

# P & D ENVIRONMENTAL

A Division of Paul H. King, Inc.  
4020 Panama Court  
Oakland, CA 94611  
(510) 658-6916

January 17, 2005  
Work Plan 0330.W2A

Mr. Amir Gholami  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

✓ RO 2509  
Alameda County  
Environmental Health  
JAN 21 2005

**SUBJECT: SUBSURFACE INVESTIGATION WORK PLAN (B8 Through B12)  
ADDENDUM  
ACEHS File # RO0002509  
901 77<sup>th</sup> Avenue  
Oakland, California**

Dear Mr. Gholami:

P&D Environmental, a division of Paul H. King, Inc. (P&D), is pleased to present this work plan addendum for the subject site. This work plan addendum modifies P&D's October 26, 2004 Subsurface Investigation Work Plan (B8 Through B12) by incorporating additional elements you identified during a meeting with Wilhelm Welzenbach of P&D at your office on November 23, 2004. A detailed discussion of historic investigations at the site is provided in P&D's October 26, 2004 Work Plan.

During the November 23, 2004 meeting you identified the following requirements.

- New county requirements for sample collection to define the vertical extent of contamination in soil and groundwater.
- Additional boreholes to delineate the downgradient vertical extent of petroleum hydrocarbons.
- The need for piezometers to quantify the groundwater flow direction and gradient.
- Further define the extent and nature of the MTBE identified as a separate plume in the October 26, 2004 work plan.
- Prepare geologic cross-sections.
- Prepare iso-concentration contour maps for TPH-G and MTBE for all soil and groundwater sample results.
- Develop a site conceptual model.

The additional work plan elements listed below address the new requirements for work plans and case closure.

- 1) In boreholes B8 and B9 collect discrete soil and groundwater samples from immediately below the water table and at a depth of 10 feet below the water table.
- 2) In boreholes B10, B11 and B12 collect discrete soil and groundwater samples from immediately below the water table and at depths of 10 and 20 feet below the water table.
- 3) Install one additional borehole designated as B13 at the location shown on the attached site plan. The borehole will be drilled using procedures identified in the

October 26, 2004 Work Plan for boreholes B10, B11 and B12. In addition, at the time of drilling of B13, collect discrete soil and groundwater samples from immediately below the water table and at depths of 10 and 20 feet below the water table.

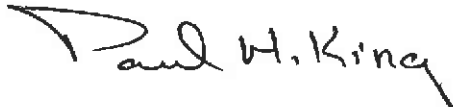
- 4) Install one additional borehole designated as B14 at the location shown on the attached site plan. The borehole will be drilled using procedures identified in the October 26, 2004 Work Plan for boreholes B8 and B9. In addition, at the time of drilling of B14, collect discrete soil and groundwater samples from immediately below the water table and at depths of 10 and 20 feet below the water table.
- 5) Analyze all of the soil and groundwater samples for petroleum hydrocarbons as identified in the October 26, 2004 Work Plan.
- 6) Construct a total of three one-inch diameter schedule 40 PVC piezometers designated as P1, P2 and P3 in boreholes B8, B9, and B14, respectively. The boreholes for the piezometers will be drilled using 6- or 8-inch outside diameter hollow stem augers. The piezometers will extend to 10 feet below the water table and will consist of a 5-foot screened interval (0.010-inch slot) in the lowermost portion of the borehole with a cap on the bottom. The annular space in the borehole will be filled with a Pacific Materials #2/16 washed sack sand to a height of one foot above the top of the screened interval. A one-foot thick bentonite pellet seal will be placed above the filter sand, and the remaining borehole annular space will be filled with neat cement grout. The tops of the piezometers will be enclosed in traffic-rated water-tight vaults.
- 7) Arrange for all of the borehole locations to be surveyed horizontally and the elevations of the tops of the piezometers to be surveyed horizontally and vertically by a State-licensed surveyor.
- 8) Develop all of the piezometers by surging and over pumping. Water purged from the piezometers will be stored in a drum at the site pending characterization and disposal.
- 9) Monitor the piezometers for depth to water to the nearest 0.01 foot at two-week intervals for one month after they have been developed (a total of two monitoring events) and include Site Plans for the two monitoring events in the subsurface investigation report showing the groundwater flow direction.
- 10) Include a discussion in the report of potential alternate sources for the MTBE identified in the October 26, 2004 Work Plan in the vicinity of borehole SB-7.
- 11) Prepare geologic cross sections A-A' and B-B' at locations shown on the attached Site Plan and include the geologic cross sections in the report documenting the subsurface investigation.
- 12) Prepare isoconcentration contour maps for TPH-G and MTBE in soil and groundwater for all borehole locations and include the isoconcentration contour maps in the report documenting the subsurface investigation.
- 13) Develop a site conceptual model based on the available information.

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Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental

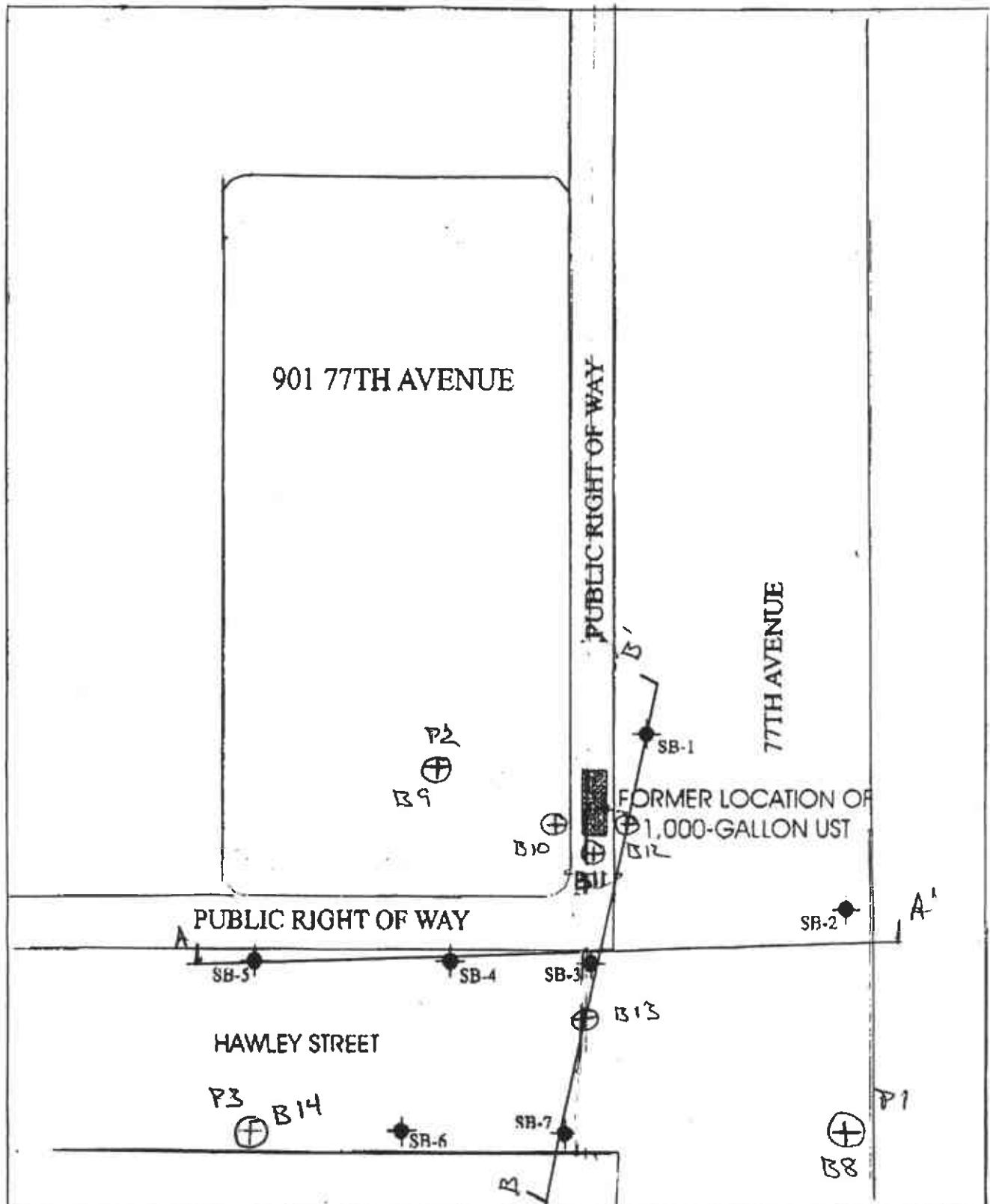


Paul H. King  
President  
California Registered Geologist #5901  
Expires: 12/31/05

Attachments: Site Plan Showing Proposed Geologic Cross-Section and Borehole Locations  
(Figure 1)

cc: Mr. Naresh Sawhney – Real Equity Investment Group I, LLC.  
Mr. Michael Parsons – Cupertino Capital

PHK  
0330.W2A



LEGEND



◆ Soil Boring Location  
(A.E.K. 2004)

⊕ Proposed Boring (P2D)

⊕ Proposed Geologic Cross-section Locations

1" = 10'

**AEI Consultants**

2500 Camino Diablo, Walnut Creek, CA

1" = 10'

4/26/2004

**SITE PLAN**

901 77TH AVENUE  
OAKLAND, CALIFORNIA

FIGURE X 1