ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

October 22, 2013

Housing Authority of City of Alameda
701 Atlantic Avenue
Alameda, CA 94501-2161

Brian Saliman
Alameda Islander LP
2220 Oxford Street
Berkeley, CA 94704
(Sent via E-mail to bsaliman@rcdev.org)

Mr. Robert Stahl
Stahl Woodridge Construction
105 2nd Street, Oakland, CA 94607

Subject: Case Closure for SLIC Case No. RO0003075 and GeoTracker Global ID T10000003048, Alameda Islander Motel, 2428 Central Avenue, Alameda, CA 94601

Dear Responsible Parties:

This letter confirms the completion of site investigation and remedial actions for the soil and groundwater investigation at the above referenced site. We are also transmitting the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported releases at the subject site with the provision that the information provided to this agency was accurate and representative of existing conditions. The subject Spills, Leaks, Investigation, and Cleanup (SLIC) case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (http://geotracker.swrcb.ca.gov) and the Alameda County Environmental Health website (http://www.acgov.org/aceh/index.htm).

The use of a Covenant and Environmental Restriction on Property to restrict future excavation in areas of residual contamination and limit modifications to the first-floor parking garage was initially considered for this site. However, further evaluation under the State Water Resources Control Board Low-threat Closure Policy for petroleum sites indicates that the site meets the criteria for case closure without land use restrictions. Therefore, the case is closed without a Covenant and Environmental Restriction on property.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Total petroleum hydrocarbons as gasoline remain in soil beneath the site at concentrations up to 1,700 parts per million (ppm).
- Total petroleum hydrocarbons as motor oil remain in soil beneath the site at concentrations up to 50,000 parts per million (ppm).

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna Drogos, P.E.
Division Chief

Enclosure: Case Closure Summary

cc: Mark Trevor, Strategic Engineering & Science, 110 11th Street, 2nd Floor, Oakland, CA 94607
(*Sent via E-mail to mtrevor@sesinconline.net*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker, eFile

CASE CLOSURE SUMMARY
SPILLS, LEAKS, INVESTIGATION, AND CLEANUP PROGRAM

I. AGENCY INFORMATION

Date: August 6, 2013

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Senior Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Alameda Islander Hotel		
Site Facility Address: 2428 Central Avenue, Alameda, CA 94601		
RB Case No.: ---	Local Case No.: ---	LOP Case No.: RO0003075
URF Filing Date: ---	Geotracker ID: T10000003048	APN: 70-186-1

Responsible Parties	Addresses	Phone Numbers
Brian Saliman, Alameda Islander LP	2220 Oxford Street Berkeley, CA 94704	No phone number
Debbie Potter Housing Authority of City of Alameda	701 Atlantic Avenue Alameda, CA 94501-2161	No phone number
Robert Stahl Stahl Wooldridge Construction	105 2nd Street Oakland, CA 94607	No phone number

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
---	---	---	---	---
Piping			---	---

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Petroleum hydrocarbons were released during operation of a gasoline service station from 1947 until 1970. Hydraulic oil also leaked from an elevator at the northwestern corner of the building.		
Site characterization complete? Yes	Date Approved By Oversight Agency: -----	
Monitoring wells installed? No.	Number: 0	Proper screened interval? NA
Highest GW Depth Below Ground Surface: 4.38 fbgs	Lowest Depth: 9.80 fbgs	Flow Direction: Northwest to northeast.
Most Sensitive Current Use: Potential drinking water source		

Summary of Production Wells in Vicinity: A total of six water supply wells were identified within 2,000 feet of the site. One irrigation well is approximately 650 feet southeast of the site. Based on the distance from the site, cross gradient direction, and decreasing size of the plume over time, the well is not expected to be a receptor for the site. A second irrigation well is approximately 1,000 feet northwest of the site. Based on the distance from the site and the decreasing size of the plume over time, the well is not expected to be a receptor for the site. Four additional irrigation wells are located between 1,000 and 2,000 feet from the site. Based on the distance from the site, the four irrigation wells are not expected to be receptors for the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: The Oakland Tidal Canal is approximately 1,000 feet north of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): ---	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	----	----	----
Piping	----	----	----
Free Product	----	----	----
Soil	13 cubic yards	Excavated soil from the elevator shaft area was disposed off-site at the Vasco Road landfill in Livermore, CA	March 2012
Groundwater	----	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
(Please see Attachments 1 through 4 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	1,700	1,700	1,800	1,800
TPH (Diesel)	2,500	2,500	640	640
TPH (Motor Oil)	50,000	50,000	<184	<184
Benzene	0.60	0.60	2.1	2.1
Toluene	22	22	<1.1	<1.1
Ethylbenzene	23	23	7.9	7.9
Xylenes	30	30	0.56	0.56
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	----	----	----	----
MTBE	<0.01 (1)	<0.01 (1)	<1.1 (2)	<1.1 (2)
Other (8240/8270)	<0.01 (3)	<0.01 (3)	130 (4)	130 (4)

Notes:

(1) MTBE, TBA; DIPE, ETBE, TAME, EDB, and EDC <0.01 ppm.
(2) MTBE, TBA; DIPE, ETBE, TAME, EDB, and EDC <1.1 ppb.
(3) VOCs and PCBs were not detected at various reporting limits.
(4) Napthalene = 130 ppb; other VOCs were not detected at various reporting limits

Site History and Description of Corrective Actions:

The site consists of a residential multi-story building and two associated smaller structures located on the southeastern corner of the intersection of Central Avenue and Park Avenue in Alameda, California. Surrounding land use is mixed commercial and residential.

A gasoline service station operated at the site from 1922 until 1970. The service station was demolished and four underground storage tanks (USTs) and associated piping were removed in 1970. In 1973, a multi-story motel building, which is currently the main building on the site, was constructed above the area of the former dispensers and USTs. The multi-story building consists of an open air parking garage on the first floor with living spaces on the second, third, and fourth floors.

In June 1993, two exploratory soil borings were advanced in the vicinity of the former dispenser islands and UST pit. Three groundwater monitoring wells were installed on site in March 1994 and an additional three groundwater monitoring wells were installed off-site in August 1996. Groundwater monitoring was conducted from 1994 until 1998. Based on the results of these investigations and groundwater monitoring, the fuel leak case (ACEH case RO0000025) was closed on December 27, 2001. Due to the residual contamination on-site, the case was closed with a Site Management requirement to review the case if land use changes.

Based on planned renovation of the motel building and a change in land use from commercial to residential, this SLIC case (RO0003075) was opened in June 2011 to review the current site conditions and evaluate potential risks due to the proposed land use changes. In July 2011, eight soil borings (SB-1 through SB-8) were advanced at the site for the collection of soil and grab groundwater samples and six borings (SG-1 through SG-6) were advanced for the collection of soil gas samples. TPHg was detected in soil and groundwater at maximum concentrations of 180 ppm and 1,800 ppb, respectively. Benzene was not detected in the soil samples at concentrations above reporting limits and was detected in only 1 of 8 grab groundwater samples at a concentration of 2.1 ppb. TPHg and benzene were detected in the soil vapor samples at maximum concentrations up to 11,000 and 0.60 micrograms per cubic meter, respectively.

As part of building renovation, the concrete elevator shaft was broken up and removed in March 2012. Ten soil samples were collected at depths of 4.5 and 8 feet below ground surface (fbgs) to characterize the exposed soils. Analytical results from the soil samples indicated that heavy-chain petroleum hydrocarbons were present at a depth of 8 fbgs at concentrations up to 50,000 ppm. During removal of the elevator shaft plunger on March 16, 2012, several machined holes were observed in the shaft and grayish green liquid was observed leaking into the shaft hole. Visibly contaminated soils were excavated where feasible. However, additional excavation was limited by the proximity to the building to the north and east and the sidewalk and construction activities to the south and west. Approximately 13 cubic yards of soil was removed and disposed off-site.

To assess whether hydraulic fluid or similar heavy oil had impacted an area beyond the elevator shaft, two borings were advanced immediately downgradient (north) of the elevator shaft. TPHd and TPHmo were not detected at concentrations above reporting limits in seven groundwater samples collected at discrete depths from the two soil borings, indicating that residual contamination from the elevator shaft appears to be confined to within a few feet of the source.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, closure of this site appears to be consistent with the policies established by the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy which became effective on August 17, 2012.		
Site Management Requirements: This fuel leak case has been evaluated for closure consistent with the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). Based on this evaluation, no site management requirements appear to be necessary. However, petroleum hydrocarbons in the gasoline and diesel range remain in the area of the former USTs and dispensers and heavy-chain hydrocarbons remain in the area of the elevator shaft. Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.		
Should corrective action be reviewed if land use changes? No		
Was a deed restriction or deed notification filed? No		Date Recorded: ---
Monitoring Wells Decommissioned: ---	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

The site meets the general criteria for case closure under the LTCP.

The site meets the groundwater media-specific criteria in scenario 1 for closure under the LTCP based on the following:

1. The plume is less than 100 in length.
2. There is no free product.
3. The nearest water supply well and surface water body is greater than 250 feet from the plume boundary.

The site appears to meet scenario 4 of the numerical media-specific criteria in the LTCP for petroleum vapor intrusion to indoor air (with no bioattenuation zone) for the following reasons:

1. The concentration of benzene detected in soil vapor is less than 0.6 micrograms per cubic meter ($\mu g/m^3$) which is significantly less than the residential LTCP soil gas criteria of 85 $\mu g/m^3$ (with no bioattenuation zone).
2. The concentration of ethylbenzene in soil vapor is less than 23 micrograms per cubic meter ($\mu g/m^3$), which is significantly less than the residential LTCP soil gas criteria of 1,100 $\mu g/m^3$ (with no bioattenuation zone).
3. Napthalene was not an analyte in soil vapor samples. However, since the release at the site appeared to consist primarily of gasoline and benzene and ethylbenzene were not detected at concentrations above reporting limits in soil vapor, napthalene concentrations in soil vapor are not likely to exceed the media-specific criteria in the LTCP.
4. The maximum concentration of benzene in groundwater during the most recent groundwater monitoring event was 2.1 ppb.

The maximum concentrations of benzene, ethylbenzene, and napthalene detected in soil samples collected to date within the upper 10 feet are less than the media-specific criteria in Table 1 of the LTCP for direct contact and outdoor air exposure. Therefore, the site appears to meet the media-specific criteria for direct contact and outdoor air exposure under the LTCP.

Conclusion:

Alameda County Environmental Health staff believe that the site meets the conditions for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham, P.G.	Title: Senior Hazardous Materials Specialist
Signature: Jerry Wickham	Date: 8/7/13
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: Donna L. Drogos	Date: 08/07/13

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Notification Date: 7/9/13	

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: NA	Date of Well Decommissioning Report: NA	
All Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: NA		
ACEH Concurrence - Signature: Jerry Wickham		Date: 10/22/13

Attachments:

1. Vicinity Map and Aerial Photo (2 pp)
2. Site Plans (2 pp)
3. Sampling Location and Analytical Results Maps (3 pp)
4. Soil and Soil Vapor Analytical Data (3 pp)
5. Groundwater Analytical Data (3 pp)
6. Boring Logs (16 pp)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

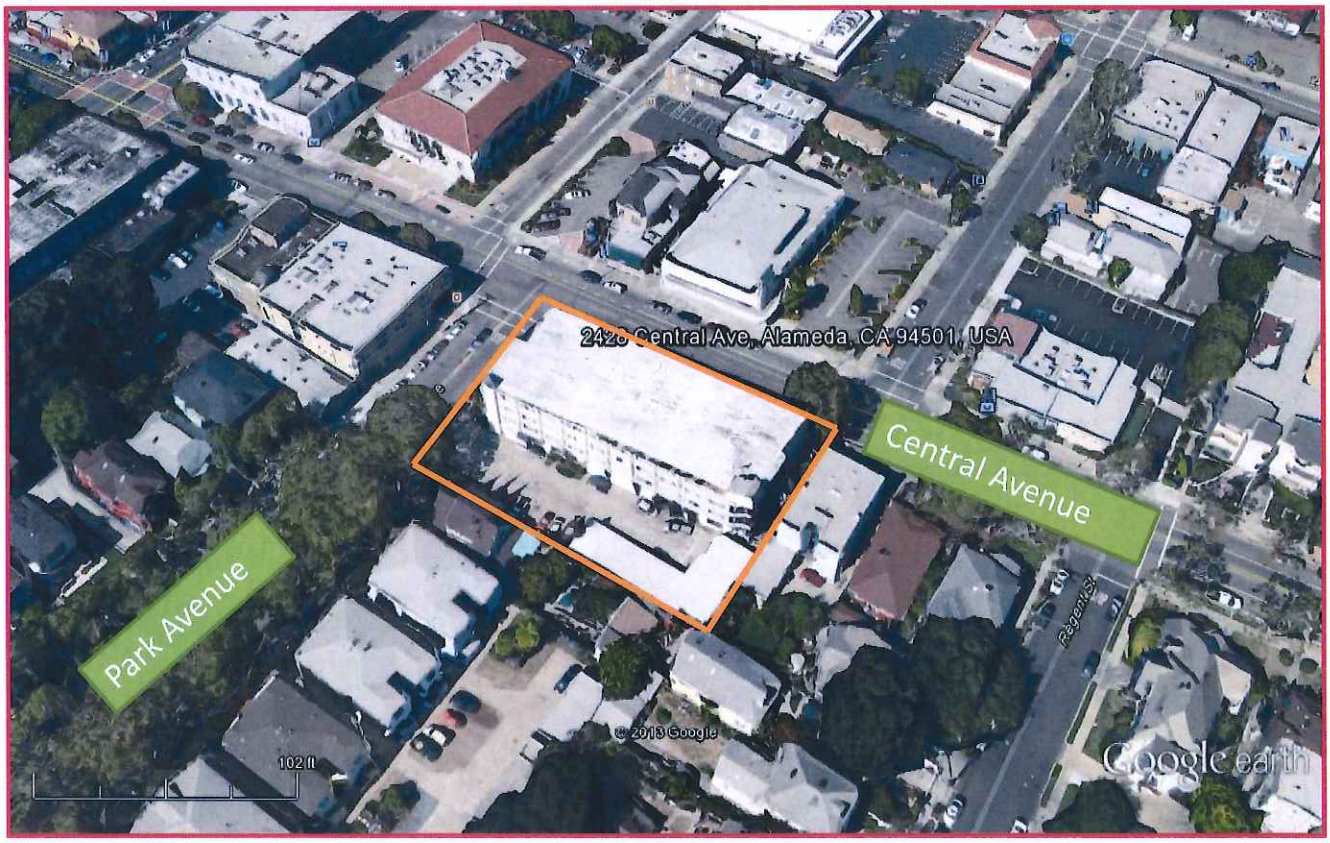
NOT TO SCALE

Vicinity Map
2428 Central Avenue
Alameda, California

Figure 1

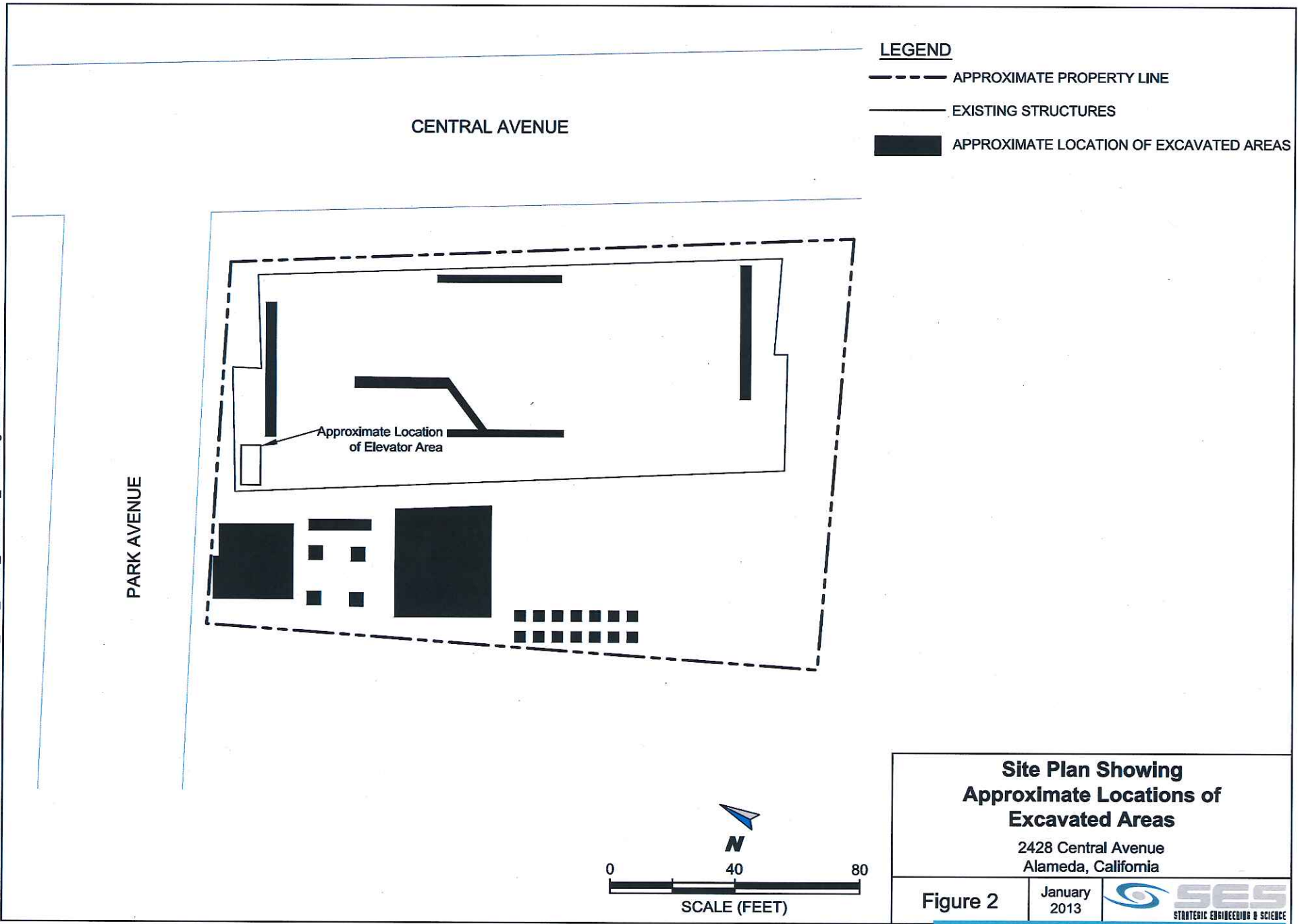
ATTACHMENT 1

P:\CAD\0208 City of Alameda\2428CentralAve\Fig1_Vicinity_Map.dwg



Aerial View Google Earth 2013

CASE RO0003075 ALEMDA ISLANDER HOTEL
2428 CENTRAL AVENUE, ALAMEDA, CA



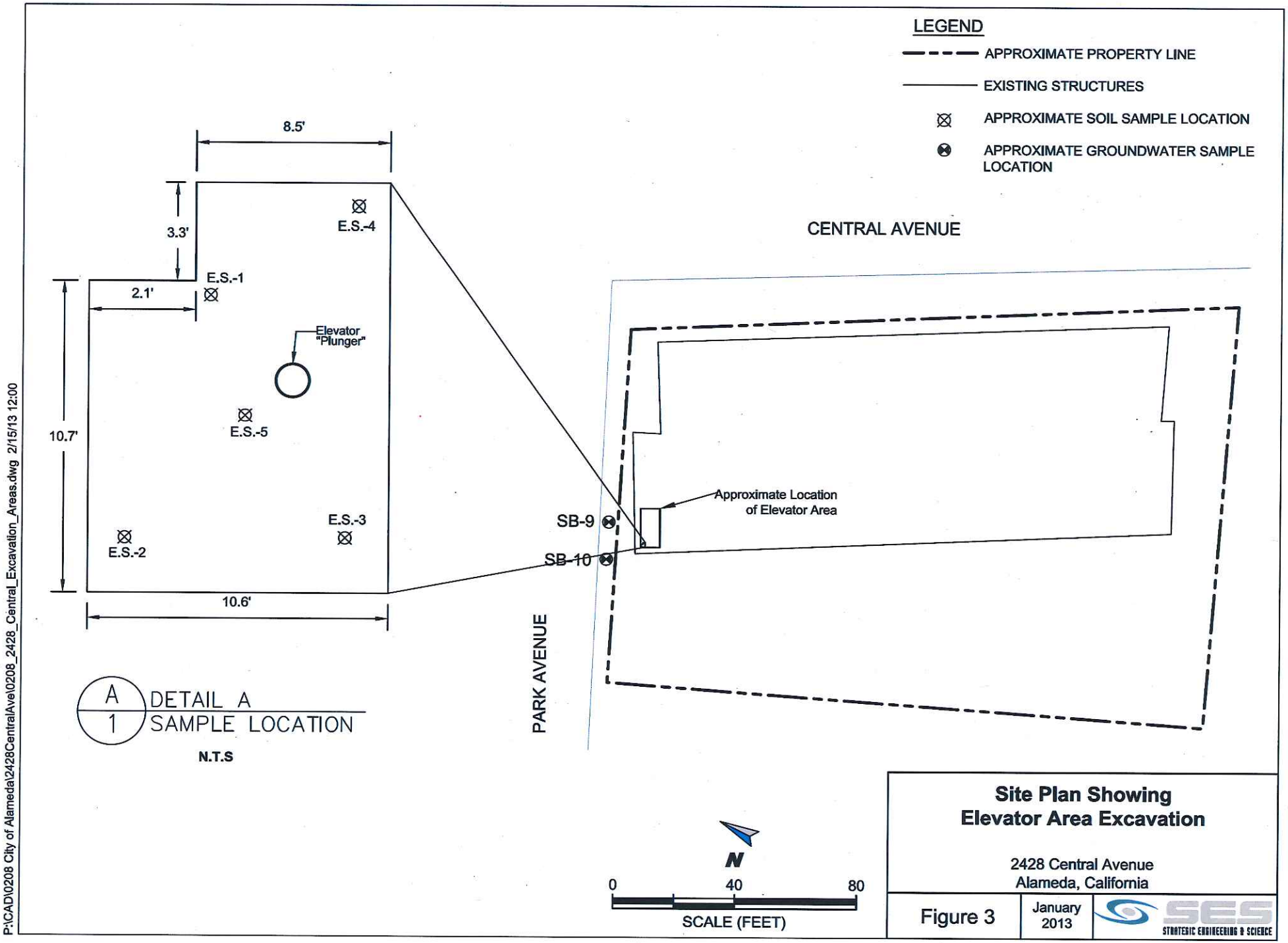
P:\CAD\0208 City of Alameda\2428CentralAve\0208_2428_Central_Excavation_Areas.dwg 2/15/13 12:00

Site Plan Showing Approximate Locations of Excavated Areas

2428 Central Avenue
Alameda, California

Figure 2 | January 2013 | SES STRATEGIC ENGINEERING & SCIENCE

ATTACHMENT 2

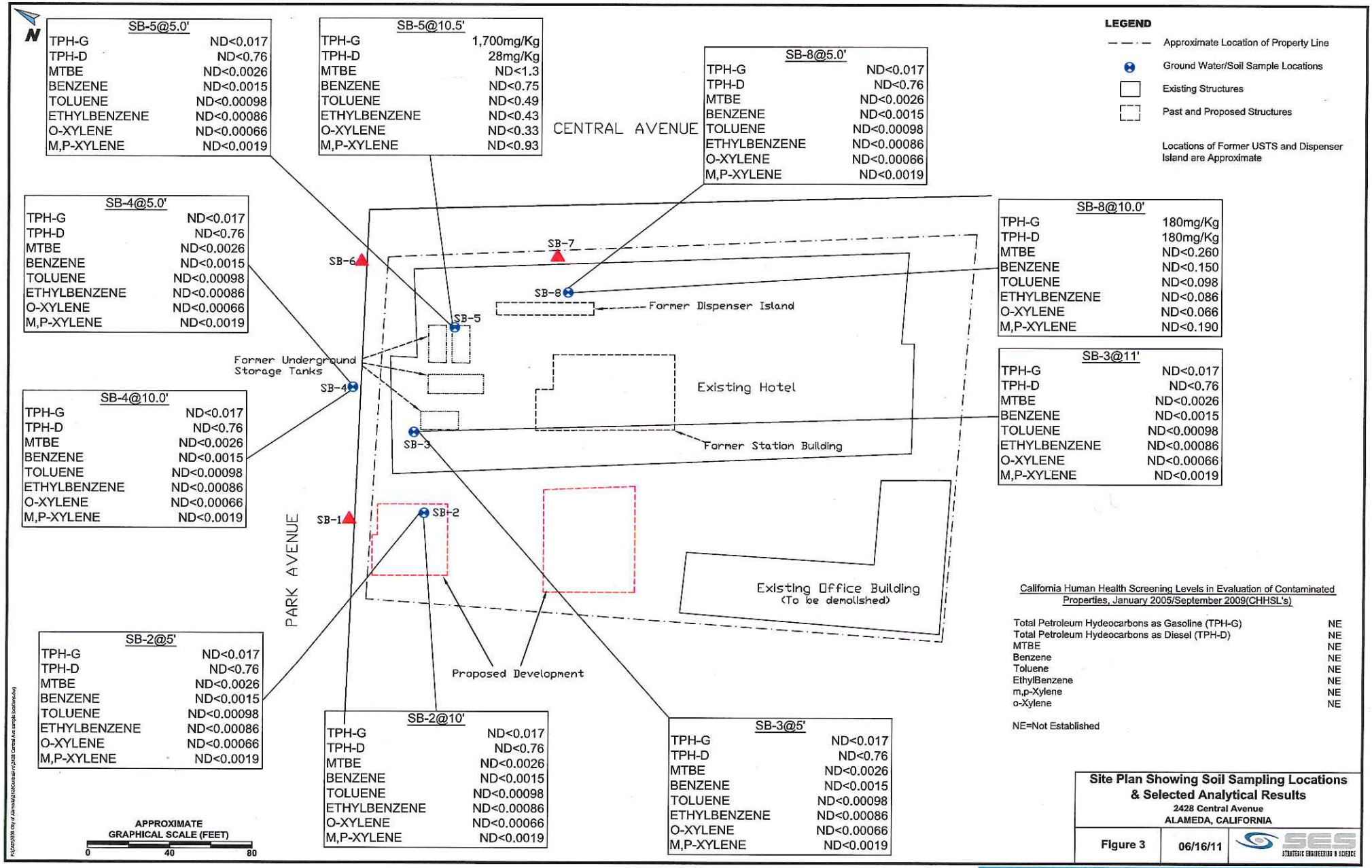


P:\CAD\0208 City of Alameda\2428CentralAve\0208_2428_Central_Excavation_Areas.dwg 2/15/13 12:00

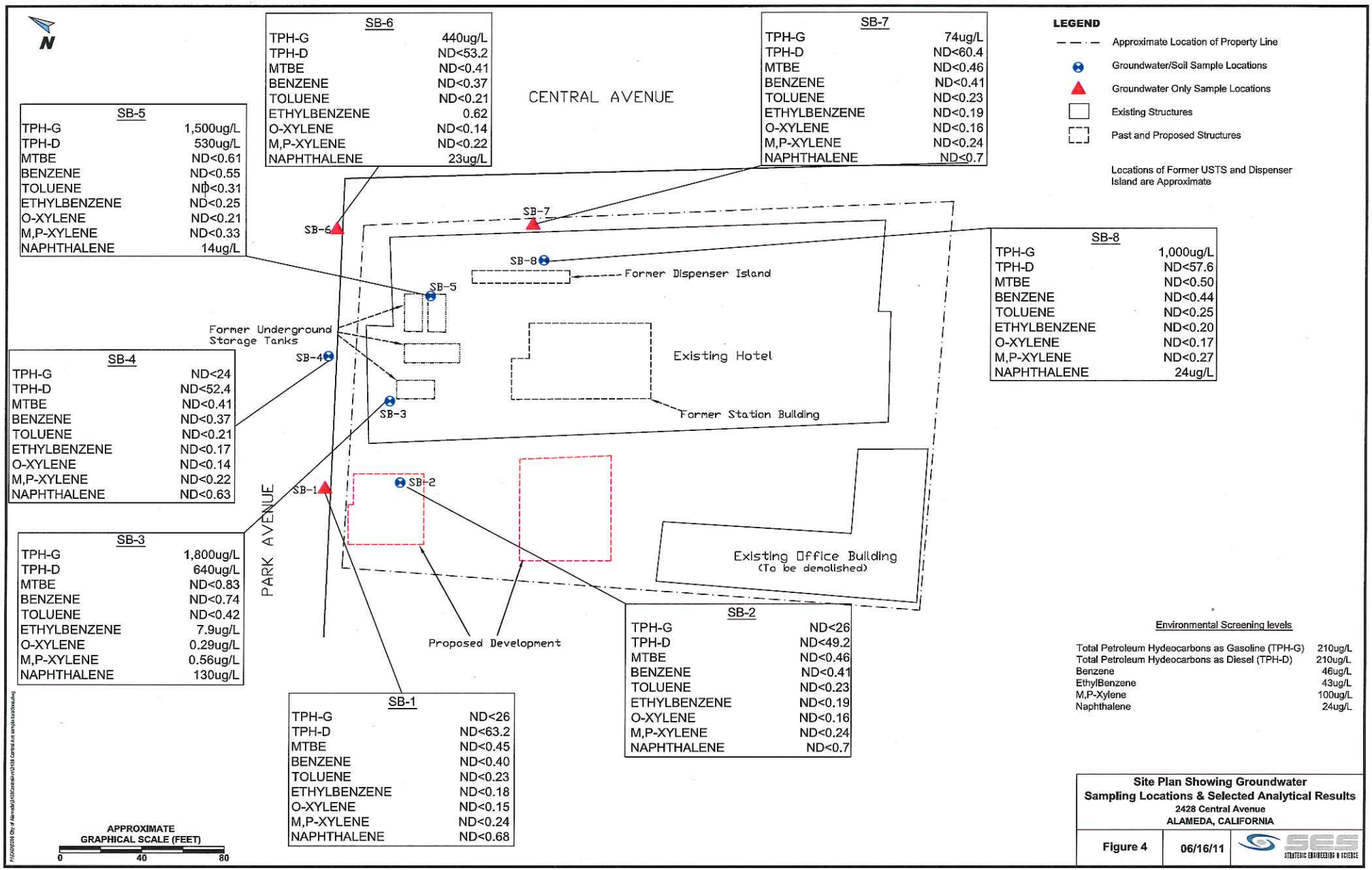
Site Plan Showing
Elevator Area Excavation

2428 Central Avenue
Alameda, California

Figure 3 | January 2013 | SES STRATEGIC ENGINEERING & SCIENCE

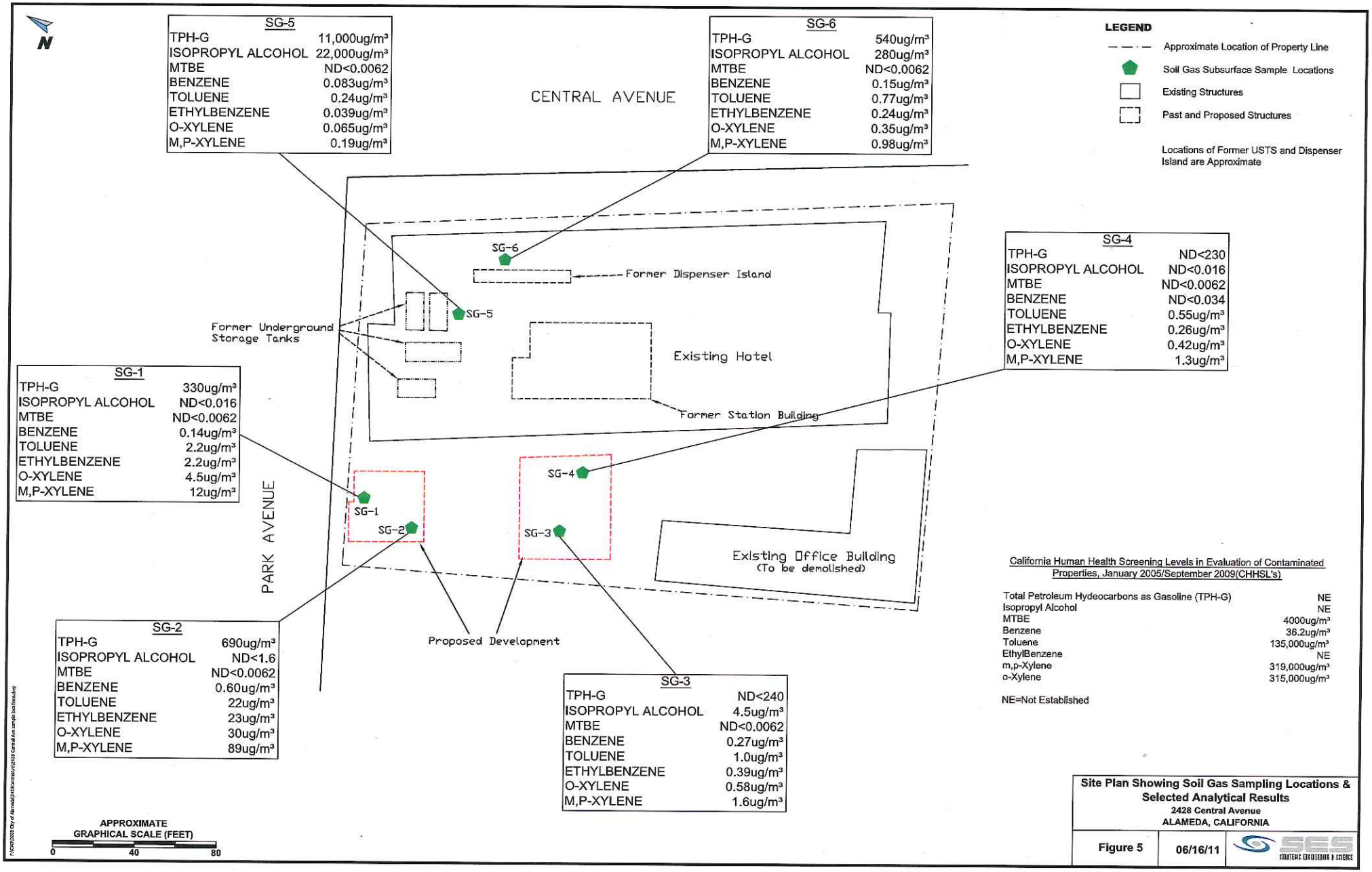


ATTACHMENT 3



Site Plan Showing Groundwater Sampling Locations & Selected Analytical Results
2428 Central Avenue
ALAMEDA, CALIFORNIA

Figure 4	06/16/11	SES STRATEGIC ENGINEERING & SCIENCE



California Human Health Screening Levels in Evaluation of Contaminated Properties, January 2005/September 2009(CHHSL's)

Total Petroleum Hydeocarbons as Gasoline (TPH-G)	NE
Isopropyl Alcohol	NE
MTBE	4000ug/m³
Benzene	36.2ug/m³
Toluene	135,000ug/m³
EthylBenzene	NE
m,p-Xylene	319,000ug/m³
o-Xylene	315,000ug/m³

NE=Not Established

Site Plan Showing Soil Gas Sampling Locations & Selected Analytical Results
2428 Central Avenue
ALAMEDA, CALIFORNIA

Figure 5	06/16/11	SES STRATEGIC ENVIRONMENTAL SCIENCE

Table 1
Summary of Soil Sample Analytical Results
2428 Central Avenue
Alameda, California

Sample Designation	Date	Sample Depth (fbg)	TPH-G (mg/kg)	TPH-D (mg/kg)	VOCs (mg/kg)	Isopropyl Benzene (mg/kg)	n-propylbenzene (mg/kg)
SB-2	07/07/11	5.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-2	07/07/11	10.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-3	07/06/11	5.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-3	07/06/11	11.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-4	07/08/11	5.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-4	07/08/11	10.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-5	07/06/11	5.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-5	07/06/11	10.5	1,700	28	ND	6.6	8.3
SB-8	07/07/11	5.0	ND<0.017	ND<0.76	ND	ND<0.0012	ND<0.0014
SB-8	07/07/11	10.0	180	180	ND	ND<0.12	ND<0.14
Residential CHHSLs			**NE**	**NE**	**NA**	**NE**	**NE**

Notes:

— = not analyzed
fbg = feet below grade
mg/kg = milligrams per kilogram
ND = not detected at or above laboratory detection limits
ug/kg = micrograms per kilogram
CHHSLs = California Human Health Screening Levels in Evaluation of Contaminated Properties, January 2005/September 2009
NE = not established
NA = not applicable
TPH-G = Total petroleum hydrocarbons as gasoline
TPH-D = Total petroleum hydrocarbons as diesel
VOCs = Volatile organic compounds

ATTACHMENT 4

Table 1
Summary of Elevator Shaft Soil Sample Analytical Results
2428 Central Avenue
Alameda, California

Sample Designation	Date	Sample Depth (fbg)	TPH-G (mg/kg)	TPH-D (mg/kg)	TPH-MO (mg/kg)	VOCs (mg/kg)	PCBs (mg/kg)
ES-1	03/06/12	8.0	0.14	690	4,900	ND	ND
ES-2	03/06/12	4.5	ND<0.30	ND<0.660	21	ND	ND
ES-2	03/06/12	8.0	0.10	2,500	15,000	ND	ND
ES-3	03/06/12	8.0	ND<0.30	680	4,800	ND	ND
ES-4	03/06/12	4.5	ND<0.30	410	4,500	ND	ND
ES-4	03/06/12	8.0	ND<0.30	1,600	50,000	ND	ND
ES-5	03/06/12	8.0	0.23	ND<667	45,000	ND	ND
Residential CHHSLs			**NE**	**NE**	**NE**	**NA**	**NA**

Notes:

— = not analyzed
fbg = feet below grade
mg/kg = milligrams per kilogram
ND = not detected at or above laboratory detection limits
CHHSLs = California Human Health Screening Levels in Evaluation of Contaminated Properties, January 2005/September 2009
NE = not established
NA = not applicable
TPH-G = Total petroleum hydrocarbons as gasoline
TPH-D = Total petroleum hydrocarbons as diesel
TPH-MO = Total petroleum hydrocarbons as motor oil
VOCs = Volatile organic compounds
PCBs = Polychlorinated biphenyls

Table 3
Summary of Soil Gas Analytical Results
2428 Central Avenue
Alameda, California

Sample Designation	Date	Dichloro difluoro methane (ug/m3)	Chloro methane (ug/m3)	Chloro ethane (ug/m3)	Trichloro monofluoro methane (ug/m3)	Methylene Chloride (ug/m3)	Freon 113 (ug/m3)	Chloroform (ug/m3)	1,2-Dichloro ethane (EDC) (ug/m3)	1,1,1-Trichloro ethane (ug/m3)	Trichloro ethylene (ug/m3)	Tetrachloro ethylene (ug/m3)	1,1,2,2-Tetrachloroe thane (ug/m3)	1,4-Dichloro benzene (ug/m3)	Toluene (ug/m3)	m,p-Xylene (ug/m3)	o-Xylene (ug/m3)	Benzene (ug/m3)	Ethyl benzene (ug/m3)	Isopropyl Alcohol (ug/m3)	TPH-G (ug/m3)
SG-1	07/08/11	0.42	ND<0.0088	ND<0.0021	0.174	ND<0.015	0.25	0.172	ND<0.0050	ND<0.0083	0.070	0.79	ND<0.0090	ND<0.0056	2.2	12	4.5	0.14	2.2	ND<0.016	330
SG-2	07/07/11	0.41	0.19	0.016	0.0560	ND<0.015	0.25	ND<0.0081	ND<0.0050	ND<0.0083	ND<0.011	1.3	0.00690	ND<0.0056	22	89	30	0.60	23	ND<1.6	690
SG-3	07/07/11	0.38	0.13	0.018	ND<0.012	0.091	0.20	ND<0.0081	ND<0.0050	0.0275	ND<0.011	7.1	ND<0.0023	ND<0.0056	1.0	1.6	0.58	0.27	0.39	4.5	ND<240
SG-4	07/08/11	0.36	ND<0.0088	ND<0.0021	ND<0.012	0.11	0.21	ND<0.0081	0.0205	0.330	0.22	52	ND<0.0023	0.078	0.55	1.3	0.42	ND<0.034	0.26	ND<0.016	ND<230
SG-5	07/07/11	0.31	0.038	ND<0.0021	ND<0.012	0.084	0.15	ND<0.0081	ND<0.0050	ND<0.0083	0.032	1.7	ND<0.0023	ND<0.0056	0.24	0.19	0.065	0.083	0.039	22,000	11,000
SG-6	07/07/11	0.35	0.15	0.013	0.0840	0.070	0.21	ND<0.0081	ND<0.0050	ND<0.0083	ND<0.011	1.6	ND<0.0023	ND<0.0056	0.77	0.98	0.35	0.15	0.24	280	540
Residential CHHSLs		**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**49.6**	**991,000**	**528**	**180**	**NE**	**NE**	**135,000**	**319,000**	**315,000**	**36.2**	**NE**	**NE**	**NE**

Notes:

—= not analyzed
ug/m3 = micrograms per cubic meter
ND = not detected at or above laboratory detection limits
CHHSLs = California Human Health Screening Levels in Evaluation of Contaminated Properties, January 2005/September 2009
NE = not established
NA = not applicable

Table 2A
Summary of Groundwater Analytical Results - VOCs
2428 Central Avenue
Alameda, California

Sample Designation	Date	Methylene Chloride (ug/L)	Benzene (ug/L)	Ethyl Benzene (ug/L)	1,1,1,2-Tetrachloroethane (ug/L)	m,p-Xylene (ug/L)	o-Xylene (ug/L)	Isopropyl Benzene (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	n-Propylbenzene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	4-Chlorotoluene (ug/L)	tert-Butylbenzene (ug/L)	1,2,4-Trimethylbenzene (ug/L)	p-Isopropyltoluene (ug/L)	n-Butylbenzene (ug/L)	Naphthalene (ug/L)	VOCs (ug/L)
SB-1	07/08/11	ND<0.21	ND<0.4	ND<0.18	ND<0.12	ND<0.24	ND<0.15	ND<0.34	ND<0.30	ND<0.35	ND<0.24	ND<0.39	ND<0.34	ND<0.39	ND<0.29	ND<0.38	ND<0.68	ND
SB-2	07/07/11	ND<0.21	ND<0.41	ND<0.19	ND<0.12	ND<0.24	ND<0.16	ND<0.34	ND<0.31	ND<0.36	ND<0.24	ND<0.4	ND<0.35	ND<0.4	ND<0.3	ND<0.39	ND<0.7	ND
SB-3	07/06/11	ND<0.39	ND<0.74	7.9	ND<0.22	0.56J	0.29J	40	0.59J	110	7.3	2.7	5.0	42	1.6	13	130	ND
SB-4	07/08/11	ND<0.19	ND<0.37	ND<0.17	ND<0.11	ND<0.22	ND<0.14	ND<0.31	ND<0.28	ND<0.33	ND<0.22	ND<0.36	ND<0.32	ND<0.36	ND<0.27	ND<0.35	ND<0.63	ND
SB-5	07/07/11	ND<0.29	2.1	ND<0.25	ND<0.16	ND<0.33	ND<0.21	56	ND<0.42	55	ND<0.33	ND<0.53	ND<0.47	ND<0.54	ND<0.40	2.5	14	ND
SB-6	07/08/11	ND<0.19	ND<0.37	0.62	ND<0.11	ND<0.22	ND<0.14	47	ND<0.28	32	ND<0.22	ND<0.36	0.67	ND<0.36	ND<0.27	1.5	23	ND
SB-7	07/08/11	0.25J	ND<0.41	ND<0.19	ND<0.12	ND<0.24	ND<0.16	1.8	1.0	1.4	ND<0.24	ND<0.4	ND<0.35	ND<0.4	ND<0.3	ND<0.39	ND<0.7	ND
SB-8	07/07/11	ND<0.23	ND<0.44	ND<0.20	ND<0.13	ND<0.27	ND<0.17	23	ND<0.34	26	ND<0.27	ND<0.43	ND<0.38	ND<0.44	2.8	4.2	24	ND
	ESLs	**2,200**	**46**	**43**	**930**	**100**	**100**	**NE**	**190**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**24**	**NA**

Notes:

— = not analyzed
ug/L = micrograms per Liter
ND = not detected at or above laboratory detection limits
VOCs = Volatile Organic Compounds
ESLs = Environmental Screening Levels -
Groundwater is not a current or potential drinking water resource
NE = not established
NA = not applicable
J = J flag indicates an estimated value between the Reporting Limit and Method Detection Limiit

ATTACHMENT 5

Table 2B

Summary of Groundwater Analytical Results - TPH

2428 Central Avenue

Alameda, California

Sample Designation	Date	TPH-G (ug/L)	TPH-D (ug/L)
SB-1	07/08/11	ND<26	ND<63.2
SB-2	07/07/11	ND<26	ND<49.2
SB-3	07/06/11	**1,800**	**640**
SB-4	07/08/11	ND<24	ND<52.4
SB-5	07/07/11	**1,500**	**530**
SB-6	07/08/11	**440**	ND<53.2
SB-7	07/08/11	74	ND<60.4
SB-8	07/07/11	**1,000**	ND<57.6
	ESLs	**210**	**210**

Notes:

— = not analyzed
ug/L = micrograms per liter
ND = not detected at or above laboratory detection limits
TPH-G = Total Petroleum Hydrocarbons as gasoline
TPH-D = Total Petroleum Hydrocarbons as diesel
ESLs = Environmental Screening Levels - Groundwater is not a current or potential drinking water resource
NE = not established
NA = not applicable

Table 2

Summary of Additional Groundwater Investigation Analytical Results

2428 Central Avenue

Alameda, California

Sample Designation	Date	TPH-D (mg/L)	TPH-MO (mg/L)
SB-09 @ 8-13'	09/18/12	ND<0.0476	ND<0.153
SB-09 @ 20-25'	09/18/12	ND<0.0359	ND<0.115
SB-09 @ 30-35'	09/18/12	ND<0.0408	ND<0.131
SB-10 @ 8-13'	09/18/12	ND<0.0574	ND<0.184
SB-10 @ 20-25'	09/18/12	ND<0.0476	ND<0.153
SB-10 @ 30-35'	09/18/12	ND<0.0476	ND<0.153
SB-10 @ 36-41'	09/18/12	ND<0.0359	ND<0.115

Notes:

mg/L = milligrams per liter

ND = not detected at or above laboratory detection limits

TPH-D = Total petroleum hydrocarbons as diesel

TPH-HO = Total petroleum hydrocarbons as hydraulic oil

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SG-1

Project Number 203 Date Drilled 07 / 07 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water N/A

Drill Rig Model Hand Auger Driller Clayton

Drilling Method Hand Auger Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
12:48					0					CONCRETE
								SP		SAND (SP) YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
					5					T.D. 5 FBG
										POLY TUBE 4.5 FBG TO SURFACE
										SAND 5 TO 1.5 FBG
										BENTONITE 1.5 TO 0.5 FBG
					10					
					15					
					20					

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

ATTACHMENT 6

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SG-2

Project Number 203 Date Drilled 07 / 07 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water N/A

Drill Rig Model Hand Auger Driller Clayton

Drilling Method Hand Auger Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
13:30					0					CONCRETE
								SP		SAND (SP) YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
					5					T.D. 5 FBG
										POLY TUBE 4.5 FBG TO SURFACE
										SAND 5 TO 1.5 FBG
										BENTONITE 1.5 TO 0.5 FBG
					10					
					15					
					20					

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SG-3

Project Number 203 Date Drilled 07 / 07 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water N/A

Drill Rig Model Hand Auger Driller Clayton

Drilling Method Hand Auger Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
11:00					0					CONCRETE
										SAND (SP) YELLOWISH BROWN
								SP		90% F-M SAND 10% FINES; DAMP
					5					T.D. 5 FBG
										POLY TUBE 4.5 FBG TO SURFACE
										SAND 5 TO 1.5 FBG
										BENTONITE 1.5 TO 0.5 FBG
					10					
					15					
					20					

P:\CAD\0206 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SG-4

Project Number 203 Date Drilled 07 / 07 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water N/A

Drill Rig Model Hand Auger Driller Clayton

Drilling Method Hand Auger Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
11:45					0					CONCRETE
										SAND (SP) YELLOWISH BROWN
								SP		90% F-M SAND 10% FINES; DAMP
					5					T.D. 5 FBG
										POLY TUBE 4.5 FBG TO SURFACE
										SAND 5 TO 1.5 FBG
										BENTONITE 1.5 TO 0.5 FBG
					10					
					15					
					20					

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SG-5

Project Number 203 Date Drilled 07 / 07 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water N/A

Drill Rig Model Hand Auger Driller Clayton

Drilling Method Hand Auger Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
14:10					0					CONCRETE
								SP		SAND (SP) YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
					5					T.D. 5 FBG
										POLY TUBE 4.5 FBG TO SURFACE
										SAND 5 TO 1.5 FBG
										BENTONITE 1.5 TO 0.5 FBG
					10					
					15					
					20					

P:\CAD\0226 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SG-6

Project Number 203 Date Drilled 07 / 07 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water N/A

Drill Rig Model Hand Auger Driller Clayton

Drilling Method Hand Auger Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
08:50					0					CONCRETE
								SP		SAND (SP) YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
					5					T.D. 5 FBG
										POLY TUBE 4.5 FBG TO SURFACE
										SAND 5 TO 1.5 FBG
										BENTONITE 1.5 TO 0.5 FBG
					10					
					15					
					20					

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-1

Project Number 203 Date Drilled 07 / 08 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 11'

Drill Rig Model Geoprobe 7730DT Driller Clayton

Drilling Method D.P. Hole Dia. 2"

Sampled By N/A Logged By MT Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
08:20					0					ASPHALT
								GM		FILL: GRAVEL AND SILTY SAND (BROWN)
			3/							
			5							
										SAND (SP): YELLOWISH BROWN
	3.4									90% F-M SAND 10% FINES; DAMP
								SP		
					5					
08:30			5/					ML		SANDY SILT (ML) DARK BROWN
			5							60% FINES 40% F-M SAND; DAMP
										SAND (SP): YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
	7.1									
								SP		
					10					COLOR CHANGE TO GRAY FROM 9.5 TO 10 FBG
08:40										
	8.5						▽			WET @ 11 FBG
			5/							
			5							
					15					
										TD = 15
										PVC SCREEN 10 - 15 FBG
										WATER SAMPLE @ 09:45
										PH: 7.70
										COND: 0.134
										DO: 5.77
										TEMP: 19.41 °C
					20					ORP: 60 mV

P:\CAD\0208 City of Alameda\2428Centralave\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-2

Project Number 203 Date Drilled 07 / 07 / 2011
Project Name Islander Motel
Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 10.5'
Drill Rig Model Geoprobe 7730DT Driller Clayton
Drilling Method D.P. Hole Dia. 2"
Sampled By N/A Logged By SK Reviewed By MT
Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
					0					CONCRETE
11:35										
			3/					SP		SAND (SP): YELLOWISH BROWN
			5							90% F-M SAND 10% FINES; DAMP
	5.5									
					5					
11:41	5.1			■						
			5/							
			5							
					10					COLOR CHANGE TO GRAY FROM 9.0 TO 10 FBG
11:50	11.1			■			▽			
										WET @ 10.5 FBG
			5/							
			5							
					15					
										TD = 15
										PVC SCREEN 10 - 15 FBG
										WATER SAMPLE @ 14:02
										PH: 7.97
										COND: 0.300
										DO: 7.06
										TEMP: 21.05 °C
					20					ORP: -21 mV

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-3

Project Number 203 Date Drilled 07 / 07 / 2011
Project Name Islander Motel
Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 12'
Drill Rig Model Geoprobe 7730DT Driller Clayton
Drilling Method D.P. Hole Dia. 2"
Sampled By N/A Logged By SK Reviewed By MT
Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
					0					CONCRETE
10:00								SP		
			3/							SAND (SP): YELLOWISH BROWN
	3.8		4							90% F-M SAND 10% FINES; DAMP
			1/							
10:12	2.1		2	■	5					
10:18			1/							
			2							
10:30			2/							
			2							
10:31	3.2			■	10					
10:47	5.1		5/	■						
			5				▽			WET @ 12 FBG
										COLOR CHANGE TO GRAY FROM 13.5 TO 15.5 FBG
										STRONG HYDROCARBON ODOR
										COLOR CHANGE TO BROWN FROM 15.5 TO TOTAL DEPTH
	1603									
					15					
13:01										TD = 20
			5/							PVC SCREEN 10 - 20 FBG
	3.0		5							
										WATER SAMPLE @14:43
										PH: 6.81
										COND: 0.839
										DO: 6.04
										TEMP: 19.98 °C
					20					ORP: -10 mV

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

Boring Log

Boring Number SB-4

SES STRATEGIC ENGINEERING & SCIENCE

Project Number 203 Date Drilled 07 / 08 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 11.5'

Drill Rig Model Geoprobe 7730DT Driller Clayton

Drilling Method D.P. Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
08:50					0					ASPHALT
								GM		FILL: GRAVEL AND SILTY SAND (BROWN)
	3.4		5/					SP		SAND (SP): YELLOWISH BROWN
			5							90% F-M SAND 10% FINES; DAMP
09:00	4.4			■	5					
			5/					ML		SANDY SILT (ML) DARK BROWN
			5					SP		60% FINES 40% F-M SAND; DAMP
										SAND (SP): YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
				■	10					COLOR CHANGE TO GRAY FROM 9.5 TO 10 FBG
09:06	6.2									
			5/				▽			WET @ 11.5 FBG
			5							
					15					
										TD = 15
										PVC SCREEN 10 - 15 FBG
										WATER SAMPLE @ 10:00
										PH: 7.65
										COND: 0.154
										DO: 5.59
										TEMP: 19.48 °C
					20					ORP: 49 mV

P:\CAD\0206 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-5

Project Number 203 Date Drilled 07 / 06 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 11'

Drill Rig Model Geoprobe 7730DT Driller Clayton

Drilling Method D.P. Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
13:49			1.5/		0					CONCRETE
			2							FILL: GRAVEL AND SILTY SAND (BROWN)
	2.5							SP		SAND (SP): YELLOWISH BROWN
			3/							90% F-M SAND 10% FINES; DAMP
			3							
13:51	3.1				5					
			5/					ML		SANDY SILT (ML) DARK BROWN
			5							60% FINES 40% F-M SAND; DAMP
										SAND (SP): YELLOWISH BROWN
								SP		90% F-M SAND 10% FINES; DAMP
14:05	2.2				10					
14:10	11.16						▽			
			5/							WET @ 11.0 FBG
			5							
										COLOR CHANGE TO GRAY FROM 11 TO 15.5 FBG
										COLOR CHANGE TO YELLOWISH FROM 15.5 TO TOTAL DEPTH
14:15	3.7				15					
										TD = 20
										PVC SCREEN 10 - 20 FBG
			5/							WATER SAMPLE @ 16:10 07-07-11
			5							
										PH: 6.99
										COND: 1.73
										DO: 4.42
										TEMP: 17.73 °C
					20					ORP: -84 mV

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-6

Project Number 203 Date Drilled 07 / 08 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 11'

Drill Rig Model Geoprobe 7730DT Driller Clayton

Drilling Method D.P. Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
09:21					0					ASPHALT
								GM		FILL: GRAVEL AND SILTY SAND (BROWN)
	2.2		3/							
			5							
								SP		SAND (SP): YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
					5					
09:35								ML		SANDY SILT (ML) DARK BROWN
			5/							60% FINES 40% F-M SAND; DAMP
	4.4		5							
								SP		SAND (SP): YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
					10					COLOR CHANGE TO GRAY FROM 10 TO 11.5 FBG
09:48							▽			WET @ 11.0 FBG
			4/							COLOR CHANGE TO YELLOWISH BROWN FROM 11.5
			5							TO TOTAL DEPTH
	6.2									
					15					
										TD = 15
										PVC SCREEN 10 - 15 FBG
										WATER SAMPLE @ 10:05
										PH: 7.44
										COND: 0.728
										DO: 8.00
										TEMP: 20.90 °C
					20					ORP: -54 mV

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-7

Project Number 203 Date Drilled 07 / 07 / 2011
Project Name Islander Motel
Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 11.5'
Drill Rig Model Geoprobe 7730DT Driller Clayton
Drilling Method D.P. Hole Dia. 2"
Sampled By N/A Logged By SK Reviewed By MT
Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
10:10					0					
			3/							
	7.1		5					SP		SAND (SP): YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
					5					
11:41										
	6.8		4/							
			5							
					10					COLOR CHANGE TO GRAY FROM 10.0 TO 12.0 FBG
10:31										
	7.7						▽			WET @ 11.5 FBG
			4/							
			5							COLOR CHANGE TO YELLOWISH BROWN FROM 12.0 TO TOTAL DEPTH
					15					
										TD = 15
										PVC SCREEN 10 - 15 FBG
										WATER SAMPLE @ 10:40
										PH: 7.85
										COND: 0.366
										DO: 4.87
										TEMP: 19.31 °C
					20					ORP: 48 mV

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-8

Project Number 203 Date Drilled 07 / 07 / 2011

Project Name Islander Motel

Location 2428 Central Avenue, Alameda CA

Drilling Company WDC Depth To Water 14.5'

Drill Rig Model Geoprobe 7730DT Driller Clayton

Drilling Method D.P. Hole Dia. 2"

Sampled By N/A Logged By SK Reviewed By MT

Sheet 1 Of 1

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
09:18			1/		0					CONCRETE
	5.5		2					SP		SAND (SP): YELLOWISH BROWN
										90% F-M SAND 10% FINES; DAMP
	5.1				5					
09:31										
			5/							
			5							
9:39	71.4				10					COLOR CHANGE TO GRAY FROM 9.0 TO 14.0 FBG
10:00										
			5/							
			5							
										COLOR CHANGE TO YELLOWISH BROWN FROM 14.0 TO TOTAL DEPTH
					15					WET @ 14.5 FBG
10:14										
	4.5									REFUSAL @ 17.5
			2/							TD = 17.5
			5							PVC SCREEN 10 - 17.5 FBG
							▽			WATER SAMPLE @ 13:44 (07-07-11)
										PH: 7.24
										COND: 0.883
										DO: 6.99
										TEMP: 20.43 °C
					20					ORP: -37 mV

P:\CAD\0208 City of Alameda\2428CentralAve\Boring Logs 2428 Central Ave.dwg

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-10

Project Number 208 — Date Drilled 9/13/2012
Project Name LINCOLN AVE.
Location ALAMEDA, CA — Sheet 1 Of 2
Drilling Company PENECORE — Drilling Method 2" DP
Sampled By MT — Logged By MT — Reviewed By MT
Depth To Water 8.5' — Time _____ — Date _____

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
08:30					0					CONCRETE AND BASE ROCK
			HAND AUGER		5			SP		SAND (SP) : BROWN (2.5YR 4/4); >90% MEDFINE SAND; < 10% FINES; MEDIUM DENSE; NON PLASTIC; DAMP; NO ODOR.
09:00			4/5							
	0				10		HYDROPUNCH	SP		WET @ 8.5 FBG NO SIGN OF HYDRO OIL OR VOC'S
09:10			4.5/5							HYDROPUNCH INTERVAL 8-13 FBG ATTEMPT H2O GRAB GROUND WATER SAMPLE: SB-10@ 8 - 13' 09:30 HRS
	0				15			SP		COLOR CHANGE TO GRAYISH BROWN (10YR 5/2)
09:40			4.5/5							
	0				20			SP		

SES STRATEGIC ENGINEERING & SCIENCE

Boring Log

Boring Number SB-10

Project Number 208
Project Name LINCOLN AVE.
Location ALAMEDA, CA
Drilling Company PENECORE
Sampled By MT Logged By MT Reviewed By MT
Depth To Water _____ Time _____ Date _____

Date Drilled 9/13/2012
Sheet 2 Of 2
Drilling Method 2" DP

Time	PID/FID HNu/OVA (ppm)	Blows/6 in. or Pressure (psi)	Recovery (ft/ft)	Sample No.	Depth (feet)	Sample Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Field Soil Description / Interpretation
09:50			4/		20		HYDROPUNCH	SP		GROUND WATER SAMPLE: SB-10@ 20 - 25' 09:50 HRS
			5							
										HYDROPUNCH INTERVAL 20-25 FBG
										ATTEMPT H2O GRAB
	0									
					25					
10:00	7.1		5/							
			5							
					30			SP		
10:15	0		5/				HYDROPUNCH			GROUND WATER SAMPLE: SB-10@ 30 - 35' 10:30 HRS
			5							
										HYDROPUNCH INTERVAL 20 - 25 FBG
					35					
10:40	0		3/							
			3							
								SP		
										HYDROPUNCH INTERVAL 36 - 41 FBG
							HYDROPUNCH			GROUND WATER SAMPLE: SB-10@ 36 - 41' 11:00 HRS
10:50	0									
			3/		40					
			3							