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Alameda County
Environmental Health

SITE MANAGEMENT PLAN

FREISMAN RANCH PROPERTY
1600 FREISMAN ROAD
LIVERMORE, CALIFORNIA
(APN 904-0001-001-10)

Presented to:

Children's Hospital & Research Center Foundation
2201 Broadway Avenue, Suite 600
Oakland, California 94612
(510) 428-3119

Presented by:

SCS ENGINEERS
6601 Koll Center Parkway, Suite 140
Pleasanton, California
(925) 426-0080

March 28, 2008
File No. 01203087.05

Offices Nationwide
www.scsengineers.com

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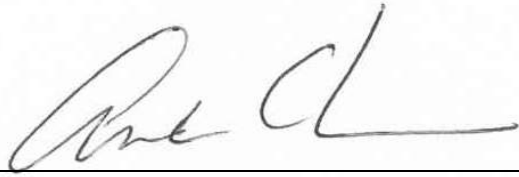
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This Site Management Plan for the Freisman Ranch Property located at 1600 Freisman Road, Livermore, California, dated March 28, 2008 has been prepared and reviewed by the following:



Andy Chan, P.E.
Project Engineer



Steve Clements P.G., R.E.A.
Project Manager
SCS ENGINEERS

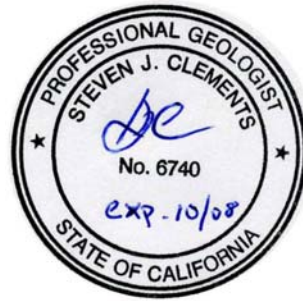


Table of Contents

Section	Page
Limitations/Disclaimer	i
1 Introduction.....	1
2 Objective and Purpose.....	1
3 Site Description.....	1
4 Site Background and Environmental History	1
5 Residual Impacted Groundwater.....	2
6 Site Management Requirements	3
Soil.....	3
Existing Water Supply Well.....	3
Future Water Supply Wells.....	4
7 Notifications.....	4
8 References.....	5

List of Figures, Tables, and Appendices

Figures

- 1 Vicinity Map and Site Plan Showing Soil Management Area

Tables

- 1 Historic Groundwater Data

Appendices

- A City of Livermore Water Use Letter

LIMITATIONS/DISCLAIMER

This Site Management Plan has been prepared on the behalf of the Children's Hospital and Research Center Foundation (Children's Hospital) with specific application to the Freisman Ranch Property located at 1600 Freisman Road, Livermore, California. This report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, expressed or implied, is made as to the professional opinions presented herein. Third parties use this report at their own risk.

Changes in site use and conditions may occur due to manmade changes or variations in rainfall, temperature, water usage, or other factors. Additional information which was not available to the consultant at the time this report was prepared or changes which may occur on the Property or in the surrounding area may result in modification to the Property that would impact the this report. This report is not a legal opinion.

1 INTRODUCTION

This Site Management Plan has been prepared by SCS Engineers (SCS) on behalf of Children's Hospital & Research Center Foundation (Children's Hospital) for the Freisman Ranch property located at 1600 Freisman Road, Livermore, California (the "Property") (see Figure 1).

2 OBJECTIVE AND PURPOSE

The objective of this Site Management Plan is to outline notification requirements and use restrictions for the Property established to limit the potential for exposure to residual hydrocarbon-impacted groundwater (and associated soil) present beneath the southwestern portion of the Property and to outline future use restrictions for the on-site water supply well.

This Site Management Plan has been prepared at the request of Alameda County Environmental Health (ACEH) and documents Property use restrictions and requirements established at the February 14, 2008 project meeting attended by representatives from ACEH, Children's Hospital, The Terrill Company, Cross Winds Church, Zone 7 Water Agency (Zone 7), and SCS.

3 SITE DESCRIPTION

The Property is an approximately 36-acre, square-shaped property located at 1600 Freisman Road, Livermore, California. The Property is identified by Alameda County Assessor's Parcel Number (APN) 904-0001-001-10), and is located at the eastern terminus of Freisman Road just south of the Highway 580 Freeway. Arroyo Las Positas and one of its tributaries flow through the Property - roughly dividing it into thirds.

The southwestern portion of the Property is developed with remnants of the former Freisman Dairy including six single family residential structures. According to Children's Hospital, three of the residences are currently occupied and arrangements are presently underway to relocate these tenants. Other structures associated with the closed dairy include the dairy building, nine large storage sheds/barns, and various small outbuildings. A water supply well (State Well No. 3S/1E/2P3) that supplies potable water to the on-site residences and livestock is located in the south-central portion of the Property (see Figure 1). Information provided by Zone 7 indicates that this well was installed in 1975 and is screened from 340 to 372 feet below ground surface (bgs).

4 SITE BACKGROUND and ENVIRONMENTAL HISTORY

The Property was first developed in the 1910's with the residential structures, dairy building, sheds/barns, and outbuildings associated with the former onsite dairy. Dairy operations ceased in 1971, and since that time the Property has been used for residential housing, miscellaneous storage, and animal boarding/grazing (horses, cattle, etc.).

Extensive environmental assessment, investigation, and remediation have occurred at the Property since 1997. These have included a Phase I Environmental Assessment (Kleinfelder, July 8, 1997), soil and groundwater investigations including the installation and monitoring of eight groundwater monitoring wells (Kleinfelder, October 17, 1997 and February 17, 1999 and SCS, March 7, 2007), the investigation/removal of a small incinerator and associated soil (SCS, November 21, 2003, October 19, 2006, March 7, 2007, and October 5, 2007), additional soil and groundwater investigation including installation and sampling of three temporary wells (SCS, March 7, 2007), two soil vapor surveys (SCS, November 21, 2003 and March 7, 2007), and a deep groundwater investigation (SCS, October 12, 2007). A list of previous environmental reports for the Property is provided in the References section of this report.

Based on the assessments and investigations, petroleum hydrocarbon-impacted groundwater (and associated soil) was identified in the southwestern portion of the Property (central portion of the former dairy). The apparent source of petroleum hydrocarbon contamination was the former heating oil above ground storage tank (AST) used to fuel two former boilers that were located in the northern portion of the main dairy building. In addition, a small (approximately 300 gallon) gasoline underground storage tank (UST) may have been located in the vicinity of the former heating oil AST. The former caretaker of the Property has indicated that, to the best of his knowledge, this UST was removed sometime in the 1970's. This suspected former UST may be a source of gasoline range hydrocarbons detected in groundwater beneath the southwestern portion of the Property.

In an effort to remove sources of petroleum hydrocarbon contamination at the Property SCS removed the two boilers, the metal shed that historically housed the former heating oil AST, associated underground fuel piping, and impacted soil in August and September 2003 (SCS, November 21, 2003 and October 19, 2006). The soil and debris were properly disposed of off-site and the excavations were subsequently backfilled.

5 RESIDUAL IMPACTED GROUNDWATER

Eight shallow groundwater monitoring wells (KMW-1 through KMW-8) were installed in the vicinity of the former dairy on the southwestern portion of the Property between 1997 and 1999. These wells were screened from depths of approximately 9 to 24 feet bgs and water levels have historically ranged from approximately 10 to 15 feet bgs. In addition, deeper groundwater samples (depths of 48 to 78 feet bgs) were collected and analyzed from three Cone Penetration Test (CPT) locations advanced in the vicinity of the former dairy in August 2007.

Monitoring of these wells and CPT locations indicates that a relatively shallow plume of petroleum hydrocarbon-impacted groundwater is present in the central portion of the former dairy on the southwestern portion of the Property. The highest concentrations of the constituents detected in groundwater at the Property during the most recent groundwater sampling events (April and August 2007) are provided below. Current and historical groundwater data from the monitoring wells is provided in Table 1.

- Total Petroleum Hydrocarbons as gasoline (TPH-g): 2,700 µg/L
- Total Petroleum Hydrocarbons as diesel (TPH-d): 1,100 µg/L

- Total Petroleum Hydrocarbons as stoddard solvent (TPH-ss): 1,500 µg/L
- Benzene: 35 µg/L
- Toluene: <5.0 µg/L
- Ethylbenzene: 52 µg/L
- Xylenes: 33 µg/L
- n-Butylbenzene: 21 µg/L
- sec-Butylbenzene: 6.1 µg/L
- 1,2-Dichloroethane: 0.50 µg/L
- Isopropylbenzene: 25 µg/L
- Naphthalene: 110 µg/L
- n-Propylbenzene: 86 µg/L
- 1,2,4-Trimethylbenzene: 110 µg/L
- 1,3,5-Trimethylbenzene: 30 µg/L
- Dissolved Lead: 2.2 ug/L

6 SITE MANAGEMENT REQUIREMENTS

Based on the known impacted groundwater (and associated soil) in the vicinity of the former dairy on the southwestern portion of the Property, the following site management requirements shall be implemented for the Property.

Soil

If future excavation, development, or other activities at the Property will encounter or remove soil at depths greater than 10 feet below current surface grade within the Soil Management Area shown on Figure 1, ACEH must be given prior notification for project review and approval.

The Soil Management Area shown on Figure 1 is based on analytical data collected from the on-site groundwater monitoring wells. Analytical data from these wells indicates that the plume of impacted groundwater is present in the central portion of the former dairy, on the southwestern portion of the Property. Constituents of concern have generally not been detected in groundwater samples collected from perimeter monitoring wells KMW-1, -2, -3, -4, -5, and -8, and, as a result, these wells were used to “define” the Soil Management Area.

Existing Water Supply Well

The Property is part of the City of Livermore EL Charro Specific Plan and is zoned for “Regional Commercial” use. The City of Livermore requires that, when available, future developments in this area be connected to the municipal water source (see City letter provided in Appendix A).

Based on information supplied by the Terrill Company, current water usage on the Property is estimated at approximately 3,000 gallons per day (GPD). This estimate is based on 500 GPD for each of the three occupied residences and 1,500 GPD for livestock and miscellaneous irrigation. All of this water is currently supplied by the on-site water supply well.

During our February 14, 2008 meeting ACEH and Zone 7 indicated that future extraction of groundwater from well 3S/1E/2P3 should not exceed current levels and, preferably, should decrease or be eliminated.

Based on this information, the following restrictions shall be implemented for well 3S/1E/2P3: The Property owner shall connect to the municipal water source for all on-site domestic (household) water requirements when required by the City of Livermore. The Property owner may continue to use groundwater from well 3S/1E/2P3 for all on-site purposes until a municipal source is available as stated above as long as the volume extracted from the well does not exceed 3,000 GPD. Following connection to the municipal source the Property owner may continue to use groundwater from well 3S/1E/2P3 for non-domestic purposes (e.g. agricultural uses, landscape irrigation, etc.) so long as the volume extracted from the well does not exceed 3,000 GPD.

If well 3S/1E/2P3 is no longer to be used it shall be properly destroyed by a licensed well driller in accordance with state and local requirements. A permit for this work must be obtained from Zone 7 prior to well destruction.

Future Water Supply Wells

At the request of ACEH no new water supply wells are to be installed on the Property.

7 NOTIFICATIONS

Correspondences and notifications required as part of this Site Management Plan should be provided to ACEH and Zone 7 as shown below:

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502
Phone (510) 567-6791
Fax (510) 337-9335

Zone 7 Water Agency
100 North Canyons Parkway
Livermore, California 94551
Phone (925) 454-5000
Fax (925) 454-5727

8 REFERENCES

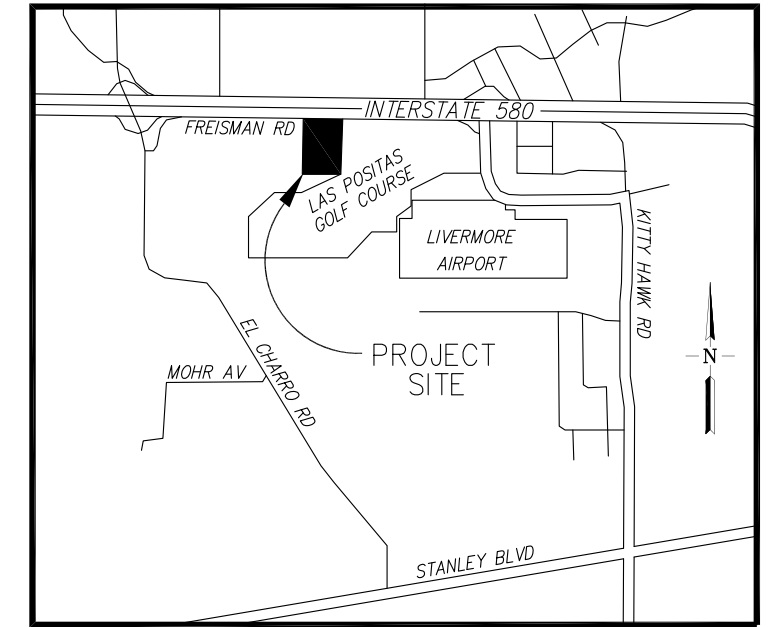
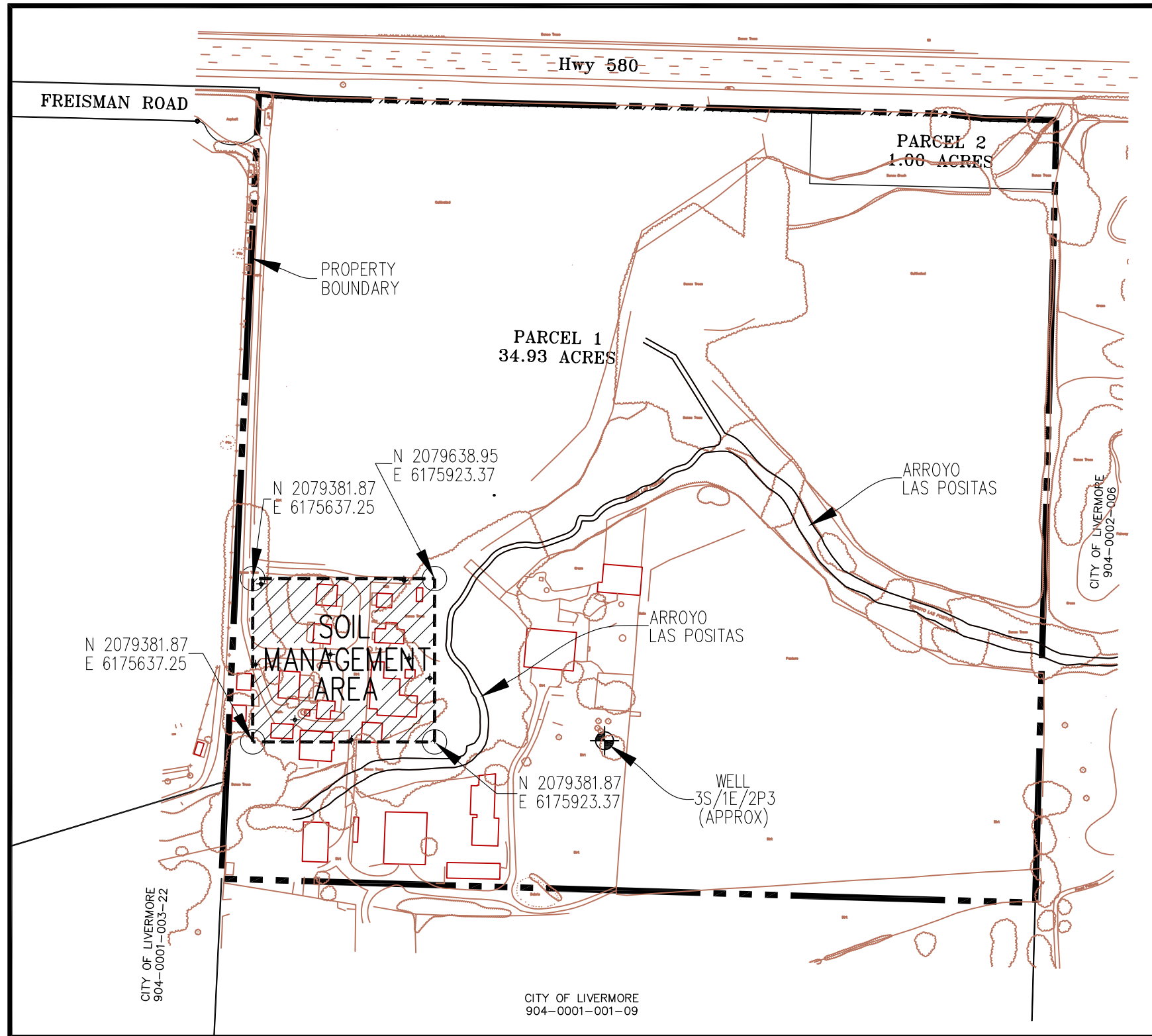
- ATC Associates, Inc., December 27, 2002.** *Quarterly Groundwater Monitoring Report, Fourth Quarter 2002, Freisman Ranch Property, Livermore, California.*
- ATC Associates, Inc., April 22, 2003(a).** *Quarterly Groundwater Monitoring Report, First Quarter 2003, Freisman Ranch Property, Livermore, California.*
- ATC Associates, Inc., April 22, 2003(b).** *Workplan for Soil Vapor Survey, Freisman Ranch Property, Livermore, California.*
- Consolidated Engineering, March 2, 2005.** *Limited Sampling Report.*
- Consolidated Engineering, March 2, 2006.** *Sampling Results for Limited Sampling Assessment letter.*
- H₂OGEOL, February 6, 2006.** *January 2006 Groundwater Monitoring Report and Summary of Possible Remedial Activities.*
- Kleinfelder, Inc., July 8, 1997.** *Phase I Environmental Site Assessment and Limited Soil and Groundwater Sampling Report, Freisman Road Property, Livermore California.*
- Kleinfelder, Inc., October 17, 1997.** *Remedial Investigation, RBCA Tier 2 Evaluation and Remedial Action Plan, Freisman Ranch Property, Livermore, California.*
- Kleinfelder, Inc., February 17, 1999.** *Well Installation and Quarterly Groundwater Monitoring Report, Freisman Ranch Property, Livermore, California.*
- SCS Engineers, July 28, 2003.** *Quarterly Groundwater Monitoring Report, Second Quarter 2003. Freisman Ranch Property, Livermore, California.*
- SCS Engineers, November 21, 2003.** *Groundwater Monitoring, Soil Vapor Survey, and Source Removal Report, Freisman Ranch Property, 1660 Freisman Road, Livermore, California.*
- SCS Engineers, December 17, 2003.** *Quarterly Groundwater Monitoring Report, Fourth Quarter 2003. Freisman Ranch Property, Livermore, California.*
- SCS Engineers, May 14, 2004.** *General Site Cleanup and Above-Ground Storage Tank Removal, Freisman Ranch Property, Livermore, California.*
- SCS Engineers, October 19, 2006.** *Revised Response to Comments/Workplan, Freisman Ranch Property, 1600 Freisman Road, Livermore, California.*
- SCS Engineers, March 7, 2007.** *Additional Site Investigation Report, Freisman Ranch Property, 1600 Freisman Road, Livermore, California.*
- SCS Engineers, April 17, 2007.** *Workplan – Limited Soil Removal/Disposal, , Freisman Ranch Property, 1600 Freisman Road, Livermore, California.*

SCS Engineers, June 6, 2007. *Workplan for Additional Groundwater Investigation, Freisman Ranch Property, 1600 Freisman Road, Livermore, California.*

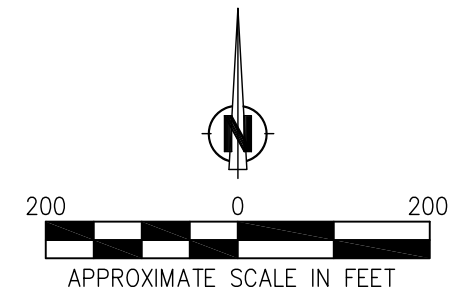
SCS Engineers, October 5, 2007. *Limited Soil Removal/Disposal Report, Freisman Ranch Property, 1600 Freisman Road, Livermore, California.*

SCS Engineers, October 12, 2007. *Additional Groundwater Investigation Report, Freisman Ranch Property, 1600 Freisman Road, Livermore, California.*

FIGURES



VICINITY MAP
NOT TO SCALE



NOTICE:

IF FUTURE EXCAVATION, DEVELOPMENT, OR OTHER ACTIVITIES AT THE PROPERTY WILL ENCOUNTER OR REMOVE SOIL AT DEPTHS GREATER THAN 10 FEET BELOW CURRENT SURFACE GRADE WITHIN THE "SOIL MANAGEMENT AREA" SHOWN ON THIS FIGURE, ALAMEDA COUNTY ENVIRONMENTAL HEALTH (ACEH) MUST BE GIVEN PRIOR NOTIFICATION FOR PROJECT REVIEW AND APPROVAL. ACEH'S CURRENT PHONE NUMBER IS (510) 567-6791.

BASE: A.L.T.A. SURVEY BY RUGGERI, JENSEN, AZAR, AND ASSOCIATES 9-14-2007

SCS ENGINEERS		
ENVIRONMENTAL CONSULTANTS		
6601 KOLL CENTER PARKWAY, SUITE 140 PLEASANTON, CALIFORNIA 94566 PH. (925) 426-0080 FAX. (925) 426-0707		
PROJ. NO. 01203087.05	DWN. BY: TMS	ACAD FILE: FIGURE 2.DWG
DSN. BY: TMS	CHK. BY: TMS	APP. BY: S. CLEMENTS

SHEET TITLE: VICINITY MAP AND SITE PLAN SHOWING SOIL MANAGEMENT AREA
PROJECT TITLE: FREISMAN RANCH PROPERTY 1600 FREISMAN ROAD LIVERMORE, CALIFORNIA

DATE: 2/28/08
SCALE: AS SHOWN
FIGURE: 1

TABLES

Table 1
Summary of Groundwater Analytical Results - Groundwater Monitoring Wells
Freisman Ranch Property
1600 Freisman Road, Livermore, California

Well	Sample Date	TPH-D	TPH-G	TPH-SS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	n-butyl Benzene	Isopropyl Benzene	1,2-DCA	Naphthalene	n-Propyl Benzene	1,2,4-Trimethyl Benzene	Dissolved Lead
KMW-1	9/8/1997	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	12/28/1998	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	7.8
	12/28/1998 dup	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	5.9
	3/25/1999	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	6/21/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	9/16/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/16/2002	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/17/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	4/15/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	7/21/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	10/30/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/12/2006 h2o	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	<5.0	NA	NA	NA	NA	NA	NA	NA
1/21/2006 cs	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	0.99	
1/9/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4/18/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
KMW-2	9/8/1997	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	12/28/1998	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	<5.0
	3/25/1999	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	6/21/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	9/16/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/16/2002	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	1/17/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	4/15/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	7/21/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/30/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	1/12/2006 h2o	55	65	NA	<0.5	<0.5	<0.5	<1.0	1.6	NA	NA	NA	NA	NA	NA	NA
	1/21/2006 cs	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	5.0
1/9/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4/18/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4/19/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
KMW-3	9/8/1997	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	12/28/1998	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	<5.0
	3/25/1999	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	6/21/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	9/16/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/16/2002	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/17/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	4/15/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	7/21/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/30/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	1/12/2006 h2o	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	NA	NA	NA	NA	NA
	1/9/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4/18/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

Table 1
Summary of Groundwater Analytical Results - Groundwater Monitoring Wells
Freisman Ranch Property
1600 Freisman Road, Livermore, California

Well	Sample Date	TPH-D	TPH-G	TPH-SS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	n-butyl Benzene	Isopropyl Benzene	1,2-DCA	Naphthalene	n-Propyl Benzene	1,2,4-Trimethyl Benzene	Dissolved Lead
		(µg/L)														
KMW-4	9/8/1997	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	12/28/1998	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	7.5
	3/25/1999	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	6/21/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	9/16/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/16/2002	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/17/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	4/15/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	7/21/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/30/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	1/12/2006 h2o	<50	<50	NA	<0.5	<0.5	<0.5	<1.0	<0.5	NA	NA	NA	NA	NA	NA	NA
1/9/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4/18/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
KMW-5	9/8/1997	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	9/8/1997 dup	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	12/28/1998	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	8.5
	3/25/1999	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	6/21/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	9/16/1999	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/16/2002	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/17/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	4/15/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	7/21/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
	10/30/2003	NS	NS	NA	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NS
1/12/2006 h2o	<50	89	NA	<0.5	<0.5	2	<1.0	<0.5	NA	NA	NA	NA	NA	NA	NA	
1/9/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4/18/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4/19/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
KMW-6	9/8/1997	3,200, d	13,000, a	NA	250	14	560	490	<150	NA	NA	NA	140	NA	NA	NA
	12/28/1998	1,800, d	3,200, a	NA	86	3.6	140	90	<50	NA	NA	NA	130	NA	NA	15
	3/26/1999	1,700, d,b	7,000, a	NA	160	5.1	270	200	<100	NA	NA	NA	100	NA	NA	<5.0
	3/26/1999 dup	1,700, d,b	6,700, a	NA	170	6.5	270	200	<100	NA	NA	NA	100	NA	NA	NA
	6/21/1999	1,500, d,b	3,800, a	NA	170	<0.5	260	160	<10	NA	NA	NA	200	NA	NA	<5.0
	9/16/1999	1,900, d	7,100, a	NA	230	9.8	300	210	<120	NA	NA	NA	NA	NA	NA	<5.0
	10/16/2002	1,600, d	4,600, a	NA	100	8.4	190	110	<50	NA	NA	NA	NA	NA	NA	NA
	10/16/2002 dup	1,900, d	5,100, a	NA	110	10	210	110	<50	NA	NA	NA	NA	NA	NA	NA
	1/17/2003	2,100, d	5,700, a	NA	87	4.3	170	100	<25	NA	NA	NA	NA	NA	NA	NA
	1/17/2003 dup	1,900, d	5,800, a	NA	89	6.4	180	100	<25	NA	NA	NA	NA	NA	NA	NA
	4/15/2003	110, d	390, a	NA	7.4	0.58	8.5	6.1	<5.0	NA	NA	NA	NA	NA	NA	NA
	4/15/2003 dup	100, d	270, a	NA	4.2	0.51	5.6	3.0	<5.0	NA	NA	NA	NA	NA	NA	NA
	7/21/2003	1,600, d	4,300, a	NA	89	3.0	130	70	<17	NA	NA	NA	NA	NA	NA	NA
	7/21/2003 dup	1,500, d	4,600, a	NA	83	5.2	130	72	<25	NA	NA	NA	NA	NA	NA	NA
	10/30/2003	310, d	700, a	NA	23	1.1	8.0	8.3	<5.0	NA	NA	NA	NA	NA	NA	NA
	10/30/2003 dup	350, d	750, a	NA	24	1.3	8.5	8.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/12/2006 h2o	630	2,200	NA	21	33	<2.0	18	<2.0	NA	NA	NA	NA	NA	NA	NA
1/21/2006 cs	1500, d	4000, a	NA	38	<5.0	77	43	<50	NA	NA	NA	77	NA	NA	2.0	
1/9/2007	53, d	180, a	70	3.1	<0.5	1.9	0.65	<0.5	0.6	1.1	0.72	3.2	1.8	<0.5	<0.5	
4/18/2007	<50	86, m	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.59	<0.5	<0.5	<0.5	
4/19/2007	1,100, d	2,700, a	890	35	<5.0	52	23	<5.0	21	25	<5.0	110	86	<5.0	<0.5	

Table 1
Summary of Groundwater Analytical Results - Groundwater Monitoring Wells
Freisman Ranch Property
1600 Freisman Road, Livermore, California

Well	Sample Date	TPH-D	TPH-G	TPH-SS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	n-butyl Benzene	Isopropyl Benzene	1,2-DCA	Naphthalene	n-Propyl Benzene	1,2,4-Trimethyl Benzene	Dissolved Lead
KMW-7	12/28/1998	1,000, d,h	9,100, a,h	NA	23	17	190	700	<70	NA	NA	NA	110	NA	NA	38
	3/25/1999	1,200 d,b	4,300, a,h	NA	19	16	56	270	<70	NA	NA	NA	23	NA	NA	22
	6/21/1999	1,300, d,b	1,300, a	NA	6.5	<0.5	21	62	<5.0	NA	NA	NA	27	NA	NA	<5.0
	6/21/1999 dup	1,200, d	2,000, a	NA	6.4	6.7	24	76	<5.0	NA	NA	NA	17	NA	NA	NA
	9/16/1999	1,100, d	950, a	NA	3.3	2	19	33	<10	NA	NA	NA	NA	NA	NA	<10
	10/16/2002	480, d	270, a	NA	1.3	<0.5	4	15	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/17/2003	610, d	1,100, a	NA	7.8	1.3	24	84	<10	NA	NA	NA	NA	NA	NA	NA
	4/15/2003	350, d	880, a	NA	7.1	0.69	4.4	52	<5.0	NA	NA	NA	NA	NA	NA	NA
	7/21/2003	830, n	1,500, e/g, a	NA	2.8	<0.5	8.3	28	<5.0	NA	NA	NA	NA	NA	NA	NA
	10/30/2003	100, d	150, a	NA	0.54	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/12/2006 h2o	61	230	NA	0.51	<0.5	<0.5	2.8	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/21/2006 cs	320#	530	NA	2.5	<0.5	8.1	26	<0.5	NA	NA	NA	6.1	NA	NA	2.9
1/9/2007	84, d	330, a	110	<0.5	<0.5	0.57	3.2	<0.5	<0.5	<0.5	<0.5	0.72	<0.5	1.3	<0.5	
4/18/2007	<50	170, m	96	0.6	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	
4/19/2007	290, d	720, a	490	3.3	<0.5	12	33	<0.5	1.8	3.6	<0.5	11	7.7	32	<0.5	
KMW-8	12/28/1998	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	12
	3/25/1999	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	6/21/1999	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	9/16/2002	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	10/16/2002	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/17/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	4/15/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	7/21/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	10/30/2003	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
	1/12/2006 h2o	52	58	NA	<0.5	<0.5	0.71	<1.0	<0.5	NA	NA	NA	NA	NA	NA	NA
	1/21/2006 cs	<50	<50	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	6.1
	1/9/2007	<50	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4/18/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4/19/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
TAP Sample	4/15/2003	NA	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA
3S/1E/2P3 (well)	1/9/2007	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ESL		100	100	100	1.0	40	30	20	5	NE	NE	0.5	17	NE	NE	2.5

Notes:

- | | | | |
|---------|--|----|--|
| TPH-D | Total Petroleum Hydrocarbons as Diesel | d | Gasoline range compounds are significant |
| TPH-G | Total Petroleum Hydrocarbons as Gasoline | e | TPH pattern that does not appear to be derived from gasoline |
| TPH-SS | Total Petroleum Hydrocarbons as Stoddard Solvent | # | Kerosene and jet fuel range compounds (possibly stoddard solvent/mineral spirit) |
| MTBE | Methyl Tertiary-Butyl Ether | g | strongly aged gasoline or diesel range compounds are significant |
| µg/L | Micrograms per Liter (approx. equal to parts per billion) | h | Lighter than water immiscible sheen is present |
| <0.5 | Not detected at or above the laboratory method reporting limit | n | stoddard solvent/mineral spirit |
| a | Unmodified or weakly modified gasoline is significant | m | No recognizable pattern |
| b | Diesel range compounds are significant; no recognizable pattern | NA | Not analyzed |
| TAP | Sample collected from the on-site water supply well | NS | Not Sampled |
| h2o | Sampling conducted by H2OGEOL | cs | Sampling conducted by Consolidated Engineering |
| ND | Not Detected | NE | Not Established |
| 1,2-DCA | 1,2-Dichloroethane | | |
| ESL | Environmental Screening Level for groundwater that is a current or potential source of drinking water - San Francisco Bay Regional Water Quality Control Board, Interim Final - February 2005. | | |

Consolidated Engineering also analyzed groundwater samples for semivolatle organic compounds by EPA Method 8270D. See their report for details.

APPENDIX A
CITY OF LIVERMORE WATER USE LETTER



March 12, 2008

Jerry Wickham
Environmental Health Services
Environmental Protection
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: SLIC Case No. RO0002484 and Geotracker Global ID T0600143091, Freisman Ranch, 1600 Freisman Road, Livermore, CA 94550

Dear Mr. Wickham:

We are providing this letter to you at the request of the new owner, Cottonwood Properties, LLC.

Pursuant to City development policies and ordinances, the City requires that all properties within the City, to build the necessary water lines to provide water service or connect to an existing line, as part of development of a property. The above-mentioned property currently lies within the City limits and is part of the approved El Charro Specific Plan area. As part of development of this area, the specific plan requires all developers in this area to extend the potable and recycled water lines to serve this area.

If you have any questions or need additional information, please feel free to call me at (925)960-4500.

Sincerely,

Cheri R. Sheets, P.E.
City Engineer
Community Development

cc: Bob Vinn, P.E., Assistant City Engineer
Lorraine Purcell, Associate Civil Engineer
Judith Propp, City Attorney's Office
Tom Terrill, Cottonwood Properties, LLC
Martin Inderbitzen, Cottonwood Properties LLC
FILE – El Charro Specific Plan, Correspondence

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