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Alameda County
Environmental Health

October 8, 2008

Mr. Paresh Khatri
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Revised Site Conceptual Model and Work Plan
6211 San Pablo Avenue
Oakland, California
AEI Project # 280346
Fuel Leak Case RO0000127

Dear Mr. Khatri:

The following revised site conceptual model and work plan has been prepared on behalf of Mr. Pritpaul Sappal (client), and addresses the technical comments by the Alameda County Health Care Services Agency (ACHCSA) in the letter date June 26, 2008. The original *Site Conceptual Model* (SCM) and *Additional Investigation Workplan*, both dated May 27, 2008, were prepared by Herschy Environmental Inc. (Herschy), however All Environmental Inc. (AEI) has recently been hired by the client to replace Herschy and to provide environmental consulting and engineering services for the site. Although AEI did not write the SCM or workplan, AEI, as the new consultant, plans to complete the proposed work outlined in these reports and manage all site work from this point forward. The ACHCSA had four technical comments regarding the May 27, 2008 reports. Each of the comments are rephrased below (indicated by italics) and followed by AEI's response.

1) In addition to collecting soil and groundwater at five foot intervals, please collect soil samples at distinct changes in lithology and at obvious indications of hydrocarbon contamination.

AEI concurs with the ACHCSA request. Soil samples will be collected as described in the workplan, however AEI will also collect soil samples at distinct changes in lithology as well as at obvious indications of hydrocarbon contamination as indicated by PID readings, odors, and visual observation.

2) Please include a thorough discussion on whether preferential migration is occurring (both groundwater and potential soil vapor) at the site, include figures that illustrate proposed boring locations as well as utilities found at the site.

Groundwater levels at the site are on average around 6 to 7 feet bgs, which given the identified depths of the utilities in the vicinity of the site (<6.5 feet bgs), it is not expected that utility corridors would act as preferential pathways. However, during times of elevated water tables (typically rainy season), groundwater levels have been measured as high as 3.51 feet (EX-1) and 4.28 (MW-4). Therefore, it is possible that during times of elevated water tables, the deeper utilities, particular natural gas (identified at 3.5 to 4.5 feet bgs) and sewer (identified at 5.5 to 6.5 feet bgs) could act as preferential pathways for contaminate migration. Based on the possibility of the sewer and natural gas lines acting as preferential pathways, AEI has adjusted the locations for some of the proposed borings to adequately address this concern as follows (Figure 1):

- Boring DP-4 has been moved south in order to asses sewer conditions in 62nd Street. In addition, the boring has been moved in order to avoid allowing continuing access request with the property owner (Housing Authority of Oakland) to delay the investigation (the correspondence log was included in the previous Herschy workplan dated May 27, 2008 as Appendix G).
- Borings SB-5 will be moved to the northwest to investigate conditions along the natural gas line in the southern portion of 62nd Street.
- Boring SB-8 has been moved to the northwest to investigate conditions along the sewer line in 62nd Street.
- Boring SB-9 has been moved towards the west to investigate conditions along the sewer line located in Marshall Street.
- Boring SB-14 has been moved to the south to investigation conditions along the sewer line in 62nd Street.

The adjusted locations of these borings will allow for both further delineation of the contaminate plume and investigation of the utility corridors. The location of the proposed borings are based off of estimated utility maps generated by the previous consultant. Prior to completion of the borings, the location of the utilities will be verified and boring locations adjusted as necessary based on utility location, feasibility based on traffic patterns, and worker safety.

Soil vapor samples have not been collected at the site to date. Due to the lack of data concerning potential soil vapor contamination, AEI believes that it would be prudent to install the proposed 3 soil vapor wells as previously proposed (see question 4). Following the collection of data from these wells, it may be prudent to further evaluate if soil vapor migration is occurring in the utility corridors.

3) In the SCM, it is stated that groundwater beneath the site is classified as "other". Groundwater beneath the subject site must be considered beneficial for domestic or municipal water supply, unless shown to be non beneficial using criteria presented in the Basin Plan.

AEI concurs with the ACHCSA that the groundwater beneath the site, according to the definitions in the RWQCB Basin Plan for the San Francisco region, is classified for municipal or domestic water supply (MUN). Therefore, groundwater beneath the site is not to be classified as "other groundwater (not used as drinking water)" rather as for MUN purposes. Based this classification, cleanup goals for the time being will remain as secondary MCLs. Following site delineation, it is expected that a Corrective Action Plan will be prepared for the site. At that time, final cleanup goals may be established based on site specific data.

4) Please include a figure of the proposed construction for the permanent vapor wells at the site. In addition, please outline a suitable leak detection method to be used during sampling of the wells.

In order to better profile site conditions and potentially obtain additional data associated with the vapor extraction/air sparging system, AEI proposes to complete each of the vapor wells as nested vapor wells consisting of two screens. Each well will have a shallow (approximately 2.5 to 3 feet bgs) and a deep (approximately 5.5 to 6 feet bgs) screen. Data from the nested wells will give a better understanding of the vapor profile in regards to vapor intrusion as well as potentially be used to record vacuum data and influence from the soil vapor extraction wells. The requested figure of the proposed construction for the wells is included as Figure 3.

During vapor sampling, AEI plans to conduct the appropriate leak detection protocol. Per the ACHCSA request, pliable weather stripping will be attached to the plastic shroud. The well and all sampling equipment will be stored underneath the shroud and a rag soaked in isopropyl alcohol will be placed under the shroud. PID readings will be periodically taken from inside the shroud to verify the presence of the tracer gas.

ESTIMATED SCHEDULE

Although, the recent consultant change for the site has resulted in requested time extensions for activities at the site, AEI continues to focus on completing the necessary activities. The following is a brief summary of what has been going on and is planned at the site:

- The 2nd Quarter 2008 Groundwater Monitoring Report dated October 2, 2008 was submitted by AEI.
- The 3rd Quarter 2008 groundwater monitoring and sampling field work was completed on September 10, 2008, and AEI anticipates submitting the report in the near future.
- AEI continues to work with on obtaining the necessary liability insurance requirements imposed by the City of Oakland in order to complete downgradient monitoring wells.
- Upon approval from the ACHCSA, AEI will apply for all necessary permits to complete the proposed field work. It is expected that field work will begin approximately 3 to 4 weeks

following approval from the ACHCSA. A report documenting the performed activities will be completed within 4 weeks following the receipt of all necessary data.

Please contact the undersigned at (925) 944-2899 if you have any questions or need any additional information.

Sincerely,
AEI Consultants

Jeremy Smith
Senior Project Manager

Peter McIntyre, PG, REA
Senior Project Geologist

REGISTERED GEOLOGIST
PETER J. MCINTYRE
Exp. 5/30/10
No. 7702
STATE OF CALIFORNIA

Figure 1 – Extended Site Plan
Figure 2 – Site Plan
Figure 3 – Proposed Nested Soil Vapor Monitoring Point

Distribution:
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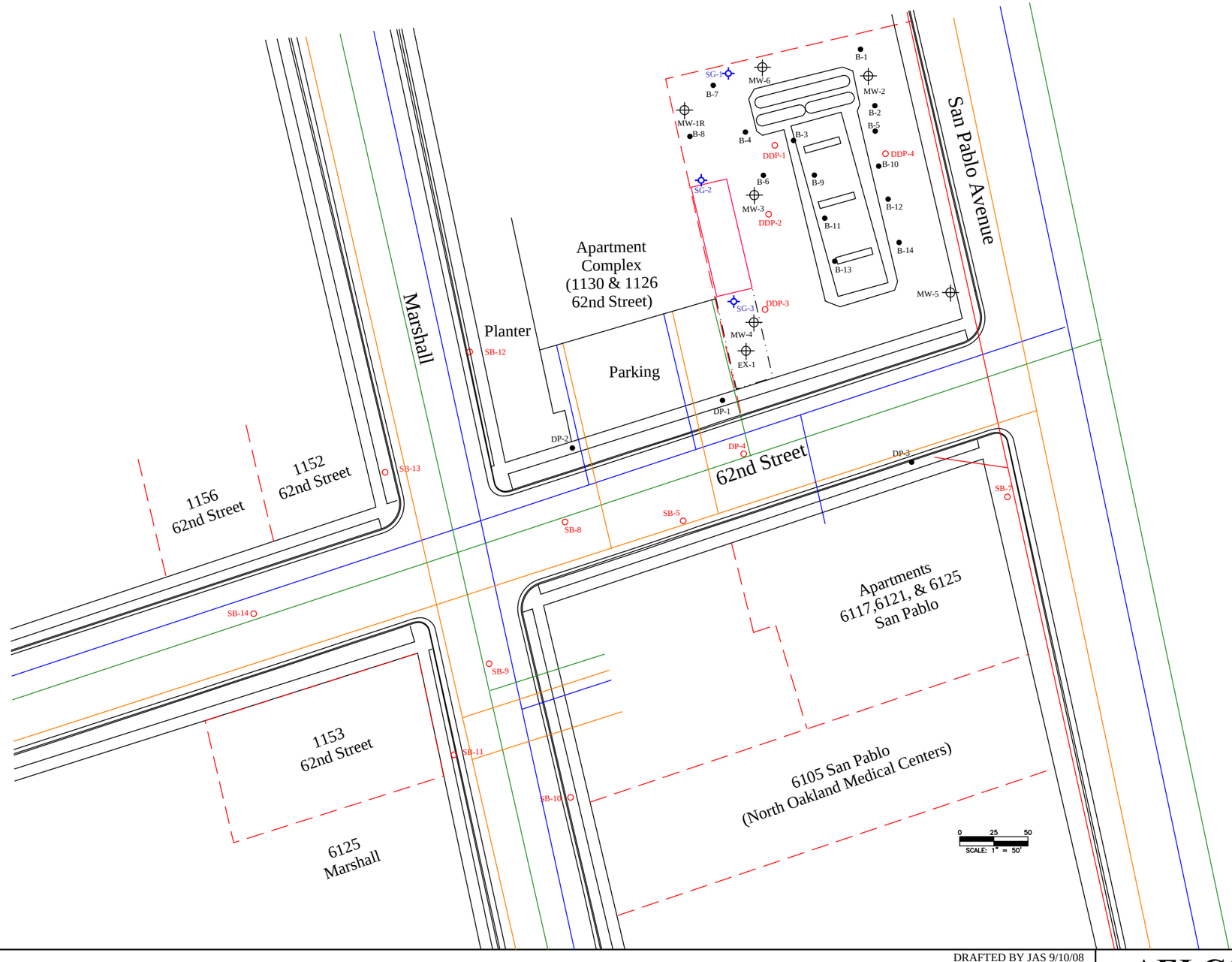
Mr. Paresh Khatri, ACHCSA, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502 (electronic upload)
Mr. Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612



LEGEND

- MONITORING WELL
- SOIL BORING
- ABANDONED WELL
- PROPOSED BORING
- PROPOSED VAPOR PROBE
- VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- APPROXIMATE PROPERTY BOUNDARY
- WATER LINE
- NATURAL GAS LINE
- ELECTRIC LINE
- SEWER LINE

DRAFTED BY JAS 9/10/08
REVISED BY JAS 9/26/08

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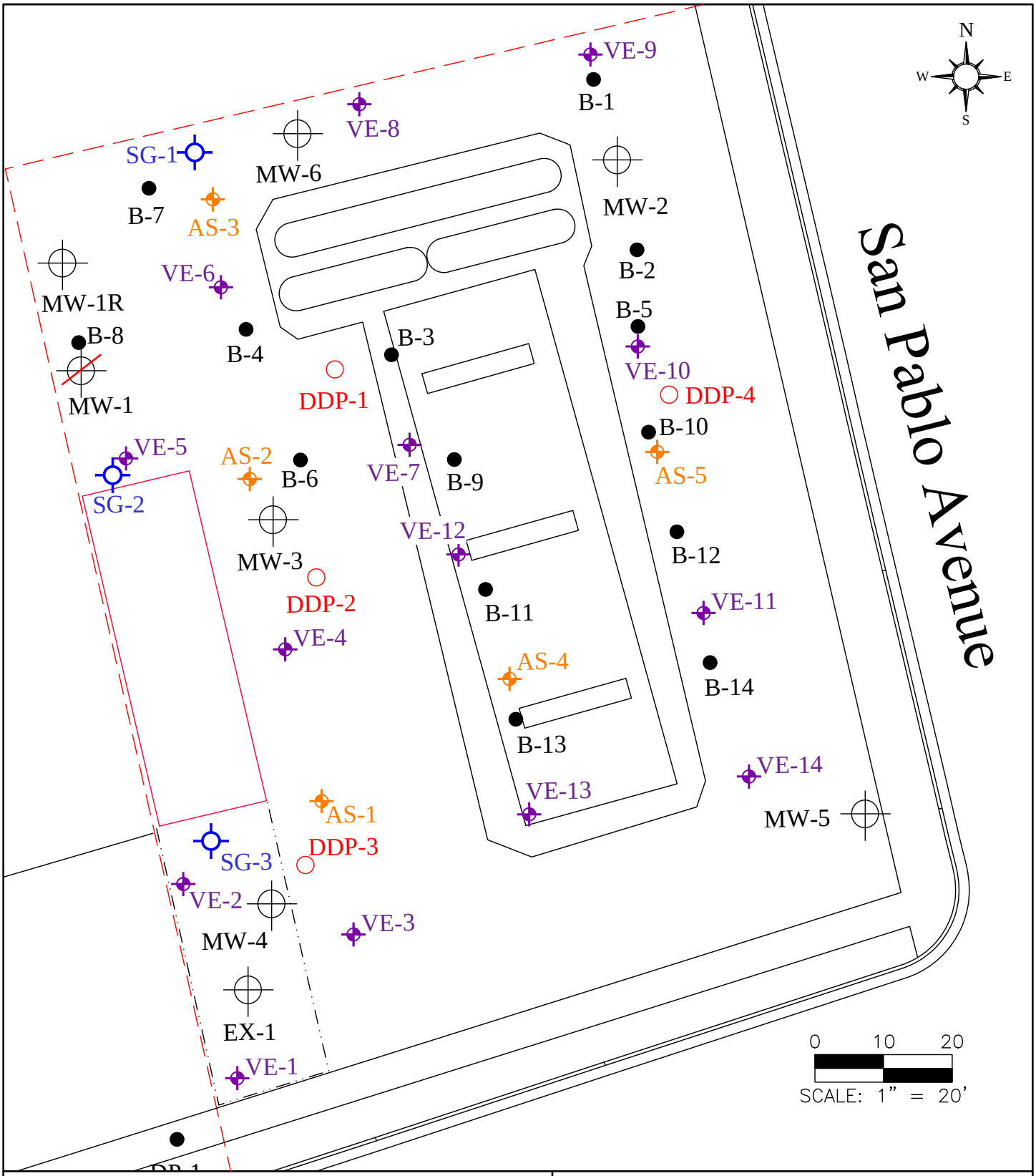
EXTENDED SITE PLAN

6211 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

FIGURE 1
PROJECT NO. 280346



LEGEND

- MONITORING WELL
- SOIL BORING
- ABANDONED WELL
- PROPOSED BORING
- PROPOSED VAPOR PROBE
- VAPOR EXTRACTION WELL
- AIR SPARGE WELL

DRAFTED BY JAS 09-10-08
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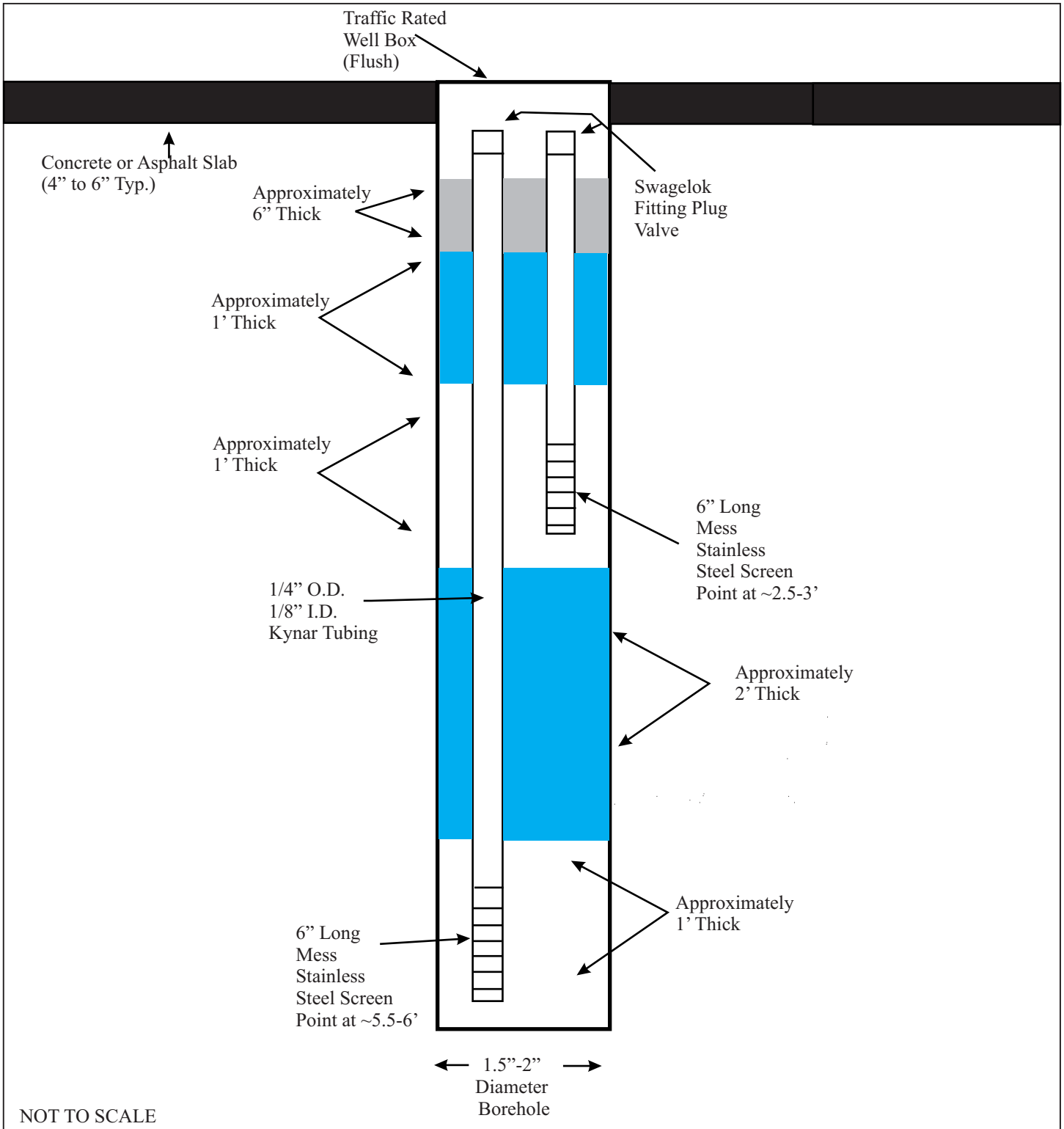
2500 CAMINO DIABLO, WALNUT CREEK

SITE PLAN

6211 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

FIGURE 2
PROJECT NO. 280346



NOT TO SCALE

LEGEND

- Neat Cement Grout Seal
- Bentonite Seal
- Sand Filter Pack
- Monitoring Point

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FIGURE 3:
PROPOSED NESTED
SOIL VAPOR MONITORING POINT