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August 3, 2006

Mr. Barney Chan  
Alameda County Health Care Services  
Environmental Health Services  
1131 Harbour Bay Parkway, Suite 250  
Alameda, CA 94502-6577

RE: Soil Management Plan  
3701-3757 Broadway, Oakland, California  
SECOR PN: 05OT.50238.00

Dear Mr. Chan:

SECOR International Incorporated (SECOR), on behalf of Kaiser Foundation Health Plan, Inc. (Kaiser Permanente), is pleased to present the enclosed *Soil Management Plan*. This document describes excavation and soil management practices proposed at the above-referenced site.

If you have any questions regarding the Report or the project in general, please contact Mr. David Grede with Kaiser Permanente at (510) 987-3143 or the undersigned at (925) 299-9300.

Sincerely,  
SECOR International Incorporated

Greg D. Hoehn  
Principal Geologist

Enclosure

cc: Tim Havel, Kaiser Permanente  
David Grede, Kaiser Permanente  
Jay Asercion, Kaiser Permanente  
Kim Kelley, Kaiser Permanente  
Mark Inglis, Chevron  
Laura Genin, Cambria  
Mark Herman, NBBJ  
Angeles Garcia, McCarthy

Alameda County  
AUG 07 2006  
Environmental Health



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**SOIL MANAGEMENT PLAN**

3701-3757 Broadway  
Oakland, California

August 3, 2006

SECOR PN: 05OT.50238.00

Prepared For:

Mr. Jay Asercion  
Kaiser Foundation Health Plan, Inc.  
1100 San Leandro Boulevard, Suite 200  
San Leandro, California 94577

Submitted By:

SECOR International Incorporated  
57 Lafayette Circle, 2<sup>nd</sup> Floor  
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Alameda County  
AUG 07 2006  
Environmental Health

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Note: Tables and Figures appear at end of report.

# SECOR

The material and data in this report were prepared under the supervision and direction of the undersigned. This report was prepared consistent with current and generally accepted geologic and environmental consulting principles and practices that are within the limitations provided herein.

Prepared for:

Mr. Jay Asercion  
Kaiser Foundation Health Plan, Inc.  
1100 San Leandro Boulevard, Suite 200  
San Leandro, California 94577

Submitted by:

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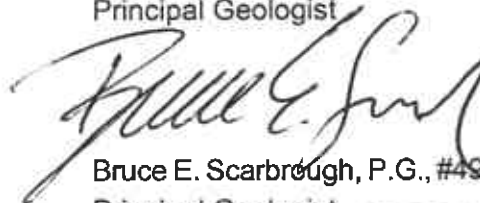


Neil H. Doran  
Associate Geologist

Reviewed by:



Greg D. Hoehn  
Principal Geologist



Bruce E. Scarbrough, P.G., #4931  
Principal Geologist



## 1.0 INTRODUCTION

SECOR International Incorporated (SECOR) on behalf of Kaiser Foundation Health Plan, Inc. (Kaiser Permanente) has prepared this *Soil Management Plan* (SMP) for the Kaiser Permanente Medical Office Building (MOB) project located at 3701-3757 Broadway Avenue in Oakland, California (the Site). Kaiser Permanente plans to redevelop the Site, which is currently vacant. During redevelopment activities, soils excavated and removed from the Site will be managed under this SMP.

The purpose of this SMP is to define areas of the Site which may require special handling and/or disposal considerations during excavation due to elevated concentrations of petroleum hydrocarbons and/or metals. General safe work practices regarding handling, excavating, transporting, and disposing of impacted soils are described in this document. SECOR recommends that a site-specific health and safety plan (HASP) be prepared prior to implementing this SMP. The HASP should describe potential chemical and physical hazards, methods for monitoring, chemical action levels, and response actions.

## 2.0 PROJECT SUMMARY

### 2.1 Site Description

The Site is located at 3701 through 3757 Broadway in Oakland, California (see Figure 1, Site Location Map), and consists of several commercial properties with frontage to Broadway. The Site is bounded to the southeast by Broadway; to the southwest by Macarthur Street; to the northwest by Western Creek, single-family residences, and Manila Street; and to the northeast by commercial/retail properties.

The property located at 3701 Broadway (corner of Broadway and Macarthur Street) was occupied by a gasoline service station from approximately 1924 to 1988 (herein referred to as the former Chevron property). The property located at 3735-3737 Broadway was formerly occupied by a car washing facility, which previously contained underground fuel storage tanks (USTs) and an aboveground sump used to contain rinsate from washing operations. This property, as well as the properties located at 3741 Broadway and 3751-3757 Broadway, were most recently occupied by Honda of Oakland and operated as a new car dealership and automotive repair facility. Historical documentation indicates that the properties at 3741 and 3751-3757 Broadway have been used as an automotive service facility since at least the 1920s. The Site and vicinity are illustrated on Figure 2.

### 2.2 Proposed Scope of Work

Kaiser Permanente's immediate development plans include demolition of the existing structures and construction of the MOB, which will include a basement level. The footprint of the building, illustrated on Figure 3, will be excavated to 15 feet below ground surface (bgs) as measured at the southern edge adjacent to Macarthur Boulevard. Because the ground slopes upward slightly towards the north across the Site, the excavation will extend slightly deeper relative to existing grade in the northern part of the Site. Excavated soils will be managed appropriately and/or off-hauled for disposal.

In the future, Kaiser Permanente intends to purchase the properties north of 3757 Broadway as far as 38<sup>th</sup> Street. Redevelopment of these parcels will consist of constructing an underground parking garage to service the MOB. This construction will be managed under a separate SMP (or as an amendment to this SMP) developed following Kaiser's purchase of the properties and subsequent environmental characterization.

### 2.3 Existing and Anticipated Site Conditions

The former Chevron service station located at 3701 Broadway is currently vacant with no structures, and is the site of recent and ongoing remediation by Chevron (see Section 2.6). The adjacent parcels to the north (3735-3737 Broadway, 3741 Broadway, and 3751-3757

Broadway) are occupied by three buildings which recently operated as an automotive dealership and related service and repair facilities. The parcel immediately north of the former Chevron site (3735-3737 Broadway) extends to the northwest to Manila Avenue and consists of a parking lot with an additional, underlying subgrade parking lot.

Prior to excavation, the existing buildings and related structures at 3735-3757 Broadway will be demolished and removed. Demolition will include removal of pavement and/or concrete and possibly removal of shallow base rock materials. SECOR anticipates using the subgrade lot northeast of 3735-3737 Broadway as a staging area, as necessary. Western Creek is located adjacent to the Site to the northwest and is in either a culvert or open channel as it flows along the property. Flow from the creek will be routed through a temporary culvert during demolition and excavation activities. Streambed protection work and permitting will be performed by others on behalf of Kaiser Permanente.

#### **2.4 Previous Environmental Characterization**

SECOR has performed two phases of subsurface environmental characterization at the Site. In January 2004, SECOR advanced 12 soil borings for collection of soil, soil vapor, and groundwater samples. Soil boring locations were based on findings of a Phase I Environmental Site Assessment (Phase I ESA) previously completed by SECOR.

The purpose of the 2004 investigation was to provide initial characterization of environmental conditions at the Site with special attention to areas of known or suspected chemical impact. These suspect areas included the former Chevron service station, fuel USTs previously operated at 3735-3737 Broadway, and a debris pile observed below a false floor along the western edge of 3741 Broadway (adjacent to Western Creek). Chemical results and SECOR's conclusions were presented in the *Phase II Environmental Site Assessment Report* dated February 10, 2004.

SECOR performed additional Site characterization in January 2006 by advancing 37 soil borings at locations across the Site. The purpose of the work was to provide additional characterization of Site soil conditions. The majority of soil borings were advanced at the former Chevron site, and additional soil borings were located at representative locations across the Site to provide chemical data from non-target areas (i.e., background conditions). The findings were reported in SECOR's *Soil Characterization Report* dated March 6, 2006.

SECOR compared soil and groundwater chemical data to Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB). ESLs are risk-based environmental screening levels intended to be protective of human health and the environment. SECOR compared Site data to ESLs protective of residential development.



The relevant findings of these investigations were:

- ❑ Soil deeper than 10 feet bgs across much of the former Chevron site is impacted by petroleum hydrocarbons at concentrations that exceed one or more residential soil ESLs with localized impacts exceeding ESLs as shallow as 2 feet bgs. Concentrations of metals are relatively uniform across the Chevron property with only scattered concentrations which exceed soil ESLs.
- ❑ Soils deeper than 10 feet near the former USTs at 3735-3737 Broadway contained minor concentrations of petroleum hydrocarbons, and groundwater in the vicinity of the former USTs is impacted by petroleum hydrocarbons at concentrations that exceed groundwater ESLs.
- ❑ Soils beneath the false floor forming the western boundary of 3741 Broadway are impacted by metals that exceed one or more residential soil ESLs. The impacts appear to be related to historical releases of debris through overlying floor drains and do not extend to depths greater than approximately 4 feet bgs.
- ❑ Shallow soils in the vicinity of SB-48, advanced within the building at 3751-3757 Broadway, are impacted by elevated concentrations of petroleum hydrocarbons. The impacts appear to be limited in vertical and lateral extent.

Soil boring locations from the two investigations are illustrated on Figure 2, and soil chemical data is summarized in Tables 1 and 2.

## 2.5 Areas Requiring Special Soil Handling

Based on work performed to date, SECOR has identified four areas which will require special handling and disposal of chemically-impacted soils. The four areas are illustrated on Figure 3.

- ❑ Soil Area 1 – Former Chevron service station. Previous investigations indicate the widespread presence of elevated concentrations of petroleum hydrocarbons at depths greater than 10 feet bgs and localized impacts at shallower depths. Because of the widespread nature of chemical impacts, the entire volume of soil to 15 feet bgs will be excavated and disposed of. This work will follow excavation performed by Chevron (see Section 2.6).
- ❑ Soil Area 2 – Former USTs at 3735-3737 Broadway. The former UST cavity and surrounding soils will be excavated to approximately 15 feet bgs.

- Soil Area 3 – Debris pile beneath the false floor along the western side of 3741 Broadway. Soils in this area will be excavated to approximately 5 feet bgs.
- Soil Area 4 – Chemical impacts observed at SB-48. Soils will be excavated to approximately 5 feet bgs.

## **2.6 Excavation Performed by Chevron**

Chevron has developed and submitted a SMP to remove impacted soils in the southern end of the former Chevron service station. The extent of Chevron's proposed excavation is illustrated on Figure 3.

### 3.0 SOIL HANDLING AND DISPOSAL

The following sections describe excavation, handling, transport, and disposal of impacted soil.

#### 3.1 Permitting

Kaiser Permanente's excavation contractor will acquire the necessary grading and/or encroachment permits from the City of Oakland.

#### 3.2 Shoring

Kaiser Permanente's excavation contractor will install shoring as necessary to complete the excavations described in Section 2.5.

#### 3.3 Excavation and Loading of Soil

Soils will be excavated and loaded directly onto trucks for off-site disposal. If stockpiling is necessary, soils will be placed on and underneath plastic sheeting. A loading zone will be designated out of the public right-of-way and trucks will be cleaned using shovels to minimize the spreading of impacted soils to the sidewalk and street.

#### 3.4 Management of Nuisance Odors and Dust

During excavation, SECOR will monitor excavation activities using a photoionization detector (PID). If volatile vapors are produced at such a level that they constitute a nuisance to nearby residents and workers, SECOR will direct the excavation contractor in mitigating the odors using an agent such as Simple Green over the excavation area. The excavation will proceed in such a manner that generation of dust will be minimized. If dust is observed originating from the excavation, a wetting agent will be applied.

#### 3.5 Transport and Disposal of Impacted Soils

Soils will be transported in accordance with City of Oakland truck route restrictions. Soils will be transported to an accepting Class II or Class III disposal facility.

#### 3.6 Confirmation Sampling

Confirmation soil samples will be collected following removal of impacted soils. The following sections detail the sampling frequency and analytical program for each area.

##### 3.6.1 Soil Area 1 – Former Chevron Site

Confirmation soil samples will be collected from the floor of the excavation on approximately 15-foot by 15-foot centers. Soil samples will be analyzed for the following constituents:

- Total petroleum hydrocarbons as gasoline (TPHg) by modified U.S. Environmental Protection Agency (USEPA) Method 8015M, and benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) by USEPA Method 8260B;
- TEPH as diesel and motor oil by USEPA Method 8015B with silica gel cleanup; and
- Five leaking underground fuel tank (LUFT) metals by USEPA Method 6010B.

**3.6.2 Soil Area 2 – Former USTs**

Two confirmation soil samples will be collected from the floor of the excavation, and confirmation soil samples will be collected every 5 feet below grade from each of the four sidewalls. Soil samples will be analyzed for the following constituents:

- TPHg by modified USEPA Method 8015M, and BTEX and MTBE by USEPA Method 8260B;
- TEPH as diesel and motor oil by USEPA Method 8015B with silica gel cleanup; and
- Five LUFT metals by USEPA Method 6010B.

**3.6.3 Soil Area 3 – Debris Pile and Underlying Soils**

Two confirmation soil samples will be collected from the floor of the excavation, and soil samples will be collected from two locations along each of the two sidewalls in the long dimension. One soil sample will be collected from each of the two sidewalls in the short dimension. Soil samples will be analyzed for the following constituents:

- TEPH as diesel and motor oil by USEPA Method 8015B with silica gel cleanup; and
- Five LUFT metals by USEPA Method 6010B.

**3.6.4 Soil Area 4 – SB-48 Location**

One confirmation soil sample will be collected from the floor of the excavation, and soil samples will be collected from each of the four sidewalls. Soil samples will be analyzed for the following constituents:

- TEPH as diesel and motor oil by USEPA Method 8015B with silica gel cleanup; and
- Five LUFT metals by USEPA Method 6010B.

### 3.7 Groundwater Management

Groundwater generated during Site excavation will be treated using activated carbon filtration. Groundwater will be collected into a holding tank (10,000- to 20,000-gallon capacity) and pumped through two 10,000-pound carbon vessels in series using a booster pump. The treated groundwater will be sampled to confirm adequate treatment and discharged to the sanitary sewer under permit. A schematic of the proposed groundwater treatment system is presented as Figure 4.

#### 4.0 LIMITATIONS

The conclusions and recommendations contained in this report/assessment are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location and are subject to the following inherent limitations:

1. The data and findings presented in this report are valid as of the dates when the investigations were performed. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
2. The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Work. The Scope of Work was defined by the request of the client, the time and budgetary constraints imposed by the client, and availability of access to the Site.
3. Because of the limitations stated above, the findings, observations, and conclusions expressed by SECOR in this report are not, and should not be, considered an opinion concerning the compliance of any past or present owner or operator of the Site with any federal, state or local law or regulation.
4. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, and conclusions, which are based solely upon Site conditions in existence at the time of investigation.
5. SECOR reports present professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable environmental laws and regulations, the report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of federal, state or local governmental agencies. Any use of the report constitutes acceptance of the limits of SECOR's liability. SECOR's liability extends only to its client and not to any other parties who may obtain the report. Issues raised by the report should be reviewed by appropriate legal counsel.

**TABLES**

Soil Management Plan  
3701-3757 Broadway Avenue  
Oakland, California  
SECOR PN: 05OT.50238.00  
August 3, 2006







Table 1  
 Soil Sample Analytical Results - Petroleum Hydrocarbons and Volatile Organic Compounds  
 Kaiser Permanente  
 3701 - 3757 Broadway  
 Oakland, California  
 Results in milligrams per kilogram (mg/kg)

Area of Investigation	Sample ID	Depth (ft)	Sample Date	EPA Method 8015M			Volatile Organic Compounds (EPA Method 8260B)																		
				TPHg	TPHd	TPHmc	Benzene	Toluene	Ethyl benzene	Xylenes	Acetone	sec-Butyl benzene	Isopropyl benzene	Napthalene	n-Propyl benzene	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	n-Butyl benzene	p-Isopropyl toluene	2-Butanone	Methylene Chloride	1,2-Dichloro ethane	tert-Butyl benzene	Freon 12	All Other VOCs
	SB49-5'	5	01/20/06	ND<1.1	ND<1.0	ND<5.0	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.019	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0093	ND<0.019	ND<0.0048	ND<0.0048	ND<0.0093	ND<0.0048-0.048
	SB49-11'	11	01/20/06	ND<1.0	1.4* H	11	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	0.063	ND<0.0050	ND<0.0050	ND<0.010	ND<0.0050-0.050
	SB50-5'	5	01/20/06	ND<1.1	ND<1.0	8.5 H	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.019	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0098	0.14	ND<0.0048	ND<0.0048	ND<0.0098	ND<0.0048-0.048
	SB50-14'	14	01/20/06	11	1.4* H	5.4	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.020	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0048	ND<0.0098	0.043	ND<0.0048	ND<0.0048	ND<0.0098	ND<0.0048-0.048
ESL	Residential (<3m)			100	100	500	0.044	2.9	3.3	2.3	0.5	NE	NE	0.48	NE	NE	NE	NE	NE	3.9	0.077	0.0048	NE	NE	NA
	Residential (>3m)			100	100	1000	0.044	2.9	3.3	2.3	0.5	NE	NE	0.48	NE	NE	NE	NE	NE	3.9	0.077	0.0048	NE	NE	NA
				gasolines	middle distillates	residual fuels																			

Notes:

- ESL = Environmental screening levels for subsurface soils-residential land use permitted, where groundwater is a current or potential source of drinking water (Interim Final - Feb. 2005, San Francisco Bay Area Regional Water Quality Control Board, Summary Tables A-1 and C-1)
- TPHg = Total petroleum hydrocarbons as gasoline
- TPHd = Total petroleum hydrocarbons as diesel
- TPHmc = Total petroleum hydrocarbons as motor oil
- NE = Not established
- NA = Not applicable
- ND = Not detected above specified reporting limit
- \* = Laboratory qualifier indicates that the hydrocarbon reported does not match the pattern of their diesel standard
- H = Heavier hydrocarbons contributed to the quantitation
- L = Lighter hydrocarbons contributed to the quantitation
- Z = Sample exhibits unknown single peak or peaks

Table 2  
**Soil Sample Analytical Results - Metals**  
**Kaiser Permanente**  
**3701 - 3757 Broadway**  
**Oakland, California**  
**Results in milligrams per kilogram (mg/kg)**

Area of Investigation	Sample ID	Depth (ft)	Sample Date	LUFT 5 Metals (EPA Method 6010B)				
				Cadmium	Chromium	Lead	Nickel	Zinc
3701 Broadway	SB1-15'	15	01/08/04	ND<0.50	34	2.8	44	38
	SB2-10'	10	01/08/04	ND<0.50	35	6.2	74	33
	SB3-5'	5	01/08/04	ND<0.50	28	4.9	37	26
	SB3-15'	15	01/08/04	ND<0.50	32	2.7	40	31
	SB13-10'	10	01/17/06	0.30	46	5.9	73	36
	SB13-15'	15	01/17/06	0.32	48	12	81	53
	SB13-18'	18	01/17/06	ND<0.21	37	6.7	48	40
	SB14-10'	10	01/19/06	0.50	35	14	96	40
	SB14-15'	15	01/19/06	0.45	49	2.5	55	49
	SB14-20.5'	21	01/19/06	0.46	37	3.9	50	56
	SB15-10'	10	01/18/06	0.65	66	6.6	180	45
	SB15-15'	15	01/18/06	ND<0.25	42	2.3	55	41
	SB15-18'	18	01/18/06	ND<0.26	33	3.9	42	37
	SB16-5'	5	01/18/06	ND<0.27	32	3.8	42	31
	SB16-10'	10	01/18/06	ND<0.26	43	2.6	57	36
	SB17-10'	10	01/18/06	0.27	55	4.1	61	45
	SB17-15'	15	01/18/06	0.42	43	15	79	51
	SB17-18.5'	18.5	01/18/06	0.71	37	22	63	44
	SB18-10'	10	01/18/06	0.23	39	11	61	41
	SB18-15'	15	01/18/06	0.31	52	6.1	69	48
	SB18-17.5'	17.5	01/18/06	0.31	45	4.4	58	49
	SB19-10'	10	01/18/06	0.31	52	7.8	73	51
	SB19-15'	15	01/18/06	0.26	47	3.7	54	49
	SB19-18'	18	01/18/06	0.34	40	14	86	47
	SB20-10'	10	01/18/06	0.42	57	8.4	110	49
	SB20-15'	15	01/18/06	0.33	43	9.9	71	43
SB20-18.5'	18.5	01/18/06	0.35	35	23	63	42	
SB21-9'	9	01/17/06	0.22	42	6.5	64	29	

**Table 2**  
**Soil Sample Analytical Results - Metals**  
**Kaiser Permanente**  
**3701 - 3757 Broadway**  
**Oakland, California**  
**Results in milligrams per kilogram (mg/kg)**

Area of Investigation	Sample ID	Depth (ft)	Sample Date	LUFT 5 Metals (EPA Method 6010B)				
				Cadmium	Chromium	Lead	Nickel	Zinc
3701 Broadway	SB21-15'	15	01/17/06	0.32	52	6.4	69	52
	SB21-20.5'	20.5	01/17/06	0.34	45	8.5	64	47
	SB22A-7'	7	01/17/06	ND<0.27	54	5.8	76	24
	SB22A-10'	10	01/17/06	0.23	59	18	62	44
	SB22A-20'	20	01/17/06	ND<0.18	28	1.7	29	26
	SB23-3'	3	01/17/06	ND<0.24	43	5.2	29	21
	SB23-10'	10	01/17/06	ND<0.25	12	7.4	49	34
	SB23-18'	18	01/17/06	0.37	38	3.6	66	48
	SB24-10'	10	01/19/06	0.19	41	5.6	61	23
	SB24-15'	15	01/19/06	0.27	47	4.2	54	49
	SB24-20'	20	01/19/06	0.34	31	7.3	48	38
	SB25-5'	5	01/17/06	ND<0.22	45	6.4	38	26
	SB25-9'	9	01/17/06	0.29	36	12	63	37
	SB25-18.5'	18.5	01/17/06	0.31	46	4.0	72	53
	SB26-5'	5	01/17/06	ND<0.23	52	6.0	34	26
	SB26-10'	10	01/17/06	ND<0.26	46	9.7	61	25
	SB26-20.5'	20.5	01/17/06	0.27	35	2.5	53	38
	SB27-10'	10	01/17/06	ND<0.26	49	7.4	86	31
	SB27-15'	15	01/17/06	0.38	62	4.4	70	59
	SB27-18.5'	18.5	01/17/06	0.36	40	3.9	53	44
	SB28-10'	10	01/17/06	0.26	46	9.9	59	43
	SB28-15'	15	01/17/06	0.28	68	3.0	54	48
	SB28-20'	20	01/17/06	ND<0.20	27	5.4	32	28
	SB29-10'	10	01/18/06	0.31	45	9.4	70	37
	SB29-17'	17	01/18/06	0.39	47	2.5	62	54
	SB29-21'	21	01/18/06	0.27	32	5.6	45	47
	SB30-10'	10	01/19/06	0.42	74	7.6	150	45
	SB30-15'	15	01/19/06	0.33	48	5.4	60	44

**Table 2**  
**Soil Sample Analytical Results - Metals**  
**Kaiser Permanente**  
**3701 - 3757 Broadway**  
**Oakland, California**  
**Results in milligrams per kilogram (mg/kg)**

Area of Investigation	Sample ID	Depth (ft)	Sample Date	LUFT 5 Metals (EPA Method 6010B)				
				Cadmium	Chromium	Lead	Nickel	Zinc
3701 Broadway	SB30-18'	18	01/19/06	0.22	32	3.1	41	36
	SB37-10'	10	01/19/06	0.23	45	7.9	89	39
	SB37-13'	13	01/19/06	0.25	37	9.0	66	39
	SB37-16'	16	01/19/06	0.34	47	5.1	60	46
	SB38-4.5'	4.5	01/19/06	2.2	29	1,300	35	330
	SB38-12'	12	01/19/06	ND<0.19	39	6.8	45	28
	SB38-17'	17	01/19/06	0.23	32	4.6	37	33
	SB39-10'	10	01/19/06	0.28	36	8.5	64	35
	SB39-14'	14	01/19/06	0.31	52	6.8	56	52
	SB39-18'	18	01/19/06	ND<0.27	37	2.6	44	42
	SB40-10'	10	01/19/06	0.24	39	7.4	66	34
	SB40-15'	15	01/19/06	0.38	39	6.0	57	52
	SB40-18.5'	18.5	01/19/06	0.34	34	3.9	39	35
	SB41-10'	10	01/19/06	0.37	45	2.2	64	30
	SB41-15'	15	01/19/06	0.47	52	2.3	58	54
	SB41-18'	18	01/19/06	0.31	28	2.1	35	33
	SB42-10'	10	01/18/06	0.30	52	3.8	68	41
	SB42-14'	14	01/18/06	0.34	45	8.8	69	55
	SB42-18'	18	01/18/06	0.27	44	6.4	72	46
	SB43-15'	15	01/19/06	0.69	51	5.8	73	56
3735-3737 Broadway	SB4-13'	13	01/08/04	ND<0.50	32	4.5	75	33
	SB5-10.5'	10.5	01/08/04	ND<0.50	41	3.2	57	40
	SB44-5'	5	01/20/06	0.33	44	8.3	51	34
	SB44-16'	16	01/20/06	0.40	51	2.1	48	46
	SB45-5'	5	01/20/06	0.46	45	11	77	57
	SB45-14'	14	01/20/06	0.40	69	4.7	51	38
	SB46-8'	8	01/20/06	0.28	43	9.2	61	29
	SB46-15'	15	01/20/06	ND<0.25	39	2.7	72	39

**Table 2**  
**Soil Sample Analytical Results - Metals**  
**Kaiser Permanente**  
**3701 - 3757 Broadway**  
**Oakland, California**  
**Results in milligrams per kilogram (mg/kg)**

Area of Investigation	Sample ID	Depth (ft)	Sample Date	LUFT 5 Metals (EPA Method 6010B)				
				Cadmium	Chromium	Lead	Nickel	Zinc
	SB47-2'	2	01/20/06	ND<0.20	44	35	61	38
3741 and 3751-3757 Broadway	SB7-19'	19	01/09/04	ND<0.50	44	5.2	65	26
	SB8-5'	5	01/09/04	ND<0.50	34	5.3	39	31
	SB9-5'	5	01/09/04	ND<0.50	52	4.6	70	30
	SB10-5'	5	01/09/04	ND<0.50	35	45	55	56
	SB11-1'	1	01/09/04	24	69	6,500	110	4,100
	SB12-1'	1	01/09/04	0.88	34	550	60	200
	SB31-2'	2	01/20/06	ND<0.24	23	90	26	57
	SB32-2'	2	01/20/06	9.8	42	910	48	2300
	SB33-4'	4	01/20/06	ND<0.23	25	27	23	37
	SB35-4'	4	01/20/06	ND<0.27	34	69	41	63
	SB36-4'	4	01/20/06	ND<0.22	32	21	34	38
	SB48-4'	4	01/20/06	ND<0.28	81	3.8	90	39
	SB48-10'	10	01/20/06	ND<0.19	40	4.6	51	22
	SB49-5'	5	01/20/06	0.33	41	5.9	50	37
	SB49-11'	11	01/20/06	ND<0.23	44	7.5	45	25
	SB50-5'	5	01/20/06	ND<0.18	39	7.4	61	31
	SB50-14'	14	01/20/06	ND<0.18	38	5.8	41	25
<b>ESL</b>			<b>Residential (&lt;3m)</b>	<b>1.7</b>	<b>58</b>	<b>150</b>	<b>150</b>	<b>600</b>
			<b>Residential (&gt;3m)</b>	<b>38</b>	<b>58</b>	<b>750</b>	<b>1,000</b>	<b>2,500</b>

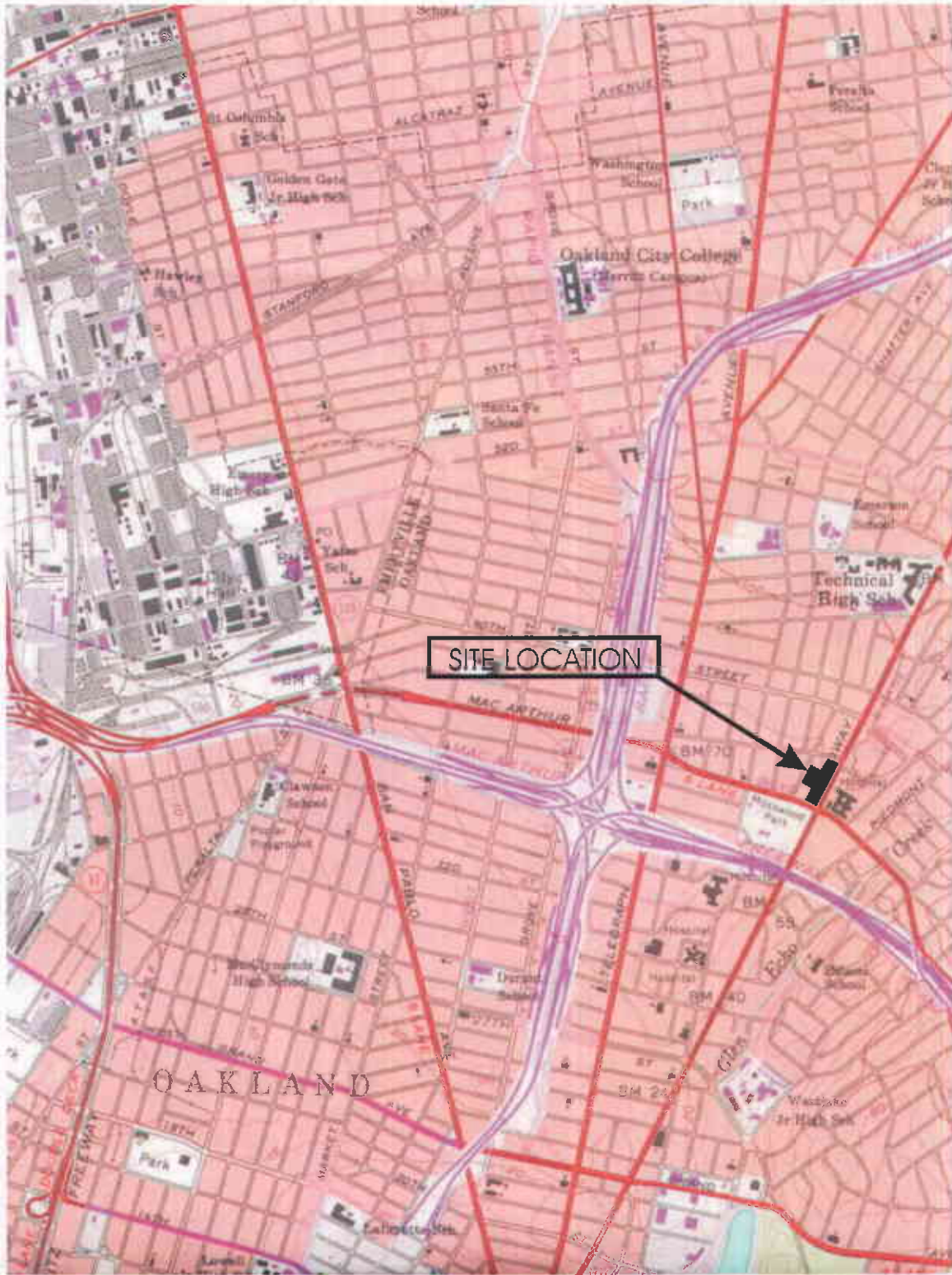
**Notes:**

ESL = Environmental screening levels for subsurface soils - residential land use permitted, where groundwater is a current or potential source of drinking water (Interim Final - Feb. 2005, San Francisco Bay Area Regional Water Quality Control Board, Summary Tables A-1 and C-1).

ND = Not detected above specified reporting limit

**FIGURES**

Soil Management Plan  
3701-3757 Broadway Avenue  
Oakland, California  
SECOR PN: 05OT.50238.00  
August 3, 2006



SOURCE: OAKLAND WEST QUADRANGLE  
 7.5 MINUTE SERIES (TOPOGRAPHIC)  
 CALIFORNIA - PHOTOREVISED 1980

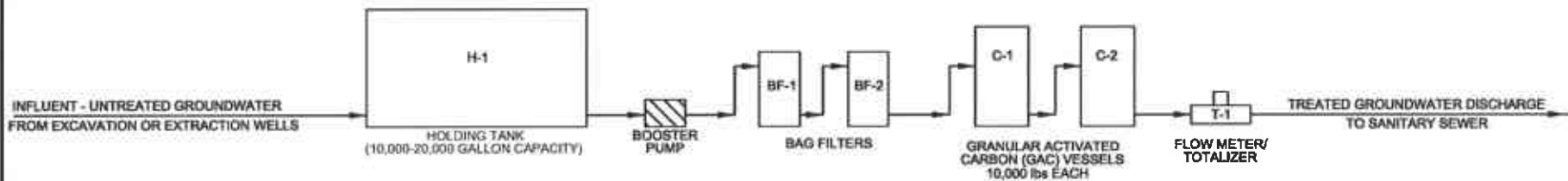


DRAWN	<b>RRR</b>
APPR	<b>GH</b>
DATE	<b>02 DEC 2005</b>
JOB NO.	<b>05OT.50238.00</b>

**FIGURE 1**  
 KAISER PERMANENTE  
 3701-3757 BROADWAY  
 OAKLAND, CALIFORNIA  
**SITE LOCATION MAP**




**LARGE  
MAP  
REMOVED**



NOT TO SCALE

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 <b>SECOR</b> 57 Lafayette Circle, 2nd Floor Lafayette, CA PHONE: (925) 299-9300 FAX: (925) 299-9302	FOR: <b>KAISER PERMANENTE</b> 3701-3757 BROADWAY OAKLAND, CA		<b>GROUNDWATER TREATMENT          SYSTEM SCHEMATIC</b>		FIGURE: <b>4</b>
	JOB NUMBER: D50T.50238.00.003	DRAWN BY: RRR	CHECKED BY: GH/ND	APPROVED BY: GH	DATE: 07/13/06