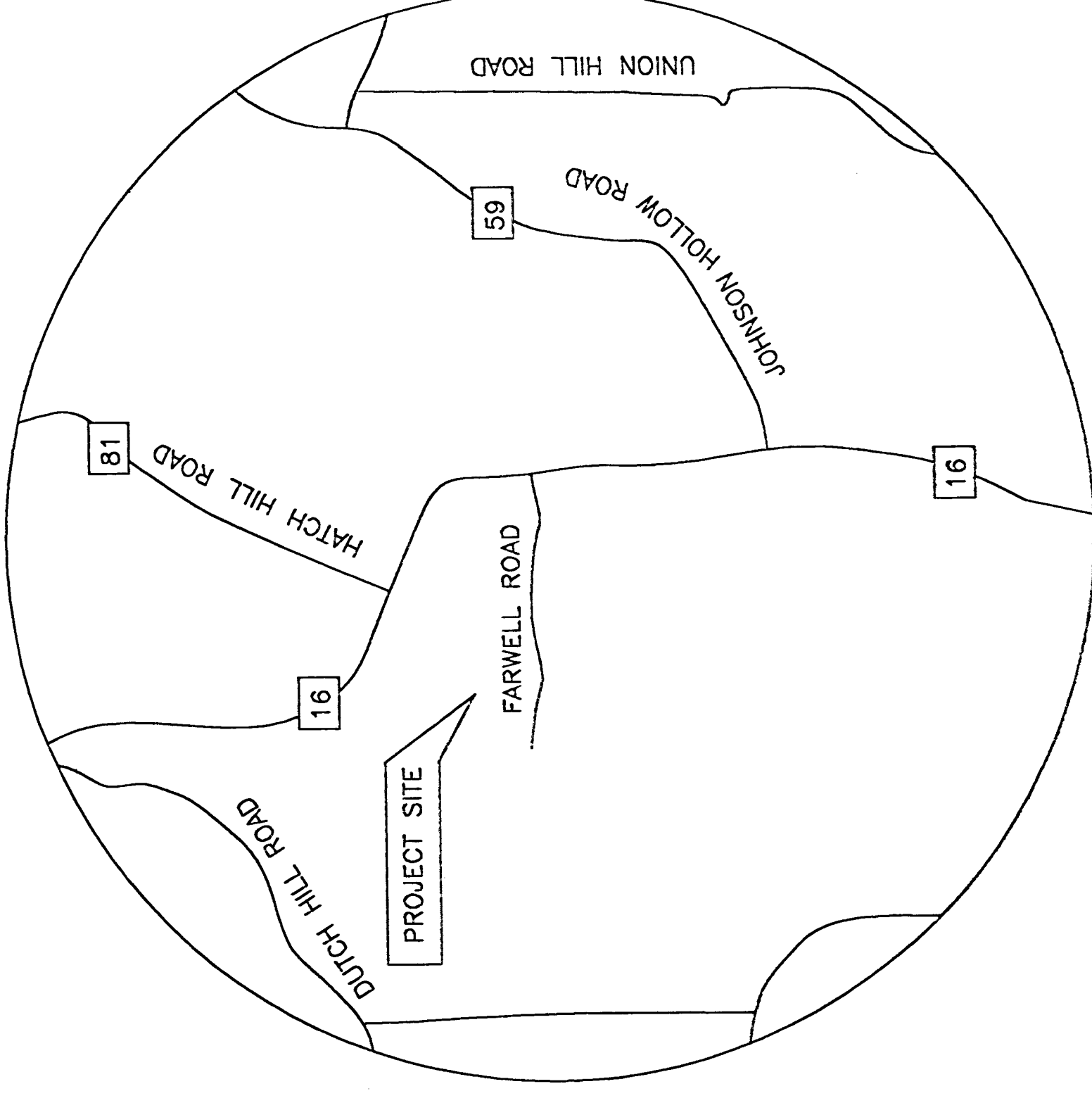
OWNER: CATTARAUGUS COUNTY
DEPT. OF PUBLIC WORKS

COMMISSIONER
DAVID J. RIVET

DIRECTOR OF ENGINEERING
MARK C. BURR, P.E.

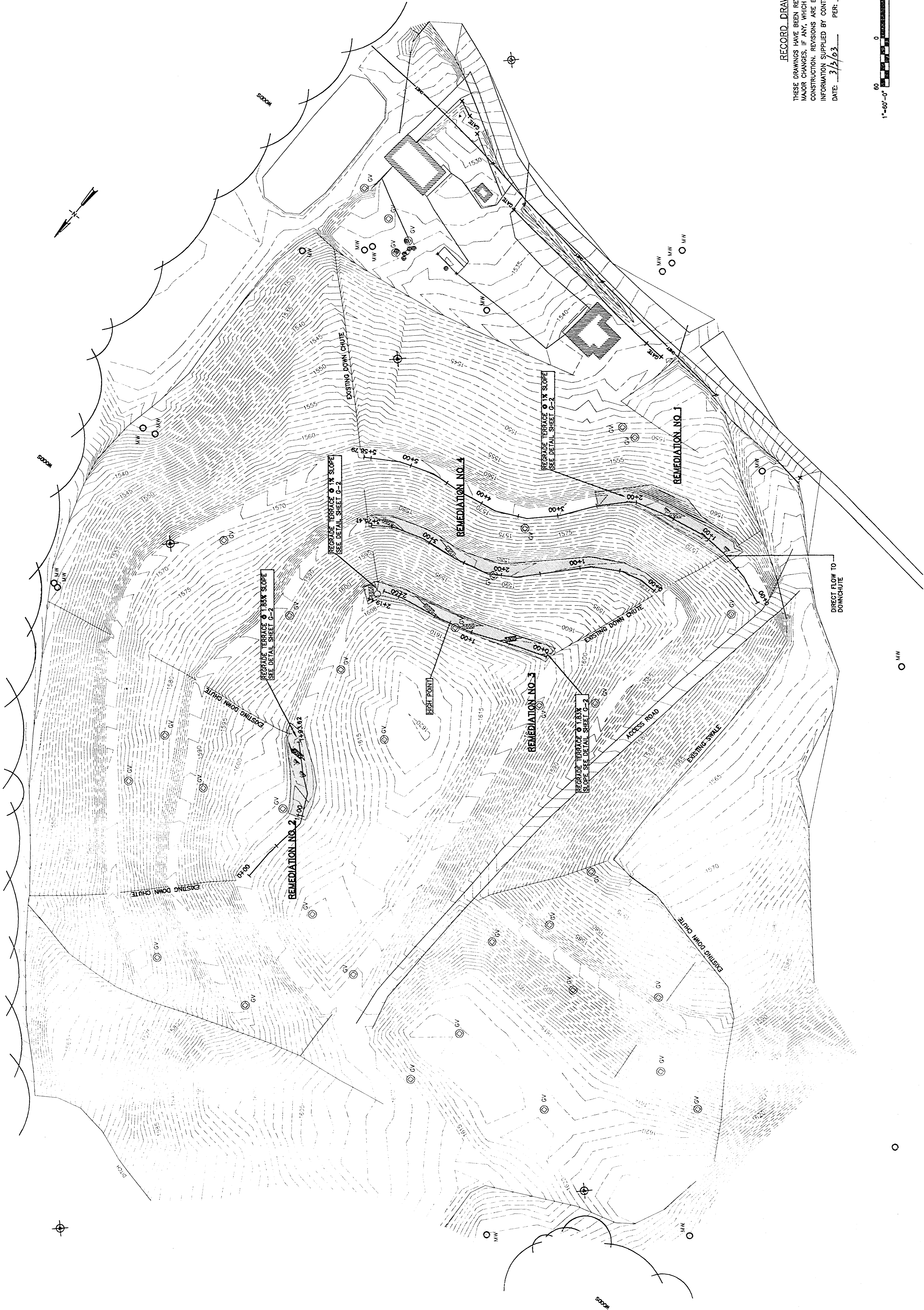
LIST OF CONTRACT DRAWINGS

NO.	TITLE
G-1	FARWELL LANDFILL REMEDIAL DESIGN - SITE PLAN
G-2	FARWELL LANDFILL REMEDIAL DESIGN - MISCELLANEOUS DETAILS
G-3	FARWELL LANDFILL HEDGE ROW PLAN - SITE PLAN



LOCATION MAP
N.T.S.

RECORD DRAWING
THESE DRAWINGS HAVE BEEN REVISED TO REFLECT
REVISIONS MADE DURING THE DESIGN AND
CONSTRUCTION. REVISIONS ARE BASED UPON
INFORMATION SUPPLIED BY CONTRACTOR.
DATE: 3/3/02 PER: *DR*




RECORD DRAWING
THESE DRAWINGS HAVE BEEN REVISED TO REFLECT
MAJOR CHANGES, IF ANY, WHICH OCCURRED DURING
CONSTRUCTION. REVISIONS ARE BASED UPON
INFORMATION SUPPLIED BY CONTRACTOR.
DATE: 3/2/03 PER: *AMH*



NOTES:
Under and facilities, structures, and utilities have been plotted
from available surveys and records, and therefore their locations
must be considered approximate only. There may be others, the
existence of which is presently not known.
It is a violation of New York State Education Law for any person,
unless acting under the direction of a licensed professional
engineer, to alter an item on this drawing in any way, if an item is
altered, the altering engineer shall affix to the item his/her seal
and signature and the date of such alteration, and a specific description of the alteration.

3	RECORD DRAWING	SSH	11/02	SSH
2	FOR CONSTRUCTION	SSH	5/02	SSH
1	FOR APPROVAL	FSE	11/01	FSE
DATE	DRAWN	CHECKED	DESIGNER	APPROVED
PROJECT SUPERVISOR	DATE	DATE	DATE	DATE

DATE	DRAWN	CHECKED	DESIGNER	APPROVED	DATE

**Stearns & Wheeler, LLC**
ENVIRONMENTAL ENGINEERS & SCIENTISTS
AMHERST, NEW YORK

CATTARAUGUS COUNTY				
DEPARTMENT OF PUBLIC WORKS				
FARWELL LANDELL REMEDIATION DESIGN SITE PLAN				
JOB NO.	10010	CONTRACT	1	SHEET
				G-1

