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29 January 2016  
Project 731641601

Mr. Mark Detterman, PG, CEG  
Senior Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Environmental Health Department  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Subject: Soil and Groundwater Management Plan  
Alta Waverly  
2302 Valdez Street  
Oakland, California  
Alameda County SCP Case No. RO0003149  
Langan Project: 731641601

Dear Mr. Detterman:

As a legally authorized representative of CRP/WP Alta Waverly Owner, LLC, and on behalf of CRP/WP Alta Waverly Owner, LLC, I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document titled *Soil and Groundwater Management Plan, Alta Waverly, 2302 Valdez Street, Oakland, CA*, Alameda County SCP Case No. RO0003149, are true and correct to the best of my knowledge.

Sincerely yours,

Brian Pianca  
Wood Partners

Wood Partners is a Group of Limited Liability Companies  
20 Sunnyside Avenue, Suite B, Mill Valley, California 94941  
(415) 888-8075

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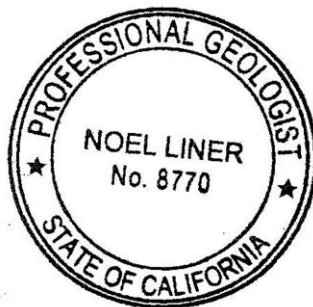
**SOIL AND GROUNDWATER MANAGEMENT PLAN  
ALTA WAVERLY  
2302 VALDEZ STREET  
Oakland, California**

*Prepared For:*

**CRP/WP Alta Waverly Owner, LLC  
c/o WP West Development, LLC  
20 Sunnyside Avenue, Suite B  
Mill Valley, California**

*Prepared By:*

**Langan Treadwell Rollo  
555 Montgomery Street, Suite 1300  
San Francisco, California 94111**



A handwritten signature in black ink, appearing to read "Noel Liner".

**Noel Liner, PG  
Project Geologist**

A handwritten signature in black ink, appearing to read "Peter J. Cusack".

**Peter J. Cusack  
Senior Associate**

**29 January 2016  
Project No. 731641601**

***LANGAN TREADWELL ROLLO***

29 January 2016

Mr. Mark Detterman  
Senior Hazardous Materials Specialist, PG, CEG  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502

**Subject: Soil and Groundwater Management Plan  
Alta Waverly  
2302 Valdez Street  
Oakland, California  
Langan Project: 731641601  
ACEH RO3149**

Dear Mr. Detterman:

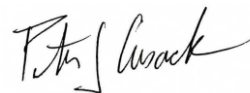
Langan Treadwell Rollo (Langan) has prepared the attached Soil and Groundwater Management Plan (SGMP) for the Alta Waverly development at 2302 Valdez Street property, for your review and approval. The SGMP has been prepared to address soil and groundwater management practices and procedures to be employed during development of the Alta Waverly, based on the results of investigation activities conducted at the subject property and based on Site development plans prepared by Pyatok Architect and Urban Design dated 12 October 2015.

If you have any questions or require additional information, please call.

Sincerely yours,  
**Langan Treadwell Rollo**



Noel Liner, PG  
Project Geologist



Peter J. Cusack  
Senior Associate

cc: Mr. Brian Pianca – CRP/WP Alta Waverly Owner, LLC

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**SOIL AND GROUNDWATER MANAGEMENT PLAN  
ALTA WAVERLY  
2302 VALDEZ STREET  
Oakland, California**

**EXECUTIVE SUMMARY**

This Soil and Groundwater Management Plan (SGMP) has been prepared by Langan Treadwell Rollo (Langan) in support of the Alta Waverly development project at 2302 Valdez Street (Site) in Oakland, California (Figure 1). This SGMP has been prepared to address soil and groundwater management practices and procedures to be employed during development of the Alta Waverly, based on the results of investigation activities conducted at the subject property and based on Site development plans prepared by Pyatok Architect and Urban Design dated 12 October 2015. The purpose of this SGMP is to describe Site conditions as associated with past property use, specifically the location and character of use-related environmental contamination. The SGMP also describes measures that are to be taken during development activities to ensure that historic use-related substances are removed in a safe and protective manner during construction and that the resultant Site conditions are protective for future inhabitants and workers at the Alta Waverly.

The Site is within the block encompassed by 23<sup>rd</sup>, Valdez, Waverly, and 24<sup>th</sup> Streets and encompasses the addresses of 2302-2342 Valdez Street and 2321-2335 Waverly Street. As shown on Figure 2, the Site consists of the following Assessor Parcel Numbers (APNs) 008-669-009, -010, -012, -013, -014, -015, -016 and -017 which will be consolidated into one APN for the Alta Waverly development. The Site is bound by Valdez Street to the west, Waverly Street to the east, 23<sup>rd</sup> Street and an existing nine-story parking garage to the south, and residential buildings and parking lots to the north (Figure 2). The Site is T-shaped, measuring approximately 350 feet along Valdez Street, approximately 115 feet along 23<sup>rd</sup> Street, and approximately 100 feet along Waverly Street.

The Site is currently occupied by two buildings and an asphalt-paved parking lot. The Site slopes down to the east; the drop in elevation from the west (Valdez Street side) to the east (Waverly Street side) is approximately 12 feet. The Alta Waverly development includes demolition of the existing structures within the Site and the construction of a mixed-use development with a structural footprint to cover the entire property. The proposed structure is a seven-story, mixed-use (retail and residential) building over a partially below-grade parking level.

The development will cover the footprint of the existing Site. Residential parking will be below grade along Valdez Street, with an at-grade entrance along Waverly Street.

The expected depth of excavation for floor slabs and foundation will be approximately 14 feet below existing street grade (bgs) along Valdez Street, with only minor excavation along Waverly Street. A total volume of approximately 26,000 cubic yards of soil will be excavated for off-Site disposal.

The Site was previously occupied by the Oakland Tribune Garage facility, which contained three service bays with hydraulic lifts for vehicle repair, located on the eastern side of the building. A gasoline dispensing pump was formerly located near the center of the building; and a floor sump, presumably used to drain fluids from cleaning the floors, in the northeastern corner of the building. The sump was reportedly removed and sealed in 1988. In addition, two underground storage tanks (USTs) (one 8,000-gallon gasoline tank and one 750-gallon waste oil tank) previously located beneath the Valdez Street sidewalk, directly outside of the western side of the building, were removed in February 1988.

Based on the contaminated soil remediation and groundwater monitoring activities previously performed at the Site, administrative case closure for the fuel leak was granted by the Alameda County Department of Environmental Health Services (ACEHS) in a letter dated 31 July 1998, contingent on stating the following:

1. If a change in land use is proposed or excavation of soils is planned at this site, then an evaluation of risk from exposure to contaminated soil and groundwater must be made.

To address the change in land use for the Alta Waverly development, Langan conducted multiple environmental subsurface investigations. Soil and groundwater sampling performed at the Site has identified contaminants, which include petroleum hydrocarbons, volatile organic compounds (VOCs) and heavy metals. The majority of these contaminants were detected below residential land use and construction worker screening levels developed by the California Environmental Protection Agency's (CalEPA) Department of Toxic Substances Control (DTSC); the United States Environmental Protection Agency, Region 9 (USEPA); and the CalEPA's Regional Water Quality Control Board, San Francisco Bay Region (RWQCB).

Based on the proposed finished floor elevation from the on project plans by Pyatok Architect and Urban Design (Pyatok) dated 12 October 2015, for the residential garage and assuming two



feet of additional excavation for floor slabs and foundations, an excavation on the order of 14 feet below the existing street grade (bgs) will be required along Valdez Street, while there will be only minor excavation along Waverly Street. A total volume of approximately 26,000 cubic yards (in place) of soil will be excavated and disposed off-Site.

Prior to the start of any excavation activities, Langan will inspect the concrete floor of the two current buildings for indications of any sumps, piping or any subsurface features. If present, the General Contractor will identify line locations, uncover the lines, remove and contain any free liquids, then dispose of the lines off-site at an appropriate facility. If petroleum staining or odors are encountered in soil while uncovering the lines, the soil will be segregated, contained in a separate stockpile, and profiled for off-Site disposal.

Groundwater monitoring wells within the Site's boundary will be decommissioned after approval from ACEH and with an Alameda County Public Water Agency (ACPWA) permit and under the oversight of an ACPWA inspector. Additional supporting documentation for the monitoring well destructions will be included in the Completion Report. The Completion Report is described in Section 7.0.

Groundwater at the Site has been encountered in recent years at depths ranging from 13.5 feet to 16 feet bgs, therefore some dewatering may be required. With the anticipated El Nino type weather occurring during the Alta Waverly excavation activities and the potential for a higher water table, groundwater and rain water may accumulate in quantities that would require removal during excavation and construction, and the water will be pumped into appropriate containers (i.e. Baker Tanks) and samples will be obtained for chemical analyses. The water will be tested for parameters established by East Bay Municipal Utility District (EBMUD) for discharge into the sanitary sewer system. A permit will be obtained from EBMUD prior to any water discharge. If detected analytes in the groundwater exceed the EBMUD discharge limits, the water will be properly treated prior to disposal. If the water is to be discharged into the storm drain, then a discharge permit will be obtained (e.g., a National Pollutant Discharge Elimination System (NPDES)) permit prior to any discharge to the storm drain.

Confirmation sampling will be performed along the perimeter and base of the excavation to verify that the lateral and vertical extent of the removal action meets the remedial action goals. As requested by the ACEH, a report presenting confirmation soil sampling and analytical results will be submitted to the ACEH for review and approval prior to the start of the construction of the final foundation system. The report will include description of the sampling methods, a

scaled figure showing sampling locations, tabulated analytical results, and laboratory analytical reports.

If any development changes occur that would affect the foundation and/or grading plans prior to any excavation activities, Langan and ACEH will review the changes to assure consistency with this SGMP. The current schedule for the demolition and excavation activities indicates that the building and surface demolition will take approximately two weeks and the total excavation will take an additional six to seven weeks.

This SGMP has been prepared to satisfy applicable federal, state, and local criteria. This SGMP will also provide guidelines for the contractor to prepare site-specific documents for health and safety measures to be employed during redevelopment activities to protect the public and the environment.

## 1.0 INTRODUCTION

This Soil and Groundwater Management Plan (SGMP) has been prepared by Langan Treadwell Rollo (Langan) on behalf of CRP/WP Alta Waverly Owner, LLC for use during the development of the property located at 2302 Valdez Street (Site) in Oakland, California. The SGMP is intended to provide soil management procedures for the development activities planned for the Site to mitigate conditions potentially hazardous to human health or the environment during and after construction. It is based on the results of investigation activities conducted at the subject property and on Site development plans prepared by Pyatok Architect and Urban Design dated 12 October 2015.

The proposed development plan consists of constructing a mixed-use development of the Site, consisting of below grade parking, street level commercial space, and upper floor residential units which will cover the entire property. The proposed structure is a seven-story, mixed-use (retail and residential) building over a partially below-grade parking level. Residential parking will be below grade along Valdez Street, with an at-grade entrance along Waverly Street. During Site construction, soil will be excavated to approximately 14 feet below ground surface (bgs) with a deeper excavation (approximately 4 feet) for the elevator pit.

The Site was previously occupied by the Oakland Tribune Garage facility, which contained three service bays with hydraulic lifts for vehicle repair, located on the eastern side of the building. A gasoline dispensing pump was formerly located near the center of the building; and a floor sump, presumably used to drain fluids from cleaning the floors, in the northeastern corner of the building. The sump was reportedly removed and sealed in 1988. In addition, two underground storage tanks (USTs) (one 8,000-gallon gasoline tank and one 750-gallon waste oil tank) previously located beneath the Valdez Street sidewalk, directly outside of the western side of the building, were removed in February 1988.

Based on the contaminated soil remediation and groundwater monitoring activities previously performed at the Site, administrative case closure for the fuel leak was granted by the Alameda County Department of Environmental Health Services (ACEHS) in a letter dated 31 July 1998, contingent on stating the following:

- If a change in land use is proposed or excavation of soils is planned at this site, then an evaluation of risk from exposure to contaminated soil and groundwater must be made.

To address the change in land use for the Alta Waverly development, Langan conducted multiple environmental subsurface investigations. The investigations and analytical results were detailed in Langan's Technical Memorandum: *Summary of Site Environmental Subsurface Conditions for Soil, Groundwater, Soil Vapor, and Request for Case Closure for Multi-Family Residential Use, 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California* dated 19 March 2015. In addition, Langan developed a Site Conceptual Model (SCM), which was included with the technical memorandum as an attachment. The technical memorandum and attached SCM was submitted to the ACEH for review and approval on 19 March 2015.

Soil and groundwater sampling performed at the Site has identified contaminants, which include petroleum hydrocarbons, volatile organic compounds (VOCs) and heavy metals. The majority of these contaminants are below applicable screening levels applicable to the proposed residential development for residential land use and construction worker screening levels developed by the California Environmental Protection Agency's (CalEPA) Department of Toxic Substances Control (DTSC); the United States Environmental Protection Agency, Region 9 (USEPA); and the CalEPA's Regional Water Quality Control Board, San Francisco Bay Region (RWQCB).

In its letter dated 14 May 2015, ACEH confirmed that it is in agreement with the recommendation for Site case closure for the proposed multi-family residential use. However, as set forth in the letter, prior to closure being granted, ACEH requires the preparation of a Site Management Plan (SMP) and the additional uploading of electronic report(s) and data to the GeoTracker website, to obtain compliance with both GeoTracker and State of California requirements. This SGMP is being submitted to meet the ACEH requirement of a SMP, as set forth in the ACEH letter dated 14 May 2015.

## **1.1 Objective**

This SGMP presents procedures and protocols for the identification, handling, management, and disposal of hazardous materials encountered in Site soil and groundwater during redevelopment of the Alta Waverly development, based on the results of investigation activities conducted at the subject property and based on the Site development plans prepared by Pyatok Architect and Urban Design dated 12 October 2015. The procedures and protocols are designed to facilitate compliance with applicable federal, state, and local laws and regulations regarding hazardous and industrial waste management. This SGMP does not address hazardous materials that may be encountered in existing structures, such as asbestos-

containing materials or lead-based paint. Asbestos and lead-based paint abatement will be evaluated and managed consistent with all applicable laws and under separate work plans.

The proposed development, as shown on plans by Pyatok dated 12 October 2015, includes demolition of the existing structures within the Site and construction of a development with a structure footprint to cover the entire property. The proposed structure is a seven-story, mixed-use (retail and residential) building with below grade parking along Valdez Street and an at-grade entrance along Waverly Street.

## **2.0 SITE BACKGROUND**

The Site is within the block encompassed by 23<sup>rd</sup>, Valdez, Waverly, and 24<sup>th</sup> Streets, as shown on the Site Location Map, Figure 1. The Site encompasses the addresses of 2302-2342 Valdez Street and 2321-2335 Waverly Street. The Site consists of the following Assessor Parcel Numbers (APNs) 008-669-009, -010, -012, -013, -014, -015, -016 and -017 which will be consolidated into one APN for the Alta Waverly development, Table 1 presents the Site addresses, APNs, and historical Site uses. The Site is bound by Valdez Street on the west, Waverly Street on the east, 23<sup>rd</sup> Street and an existing 9-story parking garage on the south, and residential buildings and parking lots to the north, Site Plan, Figure 2. The Site is T-shaped, measuring approximately 360 feet along Valdez Street, approximately 115 feet along 23<sup>rd</sup> Street, and approximately 100 feet along Waverly Street.

The Site is currently occupied by two buildings and an asphalt-paved parking lot. The Site slopes down to the east; the drop in elevation from the west (Valdez Street side) to the east (Waverly Street side) is approximately 12 feet.

### **2.1 Points of Contact and Project Responsibilities**

This section defines the roles of the parties involved in this Alta Waverly project and provides contact information for each person or entity. CRP/WP Alta Waverly Owner, LLC is the project owner and developer and will be responsible for implementation of the procedures and protocols outlined in this document. The primary contact for CRP/WP Alta Waverly Owner, LLC will be Mr. Brian Pianca. The primary lead oversight agency for approval of this SGMP is the ACEH. The general contractor selected by CRP/WP Alta Waverly Owner, LLC to implement the SGMP is Andersen Construction. CRP/WP Alta Waverly Owner, LLC's environmental consultant for administration of this SGMP is Langan. The demolition and excavation contractor is RV Stich. The certified industrial hygienist (CIH) responsible for preparing the project specific

Health and Safety Plan (HASP) and Dust Control Plan (DCP) is Acumen Industrial Hygiene (Acumen). Contact information for each of these parties is listed below.

### Points of Contact

Role	Company	Contact	Telephone Number
Owner	CRP/WP Alta Waverly Owner, LLC	Brian Pianca	(925) 766-5522
Lead Oversight Agency	ACEH	Mark Detterman	(510) 567-6876
General Contractor	Andersen Construction	Steve Klienheinz	(650) 570-6161
Environmental Consultant for SGMP	Langan	Peter J. Cusack	(415) 955-5200
Demolition Contractor	RV Stich Construction	Rocky Stich	(510) 412-9070
Excavation Contractor	RV Stich Construction	Rocky Stich	(510) 412-9070
Certified Industrial Hygienist	Acumen Industrial Hygiene	Paul Spillane	(415) 242-6060
UST Oversight Agency	ACEH CUPA	Chris Tougeron	(510) 567-6804

## 2.2 Historical Information

Historical Site information was presented in the following Phase I Environmental Site Assessments (ESAs) prepared by Langan in 2014 and is also reflected in Table 1.

1. Langan Treadwell Rollo, *Phase I Environmental Site Assessment, 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California* dated 30 September 2014.
2. Langan Treadwell Rollo, *Phase I Environmental Site Assessment, 2342 Valdez Street, Oakland, California*. Dated 13 November 2014

The 2302 Valdez Street portion of the Site is currently occupied by a one-story warehouse type building and at-grade asphalt paved parking lot. The Site was previously occupied by the Oakland Tribune Garage facility, which contained three service bays with hydraulic lifts for vehicle repair, located on the eastern side of the building. A gasoline dispensing pump was formerly located near the center of the building; and a floor sump, presumably used to drain fluids from cleaning the floors, in the northeastern corner of the building. The sump was

reportedly removed and sealed in 1988. In addition, two underground storage tanks (USTs) (one 8,000-gallon gasoline tank and one 750-gallon waste oil tank) previously located beneath the Valdez Street sidewalk, directly outside of the western side of the building, were removed in February 1988.

The 2312 Valdez Street portion of the Site, which is located north and adjacent to 2302 Valdez Street (former Oakland Tribune Garage) facility, and is currently occupied by an at-grade asphalt paved parking lot. This portion of the Site was reported to have been in operation as an automotive repair facility between the years of 1933 and 1943.

The 2342 Valdez Street portion of the Site was historically occupied by various residential structures as early as 1889. According to historical sources, the current Site building was constructed in the 1940's. The Site building has been occupied by various electrical and automotive repair companies from the years 1943 to 1991. The Site building has been occupied by an automotive detailing business, Ho's Automotive Detail, from the years 1992 to present.

### **2.3 Site-Specific Geology and Hydrogeology**

Langan has performed several subsurface investigations at the Site, including two geotechnical and environmental subsurface investigations. Based on these studies, the Site is blanketed by about two to five feet of fill, which is comprised of silt, sand, and clay mixtures. The fill is generally underlain by interlayered medium dense to very dense silty and clayey sand and medium stiff to hard silt and clay with varying amounts of sand and gravel. An area of soft to medium stiff clay with varying amounts of sand and silt was encountered in the eastern side of the Site.

Groundwater was encountered in each of the Site's previously installed groundwater monitoring wells at depths ranging from 13.5 feet to 16 feet bgs. Seasonal fluctuations in rainfall influence groundwater levels and may cause several feet of variation. In addition, with the anticipated El Nino type weather occurring during the Alta Waverly excavation activities and the potential for a higher water table, groundwater and rain water may accumulate in quantities that would require removal during excavation and construction. Historical groundwater gradient direction at the site has been to the southeast and southwest.

## **2.4 Surrounding Land Use & Sensitive Ecosystems**

The surrounding land use is a mixture of residential and commercial development. Adjacent property uses currently include a parking area on Valdez Street to the west, an existing nine-story parking garage fronting Waverly Street to the east, a two to three story commercial and residential building to the south bordering 23<sup>rd</sup> Street, and residential buildings and parking lots to the north, as shown on Figure 2.

The East Bay Municipal Utility District (EBMUD) provides potable water for the Site and vicinity. Groundwater in the vicinity of the Site is not used as a source of drinking water, nor does the Site overlie a shallow aquifer used for drinking water.

## **3.0 RECENT ENVIRONMENTAL INVESTIGATIONS**

Previous environmental investigations by Langan include the following:

1. Langan Treadwell Rollo, *Phase I Environmental Site Assessment, 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California* dated 30 September 2014;
2. Langan Treadwell Rollo, *Environmental Site Characterization, 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California* dated 22 October 2014;
3. Langan Treadwell Rollo, *Phase I Environmental Site Assessment, 2342 Valdez Street, Oakland, California* dated 13 November 2014;
4. Langan Treadwell Rollo, *Environmental Site Characterization, 2342 Valdez Street, Oakland, California* dated 9 January 2015;
5. Langan Treadwell Rollo, *Technical Memorandum: Summary of Site Environmental Subsurface Conditions for Soil, Groundwater, Soil Vapor, and Request for Case Closure for Multi-Family Residential Use, 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California* dated 19 March 2015.

### **3.1 Phase I Environmental Site Assessments**

#### **2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California**

Two of the Site addresses (2302 Valdez Street and 2312 Valdez Street) were identified on environmental regulatory agency lists and records searched by both Langan and EDR:



The 2302 Valdez Street address was listed in the LUST, RGA LUST, Hist Cortese, EDR US Hist Auto Stat, and Alameda County CS databases. Based on historical research, the former Oakland Tribune Garage facility contained three service bays with hydraulic lifts for vehicle repair, located on the eastern side of the building; a gasoline dispensing pump was located near the center of the building; and a floor sump, was located in the northeastern corner of the building. The sump was reportedly removed and sealed in 1988. In addition, two USTs (one 8,000-gallon gasoline tank and one 750-gallon waste oil tank) were located beneath the Valdez Street sidewalk, directly outside of the western side of the building.

The two USTs were removed on 23 February 1988 by Clayton. During the removal activities, visible soil contamination was observed and soil samples were collected from beneath both USTs. Analytical results from soil samples collected beneath the USTs reported concentrations of TPH ranging from 46 mg/kg to 4,000 mg/kg and oil and grease concentrations ranging from 2,400 mg/kg and 6,000 mg/kg.

In August 1988, three groundwater monitoring wells (MW-1 through MW-3) were installed by Clayton, and the analytical results of the groundwater samples indicated groundwater was impacted at the property. In September 1989, eight soil borings were advanced and four additional groundwater monitoring wells (MW-4 through MW-7) were installed at the Site. In August 1990, two additional groundwater monitoring wells installed (MW-8 and MW-9) off-Site within 23<sup>rd</sup> Street and Valdez Street. Between 1990 and 1996, numerous notices from ACDEHS were sent to the owner stating that additional sampling was required. Starting in January 1996, the nine groundwater monitoring wells were purged and sampled for the next three years.

Based on the contaminated soil remediation and groundwater monitoring activities, administrative case closure for the fuel leak was granted by the ACDEHS in a letter dated 31 July 1998 for the former Oakland Tribune Garage located at 2302 Valdez Street in Oakland, California.

The Phase I also found that the 2312 Valdez Street property is located north and adjacent to 2302 Valdez Street (former Oakland Tribune Garage) facility, and currently is occupied by an at-grade asphalt paved parking lot. This property was listed in the EDR US Hist Auto Stat database searched by EDR. According to EDR, this facility is reported to have been in operation as an automotive repair facility between the years of 1933 and 1943.

## **2342 Valdez Street, Oakland, California**

The 2342 Valdez Street property is bound by commercial and residential properties to the north and east, a parking lot to the south, and Valdez Street to the west. The Site has a lot area of approximately 8,750 square feet (0.2 acres) and is currently occupied by a one-story building and at-grade asphalt paved parking lot.

The Site was historically occupied by various residential structures as early as 1889. According to historical sources, the current Site building was constructed in the 1940's. The Site building has been occupied by various electrical and automotive repair companies from the years 1943 to 1991. The Site building has been occupied by an automotive detailing business, Ho's Automotive Detail, from the years 1992 to present.

The Site was not identified on any of the environmental regulatory agency lists and records searched by both Langan and EDR:

Although the assessment revealed no evidence of any documented release(s) at the Site, our assessment of the Site's land-use history revealed that the Site has been occupied by commercial businesses associated with electrical and automotive repair from as early as 1943 to 1991 and automotive detailing from 1992 to present.

Due to the findings of Langan's Phase I ESAs, Langan conducted a subsurface investigation in order to evaluate the current subsurface Site conditions.

### **3.2 Environmental Subsurface Investigations**

Between September 2014 and March 2015, Langan performed subsurface investigations at the Site for soil, groundwater, and soil vapor. The analytical results and general findings are summarized below. Soil, groundwater and soil vapor sampling locations are presented on Figure 3. Also, Figure 3A depicts the Alta Waverly Ground Floor Plan with sampling locations. The sub-slab vapor and soil vapor investigations were performed to investigate in any additional petroleum hydrocarbon sources may be present at the Site, based on the results vapor intrusion is not expected to be an issue at this Site.

#### 3.2.1 Soil Investigation

On 6 September 2014, soil samples were collected from six environmental borings (EB-1 through EB-6) and four geotechnical borings (B-1 through B-4). On 6 December 2014, soil

samples were collected from four additional geotechnical borings (B-5 through B-7 and CPT-7). On 7 February 2015, soil samples were collected from three additional environmental borings (EB-7 through EB-9). All soil samples were submitted to McCampbell Analytical, Inc. (McCampbell), a state-certified analytical laboratory in Pittsburg, California and analyzed for some or all of the following:

- Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8021/8015;
- TPH as diesel (TPHd) by EPA Method 8015;
- TPH as motor oil (TPHmo) by EPA Method 8015;
- Volatile organic compounds (VOCs) by EPA Method 8260;
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270;
- Organochlorine pesticides (OCPs) by EPA Method 8081/8082;
- Polychlorinated biphenyls (PCBs) by EPA Method 8081/8082;
- California assessment manual (CAM 17) by EPA Method 7000/6010; and,
- Leaking Underground Fuel Tank (LUFT) 5 metals by EPA Method 7000/6010.

Analytical results for metal concentrations in soil were compared to the total threshold limit concentration (TTLC). Samples with concentrations of any metal greater than ten times the soluble threshold limit concentration (STLC) were also analyzed for soluble metals using the California waste extraction test (WET) method. Any sample exceeding the STLC value after analysis with the WET method was submitted for analysis by the Federal toxicity characteristic leaching potential (TCLP). These analyses were run to assess if metal concentrations in soil exceeded State and/or Federal hazardous waste criteria.

### 3.2.2 Soil Analytical Results

The soil analytical results for non-metals are presented in Table 2 and the soil analytical results for metals are presented in Table 3. Soil analytical results are discussed below, based on the Site's eight APNs:

**APN 008-669-009 – 2335 Waverly Street**

TPHg was detected at or above the method reporting limit (1.0 milligrams per kilogram (mg/kg)) in one (EB-3-1.5) of the five soil samples analyzed at a concentration of 2.9 mg/kg. TPHd was detected at or above the method reporting limit (1.0 mg/kg) in two (EB-3-1.5 and EB-4-1.5) of the five soil samples analyzed at concentrations of 290 mg/kg and 4.5 mg/kg, respectively. Based on these results, one sample (EB-3-1.5), exceeds the established environmental screening level (ESL) for TPHd in shallow soils (< 3 meters bgs) associated with residential land use of 100 mg/kg (Table B-1, RWQCB, 2013). TPHmo was detected at or above the method reporting limit (5.0 mg/kg) in the same two of the five soil samples analyzed at concentrations of 660 mg/kg and 59 mg/kg, respectively. Based on these results, one sample (EB-3-1.5), exceeds the ESL for TPHmo in shallow soils (< 3 meters bgs) associated with residential land use of 100 mg/kg (Table B-1, RWQCB, 2013). No VOCs, SVOCs, OCPs, or PCBs were detected at or above the method reporting limits in the soil samples analyzed.

Total lead was detected at or above the method reporting limit in each of the five soil samples analyzed, at concentrations ranging from 2.6 mg/kg to 310 mg/kg. Total lead was detected at concentrations at or above 50 mg/kg but below 1,000 mg/kg in three samples, which were subsequently run for STLC analysis and TCLP analysis, to determine soluble lead levels.

STLC lead was detected at or above the method reporting limit (0.20 milligrams per liter (mg/L)) in each of the three soil samples analyzed at concentrations ranging from 8.5 mg/L to 26 mg/L, all of which exceed the California hazardous waste classification of 5.0 mg/L. TCLP lead was detected at or above the method reporting limit (0.20 mg/L) in one of the three samples analyzed at a concentration of 1.1 mg/L, which does not exceed the Federal waste criteria of 5.0 mg/L.

The remaining metals detected were within typical background levels of San Francisco Bay Area soils.

**APN 008-669-010 – 2321 Waverly Street**

No TPHg, TPHd, TPHmo, VOCs, SVOCs, OCPs, and PCBs were detected at or above the method reporting limits in the soil samples analyzed.

Total lead was detected at or above the method reporting limit in each of the two soil samples analyzed, at concentrations of 4.8 mg/kg and 60 mg/kg. Total lead was detected at a

concentration at or above 50 mg/kg but below 1,000 mg/kg in one sample (B-4-3.0), which was subsequently run for STLC analysis and TCLP analysis, to determine soluble lead levels.

STLC lead was detected at or above the method reporting limit (0.20 mg/L) in the single soil sample analyzed at a concentration of 1.2 mg/L, which does not exceed the California hazardous waste classification of 5.0 mg/L. TCLP lead was not detected at or above the method reporting limit (0.20 mg/L).

The remaining metals detected were within typical background levels of San Francisco Bay Area soils.

**APN 008-669-012 – 2302 Valdez Street**

TPHd was detected at or above the method reporting limit (1.0 milligrams per kilogram (mg/kg)) in one (EB-6-3.0) of the 16 soil samples analyzed at a concentration of 1.0 mg/kg. No TPHg, TPHmo, VOCs, SVOCs, OCPs, or PCBs were detected at or above the method reporting limits in the soil samples analyzed.

Total lead was detected at or above the method reporting limit in each of the 12 soil samples analyzed, at concentrations ranging from 5.0 mg/kg to 170 mg/kg. Total lead was detected at concentrations at or above 50 mg/kg but below 1,000 mg/kg in one sample (EB-7-1.5), which was subsequently run for STLC analysis and TCLP analysis, to determine soluble lead levels.

STLC lead was detected at or above the method reporting limit (0.20 milligrams per liter (mg/L)) at a concentration of 4.1 mg/L which does not exceed the California hazardous waste classification of 5.0 mg/L. TCLP lead was not detected at or above the method reporting limit (0.20 mg/L).

The remaining metals detected were within typical background levels of San Francisco Bay Area soils.

**APN 008-669-013 – 2316 Valdez Street**

TPHd was detected at or above the method reporting limit (1.0 mg/kg) in four of the six soil samples analyzed at concentrations ranging from 1.2 mg/kg and 3.8 mg/kg. TPHmo was detected at or above the method reporting limit (5.0 mg/kg) in three of the six soil samples analyzed at concentrations ranging from 15 mg/kg to 70 mg/kg. No TPHg, VOCs, SVOCs,

OCPs, or PCBs were detected at or above the method reporting limits in the soil samples analyzed.

Total lead was detected at or above the method reporting limit in each of the five soil samples analyzed, at concentrations ranging from 5.1 mg/kg to 510 mg/kg. Total lead was detected at concentrations at or above 50 mg/kg but below 1,000 mg/kg in three samples, which were subsequently run for STLC analysis and TCLP analysis, to determine soluble lead levels.

STLC lead was detected at or above the method reporting limit (0.20 mg/L) in each of the three soil samples analyzed at concentrations ranging from 11 mg/L to 27 mg/L, all of which exceed the California hazardous waste classification of 5.0 mg/L. TCLP lead was detected at or above the method reporting limit (0.20 mg/L) in one of the three samples analyzed at a concentration of 0.36 mg/L, which does not exceed the Federal waste criteria of 5.0 mg/L.

The remaining metals detected were within typical background levels of San Francisco Bay Area soils.

***APN 008-669-014 –Valdez Street (no Street number provided)***

TPHd was detected at or above the method reporting limit (1.0 mg/kg) in two (B-2-5.5 and EB-2-1.5) of the five soil samples analyzed at concentrations of 1.3 mg/kg and 2.2 mg/kg, respectively. TPHmo was detected at or above the method reporting limit (5.0 mg/kg) in one (EB-2-1.5) of the five soil samples analyzed at a concentration of 19 mg/kg. No TPHg, VOCs, SVOCs, OCPs, or PCBs were detected at or above the method reporting limits in the soil samples analyzed.

Total chromium was detected at or above the method reporting limit in each of the five soil samples analyzed, at concentrations ranging from 39 mg/kg to 62 mg/kg. Total chromium was detected at concentrations at or above 50 mg/kg but below 1,000 mg/kg in two samples, which were subsequently run for STLC analysis, to determine soluble chromium levels.

STLC chromium was detected at or above the method reporting limit (0.050 milligrams per liter (mg/L)) in one of the two soil samples analyzed at a concentration of 0.077 mg/L, which does not exceed the California hazardous waste classification of 5.0 mg/L.

The remaining metals detected were within typical background levels of San Francisco Bay Area soils.

**APN 008-669-015 – 2328 Valdez Street**

No soil samples were collected from this APN area.

**APN 008-669-016 – 2332 Valdez Street**

TPHd was detected at or above the method reporting limit (1.0 mg/kg) in three of the eight soil samples analyzed at concentrations ranging from 1.1 mg/kg to 2.7 mg/kg. TPHmo was detected at or above the method reporting limit (5.0 mg/kg) in four of the eight soil samples analyzed at concentrations ranging from 5.4 mg/kg to 33 mg/kg. No TPHg, VOCs, SVOCs, OCPs, or PCBs were detected at or above the method reporting limits in any of the soil samples analyzed.

Total chromium was detected at or above the method reporting limit in each of the eight soil samples analyzed, at concentrations ranging from 38 mg/kg to 62 mg/kg. Total chromium was detected at concentrations at or above 50 mg/kg but below 1,000 mg/kg in seven samples, which were subsequently run for STLC analysis, to determine soluble chromium levels.

STLC chromium was detected at or above the method reporting limit (0.050 mg/L) in one of the seven soil samples analyzed at a concentration of 0.075 mg/L, which does not exceed the California hazardous waste classification of 5.0 mg/L.

The remaining metals detected were within typical background levels of San Francisco Bay Area soils.

**APN 008-669-017 – 2342 Valdez Street**

TPHd was detected at or above the method reporting limit (1.0 mg/kg) in five of the nine soil samples analyzed at concentrations ranging from 2.4 mg/kg to 81 mg/kg. TPHmo was detected at or above the method reporting limit (5.0 mg/kg) in five of the nine soil samples analyzed at concentrations ranging from 6.0 mg/kg to 140 mg/kg. Based on these results, one sample (CPT-7-3.0), exceeds the ESL for TPHmo in shallow soils (< 3 meters bgs) associated with residential land use of 100 mg/kg (Table B-1, RWQCB, 2013). Of the six soil samples analyzed for VOCs, one sample (CPT-7-3.0) detected naphthalene above the method reporting limit, at a trace concentration of 0.029 mg/kg. This detection does not exceed the established environmental screening level (ESL) for naphthalene in shallow soils, 1.2 mg/kg (Table A-1, RWQCB, 2013). No other VOCs were detected at or above the method reporting limits in the samples analyzed. Of the seven soil samples analyzed for SVOCs, three samples detected low concentrations of fluoranthene, phenanthrene, and/or pyrene; all of which do not exceed the

established ESLs of 40 mg/kg, 11 mg/kg, and 85 mg/kg, respectively. No other SVOCs were detected at or above the method reporting limits in the samples analyzed. No TPHg, OCPs, or PCBs were detected at or above the method reporting limits in the soil samples analyzed.

Total lead was detected at or above the method reporting limit in each of the nine soil samples analyzed, at concentrations ranging from 4.8 mg/kg to 2,600 mg/kg. One sample (B-6-2.0) exceeded the State of California hazardous waste criteria of 1,000 mg/kg and was subsequently run for TCLP lead to determine if the material represents a Federal RCRA hazardous waste. TCLP lead was detected at a concentration of 15 mg/L, which does exceed the Federal RCRA hazardous waste criteria of 5 mg/L.

One sample (CPT-7-8.0) detected total lead at a concentration of 130 mg/kg and was subsequently run for STLC analysis and TCLP analysis, to determine soluble lead levels. STLC lead was detected at or above the method reporting limit (0.20 milligrams per liter (mg/L)) in the single sample analyzed at a concentration of 4.1 mg/L, which does not exceed the California hazardous waste classification of 5.0 mg/L. TCLP lead was not detected at or above the method reporting limit (0.20 mg/L) in the same sample analyzed.

The remaining metals detected were within typical background levels of San Francisco Bay Area soils.

### 3.2.3 Groundwater Investigation

Previously installed groundwater monitoring wells (MW-1 through MW-9) were located on-Site and in the adjacent right-of-ways. All remain except MW-1 and MW-5, which were decommissioned prior to our investigation, and thus, no groundwater samples were collected at these former monitoring well locations. Groundwater monitoring wells MW-2, MW-4, MW-7, MW-8, and MW-9) were re-developed and sampled by Langan on 4 September 2014 and 12 September 2014, respectively. Langan conducted additional groundwater purging and sampling on 24 September 2014 from groundwater monitoring wells MW-2, MW-4, MW-6, and MW-9. During our 6 December 2014 investigation, grab groundwater samples were collected from three geotechnical borings B-5, B-7, and CPT-7. Sampling at geotechnical boring B-6 was attempted via hydropunch, but no groundwater was encountered. On 7 February 2015, grab groundwater samples were collected at environmental borings EB-8 and EB-9, and a new groundwater monitoring well (MW-10) was installed by Langan. Based on the grab groundwater results from boring EB-8 which detected elevated petroleum hydrocarbon as gasoline and diesel, we installed the monitoring well to obtain a more representative groundwater sample.



On 4 March 2015, both groundwater monitoring wells MW-3 and MW-10 were sampled. Approximate groundwater sampling locations are shown on Figure 3. All groundwater samples were submitted to McCampbell and analyzed for some or all of the following:

- TPHg by EPA Method 8021/8015;
- TPHd by EPA Method 8015;
- TPHmo by EPA Method 8015;
- VOCs by EPA Method 8260;
- SVOCs by EPA Method 8270;
- PCBs by EPA Method 8081/8082;
- CAM 17 metals by EPA Method 7000/6010; and
- LUFT 5 metals by EPA Method 7000/6010.

It should be noted that two sampling events occurred at previously installed groundwater monitoring wells MW-2, MW-4, and MW-9. Because the monitoring wells were apparently dormant for a number of years, it is Langan's opinion that the second sampling event (24 September 2014), after additional groundwater purging, is the most representative of the current groundwater conditions at the Site and surrounding area. Analytical results of the groundwater samples were compared to the December 2013 RWQCB ESLs, where groundwater is not a current or potential drinking water resource (Table F-1b, RWQCB, 2013) and potential vapor intrusion ESLs for residential and commercial site use (ESL Detail Table E-1).

#### 3.2.4 Groundwater Analytical Results

The groundwater analytical results for non-metals are presented in Table 4 and the groundwater analytical results for metals are presented in Table 5. Groundwater analytical results are discussed below, based on the Site's eight APNs. (MW-8 through MW-10 are not discussed because they are located off Site and within adjacent right-of-ways and not Site APNs.):

##### **APN 008-669-009 - 2335 Waverly Street**

No groundwater samples were collected from this APN area.

**APN 008-669-010 - 2321 Waverly Street**

No groundwater samples were collected from this APN area.

**APN 008-669-012 - 2302 Valdez Street**

No TPHg, TPHd, TPHmo, or VOCs were detected at or above the method reporting limits in the MW-2, MW-3, MW-4, and MW-6 groundwater samples analyzed. Sample EB-8-GW detected TPHg and TPHd at concentrations of 3,100 micrograms per liter ( $\mu\text{g/L}$ ) and 720  $\mu\text{g/L}$ , respectively. Both concentrations exceed the respective ESLs for TPHg and TPHd (500  $\mu\text{g/L}$  and 640  $\mu\text{g/L}$ ) (Table F-1b, RWQCB, 2013). Trace concentrations of benzene, n-butyl benzene, sec-butyl benzene, tert-butyl benzene, diisopropyl ether, isopropyl benzene, 4-isopropyltoluene, and n-propyl benzene (all VOCs) were all detected in sample EB-8-GW, none of which exceeded the ESLs, where established.

Sample EB-9-GW detected TPHg and TPHd at concentrations of 94  $\mu\text{g/L}$  and 320  $\mu\text{g/L}$ , respectively. Trace concentrations of 2-butanone (MEK), t-butyl alcohol (TBA), n-butyl benzene, sec-butyl benzene, and toluene (all VOCs) were all detected in sample EB-9-GW, none of which exceeded the ESLs, where established.

**APN 008-669-013 - 2316 Valdez Street**

No groundwater samples were collected from this APN area.

**APN 008-669-014 –Valdez Street (no Street number provided)**

No TPHg, TPHd, TPHmo, or VOCs were detected at or above the method reporting limits in the MW-7 groundwater sample analyzed.

**APN 008-669-015 – 2328 Valdez Street**

No groundwater samples were collected from this APN area.

**APN 008-669-016 – 2332 Valdez Street**

Sample B-7-GW detected TPHd and TPHmo at concentrations of 610  $\mu\text{g/L}$  and 670  $\mu\text{g/L}$ , respectively. The TPHmo concentration exceeds the established ESL, 640  $\mu\text{g/L}$  (Table F-1b, RWQCB, 2013). Trace concentrations of chloroform and toluene (both VOCs) were detected in sample B-7-GW, none of which exceeded their respective ESLs, 170  $\mu\text{g/L}$  and 130  $\mu\text{g/L}$ . TPHg, SVOCs, and PCBs were not detected at or above the method reporting limits in sample B-7-GW.

### **APN 008-669-017 – 2342 Valdez Street**

Sample B-5-GW detected TPHd and TPHmo at concentrations of 190 µg/L and 250 µg/L, respectively. No TPHg, VOCs, SVOCs, or PCBs were detected at or above the method reporting limits in sample B-5-GW. Sample CPT-7-GW detected TPHd at a concentration of 63 µg/L. A trace concentration of chloroform (a VOC) was detected in sample CPT-7-GW at a concentration of 0.82 µg/L, which does not exceed the ESL of 170 µg/L. No TPHg, TPHmo, SVOCs, or PCBs were detected at or above the method reporting limits in sample CPT-7-GW.

## **4.0 ANALYSIS OF FINDINGS**

Observations during Site investigations indicate the Site is blanketed by up to five feet of fill, which overlays clay and sandy clay, a coarse deposit of sand and sandy gravel, and clay and gravelly clay to the maximum depth explored. The soil sample analytical results indicated that some of the fill material at the Site contains elevated total lead and soluble lead and chromium at concentrations exceeding State of California and Federal hazardous waste levels.

As shown in Figure 4, the area of fill material containing lead concentrations exceeding the Federal hazardous waste criteria is near boring B-6 at a depth of 2.0 feet bgs, this sample also exceeded the State of California hazardous waste criteria for soluble chromium. The areas of fill material containing total and soluble lead concentrations exceeding the State of California hazardous waste criteria are near borings EB-3 at a depth of 1.5 feet bgs, EB-4 at depths of 1.5 feet bgs and 3.0 feet bgs, and EB-5 at depths of 1.5 feet bgs, 3.0 feet bgs, and 5.0 feet bgs. The fill material near the sampling locations and depths that exceeded Federal and State of California hazardous waste criteria will be disposed as Federal Class I RCRA hazardous waste and State of California Class I non-RCRA, respectively. The remaining fill material and any residual petroleum hydrocarbon contaminated soil encountered will be excavated and disposed off-Site as Class II non-hazardous waste.

Site excavation for the development will reduce existing grade by approximately 0 to 14 feet. Based on the Excavation and Shoring Plan (Plan 32) prepared by BKF dated 18 November 2015, it is anticipated that approximately 26,000 cubic yards (CY) of soil (in-place volume) will be exported as part of the development.

Residual petroleum hydrocarbons exceeding ESLs in groundwater appear limited in extent to the vicinity of on-Site borings B-7 and EB-8, and at the off-Site monitoring well MW-9. Low levels of dissolved petroleum hydrocarbons remain in groundwater in the vicinity of borings B-5

and EB-9. VOC concentrations detected in groundwater do not exceed ESLs, where established. Because the previously installed groundwater monitoring wells were idle for a number of years, prior to Langan's recent redevelopment, purging, and sampling activities at the Site, it is Langan's opinion that the sampling results following purging (24 September 2014 and 4 March 2015) were the best representation of the groundwater conditions at the Site.

## **5.0 NOTIFICATIONS**

The General Contractor will notify Langan at least one week prior to conducting intrusive Site work, including subsurface demolition or soil excavation. The General Contractor will notify Langan, and Langan will notify the ACEH of dust or odor complaints from nearby businesses, residents, or passersby, if any. The General Contractor will inform Langan if unexpected conditions or features are observed during site work, that suggest the potential presence of petroleum or hazardous materials in soil or groundwater at the site, in areas or quantities, or at concentrations that are likely to be inconsistent with the previous analytical results and impacts at the Site.

## **6.0 ENVIRONMENTAL MEASURES**

The results of our environmental investigation at the Site indicate that low levels of petroleum hydrocarbons, heavy metals, and VOCs were detected in the soil and groundwater. The presence of these compounds poses soil and groundwater management and potential health and safety (H&S) issues to be addressed as part of the Site development activities. The soil and groundwater management objectives for the Site are to minimize exposure to construction workers at the Site, nearby residents and/or pedestrians, and future users of the Site to constituents in the soil and groundwater.

The procedures in this SGMP are designed to meet ACEH requirements relating to the soil and groundwater impacts at the Site. In addition, the procedures in this SGMP are intended to facilitate compliance with applicable federal, state, and local laws and regulations, applicable to earth work activities at the Site as a result of the reported petroleum or hazardous substance concentrations in soil or groundwater. Before intrusive earthwork begins at the Site, an on-Site pre-field meeting will be conducted between Langan and the General Contractor to review the former location of the USTs and the locations of petroleum, lead and chromium impacted soils. The meeting will also discuss the site-specific health and safety plans and discuss the typical observations associated with petroleum-impacted soil (i.e., staining or odor).

## **6.1 Health and Safety Measures**

The General Contractor will be responsible for establishing and maintaining proper health and safety procedures to minimize worker and public exposure to Site contaminants during construction.

## **6.2 Health and Safety of Personnel**

Potential health risk to on-site construction workers and the public from implementation of the corrective actions will be addressed by developing and implementing a health and safety program. The General Contractor will be responsible for establishing and maintaining proper health and safety procedures to minimize worker and public exposure to site contaminants during construction. It is the General Contractor's responsibility to communicate the site information, including this SGMP, to its subcontractors. As part of its health and safety program, the General Contractor will prepare a site-specific HASP and identify a Health and Safety Officer, as outlined in the subsections, below.

## **6.3 Health and Safety Issues**

On the basis of our experience on similar sites, there are potential health and safety risks associated with the heavy metals and petroleum hydrocarbons detected at the Site for construction workers, nearby residents and/or pedestrians, and future users of the Site. The routes of potential exposure to the petroleum hydrocarbons and metals could be through three pathways: 1) dermal (skin) contact with the soil; 2) inhalation of dusts; and 3) ingestion of the soil.

The most likely potential for human exposure to the petroleum hydrocarbons and metals in the soil will be during soil excavation operations. Because on-site materials contain concentrations of petroleum hydrocarbons and lead in excess of the Proposition 65 guidelines, we recommend that proper health and safety procedures, as well as warning requirements, be implemented during construction. The General Contractor will be responsible for establishing and maintaining proper health and safety procedures to minimize worker and public exposure to Site contaminants during construction.

### 6.3.1 Site-Specific Health and Safety Plan

The General Contractor will be responsible for the preparation of a Site-specific HASP signed by a certified industrial hygienist (CIH). This HASP will be prepared by Acumen and the purpose of

the HASP will be to establish procedures to address potential chemical and physical hazards to field personnel and off-site receptors that may result from excavation of impacted soils at the site. The HASP plan will describe the health and safety requirements, i.e. trained in accordance with Section 1910.120 of 29 Code of Federal Regulations (HazWoper training), specific personal hygiene, and monitoring equipment that will be used during construction to protect and verify the health and safety of construction workers and the general public from exposure to constituents in the soil. In addition, emergency response actions will be described in the HASP. The General Contractor is responsible for verifying that on-Site project personnel have read and will adhere to the procedures established in the HASP. A copy of the plan will be kept on site during field activities. The HASP will be reviewed and updated as necessary during implementation of the soil excavation.

### 6.3.2 Health and Safety Officer

The Site health and safety officer (HASO) identified by the CIH in the HASP will be on Site at all times during excavation activities to oversee implementation of the HASP and to ensure that all health and safety measures are maintained. The HASO will have authority to direct and stop (if necessary) all construction activities in order to ensure compliance with the HASP.

## **6.4 General Soil Handling Procedures**

The soil handling procedures described in this section are intended to support compliance with federal, state, and local requirements, reduce the potential for off-Site migration, and reduce the potential for exposure by construction workers, nearby residents and workers, and pedestrians, to constituents in Site soil and groundwater.

## **6.5 Demolition**

CRP/WP Alta Waverly Owner, LLC plans to demolish the existing buildings and RV Stich will be performing the demolition activities. Demolition will include removal of all above structures and the buildings concrete slabs. Langan will be present during the buildings concrete slab removal activities to oversee any handling or excavation of potential petroleum-impacted soil.

## **6.6 Utility Lines Construction**

The planned utility line construction is located along Waverly Street at the entrance into the Alta Waverly development and at the northern corner of the property line at Valdez Street.

## **6.7 Soil Management**

The proposed construction activities will disturb soil during the mass excavation, Site grading, the construction of new foundations, and utility lines. During all excavation activities, dust control measures will be implemented to reduce potential exposure. These measures may include moisture-conditioning the soil and covering the exposed soil and stockpiles with weighed down plastic sheeting to prevent exposure of the soil.

The Site's HASP (prepared by Acumen) will contain additional dust monitoring, action levels, dust control measures, and work stoppage provisions that will be followed during construction activities in addition to those described in this SGMP.

### 6.7.1 Soil Segregation and Disposal

The results of Langan's subsurface investigations and previous investigations indicate that fill material underlies the Site with elevated levels of petroleum hydrocarbons and heavy metals and will need to be disposed off-site at a Class I and Class II regulated landfills. Before any excavation activities begin at the Site, Langan shall be provided documentation from the excavation contractor that the soil from the Alta Waverly development project containing Federal and State of California hazardous waste has been accepted by the landfill facility. The excavation contractor shall be responsible for tracking the disposition of soil removed from the Site. At this time, the proposed regulated landfills for the Federal RCRA and State of California Class I non-RCRA hazardous waste will be either Clean Harbor's Buttonwillow Landfill in Buttonwillow, California, Waste Management's Kettlemen City Landfill in Kettlemen City, California or ECDC Environmental Landfill in East Carbon, Utah. The Class II non-hazardous will be either Potrero Hill landfill in Fairfield, California or Waste Management's Altamont landfill in Livermore, California.

Based on the limited area of the Site, at this time it is anticipated that soil excavated during the construction activities will be directly loaded into trucks for off-site disposal; if necessary, other means for disposal of soils include use of bins for containing soil prior to transport and off-Site disposal. If needed, additional soil samples will be tested for analysis typically required by regulated landfills.

If soil stockpiling of suspected contaminated soil is to be performed, the excavation contractor shall establish appropriate soil stockpile locations on the Site to properly segregate, cover, control dust, profile, and manage the excavated soil. At a minimum, stockpiled soils will be

placed on top of one layer of 10-mil polyethylene sheeting (or equivalent), such as Visqueen. When stockpiled soil is not actively being handled, top sheeting will be adequately secured so that all surface areas are covered. All stockpiling activities must be in compliance with the site specific SWPPP.

#### 6.7.2 Soil Disposition

The contractor will establish appropriate off-site soil disposal locations and direct truck loading scheduling and/or soil stockpile locations on the Site to properly segregate, cover, moisture control, and profile the excavated soil. Soil profiling criteria will ultimately depend on the acceptance criteria of the facilities receiving the soil. These procedures will be established by the excavation contractor and coordinated with the proposed facilities prior to initiating soil excavation. Langan shall be provided documentation from the excavation contractor that the soils from the Alta Waverly development project to the proposed acceptance facilities have been approved. The contractor, on behalf of the owner, will be responsible for tracking final soil dispositions. Any excavated soil considered Federal RCRA or State of California non-RCRA hazardous waste will be tracked using the Uniform Hazardous Waste Manifest System (USEPA Form 8700-22), as applicable. Soil not considered hazardous waste will be tracked using non-hazardous bills of lading. These two systems will be used to comply with appropriate state and local requirements. All manifest and bills of lading will be provided to Langan during the excavation activities.

The contractor will arrange for transportation of all wastes off-site to the appropriate disposal facility using a permitted, licensed, and insured transportation company. Transporters of hazardous waste must meet the requirements of 40 CFR 263 and 22 CCR 66263. All trucks transporting bulk hazardous waste will be properly lined and covered with compatible materials.

Soil is to be exported off-site that is characterized as a hazardous waste, an appropriate USEPA Generator Identification Number will be recorded on the hazardous waste manifests used to document transport of hazardous waste off-site. The hazardous waste transporter, disposal facility, and U.S. Department of Transportation (DOT) waste description required for each manifest will be determined on a case-by-case basis. A description of the number of containers being shipped, the type of container, and the total quantity of waste being shipped will also be included on each manifest.

The excavation contractor will be responsible for accurate completion of the hazardous waste manifests and nonhazardous bills of lading. Records of all wastes shipped off-site will be



maintained by the owner and will be made available for inspection on request. The final destination of wastes transported off-site will be documented in the Soil Management Completion Report (Section 7.0).

The following records will be kept by the owner for the indicated length of time:

3. Copies of uniform hazardous waste manifests signed by the designated waste disposal facility will be retained for at least five years from the date the waste was accepted by the initial transporter.
4. All records pertaining to the characterization of hazardous or nonhazardous waste will be retained for a minimum of three years.

#### 6.7.3 Stockpile Sampling

If needed, chemical testing of the stockpiled soil will be performed to profile the soil for disposal. Soil profiling criteria depends on the proposed landfill location or off-site receiving facility. These procedures shall be established by the excavation contractor and coordinated with the proposed landfills prior to initiating soil excavation. Langan shall be provided documentation from the excavation contractor that the soils from the Alta Waverly development project to the proposed acceptance facilities have been approved. Typical soil profiling requirements for landfills are one four-point composite sample per 250 - 500 cubic yards to be disposed. If soil samples are required for analysis, the samples shall be collected using a hand-driven sampler with an inside diameter of two inches, lined with a clean stainless steel tube, and driven into the soil. The ends of the sample tube shall be covered with Teflon and sealed with plastic end caps, and placed into an ice-chilled cooler until delivery under chain-of-custody protocol to a California-certified analytical laboratory. The soil samples collected from the stockpile shall be identified by using a progressive numbering sequence with the date of the sample collection and the location. All appropriate regulatory sampling methods, holding times, and detection limits shall be followed.

#### 6.7.4 Remedial Action Goals

Remedial action goals for the Site are included for chemicals of potential concern (COPC) for soil and groundwater. The listed goals are intended to quickly guide any additional excavation needed with minimal additional communications, and provide the general knowledge of what the remedial goal at the end of the excavation will be. The COPCs and remedial goals include the following:

Based on the most recent soil results, the COPCs in soil at the Site are TPH-g, TPH-d, TPH-mo, and select Title 22 (CAM 17) metals total lead and chromium. The selected remedial action goals for the COPCs in soils are the Regional Water Quality Control Board's December 2013 environmental screening levels (ESLs) shallow residential soil where groundwater is not a current or potential drinking water resource (Table B-1) and Construction Worker ESLs (Table K-3). Additionally, the selected cleanup level for arsenic in soil is the background level of 5.10 mg/kg (described in more detail below).

In the case of arsenic in soil, the residential ESL is 0.39 mg/kg. Langan evaluated the mean arsenic concentration for soils at the Site using soil samples that did not have detected concentrations of TPH. A total of 14 samples were collected and a mean value of 3.56 mg/kg was calculated using the United States Environmental Protection Agency's ProUCL software. As previously stated in section 2.3, the geologic unit underlying the Site has been mapped as Holocene alluvium. Mean arsenic concentrations within Holocene and Pleistocene alluvium were found to be 5.10 mg/kg and 3.65 mg/kg, respectively (Duverge, 2011). Therefore, it is likely that detections of arsenic in soils at the Site will naturally exceed the ESL due to background conditions. To account for background conditions, as well as possible natural variations in arsenic concentrations on a per-sample basis, the following approach will be undertaken to evaluate samples relative to arsenic:

1. Should a single confirmation sample exceed the mean concentration of the Holocene alluvium (5.10 mg/kg), either the location with the sample will be excavated and resampled until the resampled concentration is below Holocene alluvium mean concentration of 5.10 mg.kg, OR
2. The sample concentration will be included in a 95% upper confidence limit (95UCL) of the mean of all the sample concentrations at the Site. Prior to calculating the 95UCL, the sample concentration will be statistically evaluated as to whether the concentration of the sample is considered to be a hot spot or an outlier; if so, it will be excavated and the surrounding soil will be re-sampled, and the confirmation samples used to re-calculate an updated 95UCL. If the concentration is not a statistical outlier or hotspot, and the 95UCL is below the mean value of the Holocene alluvium, then no further excavation would be necessary for that location relative to arsenic.

The cleanup goals selected for soils (in milligrams per kilogram - mg/kg) at the Site are the following:

<b>COPC</b>	<b>Cleanup Level (mg/kg)</b>
TPH-g	100
TPH-d	100
TPH-mo	100
Total lead	80
Total chromium	1,000
Arsenic	5.10

Based on most recently groundwater results, the COPCs in groundwater at the Site are TPH-g, TPH-d, and TPH-mo. The selected remedial action goals for the COPCs in groundwater are the December 2013 ESLs for groundwater that is not a current or potential drinking water resource (Table F-1b) and potential vapor intrusion ESLs for residential and commercial site use (ESL Detail Table E-1). The cleanup goals selected for groundwater (in micrograms per liter - ug/L) at the Site are the following:

<b>COPC</b>	<b>Cleanup Level (mg/kg)</b>
TPH-g	100
TPH-d	100
TPH-mo	100

#### 6.7.5 Perimeter and Excavation Base Sampling

Verification soil samples will be collected from the base and sidewalls of the excavation to verify that the lateral and vertical extent of the removal action meets the remedial action goals. Soil samples will generally be collected in following manner:

1. Sidewall verification samples would be collected at the midpoint depth of the excavation sidewall at 50 foot lateral intervals, and in locations of elevated PID readings;
2. At the location of the former USTs, additional sidewall samples will be collected at the excavation sidewall at 10 foot lateral intervals and in locations of elevated PID readings;
3. Bottom verification samples will be collected on grids covering every approximately 2,500 square feet (50 foot by 50 foot grid). Additional bottom samples will be collected in locations of staining or odorous soils or locations of elevated PID readings;

4. Additional samples would be collected at the discretion of the Langan's field personnel. Should additional excavation be necessary, excavation in sidewalls would be performed by extending the excavation a minimum of 1 foot into the sidewall, 5 feet to either side of the original sample that exceeded the cleanup goal and to the full depth of the excavation. Additional verification samples would be collected as follows: one sample would be collected directly behind the original sample in the new sidewall at the same depth and lateral location and one sample would be collected from the center of the base of the new excavation. The locations of selected samples could be adjusted by the field geologist based on field conditions, such as stained or odorous soils.
5. Additional excavations in the base of excavations would be performed by excavating a minimum of six additional inches below the base area represented by the sample exceeding the cleanup goal. One verification sample would be collected from the new excavation base; and
6. Excavation boundaries and excavation depths measured across the excavations will be recorded.

As requested by the ACEH, a report presenting confirmation soil sampling and analytical results will be submitted to the ACEH for review and approval prior to the start of the construction of the final foundation system. The report will include description of the sampling methods, a scaled figure showing sampling locations, tabulated analytical results, and laboratory analytical reports.

## **6.8 Dust Control Plan**

Prior to initiating construction activities, a Site specific dust control plan will be prepared on behalf of the General Contractor by Acumen and will be implemented to reduce potential exposure, and included as an Appendix to the Site's HASP also prepared by Acumen. This document will contain measures to protect construction workers and the public, including dust monitoring, action levels, dust control measures, and work stoppage provisions that will be followed during construction activities.

During excavation and subsurface demolition activities, a dust control plan will be implemented through implementation of engineering controls, to minimize generation of dust and the potential off-site migration of chemicals in site soil. Dust control measures at a minimum will include:

- Covering soil stockpiles with plastic sheeting;
- Watering uncovered ground surface at the Site; use of water will be limited to prevent runoff;
- Misting or spraying of soil during excavation and loading;
- Emplacement of gravel and/or rubble plates on Site access roads as feasible;
- Trucks hauling soil from the Site will be covered;
- Visible dust will be monitored during excavation and subsurface demolition;
- The soil drop height from an excavator's bucket onto soil piles or into transport trucks will be minimized;
- Windbreaks will be deployed as necessary;
- If necessary, the area of excavation may be limited to reduce dust generation;
- Site vehicle speed limits;
- Street sweeping;
- Termination of excavation if winds exceed 25 mph; and
- Addition of soil stabilizers and other responses as needed.

The site-specific dust control plan will, at a minimum, include some or all of the following procedures: site fencing; wetting soil; analysis of wind direction; dust monitors at the work zone and at the Site perimeter and appropriate record keeping, visible inspection; and establishing a hotline for community response.

The dust monitors shall be capable of continuous, real-time monitoring, data-logging, and data transmission, measurement of air-borne particulates 10 micrometers in size (PM-10) or less, measurement of a 15-minute time-weighted average (TWA), a detection limit range of between 1 microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 400,000  $\mu\text{g}/\text{m}^3$  and be able to trigger visual and/or remote alarms consisting of a flashing light, or similar, to alert on-Site monitoring and/or

contractor personnel an action level has been exceeded. The remote alarm, if used, will consist of a text message, email, phone message, or similar, to alert off-Site monitoring personnel an action level has been exceeded. The public will be notified as necessary and the General Contractor will take appropriate corrective actions.

Except in the case of heavy fog or precipitation events, the dust monitors will be set up on a daily basis, for the first week of each new, potential dust-generating activity conducted at the Site (e.g., one week of dust monitoring at the start of grading, one week of dust monitoring at the start of excavation, etc.). The dust monitors will be set up by dust monitoring personnel at the start of each work-day prior to the start of the dust generating activity, and taken down at the conclusion of each work-day. Additionally, dust monitoring personnel will be present on-site to monitor field conditions and consult with contractor personnel on suitable dust suppression measures at:

1. The start of each new dust-generating activity, and for one to two days thereafter depending on the observed Site conditions.
2. The day after an exceedance of the daily average action level, if any.
3. The day of and/or the day after an exceedance of the 15-minute TWA action level, if any.
4. The day of and/or the day after visual observation of fugitive dust, if any.
5. The day of and/or the day after neighbor complaints of dust, if any.

Two dust monitors will be placed at the Site perimeter at an upwind location, and at a downwind location. Additional dust monitors will be placed at the northern and northeastern boundaries near the adjacent residential buildings during all excavation and soil handling activities. Wind direction will be evaluated based on a wind sock or flag located at the Site as well as a weather forecasting and reporting website. Dust monitor locations will be re-located in the case of significant changes in the wind direction. The locations of the dust monitors will be recorded in dedicated field logs.

Action levels for analytes in dust will be calculated for the Site and presented in the Site specific Dust Control Plan. The action levels will be defined as the concentration of total dust in the air at which the contaminant of concern would be at its established OSHA Permissible Exposure Limits (PEL of 0.05 mg/m<sup>3</sup> for lead) and the highest detected concentration of the analyte in soil (lead in soil of 510 mg/kg). If the daily average from perimeter monitoring exceeds the California Air Resources Board (CARB) standard of 50 µg/m<sup>3</sup> or the 15-minute

TWA, additional dust control measures will be implemented. The daily average will be calculated over a 24 hour period based on the continuous dust monitoring data collected over the course of the work day. Visual and/or remote alarms on the perimeter dust monitors will be set to trigger if the 15 minute TWA is exceeded. Baseline dust conditions for the day may be either measurements collected from the upwind dust monitoring location prior to the start of the work day or as continuous monitoring data over an 8-hour period collected one to two days before the start of construction activities and extrapolated over the remainder of the 24 hour period.

If dust levels exceed the action levels listed above or if visible dust is observed, additional engineering controls will be immediately implemented by the General Contractor to minimize fugitive dust. If necessary, work will cease until conditions can be controlled so three consecutive measurements are below the established action levels. Visible emissions shall not be allowed to migrate off-Site at any time.

## **6.9 Odor Control**

When needed, odor suppression measures will be implemented by the General Contractor to minimize odor during excavation activities. The means to be considered for minimization of odors during excavation activities includes, but are not limited to: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; (c) Limiting soil excavation or loading to times when meteorological conditions are conducive to conducting operations (e.g., the predominant wind direction does not direct vapors or odors toward a sensitive receptor); (d) use of foams to cover exposed odorous soil and rock material; (e) use of chemical odorants in spray or misting systems (i.e. Simple Green, ODEX, or Biosolve); and, (e) use of staff to monitor odors in surrounding area.

## **6.10 Storm Water Pollution Controls**

Storm water pollution controls will be implemented to minimize storm water runoff and sediment transport from the Site. A Storm Water Pollution Prevention Plan (SWPPP) has been prepared by the BKF for earthwork-related activities. The SWPPP identifies Best Management Practices (BMPs) for activities as specified by the California Storm Water Best Management Practices Handbook (Stormwater Quality Task Force, 1993) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995). The SWPPP will include protocols (i.e.,

earth dikes and drainage swales) to control storm water contact with, or runoff from petroleum-impacted soil, during wet weather conditions.

### **6.11 Groundwater Management**

Groundwater at the Site has been encountered in recent years at depths of 13.5 feet to 16 feet bgs, therefore it is anticipated that no groundwater dewatering will be required. With the anticipated El Nino type weather occurring during the Alta Waverly excavation activities, rain water may accumulate in quantities that would require removal during excavation and construction, and the water will be pumped into appropriate containers (i.e. Baker Tanks) and samples will be obtained for chemical analyses. The water will be tested for parameters established by East Bay Municipal Utility District (EBMUD) for discharge into the sanitary sewer system. A permit will be obtained from EBMUD prior to any water discharge. If analytes in the groundwater exceed the EBMUD discharge limits, the water will be properly treated prior to disposal. If the water is to be discharged into the storm drain, then a discharge permit will be obtained (e.g., a National Pollutant Discharge Elimination System (NPDES) permit for discharge to the storm drain.

### **6.12 Maintenance Requirements**

When the proposed development-required excavation is implemented, all concentrations of chemicals of concern will have been removed from the Site and no maintenance activities are expected to be required with respect to residual environmental conditions at the Site. However, if the results of confirmation sampling demonstrate the need for a vapor barrier in the foundation of the garage, an appropriate maintenance plan will be implemented for the barrier.

### **6.13 Contingency Procedures for Unknown/Unexpected Conditions**

The following tasks should be implemented during soil excavation if unknown historical subsurface features and/or unanticipated hazardous materials are encountered. Such materials may include unaccounted for underground storage tanks (USTs) and associated product lines, sumps, and/or vaults, former monitoring wells, and soil with significant petroleum hydrocarbon odors and/or stains:

- Stop work in the area where the suspect material is encountered and cover with plastic sheets;



- Notify the General Contractor's site safety officer and site superintendent. The General Contractor will request that Langan conduct a Site inspection and will consult with the Langan regarding appropriate follow-up actions in the suspect area. Langan will notify the ACEH and CUPA (if needed) of Site conditions that indicate a material threat to human health or the environment;
- Review the existing health and safety plan for revisions, if necessary, and have appropriately trained personnel on-Site to work with the affected materials, once directed by the General Contractor;

If necessary, notifications will be performed, permits will be in place prior to subsurface feature removals, and permit conditions will be followed.

If a UST, product line, sump, or vault is found, ACEH and ACEH CUPA will be notified and a licensed tank removal contractor will properly remove and dispose of the UST. Proper permits and notifications should be in place prior to removal of the UST. If soil staining is observed, the affected soil will be placed in a stockpile on plastic sheets and covered with plastic sheets. Langan will complete soil sampling and analysis tasks for UST closure in accordance with ACEH and the ACEH CUPA. Langan will collect and analyze soil samples to determine disposal of the material, the extent of the unexpected area of apparent petroleum impacted soil, and that impacted material has been appropriately removed. Soil samples collected from beneath fuel pipelines, if any, will be collected beneath joints and elbows and at a frequency of one sample per 20 linear feet.

If a sump and/or vaults are located during excavation activities, Langan will be contacted for inspection and appropriate action, Langan will notify the ACEH and CUPA (if needed) of Site conditions. If no liquid, obvious soil staining or odors are noted, the sump and/or vault will be destroyed and disposed of. Langan will collect and analyze soil samples from beneath the sump and/or vault to determine disposal of the material, the extent of the unexpected area of apparent impacted soil, if any, and that impacted material has been appropriately removed. If liquid is present within the sump and/or vault and/or obvious staining and odors are noted, Langan will collect samples for analyses to evaluate proper disposal of the material Langan will collect and analyze samples of the liquid material and soil samples from beneath the sump and/or vault to determine disposal of the material, and the extent of the unexpected area of apparent impacted soil, if any, and that impacted material has been appropriately removed.

If stained soil or odors are noted in association with an unknown subsurface feature, plastic sheeting will be placed over the affected area and Langan will be contacted for inspection and appropriate action. If the stained or odor-containing soil is excavated, the soil will be stockpiled onto plastic sheeting and covered with plastic sheeting. Langan will collect and analyze soil samples to determine disposal of the material, the extent of the unexpected area of apparent petroleum impacted soil, and that impacted material has been appropriately removed. Soil samples collected from beneath fuel pipelines, if any, will be collected beneath joints and elbows and at a frequency of one sample per 20 linear feet.

## **7.0 SOIL MANAGEMENT COMPLETION REPORT**

A Soil Management Completion Report (SMCR) will be prepared that summarizes the soil and groundwater management activities and any subsequent investigative and removal activities that were completed during redevelopment and submitted to ACEH.

This SMCR will present a chronology of the construction events, a summary of analytical data, a copy of all manifests from the Site, and a description of all soil and groundwater management activities at the Site. The report will also contain laboratory analytical results and figures, as appropriate, to provide detail regarding the amount and type of contamination encountered during various activities. The report will also summarize any residual contaminants that were left on the Site after completion of redevelopment activities and document that soil handling procedures were implemented in accordance with this SGMP. We will discuss the report with ACEH as appropriate and respond to questions as needed.

## **8.0 MODIFICATIONS TO THE SGMP**

There may be a need to modify the SGMP as Site conditions and/or building plans change. Additionally, as implementation of the SGMP proceeds, CRP/WP Alta Waverly Owner, LLC and ACEH may request revised provisions of the SGMP, including those related to the soil and/or groundwater at specified locations within the Site. Such requests for modification will be included in amendments to the SGMP.

## **9.0 LIMITATIONS**

This SGMP has been prepared on behalf of CRP/WP Alta Waverly Owner, LLC and is specific to the Alta Waverly project. All conclusions and recommendations in this report concerning the Site are the professional opinions of the Langan personnel involved with the project, and this

report should not be considered a legal interpretation of existing environmental regulations. Opinions presented herein apply to Site conditions existing at the time of our assessment, and cannot necessarily be taken to apply to Site changes or conditions of which we are not aware and have not had the opportunity to evaluate. This SGMP does not address hazardous materials that may be encountered in aboveground structures, such as asbestos-containing materials or lead-based paint.

## REFERENCES

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Sloan, Doris. *Geology of the San Francisco Bay Region, California Natural History Guides*, University of California Press; First Printing edition. (360 pages), 27 June 2006.

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## **TABLES**

**Table 1**  
**Assessor Parcel Numbers and Street Addresses**  
**Alta Waverly**  
**2302 Valdez Street**  
**Oakland, California**

Langan Project: 731641601  
 January 2016

<b>APN #</b>	<b>Address</b>	<b>Historical Use</b>	<b>Current Use</b>	<b>Proposed Use</b>	<b>Associated Borings/Monitoring Wells</b>
008-669-009	2335 Waverly Street	Residential (dwelling), 2-story building	Surface Parking Lot	Residential and Retail Development	EB-3, EB-4, SG-2, CPT-2A, and CPT-2
008-669-010	2321 Waverly Street	Residential (dwelling)	Surface Parking Lot	Residential and Retail Development	B-4 and SG-3
008-669-012	2302 Valdez Street	Residential, Oakland Tribune Garage facility, two former USTs	Surface Parking Lot	Residential and Retail Development	EB-6, EB-7, EB-8, EB-9, SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-8, SB-9, SB-10, SB-11, SB-12, SGW-1, SG-5, SG-6, SG-7, SSG-1 and SSG-2, MW-2, MW-3, MW-4, and MW-6
008-669-013	2316 Valdez Street	Residential, Truck parking, 2-story building	Surface Parking Lot	Residential and Retail Development	B-3, EB-5, CPT-3, and CPT-4
008-669-014	Valdez Street (no #)	Residential	Surface Parking Lot	Residential and Retail Development	B-2, EB-2, and SB-7/MW-7
008-669-015	2328 Valdez Street	Residential	Surface Parking Lot	Residential and Retail Development	B-8, SG-1, and CPT-5
008-669-016	2332 Valdez Street	Residential, Parking	Surface Parking Lot	Residential and Retail Development	B-1, B-7, EB-1, CPT-1, and CPT-1A
008-669-017	2342 Valdez Street	Residential, Auto electrical shop	Auto Detailing Shop	Residential and Retail Development	B-5, B-6, CPT-7, and MW-10

**Table 2**  
**Non-Metal Analytical Results in Soil**  
**Alta Waverly**  
**2302 Valdez Street**  
**Oakland, California**

Sample ID	Sample Depth (feet)	Date Sample	TPHg	TPHd	TPHmo	VOCs	SVOCs	OCPs	PCBs
(mg/kg)									
B-1-3.0	3.0	09/06/14	< 1.0	2.1	8.9	–	–	–	–
B-1-9.0	9.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
B-2-3.0	3.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
B-2-5.5	5.5	09/06/14	< 1.0	1.3	< 5.0	–	–	–	–
B-3-3.0	3.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
B-3-5.0	5.0	09/06/14	< 1.0	2.6	< 5.0	–	–	–	–
B-4-3.0	3.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
B-4-5.5	5.5	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
B-5-2.0	2.0	12/6/2014	< 1.0	< 1.0	< 5.0	ND	ND	ND	< 0.050
B-5-5.5	5.5	12/6/2014	< 1.0	< 1.0	< 5.0	ND	–	–	–
B-5-8.5	8.5	12/6/2014	< 1.0	< 1.0	< 5.0	–	–	–	–
B-6-2.0	2.0	12/6/2014	< 1.0	7.4	27	–	ND	ND	–
B-6-3.5	3.5	12/6/2014	< 1.0	2.8	6.0	ND	ND	–	< 0.050
B-6-5.5	5.5	12/6/2014	< 1.0	< 1.0	< 5.0	–	ND	–	–
B-7-2.0	2.0	12/6/2014	< 1.0	< 1.0	5.4	–	–	ND	–
B-7-5.5	5.5	12/6/2014	< 1.0	< 1.0	< 5.0	ND	ND	–	< 0.050
B-7-8.5	8.5	12/6/2014	< 1.0	< 1.0	< 5.0	ND	–	–	–
CPT-7-1.5	1.5	12/6/2014	< 1.0	2.4	14	ND	ND <sup>2</sup>	ND	< 0.050
CPT-7-3.0	3.0	12/6/2014	< 1.0	81	<b>140</b>	ND <sup>1</sup>	ND <sup>3</sup>	ND	–
CPT-7-8.0	8.0	12/6/2014	< 1.0	3.5	11	ND	ND <sup>4</sup>	–	< 0.050
EB-1-1.5	1.5	09/06/14	< 1.0	< 1.0	< 5.0	–	–	ND	ND
EB-1-5.0	5.0	09/06/14	< 1.0	2.7	33	ND	ND	–	–
EB-1-8.0	8.0	09/06/14	< 1.0	1.1	5.5	–	–	–	–
EB-2-1.5	1.5	09/06/14	< 1.0	2.2	19	–	–	–	–
EB-2-3.0	3.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-2-8.0	8.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-3-1.5	1.5	09/06/14	2.9	<b>290</b>	<b>660</b>	–	–	ND	ND
EB-3-5.0	5.0	09/06/14	< 1.0	< 1.0	< 5.0	ND	ND	–	–
EB-4-1.5	1.5	09/06/14	< 1.0	4.5	59	–	–	–	–
EB-4-3.0	3.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-4-8.0	8.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-5-1.5	1.5	09/06/14	< 1.0	3.8	26	–	–	ND	ND
EB-5-3.0	3.0	09/06/14	< 1.0	1.2	15	–	–	–	–
EB-5-5.0	5.0	09/06/14	< 1.0	3.6	70	–	–	–	–
EB-5-8.0	8.0	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-6-1.5	1.5	09/06/14	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-6-3.0	3.0	09/06/14	< 1.0	1.0	< 5.0	ND	ND	–	< 0.050
EB-7-1.5	1.5	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-7-5.0	5.0	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-7-7.5	7.5	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-7-15	15.0	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-7-20	20.0	02/07/15	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-8-3.0	3.0	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-8-7.5	7.5	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-8-10	10.0	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-8-15	15.0	02/07/15	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-9-3.0	3.0	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-9-5.0	5.0	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-9-7.5	7.5	02/07/15	< 1.0	< 1.0	< 5.0	ND	ND	ND	ND
EB-9-10	10.0	02/07/15	< 1.0	< 1.0	< 5.0	–	–	–	–
EB-9-15	15	42042	< 1.0	< 1.0	< 5.0	–	–	–	–
Residential ESLs			100	100	100				
Commercial ESLs			500	110	500				
Construction Worker ESLs			2,700	900	28,000				

**Notes:**

mg/kg - milligrams per kilogram

– - soil to be excavated

TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M

TPHd - Total Petroleum Hydrocarbons as Diesel Range, EPA Method 8015M

TPHmo - Total Petroleum Hydrocarbons as Motor Oil EPA Method 8015M

VOCs - Volatile Organics, EPA Method 8260B

SVOCs - Semi-Volatile Organics, EPA Method 8270C

OCPs - Organochlorine Pesticides (EPA Method 8081A/8082)

PCBs - Polychlorinated Biphenyls (EPA Method 8081A/8082)

<sup>1</sup> - Naphthalene was detected at a concentration of 0.029 mg/kg. Does not exceed ESL

<sup>2</sup> - Pyrene was detected at a concentration of 0.26 mg/kg. Does not exceed ESL

<sup>3</sup> - Floranthene was detected at a concentration of 6.2 mg/kg; Phenanthrene was detected at a concentration of 8.1 mg/kg; and

Pyrene was detected at a concentration of 5.6 mg/kg. Does not exceed ESLs

<sup>4</sup> - Floranthene was detected at a concentration of 0.26 mg/kg, and Pyrene was detected at a concentration of 0.30 mg/kg. Does

not exceed ESLs

Residential ESLs - Regional Water Quality Control Board, SFBay, Environmental Screening Levels in shallow soils for residential

land use when groundwater is not a current or potential drinking water resource (Table B-1, December 2013)

Commercial ESLs - Regional Water Quality Control Board, SFBay, Environmental Screening Levels in shallow soils for

commercial/industrial land use when groundwater is not a current or potential drinking water resource (Table B-2, December 2013)

Construction Worker ESLs - Regional Water Quality Control Board, SFBay, Direct Exposure Soil Screening Levels for

construction/trench worker exposure scenario (Table K-3, December 2013)

**Bold** - Detected concentration exceeds screening level(s)

< 1.0 - Analyte was not detected above the laboratory reporting limit (1.0 mg/kg)

– Not analyzed

ND - Not detected at or above the laboratory reporting limit



**Table 3**  
**Metal Analytical Results in Soil**  
**Alta Waverly**  
**2302 Valdez Street**  
**Oakland, California**

Sample ID	Sample Depth (feet)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium STLC	Cobalt	Copper	Lead	Lead STLC	Lead TCLP	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			(mg/kg)						(mg/L)	(mg/kg)			(mg/L)		(mg/kg)							
B-1-3.0	3.0	09/06/14	< 0.50	4.0	140	0.68	< 0.25	62	< 0.050	14	20	7.1	--	--	0.074	< 0.50	92	< 0.50	< 0.50	< 0.50	47	41
B-1-9.0	9.0	09/06/14	--	--	--	--	< 0.25	59	< 0.050	--	--	7.7	--	--	--	--	78	--	--	--	--	49
B-2-3.0	3.0	09/06/14	--	--	--	--	< 0.25	39	--	--	--	4.8	--	--	--	--	32	--	--	--	--	20
B-2-5.5	5.5	09/06/14	--	--	--	--	< 0.25	62	< 0.050	--	--	12	--	--	--	--	94	--	--	--	--	41
B-3-3.0	3.0	09/06/14	< 0.50	3.8	120	0.51	< 0.25	49	--	11	17	5.1	--	--	0.077	< 0.50	66	< 0.50	< 0.50	< 0.50	40	33
B-4-3.0	3.0	09/06/14	< 0.50	2.8	180	< 0.50	0.31	29	1.2	9.0	14	60	1.2	< 0.20	0.054	< 0.50	27	< 0.50	< 0.50	< 0.50	28	120
B-4-5.5	5.5	09/06/14	--	--	--	--	< 0.25	44	--	--	--	4.8	--	--	--	--	38	--	--	--	--	29
B-5-2.0	2.0	12/6/2014	< 0.50	2.4	160	0.63	< 0.25	53	< 0.050	11	12	4.8	--	--	0.066	< 0.50	100	< 0.50	< 0.50	< 0.50	29	27
B-5-5.5	5.5	12/6/2014	--	--	--	--	< 0.25	51	< 0.050	--	--	8.4	--	--	--	--	72	--	--	--	--	46
B-5-8.5	8.5	12/6/2014	--	--	--	--	0.39	48	--	--	--	5.3	--	--	--	--	84	--	--	--	--	36
B-6-2.0	2.0	12/6/2014	--	--	--	--	< 0.25	150	<b>5.6</b>	--	--	<b>2,600</b>	--	<b>15</b>	--	--	82	--	--	--	--	180
B-6-3.5	3.5	12/6/2014	0.64	4.9	550	0.64	< 0.25	42	--	8.8	27	36	--	--	0.093	0.93	46	< 0.50	< 0.50	< 0.50	52	49
B-6-5.5	5.5	12/6/2014	--	--	--	--	< 0.25	29	--	--	--	17	--	--	--	--	29	--	--	--	--	330
B-7-2.0	2.0	12/6/2014	< 0.50	3.4	110	0.57	< 0.25	56	0.075	3.4	15	7.0	--	--	< 0.050	0.52	44	< 0.50	< 0.50	< 0.50	39	36
B-7-5.5	5.5	12/6/2014	--	--	--	--	< 0.25	53	< 0.050	--	--	7.4	--	--	--	--	110	--	--	--	--	40
B-7-8.5	8.5	12/6/2014	< 0.50	2.9	200	0.55	< 0.25	62	< 0.050	7.4	20	5.5	--	--	< 0.050	< 0.50	68	< 0.50	< 0.50	< 0.50	39	46
CPT-7-1.5	1.5	12/6/2014	--	--	--	--	< 0.25	39	--	--	--	14	--	--	--	--	44	--	--	--	--	36
CPT-7-3.0	3.0	12/6/2014	< 0.50	3.0	89	< 0.50	< 0.25	25	--	4.8	13	53	--	--	0.052	< 0.50	23	< 0.50	< 0.50	< 0.50	25	48
CPT-7-8.0	8.0	12/6/2014	0.58	5.4	150	0.64	0.31	53	0.11	14	23	130	4.1	< 0.20	0.11	< 0.50	60	< 0.50	< 0.50	< 0.50	47	90
EB-1-1.5	1.5	09/06/14	< 0.50	3.6	180	0.54	< 0.25	50	< 0.050	14	17	10	--	--	< 0.050	0.65	38	< 0.50	< 0.50	< 0.50	39	32
EB-1-5.0	5.0	09/06/14	--	--	--	--	< 0.25	38	--	--	--	5.1	--	--	--	--	74	--	--	--	--	30
EB-1-8.0	8.0	09/06/14	--	--	--	--	< 0.25	53	< 0.050	--	--	14	--	--	--	--	79	--	--	--	--	46
EB-2-1.5	1.5	09/06/14	0.59	4.3	140	0.52	< 0.25	43	--	10	19	44	--	--	0.052	< 0.50	43	< 0.50	< 0.50	< 0.50	39	54
EB-2-3.0	3.0	09/06/14	--	--	--	--	< 0.25	49	--	--	--	7.6	--	--	--	--	54	--	--	--	--	31
EB-2-8.0	8.0	09/06/14	--	--	--	--	< 0.25	61	0.077	--	--	15	--	--	--	--	85	--	--	--	--	52
EB-3-1.5	1.5	09/06/14	--	--	--	--	0.50	38	--	--	--	290	<b>24</b>	1.1	--	--	32	--	--	--	--	260
EB-3-5.0	5.0	09/06/14	--	--	--	--	< 0.25	40	--	--	--	6.3	--	--	--	--	27	--	--	--	--	26
EB-4-1.5	1.5	09/06/14	1.8	6.7	350	0.57	0.51	45	--	13	52	190	<b>8.5</b>	< 0.20	0.45	0.57	44	< 0.50	< 0.50	< 0.50	42	180
EB-4-3.0	3.0	09/06/14	--	--	--	--	< 0.25	45	--	--	--	310	<b>26</b>	< 0.20	--	--	38	--	--	--	--	65
EB-4-8.0	8.0	09/06/14	--	--	--	--	< 0.25	12	--	--	--	2.6	--	--	--	--	7.8	--	--	--	--	43
EB-5-1.5	1.5	09/06/14	1.0	6.6	320	0.68	0.34	44	--	13	42	170	<b>11</b>	< 0.20	0.24	0.61	47	< 0.50	< 0.50	< 0.50	41	150
EB-5-3.0	3.0	09/06/14	--	--	--	--	0.37	48	--	--	--	510	<b>27</b>	0.36	--	--	57	--	--	--	--	210
EB-5-5.0	5.0	09/06/14	--	--	--	--	0.53	36	--	--	--	360	<b>19</b>	< 0.20	--	--	30	--	--	--	--	250
EB-5-8.0	8.0	09/06/14	--	--	--	--	< 0.25	60	--	--	--	7.8	--	--	--	--	55	--	--	--	--	28

**Table 3**  
**Metal Analytical Results in Soil**  
**Alta Waverly**  
**2302 Valdez Street**  
**Oakland, California**

Sample ID	Sample Depth (feet)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Chromium STLC	Cobalt	Copper	Lead	Lead STLC	Lead TCLP	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			(mg/kg)						(mg/L)	(mg/kg)			(mg/L)		(mg/kg)							
EB-6-1.5	1.5	09/06/14	--	--	--	--	< 0.25	57	< 0.050	--	--	7.1	--	--	--	--	89	--	--	--	--	36
EB-6-3.0	3.0	09/06/14	< 0.50	3.6	130	0.62	< 0.25	58	< 0.050	--	18	6.0	--	--	< 0.050	< 0.50	89	< 0.50	< 0.50	< 0.50	43	38
EB-7-1.5	1.5	02/07/15	< 0.50	3.8	150	< 0.50	< 0.25	35	--	7.8	16	170	4.1	< 0.20	0.34	0.56	24	< 0.50	< 0.50	< 0.50	28	170
EB-7-5.0	5.0	02/07/15	< 0.50	2.9	130	< 0.50	< 0.25	32	--	7.4	12	17	--	--	0.092	< 0.50	26	< 0.50	< 0.50	< 0.50	30	29
EB-7-7.5	7.5	02/07/15	< 0.50	3.8	150	0.75	< 0.25	60	< 0.050	7.2	24	5.8	--	--	0.091	< 0.50	81	< 0.50	< 0.50	< 0.50	41	47
EB-7-15	15.0	02/07/15	< 0.50	4.8	200	0.56	< 0.25	52	--	15	16	7.3	--	--	0.052	0.71	79	< 0.50	< 0.50	< 0.50	43	33
EB-8-3.0	3.0	02/07/15	< 0.50	3.8	280	0.55	< 0.25	49	--	12	14	7.6	--	--	0.055	< 0.50	60	< 0.50	< 0.50	< 0.50	39	29
EB-8-7.5	7.5	02/07/15	< 0.50	4.0	230	< 0.50	< 0.25	44	--	8.0	15	5.0	--	--	< 0.050	< 0.50	51	< 0.50	< 0.50	< 0.50	38	36
EB-8-10	10.0	02/07/15	< 0.50	2.0	600	< 0.50	0.33	44	--	17	23	9.2	--	--	< 0.050	0.64	110	< 0.50	< 0.50	< 0.50	42	40
EB-9-3.0	3.0	02/07/15	< 0.50	3.7	180	< 0.50	< 0.25	41	--	9.2	12	6.5	--	--	< 0.050	< 0.50	33	< 0.50	< 0.50	< 0.50	34	21
EB-9-5.0	5.0	02/07/15	< 0.50	3.9	270	0.64	< 0.25	57	< 0.050	17	21	11	--	--	< 0.050	< 0.50	93	< 0.50	< 0.50	< 0.50	53	48
EB-9-7.5	7.5	02/07/15	< 0.50	3.3	150	0.68	< 0.25	52	--	9.5	19	6.5	--	--	0.11	< 0.50	70	< 0.50	< 0.50	< 0.50	42	41
Hazardous Waste Criterion																						
TTL	(mg/kg)		500	500	10,000	75	100	2,500	--	8,000	2,500	1,000	--	--	20	3,500	2,000	100	500	700	2,400	5,000
STLC	(mg/L)		15	5	100	0.75	1	--	5	80	25	--	5	--	0.2	350	20	1	5	7	24	250
TCLP	(mg/L)		--	5	100	--	1	--	--	--	--	--	--	5	0.2	--	--	1	5	--	--	--
Residential ESLs	(mg/kg)		20	0.39	750	4.0	12	1,000	NE	23	230	80	NE	NE	6.7	40	150	10	20	0.78	200	600
Commercial ESLs	(mg/kg)		40	1.6	1,500	8.0	12	2,500	NE	80	230	320	NE	NE	10	40	150	10	40	10	200	600
Construction Worker ESLs	(mg/kg)		120	10	61,000	180	110	NE	NE	49	12,000	320	NE	NE	27	1,500	6,100	1,500	1,500	3.1	1,500	93,000

**Notes:**

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

-- soil to be excavated

< 0.5 - Analyte was not detected above the laboratory reporting limit (0.5 mg/kg).

-- Not analyzed

**Bold** - Detected concentration exceeds hazardous waste criterion

TTL - California Total Threshold Limit Concentration - State hazardous waste criterion

STLC - California Soluble Threshold Limit Concentration

TCLP - Federal Toxicity Characteristic Leaching Procedure

Residential ESLs - Regional Water Quality Control Board, SFBay, Environmental Screening Levels in shallow soils for residential land use when groundwater is not a current or potential drinking water resource (Table B-1, December 2013)

Commercial ESLs - Regional Water Quality Control Board, SFBay, Environmental Screening Levels in shallow soils for commercial/industrial land use when groundwater is not a current or potential drinking water resource (Table B-2, December 2013)

Construction Worker ESLs - Regional Water Quality Control Board, SFBay, Direct Exposure Soil Screening Levels for construction/trench worker exposure scenario (Table K-3, December 2013)

NE - No established ESL

**Table 4  
Non-Metal Analytical Results in Groundwater  
Alta Waverly  
2302 Valdez Street  
Oakland, California**

Sample ID	Date Sampled	TPHg	TPHd	TPHmo	VOCs																		SVOCs	PCBs	
					Acetone	Benzene	2-Butanone (MEK)	t-Butyl alcohol (TBA)	n-Butyl benzene	sec-Butyl benzene	tert-Butyl benzene	Chloroform	Diisopropyl ether (DIPE)	Ethyl-benzene	Isopropyl-benzene	4-Isopropyl toluene	Methyl tert-butyl ether (MTBE)	Naphthalene	n-Propyl benzene	Toluene	1,3,5-Trimethyl-benzene	Total Xylenes			All Other VOCs
					(µg/L)																				
MW-2	09/12/14	190	< 50	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	ND	--	--
MW-2	09/24/14	< 50	< 50	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	--	--
MW-3	03/04/15	< 50	< 50	< 250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	09/12/14	< 50	78	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	--	--
MW-4	09/24/14	< 50	< 50	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	--	--
MW-6	09/24/14	< 50	< 50	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	--	--
MW-7	09/12/14	< 50	< 50	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	--	--
MW-8	09/12/14	< 50	< 50	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	--	--
MW-9	09/12/14	<b>620</b>	460	< 250	17	2.3	8.3	< 2.0	2.2	1.7	< 0.50	< 0.50	< 0.50	4.4	11	0.68	< 0.50	6.2	14	2.0	0.73	2.7	ND	--	--
MW-9	09/24/14	<b>520</b>	220	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.55	0.73	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	ND	--	--
MW-10	03/04/15	< 50	< 50	< 250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B-5-GW	12/06/14	< 50	190	250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	ND	< 0.50
B-7-GW	12/06/14	< 50	610	<b>670</b>	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	ND	ND	< 0.50
CPT-7-GW	12/06/14	< 50	63	< 250	< 10	< 0.50	< 2.0	< 2.0	< 0.50	< 0.50	< 0.50	0.82	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	ND	ND	< 0.50
EB-8-GW	02/07/15	<b>3,100</b>	<b>720</b>	< 250	< 20	3.0	< 4.0	< 4.0	13	7.5	2.2	< 0.50	3.2	< 1.0	8.7	2.2	< 1.0	< 1.0	11	< 1.0	< 1.0	< 1.0	ND	--	--
EB-9-GW	02/07/15	94	320	< 250	< 10	< 0.50	3.3	4.7	0.63	0.78	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.53	< 0.50	< 0.50	ND	--	--
ESLs <sup>1</sup>		500	640	640	1,500	27	14,000	18,000	NE	NE	NE	170	NE	43	NE	NE	1800	24	NE	130	NE	100			

**Notes:**  
µg/L - micrograms per liter  
TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M  
TPHd - Total Petroleum Hydrocarbons as Diesel Range, EPA Method 8015M  
TPHmo - Total Petroleum Hydrocarbons as Motor Oil, EPA Method 8015M  
MEK - Methyl Ethyl Ketone  
VOC - Volatile Organics Compounds, EPA 8260B  
< 50 - Analyte was not detected above the laboratory reporting limit (50 µg/L)  
-- Not Analyzed  
**Bold** - Exceeds Screening Level  
ND - Analyte was not detected above the laboratory reporting limits  
ESLs<sup>1</sup> - Regional Water Quality Control Board, SFBay, Environmental Screening Levels Groundwater Where Groundwater is Not a Current or Potential Drinking Water Resource: Table F-1b (December 2013)  
NE - No established ESL

**Table 5**  
**Metal Analytical Results in Grab Groundwater**  
**Alta Waverly**  
**2302 Valdez Street**  
**Oakland, California**

Sample ID	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Colbalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		(µg/L)																
B-5-GW	12/6/2014	< 0.50	3.7	960	9.3	3.5	34	150	33	5.7	< 0.25	< 0.50	640	1.2	0.22	< 0.50	23	160
B-7-GW	12/6/2014	< 10	< 10	400	16	5	46	300	61	< 10	< 0.50	< 10	930	< 10	< 3.8	< 10	31	340
CPT-7-GW	12/6/2014	--	--	--	--	< 5.0	530	--	--	29	--	--	1,400	--	--	--	--	44

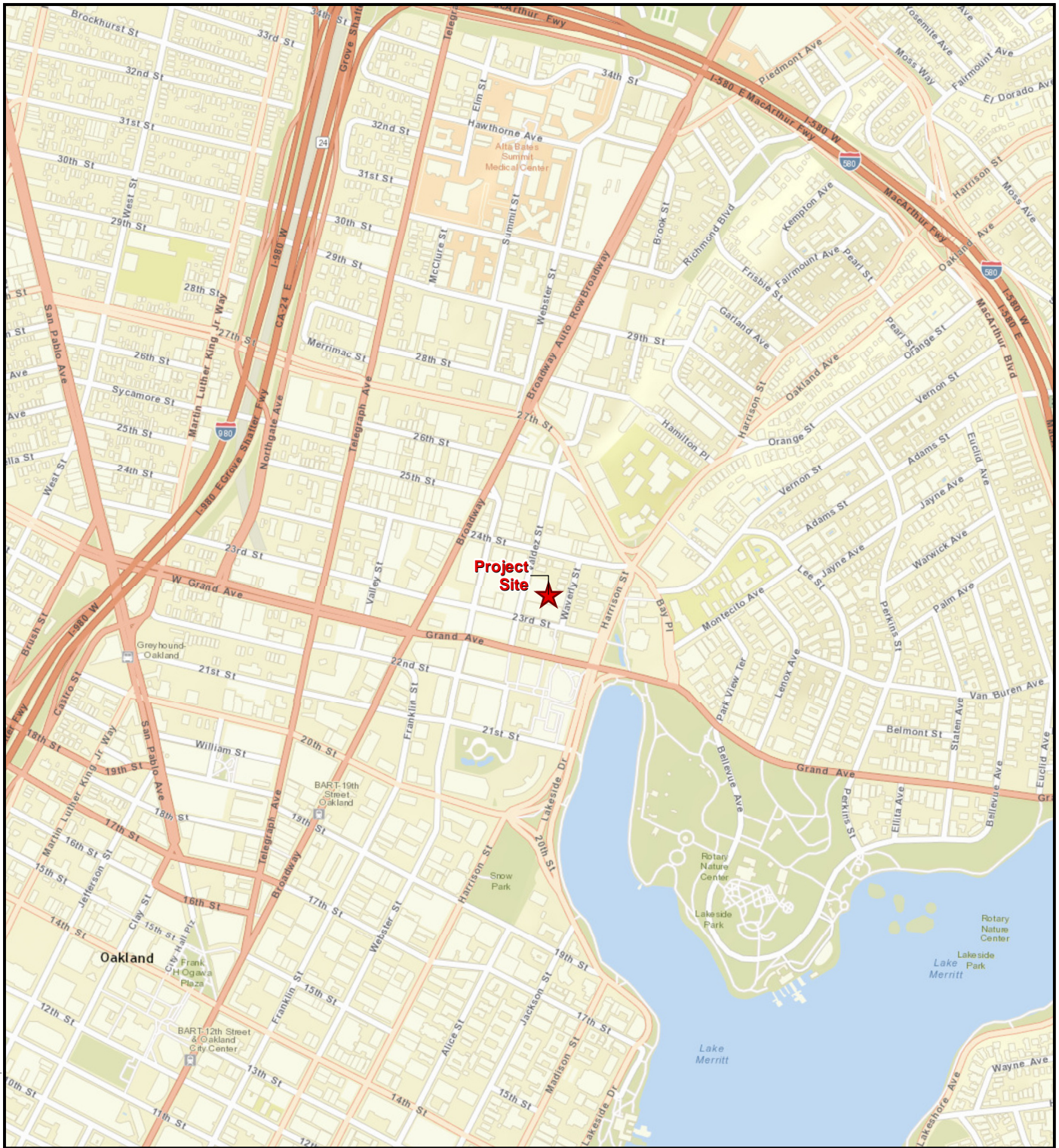
Notes:

µg/L - micrograms per Liter

< 0.50 - Analyte was not detected above the laboratory reporting limit (0.5 mg/kg).

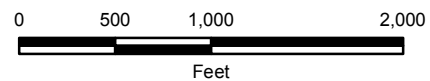
-- Not analyzed

## **FIGURES**



**Notes:**

1. World street basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online. Credits: Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN.
2. Map displayed in California State Plane Coordinate System , Zone III, North American Datum of 1983 (NAD83), US Survey Feet.



**ALTA WAVERLY  
2302 VALDEZ STREET**  
Oakland, California

**SITE LOCATION MAP**

**LANGAN TREADWELL ROLLO**

Date 9/29/2014

Project 731641601

Figure 1

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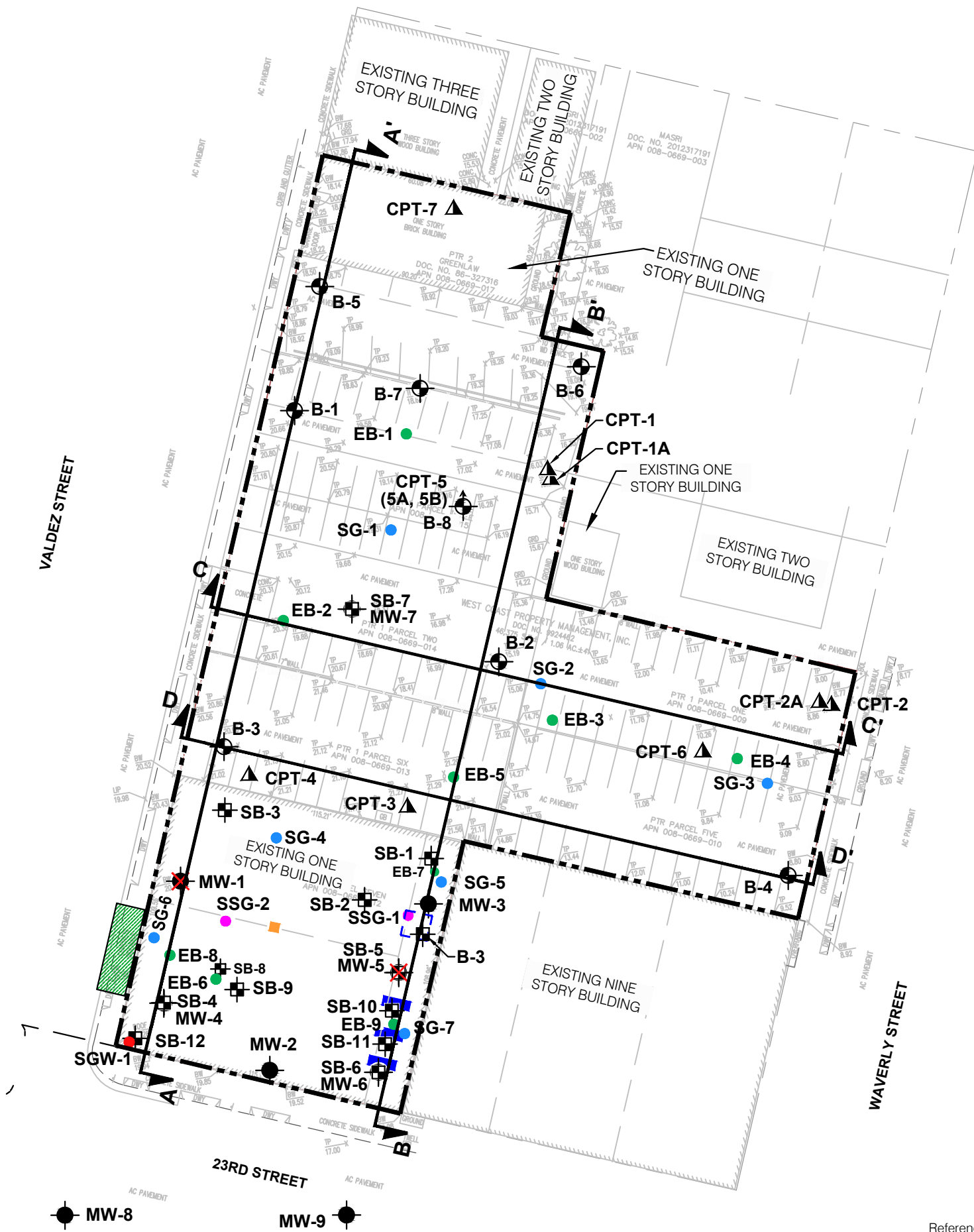
MAP KEY	APN #
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10	008-669-010
12	008-669-012
13	008-669-013
14	008-669-014
15	008-669-015
16	008-669-016
17	008-669-017



**ALTA WAVERLY**  
**2302 VALDEZ STREET**  
 Oakland, California

**SITE PLAN**

**LANGAN TREADWELL ROLLO**

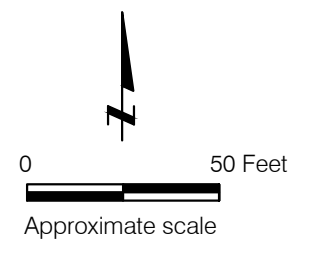


**EXPLANATION**

- B-1** Approximate location of geotechnical boring by Langan Treadwell Rollo, September and December 2014
- CPT-1** Approximate location of geotechnical cone penetration test by Langan Treadwell Rollo, September and December 2014 (Note: CPT-1A & CPT-2A were grab sample locations)
- MW-1** Approximate location of previously installed monitoring well
- SB-1** Approximate location of soil boring by Dames and Moore, August 1989 & GRIBI Associates, February 1998
- Approximate location of former USTs. Removed February 1988
- Approximate Site boundary
- SGW-1** Approximate location of permanent soil vapor probe by Langan Treadwell Rollo, February 2015
- EB-1** Approximate location of environmental boring by Langan Treadwell Rollo, September 2014 and February 2015
- SG-1** Approximate location of environmental soil vapor sampling by Langan Treadwell Rollo, September 2014 and February 2015
- SSG-1** Approximate location of environmental sub-slab soil vapor sampling by Langan Treadwell Rollo, September 2014
- Abandoned monitoring well
- Former Drain Area
- Hydraulic Lifts
- Former Fuel Dispenser
- Idealized subsurface profile location (See Figures 5, 6, 7 & 8)
- Proposed Improvements

**NOTE**

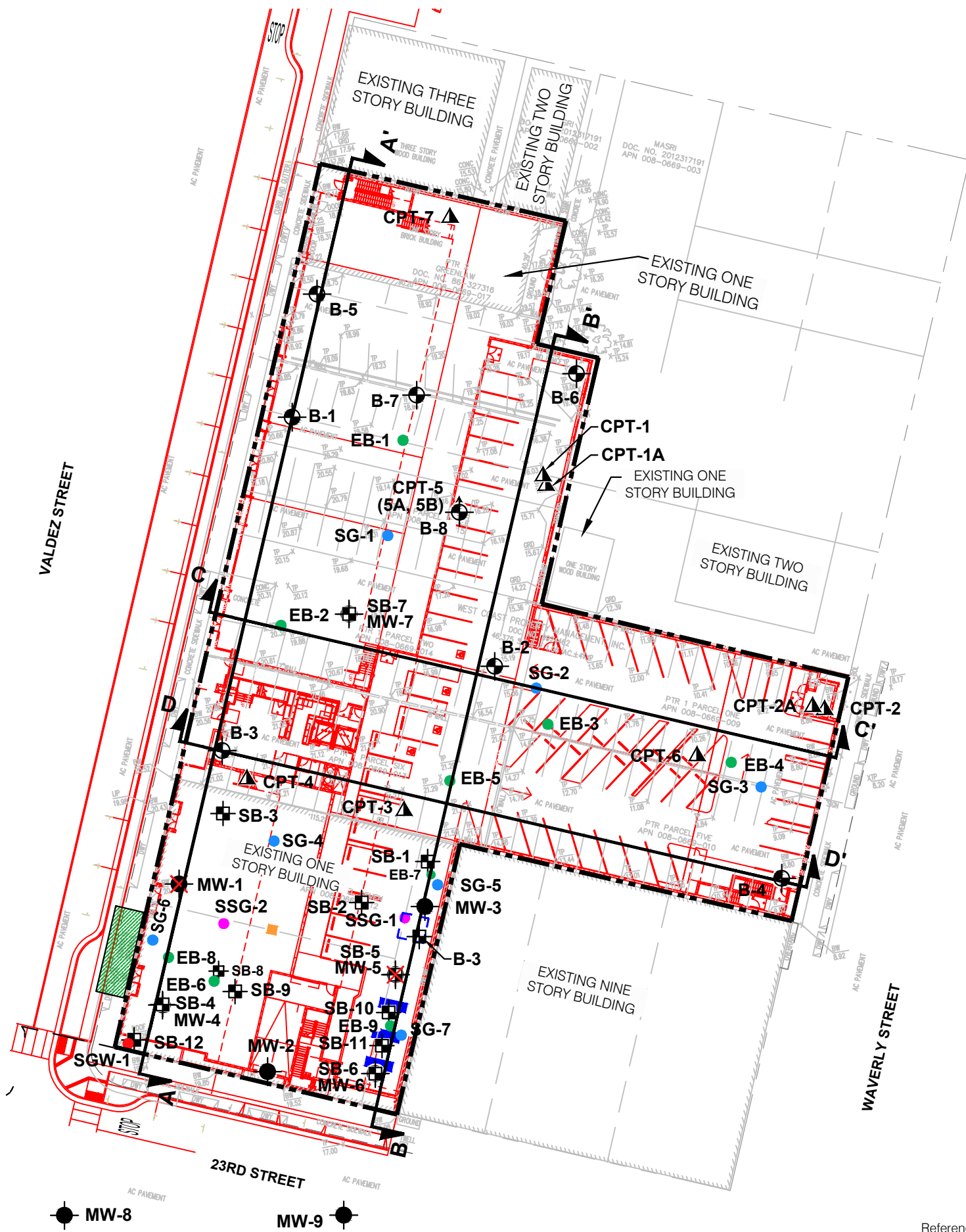
1. Proposed Site Plan per PYATOK Architects.
2. Proposed housing/retail is located on the ground level. Proposed parking is located below ground level.



Reference: Base map from drawing titled "Existing Site Boundary Plan", by BKF, dated 21 November 2014.

<b>ALTA WAVERLY</b> 2302 VALDEZ STREET Oakland, California		
<b>SITE PLAN WITH SAMPLING LOCATIONS</b>		
Date 1/26/16	Project No. 731641601	Figure 3
<b>LANGAN TREADWELL ROLLO</b>		



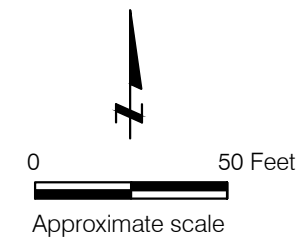


**EXPLANATION**

- B-1** Approximate location of geotechnical boring by Langan Treadwell Rollo, September and December 2014
- CPT-1** Approximate location of geotechnical cone penetration test by Langan Treadwell Rollo, September and December 2014 (Note: CPT-1A & CPT-2A were grab sample locations)
- MW-1** Approximate location of previously installed monitoring well
- SB-1** Approximate location of soil boring by Dames and Moore, August 1989 & GRIBI Associates, February 1998
- Approximate location of former USTs. Removed February 1988
- Approximate Site boundary
- SGW-1** Approximate location of permanent soil vapor probe by Langan Treadwell Rollo, February 2015
- EB-1** Approximate location of environmental boring by Langan Treadwell Rollo, September 2014 and February 2015
- SG-1** Approximate location of environmental soil vapor sampling by Langan Treadwell Rollo, September 2014 and February 2015
- SSG-1** Approximate location of environmental sub-slab soil vapor sampling by Langan Treadwell Rollo, September 2014
- Abandoned monitoring well
- Former Drain Area
- Hydraulic Lifts
- Former Fuel Dispenser
- Idealized subsurface profile location (See Figures 5, 6, 7 & 8)
- Proposed Improvements

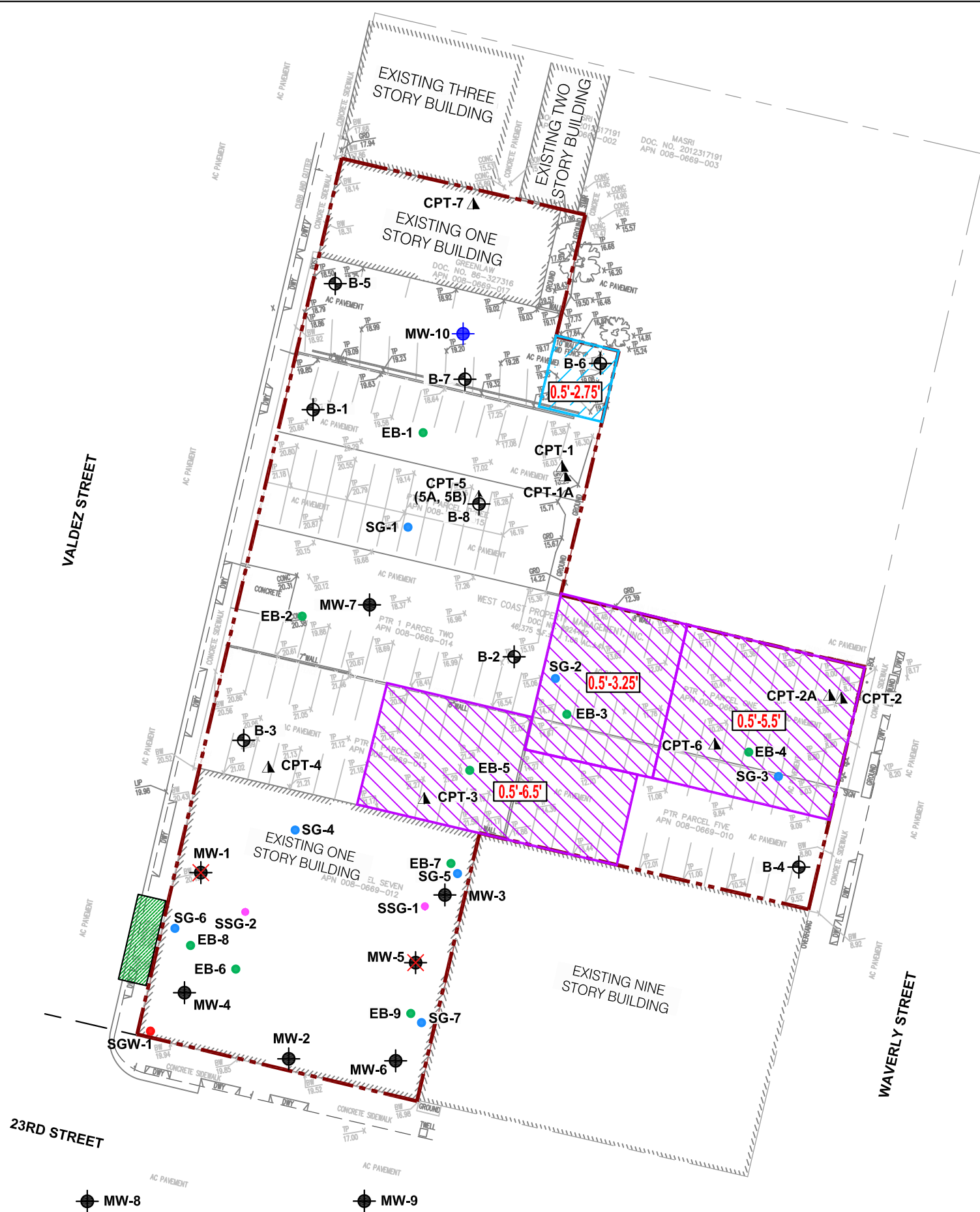
**NOTE**

1. Proposed Site Plan per PYATOK Architects.
2. Proposed housing/retail is located on the ground level. Proposed parking is located below ground level.



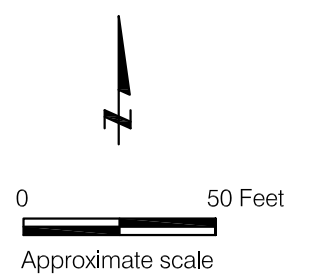
Reference: Base map from drawing titled "Existing Site Boundary Plan", by BKF, dated 21 November 2014.

<b>ALTA WAVERLY 2302 VALDEZ STREET Oakland, California</b>		
<b>LAYOUT SAMPLING LOCATIONS SITE PLAN WITH GROUND FLOOR</b>		
Date 1/29/16	Project No. 731641601	Figure 3A
<b>LANGAN TREADWELL ROLLO</b>		



**EXPLANATION**

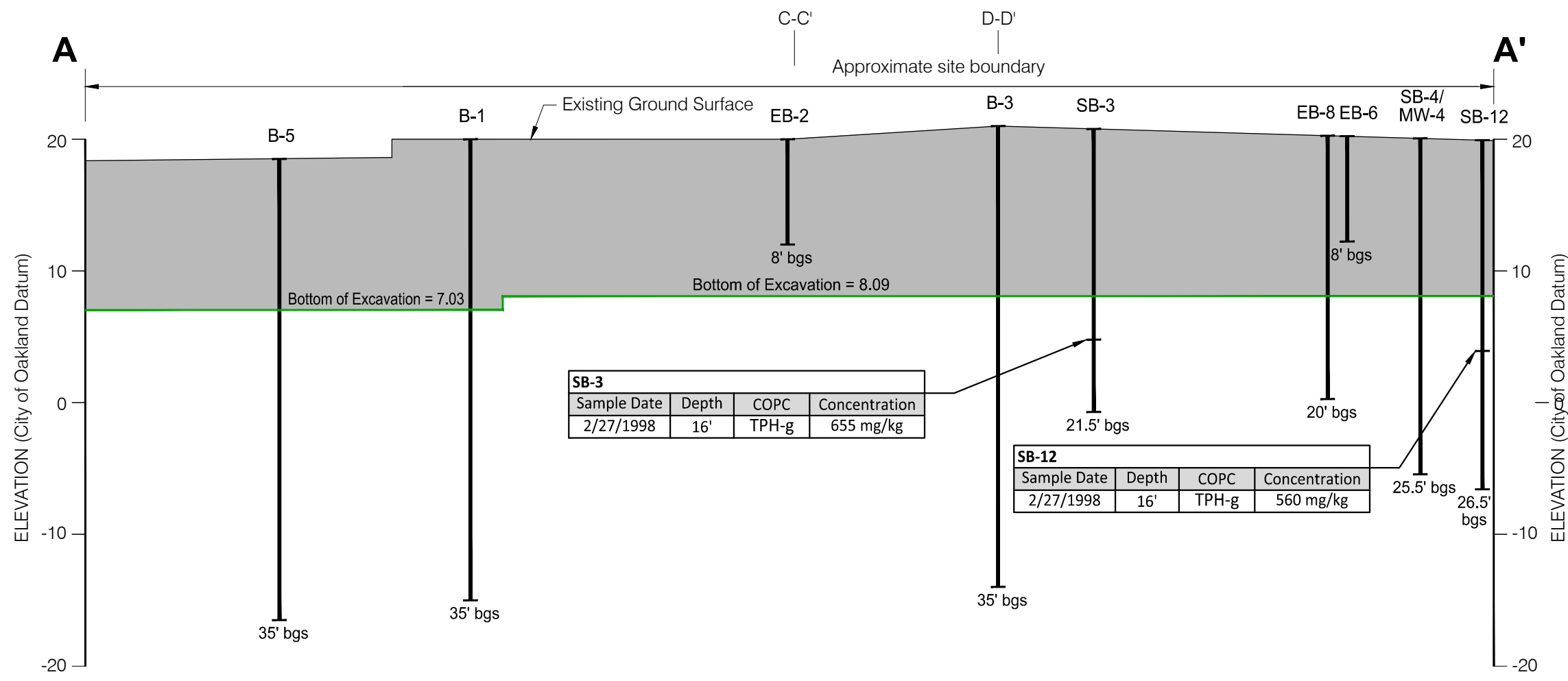
- B-1** Approximate location of geotechnical boring by Langan Treadwell Rollo, September and December 2014
- CPT-1** Approximate location of geotechnical cone penetration test by Langan Treadwell Rollo, September and December 2014 (Note: CPT-1A & CPT-2A were grab sample locations)
- MW-1** Approximate location of previously installed monitoring well by Langan Treadwell Rollo, November 2010
- MW-10** Approximate location of installed monitoring well by Langan Treadwell Rollo, February 2015
- Approximate location of former USTs. Removed February 1988
- Approximate Site boundary
- SGW-1** Approximate location of permanent soil vapor probe by Langan Treadwell Rollo, February 2015
- EB-5** Approximate location of environmental boring by Langan Treadwell Rollo, September 2014 and February 2015
- SG-7** Approximate location of environmental soil vapor sampling by Langan Treadwell Rollo, September 2014 and February 2015
- SSG-1** Approximate location of environmental sub-slab soil vapor sampling by Langan Treadwell Rollo, September 2014
- Abandoned monitoring well
- Approximate extent of Federal RCRA Hazardous Material
- Approximate extent of State of California Non-RCRA Hazardous Material
- Approximate depth of material to be excavated (feet below the ground surface)



<b>ALTA WAVERLY 2302 VALDEZ STREET Oakland, California</b>		
<b>SITE PLAN WITH APPROXIMATE EXTENT OF FEDERAL AND STATE OF CALIFORNIA HAZARDOUS MATERIAL</b>		
Date 06/09/15	Project No. 731641601	Figure 4
<b>LANGAN TREADWELL ROLLO</b>		

Reference: Base map from drawing titled "Existing Site Boundary Plan", by BKF, dated 21 November 2014.

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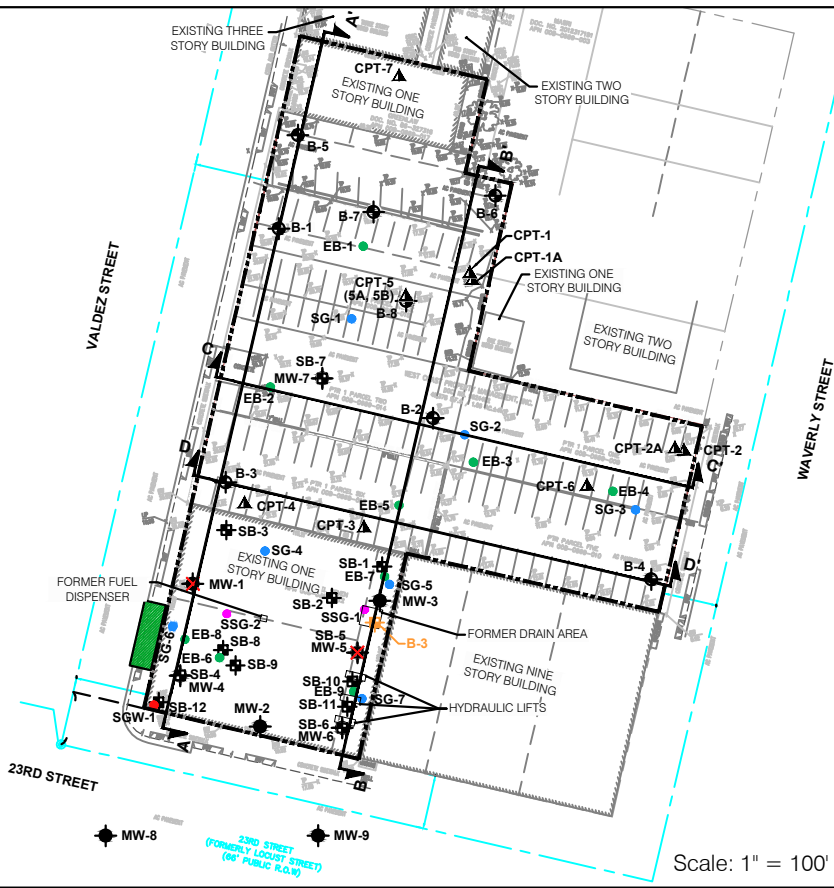


**SB-3**

Sample Date	Depth	COPC	Concentration
2/27/1998	16'	TPH-g	655 mg/kg

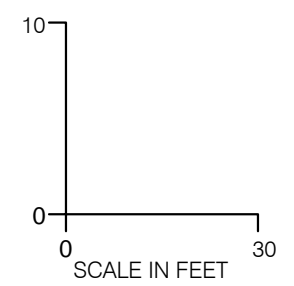
**SB-12**

Sample Date	Depth	COPC	Concentration
2/27/1998	16'	TPH-g	560 mg/kg



- EXPLANATION**
- Excavation Depth
  - Excavated Soil
  - bgs - below ground surface
  - TPH-g - total petroleum hydrocarbons, gasoline range

Notes:  
1. Excavation depths taken from BKF's Excavation plan dated 11/16/15.



**ALTA WAVERLY  
2302 VALDEZ STREET  
Oakland, California**

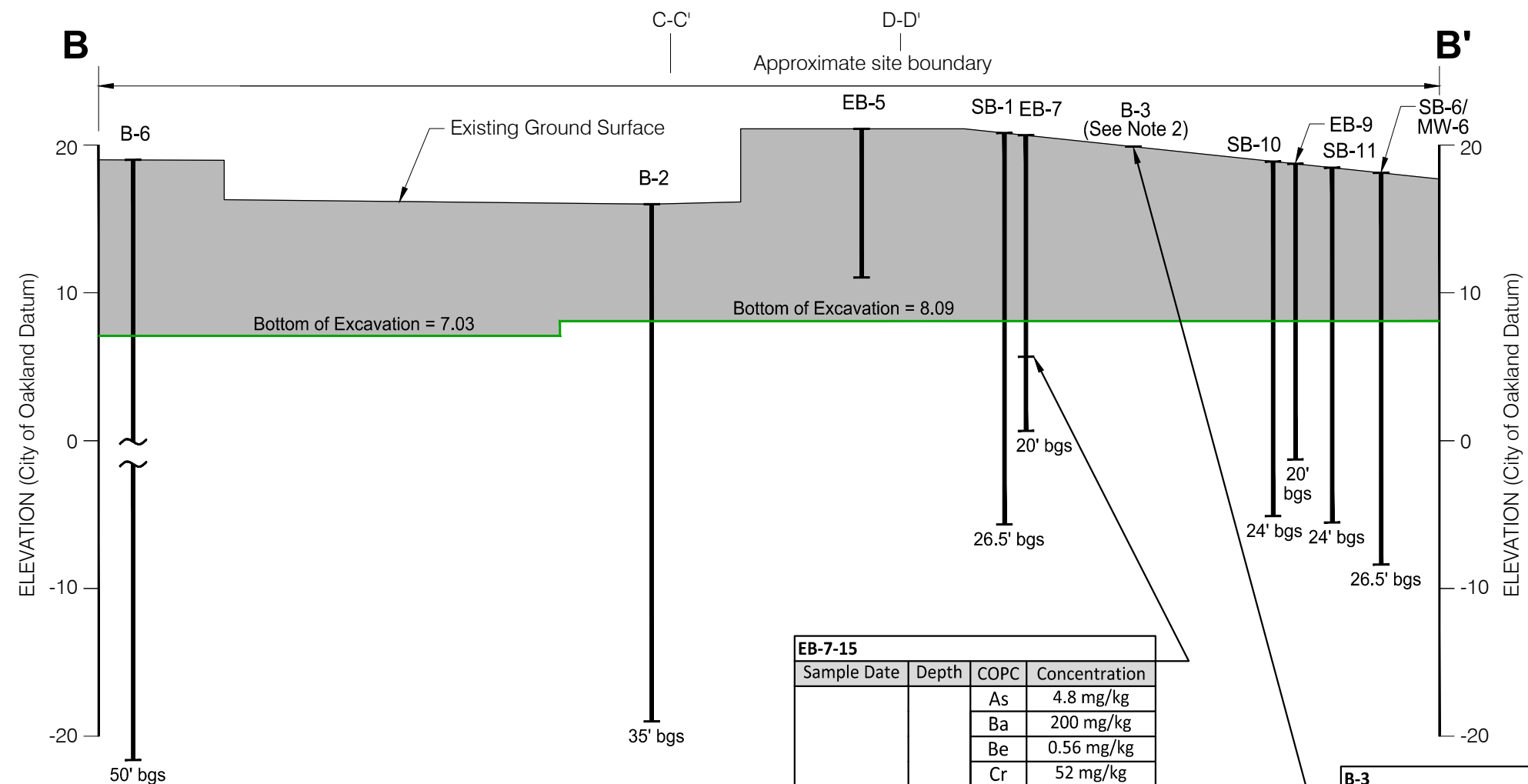
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**IDEALIZED SUBSURFACE PROFILE  
A-A'**

Date 1/26/16	Project No. 731641601	Figure 5
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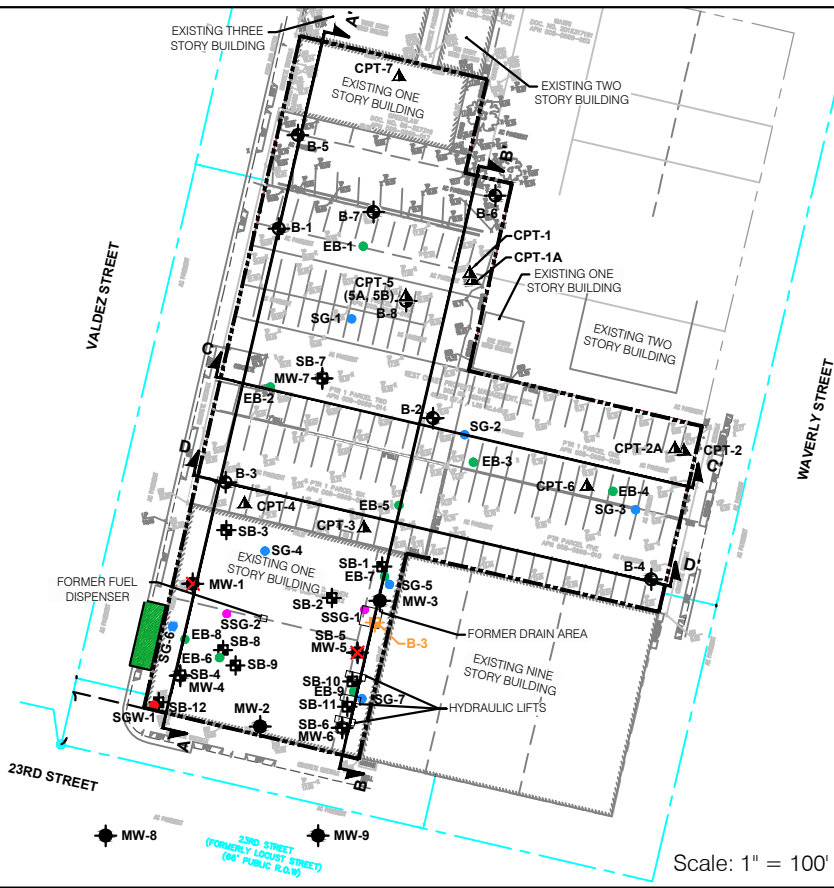
**LANGAN TREADWELL ROLLO**

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EB-7-15			
Sample Date	Depth	COPC	Concentration
2/7/2015	15'	As	4.8 mg/kg
		Ba	200 mg/kg
		Be	0.56 mg/kg
		Cr	52 mg/kg
		Co	15 mg/kg
		Cu	16 mg/kg
		Pb	7.3 mg/kg
		Hg	0.052 mg/kg
		Mo	0.71 mg/kg
		Ni	79 mg/kg
V	43 mg/kg		
Zn	33 mg/kg		

B-3			
Sample Date	Depth	COPC	Concentration
2/27/1998	16'	TPH-g	40 mg/kg
		Total Oil & Grease	5,400 mg/kg

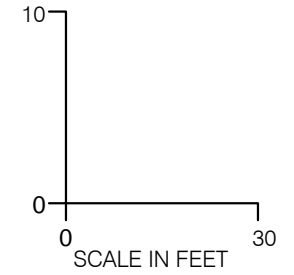


**EXPLANATION**

- Excavation Depth
- Excavated Soil
- bgs - below ground surface
- TPH-g - total petroleum hydrocarbons, gasoline range

- Sb - Antimony
- As - Arsenic
- Ba - Barium
- Be - Beryllium
- Cd - Cadmium
- Cr - Chromium
- Co - Cobalt
- Cu - Copper
- Pb - Lead
- Hg - Mercury
- Mo - Molybdenum
- Ni - Nickel
- V - Vanadium
- Zn - Zinc

Notes:  
 1. Excavation depths taken from BKF's Excavation plan dated 11/16/15.  
 2. Location of soil boring B-3 provided by GRIBI Associates, Figures 3 & 4. Depth of soil boring is unknown.



**ALTA WAVERLY**  
**2302 VALDEZ STREET**  
 Oakland, California

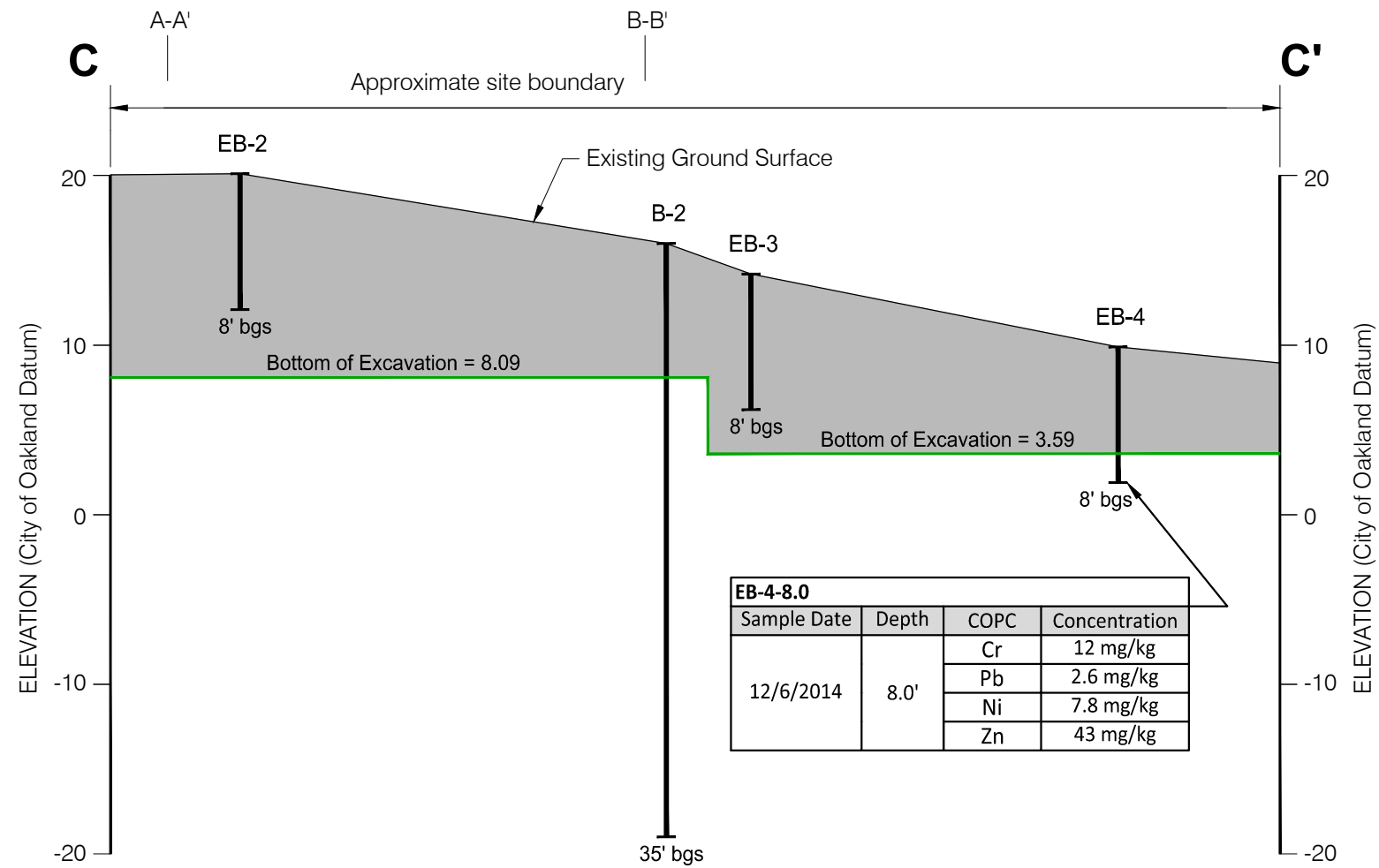
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**IDEALIZED SUBSURFACE PROFILE**  
**B-B'**

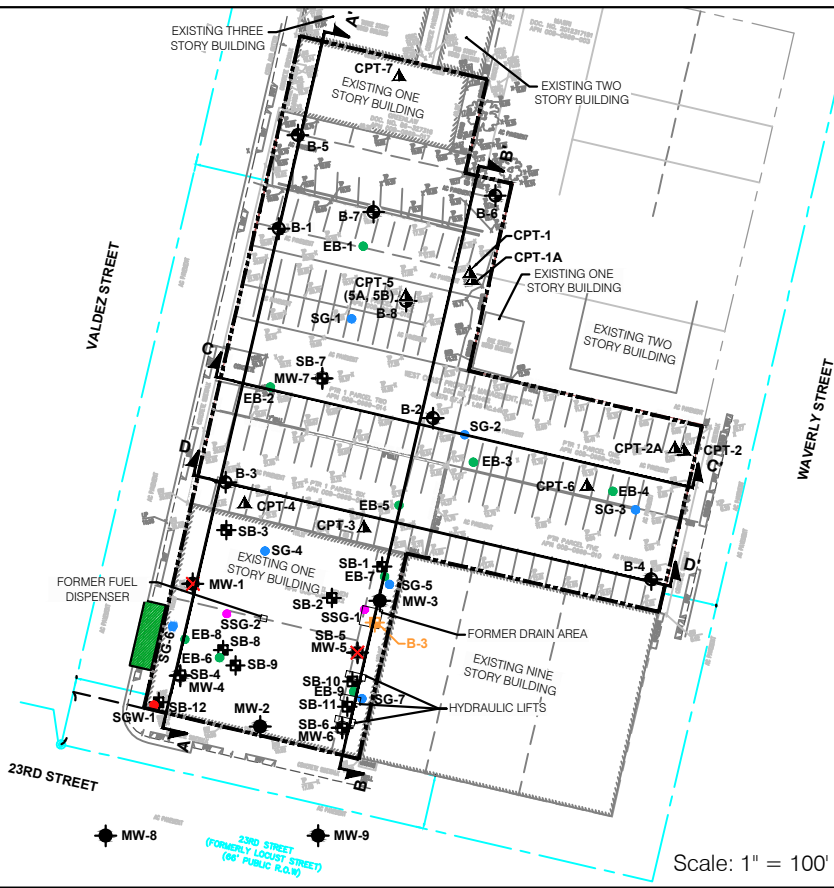
Date 1/26/16	Project No. 731641601	Figure 6
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**LANGAN TREADWELL ROLLO**

\\langan.com\data\SF\data6\731641601\Cadd Data - 731641601\2D-DesignFiles\Environmental\Figure 5 - 8.dwg 1/29/16

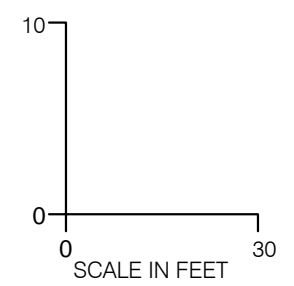


EB-4-8.0			
Sample Date	Depth	COPC	Concentration
12/6/2014	8.0'	Cr	12 mg/kg
		Pb	2.6 mg/kg
		Ni	7.8 mg/kg
		Zn	43 mg/kg



- EXPLANATION**
- Excavation Depth
  - Excavated Soil
  - bgs - below ground surface
- Sb - Antimony
  - As - Arsenic
  - Ba - Barium
  - Be - Beryllium
  - Cd - Cadmium
  - Cr - Chromium
  - Co - Cobalt
  - Cu - Copper
  - Pb - Lead
  - Hg - Mercury
  - Mo - Molybdenum
  - Ni - Nickel
  - V - Vanadium
  - Zn - Zinc

Notes:  
1. Excavation depths taken from BKF's Excavation plan dated 11/16/15.



**ALTA WAVERLY**  
2302 VALDEZ STREET  
Oakland, California

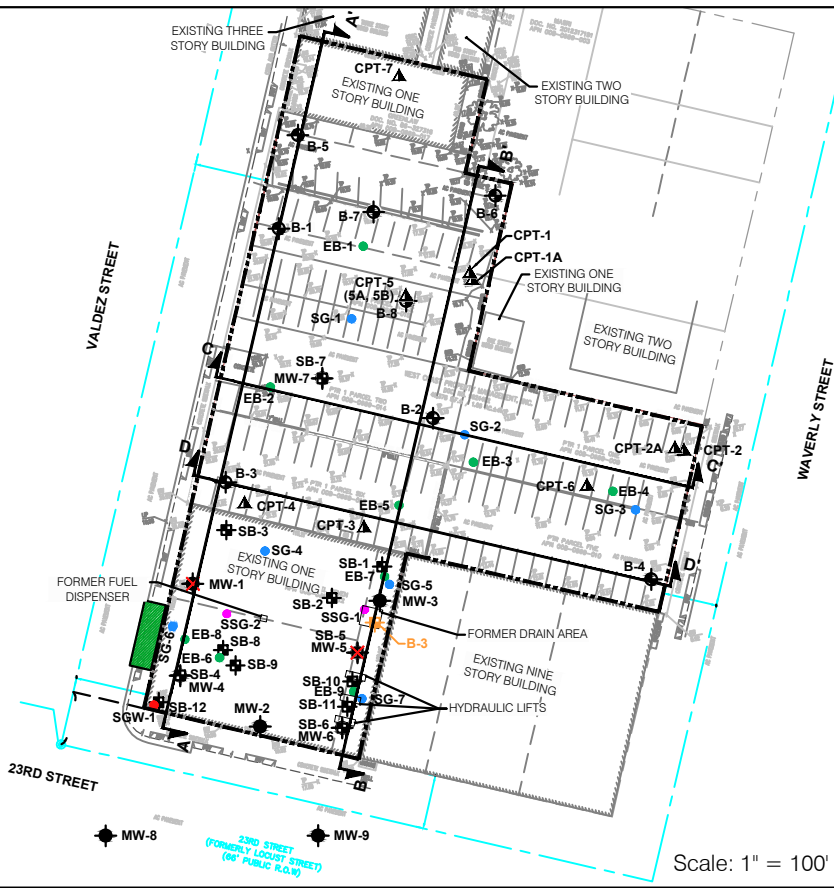
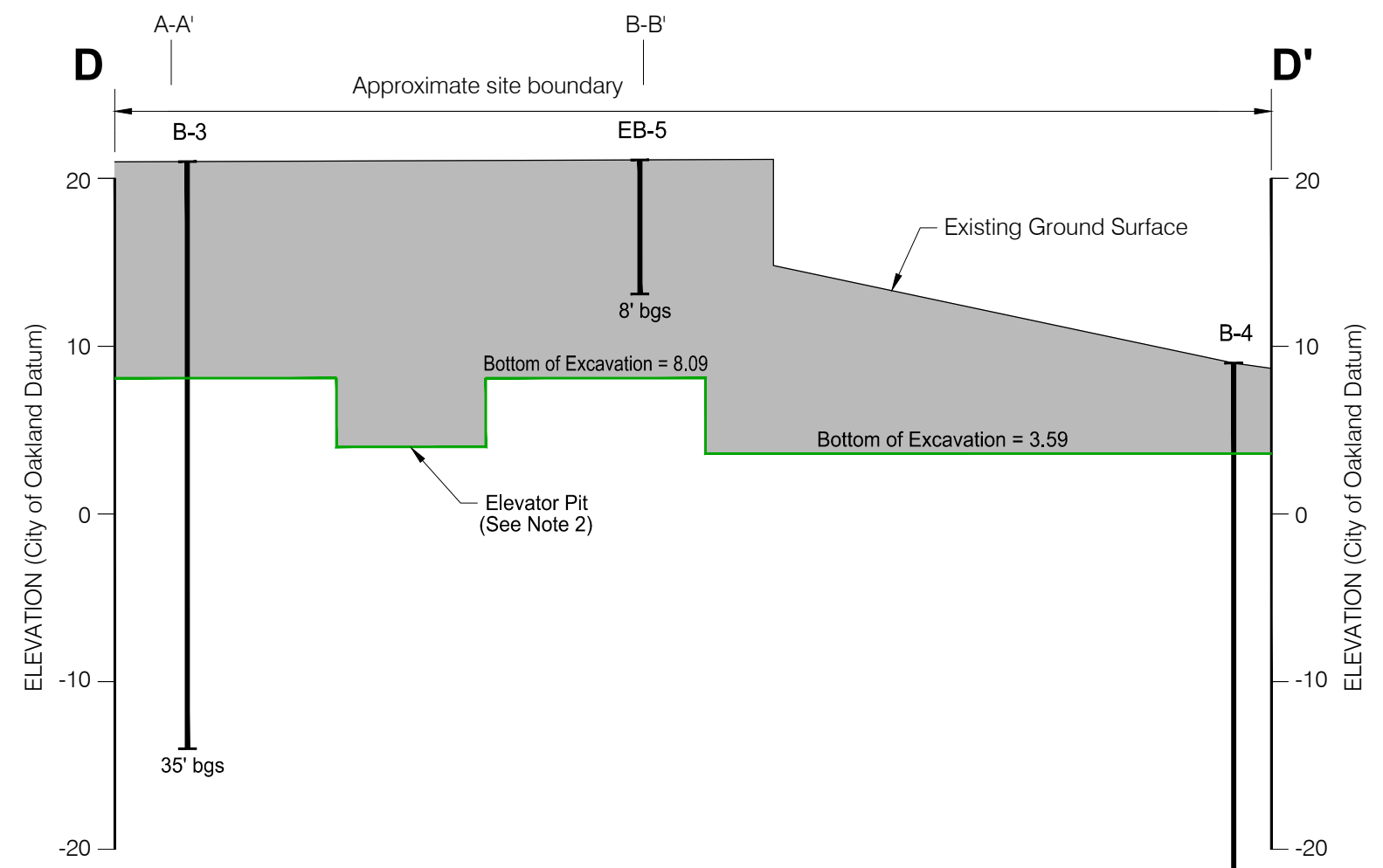
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**IDEALIZED SUBSURFACE PROFILE**  
C-C'

Date 1/26/16	Project No. 731641601	Figure 7
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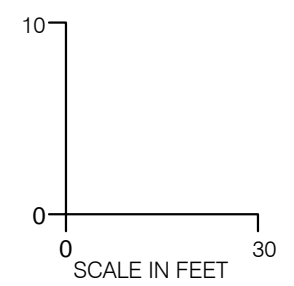
**LANGAN TREADWELL ROLLO**

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- EXPLANATION**
- Excavation Depth
  - Excavated Soil
  - bgs - below ground surface

- Notes:
1. Excavation depths taken from BKF's Excavation plan dated 11/16/15.
  2. Elevator Pit bottom elevation taken from PYATOK's Construction Documents, sheet A7.16, dated 10/12/15.



**ALTA WAVERLY**  
**2302 VALDEZ STREET**  
 Oakland, California

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**IDEALIZED SUBSURFACE PROFILE**  
**D-D'**

Date 1/26/16	Project No. 731641601	Figure 8
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**LANGAN TREADWELL ROLLO**