

Proposal

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**GROUNDWATER MONITORING WELL
INSTALLATION AND SAMPLING
PROPOSAL**

at
508 East Lewelling Boulevard
San Lorenzo, California

PROPOSAL 2000-2437

Prepared for:

Mr. & Mrs. Gracio
508 Lewelling Boulevard
San Lorenzo, CA 94580

Prepared by:

AEI Consultants
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549
(925) 283-6000

1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this proposal on behalf of Mr. and Mrs. Gracio in response to their request for a soil and groundwater investigation proposal. This proposal describes activities to provide and submit a Work plan to Alameda County Health Care Services Agency as required, install three groundwater monitoring wells and perform quarterly groundwater monitoring activities at the property located at 508 Lewelling Boulevard in San Lorenzo, California.

2.0 AEI'S CAPABILITIES

The staff at AEI has many years as experienced contractors and consultants and are familiar with all aspects associated with the installation of groundwater monitoring wells. All of our construction projects are supervised by qualified engineers and geologists who know how to interact productively with the clients, regulatory inspectors, and any agents involved in the project. All aspects in our field operations are conducted by trained technicians who are certified per the mandatory 40-hour training safety program as specified in the OSHA Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910). Our staff includes a California State registered Professional Chemical Engineer, Civil Engineer, Mechanical Engineer, and an Engineering Geologist. AEI holds a Class A Contractors License (# 654919), with a Hazardous Substance Removal and Remedial Action Certificate.

"Contractors are required by law to be licensed and regulated by the Contractors' State License Board. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, 3132 Bradshaw Road, Sacramento, California. Mailing Address: P.O. Box 26000, Sacramento, California 95826."

3.0 PROPOSED SOIL AND GROUNDWATER INVESTIGATION

AEI has outlined the following scope of work for the monitoring well installations and subsequent sampling:

Task 1

AEI will prepare and submit a workplan to the Alameda County Health Care Services Agency (ACHCSA) for the installation of three groundwater-monitoring wells at the property. This work was requested by the ACHCSA to monitor groundwater quality beneath the site and determine the on-site groundwater flow direction. Installation of the wells will commence after approval of the workplan is granted from the ACHCSA.

Task 2

AEI will advance three soil borings using a hollow stem auger-drilling rig. The borings will be positioned to determine the groundwater flow direction and gradient as well as the extent of impacted groundwater. Soil borings will be continuously logged on-site by a professional geologist using the Unified Soil Classification System. Undisturbed soil samples will be taken at 5-foot intervals. The soil borings will be extended to a depth of approximately 10 feet below first encountered groundwater, corresponding to approximately 30 feet below ground surface. (bgs).

The soil samples will be secured using teflon tape and teflon caps. The samples will be put on ice and transported under chain of custody procedures to McCampbell Analytical for analysis.

Task 3

The three soil borings will be converted to three groundwater-monitoring wells.

The top of the casing elevation of the three wells will be surveyed to the nearest .01 ft in order for the collection of groundwater elevation data to determine on-site groundwater flow direction and gradient.

AEI will develop the newly installed wells, purge the wells, and sample the groundwater from each well.

Strict chain of custody protocol will be followed in all phases of sampling and transportation.

Task 4

Soil and groundwater samples will be submitted to a state certified laboratory for chemical analyses. Two soil samples from each of the borings and the groundwater samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline (EPA 5030/8015), Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and MTBE (EPA 8020). If MTBE is detected in the groundwater, the sample with the highest level of MTBE will be reanalyzed by EPA method 8260 to confirm the presence of MTBE.

Task 5

The installation of the three monitoring wells is expected to produce approximately 8 drums of soil. The soil will be stored on-site until the receipt of the analytical results.

Task 6

AEI will prepare a written final report that details the methods and findings of the soil and groundwater investigation. This technical report includes boring logs, tables, figures with drilling locations, laboratory analyses, conclusions and recommendations. Copies of the final report will be submitted to the client and all of the appropriate agencies.

Task 7

Purged groundwater will be stored on site in sealed 55-gallon drums.

4.0 ESTIMATED SCHEDULE

A workplan will be prepared within two weeks of receipt of the Authorization to Proceed. The wells will be installed following approval of the workplan by the ACHCSA. A final report will be issued promptly following receipt of the analytical results. The client will be notified of any delays.

5.0 COST

AEI will perform the outlined scope of work for the fixed price of \$ 11,915.00 based on the following assumptions. The soil cuttings will be disposed of at a cost of \$ 150.00 per drum. Purged groundwater will be billed at cost plus 15%.

Assumptions

- No underground utilities are encountered.
- Refusal conditions are not encountered during drilling.
- Soil is approved for disposal at a Class III landfill

Monitoring of the wells will continue on a quarterly basis for a period of approximately one year. The cost for quarterly monitoring of the three wells is \$ 1,680.00 per sampling episode. This cost is based on one day for purging and sampling the wells. The first sampling episode of the wells is included in the price for the well installations.

6.0 TERMS AND CONDITIONS

10% of the contract amount will be due with the authorization to proceed, 80% upon completion of the well installation, and 10% upon presentation of the final report. Client agrees to pay interest (1.5%) per month on any and all balances not paid by the date of receiving the final report. Client will also agree to pay court costs, attorney fees, and any expenses incurred by AEI in the event the client does not pay the final invoice and litigation or collection procedures begin.

This proposal constitutes a firm offer to conduct business with AEI. Please return a signed copy of the Authorization to Proceed to initiate the project.

If you have any questions, please do not hesitate to contact us at (925) 283-6000.

AUTHORIZATION TO PROCEED

Sign and Return to:

AEI Consultants
3210 Old Tunnel Road, Suite B.
Lafayette, CA 94549
Facsimile: (925) 283-6121

Client: Mr. & Mrs. Gracio
508 Lewelling Boulevard
San Lorenzo, CA 94580

RE: Proposal 2000-2437

_____ authorizes the scope of work as outlined in this proposal either through an agent or on their own accord.

Client: _____
Signature: _____
Title: _____
Date: _____

AEI Consultants

Name: Greg Griffin
Signature: _____
Date: February 3, 2000