Treadwell&Rollo

22 September 2005
Project No. 3149.02

Ms. Danielle Stefani
Livermore-Pleasanton Fire Department
Hazardous Materials Office
3560 Nevada Street
Livermore, California 94566

Subject: Soil Management Plan
Pleasanton Assisted Living Facility
Junipero Street and Sunol Boulevard
Pleasanton, California

Dear Ms. Stefani:

On behalf of BRIDGE Housing Corporation, Treadwell & Rollo is pleased to submit this *Soil Management Plan* (SMP) for the proposed construction activities at the Pleasanton Assisted Living Facility in Pleasanton, California. The SMP describes procedures for the removal of soil containing residual chemicals exceeding San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residual site use.

We are submitting this SMP with the request that your agency review and approve the activities described. As qualified persons, we judge the soil management measures identified, if completed, will mitigate significant potential environmental or health and safety risks that may be associated with the residual chemicals in the soil at the site.

We appreciate the opportunity to work with you on this project. If you have any questions, please call.

Sincerely yours,
TREADWELL & ROLLO, INC.

Grover Buhr, P.G.
Senior Geologist

Jeffrey F. Ludlow, P.G.
Senior Associate Geologist

31490110.OAK

Attachments

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SOIL MANAGEMENT PLAN
PLEASANTON ASSISTED LIVING FACILITY
JUNIPERO STREET AND SUNOL BOULEVARD
Pleasanton, California

BRIDGE Housing Corporation
San Francisco, California

22 September 2005
Project No. 3149.01

Treadwell&Rollo
Environmental and Geotechnical Consultants

Treadwell&Rollo

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JUNIPERO STREET AND SUNOL BOULEVARD
Pleasanton, California

EXECUTIVE SUMMARY

This Soil Management Plan (SMP) presents the measures recommended by Treadwell & Rollo to protect construction workers and future Site users from risks associated with the presence of residual chemicals in the soil at the Pleasanton Assisted Living Facility property, located at Junipero Street and Sunol Boulevard in Pleasanton, California. Plans are to redevelop the Site for use as an assisted living facility for senior citizens. A total of 86 assisted living units surrounding a common area are planned, with an additional 19-unit wing and parking lots.

The Site consists of approximately 2.63 acres of relatively flat land bordered by Centennial Park to the north, Sunol Boulevard to the east, Junipero Street to the south, and a residential development to the west. The Site was previously a part of the City of Pleasanton Corporation Yard that was occupied by wastewater evaporation ponds between 1978 and 1991.

Sampling and analysis of soil at the Site has indicated that chromium and petroleum hydrocarbons are present in the shallow soils. These chemicals were found in some soil samples at concentrations exceeding Environmental Screening Levels (ESLs) for residential site use, developed by the San Francisco Bay Regional Water Quality Control Board (RWQCB). The chromium levels are probably background levels for the area. The source of the hydrocarbons is not known.

This SMP provides procedures for soil management to be approved by the Livermore-Pleasanton Fire Department, and implemented by the Site owner and contractor. Soil management procedures will be conducted in three locations where chromium and/or petroleum hydrocarbons exceed their respective ESLs. Soil exceeding ESLs in these areas will be removed and disposed off site. The removal of soil in these areas will allow development without deed restrictions.

Excavated soil determined to contain contaminants above risk-based levels and below hazardous waste criteria will be disposed of at a class II landfill. Soil determined to be hazardous will be disposed at a Class I landfill.

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SOIL MANAGEMENT PLAN
PLEASANTON ASSISTED LIVING FACILITY
JUNIPERO STREET AND SUNOL BOULEVARD
Oakland, California

1.0 INTRODUCTION

This Soil Management Plan (SMP) presents the measures recommended by Treadwell & Rollo to protect construction workers and future site users from potential risks associated with the presence of residual chemicals in the soil at the planned Pleasanton Assisted Living Facility located at Junipero Street and Sunol Boulevard in Pleasanton, California (the "Site"). This SMP was prepared by Treadwell & Rollo for BRIDGE Housing Corporation (BRIDGE), in support of their redevelopment of the Site. Although this Site is not under an administrative order by local or state environmental regulatory agencies, we understand that BRIDGE requests that this SMP be submitted to the Livermore-Pleasanton Fire Department (LPFD), the Certified Unified Program Agency (CUPA), for review and comment.

The Site is bordered by Junipero Street, the Promenade Apartments, Centennial Park and Sunol Boulevard, as shown on Figures 1 and 2. The Site was formerly a part of the City of Pleasanton Corporation Yard and was previously occupied by wastewater evaporation ponds. BRIDGE intends to redevelop the Site with a two-story at-grade residential structure for senior citizens.

2.0 BACKGROUND

The Site encompasses an area of approximately 2.63 acres that was formerly a part of the City of Pleasanton Corporation Yard, occupied by wastewater evaporation ponds, and is currently vacant. The Site is in an area of Pleasanton that historically has been residential, commercial and light industrial. Adjacent property uses are residential to the west, parkland to the north, and commercial to the east and south.

The Site is at approximately 360 feet above Mean Sea Level (NGVD, 1929). The ground surface at the Site and general vicinity is relatively flat. Previous investigations in the Site vicinity indicate groundwater flow direction is variable. Based on topography and groundwater measurements made at a neighboring property, groundwater is found at approximately nine feet below the ground surface, and groundwater flow at the Site is likely toward the west.

Sampling and analysis of soil and groundwater at the Site indicate that chromium and/or petroleum hydrocarbons are present in 39 samples tested. These chemicals were found in four samples at concentrations exceeding Environmental Screening Levels (ESLs) for residential site use, as defined in the San Francisco Regional Water Quality Control Board (RWQCB) February 2005 Interim Final document titled *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. Soil and groundwater sampling and analytical results have previously been reported in the 21 June 2004 Treadwell & Rollo report titled *Phase II Environmental Site Assessment, Pleasanton Assisted Living Facility, Junipero Street and Sunol Boulevard, Pleasanton, California* (Treadwell & Rollo, 2004), which is provided on CD-ROM in Appendix A.

3.0 PROJECT DESCRIPTION

Plans are to redevelop the Site for assisted-living residential use. The general plan of the development is shown in Figure 2. There will be a total of 105 residential units in two wings of an at-grade, two-story, wood-framed structure. One wing will consist of 86 assisted-living units and will surround a common area. The other wing will include 19 units built to accommodate people with Alzheimer's disease. Other proposed improvements on the Site will include recreation areas, community rooms, pedestrian walkways, asphalt parking lots, and landscaped areas. No design excavation is planned for the proposed redevelopment plan. Depending on the foundation design selected, excavation and recompaction of soil up to four feet below the ground surface may be performed.. Dewatering of groundwater from excavations is not considered to be necessary.

4.0 SITE HISTORY

The history of the Site was investigated by ATC Associates (ATC) of Pleasanton, California while performing a Phase I Environmental Site Assessment in 2001 (ATC, 2001), and summarized in the Treadwell & Rollo Phase II ESA (Treadwell & Rollo, 2004). Based on the ATC report, the Site was most recently occupied by the City of Pleasanton Corporation Yard, which was constructed in 1957 and operated until 1991. Site uses prior to that were not reported (ATC, 2001). The Corporation Yard occupied all of the Site as well as the adjoining property to the west. The portion of the former Corporation Yard now occupied by the Site was used for wastewater evaporation ponds. The ponds were taken out of service after 1986 and filled to depths up to 10 feet. The source of the fill material is unknown. The Site has been vacant since 1991.

5.0 SOIL MANAGEMENT CRITERIA

The purpose of this SMP is to provide procedures for soil management to be implemented by the Site owner and contractor. As described below, soil management procedures will be conducted whenever soil is disturbed or exposed, such as excavation during and following development. Soil with residual chemicals exceeding screening levels will be removed for disposal off Site.

5.1 Environmental Screening Levels

Total Petroleum Hydrocarbons (TPH) and metals were detected in soil and groundwater samples at the Site. Concentrations of detected TPH and metals were compared with ESLs developed by the RWQCB to conservatively indicate contaminant concentrations below which no mitigative action will generally need to be taken to address potential risks to public health or the environment, or to meet other regulatory standards. No metals were detected in up to eight samples tested at concentrations equal to or exceeding the applicable ESL, with the exception of chromium in one soil sample.

Based on these data, the residual chemicals of interest at the Site are chromium, TPH quantified as diesel (TPH-d), and TPH quantified as motor oil (TPH-mo). Therefore, the ESLs used in this SMP for soil were: chromium – 58 milligrams per kilogram (mg/kg); TPH-d – 100 mg/kg; and TPH-mo – 500 mg/kg. These ESLs apply to residential land-use scenarios for surface soils (soil shallower than approximately ten feet) in areas where shallow groundwater is considered a potential source of drinking water. The ESLs used for groundwater were: TPH-d – 100 micrograms per liter (ug/L); and TPH-mo – 100 ug/L.

5.2 Evaluation of Excavated On-Site Soils

For soil to be excavated and disposed off site during redevelopment, soil analytical results will be compared with hazardous waste criteria in Title 22, Section 66261.20 through 66261.24 of the California Code of Regulations (22CCR66261.20-66261.24). No regulatory standards for characterizing the toxicity of TPH have been promulgated with respect to waste classification. However, if TPH concentrations in soil are greater than 1,000 mg/kg, waste disposal facilities may require the soil to be tested for the characteristics of ignitability or aquatic toxicity to determine if the soil is a hazardous waste.

6.0 SITE INVESTIGATIONS, LOCALIZED EXCAVATIONS, AND INITIAL SOIL PROFILING

Soil characterization and management activities conducted at the former Corporation Yard in support of this development have included collecting and analyzing soil from the surface, in borings, and in test pits; and collecting and analyzing grab groundwater samples from borings. This section summarizes these activities and discusses the results of soil and groundwater analysis.

Since May, 2001, Treadwell & Rollo has performed several stages of environmental investigations to evaluate residual chemicals in shallow subsurface soil and groundwater. These investigations have included a total of 9 soil borings and 20 test trenches. The boring and trench

sample locations are shown in Figure 2. Chemical data collected during these investigations are presented in Tables 1 through 3. These data have been previously reported in the June 2004 Treadwell & Rollo Phase II ESA report (Treadwell & Rollo, 2004).

6.1 Subsurface Conditions

The Site is generally underlain by about 5.5 to 10.5 feet of fill. The fill generally consists of dry to wet, medium stiff to hard clay with varying amounts of sand, gravel, construction debris, and some organic material. The fill is underlain by native clay, medium stiff to stiff, with varying amounts of sand and loose to medium dense clayey sand with gravel in discontinuous lenses. Depths to groundwater were measured in two of the test borings at approximately 9 to 9.5 feet below the ground surface (bgs).

6.2 Soil Sampling and Analysis

In January 2004, four soil borings were advanced to sample soil and groundwater for chemical analyses. The borings extended to depths ranging from 5 to 16 feet bgs. Eight soil samples and two groundwater samples were collected and analyzed from these borings. All eight soil samples were analyzed for TPH-d, TPH-mo, and metals; four samples were analyzed for the 17 California Assessment Manual (CAM 17) metals[1], and the remaining four samples tested for total lead. Two samples were analyzed for semivolatile organic compounds (SVOCs), PCBs, and organochlorine pesticides. The locations and analytical results for these samples are shown on Figure 2. Analytical results are also posted in Tables 1 and 2.

Petroleum hydrocarbons were detected in seven samples. Detected TPH-d concentrations ranged from 2 mg/kg in EB-1 at 0.5 feet bgs to 390 mg/kg in EB-3 at 3.5 feet bgs. Detected TPH-mo concentrations ranged from 1,100 in EB-3 at 1 feet bgs to 4,400 mg/kg in EB-4 at 4 feet bgs. TPH-d concentrations exceeded the ESL in two borings: EB-3 at 3.5 feet bgs (390 mg/kg); and

[1] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.

EB-4 at 4.0 feet bgs (350 mg/kg). TPH-mo also exceeded the ESL in these two borings: EB-3 at 3.5 feet bgs (3,800 mg/kg); and EB-4 at 1.0 feet bgs (1,100 mg/kg) and 4.0 feet bgs (4,400 mg/kg).

Chromium was detected in the four samples tested, at concentrations ranging from 33 mg/kg to 59 mg/kg. In one sample (EB-4 at one foot bgs), chromium at 59 mg/kg exceeded the ESL of 58 mg/kg. Total lead (defined as the total of soluble and insoluble forms) was found in all eight soil samples. Total lead concentrations ranged from 5.7 mg/kg to 20 mg/kg. SVOCs, PCBs, and Organochlorine pesticides were not detected.

In addition, twenty test pits were excavated by Treadwell & Rollo in April 2004 (Figure 2). The test pits were 3.5 to 4.5 ft deep. A total of 44 soil samples were collected from the trenches and were tested for petroleum hydrocarbons. Analytical results for these samples are presented in Table 2. TPH-d and TPH-mo exceeded their respective ESLs in one test pit only: TP-4 at 4.5 feet bgs, with TPH-d at 160 mg/kg and TPH-mo at 1,700 mg/kg.

The analyses for TPH-d and TPH-mo were not performed using a silica-gel rinse preparation, a procedure that removes polar hydrocarbon molecules, which represent naturally occurring organic oils and fats. Therefore, the reported concentrations of TPH-d and TPH-mo in soil may be artificially high.

To address the localized areas (EB-3, EB-4, and TP-4) where chromium and/or TPH-d and TPH-mo were reported at concentrations greater than their respective ESLs, soil will be locally excavated to remove the impacted soil. Confirmation samples will be collected from the walls and floor of the excavations and tested for chromium and for TPH-d and TPH-mo (using the silica gel rinsate sample preparation procedure). The excavations will be extended until confirmation samples show that the remaining soil does not exceed the ESLs. Excavated soil will be disposed off site at an appropriately permitted landfill.

6.3 Groundwater Sampling and Analysis

Grab groundwater samples were collected from borings EB-2 and EB-3. Groundwater samples were analyzed for the Leaking Underground Fuel Tank 5 (LUFT 5) metals[2], TPH-d, TPH-mo, TPH quantified as gasoline (TPH-g), and volatile organic compounds (VOCs).

The groundwater analytical results are shown in Table 3. No TPH-g, TPH-mo, VOCs or metals were detected in the groundwater samples, with the exception of zinc. Zinc was detected at 0.018 and 0.024 ug/L, below the ESL of 81 ug/L.

In boring EB-2, TPH-d was detected at 86 ug/L. In EB-3, TPH-d was detected at 250 ug/L. The reported concentration of TPH-d in EB-3 exceeds the ESL of 100 ug/L, which was designated for residential site use where groundwater is a potential source of drinking water. This ESL is based on the pathway-specific ESL components for drinking-water toxicity (210 ug/L) and the ceiling value for odor and taste (100 ug/L). No vapor pathway value is indicated, because the components are primarily non-volatile. The pathway-specific ESL component for protection of aquatic habitats is 640 ug/L, which is greater than the TPH-d concentration detected at the Site. The proposed development, consisting of residential housing for senior citizens, will be supplied with water by the City of Pleasanton. Therefore, the pathway-specific ESLs for drinking water and ceiling values do not apply, and no action should be required regarding the reported TPH-d in groundwater.

7.0 SOIL MANAGEMENT PROCEDURES

The results of our environmental investigations and soil removal actions, and previous investigations by others, indicate that shallow soils in localized areas of the Site contained residual levels of chromium and/or TPH in soils that exceed the applicable ESLs. Such soils need to be managed appropriately during construction and subsequent development of the Site for residential and commercial use. The presence of these residual chemicals requires planning

[2] Cadmium, chromium, lead, nickel, and zinc.

and implementing specific soil management procedures to mitigate potential health and safety concerns as part of the Site development activities. The risk to workers during construction of the development is addressed by health and safety procedures described below in Section 7.4.

Soil management actions to be performed are limited to removal of contaminants from the three areas where chromium and/or petroleum hydrocarbons in soil are known to exceed the ESLs. The areas of planned removal are in the vicinity of borings EB-3 and EB-4, and Test Pit 4.

7.1 Removal of Soil Containing Residual Chemicals

The soil management procedures to be implemented will include the following.

- To remove the residual chemicals, soil should be removed to a depth of five feet in an area extending five feet in each direction laterally from the location of each of the specified borings or test pit. The soil will be either removed from the site directly for off-site disposal or placed in stockpiles. Stockpiles must be placed on plastic tarpaulins and also covered with tarpaulins when not in active use (i.e., being added to or removed).
- If required by candidate disposal facilities, the stockpiles will be profiled for disposal by sampling at a frequency specified by the disposal facility. Profiling samples will be analyzed for petroleum hydrocarbons and other chemicals as required by the disposal facility. Any soil to be disposed off-site must be taken to an appropriately-licensed disposal facility.
- Confirmation samples will be collected from each of the four sidewalls and the bottom of each excavation to verify that the remedial goal has been met. If samples contain chromium, TPH-d, or TPH-mo at concentrations greater than their respective ESLs, additional excavation in the location of the residual chemical exceeding the ESL will be performed and confirmation sampling repeated. Additionally excavated soil will be stockpiled or removed directly from the Site as stated above. Additional excavation will be extended until confirmation samples indicate the analytical parameters are below the applicable ESL.

7.2 General Soil Management Procedures

The planned construction activities will disturb a portion of the underlying soil during demolition, excavation, and grading activities. Soil movement during construction will include excavation, grading, stockpiling, loading, and backfilling. The original and final locations of soils excavated and reused on site will be documented. This documentation, including all analytical test results, will be kept on record by the contractor and provided to the Site owner at completion. These test results must accompany and be part of the maintenance records for future Site use.

During construction activities, general soil management procedures will be used to prevent significant exposure to Site workers and the public. The procedures are designed to control exposure by dermal contact, ingestion and inhalation of dust particles. Procedures to control exposure by dermal contact and ingestion will be specified in a Site-specific health and safety plan (see Section 7.5). Soil management procedures will be observed by a third party separate from the contractor for documentation that procedures are accurately followed.

To control exposure by dust inhalation, dust control measures must be implemented to reduce exposure both on and off site. These measures are typically performed by the excavation contractor and may include moisture-conditioning the soil, using dust suppressants or by covering the exposed soil with plastic sheeting. These dust control measures will be performed throughout demolition, excavation and grading. The standard of monitoring will be to prevent visibly entrained dust.

7.3 Groundwater Management

Groundwater is not expected to be generated during Site construction. However, if it is, the groundwater will either be disposed of in the sanitary or stormwater sewer system under permit with the appropriate regulatory agency or recycled at a licensed and permitted facility.

7.4 Health and Safety Issues

There may be the potential for chemically-impacted soils to affect construction workers at the Site. The routes of potential exposure to chromium or petroleum hydrocarbons may be through three pathways: 1) dermal (skin) contact with the soil, 2) inhalation of dusts and/or vapors, and 3) ingestion of the soil. The most likely potential for human exposure to the contaminants will be during soil excavation and grading operations.

Because on-site materials may contain lead and other chemicals in excess of Proposition 65 guidelines, it is recommended that proper health and safety procedures, as well as warning requirements, be implemented during construction. The potential health risk to on-site construction workers and the public will be minimized by developing a comprehensive health and safety plan (HSP), prepared by a certified industrial hygienist who represents the Site contractors. The Site contractor will be responsible for establishing and maintaining proper health and safety procedures to minimize worker and public exposure to Site contaminants during construction.

The HSP will describe the health and safety training requirements, specific personal hygiene, and monitoring equipment that will be used during construction to protect and verify the health and safety of the construction workers and the general public from exposure to constituents in the soil.

A Site health and safety officer (HSO) should be on site at all times specified by the HSP, which may include during excavation activities, to ensure that all health and safety measures are maintained. The HSO will have authority to direct and stop (if necessary) all construction activities in order to ensure compliance with the HSP. The health and safety protocols used to minimize exposure to contaminants by construction workers during construction activities must be followed until all impacted soil is either removed or capped in accordance with this SMP.

REFERENCES

ATC Associates, Inc (ATC), 2001, *Draft Phase I Environmental Site Assessment, Vacant Lot, Corner of Sunol Boulevard and Junipero Street, Pleasanton, California*, 26 October 2001

Treadwell & Rollo, 2004, *Phase II Environmental Site Assessment, Pleasanton Assisted Living Facility, Junipero Street and Sunol Boulevard, Oakland, California*, 5 May 2004.

TABLES

Table 1
Metals in Soil
Pleasanton Assisted Living Facility
Pleasanton, California

Sample ID	Sample Date	Depth (feet bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
EB-1	1/20/2004	0.5	<2.0	3.3	140	<0.5	<0.5	39	8.8	19	11	0.067	<1.0	50	<2.0	<1.0	<1.0	23	41
EB-1	1/20/2004	4.0	--	--	--	--	--	--	--	--	7.9	--	--	--	--	--	--	--	--
EB-2	1/20/2004	1.0	<2.0	2.9	--	<0.5	<0.5	33	--	14	5.7	<0.05	--	40	<2.0	<1.0	<1.0	--	25
EB-2	1/20/2004	3.5	--	--	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--
EB-3	1/20/2004	1.0	<2.0	3.8	140	<0.5	<0.5	35	8.2	22	19	0.082	<1.0	45	<2.0	<1.0	<1.0	23	47
EB-3	1/20/2004	3.5	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--
EB-4	1/20/2004	1.0	<2.0	3.8	--	<0.5	<0.5	59	--	19	8.5	<0.05	--	38	<2.0	<1.0	<1.0	--	37
EB-4	1/20/2004	4.0	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--
ESL			6	6	750	4	17	58	40	230	150	3	40	150	10	20	1	110	600

Notes:
-- = Not analyzed
Results presented in milligrams per kilogram (mg/kg)
bgs = below ground surface
ND = not detected above laboratory report limit
EB-1 and EB-3 were analyzed for CAM 17 metals
EB-2 and EB-4 were analyzed for Priority Pollutants 13 metals
ESL = RWQCB Environmental Screening Level for shallow soils where groundwater is current or potential source of drinking water

Table 2
Organic Chemicals in Soil
Pleasanton Assisted Living Facility
Pleasanton, California

Sample ID	Sample Date	Depth (feet bgs)	TEPH		All SVOCs	All PCBs	Pesticides
			TEPH-diesel	TEPH-motor oil			
EB-1	1/20/2004	0.5	2	<50	--	--	--
EB-1	1/20/2004	4.0	3	<50	--	--	--
EB-2	1/20/2004	1.0	<1.0	<50	ND	ND	ND
EB-2	1/20/2004	3.5	4	<50	--	--	--
EB-3	1/20/2004	1.0	3	<50	--	--	--
EB-3	1/20/2004	3.5	**390**	**3,800**	--	--	--
EB-3	1/20/2004	7.0	<1.0	<50	--	--	--
EB-3	1/20/2004	10.5	<1.0	<50	--	--	--
EB-4	1/20/2004	1.0	39	**1,100**	ND	ND	ND
EB-4	1/20/2004	4.0	**350**	**4,400**	--	--	--
EB-4	1/20/2004	7.0	<1.0	<50	--	--	--
EB-4	1/20/2004	10.0	<1.0	<50	--	--	--
TP-1	4/22/2004	2.0	4	29	--	--	--
TP-1	4/22/2004	4.0	<1.0	<5.0	--	--	--
TP-2	4/22/2004	2.5	24	280	--	--	--
TP-2	4/22/2004	4.5	11	32	--	--	--
TP-3	4/22/2004	1.0	4	42	--	--	--
TP-3	4/22/2004	3.0	7	100	--	--	--
TP-4	4/22/2004	1.5	2	22	--	--	--
TP-4	4/22/2004	4.5	**160**	**1,700**	--	--	--
TP-5	4/22/2004	1.0	4	35	--	--	--
TP-5	4/22/2004	4.0	2	<5.0	--	--	--
TP-6	4/22/2004	2.0	<1.0	<5.0	--	--	--
TP-6	4/22/2004	3.5	6	25	--	--	--
TP-7	4/22/2004	1.0	1	5	--	--	--
TP-7	4/22/2004	3.5	21	210	--	--	--
TP-8	4/22/2004	1.0	7	34	--	--	--
TP-8	4/22/2004	4.5	<1.0	7	--	--	--
TP-9	4/22/2004	2.5	19	98	--	--	--
TP-9	4/22/2004	4.0	<1.0	10	--	--	--
TP-10	4/22/2004	1.0	<1.0	6	--	--	--
TP-10	4/22/2004	4.5	<1.0	6	--	--	--
TP-11	4/22/2004	3.0	<1.0	5	--	--	--
TP-11	4/22/2004	5.5	3	24	--	--	--
TP-12	4/22/2004	2.5	20	220	--	--	--
TP-12	4/22/2004	3.5	<1.0	<5.0	--	--	--
TP-13	4/22/2004	1.0	1	8	--	--	--

Table 2
Organic Chemicals in Soil
Pleasanton Assisted Living Facility
Pleasanton, California

Sample ID	Sample Date	Depth (feet bgs)	TEPH		All SVOCs	All PCBs	Pesticides
			TEPH-diesel	TEPH-motor oil			
TP-13	4/22/2004	4.5	<1.0	<5.0	--	--	--
TP-14	4/22/2004	2.0	<1.0	9	--	--	--
TP-14	4/22/2004	4.0	8	28	--	--	--
TP-15	4/22/2004	1.0	<1.0	<5.0	--	--	--
TP-15	4/22/2004	4.0	<1.0	<5.0	--	--	--
TP-16	4/22/2004	2.5	<1.0	7	--	--	--
TP-16	4/22/2004	4.0	<1.0	<5.0	--	--	--
TP-17	4/22/2004	2.0	<1.0	6	--	--	--
TP-17	4/22/2004	5.0	6	29	--	--	--
TP-18	4/22/2004	1.5	5	28	--	--	--
TP-18	4/22/2004	4.5	<1.0	<5.0	--	--	--
TP-19	4/22/2004	1.0	3	24	--	--	--
TP-19	4/22/2004	3.0	2	33	--	--	--
TP-20	4/22/2004	2.0	4	20	--	--	--
TP-20	4/22/2004	4.0	<1.0	<5.0	--	--	--
ESL			100	500	--	--	--

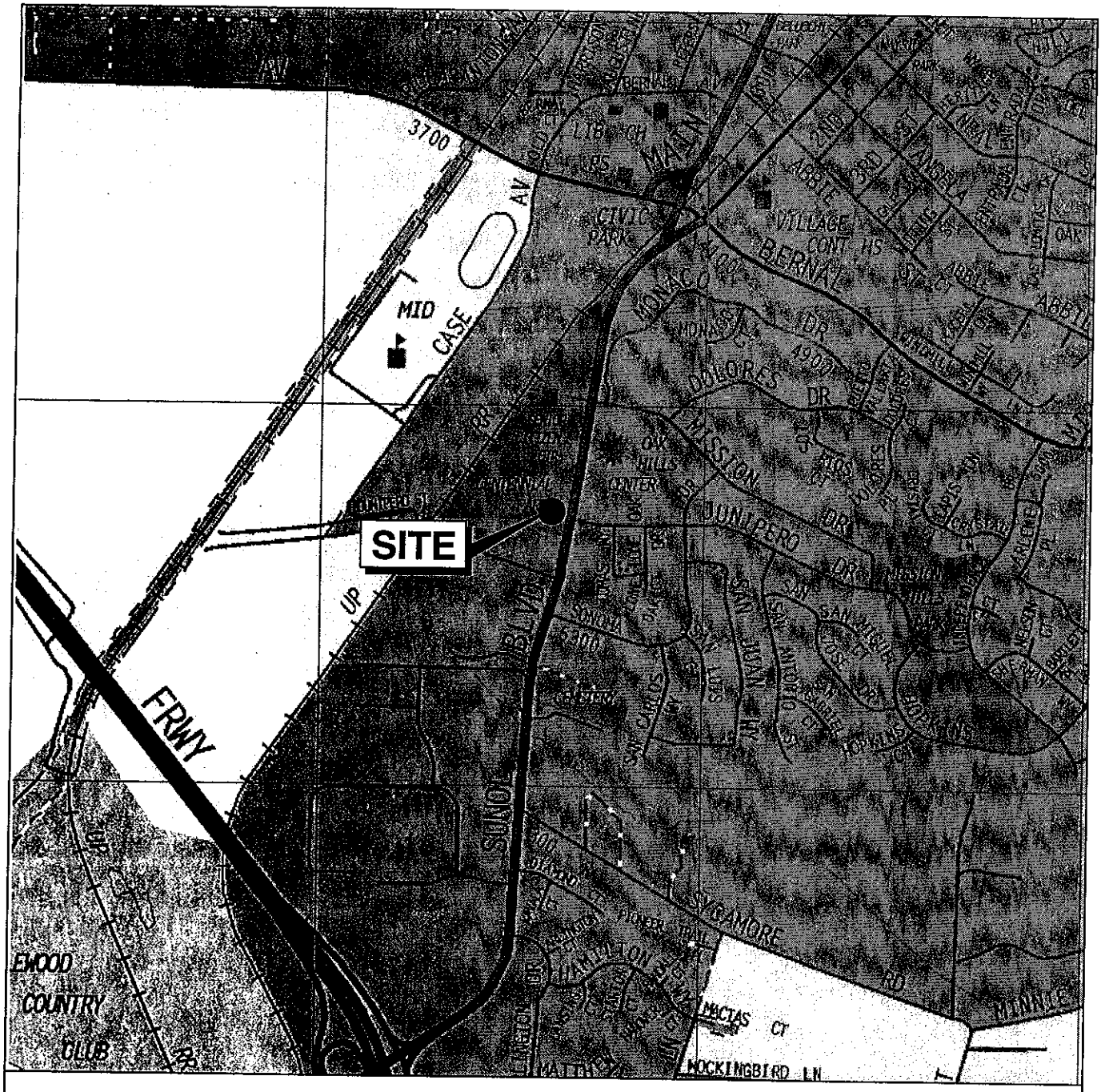
Notes:
-- = Not analyzed
Results presented in milligrams per kilogram (mg/kg)
ND = not detected above laboratory report limit
TEPH = total extractable petroleum hydrocarbons
SVOCs = semi-volative organic compounds
PCBs = polychlorinated biphenyls
ESL = RWQCB Environmental Screening Level for shallow soils where groundwater is current or potential source of drinking water
Bold = Reported concentration exceeding ESL

Table 3
Organic Chemicals and Metals in Groundwater
Pleasanton Assisted Living Facility
Pleasanton, California

Sample ID	Sample Date	TEPH			All VOCs	LUFT 5 Metals				
		TEPH-gasoline	TEPH-diesel	TEPH-motor oil		Cd	Cr	Pb	Ni	Zn
EB-2	1/20/2004	<0.05	86	<0.5	ND	<0.002	<0.005	<0.005	<0.005	0.018
EB-3	1/20/2004	<0.05	**250**	<0.5	ND	<0.002	<0.005	<0.005	<0.005	0.024
ESL		100	100	100	--	2.2	50	2.5	8.2	81

Notes:
Results presented in micrograms per liter (ug/L)
ND = not detected above laboratory reporting limits
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds
LUFT 5 Metals: Cadmium (Cd), Chromium (Cr), Lead (Pb), Nickel (Ni), Zinc (Zn)
ESL = RWQCB Environmental Screening Level for groundwater where groundwater is current or potential source of drinking v
Bold = Reported concentration exceeding ESL

FIGURES



Base map: The Thomas Guide
Contra Costa County
1999

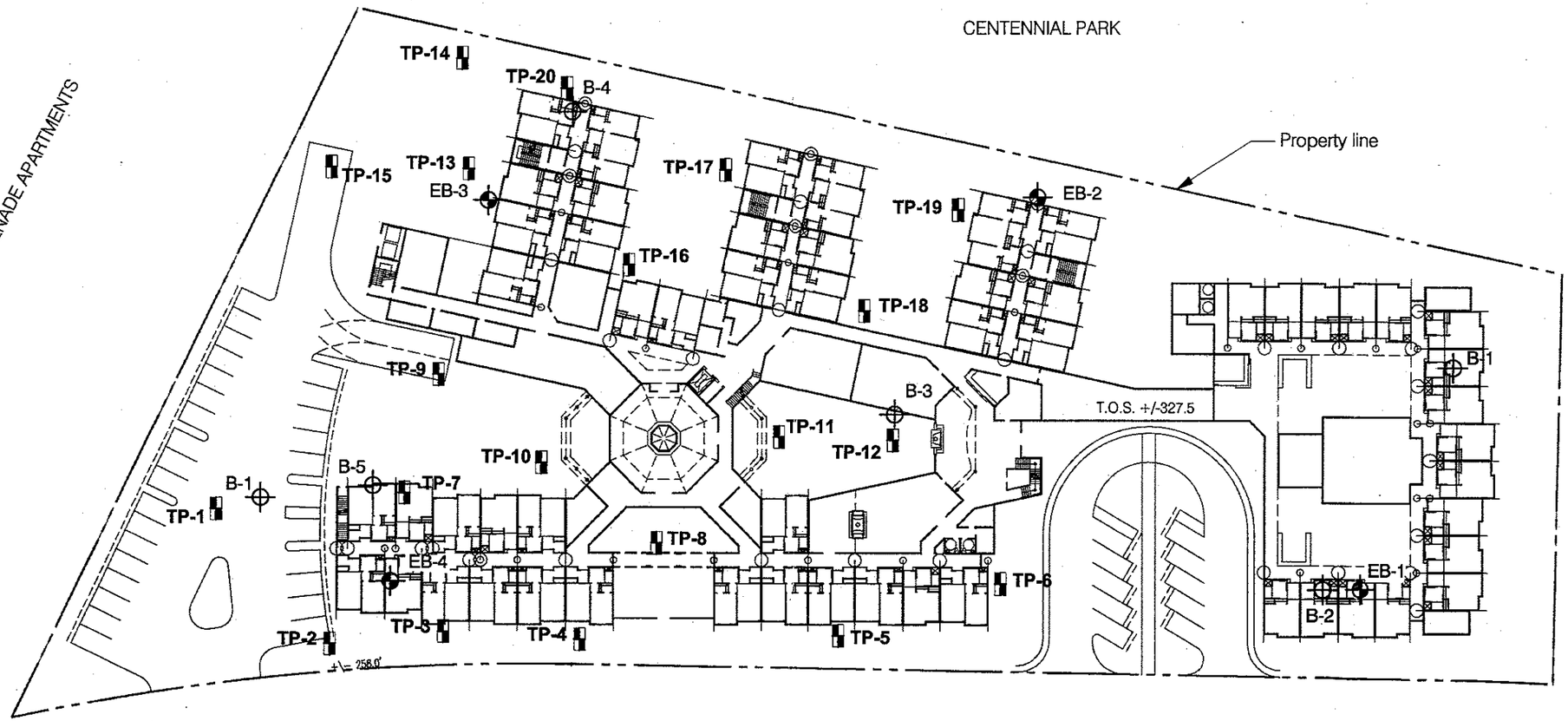
No scale

PLEASANTON ASSISTED LIVING FACILITY
Pleasanton, California

SITE LOCATION MAP

Treadwell&Rollo

Date 07/16/01	Project No. 3149.01	Figure 1



EXPLANATION

B-1 ⊕ Approximate location of test boring drilled by Treadwell & Rollo, Inc., on 23 May 2001

EB-1 ⊕ Approximate location of enviromnental soil borings drilled by Treadwell & Rollo, Inc., on January 2004

TP-1 Approximate location of test pits excavated by Treadwell & Rollo, Inc., on 22 April 2004

0 60 Feet

Approximate scale

Reference: Base drawing from The Steinberg Group titled Preliminary Site Plan dated 26 March 2001.

Site Plan.Dwg

PLEASANTON ASSISTED LIVING FACILITY
Pleasanton, California

SITE PLAN OF PROPOSED DEVELOPMENT

Date 08/03/05	Project No. 3149.01	Figure 2

Treadwell&Rollo

Treadwell&Rollo

APPENDIX A

Treadwell & Rollo, 2004, *Phase II Environmental Site Assessment, Pleasanton Assisted Living Facility, Junipero Street and Sunol Boulevard, Oakland, California*, 21 June 2004