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BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Transmitted Via U.S. Mail

August 4, 1997

Mr. Barney M. Chan
Hazardous Materials Specialist
Alameda County Health Care Services
Environmental Health Services
1131 Harbor Bay Parkway, #250
Alameda, CA 94502-6577

Re: Work Plan
United Parcel Service Center
8400 Pardee Drive
Oakland, CA
Project #: 36768.01

Dear Mr. Chan:

On July 29, 1997, a meeting was held at your office with Ms. Linda Lyons, representing United Parcel Service (UPS), and Mr. Bruce Scheibach, representing Blasland, Bouck & Lee, Inc. (BBL). The purpose of this meeting was to discuss ground-water data collected during the past year at the UPS Oakland Service Center southern fueling island and the request for case closure. At the conclusion of this meeting it was decided that the following would take place:

- The northern fueling island is not an environmental concern, therefore the monitoring wells at this location can be removed.
- Up to eight direct push borings will be drilled at selected locations upgradient of the southern fueling island underground storage tanks (USTs) at the UPS facility to collect soil and ground-water samples for analysis. These data will be used to assess the extent of contaminated fill at the property.
- ORC "socks" will be installed in three monitoring wells and one piezometer at the southern fueling island. After approximately six months, the three monitoring wells will be sampled and analyzed for total petroleum hydrocarbons as diesel.
- Assuming TPHd contaminated fill, unrelated to UPS activities, is confirmed as the upgradient source for TPHd detected, Alameda County Environmental Health Services will issue a no further action letter or grant case closure.

The following sections describe the proposed soil and ground-water sampling efforts in greater detail.

Scope of Work

Before proceeding with drilling activities each location will be cleared for underground obstructions using ground penetrating radar and electromagnetics. Soil and ground-water samples will be collected from up to eight locations identified on the attached Figure 1. Soil samples will be collected using a truck-mounted direct-push apparatus equipped with a 2-inch I.D., stainless-steel split-spoon sampler lined with 2-foot long acetate liners. The sampling device will be pneumatically driven to a depth not exceeding 15-feet below ground surface. A soil sample will be collected for analysis within approximately two feet of the assumed ground water elevation. Each sample collected will be lithologically logged.

After collecting the soil sample each boring will be advance to 2 to 5 feet below the estimated water table or to a maximum depth of 15-feet. If ground water is not encountered at the estimated water table depth then the boring will be advanced to a maximum of 15 feet bgs. The ground-water sample will be collected using the HydroPunch method, which involves pneumatically driving a 5-foot long, 3/4-inch I.D. perforated probe connected to 5-foot long sections of probe pipe. Insert rods will be placed through the probe and pneumatically driven to the desired depth. The insert rods will be removed and ground-water will be allowed to infiltrate through the perforated section of the probe. Sample collection will be accomplished using either a peristaltic pump with clean Tygon tubing or a disposable bailer. + Run D.O. in field.

It should be noted that during BBL's June 1996 investigation at this site, many of the direct-push borings did not produce one liter of water required for TPH-d analysis. If a boring does not produce an adequate amount of water, temporary well casing will be installed in the open hole in an attempt to allow sufficient water to seep into the boring. After completion of each boring an ORC slurry will be injected into the boring in an attempt to provide oxygen to the subsurface to promote natural degradation of hydrocarbons.

Soil and ground-water samples collected will be labeled, stored in an ice chest with ice, and transported under chain of custody to Columbia Analytical, in San Jose, California for analysis. Each sample will be analyzed using EPA Test Method 8015-modified for Total Petroleum Hydrocarbons in the diesel range (TPH-d). As directed by Alameda County, each sample will be pretreated with a silica gel to remove naturally occurring hydrocarbons. After receipt of the laboratory analysis a letter report will be prepared describing the results of this investigation.

ORC Installation in Monitoring Wells

BBL will install ORC "socks" in the three existing monitoring wells and one piezometer in August. The "socks" will be removed after six months (March 1998), after which each monitoring well will be purged and sampled for TPHd. A brief letter report will be submitted to Alameda County describing the results.

If there are any questions concerning this work plan, please feel free to contact me at (707) 773-4270.

Yours very truly,

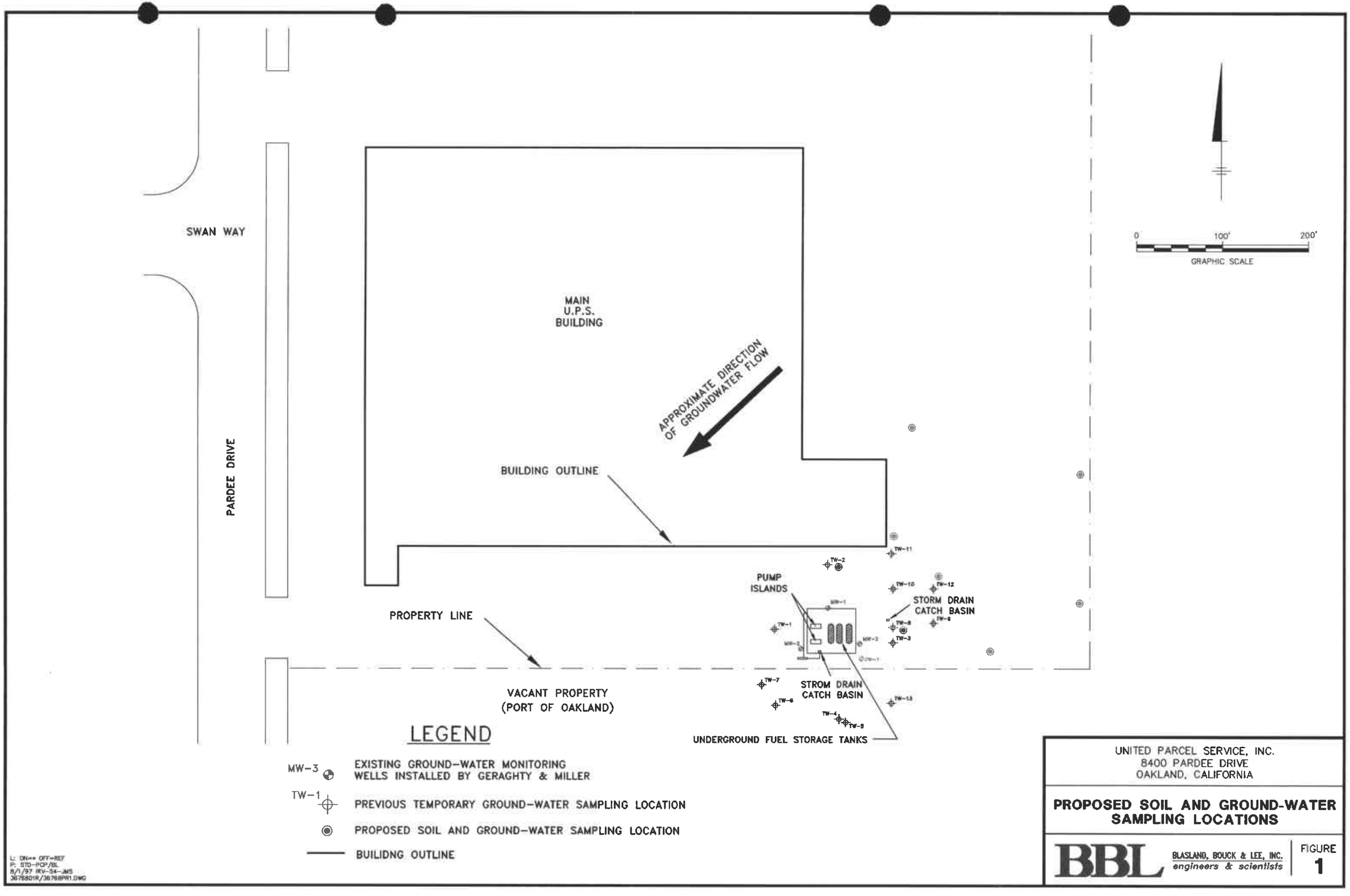
BLASLAND, BOUCK & LEE, INC.

R. Bruce Scheibach

R. Bruce Scheibach, R.G.
Associate Hydrogeologist

cc: Ms. Linda Lyons, UPS
Ms. Caroline Ehrlich, UPS

UPSWKPLN.WPD



LEGEND

- MW-3 — EXISTING GROUND-WATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER
- TW-1 — PREVIOUS TEMPORARY GROUND-WATER SAMPLING LOCATION
- PROPOSED SOIL AND GROUND-WATER SAMPLING LOCATION
- BUILIDNG OUTLINE

L: ON== OFF=REF
P: STD-PCP/BL
8/1/97 IRV-S4-JMS
3676B01R/3676BPR1.DWG

UNITED PARCEL SERVICE, INC.
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA

PROPOSED SOIL AND GROUND-WATER SAMPLING LOCATIONS

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FIGURE 1