Remedial Investigation Work Plan

Buffalo Development Corporation Hotel Site
Buffalo, New York

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Prepared For:

Buffalo Development Corporation

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RI/AAR WORK PLAN
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1.0 INTRODUCTION

This document presents the proposed scope of work and implementation procedures for completion of a Remedial Investigation (RI) and Alternatives Analysis Report (AAR) at three adjacent properties in the City of Buffalo, New York (collectively, the Site) (see Figures 1 and 2). The property addresses are 275-277 Franklin Street, 279 Franklin Street, and 432 Pearl Street (Erie County Tax Map Nos. 111.38-2-22, 111.38-2-23, and 111.38-2-4.1, respectively). Buffalo Development Corporation currently owns the Site and plans to redevelop it as a hotel and conference center.

Buffalo Development Corporation has elected to pursue cleanup and redevelopment of the Site under the New York State Brownfield Cleanup Program (BCP), and has applied for entrance into the BCP with the intent to execute a Brownfield Cleanup Agreement (BCA) as a non-responsible party (volunteer) per ECL§27-1405. This BCA process is initiated upon Buffalo Development Corporation's submittal of a BCP application submitted concurrently with this RI/AAR Work Plan.

The RI/AAR will be completed by Benchmark Environmental Engineering & Science, PLLC (Benchmark) on behalf of Buffalo Development Corporation. The work will be completed in accordance with NYSDEC DER-10 guidelines (Ref. 1).

1.1 Background

The Site encompasses three parcels in the City of Buffalo, New York identified as 275-277 Franklin Street (~0.13 acres), 279 Franklin Street (~0.12 acres), and 432 Pearl Street (~0.44 acres) (see Figure 2). The Site is bounded by a restaurant and surface parking lot to the north and east, Pearl Street to the east, a surface parking lot and apartment building to the south and west and Franklin Street to the west.

The Site has been used for various purposes since the late 1800s. 275-277 Franklin Street was used as a dry cleaner from at least 1951 through the early 2000s. 279 Franklin Street was used for residential purposes from the late 1800s through at least 1951 and a parking lot from at least 1981 to the present. 432 Pearl Street was developed with various residential and commercial structures from the late 1800s through 1981 and has apparently been used as a surface parking lot since 1981. Of note, "Martin Fischer and Sons Hot Air Heaters" was noted on this portion of the Site in 1925 (Ref. 2).

A Limited Environmental Investigation was performed at 275-277 Franklin Street by Nature's Way Environmental Consultants & Contractors, Inc. in September 2004 (Ref. 3). The results of that investigation indicated that Site soils and groundwater have been impacted by tetrachloroethene (PCE), a chlorinated volatile organic compound (VOC), typically associated with dry cleaning operations.

In March 2006, Benchmark performed a Preliminary Site Investigation at 275-277 Franklin Street, 279 Franklin Street, 432 Pearl Street, and 470 Pearl Street (Refs. 4 and 5). The Preliminary Site Investigation was performed to assess soil/fill materials and soil vapor on-site and to ascertain if subsurface environmental conditions on these parcels were likely to impact Site redevelopment. The results of the investigation indicate that Site soils have been impacted by semi-volatile organic compounds (SVOCs), mercury, and lead. In addition, soil vapor samples collected from 279 Franklin Street and 432 Pearl Street contained several chlorinated VOCs. Results of these Site investigations are more fully described in Section 2.8.

1.2 Project Objectives

For sites entering the BCP at the point of investigation, NYSDEC requires completion of a RI/AAR. The primary objectives of the RI/AAR are to:

- Collect additional soil/fill, groundwater and sub-grade vapor samples, under appropriate quality assurance/quality control criteria, to better delineate the nature and extent of contamination.
- Determine if the concentrations of constituents of concern in site soil and/or groundwater pose potential unacceptable risks to human health and the environment.
- Provide the data needed to evaluate potential remedial measures and determine appropriate actions to address potential significant risks.

2.0 SITE DESCRIPTION

For purposes of this work plan, the Site refers to the three parcels subject to the BCP as delineated in Figure 2.

2.1 General

The Site encompasses approximately 0.7 acres comprised of three parcels in the City of Buffalo, New York (see Figure 2). The Site is currently used as a commercial surface parking lot. There are currently no structures on the Site.

2.2 Site Topography and Drainage

The Site is generally flat lying with limited distinguishable Site features (see Figure 2). The surface is covered with asphalt. Precipitation (i.e., rain or melting snow) moves to the storm drains present in the roadways via overland flow. Surface and shallow groundwater flow are likely impacted by various cycles of development and filling, as well as utility lines and foundations.

2.3 Geology and Hydrogeology

2.3.1 Overburden

The Site is located within the Erie-Ontario lake plain physiographic province, which is typified by little topographic relief and gentle slope toward Lake Erie, except in the immediate vicinity of major drainage ways (Ref. 6). The surficial geology of the Lake Erie Plain consists of a thin glacial till (if present), glaciolacustrine deposits, recent alluvium, and the soils derived from these deposits. Glacial till deposits are not encountered on this Site. Glaciolacustrine deposits are characterized as thinly bedded to laminated silts and clays, which were deposited in lakes impounded between glacial ice and ice-free highland areas. As the glacial ice retreated northward in Erie County, water depths decreased and coarser grained shallow water sediments were deposited. These shallow water deposits included sandy beach ridges that defined lake edges, sand bars associated with offshore currents, and near shore silty fine sands. These sands exist below soil/fill at the Site.

Surface soils within the City are characterized as urban land with level to gently sloping land in which 80 percent or more of the soil surface is covered by asphalt, concrete,

buildings, or other impervious structures (Ref. 6) typical of an urban environment. The presence of overburden fill material is widespread and common throughout the City of Buffalo. Site overburden soils have been described as soil/fill to approximately 3- to 4-feet below ground surface (fbgs) overlying native glaciolacustrine sand and silt. The U.S. Department of Agriculture Soil Conservation Service soil survey map of Erie County (Ref. 6) describes the general soil type at the Site as urban land. Field characterization confirms the presence of fill over much of the Site.

2.3.2 Bedrock

Based on the bedrock geologic map of Erie County (Ref. 7), the Site is situated over Onondaga Formation of the Middle Devonian Series. The Onondaga Formation is comprised of a varying texture from coarse to very finely crystalline with a dark gray to tan color and chert and fossils within. The unit has an approximated thickness of 110 to 160 feet. Structurally, the bedrock formations strike in an east-west direction and exhibit a regional dip that approximates 40 feet per mile (3 to 5 degrees) toward the south and southwest. As a result of this dip, the older Onondaga limestone outcrops or subcrops north of the Hamilton Group. An intersecting, orthogonal patter of fractures and joint sets are common throughout the bedrock strata. The surficial geomorphology of the bedrock strata was modified by period subaerial erosion and continental glaciation. Depth to and type of bedrock below the Site has not been determined by drilling.

2.3.3 Hydrogeology

Unconfined perched groundwater was encountered at the Site within the soil/fill at a depth of ± 5.0 to 7.0 fbgs (Ref. 3). Site groundwater flow direction has not been determined; however, regional groundwater appears to flow west/southwest towards Lake Erie. Localized groundwater flow will be confirmed during the RI.

2.4 Climate

Western New York has a cold continental climate, with moisture from Lake Erie causing increased precipitation. Average annual precipitation is reportedly 40.5 inches and snowfall is 93.6 inches (Ref. 8) to the northern part of the watershed with over 150 inches per year falling on the southern portion of the watershed. Average monthly temperatures range from 24.5 degrees Fahrenheit in January to 70.8 degrees Fahrenheit in July (Ref. 8).

The ground and lakes typically remain frozen from December to March. Winds are generally from the southwest (240 degrees) with a mean velocity of 10 miles per hour (Buffalo Airport, 1999).

2.5 Population and Land Use

The City of Buffalo, encompassing 40.6 square miles, has a population of 292,648 persons (2000 U.S. Census Bureau), a decrease of 35,527 from the 1990 U.S. Census. The population density in the City is 7,205.8 people per square mile. Buffalo is primarily zoned residential with commercial use mixed in along major roads. The Site is located in Census Tract 72.01, in an area of the City zoned commercial/residential and has a population density that is 3,182 to 7,750 per square mile. Land use surrounding the Site includes commercial properties, public property, and recreational/community properties. The nearest residential property is approximately 0.2 miles west of the Site.

2.6 Utilities and Groundwater Use

The subject property has access to major public and private utilities, including water (City of Buffalo Division of Water), sanitary and storm sewers (City of Buffalo), electric (National Grid/New York State Electric & Gas), and natural gas (National Fuel Gas).

Groundwater at the Site is assigned Class "GA" by 6NYCRR Part 701.15. Currently, there are no deed restrictions on the use of groundwater at the Site; however, groundwater supply wells are not present on the Site. Regionally, groundwater in the area has not been developed for industrial, agriculture, or public supply purposes. Municipal potable water service is provided on-site and off-site. Currently, there are no monitoring wells on the Site.

2.7 Wetlands and Floodplains

There are no State or Federal wetlands or floodplains on the Site; however, Federal wetlands are located approximately 0.75 miles to the west adjacent to Lake Erie. State wetlands are located more than one mile southwest of the Site. Erie County Internet Mapping Service also shows a 100-year floodplain located approximately 0.75 miles southwest of the Site (i.e., Lake Erie). Viable aquatic habitats in the vicinity of the Site include the Buffalo River (approximately 1 mile southwest) and Lake Erie.

2.8 Previous Investigations

A summary of the investigations that have occurred at the Site are presented below. Data from these investigations is presented in Appendix A. Sample locations are shown on Figure 2.

2.8.1 September 2004 – Limited Environmental Investigation

A Limited Phase II Environmental Assessment was performed at 275 Franklin Street by Nature's Way Environmental Consultants & Contractors, Inc. in September 2004 (Ref. 3). Based on elevated field screening for volatile organic compounds (VOCs), two soil samples were collected from the 10- to 12-foot interval and temporary wells were installed in two borings for collection of groundwater samples. Two soil samples and one groundwater sample were analyzed for chlorinated VOCs. Tetrachloroethene (PCE) was detected in the soil samples at concentrations of 12,700 micrograms per kilogram (ug/kg) or parts per billion (ppb) and 671 ppb at B-3 (10'-12') and B-5 (10'-12'), respectively. PCE was detected in the groundwater samples from BMW-5 at a concentration of 70,400 micrograms per liter (ug/L). Soil borings and monitoring well locations are shown on Figure 2.

2.8.2 March 2006 – Preliminary Site Investigation

Benchmark completed a Preliminary Site Investigation at 275-277 Franklin Street, 279 Franklin Street, 432 Pearl Street and 470 Pearl Street (Ref. 4 and 5) on behalf of Knoer, Crawford, and Bender, LLP, the attorney for Buffalo Development Corp.. In January 2006, seven soil borings were advanced to 4 fbgs. The soil samples were analyzed for Target Compound List (TCL) SVOCs (base neutral fraction) TCL polychlorinated byphenyls (PCBs), arsenic, chromium, lead, and mercury. Several polynuclear aromatic hydrocarbons (PAHs) were detected above NYSDEC TAGM-4046 recommended soil cleanup objectives (RSCOs). No PCBs were detected above laboratory detection levels. Field screening of soil samples using a photoionization detector (PID) did not indicate VOC concentrations above background concentrations. Mercury and lead concentrations exceeded RSCOs in some of the soil samples analyzed. The investigation also consisted of collecting four soil vapor samples from beneath asphalt paving for analysis of TCL VOCs. The purpose of this sampling effort was to determine if soil vapor VOCs were present as a result of VOCs previously identified in soil and groundwater at 275 Franklin Street. Comparison of the soil vapor data to soil vapor/indoor air matrices presented in the New York State Department of

Health (NYSDOH) draft document entitled, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (Ref. 9) indicates that mitigation of PCE and monitoring of trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA) is recommended for soil vapor samples collected from 279 Franklin Street. Furthermore, mitigation of soil vapor at 432 Pearl Street would be necessary as a result of elevated PCE. Benchmark concluded that environmental conditions at all three subject properties were likely to impact redevelopment activity.

Relative to the Preliminary Site Investigation report, it should be noted that certain addresses were incorrectly identified. Therefore, any reference to 277 Franklin Street in that report should correctly be identified as 279 Franklin Street and any reference to 275 Franklin Street in that report should correctly be identified as 275-277 Franklin Street.

2.9 Primary Constituents of Potential Concern (COPCs)

Based on findings to date, the Constituents of Potential Concern (COPCs) are presented by media below:

- ***Soil:*** Chlorinated VOCs, PAHs, mercury, and lead
- ***Soil Vapor:*** Chlorinated VOCs
- ***Groundwater:*** Chlorinated VOCs

3.0 SCOPE OF WORK

The Remedial Investigation scope of work is focused on defining the nature and extent of contamination on-site, identifying the source of contamination, defining chemical constituent migration pathways, qualitatively assessing human health and ecological risks (if necessary), and obtaining data of sufficient quantity and quality to perform the remedial alternatives evaluation.

Field team personnel will collect environmental samples in accordance with the rationale and protocols described in the Field Sampling Plan (FSP) presented in the Quality Assurance Project Plan (QAPP), provided under separate cover. USEPA and NYSDEC-approved sample collection and handling techniques will be used. Samples for chemical analysis will be analyzed in accordance with NYSDEC ASP-CLP methodology to meet the definitive-level data requirements. Analytical results will be evaluated by a third-party data validation expert in accordance with provisions described in the QAPP.

3.1 Field Investigation Activities

3.1.1 Supplemental Soil Investigation

A supplemental soil investigation will be completed to delineate VOC-impact on-site Figure 3 depicts planned soil boring locations. The soil investigation will employ both direct-push and hollow-stem auger drilling techniques. Ten soil borings will be advanced to approximately 16 fbgs. However, soil borings will continue if field observations suggest VOC impact within soils at 16 fbgs. Soil samples will be collected from all soil borings as described below. All soil samples will be field screened for the presence of VOCs using a field photoionization detector (PID) as a procedure for ensuring the health and safety of personnel at the Site and to identify potentially impacted soil samples for laboratory analysis. Upon reaching the completion depth of each boring, PID and visual/olfactory results will be reviewed. The sample interval identified as the most impacted (i.e., greatest PID scan result and/or evidence of visual/olfactory impact) will be selected for analysis. In the event that either the impacts are ubiquitous from grade to final depth or no impacts were identified, the soil/fill horizon above the native soils will be selected for analysis.

Soil samples will be collected using dedicated stainless steel sampling tools. Representative soil samples will be placed in pre-cleaned laboratory provided sample bottles,

cooled to 4°C in the field, and transported under chain-of-custody command to Severn Trent Laboratories, Inc. (STL), located in Amherst, New York, a New York State Department of Health (NYSDOH) ELAP-certified analytical laboratory. Each soil sample will be analyzed for TCL VOCs in accordance with NYSDEC ASP CLP methodology.

3.1.2 Sub-grade Vapor Sampling

Two samples will be collected and analyzed for sub-grade vapors. These samples will be used to evaluate whether VOC vapors from the former drycleaner have migrated to the area of planned building locations. As shown on Figure 3, the samples will be collected from 432 Pearl Street.

At each location, Benchmark personnel will drill an approximately 3/4-inch diameter hole through the asphalt (est. 4-6 inches thick) using a hand-held drill. Approximately 6 inches of soil will then be drilled from beneath the hole. An appropriately sized silicone stopper fitted with a ¼-inch hollow Teflon tube will then be inserted into the core hole and sealed using modeling clay. A 6-liter Summa canister fitted with an 8-hour regulator will be attached to the opposite end of the Teflon tubing. Three volumes will be purged from the sampling line before initiating Summa canister sampling. Purging will be performed with a vacuum pump or syringe. Traffic cones will be used to mark and protect the canisters.

Concurrent with the sub-grade vapor samples, one outdoor field-located air sample will be collected from a ground level location upwind of the properties, as determined on the day of sub-grade vapor sampling field activities.

All Summa canister valves will remain closed until the borings are complete, purged, and all of the canisters are in their respective positions. The valves will then be opened for the 8-hour collection period. Following sample collection, the Summa canisters will be shipped to an NYSDOH-approved laboratory for analysis of USEPA Target Compound List (TCL) Volatile Organic Compounds in accordance with USEPA Method TO-15. All openings will be repaired with asphalt cold patch.

3.1.3 Supplemental Groundwater Investigation

Previous investigations indicated that soil and shallow groundwater has been impacted by PCE. Based on the concentrations in shallow groundwater (i.e., up to 137,000 ug/L) and depth of PCE impact in soil (i.e., 10-12 fbgs), it is possible that PCE and/or its chemical degradation products (e.g., trichloroethylene, dichloroethylene, etc.) are present at

deeper locations than previously investigated (i.e., up to 12 fbgs). As such, Benchmark will assess groundwater at varying depths.

Three new groundwater monitoring wells, designated as MW-1, MW-2 and MW-3, and eight new piezometers, designated as PZ-1 – PZ-8, will be installed at the locations shown on Figure 3. The new monitoring wells and piezometers will provide groundwater flow information as well as groundwater quality information. Monitoring well installation, well development, and groundwater sample collection are discussed in the following sections.

3.1.3.1 Piezometer/Monitoring Well Installation

Eight piezometers will be installed to better delineate the VOC-impact identified during previous investigations and to estimate shallow groundwater flow direction. Piezometers will be constructed of one-inch, flush-joint PVC fitted with a 10-foot, 0.10-inch well screen, and a riser cap. The piezometers will be installed using a direct-push drill rig to advance an approximate two-inch borehole approximately five to seven feet below first encountered groundwater, designed to straddle the groundwater table. Each well screen and attached riser will be placed at the bottom of each borehole and a silica sand filter pack (size #0) will be installed from the base of the well to a maximum of 2 feet above the top of the screen. A minimum 2-foot thick bentonite chip seal will then be installed. The newly installed piezometers will be completed with a riser cap and a six-inch diameter steel flush mounted road box. Water levels will be measured in the piezometers upon completion. As described in Section 3.3, a groundwater isopotential map will be prepared to illustrate groundwater flow direction.

Three additional soil borings will be advanced using hollow stem auger technology to facilitate installation of three groundwater monitoring wells, designated as MW-1 through MW-3 as shown on Figure 3. The newly installed monitoring wells will be used to assess groundwater at greater depths than the piezometers.

Based on a previous investigation, which identified chlorinated VOC-impact at 10-12 fbgs within saturated soils, deeper groundwater may be impacted. Each hollow-stem auger boring location will be advanced to the top of bedrock, estimated at approximately 30 fbgs, using hollow stem auger drilling methods. A 2-inch diameter, 2-foot long split spoon sampler will be advanced ahead of the auger string with a standard 140-pound hammer falling freely over a 30-inch fall until 24 inches have been penetrated or 50 blows applied.

Recovered samples will be described in the field by qualified Benchmark personnel using the Unified Soil Classification System (USCS), scanned for total volatile organic vapors with a calibrated PID equipped with a 10.6 eV lamp (or equivalent), and characterized for impacts via visual and/or olfactory observations. All non-dedicated drilling tools and equipment will be decontaminated between boring locations using potable tap water and a phosphate-free detergent (e.g., Alconox).

Subsequent to boring completion, a 2-inch diameter flush-joint Schedule 40 PVC monitoring well will be installed at boring locations MW-1, MW-2, and MW-3. Each well will be constructed with a 10-foot flush-joint Schedule 40 PVC, 0.010-inch machine slotted well screen. Each well screen and attached riser will be placed at the bottom of each borehole and a silica sand filter pack (size #0) will be installed from the base of the well to a maximum of 2 feet above the top of the screen. A bentonite chip seal will then be installed and allowed to hydrate sufficiently to mitigate the potential for downhole grout contamination. Cement/bentonite grout will be installed to approximately one-foot below ground surface via pressure tremie-pipe procedures. The newly installed monitoring wells will be completed with keyed alike locks, a lockable J-plug, and an 8-inch diameter steel flush mounted road box anchored within a 2-foot by 2-foot by 1-foot square concrete pad.

3.1.3.2 Well Development

Upon installation, but not within 24 hours, newly installed monitoring wells and piezometers will be developed in accordance with Benchmark and NYSDEC protocols. Development of the monitoring wells will be accomplished with dedicated disposable polyethylene bailers via surge and purge methodology. Field parameters including pH, temperature, turbidity and specific conductance will be measured periodically (i.e., every well volume or as necessary) during development. Field measurements will continue until they became relatively stable. Stability will be defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements. A minimum of 10 well volumes will be evacuated from each monitoring well. Development water from the seven monitoring wells will be contained in 55-gallon steel drums.

3.1.3.3 Groundwater Sample Collection

Prior to sample collection, static water levels will be measured and recorded from all on-site monitoring wells and piezometers. Following water level measurement, Benchmark personnel will purge and sample monitoring wells MW-1, MW-2, MW-3 and piezometers PZ-1 through PZ-8 using a peristaltic pump and dedicated pump tubing following low-flow/minimal drawdown purge and sample collection procedures. Prior to sample collection, groundwater will be evacuated from each well at a low-flow rate (typically less than 0.1 L/min). Field measurements for pH, specific conductance, temperature, turbidity, and water level as well as visual and olfactory field observations will be periodically recorded and monitored for stabilization. Purging will be considered complete when pH, specific conductivity and temperature stabilize and when turbidity measurements fall below 50 Nephelometric Turbidity Units (NTU), or become stable above 50 NTU. Stability is defined as variation between field measurements of 10 percent or less and no overall upward or downward trend in the measurements. Upon stabilization of field parameters, groundwater samples will be collected and analyzed as discussed below.

Upon arrival at each monitoring well, field personnel will visually inspect the monitoring well for defects and/or vandalism. Following location and inspection of each well, the static water level and total depth will be recorded and one standing well volume will be calculated. The following bulletized list describes each sample collection method that may be implemented during the RI.

- **<u>Peristaltic Pump with Dedicated Pump Tubing</u>**

  Wells less than 20 fbgs will be purged and sampled using a peristaltic pump and dedicated pump tubing following low-flow (minimal drawdown) purge and sample collection procedures in a manner similar to that described in the previous section. However, the pump will not require decontamination because all components are dedicated to each monitoring well. In addition, groundwater samples collected for VOC analysis will not be sampled directly through the peristaltic pump due to potential degassing (i.e., loss of VOCs) of the groundwater sample. Instead, prior to collection of VOC samples, the pump will be turned off and the pressure on the flexible walled tubing within the pump head will be maintained in order to prevent water within the collection tubing from escaping. The tubing will be removed from the well and coiled to prevent any contact with the ground surface. Upon removal of the tubing and prior to re-activating the pump, the pump flow direction will be

reversed. Upon pump re-activation, the pumping rate will be slowly increased; positively displacing groundwater within the tubing allowing it to flow, without disturbance and degassing, into the appropriate VOC sample jars.

- **Polyethylene Disposable Bailer**

  In the event of a pump malfunction, wells of any depth (up to 100 fbgs) may be purged and sampled using a polyethylene disposable bailer via direct grab. In general, a bottom filling dedicated polyethylene bailer is attached to a length of dedicated hollow-braid polypropylene rope and lowered into the well smoothly and slowly as not to agitate the groundwater or damage the well. Purging continues until a predetermined volume of water has been removed (typically three well volumes) or to dryness. Measurements for pH, temperature, specific conductance, dissolved oxygen (optional), Eh (optional), and turbidity are recorded following removal of each well volume. The well is purged until the readings for indicator parameters stabilize or the well is purged to dryness.

Prior to and immediately following collection of groundwater samples, field measurements for pH, specific conductance, temperature, turbidity, Eh, dissolved oxygen, and water level as well as visual and olfactory field observations will be recorded. All collected groundwater samples will be placed in pre-cleaned, pre-preserved laboratory provided sample bottles, cooled to 4°C in the field, and transported under chain-of-custody command to STL for analysis

3.1.3.4 Groundwater Sample Analyses

All groundwater samples will be analyzed for Target Compound List (TCL) VOCs in accordance with NYSDEC ASP CLP methodology. In addition, three newly installed monitoring wells or piezometers (biased to wells/piezometers with VOC-impact) will be analyzed for total and dissolved iron and manganese, as well as COD, nitrate and sulfate. These additional inorganic and water quality analyses will allow for evaluation of enhanced in-situ bioremediation as a potential remedial alternative. All TCL VOC samples analyses will be reported with an ASP Category B deliverables package to allow for third party data usability assessment.

3.1.4 Field Specific Quality Assurance/Quality Control Sampling

In addition to the soil/fill and groundwater samples described above, field-specific quality assurance/quality control (QA/QC) samples will be collected and analyzed to ensure

the reliability of the generated data as described in the QAPP (provided under separate cover) and to support the required third-party data usability assessment effort. Site-specific QA/QC samples will include matrix spikes, matrix spike duplicates, blind duplicates, and trip blanks.

3.2 Investigation-Derived Waste Management

During installation of the monitoring wells, excess soil cuttings will be containerized in 55-gallon drums. Groundwater from well development and purging will be separately containerized in 55-gallon drums. Drums will be labeled with regard to contents, origin, and date of generation using a paint stick marker on two sides and the top of each drum. The drums will be staged on-site pending soil and groundwater analyses and remedial measures assessment.

3.3 Site Mapping

A Site map will be developed during the field investigation. All sample points and relevant Site features will be located on the Site map. Benchmark will employ a Trimble GeoXT handheld GPS unit to identify the locations of all soil borings and newly installed wells relative to State planar grid coordinates. Monitoring well elevations will be measured by Benchmark's surveyor. An isopotential map showing the general direction of groundwater flow will be prepared based on water level measurements relative to USGS vertical datum. The maps will be provided with the RI report.

4.0 QUALITY ASSURANCE/QUALITY CONTROL PROTOCOLS

A Quality Assurance Project Plan (QAPP) has been prepared as a stand-alone document for the RI activities. The QAPP dictates implementation of the investigation tasks delineated in this Work Plan. A Sampling and Analysis Plan (SAP) identifying methods for sample collection, decontamination, handling, and shipping, is provided as Section 4.0 to the QAPP. The RI project management methods, organizational structure, and schedule are also included in the QAPP.

The QAPP will assure the accuracy and precision of data collection during the Site characterization and data interpretation periods. The QAPP identifies procedures for sample collection to mitigate the potential for cross-contamination, as well as analytical requirements necessary to assure compliance with NYSDEC (ASP) Contract Laboratory Procedures (CLP) methodology. The QAPP has been prepared in accordance with USEPA's Requirements for Quality Assurance Project Plans for Environmental Data Operations (Ref. 10); the EPA Region II CERCLA Quality Assurance Manual (Ref. 11), and NYSDEC's December 2002 draft DER-10 Technical Guidance for Site Investigation and Remediation (Ref. 1).

5.0 HEALTH AND SAFETY PROTOCOLS

Benchmark and our construction and operations arm, TurnKey Environmental Restoration, have prepared a Site-Specific Health and Safety Plan (HASP) for use by our employees in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120. The HASP, provided in Appendix B, includes the following Site-specific information:

- A hazard assessment.
- Training requirements.
- Definition of exclusion, contaminant reduction, and other work zones.
- Monitoring procedures for site operations.
- Safety procedures.
- Personal protective clothing and equipment requirements for various field operations.
- Disposal and decontamination procedures.

The HASP also includes a contingency plan that addresses potential Site-specific emergencies, and a Community Air Monitoring Plan (CAMP) that describes required particulate and vapor monitoring to protect the neighboring community during intrusive Site investigation activities. The HASP and CAMP will be modified/expanded as appropriate if significant Site invasive activities are deemed necessary, such as those associated with soil excavation.

Health and safety activities will be monitored throughout the field investigation. A member of the field team will be designated to serve as the on-site Health and Safety Officer throughout the field program. This person will report directly to the Project Manager and the Corporate Health and Safety Coordinator. The HASP will be subject to revision as necessary, based on new information that is discovered during the field investigation.

6.0 CITIZEN PARTICIPATION ACTIVITIES

NYSDEC will coordinate and lead community relations throughout the course of the project. Benchmark will support NYSDEC's community relations activities, as necessary. A Citizen Participation (CP) Plan will be prepared by Benchmark and submitted to NYSDEC under separate cover. The CP Plan will follow NYSDEC's Citizen Participation Plans template for Brownfield Cleanup Program sites entering the BCP at the point of site investigation.

7.0 REPORTING AND SCHEDULE

7.1 Remedial Investigation Reporting

A Remedial Investigation (RI) report will be prepared at the conclusion of the investigation. The RI report will include the following information and documentation, consistent with the NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation (Ref.1).

- Introduction and background.
- A description of the site and the investigation areas.
- A description of the field procedures and methods used during the RI.
- A discussion of the nature and rationale for any significant variances from the scope of work described in this RI Work Plan.
- The data obtained during the RI and historical data considered by Benchmark to be of useable quality. This will include geochemical data, field measurements, etc.
- The results of an assessment of the achievement of RI acceptance/performance criteria as specified in the QAPP.
- Comparative criteria that may be used to calculate cleanup levels during the alternatives analysis report (AAR) process, such as NYSDEC Soil Cleanup Objectives and other pertinent regulatory standards or criteria.
- A discussion of contaminant fate and transport. This will provide a description of the hydrologic parameters of the Site, and an evaluation of the lateral and vertical movement of groundwater.
- Conclusions regarding the extent and character of environmental impact in the media being investigated.
- The conclusions of the qualitative human health and environmental risk assessments, including any recommendations for more detailed assessments, if applicable.

- Supporting materials for RI data. These will include boring logs, monitoring well construction diagrams, laboratory analytical reports, aquifer test calculation sheets, and similar information.

In addition, Benchmark will require third-party data review by a qualified, independent data validation expert. Specifically, a Data Usability Summary Report (DUSR) will be prepared, with appropriate data qualifiers added to the results. The DUSR will follow NYSDEC format per the Department's September 1997 DUSR guidelines and draft DER-10 guidance. The DUSR and any necessary qualifications to the data will be appended to the RI report.

7.2 Alternatives Analysis Report

An alternatives analysis report (AAR) will be developed to provide a forum for evaluating and selecting a recommended remedial approach. A list of remedial action objectives will be developed based on findings of the RI and the requirement for the selected remedial measures to be protective of human health and the environment under the proposed future use scenario. Proposed site-specific action levels (SSALs) for the property will also be presented. SSALs will be based on published standards, criteria, and guidance (SCGs) and other NYSDEC and NYSDOH-accepted values.

Based on the remedial action objectives and SSALs, volumes and areas of media potentially requiring remediation will be calculated. General response actions will then be delineated to address each of the site problem areas. These response actions will form the foundation for the development and screening of applicable remedial alternatives against the following criteria as described in 6NYCRR 375-1.10:

- Overall Protection of Human Health and the Environment
- Compliance with Standards, Criteria, & Guidance (SCGs)
- Long-term Effectiveness & Permanence
- Reduction of Toxicity, Mobility, or Volume
- Short-term Effectiveness
- Implementability
- Cost

In addition, the criteria of community acceptance will be considered based on public comments on the AAR and proposed remedial action. Following the screening of

alternatives, a comparative analysis will be performed against the above criteria. The comparative analysis will allow for better understanding of the relative advantages and disadvantages of each of the alternatives, and will facilitate identification of a recommended remedial approach.

7.3 Project Schedule

A tentative project schedule for the major tasks to be performed in support of the RI and Alternatives Analysis Report is presented as Figure 4.

8.0 REFERENCES

1. New York State Department of Environmental Conservation. *Draft DER-10; Technical Guidance for Site Investigation and Remediation.* December 2002.

2. The Sanborn Library, LLC. Sanborn maps dated 1889, 1899, 1925, 1951, 1981 and 1986.

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4. Benchmark Environmental Engineering & Science, PLLC. *Preliminary Site Investigation Letter Report, 275 & 277 Franklin Street and 470 Pearl Street parcels, Buffalo, NY.* March 10, 2006.

5. Benchmark Environmental Engineering & Science, PLLC. *Addendum to March 2006 Preliminary Site Investigation, 432 Pearl Street, Buffalo, NY.* June 26, 2006.

6. United States Department of Agriculture (USDA), Soil Conservation Service. *Soil Survey of Erie County, New York.* 1972.

7. Buehler, E.J., & Tesmer, I.H. *Geology of Erie County, New York: Buffalo Society of Natural Sciences Bulletin v. 21, no. 3.* 1963.

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10. U.S. Environmental Protection Agency. *Requirements for Quality Assurance Project Plans for Environmental Data Operations (EPA QA/R-5).* October 1998.

11. U.S. Environmental Protection Agency, Region II. *CERCLA Quality Assurance Manual, Revision I.* October 1989.Bradford B. Van Diver. *Roadside Geology of New York.* 1985.

TABLES

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

TABLE 1

SAMPLING AND ANALYTICAL PROGRAM

RI/AAR WORK PLAN
Buffalo Development Corp. Hotel Site
Buffalo, New York

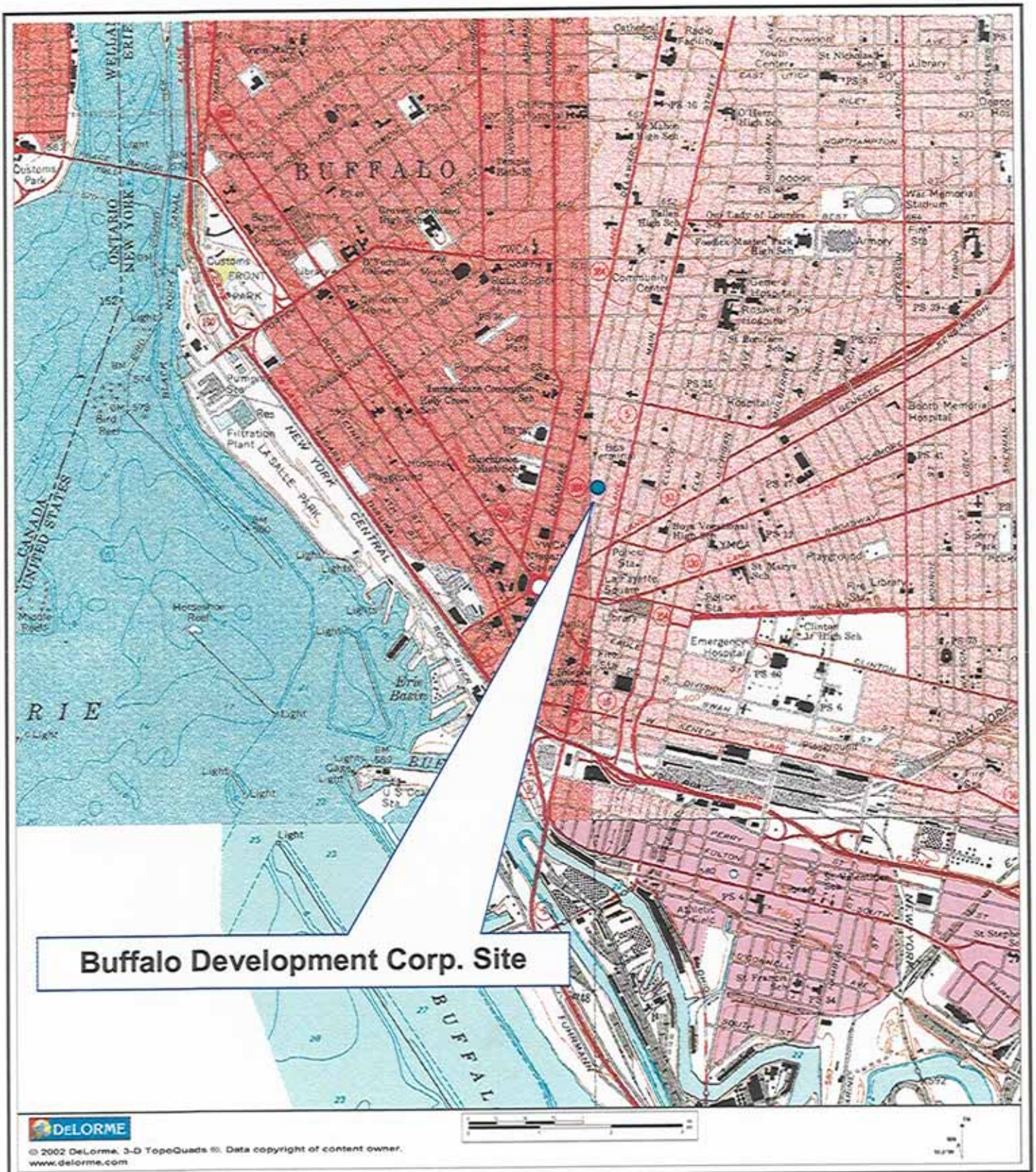
Matrix	Parameter[1]	No. Samples	Estimated Number of QC Samples					Total
			Trip Blank[2]	Matrix Spike[3]	Matrix Spike Duplicate[3]	Equipment Blank[4]	Blind Duplicate[3]	
Soil/Fill	TCL VOCs	13	1	1	1		1	17
Sub-Grade Vapor	TCL VOCs	2						2
Groundwater	TCL VOCs	11	1	1	1		1	15
	COD, Total & Dissolved Iron, Total & Dissolved Manganese, Nitrate, Sulfate	3						3
	Field Parameters: DO, pH, Eh, Turbidity, Conductance, Temperature	11						11

Notes:

1. VOC, SVOC, PCB, and Metals analyses will be performed via NYSDEC ASP-2000 protocol, CLP methodology w/ Category B deliverables package. Remaining analyses to follow USEPA SW-846 or 40 CFR Part 136. Sub-grade vapor samples will be analyzed via USEPA TO-15.
2. Trip blanks will be submitted to the laboratory each day aqueous volatile organic samples are collected.
3. Blind duplicate and MS/MSD samples will be collected at a frequency of 1 per 20 samples collected.
4. Dedicated sampling equipment will be used for groundwater and soil/fill sample collection.
5. Total organic carbon sample will be a composite sample of four select borings

FIGURES

FIGURE 1



BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 0099-003-100

DATE: JUNE 2006

DRAFTED BY: BCH

SITE LOCATION AND VICINITY MAP

REMEDIAL INVESTIGATION WORK PLAN

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR

BUFFALO DEVELOPMENT CORPORATION

FIGURE 2

G:\CAD\Benchmark\4470 Pearl Street, LLC (Buffalo Development Corp)\RI Work Plan\Figure 2, Site Plan.dwg

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726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 0099-003-100

DATE: JUNE 2006

DRAFTED BY: BCH

SITE PLAN

REMEDIAL INVESTIGATION WORK PLAN

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR

BUFFALO DEVELOPMENT CORPORATION

FIGURE 3

G:\CAD\Benchmark\470 Pearl Street, LLC (Buffalo Development Corp)\RI Work Plan\Figure 3, RI Sample Locations.dwg

LEGEND:

- PROPERTY BOUNDARY
- PREVIOUS SOIL BORING (Nature's Way, September 2004)
- PREVIOUS TEMP. MONITORING WELL (Nature's Way, Sept. 2004)
- PREVIOUS SOIL BORING (Benchmark, January 2006)
- SUBSLAB VAPOR SAMPLE (Benchmark, January 2006)
- PROPOSED SOIL BORING (2)
- PROPOSED SOIL BORING / PIEZOMETER (8)
- PROPOSED MONITORING WELL (3)
- PROPOSED SUBSLAB VAPOR SAMPLE (2)

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
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SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 0099-003-100
DATE: JUNE 2006
DRAFTED BY: BCH

REMEDIAL INVESTIGATION SAMPLE LOCATIONS

REMEDIAL INVESTIGATION WORK PLAN

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR
BUFFALO DEVELOPMENT CORPORATION

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 0099-003-100

DATE: JULY 2006

DRAFTED BY: BCH

PROJECT SCHEDULE

REMEDIAL INVESTIGATION WORK PLAN

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR

BUFFALO DEVELOPMENT CORPORATION

FIGURE 4

APPENDIX A

PREVIOUS INVESTIGATION SAMPLE RESULTS

APPENDIX A-1

PREVIOUS INVESTIGATION SAMPLE RESULTS

SEPTEMBER 2004 – LIMITED ENVIRONMENTAL INVESTIGATION

NATURE'S WAY
ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

September 15, 2004

Mark Croce
c/o Robert Knoer, Esq.
Knoer Crawford & Bender
14 Lafayette Square, Suite 1700
Buffalo, New York 14203

NOV 15 2004

Re: Limited Environmental Investigation
275 Franklin Street
Buffalo, New York

Gentlemen:

As we have discussed, please find the following summary of findings with respect to sampling and analytical testing of soil and groundwater at the above referenced site. I am providing this abbreviated summary so that you may proceed with written notification of appropriate parties. A more detailed report will follow.

At your request Nature's Way Environmental has performed a limited Phase II type Environmental Assessment of the subject property focused on potential impacts related to its former use as a dry-cleaner.

This work involved sampling subsurface soils at from two indoor and four outdoor locations, as shown on the attached site map. Groundwater samples were obtained through temporary well screens installed in two of the borings. Field instrument screening and observation indicated the presence of volatile organic compounds in samples from two of the borings (B-3 and B-5). Soil samples from 10-12 foot depth interval at those borings as well as groundwater samples from both temporary wells were analyzed for chlorinated organics by EPA Method 8010.

Laboratory analytical reports have confirmed the presence of Tetrachloroethene in all samples analyzed. It was reported at concentrations in excess of applicable NYS Groundwater Quality Standards in both groundwater samples; at137,000 ppb in BMW-3 and 70,400 ppb in BMW-5, as compared to published standards ranging from 0.7 - 5 ppb. One of the soil samples was also reported to contain Tetrachloroethene at a level exceeding Recommended Soil Cleanup Objectives published NYSDEC TAGM #4046. Specifically, the sample from B-3 was reported to contain Tetrachloroethene at a concentration of 12,700 ppb in comparison with the 1.4 ppm (1,400 ppb) Recommended Soil Cleanup Objective. There were no other method target compounds identified in any of the samples. Copies of laboratory reports are attached.

NATURE'S WAY
ENVIRONMENTAL CONSULTANTS & CONTRACTORS INC.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Please call if you should have any questions or require additional information.

Respectfully,

Gregory J. Weber
Sr. Project Manager

NATURE'S WAY
ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: B 1

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at
275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

SN	0/6	6/12	12/18	18/24	N	OVM	LITH	DESCRIPTION AND CLASSIFICATION	REC	COMMENTS
1						0.0		Moist, dark gray and gray, gravelly (SILTY-SAND) fill with 15 to 30% gravel, very fine to fine size sand	1.8'	Sandy fill to 2.0 feet over water sorted and deposited sand with little silt to end of boring
2						0.0		2.5	1.8'	
								Moist, distinctly mottled, brown (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded		
3						0.0			2.0'	
								6.0		
4						0.0		Wet, faintly mottled, brown (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded	2.0'	
5						0.0			2.0'	
6						0.0			2.0'	
								12.0		
								Earthprobe Boring Completed at 12.0 feet		

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1

ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: B 2

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

SN	0/6	6/12	12/18	18/24	N	OVM	LITH	DESCRIPTION AND CLASSIFICATION	REC	COMMENTS
1						0.0		Asphalt 0.3 Moist, dark gray to black, gravelly (SAND) fill with 20 to 40% gravel, cinders and red brick fragments	1.4'	Asphalt to 0.3 foot over sandy fill with some gravel, cinders and bricks to 4.5 feet over water sorted and deposited sand with little silt to end of boring
2						3.0			1.5'	
3						11.0		4.5 Moist becoming wet below 8.5 feet (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded	2.0'	
4						0.0			2.0'	
5						0.0			2.0'	
6						0.0		12.0 Earthprobe Boring Completed at 12.0 feet	2.0'	

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NATURE'S WAY
ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: BMW 3

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

SN	0/6	6/12	12/18	18/24	N	OVM	LITH	DESCRIPTION AND CLASSIFICATION	REC	COMMENTS
1						0.0		Moist, dark brown, gravelly (SILTY-SAND) fill with 5 to 15% gravel, very fine to medium size sand, little silt (1.0)	1.7'	Sandy fill with little gravel and silt to 1.0 feet over sandy fill with trace gravel to 2.0 feet over sandy fill with brick to 4.0 feet over water sorted and deposited sand to end of boring
2						0.0		Moist, brown (SAND) with 3 to 5% gravel, very fine to fine size sand, trace silt (2.0)	1.8'	
								Moist, light brown (SAND) fill iwth brick cobbles and fragments (4.0)		
3						0.0		Moist, light brown (SAND) with very fine size sand, trace silt, thinly bedded (6.0)	1.4'	
4						0.0		Extremely moist to wet below 8.0 feet, brown (SAND) with very fine to fine size sand, little silt, thinly bedded	1.6'	
5						0.0			1.7'	
6						80.0			1.8'	
								Earthprobe Boring Completed at 12.0 feet (12.0)		

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ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.

CRITTENDEN
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SYRACUSE
(315) 635-9818

Hole Number: B 4

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

SN	0/6	6/12	12/18	18/24	N	OVM	LITH	DESCRIPTION AND CLASSIFICATION	REC	COMMENTS
1						0.0		Black and dark brown (SILTY-SAND) fill with 5 to 15% gravel and occasional brick fragments	1.4'	Sandy fill with some gravel and brick to 2.0 feet over apparent water sorted and deposited sand with trace silt to 8.0 feet over water sorted and deposited sand with trace gravel and little silt to end of boring
								2.0		
2						0.0		Moist, light brown (SILTY-SAND) with very fine to fine size sand, trace silt, thinly bedded	1.6'	
3						0.0			1.8'	
								6.0		
4						0.0		Extremely moist to wet below 8.0 feet, brown (SILTY-SAND) with 3 to 5% gravel, very fine to fine size sand, little silt, thinly bedded	1.5'	
5						0.0			1.7'	
6						0.0			1.7'	
								12.0		
								Earthprobe Boring Completed at 12.0 feet		

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ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: BMW 5

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

SN	0/6	6/12	12/18	18/24	N	OVM	LITH	DESCRIPTION AND CLASSIFICATION	REC	COMMENTS
1						8.0		Asphalt pavement 0.2 Moist, grayish brown and brown, gravelly (SILTY-SAND) fill with 20 to 40% gravel, and red brick fragments	1.4'	Asphalt pavement to 0.2 foot over sandy fill with some gravel and bricks to 4.5 feet over water sorted and deposited sand with litlte silt to end of boring
2						0.0			1.6'	
3						0.0		4.5	1.6'	
4						0.0		Moist becoming extremely moist below 7.5 feet (SILTY-SAND) with very fine size sand, little silt	1.7'	
5						0.0			1.8'	
6						82.0		12.0 Earthprobe Boring Completed at 12.0 feet	1.7'	

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ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: B 6

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

SN	0/6	6/12	12/18	18/24	N	OVM	LITH	DESCRIPTION AND CLASSIFICATION	REC	COMMENTS
1						0.0		Moist, dark brown (SANDY-SILT) fill with little to some very fine size sand,	1.5'	Coarse silty fill to 1.5 fet over water sorted and deposited sand with little silt to end of boring
								1.5		
2						0.0		Moist, brown (SILTY-SAND) with very fine to fine size sand, weakly thinly bedded	1.5'	
3						0.0			2.0'	
4						0.0			2.0'	
								8.0		
5						0.0		Wet, brown (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded	2.0'	
6						0.0			2.0'	
								12.0		
								Earthprobe Boring Completed at 12.0 feet		

0 5 10 15 20

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PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

04-249

Volatile Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	275 Franklin St.	**Lab Project Number:**	04-2622
		Lab Sample Number:	8914
Client Job Number:	N/A		
Field Location:	B-3, 10'-12'	**Date Sampled:**	09/08/2004
Field ID Number:	N/A	**Date Received:**	09/10/2004
Sample Type:	Soil	**Date Analyzed:**	09/14/2004

Halocarbons	Results in ug / Kg	Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 140	trans-1,2-Dichloroethene	ND< 140
Bromomethane	ND< 140	1,2-Dichloropropane	ND< 140
Bromoform	ND< 140	cis-1,3-Dichloropropene	ND< 140
Carbon Tetrachloride	ND< 140	trans-1,3-Dichloropropene	ND< 140
Chloroethane	ND< 140	Methylene chloride	ND< 349
Chloromethane	ND< 140	1,1,2,2-Tetrachloroethane	ND< 140
2-Chloroethyl vinyl Ether	ND< 140	Tetrachloroethene	12,700
Chloroform	ND< 140	1,1,1-Trichloroethane	ND< 140
Dibromochloromethane	ND< 140	1,1,2-Trichloroethane	ND< 140
1,1-Dichloroethane	ND< 140	Trichloroethene	ND< 140
1,2-Dichloroethane	ND< 140	Trichlorofluoromethane	ND< 140
1,1-Dichloroethene	ND< 140	Vinyl chloride	ND< 140
Chlorobenzene	ND< 140	1,3-Dichlorobenzene	ND< 140
1,2-Dichlorobenzene	ND< 140	1,4-Dichlorobenzene	ND< 140

ELAP Number 10958 Method: EPA 8010 Data File: 24238.D

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

Signature: _____
Bruce Hoogesteger, Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site: 275 Franklin St.
Client Job Number: N/A
Field Location: B-5, 10'-12'
Field ID Number: N/A
Sample Type: Soil

Lab Project Number: 04-2622
Lab Sample Number: 8915

Date Sampled: 09/08/2004
Date Received: 09/10/2004
Date Analyzed: 09/14/2004

Halocarbons	Results in ug / Kg	Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 27.0	trans-1,2-Dichloroethene	ND< 27.0
Bromomethane	ND< 27.0	1,2-Dichloropropane	ND< 27.0
Bromoform	ND< 27.0	cis-1,3-Dichloropropene	ND< 27.0
Carbon Tetrachloride	ND< 27.0	trans-1,3-Dichloropropene	ND< 27.0
Chloroethane	ND< 27.0	Methylene chloride	ND< 67.5
Chloromethane	ND< 27.0	1,1,2,2-Tetrachloroethane	ND< 27.0
2-Chloroethyl vinyl Ether	ND< 27.0	Tetrachloroethene	671
Chloroform	ND< 27.0	1,1,1-Trichloroethane	ND< 27.0
Dibromochloromethane	ND< 27.0	1,1,2-Trichloroethane	ND< 27.0
1,1-Dichloroethane	ND< 27.0	Trichloroethene	ND< 27.0
1,2-Dichloroethane	ND< 27.0	Trichlorofluoromethane	ND< 27.0
1,1-Dichloroethene	ND< 27.0	Vinyl chloride	ND< 27.0
Chlorobenzene	ND< 27.0	1,3-Dichlorobenzene	ND< 27.0
1,2-Dichlorobenzene	ND< 27.0	1,4-Dichlorobenzene	ND< 27.0

ELAP Number 10958 Method: EPA 8010 Data File: 24244.D

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

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site: 275 Franklin St.
Client Job Number: N/A
Field Location: BMW-5
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 04-2622
Lab Sample Number: 8916
Date Sampled: 09/08/2004
Date Received: 09/10/2004
Date Analyzed: 09/14/2004

Halocarbons	Results in ug / L	Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2,000	trans-1,2-Dichloroethene	ND< 2,000
Bromomethane	ND< 2,000	1,2-Dichloropropane	ND< 2,000
Bromoform	ND< 2,000	cis-1,3-Dichloropropene	ND< 2,000
Carbon Tetrachloride	ND< 2,000	trans-1,3-Dichloropropene	ND< 2,000
Chloroethane	ND< 2,000	Methylene chloride	ND< 5,000
Chloromethane	ND< 2,000	1,1,2,2-Tetrachloroethane	ND< 2,000
2-Chloroethyl vinyl Ether	ND< 2,000	Tetrachloroethene	70,400
Chloroform	ND< 2,000	1,1,1-Trichloroethane	ND< 2,000
Dibromochloromethane	ND< 2,000	1,1,2-Trichloroethane	ND< 2,000
1,1-Dichloroethane	ND< 2,000	Trichloroethene	ND< 2,000
1,2-Dichloroethane	ND< 2,000	Trichlorofluoromethane	ND< 2,000
1,1-Dichloroethene	ND< 2,000	Vinyl chloride	ND< 2,000
Chlorobenzene	ND< 2,000	1,3-Dichlorobenzene	ND< 2,000
1,2-Dichlorobenzene	ND< 2,000	1,4-Dichlorobenzene	ND< 2,000

ELAP Number 10958 Method: EPA 8010 Data File: 24246.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:

COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:
COMMENTS:

INVOICE TO:

COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #:
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)

STD OTHER
☐ 1 ☐ 2 ☐ 3 ☐ 5 ☐

PROJECT NAME/SITE NAME:

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS										REMARKS	PARADIGM LAB SAMPLE NUMBER
1					B-3 10'-12'		1	X										
2					B-5 10'-12'		1	X										
3																		
4				X	BMW-5		2	X										
5																		
6																		
7																		
8																		
9																		
10																		

LAB USE ONLY

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

Sampled By: Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time:

Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Date/Time:

Total Cost:
P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

04-244

Volatile Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site: 275 Franklin St.
Client Job Number: N/A
Field Location: BMW-3
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 04-2623
Lab Sample Number: 8917

Date Sampled: 09/09/2004
Date Received: 09/10/2004
Date Analyzed: 09/14/2004

Halocarbons	Results in ug / L	Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2,000	trans-1,2-Dichloroethene	ND< 2,000
Bromomethane	ND< 2,000	1,2-Dichloropropane	ND< 2,000
Bromoform	ND< 2,000	cis-1,3-Dichloropropene	ND< 2,000
Carbon Tetrachloride	ND< 2,000	trans-1,3-Dichloropropene	ND< 2,000
Chloroethane	ND< 2,000	Methylene chloride	ND< 5,000
Chloromethane	ND< 2,000	1,1,2,2-Tetrachloroethane	ND< 2,000
2-Chloroethyl vinyl Ether	ND< 2,000	Tetrachloroethene	137,000
Chloroform	ND< 2,000	1,1,1-Trichloroethane	ND< 2,000
Dibromochloromethane	ND< 2,000	1,1,2-Trichloroethane	ND< 2,000
1,1-Dichloroethane	ND< 2,000	Trichloroethene	ND< 2,000
1,2-Dichloroethane	ND< 2,000	Trichlorofluoromethane	ND< 2,000
1,1-Dichloroethene	ND< 2,000	Vinyl chloride	ND< 2,000
Chlorobenzene	ND< 2,000	1,3-Dichlorobenzene	ND< 2,000
1,2-Dichlorobenzene	ND< 2,000	1,4-Dichlorobenzene	ND< 2,000

ELAP Number 10958 Method: EPA 8010 Data File: 24247.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO

COMPANY: NWECHC
ADDRESS: 3553 Crittenden Rd.
CITY: Crittenden STATE: NY ZIP: 14038
PHONE: (716) 937-6527 FAX: 937-9360
ATTN: R. Savage / G. Weber
COMMENTS: please fax report

INVOICE TO

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-2623
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)
Rush - ASAP
STD
☐ 1 ☐ 2 ☐ 3 ☐ 5 OTHER

PROJECT NAME/SITE NAME: 275 Franklin St.

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	EPA 8010										REMARKS	PARADIGM LAB SAMPLE NUMBER
1	9/9/04			X	BMW-3	Aqueous	2	X											8917
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

LAB USE ONLY

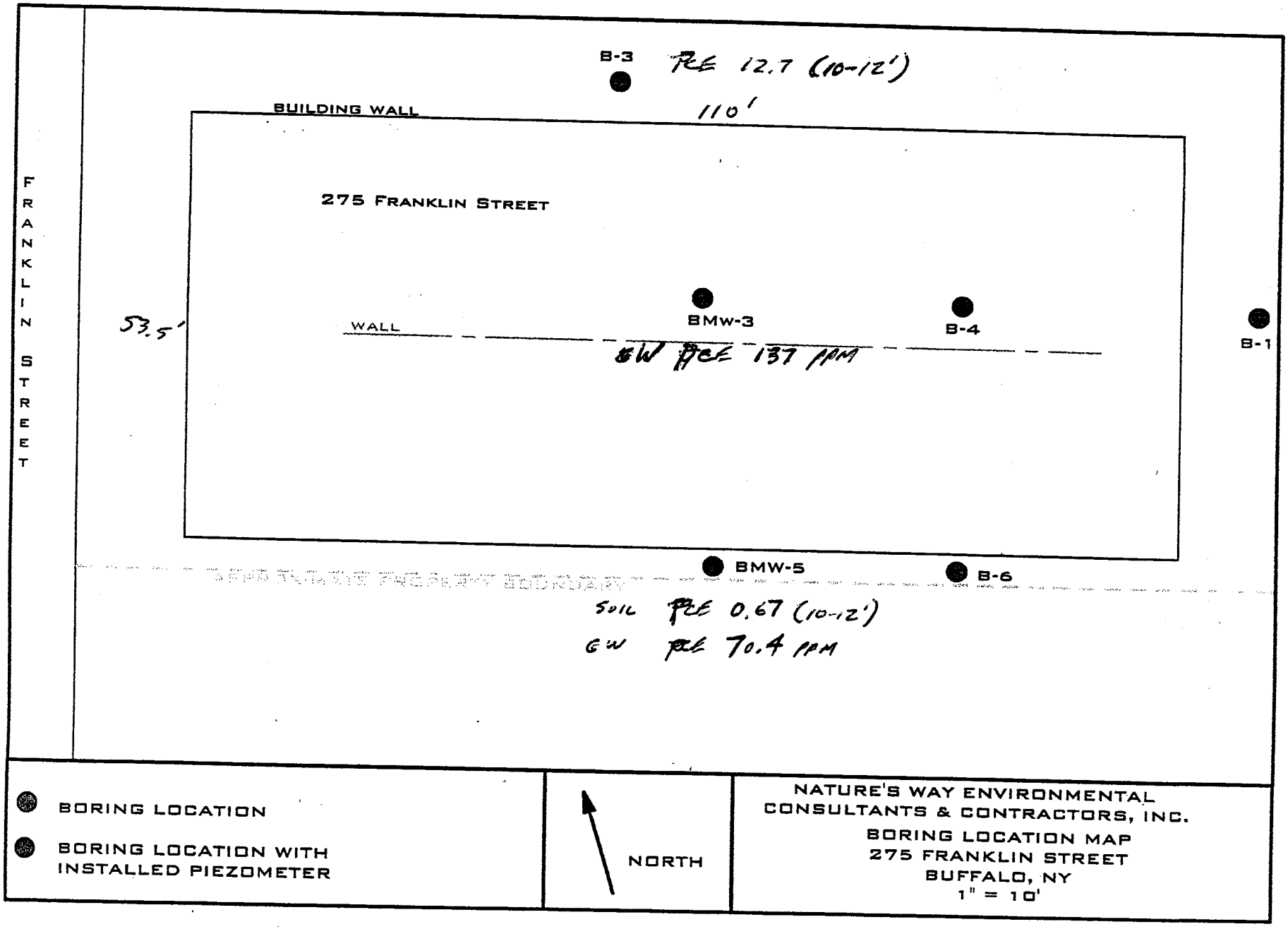
SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ☑ PRESERVATIONS: ☑ HOLDING TIME: ☑ TEMPERATURE: ☐ 12

VOAs2

Sampled By: James Davey Date/Time:
Relinquished By: Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time: 9/9/04 4:30PM
Received By: Date/Time:
Received @ Lab By: Kelly Crandall Date/Time: 9/10/04 946

Total Cost:
P.I.F.


Rounded to
8/10/04
277 Franklin
233.86
115.50
1.0 A(C)
1.1
2
197.07
182.36
(66' WIDE)
3
56.45
108.9(S)
4.1
74.25
9.5(S)
5
35
277
Franklin
116.93
115
50
23
11.5
116.93
110
110
33
22
53.50
55.50
51.50
2.1
110
51.50
FRANKLIN ST
284.74
99
20.1
19
40
40
18
70
70
28
111.42
110
7
28
27.97
8.2
28.12
31.03
8.1
30.88
15.1
87
110
14
ASBURY AL
87
45
110
115.50 CL
9
45
(11' WIDE)
99
177.40
4.1
177.40
PEARL ST
133.16(S)
46.57
7.1
17


B-3
PCE 12.7 (10-12')
110'
BUILDING WALL
275 FRANKLIN STREET
FRANKLIN STREET
53.5'
WALL
BMW-3
B-4
B-1
GW PCE 137 PPM
BMW-5
B-6
SOIL PCE 0.67 (10-12')
GW PCE 70.4 PPM
BORING LOCATION
BORING LOCATION WITH INSTALLED PIEZOMETER
NORTH
NATURE'S WAY ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.
BORING LOCATION MAP
275 FRANKLIN STREET
BUFFALO, NY
1" = 10'

APPENDIX A-2

PREVIOUS INVESTIGATION SAMPLE RESULTS

MARCH 2006 – PRELIMINARY SITE INVESTIGATION

JUNE 2006 – ADDENDUM TO PRELIMINARY SITE INVESTIGATION

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

March 10, 2006

Robert E. Knoer, Esq.
Knoer, Crawford, and Bender, LLP
14 Lafayette Square
Suite 1700
Buffalo, N.Y. 14203

Re: Preliminary Site Investigation
275 & 277 Franklin Street and 470 Pearl Street parcels

Dear Mr. Knoer:

We have prepared this letter report summarizing the results of the Preliminary Site Investigation at 277 Franklin Street and 470 Pearl Street parcels in accordance with the Preliminary Investigation Work Plan (December 2005). The work was performed to ascertain if subsurface environmental conditions on these parcels were likely to impact redevelopment and thereby provide the New York State Department of Environmental Conservation (NYSDEC) a basis to determine eligibility for participation in the NYSDEC Brownfield Cleanup Program (BCP). A summary of findings is presented below. In addition, a summary of the data obtained from the Limited Environmental Investigation previously performed by Nature's Way on the 275 Franklin Street parcel (September 2004) is also included for completeness.

Soil Boring Sampling Results

The boring program, conducted on January 18, 2006, consisted of advancing direct-push (Geoprobe®) boreholes as shown in Figure 1. All direct-push boreholes were advanced using 1.5-inch diameter macro-samplers. The 4-foot sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples.

Soil/fill samples were retrieved from each boring and field screened for headspace VOC content utilizing a hand-held photoionization detector (PID). The PID is capable of detecting the presence of certain volatile organic contaminants. PID scans of the soil borings resulted in no readings above background concentrations.

Direct grab soil samples were collected from the upper fill zone of each boring (see Figure 1 for approximate sample location). Each grab sample was analyzed for Target Compound List (TCL) semi-volatile organic compounds-base neutral fraction (SVOCs) via USEPA Method 8270, TCL polychlorinated biphenyls (PCBs) via

USEPA Method 8082, chromium, arsenic, mercury, and lead via USEPA Method 6010 (7471 for Mercury).

The soil analytical results are summarized in Tables 1 through 3. Each compound that was analyzed is listed on the table, with its associated result, to provide a complete data summary. Recommended Soil Cleanup Objectives as published in NYSDEC Technical Assistance and Guidance Memorandum (TAGM) HWR-94-4046 are also presented for comparative purposes.

As indicated on Table 1, the soil borings indicate concentrations of various semi-volatile organic compounds in the composite soil sample. In particular, several polynuclear aromatic hydrocarbons (PAHs) were detected above the NYSDEC Recommended Soil Cleanup Objectives (RSCOs). No PCBs were found above laboratory detection level (see Table 2).

Inorganic metals concentrations (see Table 3) exceeded RSCO for mercury and lead in one or more soil samples at each of the parcels.

Soil Vapor Sampling Results

The soil vapor sampling program, conducted on January 20, 2006, consisted of collecting and analyzing three samples from beneath asphalt paving (see Figure 1 for approximately locations) in the vicinity of the former dry cleaning operation. Summa Canisters fitted with an 8-hour regulator were utilized.

Soil vapor samples were analyzed for Target Compound List volatile organic compounds (VOCs) in accordance with USEPA Method TO-15. The purpose of this sampling effort was to determine if subsurface VOCs from impacted soil or groundwater was present in sufficient concentration to likely require mitigation in the context of planned redevelopment. Results are presented in Table 4

The New York State Department of Health has published a draft document entitled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York." This document is presently guiding NYSDOH and NYSDEC decisions concerning the need for subslab vapor mitigation at sites undergoing investigation, cleanup and monitoring under NY State remedial programs (e.g., Brownfield Cleanup Program sites, Inactive Hazardous Waste Site Remediation Program sites, etc.). The guidance presents two soil vapor/indoor air matrices to assist in interpreting subslab and ambient air data (i.e., Matrix 1 and Matrix 2). To date, three chemicals have been assigned to these two matrices: trichloroethene (TCE) is assigned to Matrix 1, while tetrachloroethene (also known as perchloroethene, or PCE) and 1,1,1-trichloroethane (1,1,1-TCA) are assigned to Matrix 2.

As indicated in Table 4, a comparison of TCE levels with Matrix 1 indicate no further action is recommended for the 470 Pearl Street parcel, however, sample results of 70 ug/m^3 for the 277 Franklin St. parcel indicates that mitigation/monitoring is recommended as per NYSDOH guidance.

Comparison of the soil vapor data for PCE to the Matrix 2 values indicates that mitigation is recommended for the 277 Franklin St. parcel with a value of 14,000 ug/m^3. When comparing 1,1,1-TCA, mitigation/monitoring is recommended for the 277 Franklin St. parcel, with a value of 71 ug/m^3.

275 Franklin Street Parcel Soil and Groundwater Sampling Results

Nature's Way performed a limited Phase II environmental assessment on the 275 Franklin Street parcel in September of 2004. The sampling included both sub-surface soil sampling and groundwater sampling and analysis by EPA Method 8010. Volatile organic compounds were found in both soil samples and both groundwater samples (see Table 5). Tetrachloroethene (PCE) was detected above the NYSDEC Recommended Soil Cleanup Objectives (RSCOs) in one of the soil samples, and exceeded NYSDEC Groundwater Quality Standards in both locations.

Conclusion

Soil sampling results at all three parcels exhibited semi-volatile and inorganic contamination in excess of the NYSDEC recommended soil cleanup objectives at one or more shallow subsurface locations. Soil vapor sampling results at 277 Franklin Street indicate the presence of one or more chlorinated solvents at concentrations that would require mitigation or monitoring in accordance with NYSDOH guidance.

As such, environmental conditions at all three subject parcels are likely to impact redevelopment activity and therefore should be deemed eligible for participation in the NYSDEC Brownfields Cleanup Program.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Paul H. Werthman, P.E.
Principal Engineer

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS - SVOCs
470 Pearl Street, LLC
BUFFALO, NEW YORK

Location	277 Franklin St.		470 Pearl Street					
Parameter	**SB-1**	**SB-2**	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**Rec. Soil Cleanup Objective (1) (mg/kg)**
TCL Semi-Volatile Organic Compounds (SVOCs) -mg/kg								
Acenaphthene	<7.8	<7.1	3.2 J	1.5 J	<4.1	0.30 J	0.095 J	50
Acenaphthylene	<7.8	<7.1	1.6 J	<7.9	0.73 J	0.14 J	0.019 J	41
Anthracene	<7.8	<7.1	8.8	3.2 J	0.62 J	0.62 J	0.16 J	50
Benzo(a)anthracene	<7.8	0.44 J	22	6.5 J	2.8 J	1.5 J	0.73	0.224
Benzo(b)fluoranthene	<7.8	0.57 J	26	7.6 J	5.1	1.9	1.3	1.1
Benzo(k)fluoranthene	<7.8	<7.1	9.1	2.1 J	1.6 J	0.71 J	0.44	1.1
Benzo(ghi)perylene	<7.8	0.47 J	8.0 J	2.4 J	2.5 J	0.65 J	0.5	50
Benzo(a)pyrene	<7.8	<7.1	20	5.7 J	3.7 J	1.4 J	0.9	0.061
Benzyl alcohol	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Bis (2-chloroethoxy) methane	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Bis (2-chloroethyl) ether	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
2,2'-Oxybis (1-Chloropropane	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Bis (2-ethylhexyl) phthalate	<7.8	<7.1	<8.6	<7.9	<4.1	0.098 J	0.063 J	50
4-Bromophenyl phenyl ether	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Butyl benzyl phthalate	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	50
4-Chloroaniline	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	0.22
2-Chloronaphthalene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	0.24
4-Chlorophenyl phenyl ether	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Chrysene	<7.8	<7.1	20	6.6 J	3.2 J	1.4 J	0.9	0.4
Dibenzo (a,h) anthracene	<7.8	<7.1	2.4 J	0.74 J	0.54 J	0.18 J	0.13 J	0.014
Dibenzofuran	<7.8	<7.1	1.8 J	1.0 J	<4.1	0.23 J	0.088 J	6.2
Di-n-butyl phthalate	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	8.1
1,2-Dichlorobenzene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
1,3-Dichlorobenzene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
1,4-Dichlorobenzene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
3,3'-Dichlorobenzidine	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Diethyl phthalate	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	7.1
Dimethyl phthalate	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	2
2,4-Dinitrotoluene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS - SVOCs
470 Pearl Street, LLC
BUFFALO, NEW YORK

Location	277 Franklin St.		470 Pearl Street					
Parameter	**SB-1**	**SB-2**	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**Rec. Soil Cleanup Objective [1] (mg/kg)**
TCL Semi-Volatile Organic Compounds (SVOCs) -mg/kg								
2,6-Dinitrotoluene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	1
Di-n-octyl phthalate	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	50
Fluoranthene	0.63 J	0.55 J	49	14	5.9	3.4	2.0	50
Fluorene	<7.8	<7.1	3.4 J	1.5 J	<4.1	0.25 J	0.08 J	50
Hexachlorobenzene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	0.41
Hexachlorobutadiene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Hexachlorocyclopentadiene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Hexachloroethane	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Indeno (1,2,3-cd) pyrene	<7.8	<7.1	7.4 J	2.0 J	2.1 J	0.57 J	0.44	3.2
Isophorone	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	4.4
2-Methylnaphthalene	<7.8	<7.1	0.89 J	0.72 J	<4.1	0.15 J	0.097 J	36
Naphthalene	<7.8	<7.1	1.1 J	1.1 J	<4.1	0.19 J	0.067 J	13
2-Nitroaniline	<7.8	<34	<42	<38	<20	<7.7	<1.8	0.43
3-Nitroaniline	<7.8	<34	<42	<38	<20	<7.7	<1.8	0.5
4-Nitroaniline	<38	<34	<42	<38	<20	<7.7	<1.8	-
Nitrobenzene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	0.2
N-Nitrosodiphenylamine	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
N-Nitroso-Di-n-propylamine	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-
Phenanthrene	<7.8	<7.1	35	14	2.8 J	2.8	1.2	50
Pyrene	0.53 J	0.58 J	38	12	5.3	2.5	1.8	50
1,2,4-Trichlorobenzene	<7.8	<7.1	<8.6	<7.9	<4.1	<1.6	<0.36	-

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Highlighted values indicate exceedances of the NYSDEC Recommended Soil Cleanup Objectives.
3. J = estimated concentration.
4. Analytical results were reported in ug/kg and converted to mg/kg for comparison toTAGM Values.

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SCIENCE, PLLC

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS
PCBs
470 Pearl Street, LLC
BUFFALO, NEW YORK

Location	277 Franklin St.		470 Pearl Street					
Parameter	**SB-1**	**SB-2**	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**Rec. Soil Cleanup Objective [1] (mg/kg)**
PCB's mg/kg								
Aroclor 1016	<0.02	<0.018	<0.022	<0.02	<0.021	<0.02	<0.018	note 2
Aroclor 1221	<0.02	<0.018	<0.022	<0.02	<0.021	<0.02	<0.018	note 2
Aroclor 1232	<0.02	<0.018	<0.022	<0.02	<0.021	<0.02	<0.018	note 2
Aroclor 1242	<0.02	<0.018	<0.022	<0.02	<0.021	<0.02	<0.018	note 2
Aroclor 1248	<0.02	<0.018	<0.022	<0.02	<0.021	<0.02	<0.018	note 2
Aroclor 1254	<0.02	<0.018	<0.022	<0.02	<0.021	<0.02	<0.018	note 2
Aroclor 1260	<0.02	<0.018	<0.022	<0.02	<0.021	<0.02	<0.018	note 2

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Total PCB Cleanup Objective = 1 mg/kg surface, 10 mg/kg subsurface.
3. Analytical results were reported in ug/kg and converted to mg/kg for comparison to soil cleanup objective values.

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TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS
INORGANICS
470 Pearl Street, LLC
BUFFALO, NEW YORK

Location	277 Franklin St.		470 Pearl Street					
Parameter	**SB-1**	**SB-2**	**SB-1**	**SB-2**	**SB-3**	**SB-4**	**SB-5**	**Rec. Soil Cleanup Objective [1] (mg/kg)**
Inorganics (mg/kg)								
Arsenic	3.5	5.1	10.3	10.1	4.3	4.8	3.8	12
Mercury	0.18	0.33	0.93	0.16	0.12	0.81	0.41	0.2
Chromium	6.3	11.1	12.7	6.4	9.0	6.0	5.5	40
Lead	87.8	358	938	313	115	663	262	500 [3]

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Highlighted values indicate exceedances of the NYSDEC Recommended Soil Cleanup Objectives.
3. Urban typical range 200-500 mg/kg.

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TABLE 4
SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS

470 Pearl Street, LLC
BUFFALO, NEW YORK

Location	277 Franklin St	470 Pearl Street	
Parameter	**Air**	**Air -1**	**Air -2**
Soil Vapor Concentration (ug/m^3)			
Trichloroethene (TCE)	70	1.1	1.1
Tetrachloroethene (PCE)	14000	2.4	1.4
1,1,1-trichloroethane (1,1,1-TCA)	71	1.1	1.1

Notes:

- Highlight indicates Monitoring or Mitigation required under the Recommended Action Level as per NYSDOH Indoor Air Matrix 1 and 2 Guidances
- Highlight indicates Mitigation required under the Recommeded Action Level as per NYSDOH Indoor Air Matrix 1 and 2 Guidances

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TABLE 5

SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS

September 2004 Investigation

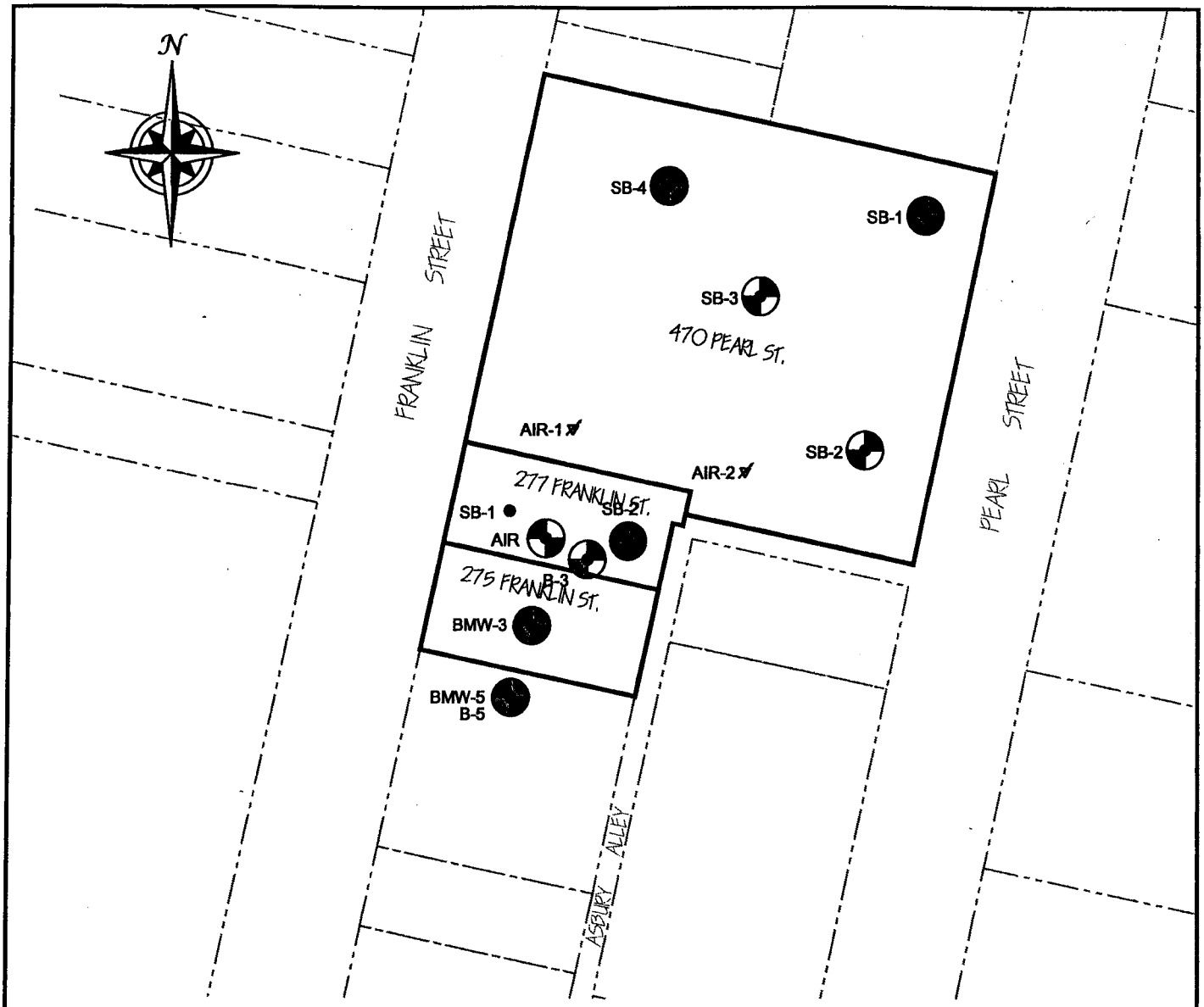
470 Pearl Street, LLC
BUFFALO, NEW YORK

Location	275 Franklin Street			
Media	**Soil (ug/Kg)**		**Groundwater (ug/L)**	
Parameter	**B-3**	**B-5**	**BMW-3**	**BMW-5**
Concentration				
Tetrachloroethene (PCE)	12,700	671	137,000	70,400

Notes:

- Highlight indicated soil exceedance of NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
- Highlight indicated groundwater exceedance of NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1) Class GA used for comparison

FIGURE 1



LEGEND:

———	PROPERTY BOUNDARY
SB-1 ●	GEOPROBE SOIL BORING LOCATION
AIR-1 ✗	SUBSLAB VAPOR SAMPLE LOCATION
SB-4 ●	EXCEEDS RSCO FOR SVOCs AND INORGANICS
SB-4 ◕	EXCEEDS RSCO FOR SVOCs
AIR ◕	SUBSLAB VAPOR MITIGATION/MONITORING REQD.
B-3 ◕	EXCEEDS RSCO FOR VOCs
BMW-3 ◕	EXCEEDS GROUNDWATER STD. FOR VOCs

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 2099-002-100
DATE: DECEMBER 2005
DRAFTED BY: BCH

OFFSITE SAMPLE LOCATIONS

470 PEARL STREET, LLC SITE
BUFFALO, NEW YORK

PREPARED FOR
470 PEARL STREET, LLC

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

June 26, 2006

Robert E. Knoer, Esq.
Knoer, Crawford and Bender, LLP
14 Lafayette Square
Suite 1700
Buffalo, N.Y. 14203

Re: Addendum to March 2006 Preliminary Site Investigation
432 Pearl Street, Buffalo, New York Property

Dear Mr. Knoer:

We have prepared this Addendum to the March 2006 Preliminary Site Investigation to include the investigative results for the property located at 432 Pearl Street, Buffalo, New York. The investigation of this property was conducted concurrently with the investigation of the 275/277 & 279 Franklin Street properties in accordance with the Preliminary Investigation Work Plan (December 2005). The work was performed to ascertain if subsurface environmental conditions on these parcels were likely to impact redevelopment and thereby provide the New York State Department of Environmental Conservation (NYSDEC) a basis to determine eligibility for participation in the NYSDEC Brownfield Cleanup Program (BCP). A summary of the findings for the 432 Pearl Street property is presented below.

Soil Boring Sampling Results

The boring program, conducted on January 18, 2006, consisted of advancing three direct-push (Geoprobe®) boreholes as shown in Figure A-1. All direct-push boreholes were advanced using 1.5-inch diameter macro-samplers. The 4-foot sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples.

Soil/fill samples were retrieved from each boring and field screened for headspace VOC content using a hand-held photoionization detector (PID). The PID is capable of detecting the presence of certain volatile organic contaminants. PID scans of the soil borings resulted in no readings above background concentrations.

Direct grab soil samples were collected from the upper fill zone of each boring (see Figure A-1 for approximate sample location). Each grab sample was analyzed for Target Compound List (TCL) semi-volatile organic compounds (SVOCs) – base neutral fraction via USEPA Method 8270, TCL polychlorinated biphenyls (PCBs) via

USEPA Method 8082, chromium, arsenic, mercury, and lead via USEPA Method 6010 (7471 for mercury).

The soil analytical results are summarized in Table A-1. Each compound that was analyzed is listed on the table, with its associated result, to provide a complete data summary. Recommended Soil Cleanup Objectives (RSCOs) as published in NYSDEC Technical Assistance and Guidance Memorandum (TAGM) HWR-94-4046 are also presented for comparative purposes.

As indicated on Table A-1, the soil borings indicate concentrations of various SVOCs in the composite soil sample. In particular, several polynuclear aromatic hydrocarbons (PAHs) were detected above the NYSDEC RSCOs. No PCBs were found above laboratory detection level. Inorganic metals concentrations exceeded RSCO for mercury and lead in the sample collected from soil boring SB-2.

Soil Vapor Sampling Results

The soil vapor sampling program, conducted on January 20, 2006, consisted of collecting and analyzing one sample from beneath asphalt pavement (refer to Figure A-1 for approximately location). A Summa Canister fitted with an 8-hour regulator was used for sample collection.

The soil vapor sample was analyzed for TCL volatile organic compounds (VOCs) in accordance with USEPA Method TO-15. The purpose of this sampling effort was to determine if subsurface VOCs from impacted soil or groundwater was present in sufficient concentration to likely require mitigation in the context of planned redevelopment.

The New York State Department of Health has published a draft document entitled, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York." This document is presently guiding NYSDOH and NYSDEC decisions concerning the need for subslab vapor mitigation at sites undergoing investigation, cleanup and monitoring under NY State remedial programs (e.g., Brownfield Cleanup Program, Inactive Hazardous Waste Site Remediation Program, etc.). The guidance presents two soil vapor/indoor air matrices to assist in interpreting subslab and ambient air data (i.e., Matrix 1 and Matrix 2). To date, three chemicals have been assigned to these two matrices: trichloroethene (TCE) is assigned to Matrix 1, while tetrachloroethene (also known as perchloroethene, or PCE) and 1,1,1-trichloroethane (1,1,1-TCA) are assigned to Matrix 2.

Of the three chemicals of concern, only PCE was detected at a concentration of 140 $\mu g/m^3$. Comparison of the soil vapor data for PCE to the Matrix 2 value (100

$\mu g/m^3$) indicates that mitigation/monitoring for this compound is recommended for the 432 Pearl Street property .

Conclusion

Soil sampling results exhibit SVOC and inorganic contamination in excess of the NYSDEC RSCOs at one or more shallow subsurface locations. Soil vapor sampling results indicate the presence of PCE at a concentration that would require mitigation/monitoring in accordance with NYSDOH guidance.

As such, environmental conditions at the 432 Pearl Street parcel is likely to impact future redevelopment activities and therefore, the parcel should be eligible for participation in the NYSDEC Brownfields Cleanup Program.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Patrick T. Martin, P.E.
Project Manager

c: File: 0099-003-100

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE A-1
SUMMARY OF SOIL ANALYTICAL RESULTS
432 PEARL STREET PROPERTY

BUFFALO DEVELOPMENT CORP.
BUFFALO, NEW YORK

Parameter	SB-1	SB-2	SB-3	Rec. Soil Cleanup Objective [1] (mg/kg)
TCL Semi-Volatile Organic Compounds (mg/kg)				
Acenaphthene	<75	1.4 J	<3.9	50
Acenaphthylene	<75	0.48 J	<3.9	41
Anthracene	<75	2.7 J	0.34 J	50
Benzo(a)anthracene	7.2 J	7.7 J	0.80 J	0.224
Benzo(b)fluoranthene	10.0 J	12.0	0.93 J	1.1
Benzo(k)fluoranthene	4.4 J	2.6 J	0.35 J	1.1
Benzo(ghi)perylene	4.7 J	4.2 J	0.38 J	50
Benzo(a)pyrene	7.2 J	8.3	0.74 J	0.061
Benzyl alcohol	<75	<8.2	<3.9	-
Bis (2-chloroethoxy) methane	<75	<8.2	<3.9	-
Bis (2-chloroethyl) ether	<75	<8.2	<3.9	-
2,2'-Oxybis (1-Chloropropane)	<75	<8.2	<3.9	-
Bis (2-ethylhexyl) phthalate	<75	<8.2	<3.9	50
4-Bromophenyl phenyl ether	<75	<8.2	<3.9	-
Butyl benzyl phthalate	<75	<8.2	<3.9	50
4-Chloroaniline	<75	<8.2	<3.9	0.22
2-Chloronaphthalene	<75	<8.2	<3.9	0.24
4-Chlorophenyl phenyl ether	<75	<8.2	<3.9	-
Chrysene	7.8 J	8.4	0.71 J	0.4
Dibenzo (a,h) anthracene	<75	1.3 J	<3.9	0.014
Dibenzofuran	<75	1.1 J	<3.9	6.2
Di-n-butyl phthalate	<75	<8.2	<3.9	8.1
1,2-Dichlorobenzene	<75	<8.2	<3.9	-
1,3-Dichlorobenzene	<75	<8.2	<3.9	-
1,4-Dichlorobenzene	<75	<8.2	<3.9	-
3,3'-Dichlorobenzidine	<75	<8.2	<3.9	-
Diethyl phthalate	<75	<8.2	<3.9	7.1
Dimethyl phthalate	<75	<8.2	<3.9	2
2,4-Dinitrotoluene	<75	<8.2	<3.9	-
2,6-Dinitrotoluene	<75	<8.2	<3.9	1
Di-n-octyl phthalate	<75	<8.2	<3.9	50
Fluoranthene	18.0 J	20.0	1.9 J	50
Fluorene	<75	1.3 J	<3.9	50
Hexachlorobenzene	<75	<8.2	<3.9	0.41
Hexachlorobutadiene	<75	<8.2	<3.9	-
Hexachlorocyclopentadiene	<75	<8.2	<3.9	-
Hexachloroethane	<75	<8.2	<3.9	-
Indeno (1,2,3-cd) pyrene	4.3 J	3.8 J	0.36 J	3.2
Isophorone	<75	<8.2	<3.9	4.4

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE A-1
SUMMARY OF SOIL ANALYTICAL RESULTS
432 PEARL STREET PROPERTY

BUFFALO DEVELOPMENT CORP.
BUFFALO, NEW YORK

Parameter	SB-1	SB-2	SB-3	Rec. Soil Cleanup Objective [1] (mg/kg)
TCL Semi-Volatile Organic Compounds (mg/kg)				
2-Methylnaphthalene	<75	0.66 J	<3.9	36
Naphthalene	<75	1.3 J	<3.9	13
2-Nitroaniline	<360	<40	<19	0.43
3-Nitroaniline	<360	<40	<19	0.5
4-Nitroaniline	<360	<40	<19	-
Nitrobenzene	<75	<8.2	<3.9	0.2
N-Nitrosodiphenylamine	<75	<8.2	<3.9	-
N-Nitroso-Di-n-propylamine	<75	<8.2	<3.9	-
Phenanthrene	12.0 J	17.0	1.5 J	50
Pyrene	17.0 J	21.0	1.7 J	50
1,2,4-Trichlorobenzene	<75	<8.2	<3.9	-
PCBs (mg/kg)				
Aroclor 1016	<0.018	<0.021	<0.020	note 2
Aroclor 1221	<0.018	<0.021	<0.020	note 2
Aroclor 1232	<0.018	<0.021	<0.020	note 2
Aroclor 1242	<0.018	<0.021	<0.020	note 2
Aroclor 1248	<0.018	<0.021	<0.020	note 2
Aroclor 1254	<0.018	<0.021	<0.020	note 2
Aroclor 1260	<0.018	<0.021	<0.020	note 2
Inorganic Compounds (mg/kg)				
Arsenic	5.3	9.0	4.3	12
Mercury	0.089	1.1	0.11	0.2
Chromium	6.6	11.4	8.2	40
Lead	103	507	78.1	500 [3]

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Total PCB Cleanup Objective = 1 mg/kg surface, 10 mg/kg subsurface.
3. Urban typical range 200-500 mg/kg.

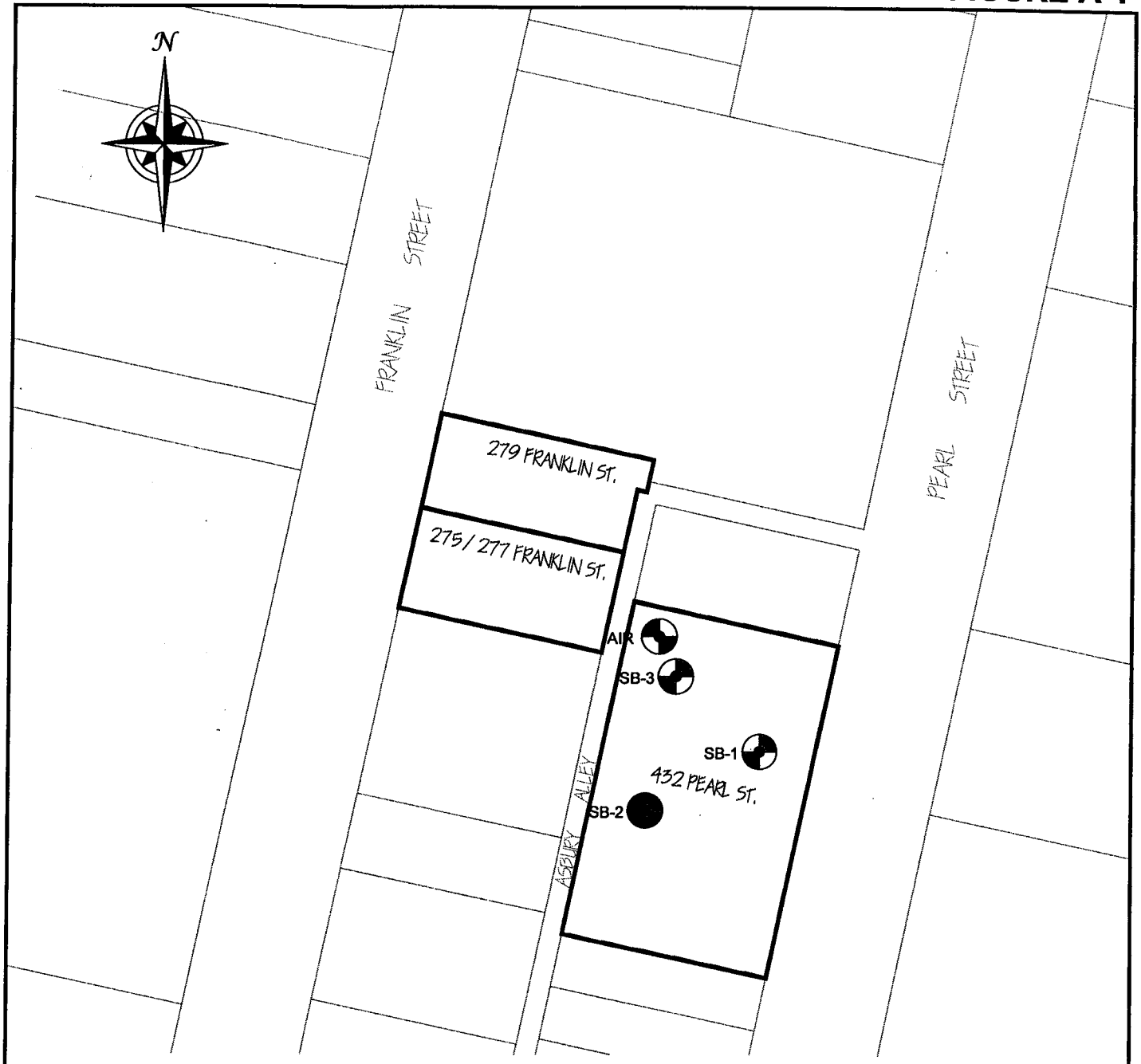
Highlighted values indicate exceedances of the NYSDEC Recommended Soil Cleanup Objectives.

J = estimated concentration.

Analytical results were reported in ug/kg and converted to mg/kg for comparison to TAGM Values.

FIGURE A-1

G:\CAD\Benchmark\470 Pearl Street, LLC (Buffalo Development Corp)\BCP Attachment Figures\Figure A-1; Sample Locations.dwg



LEGEND:

- PROPERTY BOUNDARY
- SB-1 GEOPROBE SOIL BORING LOCATION
- SB-4 EXCEEDS RSCO FOR SVOCs AND INORGANICS
- SB-4 EXCEEDS RSCO FOR SVOCs
- AIR SUBSLAB VAPOR MITIGATION/MONITORING REQD.

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 0099-003-100
DATE: JUNE 2006
DRAFTED BY: BCH

SAMPLE LOCATIONS

BUFFALO DEVELOPMENT CORP.
BUFFALO, NEW YORK

PREPARED FOR
432 PEARL STREET PROPERTY

APPENDIX B

SITE-SPECIFIC HEALTH AND SAFETY PLAN

(TO BE INCLUDED IN FINAL DOCUMENT)