ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

March 11, 1996
STID 4616

Edward Myall and Ray Weymouth
Meyer Plumbing Supply
311-2nd St.
Oakland CA 94607

RE: Meyer Plumbing Supply, 311-2nd St., Oakland CA 94607

Dear Mr. Myall and Weymouth,

The "Soil and Groundwater Investigation Work Plan," prepared by All Pro Corp, dated 2/29/96, was received in this office on 3/6/96. I reviewed the workplan today, only 3 days later. This workplan involves the Geoprobe installation of 4 boreholes, with soil and grab groundwater sampling. **This workplan is acceptable for implementation.**

Please notify me at least 2 business days in advance of field activities. I will be away from the office from 3/22 through 3/26. If you have any questions, please contact me at 510-567-6700, ext 6761.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Don Anderson, Law Offices, 2033 North Main St., Suite 700, Walnut Creek CA 94596
Paul King, All Pro Corp, 1125B Arnold Dr., Ste 284, Martinez CA 94553
Acting Chief/files

je.4616-B

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 1

To Paul King	From J. Eberle
Co.	Co.
Dept.	Phone #
Fax #	Fax #

ALLPRO ENVIRONMENTAL CORPORATION

96 MAR -5 PM 1:25

February 29, 1996
Work Plan 0109.W1

Ms. Jennifer Eberle
Alameda County Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Oakland, CA 94502

4616

SUBJECT: SOIL AND GROUNDWATER INVESTIGATION WORK PLAN
Meyer Plumbing Supply Facility
311 Second Street
Oakland, California

Dear Ms. Eberle:

AllPro Environmental Corporation (AllPro) is pleased to present this work plan for soil and groundwater investigation at the subject site. The proposed investigation consists of drilling a total of four boreholes in the vicinity of the former underground storage tank, and the collection of one soil sample and one groundwater sample from each borehole for laboratory analysis. This work is being performed in response to a request for investigation set forth in a letter dated January 6, 1995 from Ms. Jennifer Eberle at the Alameda County Department of Environmental Health (ACDEH) addressed to Meyer Plumbing Supply. A Site Location Map is attached as Figure 1, and a Site Plan Detail is attached as Figure 2.

All work will be performed under the direct supervision of an appropriately registered professional. This workplan is prepared in accordance with guidelines set forth in the document "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" dated August 10, 1990 and "Appendix A - Workplan for Initial Subsurface Investigation" dated August 20, 1991.

BACKGROUND

It is AllPro's understanding that Blymyer Engineers, Inc. (BEI) was retained by Meyer Plumbing Supply (MPS) to perform a closure site assessment for one 1,000-gallon underground storage tank (UST) at the subject site. Review of a BEI report titled "Underground Storage Tank Closer Assessment" dated November 1, 1993 indicates that the UST was filled with concrete by an unidentified previous owner of the site some time before 1976. In addition, the BEI report indicates that the UST was known to store motor vehicle fuel, but it was not known to MPS whether the fuel was gasoline or diesel. The UST location is shown in Figure 2.

Review of the BEI report indicates that on September 15, 1993 two slanted soil borings designated as SB-1 and SB-2 were drilled at a 30 degree angle from vertical to obtain soil samples from beneath the ends of the UST. One soil sample was reported to have been collected from each of soil borings SB-1 and SB-2 at a depth of approximately 5.5 and 7.0 feet in each borehole, respectively. In addition, the SB-2 soil boring was reported to have been advanced to a total depth of 10.5 feet, and a groundwater grab sample collected from the borehole. The depth at which groundwater was encountered in borehole SB-2 was reported to be 7.0 feet below grade. Review of the boring logs in the BEI report indicates that the reported sample collection depths, depth to groundwater and borehole depths were reported as the linear distance in the borehole, and were not corrected to show actual vertical depth. The vertical depth to groundwater corresponds to approximately 6 feet below grade, assuming a uniform boring angle of 30 degrees from vertical.

The boring logs indicate that clayey, silty fine sand with gravel were encountered in borehole SB-1, and fine sand with gravel was encountered in borehole SB-2 to the total depths explored. The materials encountered in both boreholes was interpreted by BEI to consist of fill materials. Evaluation of materials from the boreholes with a photoionization detector (PID) revealed that no detectable concentrations of organic vapors were detected in borehole SB-1, and that organic vapors with concentrations ranging from 2 to 24 were encountered in borehole SB-2. Similarly, no odors were reported to be present in borehole SB-1, and a "petroleum" odor was reported to be present in the materials from borehole SB-2.

The soil and groundwater samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G), benzene, toluene, ethylbenzene and xylenes (BTEX), for Total Petroleum Hydrocarbons as Diesel (TPH-D) and for total lead. The analytical results of the soil samples showed that in boreholes SB-1 and SB-2 TPH-D was detected at concentrations of 4.2 and 15,000 ppm, respectively, and that lead was detected in concentrations of 71 and 84 ppm, respectively. In borehole SB-1, TPH-G and BTEX were not detected with the exception of 0.0090 ppm xylenes. In borehole SB-2, TPH-G was detected at a concentration of 34 ppm, and ethylbenzene and xylenes were detected at concentrations of 0.65 and 0.82 ppm, respectively. The results of the soil samples are summarized in Table 1.

The analytical results of the groundwater grab sample from borehole SB-2 showed 5.5 ppm TPH-D, 0.085 ppm TPH-G, and benzene, toluene and xylenes at concentrations of 0.0027, 0.00066 and 0.00051 ppm, respectively. Lead was not detected. The results of the groundwater grab sample are summarized in Table 2.

It is AllPro's understanding that the sidewalk and street immediately adjacent to the study area has been given to Meyer Plumbing Supply by the Port and City of Oakland.

SCOPE OF WORK

The scope of work proposed by AllPro entails the following activities.

- Regulatory agency coordination and health and safety plan preparation.
- Collection of soil and groundwater samples from four boreholes.
- Arrange for analysis of the soil and groundwater samples from the boreholes for TPH-D, BTEX, and for total Lead.
- Report preparation.

Each of these is discussed below in more detail.

Regulatory Agency Coordination

Following approval of this work plan, a permit application will be submitted to the Zone 7 Water Agency for the drilling of four boreholes.

After the Zone 7 permit has been approved, Underground Service Alert will be notified for underground utility location and a date scheduled for the drilling of the soil borings. The date for field work will be set for the earliest possible date available, and the ACDEH will be notified of the date by telephone as soon as it has been set. Prior to the beginning of field work, a health and safety plan will be prepared.

Soil Boring and Sample Collection

To evaluate the vertical and horizontal extent of petroleum hydrocarbons in soil in the vicinity of the tank pit, four exploratory soil borings, designated as B3 through B6, will be installed using Geoprobe drilling methods. The proposed locations of the soil borings are shown in Figure 2.

The boreholes will be drilled using 1.5-inch outside diameter Geoprobe technology drilling equipment. The boreholes will be advanced to a depth of approximately 10 feet below grade, which is approximately 3 to 4 feet below the anticipated depth of the water table. Soil samples will be collected from each borehole at 5 foot intervals using a Geoprobe sampler lined with brass tubes. The samples will be evaluated using a model 580B OVM PID equipped with

a 10.0 eV bulb. The PID will be calibrated prior to use at the site using a 100 ppm isobutylene standard. The soil samples will be logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System.

The soil samples collected at a depth of 5 feet will be retained for laboratory analysis. The ends of the brass tubes for these samples will be successively sealed with aluminum foil and plastic endcaps. The brass tubes will then be labeled, placed into ziplock baggies, and stored in a cooler with ice pending delivery to McCampbell Analytical, Inc. in Pacheco, California. McCampbell Analytical, Inc. is a State-accredited hazardous waste testing laboratory. Chain of custody procedures will be observed for all sample handling.

The groundwater grab samples will be collected from the boreholes using a polypropylene bailer. A new polypropylene bailer will be used for each borehole. The groundwater grab samples will be transferred from the Teflon bailer to 40-milliliter Volatile Organic Analysis (VOA) vials and one-liter amber glass bottles and capped with Teflon-lined screw caps. The VOAs will be overturned and tapped to assure that no air bubbles are present. The bottles will then be labeled and stored in a cooler with ice pending delivery to McCampbell Analytical, Inc. Chain of custody procedures will be observed for all sample handling.

The drilling and sampling equipment will be washed with an Alconox solution and clean water rinse prior to use in each borehole. Following completion of exploratory soil boring activities, the boreholes will be filled with neat cement grout. Any soil generated during the subsurface investigation will be stored onsite and covered with visqueen pending characterization and appropriate disposal.

Laboratory Analysis

In accordance with the request for investigation set forth in the letter dated January 6, 1995 from Ms. Jennifer Eberle at the ACDEH addressed to Meyer Plumbing Supply, the soil and groundwater samples will be analyzed for Total Petroleum Hydrocarbons as Diesel (TPH-D) using EPA Method 3550 (soil) and EPA Method 3510 (water) in conjunction with Modified EPA Method 8015; for Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), using EPA Method 8020; and for total Lead using EPA Method 6010.

Report Preparation

Following receipt of the laboratory analytical results for the soil and groundwater samples, a report will be prepared documenting field activities and the sample results. The report will include a map showing the drilling locations, descriptions of the methods

used for sample collection, tabulated summaries of the sample results, copies of the laboratory analytical reports and chain of custody documentation, a discussion of the local geology and hydrogeology, a discussion of the sample results, recommendations, and the stamp of an appropriately registered professional.

SCHEDULE

The following schedule addresses elements identified in this work plan.

Activity	Calendar Days
Work plan submittal	Day 0
Work plan approval	Day 7
Permit application approval	Day 8
Set drill date	Day 15
Collection of soil and groundwater samples	Day 22
Receipt of sample results from laboratory	Day 29
Submittal of draft report to client for review	Day 46
Submittal of final report to ACDEH	Day 60

Should you have any questions, please do not hesitate to contact us at (510) 706-9308.

Sincerely,

AllPro Environmental Corporation

Paul H. King

Paul H. King
Hydrogeologist

Don R. Braun
Certified Engineering Geologist
Registration No. : 1310
Expires 6/30/96

cc: Mr. Bud Weymouth, Meyer Plumbing Supply

Attachments: Tables 1, and 2
Site Location Map (Figure 1)
Site Plan Detail (Figure 2)

PHK/aog
0109.W1

TABLE 1

SUMMARY OF LABORATORY ANALYTICAL RESULTS

BOREHOLE SOIL SAMPLES
(Samples Collected on September 15, 1993)

Sample No.	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total Lead
SB-1	4.2	ND	ND	ND	ND	0.0090	71
SB-2	15,000	34	ND	ND	0.65	0.82	84

TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
ND = Not Detected.
Results are in parts per million (ppm), unless otherwise indicated.

TABLE 2

SUMMARY OF LABORATORY ANALYTICAL RESULTS

GROUNDWATER GRAB SAMPLE
(Sample Collected on September 15, 1993)

Sample No.	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total Lead
SB-2	5.5	0.085	0.0027	0.00066	ND	0.00051	ND

TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
ND = Not Detected.
Results are in parts per million (ppm), unless otherwise indicated.

used for sample collection, tabulated summaries of the sample results, copies of the laboratory analytical reports and chain of custody documentation, a discussion of the local geology and hydrogeology, a discussion of the sample results, recommendations, and the stamp of an appropriately registered professional.

SCHEDULE

The following schedule addresses elements identified in this work plan.

Activity	Calendar Days
Work plan submittal	Day 0
Work plan approval	Day 7
Permit application approval	Day 8
Set drill date	Day 15
Collection of soil and groundwater samples	Day 22
Receipt of sample results from laboratory	Day 29
Submittal of draft report to client for review	Day 46
Submittal of final report to ACDEH	Day 60

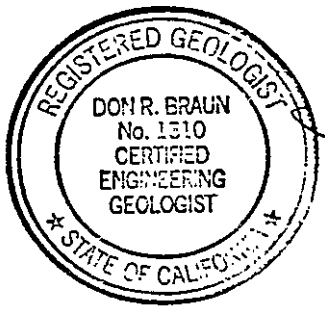
Should you have any questions, please do not hesitate to contact us at (510) 706-9308.

Sincerely,

AllPro Environmental Corporation

Paul H. King

Paul H. King
Hydrogeologist



Don R. Braun

Don R. Braun
Certified Engineering Geologist
Registration No. : 1310
Expires 6/30/96

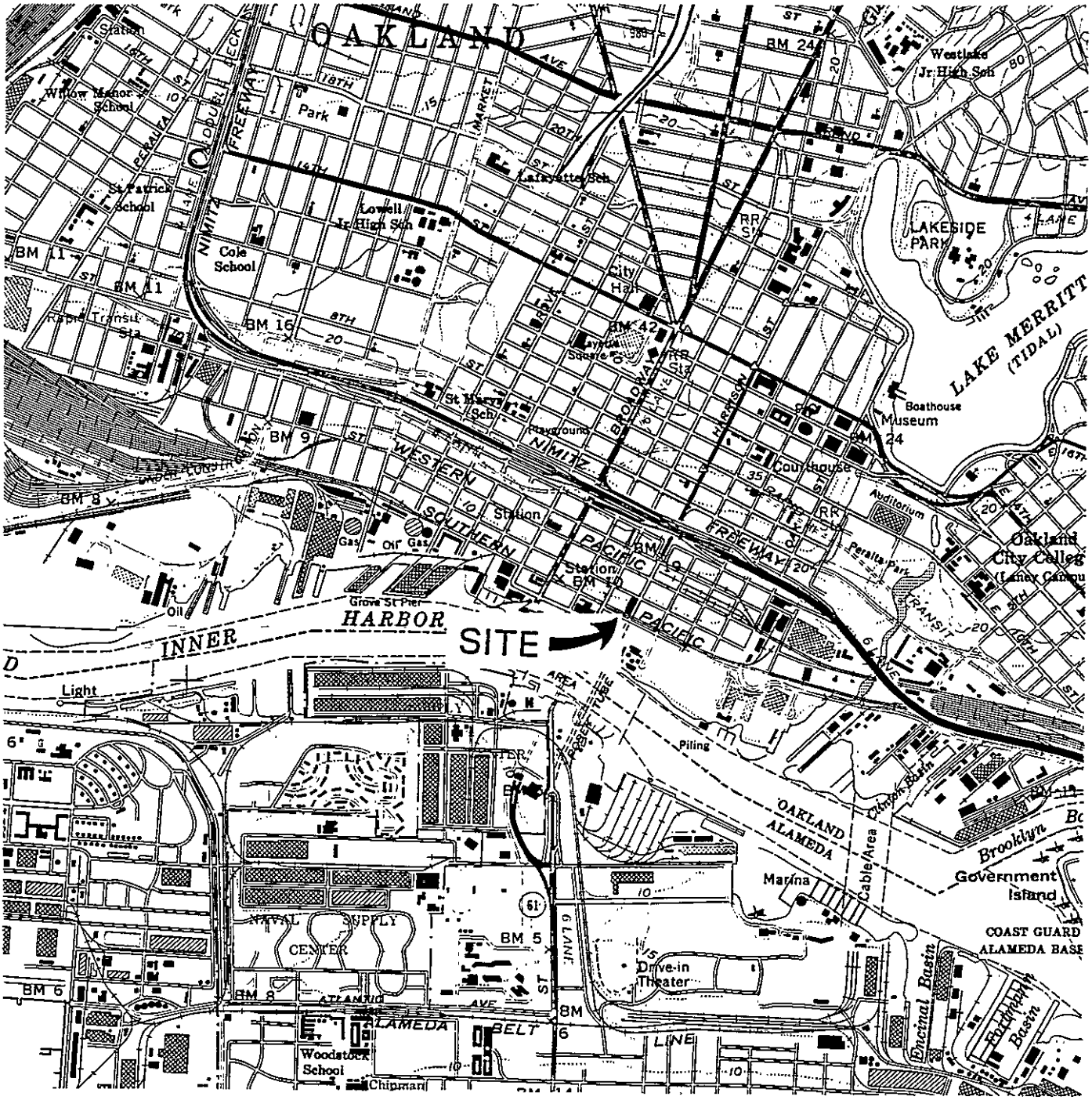
cc: Mr. Bud Weymouth, Meyer Plumbing Supply

Attachments: Tables 1, and 2
Site Location Map (Figure 1)
Site Plan Detail (Figure 2)

PHK/aog
0109.W1

P & D ENVIRONMENTAL

4020 Panama Court
Oakland, CA 94611
Telephone (510) 658-6916



Base Map From:
U.S. Geological Survey
Oakland West, Calif.
7.5 Minute Quadrangle
Photorevised, 1980

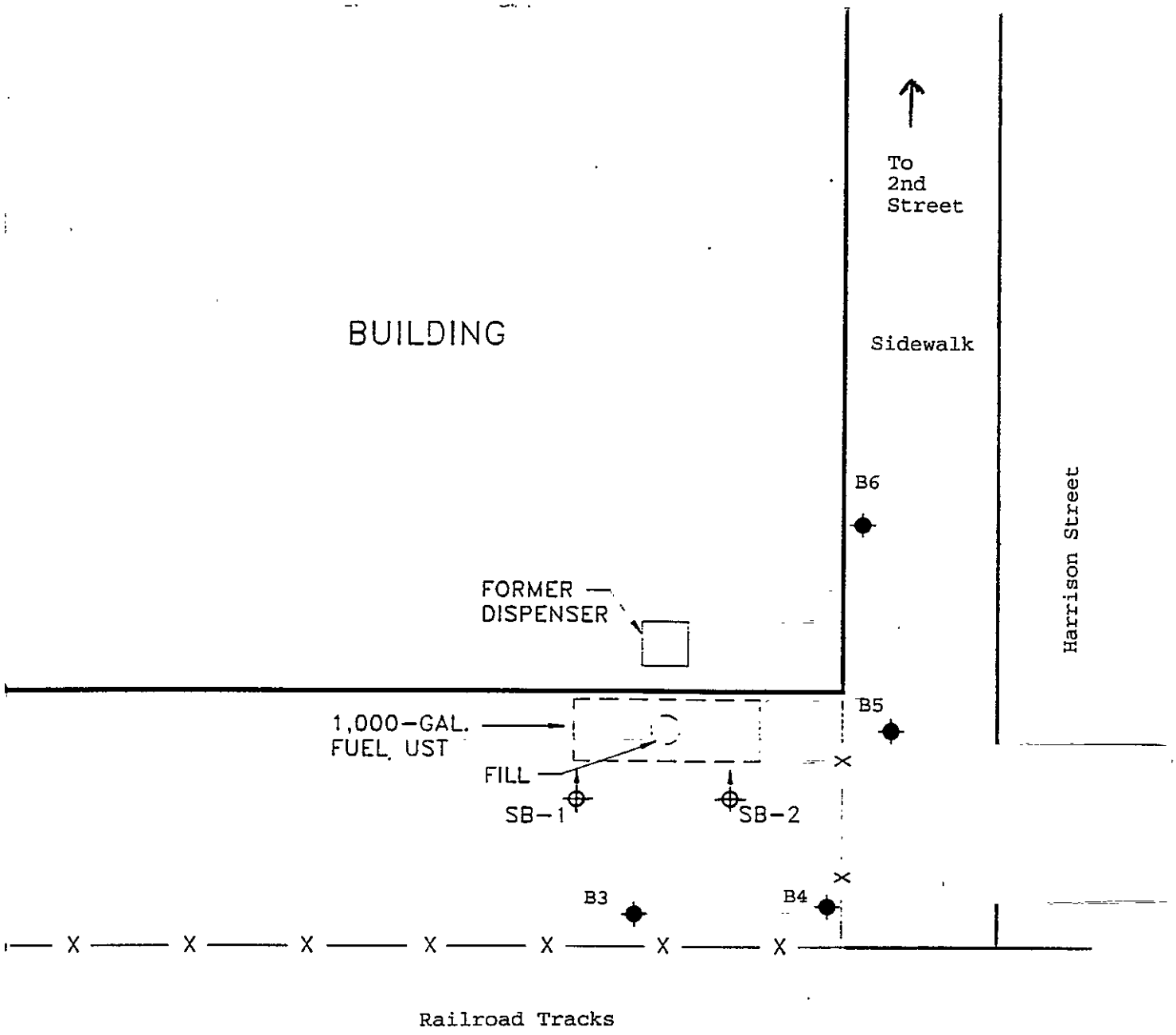
N

Scale in Feet
0 1000 2000 3000

Figure 1
SITE LOCATION MAP
Meyer Plumbing Supply
311-2nd Street
Oakland, California

P & D ENVIRONMENTAL

4020 Panama Court
Oakland, CA 94611
Telephone (510) 658-6916



LEGEND
⊕ Angled Soil Boring Location
● Proposed Soil Boring Location

Base Map From
Blymyer Engineers, Inc.
Dated: 10/26/93

0 10
SCALE IN FEET

Figure 2
SITE PLAN DETAIL
Meyer Plumbing Supply
311 Second Street
Oakland, California