



## Engineers, Inc.

1099 Airport Boulevard, North Syracuse, New York 13212  
(315) 455-2000 Fax: (315) 455-9667

April 7, 1997

Mr. James Zeller  
Bridge Street Enterprises  
P.O. Box 270  
Oneida, New York 13241

**Re: Phase II Environmental Site Assessment  
Bridge Street Enterprises and Timbello Enterprises Parcels**

File: 631.001.096.180

Dear Mr. Zeller:

C&S Engineers, Inc. has completed a Phase II Environmental Site Assessment of the Timbello Enterprises Property as summarized in our agreement with you dated February 4, 1997.

Based on a walkover of both of the above-referenced properties on February 19, 1997, an adjustment was made to our scope related to making test pit excavations on only the Timbello property. It was decided to also place several test pits on the Bridge Street Enterprises property to assess specific areas of mounded material. Although this slight change was made, the objectives of the Phase II Environmental Site Assessment were not altered. The objectives, as stated in our Scope of Services, included:

- An evaluation of shallow groundwater quality along the northern and western portion of the property.
- An assessment of the characteristics of shallow soils which may be disturbed or excavated during subsequent earthwork activities associated with site development.

### GROUNDWATER EVALUATION

On February 28, 1997, CME Associates, Inc. mobilized a trailer mounted rotary drill rig to make two continuously sampled soil borings. These soil borings were completed as temporary PVC shallow groundwater monitoring wells. These temporary groundwater monitoring wells were designated as MW-1 and MW-2. Each of the temporary monitoring wells were purged and sampled for subsequent laboratory analysis on March 3, 1997. The approximate locations of these wells are shown on Figure 2.

Each borehole was sampled continuously using a standard split spoon sampler driven with a 140 lb. hammer falling freely 30 inches. The resulting blow counts were recorded for each 6 inch interval of driven spoon. Once the spoon was removed from the borehole, the next sampling interval was reached by advancing the hollow stem augers. Each borehole was made with a decontaminated set of hollow stem augers. After each sample was retrieved, the split spoon sample was decontaminated with potable water and detergent.

Soil samples retrieved with the split spoon sampler were:

- Physically described with regard to color, density, moisture, grain size, and physical evidence indicative of potential petroleum contamination.
- Evaluated for the presence of volatile organic vapors utilizing a technique referred to as headspace analysis. This consists of taking a representative portion of the retrieved sample and placing it in a zip seal polyethylene bag. The bag is then sealed and allowed to warm for a period ranging from 10 to 15 minutes. Once warmed, the probe of a Thermo Environmental Model 580S photoionization detector (PID) equipped with a 10.0 eV lamp was inserted through the bag. The highest reading obtained on the instrument was recorded. This reading, along with physical characteristics, was used to identify which samples should be submitted to the laboratory.

### ***Borehole B-1***

Test Boring B-1, completed as MW-1, was located just north of the southern boundary of the Bridge Street Enterprises property, approximately 140 feet east of the former Agway Building located on the adjoining Bruce Property. It should be noted that the former Agway Building has since been demolished.

Test Boring B-1, terminated at 15 feet, encountered the following:

#### Depth

|          |   |
|----------|---|
| 0-2 feet | Gray Deteriorated Concrete Fragments                            |
| 2 feet   | Gray to Gray Brown or Brown-Tan SILT                            |
| 15 feet  | Little to Some Clay with Trace Fine to Medium Sand in Interbeds |

Groundwater while drilling was encountered at a depth of 6.5 feet below ground surface. However, once the groundwater monitoring well was installed and developed by bailing, the groundwater level was measured at approximately 1 foot below ground surface.

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April 7, 1997

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Headspace analysis of each of the retrieved soil samples did not register above site background (ambient air) which ranged from 0.2 to 0.3 ppm. Also, none of the soil samples exhibited physical evidence indicative of petroleum contamination. Although evidence of contamination was not found during field screening, the soil sample representative of the 6 to 8 feet range was submitted to Life Science Laboratories, Inc. for the following analysis:

♦ EPA 8260 Volatile Organic Compounds

*Borehole B-2*

As shown on Figure 2, Borehole B-2 was placed on the Timbello Enterprises property approximately 110 feet southeast of the now demolished Agway Building. Boring B-2 was also terminated at a depth of 15 feet. Soils found in this boring are as follows:

Depth

|            |   |
|------------|---|
| 0-4 feet   | Brown Silt and Sand with Asphalt  |
| 4-10 feet  | Red to Gray Silt, Little Clay Transitioning to Gravel and Sand at 10 feet |
| 10-12 feet | Brown Sand, Trace Silt, Trace Gravel                                      |
| 12-14 feet | Brown Silt, Some Clay with Interbeds of Sand                              |

Groundwater was encountered during drilling at approximately 7 feet below ground surface. Similar to B-1, the resultant water level in Monitoring Well B-2 was at a depth of approximately 1 foot below ground surface.

Although no significant odors or discolorations were noted in each of the soil samples, elevated headspace analysis results were recorded in the 8 to 10 feet and 10 to 12 feet samples. In these samples the volatile organic vapor readings were 12 ppm and 10 ppm respectively. Based on the field screening, the 8 to 10 feet sample was submitted to Life Science Laboratories, Inc. for the following analysis:

- ♦ EPA 8080 PCBs
- ♦ 8 RCRA Metals - Totals
- ♦ EPA 8260 Volatile Organic Scan

The logs for each of these boreholes prepared by C&S are presented in Appendix A.

## LABORATORY RESULTS

### Soil Samples

Review of the analytical results (Appendix B) for the soil samples submitted from Test Borings B-1 and B-2 show that volatile organic compounds were not detected in the 6 to 8 feet sample taken from B-1. However, in the 8 to 10 feet sample taken from B-2, the following volatile organic compounds were detected:

- ♦ 1,2 Dichloroethene      350 ug/kg
- ♦ Trichloroethane        54 ug/kg

It should be noted that 1,2 Dichloroethene is a breakdown product of trichloroethane. With regard to PCBs, none were detected in the B-2 sample and the concentrations of metals found in this sample generally appear to be within typical background concentrations of eastern United States soils according to a 1984 report by E. Carol McGovern, New York State Department of Environmental Conservation (NYSDEC), entitled "Background Concentrations of 20 Elements in Soils with Special Regard for New York State".

The analysis of this sample did detect the presence of silver at 1.1 mg/kg. Based on our experience, this metal is typically not found in the Syracuse area and the previously cited document does not comment on silver. However, the United States Environmental Protection Agency document, entitled "Hazardous Waste Land Treatment SW-874" dated April 1983, has within it a table entitled Trace Chemical Element Content Of Natural Soils. According to this table, the concentration of silver in natural, uncontaminated soils in the United States may range from 0.01 to 5 ppm (mg/kg) and averages .05 ppm (mg/kg).

To further evaluate the presence of volatile organic compounds detected in B-2, C&S used a Technical and Administrative Guidance Memorandum entitled "Determination of Soil Cleanup Objectives and Cleanup Levels" (HWR-94-4046), dated January 24, 1994. This document was prepared by NYSDEC to provide a basis and procedure to determine soil cleanup levels at individual Federal Superfund, State Superfund 1986 EQBA Title 3, and Responsible Party (RP) sites. Table 1 of this document shows the recommended cleanup objectives that *could* be used if the Timbello parcel was subsequently subject to a NYSDEC ordered cleanup action.

The following table summarizes the analytical results and corresponding soil cleanup objectives to protect groundwater quality:

| Organic Compound     | Lab Result      | Recommended Cleanup Objective |
|----------------------|-----------------|-------------------------------|
| 1,2 - Dichloroethene | 350 ug/kg (ppb) | 100 ppb                       |
| Trichloroethane      | 54 ug/kg (ppb)  | 700 ppb                       |

Based on the above, it appears that the single sample analyzed from B-2 would exceed the recommended cleanup objective for 1,2 -Dichloroethene.

#### GROUNDWATER QUALITY

The analysis of groundwater taken from MW-1 did not detect compounds at concentrations which should not pose an environmental concern, especially since shallow groundwater is not a potable source for users in the area. Although groundwater is not a potable source, we do express a concern with regard to the analytical results for MW-2.

The following are the compounds of concern that were detected in MW-2:

|                      |                  | NYSDEC<br>Groundwater<br>Standard |
|----------------------|------------------|-----------------------------------|
| ♦ 1,2 Dichloroethene | 2,000 ug/l (ppb) | 5 ppb                             |
| ♦ Trichloroethane    | 100 ug/l (ppb)   | 5 ppb                             |
| ♦ Vinyl Chloride     | 53 ug/l (ppb)    | 2 ppb                             |

It should be noted that both 1,2 Dichloroethene and Vinyl Chloride are breakdown products of Trichloroethane commonly referred to as TCE. The laboratory analytical data regarding groundwater quality is contained in Appendix C.

Information generated during a previous environmental site assessment performed on the adjoining Bruce property in 1995 revealed that the following compounds were detected in monitoring well GZ-5, which is just west of MW-2, as shown on Figure 2 of this report.

|                              |            | NYSDEC<br>Groundwater<br><u>Standard</u> |
|------------------------------|------------|--|
| ♦ 1,1 Dichloroethene         | 37 ppb     | 5 ppb                                    |
| ♦ Trans - 1,2-Dichloroethene | 33 ppb     | 5 ppb                                    |
| ♦ cis - 1,2-Dichloroethene   | 360 ppb    | 5 ppb                                    |
| ♦ Trichloroethane            | 19,000 ppb | 5 ppb                                    |

The previous site assessment on the Bruce property also indicated that shallow groundwater flow is in a westerly direction. Based on our understanding of the site and surrounds, C&S agrees with this. Although a direct comparison of the data cannot be made since the samples were taken approximately 1.5 years apart and there is only one round of analysis, the data in combination with the probable groundwater flow direction suggests that the Timbello property may be the source of these contaminants. As stated earlier in this report, groundwater is not a potable source. However, the presence of these volatile organic compounds would impact construction dewatering activities associated with the proposed site development. These impacts include:

- Costs to contain, treat, and dispose of groundwater during site construction.
- Possible migration of contaminants toward the area where dewatering is taking place.
- Exposure to site workers and possibly building occupants.
- Possible NYSDEC involvement.

Additionally, the construction of a building with a basement at a site with a high groundwater condition, in combination with these contaminants being present, in our opinion, would be considered undesirable.

#### SHALLOW SOIL ASSESSMENT

On March 3, 1997, a total of 14 test pit excavations were made utilizing equipment provided by Griffin Industrial Services, Inc. The test pits were identified as TP-1 through TP-14. Figure 2 of this report shows the approximate location of the test pits and Appendix D contains test pits logs prepared by C&S. As with the drilling program, the excavated soils were assessed with regard to physical appearance and evidence of petroleum contamination. This evaluation of soils was further assisted by the use of the PID and performance of headspace analysis.

Also on this day, C&S obtained shallow (0-6 inch) soil samples from three specific areas on the Timbello property. These areas shown on Figure 2 are:

- A surface area of staining which had an oily appearance (Figure 2 - ◇)
- An area in the southeast quadrant of the property where several drums are stored (Figure 2 - ○).
- The north side of a fence, apparently erected by Niagara Mohawk Power Corporation (Figure 2 - ▲). At the south side of this fence, out-of-service electrical transformers are stored and are labelled as non-PCB. At the time of the walkover for the Phase I Environmental Site Assessment, staining was observed on the ground surface south of the fence near one of the out-of-service transformers.

## FIELD OBSERVATIONS

### Bridge Street Enterprises Property

Based on visual observations made, as documented on the Test Pit Logs, TP-1 through TP-3 made on the Bridge Street Enterprises property, in our opinion, did not reveal physical evidence suggesting a significant environmental concern.

### Timbello Property

Test pit explorations TP-4 through TP-14 revealed that a variety of materials have been placed at the site. These materials consist of sand, gravel, silt, concrete, crushed stone, brick, and metal. Based on visual appearances, it is suspected that the fill material was brought in from a variety of sources or sites. The depth of fill is typically 6 to 8 feet and at the base of the fill is a black organic material which is interpreted to represent the original ground on which the fill was placed. With the exception of test pits TP-13 and TP-14, the physical characteristics of the subsurface materials encountered generally did not indicate a significant environmental concern. Corresponding headspace analysis of soil samples taken from TP-4 and TP-12 were less than background which ranged from 0.7 ppm to 1.3 ppm.

Test pits TP-13 and TP-14 were located in an area of the Timbello property where obvious staining was observed. Depressions or tracks observed on the ground surface were in this area. The tracks had the appearance of those made by construction/earthwork equipment. Additionally, a rusted and crushed 55 gallon drum with evidence of a residual fluid which appeared to be petroleum-like was also present.

While making the test pit excavations which were situated within approximately 10 feet of each other, an odor similar to fuel oil was noted. Headspace analysis of soil samples taken from TP-13 and TP-14 ranged from 23 ppm to 100 ppm in the upper 2 to 3 feet. At the 4.5 foot level, the readings dropped off to 0 to 2 ppm. This may indicate that the depth of the soil which exhibits petroleum-like contamination may be limited in this area. Although the actual areal extent of petroleum-like contamination was not defined, it is suspected it could cover approximately 400 to 800 square feet. As a result of the field observations, soil samples from the upper 3 feet of TP-13 and TP-14 were obtained and submitted to Life Science Laboratories, Inc. for analysis via EPA 8080 PCB, 8 RCRA Metals-Totals, and EPA 8260 Volatile Organic Scan.

#### **SURFACE SOIL SAMPLING**

As stated in this report, three other areas on the Timbello property were identified as being locations where samples should be taken for laboratory analysis. Soil samples taken from the drum storage area and along the north side of the Niagara Mohawk Power Corporation fence did not exhibit visual evidence or odors indicative of petroleum release. Additionally, headspace analysis readings of these soil samples did not exceed site background. A further evaluation of these soil samples was made by laboratory analysis using the same methods previously identified.

The oil spot area located just southeast of TP-10 did exhibit an odor similar to fuel oil along with obvious discoloration. A surface sample of the stained soil was obtained as well as a sample approximately 8 inches below grade. This deeper sample did not exhibit staining but did possess a slight petroleum-like odor. The volatile organic vapor headspace readings recorded were 52 ppm and 8 ppm respectively. Based on the field observations, the upper soil sample was submitted to the laboratory for analysis of metals, PCBs, and volatile organics.

#### **ANALYTICAL RESULTS**

##### **TP-14/TP-14**

No PCB aroclors were detected in these samples and the concentration of metals found, with the exception of silver, were within typical background ranges. In TP-13, silver was detected at a concentration of 6.1 mg/kg (ppm) and not detected in TP-14. This may indicate that silver was contained within the material/fluid which caused the staining observed in this area.



Although volatile organic compounds were not detected in TP-13, analysis of the sample taken from TP-14 detected the following:

| Compound   | Concentration     |
|------------|-------------------|
| Toluene    | 110 ug/kg (ppb)   |
| O-xylene   | 1,100 ug/kg (ppb) |
| m-p xylene | 380 ug/kg (ppb)   |

Assuming the source of these compounds was petroleum based, C&S used the tables contained within the NYSDEC Spill Technology and Remediation Series (STARS) Memo No. 1 Petroleum Contaminated Soil Guidance Policy to evaluate the data. Using the TCLP Alternative Guidance Values for these compounds, the threshold limit which is typically used is 100 ppb. Given the data, it is our opinion that these soils would not meet the cleanup criteria in STARS Memo No. 1. Therefore, a removal action would be required. The analytical results for TP-13 and TP-14 are presented in Appendix E.

#### *Sample North of Niagara Mohawk Power Corporation Fence Line*

This sample is labelled as "SW Cor. Near NIMO" on the analytical data sheet contained in Appendix F. Based on our experience and the references cited in this report, there appears to be no significant environmental concern represented by this single sample for PCBs, 8 RCRA Metals, or volatile organics.

#### *Drum Area*

Our opinion relating to the laboratory analysis of the surface soil sample taken from this location is that there appears to be no significant environmental concern represented by this sample. The analytical data for this sample is presented in Appendix G.

#### *Oil Spot*

Laboratory analysis of the oil spot area (Appendix H) did not detect PCBs, nor did the concentration of metals analyzed for exceed typical background ranges according to the previously cited reference. Analysis of this sample by EPA 8260 Volatile Organic Scan detected:

| Compound   | Concentration   |
|------------|-----------------|
| O-xylene   | 180 mg/kg (ppm) |
| m-p xylene | 96 mg/kg (ppm)  |

Using the assumption that this stain is petroleum related, the corresponding STARS Memo No. 1 guidance criteria for these compounds is 100 ppb. Based on this, a removal action may need to be implemented at this location.

## **RECOMMENDATIONS**

### **Bridge Street Enterprises Parcel**

Based on field observations and review of historic aerial photographs during the Phase I Environmental Site Assessment, it appears that the placement of fill at the site is limited to specific areas. The nature of the fill ranges from soil to metal and building demolition debris. It is our opinion based on experience and field conditions that no special handling of fill placed at the site would be required, except that items such as metal and wood debris are typically not suitable for backfill and should be disposed of off-site as scrap or construction/demolition debris as appropriate. With regard to groundwater quality at MW-1, it is our opinion based on one round of sampling and analysis, that a significant environmental concern is not evident.

### **Timbello Enterprises Parcel**

- Field observations and a previous review of historic aerial photographs indicates that approximately 6 to 8 feet of fill has been placed on the Timbello property. The approximate northern extent of the fill is north of the line made by TP-4, TP-5, TP-6, and TP-7. The fill extends in a southward direction or at least to the southern property line.
- The type of fill present in the subsurface is widely variable and typically does not exhibit physical evidence or odors usually associated with a significant environmental concern.
- At the time of the investigation, two areas of discolored soil were sampled and subsequently analyzed by the laboratory. That analysis revealed the presence of petroleum related compounds in concentrations which exceed NYSDEC guidance documents. It is suspected that staining of this nature is related to the storage of construction equipment and possibly containers holding petroleum related substances.

Although only two areas were readily identified during this investigation, it is suspected that other areas are present throughout the property and may not be evident until debris is removed and site work starts. Should additional stained areas be found during site work which may occur in the future, it is recommended that these stained areas be excavated and the spoils contained for subsequent characterization, proper transport, and off-site disposal. Please be advised that the discovery of additional stained areas may trigger a reporting requirement to NYSDEC.

Mr. James Zeller

April 7, 1997

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- At groundwater monitoring well MW-2, several chlorinated compounds were found in the soil and groundwater. Similar compounds at higher concentrations were detected in a monitoring well installed on the adjoining Bruce property. The concerns regarding these compounds are related to potential site work activities and building construction such as excavation, dewatering, and foundation installations. Since chlorinated compounds were found in this area, it should be anticipated that spoils generated during earth work will require special handling, laboratory analysis, transport, and disposal. Similar concerns are expressed regarding groundwater which may have to be removed in order to accommodate construction. The type of procedures which may have to be implemented include:
  - Containerizing effluent from dewatering operations
  - On-site treatment of effluent and/or transport and off-site disposal

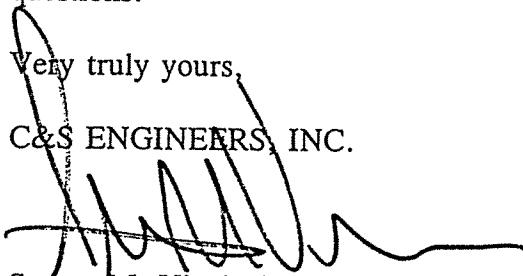
It should be noted that as a result of these activities, NYSDEC or the Onondaga County Department of Drainage and Sanitation may have to be notified.

- Since the extent and magnitude of soil and groundwater which is effected by these chlorinated compounds is unknown, it is recommended that a soil boring program which includes the sampling and laboratory analysis of soil and groundwater be completed prior to proceeding with the purchase of the property or prior to completing final designs for the proposed project. This will enable you to more accurately estimate site development costs and accommodate these conditions in your site work design.

Thank you for asking C&S to help Bridge Street Enterprises in assessing these properties. Once you have reviewed this report, I am available to answer your questions.

Very truly yours,

C&S ENGINEERS, INC.

  
Steven M. Vinci, CPG  
Senior Engineering Geologist

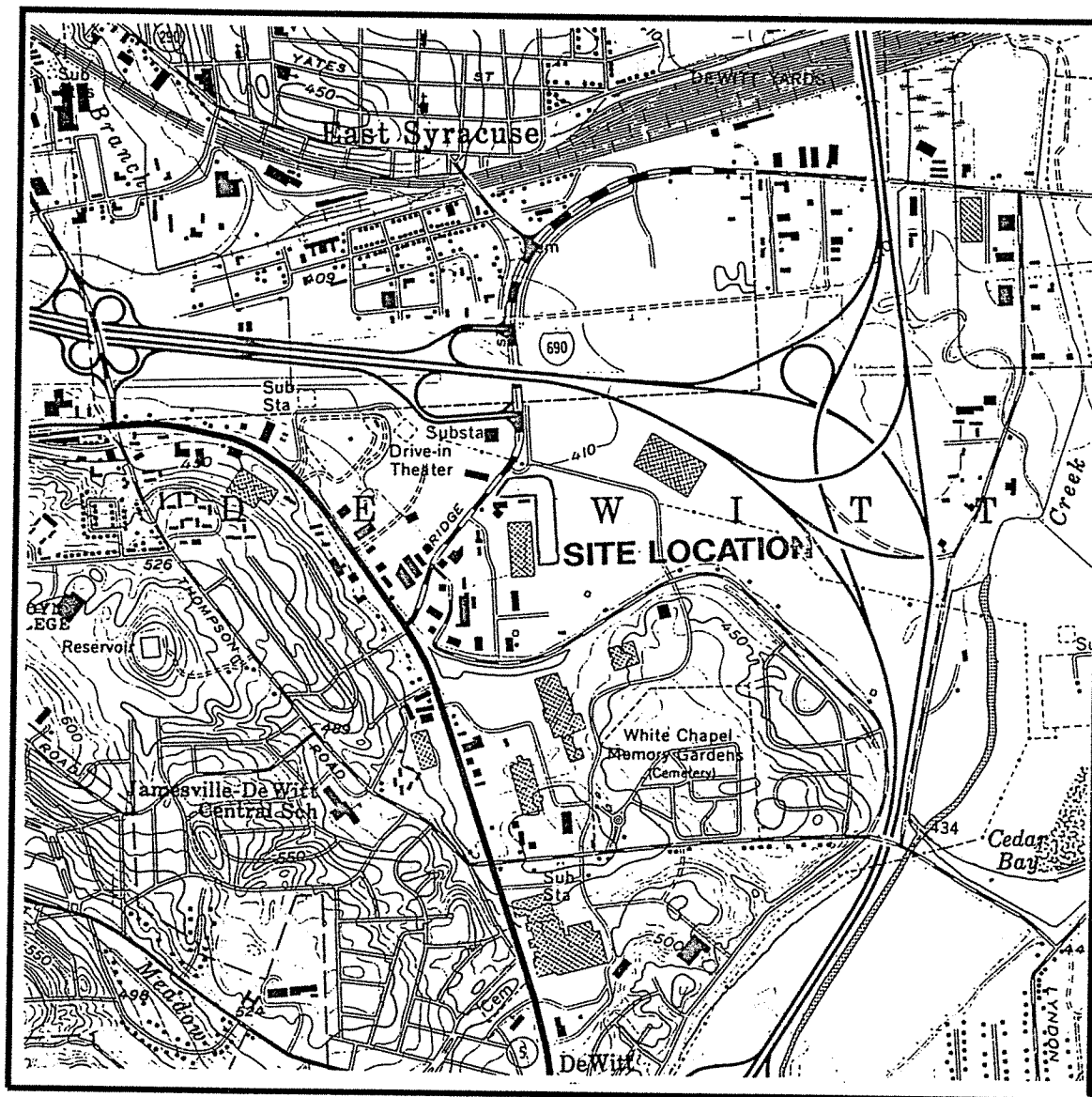
SMV/cal  
Attachments

**C&S**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

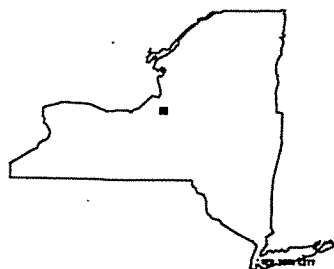
# FIGURE 1 SITE PLAN SYRACUSE EAST QUADRANGLE

NEW YORK  
7.5 MINUTE SERIES TOPOGRAPHIC



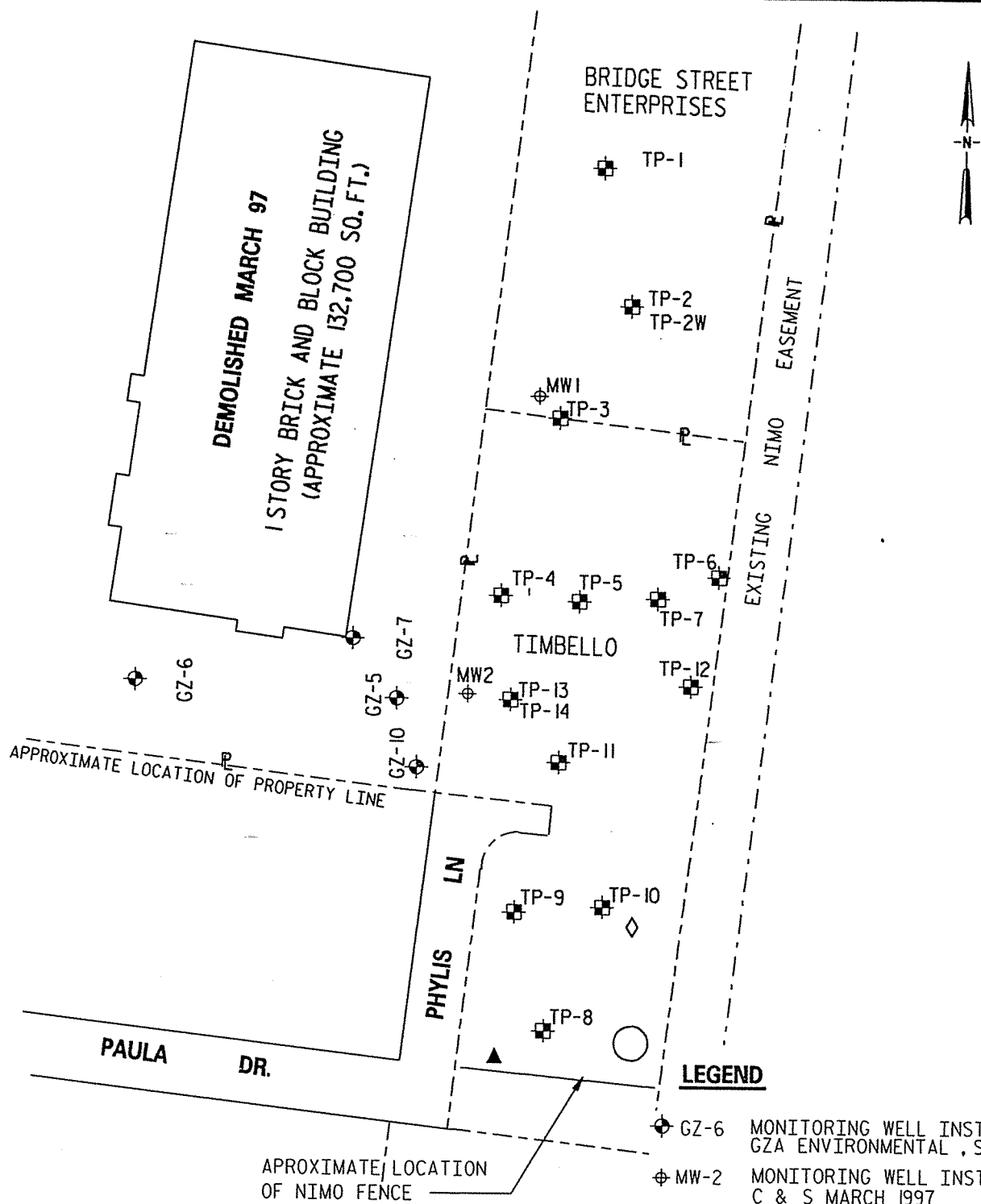
SCALE 1:24000

PHASE 1  
ENVIRONMENTAL SITE ASSESSMENT  
BRIDGE STREET ENTERPRISES & TIMBELLO PROPERTIES  
5840 BRIDGE STREET  
EAST SYRACUSE NEW YORK



## ROAD CLASSIFICATION

|                                  |                |                   |
|----------------------------------|----------------|-------------------|
| HARD-SURFACE ALL WEATHER ROADS   |                | DRY WEATHER ROADS |
| HEAVY-DUTY                       | 4 LANE 16 LANE | IMPROVED DIRT     |
| MEDIUM-DUTY                      | 4 LANE 16 LANE | UNIMPROVED DIRT   |
| LOOSE-SURFACE, GRADED, OR NARROW |                | HARD-SURFACE      |



**PLAN**  
SCALE: APPROX. 1/16" = 10'-0"

- LEGEND**
- ◆ GZ-6 MONITORING WELL INSTALLED BY GZA ENVIRONMENTAL, SUMMER 1995
  - ⊕ MW-2 MONITORING WELL INSTALLED BY C & S MARCH 1997
  - ⊕ TP-11 TEST PIT LOCATION
  - ▲ 0-6 INCH SOIL SAMPLE
  - DRUM AREA
  - ◇ OIL SPOT

NOTE: LOCATIONS SHOWN ARE APPROXIMATE

|   |                 |
|---|-----------------|
| <b>PHASE II ENVIRONMENTAL SITE ASSESSMENT</b><br><b>BRIDGE STREET ENTERPRISES AND</b><br><b>TIMBELLO PROPERTIES</b> |                 |
| <b>C&amp;S Engineers, Inc.</b><br><small>SYRACUSE • BUFFALO • BINGHAMTON</small>                                    | <b>FIGURE 2</b> |

NOTE: BASE DRAWING MADE FROM OCTOBER 1996  
SITE PLAN - BY ZELLER ENTERPRISES



## Engineers, Inc.

1099 Airport Boulevard, North Syracuse, New York 13212  
(315) 455-2000 Fax: (315) 455-9667

December 19, 1997

Mr. Christopher C. Mannes, III  
Environmental Engineer  
Spill Prevention and Response  
New York State Department of  
Environmental Conservation  
Region 7  
615 Erie Boulevard West  
Syracuse, New York 13204-2400

Re: Bridge Street Associates, LLC  
East Syracuse, New York  
Site Remediation  
NYSDEC Spill File No. 92-06711  
NYSDEC Spill File No. 93-04349  
NYSDEC Spill File No. 96-00805

File: 631.001.096

Dear Mr. Mannes:

On behalf of our client, Bridge Street Enterprises, C&S Engineers, Inc. has prepared this report which documents remedial activities at the property formerly owned by Timbello Enterprises located in East Syracuse, New York.

### Site Background

The Bridge Street Enterprises property is situated in a commercialized area of East Syracuse, Onondaga County, New York, as shown on Figure 1. The topography of the subject property and the immediate surrounds is relatively flat. Based on topographic mapping and information generated during the closure of the former Agway Gasoline Station, which is located to the northwest on an adjoining parcel, groundwater in the area is believed to migrate in a westerly to northwesterly direction.

During Spring 1997, a Phase II Environmental Site Assessment was completed by C&S. The scope of the Environmental Site Assessment included:

- The completion of 14 test pit excavations to evaluate shallow (< 8 feet) subsurface conditions. These test pits were made on property held by Bridge Street Enterprises and formerly Timbello Enterprises.

- Installation of two shallow groundwater monitoring wells (MW-1 and MW-2).
- Visual reconnaissance to identify areas of staining.
- Sampling and laboratory analysis of soil and groundwater.

As a result of the assessment, two isolated areas of soil were identified. Analysis of soil samples from these locations revealed the presence of petroleum related compounds at concentrations which exceed NYSDEC guidance levels. The presence of these compounds may have been related to the storage of construction equipment and possibly containers holding petroleum related substances.

Also identified were groundwater contaminants, consisting of several chlorinated compounds. These compounds were found in monitoring well MW-2, but not in MW-1. Additionally, several 55 gallon drums were found at the property. Please refer to Figure 2 which shows the relative locations of these areas of concern and groundwater monitoring wells.

Based on previous information from test pits made during the Phase II Environmental Site Assessment, there appears to be approximately 5 feet of fill on the southern portion of the property which was previously owned by Timbello Enterprises. The boring logs from MW-1 and MW-2 indicate that a silty clay underlies the fill and that groundwater at the time the wells were installed was encountered at a depth of approximately 5 feet below ground surface. Also, previous experience in this area has disclosed that organic peats are typically present.

On October 1, 1997, representatives of Bridge Street Enterprises, C&S Engineers, Inc., and NYSDEC Region 7 Spill Response met at the site. At the time of the site visit, NYSDEC was informed that:

- Construction/demolition debris previously located on the property had been removed and disposed.
- Eight 55-gallon drums found at the property had been preliminarily characterized, sampled for laboratory analysis, and overpacked.
- An additional area exhibiting soil staining was identified.

During the meeting, proposed remedial actions were discussed and included:

- Excavation and containerization of soil from two specific stained areas.

- Removal of soil in the vicinity of test pits TP-13 and TP-14.
- An assessment of the areas once excavated would also take place. This assessment would be through field headspace analysis using a photoionization detector and by obtaining samples for laboratory analysis via EPA 8021 STARS and EPA 8270 Base/Neutral STARS, unless site conditions indicate otherwise.
- Once the excavated contaminated soil was containerized, the material would be sampled and analyzed for waste characterization prior to disposal.
- Final off-site disposal of the overpacked 55 gallon drums would take place once characterization was complete.

As a result of concerns expressed by NYSDEC Region 7 during the October 1, 1997 meeting, a series of test pit excavations or trenches were also to be made at the southeast quadrant of the subject parcel. The goal of these additional explorations was to evaluate the absence or presence of physical evidence relating to a possible release(s) of petroleum from unused storage tanks, that were at one time, resting on the ground surface.

### **Remedial Actions Observations**

#### *Drum Containment/Removal*

On September 16, 1997, Abscope Environmental Services, Inc., mobilized to the site to locate, screen, and overpack abandoned drums found at the site. A C&S representative was present on-site as eight drums were sampled and characterized. Abscope personnel constructed a drum staging area consisting of 6 mil polyethylene sheeting and hay bales. Each drum was opened and field characterized for volatile organic vapors, water miscibility, pH, and visual appearance prior to being moved to the staging area. Samples from the collected drums were then consolidated into compatibility groups and analyzed for waste profiling purposes. Following sampling, each drum was overpacked and labeled. The contents of the drums were analyzed by Northeast Environmental Services. The results of the field characterization and laboratory analyses are included in Appendix A.

Analyses performed included:

- Flash Point
- Specific Gravity
- BTU Content
- % Chlorine



- Cyanide
- Sulfide
- pH
- Reactivity
- TCLP Metals
- Total PCB

Based on the laboratory analyses, the drummed contents were characterized as follows:

- 3 Drums RQ Waste Paint, UN 1263 PG II (D001, D007)
- 2 Drums RQ Waste Flammable Liquids, N.O.S.  
(Petroleum Distillates) UN 1993 PG II (D001)
- 1 Drum Non-Regulated Solid (Grease) N003
- 2 Drums Non-Regulated Liquid (Oil) N001

Photocopies of hazardous waste manifests and bills of lading for these containers are presented in Appendix A of this report.

### *Soil Removal*

Snyder Construction performed the removal of contaminated soils from the three areas of concern between October 6, 1997 and October 8, 1997. The areas of excavation were located within the southern third of the property. These areas are shown on Figure 2. The first two "areas of concern" were attributed to possible oil spotting from heavy machinery or from possible leakage of containers (ie. 55 gallon drums) suspected of containing spent petroleum products. Oil Spot 1 (OS-1), was located in the middle portion of the southern third of the property and was relatively small. Oil Spot 2 (OS-2), was located along the southern border of the property. A third area of concern was located along the west side of the property, approximately 20 feet southeast of monitoring well MW-2. This area was identified in the Phase II Assessment as a concern based on conditions observed when Test Pit 13 and Test Pit 14 were made. In the area of these test pits, obvious staining of surficial soils were observed as well as depressions or tracks which, in our opinion, were similar to those made by construction/earth work equipment. Additionally, a crushed 55-gallon with evidence of a residual fluid, which appeared to be petroleum-like, was also present. At the time those test pits were made, an odor similar to fuel oil was noted.

*Analytical Results - MW Area*

Analytical results of soil samples taken from the MW area are presented in Appendix C of this report. A summary of the "Hot Spot" and final excavation data, with comparison to cleanup guidance values contained in TAGM HWR-94-4046, are presented in Table 1, which is also shown in Appendix C.

| SUMMARY OF DETECTED COMPOUNDS |  |            |           |           |                  |
|-------------------------------|--|------------|-----------|-----------|------------------|
|                               | Final Excavation Limits (ppm dry weight) |            |           |           |                  |
|                               | North Wall                               | South Wall | East Wall | West Wall | Cleanup Standard |
| 1,2 Dichloroethene            | 0.67                                     | N.D.       | 0.096     | 0.83      | 0.3              |
| Trichloroethene               | 0.16                                     | N.D.       | 0.023     | 0.17      | 0.7              |
| N.D. = Not Detected           |  |            |           |           |                  |

- As can be seen from the above summary table, Trichloroethene and 1,2 Dichloroethene were the only volatile organic compounds detected.
- Trichloroethene was detected in three of the four samples in concentrations ranging from 0.023 ppm to 0.17 ppm, all of which are below the cleanup guidance value of 0.7 ppm.
- 1,2 Dichloroethene was detected in three of the four clearance samples at concentrations ranging from 0.096 ppm to 0.83 ppm. Two of the four samples (North Wall and West Wall) slightly exceeded the cleanup guidance value of 0.30 ppm as contained in TAGM 4046.

Review of the clearance sample data shows that the residual levels of Trichloroethene are below applicable cleanup guidance criteria. Levels of 1,2 Dichloroethene were below cleanup criteria along the south and east walls and only slightly exceeded the criteria along the north and west walls of the excavation. Given the effectiveness of this removal action, no further soil excavation was recommended.

**Trenches and Test Pits**

A trench and two test pits were dug on October 6, 1997, along the southwestern corner of the property in order to address concerns expressed by NYSDEC of possible petroleum release(s) from tanks that were situated on the ground surface during a previous NYSDEC site visit. The trench was approximately 3'W x 50'L x 3'D and

Mr. Christopher C. Mannes, III

December 19, 1997

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each of the test pits were approximately 3'W x 5'L x 4'D. These excavations were examined using the PID meter as well as visual and olfactory methods. As a result of this effort, no further areas of concern were identified, no visual observations of buried tanks or contaminated soils were made nor were any odors detected. Also PID readings of soil samples taken during the exploration were within background levels. Based on our observations, it is our opinion that no further work is warranted at this area of the property.

### **Soil Disposal**

A composite sample of the excavated materials was analyzed for disposal profiling. The analytical data is presented Appendix D and includes full TCLP, PCB's, Ignitability, Corrosivity (pH) and Reactivity. As can be seen from the data, all results were below the applicable threshold levels for hazardous waste characteristics. Given the unknown source of the contamination, the lack of any documented evidence of a release of a listed hazardous waste and the absence of hazardous waste characteristics, this material would not be considered hazardous waste under 6NYCRR Part 371.

On November 14, 1997, a total of approximately 77 tons of soil were transported to and disposed of at the Seneca Meadows Landfill. Waste stream characterization and transport documents are also presented in Appendix D.

### **Summary and Recommendations**

Remedial efforts and supplemental site investigation work recently completed are summarized as follows:

- Characterization, containerization, and off-site disposal of eight 55-gallon drums which contained hazardous and non-hazardous waste was completed.
- Physical evidence of a petroleum release(s) in the southern and southeastern portion of the property was not revealed through the making of a test trench and two test pits.
- Approximately 47 cy of soil was removed from the vicinity near MW-1. The remedial efforts conducted in this area resulted in a substantial decrease in the concentration of detectable compounds.

Given that:

- The area is served by municipal water whose supply is a surface body of water;

Mr. Christopher C. Mannes, III  
December 19, 1997  
Page 10

- Land use adjoining the subject parcel is either commercial/light industrial or vacant;
- Proposed development of the subject parcel is a single-story slab on grade retail structure; and
- The area near MW-2 is scheduled to be an asphalt paved parking area;

It is our opinion that there is insufficient evidence of additional environmental concerns at this site requiring further remediation.

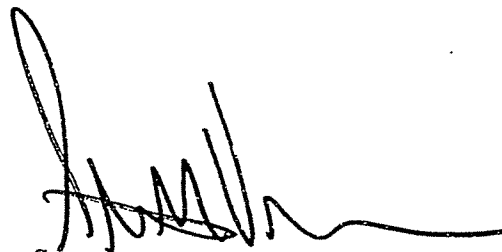
Once you have reviewed this report, we look forward to your written concurrence with its findings. Should you have any questions or require additional information, please contact Steve Vinci or me.

Very truly yours,

C&S ENGINEERS, INC.



Robert M. Palladine, Jr., P.E.  
Managing Engineer



Steven M. Vinci, CPG  
Senior Engineering Geologist

RMP\SMV:cal  
Attachments

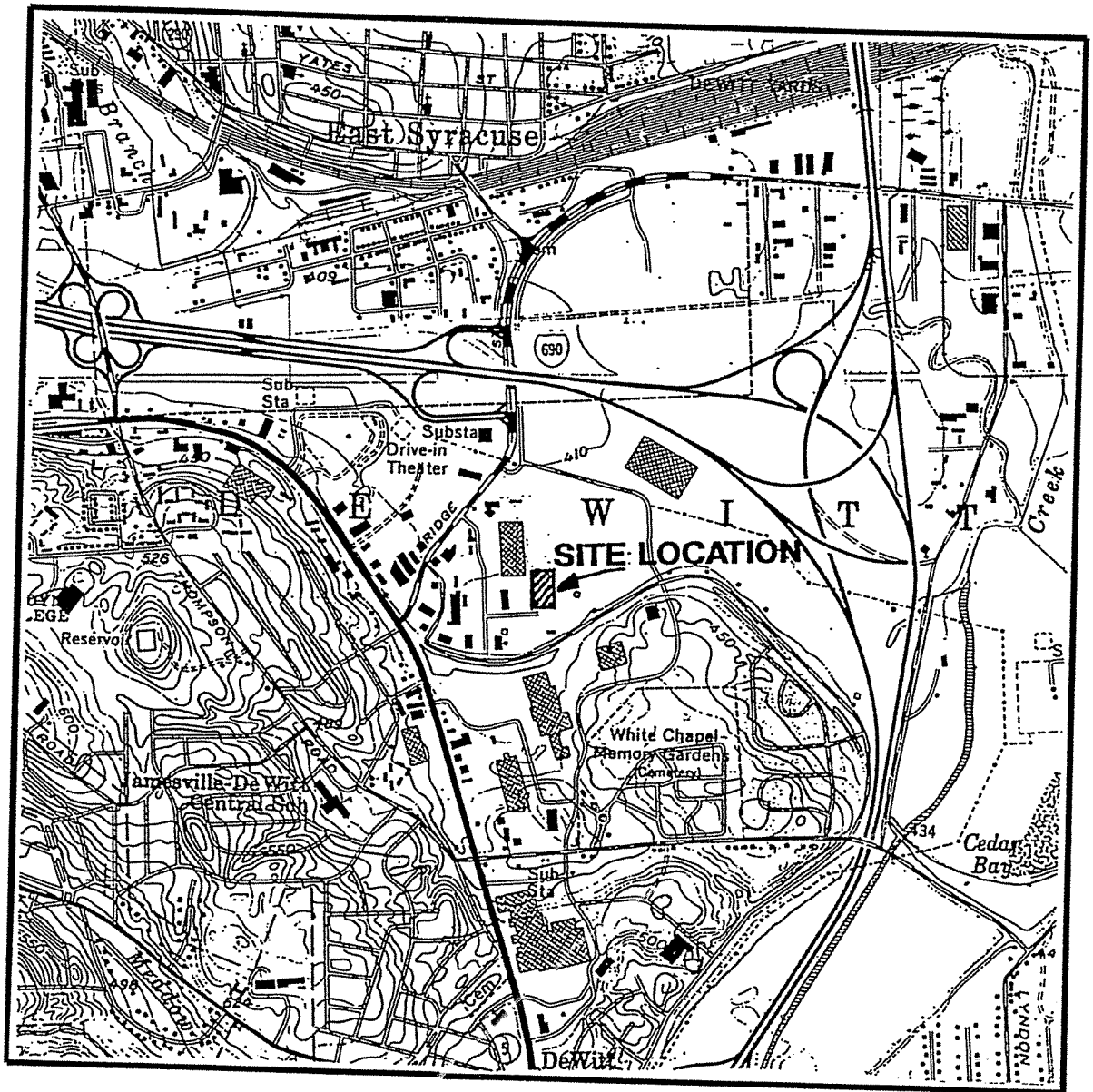
cc: Mr. David Allen, Bridge Street Associates, LLC

## FIGURES

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

DATED 1955  
PHOTOREVISED 1978

FIGURE 1  
SYRACUSE EAST QUADRANGLE  
NEW YORK  
7.5 MINUTE SERIES (TOPOGRAPHIC)



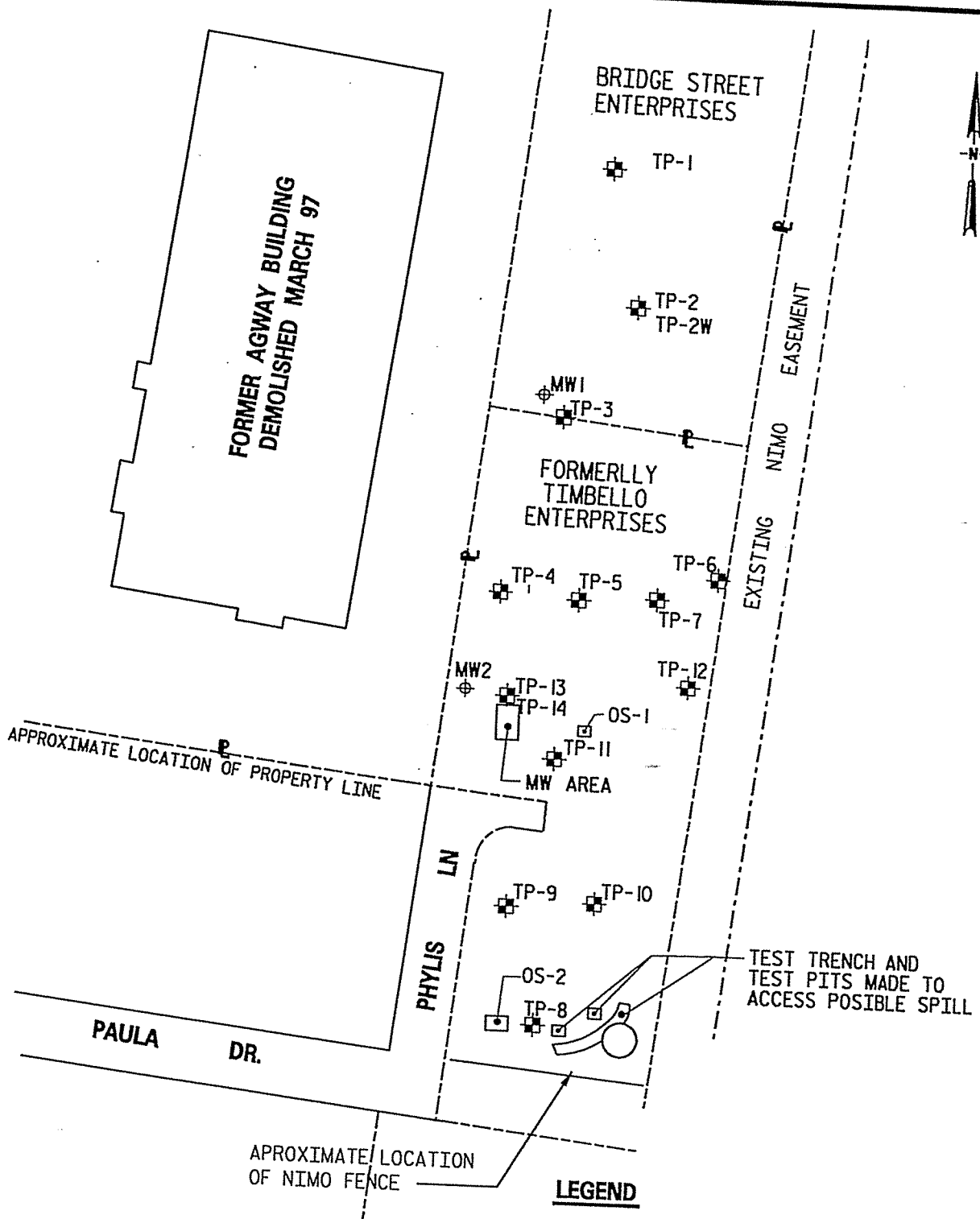
SCALE 1:24000

SITE REMEDIATION  
BRIDGE STREET ENTERPRISES  
EAST SYRACUSE NEW YORK



ROAD CLASSIFICATION

|                                  |                |                   |
|----------------------------------|----------------|-------------------|
| HARD-SURFACE ALL WEATHER ROADS   |                | DRY WEATHER ROADS |
| HEAVY-DUTY                       | 4 LANE 16 LANE | IMPROVED DIRT     |
| MEDIUM-DUTY                      | 4 LANE 16 LANE | UNIMPROVED DIRT   |
| LOOSE-SURFACE, GRADED, OR NARROW |                | HARD-SURFACE      |



**PLAN**  
SCALE: APPROX.  $\frac{1}{16}$ " = 10'-0"

**LEGEND**

- ⊕ MW-2 MONITORING WELL INSTALLED BY C & S MARCH 1997
- ⊕ TP-11 TEST PIT LOCATION BY C&S MARCH 1997
- DRUM AREA MARCH 1997

NOTE: LOCATIONS SHOWN ARE APPROXIMATE

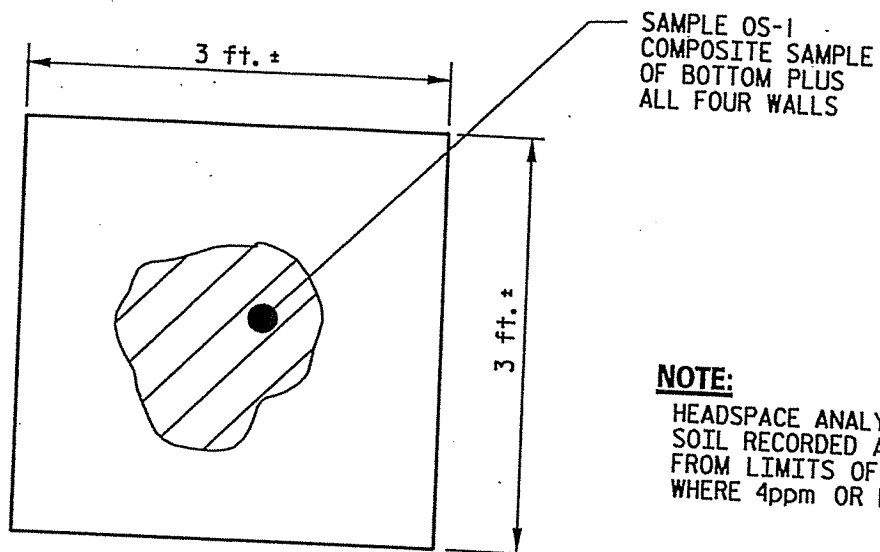
**SITE REMEDIATION  
BRIDGE STREET ENTERPRISES**

NOTE: BASE DRAWING MADE FROM OCTOBER 1996  
SITE PLAN - BY ZELLER ENTERPRISES

**C&S Engineers, Inc.**  
SYRACUSE • BUFFALO • BINGHAMTON

**FIGURE 2**

## OIL SPOT 1 = OS-1



### NOTE:

HEADSPACE ANALYSIS OF CONTAMINATED SOIL RECORDED AT 115ppm. SAMPLES TAKEN FROM LIMITS OF REMEDIAL EXCAVATION WHERE 4ppm OR LESS.

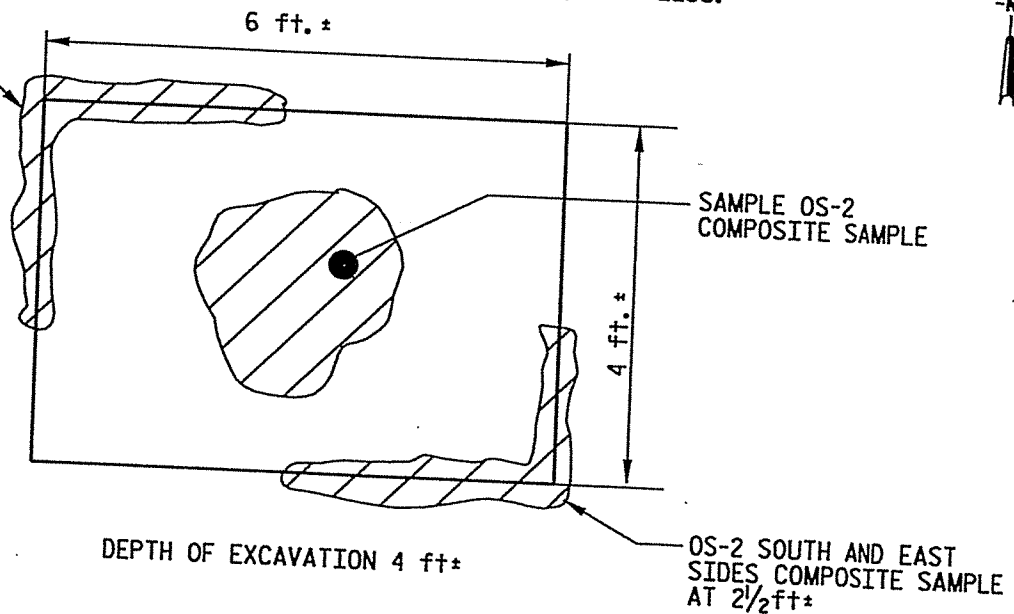
DEPTH OF EXCAVATION 6 INCHES

## OIL SPOT 2 = OS-2

OS-2 NORTH AND WEST SIDES COMPOSITE SAMPLE AT 2½ft±

### NOTE:

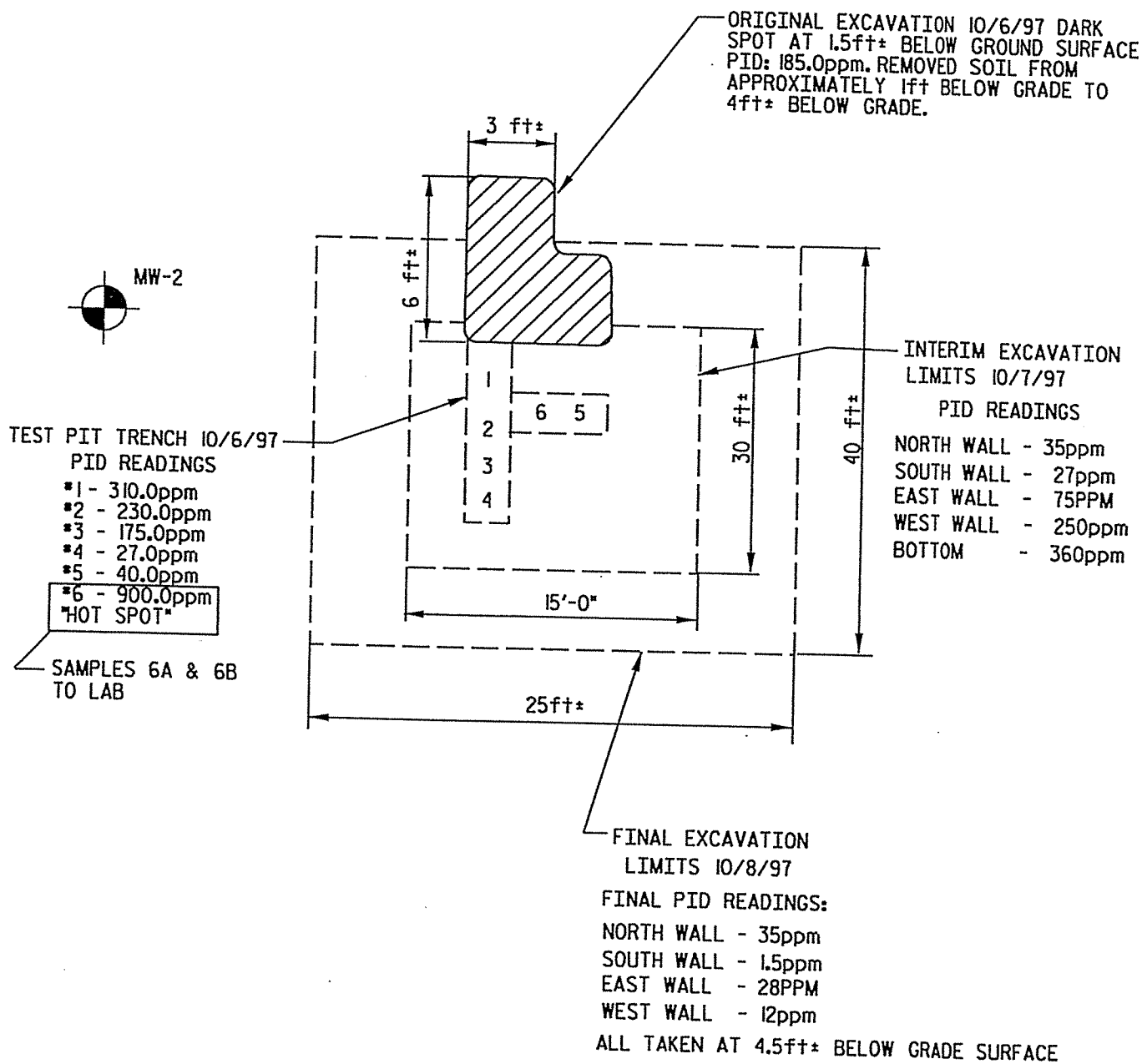
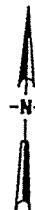
HEADSPACE ANALYSIS OF CONTAMINATED SOIL RECORDED AT 125ppm. SAMPLES TAKEN FROM LIMITS OF REMEDIAL EXCAVATION WERE 5.5ppm OR LESS.



DEPTH OF EXCAVATION 4 ft±

SITE REMEDIATION  
BRIDGE STREET ENTERPRISES  
DETAIL OF REMEDIATION AREAS





SITE REMEDIATION  
BRIDGE STREET ENTERPRISES  
DETAIL OF MW-2 REMEDIATION AREA

## **APPENDIX A**

### **DRUM CHARACTERIZATION DATA**

# DRUM INVENTORY

| DRUM<br>NUMBER | DRUM<br>SIZE | VOLUME<br>APPROX | TYPE  | CONDITION | CONTENTS                                     | COLOR  | PH | MISC  | PID<br>READING |
|----------------|--------------|------------------|-------|-----------|--|--------|----|-------|----------------|
| 1              | 55           | 40               | STEEL | POOR      | PAINT LIKE MATERIAL<br>100 % LIQUID          | WHITE  | 7  | NO    | 500            |
| 2              | 55           | 40               | STEEL | POOR      | WATER OR SOLVENT<br>100 % LIQUID             | BROWN  | 7  | NO    | 50             |
| 3              | 55           | 55               | STEEL | POOR      | PAINT SLUDGE<br>25% LIQUID 75% SLUDGE        | WHITE  | 7  | NO    | 200            |
| 4              | 55           | 15               | STEEL | POOR      | SOLVENT<br>100 % LIQUID                      | BROWN  | 7  | NO    | 250            |
| 5              | 15           | 55               | STEEL | POOR      | OLD GREASE<br>100% SOLID                     | BROWN  | 7  | NO NA |                |
| 6              | 55           | 25               | STEEL | POOR      | PAINT AND SOLVENT<br>50 % LIQUID 50 % SLUDGE | YELLOW | 7  | NO    | 200            |
| 7              | 55           | 15               | STEEL | POOR      | OIL<br>100 % LIQUID                          | BROWN  | 7  | NO    | 50             |
| 8              | 55           | 10               | STEEL | POOR      | OIL<br>100 % LIQUID                          | AMBER  | 7  | NO    | 50             |

NOTE: ALL DRUMS WILL BE OVERPACKED IN 85 GALLON OVER PACKS W/ THE EXCEPTION OF # 5 IT WILL BE IN A 55 GALLON DRUM

RIDGE STREET ENTERPRISES PAULA DRIVE DEWITT

NORTHEAST ENVIRONMENTAL SERVICES, INC.  
ANALYTICAL RESULTS  
NYS DOH LAB CERTIFICATION ID# 11272

\*\*\*\*\*

Sample#: UU76 Waste name:

Date rec'd 9/24/97 Generator : Bridge Street Assoc.

Cust.# : 4344  
MCS # : A001  
NES code: LNS

\*\*\*\*\*

Flash Point: >200  
(degree F)  
SW846 1010

Cyanide: N  
(ppm)  
SW846 9010/SM412

Acidity: NA  
(ppm CaCO3)  
SM402

Specific Gravity: NA  
(g/cm3)  
ASTM D5057-90

Sulfide: N  
(ppm)  
SW846 9030

%H2O: NA  
ASTM-K.F./  
01475

BTU: NA  
(BTU/gallon)  
ASTM D240

PH: 8.0  
(at 25 C)  
SW846

%TOC: NA  
SW846 9060

% Chlorine: NA  
SM407A

Reactivity: 0  
(degrees F)  
w/H2O

~~~~~  
TCLP METALS (DONE)  
(mg/L)  
SW846 1311

~~~~~  
POLYCHLORINATED BIPHENYLS  
(AROCLOR, ppm)  
SW846 8080

-----  
Arsenic: <0.2  
Barium: <5  
Cadmium: <0.05  
Chromium: <0.3  
Copper: <0.3  
Lead: <0.3  
Mercury: <0.05  
Nickel: <0.3  
Selenium: <0.2  
Silver: <0.05  
Zinc: <5  
-----

-----  
PCB 1016: NA  
PCB 1221: NA  
PCB 1232: NA  
PCB 1242: NA  
PCB 1248: NA  
PCB 1254: NA  
PCB 1260: NA  
-----

-----  
Misc. Testing:  
-----

Comments:  
~~~~~

THE ANALYSES CONTAINED HEREIN ARE PERFORMED SOLELY FOR THE PURPOSE OF  
QUALIFYING THE ANALYZED MATERIALS FOR ACCEPTANCE BY NES IN ACCORDANCE WITH  
ITS PERMITS AND CONDITIONS. NES WILL NOT ASSUME LIABILITY FOR ANY DAMAGE  
BEYOND THE COST OF THESE ANALYSES AND WILL NOT ACCEPT ANY LIABILITY AS A  
RESULT OF DATA INTERPRETATION BY THE CLIENT.

AUTHORIZED SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

NORTHEAST ENVIRONMENTAL SERVICES, INC.  
ANALYTICAL RESULTS  
NYS DOH LAB CERTIFICATION ID# 11272

\*\*\*\*\*

Sample#: UU77

Waste name:

Date rec'd 9/24/97 Generator :Bridge Street Assoc.

Cust.# : 4344  
MCS # : A002  
NES code: S1

\*\*\*\*\*

Flash Point: >200  
(degree F)  
SW846 1010

Cyanide: NA  
(ppm)  
SW846 9010/SM412

Acidity: NA  
(ppm CaCO3)  
SM402

Specific Gravity:0.87  
(g/cm3)  
ASTM D5057-90

Sulfide: NA  
(ppm)  
SW846 9030

%H2O: NA  
ASTM-K.F./  
01475

BTU: 144,500  
(BTU/gallon)  
ASTM D240

PH: 5.0  
(at 25 C)  
SW846

%TOC: NA  
SW846 9060

% Chlorine: 0.25  
SM407A

Reactivity: NA  
(degrees F)  
w/H2O

TCLP METALS(NA )  
(mg/L)  
SW846 1311

POLYCHLORINATED BIPHENYLS  
(AROCLOR, ppm)  
SW846 8080

Arsenic:  
Barium:  
Cadmium:  
Chromium:  
Copper:  
Lead:  
Mercury:  
Nickel:  
Selenium:  
Silver:  
Zinc:

PCB 1016: <10ND  
PCB 1221: <10ND  
PCB 1232: <10ND  
PCB 1242: <10ND  
PCB 1248: <10ND  
PCB 1254: <10ND  
PCB 1260: <10ND

Misc. Testing:

Comments:

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AUTHORIZED SIGNATURE

DATE

NORTHEAST ENVIRONMENTAL SERVICES, INC.  
ANALYTICAL RESULTS  
NYS DOH LAB CERTIFICATION ID# 11272

\*\*\*\*\*

Sample#: UU78

Waste name:

Cust.# : 4344

Date rec'd 9/24/97 Generator : Bridge Street Assoc.

MCS # : A003

NES code: ST

\*\*\*\*\*

Flash Point: 104  
(degree F)  
SW846 1010

Cyanide: N  
(ppm)  
SW846 9010/SM412

Acidity: NA  
(ppm CaCO3)  
SM402

Specific Gravity: 1.02  
(g/cm3)  
ASTM D5057-90

Sulfide: N  
(ppm)  
SW846 9030

%H2O: NA  
ASTM-K.F./  
01475

BTU: 70,000  
(BTU/gallon)  
ASTM D240

PH: 6.0  
(at 25 C)  
SW846

%TOC: NA  
SW846 9060

% Chlorine: 0.20  
SM407A

Reactivity: 0  
(degrees F)  
w/H2O

~~~~~  
TCLP METALS(NA )  
(mg/L)  
SW846 1311

~~~~~  
POLYCHLORINATED BIPHENYLS  
(AROCLOL, ppm)  
SW846 8080

~~~~~  
Arsenic:  
Barium:  
Cadmium:  
Chromium:  
Copper:  
Lead:  
Mercury:  
Nickel:  
Selenium:  
Silver:  
Zinc:  
~~~~~

~~~~~  
PCB 1016: <10ND  
PCB 1221: <10ND  
PCB 1232: <10ND  
PCB 1242: <10ND  
PCB 1248: <10ND  
PCB 1254: <10ND  
PCB 1260: <10ND  
~~~~~

~~~~~  
Misc. Testing:  
~~~~~

Comments: ST=CASE BY CASE TESTING  
~~~~~

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RESULT OF DATA INTERPRETATION BY THE CLIENT.

AUTHORIZED SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

NORTHEAST ENVIRONMENTAL SERVICES, INC.  
ANALYTICAL RESULTS  
NYS DOH LAB CERTIFICATION ID# 11272

\*\*\*\*\*

Sample#: UU79

Waste name:

Cust.# : 4344

Date rec'd 9/24/97 Generator : Bridge Street Assoc.

MCS # : A004

NES code: W

\*\*\*\*\*

Flash Point: 97  
(degree F)  
SW846 1010

Cyanide: N  
(ppm)  
SW846 9010/SM412

Acidity: NA  
(ppm CaCO3)  
SM402

Specific Gravity: 0.91/1.01  
(g/cm3)  
ASTM D5057-90

Sulfide: N  
(ppm)  
SW846 9030

%H2O: SO  
ASTM-K.F./  
01475

BTU: 135,00  
(BTU/gallon)  
ASTM D240

PH: 6.0  
(at 25 C)  
SW846

%TOC: SO  
SW846 9060

% Chlorine: 0.3  
SM407A

Reactivity: NA  
(degrees F)  
w/H2O

TCLP METALS(NA )  
(mg/L)  
SW846 1311

POLYCHLORINATED BIPHENYLS  
(AROCOR, ppm)  
SW846 8080

Arsenic:  
Barium:  
Cadmium:  
Chromium:  
Copper:  
Lead:  
Mercury:  
Nickel:  
Selenium:  
Silver:  
Zinc:

PCB 1016: <10ND  
PCB 1221: <10ND  
PCB 1232: <10ND  
PCB 1242: <10ND  
PCB 1248: <10ND  
PCB 1254: <10ND  
PCB 1260: <10ND

Misc. Testing:

Comments:

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AUTHORIZED SIGNATURE

DATE

**APPENDIX C**

**MW-2 AREA**

**DATA SUMMARY TABLE  
AND  
ANALYTICAL DATA**



Table 1  
Bridge Street Enterprises  
Summary of Analytical Data  
MW-2 Area

| Parameters                  | Units | Recommended*<br>Soil Cleanup Criteria | "Hot Spot"<br>06A-06B | Final Remedial Excavation Limits |                 |                  |                 |
|-----------------------------|-------|---------------------------------------|-----------------------|----------------------------------|-----------------|------------------|-----------------|
|                             |       |                                       |                       | MW<br>North Wall                 | MW<br>East Wall | MW<br>South Wall | MW<br>West Wall |
| Date Sampled                |       | ug/kg                                 | 10/06/97              | 10/08/97                         | 10/08/97        | 10/08/97         | 10/08/97        |
| Acetone                     | ug/kg | 200                                   | <2000                 | <40                              | <10             | <10              | <40             |
| Benzene                     | ug/kg | 60                                    | <1000                 | <20                              | <5              | <5               | <20             |
| Bromodichloromethane        | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| Bromoform                   | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| Bromomethane                | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| 2-Butanone (MEK)            | ug/kg | 300                                   | <2000                 | <40                              | <10             | <10              | <40             |
| Carbon Disulfide            | ug/kg | 2700                                  | <1000                 | <20                              | <5              | <5               | <20             |
| Carbon Tetrachloride        | ug/kg | 600                                   | <1000                 | <20                              | <5              | <5               | <20             |
| Chlorobenzene               | ug/kg | 1700                                  | <1000                 | <20                              | <5              | <5               | <20             |
| Chloroethane                | ug/kg | 1900                                  | <1000                 | <20                              | <5              | <5               | <20             |
| Chloroform                  | ug/kg | 300                                   | <1000                 | <20                              | <5              | <5               | <20             |
| Chloromethane               | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| Dibromochloromethane        | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| 1,1-Dichloroethane          | ug/kg | 200                                   | <1000                 | <20                              | <5              | <5               | <20             |
| 1,2-Dichloroethane          | ug/kg | 100                                   | <1000                 | <20                              | <5              | <5               | <20             |
| 1,1-Dichloroethene          | ug/kg | 400                                   | <1000                 | <20                              | <5              | <5               | <20             |
| 1,2-Dichloroethene Total    | ug/kg | 300                                   | <1000                 | <20                              | <5              | <5               | <20             |
| 1,2-Dichloropropane         | ug/kg |                                       | 1700                  | 670                              | 96              | <5               | 830             |
| cis-1,3-Dichloropropene     | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| trans-1,3-Dichloropropene   | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| Ethylbenzene                | ug/kg | 5500                                  | <1000                 | <20                              | <5              | <5               | <20             |
| 2-Hexanone                  | ug/kg |                                       | <1000                 | <20                              | <5              | <5               | <20             |
| Methylene Chloride          | ug/kg | 100                                   | <2000                 | <40                              | <10             | <10              | <40             |
| 4-Methyl-2-Pentanone (MIBK) | ug/kg | 1000                                  | <2000                 | <40                              | <10             | <10              | <40             |
| Styrene                     | ug/kg |                                       | <2000                 | <40                              | <10             | <10              | <40             |
| 1,1,2,2-Tetrachloroethane   | ug/kg | 300                                   | <1000                 | <20                              | <5              | <5               | <20             |
| Tetrachloroethene           | ug/kg | 1400                                  | <1000                 | <20                              | <5              | <5               | <20             |
| Toluene                     | ug/kg | 1500                                  | <1000                 | <20                              | <5              | <5               | <20             |
| 1,1,1-Trichloroethane       | ug/kg | 300                                   | <1000                 | <20                              | <5              | <5               | <20             |
| 1,1,2-Trichloroethane       | ug/kg | 6000                                  | <1000                 | <20                              | <5              | <5               | <20             |
| Trichloroethene             | ug/kg | 700                                   | <1000                 | <20                              | <5              | <5               | <20             |
| Vinyl Chloride              | ug/kg | 200                                   | 77000                 | 160                              | 23              | <5               | 170             |
| Xylene                      | ug/kg | 1200                                  | <1000                 | <20                              | <5              | <5               | <20             |
|                             |       |                                       | <1000                 | <20                              | <5              | <5               | <20             |

Exceeds New York State Department of Conservation Division of Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels, January 24, 1994.

\* TAGM HWR-94-4046 - Determination of Soil Cleanup Objectives and Cleanup Levels, January 1994.