

Project No.
4216-E3

September 15, 1998
Revised September 23, 1998

Mr. Fred Musser
Braddock & Logan Group
4155 Blackhawk Plaza Circle, Suite 201
Danville, CA 94526

Subject: Niles Court - Tract 6938
King Avenue
Fremont, California

FILL ENCAPSULATION

- Reference:
1. ENGEO Inc: Modified Environmental Site Assessment, King Avenue Properties, Fremont, California; December 30, 1996.
 2. Berlogar Geotechnical Consultants, Phase I Environmental Site Assessment; J.A. Gallegos Trucking, Fremont, California; July 19, 1994.

Dear Mr. Musser:

In accordance with the recommendations of the referenced environmental site assessment, ENGEO Incorporated has provided observation services during the relocation and placement of contaminated fill within the paved street section (Figure 1).

BACKGROUND

ENGEO prepared a modified phase one site assessment for the property in December 1996. The scope of the assessment included a review of the property's history with regard to hazardous material usage and land usage, a review of historical records and a review of government database information. The assessment also included the sampling and analysis of a ± 500 cubic yard soil stockpile which was placed on the site by a previous tenant (landscape contractor). Review of the laboratory analyses for the stockpile found some extractable petroleum hydrocarbons at concentrations 380 to 490 parts per million (ppm). No volatile or semi-volatile organic compounds were reported, with the exception of trace levels of toluene at 29 and 30 parts per billion (ppb). Lead was reported for the two composite soil samples at concentrations of 41 and 110 ppm, with an average of approximately 76 ppm. In addition to the soil stockpile, some small areas of petroleum stained gravel and soil were observed on the property.

Based on the available information regarding health risks associated with petroleum hydrocarbons and lead, the stockpile is not considered hazardous with regards to human health risk. The current EPA Preliminary Remediation Goal (PRG) for lead in residential soils is 130 ppm. Precedent has been established by the USEPA and CAL-EPA DTSC for concentrations up to 400 ppm in residential soil. Based on the findings of the phase one assessment and sample test results, ENGEO provided the following recommendations:

1. ENGEO recommended that the property was viewed during demolition and pregrading activities to observe areas which may have been obscured by existing structures, vehicles, or debris.
2. ENGEO recommended that the scarifying and removal of the stained soils should be observed.
3. The scarified material along with the fill stockpiles on Parcel 63 and 64 could be used as fill outside of proposed residential pads.

Grading Activities

Pre-grading work was conducted between March 16, 1998, and April 3, 1998. The week of March 31, 1998, ENGEO observed the scarifying and stockpiling of visually stained soils observed along the north and east sides of the former truck maintenance shop. In addition, several small areas of petroleum stained soil were also viewed along the west property line. The stained soils were observed a maximum of 4 to 6 inches in depth. The material was readily identifiable visually and was removed to the point where native soils or clean base rock was observed. The stained soil was placed within one soil stockpile on plastic and covered. The volume of the soil was estimated at less than 20 cubic yards.

Residential grading activities began the week of April 27, 1998. The ± 500 cubic yard stockpile was initially relocated to Lots 16 - 20 until the material could be placed as engineered fill within the street section at depths of approximately 18 to 30 inches. Figure 1 shows the location where the ± 500 yards of contaminated fill was placed beneath the roadways. The small stockpile of stained soil was placed on Jewel Terrace at depths of 18 to 30 inches. The grading activities were conducted under the observation of an ENGEO field technician who documented the fill placement and performed density and moisture testing in accordance with geotechnical engineering requirements. Grading quantities essentially balanced at the site; therefore, no import material was used on-site.

SUMMARY AND CONCLUSIONS

Based on the initial soil sampling and laboratory analysis conducted in 1996, it is our opinion that the soil stockpile is non-hazardous with regard to known human health risks. Therefore, the recommendation for use as fill within the street section, outside of residential pad areas, is considered an appropriate use of this fill material.

A copy of this report should be provided to the City of Fremont and the Alameda County Environmental Health Department for review. We are pleased to be of continued service to you regarding this project. If you have any questions regarding the scope of work, please contact our office.

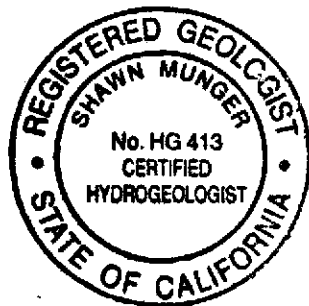
Very truly yours,

ENGEO INCORPORATED



Shawn Munger
CHG 413
Manager, Environmental Services.

sm/jd:soil



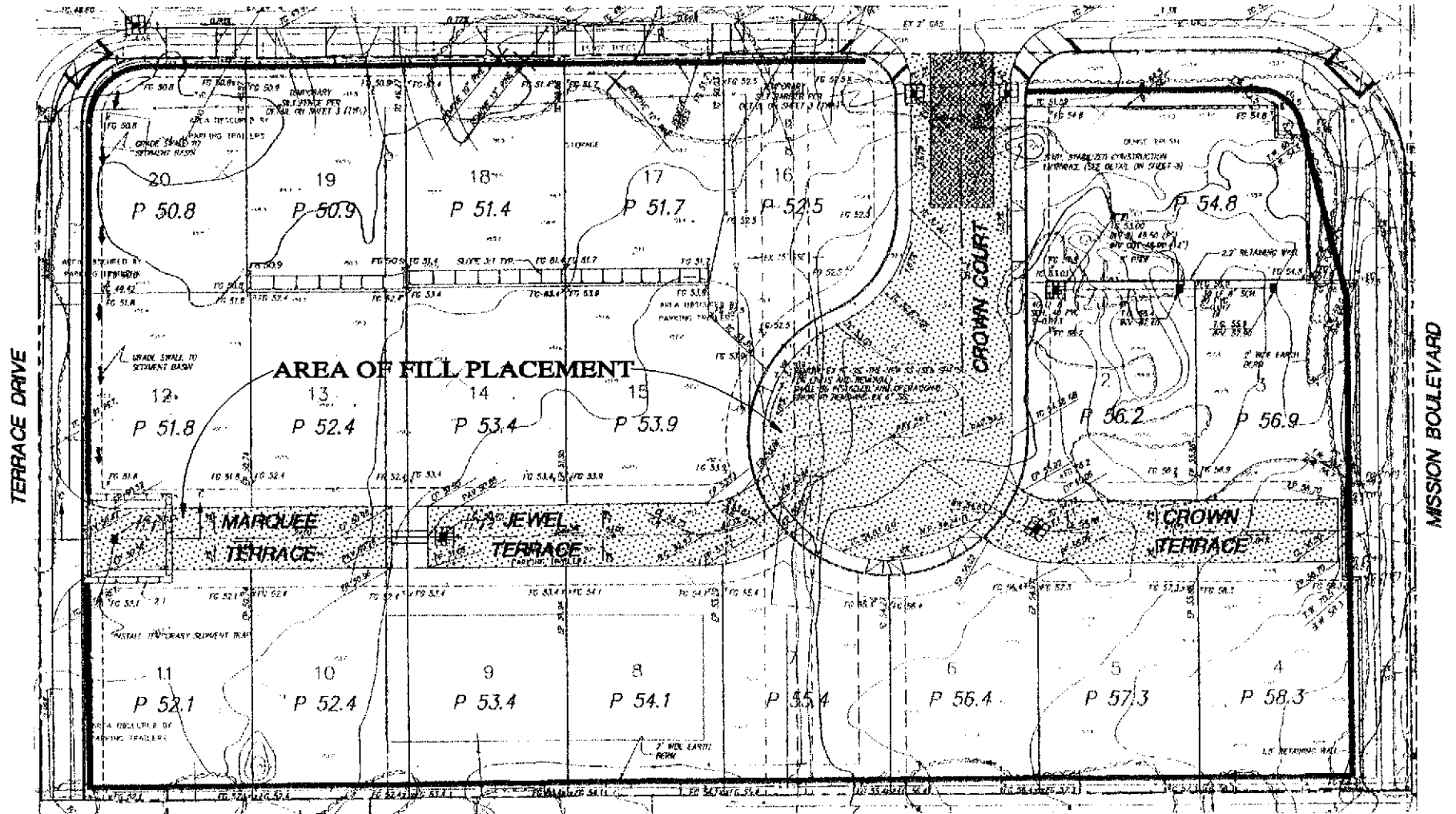
Reviewed by:



Donald Bruggers
GE 2094



KING AVENUE



BASE: RUGGERI-JENSEN-AZAR & ASSOCIATES

ENGEO
INCORPORATED

SITE PLAN
NILES COURT-TRACT 6938
FREMONT, CALIFORNIA

PROJECT NO.: 4216-E3	FIGURE NO.
DATE: SEPTEMBER 1998	1
DRAWN BY: <i>JB</i> CHECKED BY: <i>SM</i>	