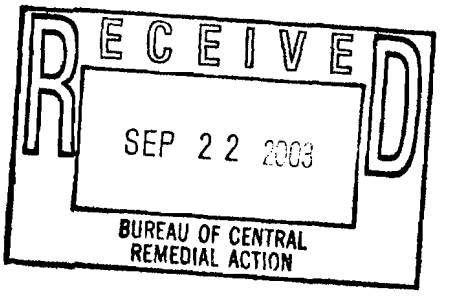
Kroll
The Risk Consulting Company

31 Milk Street
Suite 510
Boston, MA 02109
Phone: (617) 350-7878
Fax: (617) 350-7901
www.krollworldwide.com



September 18, 2003

Mr. Ralph Keating
NYSDEC
Division of Environmental Remediation
Bureau of Central Remediation Action
625 Broadway
Albany, NY 12233-7016

RE: Interim Remedial Measure Summary Report
Dalewood I Shopping Plaza
357 North Central Avenue, Hartsdale, NY
VCP Site V00457-3

Dear Mr. Keating:

Kroll is pleased to provide the enclosed IRM Summary Report for the removal of impacted soil, and for the installation of a soil vapor extraction system and the piping of an *in situ* groundwater treatment system beneath the floor of a former dry cleaner.

The enclosed report provides details of the assessment and ultimate removal of impacted soils from within the building, and the development of the treatment systems that will assist with further remediation of the site and protection of the internal building environment.

At this time, Kroll is awaiting for Heritage's contractor to re-install and seal the concrete flooring. Once the sealant has cured, Kroll will conduct in-door air testing to confirm that volatile organic constituents from the subsurface soils are no longer migrating into the building.

Should you have any questions regarding the enclosed report, please feel free to contact me at (978) 443-1833.

Very truly yours,
KROLL INC.

Neal M. Drawas, LSP
Managing Director

Cc: NYSDOH, Westchester County DOH

Kroll
The Risk Consulting Company

31 Milk Street
Suite 530
Boston, MA 02109
Phone: (617) 350-7878
Fax: (617) 350-7901
www.krollworldwide.com

INDOOR AREA INVESTIGATION AND INTERIM REMEDIAL MEASURE SUMMARY REPORT

Dalewood I Shopping Plaza
357 North Central Avenue
Hartsdale, NY

VCP Site V00457-3

September 2003

Prepared for:

Heritage SPE, LLC
535 Boylston Street
Boston, MA 02116

Prepared by:

Kroll Inc.
900 Third Avenue
New York, NY 10022

TABLE OF CONTENTS

1.0 Introduction

Heritage SPE, LLC (Heritage) and the New York State Department of Environmental Conservation (NYSDEC) executed a Voluntary Cleanup Program (VCP) agreement for the subject Site. The VCP application was submitted based on information obtained in previous investigations completed at the Site. A NYSDEC approved Investigation Work Plan was initiated in February 2003 and from this effort Kroll identified the presence of perchloroethylene (PCE) impacted soils beneath the floor of the former drycleaning facility.

The Investigation Work Plan included sampling of soil and groundwater from throughout the Site and indoor air from the main Site building. Although soil and groundwater have been collected from throughout the Site, the subject of this report is limited to the indoor area of the former drycleaning facility. A separate report will be provided that includes soil and groundwater investigation details for the remainder of the Site.

An Interim Remedial Measure (IRM) Work Plan was prepared and implemented in May and June 2003. The IRM scope consisted of removal and off-site disposal of approximately 80 cubic yards of soil from below the building floor, and installation of a soil vapor extraction system and groundwater treatment injection network beneath the building floor.

A summary of the results of the indoor portion of the investigation and the outcome of the Interim Remedial Measure is provided in the following sections of this report.

2.0 Site Background and Description

The subject Site consists of a retail shopping center located on the west side of North Central Avenue (Route 100) in the Village of Hartsdale, Greenburgh Township, Westchester County, NY. The Site property consists of approximately 7 acres of land and is improved with two structures consisting of 67,500 square feet and 1,500 square feet. The Site area was reportedly occupied by residential structures prior to 1966. The Dalewood I Site building was constructed circa 1966. The surrounding properties are heavily developed with a mixed us of commercial and residential buildings.

The main Site building is occupied by the following businesses, based on mailing address:

355 N. Central Avenue	Coconuts Music
357 N. Central Avenue	Vacant (Former Dry Cleaner and Former Huntington Learning Center)
359 N. Central Avenue	Spectrum (Card and Novelty Store)
361 N. Central Avenue	Friendly's Restaurant
365 N. Central Avenue	Sally Beauty Supply (Retail Store)
371 N. Central Avenue	Path Mark (Grocery Store)

357 N. Central Avenue was previously occupied by a dry cleaning facility from 1966 until 1997, and is the project area of concern. Huntington Learning Center vacated this unit in March 2003 and it has remained vacant since that time.

A separate building is located in the southeast area of the property with an address of 353 N. Central Avenue and is occupied by Proper Service Center (a vehicle service center and retail gasoline (ExxonMobil) sales facility).

The shopping center construction generally consists of slab on grade with standard subsurface footing walls located below the outside structural walls and certain internal structural walls. Internal concrete block structural walls are known to exist between Units 355 and 357 and Units 365 and 371. Basements are not present in any areas of the Site buildings. Individual subsurface utilities are generally limited to sewer and water connections, which are predominantly located in the rear section (west) of each unit. According to town records, the property has been connected to municipal water and sewer systems since the Site was developed in 1966.

2.1 Site Hydrogeology

The ground surface topography at the Site is generally level and according to the USGS Topographic Map of this area the Site is located at an elevation of approximately 205 feet above mean sea level. A large parking area is located in the front of the shopping center, and a driveway and service entrance is located in the rear of the center. A steep embankment is located immediately behind (west) the Plaza which rises approximately 110 feet in less than 500 linear feet. The closest surface water body to the Site is the Bronx River that is located ½ mile to the east and 3/4 mile to the northeast.

Soil encountered in the borings generally consists of a medium size brown sand. Groundwater is typically present throughout the Site between 3.5 and 5 feet below grade. Based on water table elevation data, groundwater within the Site area has been determined to flow toward the east/northeast. A drainage culvert is present in the front (eastern) parking area of the Site that runs in a north-south orientation. The estimated size of the drainage culvert, based on utility locating data, is four feet (4') in diameter. The culvert extends into the groundwater table and appears to act as a divide in this area of the Site.

2.2 Previous Investigations

Phase I Environmental Site Assessments have been completed for the subject property by GZA GeoEnvironmental, Inc. in February 1997 and EMG in September 2000. The GZA and EMG Phase I identified a former building tenant that completed dry cleaning on-site. The former dry cleaning facility was specifically located at 357 North Central Avenue, which was most recently occupied by the Huntington Learning Center.

An Initial Sub-Surface Assessment was completed by Kroll, Inc. (KROLL) in March 2000. The results of this assessment identified tetrachloroethylene, trichloroethylene, vinyl chloride, trans and cis 1,2-dichloroethylene, and benzene in groundwater samples.

The NYSDEC and Westchester County Department of Health (WCDOH) were notified of these results in the form of a written report of the assessment findings dated July 25, 2000.

A subsequent Phase II Sub-Surface Assessment of the Site was completed by KROLL during the period from August to November 2000. A Comprehensive Site Assessment and Remedial Investigation was completed by KROLL during the period from March to June 2001 and was provided to the NYSDEC and NYSDOH in June 2001.

An Investigation Work Plan was submitted to the NYSDEC in October 2002 for additional subsurface investigation of soil and groundwater as well as indoor air. The Investigation Work Plan was approved by the NYSDEC in January 2003 and work was initiated in February 2003. Results of the indoor air portion of the investigation are provided in this summary report. Results of the outdoor area soil and groundwater sampling will be provided in a separate report.

3.0 Indoor Air Sampling Method and Results

The Investigation Work Plan included an Indoor Air Sampling and Analysis Plan as Appendix D. The plan was prepared following the NYSDOH Indoor Air Sampling & Analysis Guidance dated August 8, 2001. The NYSDOH Guidance includes the following task breakdown:

1. Pre-sampling inspection and preparation of indoor sample collection areas
2. Product Inventories
3. Collection of Samples
    - 3a. Quality Assurance/Quality Control
    - 3b. Sampling Information
    - 3c. Sample Analysis

A presampling review was completed prior to development of the indoor air sampling plan. Therefore, the sampling plan included a description of the basic construction and layout of each unit. Additional unit details were obtained, as needed, at the time of sampling.

Indoor air samples were collected utilizing Summa canisters and following the procedures described in the Work Plan. Samples of indoor air were initially collected from within units 355, 357, 359, and 361 on February 18, 2003. A summary of the indoor air laboratory results is provided in Table 1. The Summa canister sampling method followed strict labeling and chain of custody critieria. Each canister and flow regulator are inscribed by the laboratory with a unique identification. The canister and regulator identifications were recorded at the time of sample collection. Additional data collected at the time of sample collection included start and end times, and initial and final canister vacuum readings. A summary of this data is provided with the laboratory results in the

Appendix of this report. A summary of the sample collection method is also provided with the laboratory results.

Indoor air samples collected on February 18, 2003 within unit number 357 (former dry cleaner) ranged from 0.011 ppmv to 0.473 ppmv of tetrachloroethylene (PCE). These results were compared to the New York State Department of Health (NYSDOH) and Westchester County Department of Health guideline for PCE of 0.015 ppmv. The NYSDOH Guideline is based on a long term (greater than 14 day), residential type (nearly continuous) of exposure. The Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) for an 8 hour workday is 100 ppmv. The Agency for Toxic Substance and Disease Registry provides a chronic (long term) minimum risk level (MRL) of 0.04 ppmv.

As the results for most of the samples collected from within Unit 357 were over the NYSDOH guideline, an initial response was initiated and consisted of repair of the tenant space heating system and proper adjustment of the fresh air intake. Subsequently, Kroll field staff collected additional air samples from units 355, 357, and 359 on March 5, 2003 utilizing Summa canisters. The results of laboratory analysis for these samples ranged from 0.0026 to 0.0778 ppmv of PCE (see Table 1). Three of the samples collected from within unit 357 remained above the NYSDOH guideline.

A handheld photoionization detector (PID) with a lower sensitivity range of 1 part per billion by volume (ppbv) was utilized at the Site (herein referred to as the "ppb PID"). Each room and floor area was screened utilizing the ppb PID. The individual room readings collected on March 8, 2003 are summarized in Table 2, as well as future monitoring events. On March 8, 2003 the room readings ranged from 20 to 220 ppbv (0.020 to 0.220 ppmv). An area of the main classroom along the wall adjacent to Coconuts was further identified with elevated readings along the joint of the floor and wall. This area exhibited readings up to 250 ppbv.

4.0 Sub-Slab Depressurization System Installation

A Sub-slab Depressurization System (SSDS) / Soil Vapor Extraction System (SVE) was installed and initiated operation on March 9, 2003 to mitigate volatile organic vapors migrating into the tenant space. The SSDS system consisted of vertical, two inch diameter screened PVC extraction points installed through the floor of the building. A total of seven points were initially installed as shown in Figure 3 and each consisted of twelve to eighteen inches of screened PVC. The screen sections were located just below the concrete slab and the concrete opening was sealed with a layer of bentonite and the surface was sealed with cement grout. A solid two inch diameter PVC pipe was connected to the top of the screen sections and continued above the ceiling. A two inch diameter ball valve was installed on each "leg" and a four inch diameter solid PVC trunkline was installed in the ceiling area to connect each of the legs to the blower unit.

The blower unit is located in a locked metal container in the rear outdoor area of the building, behind units 357 and 359. The blower includes a 2 horsepower motor with

ancillary equipment consisting of a knock out drum, particulate filter, valves, gauges, electric controls, and vapor phase carbon for emissions treatment. A Permit Application for the air emission source has been completed with the WCDOH.

System monitoring, soil sampling, soil vapor monitoring, and additional indoor air sampling were completed during a period of three to four weeks following start up of the SSDS. A summary of this monitoring is provided in the following sections.

4.1 Soil Vapor Summary

On March 13, 2003 several soil gas survey points were installed through the floor and an additional SSDS extraction point was installed (Leg #8). A summary of the various soil gas readings from below the concrete floor and SVE system readings are provided on Table 3. Soil gas and SVE system readings were collected utilizing a handheld photoionization detector (PID) with a lower sensitivity range of 1 part per million (ppm).

The overall SVE system reading collected from March 10 through May 16 ranged from 1,020 to 45.5 ppmv. SVE Leg #2 exhibited the highest readings from 2,300 ppmv on March 11 down to 56.4 ppmv on April 16, 2003. The remaining SVE legs exhibited readings ranging from 471 ppmv on March 11 down to 0.7 ppmv on April 16.

The soil gas survey points installed on March 13, 2003 were utilized to monitor vacuum readings and soil gas vapor readings. The vapor points were installed by drilling a ¾ inch diameter hole through the floor and several inches into the soil. A section of ¼ inch diameter tubing was inserted through the opening. A small amount of sand was placed around the bottom of the tubing and a bentonite seal was placed between the tubing and the concrete floor.

Soil gas readings were collected by applying the PID directly to the tubing and obtaining a measurement. Initial readings were collected with the SVE system not operating. Additional readings were collected during system operation in an effort to determine the radius of influence of the existing legs. Based on the data collected on March 13 in the area of VP-6 and VP-7, the additional SVE Leg #8 was added to the system.

The vapor point readings on March 13th ranged from 11 to 200 ppmv. The vapor point readings on April 16 ranged from 0 to 0.2 ppmv.

Vacuum readings collected from the vapor points on March 13, 2003 ranged from ND to 0.2 inches of water. Vacuum readings collected on April 16 ranged from ND to 1.2 inches of water. The vacuum readings varied based on floor sealing activities completed at the Site that are further described in Section 3.3 of this report. On March 13, 2003 the vacuum reading for VP-7 was not detectable, however, following modification of the floor area around SVE-7, the soil vapor reading at VP-7 decreased from 200 ppmv to 32.5 ppmv.

Samples of the influent air were collected on March 25 and May 16, 2003 for laboratory analysis. The results of analysis for PCE were 50.1 and 5.9 ppmv, respectively.

The overall SVE system data, leg data, soil vapor readings, and vacuum readings were utilized in order to optimize and modify the SVE system operation.

4.2 Indoor Air Sampling

Additional indoor air samples were collected for laboratory analysis from within unit 357 on March 11, 17, and 25, 2003. The samples were reported with PCE concentrations ranging from 0.0089 to 0.042 ppmv. Four out of the five indoor air samples collected during this period were greater than the NYSDOH guideline of 0.015 ppmv.

Individual room readings were collected utilizing the ppb PID during the period from March 10, 2003 through April 3, 2003. A summary of this data is provided in Table 2. The readings collected on March 10, 2003 ranged from 22 to 101 ppbv (0.022 to 0.101 ppmv). The readings collected on April 3, 2002 ranged from 0 to 35 ppbv (0 to 0.035 ppmv). The area of the main room along the floor and wall adjacent to Coconuts continued to exhibit elevated readings at the seams of the construction materials.

4.3 Building Construction and Materials

On March 13, 2003 a small hole (3 inches by 3 inches) was created in the sheetrock wall at the floor level in the area of the elevated readings to examine the interior wall/floor seam. Expansion joint material was observed between the concrete floor and concrete block wall. A sample of the expansion joint material was collected through the hole and appeared to be a typical heavy cardboard and/or fiber like material. The sample was sent to the laboratory for analysis. PCE was reported in the sample at a concentration of 29,500 ug/kg. A summary of the laboratory results is provided in Table 5.

Samples of concrete were collected from the floor during the installation of vapor points VP-1 and VP-5 on March 13, 2003. The VP-1 and VP-5 concrete dust samples were laboratory analyzed and reported to contain 713 ug/kg and 172 ug/kg, respectively, of PCE suggesting that a historical release of PCE occurred within the interior of the former dry cleaner.

The lower one foot of sheetrock wall board was removed on April 3, 2003 in order to more effectively inspect the floor / wall joint area and to apply a caulk sealant. The wall board along the Coconuts side of the unit was removed and the joint between the concrete floor and the concrete block wall was inspected. Short sections of the joint material were noted to be missing or deteriorated. The SVE system remained operational during this time and air flow was audible in many locations. The caulk sealant was applied along the joint with the Coconuts wall. Subsequently, the SVE system vacuum readings increased 10 – 20% and the SVE overall influent reading increased as a result of sealing the floor.

On April 8, 2003 an epoxy sealant was planned to be applied over the caulk and a portion of the concrete floor. The carpet was removed from along the wall in the main classroom. Cracks and patch areas of the concrete were revealed after the carpet was removed. A former floor drain and drainage piping was identified in the concrete floor in the area of SVE Leg #2. The concrete floor was also observed to have variations in elevation of one to two inches, with several low points present at the joint with the Coconuts wall. Following discovery of the former floor drain and cracking in the floor, the epoxy sealant was not applied at this time.

4.4 Soil Sampling Summary

Soil samples were collected from below the building floor during the SSDS installation process in the SSDS extraction point locations (labeled as SVE-1, 2, 3, 4, 5, and 6). Two soil borings (IB-50 and IB-51) were completed through the building floor on October 11, 2000.

The results of SVE system testing and soil vapor testing indicated that a significant source of PCE remained below the building floor. Following the discovery of a former floor drain, locations of low points in the concrete floor, and soil gas hot spots, the installation of additional soil borings was completed. On April 10, 2003 three additional soil borings (IB-52, IB-53, IB-54) were installed through the floor in an effort to further quantify the extent and degree of impacted soil.

A total of twelve soil samples were collected from below the building floor and laboratory analyzed. The results of this analysis ranged from 19 to 51,700 ug/kg (ppb) and are summarized in Table 5. The results are compared to the NYSDEC Cleanup Criteria (TAGM 4046, Appendix A, Table 1) for PCE of 1,400 ug/kg. Ten of the samples were identified with concentrations exceeding the criteria and five of the samples exceeded ten times the criteria (greater than 14,000 ug/kg).

5.0 Interim Remedial Measure (Indoor Area) Completion

Based on the results of all-indoor area sampling, the need for additional reduction of the contaminant mass was determined to be the necessary remedial approach. Therefore, an Interim Remedial Measure (IRM) to remedy the condition whereby a volume of contaminated soil (approximately 80 cubic yards) located beneath the former drycleaning facility floor (unit 357) has resulted in the presence of measurable concentrations of perchloroethylene in the building interior air space.

An Interim Remedial Measure Work Plan was completed and submitted to the NYSDEC, NYSDOH, and the WCDOH on May 14, 2003. The plan provided a scope of work, health and safety procedures, and a sampling and analysis plan.

A general contractor removed interior walls and created an opening in the rear of the building that was wide enough for excavating equipment to enter the building. The IRM was initiated on Monday May 19, 2003. The physical Site work was completed during the nighttime hours in an effort to limit Site disruptions and potential exposure. Six dumpsters, each with a 20 cubic yard capacity, were staged at the Site in the driveway behind Coconuts. The dumpsters were equipped with poly sheeting liners and tarp systems held down with bungee type cords. The liners and tarps were installed upon delivery in order to prohibit accumulation of rainwater and/or debris. A summary of the IRM completion and findings is provided as follows:

5.1 Excavation Area

The concrete floor within unit 357 was removed throughout the area shown on Figure 5. The concrete was broken and removed from the building utilizing a skid steer ram and loader. The concrete was removed from the Site as construction derived materials and delivered to a standard debris recycling facility where it was crushed and re-used in construction materials. The floor drain located in the area of SVE-2 was fully exposed during the concrete removal process. An additional sewer drain pipe was identified in the area of SVE-3, towards the bathroom location. Poly sheeting was placed over the exposed soil during the daytime hours and the SVE system remained operational.

Soil excavation was initiated in the evening of May 20, 2003. Skid steer loaders with a five foot wide bucket were utilized to excavate the soil within the building, haul it outside, and place it directly into lined roll off dumpsters. Figure 5 illustrates a grid system that was utilized to define locations within the building and excavation. The orientation of north (N), south (S), east (E), and west (W) was provided for the sidewalls. Gridlines that are shown on Figure 5 were painted on the concrete floor at the edge of the excavation every ten feet. The building wall that is shared with Coconuts represents the south sidewall of the excavation. The zero (0) line is located at the east end wall and the west end wall is located approximately sixty feet (60) from the east end and is coincident with the rear wall of the building. Field notes, sample locations, and other excavation details utilize this grid and orientation system. Field screening of soil was completed using a ppm PID throughout the excavation process. The soil type encountered throughout the excavation consisted of a brown, medium to fine sand with some stones and gravel.

Excavation of shallow soil began in the area of the grid between 10 and 30 feet from the east end. Field screening readings obtained from undisturbed soil from one to three feet below grade ranged from 9.5 to 35 ppm. The bucket loaders continued removing soil by driving into the excavation area from the rear, following the south sidewall, and digging into the soil with the bucket. The width of the excavation was completed eight feet out from the south side wall.

The excavation continued to the east end wall and additional depth was achieved in the 10 to 30 foot area. The top of the building footing for the concrete block interior wall with Coconuts was identified at 39 inches (3 feet 3 inches) below grade. A standard footing was present running the length of the wall, extending 3 to 4 inches out from the wall, and

approximately 15 to 18 inches thick (top to bottom). Two spread type footings were encountered that extended 20 inches out from the wall, were each approximately four feet long, and also 15 to 18 inches thick. Based on grid system locations the spread footings extend from Grid #10 to Grid #14, and then from Grid #27 to Grid#31 (see Figure 5). The bottom of each footing was approximately 5 feet below grade.

Field screening readings were collected from below the main wall footing between Grid #5 and #25. The field readings ranged from 85 to 239 ppm. A reading of 1,341 ppm was obtained from soil located in the center of the excavation at a depth of five feet at grid #30.

Excavation was discontinued for the day. The open excavation and exposed indoor soil were covered with poly sheeting. Although a few SVE points were no longer below the floor surface, the system remained operational in an effort to minimize potential vapor migration. Each of the contaminated soil dumpsters were covered with the tarp and bungee cord systems. Approximately four dumpsters were filled during this period of excavation.

Clean backfill material (bank run gravel) was delivered to the Site during the daytime hours and staged in the rear parking area behind unit 357.

Excavation resumed on the evening of May 21, 2003. The west end of the excavation was completed to a depth of five feet to Grid #50. Based on field screening readings and physical Site limitations, additional deep excavation was not completed in the west end. The Grid #50 to Grid #60 area of the excavation was later completed to approximately two feet below grade.

The excavation bottom was field screened and exhibited elevated readings. Additional excavation of the bottom was completed that extended the full grid area down to 5' 9" below grade. Further excavation was completed between Grids #15 to #35. Excavation was completed in this area to a depth of 6' 2" below grade. As this depth was approximately one foot below the bottom of the wall footings, the area adjacent to the footings was sloped down into the excavation. The soil at this depth was moist to saturated, however groundwater was not entering the excavation. A six inch diameter hole was completed by hand in the middle of the excavation area and groundwater was encountered at 6' 5" below grade.

The excavation was considered complete at this depth and end point soil samples were collected for field screening and laboratory analysis. A summary of the end point data is provided in Table 6.

Based on the field screening readings, the bottom of the excavation in the area between Grids #15 and #35 contained residual concentrations that could not be further excavated. A plan to modify the SVE system, as described in the IRM Plan, was further developed based on the field conditions. The installation of additional piping for a potential groundwater treatment injection system was also planned to be installed based on the

field conditions. These systems are further described in subsequent sections of this report.

A total of five roll off dumpsters were filled during the excavation process. Each of the contaminated soil dumpsters was covered with the tarp and bungee cord systems. The transportation and off site disposal of this soil is further described in Section 5.5 of this report.

The excavation was backfilled and compacted with clean soil following installation of the remediation piping. The backfill process is further described in Section 5.4 of this report.

5.2 Groundwater Treatment System Installation

A plan to install piping for a groundwater treatment injection system was developed based on the known presence of a contaminated groundwater plume extending under the building floor and the excavation area. Preliminary remedial alternative screening has identified that anaerobic bioremediation enhanced with a substrate releasing compound is a likely and feasible approach. A field design was completed to install piping that would allow future access to groundwater in the area of the grid between lines 15 and 35. Additionally, 250 pounds of SRC™ product was delivered to the site for application directly into the open excavation. SRC™ is a substrate release compound specifically designed for anaerobic bioremediation of halogenated compounds.

The design of groundwater treatment piping consisted of a two foot length of 4 inch diameter screened PVC installed vertically into the groundwater table utilizing handheld post hole digging equipment. The screen section was backfilled with a mix of silica sand and the SRC™ product. Vertical screen sections were installed approximately three to four feet out from the south (Coconuts) wall at Grids #15, #20, #25, #30, and #35. The vertical screen section installed at Grid #35 was one and a half feet long. Each of the screen sections were connected to a single four inch diameter solid PVC pipe that was extended to the rear of the building. Plan and profile views of the piping are illustrated in Figures 7 and 8, respectively.

The excavation area between Grids #15 and #35 was covered with a layer (one half to one inch thick) of SRC™ product prior to backfilling. A total of 190 pounds of the SRC™ product was applied to the excavation and screen section areas. The excavation and solid piping section was backfilled with clean sand and gravel obtained from off-site. Additional backfill details are provided in Section 5.4 of this report.

5.3 Soil Vapor Extraction System Modification

As described in the IRM work plan, modification of the SVE system was planned based on the identified field conditions. One horizontal section of screened 4 inch diameter PVC piping was planned to be installed from Grids #10 to #40. The line was installed approximately four feet out from the south (Coconuts) wall on top of clean backfill material at a depth of approximately five feet below grade. This depth appeared to be at

an elevation above the groundwater table and able to influence the residual contamination area. Figure 8 illustrates the depth and location of the screen sections.

Solid four inch diameter PVC piping was connected to the screen section and continued, subsurface, to the rear of the building. The solid piping was extended through the wall of the building and continued underground to the remediation system location. This extraction line is now identified as SVE-1.

A horizontal section of two inch diameter screened PVC was installed from Grid #5 to #45. This section was installed approximately four to five feet away from the south (Coconuts) wall and at an elevation of two feet below grade. This line was installed immediately above the upper vapor barrier (described in Section 5.4). Solid two inch diameter PVC piping was connected to the screen and extended underground to the rear of the building and over to the remediation system location. The purpose of this line is to provide a negative pressure below the concrete floor in the event that residual vapors migrate into the building area or identified in the future. This extraction line is identified as SVE-2.

An additional section of two inch diameter screened PVC was installed from Grids #48 to #58. This section was installed approximately two feet away from the south wall and at an elevation of one half foot below grade. This section of screen was connected with solid two inch PVC to the vertical riser for former extraction point SVE-4. This extraction line is identified as SVE-4.

Each of the original vertical extraction points SVE-1, SVE-2, and SVE-3 were removed as part of the excavation and modification process. The four inch diameter solid trunk line is remaining above the drop ceiling in the former location of SVE-1, 2, and 3. The vertical extraction points SVE-5, 6, 7, and 8 (as described in previous sections of this report) remained as originally constructed.

5.4 Excavation Backfill and Vapor Barrier Installation

Clean soil obtained from off site was utilized as backfill material. Backfilling of the excavation occurred in "lifts" in order to provide sufficient compaction and to allow for installation of remediation piping and vapor barriers. The first lift was completed to a depth of four feet below grade, approximately six inches above new SVE-1, where a vapor barrier was installed. The vapor barrier consisted of a continuous sheet of 6 mil polyethylene sheeting. The poly sheeting was extended vertically up each of the sidewalls. Fill material was placed above the poly sheeting and against the sidewalls. The pressure of the fill material against the poly sheeting on the sidewalls provided an effective barrier to vertical migration.

Two feet of fill material was placed to an elevation of two feet below grade. The poly sheeting that extended up the sidewalls was then folded over and fully covered the area. A shallow (three inches) layer of fill material was placed on this upper vapor barrier and the SVE-2 line was installed. The final layer of fill material was placed to within six inches of final grade.

5.5 Soil Disposal

The contaminated soil was redistributed from the five (5) dumpsters to six (6) dumpsters on May 28, 2003, due to the apparent weight of each dumpster and to comply with federal and state transportation requirements. Profile paperwork and data were previously provided to the disposal company and a temporary EPA ID number was assigned to the Site. The soil was transported off site on June 2, 2003 as a hazardous waste under EPA ID Number NYR000115741. The soil was transported to Jones Environmental Services (N.E.), Inc. facility in Lowell, Massachusetts for treatment and disposal. Copies of the hazardous waste manifests are provided attached to this report. A total of 111.4 tons of material was transported and disposed.

5.6 Community Air Monitoring Plan and Site Safety

The Community Air Monitoring Plan (CAMP) was completed as described in the IRM Work Plan and in accordance with the New York State Department of Health "Generic Community Air Monitoring Plan" (June 20, 2000). The CAMP readings are documented in the field logs compiled for the Site. The readings indicate that elevated particulate and VOC concentrations were present inside the rear door of the facility, however, immediately outside the VOC readings reduced to below detectable levels. Additionally, very few receptors were on site as the work was completed during nighttime hours.

The Site specific health and safety procedures described in the IRM Work Plan were followed and are further described:

- Appropriate PPE (gloves, respirators, hearing and eye protection, etc.) was utilized based on indoor air monitoring data and ongoing work.
- The front and rear doors remained open during work activities.
- A high volume fan was placed in the front door, blowing into the building, to introduce fresh air and remove any potential vapors or emissions through the rear door of the building.
- Work was completed during nighttime hours, 10 p.m. through 7 a.m., when the adjacent building units were not occupied.
- Open excavations were covered with plastic sheeting when excavation or backfilling was not in progress.
- The work zone air was monitored utilizing a handheld photoionization detector and multi gas detector (O2, LEL, CO, H2S).

5.7 Modified SVE System Operation

The SVE System has remained operational following completion of the system modifications. The overall SVE system reading collected from May 27 through August 20 ranged from 33.1 to 3.1 ppmv. SVE leg number 8 exhibited the highest readings on July 9 with a concentration of 16.4 ppmv. The horizontal SVE leg 1 had a reading of 12 ppmv

on July 9, 2003. A summary of the system data is provided in Table 7. Water can be heard within leg SVE-1 when a cover is opened, indicating that groundwater may be impacting the system operation. Based on the presence of water the system operation has been optimized by reducing the overall vacuum to a level whereby water would not enter the system. The system will continue to operate and will be monitored on a monthly basis.

An air emissions discharge application was completed with the NYSDEC and WCDOH in July 2003. The NYSDEC provided an Air Facility Registration Certificate effective August 18, 2003. The permit application with the WCDOH is pending at the time of this report.

6.0 Interim Remedial Measure Summary

The IRM was effective in reducing the volume of contaminated soil located below the building floor, thereby reducing contaminants that would continue to impact groundwater or volatilize into the building.

Table 1 - Indoor Air Laboratory Analysis Summary
Dalewood I Shopping Plaza
357 North Central Avenue, Hartsdale, NY
VPC Site V00457-3

Compound	units	COCONUTS		FRIENDLY'S	HALLMARK-MAIN		HALLMARK-STORAGE	OUTDOOR	TRIP		units	OSHA PEL	ATSDR MRL	NYSDOH Guideline
MAP ID		A		B	F		G	H						
Sample Date		2/18/2003	3/5/2003	2/18/2003	2/18/2003	3/5/2003	2/18/2003	2/18/2003	2/18/2003	3/5/2003				
Benzene	ppmv	ND	<0.0005	ND	ND	0.0006	0.0006	0.0007	ND	<0.0005	ppmv	0.1	0.004 Int	
	mg/m3	ND	<0.0016	ND	ND	0.002	0.002	0.0024	ND	<0.0016	mg/m3			
Chloroform	ppmv	ND	<0.0005	0.0007	ND	<0.0005	ND	ND	ND	<0.0005	ppmv	50	0.02 Chr	
	mg/m3	ND	<0.0024	0.0035	ND	<0.0024	ND	ND	ND	<0.0024	mg/m3			
cis-1,2-Dichloroethylene	ppmv	ND	<0.0005	ND	ND	<0.0005	ND	ND	ND	<0.0005	ppmv	200	NE	
	mg/m3	ND	<0.002	ND	ND	<0.002	ND	ND	ND	<0.002	mg/m3			
Ethylbenzene	ppmv	ND	<0.0005	ND	ND	0.0005	ND	ND	ND	<0.0005	ppmv	100	1.0 Int	
	mg/m3	ND	<0.0022	ND	ND	<0.0022	ND	ND	ND	<0.0022	mg/m3			
Methylene Chloride	ppmv	0.0006	<0.0005	0.0008	0.0005	<0.0005	0.0043	0.0072	0.0008	<0.0005	ppmv	25	0.3 Chr	
	mg/m3	0.0019	<0.0017	0.0029	0.0018	<0.0017	0.0148	0.025	0.003	<0.0017	mg/m3			
Tetrachloroethylene	ppmv	**0.0619**	**0.0148**	0.0119	0.0014	0.0026	**0.019**	0.0009	ND	<0.0005	ppmv	100	0.04 Chr	0.015
	mg/m3	**0.42**	**0.101**	0.0806	0.0092	0.0174	**0.129**	0.0062	ND	<0.0034	mg/m3			0.1
Toluene	ppmv	0.0008	<0.0005	0.0008	0.0007	0.0006	0.0055	0.0022	ND	<0.0005	ppmv	200	0.08 Chr	
	mg/m3	0.003	<0.0019	0.0029	0.0025	0.0024	0.0207	0.0084	ND	<0.0019	mg/m3			
Trichloroethylene	ppmv	0.0006	<0.0005	ND	ND	<0.0005	0.0038	ND	ND	<0.0005	ppmv	100	0.1 Int	
	mg/m3	0.0034	<0.0027	ND	ND	<0.0027	0.0204	ND	ND	<0.0027	mg/m3			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ppmv	ND	<0.0005	ND	ND	<0.0005	ND	0.0005	ND	<0.0005	ppmv	1000	NE	
	mg/m3	ND	<0.0038	ND	ND	<0.0038	ND	0.0041	ND	<0.0038	mg/m3			
m/p-Xylene	ppmv	ND	<0.0005	ND	ND	0.0045	ND	ND	ND	<0.0005	ppmv	100	0.1 Chr	
	mg/m3	ND	<0.0022	ND	ND	0.0195	ND	ND	ND	<0.0022	mg/m3			

Analysis completed for Halogenated Volatile Organic Compounds via EPA Mehtod TO-14 ug/m
Map ID refers to Locations provided on Figure 2
H- ID = Sample collected within **Huntington Learning Center**
ND = reported as less than (<) values between 0.001 to 0.012 mg/m3 or less than 0.0005 or 0.0012 ppmv
NE = Not Established
ppmv = parts per million, volume
mg/m3 = milligram per cubic meter
PCE 1 mg/m3 = 0.15 ppmv
TCE 1 mg/m3 = 0.186 ppm
MRL = Minimum Risk Level
Acute MRL = Exposure period of 1 to 14 days
ATSDR = Agency for Toxic Substance and Disease Registry
OSHA = Occupational Safety and Health Administration
Intermediate MRL = Exposure period of 14 to 364 days
Chronic MRL = Exposure period of 365 days and greater
OSHA PEL = Permissible Exposure Limit - 8 Hour Time Weighted Average, unless otherwise noted
OSHA PEL = ST = Short Term Exposure Limit, no TWA Established

Table 1 - Indoor Air Laboratory Analysis Summary
Dalewood I Shopping Plaza
357 North Central Avenue, Hartsdale, NY
VPC Site V00457-3

Compound	units	H-MINICLASS		H-OFFICE				units	OSHA PEL	ATSDR MRL	NYSDOH Guideline
MAP ID		D		E							
Sample Date		2/18/2003	3/5/2003	2/18/2003	3/5/2003	3/17/2003	3/25/2003				
Benzene	ppmv	0.0006	0.0011	ND	<0.0014	ND	ND	ppmv	0.1	0.004 Int	
	mg/m3	0.0019	0.0035	ND	<4.6	ND	ND	mg/m3			
Chloroform	ppmv	ND	<0.0005	ND	<0.0014	ND	ND	ppmv	50	0.02 Chr	
	mg/m3	ND	<0.0024	ND	<0.007	ND	ND	mg/m3			
cis-1,2-Dichloroethylene	ppmv	ND	<0.0005	ND	<0.0014	ND	ND	ppmv	200	NE	
	mg/m3	ND	<0.002	ND	<0.0057	ND	ND	mg/m3			
Ethylbenzene	ppmv	ND	<0.0005	ND	<0.0014	ND	ND	ppmv	100	1.0 Int	
	mg/m3	ND	<0.0022	ND	<0.0063	ND	ND	mg/m3			
Methylene Chloride	ppmv	0.0007	<0.0005	ND	<0.0014	0.0016	ND	ppmv	25	0.3 Chr	
	mg/m3	0.0024	<0.0017	ND	<0.005	0.0054	ND	mg/m3			
Tetrachloroethylene	ppmv	**0.473**	**0.0778**	**0.321**	**0.0251**	0.0089	**0.0205**	ppmv	100	0.04 Chr	0.015
	mg/m3	**3.21**	**0.528**	**2.18**	**0.17**	0.0604	**0.139**	mg/m3			0.1
Toluene	ppmv	0.0027	0.0032	0.0023	<0.0014	0.0022	0.0018	ppmv	200	0.08 Chr	
	mg/m3	0.0102	0.012	0.0087	<0.0054	0.0083	0.0067	mg/m3			
Trichloroethylene	ppmv	0.0019	<0.0005	0.0013	<0.0014	ND	ND	ppmv	100	0.1 Int	
	mg/m3	0.0101	<0.0027	0.007	<0.0078	ND	ND	mg/m3			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ppmv	ND	<0.0005	ND	<0.0014	ND	ND	ppmv	1000	NE	
	mg/m3	ND	<0.0038	ND	<0.0111	ND	ND	mg/m3			
m/p-Xylene	ppmv	0.0005	<0.0005	ND	<0.0014	ND	ND	ppmv	100	0.1 Chr	
	mg/m3	0.0022	<0.0022	ND	<0.0063	ND	ND	mg/m3			

Compound	units	H-MAIN					H-MAIN DUP		units	OSHA PEL	ATSDR MRL	NYSDOH Guideline
MAP ID		C1					C2					
Sample Date		2/18/2003	3/5/2003	3/11/2003	3/17/2003	3/25/2003	2/18/2003	3/5/2003				
Benzene	ppmv	ND	<0.0005	ND	0.0019	0.0006	ND	0.0011	ppmv	0.1	0.004 Int	
	mg/m3	ND	<0.0016	ND	0.006	0.0019	ND	0.0036	mg/m3			
Chloroform	ppmv	ND	<0.0005	ND	ND	ND	ND	<0.0005	ppmv	50	0.02 Chr	
	mg/m3	ND	<0.0024	ND	ND	ND	ND	<0.0024	mg/m3			
cis-1,2-Dichloroethylene	ppmv	ND	0.0037	ND	ND	ND	0.0011	<0.0005	ppmv	200	NE	
	mg/m3	ND	0.0147	ND	ND	ND	0.0045	<0.002	mg/m3			
Ethylbenzene	ppmv	ND	<0.0005	ND	ND	ND	0.0005	<0.0005	ppmv	100	1.0 Int	
	mg/m3	ND	<0.0022	ND	ND	ND	0.0023	<0.0022	mg/m3			
Methylene Chloride	ppmv	0.0012	<0.0005	ND	0.0013	ND	0.0012	<0.0005	ppmv	25	0.3 Chr	
	mg/m3	0.0041	<0.0017	ND	0.0046	ND	0.0043	<0.0017	mg/m3			
Tetrachloroethylene	ppmv	0.011	0.0107	**0.0363**	**0.042**	**0.0229**	**0.064**	**0.0706**	ppmv	100	0.04 Chr	0.015
	mg/m3	0.0746	0.0725	**0.246**	**0.285**	**0.155**	**0.434**	**0.479**	mg/m3			0.1
Toluene	ppmv	0.001	<0.0005	ND	0.004	0.0017	ND	0.0031	ppmv	200	0.08 Chr	
	mg/m3	0.0037	<0.0019	ND	0.0149	0.0062	ND	0.0117	mg/m3			
Trichloroethylene	ppmv	ND	<0.0005	ND	ND	ND	0.0012	<0.0005	ppmv	100	0.1 Int	
	mg/m3	ND	<0.0027	ND	ND	ND	0.0067	<0.0027	mg/m3			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ppmv	ND	<0.0005	ND	ND	ND	ND	<0.0005	ppmv	1000	NE	
	mg/m3	ND	<0.0038	ND	ND	ND	ND	<0.0038	mg/m3			
m/p-Xylene	ppmv	ND	<0.0005	ND	0.0012	0.0015	ND	<0.0005	ppmv	100	0.1 Chr	
	mg/m3	ND	<0.0022	ND	0.0052	0.0069	ND	<0.0022	mg/m3			

Table 2 - Indoor Air PID Screening Summary
Dalewood I Shopping Plaza
357 North Central Avenue, Hartsdale, NY
VCP SIte V00457-3

Date	3/8/2003	3/10/2003	3/11/2003	3/13/2003	3/14/2003	3/17/2003	3/25/03	4/3/03
Room								
Entrance	20 - 60				0 - 12	0-10	0-1	0-3
Office 1	20 - 40				ND	ND	0	0-2
Office 2	20 - 40				0 - 3	0-5	0	0-1
Receptionist	60 - 90	25 - 35		39 - 65	2 - 57	5-60	0-17	4-7
Test Rm 1	100 - 200			40 - 62	0 - 8	0-10	0-2	3-6
Test Rm 2	80 - 140	22 - 33		69 - 81	5 - 102	5-95	0-2	3-5
Hallway	80 - 100				0 - 25	0-20	0-1	2-5
Main Class	150 - 220	32 - 101	60 - 90	65 - 125	0 - 98	0-100	0-35	3-15
Main Floor*	250			132				
Mini Class	130 - 180	23 - 39		25 - 44	5 - 49	0-55	0-5	0-5
Lav 1 (front)	130 - 160	40 - 56			5 - 15	0-10	0	0-4
Lav 2 (rear)	100				0 - 6	0-5	0	0-4

ALL results above are in Parts Per Billion (PPB)
Received rental meter on 3/7/03
Main Floor* = Floor level location adjacent to Coconuts wall in area of "hot spot"
Variations are caused by heat system flow & general variations throughout the room
Heat system appears to be set to maintain room temp at 76 F
Mini Rae Photionization Detector (PID) with sensitivity of 1 ppb

Table 3 - SVE System and Vapor Point Field Data Summary
Dalewood I Shopping Center
Hartsdale, New York
VCP Site V00457-3

Soil Vapor Extraction System Leg Screening Readings											
Date	3/10/03	3/11/03	3/13/03	3/14/03	3/17/03	3/25/03	4/3/03	4/8/03	4/10/03	4/16/03	5/16/03
	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv
SVE Sys Overall	950	660 / 1020	300	230	124	115	72.5	128	86.9	51	45.5
SVE Leg											
SVE-1	NA	340	50 - 80	165	25.5	78.4	7.1	8.3	NA	2.4	NA
SVE-2	NA	2300	600	739	468	315	245	280	NA	56.4	NA
SVE-3	NA	471	76	75.4	45.6	0	9.5	8.3	NA	0.7	NA
SVE-4	NA	194	97	58.8	59.7	31	8.9	10.1	NA	9.8	NA
SVE-5	NA	367	13	29.6	33.5	0	19	14	NA	12.9	NA
SVE-6	NA	366	48	51.8	9.0	0	25	9.9	NA	12	NA
SVE-7	NA	162	233	28.2	25.0	0	8.5	10	NA	9.8	NA
SVE-8	NA	NA	NA	No Port	No Port	No Port	65.2	58	NA	11.4	NA
System Legs Off		5 & 7	4 & 7	4 & 8	4	4	4	4	4	4	4
Leg Vacuum (" H2O)		22	25	22	22	21	21	NA	22	22	21
System Vac (" H2O)		8	11	10	10	9	9	11	11	11	11
System Effluent ppmv	0	0	0	NA	NA	75.4	0.6	0	0	0	0.3

Soil Vapor Point Screening Readings											
Date			3/13/03	3/14/03	3/17/03	3/25/03	4/3/03	4/8/03	4/10/03	4/16/03	
Vapor Point			ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	
VP-1	NA	NA	100	32.9	24.2	92.5	4.2	1.2	0	0.2	
VP-2	NA	NA	22	1.5	1.2	19.6	0.1	0.3	0	0.1	
VP-3	NA	NA	11	15.5	5.2	0.1	1.1	0.8	0	0	
VP-4	NA	NA	74	8	10.3	6.7	6.4	1.5	0	0	
VP-5	NA	NA	14	5	5.7	2	0.1	4.4	0.2	0.1	
VP-6	NA	NA	96	NA	NA	NA	NA	NA	NA	NA	
VP-7	NA	NA	200	2.4	1.1	0.3	0.2	0.4	1.6	0	
			*	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	

Soil Vapor Point Vacuum Readings											
Date			3/13/03	3/14/03	3/17/03	3/25/03	4/3/03	4/8/03	4/10/03	4/16/03	
Vapor Point			" H2O	" H2O	" H2O	" H2O	" H2O	" H2O	" H2O	" H2O	
VP-1	NA	NA	ND	0.1	0.1	0.05	0.05	0.15	0.15	0.15	
VP-2	NA	NA	0.1	0.1	0.1	0.05	0.1	1.25	0.15	1.2	
VP-3	NA	NA	0.05	0.1	0.15	0.3	0.05	0.15	1.2	0.15	
VP-4	NA	NA	0.05	0.1	0.15	0.05	0	0.1	0.1	0	
VP-5	NA	NA	0.2	0.15	0.15	0.1	0.15	0.35	0.3	0.35	
VP-6	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	
VP-7	NA	NA	ND	ND	ND	0	0	0	0	0	
			*	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	Leg 8 Open	

NOTE:
* VP-7 on 3/13 - Sealed SVE-7 & opened leg - reading at VP-7 dropped to 32.5
3/11/03 SVE Sys Overall readings collected on arrival; system modifications completed and second reading taken on departure
Vapor Points installed through floor using 1/4" tubing, sealed w/ bentonite
Leg readings are collected by closing off the individual valve and measuring through a port in the line
VP - 1, 4, & 5 are 9' away from SVE-2
VP-2 is 4.5' away from SVE-2; VP-3 is 4.5' from VP-1
VP-7 is 10' away from SVE-8
Carbon changed on April 3, 2003
ppmv = Parts Per Million volume
ppmv readings obtained utilizing a handheld photoionization detector (PID) with 10.6 eV lamp

Table 4 - SVE System Influent Data Summary
Dalewood I Shopping Center
Hartsdale, New York

Soil Vapor Extraction System Laboratory Analysis		
Date	3/25/03	5/16/03
	ppmv	ppmv
SVE Sys PID	115	45.5
Benzene	<0.50	<0.5
Chloroform	<0.50	<0.5
cis-1,2-Dichloroethylene	<0.50	<0.5
Ethylbenzene	5.23	<0.5
Methylene Chloride	<0.50	<0.5
Tetrachloroethylene	50.1	5.9
Toluene	3.23	<0.5
Trichloroethylene	5.09	<0.5
m/p-Xylene	4.75	<0.5
o-Xylene	0.85	<0.5
Sum of Detected Compounds	69.25	5.9

NOTE:
ppmv = Parts Per Million volume
Air Samples collected in a tedlar directly from an available port following the blower location

Table 5 - Subfloor Soil Sample Laboratory Data Summary
Dalewood I Shopping Center
Hartsdale, New York
VCP Site V00457-3

Parameter	Sample Location and Depth						NYSDEC Cleanup Objective
	IB-50	IB-50	IB-51	IB-52	IB-53	IB-54	
	1-2'	3-4'	0-2'	3 - 4'	3 - 4'	3 - 4'	
Date Collected	10/11/00	10/11/00	10/11/00	04/10/03	04/10/03	04/10/03	
Tetrachloroethylene	7,620	3,640	7,660	30,200	30,100	5,490	1,400 ug/kg
Trichloroethylene	ND	ND	ND	<367	<400	<426	700 ug/kg

Notes:

All concentrations reported in parts per billion unless otherwise noted.
ND = Not Detected.
NYSDEC Cleanup Objectives from TAGM HWR-94-4046, Appendix A, Table 1 (January 24, 2994)
Shaded field indicates exceedence of NYSDEC Cleanup Objective

Parameter	Sample Location and Depth						NYSDEC Cleanup Objective
	SVE-1	SVE-2	SVE-3	SVE-4	SVE-5	SVE-6	
	0.5'	0.5'	0.5'	0.5'	0.5'	0.5'	
Date Collected	03/08/03	03/08/03	03/08/03	03/08/03	03/08/03	03/08/03	
Tetrachloroethylene	15,300	51,700	43,800	2,200	19	39	1,400 ug/kg
Trichloroethylene	2	<192	0	3	<2	<2	700 ug/kg

Notes:

All concentrations reported in parts per billion unless otherwise noted.
ND = Not Detected.
NYSDEC Cleanup Objectives from TAGM HWR-94-4046, Appendix A, Table 1 (January 24, 2994)
Shaded field indicates exceedence of NYSDEC Cleanup Objective

Parameter	Sample Location and Depth						NYSDEC Cleanup Objective
	Exp. Joint	VP-1	VP-5				
		Concrete	Concrete				
Date Collected	03/13/03	03/13/03	03/13/03				
Tetrachloroethylene	29,500	713	172				1,400 ug/kg
Trichloroethylene	ND	ND	ND				700 ug/kg

Notes:

All concentrations reported in parts per billion unless otherwise noted.
ND = Not Detected.
NYSDEC Cleanup Objectives from TAGM HWR-94-4046, Appendix A, Table 1
Shaded field indicates exceedence of NYSDEC Cleanup Objective
Exp Joint sample collected from wall to floor joint

Table 6 - Post Excavation Sampling Data Summary
Dalewood I Shopping Center
Hartsdale, New York
VCP Site V00457-3

	Sample Location and Depth						NYSDEC
ID	S Side 8	S Side 15	S Side 20	S Side 25	S Side 40	S Side 55	Cleanup
Depth	5'	5.5'	5.5'	5.5'	5'	2'	Objective
Parameter Date Collected	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	
Tetrachloroethylene	16,000	1,600	1,100	2,000	490	1,900	1,400 ug/kg
Trichloroethylene	ND	ND	ND	ND	ND	ND	700 ug/kg
Field Screening Reading (PPMv)	NA	44.1	41.1	45.5	42	NA	NA

	Sample Location and Depth								NYSDEC
ID	N Side 10S	S Side 10D	N Side 20	N Side 30S	N Side 30D	N Side 40	N Side 50S	N Side 50D	Cleanup
Depth	2'	5'	5'	2'	5'	5'	2'	5'	Objective
Parameter Date Collected	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	
Tetrachloroethylene	14,000	460	2,200	360	5,100	540	640	2,000	1,400 ug/kg
Trichloroethylene	5.1	2	3.1	ND	3.9	ND	ND	ND	700 ug/kg
cis-1,2-Dichloroethylene	ND	ND	ND	ND	3	ND	ND	ND	300 ug/kg
Field Screening Reading (PPMv)	24.1	3.2	8.4	9.8	30	10.5	0	12.9	NA

	Sample Location and Depth							NYSDEC
ID	E Side	E Side	W Side	W Side	SE Side	SW Side	C Back60	Cleanup
Depth	2'	5'	2'	5'	3'	3'	2'	Objective
Parameter Date Collected	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	
Tetrachloroethylene	2,200	400	340	890	340	340	950	1,400 ug/kg
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	700 ug/kg
cis-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	300 ug/kg
Field Screening Reading (PPMv)	53	92	11	12	46	6	NA	NA

	Sample Location and Depth								NYSDEC
ID	Bottom 10	Bottom 15	Bottom 25	Bottom 30	Bottom 40	Bottom 45	Out Bott 1	Out Bott 2	Cleanup
Depth	6'	6'	6'	6'	6'	6'	15"	15"	Objective
Parameter Date Collected	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	05/22/03	
Tetrachloroethylene	140	130,000	230,000	80,000	6,600	6,700	55,000	34,000	1,400 ug/kg
Trichloroethylene	ND	ND	120	ND	11	30	ND	62	700 ug/kg
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	24	400 ug/kg
cis-1,2-Dichloroethylene	ND	ND	ND	ND	9.5	25	ND	83	300 ug/kg
Field Screening Reading (PPMv)	529	6664	NA	10000	28.7	39	1.1	NA	NA

All concentrations reported in parts per billion unless otherwise noted.
ND = Not Detected.
NYSDEC Cleanup Objectives from TAGM HWR-94-4046, Appendix A, Table 1
Shaded field indicates exceedence of NYSDEC Cleanup Objective
NA = Not analyzed or Not available
Field Screening Readings collectected with a handheld Photoionization Detector (PID) with results in parts per million by volume (PPMv)

Table 7 - Modified SVE System Influent Data Summary
Dalewood I Shopping Center
Hartsdale, New York
VCP SIte V00457-3

Soil Vapor Extraction System Leg Screening Readings							
Date	5/27/03	5/28/03	6/2/03	6/30/03	7/9/03	7/31/03	8/20/03
	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv
SVE Sys Overall	25	20.7	33.1	3.1 / 8.3	9.8 / 18	11.5	10
SVE Leg							
SVE-1					12		
SVE-2					6		
SVE-3					NA		
SVE-4					0		
SVE-5					4.1		
SVE-6					8.3		
SVE-7					2.8		
SVE-8					16.4		
System Legs Off				4 / var	4 / var	4 / var	4 / var
Leg Vacuum (" H2O)					var	var	var
System Vac (" H2O)	19	19	19	15	18	20	
System Effluent ppmv	0	0	0		22		

NOTE:

6/30 and 7/9/03 SVE Sys Overall readings collected on arrival; system modifications completed and second reading taken on departure
Vapor Points installed through floor using 1/4" tubing, sealed w/ bentonite
Leg readings are collected by closing off the individual valve and measuring through a port in the line
Carbon changed on July 31, 2003
var = variable readings at legs due to partial opening of valves for optimization
ppmv = Parts Per Million volume
ppmv readings obtained utilizing a handheld photoionization detector (PID) with 10.6 eV lamp

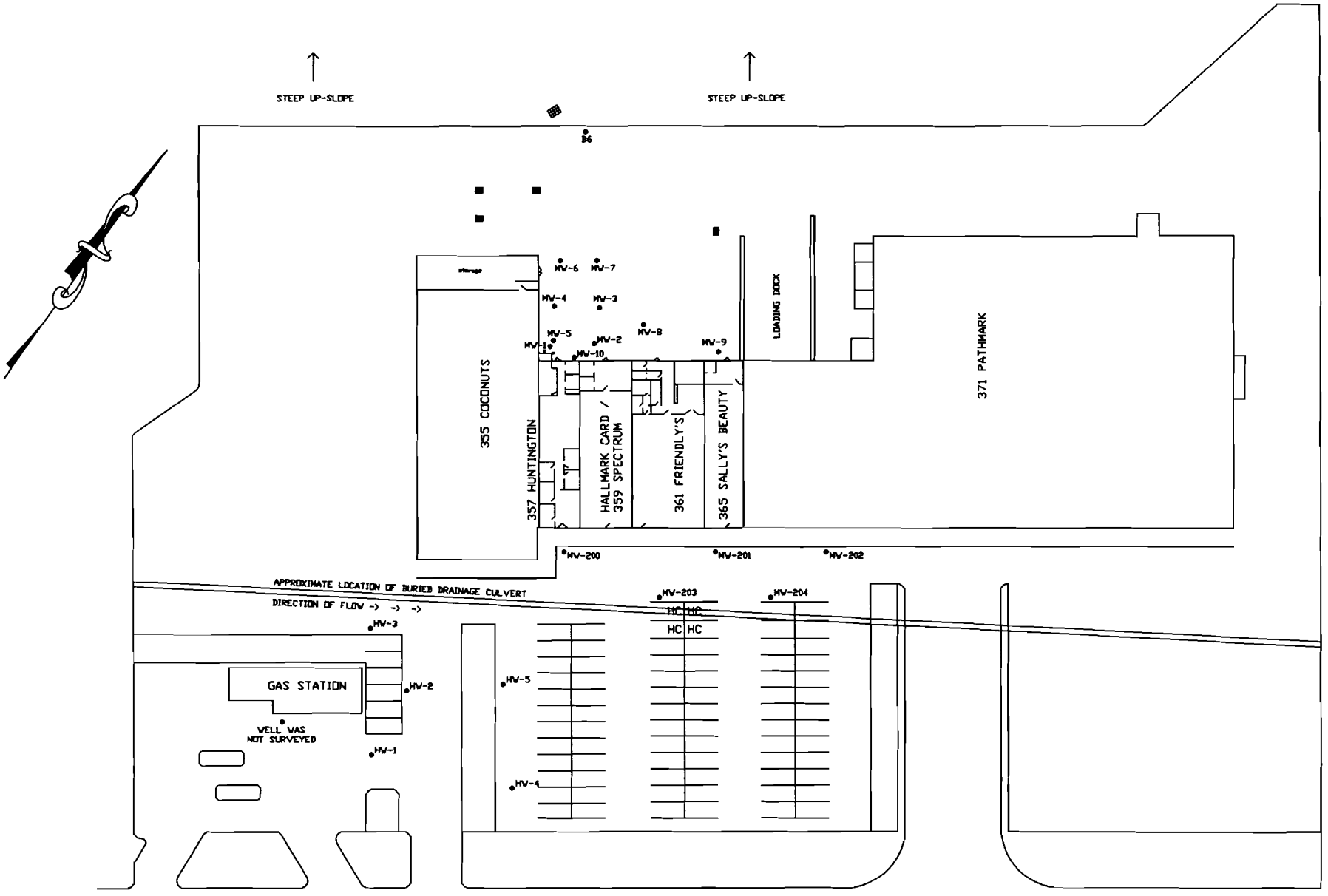


FIGURE 1 – SITE PLAN
DALEWOOD PLAZA
HARTSDALE, NEW YORK

LEGEND:

SCALE:
DATE: 3/3/00
DRAWN BY: PMR
CHECKED BY:

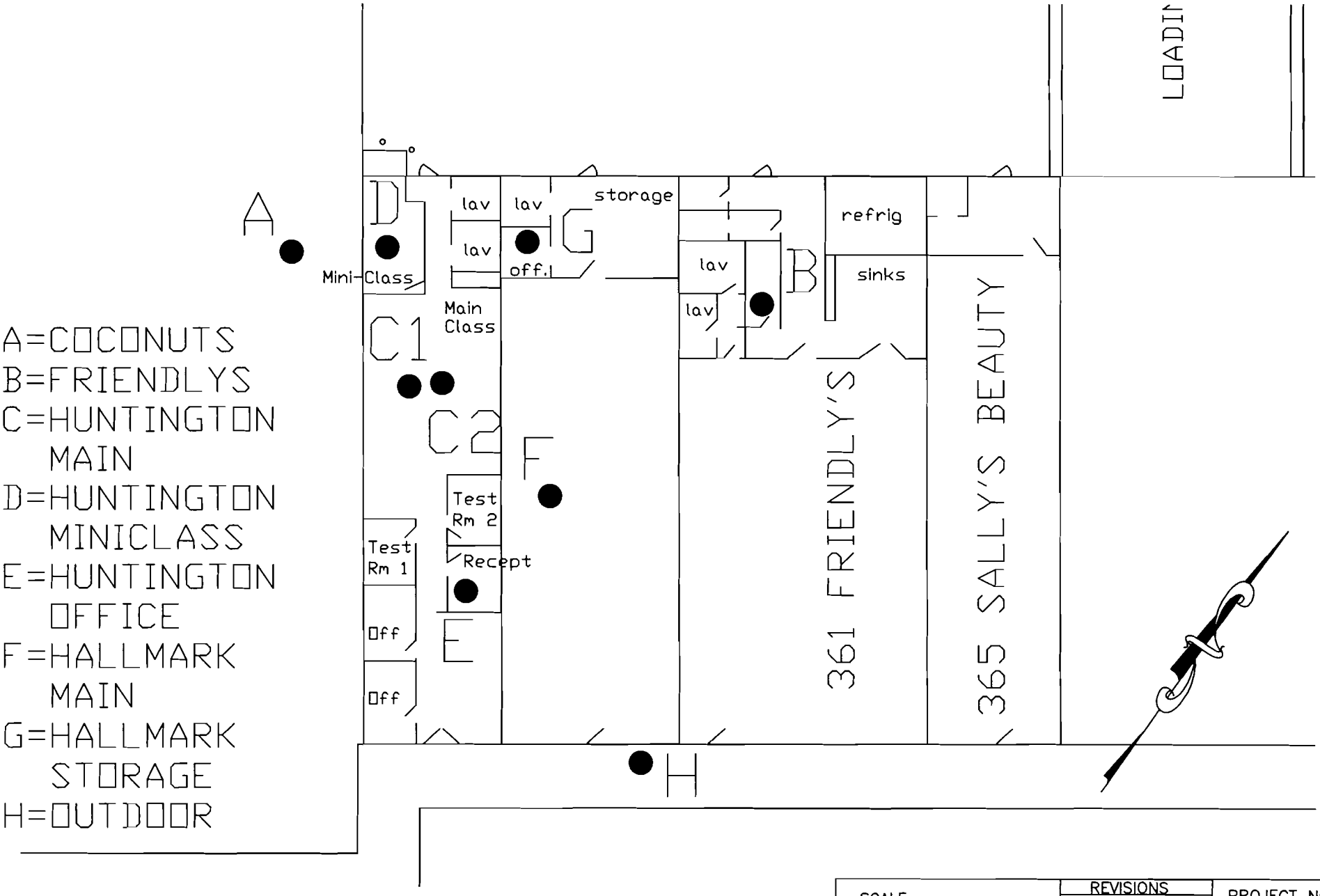
REVISIONS

PROJECT NO.: 2346-F

FILE NAME: 2346F-DALEWOOD PLAZ

KROLL ASSOCIATES, INC.
900 THIRD AVENUE, NEW YORK, NEW YORK 10022

1 OF 1 SHEETS



A=COCONUTS
B=FRIENDLYS
C=HUNTINGTON
MAIN
D=HUNTINGTON
MINICLASS
E=HUNTINGTON
OFFICE
F=HALLMARK
MAIN
G=HALLMARK
STORAGE
H=OUTDOOR

FIGURE 2–DALEWOOD PLAZA
INDOOR AIR SAMPLING LOCATIONS

SCALE: DATE: 3/3/00 DRAWN BY: PMR CHECKED BY:	REVISIONS	PROJECT NO.: 2346–F FILE NAME: Dalewood Interior Walls
KROLL ASSOCIATES, INC. 900 THIRD AVENUE, NEW YORK, NEW YORK 10022		1 OF 1 SHEETS

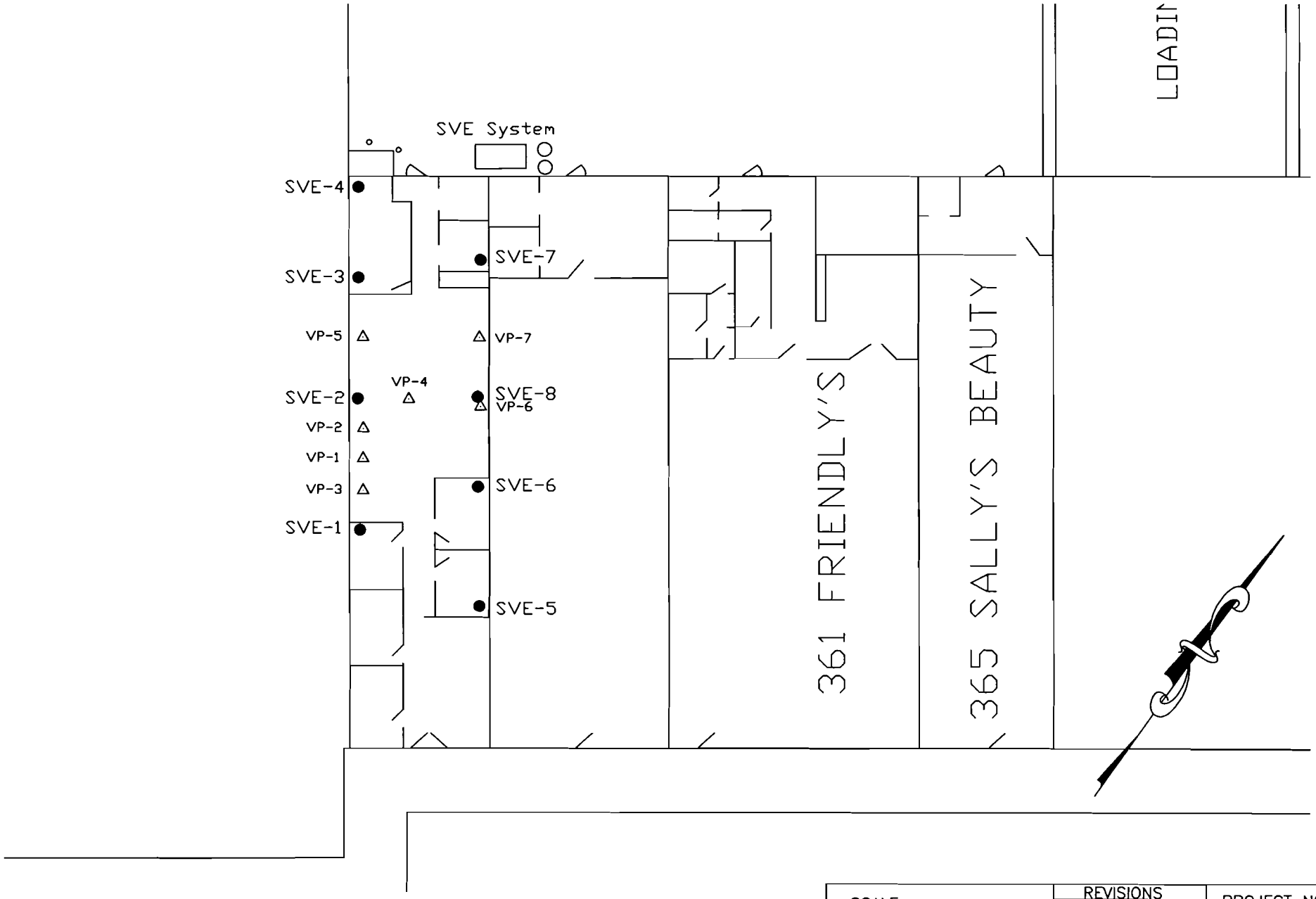


FIGURE 3—DALEWOOD PLAZA
SVE AND VAPOR POINT LOCATIONS

SCALE: DATE: 3/3/00 DRAWN BY: PMR CHECKED BY:	REVISIONS	PROJECT NO.: 2346-F FILE NAME: Dalewood Interior Walls

KROLL ASSOCIATES, INC.
900 THIRD AVENUE, NEW YORK, NEW YORK 10022

1 OF 1 SHEETS

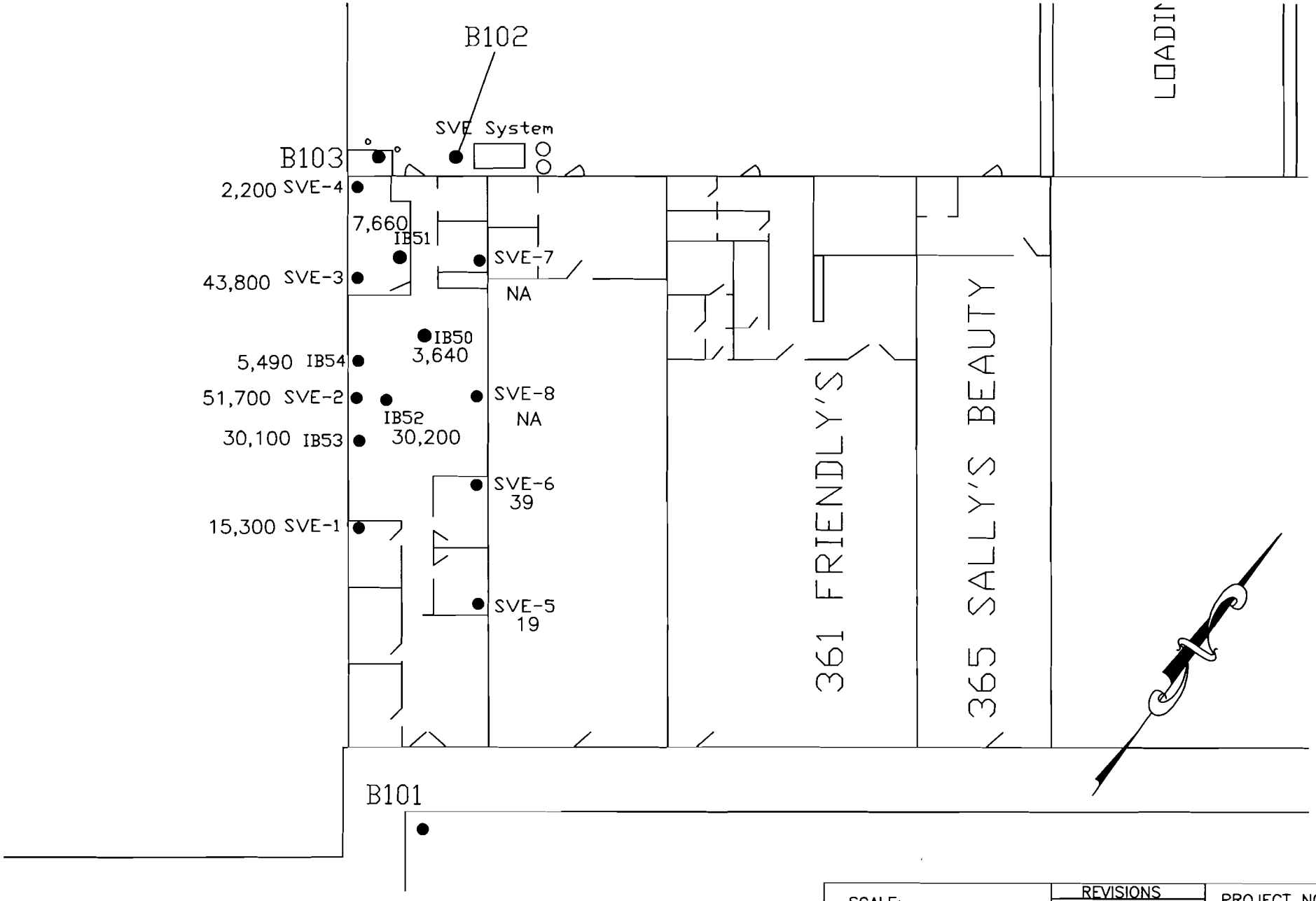
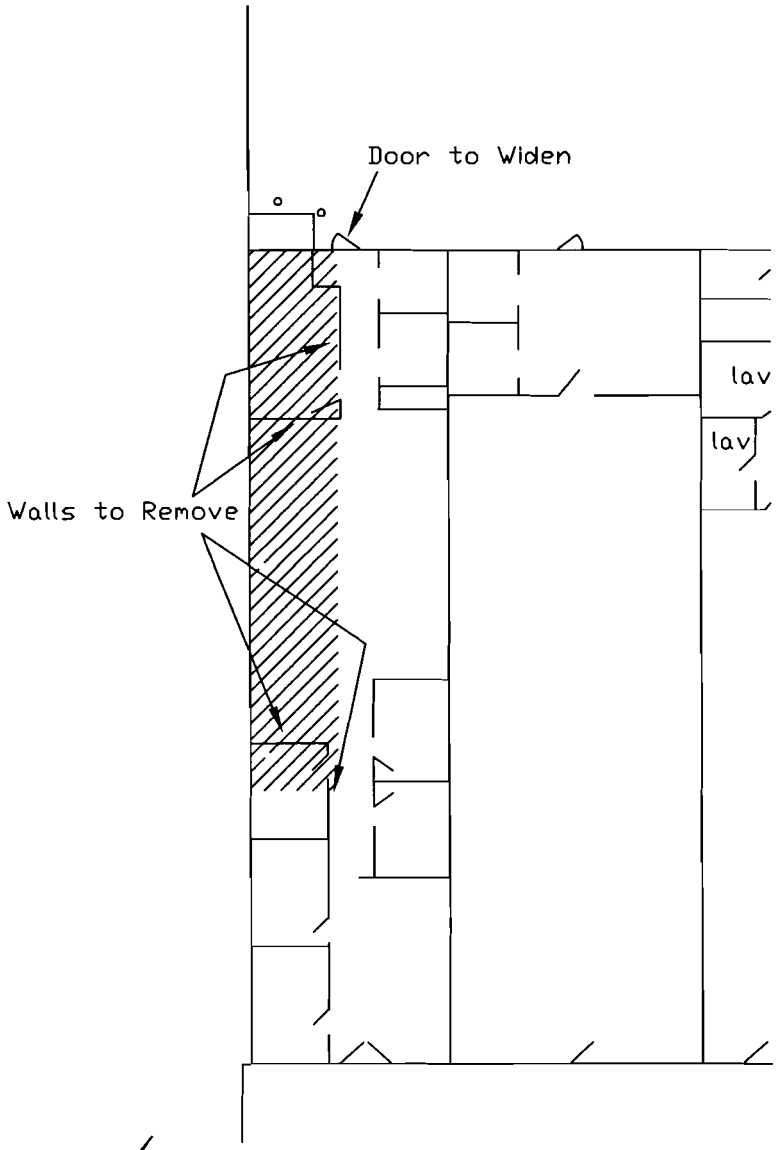


FIGURE 4 – DALEWOOD PLAZA SUBFLOOR SOIL DATA

SCALE: DATE: 3/3/00 DRAWN BY: PMR CHECKED BY:	REVISIONS	PROJECT NO.: 2346–F FILE NAME: Dalewood Interior Walls
KROLL ASSOCIATES, INC. 900 THIRD AVENUE, NEW YORK, NEW YORK 10022		1 OF 1 SHEETS



WALL REMOVAL

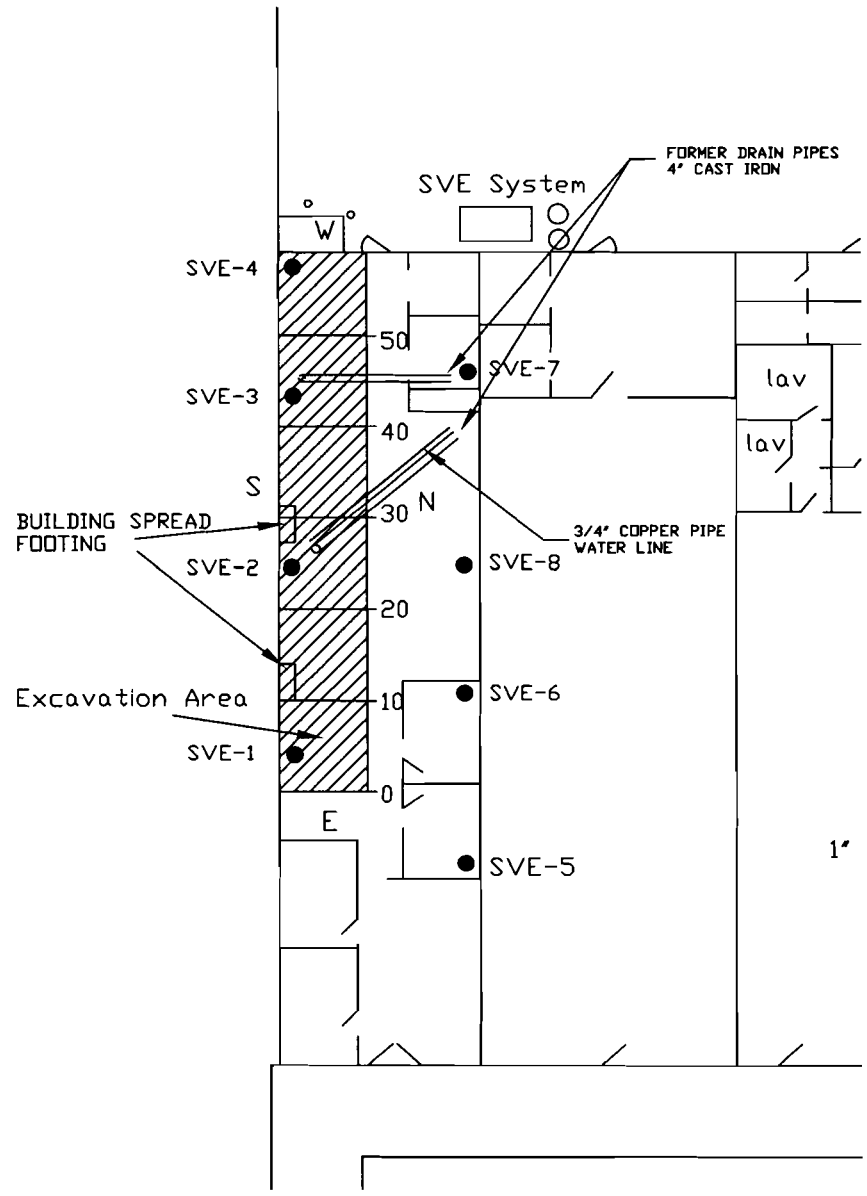


FIGURE 5 – DALEWOOD PLAZA
INDOOR EXCAVATION – UNIT 357

SCALE: DATE: 5/2/03 DRAWN BY: RPM CHECKED BY:	REVISIONS	PROJECT NO.: 2346-F FILE NAME: INT WALL DEMO PLAN

KROLL ASSOCIATES, INC.
900 THIRD AVENUE, NEW YORK, NEW YORK 10022

1 OF 1 SHEETS

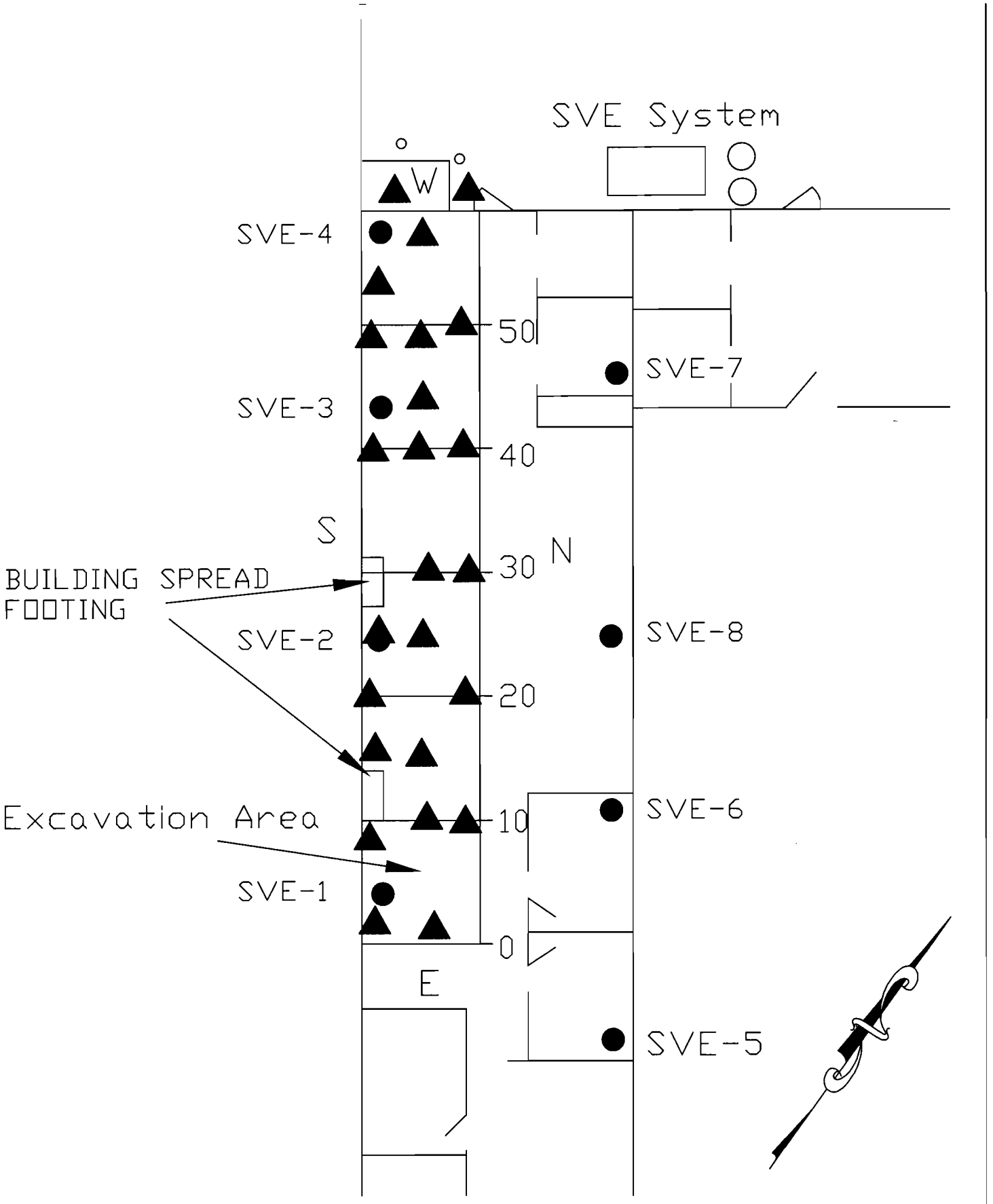


FIGURE 6 DALEWOOD PLAZA
POST EXCAVATION
SAMPLE LOCATIONS 5/22/03

SCALE: DATE: 5/13/03 DRAWN BY: RPM CHECKED BY:	REVISIONS	PROJECT NO.: 2346-F FILE NAME: Int Wall demo Plan
KROLL ASSOCIATES, INC. 900 THIRD AVENUE, NEW YORK, NEW YORK 10022		1 OF 1 SHEETS

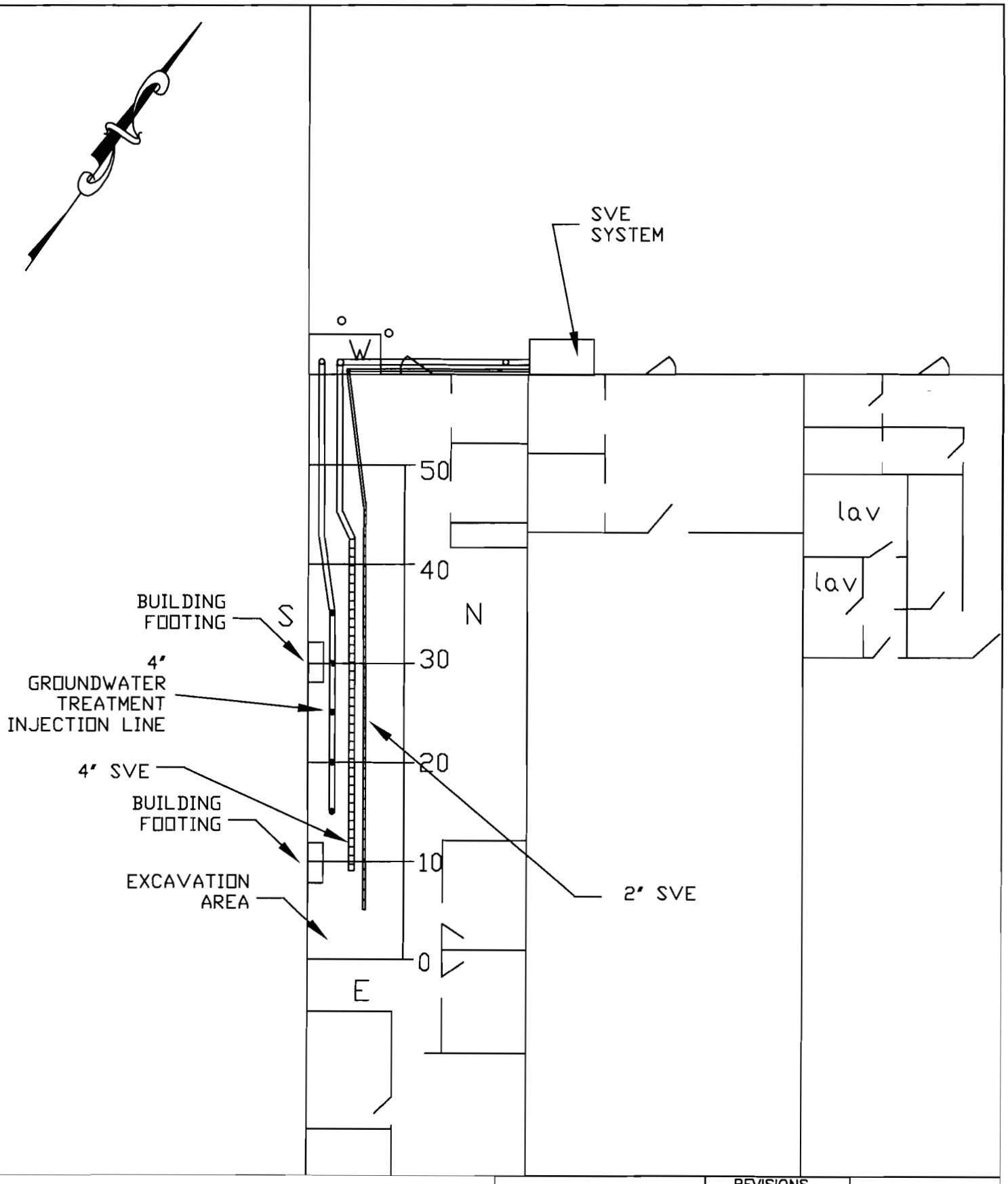


FIGURE 7 DALEWOOD PLAZA
HORIZONTAL SVE AND
GROUNDWATER INECTION LINES

SCALE:
DATE: 7/8/03
DRAWN BY: RPM
CHECKED BY:

REVISIONS

PROJECT NO.: 2346-F

FILE NAME: Horizontal SVE Wells

KROLL ASSOCIATES, INC.
900 THIRD AVENUE, NEW YORK, NEW YORK 10022

1 OF 1 SHEETS

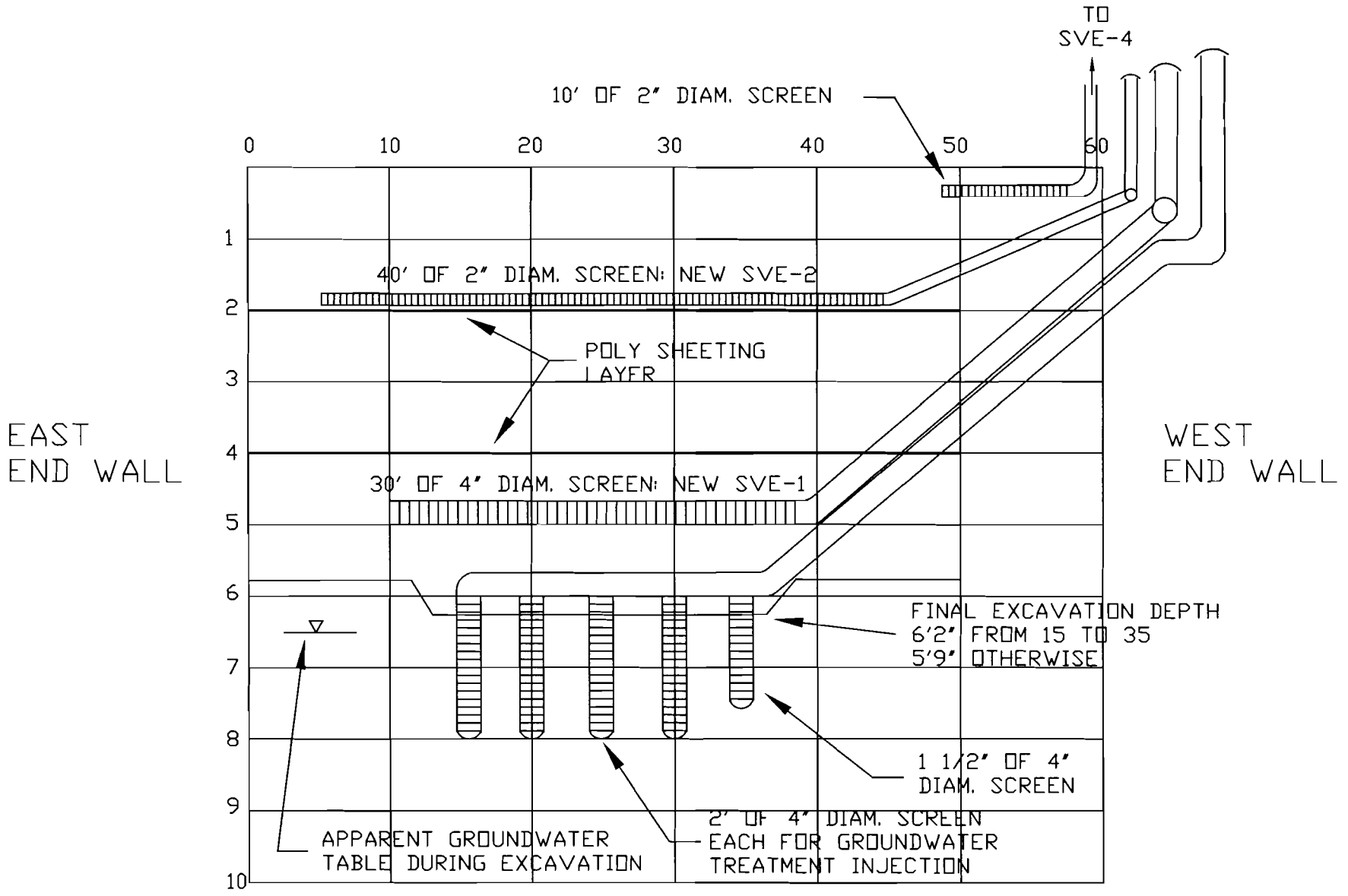


FIGURE 8 DALEWOOD PLAZA PROFILE VIEW - HORIZONTAL SVE AND GROUNDWATER TREATMENT INJECTION SYSTEM

DALEWOOD PLAZA
HARTSDALE, NY

357 N. CENTRAL AVE

SCALE:	As Shown
DATE:	7/9/03
DRAWN BY:	KLS
CHECKED BY:	

REVISIONS

PROJECT NO.: 2346-F

FILE NAME: Horizontal SVE Wells

KROLL ASSOCIATES, INC.
900 THIRD AVENUE, NEW YORK, NEW YORK 10022

1 OF 1 SHEETS