GRIBI Associates *Geological and Environmental Consulting Services*

FACSIMILE TRANSMITTAL

Date: MARCH 1, 2000

To: EVA CHU
ALAMEDA COUNTY
ENVIRONMENTAL HEALTH

Fax No.: (510)337-9335

From: JIM GRIBI
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Number of pages, including this transmittal page: 8

Eva,

Attached please find the workplan to conduct a soil boring investigation at the Corwood Car Wash site in Dublin. Roger has apparently entered into contract to sell the car wash and, as such, has indicated that he wants to proceed with additional investigation activities. Gregg Drilling has an opening this Friday - this may be too quick.

Please call to discuss, or if you have questions or need additional info.

Thanks!

Jim

1350 Hayes Street, Suite C-14 ● Benicia ● California ● 94510 ● Phone (707)748-7743, Fax (707)748-7763

March 1, 2000

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Attention: Eva Chu

Subject: Workplan to Conduct Soil and Groundwater Investigation
Corwood Car Wash,6973 Village Parkway
Dublin, California
GA Project No. 106-02-01

Ladies and Gentlemen:

Gribi Associates is pleased to submit this workplan on behalf of the R. L. Woodward Industries, Inc. for the underground storage tank (UST) site located at 6973 Village Parkway in Dublin, California (see Figure 1 and Figure 2). This workplan proposes the drilling and sampling of two soil borings immediately south from removed UST components at the site. The goal of proposed soil boring activities will be to assess soil and groundwater conditions in an expected downgradient (southerly) direction from previously removed USTs in order to address regulatory site closure.

SITE BACKGROUND

Corwood Car Wash previously operated two unleaded gasoline USTs, located in a common excavation cavity on the northwest side of the site. The UST system was apparently installed in about 1968, and it is our understanding that diesel fuel was also stored in the USTs at some time in the distant past.

On January 31, 2000, both USTs were removed from the site in accordance with Alameda County Department of Environmental Health requirements. In addition, approximately 3,800 gallons of hydrocarbon-impacted groundwater was pumped from the excavation cavity for offsite disposal. Also, approximately 350 tons of hydrocarbon-impacted soil, primarily backfill material, was excavated and removed from the site. After backfilling with clean imported pea gravel, the UST excavation cavity and piping and dispenser excavations were re-surfaced with concrete to match existing surface grade.

While stockpiled soil samples contained moderate levels of predominantly diesel-range hydrocarbons, UST pit bottom samples contained low to nondetectable levels of all hydrocarbon constituents. These results, together with previous results from soil and groundwater investigations conducted at the site in the past, seem to suggest that although some releases, primarily diesel, occurred from the USTs, these releases remained in the backfill sands for the most part and did not migrate appreciably into native silts and clays surrounding the USTs. Given that diesel was only

stored in the USTs in the distant past (probably in the early to mid-1970s), it appears that releases associated with the USTs occurred in the distant past, prior to UST system upgrades which included installing interior fiberglass linings in both of the USTs.

A soil sample collected at four feet in depth adjacent to the western fuel dispenser, contained a moderate level of diesel-range hydrocarbons, with no significant level of gasoline-range hydrocarbons. Soil samples collected at about four feet and seven feet in depth adjacent to the east fuel dispenser contained both diesel- and gasoline-range hydrocarbons, with no detectable Benzene, Toluene, or MTBE in these samples. Given that diesel was only stored in the USTs in the distant past, as well as the apparent aged quality of the gasoline-range hydrocarbons in the east dispenser soil samples, it appears that releases associated with the fuel dispensers occurred in the distant past, prior to UST system upgrades, which included installing secondary containment beneath each dispenser.

Two water samples collected from the UST excavation cavity following tank removal contained relatively high levels of both diesel- and gasoline-range hydrocarbons, with detections of both Benzene and MTBE. However, we do not believe that these results are representative of true groundwater conditions beneath the site. The first water sample was collected directly from the UST cavity after excavation for soil sampling and prior to water purging. The second sample was collected after 3,800 gallons of water had been purged, but also then after at least 150 tons of hydrocarbon-impacted soil had been excavated from the UST cavity. Thus, both of these water samples were obviously tainted by excavation activities and are not representative of true groundwater conditions.

On February 28, 2000, Gribi Associates submitted a draft UST removal report entitled *Report of Underground Storage Tank Removal Activities, Corwood Car Wash*. On February 28, 2000, Alameda County Department of Environmental Health issued a letter recommending that at least two soil borings be drilled and sampled to assess groundwater quality downgradient from removed UST system components.

WORKPLAN ELEMENTS

In order to investigate possible soil and shallow groundwater impacts and to proceed towards regulatory closure of this site, we propose to drill and sample two soil borings immediately south from removed UST components using direct-push coring equipment. The proposed soil boring investigation will include the following workplan elements. All activities will be conducted in accordance with applicable local, State, and Federal guidelines and statutes.

Prefield Activities

Prior to implementing this workplan, written approval will be obtained from the Alameda County Department of Environmental Health. Also, a soil boring installation permit will be obtained from Alameda County Zone 7 Water Agency, and 48-hour notification will be given to Alameda County Department of Environmental Health . In addition, proposed boring locations will be marked with white paint, and Underground Services Alert (USA) will be notified at least 48 hours prior to

drilling. Also, a private underground utility locator will clear proposed boring locations. Prior to initiating drilling activities, a Site Safety Plan will be prepared, and a tailgate safety meeting will be conducted with all site workers.

Location of Borings

Proposed soil boring locations are shown on Figure 2. Based on the expected south-southeasterly groundwater flow beneath the site, one of the borings will be sited immediately south-southeast from the former east fuel dispenser, and the other boring will be sited south-southeast from the former UST excavation cavity.

Drilling and Sampling of Investigative Soil Borings

[redacted] This coring system allows for the retrieval of almost continuous soil cores, which are contained in a clear plastic acetate tube, nested inside a stainless steel core barrel. After the core barrel is brought to the surface and exposed, the core will be examined, logged, and field screened for hydrocarbons by a qualified Gribi Associates scientist using sight and smell. Following completion, the two investigative borings will be grouted to match existing grade using a cement\sand slurry. Soil cuttings generated during this investigation will be stored onsite in sealed DOT-approved containers.

Subsurface soils will be sampled at approximately five-foot intervals starting at five feet in depth. After the sample and core barrel are raised to the surface, each sample was collected as follows: (1) The filled acetate tube will be exposed for visual examination; (2) The selected sample interval will be collected by cutting the sample and acetate plastic tubing to the desired length (typically about six inches); (3) The ends of the selected sample will be quickly wrapped with Teflon sheets or aluminum foil, capped with plastic end caps, labeled and wrapped tightly with tape; and (4) The sealed soil sample will be labeled and immediately placed in cold storage for transport to the analytical laboratory under formal chain-of-custody. All coring and sampling equipment will be thoroughly cleaned and decontaminated between each sample collection by triple rinsing first with water, then with dilute tri-sodium phosphate solution, and finally with distilled water. Cleaning rinseate will be contained onsite in a sealed drum pending laboratory results.

Following completion of soil sampling activities, 3/4 inch diameter Schedule 40 PVC well casing will be placed in each boring, with 0.01-inch slotted well screen from about 15 feet to five feet in depth, followed by blank well casing to above surface grade. Grab groundwater samples will then be collected from each of the borings using the clean stainless steel bailer as follows: (1) Laboratory-supplied containers will be completely filled directly from the bailer with a minimum of agitation; (2) After making sure that no air bubbles are present, each container will then be tightly sealed with a Teflon-lined septum; and (3) Each container will then be labeled and placed in cold storage for transport to the analytical laboratory under formal chain-of-custody. All sampling equipment will be thoroughly cleaned and decontaminated between each sample collection by triple rinsing as described above.

Laboratory Analysis of Soil and Water Samples

One soil sample and one grab groundwater sample from each soil boring will be analyzed for the following parameters:

USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPH-G)
USEPA 8020 Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)
USEPA 8020 Methyl-t-Butyl Ether (MTBE) - Do confirmation analysis, if necessary, w/ 8260
USEPA 8015M Total Petroleum Hydrocarbons as Diesel (TPH-G)
Quantify for other oxygenates TBA, EDB

All analyses will be conducted by a California-certified analytical laboratory with 48-hour turn around on lab results.

Preparation of Summary Report

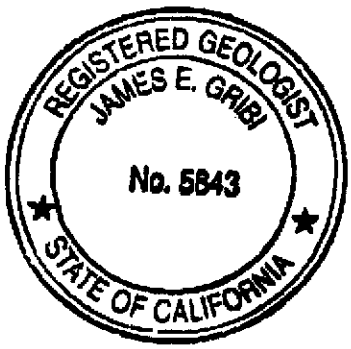
A report of findings will be prepared for submittal to Alameda County Department of Environmental Health. This report will describe all investigative methods and results, and will include tabulated laboratory analytical results, as well as laboratory reports and chain-of-custody records.

PROJECT SCHEDULE

Subject to your approval, Gribi Associates is prepared to begin the proposed workplan activities immediately. Based on our understanding of the project and subject to rig availability, we expect to complete the proposed soil and groundwater investigation within two weeks following workplan approval.

We appreciate the opportunity to present this workplan for your review. Please contact us if you have questions or require additional information.

Very truly yours,

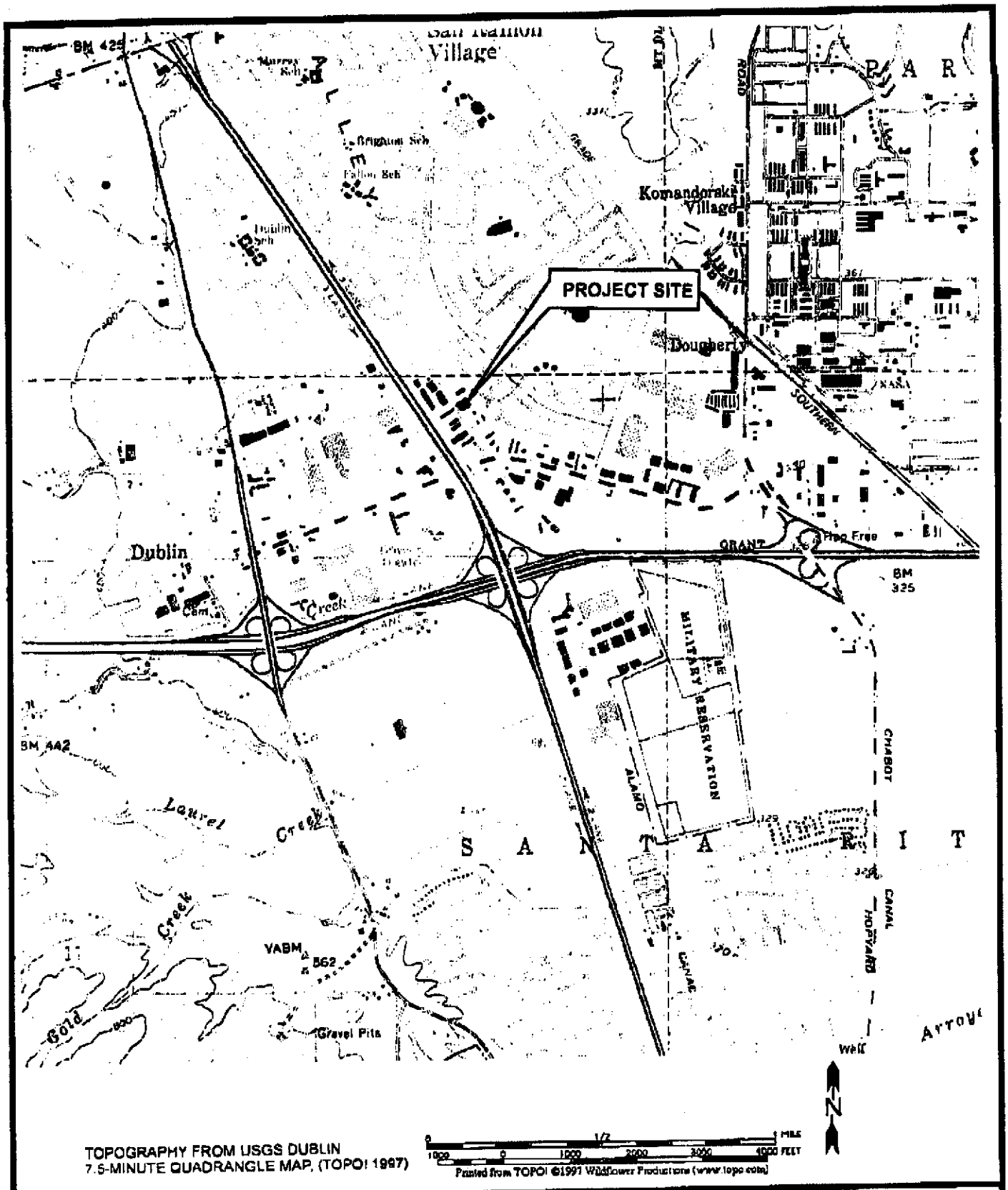


James E. Gribi
Registered Geologist
California No. 5843

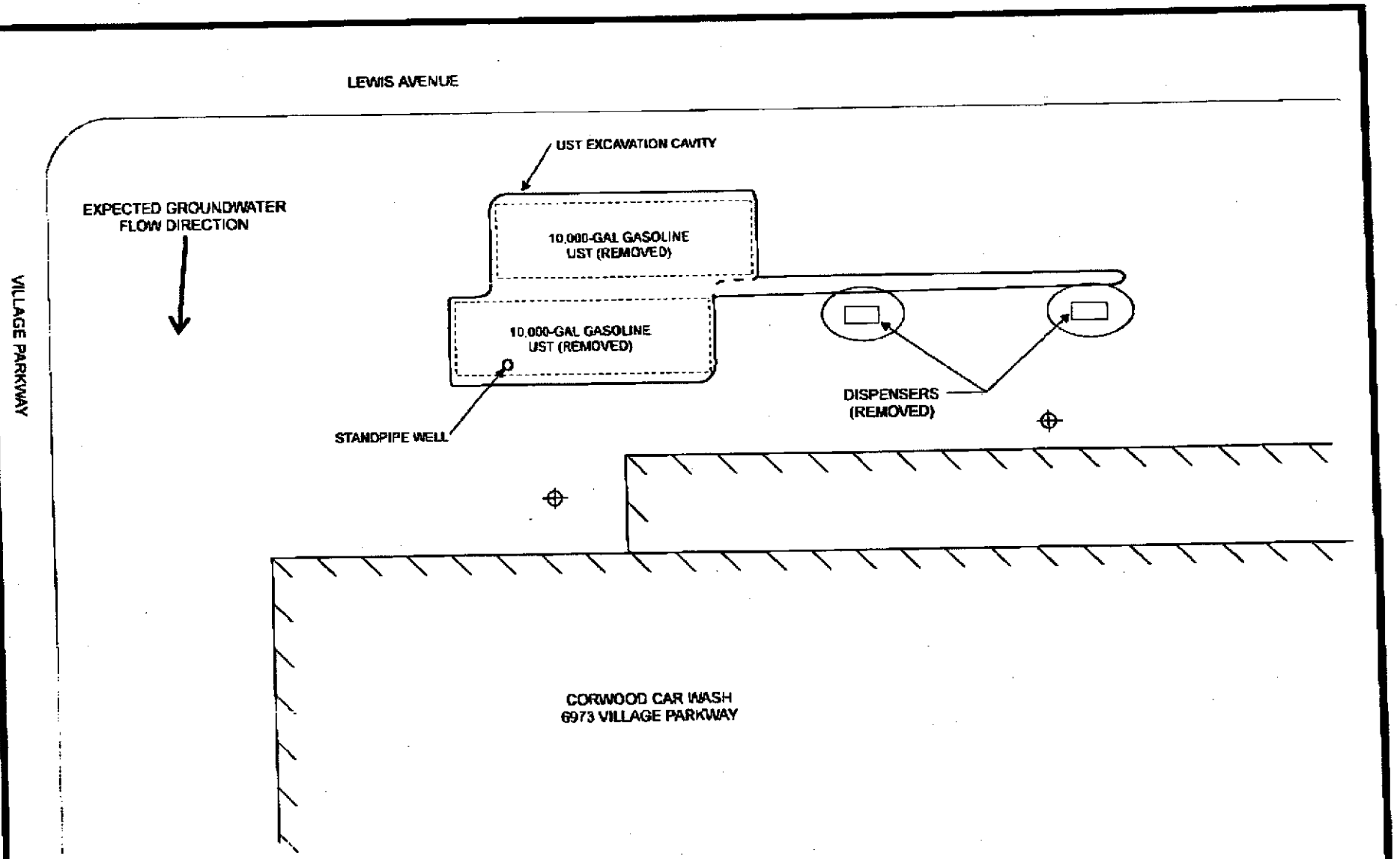
JEG:et
Enclosure

c Mr. Roger Woodward, R. L. Woodward Industries, Inc.

File: C:\MyFiles\Workplans\Corrwood\SRI wp1.wpd



DESIGNED BY:	CHECKED BY:	**SITE VICINITY MAP**	DATE: 02/28/00 / FIGURE. 1
DRAWN BY: JG	SCALE: 1:24,000	CORWOOD CAR WASH 6973 VILLAGE PARKWAY	**GRIBI Associates**
PROJECT NO: 106-02-01			



⊕ - PROPOSED SOIL BORING LOCATION

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APPROXIMATE SCALE IN FEET

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DESIGNED BY	CHECKED BY
DRAWN BY JEG	SCALE
PROJECT NO 106-02-02	

PROPOSED SOIL BORING LOCATIONS

CORWOOD CAR WASH
6973 VILLAGE PARKWAY

DATE 03/01/00 | FIGURE 2

GRIBI Associates