Albany Public Library Arbor Hill/West Hill Branch Site

ALBANY COUNTY, NEW YORK

Final Engineering Report

Prepared for:

Albany Public Library

161 Washington Avenue Albany, New York 12210

Prepared by:

The Chazen Companies

547 River Street

Troy, New York 12180

(518) 273-0055

DECEMBER 2011

CERTIFICATIONS

I, Daniel W. Stone, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for preparation of this Final Engineering Report documenting implementation of the remedial program activities and construction activities completed at the site.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Daniel W. Stone, of The Chazen Companies at 21 Fox Street Poughkeepsie, New York, am certifying as Owner's Designated Site Representative for the site.

052135	1/13/12	
NYS Professional Engineer #	Date	Signature

Note: include PE stamp

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LIST OF ACRONYMS

Acronym	Definition
ACDA	Albany Community Development Agency
APL	Albany Public Library
Arbor Hill/West Hill Branch	AH/WH Branch
CT	carbon tetrachloride
DASNY	Dormitory Authority of the State of New York
DUSR	data usability summary report
ERP	Environmental Restoration Program
ESA	Environmental Site Assessment
FER	Final Engineering Report
HJB	Henry Johnson Boulevard
MP	Malcolm Pirnie Inc.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	tetrachloroethylene
PVC	polyvinyl chloride (a thermoplastic polymer)
RAO	remedial action objectives
RCRA	Resource Conservation Recovery Act
RI/AA	Remedial Investigation/Alternatives Analysis
SCO	soil cleanup objective
SSVS	sub-slab venting system
STV	STV Incorporated
SVOC	semi-volatile organic compound
TCA	1,1,1-trichloroethane
TCE	trichloroethylene
UST	underground storage tank
VC	vinyl chloride
VOC	volatile organic compound

Final Engineering Report

1.0 BACKGROUND AND SITE DESCRIPTION

Albany Public Library (APL) entered into an Order on Consent (Index No. A4-0640-07-10) with the New York State Department of Environmental Conservation (NYSDEC) in October 2010, to institute a vapor intrusion program to mitigate potential vapor intrusion on a 0.62-acre property located in the City of Albany, Albany County, New York. A copy of the Order on Consent is provided in Appendix E. The property is intended for commercial use, and will be used as the Arbor Hill/West Hill (AH/WH) Branch of the Albany Public Library system.

1.1 SITE DESCRIPTION

The site is located in the County of Albany, New York and is identified as Block 3 and Lots 1.1, 2, 56, 57, 58, 59, 60, 61, 62 and 63 on the City of Albany Tax Map #65.65. Addresses for the site parcels are listed below. The site is situated on a 0.62-acre area bounded by Henry Johnson Boulevard (HJB) to the northwest, First Street to the southwest, Second Street to the northeast, and mixed small commercial and residential properties including a preschool to the southeast (see Figures 1A and 1B). The current site layout is shown in Figure 1C.The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

Parcel Address	**Section**	**Block**	**Lot**
138-144 Henry Johnson Boulevard	65.65	3	60
146 Henry Johnson Boulevard	65.65	3	61
148 Henry Johnson Boulevard	65.65	3	62
150 Henry Johnson Boulevard	65.65	3	63
231 First Street	65.65	3	56
233 First Street	65.65	3	57
235 First Street	65.65	3	58
237 First Street	65.65	3	59

214 Second Street	65.65	3	2
216 Second Street	65.65	3	1.1

An electronic copy of this FER with all supporting documentation is included as Appendix C, which is a compact disc.

1.2 SITE GEOLOGY/HYDROLOGY

Overburden geology in the vicinity of the APL site is described as glacially-derived alluvium and/or till. This material generally consists of unstratified boulders, cobbles, gravel, sand, silt and clay of varying thickness and extending to the depth of the local bedrock. Soil borings advanced during a 2006 Phase II Environmental Site Assessment (ESA) by STV Incorporated (STV) provided more detailed information about on-site soils. A layer of mixed fill materials was found between grade and approximately six to eight feet below ground surface (bgs). This fill horizon was described as being generally sandy and containing fragments of wood, brick and charcoal (i.e., urban fill materials) as well gravel and larger rock fragments. Medium-density brown to grey clay with some sand lenses was encountered beneath the fill horizon (at eight feet bgs) and STV suggested that this clay layer extends to 30 feet below grade or possibly deeper.

Overburden groundwater occurs at approximately four to ten feet below grade at the APL site, based on studies by Malcolm Pirnie (MP) (2009). Groundwater flow is mapped as generally to the south and southwest, toward First Avenue. A groundwater flow figure is shown in Figure 2. Regional groundwater flow is interpreted to be in a south to southeasterly direction, towards the Hudson River, which is located approximately one mile southeast of the APL site.

Hydraulic conductivity testing for the adjacent property (just to the southwest of the subject site) showed values ranging from 0.09 to 0.33 feet per day, which are indicative of soil types ranging between clay and silty fine sands in which the wells were screened (MP 2009).

1.3 SITE BACKGROUND

The AH/WH Branch site was initially developed in the late 1800s as a mixture of residential and small commercial properties. As the City of Albany grew in the 20th

century, some of the original structures were demolished and rebuilt on the same footprint while others remained intact. By the end of the 20th century, most of the structures had been demolished, leaving a number of these lots vacant.

In 2003, the Albany Community Development Agency (ACDA) was in the process of acquiring these and several additional surrounding parcels (a total of 1.25 acres of land). ACDA secured funding through a grant from the USEPA Brownfields Assessment Demonstration Pilot Program and commissioned MP to perform a Phase I Environmental Site Assessment (ESA). This ESA revealed that the building at 148 Henry Johnson Boulevard, on the current APL site, had formerly been used as a laundry and tailor shop and may have also been a dry cleaner. No evidence of dry cleaning equipment or chemicals was noted at that property. The 2003 investigation also identified a former gasoline filling station and vehicle maintenance facility at nearby 132 HJB with a known spill history as a recognized environmental condition (REC). The 132 HJB parcel is located directly across First Street from the APL site. The 2003 report identified the use of fill materials of unknown origin during historic demolition activities at the parcels comprising the APL site as a second recognized environmental condition. The report further suggested that lead-based paint and similar materials used on or in historical building materials emplaced within former basements during demolition/backfilling may present the possibility for soil impacts as those materials decompose.

Following the completion of the Phase I ESA and also funded by a USEPA grant, ACDA hired MP to conduct a Phase II ESA for these properties, which was completed in 2004. The samples collected from the parcels comprising the APL site contained only trace concentrations of select semi-volatile organic compounds (SVOCs) and some minor metal impacts from mercury, chromium and lead. Underground Storage Tanks (USTs) were identified at the nearby 132 Henry Johnson Boulevard location as well as at 216 Second Street (part of the APL site). Based on the results of the Phase II ESA, both the 132 HJB and APL properties investigated were jointly accepted into the NYSDEC's Environmental Restoration Program (ERP) as Site Number E401049.

In 2006, the Dormitory Authority of the State of New York (DASNY) hired STV to conduct a Phase I ESA of the collective APL parcels to assist with APL's desire to formally acquire the parcels. STV identified the former gasoline filling and vehicle maintenance operation at the nearby 132 Henry Johnson Boulevard property as an off-site REC, and recommended that DASNY proceed with a Phase II ESA. The STV Phase I ESA did not identify the APL site as part of an existing larger ERP site. Later in 2006, STV conducted a Phase II ESA for DASNY and collected samples of soil and

groundwater from select locations on portions of the APL parcels. These soil samples were found to contain trace concentrations of select VOCs and SVOCs at concentrations less than NYSDEC's Part 375 Commercial Use soil cleanup objectives (SCOs). Some traces of metals were also detected, but at concentrations below eastern USA background levels. Groundwater samples met groundwater quality standards except for low concentrations of cis-1,2-dichloroethene and bis(2-ethylhexyl)phthalate.

Based on the results of the 2006 Phase II ESA, APL acquired the site parcels in 2007. Meanwhile, ACDA had hired MP to conduct a Remedial Investigation/Alternatives Analysis (RI/AA) for the entire ERP property, including the APL parcels. During this time, a heating oil UST was removed by ACDA from the APL site's 216 Second Street parcel, along with approximately 41 tons of petroleum-impacted soils. Results of confirmatory sidewall sample collected during this tank removal showed that impacted soil did not remain after the completion of excavation, as depicted on Figure 3A.

Additional soil and groundwater sampling was conducted elsewhere on the APL site (locations shown on Figures 4A and 4B) during the RI, and select VOCs, SVOCs and metals were again detected in soil and groundwater at the APL parcels in similar concentrations to those noted in previous investigations. Soil met NYSDEC's Part 375 Commercial Use SCOs (see Table 1 and Figures 4A and 4B). The following was found during the RI:

- three groundwater well samples contained a cis-1,2-dichloroethene concentration in excess of the groundwater quality standard;
- one groundwater sample contained a tetrachloroethylene (PCE) concentration in excess of the groundwater quality standard; and
- two groundwater samples contained trichloroethylene (TCE) and vinyl chloride (VC) concentrations greater than the groundwater quality standards (see Table 2 and Figure 5).

Soil gas samples were also collected on the APL parcels, and the results did not exceed state or federal guidance in place at that time (see Table 3). The RI/AA was completed in 2008 and results were forwarded to the NYSDEC in 2009. APL began constructing a new branch library on the site in mid-2009, but remained unaware of the site's ERP status until being advised of it by the NYSDEC. The APL immediately sought to be recognized as an 'innocent purchaser' but also proactively undertook some remedial actions with NYSDEC and NYSDOH approvals. These included 1) installing a permanent sub-slab vapor barrier, 2) installing a passive sub-slab venting system (SSVS)

that could be converted to an active system if needed, and 3) removing some soils from the site and replacing them with clean structural fill.

During November 2009 construction activities, a 500-gallon fuel oil UST was discovered under the sidewalk along First Street, on the City of Albany's property adjacent to the APL site. With the City's permission, the UST was removed by APL along with approximately 51 tons of petroleum-impacted soil that were disposed of off-site. NYDEC was notified and spill number 0909458 was assigned to the case. Groundwater was not encountered. Confirmation soil samples met Commercial Use SCOs (see Table 5 and Figure 3B). The spill was closed in July 2010.

1.4 RECENT SITE ACTIVITIES

Based on the APL's willingness to take remedial steps at their cost, the NYSDEC agreed to remove the APL site parcels from the ERP. This action was completed in October 2010, at which time the APL also signed the Order on Consent with the NYSDEC. The Order provided that: "as a result of APL's remedial activities which have occurred at the site, the NYSDEC has determined that the site has met the goals of the ERP and the site does not pose a significant threat to human health and the environment. Accordingly, the site is being removed from the ERP and any possible residual contamination at the Site shall be addressed in accordance with the terms of this order under the Department's authority pursuant to ECL Section 71-2727(1),(3)." The Order further provided that "the goal of this Order is to certify that the site is protective of public health and suitable for commercial use as a public library…". Construction of the library building and its related improvements has been completed.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Soil Vapor RAO

The RAO for Public Health Protection is to prevent inhalation of or exposure to contaminants volatilizing from contaminated soil. The RAO will be met when sampling data for sub-slab soil vapor and indoor air quality indicate that mitigation is not warranted, when compared to Matrix 1 and 2 of the New York State Department of Health's (NYSDOH's) October 2006 *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. As detailed in Section 3, the RAO have been met for this site.

2.2 DESCRIPTION OF SELECTED REMEDY

APL voluntarily included a remedy during the building's construction phase to address potential soil vapors. The selected remedy was approved by NYSDEC and NYSDOH on June 2, 2009, and consists of a permanent sub-slab vapor barrier with a passive SSVS that can be converted to an active system if needed. As-built drawings for the remedy are attached as Appendix B, and a description of the engineering controls follows.

The SSVS was installed horizontally within a layer of ¾-inch crushed stone and consists of 4-inch diameter schedule 40 slotted polyvinyl chloride (PVC) piping positioned across the footprint of the building to provide adequate coverage beneath the structure. The three horizontal pipes were each connected to a 6-inch diameter schedule 40 PVC manifold pipe that extends to the mechanical room of the building. A nine-inch thick (minimum) layer of ¾-inch crushed stone was installed over the horizontal pipes and beneath the entire building foundation.

Structural insulation and a vapor barrier were installed over the crushed stone across the complete footprint of the building's slab. The vapor barrier membrane is a cold-applied composite sheet consisting of high-density polyethylene film, synthetic adhesive, and protective coating.

The SSVS pipe penetrates the building slab in the mechanical room and was constructed using a six-inch diameter steel pipe extending to the roof. A double ply of sheet membrane was applied around the penetration and extended in a six-inch radius from the penetration edges. The vapor barrier penetration in the mechanical room was sealed at the vapor barrier and additional sealant was installed at the floor around the vent pipe penetration. A testing port was installed in the vertical vent line at an accessible height in the mechanical room. A passive turbine ventilator was installed at the end of the vent line.

Three sub-slab sampling/monitoring ports were installed near three corners of the building. Each sealed/accessible port is located at an exterior wall of the building foundation. A ½-inch diameter PVC sleeve penetrates the foundation wall and extends two feet horizontally beneath the building into the crushed stone layer, beneath both the structural insulation and vapor barrier.

3.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the site were conducted in accordance with the NYSDEC-approved Air Sampling Work Plan for the Albany Public Library Arbor Hill/West Hill Branch Site (January 2011).

NYSDEC-approved a January 14, 2011 Air Sampling Work Plan to determine if the site's two installed engineering controls (a sub-slab vapor barrier and passive SSVS) effectively mitigate soil vapors potentially present on the site. Results of performance assessment documenting effectiveness of the engineering controls are detailed in Section 3.2 of this Final Engineering Report. Based on results of the sampling event, NYSDEC determined that a Site Management Plan is not required for the site and that this Final Engineering Report will sufficiently complete document compliance with the Order on Consent.

3.1 GOVERNING DOCUMENTS

Consistent with the November 22, 2010 NYSDEC letter regarding the Order on Consent (attached in Appendix E), a Vapor Intrusion Evaluation Work Plan was prepared (Section 3.1.1) and implemented (Section 3.2). This FER also provides documentation regarding the importation of clean structural fill onto the site for use during construction (Section 3.2). The vapor barrier is described in Section 2.2.

3.1.1 Vapor Intrusion Evaluation Work Plan

The January 2011 Air Sampling Work Plan presented the vapor intrusion evaluation that was implemented to assess whether vapor intrusion was evident at the site. This plan was implemented on January 23, 2011.

3.2 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

As part of a performance assessment, and consistent with the January 2011 Work Plan (provided electronically in Appendix C, which is a compact disc), samples were collected of indoor air, sub-slab vapor and outdoor air. Indoor air quality samples were collected from two locations within public areas of the library. One sample was collected from each of the three sub-slab sample ports, and one outdoor air sample was collected near the building's air intake. In addition, a field reading was collected from the sample port in the 6-inch diameter steel vent pipe. Indoor air, sub-slab and outdoor air samples

were submitted to the laboratory for TO-15 analysis. A table summarizing sampling is included in Table 4 and sample locations are shown on Figures 6A and 6B.

A Data Usability Summary Report (DUSR) was prepared for data generated in this 2011 remedial performance evaluation program. This DUSR and associated raw data are provided electronically in Appendix C, which is a compact disc.

The results were compared to the NYSDOH Matrix 1 and 2 guidelines. The three sub-slab vapor samples collected via the sample ports did not contain detectable VOCs listed in the NYSDOH soil vapor intrusion guidance document. The two indoor air samples contained carbon tetrachloride (CT), TCE, 1,1,1-trichloroethane (TCA), and PCE at very low concentrations. The outdoor air sample contained CT and PCE, which provides an explanation for why these constituents were also detected in the indoor air samples. TCE is a degradation product of PCE, which may explain why it was detected in the indoor air samples at low concentrations. The low estimated concentrations of TCA, a common aerosol propellant, were well below the NYSDOH guideline. TCA was not detected in the sub-slab or outdoor air samples and was determined by NYSDOH to be unrelated to vapor intrusion. Following protocols listed in the NYSDOH guidance document, a product inventory was performed during the air sampling event, and found no direct chemical compound link to trace concentrations of VOCs present in the air samples collected during this sample event. A copy of indoor air quality questionnaire and building inventory is included in Appendix D.

The 2009 remedial investigation identified volatile compounds in soil and groundwater. PCE was present in soil at low concentrations. Several VOCs (i.e., cis-1,2-dichloroethene, trans-1,2-dichloroethene, vinyl chloride, PCE, TCE, and benzene) were detected in select groundwater samples. None of these previously identified constituents were detected in the 2011 sub-slab air samples.

VOCs detected in the outdoor air sample reveals a background VOC-load of the constituents identified at very low concentrations in the indoor air samples. Chlorinated compounds were absent from the three sub-slab vapor samples and no chlorinated solvent-containing products were identified in the library during the inventory process. The very low concentrations of chlorinated compounds in the indoor air samples were

determined to be related to outdoor "background" conditions, rather than from volatile compounds migrating into the building through the building foundation.

Due to the comparable concentrations of volatile compounds present in the outdoor air sample, the presence of a passive SSVS and vapor barrier, the results identified no vapor intrusion. As there are no public health issues, no further sampling or monitoring was proposed for this site. NYSDEC and NYSDOH concurred with this recommendation. In addition, NYSDEC determined that a Site Management Plan is not required for the site and that this FER will complete the required documentation thereby complying with the terms of the Order on Consent.

3.3 IMPORTED BACKFILL

As noted in the Order on Consent, building foundation construction activities included removal of some soil from the site to allow for emplacement of clean structural fill. As a result, the first four to ten feet of existing soils have been removed from the APL site and were replaced with clean structural materials.

3.4. SOIL CAP SYSTEM

Exposure to underlying soils on the site is prevented by a soil cap system placed over the site. This cap system is comprised of asphalt pavement, the concrete building slab, concrete-covered sidewalks, and some limited landscaped areas. Figure 1C shows the location of the cover types at the Site.

4.0 CONCLUSION

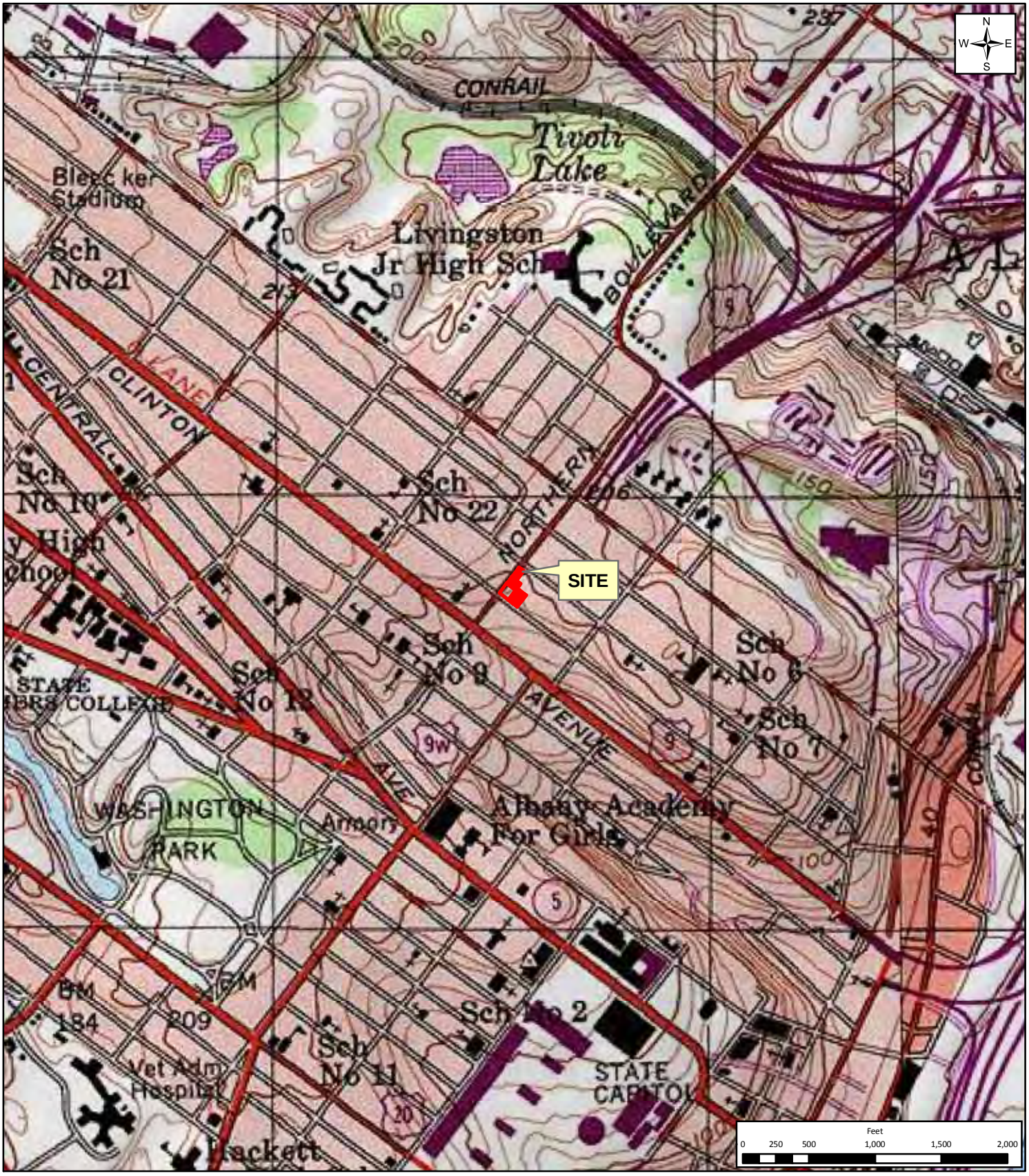
The APL site is a portion of a larger property that was included in NYSDEC's Environmental Restoration Program (ERP) as Site Number E401049. APL acquired the subject site parcels in 2007 and began site development in 2009, without knowledge that the APL site was part of an ERP site. Immediately upon learning of the ERP site status, APL sought to be recognized as an 'innocent purchaser' and also proactively undertook some remedial actions with NYSDEC and NYSDOH approvals.

Remedial investigation findings and actions taken at the site to-date have included:

- The 2006 investigation findings show that site soil met Commercial Use SCOs and some groundwater samples exceeded groundwater quality criteria for VOCs. Residual contamination is at depth and potential exposures are prevented by the site soil cap system placed over the site. This cap system is comprised of asphalt pavement, the concrete building slab, concrete-covered sidewalks, and some limited landscaped areas.
- The removal of two heating oil USTs with surrounding soil, where confirmation samples document that there are no remaining impacts.
- The installation of a NYSDEC and NYSDOH-approved remedy consisting of 1) a permanent sub-slab vapor barrier, 2) a passive sub-slab venting system that could be converted to an active system if needed, and 3) removal of some soils from the site and replacing them with clean structural fill.

As a result of these actions and findings, APL's parcels were removed from the ERP in October 2010, at which time the APL also signed the Order on Consent with the NYSDEC. In response to NYSDEC direction, a vapor intrusion evaluation work plan was prepared, approved and implemented in 2011 to determine if the site's engineering controls (a sub-slab vapor barrier and passive SSVS) effectively mitigate soil vapors potentially present on the site. The NYSDEC's and NYSDOH's review of the vapor intrusion evaluation confirmed that there is no vapor intrusion occurring at the site and there are no public health issues. As such, NYSDEC determined that a Site Management Plan is not required for the site and that this Final Engineering Report will sufficiently complete document compliance with the Order on Consent, prior to issuance of a Certificate of Completion for the site.

FIGURES



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Albany Public Library - Arbor Hill/West Hill Branch

Figure 1A - Site Location Map

Henry Johnson Boulevard, First Street and Second Street
City of Albany, Albany County, New York

Source: USGS Topographic Maps of the Albany and Troy South, New York Quadrangles, Dated 1994 and 1980 respectively, 7.5-Minute Series; Albany County Real Property Services 2008 Tax Parcel Data.

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Date:	February 2011
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Project:	41046.00
Figure:	1A

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Legend

Approximate APL Site Parcel Boundaries

Note: Site Cover System: Asphalt Pavement and/or Concrete Foundation Slab Over Soils

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Albany Public Library - Arbor Hill/West Hill Branch

Site Layout and Existing Site Cover System

Henry Johnson Boulevard, First Street and Second Street
City of Albany, Albany County, New York

Source: Bing.com 2010 Orthoimagery; Albany County Real Property Services 2008 Tax Parcel Data.

Drawn:	JLK
Date:	December 2011
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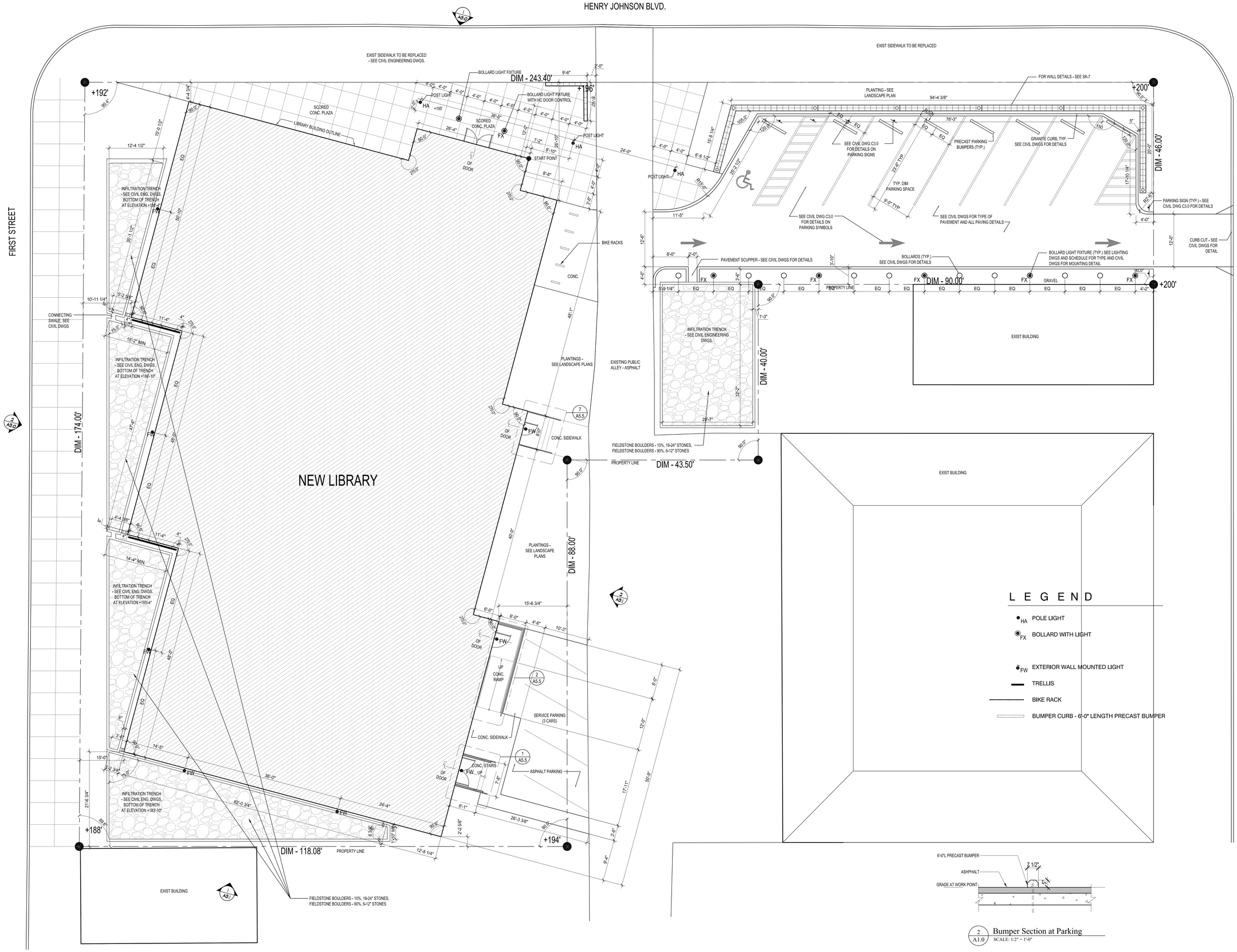

1 A1.0 Site Plan
SCALE: 1/8" = 1'-0"

2 A1.0 Bumper Section at Parking
SCALE: 1/2" = 1'-0"

NOTES

NO.	DATE	REVISION	BY
	8/30/10	As-Built Drawings	AF

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ANDREW GOLDMAN

PROJECT ARCHITECT/ENGINEER
LAWRENCE LAMBERT

DRAWN BY
ADAM FOTTA / PAUL STEIN

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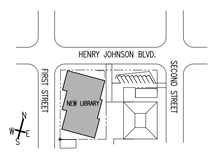
PROJECT TITLE
Albany Public Library
Arbor Hill Branch

148 Henry Johnson Blvd.
Albany NY 12210

DRAWING TITLE
Site Plan

KEY PLAN



DATE
August 30, 2010

SCALE
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PROJECT NUMBER
07-102A

DRAWING NUMBER
A1.0

Figure 1C: Site Layout and Existing Soil Cover Systems

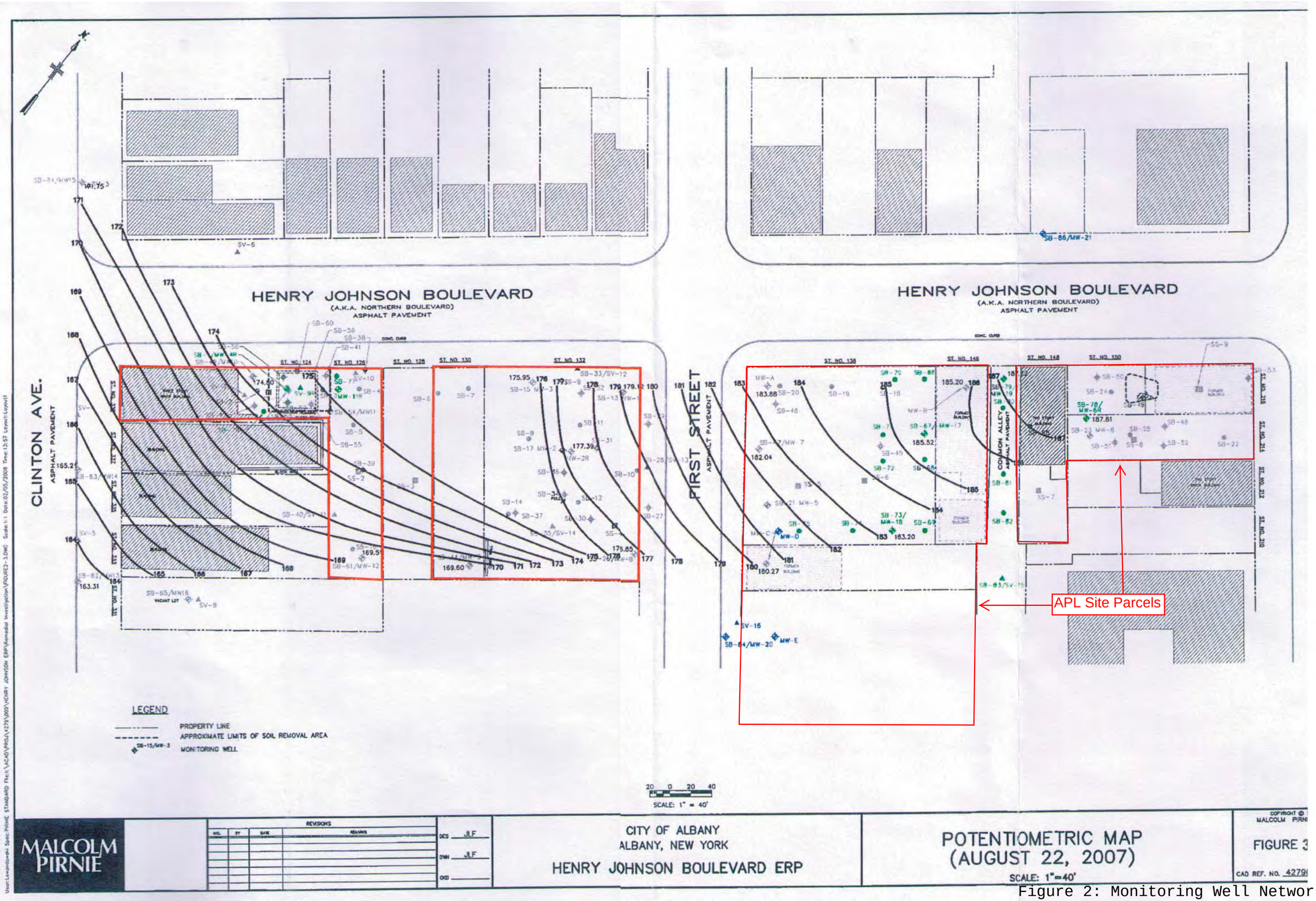

Figure 2: Monitoring Well Network and Groundwater Flow Map

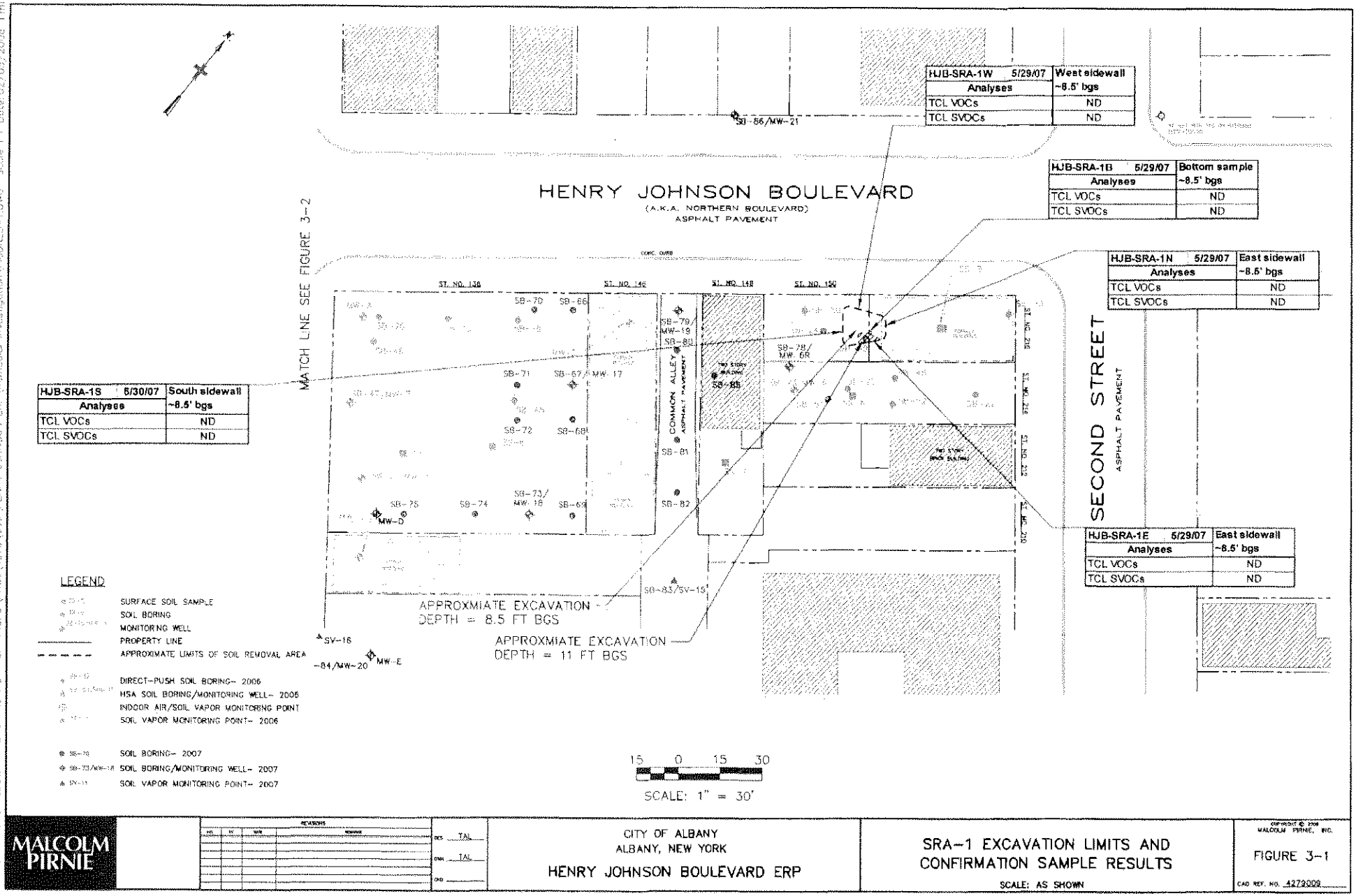

Figure 3A: Confirmation Soil Sample Results for 2007 Tank Removal Excavation

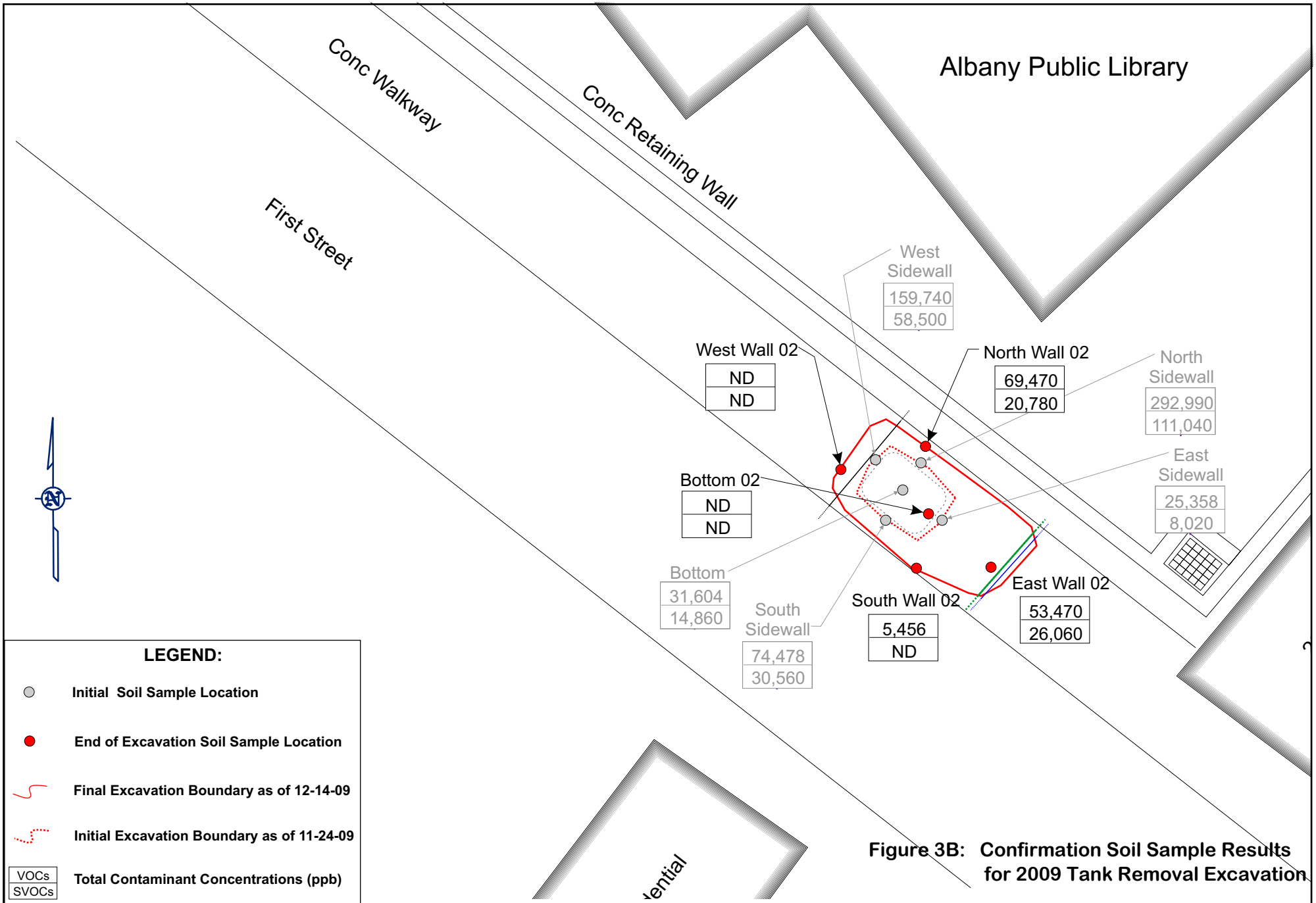

Figure 3B: Confirmation Soil Sample Results for 2009 Tank Removal Excavation

PRECISION ENVIRONMENTAL SERVICES, INC.
831 RT. 67,LOT 28
BALLSTON SPA, NY 12020
TEL: 518-885-4399
FAX: 518-885-4416

UST Closure Detail

Location: First Street, Albany, NY	Date: June 2010
Client: Sano Rubin Construction Co., Inc.	Scale: NTS
Drawn By: DN	Figure: 4

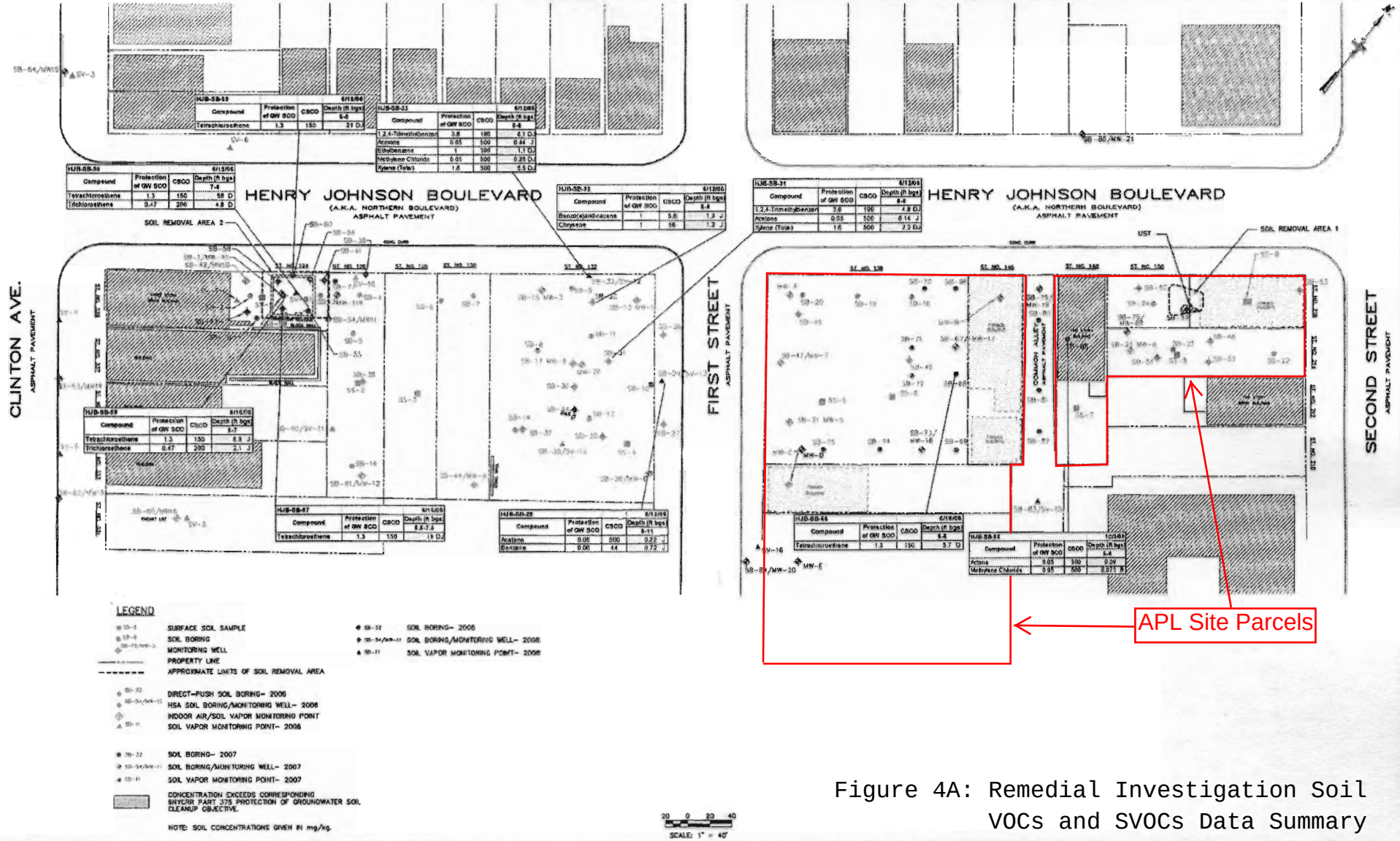

Figure 4A: Remedial Investigation Soil VOCs and SVOCs Data Summary

MALCOLM PIRNIE

CITY OF ALBANY
ALBANY, NEW YORK
HENRY JOHNSON BOULEVARD ERP

NATURE AND EXTENT OF SOIL CONTAMINATION – VOC & SVOC ANALYTICAL DATA
SCALE: 1"=40'

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FIGURE 7-1

CAD REF. NO. 4279009

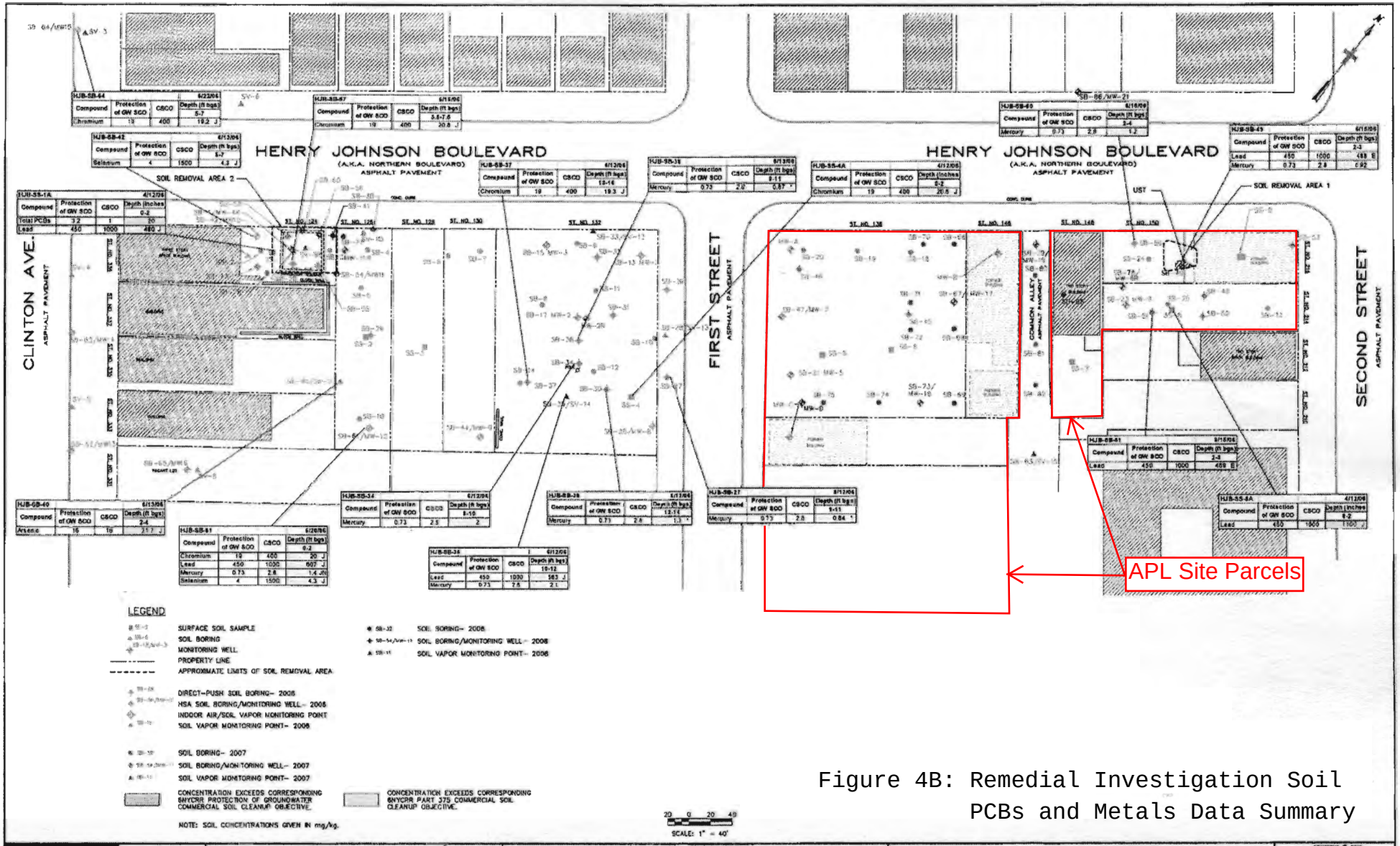

Figure 4B: Remedial Investigation Soil PCBs and Metals Data Summary

MALCOLM PIRNIE

CITY OF ALBANY
ALBANY, NEW YORK
HENRY JOHNSON BOULEVARD ERP

NATURE AND EXTENT OF SOIL CONTAMINATION – METALS AND PCBS ANALYTICAL DATA
SCALE: 1"=40'

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FIGURE 7-2

CAD REF. NO. 4279009

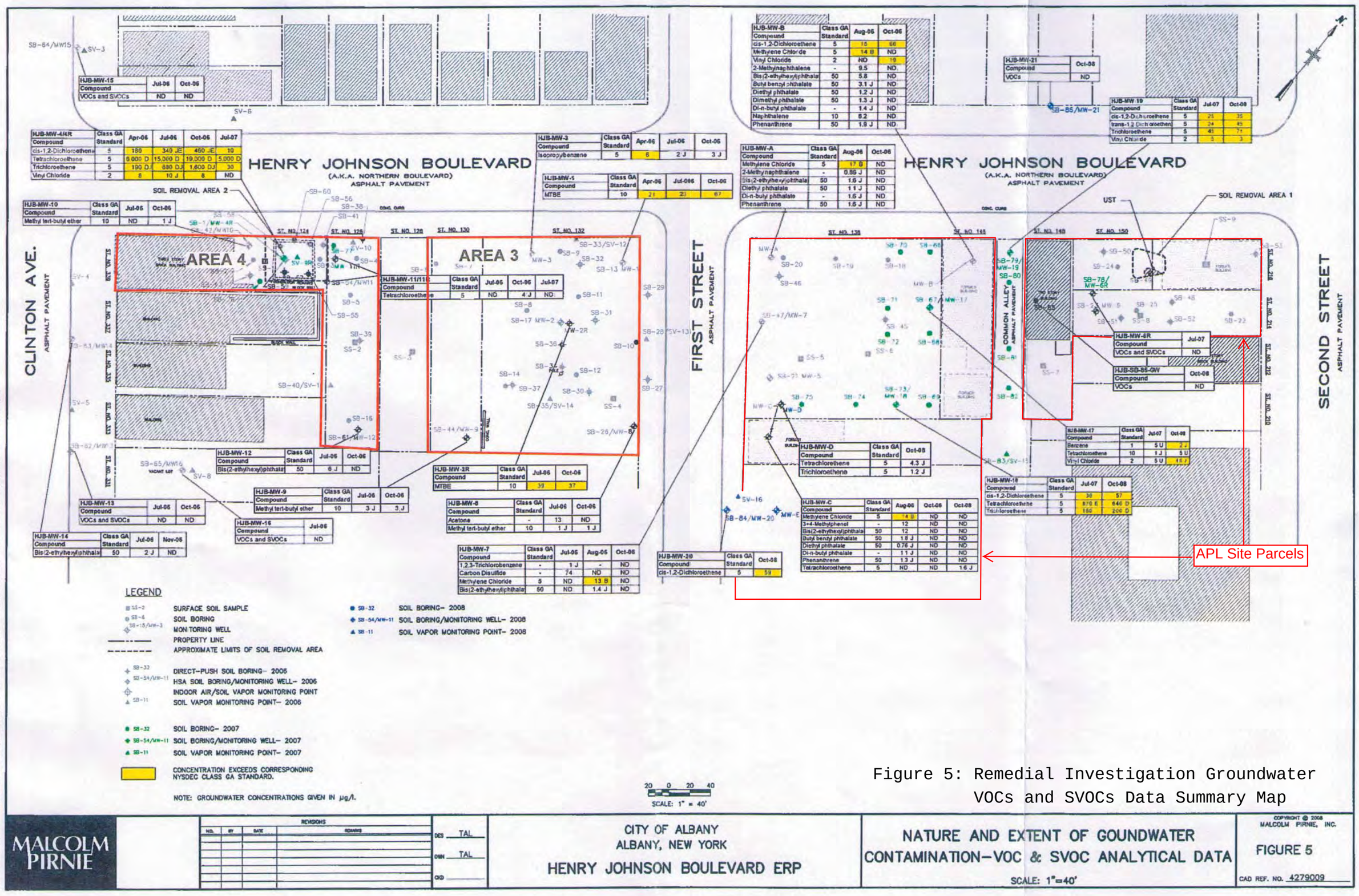

Figure 5: Remedial Investigation Groundwater VOCs and SVOCs Data Summary Map

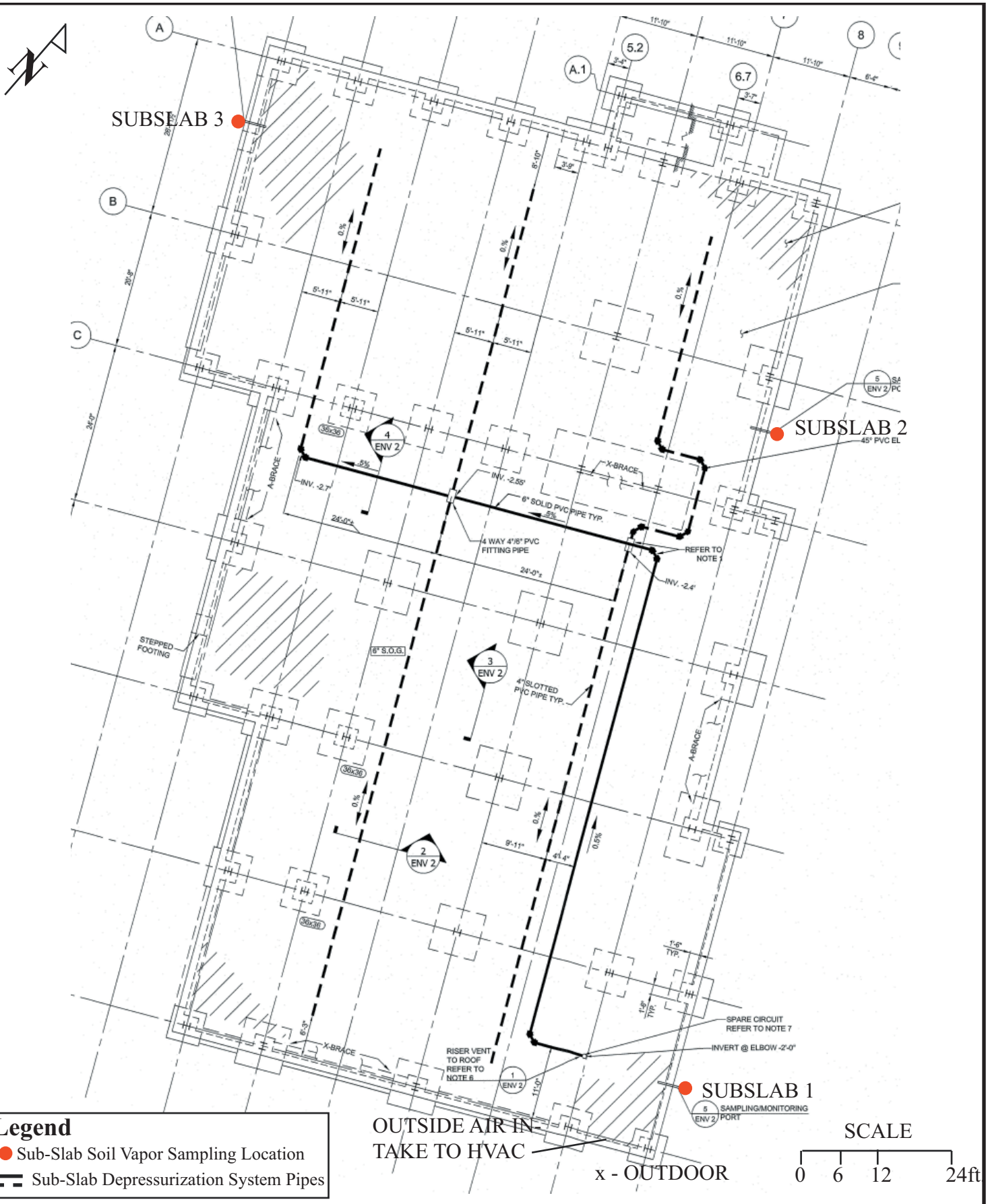

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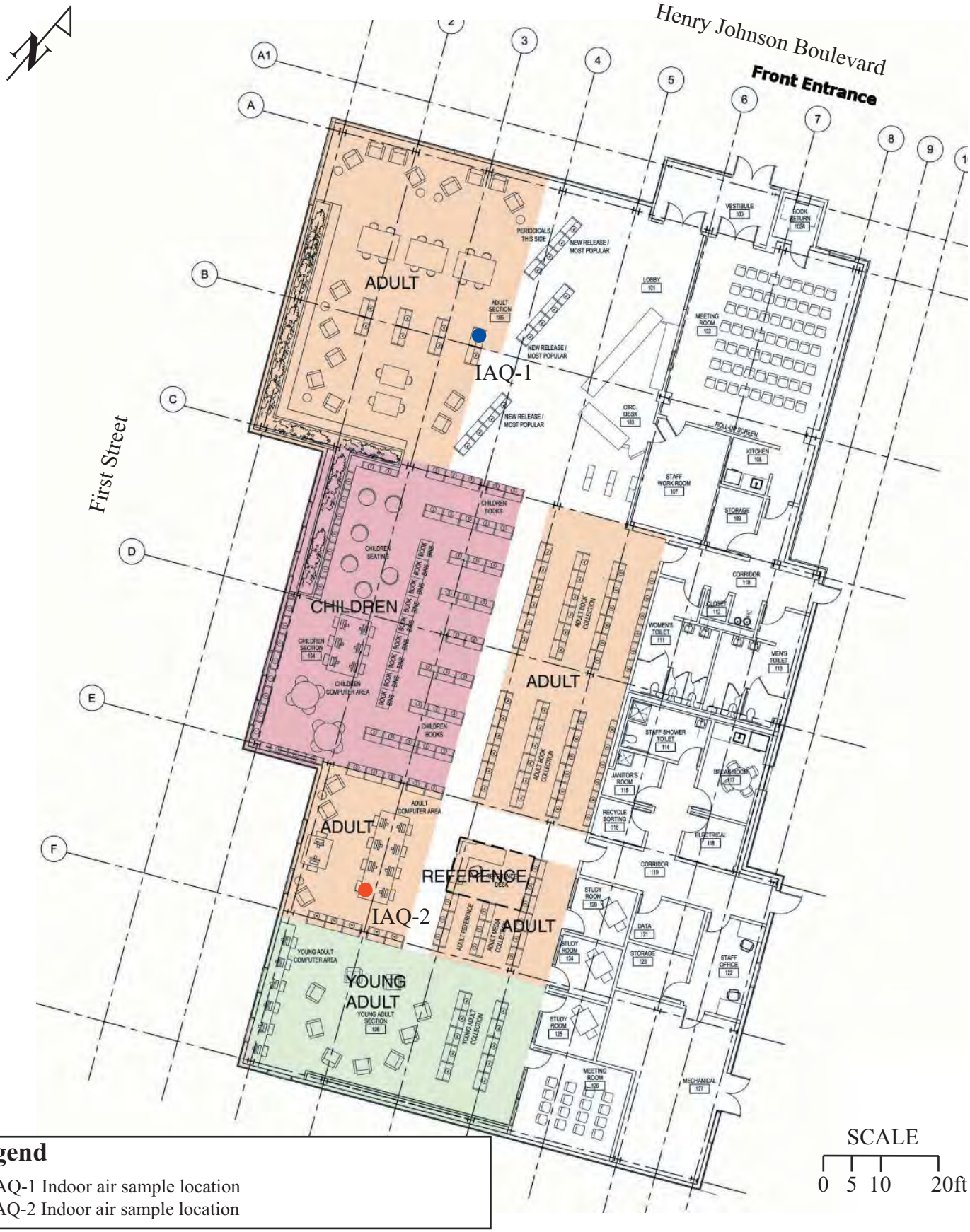
FIGURE 6A - 2011 SOIL VAPOR SAMPLING MAP

Albany Public Library - Arbor Hill/West Hill Branch
148 Henry Johnson Boulevard
City of Albany, Albany County, New York

Source: STV Incorporated, June 2009

Date: January 2011
Scale: As Noted
Project #: 41046.00



Legend

- IAQ-1 Indoor air sample location
- IAQ-2 Indoor air sample location

SCALE

0 5 10 20ft

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FIGURE 6B - 2011 INDOOR AIR QUALITY SAMPLING MAP

Albany Public Library - Arbor Hill/West Hill Branch
148 Henry Johnson Boulevard
City of Albany, Albany County, New York

Source: Hom and Goldman Architects, 2008.

Date: January 2011
Scale: As Noted
Project #: 41046.00

TABLES

Table 1: Remedial Investigation Soil Data

TABLE 7-3
SUMMARY OF DETECTED VOCS IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

On APL Site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-42 10-12 6/13/2006 SOIL mg/kg	HJB-SB-43 5-7 6/13/2006 SOIL mg/kg	HJB-SB-43 10-12 6/13/2006 SOIL mg/kg	HJB-SB-44 8-10 6/14/2006 SOIL mg/kg	HJB-SB-45 7-9 6/15/2006 SOIL mg/kg	HJB-SB-46 11-12 6/15/2006 SOIL mg/kg	HJB-SB-47 6-7 6/15/2006 SOIL mg/kg	HJB-SB-48 2-3 6/15/2006 SOIL mg/kg	HJB-SB-48 11-12 6/15/2006 SOIL mg/kg	HJB-SB-49 2-3 6/15/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
2-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
2-Hexanone			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
4-Chlorotoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
4-Isopropyltoluene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
4-Methyl-2-pentanone			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Acetone	0.05	500	0.013 J	0.006 U	0.009 J	0.006 U	0.021	0.006 U	0.031	0.006 UJ	0.006 U	0.011
Benzene	0.06	44	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Carbon Disulfide			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Chloroform	0.37	350	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Chloromethane			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Ethylbenzene	1	390	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Isopropylbenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
m,p-Xylene			0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Methyl tert-butyl ether	0.93	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.004 J	0.006 U	0.006 U
Naphthalene	12	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
n-Butylbenzene			0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
o-Xylene			0.007 UJ	0.006 UJ	0.006 UJ	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
sec-Butylbenzene	11	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.003 J	0.021	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.009 J	0.006 U	0.006 U
Toluene	0.7	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
trans-1,2-Dichloroethene		500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Trichloroethene	0.47	200	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Vinyl Chloride	0.02	13	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.007 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 UJ	0.006 U	0.006 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit.
E - Concentration exceeded the calibration range.
B - The analyte was found in the method blank as well as the sample.
D - Concentration was obtained from a diluted analysis.
R - Sample results rejected
NA - Not Analyzed.

Table 1: Remedial Investigation Soil Data

On APL Site

TABLE 7-3
SUMMARY OF DETECTED VOCS IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-49 10-11 6/15/2006 SOIL mg/kg	HJB-SB-50 2-4 6/15/2006 SOIL mg/kg	HJB-SB-50 6-8 6/15/2006 SOIL mg/kg	HJB-SB-51 2-3 6/15/2006 SOIL mg/kg	HJB-SBX 2-3 SB-51 Duplicate 6/15/2006 SOIL mg/kg	HJB-SB-51 5-7 6/15/2006 SOIL mg/kg	HJB-SB-52 3-4 6/15/2006 SOIL mg/kg	HJB-SB-52 6-8 6/15/2006 SOIL mg/kg	HJB-SB-53 6-8 6/15/2006 SOIL mg/kg	HJB-SB-54 5-6 6/15/2006 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.006 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.006 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
2-Chlorotoluene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
2-Hexanone			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
4-Chlorotoluene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
4-Isopropyltoluene			0.003 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
4-Methyl-2-pentanone			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Acetone	0.05	500	0.036	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Benzene	0.06	44	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Carbon Disulfide			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Chloroform	0.37	350	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Chloromethane			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.007
Ethylbenzene	1	390	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Isopropylbenzene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
m,p-Xylene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Methyl tert-butyl ether	0.93	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.006 U	0.006 U	0.06 U	0.006 U	0.004 J	0.004 J	0.005 J	0.004 J	0.004 J	0.005 J
Naphthalene	12	500	0.009 B	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
n-Butylbenzene			0.007	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
o-Xylene			0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
sec-Butylbenzene	11	500	0.005 J	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.12
Toluene	0.7	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
trans-1,2-Dichloroethene		500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Trichloroethene	0.47	200	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Vinyl Chloride	0.02	13	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.006 U	0.006 U	0.06 U	0.006 U	0.006 U	0.006 U	0.007 U	0.006 U	0.006 U	0.006 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit.
E - Concentration exceeded the calibration range.
B - The analyte was found in the method blank as well as the sample.
D - Concentration was obtained from a diluted analysis.
R - Sample results rejected
NA - Not Analyzed.

Table 1: Remedial Investigation Soil Data

TABLE 7-3
SUMMARY OF DETECTED VOCS IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

All of these samples are on the APL site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-66 7-8 6/18/2007 SOIL mg/kg	HJB-SB-67 7-8 6/18/2007 SOIL mg/kg	HJB-SB-68 6-7 6/18/2007 SOIL mg/kg	HJB-SB-69 6.5-7.5 6/18/2007 SOIL mg/kg	HJB-SB-70 9.5-10.5 6/18/2007 SOIL mg/kg	HJB-SB-71 13.5-14.5 6/18/2007 SOIL mg/kg	HJB-SB-72 7-8 6/18/2007 SOIL mg/kg	HJB-SB-73 6-7 6/18/2007 SOIL mg/kg	HJB-SB-74 6-7 6/18/2007 SOIL mg/kg	HJB-SB-75 6-7 6/18/2007 SOIL mg/kg
VOCs												
1,1-Dichloroethene	0.33	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
1,2,3-Trichlorobenzene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
1,2,4-Trimethylbenzene	3.6	190	0.009	0.056	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
1,3,5-Trimethylbenzene	8.4	190	0.003 J	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
2-Butanone (MEK)	0.12	500	0.006 U	0.006 U	0.4 U	0.006 U	0.094	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
2-Chlorotoluene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
2-Hexanone			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
4-Chlorotoluene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
4-Isopropyltoluene			0.015	0.005 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
4-Methyl-2-pentanone			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Acetone	0.05	500	0.014	0.006 U	0.4 U	0.006 U	0.031	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Benzene	0.06	44	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Carbon Disulfide			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Chloroform	0.37	350	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Chloromethane			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
cis-1,2-Dichloroethene	0.25	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.005 J	0.053	0.002 J	0.006 U
Ethylbenzene	1	390	0.006 U	0.006	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Isopropylbenzene			0.019	0.004 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
m,p-Xylene			0.006 U	0.004 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Methyl tert-butyl ether	0.93	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Methylene Chloride	0.05	500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Naphthalene	12	500	0.019 B	0.065	0.41 DB	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
n-Butylbenzene			0.084	0.01	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
n-Propylbenzene	3.9	500	0.012	0.007	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
o-Xylene			0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
sec-Butylbenzene	11	500	0.11	0.006	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Tetrachloroethene	1.3	150	0.006 U	0.006 U	**5.7 D**	0.006 U	0.006 U	0.006 U	0.006 U	0.031	0.011	0.006 U
Toluene	0.7	500	0.001 J	0.006 U	0.4 U	0.012	0.006 U	0.006 U	0.012	0.002 J	0.007	0.003 J
trans-1,2-Dichloroethene		500	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Trichloroethene	0.47	200	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.011	0.003 J	0.006 U
Vinyl Chloride	0.02	13	0.006 U	0.006 U	0.4 U	0.006 U	0.006 U	0.006 U	0.025	0.006 U	0.006 U	0.006 U
Xylene (Total)	1.6	500	0.006 U	0.004 J	0.4 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit.
E - Concentration exceeded the calibration range.
B - The analyte was found in the method blank as well as the sample.
D - Concentration was obtained from a diluted analysis.
R - Sample results rejected
NA - Not Analyzed.

Table 1: Remedial Investigation Soil Data

TABLE 7-3
SUMMARY OF DETECTED VOCS IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

On APL Site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-76 6-7 6/18/2007 SOIL mg/kg	HJB-SB-77 6-7 6/18/2007 SOIL mg/kg	HJB-SB-78 6-8 6/18/2007 SOIL mg/kg	HJB-SB-79 4-6 6/18/2007 SOIL mg/kg	HJB-SB-80 8-10 6/18/2007 SOIL mg/kg	HJB-SB-81 12-14 6/18/2007 SOIL mg/kg	HJB-SB-82 4-6 6/18/2007 SOIL mg/kg	HJB-SB-83 4-5 6/18/2007 SOIL mg/kg	HJB-SB-84 7-8 10/3/2008 SOIL mg/kg	HJB-SB-85 10-11 10/3/2008 SOIL mg/kg	HJB-SB-8 7.5-8.5 10/3/200 SOIL mg/kg
VOCs													
1,1-Dichloroethene	0.33	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
1,2,3-Trichlorobenzene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
1,2,4-Trimethylbenzene	3.6	190	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0022 J	0.0065
1,3,5-Trimethylbenzene	8.4	190	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0025 J	0.0065
2-Butanone (MEK)	0.12	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0062	0.0065
2-Chlorotoluene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
2-Hexanone			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
4-Chlorotoluene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
4-Isopropyltoluene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0013 J	0.0065
4-Methyl-2-pentanone			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Acetone	0.05	500	0.006 U	0.006 U	0.006 U	0.007 U	0.028	0.035	0.006 U	0.009	0.01	**0.09**	0.025
Benzene	0.06	44	0.006 U	0.006 U	0.006 U	0.007 U	0.004 J	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Carbon Disulfide			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Chloroform	0.37	350	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Chloromethane			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
cis-1,2-Dichloroethene	0.25	500	0.006 U	0.001 J	0.006 U	0.007 U	0.007 U	0.013 J	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Ethylbenzene	1	390	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Isopropylbenzene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
m,p-Xylene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Methyl tert-butyl ether	0.93	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Methylene Chloride	0.05	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0033 BJ	**0.073 B**	0.028
Naphthalene	12	500	0.006 U	0.002 J	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0025 J	0.0065
n-Butylbenzene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
n-Propylbenzene	3.9	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0021 BJ	0.0065
o-Xylene			0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
sec-Butylbenzene	11	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0018 J	0.0065
Tetrachloroethene	1.3	150	0.006 U	0.005 J	0.006 U	0.003 J	0.007 U	0.52	0.031	0.007 U	0.0053 U	0.0059	0.0065
Toluene	0.7	500	0.006 U	0.006 U	0.002 J	0.003 J	0.019	0.009 J	0.003 J	0.003 J	0.0029 J	0.0034 J	0.0039
trans-1,2-Dichloroethene		500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.034	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Trichloroethene	0.47	200	0.006 U	0.006 U	0.006 U	0.002 J	0.007 U	0.032	0.006 U	0.007 U	0.0043 J	0.005 J	0.0057
Vinyl Chloride	0.02	13	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065
Xylene (Total)	1.6	500	0.006 U	0.006 U	0.006 U	0.007 U	0.007 U	0.027 U	0.006 U	0.007 U	0.0053 U	0.0051 U	0.0065

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit.
E - Concentration exceeded the calibration range.
B - The analyte was found in the method blank as well as the sample.
D - Concentration was obtained from a diluted analysis.
R - Sample results rejected
NA - Not Analyzed.

Table 1: Remedial Investigation Soil Data

TABLE 7-4
SUMMARY OF DETECTED SVOCS IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

On APL Site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-42 5-7 6/13/2006 SOIL mg/kg	HJB-SB-42 10-12 6/13/2006 SOIL mg/kg	HJB-SB-43 5-7 6/13/2006 SOIL mg/kg	HJB-SB-43 10-12 6/13/2006 SOIL mg/kg	HJB-SB-44 8-10 6/14/2006 SOIL mg/kg	HJB-SB-45 7-9 6/15/2006 SOIL mg/kg	HJB-SB-46 11-12 6/15/2006 SOIL mg/kg	HJB-SB-47 6-7 6/15/2006 SOIL mg/kg	HJB-SB-48 2-3 6/15/2006 SOIL mg/kg	HJB-SB-48 11-12 6/15/2006 SOIL mg/kg
SVOCs												
2,4-Dinitrophenol			0.88 R	0.91 R	0.87 R	0.87 R	0.82 UJ	0.82 UJ	0.82 UJ	0.85 UJ	0.82 UJ	0.8 UJ
2-Methylnaphthalene			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.11 J	0.42 UJ	0.4 UJ	0.4 UJ
Acenaphthene	98	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Acenaphthylene		500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Anthracene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Benzo(a)anthracene	1	5.6	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.13 J	0.4 UJ
Benzo(a)pyrene	22	1	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.12 J	0.4 UJ
Benzo(b)fluoranthene	1.7	5.6	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.13 J	0.4 UJ
Benzo(g,h,i)perylene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Benzo(k)fluoranthene	1.7	56	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.06 J	0.4 UJ
bis(2-Ethylhexyl)phthalate			0.14 J	0.17 J	0.12 J	0.12 J	3.4 J	1.6 J	0.097 J	0.097 J	0.15 JB	0.041 J
Butylbenzylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Carbazole			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Chrysene	1	56	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.12 J	0.4 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Dibenzofuran			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Diethylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Di-n-butylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Di-n-octylphthalate			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Fluoranthene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.16 J	0.4 UJ
Fluorene	386	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.043 J	0.42 UJ	0.4 UJ	0.4 UJ
Hexachlorocyclopentadiene			0.43 R	0.45 R	0.43 R	0.43 R	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Hexachloroethane			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.048 J	0.4 UJ
Isophorone			0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Naphthalene	12	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ
Phenanthrene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.11 J	0.42 UJ	0.4 UJ	0.4 UJ
Pyrene	1,000	500	0.43 UJ	0.45 UJ	0.43 UJ	0.43 UJ	0.4 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.16 J	0.4 UJ

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit.
E - Concentration exceeded the calibration range.
B - The analyte was found in the method blank as well as the sample.
D - Concentration was obtained from a diluted analysis.
R - Sample results rejected
NA - Not Analyzed.

Table 1: Remedial Investigation Soil Data

TABLE 7-4
SUMMARY OF DETECTED SVOCS IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

All of these samples are on the APL site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-49 2-3 6/15/2006 SOIL mg/kg	HJB-SB-49 10-11 6/15/2006 SOIL mg/kg	HJB-SB-50 2-4 6/15/2006 SOIL mg/kg	HJB-SB-50 6-8 6/15/2006 SOIL mg/kg	HJB-SB-51 2-3 6/15/2006 SOIL mg/kg	HJB-SBX 2-3 SB-51 Duplicate 6/15/2006 SOIL mg/kg	HJB-SB-51 5-7 6/15/2006 SOIL mg/kg	HJB-SB-52 3-4 6/15/2006 SOIL mg/kg	HJB-SB-52 6-8 6/15/2006 SOIL mg/kg	HJB-SB-53 6-8 6/15/2006 SOIL mg/kg
SVOCs												
2,4-Dinitrophenol			0.75 UJ	0.8 UJ	0.79 UJ	0.8 R	0.81 UJ	0.82 UJ	0.81 UJ	0.92 UJ	0.78 UJ	0.81 UJ
2-Methylnaphthalene			0.37 UJ	0.52 J	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Acenaphthene	98	500	0.37 UJ	0.47 J	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Acenaphthylene		500	0.086 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Anthracene	1,000	500	0.085 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(a)anthracene	1	5.6	0.47 J	0.091 J	0.051 J	0.4 UJ	0.12 J	0.088 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(a)pyrene	22	1	0.51 J	0.053 J	0.065 J	0.4 UJ	0.13 J	0.1 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(b)fluoranthene	1.7	5.6	0.68 J	0.076 J	0.099 J	0.4 UJ	0.18 J	0.14 J	0.4 UJ	0.052 J	0.39 UJ	0.4 UJ
Benzo(g,h,i)perylene	1,000	500	0.2 J	0.39 UJ	0.39 UJ	0.4 UJ	0.089 J	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Benzo(k)fluoranthene	1.7	56	0.29 J	0.39 UJ	0.39 UJ	0.4 UJ	0.078 J	0.082 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
bis(2-Ethylhexyl)phthalate			0.057 J	0.064 J	1.2 J	0.45 J	3.4 J	2.2 J	0.053 J	1.4 J	0.25 J	0.84 J
Butylbenzylphthalate			0.37 UJ	0.39 UJ	0.059 J	0.4 UJ	1.3 J	0.37 J	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Carbazole			0.051 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Chrysene	1	56	0.58 J	0.099 J	0.073 J	0.4 UJ	0.17 J	0.11 J	0.4 UJ	0.046 J	0.39 UJ	0.4 UJ
Dibenzo(a,h)anthracene	1,000	0.56	0.05 J	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Dibenzofuran			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Diethylphthalate			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Di-n-butylphthalate			0.37 UJ	0.39 UJ	0.059 J	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Di-n-octylphthalate			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Fluoranthene	1,000	500	0.91 J	0.25 J	0.089 J	0.4 UJ	0.18 J	0.15 J	0.4 UJ	0.064 J	0.057 J	0.4 UJ
Fluorene	386	500	0.37 UJ	0.76 J	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Hexachlorocyclopentadiene			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Hexachloroethane			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.2 J	0.39 UJ	0.39 UJ	0.4 UJ	0.055 J	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Isophorone			0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Naphthalene	12	500	0.37 UJ	0.39 UJ	0.39 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.45 UJ	0.39 UJ	0.4 UJ
Phenanthrene	1,000	500	0.37 J	2.5 J	0.048 J	0.4 UJ	0.09 J	0.065 J	0.4 UJ	0.45 UJ	0.04 J	0.4 UJ
Pyrene	1,000	500	1 J	0.31 J	0.097 J	0.4 UJ	0.26 J	0.19 J	0.4 UJ	0.063 J	0.049 J	0.4 UJ

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit.
E - Concentration exceeded the calibration range.
B - The analyte was found in the method blank as well as the sample.
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NA - Not Analyzed.

Table 1: Remedial Investigation Soil Data

On APL site

TABLE 7-4
SUMMARY OF DETECTED SVOCS IN SOIL
HENRY JOHNSTON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-65 10-12 7/12/2006 SOIL mg/kg	HJB-SB-78 6-8 6/18/2007 SOIL mg/kg
SVOCs				
2,4-Dinitrophenol			0.87 UJ	0.82 U
2-Methylnaphthalene			0.43 UJ	0.41 U
Acenaphthene	98	500	0.43 UJ	0.41 U
Acenaphthylene		500	0.43 UJ	0.41 U
Anthracene	1,000	500	0.43 UJ	0.41 U
Benzo(a)anthracene	1	5.6	0.43 UJ	0.41 U
Benzo(a)pyrene	22	1	0.43 UJ	0.41 U
Benzo(b)fluoranthene	1.7	5.6	0.43 UJ	0.41 U
Benzo(g,h,i)perylene	1,000	500	0.43 UJ	0.41 U
Benzo(k)fluoranthene	1.7	56	0.43 UJ	0.41 U
bis(2-Ethylhexyl)phthalate			0.096 J	0.33 JB
Butylbenzylphthalate			0.43 UJ	0.41 U
Carbazole			0.43 UJ	0.41 U
Chrysene	1	56	0.43 UJ	0.41 U
Dibenzo(a,h)anthracene	1,000	0.56	0.43 UJ	0.41 U
Dibenzofuran			0.43 UJ	0.41 U
Diethylphthalate			0.43 UJ	0.41 U
Di-n-butylphthalate			0.43 UJ	0.41 U
Di-n-octylphthalate			0.43 UJ	0.41 U
Fluoranthene	1,000	500	0.43 UJ	0.41 U
Fluorene	386	500	0.43 UJ	0.41 U
Hexachlorocyclopentadiene			0.43 UJ	0.41 U
Hexachloroethane			0.43 UJ	0.41 U
Indeno(1,2,3-cd)pyrene	8.2	5.6	0.43 UJ	0.41 U
Isophorone			0.43 UJ	0.41 U
Naphthalene	12	500	0.43 UJ	0.41 U
Phenanthrene	1,000	500	0.43 UJ	0.41 U
Pyrene	1,000	500	0.43 UJ	0.41 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit.
E - Concentration exceeded the calibration range.
B - The analyte was found in the method blank as well as the sample.
D - Concentration was obtained from a diluted analysis.
R - Sample results rejected
NA - Not Analyzed.

Table 1: Remedial Investigation Soil Data

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

All of these samples are on the APL site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-45 7-9 6/15/2006 SOIL mg/kg	HJB-SB-46 11-12 6/15/2006 SOIL mg/kg	HJB-SB-47 6-7 6/15/2006 SOIL mg/kg	HJB-SB-48 2-3 6/15/2006 SOIL mg/kg	HJB-SB-48 11-12 6/15/2006 SOIL mg/kg	HJB-SB-49 2-3 6/15/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	9,710 E	11,400 E	12,600 E	12,100	9,460 E	6,400 E
Antimony	-	-	0.8 U	0.64 BN	0.83 U	0.18 BN	0.7 U	0.066 BN
Arsenic	16	16	6 E	5.6 E	4.6 E	9.7	5.5 E	6.5 E
Barium	820	400	61.8 E	101 E	78.3 E	105 E	53.2 E	92.7 E
Beryllium	47	590	0.59 E	0.65 E	0.85 E	0.8 E	0.56 E	0.45 E
Cadmium	8	9	0.21 B	0.37	0.17 B	0.36 E	0.21 B	0.22
Calcium	-	-	51,900	18,800	7,590	13,100 E	49,600	5,460
Chromium	19	400	11.8 E	15.8 E	14.4 E	16.4 E	11.8 E	9.7 E
Cobalt	-	-	7.6 E	8.8 E	8.8 E	9.3 E	6.8 E	5.4 E
Copper	1,720	270	18.4	21.3	19.3	29.6	17.2	25.5
Iron	-	-	24,900	23,800	25,000	25,300 E	22,400	13,100
Lead	450	1,000	9.1 E	62.3 E	20.6 E	321 E	6.9 E	**488** E
Magnesium	-	-	12,200 E	5,160 E	5,010 E	5,050 E	11,000 E	2,210 E
Manganese	2,000	10,000	471 E	653 E	331 E	486 E	500 E	388 E
Mercury	0.73	3	0.063	0.12	0.12	0.45	0.022 B	**0.92**
Nickel	130	310	16.6 E	18.1 E	21 E	20.1 E	15.9 E	11.7 E
Potassium	-	-	1,520 *	1,040 *	1,560 *	1,590	1,360 *	775 *
Selenium	4	1,500	3.9 E	3.1 E	2.7 E	4 E	3.3 E	1.9 E
Silver	8.3	1,500	1.2 U	1.2 U	1.2 U	0.053 B	1.1 U	0.16 B
Sodium	-	-	170	137	271	125	149	117
Thallium	-	-	1.3	2.1	0.78 B	1.3	1.3	1.4
Vanadium	-	-	18.6 E	19.9 E	21.7 E	24.5 E	18.5 E	16.6 E
Zinc	2,480	10,000	43.5 E	88.3 E	58.4 E	98.1 E	40.6 E	129 E

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
N - Matrix spike recovery falls outside the control limit.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
* - Relative Percent Difference (RPD) for duplicate analysis is outside the control limit.

Table 1: Remedial Investigation Soil Data

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

All of these samples are on the APL site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-49 10-11 6/15/2006 SOIL mg/kg	HJB-SB-50 2-4 6/15/2006 SOIL mg/kg	HJB-SB-50 6-8 6/15/2006 SOIL mg/kg	HJB-SB-51 2-3 6/15/2006 SOIL mg/kg	HJB-SBX 2-3 SB-51 Duplicate 6/15/2006 SOIL mg/kg	HJB-SB-51 5-7 6/15/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	8,330 E	9,310 E	14,900 E	11,600 E	11,100 E	9,440 E
Antimony	-	-	0.72 U	0.12 BN	0.73 U	0.093 BN	0.18 BN	0.77 U
Arsenic	16	16	3.5 E	7.9 E	5.9 E	7.2 E	6.8 E	3.5 E
Barium	820	400	51.2 E	331 E	45.9 E	181 E	169 E	52.1 E
Beryllium	47	590	0.51 E	0.56 E	0.9 E	0.73 E	0.69 E	0.55 E
Cadmium	8	9	0.13 B	0.35	0.21 B	0.85	0.99	0.1 B
Calcium	-	-	28,200	22,100	2,570	8,590	9,870	4,730
Chromium	19	400	9.1 E	14.1 E	15.5 E	16.8 E	17.3 E	11 E
Cobalt	-	-	5.5 E	7.5 E	9.9 E	9.2 E	8.8 E	7.7 E
Copper	1,720	270	13	40.8	21.1	37.9	35.8	13.5
Iron	-	-	16,900	22,100	30,500	26,100	23,600	18,200
Lead	450	1,000	7.1 E	291 E	14.8 E	**489** E	**451** E	23.3 E
Magnesium	-	-	5,110 E	5,110 E	4,330 E	4,000 E	3,980 E	3,320 E
Manganese	2,000	10,000	354 E	412 E	306 E	535 E	535 E	279 E
Mercury	0.73	3	0.015 B	**1.2**	0.096	0.33	0.53	0.055
Nickel	130	310	12.3 E	19.8 E	22.5 E	21.2 E	20.7 E	14.5 E
Potassium	-	-	1,060 *	1,230 *	1,930 *	1,500 *	1,450 *	1030 *
Selenium	4	1,500	2.2 E	3.4 E	2.7 E	2.8 E	2.8 E	2.4 E
Silver	8.3	1,500	1.1 U	0.093 B	1.1 U	0.18 B	0.072 B	1.2 U
Sodium	-	-	131	120	70.8	95.6	104	68.1
Thallium	-	-	1.1	1.2	0.51 B	1.6	1.8	0.69 B
Vanadium	-	-	15.7 E	18.9 E	25.2 E	24 E	25.2 E	17.3 E
Zinc	2,480	10,000	33.8 E	214 E	58.1 E	254 E	237 E	45 E

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
N - Matrix spike recovery falls outside the control limit.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
* - Relative Percent Difference (RPD) for duplicate analysis is outside the control limit.

Table 1: Remedial Investigation Soil Data

TABLE 7-5
SUMMARY OF SOIL SAMPLING RESULTS (METALS)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

On APL Site

Sample ID Sampling Depth (feet) Duplicate Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objective mg/kg	HJB-SB-52 3-4 6/15/2006 SOIL mg/kg	HJB-SB-52 6-8 6/15/2006 SOIL mg/kg	HJB-SB-53 6-8 6/15/2006 SOIL mg/kg	HJB-SB-54 5-6 6/15/2006 SOIL mg/kg	HJB-SB-54 11-12 6/15/2006 SOIL mg/kg	HJB-SB-55 7-8 6/15/2006 SOIL mg/kg
METALS (Total)								
Aluminum	-	-	10,200 E	8,690 E	8,860 E	6,390 E	13,900 E	13,000 E
Antimony	-	-	0.87 U	0.72 U	0.7 U	0.79 U	0.84 U	0.84 U
Arsenic	16	16	6.2 E	4.4 E	4 E	7.9 E	6.8 E	5.7 E
Barium	820	400	165 E	59.7 E	62.4 E	50.9 E	81.2 E	84.4 E
Beryllium	47	590	1.2 E	0.54 E	0.56 E	0.37 E	0.91 E	0.8 E
Cadmium	8	9	0.56	0.094 B	0.17 B	0.16 B	0.24 B	0.38
Calcium	-	-	35,500	5,210	32,600	47,500	39,500	44,400
Chromium	19	400	13.8 E	10.1 E	10.2 E	8.5 E	16.2 E	14.5 E
Cobalt	-	-	8 E	6.8 E	6.8 E	5.5 E	11.3 E	10 E
Copper	1,720	270	34.9	14.9	14.8	18.8	21.8	19.7
Iron	-	-	23,900	17,300	20,100	18,100	30,100	28,200
Lead	450	1,000	288 E	47.3 E	6.6 E	5.4 E	9.2 E	11.1 E
Magnesium	-	-	7,280 E	3,090 E	8,560 E	14,100 E	11,000 E	11,500 E
Manganese	2,000	10,000	409 E	222 E	410 E	487 E	548 E	679 E
Mercury	0.73	3	0.63	0.23	0.018 B	0.013 B	0.021 B	0.018 B
Nickel	130	310	17.6 E	13.9 E	14.4 E	11.8 E	24.1 E	20.6 E
Potassium	-	-	1,520 *	968 *	1,410 *	1,040 *	2,160 *	2,230 *
Selenium	4	1,500	3.3 E	2.1 E	2.9 E	2.6 E	2.6 E	4.3 E
Silver	8.3	1,500	0.026 B	1.1 U	1.1 U	1.2 U	1.3 U	1.3 U
Sodium	-	-	169	89.1	337	150	264	1100
Thallium	-	-	1.1	0.66 B	1.3	1.6	1.5	2.5
Vanadium	-	-	21.3 E	17.2 E	16.5 E	14.1 E	23.9 E	21.8 E
Zinc	2,480	10,000	158 E	47.8 E	40.5 E	32 E	63.6 E	56 E

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 CSCO.
- Concentration exceeds corresponding 6 NYCRR Part 375 Protection of Groundwater SCO.

U - The compound was not detected at the indicated concentration.
N - Matrix spike recovery falls outside the control limit.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
* - Relative Percent Difference (RPD) for duplicate analysis is outside the control limit.

Table 2: Remedial Investigation Groundwater Data

TABLE 7-6
SUMMARY OF DETECTED VOCS AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

On APL Site

Sample ID	NYSDEC Class GA Standard	HJB-MW-4	HJB-MW-4R	HJB-MW-6R	HJB-MW-7	HJB-MW-7	HJB-MW-X MW-7 Duplicate	HJB-MW-8	HJB-MW-8	HJB-MW-9	HJB-MW-9	HJB-MW-10
Duplicate												
Sampling Date		10/31/2006	7/5/2007	7/5/2007	7/26/2006	10/31/2006	10/31/2006	7/27/2006	10/31/2006	7/26/2006	10/30/2006	7/27/2006
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOCs												
1,1,1,2-Tetrachloroethane		1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	**6**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene		5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Isopropyltoluene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone		8	5 U	5 U	5 U	5 U	5 U	13	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide		5 U	5 U	5 U	74	5 U	5 U	5 U	5 U	5 U	5 U	17
Chloroethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	7	1 J	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	**460 JE**	**10**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	10	5 U	5 U	5 U	5 U	5 U	5 U	1 J	1 J	3 J	3 J	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene		5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	**19,000 D**	**5,000 D**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5	**1,600 DJ**	**30**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	2	**8**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylene (Total)		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Total TICS		U			NA	U	U	NA	U	NA	U	U
SVOCs												
2-Methylnaphthalene		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U
bis(2-Ethylhexyl)phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 J	10 U	2 J	12 U
Diethylphthalate	50	10 U	10 U	3 J	10 U	10 U	10 U	10 U	10 U	1 J	10 U	12 U
Total TICS		U				U	U		41 J/NJ		U	

Notes

[ ] - Concentration exceeds NYSDEC Class GA Standard
TICS - Tentatively Identified Compounds
U - The compound was not detected at the indicated concentration
J - Compound detected below the reporting limit or is estimated
E - Concentration exceeded the calibration range.
N - Positively identified TICS.
B - The analyte was found in the method blank as well as sample.
D - Concentration was obtained from a diluted analysis.
NA - Not Analyzed.

Table 2: Remedial Investigation Groundwater Data

TABLE 7-6
SUMMARY OF DETECTED VOCS AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

On APL Site

Sample ID	NYSDEC	HJB-MW-15	HJB-MW-16	HJB-MW-17	HJB-MW-17	HJB-MW-18	HJB-MW-18	HJB-MW-19	HJB-MW-19	HJB-MW-20	HJB-MW-21	HJB-MW-A
Duplicate	Class											
Sampling Date	GA	10/31/2006	7/27/2006	7/5/2007	10/13/2008	7/5/2007	10/13/2008	7/5/2007	10/13/2008	10/13/2008	10/13/2008	10/31/2006
Matrix	Standard	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOCs												
1,1,1,2-Tetrachloroethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U	1.2 J	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Isopropyltoluene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	**2** J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	**30**	**57**	**25**	**35**	**59**	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U	2.2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	5	5 U	5 U	5 U	2.8 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Butylbenzene		5 U	5 U	5 U	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene		5 U	5 U	5 U	3.3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	1 J	5 U	**870 E**	**640 D**	3 J	1.3 J	1.1 J	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U	1.1 J	**24**	**45**	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U	5 U	**160**	**200 D**	**49**	**71**	4.5 J	5 U	5 U
Vinyl Chloride	2	5 U	5 U	5 U	**4.6** J	5 U	1.3 J	**5**	**3 J**	5 U	5 U	5 U
Xylene (Total)		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Total TICS		U	NA							U	U	U
SVOCs												
2-Methylnaphthalene		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U
bis(2-Ethylhexyl)phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA	10 U
Diethylphthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	6 J	6 J	NA	NA	10 U
Total TICS		U										U

Notes

[ ] - Concentration exceeds NYSDEC Class GA Standard

TICS - Tentatively Identified Compounds

U - The compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or is estimated

E - Concentration exceeded the calibration range.

N - Positively identified TICS.

B - The analyte was found in the method blank as well as sample.

D - Concentration was obtained from a diluted analysis.

NA - Not Analyzed.

Table 2: Remedial Investigation Groundwater Data

TABLE 7-6
SUMMARY OF DETECTED VOCS AND SVOCS IN GROUNDWATER
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

All of these samples are on the APL site.

Sample ID	NYSDEC	HJB-MW-B	HJB-MW-C	HJB-MW-C	HJB-MW-D	HJB-SB-85-GW
Duplicate	Class					
Sampling Date	GA	10/31/2006	10/31/2006	10/13/2008	10/13/2008	10/3/2008
Matrix	Standard	WATER	WATER	WATER	WATER	WATER
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOCs						
1,1,1,2-Tetrachloroethane		5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane		5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene		5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene		17 B	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene		6	5 U	5 U	5 U	5 U
4-Isopropyltoluene		2 J	5 U	5 U	5 U	5 U
Acetone		5 U	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide		5 U	5 U	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U	5 U	5 U
Chloroform	7	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	**66**	5 U	5 U	5 U	5 U
Ethylbenzene	5	5	5 U	5 U	5 U	5 U
Isopropylbenzene	5	3 J	5 U	5 U	5 U	5 U
Methyl tert-butyl ether	10	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U
Naphthalene		21 B	5 U	5 U	5 U	5 U
n-Butylbenzene		5 U	5 U	5 U	5 U	5 U
n-Propylbenzene		3 J	5 U	5 U	5 U	5 U
o-Xylene		5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene		2 J	5 U	5 U	5 U	5 U
tert-Butylbenzene		5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	5 U	5 U	1.6 J	4.3 J	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
Trichloroethene	5	5 U	5 U	5 U	1.2 J	5 U
Vinyl Chloride	2	**19**	5 U	5 U	5 U	5 U
Xylene (Total)		5 U	5 U	5 U	5 U	5 U
Total TICS		203 J/NJ	U	U	U	U
SVOCs						
2-Methylnaphthalene		12	10 U	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50	10 U	10 U	NA	NA	NA
Diethylphthalate	50	10 U	10 U	NA	NA	NA
Total TICS		92 NJ	U			

Notes

[ ] - Concentration exceeds NYSDEC Class GA Standard

TICS - Tentatively Identified Compounds

U - The compound was not detected at the indicated concentration

J - Compound detected below the reporting limit or is estimated

E - Concentration exceeded the calibration range.

N - Positively identified TICS.

B - The analyte was found in the method blank as well as sample.

D - Concentration was obtained from a diluted analysis.

NA - Not Analyzed.

Table 2: Remedial Investigation Groundwater Data

TABLE 7-7
SUMMARY OF GROUNDWATER SAMPLING RESULTS (METALS AND NAP)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

On APL Site

Sample ID	NYSDEC	HJB-MW-2R	HJB-MW-X	HJB-MW-2R	HJB-MW-4	HJB-MW-4**	HJB-MW-4R	HJB-MW-6R	HJB-MW-7	HJB-MW-7	HJB-MW-X	HJB-MW-8	HJB-MW-8
Duplicate	Class		MW-2R Duplicate								MW-7 Duplicate		
Sampling Date	GA	7/26/2006	7/26/2006	10/31/2006	4/12/2006	4/12/2006	7/5/2007	7/5/2007	7/26/2006	10/31/2006	10/31/2006	7/27/2006	10/31/2006
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
METALS (Total)													
Aluminum	-	170 B	122 B	61.5 B	8,750 R	97.5 R	111 B	60.5 B	14 U	31.9 B	27.6 B	79.3 B	70.8 B
Antimony	-	1.2 U	1.2 U	1.2 U	1.2 R	3.0 R	7.6 B	13.1 B	1.2 U	2.3 B	3.7 B	1.2 U	1.2 U
Arsenic	25	2.7 B	1.6 U	5.6 B	16.2 R	2.5 R	1.6 U	1.6 U	2.2 B	1.6 U	2.7 B	10.3 B	**54.2**
Barium	1,000	381	374	425	194 R	131 R	356	71.6 B	108 B	128 B	128 B	763	773
Beryllium	3*	0.15 U	0.15 U	0.15 U	0.52 R	0.15 R	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Cadmium	5	0.22 B	0.13 B	0.1 U	0.10 R	0.10 R	0.10 U	0.10 U	0.26 B	0.92 B	0.92 B	0.13 B	0.1 U
Calcium	-	156,000	157,000	172,000	159,000 R	146,000 R	172,000	275,000	176,000	153,000	151,000	214,000	222,000
Chromium	50	1.5 B	0.59 B	0.38 U	**1,030 R**	5.2 R	0.38 U	0.38 U	0.93 B	0.38 U	0.38 U	0.53 B	0.38 U
Cobalt	-	0.97 B	0.98 B	2.9 B	8.1 R	2.6 R	1.7 B	3.5 B	0.31 B	0.15 U	0.15 U	1.9 B	7.4 B
Copper	200	6.3 U	6.3 U	6.3 U	125 R	17.1 R	6.3 U	8.8 B	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
Iron	300	**882**	**1,420**	**14,400 E**	**16,500 R**	204 R	**919**	**1,610**	159 B	156 BE	157 BE	**4,150**	**28,500 E**
Lead	25	0.46 U	0.46 U	0.46 U	24.6 R	1.4 R	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Magnesium	35,000*	**59,500**	**61,500**	**65,800**	22,400 R	18,800 R	**47,100**	**68,700**	**68,400**	**54,900**	**55,300**	**71,100**	**69,800**
Manganese	300	**421**	**408**	**420**	**543 R**	173 R	41 B	**2,570**	**917**	90.9	91.2	**592**	**1,100**
Nickel	100	1.4 B	1 B	3 B	**241 R**	**155 R**	5.9 B	9.6 B	1.2 B	0.59 U	0.59 U	3.6 B	7.1 B
Potassium	-	10,600	10,900	10,600	15,000 R	13,500 R	4,060	8,210	11,200	6,680	6,750	26,900	24,200
Selenium	10	0.98 U	0.98 U	**11.9 B**	0.98 R	3.8 R	5.8 B	0.98 U	0.98 U	**12.7 B**	**15.2 B**	0.98 U	7.9 B
Silver	50	1.1 B	0.91 U	0.91 U	5.4 R	1.8 R	13.6 B	23.3 B	1.2 B	0.91 U	0.91 U	1.1 B	1.4 B
Sodium	20,000	**217,000**	**238,000**	**319,000 E**	**1,540,000 R**	**1,580,000 R**	**160,000**	**68,600**	**109,000**	**46,200 E**	**47,200 E**	**614,000**	**870,000 E**
Thallium	0.5*	1.2 U	1.2 U	1.2 U	**2.1 R**	**2.5 R**	1.2 U	1.2 U	**2.2 B**	1.2 U	1.2 U	1.2 U	1.2 U
Vanadium	-	0.47 U	0.47 U	0.47 U	26.5 R	2.2 R	0.48 B	0.9 B	0.54 B	1 B	1.1 B	0.6 B	0.47 U
Zinc	2,000*	20.1 B	11.8 B	10.7 B	83.6 R	26.5 R	18 B	21.8 B	15.4 B	54.2	49.9 B	16.7 B	9.5 B
NATURAL ATTENUATION PARAMETERS (mg/L)													
Alkalinity	-	630	610	700	NA	NA	NA	NA	530	590	590	720	560
Chloride	-	380 NJ	390 NJ	510	NA	NA	NA	NA	140 NJ	32	34	1100 NJ	280
Dissolved Organic Carbon	-	10 U	10 U	10 U	NA	NA	NA	NA	10 U	10 U	10 U	11	10 U
Ethane (ug/L)	-	26 U	27 U	26 U	NA	NA	NA	NA	26 U	27 U	27 U	26 U	26 U
Ethene (ug/L)	-	35 U	36 U	35 U	NA	NA	NA	NA	35 U	36 U	36 U	35 U	35 U
Ferrous Iron	-	1 NJ	1 NJ	16	NA	NA	NA	NA	1 NJ	1 U	1 U	17 NJ	31
Free Carbon Dioxide	-	160	130	130	NA	NA	NA	NA	160	85	85	290	140
Methane (ug/L)	-	710	790	8500 D	NA	NA	NA	NA	14 U	14 U	14 U	1400 D	7200 D
Nitrate	-	0.13 U	0.13 U	0.18	NA	NA	NA	NA	0.13 U	0.25	0.26	0.13 U	0.13 U
Nitrite	-	0.13 NJ	0.13 NJ	0.13 U	NA	NA	NA	NA	0.13 NJ	0.13 U	0.13 U	0.13 NJ	2.6 UD
pH (S.U.)	-	6.9	7	7	NA	NA	NA	NA	6.8	7.1	7.1	6.7	6.9
Sulfate	-	34	25	5 U	NA	NA	NA	NA	210	83	83	5 U	5 U
GEOCHEMICAL PARAMETERS (mg/L)													
Total Dissolved Solids	-	1400	1400	NA	NA	NA	NA	NA	1100	NA	NA	3000	NA
Total Hardness	-	640	650	NA	NA	NA	NA	NA	720	NA	NA	830	NA
Total Kjeldahl Nitrogen	-	4.9	5.4	NA	NA	NA	NA	NA	1.5	NA	NA	17	NA
Total Organic Carbon	-	10 U	10 U	NA	NA	NA	NA	NA	10 U	NA	NA	10	NA

Notes
* Guidance Value used where no standard exists.
** Dissolved Metals
☐ - Concentration exceeds NYSDEC Class GA Standard
U - Compound not detected at the indicated concentration.
R - Results rejected by data validator.
D - Concentration was obtained from a diluted analysis.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
NA - Not Analyzed.

Table 2: Remedial Investigation Groundwater Data

TABLE 7-7
SUMMARY OF GROUNDWATER SAMPLING RESULTS (METALS AND NAP)
HENRY JOHNSON BOULEVARD PROPERTIES ERP
CITY OF ALBANY, NEW YORK

All of these samples are on the APL site.

Sample ID	NYSDEC	HJB-MW-15	HJB-MW-16	HJB-MW-17	HJB-MW-18	HJB-MW-19	HJB-MW-A	HJB-MW-B	HJB-MW-C
Duplicate	Class								
Sampling Date	GA	10/31/2006	7/27/2006	7/5/2007	7/5/2007	7/5/2007	10/31/2006	10/31/2006	10/31/2006
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
METALS (Total)									
Aluminum	-	40.6 B	17 B	73.6 B	42.1 B	30.2 B	18.1 B	139 B	49.9 B
Antimony	-	1.2 U	1.2 U	8.5 B	6.7 B	9.3 B	2.2 B	2.4 B	2.1 B
Arsenic	25	1.8 B	1.7 B	1.6 U	1.6 U	1.6 U	11.5 B	12.9 B	4.2 B
Barium	1,000	108 B	69.7 B	356	109 B	499	248	112 B	110 B
Beryllium	3*	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Cadmium	5	0.1 U	0.16 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Calcium	-	50,100	97,900	171,000	180,000	209,000	201,000	161,000	149,000
Chromium	50	0.82 B	4.1 B	0.38 U	0.38 U	0.38 U	0.38 U	1.3 B	2.6 B
Cobalt	-	0.2 B	0.15 U	1.9 B	2.4 B	2.5 B	2.3 B	1.9 B	1.4 B
Copper	200	6.3 U	6.3 U	6.3 U	6.3 U	6.7 B	6.3 U	6.3 U	6.3 U
Iron	300	35.5 BE	77.5 B	**833**	**1,100**	**935**	**6,390 E**	**11,200 E**	**3,680 E**
Lead	25	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Magnesium	35,000*	11,900	**58,300**	**55,500**	31,200	**54,300**	**72,900**	**41,400**	**48,300**
Manganese	300	7.8 B	44.3 B	**1,440**	**1,560**	**2,130**	**1,120**	**2,760**	**1,190**
Nickel	100	0.87 B	2.7 B	6 B	6.8 B	6.8 B	3.3 B	2.8 B	1.9 B
Potassium	-	4,880	5,010	4,520	11,600	5,050	5,570	3,200	14,200
Selenium	10	**10.7 B**	0.98 U	8.1 B	4.2 B	1.9 B	7.4 B	**11.1 B**	**10.8 B**
Silver	50	0.91 U	0.91 U	14.2 B	14.7 B	18 B	1.2 B	1.4 B	0.91 U
Sodium	20,000	**655000 E**	**58,200**	**93,100**	**48,600**	**677,000**	**359,000 E**	**392,000 E**	**104,000 E**
Thallium	0.5*	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vanadium	-	0.96 B	0.47 U	0.92 B	0.91 B	0.49 B	0.48 B	1.7 B	2 B
Zinc	2,000*	13.7 B	15.4 B	16.6 B	15.2 B	17.8 B	13.2 B	16 B	443
NATURAL ATTENUATION PARAMETERS (mg/L)									
Alkalinity	-	360	260	NA	NA	NA	460	440	380
Chloride	-	740	77 NJ	NA	NA	NA	790	620	200
Dissolved Organic Carbon	-	10 U	10 U	NA	NA	NA	10 U	14	18
Ethane (ug/L)	-	26 U	26 U	NA	NA	NA	26 U	26 U	26 U
Ethene (ug/L)	-	35 U	35 U	NA	NA	NA	36 U	35 U	35 U
Ferrous Iron	-	1 U	1 NJ	NA	NA	NA	8	4.8	2.5
Free Carbon Dioxide	-	21	31	NA	NA	NA	100	120	71
Methane (ug/L)	-	14 U	14 U	NA	NA	NA	2300 D	1500 D	120
Nitrate	-	2.6	0.13 U	NA	NA	NA	0.13 U	0.13 U	0.13 U
Nitrite	-	0.13 U	0.13 NJ	NA	NA	NA	0.13 U	0.13 U	0.13 U
pH (S.U.)	-	7.5	7.2	NA	NA	NA	7	6.9	7
Sulfate	-	120	140	NA	NA	NA	100	100	150
GEOCHEMICAL PARAMETERS (mg/L)									
Total Dissolved Solids	-	NA	780	NA	NA	NA	NA	NA	NA
Total Hardness	-	NA	480	NA	NA	NA	NA	NA	NA
Total Kjeldahl Nitrogen	-	NA	0.57	NA	NA	NA	NA	NA	NA
Total Organic Carbon	-	NA	10 U	NA	NA	NA	NA	NA	NA

Notes
* Guidance Value used where no standard exists.
** Dissolved Metals
☐ - Concentration exceeds NYSDEC Class GA Standard
U - Compound not detected at the indicated concentration.
R - Results rejected by data validator.
D - Concentration was obtained from a diluted analysis.
E - Estimated concentration due to the presence of interferences.
B - Compound detected below the reporting limit.
NA - Not Analyzed.

Table 3: 2009 Remedial Investigation Soil Gas Data

TABLE 7-8
SUMMARY OF DETECTED VOCS IN AIR AND SOIL VAPOR
HENRY JOHNSON BOULEVARD PROPERTIES ERP
ALBANY, NEW YORK

On APL Site

	NYSDOH VOC Levels in Fuel Oil Heated Home in NYS, 1997-2003													
Sample ID	**Indoor Air**			**Outdoor Air**			**EPA DRAFT SHALLOW SOIL GAS VAPOR INTRUSION GUIDANCE[3]**	**NYSDOH SUB-SLAB FINAL GUIDANCE[4]**	**SV-15 Soil Gas 8/22/2007**	**SV-16 Soil Gas 10/14/2008**	**AA-1 Ambient Air 8/7/2008**	**IA-1 Indoor Air 8/7/2008**	**X-1 (IA-1 Dup) 8/7/2008**	**BA-1 Basement Air 8/7/2008**
Sample Type	Min-Max Range	Background Range[1]	Upper Fence[2]	Min-Max Range	Background Range[1]	Upper Fence[2]								
Date														
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3
VOCs														
Acetone	<0.25-690	9.9-52	115	<0.25-200	3.4-14	30	3500		11.	3.5	10	280	270	49
Benzene	<0.25-460	1.1-5.9	13	<0.25-17	0.6-2.2	4.8	312		<1.6	4	0.47	0.58	0.57	0.68
2-Butanone (MEK)	<0.25-180	1.4-7.3	16	<0.25-210	0.8-2.6	5.3			<3.0	0.6	1.7	4.9	3.7	3.7
Carbon Disulfide							7000		0.93	0.88	<0.12	<0.12	<0.12	<0.12
Carbon Tetrachloride							160		<1.6	<0.62	0.51	0.56	0.56	0.56
Chloroform	<0.25-25	<0.25-0.5	1.2	<0.25-1.3	<0.25	0.5	110		2.9	5.3	<0.17	3.6	3.5	1.3
Chloromethane	<0.25-260	<0.25-1.8	4.2	<0.25-13	<0.25-1.8	4.3			<0.50	<0.20	0.95	1.2	1.3	0.99
Cyclohexane	<0.25-510	<0.25-2.6	6.3	<0.25-170	<0.25-0.4	0.9			<3.5	<0.34	<0.12	<0.12	<0.12	<0.12
1,4-Dichlorobenzene	<0.25-770	<0.25-0.5	1.2	<0.25-7.1	<0.25	0.5	8000		<3.1	<0.60	<0.21	0.76	0.73	0.38
Dichlorodifluoromethane	<0.25-300	<0.25-4.1	10	<0.25-38	<0.25-4.2	10	200		13.	3.8	3.1	3	3.1	3.2
1,1-Dichloroethane							5000		<1.0	2.2	<0.14	<0.14	<0.14	<0.14
cis-1,2-Dichloroethylene							350		<1.0	<0.40	<0.14	<0.14	<0.14	<0.14
Ethanol	<0.25-16,000	27-540	1,300	<0.25-930	3.3-16	34			10.	1.2	7.7	260	260	160
Ethyl Acetate							32000		<3.7	<0.73	<0.26	2.7	3.2	<0.26
Ethylbenzene	<0.25-340	0.4-2.8	6.4	<0.25-21	<0.25-0.5	1	2200		<1.1	<0.44	0.32	0.95	0.94	1.1
4-Ethyl Toluene									<1.3	<0.50	<0.18	0.23	0.24	0.22
n-Heptane	<0.25-670	1.0-7.6	18	<0.25-89	<0.25-1.9	4.5			<2.1	<0.40	0.39	0.75	0.72	0.77
Hexane	<0.25-950	0.6-5.9	14	<0.25-67	<0.25-1	2.2	2000		<3.6	<0.36	0.99	1.8	1.8	2.3
2-Hexanone									<4.1	<0.40	<0.14	0.88	0.34	0.34
Isopropanol									2.3	0.63	0.9	8.9	7.9	6.7
Methylene Chloride	<0.25-2,100	0.3-6.6	16	<0.25-23	<0.25-0.7	1.6	5200	60	6.4	0.63	0.53	0.88	0.89	0.91
4-Methyl-2-Pentanone (MIBK)									<4.1	<0.40	<0.14	0.4	0.31	0.26
Propene									<1.8	<0.10	<0.13	<0.13	<0.13	<0.13
Styrene	<0.25-50	<0.25-0.6	1.4	<0.25-3.6	<0.25	0.5	10000		<1.1	0.64	<0.15	1.5	1.4	2
Tetrachloroethylene	<0.25-51	<0.25-1.1	2.5	<0.25-20	<0.25-0.3	0.7	810	100	79.	3.1	<0.24	<0.24	<0.24	<0.24
Tetrahydrofuran									<1.5	<0.30	<0.11	0.31	<0.11	0.2
Toluene	<0.25-510	3.5-25	57	<0.25-640	0.60-2.4	5.1			<1.9	1.9	2.3	4.6	4.6	3.2
1,2,4-Trichlorobenzene	<0.25-37	<0.25	0.5	<0.25-21	<0.25	0.4			<1.9	<0.74	<0.26	<0.26	<0.26	<0.26
1,1,1-Trichloroethane	<0.25-110	<0.25-1.1	2.5	<0.25-8.4	<0.25-0.3	0.6	22000		1.9	33	<0.19	<0.19	<0.19	<0.19
Trichloroethylene	<0.25-25	<0.25	0.5	<0.25-1.3	<0.25	0.4	22	5	<1.4	<0.54	<0.19	<0.19	<0.19	<0.19
Trichlorofluoromethane	<0.25-190	1.1-5.4	12	<0.25-20	<0.25-2.2	5.1	7000		32.	710	2	2.1	2.1	2.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.25-7.4	<0.25-1.1	2.5	<0.25-11	<0.25-1.1	2.5	300000		<1.9	<0.76	0.77	0.71	1	0.8
1,2,4-Trimethylbenzene	<0.25-260	0.7-4.3	9.8	<0.25-50	<0.25-0.8	1.9	60		<1.3	<0.50	0.52	0.98	0.9	0.94
1,3,5-Trimethylbenzene	<0.25-97	0.3-1.7	3.9	<0.25-2.5	<0.25-0.3	0.7	60		<1.3	<0.50	<0.18	0.25	0.22	0.25
Vinyl Acetate							2000		<3.6	<0.36	<0.5	<0.5	<0.5	<0.5
Vinyl Chloride	<0.25-1	<0.25	0.4	<0.25-4.8	<0.25	0.4	280		<0.65	<0.26	<0.1	<0.1	<0.1	<0.1
m/p-Xylene	<0.25-550	0.50-4.6	11	<0.25-20	<0.25-0.5	1	70000		<2.2	<0.86	1.1	2.7	2.7	3.2
o-Xylene	<0.25-310	0.4-3.1	7.1	<0.25-10	<0.25-0.6	1.2	70000		<1.1	<0.44	0.4	0.83	0.77	0.96

Notes:
1 - Background Range = 25th to 75th percentiles
2 - Upper Fence = 1.5 times the interquartile range (difference between 25th and 75th percentiles) above the 75th percentile.
3 - EPA Target shallow soil gas concentration corresponds to target indoor air concentration where soil gas to indoor air attenuation factor = 0.1
4 - Concentrations based on NYSDOH air guidelines

Concentration greater than NYSDOH Upper Fence value for VOC Levels in fuel oil heated homes.
Concentration greater than NYSDOH Upper Fence values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.
Concentration greater than NYSDOH Upper Fence and Sub-slab Final Guidance values and EPA Draft Shallow Soil Gas Vapor Intrusion Guidance values.

Table 4: January 23, 2011 Summary of Indoor Air Quality and Sub-Slab Sampling Results
Albany Public Library Site, 148 Henry Johnson Boulevard, Albany, New York

Analyte*	NYSDOH Matrix	NYSDOH Action Levels	1/23/11 Outdoor by HVAC Air Intake	1/23/11 Computer Desk in Northwestern Section of Public Space	1/23/11 Computer Desk in Southeastern Section of Public Space	1/23/11 East-Southeastern Monitoring Port	1/23/11 East-Northeastern Monitoring Port	1/23/11 Northwestern Monitoring Port
			Outdoor Air	Indoor Air	Indoor Air	Sub-slab Vapor	Sub-slab Vapor	Sub-slab Vapor
	Sample ID		APL-OUTDOOR	APL-IAQ-1	APL-IAQ-2	APL-Subslab-1	APL-Subslab-2	APL-Subslab-3
	Units	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3
Carbon tetrachloride	Matrix 1	<0.25 IAQ and < 5 SS[1] 0.25 to <1 IAQ and < 5 SS[2]	**0.384**	**0.448**	**0.320**	ND	ND	ND
Trichloroethylene			ND	**0.765**	**0.601**	ND	ND	ND
Vinyl Chloride			ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	Matrix 2	<3 IAQ and <100 SS[1]	ND	0.111 J	0.0555 J	ND	ND	ND
1,1-Dichloroethylene			ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene			ND	ND	ND	ND	ND	ND
Tetrachloroethylene			0.414	0.966	0.552	ND	ND	ND

Notes:

1. No further action is needed to address human exposures (NYSDOH Guidance Matrix 1 and 2) .
2. Take reasonable and practical actions to identify source(s) and reduce exposures (NYSDOH Guidance). Results falling within these Matrix 1 action levels are highlighted in **BOLD.** The detected concentration is likely due to an outdoor source rather than from soil vapor intrusion given the lack of chlorinated solvents documented in the sub-slab vapor samples.
3. * Secondary Ion Mass Spectronomy (SIMS) analysis conducted for these compounds on indoor air samples to achieve required minimum detection limits.
4. ug/m^3 = Micrograms per cubic meter
5. J = Estimated concentration, below Method Detection Limit
6. ND = analyte not detected at or above the method detection limit. Method detection limits were less than the lowest concentrations listed in the NYSDOH Guidance Matrix tables.

Table 5 2009 UST Closure Soil Data

First Street., Albany, NY
NYSDEC Spill No.: 0909458

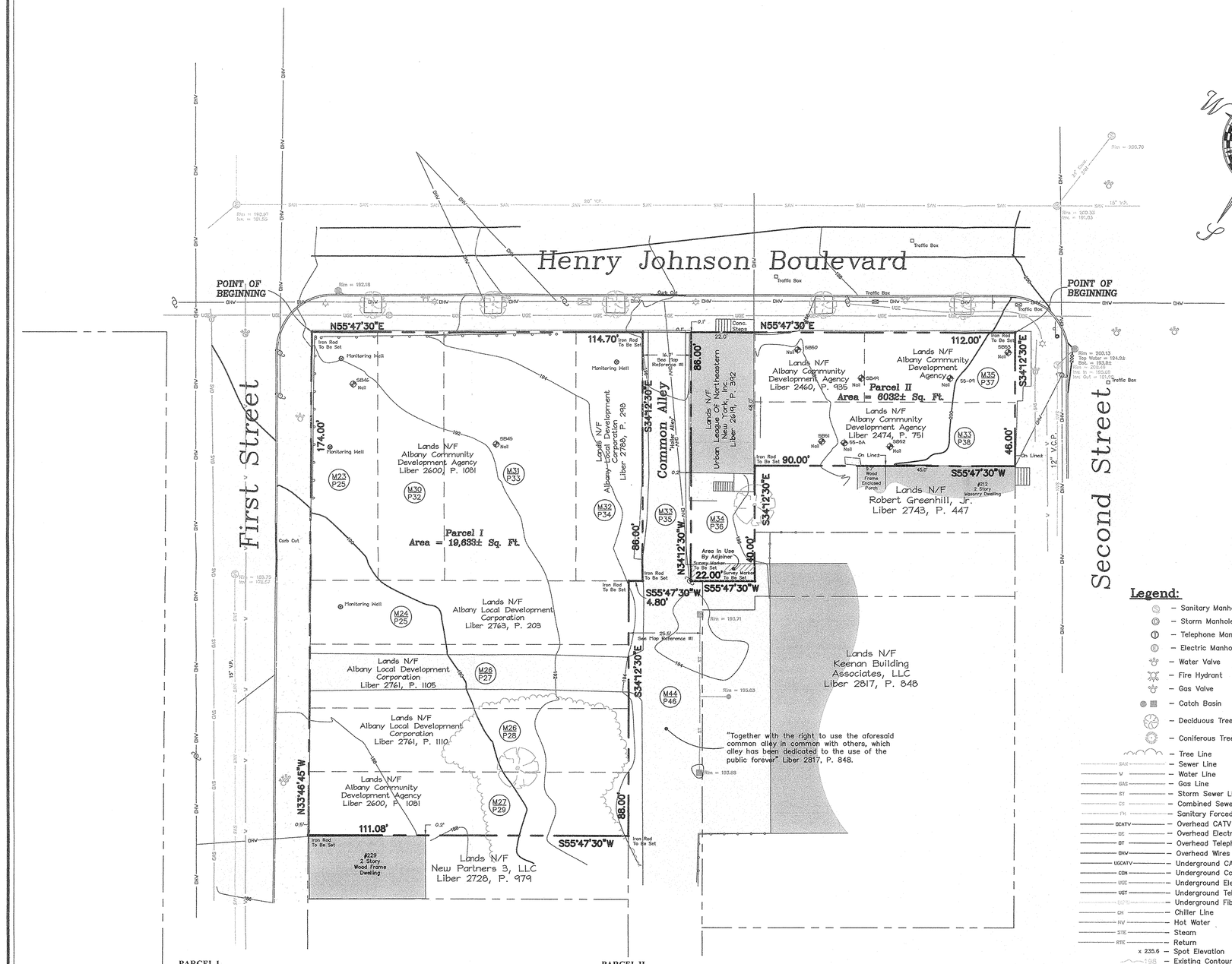
UST Closure and Remedial Action Report of Findings

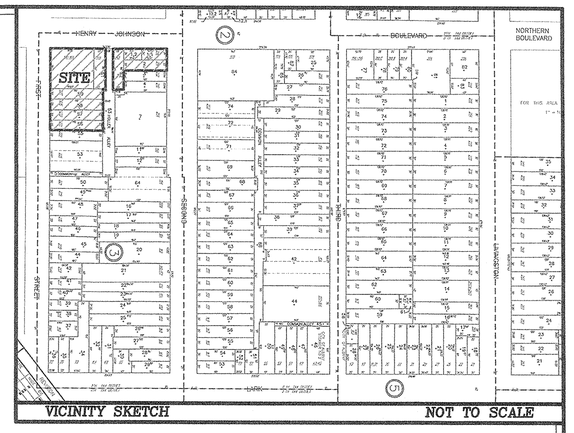
TABLE 4							
Soil Analytical Summary							
Analyte	Sample Identification					***Part 375 Recommended Soil Cleanup Objective*** [*1]	
	Post-Excavation						
	North Wall 02	**South Wall 02**	**East Wall 02**	**West Wall 02**	**Bottom 02**		
Date of Collection	12/14/2009	12/14/2009	12/14/2009	12/14/2009	12/14/2009	**Residential Use**	**Commercial Use SCOs**
Volatiles - EPA 8260 STARS							
1,2,4-Trimethylbenzene	**21,400**	**1,140**	**16,800**	ND	ND	*3,600*	190,000
1,3,5-Trimethylbenzene	**6,920**	**353**	**5,380**	ND	ND	*8,400*	190,000
4-Isopropyltoluene	**11,800**	**1,560**	**7,770**	ND	ND	*N/A*	
Benzene	ND	ND	ND	ND	ND	*60*	44,000
Ethylbenzene	**2,430**	ND	**2,280**	ND	ND	*1,000*	390,000
Isopropylbenzene	**2,520**	**187**	**2,060**	ND	ND	*N/A*	
mixed-Xylenes	**5,430**	ND	**3,940**	ND	ND	*260*	500,000
MTBE	ND	ND	ND	ND	ND	*930*	500,000
Naphthalene	**8,290**	**839**	**6,810**	ND	ND	*12,000*	500,000
n-Butylbenzene	ND	ND	ND	ND	ND	*12,000*	500,000
n-Propylbenzene	**4,770**	**382**	**4,120**	ND	ND	*3,900*	500,000
sec-Butylbenzene	**5,910**	**995**	**4,310**	ND	ND	*11,000*	500,000
tert-Butylbenzene	ND	ND	ND	ND	ND	*5,900*	500,000
Toluene	ND	ND	ND	ND	ND	*700*	500,000
BTEX	7,860	ND	6,220	ND	ND		
Total VOCs	*69,470*	*5,456*	*53,470*	*ND*	*ND*		
Semi-Volatiles - EPA 8270 STARS							
Naphthalene	**4,510**	ND	**5,260**	ND	ND	*12,000*	500,000
Acenaphthene	**2,760**	ND	**2,930**	ND	ND	*20,000*	500,000
Fluorene	**ND**	ND	**4,110**	ND	ND	*30,000*	500,000
Phenanthrene	**8,460**	ND	**8,470**	ND	ND	*100,000*	500,000
Anthracene	**2,820**	ND	**5,290**	ND	ND	*100,000*	500,000
Fluoranthene	ND	ND	ND	ND	ND	*100,000*	500,000
Pyrene	**2,230**	ND	ND	ND	ND	*100,000*	500,000
Benz(a)anthracene	ND	ND	ND	ND	ND	*1,000*	5,600
Chrysene	ND	ND	ND	ND	ND	*1,000*	56,000
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	*1,000*	5,600
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	*800*	56,000
Benzo(a)pyrene	ND	ND	ND	ND	ND	*1,000*	1,000
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	*500*	5,600
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	*330*	560
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	*100,000*	500,000
Total SVOCs	20,780	ND	26,060	ND	ND		

Laboratory analysis performed by Northeast Analytical Labs, Schenectady, NY
All results reported in ug/Kg or parts per billion (ppb)
RED = Exceeds NYSDEC recommended soil cleanup objective
ND = Not detected below the laboratories method detection limit
N/A = Not Applicable/Not Available
[*1] = NYSDEC Regulation 6 NYCRR Subpart 375 Unrestricted Use Soil Cleanup Objectives

APPENDIX A

Survey Map, Metes and Bounds





PARCEL I

ALL that certain tract, piece or parcel of land, situate, lying and being in the City of Albany, County of Albany and the State of New York, being more particularly bounded and described as follows:

BEGINNING at an iron rod set at the northeast corner of First Street and Henry Johnson Boulevard and running thence northeasterly along the southeasterly line of Henry Johnson Boulevard N55°47'30"E, 114.70' to an iron rod set at the northwesterly corner of Henry Johnson Boulevard and a common alley;
THENCE southeasterly along the common alley S34°12'30"E, 86.00' to an iron rod set;
THENCE continuing along the alley S55°47'30"W, 4.80' to an iron rod set;
THENCE continuing along the alley S34°12'30"E, 88.00' to an iron rod set at the northwest corner of lands conveyed to New Partners 3, LLC as described in Book of Deeds 2728 at page 979;
THENCE southwesterly along the lands of New Partners 3, LLC S55°47'30"W, 111.08' to an iron rod set at the northeasterly line of First Street;
THENCE northwesterly along the northeasterly line of First Street N33°46'45"W, 174.00' to the point and place of beginning. Said parcel of land containing 19,633 Square Feet of land more or less.

Subject to any and all easements of record affecting the herein described parcel of land.

PARCEL II

ALL that certain tract, piece or parcel of land, situate, lying and being in the City of Albany, County of Albany and the State of New York, being more particularly bounded and described as follows:

BEGINNING at an iron rod set at the southeast corner of Second Street and Henry Johnson Boulevard and running thence southeasterly along the southwesterly line of Second Street S34°12'30"E, 46.00' to the northwest corner of the lands conveyed to Robert Greenhill, Jr. as described in Book of Deeds 2743 at page 447;
THENCE southwesterly along the lands of Greenhill S55°47'30"W, 90.00' to an iron rod set at the southwest corner of Greenhill;
THENCE southeasterly along Greenhill and the lands of Keenan Building Associates, LLC as described in Book of Deeds 2817 at page 848; S34°12'30"E, 40.00' to a survey marker set;
THENCE southwesterly along the lands of Keenan Building Associates, LLC, S55°47'30"W, 22.00' to a survey marker set on the southwesterly line of a common alley;
THENCE northwesterly along said alley N34°12'30"W, 86.00' to the point and place of beginning. Said parcel of land containing 6,032 Square Feet of land more or less.

Subject to any and all easements of record affecting the herein described parcel of land.

Legend:

- Sanitary Manhole
- Storm Manhole
- Telephone Manhole
- Electric Manhole
- Water Valve
- Fire Hydrant
- Gas Valve
- Catch Basin
- Deciduous Tree
- Coniferous Tree
- Tree Line
- SAN — Sewer Line
- V — Water Line
- GAS — Gas Line
- ST — Storm Sewer Line
- CS — Combined Sewer Line
- FM — Sanitary Forced Main
- OCATV — Overhead CATV
- OE — Overhead Electric
- OT — Overhead Telephone
- OHV — Overhead Wires
- UGCATV — Underground CATV
- UCOM — Underground Communication
- UGE — Underground Electric
- UGT — Underground Telephone
- UGF — Underground Fiber Optic
- CH — Chiller Line
- HW — Hot Water
- STE — Steam
- RTE — Return
- x 235.6 — Spot Elevation
- 198 — Existing Contour 2' Interval
- Asphalt Surface
- Concrete Surface

NOTES:

1. This survey was prepared for the sole purpose for the **Albany Public Library** securing a mortgage and **ITS USE SHALL BE LIMITED TO THIS TRANSACTION ONLY**. Any other use of said survey for any of the following purposes shall invalidate the certification and **BE IN DIRECT VIOLATION OF THE CONTRACT WITH THE CLIENT**.
   1. Fee Land Title Survey
   2. Owner/Sellor's Affidavit
   3. Refinancing With Another Lender
   4. Any Future Transfer Of Title

   Certifications indicated hereon signify that the plat was prepared from an actual field survey conducted in accordance with the standards set forth in the Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, as last revised on July 18, 1997.

   This survey and the certification hereon shall be valid only to the party or parties hereon named and are not transferable to additional institutions or subsequent owners, other than as may be or expressly stated hereon.
2. See Title Report prepared for **Lawyers Title Insurance Corporation** Order No. A115485 Only.
3. No search of the public record was made for easements, agreements or restrictions that may affect the surveyed parcel that may not have been contained in Title Report referenced hereon.
4. Subject to any subsurface condition, improvement and/or encroachment, not evident by surface inspection.
5. Unless specifically stated the surveyor is not responsible for identifying features which are under the jurisdiction of governmental agencies, including but not limited to: designated wetlands, flood plains, floodways, dumps, landfills, hazardous waste sites, protected or endangered flora and fauna, archeological, historical, cultural, etc. It is also not the surveyors responsibility to determine if the present use of the parcel or the location of existing structures conform to the current local zoning ordinance or if said uses or locations conform to the zoning ordinance in effect at the time of construction or occupancy.
6. This map may not be used in connection with a "Survey Affidavit" or similar document, statement or mechanism to obtain title insurance for any subsequent or future grantees.
7. The location of underground utilities as shown hereon are based on aboveground structures, record information and mapping provided to the surveyor. Locations of underground utilities/structures may vary from locations shown hereon. Additional buried utilities/structures may be encountered. No excavations were made during the progress of this survey to locate buried utilities/structures. Before excavations are begun, verification of utility type and field location should be made by contacting the proper agency.
8. Any dimensions derived from the CAD Drawing shall not be used without exact field verification by the surveyor.
9. This data has been provided in digital format to the **Collins+Scoville Architects, PC** and subject to the terms contained in the **ELECTRONIC DATA DISCLAIMER AGREEMENT** with **RDM Surveying Consultants**. Any re-release of the electronic data shall be in direct violation of the contract and subject to the applicable COPYRIGHT laws. This data is furnished for general information only. While this information is believed to be reliable, **RDM Surveying Consultants** cannot assure the accuracy, and thus is not responsible for the accuracy of any work based upon the electronic data. The user of this data is advised to obtain independent verification of the accuracy of the data provided before applying it to any purpose. Use without verification by the surveyor will be at said users sole risk.
10. Elevation Datum approximate sea level datum. Contour interval is two feet.
11. Said described property is located within an Area of Minimal Hazards as shown on the FIRM MAP For the City of Albany, New York: Community Panel Number 360001 0004C, Panel 4 of 9, Effective Date April 15, 1980.

MAP REFERENCES:

1. "R.O.W. Plan Lark-Dove Arterial", dated 2/3/67 Drawing No. 2 and on file with New York State Department of Transportation.
2. See Appropriation Maps Map No. 30, Parcel No. 32, Map No. 31, Parcel No. 33, Map No. 25, Parcel No. 27, Map No. 27, Parcel No. 29, Map No. 23, Parcel No. 25, Map No. 32, Parcel No. 34, Map No. 33, Parcel No. 35, Map No. 34, Parcel No. 36, Map No. 35, Parcel No. 37, Map No. 36, Parcel No. 38, Map No. 44, Parcel No. 46, Map No. 24, Parcel No. 25, and Map No. 26, Parcel No. 28
3. "Map Showing Occupation Of No 208 Second Street 7th Ward, City Of Albany, N.Y. Owned By Anthony Venuto And Mary Scaringe Venuto Dwelling", dated Dec. 7, 1943, prepared by L.S. Rickard and filed in the Albany County Clerk's Office as Map 1737.

CERTIFIED ONLY TO:

1. **Dormitory Authority of the State of New York**, its successors and/or assigns, as their interest may appear
2. **Lawyers Title Insurance Corporation,** Order No. A115485 **ONLY**
3. **Albany Public Library**
4. **Deutsche Bank Trust Company Americas, as Trustee**, its successors and/or assigns, as their interest may appear
5. **Ambac Assurance Corporation**, its successors and/or assigns, as their interest may appear

This is to certify that this map or plat and the survey on which it is based were made in accordance with "**Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys**," jointly established and adopted by ALTA, ACSM and NSPS in 2005, and includes items 1, 2, 3, 4, 5, 7(a), 8, 9, 11(a), and 13, of Table A thereto, Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date of this certification, undersigned further certifies that in my professional opinion as a land surveyor register in the State of New York, the Relative Positional Accuracy of this survey does not exceed that which is specified therein.

Rodney D. Michael — Date: 6-4-07
Registration No. 49279

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PRELIMINARY

NOTE:
Copyright 2006, 2007 RDM Surveying Consultants
"All Rights Reserved" and "Unauthorized duplication is a violation of applicable laws."

Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of Section 7209, sub-division 2, of the New York State Education Law.
"Only copies from the original of this survey marked with an original of the land surveyor's inked seal or his embossed seal shall be considered to be valid true copies."

Only copies from original of this survey marked with an original of the land surveyor's signature in RED shall be considered to be valid copies.

Rodney D. Michael Lic. No. 49279

DATE	RECORD OF WORK	DRAWN	APPR.
5/30/07	Prepared For Albany Public Library	WKG/JR	RDM

ALTA/ACSM MORTGAGEE LAND TITLE SURVEY
LANDS TO TO CONVEYED TO THE ALBANY PUBLIC LIBRARY
HENRY JOHNSON BOULEVARD LIBRARY SITE

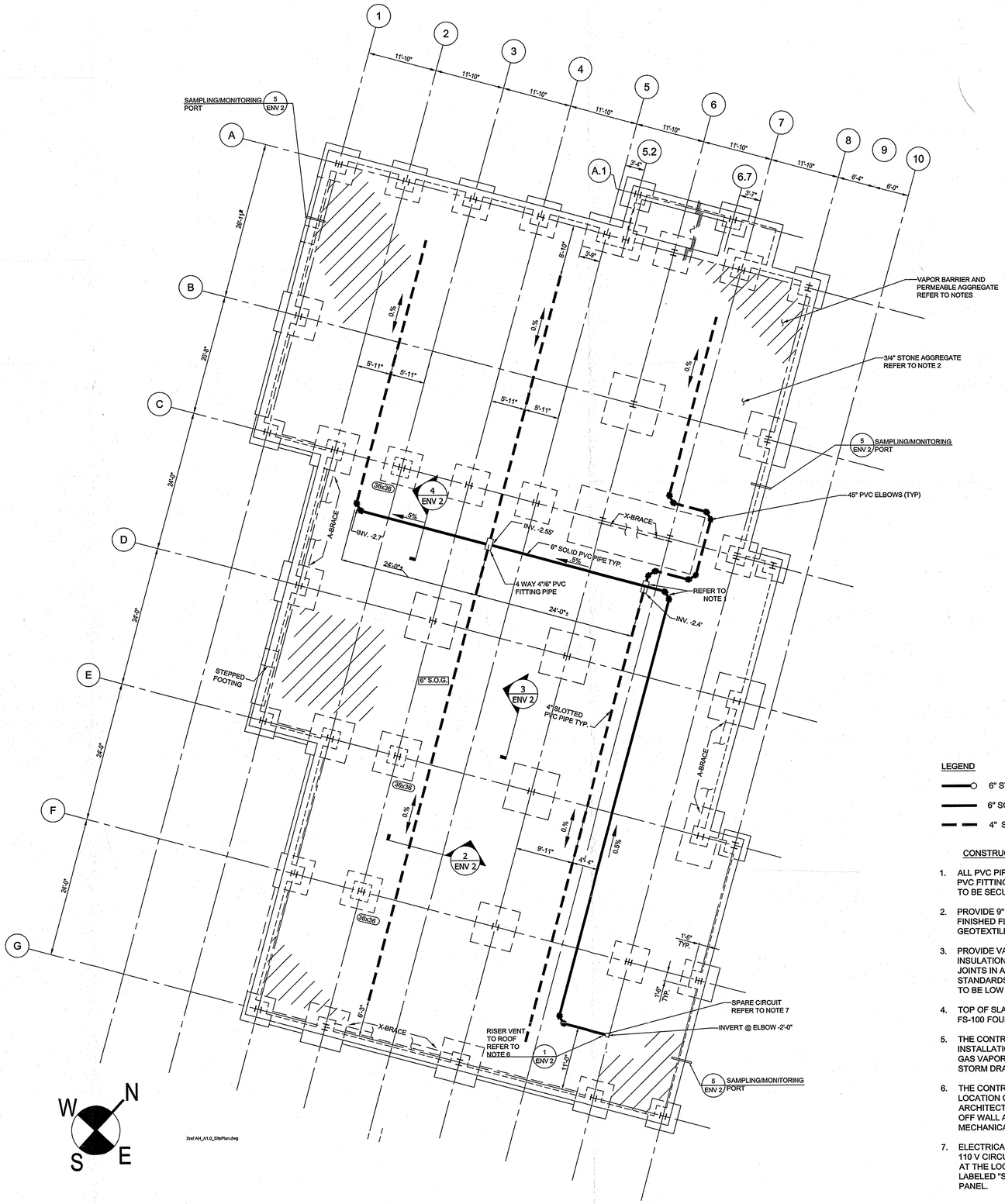
CITY: ALBANY	COUNTY: ALBANY
STATE: NEW YORK	SURVEY: AUG. 30, 2006
SCALE: 1" = 20'	MAP: MAY 30, 2007
PROJECT NO. 960-640-2006-2525 ALTA	

RDM SURVEYING CONSULTANTS
8 Grange Road
Troy, N.Y. 12180
(518) 279-3425
FAX: 279-3028
RDMSURVEYING@CSDSL.NET

Tax Map: 65.65 Block: 3 Parcel No. 1.1, 1.2, 2, 56-62 Map Disk: FMCD#17 Job Disk: B67 Job 11 Rotation Angle = 34°12'29" About 0,0

APPENDIX B

EC As-Built Drawings



LEGEND

- 6" STEEL VENT PIPING UP
- 6" SOLID PVC
- 4" SLOTTED PIPE

CONSTRUCTION NOTES

1. ALL PVC PIPE CONNECTIONS TO USE STANDARD PVC FITTINGS WITHOUT SOLVENT GLUE. FITTINGS TO BE SECURE WITH MINIMUM OF 2 SET SCREWS.
2. PROVIDE 9" OF 3/4" STONE AGGREGATE BELOW FINISHED FLOOR SLAB. PLACE AGGREGATE ON GEOTEXTILE.
3. PROVIDE VAPOR MEMBRANE OVER STRUCTURAL INSULATION AND SEAL AT ALL PENETRATIONS AND JOINTS IN ACCORDANCE WITH MANUFACTURER STANDARDS. PRIMER PRODUCTS AND SEALANTS TO BE LOW VOC FORMULATION.
4. TOP OF SLAB ON GRADE IS 0.0'. REFERENCE FS-100 FOUNDATION PLAN.
5. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND LOCATION OF THE PASSIVE GAS VAPOR SYSTEM WITH THE SUBSURFACE STORM DRAIN AND SANITARY WASTE DRAIN.
6. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE RISER VENT TO ROOF WITH THE ARCHITECTS FIRST FLOOR PLAN. THE RISER IS 4" OFF WALL AND 3' FROM CORNER WALL IN MECHANICAL ROOM.
7. ELECTRICAL CONTRACTOR TO PROVIDE 15 AMP, 110 V CIRCUIT TO WEATHER TIGHT BOX ON ROOF AT THE LOCATION OF THE RISER, CIRCUIT TO BE LABELED "SPARE/ROOF DECK FAN" IN ELECTRICAL PANEL.

DORMITORY AUTHORITY
STATE OF NEW YORK
515 BROADWAY
ALBANY, NEW YORK 12207

ALBANY, NEW YORK 12229

STV Incorporated
225 Park Avenue South
New York, NY 10003

212-777-4400 phone 212-529-5237 fax

NO.	DATE	REVISION	BY

PROJECT MANAGER
M. TUMULTY
PROJECT ARCHITECT/ENGINEER
P. BURGER
DRAWN BY
L. SGARLATA

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PROJECT TITLE
Albany Public Library
Arbor Hill Branch

148 Henry Johnson Blvd.
Albany NY 12210

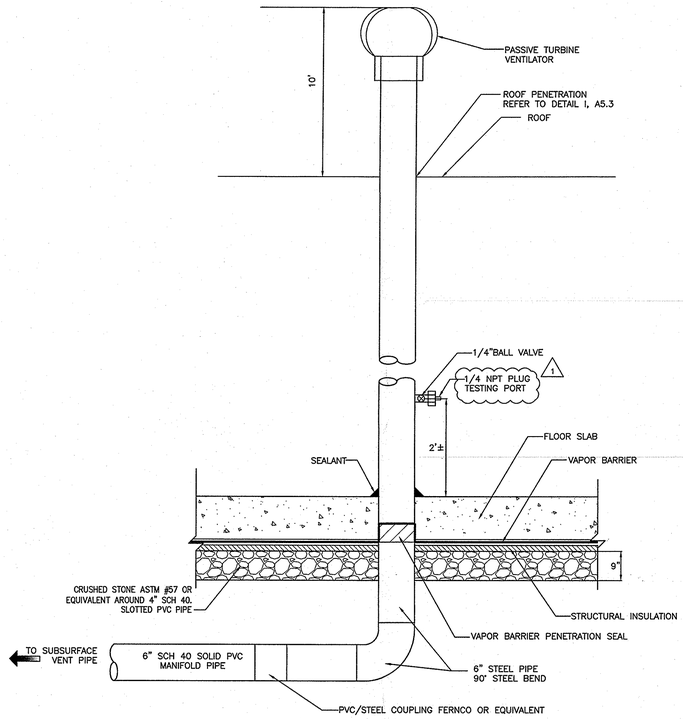
DRAWING TITLE
Passive Sub-Slab Vapor System

KEY PLAN

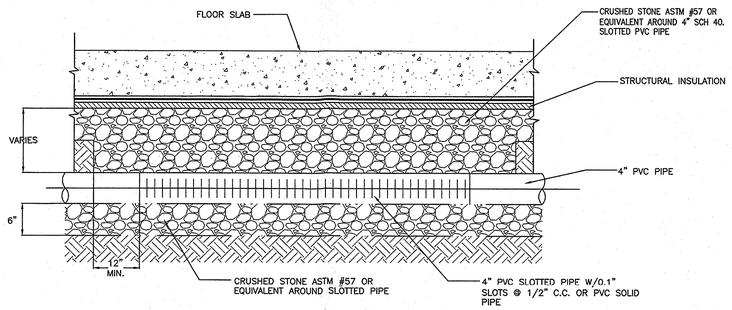
AS BUILTS

STATE OF NEW YORK
GEORGE PETER AMBER
LICENSED PROFESSIONAL ENGINEER
090403-1
1/6/11

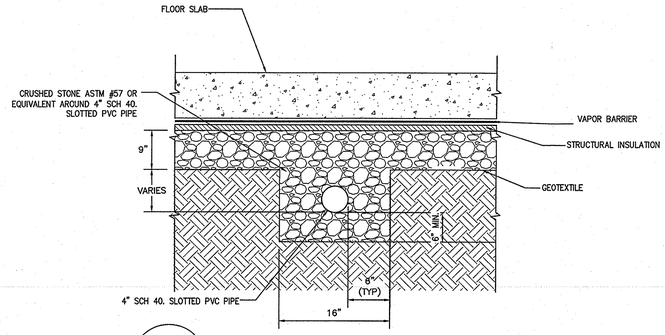
DATE
JUNE 18, 2009
SCALE
1/8" =1'-0"
PROJECT NUMBER
07-102A
DRAWING NUMBER
ENV-1



1 ENV2 PASSIVE SUB SLAB BELOW GRADE/ ABOVE GRADE TRANSITION (TYP.)
NOT TO SCALE



3 ENV2 SUBSURFACE VENT PIPE
NOT TO SCALE



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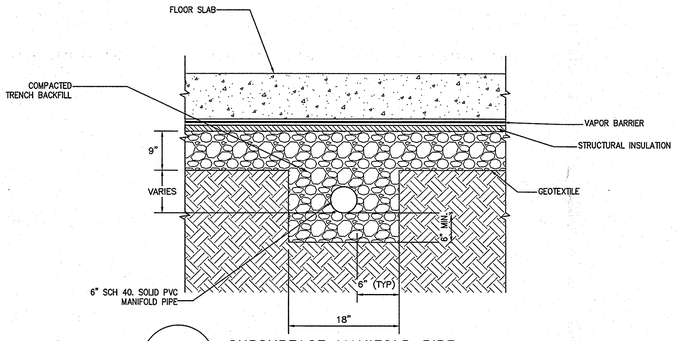
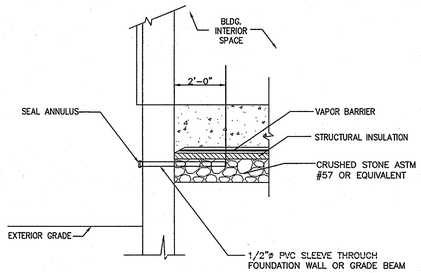
NOT TO SCALE



4 ENV2 SUBSURFACE MANIFOLD PIPE
NOT TO SCALE



5 ENV2 SAMPLING/MONITORING PORT
NOT TO SCALE

DORMITORY AUTHORITY
STATE OF NEW YORK
515 BROADWAY
ALBANY, NEW YORK 12207

ALBANY, NEW YORK 12229

STV Incorporated
225 Park Avenue South
New York, NY 10003

212-777-4400 phone 212-529-5237 fax

NO.	DATE	REVISION	BY
1	6-18-09	(DASNY REVIEW)	EPB

PROJECT MANAGER

PROJECT ARCHITECT/ENGINEER
M. TUMULTY

DRAWN BY
P. BURGER
L. SGARLATA

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PROJECT TITLE
Albany Public Library
Arbor Hill Branch

148 Henry Johnson Blvd.
Albany NY 12210

DRAWING TITLE
Passive Sub-Slab Vapor System Details

KEY PLAN

AS BUILTS

STATE OF NEW YORK · EDWARD PETER BURGER · 085823 · LICENSED PROFESSIONAL ENGINEER

DATE
JUNE 18, 2009

SCALE
AS NOTED

PROJECT NUMBER
07-102A

DRAWING NUMBER
ENV-2

APPENDIX C

Compact Disc with Digital Copy of the FER, January 2011 Work Plan, Raw Analytical Laboratory Data, and DUSRs for IAQ/SS Samples

APPENDIX D

Indoor Air Quality Questionnaire and Building Inventory

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name C. Scott Dietzel Date/Time Prepared 1/21/2011 1PM

Preparer's Affiliation The Chazen Companies Phone No. 518-266-7314

Purpose of Investigation Soil Vapor Intrusion Investigation

1. OCCUPANT:

Interviewed: Y / (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: (Y) / N

Last Name: Altheiser First Name: Dan (APL Representative)

Address: 148 Henry Johnson Boulevard

County: Albany

Home Phone: _____ Office Phone: 518-330-9038

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	(Other:) Public Library

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 1 Building age <1 year

Is the building insulated? (Y) / N How air tight? (Tight) / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

N/A - Single floor

Airflow near source

Outdoor air infiltration

New building is fairly tight. Slight infiltration at doorway openings.

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction: wood frame concrete stone brick
Steel frame, insulation, and drywall

b. Basement type: full crawlspace slab other _____

c. Basement floor: concrete dirt stone other _____

d. Basement floor: uncovered covered covered with _____

e. Concrete floor: unsealed sealed sealed with _____
unknown if sealed, tile or carpet covered

f. Foundation walls: poured block stone other _____

g. Foundation walls: unsealed sealed sealed with _____
unknown if sealed

h. The basement is: wet damp dry moldy

i. The basement is: finished unfinished partially finished

j. Sump present? Y / N

k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

No entry points found.

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other Geothermal

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural gas

Boiler/furnace located in: Basement Outdoors Main Floor Other Mechanical Room

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? (Y) / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Cold air duct work runs along the center of the building in the ceiling. Supply duct work runs in the ceiling parallel to outside walls and throughout the main entry/circulation desk area.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	
1st Floor	Library stacks, offices,restrooms, meeting rooms, kitchen, storage
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? (Y) / N Where & Type? Children's craft materials present

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? (Y) / N When & Type? green cleaning products. Fri.1/21/11

i. Have cosmetic products been used recently? Y / (N) When & Type?_____

j. Has painting/staining been done in the last 6 months? (Y) / N Where & When? recent construction

k. Is there new carpet, drapes or other textiles? (Y) / N Where & When? recent construction

l. Have air fresheners been used recently? (Y) / N When & Type? Metered aerosol dispensers in restrooms

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented? Air circulates from HVAC system

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented? Air circulates from HVAC system

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type?_____

Are there odors in the building? Y / (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? (Y) / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? Infrequent use of graffiti removers

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) — No
Yes, use dry-cleaning infrequently (monthly or less) — (Unknown)
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

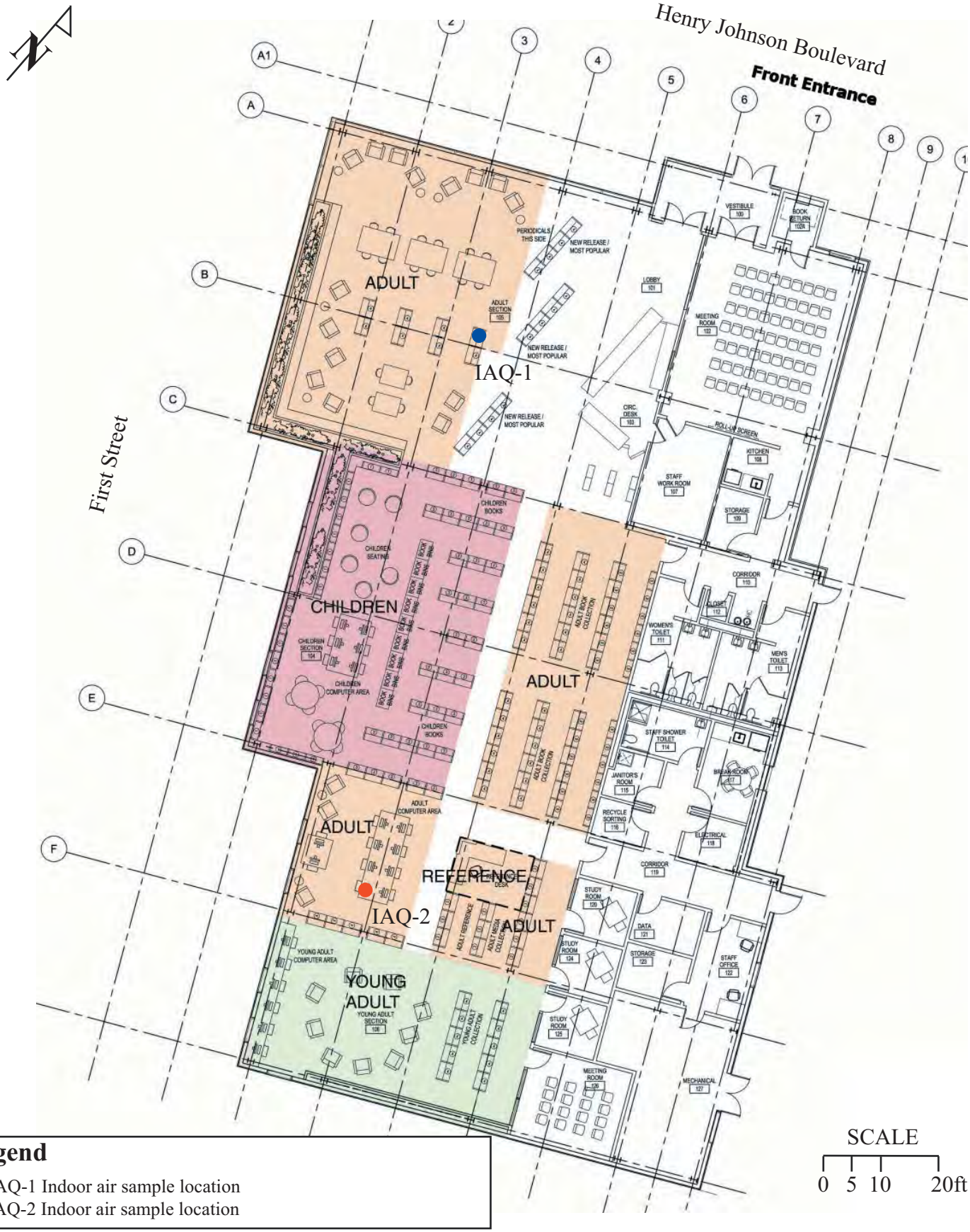
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

NO BASEMENT PRESENT

First Floor:

SEE ATTACHED PAGE



SCALE

0 5 10 20ft

Legend

- IAQ-1 Indoor air sample location
- IAQ-2 Indoor air sample location

THE Chazen COMPANIES

ENGINEERS/SURVEYORS
PLANNERS
ENVIRONMENTAL SCIENTISTS
LANDSCAPE ARCHITECTS

Dutchess County Office:
21 Fox St. Poughkeepsie, NY 12601
Phone: (845) 454-3980

Capital District Office:
547 River Street, Troy, NY 12180
Phone: (518) 273-0055

Glens Falls Office:
100 Glen Street, Glens Falls, NY 12801
Phone: (845) 812-0513

Connecticut:
914 Hartford Turnpike, Waterford, CT 06385
Phone: (860) 440-2690

FIGURE 2 - INDOOR AIR QUALITY SAMPLING MAP

Albany Public Library - Arbor Hill/West Hill Branch
148 Henry Johnson Boulevard
City of Albany, Albany County, New York

Source: Hom and Goldman Architects, 2008.

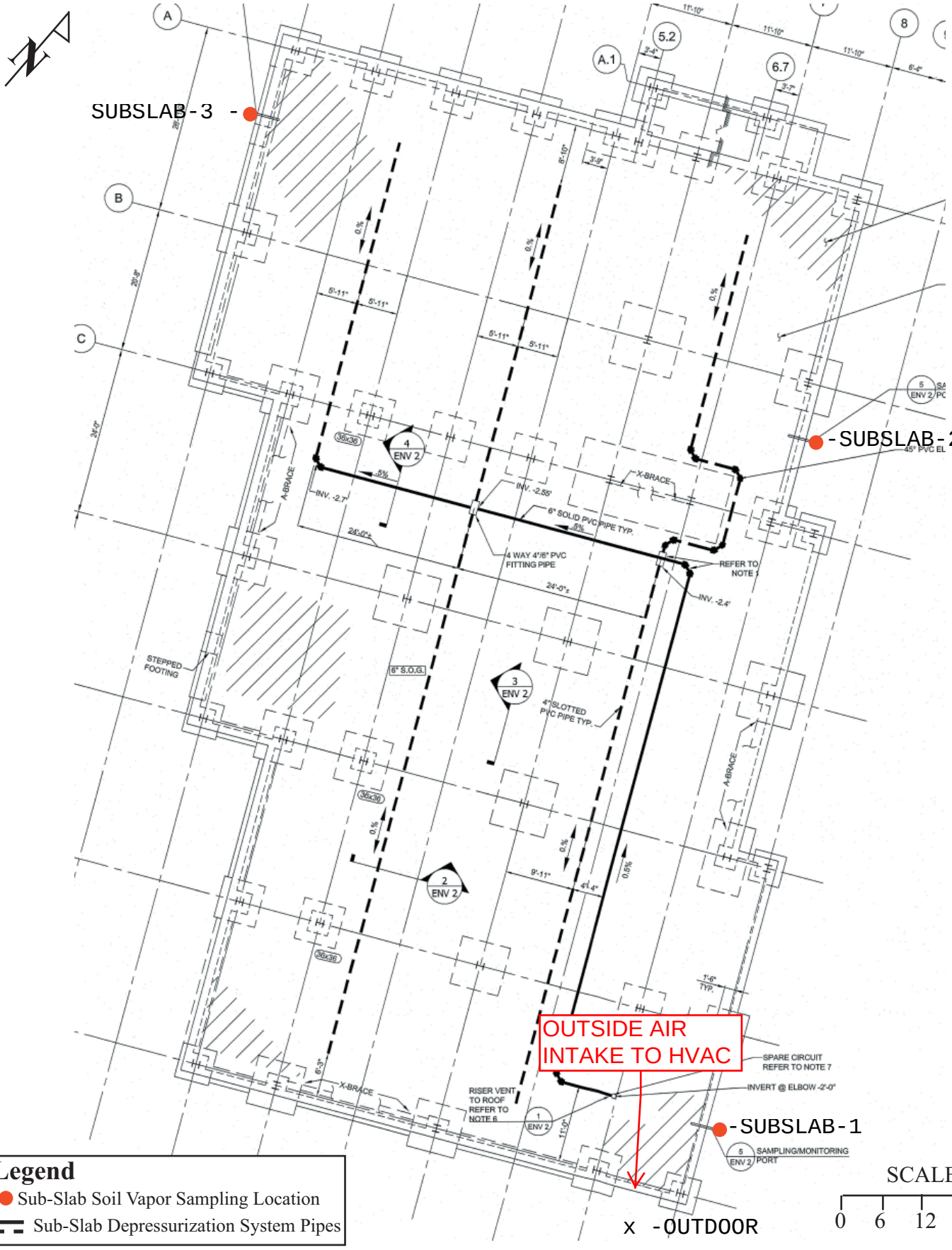
Date: January 2011
Scale: As Noted
Project #: 41046.00

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

SEE ATTACHED PAGE



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Phone: (860) 440-2690

FIGURE 1 - SOIL VAPOR SAMPLING MAP

Albany Public Library - Arbor Hill/West Hill Branch
148 Henry Johnson Boulevard
City of Albany, Albany County, New York

Source: STV Incorporated, June 2009

Date: January 2011
Scale: As Noted
Project #: 41046.00

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Electrical and Data rooms	No Products					
Mechanical	Magic Salt	200 lbs	1 opened bag 3 unopened	NaCl, MgCl		Y
	Glycol	80 gals (est)	2 plastic vessels	Glycol		Y
122	32oz Glass and Surface Cleaner	946 ml	1 partially filled spray bottle	2-butoxyethanol		Y
Recycling - Janitorial	Possible floor cleaner in floor machine holding tanks	1 L	U	("FastDraw 20") Alcohol Ethoxylate Blend, Disodium Citrate		Y
	Wall dispenser plus refills	1 L	U	("Velocity 9")Propylene Glycol phenyl ether, Propylene Glycol NButyl Ether, Tripropylene Glycol Methyl Ether, Anionic Surfactant, Surfactant Hydrotope		Y
		1 L	U	("FastDraw 19")Alkylpolyglycol ether C6-C12, Alkylpolyglucosides, Sodium Iminodisuccinate, Sodium Lauryl Ether Sulfate		Y
		5 L	U and UO	("OxyFect G")Hydrogen Peroxide, Triethylene Glycol, Alkyl (40% C12, 50% C14, 10% C16) dimethyl benzyl ammonium chloride		Y
	Graffiti removers	1 pint	UO	("Target")Acetone, Alcohols, C12-15, Ethoxylated Propoxylated, Methyl Isobutyl Ketone, d-Limonene, Hydrotreated Heavy Naphtha (petroleum)		Y
		1 pint	UO	("Defy")d-Limonene, Coconut Oil Diethanolamide, 2-Butoxyethanol, n-Methyl-2-Pyrrolidone, Ethanol		Y
		1 pint	UO	("Heavy Armor") C10-C16 Alcohol Ethoxylate, Sulfated, Sodium Salt, d-Limonene, Ethanol, Sodium Dodecylbenzenesulfonate, n-Methyl-2-Pyrrolidone		Y
		1 pint	U	("Full Range") 2-Butoxyethanol, C10-C16 Alcohol Ethoxylate, Sulfated, Sodium Salt, Medium Aliphatic Solvent Naphtha, (petroleum), d-Limonene		Y
	Glass Cleaner Stainless Steel Cleaner	4 qts. 20 oz	UO U	2-butoxyethanol Petroleum distillates		Y
	Lysol Disinfecting Wipes, Lysol Spray	50 ct. 20 oz	U U	Ethanol, Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides, Carbon Dioxide		Y
Staff Restroom	Lysol Disinfecting Wipes, Lysol Spray	50 ct. 20 oz	U U	Ethanol, Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides, Carbon Dioxide		N
Break Room	32oz Glass and Surface Cleaner	946 ml	1 partially filled spray bottle	2-butoxyethanol		N
Circulation Desk	Purell hand sanitizer fragranced Hand lotion	1 - small	U			Y
Main Library	Lysol Disinfecting Wipes, foaming hand sanitizer dispenser	1 1	U U	Ethanol, Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides, Carbon Dioxide		Y
Public Restroom	Urinal screen Air Freshener	1 1	U U	Unknown Aerosol		N
Public Meeting Room	Lysol Disinfecting Wipes	50 ct.	U	Ethanol, Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides, Carbon Dioxide		N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX E

Order on Consent and November 22, 2010 NYSDEC letter

Albany County Clerk
32 North Russell Rd.
Albany, NY 12206-1324

Receipt

Issued to: ALBANY PUBLIC LIBRARY
Receipt #613554

Issued: 11/17/2010 at 2:41 PM

Operator: CS

Document# 10769999 - Miscellaneous		
Cover Page		5.00
Cultural Ed		14.25
Misc. Rec		110.00
Record Mgt		4.75
Surcharge Ret		1.00
Sub-total:		135.00
Check 102798(SNEERINGER)		135.00
Total:	**$**	**135.00**

Thomas G. Clingan, County Clerk

Albany County Clerk
Document Number 10769999
Rcvd 11/17/2010 2:39:59 PM

STAMP AND RETURN

COPY

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of a Remedial Program for an Inactive Hazardous Waste Disposal Site under Article 27, Titles 9 and 13, and Article 71, Title 27 of the Environmental Conservation Law

by

Albany Public Library,

Respondent.

ORDER ON CONSENT and ADMINISTRATIVE SETTLEMENT

Index # A4-0640-07-10

Site # E401049

WHEREAS,

1. A. The New York State Department of Environmental Conservation ("Department") is responsible for inactive hazardous waste disposal site remedial programs pursuant to Article 27, Titles 9 and 13, and Article 71, Title 27 of the Environmental Conservation Law ("ECL") and Part 375 of Title 6 of the Official Compilation of Codes, Rules and Regulations ("6 NYCRR") and may issue orders consistent with the authority granted to the Commissioner by such statutes and regulations.

B. The Department is responsible for carrying out the policy of the State of New York to conserve, improve and protect its natural resources and environment and control water, land, and air pollution consistent with the authority granted to the Department and the Commissioner by Article 1, Title 3 of the ECL.

C. This Order is issued pursuant to the Department's authority under, *inter alia*, ECL Article 27, Title 13 and ECL 3-0301, and resolves Respondent's liability to the State as provided at 6 NYCRR 375-1.5(b)(5).

2. Albany Public Library ("Respondent") is a chartered school district public library with an address of 161 Washington Avenue, Albany, New York 12210. Respondent is also the owner of certain parcels of real property acquired from the Albany Local Development Corporation ("ALDC") and City of Albany in 2007 for purposes of constructing and operating a public library in Albany, New York. For the purposes of this Order on Consent, the parcels acquired include 214 and 216 Second Street and 138 and 150 Henry Johnson Boulevard (hereinafter, "the Site"). Exhibit "A" is a map of the Site showing its general location. The Respondent acquired additional parcels surrounding the Site, which include 231, 233, 235 and 237 First Street and 144, 146 and 148 Henry Johnson Boulevard.

3. The Site was previously subject to an Environmental Restoration Program State Assistance Contract ("SAC") between the Department and the City of Albany in accordance with Article 56 of the Environmental Conservation Law and 6 NYCRR Part 375-4.

4. The Site is a Non-Registry site.

5. Respondent allegedly purchased the Site without knowledge that portions of it were subject to a SAC, having commissioned a Phase I and Phase II Environmental Site Assessment prior to purchase which did not report the SAC or the Non-Registry listing and Classification "A" status of the Site.

6. Respondent alleges that the Site's prior owner failed to notify Respondent the Site was subject to a SAC and failed to notify Respondent of the prior owner's obligations under the SAC Respondent alleges that it acquired title to the Site as an innocent purchaser.

7. Subsequently, Respondent commenced construction of a library at the Site. Upon being advised by the Department that the Site was involved in the Department's Environmental Restoration Program and subject to a SAC, Respondent undertook remedial activity at the Site which was reviewed and approved by the Department.

8. As a result of Department and Respondent's efforts, soil was removed from the Site and replaced with clean structural fill. Two Underground Storage Tanks ("USTs") were also removed at and near the Site and two related Soil Removal Actions ("SRAs") were undertaken in accordance with the Department's policy.

9. The UST removal was undertaken in accordance with the NYSDEC Division of Spills and Response Memorandum, "Permanent Closure of Petroleum Storage Tanks," as modified on December 3, 2003, and DER-10.

10. As a result of Respondent's efforts, it has also been determined that possible residual contamination at the Site exists at depths significantly below the new foundation of the library.

11. Respondent has also undertaken an unplanned expense of installing a permanent sub-slab vapor intrusion barrier and venting system during initial construction of the library building at the Site. The barrier and system designs were reviewed and approved by the Department and the New York State Department of Health and are designed to avoid any potential indoor air quality impacts at the library which may otherwise result from vapor intrusion from possible residual contamination at the Site

12. As a result of the Respondent's remedial activities which have occurred at the Site, the Department has determined that the Site has met the goals of the Environmental Remediation Programs under 6 NYCRR Part 375 and the Site does not pose a significant threat to human health and the environment. Accordingly, the Site is being removed from the Environmental Restoration Program (6 NYCRR Part 375-4) and any possible residual contamination at the Site

shall be addressed in accordance with the terms of this Order under the Department's authority pursuant to ECL Section 71-2727(1), (3).

13. Respondent consents to the issuance of this Order without (i) an admission or finding of liability, fault, wrongdoing, or violation of any law, regulation, permit, order, requirement, or standard of care of any kind whatsoever; (ii) an acknowledgment that there has been a release or threatened release of hazardous waste at or from the Site which was not caused by the Respondent; and/or (iii) an acknowledgment that due to the Respondent's remedial efforts and implementation of the engineering controls identified in this Order a release or threatened release of hazardous waste at or from the Site no longer constitutes a significant threat to the public health or environment.

14. The parties agree that the goal of this Order is to certify that the Site is protective of public health and suitable for commercial use, as a public library, as that term is defined pursuant 6 NYCRR Part 375-6, and any guidance developed thereto.

15. Solely with regard to the matters set forth below, Respondent hereby waives any right to a hearing as may be provided by law, consents to the issuance and entry of this Order, and agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms or the validity of data submitted to the Department by Respondent pursuant to this Order.

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

I. Initial Submittal

Not Applicable

II. Development, Performance, and Reporting of Site Management Work Plans

A. Site Management Work Plan

Due to possible residual contamination which exists at the Site and contamination near the Site, a Site Management Work Plan shall be submitted to the Department for review under this Order. A site management plan will identify and implement the engineering controls required for the Site based upon monitoring of sub-slab, indoor and ambient air. The site management work plan will also address the operational and maintenance requirements for the engineering controls. Engineering controls may include the approved sub-slab vapor intrusion barrier and sub-slab depressurization system or similar controls as well as any cover systems outside the building, such as asphalt parking areas, sidewalks and vegetated areas. The site management work plan will also address the testing, handling and disposal of soils if ground intrusive activities are undertaken in the future, in the event of the need for such things as utility maintenance.

Respondent hereby consents to the requirement that they shall seek review and approval by the New York State Department of Environmental Conservation when there will be any disturbance to the soil (other than landscaping activities) or demolition of any structure that is currently on the Site.

A health and safety plan should be included in the Site Management Work Plan to address any future excavations.

All Department-approved Site Management Work Plan(s) shall be incorporated into and become enforceable part of this Order. Upon approval of a Site Management Work Plan by the Department, Respondent shall implement such Site Management Work Plan in accordance with the schedule contained therein.

B. Submission/Implementation of Site Management Work Plans

1. (a) The Site Management Work Plan shall be submitted to the Department within ninety (90) days after the effective date of this Order.

(b) The Department may request that Respondent submit additional or supplemental Site Management Work Plans for the Site. Within thirty (30) days after the Department's written request, Respondent shall advise the Department in writing whether it will submit and implement the requested additional or supplemental Site Management Work Plan or whether it elects to terminate this Order pursuant to Paragraph XIII. If Respondent elects to submit and implement such Site Management Work Plan, Respondent shall submit the requested Plan within sixty (60) days after such election. If Respondent elects to terminate this Order or fails to make a timely election, this Order shall terminate pursuant to Paragraph XIII.

(c) Respondent may opt to propose one or more additional or supplemental Site Management Work Plans at any time, which the Department shall review for appropriateness and technical sufficiency.

(d) Any request made by the Department under Subparagraph II.B.1.(b) shall be subject to dispute resolution pursuant to Paragraph XII.

2. A Professional Engineer must stamp and sign all Site Management Work Plans.

3. During all field activities conducted under this Order, Respondent shall have on-Site a representative who is qualified to supervise the activities undertaken. Such representative may be an employee or a consultant retained by Respondent to perform such supervision as set forth in 6 NYCRR Part 375-1.6(a)(3).

C. Modifications to Site Management Work Plans

The Department shall notify Respondent in writing if the Department determines that any element of a Department-approved Site Management Work Plan needs to be modified in order to achieve the objectives of the Site Management Work Plan as set forth in Subparagraph II.A or to ensure that the Remedial Program otherwise protects human health and the environment. Upon receipt of such notification, Respondent shall, subject to Respondent's right to terminate pursuant to Paragraph XIII, provide written notification as provided at 6 NYCRR Part 375-1.6(d)(3) as to whether it will modify the Site Management Work Plan, or invoke dispute resolution.

D. Submission of Final Reports and Annual Reports

1. In accordance with the schedule contained in the Site Management Work Plan, Respondent shall submit a final report as provided at 6 NYCRR Part 375-1.6(b) or a final engineering report as provided at 6 NYCRR Part 375-1.6(c)).

2. Any final report or final engineering report that includes construction activities shall include "as built" drawings showing any changes made to the remedial design or any IRM.

3. In the event that the final engineering report for the Site requires Site management, Respondent shall submit a report by the 1st day of the month following the anniversary of the start of the Site management. Such report shall be signed by a Professional Engineer or by such other qualified environmental professional as the Department may find acceptable and shall contain a certification as provided at 6 NYCRR Part 375-1.8(h)(3). One such report will be required for this project. Respondent may petition the Department for a determination that the engineering controls may be terminated. Such petition must be supported by a statement by a Professional Engineer that such controls are no longer necessary for the protection of public health and the environment. The Department shall not unreasonably withhold its approval of such petition.

E. Review of Submittals Other than Progress Reports and Health and Safety Plans

1. The Department shall make a good faith effort to review and respond in writing to each submittal Respondent makes pursuant to this Order within sixty (60) days. The Department's response shall include an approval or disapproval of the submittal, in whole or in part. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. If the Department disapproves a submittal, it shall specify the reasons for its disapproval. Within fifteen (15) days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall, subject to Respondent's right to terminate pursuant to Paragraph XIII, elect to modify the submittal or invoke dispute resolution as provided at 6 NYCRR Part 375-1.6(d)(4). If Respondent elects to modify the submittal,

Respondent shall, within thirty (30) days after such election, make a revised submittal that addresses all of the Department's stated reasons for disapproving the first submittal. In the event that Respondent's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XII and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

3. Within thirty (30) days after the Department's approval of a final submittal report, Respondent shall submit such final submittal report, as well as all data gathered and drawings and submittals made pursuant to such Site Management Work Plan, in an electronic format acceptable to the Department. If any document cannot be converted into electronic format, Respondent shall submit such document in an alternative format acceptable to the Department.

F. Department's Issuance of a ROD

Not applicable

G. Release and Covenant Not to Sue

Upon the Department's approval of the final engineering report, the Department shall issue the Certificate of Completion for the Site attached hereto and incorporated herein as Exhibit B.

Upon the Department's issuance of a Certificate of Completion as provided at 6 NYCRR Parts 375-1.9 and 375-2.9, Respondent shall obtain the benefits including the liability limitation benefits conferred by such provisions, subject to the terms and conditions described therein. The benefits and liability limitations provided to the Respondent pursuant to 6 NYCRR Part 375-1.9 and 375-2.9 shall survive the termination of this Order following the Department's issuance of a Certificate of Completion.

III. Progress Reports

Not applicable

IV. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order, the ECL, and 6 NYCRR Part 375-2.11(a)(4). Nothing herein abridges Respondent's right to contest any allegation that it has failed to comply with this Order.

2. Payment of any penalties shall not in any way alter Respondent's obligations under this Order.

B. 1. Respondent shall not suffer any penalty or be subject to any proceeding or action in the event it cannot comply with any requirement of this Order as a result of any Force Majeure Event as provided at 6 NYCRR Part 375-1.5(b)(4). Respondent must use best efforts to anticipate the potential Force Majeure Event, best efforts to address any such event as it is occurring, and best efforts following the Force Majeure Event to minimize delay to the greatest extent possible. "Force Majeure" does not include Respondent's economic inability to comply with any obligation, the failure of Respondent to make complete and timely application for any required approval or permit, and non-attainment of the goals, standards, and requirements of this Order.

2. Respondent shall notify the Department in writing within five (5) days of the onset of any Force Majeure Event Failure to give such notice within such five (5) day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall be deemed to know of any circumstance which it, any entity controlled by it, or its contractors knew or should have known.

3. Respondent shall have the burden of proving by a preponderance of the evidence that (i) the delay or anticipated delay has been or will be caused by a Force Majeure Event; (ii) the duration of the delay or the extension sought is warranted under the circumstances; (iii) best efforts were exercised to avoid and mitigate the effects of the delay; and (iv) Respondent complied with the requirements of Subparagraph IV.B.2 regarding timely notification.

4. If the Department agrees that the delay or anticipated delay is attributable to a Force Majeure Event, the time for performance of the obligations that are affected by the Force Majeure Event shall be extended for a period of time equivalent to the time lost because of the Force Majeure Event, in accordance with 6 NYCRR Part 375-1.5(4).

5. If the Department rejects Respondent's assertion that an event provides a defense to non-compliance with this Order pursuant to Subparagraph IV.B, Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XII and Respondent's position prevails.

V. Entry upon Site

A. Respondent hereby consents, upon reasonable notice under the circumstances presented, to entry upon the Site (or areas in the vicinity of the Site which may be under the control of Respondent) by any duly designated officer or employee of the Department or any State agency having jurisdiction with respect to matters addressed pursuant to this Order, and by any agent, consultant, contractor, or other person so authorized by the Commissioner, all of whom shall abide by the health and safety rules in effect for the Site, for inspecting, sampling, copying records related to the contamination at the Site, testing, and any other activities necessary to ensure Respondent's compliance with this Order. Upon request, Respondent shall (i) provide the Department with suitable work space at the Site, including access to a telephone, to the extent available, and (ii) permit the Department full access to all non-privileged records

relating to matters addressed by this Order. Raw data is not considered privileged and that portion of any privileged document containing raw data must be provided to the Department. In the event Respondent is unable to obtain any authorization from third-party property owners necessary to perform its obligations under this Order, the Department may, consistent with its legal authority, assist in obtaining such authorizations.

B. The Department shall have the right to take its own samples and scientific measurements and the Department and Respondent shall each have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled. The Department shall make the results of any such sampling and scientific measurements available to Respondent.

VI. Payment of State Costs

Not applicable

VII. Reservation of Rights

A. Except as provided at 6 NYCRR Parts 375-1.9 and 375-2.9, nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights or authorities, including, but not limited to, the right to require performance of further investigations and/or response action(s), to recover natural resource damages, and/or to exercise any summary abatement powers with respect to any person, including Respondent.

B. Except as otherwise provided in this Order, Respondent specifically reserves all rights and defenses under applicable law respecting any Departmental assertion of remedial liability and/or natural resource damages against Respondent, and further reserves all rights respecting the enforcement of this Order, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Order or Respondent's compliance with it shall not be construed as an admission of liability, fault, wrongdoing, or breach of standard of care by Respondent, and shall not give rise to any presumption of law or finding of fact, or create any rights, or grant any cause of action, which shall inure to the benefit of any third party. Further, Respondent reserves such rights as it may have to seek and obtain contribution, indemnification, and/or any other form of recovery from its insurers and from other potentially responsible parties or their insurers for past or future response and/or cleanup costs or such other costs or damages arising from the contamination at the Site as may be provided by law, including but not limited to rights of contribution under section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

VIII. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, the Trustee of the State's natural resources, and their representatives and employees harmless as provided by 6 NYCRR Part 375-2.5(a)(3)(i).

IX. Public Notice

A. Within thirty (30) days after the effective date of this Order, Respondent shall provide notice as required by 6 NYCRR Part 375-1.5(a). Within sixty (60) days of such filing, Respondent shall provide the Department with a copy of such instrument certified by the recording officer to be a true and faithful copy.

B. If Respondent proposes to transfer by sale or lease the whole or any part of Respondent's interest in the Site, or becomes aware of such transfer, Respondent shall, not fewer than forty-five (45) days before the date of transfer, or within forty-five (45) days after becoming aware of such conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed or actual date of the conveyance, and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order. However, such obligation shall not extend to a conveyance by means of a corporate reorganization or merger or the granting of any rights under any mortgage, deed, trust, assignment, judgment, lien, pledge, security agreement, lease, or any other right accruing to a person not affiliated with Respondent to secure the repayment of money or the performance of a duty or obligation.

X. Environmental Easement

Not applicable

XI. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

1. Communication from Respondent shall be sent to:

Dena Putnick, Esq.
Office of General Counsel
NYSDEC
625 Broadway
Albany, New York 12233-1500
dnputnic@gw.dec.state.ny.us

Randy Hough - Project Manager
NYSDEC
Division of Environmental Remediation
Remedial Bureau B, Section A, 12th Floor
625 Broadway
Albany, New York 12233-7016

rshough@gw.dec.state.ny.us

Mike Komoroske - Section Chief
NYSDEC
Division of Environmental Remediation
Remedial Bureau B, Section A, 12th Floor
625 Broadway
Albany, New York 12233-7016
mjkomoro@gw.dec.state.ny.us
Correspondence Only

Note: One (1) hard copy of plans is required, as well as one (1) electronic copy.

with copies to:

Bureau of Environmental Exposure Investigation
New York State Department of Health
Flanigan Square
547 River Street
Troy, New York 12180-2216

2. Communication to be made from the Department shall be sent to:

Executive Director
Albany Public Library
161 Washington Avenue
Albany, New York 12210

With copies to:

Robert T. Schofield
David R. Everett
Whiteman Osterman & Hanna, LLP
One Commerce Plaza
Albany, New York 12260
rschofield@woh.com
deverett@woh.com

B. The Department and Respondent reserve the right to designate additional or different addressees for communication upon written notice to the other.

C. Each party shall notify the other within ninety (90) days after any change in the addresses in this Paragraph XI.

XII. Dispute Resolution

In the event disputes arise under this Order, Respondent may, within fifteen (15) days after Respondent knew or should have known of the facts which are the basis of the dispute, initiate dispute resolution in accordance with the provisions of 6 NYCRR Part 375-1.5(b)(2). Nothing contained in this Order shall be construed to authorize Respondent to invoke dispute resolution with respect to the remedy selected by the Department in the ROD or any element of such remedy, nor to impair any right of Respondent to seek judicial review of the Department's selection of any remedy.

XIII. Termination of Order

A. This Order will terminate upon the earlier of the following events:

1. Respondent's election to terminate pursuant to Subparagraphs II.B.1.b, II.C or II.E.2 so long as such election is made prior to the Department's approval of the Site Management Work Plan. In the event of termination in accordance with this Subparagraph XIII.A.1, this Order shall terminate effective the 5th day after the Department's receipt of the written notification terminating this Order or the 5th day after the time for Respondent to make its election has expired, whichever is earlier, provided, however, that if there are one or more Site Management Work Plan(s) for which a final report has not been approved at the time of Respondent's notification of its election to terminate this Order pursuant to Subparagraphs II.B.1.b, II.c, or II.E.2 or its failure to timely make such an election pursuant to Subparagraphs II.B.1.b, II.c, or II.E.2, Respondent shall promptly complete the activities required by such previously approved Site Management Work Plan(s) consistent with the schedules contained therein. Thereafter, this Order shall terminate effective the 5th day after the Department's approval of the final report for all previously approved Site Management Work Plans; or

2. The Department's written determination that Respondent has completed all phases of the Remedial Program (including Site Management), in which event the termination shall be effective on the 5th day after the date of the Department's approval of the final report relating to the final phase of the Remedial Program.

B. Notwithstanding the foregoing, the provisions contained in Paragraphs VI and VIII shall survive the termination of this Order and any violation of such surviving Paragraphs shall be a violation of this Order, the ECL, and 6 NYCRR Part 375-2.11(a)(4), subjecting Respondent to penalties as provided under Paragraph IV so long as such obligations accrued on or prior to the Termination Date.

C. If the Order is terminated pursuant to Subparagraph XIII.A.1, neither this Order nor its termination shall affect any liability of Respondent for remediation of the Site, including implementation of removal and remedial actions, interest, enforcement, and any and all other response costs as defined under CERCLA, nor shall it affect any defenses to such liability that may be asserted by Respondent. Respondent shall also ensure that it does not leave the Site in a condition, from the perspective of human health and environmental protection, worse than that

which existed before any activities under this Order were commenced. Further, the Department's efforts in obtaining and overseeing compliance with this Order shall constitute reasonable efforts under law to obtain a voluntary commitment from Respondent for any further activities to be undertaken as part of a Remedial Program for the Site.

XIV. Miscellaneous

A. Respondent agrees to comply with and be bound by the provisions of 6 NYCRR Subparts 375-1 and 375-2; the provisions of such Subparts that are referenced herein are referenced for clarity and convenience only and the failure of this Order to specifically reference any particular regulatory provision is not intended to imply that such provision is not applicable to activities performed under this Order.

B. The Department may exempt Respondent from the requirement to obtain any state or local permit or other authorization for any activity conducted pursuant to this Order in accordance with 6 NYCRR Part 375-1.12(b), (c), and (d).

C. 1. Respondent shall use best efforts to obtain all Site access, permits, easements, approvals, institutional controls, and/or authorizations necessary to perform Respondent's obligations under this Order, including all Department-approved Site Management Work Plans and the schedules contained therein. If, despite Respondent's best efforts, any access, permits, easements, approvals, institutional controls, or authorizations cannot be obtained, Respondent shall promptly notify the Department and include a summary of the steps taken. The Department may, as it deems appropriate and within its authority, assist Respondent in obtaining same.

2. If an interest in property is needed to implement an institutional control required by a Site Management Work Plan and such interest cannot be obtained, the Department may require Respondent to modify the Site Management Work Plan pursuant to 6 NYCRR Part 375-1.6(d)(3) to reflect changes necessitated by Respondent's inability to obtain such interest.

D. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any provisions of this Order.

E. 1. The terms of this Order shall constitute the complete and entire agreement between the Department and Respondent concerning the implementation of the activities required by this Order. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order. In the event of a conflict between the terms of this Order and any Site Management Work Plan submitted pursuant to this Order, the terms of this Order shall control over the terms of such Work Plan(s). Respondent consents to and agrees not to contest the authority and jurisdiction of the Department to enter into or enforce this Order.

2 i. Except as set forth herein, if Respondent desires that any provision of this Order be changed, Respondent shall make timely written application to the Commissioner with copies to the parties listed in Subparagraph XI.A.1.

ii. If Respondent seeks to modify an approved Site Management Work Plan, a written request shall be made to the Department's project manager, with copies to the parties listed in Subparagraph XI.A.1.

iii. Requests for a change to a time frame set forth in this Order shall be made in writing to the Department's project attorney and project manager; such requests shall not be unreasonably denied and a written response to such requests shall be sent to Respondent promptly.

F. 1. If there are multiple parties signing this Order, the term "Respondent" shall be read in the plural, the obligations of each such party under this Order are joint and several, and the insolvency of or failure by any Respondent to implement any obligations under this Order shall not affect the obligations of the remaining Respondent(s) under this Order.

2. If Respondent is a partnership, the obligations of all general partners (including limited partners who act as general partners) under this Order are joint and several and the insolvency or failure of any general partner to implement any obligations under this Order shall not affect the obligations of the remaining partner(s) under this Order.

3. Notwithstanding the foregoing Subparagraphs XIV.F.1 and 2, if multiple parties sign this Order as Respondents but not all of the signing parties elect to implement a Site Management Work Plan, all Respondents are jointly and severally liable for each and every obligation under this Order through the completion of activities in such Site Management Work Plan that all such parties consented to; thereafter, only those Respondents electing to perform additional work shall be jointly and severally liable under this Order for the obligations and activities under such additional Site Management Work Plan(s). The parties electing not to implement the additional Site Management Work Plan(s) shall have no obligations under this Order relative to the activities set forth in such Site Management Work Plan(s). Further, only those Respondents electing to implement such additional Site Management Work Plan(s) shall be eligible to receive the Liability Limitation.

G. Respondent shall be entitled to receive contribution protection and/or to seek contribution to the extent authorized by ECL 27-1421(6) and 6 NYCRR 375-1.5(b)(5).

H. Unless otherwise expressly provided herein, terms used in this Order which are defined in ECL Article 27 or in regulations promulgated thereunder shall have the meaning assigned to them under said statute or regulations.

I. Respondent's obligations under this Order represent payment for or reimbursement of response costs, and shall not be deemed to constitute any type of fine or penalty.

J. Respondent's successors and assigns shall be bound by this Order.

K. This Order may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which shall be deemed to have the status of an executed original and all of which shall together constitute one and the same

L. The effective date of this Order is the 10th Day after it is signed by the Commissioner or the Commissioner's designee.

DATED:

OCT. 18, 2010

ALEXANDER B. GRANNIS
COMMISSIONER
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

By: _____

Dale A. Desnoyers, Director
Division of Environmental Remediation

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

Albany Public Library

By: Carol Nersinger
Carol Nersinger

Title: Executive Director

Date: 10/12/10

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

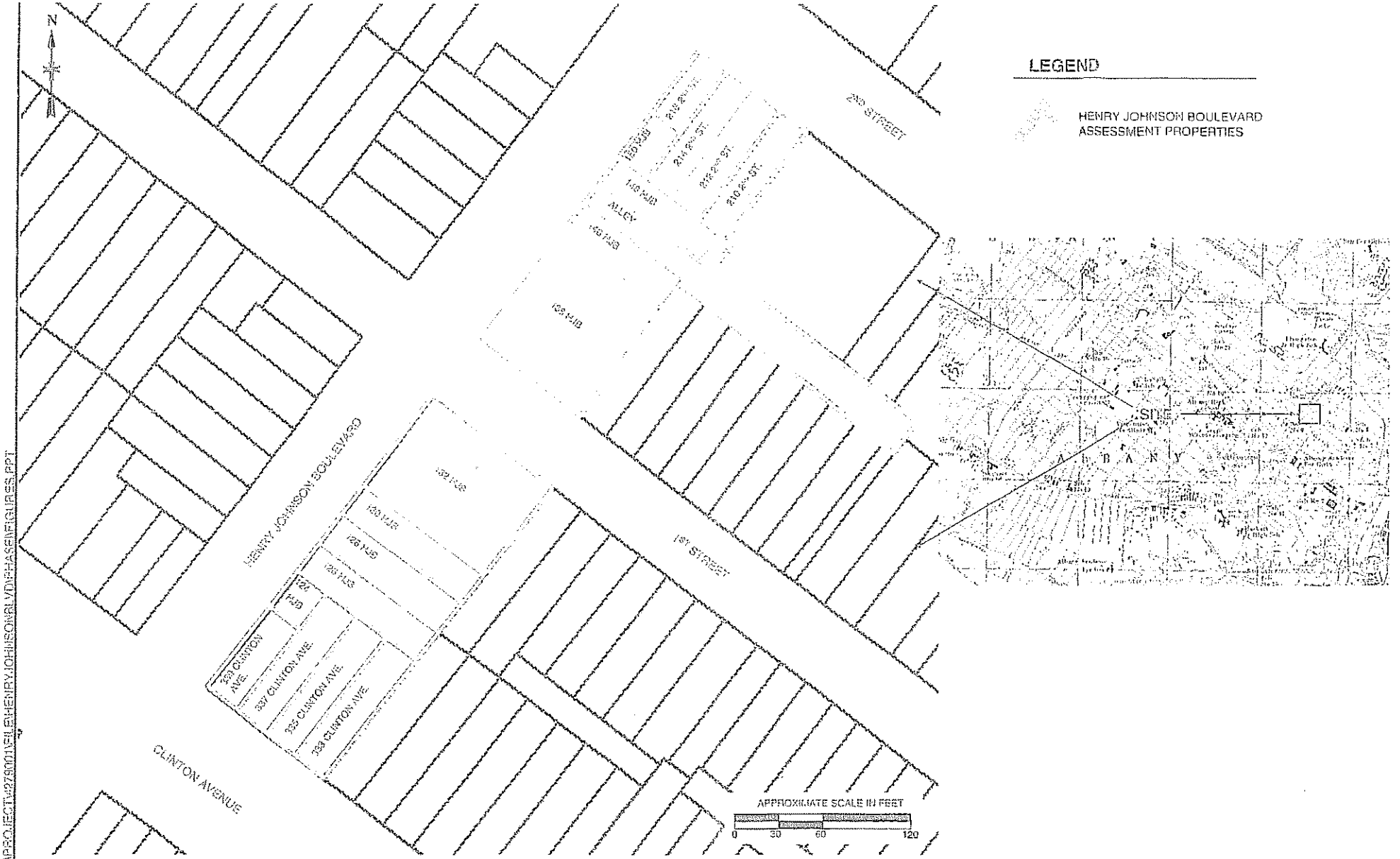
On the 12th day of OCTOBER, in the year 2010, before me, the undersigned, personally appeared CAROL NERSINGER personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Signature and Office of individual taking acknowledgment

Robert T. Schollard
NOTARY PUBLIC STATE OF N
Reg No. 02SC5077791
My Comm Expires May [illegible] 2011

EXHIBIT "A"

Map of Site



F:\PROJECT\1279001\FIGS\HENRYJOHNSON\VDI\PHASEII\FIGURES.PPT

MALCOLM PIRNIE	PHASE II ESA HENRY JOHNSON BOULEVARD ALBANY, NEW YORK	HENRY JOHNSON BOULEVARD SITE LOCATION	MALCOLM PIRNIE, INC. December 2004 FIGURE 2-1

EXHIBIT "B"

CERTIFICATE OF COMPLETION

This Certificate of Completion is issued to the Albany Public Library or its successors following the review by the New York State Department of Environmental Conservation (Department) of the Final Engineering Report and data submitted pursuant to the Order on Consent, dated _____, 2010, as well as any other relevant information regarding the Site known as the Arbor Hill / West Hill Branch Library (formerly part of the Henry Johnson Boulevard Properties, ERP Site #E401049).

The Final Engineering Report states that the requirements set forth in the library's design and specifications (remedial program) have been achieved. The design and specifications specified the use of a vapor barrier aggregate, installation of a passive sub slab depressurization system within the aggregate with a vent pipe extending to the top of the building roof and the installation of a sheet membrane gas vapor barrier over the aggregate and beneath the building slab as engineering controls for possible soil vapor intrusion

At the time of the design and specifications submission, the remedial goals were established to be as set forth pursuant to the NYSDOH, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006, for all compounds included in the decision matrices for the sub slab and indoor air samples at the library facility.

The test results demonstrate that the remedial program for the Site has achieved control of soil vapor intrusion in accordance with the NYSDOH guidance. Notably, this allows for the use of the Site as a public library and is protective of public health. The remedial program does not include use restrictions or reliance on the long term employment of institutional controls.

Based upon this remedial program, which is consistent with commercial use, the Site is acceptable for use as a branch library by the Albany Public Library or its successors and it shall not be liable to the Department in accordance with the terms and conditions set forth for a Certificate of Completion at 6 NYCRR Parts 375-1.9 and 375-2.9.

If you need further information, please contact Robert Cozzy at (518) 402-9767.

Sincerely,

Dale A. Desnoyers, Director,
Division of Environmental Remediation

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau B, 12th Floor
625 Broadway, Albany, New York 12233-7016
Phone: (518) 402-9768• **Fax:** (518) 402-9773
Website: www.dec.ny.gov

Peter M. Iwanowicz
Acting Commissioner

Ms. Carol Nersinger
Executive Director
Albany Public Library
161 Washington Avenue
Albany, New York 12210

November 22, 2010

Re: Albany Public Library
Arbor Hill/West Hill Branch
Former ERP Site No. E401049
Order on Consent Index No. A4-0640-07-10

Dear Ms. Nersinger:

As you are aware, the above referenced Order on Consent was executed by the NYS Department of Environmental Conservation (the Department) on October 18, 2010. The goal of the Order on Consent is to certify that the Site is protective of public health and that it is suitable for commercial use as a public library. To this end, the Order calls for development of a Site Management Work Plan as per Section II (A), this would lead to submittal of a final engineering report and generation of a Certificate of Completion (COC) for the library site parcels. With the issuance of the COC, the Albany Public Library (APL) would obtain the liability limitation benefits as outlined in Section II, (G) of the Order.

In order to develop the required submittals, the APL should initially perform a soil vapor intrusion investigation which includes sampling and analysis of indoor, sub-slab and ambient air at the library facility. Sub-slab sampling points were installed during building construction. The investigation should be performed in accordance with the NYS Department of Health document titled: "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006. The investigation results will provide the data necessary to implement engineering controls such as the activation of the passive sub-slab depressurization system, if required to be protective of public health. The implementation and operation of any of the engineering controls will be covered by the Site Management Plan.

Prior to initiating the soil vapor intrusion investigation the APL or their consultant should submit a short summary of the planned field activities and methodologies to be utilized. Note that the Order on Consent includes timeframes for the required submissions.

If you should have any questions or require further information please do not hesitate to contact me at the above number.

Sincerely,

Randy Hough

Randy Hough
Environmental Engineer I
Project Manager

ec: R. Schofield - Whiteman Osterman & Hanna, LLP
D. Everett - Whiteman Osterman & Hanna, LLP
R. Derico - DASNY
J. Crua - NYSDOH
A. DeMarco - NYSDOH
D. Putnik
B. Cozzy
M. Komoroske