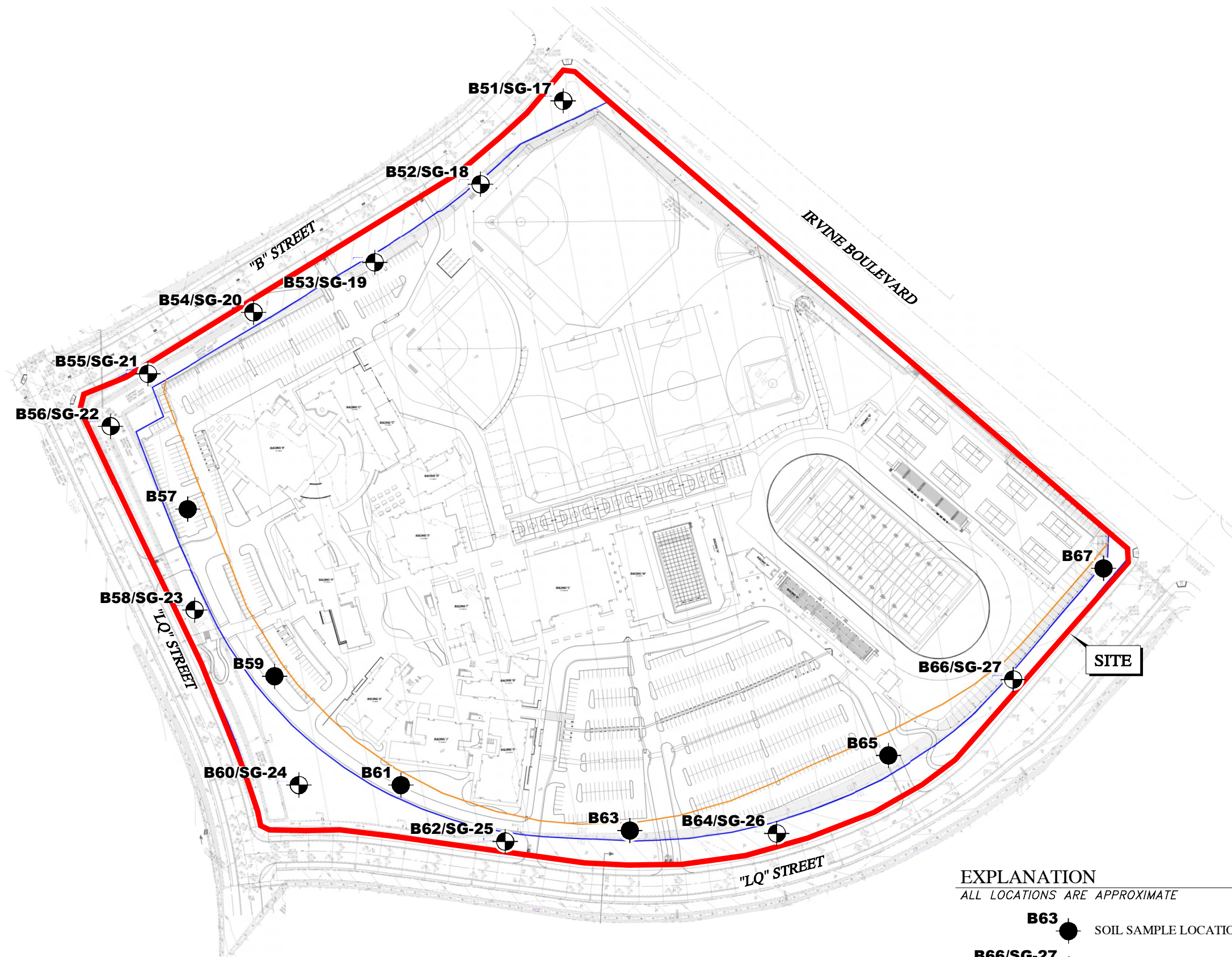


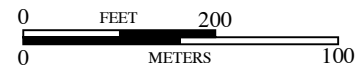
COPYRIGHT © 2014 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- B63** ● SOIL SAMPLE LOCATION
- B66/SG-27** ● SOIL SAMPLE AND SOIL/GAS WELL LOCATION



BASE MAP SOURCE: UNKNOWN



SAMPLE LOCATION MAP
 HERITAGE FIELDS DISTRICT 5 PROPOSED HIGH SCHOOL SITE
 IRVINE, CALIFORNIA

PROJECT NO.: 8506.001.SCH

SCALE: AS SHOWN

DRAWN BY: LL

CHECKED BY: SM

FIGURE NO.

2

3. Site History and background Information

3.4.2 Soil Gas Results

Relatively low concentrations of VOCs were detected in some of the soil gas samples. The detected concentrations are less than the applicable screening levels for residential land use and were detected at lower concentrations than what was reported in the PEA. The soil gas detections and screening levels are summarized below from the ENGEO report which is also included in Appendix A.

Sample	Depth feet	Benzene $\mu\text{g}/\text{m}^3$	Toluene $\mu\text{g}/\text{m}^3$	EB $\mu\text{g}/\text{m}^3$	Total Xylenes $\mu\text{g}/\text{m}^3$	1,2,4 TMB $\mu\text{g}/\text{m}^3$	PCE $\mu\text{g}/\text{m}^3$	TCE $\mu\text{g}/\text{m}^3$	Chloroform $\mu\text{g}/\text{m}^3$
SG-17	5	<3.3	<3.8	<4.4	<8.8	<5.0	14	<5.5	<5.0
SG-17	15	<3.3	<3.8	<4.4	<8.8	<5.0	17	<5.5	<5.0
SG-18	15	3.8	29	6.7	52	19	<6.9	<5.5	<5.0
SG-19	15	3.9	<3.8	<4.4	<8.8	<5.0	<6.9	<5.5	<5.0
SG-20	15	4.3	<3.8	<4.4	<8.8	<5.0	<6.9	<5.5	<5.0
SG-22	5	<3.3	<3.8	<4.4	<8.8	<5.0	12	<5.5	<5.0
SG-22	15	<3.3	<3.8	<4.4	19	<5.0	<6.9	<5.5	<5.0
SG-23	15	<3.3	<3.8	<4.4	<8.8	7.7	<6.9	<5.5	<5.0
SG-24	5	<3.3	<3.8	<4.4	<8.8	<5.0	<6.9	6.8	<5.0
SG-24	15	<3.3	<3.8	<4.4	<8.8	<5.0	9.2	<5.5	7.1
SG-25	5	<3.3	<3.8	<4.4	<8.8	5.9	<6.9	<5.5	<5.0
SG-26	5	<3.3	<3.8	<4.4	<8.8	<5.0	<6.9	<5.5	10
SG-26	15	<3.3	<3.8	<4.4	<8.8	<5.0	<6.9	<5.5	31
SG-27	5	<3.3	<3.8	<4.4	<8.8	<5.0	<6.9	<5.5	7.3
SG-27	15	4.3	4.2	<4.4	<8.8	<5.0	13	<5.5	50
CHHSL		36.2	135,000	420*	315,000		180	528	
Maximum Detected in PEA		70	440	140	740	360	ND	ND	840

PCE –Tetrachloroethylene; TCE – Trichloroethylene; 1,2,4 TMB-Trimethylbenzene; EB- Ethylbenzene. Ethylbenzene screening level is for residential base soil (CHHSL September 2010)

Tetrahydrofuran was detected in one sample SG-20 from 15 feet bgs slightly above the detection limit. Bromodichloromethane was reported in two samples, SG-26 from 15 feet bgs at $11 \mu\text{g}/\text{m}^3$ and in sample SG-27 from 15 feet bgs at $11 \mu\text{g}/\text{m}^3$. Bromodichloromethane was reported in two soil gas samples in the PEA at higher concentrations of 200 and $140 \mu\text{g}/\text{m}^3$.

Benzene, toluene, ethylbenzene, xylenes, 1,2,4 trimethylbenzene and chloroform were reported below concentrations reported in the soil gas investigation implemented for the PEA. Tetrachloroethylene and trichloroethylene were not detected in the PEA. The concentrations detected in the ENGEO investigations are significantly below CHHSLs for residential soil gas.

The leak check compound 1,1-difluoroethane was not detected above the $10,000 \mu\text{g}/\text{m}^3$ threshold established by DTSC