DEMOLITION PLAN

FOR

AMERICAN DRIVE-IN CLEANERS

3801 HEMPSTEAD TURNPIKE

LEVITTOWN, NASSAU COUNTY, NEW YORK

NYSDEC SITE NUMBER: 130049

PREPARED FOR

KASPER (1977) IRREVOCABLE TRUSTS

FOR SUBMITTAL TO

NYSDEC DIVISION OF ENVIRONMENTAL REMEDIATION
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Acronym	Definition
ADC	American Drive-In Cleaners
AST	Aboveground Storage Tank
DOB	Town of Hempstead Building Department
DUSR	Data Usability Summary Report
ECs	Engineering Controls
fbg	feet below grade
HASP	Health and Safety Plan
ICs	Institutional Controls
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	Operable Unit
PCE	Perchloroethylene
PID	Photoionization Detector
Plan	Demolition Plan
ppb	parts per billion
ppm	parts per million
QAPP	Quality Assurance Project Plan
RCA	Recycled Concrete Aggregate
SCOs	NYSDEC Subpart 375 Unrestricted Use Soil Cleanup Objectives
Site	3801 Hempstead Turnpike
SMP	Site Management Plan
SoMP	Soil Management Plan
SSDS	Sub-Slab Depressurization System
Standards	NYSDEC Class GA Ambient Water Quality Standards and Guidelines
SVE	Soil Vapor Extraction
ug/kg	micrograms per kilogram
ug/l	micrograms per liter
ug/m^3	micrograms per cubic meter
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

SECTION 1.0
SITE SUMMARY INFORMATION

1.1 Introduction

This Demolition Plan (Plan) has been prepared to provide the necessary procedures and protocols for the demolition of the onsite building and the placement of paving at the American Drive-In Cleaners Site located at 3801 Hempstead Turnpike, Levittown, Nassau County, New York (Site). The Site is listed under the New York State Registry of Inactive Hazardous Waste Disposal Sites as Site No. 130049. This Plan was prepared in accordance with the provisions in Section 1.4.3.3 of the Site Management Plan (SMP) for the American Drive-In Cleaners (ADC) Site and includes proposed modifications of the existing Engineering Controls (ECs) on the Site. The existing ECs on the Site include:

- A portion of the ADC Site groundwater monitoring well network to provide for monitoring of groundwater contamination at the Site;
- A soil vapor extraction (SVE) system to remediate soil in the Site vadose zone; and
- A sub-slab depressurization system (SSDS) to protect indoor air quality within the Site retail building.

Remedial activities are presently underway at the ADC Site; these activities have been implemented since mid-2007 by a New York State Department of Environmental Conservation (NYSDEC) standby contractor (EnviroTrac, Ltd.) in general accordance with the SMP. The remedial activities include operation of the SVE system to treat residual soil at the Site impacted by perchloroethylene (PCE), operation of the SSDS to provide for protection of indoor air quality for the Site retail building (which has been vacant since 2009), and operation of the groundwater monitoring well network. Monitoring is conducted to assess the progress of remediation and includes groundwater, soil vapor, and SVE effluent monitoring. The remedial monitoring data collected in 2008, 2009, and 2010 under the auspices of the NYSDEC are used as the basis for proposed modifications to the onsite ECs during the demolition activities.

1.2 Site Background

Detailed ADC Site background information was provided in the SMP. Information pertinent to the proposed demolition activities on the Site and associated EC modifications is summarized herein. A plan showing the ADC Site is presented in Figure 1.2.1 for reference.

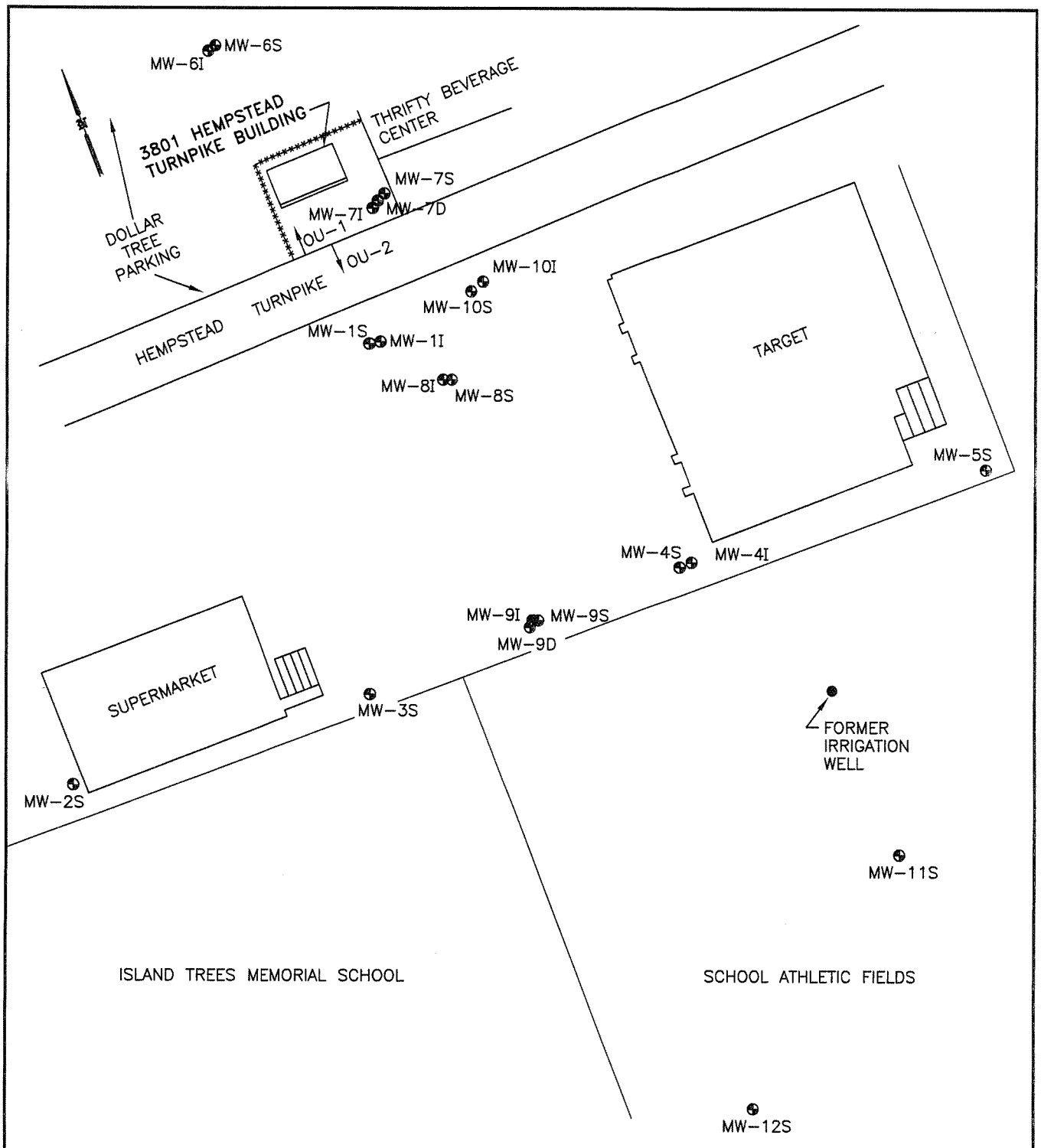

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FIGURE 1.2.1

AMERICAN DRIVE-IN CLEANERS SITE PLAN

LEVITTOWN, NY

Drawn By: J.S.	Checked By: B.C.	Date: 2/26/10

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1.2.1 General Site Conditions

The ADC Site is located in heavily-developed commercial area of Levittown, Nassau County, New York and is divided into OUs 1 and 2. OU-1 is an area north of Hempstead Turnpike that includes the 0.37-acre property located at 3801 Hempstead Turnpike (Site) in Levittown, New York (Nassau County Tax Map Section 46, Block 574, and Lot 64). OU-2 is located south of OU-1 and consists of an offsite area impacted by ADC Site-related groundwater contamination that extended beneath Hempstead Turnpike, the Target parking lot, and the Island Trees Memorial School athletic fields. As discussed below, recent groundwater monitoring data for OU-2 show the offsite area of impacted groundwater to be considerably reduced relative to its former extent.

The Site is underlain by 1 to 7 feet of sandy-silty fill, below which are found Upper Glacial outwash deposits to a depth of approximately 85 feet below grade (fbg). These deposits are composed of brown gravelly sand. Groundwater in the Upper Glacial aquifer is encountered at approximately 34 fbg and flows generally to the south in the Site vicinity. The Upper Glacial Aquifer is commonly used only for irrigation in Nassau County. The Magothy Formation underlies the Upper Glacial outwash deposits, and is typically several hundred feet thick on Long Island. Historically, the deepest boring at the Site penetrated into the Magothy Formation to a depth of 121 feet. Magothy Formation samples consisted of brown, silty, fine to medium grained sand. The Magothy aquifer is the main source of drinking water in Nassau County.

ADC Site groundwater is monitored at three intervals: shallow (generally 20 to 43 fbg), intermediate (generally 70 to 80 fbg), and deep (generally 90 to 118 fbg). Impacts have been noted in the shallow and intermediate intervals. No exceedances of the NYSDEC Class GA Ambient Water Quality Standards and Guidance (Standards) have been noted in the deep interval.

1.2.2 ADC Site History

The building on the Site was constructed in 1955 and was formerly operated as a dry cleaner. Recent uses have included several retail operations; dry cleaning was terminated in 2000 and the dry cleaner vacated the premises in December 2001. Before the connection to the public sewer system in 1981, wastewater containing PCE was drained from the Site building into two cesspools located to the east of the building; PCE-impacted soil has been identified in this area. PCE contamination was also identified in near-surface soil located near the northwest

corner of the building, where it is understood that PCE was formerly managed in association with the dry cleaning operations.

In August 1999 a vacuum truck and an excavator were used to remove approximately two cubic yards of PCE-impacted material from the bottom of the southernmost cesspool. The removal was incomplete and residual impacted soil remained present. The two cesspools are reported to have been abandoned by backfilling at that time.

Between December 2000 and February 2001, under the direction of the NYSDEC, an SVE system was installed beneath the Site building. In May 2001, the United States Environmental Protection Agency (USEPA) installed a larger SVE system. Additional SVE wells were subsequently installed. This SVE system has recently been operated and maintained under the direction of the NYSDEC and in accordance with an SMP.

In May 2001, a SSDS was installed beneath the onsite building, primarily to eliminate potential exposure to PCE and related volatile organic compounds (VOCs) in indoor air due to soil vapor intrusion. The SSDS utilizes six actively-vented depressurization wells vented via inline fans.

The SVE system and SSDS at the Site were transferred from the USEPA to the NYSDEC in August 2007. In October 2007, a subsurface investigation was conducted to determine the levels of VOCs in the soil and groundwater beneath OU-1. The 2007 investigation determined that the levels of VOCs in the vadose zone soil were below NYSDEC Subpart 375 Unrestricted Use Soil Cleanup Objectives (SCOs). It was also determined that, at that time, there was groundwater contamination in excess of NYSDEC Standards beneath both OU-1 and OU-2.

In May 2008, a vapor monitoring event was conducted to assess sub-slab and indoor air VOC concentrations associated with the five OU-1 retail store locations and to evaluate individual SVE well vapor concentrations. The investigation determined that the sub-slab and indoor air vapor concentrations warranted continued operation of the SSDS according to New York State Department of Health (NYSDOH) guidelines and that continued operation of the SVE system was necessary to address elevated vapor concentrations found in select wells.

An additional vapor monitoring event was conducted in August 2010 to further assess sub-slab soil vapor and indoor air conditions in the five OU-1 retail store locations and in the adjoining Beverage Center building. This investigation confirmed the continued need to operate

the SSDS for the Site building and also indicated the need for sub-slab vapor mitigation at the adjoining Beverage Center. These results are discussed in more detail below.

1.2.3 Summary of Current OU-1 Subsurface Conditions

Additional groundwater and SVE system monitoring were conducted in 2008, 2009, and 2010 and are documented in monitoring reports prepared for the NYSDEC. No additional soil sampling has been reported since October 2007. Current OU-1 subsurface conditions (based on the most recent available data) are detailed below.

➢ Soil

In October 2007 a subsurface soil investigation was conducted at OU-1 and included soil sampling at five locations; the results are documented in detail in the SMP and are summarized here. The three soil boring locations (SB-1 through SB-3), the storm drain sample location, and the floor drain sample location are depicted on Figure 4 in Appendix A. The resulting organic vapor screening results and analytical data are also included on Tables 1 and 2 in Appendix A. No additional soil sampling is reported to have been conducted in 2008 or 2009.

- SB-1 was performed downgradient of the abandoned cesspools to the east of the Site building to a depth of 35 fbg. Soils at SB-1 consisted mostly of medium to coarse-grained sand with trace gravel. The highest photoionization detector (PID) measurement of organic vapors was 1,200 parts per billion (ppb) at a depth of 0-5 fbg. Groundwater was encountered at approximately 32 fbg. Five soil samples were analyzed from this boring from depths ranging from 10 to 35 feet; no VOCs were found in any of the tested samples.
- SB-2 was performed upgradient of the abandoned cesspools to the east of the Site building to a depth of 30 fbg. Soils at SB-2 consisted mostly of medium to coarse-grained sand with some fine-grained sand and gravel. Groundwater was encountered at approximately 30 fbg. The highest PID measurement was 374 ppb at a depth of 15-20 fbg. Four soil samples were analyzed from this boring from depths ranging from 10 to 30 feet; no VOCs were found in any of the tested samples.
- SB-3 was performed to 30 fbg within the southernmost abandoned cesspool, located to the east of the building, where the most heavily-impacted soil had formerly been identified. The soil encountered consisted mostly of medium to coarse-grained sand with trace fine-grained sand and gravel. Groundwater was encountered at approximately 30 fbg. The highest PID measurement was 818 ppb at a depth of 20-25

fbg. An odor, reportedly resembling sewage, was noted in all samples between 10-30 fbg. Four soil samples were analyzed from this boring from depths ranging from 10 to 30 feet; no VOCs were found in any of the tested samples with the exception of the sample from 10 to 15 feet, where 5.7 ug/kg of PCE was found. This concentration is well below the NYSDEC Unrestricted Use SCO for PCE of 1,300 ug/kg.

- Three drain samples were also collected, including one sample from within the storm drain located in front of the Site building and one sample each from within and below the floor drain pipe located within the boiler room of the Site building. No VOCs were detected in the storm drain sample. Two petroleum-related VOCs (1,2,4-trimethyl-benzene and naphthalene) were detected in the two floor drain samples at concentrations well below their NYSDEC Unrestricted Use SCOs. No PCE or related chlorinated solvents were detected in the floor drain samples.

Based on this investigation, it was determined that the levels of VOCs in the OU-1 vadose zone soil were below NYSDEC Unrestricted Use SCOs. Further soil evaluation is proposed in this Plan to confirm Site soil conditions.

➢ Soil Vapor

On May 8, 2008 a vapor monitoring event was conducted, including collection of one sub-slab soil vapor sample and one indoor air sample at each of the five retail units in the Site building. Figures 8 and 9 in Appendix A depict the sub-slab soil vapor/indoor air monitoring locations. An ambient air sample was not collected during this sampling event and, therefore, potential impacts to indoor air quality from ambient air could not be assessed. The sub-slab soil vapor/indoor air investigation results (Table 5 in Appendix A) were compared to NYSDOH guidance (Matrix 2) and indicated the need for continued operation of the SSDS (monitor or mitigate responses for all paired values), although the indoor air concentrations did not exceed either the NYSDOH Air Guideline Value of 100 ug/m^3 for PCE or 5 ug/m^3 for TCE.

In addition, the individual SVE well vapor concentrations were also reportedly assessed during this investigation, although no SVE well data were provided in the SMP to substantiate this assessment. The SVE well investigation reportedly resulted in the conclusion that continued operation of the SVE system was necessary to address elevated vapor concentrations in select wells.

Quarterly reports prepared to document 2009 monitoring events indicate that monthly SVE effluent PID readings have been at 0 parts per million (ppm) total VOCs throughout the

year, with the exception of one detection at 3.2 ppm in early April. No PID readings for individual SVE wells were provided. Although an annual indoor air/ambient air/soil vapor sampling event is supposed to be conducted, there was no such monitoring event documented for 2009. The only laboratory analysis of soil vapor conducted in 2009 was performed in February and March, when two samples of SVE effluent and one sample each from SVE wells SVE-2 and SVE-7 were collected. These data indicated that the PCE in SVE effluent ranged from 2,400 to 150,000 ug/m^3. PCE was not detected in either of the two SVE wells sampled. These data suggest that PCE remains present in soil vapor at the Site.

On August 3, 2010 a vapor monitoring event was conducted, including collection of one sub-slab soil vapor sample one indoor air sample at each of the five retail units in the Site building and at two locations in the adjoining Beverage Center building. Figures 4 and 5 in Appendix A depict the sampling locations and results. Two ambient air samples were collected during this event; the results are depicted on Figure 6 in Appendix A. The ambient air samples indicated concentrations of PCE in outdoor air ranging from 2.4 to 18 ug/m^3 (Figure 6 and Table 6 in Appendix A). Therefore, PCE detections in the indoor air samples within this range are likely to be due to ambient air conditions. The sub-slab soil vapor/indoor air data (Tables 4 and 5, Figures 4 and 5 in Appendix A) were compared to NYSDOH guidance (Matrix 1 and Matrix 2) and indicated the need for monitoring and/or mitigation for all paired values for PCE. A monitor or mitigate response was not indicated for any of the other VOCs. None of the indoor air concentrations exceeded either the NYSDOH Air Guideline Value of 100 ug/m^3 for PCE or 5 ug/m^3 for TCE.

System monitoring data (Table 3 in Appendix A) indicate that SVE effluent PID readings have been 0 ppm total VOCs between June and September 2010 with the exception of July 17 when 4.3 ppm total VOCs was detected. No laboratory analysis of SVE effluent or SVE well samples was reported.

- Groundwater

Groundwater monitoring has been conducted in 2008, 2009, and 2010 in general accordance with the SMP. Monitoring well locations and the groundwater flow direction are shown on Figure 6 in Appendix A and the monitoring data through July 2010 are shown on Table 2 in Appendix A. For reference, monitoring wells MW-7S, MW-7I and MW-7D are the only wells located in the Site demolition area. The remaining wells are all associated with OU-2, with the exception of wells MW-6S and MW-6I, which are situated upgradient of the Site.

The only wells for which exceedances of the NYSDEC Standards were noted in 2010 are Site well MW-7I and OU-2 well MW-8I. Onsite well MW-7D has no recorded exceedances of the NYSDEC Standards since sampling began in 1999. Onsite well MW-7S has not shown an exceedance of NYSDEC Standards since January 2009. None of the other OU-2 wells, with the exception of well MW-8S, has shown an exceedance of the NYSDEC Standards since 2004. Based on these data, the current extent of the PCE groundwater plume associated with the Site includes the vicinity of onsite well MW-7I and extends downgradient to the vicinity of OU-2 well MW-8I. Further downgradient at the MW-9 well cluster there have been no exceedances of the NYSDEC Standards since 2000 and, therefore, the plume is absent in this area. The current extent of the plume is shown on Figure 1.2.3.1; based on the 2010 data, the plume is present at only two wells in the intermediate interval at this time.

As mentioned in Section 1.2.1, no exceedances of the NYSDEC Standards have ever been noted in the deep interval and at present there are no exceedances in the shallow interval. The maximum concentration of PCE detected in the plume in 2010 was 250 ug/l. In general, the Site groundwater contains very low levels of PCE (below Standards) in the shallow interval and a slightly higher level of PCE (presently 7.9 ug/l) in the intermediate interval. At OU-2 well MW-8S PCE has decreased to below the Standard since October 2009 and at well MW-8I PCE has ranged from 2.2 to 250 ug/l in 2009 and 2010. PCE concentrations at wells MW-7I and MW-8I have been decreasing since 2004 and 2007, respectively. PCE concentrations at well MW-7S have been decreasing since 2000. PCE has remained at very low or non-detect levels in well MW-8S since 2004.

Based on these data, it is anticipated that although Site groundwater conditions have improved substantially, additional groundwater monitoring will be required for onsite wells MW-7S and MW-7I. Therefore, during the demolition project it is intended to protect the MW-7 well cluster. In the event that these wells are inadvertently damaged, it is intended to abandon the damaged wells as required and replace wells MW-7S and MW-7I.

- Remedial Systems

Two remedial systems are present on the Site: an SVE system to treat PCE-impacted soil and a SSDS to provide for sub-slab depressurization for the Site retail building. The layout of wells and monitoring points associated with these two remedial systems is shown in Figure 1.2.3.2. As discussed in Section 2.0, it is planned to demolish the onsite building and to pave the Site for use as a parking area. Following this demolition, there will be no building present

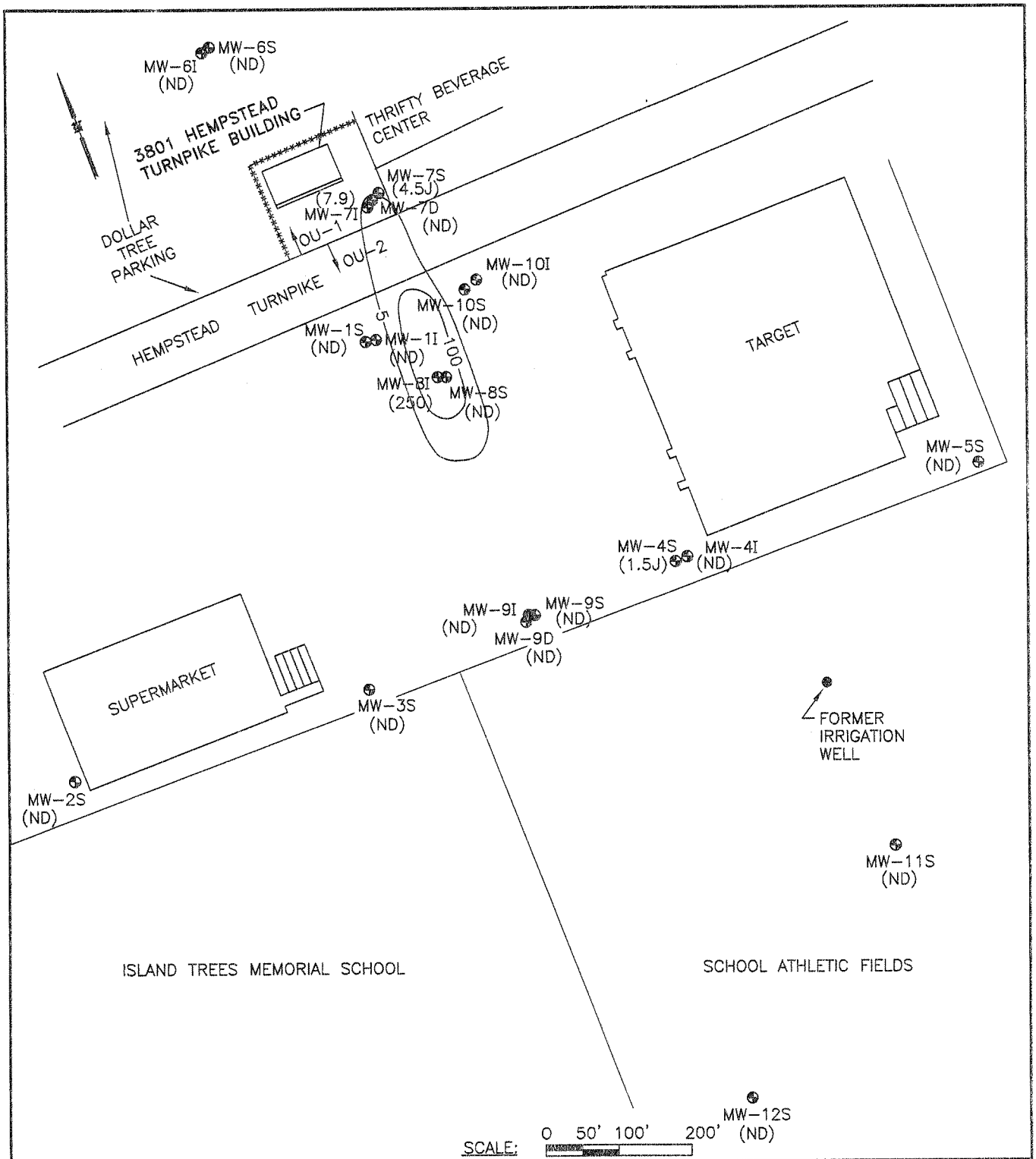

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FIGURE 1.2.3.1
EXTENT OF GROUNDWATER PCE PLUMES IN 2010
AMERICAN DRIVE-IN CLEANERS SITE
LEVITTOWN, NY

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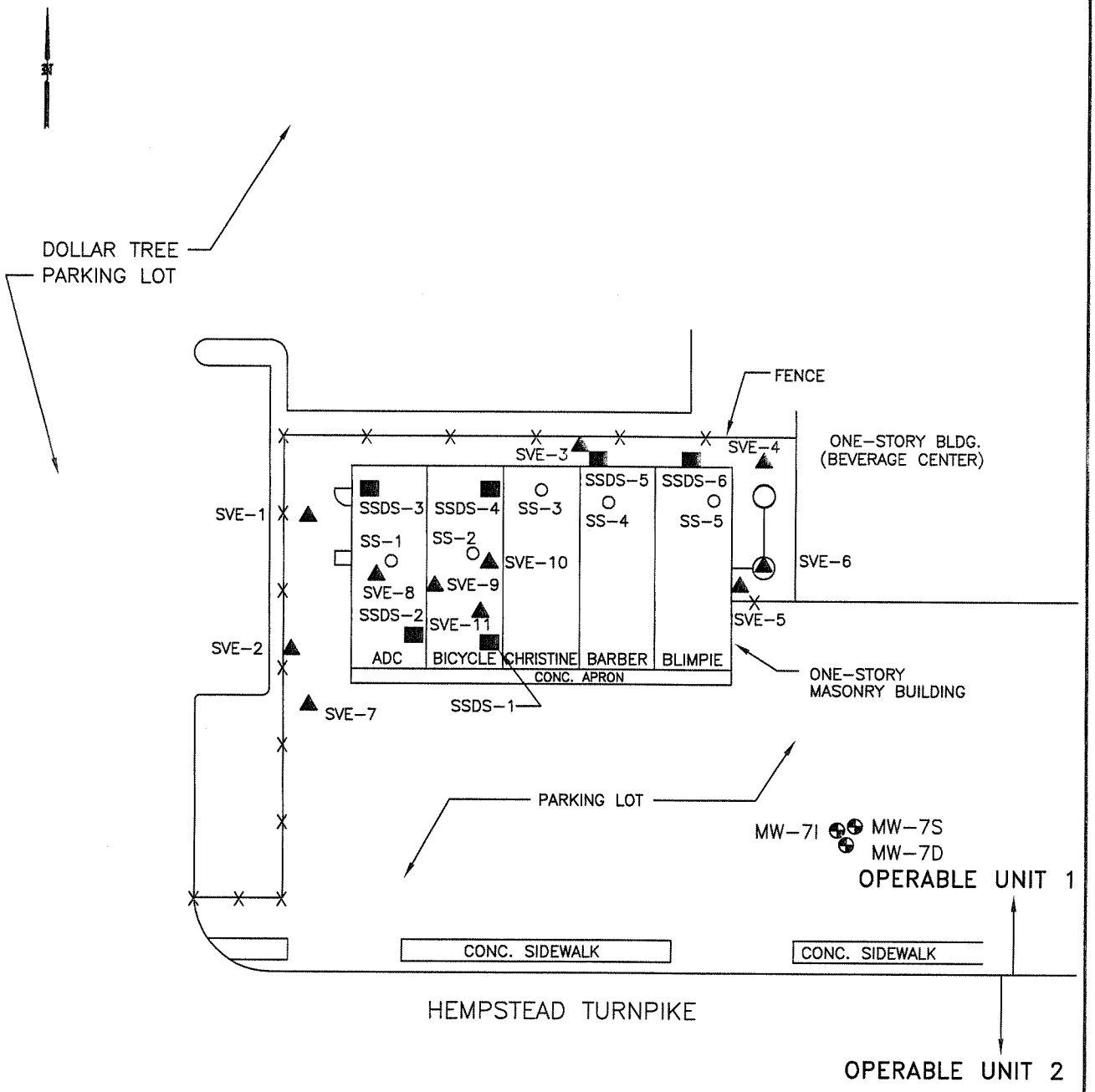

LEGEND:

MW-7S ⊕ GROUNDWATER MONITORING WELL LOCATION
S=SHALLOW
I=INTERMEDIATE
D=DEEP

○ FORMER CESSPOOL

SVE-1 ▲ SOIL VAPOR EXTRACTION WELL

SSDS-1 ■ SUB-SLAB DEPRESSURIZATION WELL

SS-1 ○ SUB-SLAB MONITORING POINT

0 15' 30' 60'

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FIGURE 1.2.3.2
REMEDIAL SYSTEMS WELLS
AMERICAN DRIVE-IN CLEANERS SITE
OPERABLE UNIT 1
3801 HEMPSTEAD TURNPIKE
LEVITTOWN, NY

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onsite and, therefore, there will be no need for a SSDS for the Site. It is planned to remove the SSDS equipment during the demolition process; this equipment will not be replaced.

Recent sub-slab and indoor air monitoring data for the adjoining Beverage Center indicate the need for sub-slab vapor mitigation for this building. Therefore, it is planned to install depressurization wells in immediate proximity to the west wall of this building prior to starting demolition procedures. This work is discussed in detail in Section 2.1.3.

As discussed above, the current sub-slab vapor monitoring data suggest that a source of PCE vapors may remain present on the Site. However, the existing data are inadequate to indicate the location or extent of a potential soil vapor source. Furthermore, soil sampling conducted in 2007, which included sampling within the former southern cesspool, did not indicate the presence of any PCE-impacted soil, with the exception of one very low-level detection which was well below the NYSDEC Unrestricted Use SCO. Groundwater data do not support the remaining presence of any significant source on the Site.

Further investigation of Site soil conditions is proposed prior to the demolition to assess whether any PCE-impacted material remains present. This assessment will also provide information relative to the need for use of a Soil Management Plan (SoMP) during demolition.

SECTION 2.0
DEMOLITION PLAN

2.1 Introduction

At the time the SMP was initially prepared (late 2008) a partially-occupied commercial building in a state of disrepair was present at the Site (3801 Hempstead Turnpike). The ECs described above in Section 1.0 pertained, in part, to that former usage. It was contemplated that during and/or following remediation, the Site might undergo redevelopment. ECs and Institutional Controls (ICs) were developed for likely redevelopment scenarios. However, it was understood that prior to commencing any redevelopment scenario, the NYSDEC would be notified and a work plan developed to address pertinent remediation and potential exposure issues. This work plan would be reviewed and approved by the NYSDEC prior to commencement of redevelopment work. Following the redevelopment work the SMP would also be amended as necessary. This Demolition Plan has been developed to address the pertinent remediation and exposure issues associated with the proposed Site modification.

As discussed in Section 1.4.3.3 of the SMP, Scenario 3 contemplated the removal of the 3801 Hempstead Turnpike building and replacement with a parking lot. In this scenario, there would no longer be any building occupying 3801 Hempstead Turnpike. In this event, the groundwater monitoring well network and the SVE system were anticipated to continue to be applicable. However, a SSDS would no longer be necessary. It was envisioned as likely that some or all of the onsite groundwater monitoring wells and SVE wells would have to be relocated due to demolition activities, the SVE system would likely be relocated, and excavations would be necessary. The work plan would include any necessary well and/or system relocations as well as soil sampling in areas of excavation. A SoMP would be developed if soil exceeding NYSDEC Unrestricted Use SCOs was confirmed to be present. This work plan would be reviewed and approved by the NYSDEC prior to the commencement of any demolition work involving the wells, SVE system, or subsurface. If residual contamination remained present at the time of building demolition, then establishment of a deed restriction might be necessary, depending on the duration of any remaining remedial activities. Potential deed restriction requirements might include prohibition of the use of groundwater underlying the Site without treatment rendering it safe for the intended use; and/or prohibition of activities on the Site that would disturb residual contaminated soil unless they were conducted in accordance with the SoMP. This Demolition Plan (Plan) has been developed to address these issues.

This Plan provides the scope of work and procedures necessary to:

- Conduct a pre-demolition soil investigation to establish if soil exceeding NYSDEC Unrestricted Use SCOs remains present onsite. If so, then a SoMP will be required and soil removal/disposal may be contemplated;
- Conduct a pre-demolition soil vapor investigation to evaluate general locations of residual PCE-impacted soil that may contribute to soil vapors and to establish if reinstallation of an SVE system is indicated based on current Site conditions;
- Install depressurization points to mitigate sub-slab soil vapors recently detected beneath the adjoining Beverage Center building;
- Perform the building demolition, including removal of all appurtenances;
- Provide for regrading, establishment of onsite stormwater drainage (as required by the Town of Hempstead DOB), and paving;
- Provide for the re-installation of the SVE system, if necessary; and
- If necessary, provide for abandonment of any damaged wells in the MW-7 cluster and re-installation of wells MW-7S and MW-7I.

Although the most recent soil sampling has not identified soil in excess of NYSDEC Unrestricted Use SCOs onsite, it is possible that such soil may be identified prior to or during demolition, as discussed below. Therefore, in anticipation of the potential need for soil management, a SoMP is included in Appendix B herein. It is not anticipated that demolition and related activities will be conducted in accordance with this SoMP unless soil is identified in excess of NYSDEC Unrestricted Use SCOs.

Dust monitoring and dust control measures will be in place throughout the demolition project. Dust control measures are included in Section B.3.7 of the Soil Management Plan (Appendix B) and dust monitoring procedures are included in Section C.2.1.3 of the Health and Safety Plan (Appendix C).

All field activities will be overseen by a Qualified Environmental Professional (QEP) as defined in 6 NYCRR §375-1.1(ak). All field decisions will be made by a QEP.

2.1.1 Pre-Demolition Soil Vapor Investigation

A pre-demolition evaluation of current soil vapor conditions using the vapor monitoring points has been conducted, as discussed in Section 1.2.3. However, this evaluation did not

include the Site's SVE or SSDS points which would provide better areal and vertical coverage of the Site's vadose zone. The proposed scope of work to complete the pre-demolition evaluation of soil vapor conditions is as follows:

- The SVE and SSDS systems will be shut down for two weeks to allow subsurface conditions to equilibrate;
- At each of the SVE and SSDS locations to be sampled (see Table 2.1.1.1), an air pump will be used to purge approximately three air volumes from the associated piping/tubing. The volume of air to be purged from each location will be calculated using estimated screen depth and diameter data. Following purging, each sampling location will be connected to a Summa canister equipped with a flow controller set to collect a vapor sample at a rate of not more than 0.2 liters per minute;

TABLE 2.1.1.1
PROPOSED SOIL VAPOR INVESTIGATION SAMPLE LOCATIONS
AMERICAN DRIVE-IN CLEANERS SITE
3801 HEMPSTEAD TURNPIKE, LEVITTOWN, NY

Type of Sample Point	Sample Point ID	Estimated Screen Depth (feet)	To be Sampled?
Sub-Slab Depressurization Well	SSDS-1	3-5	Yes
	SSDS-2	3-5	Yes
	SSDS-3	3-5	Yes
	SSDS-4	3-5	Yes
	SSDS-5	3-5	No
	SSDS-6	3-5	No
SVE Well	SVE-1	3-30	Yes
	SVE-2	3-30	No
	SVE-3	3-30	Yes
	SVE-4	3-30	Yes
	SVE-5	3-30	No
	SVE-6	3-30	Yes
	SVE-7	3-30	Yes
	SVE-8	3-30	Yes
	SVE-9	3-30	No
	SVE-10	3-30	Yes
	SVE-11	3-30	No

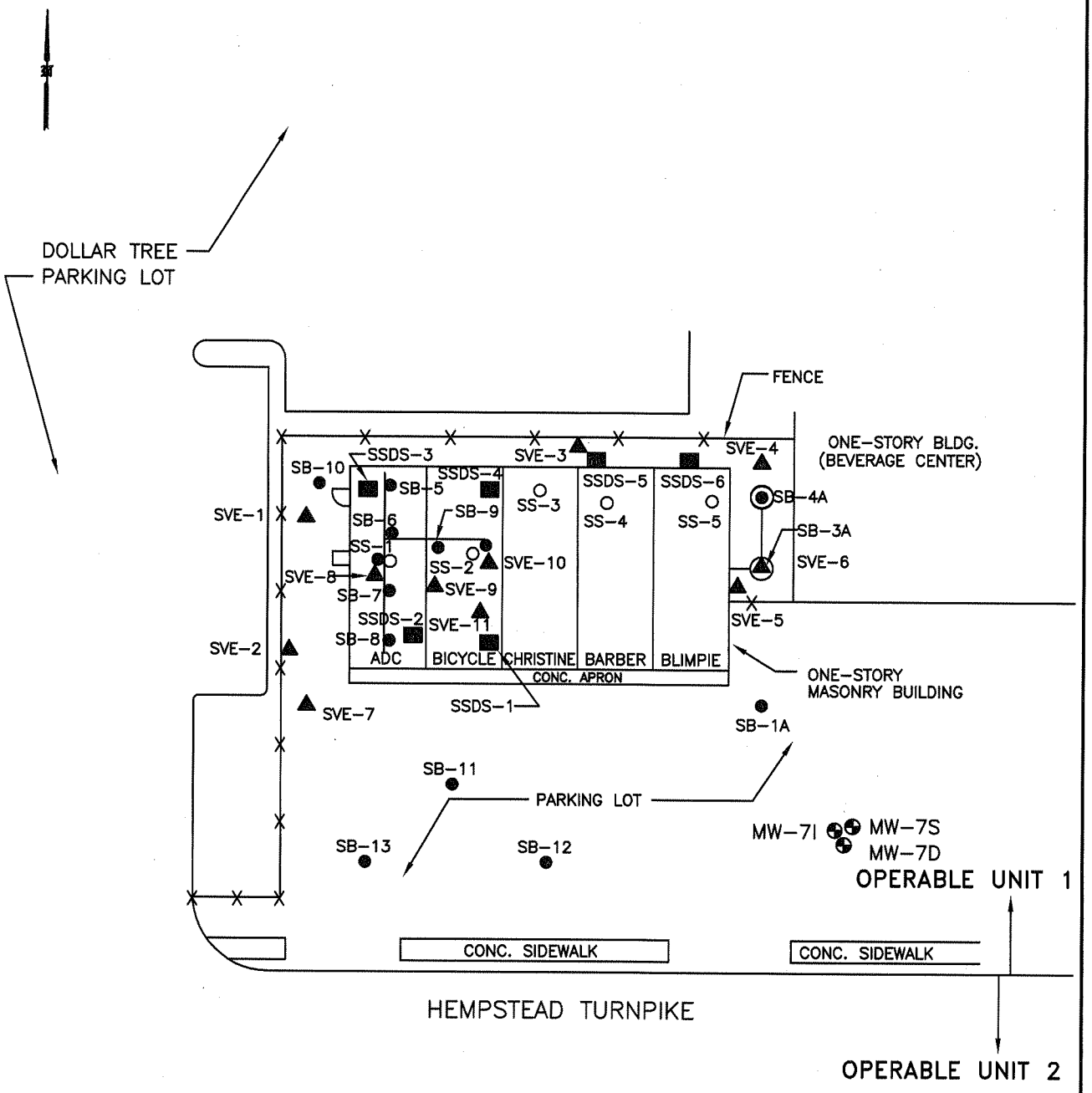
- The collected samples will be managed in accordance with the procedures in the Quality Assurance Project Plan (QAPP) in the SMP and will be transmitted to a NYSDOH-certified laboratory and analyzed for chlorinated solvents using Method TO-15; and
- Following the completion of sampling, the SVE and SSDS systems will be turned back on and allowed to operate until demolition commences.

The resulting data will be evaluated to assess whether significant soil vapors remain present onsite. If significant vapors are present, their distribution and location will be evaluated relative to the potential presence of PCE-impacted soil that may remain present. This information will be used in the final selection of soil sampling locations, as discussed below.

2.1.2 Pre-Demolition Soil Investigation

A pre-demolition evaluation of current soil conditions is proposed to assess whether soil exceeding NYSDEC Unrestricted Use SCOs remains present onsite. If so, then the demolition will be conducted under a SoMP and removal of impacted soil will be contemplated. The soil results will also be used to confirm that impacted soils are not present in areas where subsurface stormwater management structures are planned for installation after demolition. As the NYSDEC Unrestricted Use SCOs were not developed considering the potential for impacted soils to contribute to soil vapors, if PCE-impacted soil is identified, removal may be contemplated even if the soil does not exceed the NYSDEC Unrestricted Use SCOs. The proposed scope of work is as follows:

- At a minimum, soil borings will be advanced through each of the two former cesspools on the east side of the Site (SB-3A and SB-4), at the former SB-1 location to the southeast of the building to assess surficial soil conditions from 0 to 5 feet (due to previous field screening results), at the SS-1 and SS-2 sub-slab monitoring point locations, at five locations (SB-5 through SB-9) along the alignment of the former piping trench inside the building, and in the area to the northwest of the building (SB-10) where shallow impacted soil was previously identified. In addition, soil borings shall be advanced in the west-central portion of the Site (SB-11, SB-12 and SB-13), where it is likely that stormwater management structures will be installed. These proposed soil boring locations are shown on Figure 2.1.2.1. Additional soil boring locations may be selected based on the soil vapor investigation results;



LEGEND:

MW-7S ⊕	GROUNDWATER MONITORING WELL LOCATION S=SHALLOW I=INTERMEDIATE D=DEEP
○	FORMER CESSPOOL
SVE-1 ▲	SOIL VAPOR EXTRACTION WELL
SSDS-1 ■	SUB-SLAB DEPRESSURIZATION WELL
SS-1 ○	SUB-SLAB MONITORING POINT
SB-4 ●	PROPOSED SOIL BORING
———	FORMER PIPING TRENCH

0 15' 30' 60'

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FIGURE 2.1.2.1
PROPOSED SOIL SAMPLING LOCATIONS

AMERICAN DRIVE-IN CLEANERS SITE
3801 HEMPSTEAD TURNPIKE
LEVITTOWN, NY

Drawn By:H.C.	Checked By:S.D.	Date:10/25/10

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- At each proposed soil sampling location, a soil boring will be advanced from grade to the targeted depth. Soil borings through the former cesspools will be advanced to the water table (approximately 30 fbg) and soil borings at the other locations will be advanced to ten feet below grade unless observations during sampling indicate that the borings should be extended to greater depths. At each location the soil shall be visually examined and screened for organic vapors with a calibrated PID. All observations shall be recorded on boring logs;
- At each of the two former cesspool locations, three soil samples shall be retained for analysis, including one sample from just below the apparent interface of backfill and original soil (approximately 10 feet below grade), one sample just above the water table surface, and one sample between these intervals. At each of the other locations at least one soil sample shall be retained for analysis. This sample shall correspond to the interval showing the most indications of potential impact based on visual observations and/or PID readings. At the SB-1A location, the sample shall be collected from the 0 to 5-foot interval unless the screening results suggest a different interval. In the event that there are no indications of potential impact, then a shallow soil sample (1 to 3-foot interval) shall be retained, as it is presumed that any soil contamination in these areas most likely originated from former surface releases;
- The collected samples will be managed in accordance with the procedures in the QAPP in the SMP and will be transmitted to a NYSDOH-certified laboratory and analyzed for chlorinated solvents using Method 8260; and
- Following the completion of each boring, it shall be backfilled and the surface re-sealed with asphalt patch.

The resulting data will be evaluated to assess whether soil exceeding NYSDEC Unrestricted Use SCOs remains present onsite. If so, then the demolition will be conducted under a SoMP (Appendix B) and removal of impacted soil will be contemplated. The soil results will also be used to confirm that impacted soils are not present in areas where subsurface stormwater management structures are contemplated. If PCE-impacted soil is identified, removal may be contemplated even if the soil does not exceed the NYSDEC Unrestricted Use SCOs.

2.1.3 Sub-Slab Vapor Mitigation for Beverage Center

Sub-slab and indoor air sampling conducted at two locations in the Beverage Center in 2010 indicates that although no exceedances of the NYSDOH Air Guidelines are present in the indoor air, sufficient sub-slab concentrations of PCE are present such that mitigation is necessary. It is proposed to implement mitigation prior to shutdown of the SVE system during demolition.

Mitigation would be performed using three active depressurization points (DP-1 through DP-3) to be installed along the western wall of the Beverage Center, as shown in Figure 2.1.3.1. These points would be constructed in a similar manner as the existing SSDS-5 and SSDS-6 depressurization points installed at the Site building, which have been demonstrated to provide acceptable mitigation. Based on the comparable widths of the Site building and the Beverage Center (50 feet and 55 feet, respectively) and the demonstrated performance of the existing SSDS points, the proposed points are anticipated to provide adequate depressurization for the Beverage Center building.

Each point will be equipped with a 100-watt in-line fan capable of approximately 100 cfm under a one-inch water column. The stacks would extend to approximately five feet above the roof of the Beverage Center and will be located out of the vicinity of any air intakes for the building. Power will be provided by a new electrical service.

It is planned to install and operate the depressurization points prior to taking the existing SVE system out of service. This installation will likely require an access agreement with the owner of the Beverage Center unless the NYSDEC has previously established an access agreement for the existing sub-slab sampling points.

The establishment of sub-slab depressurization will be verified by monitoring the pressure beneath the Beverage Center at the existing SS-6 and SS-7 sample points to confirm that a downward pressure gradient is established. Monitoring will be in accordance with the Site Management Plan and shall be performed annually.

2.1.4 Building Demolition

The onsite building will be demolished in accordance with the procedures and requirements of the governing agency: the Town of Hempstead DOB. In addition, if soil exceeding the NYSDEC Unrestricted Use SCOs is identified, the demolition activities involving subsurface materials will be performed in accordance with the SoMP. Demolition will be

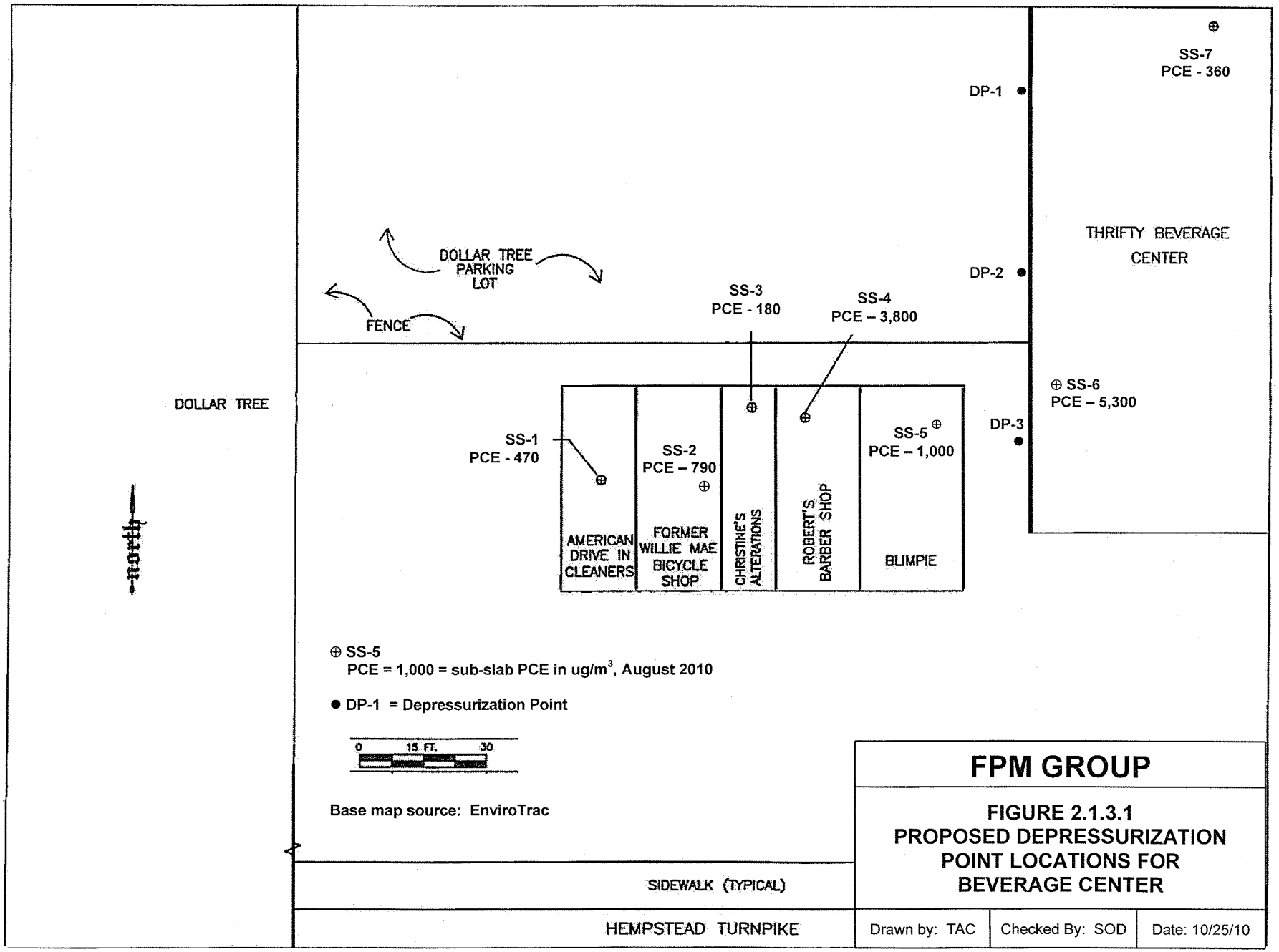

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FIGURE 2.1.3.1
PROPOSED DEPRESSURIZATION POINT LOCATIONS FOR BEVERAGE CENTER

Drawn by: TAC	Checked By: SOD	Date: 10/25/10

performed by a local contractor who is qualified to perform demolition and who is also experienced in environmental remediation and has staff with the required training and certifications.

In general, the demolition will include the following steps to be conducted by the contractor:

- Obtain DOB demolition permit;
- Abatement of asbestos-containing interior floor tiles in accordance with applicable regulations;
- Secure Site perimeter and cut off of all building utilities;
- Installation of protective barriers around all wells to remain;
- Removal/salvage of usable remedial equipment;
- Removal, cleaning and disposal of all tanks and associated piping (one 275-gallon fuel oil aboveground storage tank, or AST, adjoins the north side of the building);
- Demolition, removal, and disposal of the building exterior, interior, footing, and slab, together with all appurtenances; and
- Removal of impacted soil, if identified and targeted for removal.

A QEP shall observe and document all activities involving the protection of wells, removal/salvage of remedial equipment, tank/piping removal, and demolition of the slab and footing. These observations shall include visual observations of conditions and PID screening, as necessary. These observations shall be documented in a field log and digital photos shall also be taken.

In the event that previously-unidentified impacted soil is observed, the affected area shall be secured and sampling will be performed with rapid analytical turnaround to evaluate if soil containing contaminants in excess of NYSDEC Unrestricted Use SCOs is present. If impacted soil is identified, then activities involving this soil shall be conducted in accordance with the SoMP.

In the event that impacted soil is identified and targeted for removal, the removal shall be conducted following building demolition and shall be in accordance with the procedures in the SoMP. Prior to removal, waste classification sampling will be conducted in accordance with the targeted disposal facility's requirements and waste disposal approval shall be obtained. The

removal shall, in general, include excavation of the targeted soil under the observation of the environmental professional, direct loading of the soil into trucks appropriately-licensed for waste transport, and transportation to the approved licensed waste disposal facility. Waste manifesting shall be used to track the generation, transportation, and disposal of any excavated soil.

Following the completion of excavation of soil exceeding the NYSDEC Unrestricted Use SCOs, the environmental professional shall collect end-point samples, as necessary, to document the condition of the remaining soil. Samples shall be collected from the sidewalls and base of each excavation and shall be managed and analyzed following the above-described soil sampling procedures (Section 2.1.2) and in accordance with the QAPP and NYSDEC DER-10 (May 2010).

Following building demolition, the removal of all materials, and any necessary excavations, the Site surface shall be rough-graded to provide for excavation safety and in preparation for drainage installation and paving.

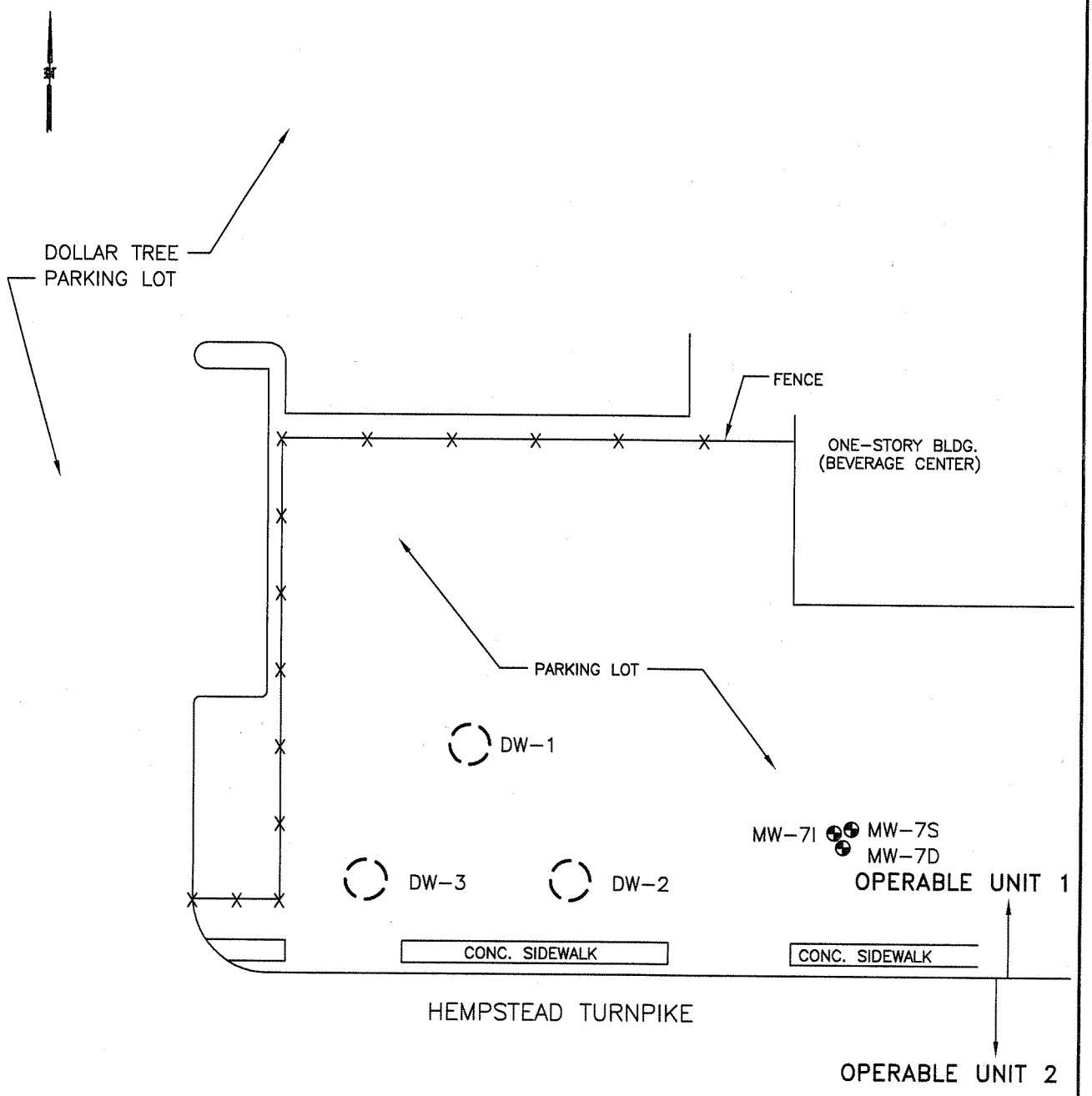
2.1.5 Site Restoration

The Site surface will be restored such that it may be used for parking purposes. This process is anticipated to include placement of clean backfill in any excavation areas, installation of required stormwater drainage structures, grading, placement of asphalt base materials, and placement of pavement. These activities will be coordinated with the abandonment/ reinstallation of monitoring wells, as necessary, and with the reinstallation of the SVE system, if required.

Site restoration will be conducted in accordance with a Paving and Grading Plan, which must be reviewed and approved by the Town of Hempstead DOB. The Paving and Grading Plan is not yet developed, but its requirements are generally understood. To the extent that that any of the provisions of the approved Grading and Paving Plan differs materially from the information presented herein, the changes will be presented to the NYSDEC in addendum to this Plan, for review and approval.

A conceptual plan for the redeveloped Site is shown in Figure 2.1.5.1. In general, the restoration process is anticipated to include the following steps:

- Installation of three subsurface stormwater management structures on the west-central portion of the Site. Based on the Site size and Town stormwater management requirements, it is anticipated that each of these structures will be 18 feet deep and 10



LEGEND:

MW-7S ⊕ GROUNDWATER MONITORING WELL LOCATION

S=SHALLOW
I=INTERMEDIATE
D=DEEP

◯ PROPOSED STORMWATER MANAGEMENT STRUCTURE

0 15' 30' 60'

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FIGURE 2.1.5.1
CONCEPTUAL SITE PLAN
FOR REDEVELOPMENT
AMERICAN DRIVE-IN CLEANERS SITE
3801 HEMPSTEAD TURNPIKE
LEVITTOWN, NY

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- feet in diameter and consist of pre-cast slotted concrete leaching rings with associated domes and slotted covers. These structures will be used to collect and discharge stormwater runoff from the Site surface. The proposed structure locations have been selected to be away from the known areas of subsurface impacts at the Site. As discussed above, soil sampling will be conducted at these locations in advance of demolition to confirm subsurface conditions. In addition, soil excavated during installation of these structures will be screened by an environmental professional and any visibly-impacted soil will be segregated for offsite disposal in accordance with the SoMP and the above-described procedures. Soil without visible impacts will be reused onsite for grading;
- Re-installation of SVE system wells and piping, if required. This process is discussed in more detail in Section 2.1.6 below;
- Abandonment and replacement, as necessary, of wells in the MW-7 cluster, as further discussed in Section 2.1.7 below;
- Grading of the Site as necessary and placement of additional fill and asphalt base, as needed to achieve the necessary grades for re-paving. Grading and asphalt base materials will consist of clean granular materials typically used in paving projects for commercial properties and will likely include recycled concrete aggregate (RCA); and
- Placement of asphalt pavement and curbing, as per the Grading and Paving Plan.

2.1.6 Reinstallation of SVE System

In the event that the pre-demolition testing demonstrates the need for continued operation of the SVE system, but impacted soil is removed during the demolition process, it is possible that there may be no need for an SVE system following soil removal. In this event, a work plan for additional soil vapor testing will be prepared and submitted for NYSDEC approval. This additional testing would be conducted following site restoration with the objective of assessing whether there is a continued need for an SVE system. The testing results would be provided to the NYSDEC together with appropriate conclusions and recommendations.

Pre-demolition testing results that would indicate the need for continued operation of the SVE system include the following:

- The presence of VOC-impacted soil in excess of a 6 NYCRR Subpart 375-6 Unrestricted Use Soil Cleanup Objectives, providing that this soil is not removed during the demolition process;
- Elevated levels of PCE in soil vapors suggestive of the continued presence of impacted soil, providing that this soil is not removed during the demolition process; or
- Concentrations of VOCs in onsite groundwater in excess of the NYSDEC Class GA Ambient Water Quality Standards and that are not asymptotic or declining. It should be noted that the most recent onsite groundwater data indicate one exceedance of the NYSDEC Standards: 7.9 ug/l of PCE at well ME-7I. This detection is only marginally above the NYSDEC Standard for PCE of 5 ug/l.

Although the configuration and design of a replacement SVE system cannot be determined until current soil and soil vapor data are available, in general it is anticipated that any replacement SVE system would include the following elements:

- One or more SVE wells installed in areas where elevated soil vapors and/or residual impacted soil remain present;
- Sub-grade piping to connect the SVE wells to remedial equipment;
- Above-grade remedial equipment, to generally include a piping manifold with individual controls and sample ports, a blower, filters and a moisture separator, a discharge stack, and vapor treatment equipment (if indicated by effluent constituent concentrations in comparison to NYSDEC Air Guide 1 criteria). The above-grade remedial equipment are anticipated to be housed in a shed in a secure fenced enclosure situated near the eastern edge of the Site; and
- Electrical service connection from the vicinity of the adjoining Hempstead Turnpike.

The SVE system design will be developed by a QEP and provided to the NYSDEC for review and approval prior to implementation. As mentioned in Section 2.1.3, existing SVE equipment that remains in usable condition would be salvaged during the demolition process and reused, as feasible, in the replacement SVE system. It is anticipated that any replacement SVE system will be operated in general accordance with the procedures in the SMP.

2.1.7 Groundwater Monitoring Wells

The onsite MW-7 monitoring well cluster will be protected, as feasible, during the demolition process. In the event that any of these wells is irreparably damaged during

demolition, it will be properly abandoned, as feasible, in accordance with the procedures in the SMP and NYSDEC CP-43. It is intended that wells MW-7S and MW-7I will remain following demolition to allow for continued groundwater monitoring downgradient of the former cesspool area. These wells will be replaced in kind if they are damaged during the demolition process and cannot be repaired.

Any well installations or abandonments will be conducted by a licensed well driller and will be observed by a QEP. Replacement wells will be installed in accordance with the original well construction.

Procedures for maintaining the groundwater monitoring wells are documented in the Operation and Maintenance Plan (Section 4 of the SMP). Groundwater monitoring procedures are included in the Monitoring Plan (Section 3 of the SMP).

2.2 Inspections, Notifications, and Reporting

In accordance with the SMP, the NYSDEC retains the right to access the Site at any time to evaluate the continued maintenance of any and all controls.

During pre-demolition and demolition activities involving the remedial systems, monitoring systems, subsurface activities, tank/piping systems, and any soil, an environmental professional will be onsite to observe and direct the activities as described above, to collect samples, to interface with agency representatives, and to conduct monitoring. The designated NYSDEC representative will be notified at least 14 calendar days in advance of any of these activities and will be promptly notified of any unusual or unanticipated conditions that are observed by the environmental professional.

Documentation of the demolition process will be made via reporting to the NYSDEC at several stages. Anticipated reporting stages include the following:

- Pre-demolition soil vapor investigation results;
- Pre-demolition soil investigation results, with soil removal/disposal plan, if warranted;
- SVE system design, if warranted;
- Final Grading and Paving Plan; and
- Post-demolition report, including any soil removal, SVE system re-installation, and well installation documentation.

These documents will be prepared in general accordance with the reporting requirements in the SMP and will include a summary of the work performed, copies of any monitoring, sampling, or installation logs, copies of any waste disposal manifests, copies of laboratory reports and associated Data Usability Summary Reports (DUSRs), and any conclusions or recommendations resulting from the work. These reports will be submitted to the NYSDEC for review and comment; any NYSDEC and/or NYSDOH comments will be addressed.

2.3 Criteria for Completion of Remediation/Termination of Remedial Systems

Following the demolition and restoration activities, the Site is anticipated to have a groundwater monitoring network and may also have an SVE system/monitoring network. Depressurization points will also be installed for the adjoining Beverage Center building. Criteria for termination of each of these systems are provided in the following sections, and are in accordance with the SMP.

2.3.1 SVE System and Depressurization Points

If an SVE system is re-installed at the Site, operation of the SVE system will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue operation of the system may be submitted after residual contamination concentrations in OU-1 groundwater and soil vapor:

- Are reduced to levels below NYSDEC guidelines or Standards and below the mitigation and monitoring levels (Matrix 1, Matrix 2) provided in the NYSDOH SVI Guidance Document (October 2006),
- Have become asymptotic over an extended period of time as agreed by the NYSDEC and the NYSDOH, or
- If the NYSDEC has determined that the SVE system has reached the limit of its effectiveness.

This assessment will be based in part on contaminant levels in groundwater and soil vapor samples collected from monitoring points on the Site, as well as data from a soil vapor intrusion reassessment conducted at the adjacent Beverage Center building . The reinstalled SVE system will remain in place and operational until permission to discontinue its use is granted in writing by NYSDEC and NYSDOH. The sampling/monitoring activities will adhere to

stipulations outlined in the Monitoring Plan section of the SMP unless modifications are approved by the NYSDEC.

A soil vapor intrusion (SVI) evaluation will be conducted if the ADC Site is redeveloped with an occupied structure. An SVI evaluation will also be conducted at the adjoining Beverage Center building prior to removal of the depressurization points to be installed for this building (see Section 2.1.3). The SVI evaluation will be conducted in accordance with the procedures in the NYSDOH October 2006 SVI guidance document.

2.3.2 Groundwater Monitoring Network

Following the completion of demolition activities, the onsite groundwater monitoring network is anticipated to include wells MW-7S and MW-7I. These wells will continue to be monitored in accordance with the SMP; monitoring will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue monitoring may be submitted after residual contamination concentrations in Site groundwater:

- Are reduced to levels below NYSDEC Standards, or
- Have become asymptotic over an extended period of time as mandated by the NYSDEC and the NYSDOH; or
- The NYSDEC determines the no further groundwater monitoring is required.

The onsite network will remain in place and operational until permission to discontinue its use is granted in writing by NYSDEC and NYSDOH. The sampling/monitoring activities will adhere to stipulations outlined in the Monitoring Plan section of the SMP unless modifications are approved by the NYSDEC.

2.3.3 Soil Vapor Monitoring Network

If an SVE system is re-installed, soil vapor monitoring will be conducted at the SVE wells on at least a yearly basis, in accordance with the SMP, to assess the progress of remediation. Soil vapor monitoring will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue monitoring may be submitted when soil vapor concentrations:

- Have become asymptotic over an extended period of time as mandated by the NYSDEC and the NYSDOH; or
- The NYSDEC determines the no further soil vapor monitoring is required.

The network of reinstalled SVE wells at which the monitoring will be performed will remain in place and operational until permission to discontinue its use is granted in writing by NYSDEC and NYSDOH. These sampling/monitoring activities will adhere to stipulations outlined in the Monitoring Plan section of the SMP unless modifications are approved by the NYSDEC.

2.4 Health and Safety

The SMP includes a Contingency Plan; however, no site-specific Health and Safety (HASP) has been established. Pre-demolition and demolition activities will be conducted in accordance with the HASP set forth in Appendix C. This HASP includes an updated Site Emergency Contact List.