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TRANSMITTAL

TO: **Mr. Jerry Wickham**
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

DATE: October 31, 2005

Project: 25255.23

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THE FOLLOWING HAS BEEN PREPARED:

One (1) original hard-copy of the SUBSURFACE INVESTIGATION AND ASSESSMENT WORKPLAN for Wash Time Laundromat located at 1815 Park Boulevard, Oakland, California

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Signed by: _____
Michael L. Siembieda, RG

E__M__F_P__T__A_

Prepared by: _____
Dawn Zamora

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SUBSURFACE INVESTIGATION AND ASSESSMENT WORKPLAN

Wash Time Laundromat
1815 Park Boulevard
Oakland, California

PREPARED FOR:

CW Investment Group
132 9th Street #200
Oakland, California 94607

ALLWEST PROJECT NO. 25255.23
October 31, 2005

PREPARED BY:

Michael L Siembieda, PG
Senior Project Manager

REVIEWED BY:

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President

AllWest

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AllWest

SUBSURFACE INVESTIGATION AND ASSESSMENT WORKPLAN

Wash Time Laundromat
1815 Park Boulevard
Oakland, California

I. INTRODUCTION

This workplan was prepared in response to an October 13, 2005 request by the Alameda County Environmental Health Services (ACEH) for additional technical information regarding the impact of a release of volatile organic compounds (VOCs) at the subject site. This work will be completed after approval and overseen by the ACEH.

The purpose of the work is to investigate the nature and extent of tetrachloroethene (PCE) and its common degradational products, trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE) and trans-1,2-dichloroethene (trans-1,2-DCE), in soil vapor, soil and first encountered groundwater at the site. The overall goal is to better define the lateral and vertical extent of chemicals in the subsurface and to assess the impact of the chemicals on onsite workers and offsite receptors.

This workplan summarizes the site setting and background, including previous investigations conducted at the property and presents an outline of the proposed activities.

II. PROJECT BACKGROUND

A. Site Location and Description

The subject property is located at 1815 Park Boulevard, Oakland, California on the north side of Park Blvd, immediately east of East 18th Street. The location of the subject property is graphically depicted in Figures 1 and 2. The property is located in a mixed commercial and residential area of Oakland.

An approximately 3,200 square foot, coin-operated Laundromat operates at the property. The facility is located in a slab-on-grade, cement block and wood frame building. The laundromat occupies the southern portion of a five unit building. Adjacent properties consist of commercial business buildings to the north and west, an asphalt paved parking lot to the northwest and public sidewalks and streets to the east and south. No monitoring or groundwater supplies wells were observed on the subject or adjacent properties.

B. Previous Site Investigations

According to a March 2005 subsurface investigation report by AEI Consultants of Walnut Creek, CA (AEI), a dry cleaning facility occupied the subject building from circa 1967 through 1997. An environmental disclosure document from 1989 confirmed the presence of the dry cleaning facility and onsite use of chlorinated solvents. The former dry cleaning machine was reportedly located towards the back and along the western side of the tenant space. Solvents were reportedly stored near the dry cleaning machine.

To assess if subsurface conditions were impacted from historical use of the dry cleaning solvent, AEI collected soil and groundwater samples from six (6) soil borings drilled on the property on January 12 and March 14, 2005. PCE was detected in three soil samples, at a maximum concentration of 3,100 micrograms per kilogram (µg/kg), equivalent to 3,100 parts per billion (ppb) at boring SB-4, and in five groundwater samples, at a maximum concentration of 230 micrograms per liter (µg/L), equivalent to 230 parts per billion (ppb) at boring SB-4 (Figures 3 and 4). Based on data collected, AEI concluded a "release of solvents had occurred in the area of the former dry cleaning operation." AEI concluded "further investigation would be necessary to determine the extent of impacted soil and to evaluate whether the PCE posed a risk to occupants of the property or nearby properties."

A subsurface investigation was performed on May 24, 2005 by AllWest and included the drilling and sampling of six soil boreholes (AWB-1 through AWB-6) and analyzing soil and "grab" groundwater samples for halogenated volatile organic compounds (VOCs). Two borings were drilled within the interior of the building and four borings were drilled at exterior locations in the inferred downgradient direction from the PCE source area (Figure 2). The boreholes were advanced by a limited access drill rig to depths of 12 to 14 feet below ground surface (bgs). Soil and "grab" groundwater samples collected were forwarded to a California State certified laboratory and analyzed for VOCs.

PCE was detected in two of four soil samples analyzed. PCE was detected in soil samples collected from 3-4 feet bgs in borings AWB-1 and AWB-2 at concentrations of 490 micrograms per kilogram (µg/kg), equivalent to 490 parts per billion (ppb) and 2,200 ppb, respectively. Analysis of soil samples collected from these borings at 7-8 feet bgs did not detect PCE. No other VOCs were detected

PCE was detected in three of the six groundwater samples at concentrations ranging from 1.2 ppb in the sample collected from AWB-3, to 77 ppb detected in AWB-2. TCE, a breakdown product of PCE, was detected at concentrations of 13 ppb and 4.2 ppb in groundwater samples collected from borings AWB-1 and AWB-2. The breakdown product cis-1,2-DCE was detected at concentrations of 14 ppb, 7.1 ppb and 0.86 ppb in groundwater samples collected from borings

AWB-1, AWB-2 and AWB-3. Low levels of vinyl chloride and chloroform were also detected in the same groundwater samples. No VOCs were detected in groundwater samples collected from borings AWB-4, AWB-5 or AWB-6. These three samples were collected from the presumed down-gradient direction of the former dry cleaning operations.

Based on the work performed AllWest concluded:

- Historic operations at a former dry cleaner resulted in a release of PCE that impacted subsurface conditions at the property. No ongoing source is present;
- A spatially limited chlorinated solvent plume exists beneath the current structure. Its lateral extent has been reasonably defined with the highest concentration centered on the location of the former dry cleaning operation;
- Elevated levels of PCE in soil are limited to near surface soils, below a concrete slab floor and in the vicinity of the former dry cleaning operations;
- Residual concentrations of VOCs will decrease due to natural attenuation.

C. Subsurface Conditions

Site soils encountered were predominately a silty sand with fine gravel near the surface. The soil was generally brown at the surface becoming black or dark gray at depths of 6 to 8 feet. Moisture content increased with depth. Groundwater was encountered in all at approximate depths of 5 to 6 feet bgs. Some saturated silty and clayey sand lenses were encountered. Based on the site location and local topography, a groundwater flow direction is estimated to the west-northwest, towards Lake Merritt.

III. PURPOSE AND SCOPE OF WORK

The purpose of this investigation is to further evaluate the lateral extent of VOCs in soil gas, soil and groundwater in the vicinity of the subject dry cleaning facilities and assess the risk of to onsite workers and adjacent receptors. The scope of work consists of the following tasks:

1) Prepare a written workplan for conducting a subsurface investigation at the site. Submit the plans to the ACEH for review and concurrence.

2) Conduct a study to evaluate if any sensitive receptors such as schools, day care centers, or medical care facilities are located within the near vicinity of the property;

3) Perform a well survey to identify monitoring, production, active, standby, decommissioned, abandoned, dewatering, drainage and cathodic protection wells within 2500 feet of the property;

4) Engage the service of Underground Service Alert (USA) and a private underground utility locator to locate and clear underground utilities including the onsite sewer line within the proposed investigation area so that the potential of accidental damage to underground utilities will be reduced.

5) Retain the service of a C-57 licensed drilling contractor for the advancement of five interior geoprobe borings to approximate depths of 12 feet. Advance two soil gas probes in the interior of dry cleaners to an approximate depth of four feet as shown on Figure 2.

6) Collect approximately five soil samples and five "grab" groundwater samples from the interior geoprobe borings for chemical analysis. Collect two soil gas samples from interior gas probe locations.

7) Maintain samples under chain-of-custody and transport the samples to a Department of Health Services (DHS) certified analytical laboratory for chemical analyses. Analyze selected soil and all groundwater samples to detect the presence of PCE and its breakdown products by EPA method 8260. Analyze soil gas samples for VOCs using EPA method TO-15.

8) Prepare a written report describing the field activities, summarizing the laboratory data, soil gas results, presenting investigation findings, and providing conclusions and recommendations. The report will include a Conceptual Site Model.

III INVESTIGATION ACTIVITIES

A. Sensitive Receptor Survey

AllWest will perform a sensitive receptor survey that will identify receptors within the near vicinity of the property. The survey will be conducted by walking the area in question and noting construction methods and land use. Specifically, AllWest will identify schools, day care centers, medicare and other potential sensitive receptors. AllWest will look for basements, utility vaults and other subterranean structures. Any vapor receptor identified will be described and summarized in a table format and plotted on a regional site map.

B. Well Survey

AllWest will contact the California Department of Water Resources (DWR), RWQCB and the Alameda County Public Works Department Environmental Health Division to obtain information regrading the existence and construction details of water wells within a 2,500 foot radius of the property line. AllWest will also access well information from the GEOTRACKER data base.

Data, including location, owner, use, well depths, surface seals and other applicable information will be summarized in a table format. Well locations will be plotted on a regional site map.

Surface water bodies and their distance to the property will also be summarized in a table format and plotted on a regional site map.

C. Geoprobe Advancement

Five soil borings (AWB-7 through AWB-11) will be advanced by the geoprobe method to further delineate the extent of VOCs in the subsurface. The borings will be located in the exterior area of the subject property (Figure 2). The primary purpose of these borings is to better define the lateral extent of VOCs in soil and groundwater along the location of the onsite sewer and to better define the extent of VOCs in the vicinity of the former dry cleaning machines. In addition, lithologic information from the borings will be used to determine the depths of the soil vapor probes, which will be located in the interior of the building.

Prior to the start of drilling, permits will be obtained from the ACEH. Boring locations will be cleared of utilities during the sewer survey. Vironex Environmental Field Service, a C-57 licensed drilling contractor and a leader in the advancement of direct-push technology will provide all drilling services. Michael Siembieda, a California Professional Geologist (PG-4007) will be present during all field work, maintain boring logs and supervise drilling activities. The boring logs will contain all pertinent information on drilling and soil conditions. Soil will be logged in accordance with the Unified Soil Classification System (USCS). Boring logs will be included in the final written report.

Soil Sampling Procedure via Geoprobe: Soil sampling will be accomplished using a nominal 4-foot long, 3-inch diameter galvanized steel drive probe and extension rods. The drive probe will be equipped with nominal 1-1/2 inch diameter clear plastic poly tubes that line the interior of the probe. The probe and insert tubes are together pneumatically driven using a percussion hammer in 4-foot intervals. After each drive interval the drive probe and rods are retrieved to the surfaced. The poly tube containing subsurface soil is then removed. The drive probe is then cleaned, equipped with a new poly tube and reinserted into the boring with extension rods as required. The apparatus is then driven following the above procedure until the desired depth is obtained. The poly tubes and soil are inspected after each drive interval with lithologic and relevant drilling observations recorded. Soil samples are screened for organic vapors using an organic vapor meter (OVM) or other appropriate device. OVM readings, soil staining and other relevant observations are recorded. Selected soil sample intervals can be cut from the 4-foot intervals for possible analytical or other purposes. The ends of samples for possible analytical testing are sealed using Teflon lined plastic end caps. The samples are labeled, and stored in an iced cooler.

Groundwater Sampling Procedure: Groundwater sampling will be performed after the completion of soil sampling and when the boring has reached its desired depth. The steel probe and rods are then removed from the boring and new, nominal 1-1/2 inch diameter PVC solid and perforated temporary casing is lowered into the borehole. Depth to water is then measured using an electronic groundwater probe. Groundwater samples will be collected using a stainless steel bailer or a Teflon disposable bailer. Upon retrieval of the bailer, the retained water will be carefully transferred to appropriate sample bottles furnished by the analytical laboratory. All sample bottles for volatile organic analysis will have a Teflon lined septum/cap and be filled such that no headspace is present. Sample bottles will be labeled and immediately placed on ice to preserve the chemical characteristics of its content.

Borehole Backfilling: At the completion of drilling and sampling, the borings will be backfilled with a "neat" cement grout that is tremied into the borehole. The level of grout will be checked to ascertain if any settling has occurred and will be "topped off" if required.

D. Soil Vapor Sampling

To evaluate the concentration of VOC in the vapor phase in the vicinity of the former dry cleaning machine and along location of the sewer, line two soil vapor probes will be sampled. The work will be performed in general accordance with the ACEH and Department of Toxic Substances Control (DTSC) Guidelines.

The probes will be located adjacent to the interior geoprobe borings described above. Lithologic information from the geoprobe borings will be used to identify permeable strata for testing.

Vironex will hydraulically push geoprobe rods to the target depth of approximately 3 to 4 feet and pull back the rods approximately 6 inches. Vironex will then place surface bentonite seals, vacuum test connections and purge ambient air from sampling equipment and vapor probe borings. If all field conditions are satisfactory, vapor samples will be collected in a laboratory prepared SUMMA canisters. All pertinent field observations, times and readings will be recorded. Sample containers will be labeled and transported under chain of custody control to the analytical laboratory.

At the completion of sampling, the borings will be backfilled with a "neat" cement grout tremied into the borehole. The level of grout will be checked to ascertain if any settling has occurred and will be "topped off" if required.

V. QUALITY ASSURANCE / QUALITY CONTROL PROGRAM

A. Sample Preservation, Storage and Handling

To prevent the loss of constituents of interest, all soil and groundwater samples will be preserved by storing in an ice chest cooled to 4°C with crushed ice immediately after their collection and during transportation to the laboratory. Soil vapor samples will be stored away from direct sunlight and transported in a way that limits significant changes in temperature and pressure. The standard chain-of-custody protocols will be followed through all stages of sample handling.

B. Chain-Of-Custody Program

All samples collected for this project will be transported under chain-of-custody protocol. The chain-of-custody program allows for the tracing of possession and handling of individual samples from the time of field collection through laboratory analysis. The document includes the signature of the collector, date and time of collection, sample number, number and type of sample containers including preservatives, parameters requested for analysis, signatures of persons and inclusive dates involved in the chain of possession. Upon delivery to the laboratory the document will also include the name of person receiving the samples and the date and time the samples were received.

VI. ANALYTICAL METHODS

All samples selected for analysis will be analyzed by a certified independent analytical laboratory. Air Toxic Limited of Sacramento will perform all soil vapor analysis. McCampbell Analytical of Pacheco, California will perform all soil and groundwater analysis. However, other qualified laboratories may be utilized dependent on work load and time frame considerations.

The soil samples collected during this investigation will be analyzed for the following:

- Halogenated Volatile Organic Compounds by EPA Method 8260

The groundwater samples collected during this investigation will be analyzed for the following:

- Halogenated Volatile Organic Compounds by EPA Method 8260

The soil vapor samples collected during this investigation will be analyzed for the following:

- Halogenated Volatile Organic Compounds by EPA Method TO-15

VII. REPORT PREPARATION

A written report will be prepared for this investigation. Included in the report will be soil boring logs, chain-of-custody documents and copies of the analytical laboratory reports. The report will include a Conceptual Site Model (CSM). The CSM will include information on regional and local hydrogeologic conditions, known historical use of the site, summary of previous investigations, distribution of VOCs in the subsurface, preferential pathways, nearby receptors and impacts to human health and the environment. Conclusions and recommendations will be included.

The report will be prepared/reviewed by a California Professional Geologist.

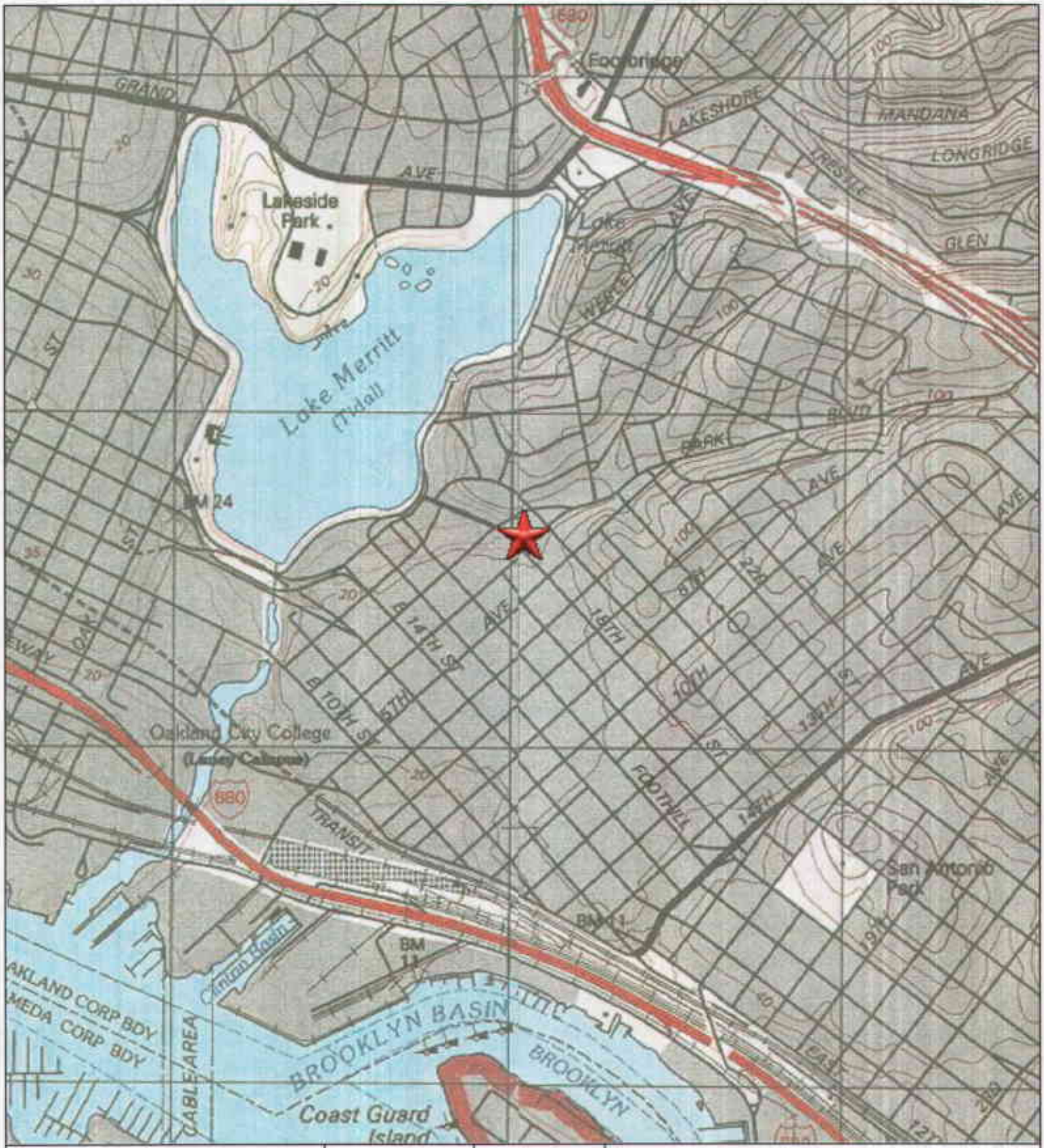
VIII. PROJECT STAFF AND SCHEDULE

Mr. Michael L. Siembieda, a California Professional Geologist, will provide technical oversight for this project and act as the project manager and regulatory liaison. Additionally, AllWest's staff of engineers, geologists, and technicians will be employed to perform the various tasks of the project.

AllWest will initially complete a utility sweep study to ascertain if any modifications to the proposed boring and vapor probe locations are warranted. AllWest will forward information to the ACEH regarding any significant modifications to the location of the proposed borings or soil gas vapor probes prior to the start of the subsurface investigation. AllWest will inform the ACEH at least 48 hour prior to the start of field activities. A tentative drilling date of Monday, November 14, 2005 has been scheduled to perform the geoprobe sampling. The soil gas vapor sampling will be performed on Tuesday, November 15, 2005. AllWest will inform the ACEH of any significant developments during the course of the investigations.

IX. LIMITATIONS

AllWest has prepared this remedial investigation and corrective action plan for the exclusive use of *CW Investment Group*, (Client) for this particular project and in accordance with generally accepted practices at the time of the work and with our written proposal dated October 21, 2005. No other warranties, either expressed or implied are made as to the professional advice offered. This plan is not a specification for the proposed work and should not be used to bid out any of the proposed work found within. Reliance on this plan by any party other than the Client is at the user's sole risk.



LEDGEND

- SITE LOCATION

N

NOT TO SCALE

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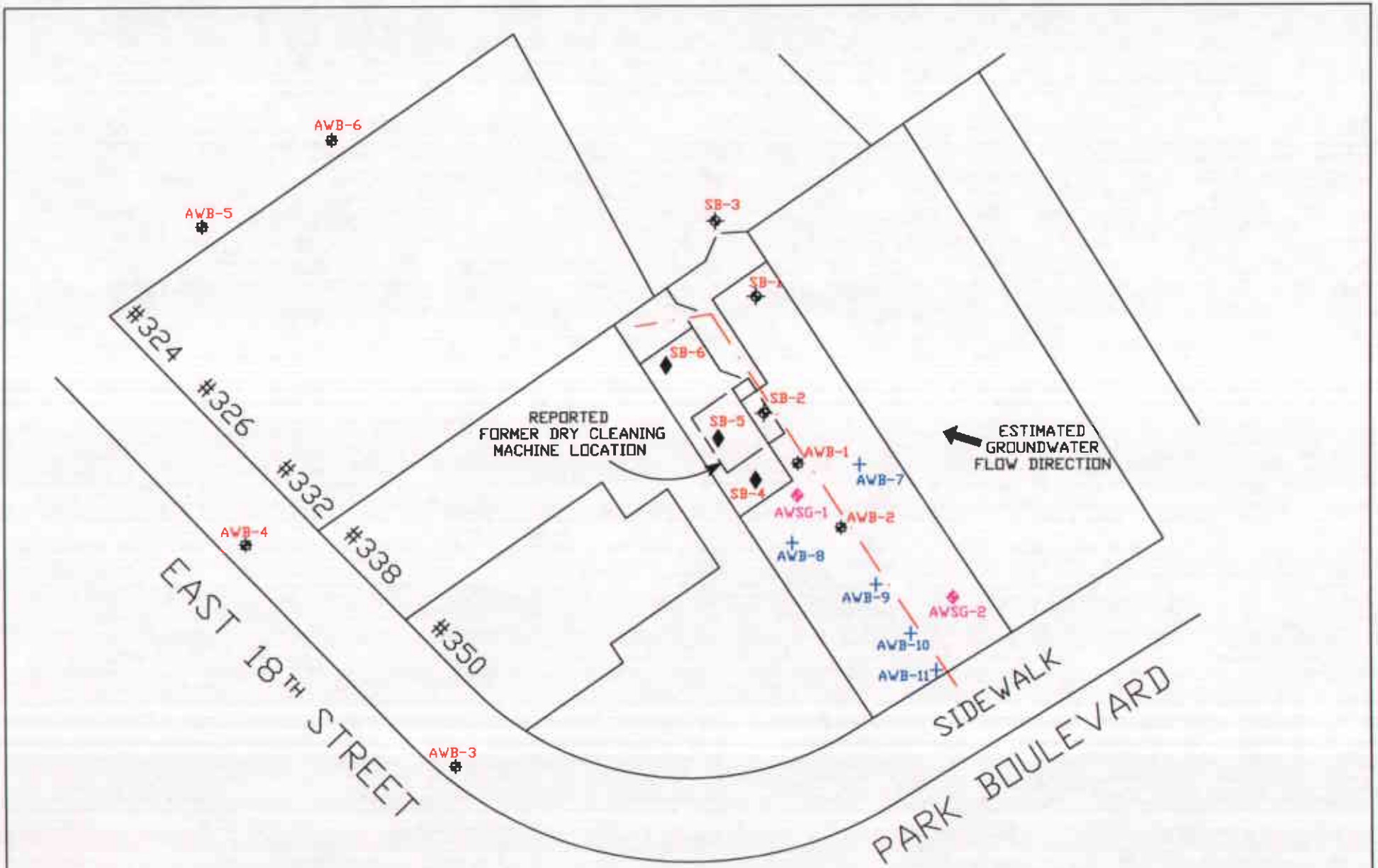
SITE LOCATION MAP
FIGURE 1
1815 PARK BOULEVARD - PHASE III
OAKLAND, CALIFORNIA
SOURCE: TOPO!
PREPARED BY: DAWN ZAMORA (10/25/05)



LEGEND

- AWB-7 Proposed - AllWest Soil Boring
- AWSG Proposed - AllWest Soil Gas Probes
- SB-1 AEI Consultants' Soil Boring (01/12/05)
- SB-4 AEI Consultants' Soil Boring (3/14/05)
- AWB-1 AllWest Soil Boring (5/24/05)
- Approximate Location

N

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SITE PLAN AND BORING LOCATION MAP

FIGURE 2

1815 PARK BOULEVARD

OAKLAND, CALIFORNIA

SOURCE: ALLWEST

PREPARED BY: DAWN ZAMORA (10/25/05)