

**SITE MANAGEMENT PLAN
OPERATIONS MAINTENANCE & MONITORING (OM&M)**

**FORMER MUNSEY CLEANERS SITE
1029 PORT WASHINGTON BOULEVARD
PORT WASHINGTON, NEW YORK
NYSDEC SITE NO: 1-30-081**

PREPARED FOR:

**NYSDEC
DIVISION OF ENVIRONMENTAL REMEDIATION
ALBANY, NEW YORK
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LEA PROJECT 02-121

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1.0 INTRODUCTION

The Site Management Plan (SMP) has been designed to include operation, maintenance and monitoring (OM&M) for the Soil Vapor Extraction System (SVE) and sub-slab depressurization system (SSDS). The system will operate continuously until the remedial objectives have been achieved, or until the NYSDEC determines that continued operation is no longer required because the remedial goals were achieved or the concentration of contaminants are asymptotic as referenced in Draft Technical Guidance Document, DER-10, Section 6.6.

1.1 PROJECT DESCRIPTION

The improper handling of dry cleaning waste at the site resulted in the disposal of hazardous wastes, containing tetrachloroethene (PERC) and other volatile organics. These wastes contaminated the soil and groundwater at the site, and resulted in:

- a significant threat to human health associated with exposures to contaminated soil and contaminants in indoor air.
- a significant environmental threat due to PERC impacting groundwater.

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the Former Munsey Cleaners site in response to the threats identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation/feasibility study (RI/FS).

The following completed elements of the IRM have achieved the soil remediation goals, and are in the process of achieving the groundwater and indoor air goals for the site:

1. The 1996 IRM has removed the contaminated soil from the basement thereby preventing the migration of contaminants from soil into the groundwater.
2. The installation of the SVE system in the basement has removed the residual contamination in soil. The subsurface soil sampling conducted during the RI showed that the PERC found in soil samples is below the SCGs.
3. The installation of the positive pressure ventilation system in October 2000 has significantly reduced the concentration of PERC of indoor air.
4. The existing SVE system was re-started in July 2003 and operated continuously until November 2004. This further reduced the PERC concentration of indoor air. The SVE system was re-started on May 12, 2005.
5. A sub-slab depressurization system was installed at the site in November 2004. The results of the indoor air samples obtained in January 2005 showed the concentration of PERC at low levels in indoor air but still above background levels.

6. The SVE system was turned off in November 2004 to determine the effectiveness of the sub-slab depressurization system. Since the sub-slab depressurization system is performing satisfactorily, on May 12, 2005, the SVE system was restarted.
7. The soil removal and operation of the SVE system has reduced the contaminant levels in groundwater.

Based on the results of the investigation at the site, the IRMs that have been performed, and the evaluation presented here, the November 2005 Record of Decision (ROD) signed by NYSDEC has selected No Further Action with continued operation of the SVE and sub-slab systems as the preferred alternative for the site. Therefore, the NYSDEC concluded that No Further Action is needed other than the SMP to include operation, maintenance and monitoring (OM&M) for the SVE and sub-slab depressurization systems listed below. The plan will include the sampling schedule, maintenance of the systems and reporting.

1. The SVE and sub-slab depressurization systems will be operated continuously and will be maintained on an annual basis. An annual certification will be submitted for the SSDS stating that the system is in good operating condition.
2. One post system installation confirmatory sampling event will be completed. Analysis will be limited to target analytes as determined by previous sampling data as well as breakdown products. However, additional sampling events may be required by the NYSDEC or NYSDOH based on the results of confirmatory sampling. Please refer to the Final NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," section 4.3, dated October 2006.
3. If it is determined from the review of the indoor air and groundwater sampling results that additional measures are required to improve the effectiveness of the systems, then additional measures will be implemented. The measures may include the installation of additional extraction points for soil vapor in the areas of concern and/or the installation of new monitoring wells.
4. Imposition of an institutional control in the form of an environmental easement that will require compliance with the approved site management plan; restrict the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH and allow the NYSDEC access to the site to evaluate continued maintenance of institutional and engineering controls; and require the property owner to complete and submit to the NYSDEC an institutional controls/engineering controls certification on a periodic basis.
5. The property owner will provide an institutional controls/engineering controls certification, prepared and submitted by a professional engineer or such other expert acceptable to the NYSDEC, on a periodic basis. This submittal will contain certification that the institutional controls and engineering controls, are still in place, allow the NYSDEC access to the site to evaluate continued maintenance of such controls, and that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan.
6. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the NYSDEC determines that continued operation is not needed because the remedial goals were achieved or the concentration of the contaminants are asymptotic as referenced in Draft Technical Guidance Document, DER-10, Section 6.6.

1.2 RECORDS MANAGEMENT

A dedicated notebook will remain at site to keep monthly inspection system readings. Records of site visits, measurement of system and effluent suppression performance, air and groundwater monitoring data and any other work performed at the site will be kept in hard copy and digital files at the offices of Laurel Environmental Associates, Ltd. for at least 7 years after work is completed. Reports will be sent to all entities noted on the Distribution List on page 4.

1.2.1 OM&M

1.2.1.1 Summary

The OM&M program will include the installation of a telemetry unit that will notify *Laurel Environmental Associates, Ltd.* any time either system is non-operational. This and other monitoring is described in Section 4 of this report.

1.2.1.2 LIST OF OFFICIAL RECORDS AND REFERENCES

1. Preliminary Site Assessment Report, CA Rich Consultants, September 1996
2. Interim Remedial Measures Report, CA Rich Consultants, December 1997
3. Interim Remedial Measures Report, Addendum #1, CA Rich Consultants, April 1998
4. Focused Remedial Investigation Work Plan, CA Rich Consultants, March 2000
5. Order on Consent, Index No. W1-0750-98-04, between NYSDEC and the Montfort Trust, executed on October 07, 2000.
6. Focused Remedial Investigation Report, CA Rich Consultants, June 2001
7. Phase II Remedial Investigation Work Plan, CA Rich Consultants, February 2002.
8. Air Dynamics Investigation Report, CA Rich Consultants, March 2002
9. Modification to Order on Consent Index No. W1-0750-98-04, between NYSDEC and the Montfort Trust, executed on May 07, 2002.
10. Phase II Remedial Investigation Report, Laurel Environmental, June 2003
11. Quarterly Sampling Report I, Laurel Environmental, December 2003
12. Quarterly Sampling Report II, Laurel Environmental, June 2004
13. Quarterly Sampling Report III, Laurel Environmental, December 2004
14. Proposed Remedial Action Plan, NYSDEC, June 2005

2.0 SITE DESCRIPTION

The site is located in an urban portion of the Town of North Hempstead, Nassau County, NY. The site is approximately 5 miles north of the Long Island Expressway. Refer to Figure 1 for the site location. The site is at the intersection of Port Washington Boulevard and Main Street in a one-story retail shopping plaza. The site occupies approximately 4,200 square feet at the north end of the shopping complex. The first floor and basement of the site are currently un-occupied. Refer to Figure 4.0 for the site plan. The Plaza Cleaners site is located across the street from the subject property on Port Washington Boulevard.

2.1 SITE HISTORY

The Former Munsey Cleaners site was a dry cleaning facility located at 1029 Port Washington Boulevard, Port Washington, New York, occupying the northern end of a commercial building. According to records found at the Town of North Hempstead, the subject building site was constructed in 1949 and this portion of the building had always been occupied by a dry cleaning facility, except for periods of vacancy. A dry cleaning facility with the name "Munsey Cleaners" occupied the site from 1978 until 1995. All dry cleaning equipment has been removed from this part of the building prior to 1997. This portion of building was occupied by a real estate company until the middle of 2006 and is currently unoccupied. Wachovia Bank had entered into an agreement to lease this space and interior renovations are currently way. Please refer to Figure 1.0 for a map of the facility location.

.Tetrachloroethene (PERC) was used during dry cleaning operations. Spent solvents appear to have been disposed of in the basement. A soil sample taken by the NYSDEC from a basement sump during the summer of 1994 revealed contamination by the dry cleaning solvent tetrachloroethene. A follow-up site inspection and sampling visit by the Nassau County Department of Health confirmed the disposal of a consequential quantity of hazardous waste. Samples from the dirt floor from the basement, floor drain and the sump were found to contain tetrachloroethene as high as 2,200 parts per million (ppm).

In 1995, the NYSDEC initially listed the site as a Class 2a site in the Registry of Inactive Hazardous Waste Disposal Sites in New York (the Registry). Class 2a is a temporary classification assigned to a site that has inadequate and/or insufficient data for inclusion in any of the other classifications. In 1997, the NYSDEC listed the site as a Class 2 site in the Registry. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

A Preliminary Site Assessment (PSA) was implemented at the site in 1996. The field work included sampling the soil in the basement and analyzing the groundwater. Based on the results from the PSA, an Interim Remedial Measure (IRM) was conducted at the site in 1996. The IRM involved the removal of approximately 30 tons of contaminated soil from the basement area. A soil vapor extraction (SVE) system was installed in the basement to remove the remaining shallow soil contamination in the basement under this IRM. The SVE system was operated continuously until July 1998 when the final verification soil samples obtained from the basement indicated that the contamination from the shallow soil had been reduced to standards, criteria and guidance (SCGs) levels. Refer to Table 1 for the project time-line.

2.2 *SITE HYDROGEOLOGY*

The site is situated at an elevation of approximately 125-feet above mean sea level in the Town of North Hempstead in northern Nassau County, Long Island on Manhasset Neck. Manhasset Neck is a 13.4 square mile peninsula that is bounded on the west, north and east by Manhasset Harbor, Long Island Sound and Hempstead Harbor. Regional topography irregularly slopes towards these bodies of water from the higher inland areas, but gently slopes away from the site to the west and more steeply upward from the site to the east. Surface run-off of storm water is controlled by gently sloping pavement towards on-site storm drains and to municipal storm water retention basins.

Manhasset Neck is composed of unconsolidated Pleistocene and Cretaceous age sediments overlying Precambrian/early Paleozoic bedrock. The Pleistocene age Upper Glacial aquifer overlies the Pleistocene and Cretaceous deposits across the entire peninsula and Upper Glacial deposits from the land surface except in shore and urban fill areas.

The upper Cretaceous sediments consist of the undifferentiated Raritan Formation, the Magothy Formation and the Matawan Group. The Raritan is composed of the lower Lloyd Sand Member, which is a fresh water aquifer, and an upper unnamed clay member (the Raritan confining unit). The Magothy Formation and Matawan, undifferentiated, form the Magothy aquifer, sand gravel overlying the Raritan confining unit. These upper Cretaceous deposits overlie bedrock in the southern half of the peninsula but are generally absent in the northern half. The site is situated near this geologic divide in the northern half of Manhasset Neck peninsula, where the Pleistocene age Port Washington aquifer and overlying Port Washington confining unit overlie bedrock and abut the Cretaceous materials to the south. Please refer to Figure 5.0 for a Geologic Cross-Section from Southeast to Northeast.

All local potable water supplies rely on the underlying groundwater, which is supplied by the Port Washington Water District and is monitored for the District by Dvirka and Bartilucci Consulting and Engineers, P.C. Most active public supply wells extract water from the deeper aquifers below the silt and clay units, but two seasonally active wells, Sandy Hollow Well #2 and Sandy Hollow Shallow, are located over 4,000 feet northwest, down-gradient of the site, and are screened in the Upper Glacial formation. According to Mr. Burns, of Dvirka and Bartilucci, dry cleaning solvents, Perchloroethylene (PCE) and Trichloroethene (TCE), have not been detected within the groundwater at the above-mentioned well sites. Please refer to Figure 4.0 for the Supply Well location aerial photograph and Figure 4.1 for the Supply Well location map. There are no existing public supply wells at the subject property, nor is groundwater used for any purpose at the site or at surrounding sites.

3.0 SITE REMEDIAL ACTION

3.1 DESCRIPTION OF REMEDIAL ACTION

As described in Section 1.1, Project Description, remedial action at the site has already taken place in the form of soil removal and the installation of the SVE and SDSS. Continuous operation of the SVE sub-slab depressurization system and shall be maintained on until remedial objectives are met.

3.2 GOALS OF REMEDIAL ACTION

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

Prior to the completion of the IRM described in Section 5.2, the remediation goals for this site were to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to PERC in soil;
- the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards;
- the release of contaminants from subsurface soil under the basement into indoor air through soil vapor; and
- exposures to contaminants in indoor air due to soil vapor intrusion.

The NYSDEC believes that the IRMs have accomplished these remediation goals provided that the SVE and sub-slab systems continue to be operated and maintained in a manner consistent with the design.

The main SCGs applicable to this project are as follows:

- ambient groundwater quality standards
- NYSDEC TAGM 4046 for the Determination of Soil Cleanup objectives and Cleanup Levels
- The Final NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York,” dated October 2006.

The remedial objectives of the SVE sub-slab depressurization system include operation of the system until the NYSDEC determines that such objectives have been achieved or the concentration of contaminants are asymptotic as referenced in Draft Technical Guidance Document, DER-10, Section 6.6.

4.0 SAMPLING AND ANALYSIS

Indoor air sampling and groundwater sampling will be performed on a periodic basis as described in each section below.

4.1 MONITORING PLAN

The SVE and SDSS will run continuously and will be monitored for operation 24 hours per day through the use of a remote telemetry unit that will contact *Laurel Environmental Associates, Ltd.* personnel any time either system shuts down. A *Laurel Environmental Associates, Ltd.* staff member will visit the site on a monthly basis to ensure that the system is functioning properly. Using a photoionization detector (PID), monitoring of the system will be performed by collecting PID readings from each of the sample/screening ports installed on the system. Vacuum pressure, air flow and temperature readings will also be recorded and maintained in a monthly log.

4.1.1 FREQUENCY OF MONITORING

Monitoring of the system will be continuous through the use of the telemetry system and will be manually performed on a monthly basis.

4.2 ENVIRONMENTAL EFFECTIVENESS MONITORING

Indoor and outdoor air will be sampled using 3M 3500 passive monitors and analyzed using NYS-DOH 311-9 (uses Gas Chromatograph and Electron Capture Detector for analysis) to ensure that the building occupants are not exposed to concentrations of PCE above what is considered typical background by the NYSDOH. Groundwater will be monitored by analyzing groundwater samples for volatile organic compounds using USEPA Method 8260B (uses Gas Chromatograph and Mass Spectrometer for analysis) to confirm the effectiveness of the systems.

4.2.1 LOCATION, FREQUENCY AND NUMBER OF SAMPLES, AND SAMPLING PROCEDURES

Indoor air and groundwater sample locations are indicated in Figure 7.0 and 6.0, respectively.

Sampling types and frequency is as follows:

| | |
|--|---|
| Indoor and Ambient Air sampling- | One event collected during heating season |
| Groundwater sampling-1 st &2 nd year | Semi-annually |
| Groundwater sampling-3 rd year on | Annually |

Based on the results of the sampling event, the NYSDEC in conjunction with NYSDOH will determine additional air the frequency of the sampling to be increased or decreased.

4.2.1.1 GROUNDWATER

Groundwater samples will be collected using dedicated or disposable tubing after purging three well volumes from four (4) locations (see Figure 6.0) on a semi-annual basis during the first year of operation. Thereafter samples will be collected on an annual basis.

4.2.1.2 AIR

Indoor and outdoor air samples will be collected from seven (7) locations (see Figure 7.0) using Summa Whole Air Canisters once during the heating season. Samples will be collected over a 24-hour period. Samples will be analyzed for contaminants of concern, namely PCE and TCE, along with breakdown products cis 1,2 DCE (Dichloroethylene), trans 1,2 DCE, and vinyl chloride. The analysis will be by EPA Method TO-15, with minimum detection limits of 0.25 mcg/m³ for TCE and 1 mcg/m³ for PCE, cis 1,2 DCE, trans 1,2 DCE, and vinyl chloride.

If it is determined from the review of the indoor air and groundwater sampling results that additional measures are required to improve the effectiveness of the systems, then the measures will be implemented. The measures may include the installation of additional extraction points for soil vapor in the areas of concern and/or the installation of new monitoring wells.

4.2.2 WELL SAMPLING AND MAINTENANCE PROCEDURES

Monitoring wells will be sampled and maintained in accordance with USEPA and NYSDEC guidelines.

4.2.2.1 WELL PURGING VOLUMES AND METHODS

Prior to collecting groundwater samples, a minimum of three well volumes will be purged from each well using a submersible pump. Well purging volumes will be determined as follows:

FORMULA TO FIND HEIGHT OF WATER COLUMN: (Total depth of water well) – (Measured static water level) = (Height of water column).

WATER VOLUME IN WELL: (Height of water column) x (Gallons/one foot of casing size) = Water volume in well.

4.2.2.2 DECOMMISSIONING PROCEDURES

Upon NYSDEC approval of permanent closure of the system, monitoring wells, SVE and SSDS treatment points will be properly abandoned in accordance with NYSDEC and NYSDOH requirements. This will include the submittal of a System Termination Plan for approval prior to closure work being implemented.

4.3 ON-SITE TREATMENT PLANT PERFORMANCE MONITORING LOCATIONS AND PROCEDURES

4.3.1 INFLUENT SAMPLING

Influent air will be collected and field screened monthly using a Tedlar bag to collect the sample at a port before treatment and at a port between the drums of granular activated carbon (GAC). The samples will be field-screened using a PID with a 10.6 eV bulb on a monthly basis. A sample will be submitted for PCE and TCE analysis on a yearly basis using USEPA Method TO15.

4.3.2 EFFLUENT SAMPLING

Effluent air will be collected and field screened monthly using a Tedlar bag to collect the sample at a port after treatment by two drums of granular activated carbon (GAC). The samples will be field-screened using a PID with a 10.6 eV bulb on a monthly basis. A sample will be submitted for PCE and TCE analysis on a yearly basis using USEPA Method TO15 or when PID readings are over 5 PPM.

4.3.3 WATER LEVEL MEASUREMENT PLAN

Measurement of depth to water will be collected from monitoring wells prior to each sampling event.

4.3.4 ANALYTICAL PROGRAM

Groundwater analysis will be performed at laboratories having USEPA CLP and NYSDOH ELAP certifications. Air sample analysis will be performed at laboratories having ACGIH and NYSDOH ELAP certifications.

4.3.4.1 ANALYTICAL SCHEDULES AND METHODS

Air samples will be analyzed using NYSDOH 311-9. Groundwater samples will be analyzed using USEPA Method 8260B.

4.3.4.2 LABORATORY QA/QC REQUIREMENTS

The selected laboratory for groundwater samples will be completing the chemical analysis of samples in strict accordance with protocols set forth in NYSDEC Analytical Services Protocols, (ASP), June, 2000, or other state or federal agency protocols, where necessary. Specific analytical methods are provided in are provided in each report. Where necessary, reporting and deliverables (data package) will be completed in accordance with ASP Category B requirements; the reporting and deliverables document will be submitted as an appendix to the report. Air samples will be subject those requirements set forth by ACGIH and NYSDOH ELAP.

4.3.4.3 LABORATORY REPORTING AND DELIVERABLES

Category B laboratory data deliverables as defined in the analytical services protocol (ASP June 2000)

4.3.4.4 SPECIAL ANALYTICAL PROTOCOLS

None.

4.3.4.5 LABORATORY CERTIFICATION

ACGIH, NYSOH ELAP, USEPA CLP.

4.3.4.6 STATISTICAL METHODS USED

As required by CLP.

4.3.4.7 LABORATORY QA/QC RECORD MANAGEMENT

As required by CLP.

5.0 SITE MAINTENANCE AND INSPECTIONS

5.1 MAINTENANCE ACTIVITIES

5.1.1 SITE SIGNS

A sign shall be posted on the effluent pipe and in the SVE/SSDS control room stating "OFF LIMITS". The SVE/SSDS control room is located in the basement under the former Munsey Cleaner tenant space. The entire basement of the site is off limits to public. The only access is for utility workers and for the property management personnel via locked doors.

5.1.2 EACH COMPONENT OF THE TREATMENT FACILITY

The SVE system consists of a 2.5 horsepower EG&G Rotron regenerative blower. The blower system discharges PCE-laden air through a four-inch diameter PVC pipe into two 55-gallon granulated activated carbon canisters (GAC). The final emissions discharge point is 5 feet above the building roofline. The maximum flow the stack will discharge is 160 scfm. Valving, inlets and outlets, control devices, stacks, and thermocouple location are shown on Figure 8.0. The SSDS system consists of a SSDS fan, piping, valves and liquid manometer set on the pipe most distant from the system as shown on Figure 9.0. See Figure 10.0 for photographs of both systems. Ventilation is provided to the basement through a louver to street level.

5.1.3 PREVENTATIVE MAINTENANCE SCHEDULES

Monthly inspections of systems including removal of water from pipe and knockout drum when present. Replacement/rotation of GAC drums if effluent level is over 1 ppm as measured by PID.

5.1.4 *REQUIREMENTS FOR DISPOSAL OF USED MATERIAL AND WASTE*

Spent granular activated carbon will be picked up and disposed of or re-generated by Carbtrol, General Carbon or a similar contractor.

5.2 *INSPECTIONS*

5.2.1 *INSPECTION SCHEDULE AND REQUIREMENTS*

Inspections will take place monthly and will record a visual inspection of SSDS manometer, SVE system pressure, SVE air flow, SVE temperature, concentrations of influent, between the GAC drums and effluent. Testing with PID between carbon vessels to determine breakthrough from the first vessel. When the concentration is above 1 ppm, move #2 GAC drum to #1 position and place new drum in #2 position. When the effluent concentration is above 1 ppm, shut down the system and make determination of whether current treatment system is sufficient. A spare carbon vessel will be kept available to minimize system shut down time. During every sampling event, the PID measurements will be obtained for both influent and effluent.

6.0 REPORTS FOR SAMPLING, ANALYSIS AND INSPECTIONS

6.1 *MONTHLY REPORT REQUIREMENTS*

Prepare site visit and monitoring report monthly.

6.2 *QUARTERLY REPORT REQUIREMENTS*

| | |
|--|--|
| Air sampling-1 st year | Quarterly |
| Air sampling-2 nd year on | Semi-annually (at least one round collected during heating season) |
| Groundwater sampling-1 st &2 nd year | Semi-annually |
| Groundwater sampling-3 rd year on | Annually |

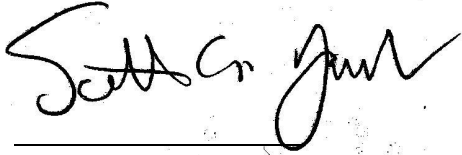
Prepare air monitoring report monthly during first year, then every 2nd quarter. Prepare groundwater sampling reports every 2nd quarter during 1st two years.

6.3 *ANNUAL REPORT REQUIREMENTS*

Prepare groundwater sampling report annually. Include data on air sampling and site visits.

Signature Page

SMP/OM&M by:

A handwritten signature in black ink, appearing to read "Scott A. Yanuck". The signature is written in a cursive style with a horizontal line underneath it.


Scott A. Yanuck
Hydrogeologist
President

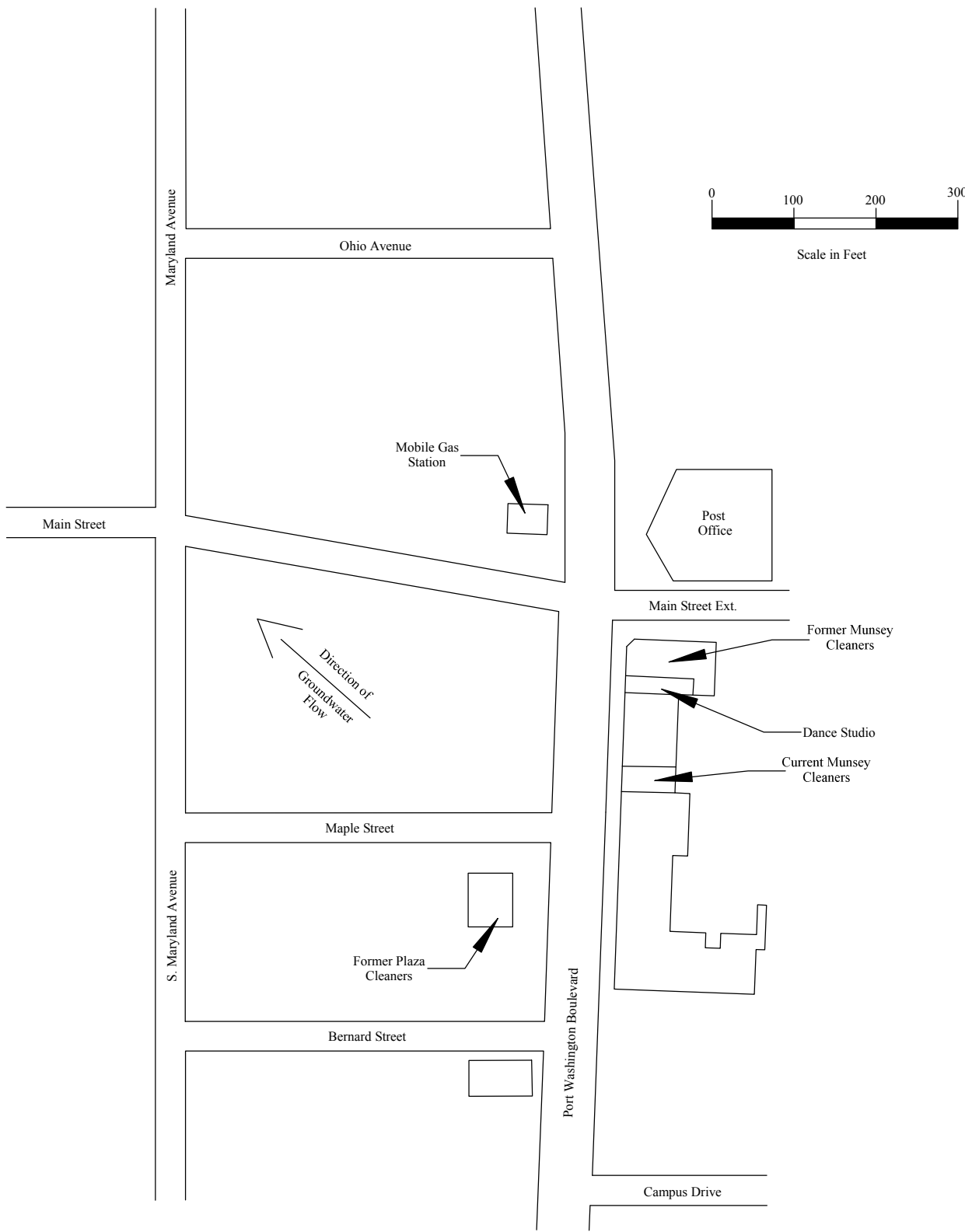
QA/QC by:


A handwritten signature in black ink, appearing to read "Carla M. Sullivan". The signature is written in a cursive style with a horizontal line underneath it.

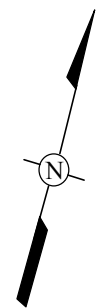
Carla M. Sullivan

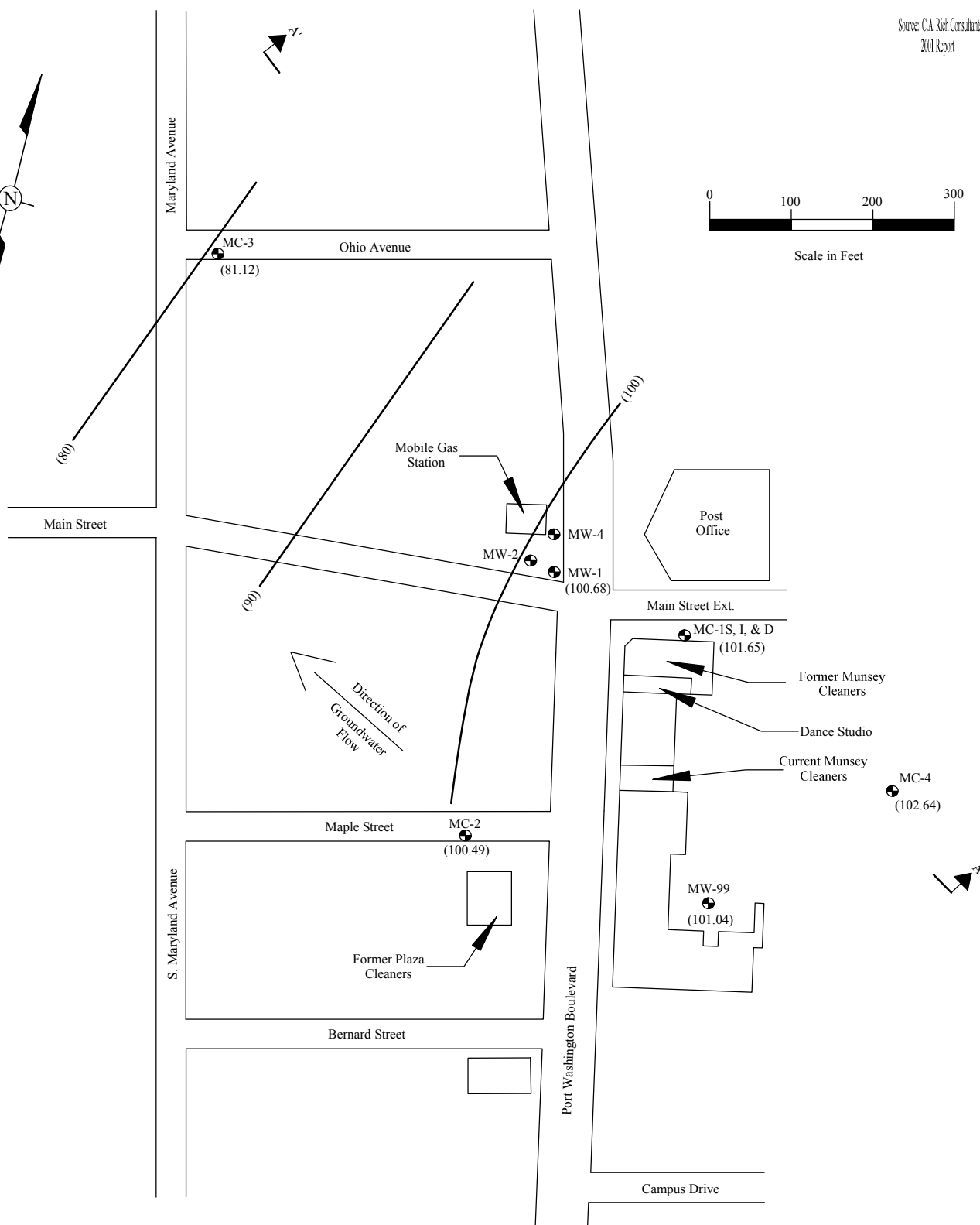
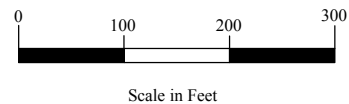
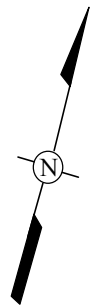


| | | |
|---|--|--|
|  | <p>Laurel Environmental Associates, Ltd.</p> | <p>Figure 1.0</p> |
| | <p>52 Elm Street Huntington, NY 11743 631-673-0612</p> | <p>Site Location</p> |
| | <p>Source: CA Rich Consultants, Inc. 1996 Report</p> | <p>Former Munsey Cleaners 1029 Port Washington Blvd. Port Washington, New York</p> |
| | <p>Scale: 1:36,900 1-3/4" = 1 Mile</p> | |



| | | |
|--|---|---|
|  | Laurel Environmental Associates, Ltd. | Figure 2.0 |
| | 52 Elm Street Huntington, NY 11743 631-673-0612 | Site Location & Surrounding Parcels |
| | Drawn By: ZHB 12/2/03 | Scale: As Shown |
| | | Former Munsey Cleaners Port Washington, New York |





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52 Elm Street
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631-673-0612

Drawn By: ZHB 12/5/03

Figure 3.0

Water Table Elevation Map
November 2000

Scale: As Shown

Former Munsey Cleaners
Port Washington, New York

Legend



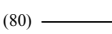

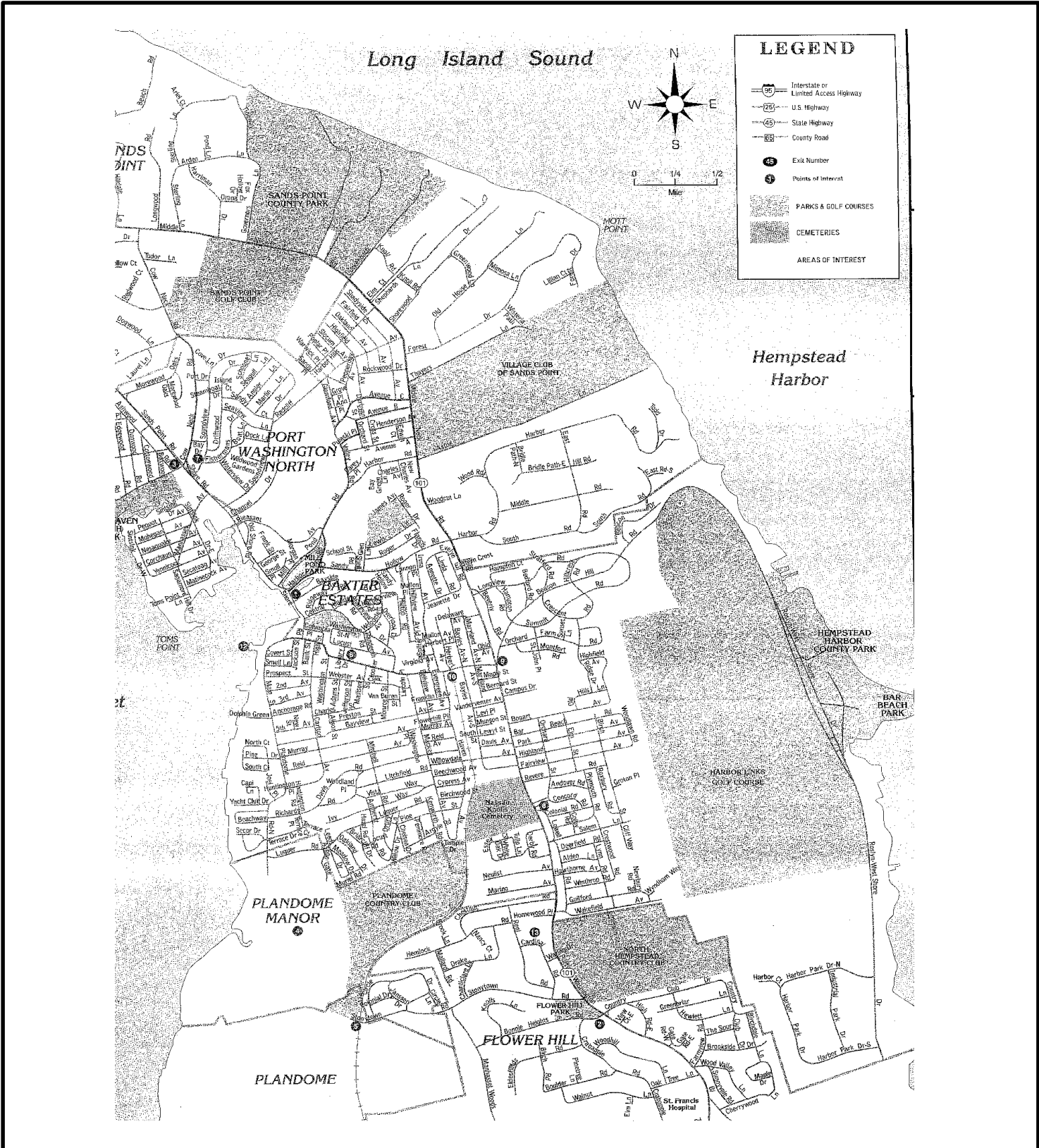
-  Monitoring Well Locations
-  Groundwater Elevation In Feet Above Mean Sea Level
-  Groundwater Elevation Contour In Feet Above Mean Sea Level
-  Trace of Geologic Cross-Section



Figure 4.0
Aerial Photograph

Former Munsey Cleaners
Port Washington, New York



Laurel Environmental Associates, Ltd.

Figure 4.1



52 Elm Street
Huntington, NY 11743
631-673-0612

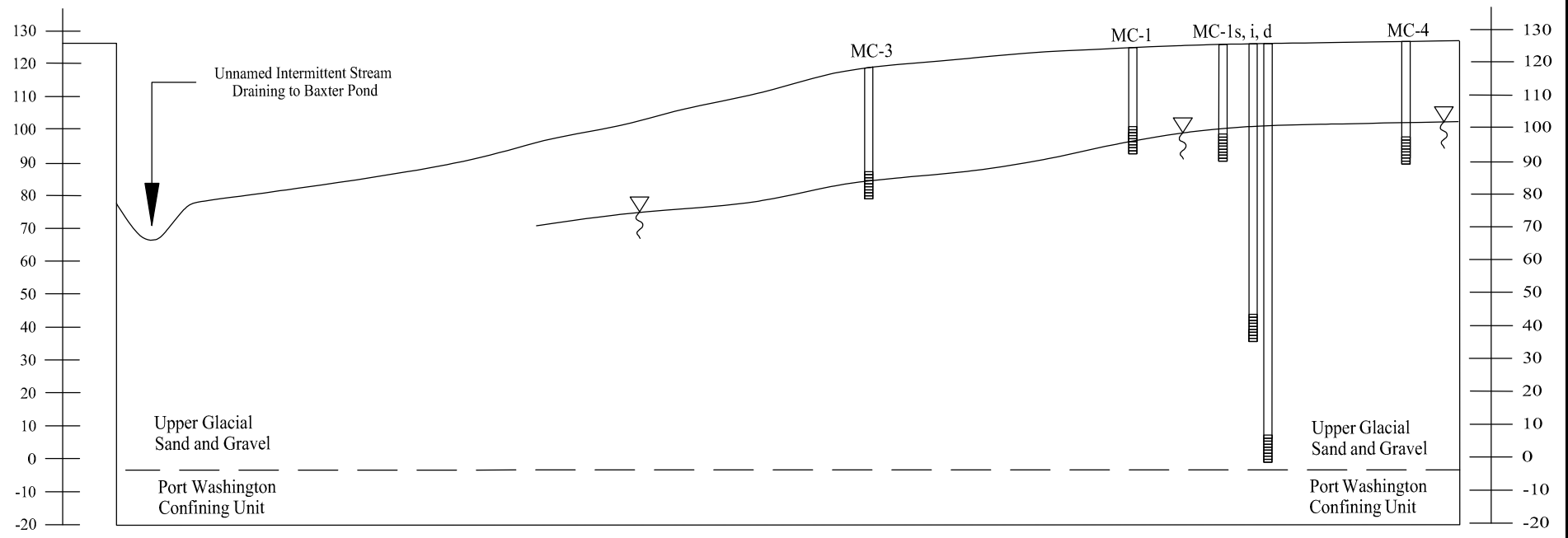
Down-Gradient
Drinking Water Supply Well
Location Map

Scale: As Shown

Former Munsey Cleaners
1029 Port Washington Blvd.
Port Washington, New York

A'
Northwest

A
Southeast



Horizontal Scale

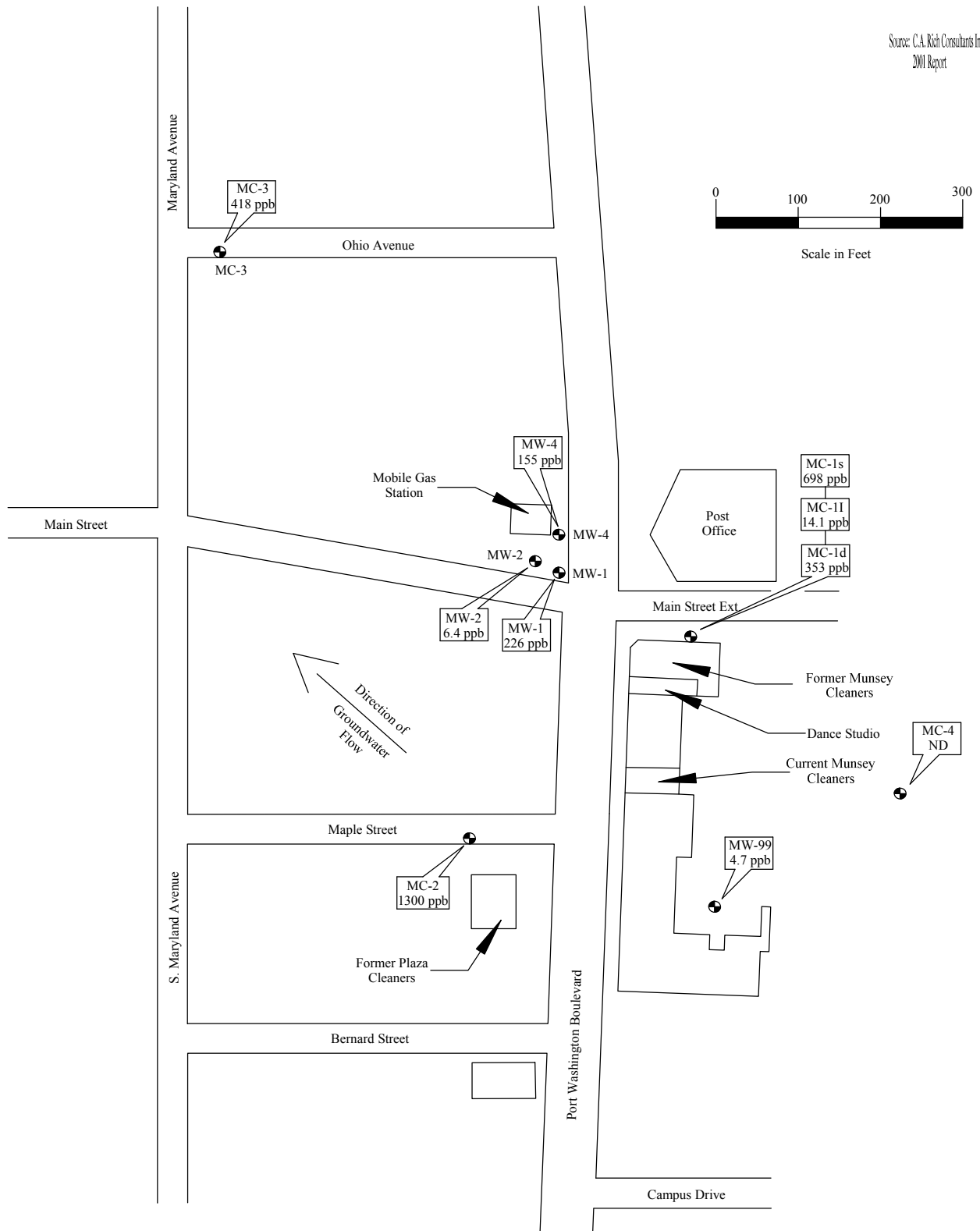
Source: C.A. Rich Consultants Inc.
2001 Report

Legend

- — — — — Geologic Contact, Dashed Where Inferred
- ▽ Water Table Surface



| | |
|---|---|
| Laurel Environmental Associates, Ltd. | Figure 5.0 |
| 52 Elm Street Huntington, NY 11743 631-673-0612 | Geologic Cross-Section from Southeast to Northwest |
| Drawn by: ZHB 12/8/03 Scale: As Shown | Former Munsey Cleaners 1029 Port Washington Blvd. Port Washington, New York |



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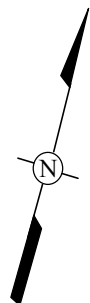
Drawn By: ZHB 12/5/03

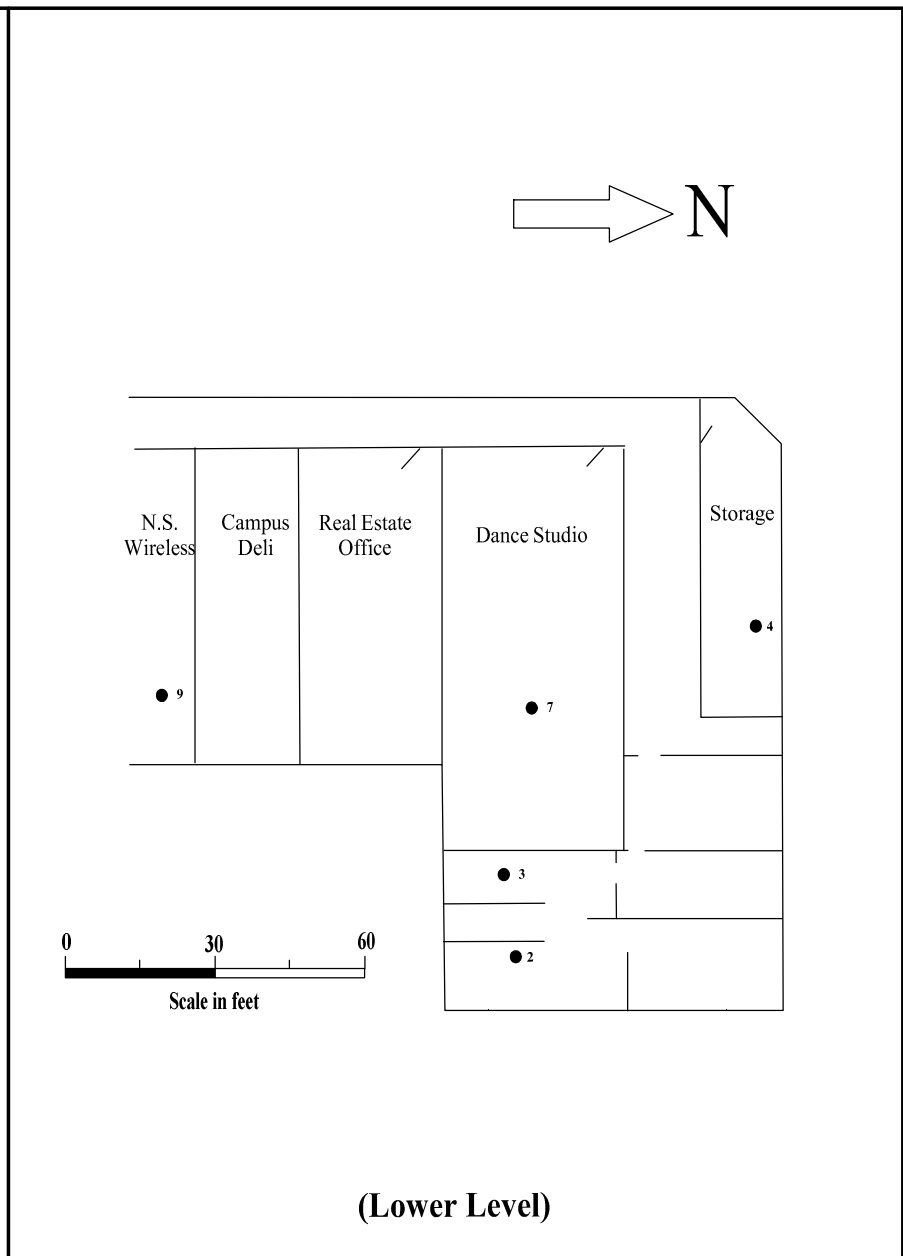
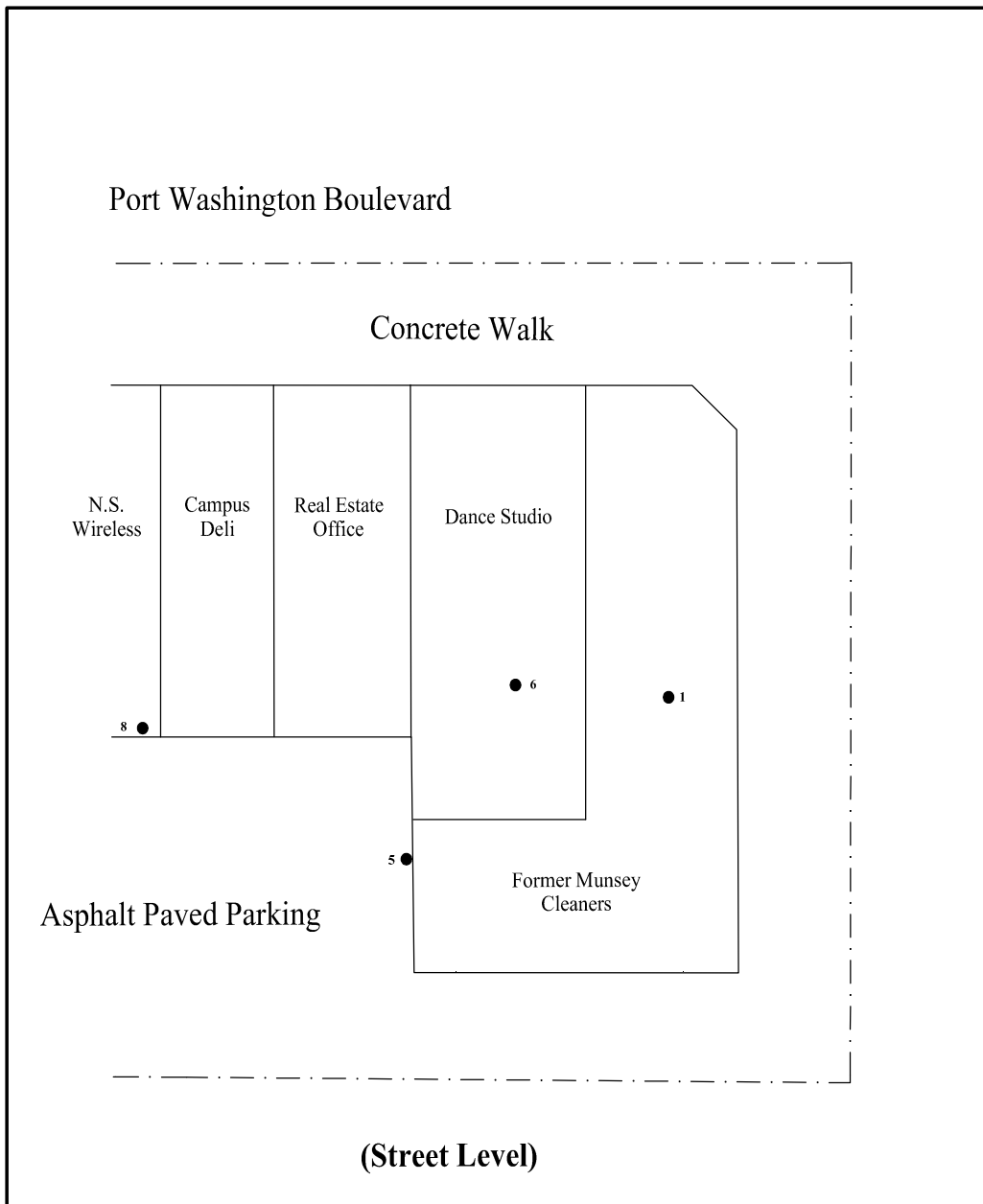
Figure 6.0


Perchloroethene Measured
in Groundwater, November 2000

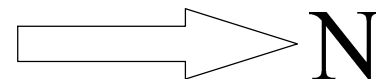
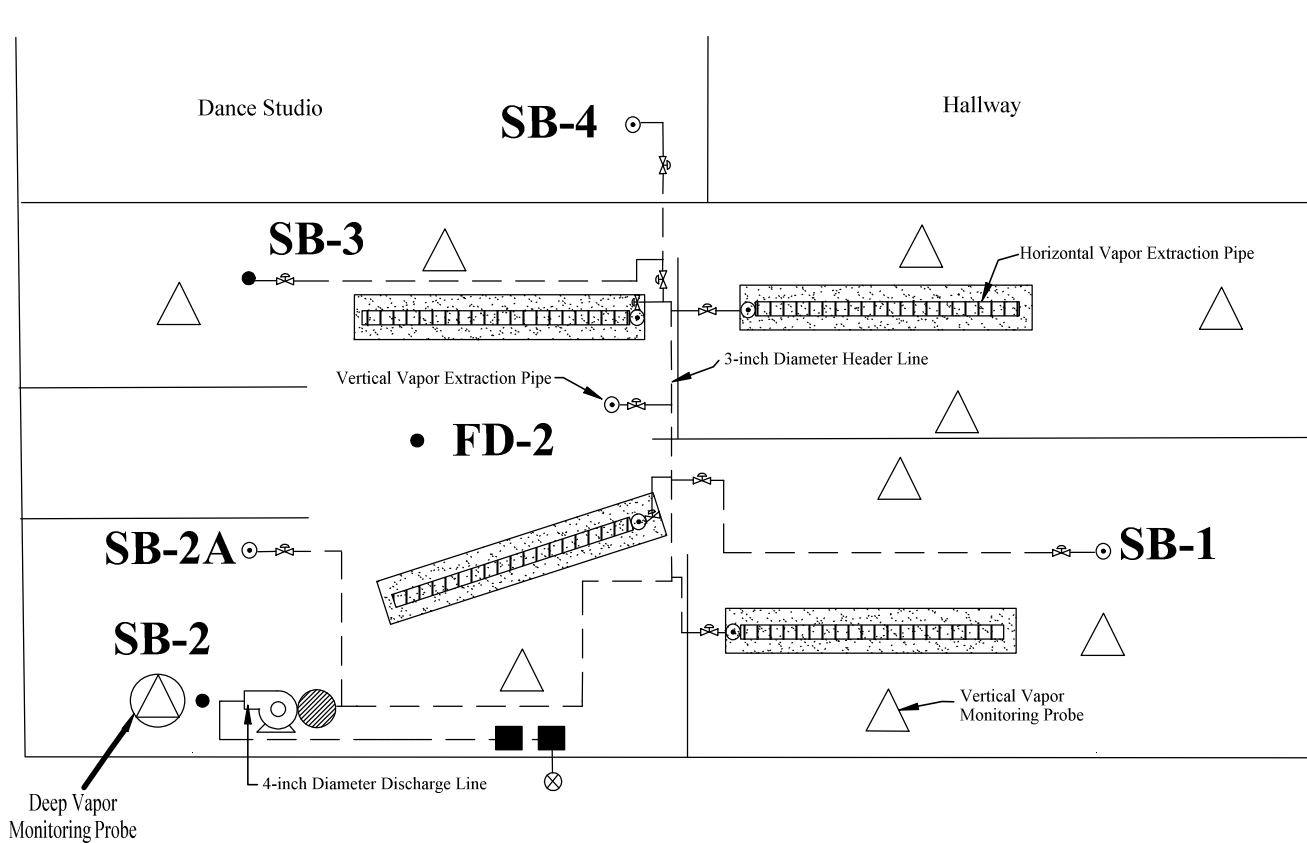
Scale: As Shown

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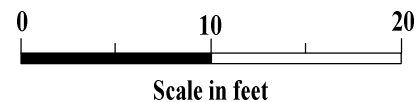




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|---|---|--|--|--|
|  | Laurel Environmental Associates, Ltd. | Legend | | Figure 7.0 |
| | 52 Elm Street Huntington, NY 11743 631-673-0612 | 1 = 1st Floor Open Room 2 = Basement South East 3 = Basement South West 4 = Basement Dry Store Room 5 = Outdoors | 6 = Dance Studio 7 = Dance Studio Basement 8 = N.S. Wireless 9 = N.S. Wireless Basement | Air Quality Sampling Locations |
| | Drawn by: ZHB 12/15/03 Scale: As Shown | | | Former Munsey Cleaners 1029 Port Washington Blvd. Port Washington, New York |



| Legend | |
|--------|--------------------------------|
| SB | = Soil Boring |
| FD | = Floor Drain |
| | = Regulator Valve |
| | = Carbon Canister |
| | = Blower |
| | = Air/Water Separator |
| | = Vapor Extraction Vent |
| | = Air Discharge Stack |
| | = Vadose Zone Monitoring Point |



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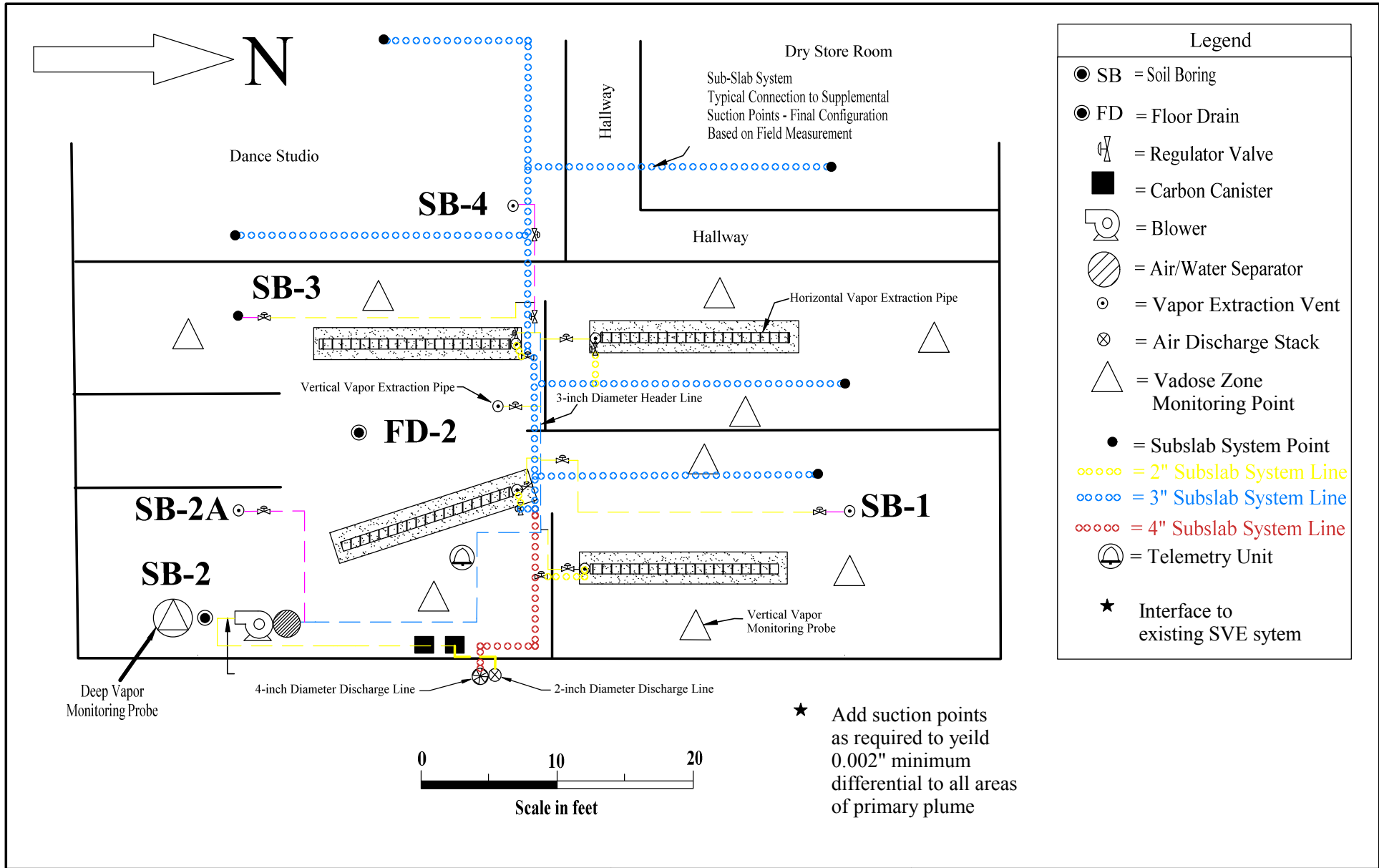
Drawn by ZHB 6/3/03
 Revised by ZHB 10/10/03


Scale: 1" = 10'

Figure 8.0

Vapor Extraction System
 as Built Details

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| | | |
|---|---|--|
|  <p>Laurel Environmental Associates, Ltd. 52 Elm Street Huntington, NY 11743 631-673-0612</p> | <p>Drawn by ZHB 6/3/03 Revised by SAY 10/25/04 Revised by BCM 1/12/06</p> | Figure 9.0 |
| | | <p>Sub Slab Depressurization System as Built Details</p> |
| | <p>Scale: 1" = 10'</p> | <p>Former Munsey Cleaners 1029 Port Washington Blvd. Port Washington, New York</p> |



**Photo 1 Sub-slab depressurization System Fan and Exhaust (3" and 4" PVC lines)
Soil Vapor Extraction System Exhaust (2" PVC line).**



Photo 2, Manometer for sub-slab depressurization system in basement storeroom



Photo 3, Soil vapor extraction system blower and gauge

**Figure 10.0
System Photographs**

**Former Munsey Cleaners
Port Washington, New York**