REMOVAL ACTION COMPLETION REPORT Areas 2, 5, 6 and Hoist/Clarifier

Roosevelt High School 456 South Matthews Street Los Angeles, CA 90033

Prepared For:

Los Angeles Unified School District
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Prepared by:



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INTRODUCTION 1.0

Montrose Environmental (Montrose) has prepared this Removal Action Completion Report (RACR) for the completed excavation oversight, sampling and analytical testing of shallow soils and stockpiles at Roosevelt High School (site, Figure 1) on behalf of Los Angeles Unified School District (LAUSD) Environmental Health Department, Office of Environmental Health and Safety (OEHS). The activities discussed herein were performed in accordance with the TRC Solutions, Inc. (TRC) Removal Action Workplan (RAW) dated August 29, 2017 recommending soil analytical testing, removal and disposal during the site redevelopment activities for the mitigation of arsenic, lead and total petroleum hydrocarbons (TPH) to levels necessary to protect human health and environment, in areas delineated in the Preliminary Environmental Assessment (PEA) Equivalent investigation by TRC dated August 4, 2017. The RAW divided the site into six separate investigation areas (Areas 2, 3, 5, 6, 8, and 9; see Figure 2) based on the planned phases of renovation. Note: Areas 1, 4, and 7 were outside the boundaries of the project. This report summarizes the completion of removal actions in areas 2, 5, 6 and the hoist/clarifier. The Area 3 (football field) and Area 9 (baseball field) will be covered in a future RACR.

The excavation activities were completed in general accordance with OEHS Section 01 4524 guidelines for Environmental Import/Export Materials Testing and per South Coast Air Quality Management District (SCAQMD) Rule 1466 dust monitoring requirements.

2.0 **SUMMARY OF COMPLETED SOIL REMOVALS**

The soil removal activities are listed below in chronologic order:

2.1 Area 5

The RAW includes recommendations for the excavation, transportation, and disposal of soil in Area 5 containing concentrations of lead above screening levels. On June 9, 2018, TRC Solutions, Inc. (TRC) supervised limited removals in areas of lead-impacted soil designated by LAUSD for immediate excavation and resulting in the disposal of approximately 2.8 yds³ (4.2 tons) of soil deemed hazardous disposal per the federal Resource Conservation and Recovery Act (RCRA). From June 22 through July 13, 2018, Montrose conducted excavation monitoring and sampling at three electric utility trench locations of Area 5 in advance of the comprehensive modernization project. Approximately 49.5 cubic yards (yds³) of lead impacted soil was excavated from Area 5 and transported offsite for disposal as California-hazardous waste.

From September 2018 to January 2019, the vertical demolition of the Auditorium/Classroom Building was completed. Following demolition, the RAW activities for Area 5 were initiated. Between January 30, 2019 to February 25, 2019, Montrose oversaw the removal of soil for transportation to the intended disposal destination, as stated in the RAW. A total of 938 yds³



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(1,407 tons) of lead contaminated soil profiled for non-hazardous disposal, and 679 yds³ (1,019 tons) of lead contaminated soil profiled for California Hazardous disposal was removed and transported for disposal, as summarized in the Removal Action Completion Report – Area 5, dated May 13, 2019.

During the removal of an underground storage tank (UST) discovered at the school, a total of 208 yds³ (312 tons) of hydrocarbon contaminated soil profiled for non-hazardous disposal was removed in March 2019.

Figure 3 illustrates the work completed for Area 5. **Table 1** summarizes soil sample analytical results during the removal activities.

2.2 Area 2

The RAW includes recommendations for the excavation, transportation and disposal of soil impacted with lead at concentrations above removal action goals in Area 2, including the physical education (PE) Building, outdoor basketball courts, and tennis courts (**Figures 4** through **7**). The Music Building was included in the Area 2 programmed removals, due to its location on the Campus. On July 6 and 7, 2018, Montrose supervised limited removals in an area of lead-impacted soil near the Music Building to install a plumbing utility (**Figure 8**). Approximately 28 yds³ of lead impacted soil was excavated during those activities from and transported offsite for disposal as non-hazardous waste.

From June to September 2020, the vertical demolition of the PE Building, Music Building and tennis courts was completed. From July 30 to September 30, 2022, Montrose oversaw the removal of soil adjacent to the former PE building, former Music Building and tennis courts for transportation to the intended disposal destination, as stated in the RAW. A total of approximately 355 yds³ (533 tons) of lead impacted soil was transported offsite for disposal as California-hazardous waste.

From June 21 to July 14, 2022, Montrose supervised the removal of soil from the outdoor basketball courts. Approximately 216 yds³ (approximately 324 tons) was transported offsite for non-hazardous disposal.

On July 16, 2021, Montrose supervised the removal of soil from the northeast part of Area 2, designated as the sample C-12 location (**Figure 9**). Approximately 37 yds³ (approximately 55 tons) was transported offsite for non-hazardous disposal.

The field screening and soil sample analytical results are summarized on **Tables 2** through **4**. Area 2 removal activities are detailed in the Removal Action Completion Report – Portions of Area 2 and Adjacent to Area 5, November 23, 2020, and the Removal Action Completion Report – Area 2 Basketball Courts, dated August 9, 2022.

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2.3 Area 6

The RAW includes recommendations for the excavation, transportation and disposal of soil impacted with lead above removal action goals in Area 6, including adjacent to Classroom Building 1, Classroom Building B, the Instrumental Music Building and Field Equipment Storage Building. Since the impacted soil was previously characterized for disposal, the lead impacted soil in Area 6 was segregated based on a California hazardous disposal scenario (soils greater than 80 mg/kg).

From August 6 to October 25, 2021, the vertical demolition of the Industrial Arts and Instrumental Music buildings, seven (7) portable buildings and the Auto Service Shed, as well as the concrete demolition and footing removals throughout Area 6 were completed. On October 29, 2021, Montrose conducted excavation monitoring and sampling at three locations in Area 6 during utilities and footings demolition activities in advance of the grading for the comprehensive modernization project, including partial removals near the field equipment storage building, the south part of portable building AA-1917 and the stained and odorous TPH impacted soil discovered during the footing excavations near the Industrial Arts Building (**Figure 10**). A total of approximately 1,055.8 yds³ (1,689.4 tons) of lead contaminated soil profiled for California Hazardous disposal was transported to South Yuma County Landfill.

After the removal of Classroom Building 1, on June 15, 16 and 19, 2023, Montrose conducted excavation monitoring at the southern limits of previous removals in Area 6 (**Figure 11**). A total of 436.9 tons (approximately 291.3 yds³) of lead and arsenic contaminated soil profiled for California Hazardous disposal was transported for off-site disposal.

The soil screening and laboratory analytical results are summarized on **Tables 5** and **6**. Details of soil removals in Area 6 were reported in the Removal Action Completion Report Roosevelt High School – Area 6, dated December 17, 2021, and the Removal Action Completion Report – South Portion of Area 6, dated November 30, 2023.

2.4 Hoist/Clarifier

The RAW identified total petroleum hydrocarbons quantified as diesel and oil (TPH-D and TPH-O, respectively) impacts within Area 6, near the Clarifier just outside of the IA Building, near Hydraulic Lift 2 within the Industrial Arts Building (IA Building), and near the former boring IA-2 (**Figure 9**). The Clarifier was removed during the RAW removal preparation work on October 8, 2021 and soil samples were collected; the Hydraulic Lifts and Stained Soil near boring IA-2 were removed during the RAW removal activities on October 29, 2021 and soil samples were collected.

The laboratory analytical results from the clarifier, hydraulic lifts and stained soil sampling activities indicated that all analytes are below the respective screening levels and therefore, the



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excavated soils were deemed acceptable for non-hazardous offsite disposal (**Table 5**). A total of 132.4 yds³ (198 tons) of TPH impacted soil was removed from the clarifier, Hydraulic Lift 2 and the stained soil for non-hazardous disposal.

3.0 CONCLUSIONS

Removal excavation activities were completed in Areas 2, 5, 6 and the hoist/clarifier areas as defined in the RAW. The excavations completed between June 2018 and June 2023, resulted in the removal of the following soil quantities:

			Removal Quantity	
Date	Area	Purpose	(cubic yards)	Disposal Scenario
July 2018		Plumbing Trench	28	Non-hazardous
June/Sep 2020	2	Tennis, PE, Music	355	Cal-hazardous
July 2022		Basketball courts	216	Non-hazardous
June 2018		Immediate Removal	2.8	RCRA-hazardous
July 2018		Plumbing	49.5	Cal-hazardous
Jan-March	5	School Comp-Mod	938	Non-hazardous
2018			679	Cal-hazardous
March 2018		UST Removal	208	Non-hazardous
June 2021		School Comp-Mod	1,055.8	Cal-hazardous
Julie 2021	6	School Comp-Mod	132.4	Non-hazardous
June 2023		School Comp-Mod	291.3	Cal-hazardous

In total, approximately 2.8 yds³ (4.2 tons) of RCRA-hazardous waste, 2,430 yds³ (3,645 tons) of California-hazardous soil (non-RCRA) and 1,522 yds³ (2,283 tons) of non-hazardous soil were removed from Area 2, Area 5, Area 6 and hydraulic lift/clarifier sites for offsite disposal. Based on the confirmation soil sample analytical results collected during the excavation activities, it is Montrose's opinion that the arsenic, lead and TPH impacts at the site, and any modifications thereto, for the Areas discussed has been completed.



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4.0 CLOSURE

Montrose is pleased to be of service to the LAUSD. If there are questions regarding this *Removal Action Completion Report* or if additional site information is required, please do not hesitate to contact Montrose at (714) 919-6526.

Sincerely,

Montrose Environmental

Chris Guesnon, PG, CHG Senior Geologist CHRIS ALBERT GUESNON

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Dane Nygaard Senior Manager



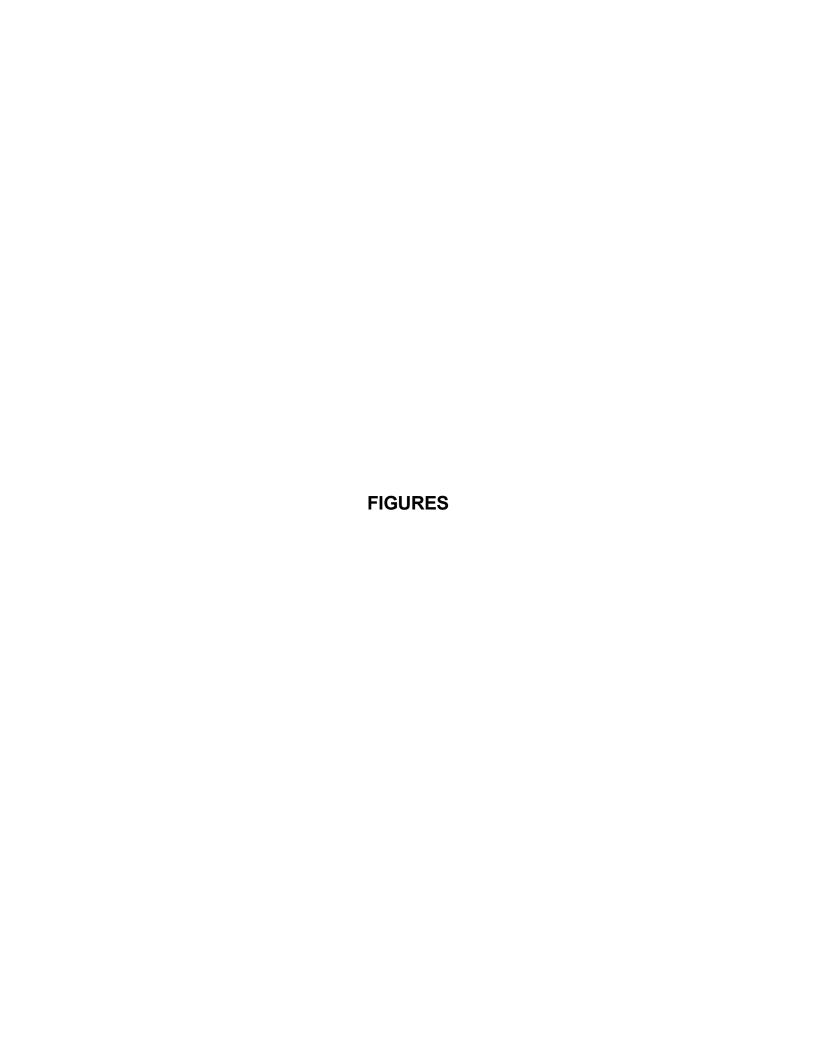
Roosevelt High School Los Angeles, CA page 6 June 25, 2024

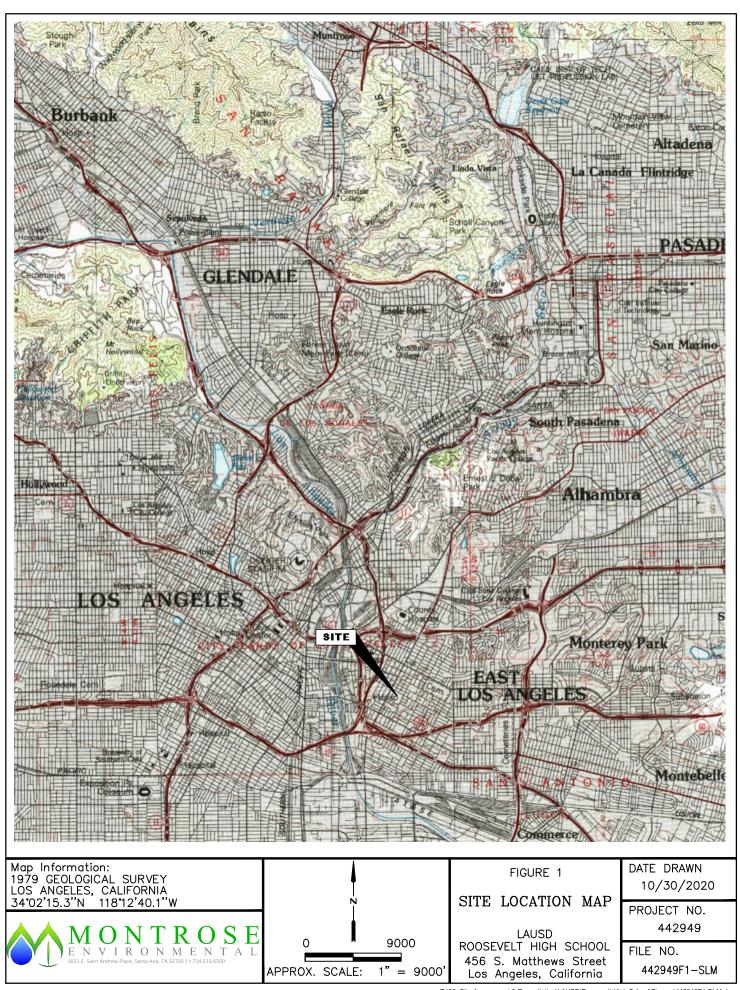
5.0 REFERENCES

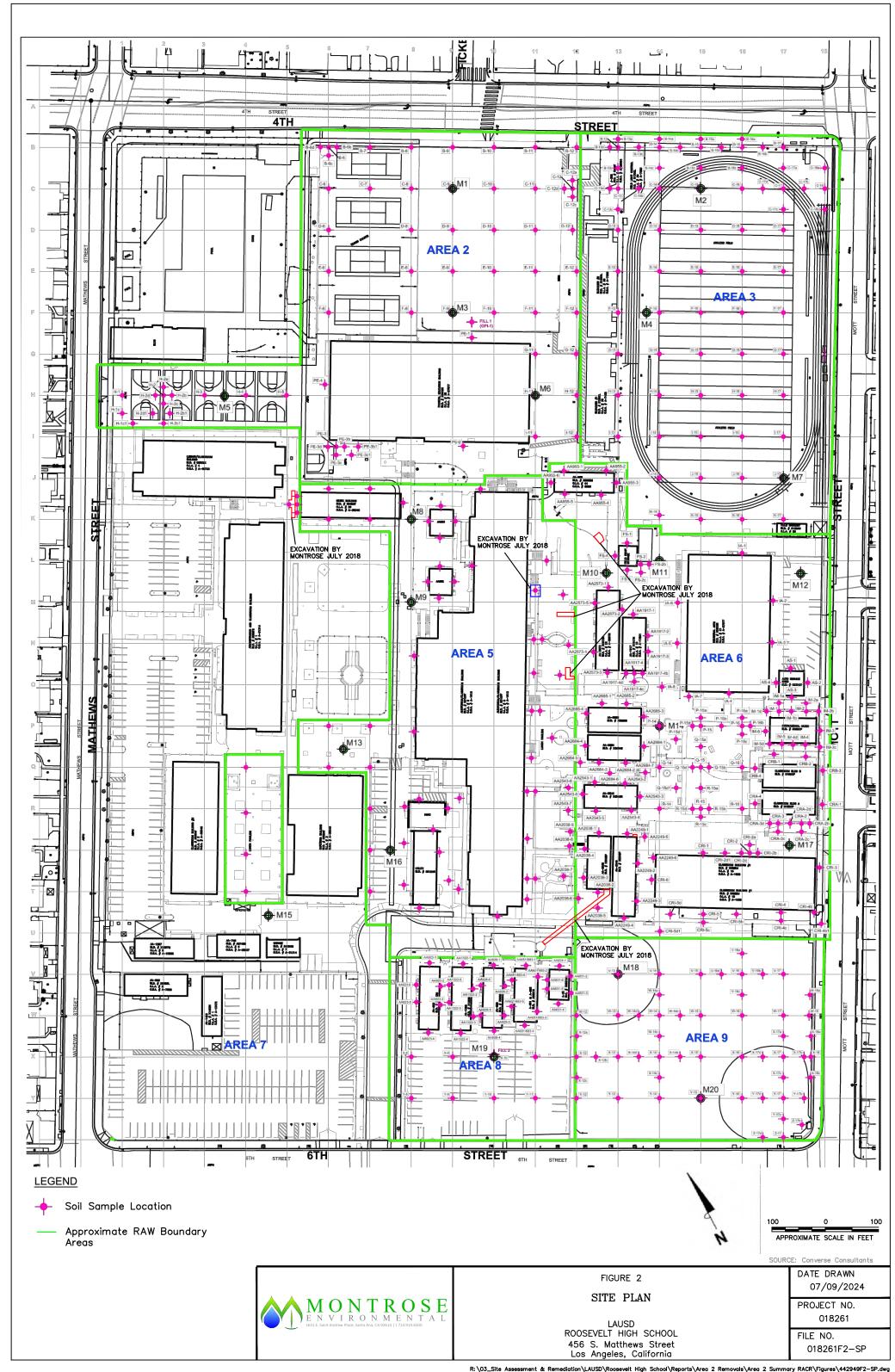
- TRC, 2017. Draft Removal Action Workplan: Theodore Roosevelt Senior High School. August 29.
- TRC, 2017. Preliminary Environmental Assessment Equivalent Report: Theodore Roosevelt Senior High School. September 22.
- Montrose Environmental, 2019. Removal Action Completion Report Roosevelt High School Area 5. May 13.
- Montrose Environmental, 2020. *Removal Action Completion Report Portions of Area 2 and Adjacent to Area 5: Roosevelt High School*. November 23.
- Montrose Environmental, 2020. Removal Action Completion Report Area 2 Basketball Courts Roosevelt High School. August 9.
- Montrose Environmental, 2021. Removal Action Completion Report Roosevelt High School Area 6.

 December 17.
- Montrose Environmental, 2023. Removal Action Completion Report South Portion of Area 6 Roosevelt High School. November 30.









EXPLANATION

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SOIL SAMPLE LOCATION

EXCAVATION AREA

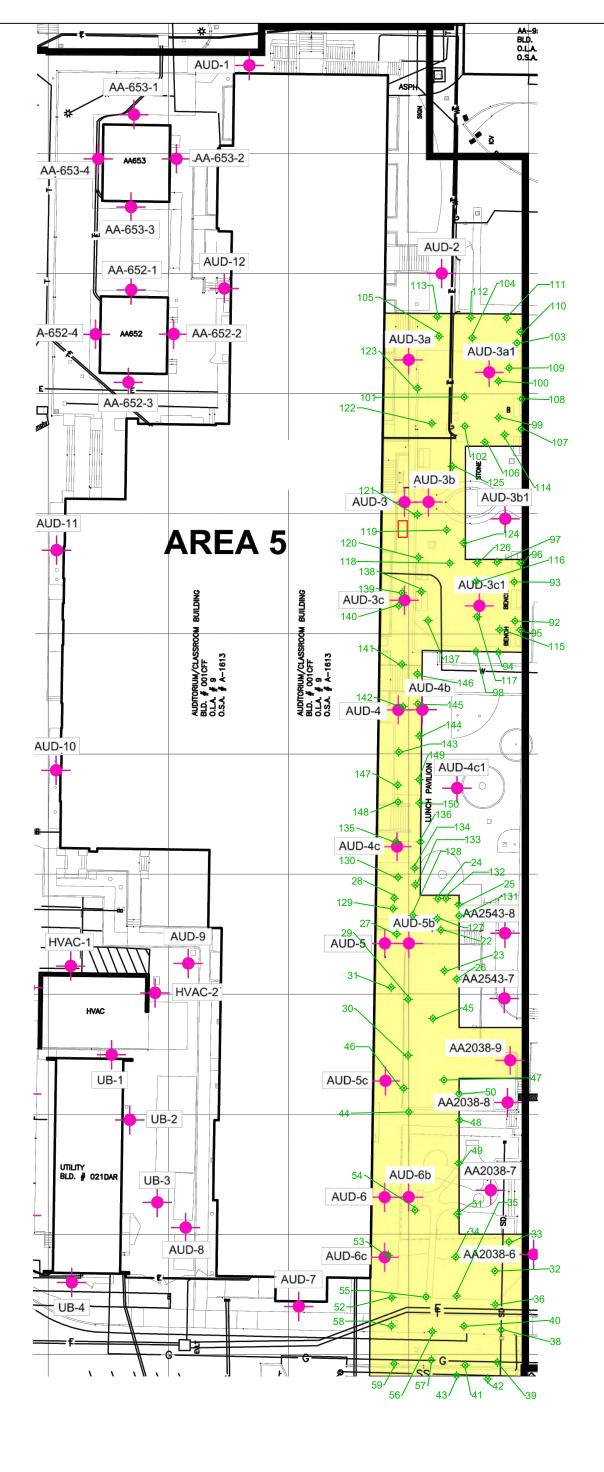
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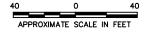
2016 SAMPLE LOCATION





SOURCE: Converse Consultants





SOURCE: Converse Consultants

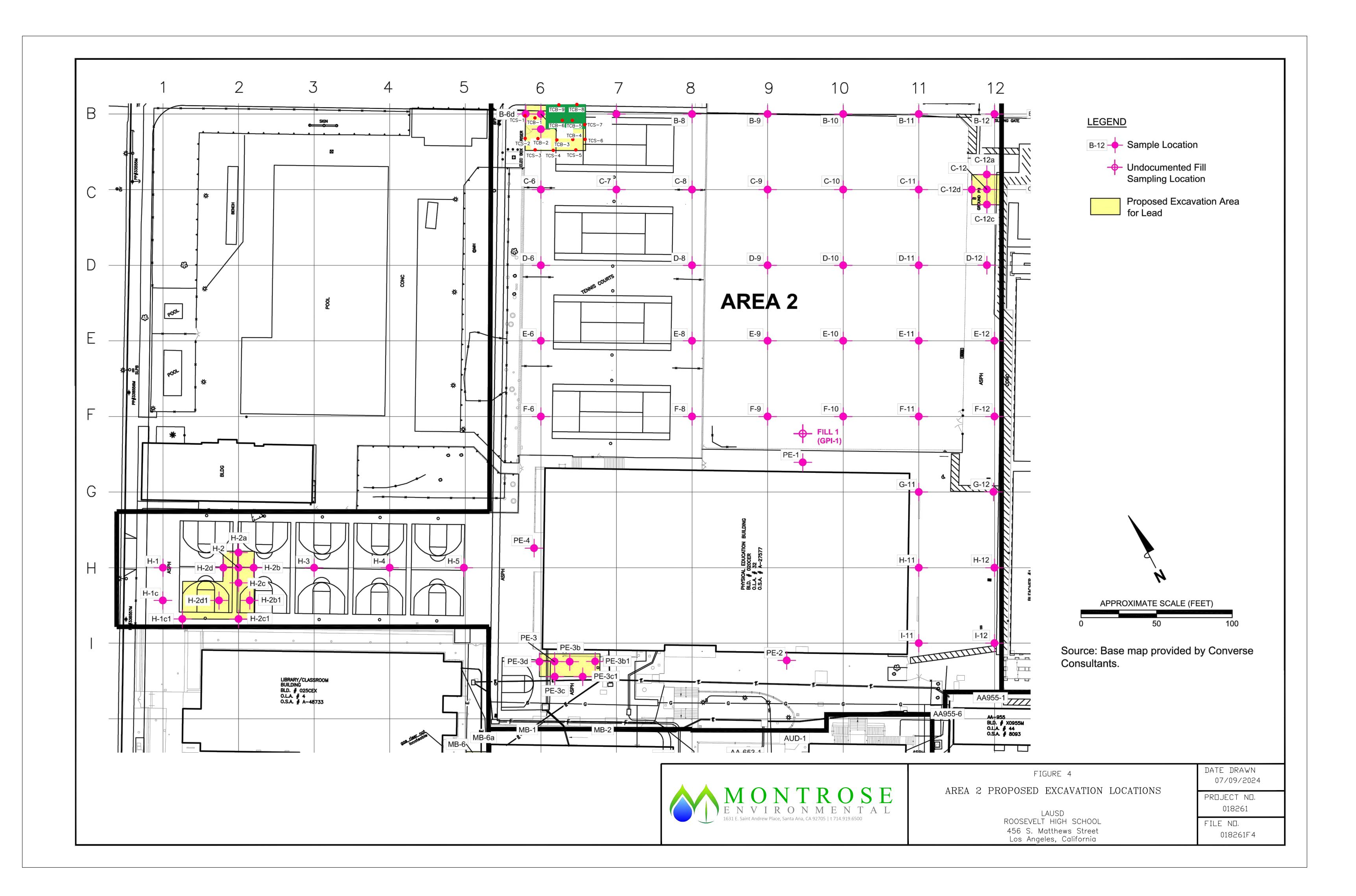


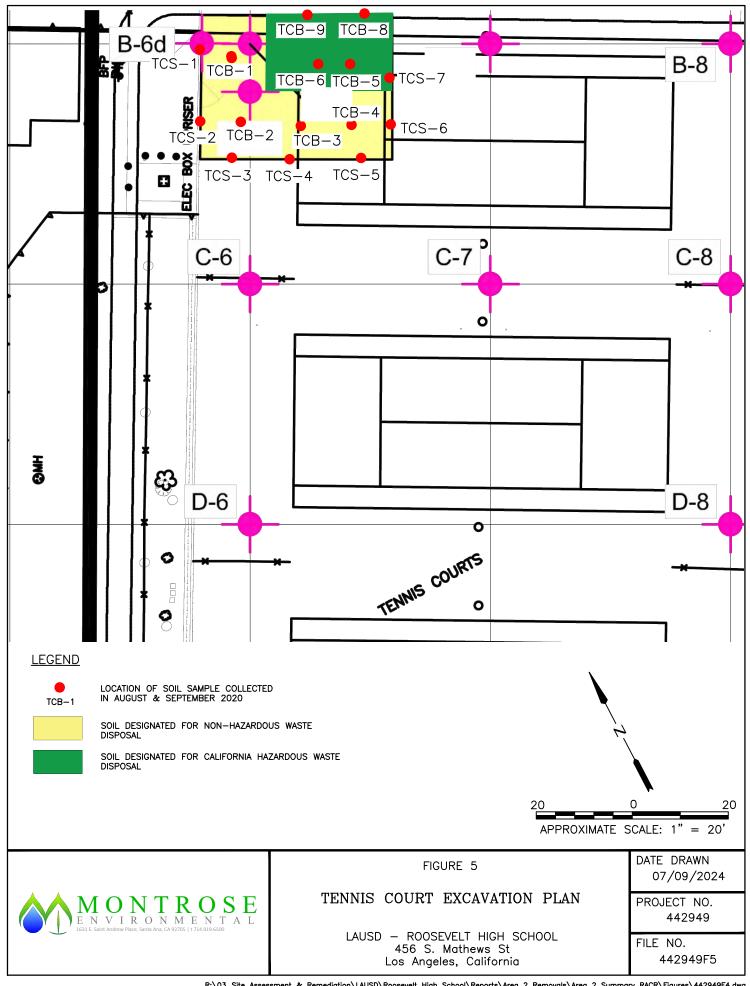
FIGURE 3

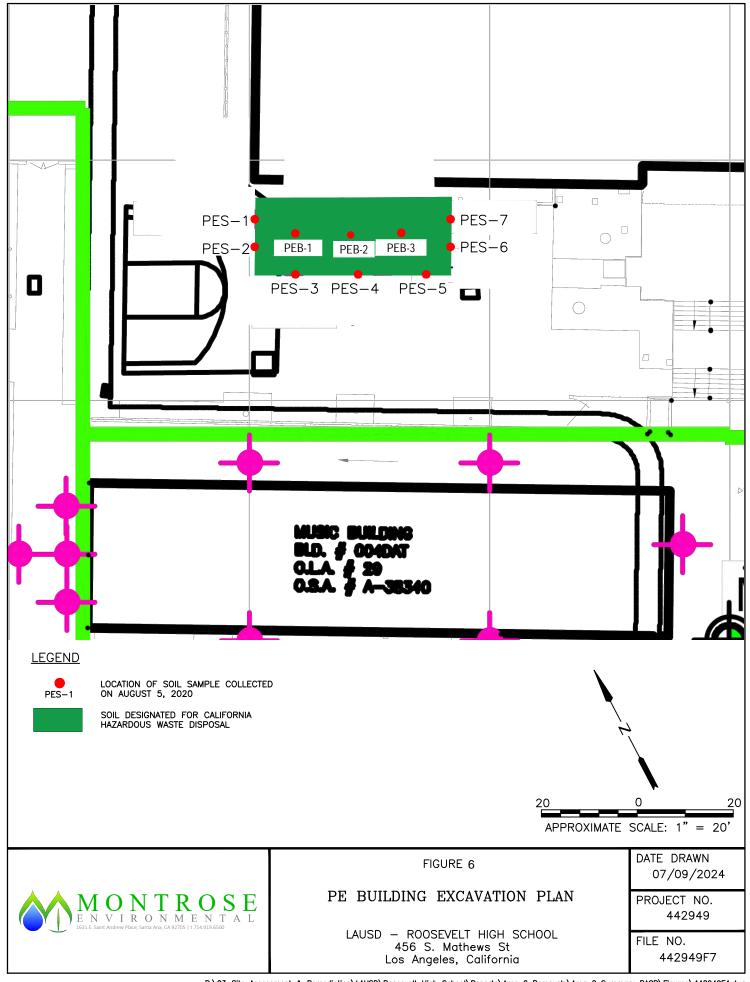
SITE PLAN SHOWING SOIL SAMPLE LOCATIONS—AREA 5

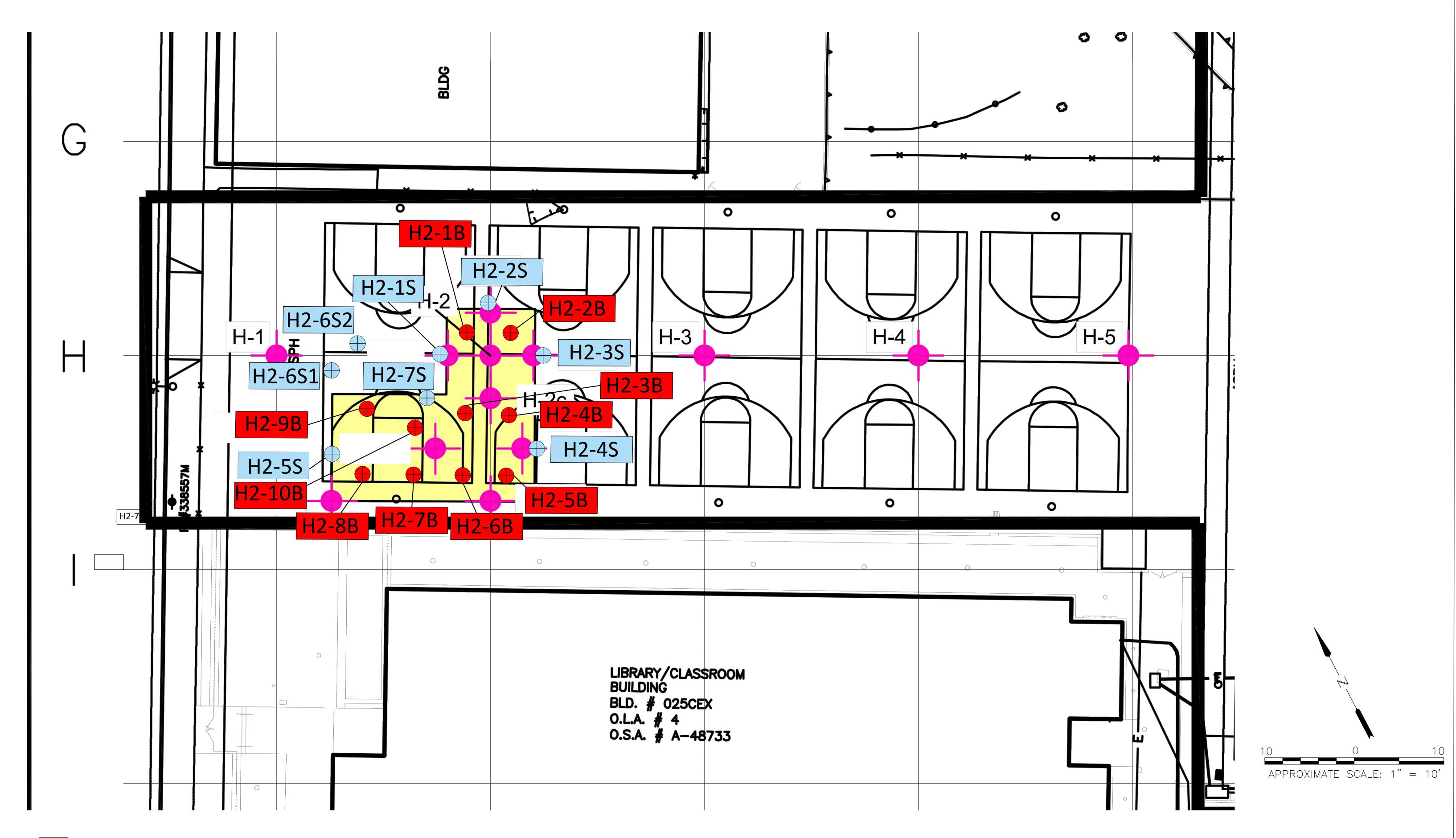
LAUSD ROOSEVELT HIGH SCHOOL 456 S. Matthews Street Los Angeles, California DATE DRAWN 07/09/2024 PROJECT NO.

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APPROXIMATE LIMITS OF BORING H2 EXCAVATION

H2-1S EXCAVATION SIDEWALL SOIL SAMPLE LOCATION

H2-7B EXCAVATION BOTTOM SOIL SAMPLE LOCATION



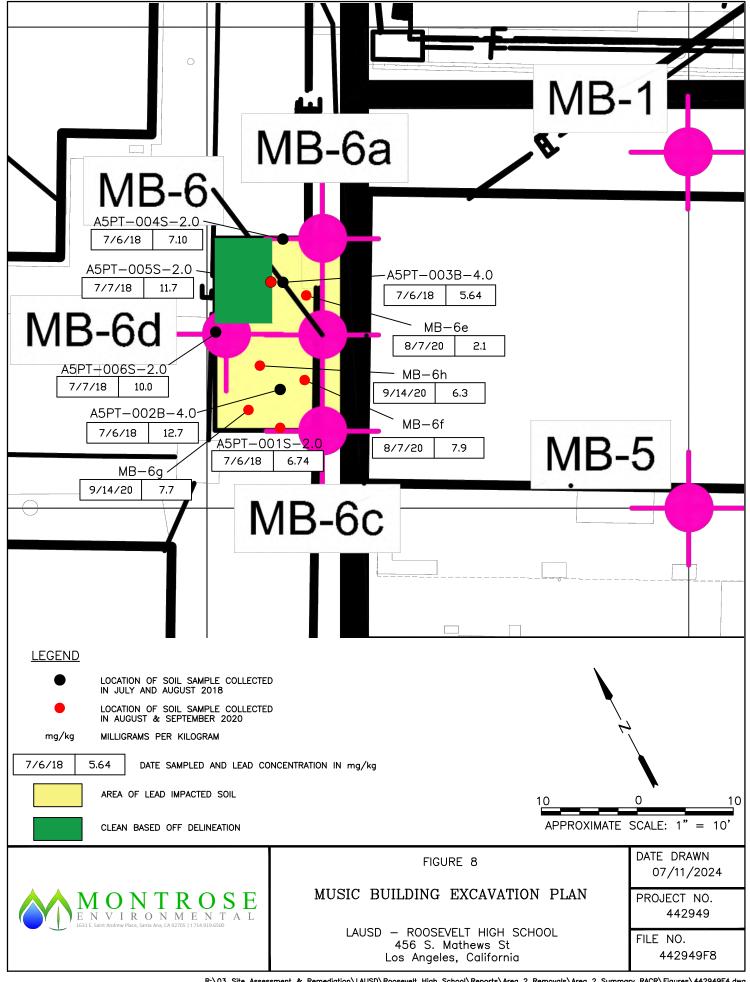
FIGURE 7

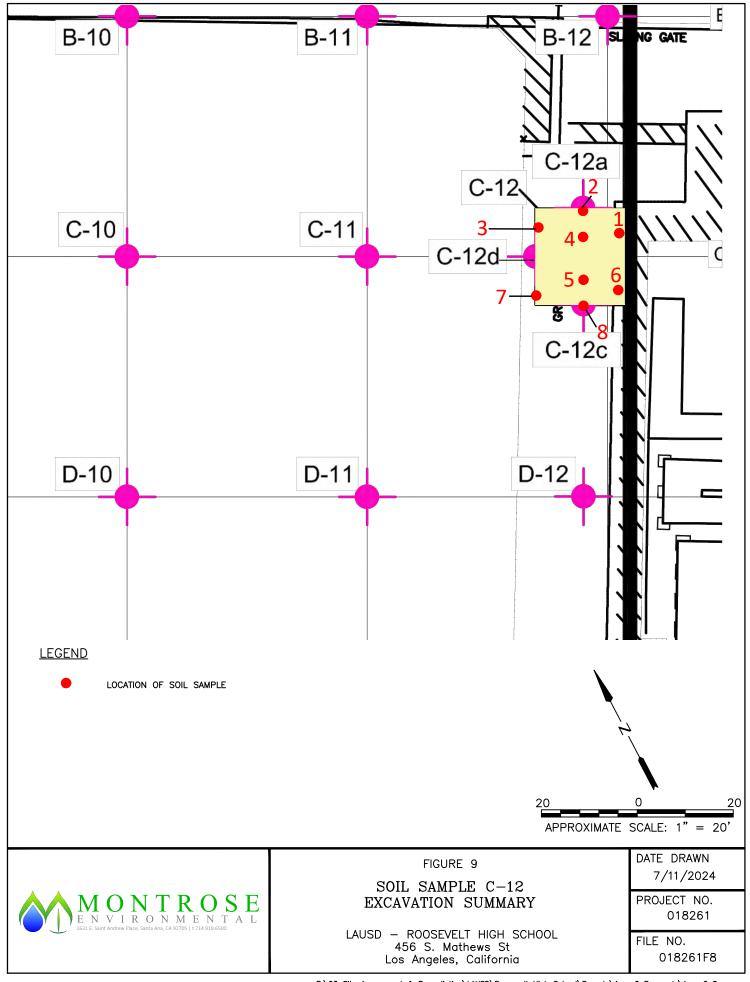
BASKETBALL COURTS EXCAVATION SUMMARY

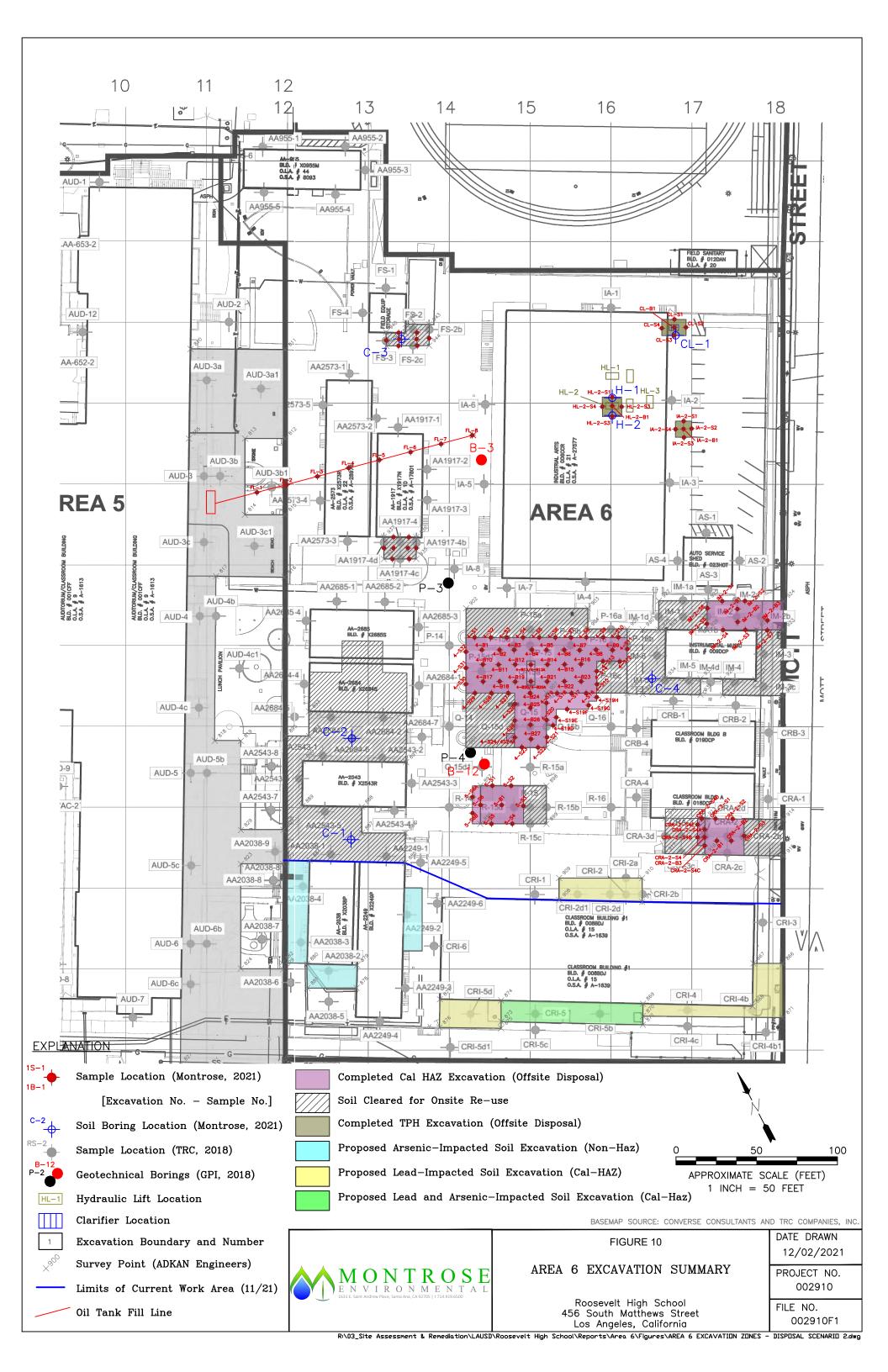
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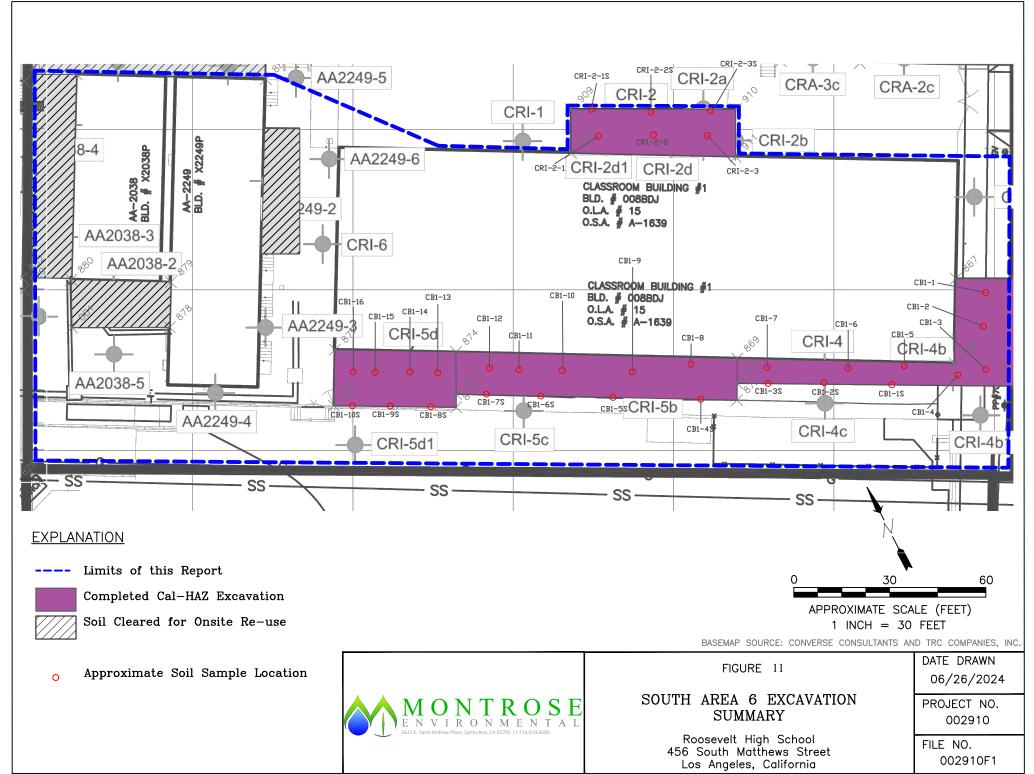
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<u></u>					
			Laboratory Analytical	XRF Analytical	
	Date Sampled	Depth	Results	Results	
Sample Location		(ft bgs)	Lead (mg/kg)		Comments
	'	`		Lead (mg/kg)	
			EPA 6010B		
1	1/30/2019	1		ND	Verification Only
2	1/30/2019	1		16	Verification Only
3	1/30/2019	1		56	Verification Only
4	1/30/2019	1, 2		121 , ND	Verification Only
5	1/30/2019	1		21	Verification Only
6	1/30/2019	1		32	Verification Only
7	1/30/2019	1		ND	Verification Only
8	1/30/2019	1		48	Verification Only
9	1/30/2019	1		ND	Verification Only
10	1/30/2019	1		20	Verification Only
11	1/30/2019	1		ND	Verification Only
12	1/30/2019	1		ND	Verification Only
13	1/30/2019	1		ND	Verification Only
14	1/30/2019	1		25	Verification Only
15	1/31/2019	1		ND	Verification Only
16	2/1/2019	1,2		<mark>538</mark> , 32	Verification Only
17	2/1/2019	1		21	Verification Only
18	2/8/2019	1		40	Verification Only
19	2/8/2019	1		36	Verification Only
20	2/8/2019	1,2		108, ND	Verification Only
21	2/8/2019	1		21	Verification Only
22	2/8/2019	2.5	2.83	ND	Bottom Sample
23	2/8/2019	2.5	5.88	ND	Bottom Sample
24	2/8/2019	1.25	3.30	ND	Sidewall Sample
25	2/8/2019	1.25	6.57	ND	Sidewall Sample
26	2/8/2019	1.25	2.82	ND	Sidewall Sample
27	2/8/2019	2.5	2.56	ND	Bottom Sample
28	2/8/2019	2.5	2.92	ND	Bottom Sample
29	2/8/2019	1.25	4.69	ND	Sidewall Sample
30	2/8/2019	1.25	3.94	ND	Sidewall Sample
31	2/8/2019	2.5	3.40	ND	Bottom Sample
32	2/11/2019	2.5, 3.5	10.80	18, ND	Bottom Sample
33	2/11/2019	1.25, 1.75		46, ND	Sidewall Sample
34	2/11/2019	2.5, 3.5	2.69	20, ND	Bottom Sample
35	2/11/2019	2.5, 3.5	3.55	17, ND	Bottom Sample
36	2/11/2019	2.5, 3.5	26.50	·	Bottom Sample
JU	2/11/2019	2.5, 5.5	20.30	21, ND	l Bottom Sample



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			Laboratory Analytical	XRF Analytical	
	Date	Depth	Results	Results	
Sample Location	Sampled	(ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B		
37	2/11/2019	1.25		41	Verification Only
38	2/11/2019	2.5	2.09	ND	Bottom Sample
39	2/11/2019	2.5	5.77	ND	Bottom Sample
40	2/11/2019	2.5	3.03	ND	Bottom Sample
41	2/11/2019	2.5	2.00	ND	Bottom Sample
42	2/11/2019	1.25	2.23	ND	Sidewall Sample
43	2/11/2019	1.25	2.85	ND	Sidewall Sample
44	2/11/2019	2.5	10.60	ND	Bottom Sample
45	2/11/2019	2.5	2.69	ND	Bottom Sample
46	2/11/2019	2.5	23.50	ND	Bottom Sample
47	2/11/2019	2.5	7.50	ND	Bottom Sample
48	2/11/2019	1.25	2.01	ND	Sidewall Sample
49	2/11/2019	1.25	3.59	ND	Sidewall Sample
50	2/11/2019	1.25	3.72	ND	Sidewall Sample
51	2/11/2019	1.25	4.27	ND	Sidewall Sample
52	2/12/2019	2.5	3.06	ND	Bottom Sample
53	2/12/2019	2.5	1.92	ND	Bottom Sample
54	2/12/2019	2.5	2.99	ND	Bottom Sample
55	2/12/2019	2.5, 3.5	3.46	24, ND	Sidewall Sample
56	2/13/2019	2.5	3.52	ND	Bottom Sample
57	2/13/2019	2.5	2.91	ND	Bottom Sample
58	2/13/2019	2.5, 3.5	2.50	21, ND	Sidewall Sample
59	2/13/2019	2.5, 3.5	2.17	14, ND	Sidewall Sample
60	2/20/2019	1		31	Verification Only
61	2/20/2019	1		33	Verification Only
62	2/20/2019	1		ND	Verification Only
63	2/20/2019	1		ND	Verification Only
64	2/20/2019	1		41	Verification Only
65	2/20/2019	1		43	Verification Only
66	2/20/2019	1		37	Verification Only
67	2/20/2019	1		ND	Verification Only
68	2/20/2019	1		27	Verification Only
69	2/20/2019	1		ND	Verification Only
70	2/20/2019	1		23	Verification Only
71	2/20/2019	1		110, ND	Verification Only
72	2/20/2019	1		129, 14	Verification Only



			Laboratory Analytical	XRF Analytical	
	Date	Depth	Results	Results	
Sample Location	Sampled	(ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B		
73	2/20/2019	1		68	Verification Only
74	2/21/2019	1		19	Verification Only
75	2/21/2019	1		48	Verification Only
76	2/21/2019	1		27	Verification Only
77	2/21/2019	1		ND	Verification Only
78	2/21/2019	1		28	Verification Only
79	2/21/2019	1		32	Verification Only
80	2/21/2019	1		33	Verification Only
81	2/21/2019	1		47	Verification Only
82	2/21/2019	1		23	Verification Only
83	2/21/2019	1		64	Verification Only
84	2/22/2019	1		31	Verification Only
85	2/22/2019	1		77	Verification Only
86	2/22/2019	1		42	Verification Only
87	2/22/2019	1		37	Verification Only
88	2/22/2019	1		63	Verification Only
89	2/22/2019	1		49	Verification Only
90	2/22/2019	1		ND	Verification Only
91	2/22/2019	1		ND	Verification Only
92	2/22/2019	2.5	1.24	ND	Bottom Sample
93	2/22/2019	2.5	0.79 J	ND	Bottom Sample
94	2/22/2019	1.25	11.70	43, ND	Sidewall Sample
95	2/22/2019	1.25	8.28	21	Sidewall Sample
96	2/22/2019	1.25	6.40	ND	Sidewall Sample
97	2/22/2019	1.25	4.98	ND	Sidewall Sample
98	2/22/2019	1.25	27.60	33, 87	Sidewall Sample
99	2/22/2019	2.5	9.22	ND	Bottom Sample
100	2/22/2019	2.5	1.88	ND	Bottom Sample
101	2/22/2019	2.5	4.84	ND	Bottom Sample
102	2/22/2019	2.5	7.31	ND	Bottom Sample
103	2/22/2019	2.5	2.36	ND	Bottom Sample
104	2/22/2019	2.5	0.40 J	ND	Bottom Sample
105	2/22/2019	2.5	1.41	ND	Bottom Sample
106	2/22/2019	1.25	3.40	ND	Sidewall Sample
107	2/22/2019	1.25	151*	85	Sidewall Sample
108	2/22/2019	1.25	19.00	ND	Sidewall Sample



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456 South Matthews Street Los Angeles, California

	Data	D. III	Laboratory Analytical Results	XRF Analytical Results	
Sample Location	Date Sampled	Depth (ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B		
147	2/25/2019	2.5	5.70	ND	Bottom Sample
148	2/25/2019	2.5	39.4	ND	Bottom Sample
149	2/25/2019	1.25	7.83	ND	Sidewall Sample
150	2/25/2019	1.25	4.35	ND	Sidewall Sample
TO	SC ⁽¹⁾		80	80	
EI	PA ⁽²⁾		400	400	

Notes:

ND: not detected

RED indicates the value exceeds the DTSC SLs

ft bgs: feet below ground surface

J: estimated value between the MDL and laboratory RDL

MDL: method detection limit mg/kg: milligrams per kilogram RDL: reporting detection limit XRF: X-Ray Fluorescence

(1): California Department of Toxic Substance Control (DTSC) Office of Human Health Risk (HERO, 2018)

RSLs Human Health Risk Assessment (HHRA) Note 3

(2): United States Environmental Protection Agency (EPA) Regional Screening Levels for Residential

Soil (RSL-mg/kg) November 2017

--: not applicable

*: soil could not be removed due to spatial constraints. The location was surveyed for future removals



Table 2 Lead Impacted Soil Removal Results Portions of Area 2 and Adjacent to Area 5 Los Angeles Unified School District Roosevelt High School

	T	1	I		1
			Laboratory Analytical	XRF Analytical	
	Date	Depth	Results	Results	
Sample Location	Sampled	(ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B		
PE Building	•		<u> </u>		
PES-1	7/30/2020	0.5	22	28	Sidewall Sample
PES-2	7/30/2020	0.5	8.2	35	Sidewall Sample
PES-3	7/30/2020	0.5	31	34	Sidewall Sample
PES-4	7/30/2020	0.5	70	61	Sidewall Sample
PES-5	7/30/2020	0.5	34	58	Sidewall Sample
PES-6	7/30/2020	0.5	31	19	Sidewall Sample
PES-7	7/30/2020	0.5	43	50	Sidewall Sample
PEB-1	7/30/2020	1	33	42	Bottom Sample
PEB-2	7/30/2020	1	71	66	Bottom Sample
PEB-3	7/30/2020	1, 2, 3	80	93, 86, 68	Bottom Sample
Music Building	, , , , , ,	, , -		,,	, , ,
MB-6E	8/7/2020	3	2.1	ND	Bottom Sample
	8/7/2020	3	7.9		=
MB-6F			6.3	ND	Bottom Sample
MB-6G	9/14/2020	3	1	16	Bottom Sample
MB-6H	9/14/2020	3	7.7	ND	Bottom Sample
MB-6I	9/14/2020	3		ND	Verification Only
Tennis Courts	_				
TCS-1	9/3/2020	2.5	7.9	ND	Sidewall Sample
TCS-2	9/3/2020	2.5	6.6	ND	Sidewall Sample
TCS-3	9/3/2020	2.5	6.8	14	Sidewall Sample
TCS-4	9/3/2020	2.5	6.4	ND	Sidewall Sample
TCS-5	9/3/2020	2.5	34	76	Sidewall Sample
TCS-6	9/3/2020	2.5	47	64	Sidewall Sample
TCB-1	9/3/2020	5	27	26	Bottom Sample
TCB-2	9/3/2020	5	6.4	17	Bottom Sample
TCB-3	9/3/2020	5	5.7	ND	Bottom Sample
TCB-4	9/3/2020	5	44	55	Bottom Sample
TCB-5	9/30/2020	5	5.3	ND	Bottom Sample
TCB-6	9/30/2020	5	9.5	18	Bottom Sample
TCB-7	9/30/2020	5	51	56	Bottom Sample
TCB-8	9/30/2020	5	31	17	Bottom Sample
TCB-9	9/30/2020	5	9.5	ND	Bottom Sample
	SC ⁽¹⁾		80	80	
	PA ⁽²⁾		400	400	



Table 2 Lead Impacted Soil Removal Results Portions of Area 2 and Adjacent to Area 5 Los Angeles Unified School District Roosevelt High School

456 South Matthews Street Los Angeles, California

			Laboratory Analytical	XRF Analytical	
Sample Location	· ·	Depth (ft bgs)	Results	Results	Comments
			Lead (mg/kg)	Lead (mg/kg)	
			EPA 6010B		

Notes:

ND: not detected

RED indicates the value exceeds the DTSC SLs

ft bgs: feet below ground surface

J: estimated value between the MDL and laboratory RDL

MDL: method detection limit mg/kg: milligrams per kilogram RDL: reporting detection limit XRF: X-Ray Fluorescence

(1): California Department of Toxic Substance Control (DTSC) Office of Human Health Risk (HERO, 2018)

RSLs Human Health Risk Assessment (HHRA) Note 3

(2): United States Environmental Protection Agency (EPA) Regional Screening Levels for Residential

Soil (RSL-mg/kg) November 2017

--: not applicable

*: soil could not be removed due to spatial constraints. The location was surveyed for future removals



Table 3 Lead Impacted Soil Removal Results Area 2 Basketball Courts Los Angeles Unified School District Roosevelt High School

456 South Matthews Street Los Angeles, California

		5 11	Laboratory Analytical Results	XRF Field Analytical Results	
Sample Location	Date Sampled	Depth (ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B		
Basketball Courts					
H2-1B	6/21/2022	3.5	3.87	ND,ND	Bottom Sample
H2-2B	6/21/2022	3.5	5.66	ND,ND	Bottom Sample
H2-3B	6/21/2022	3.5	5.05	ND,10	Bottom Sample
H2-4B	6/21/2022	3.5	21.7	10,13	Bottom Sample
H2-5B	6/21/2022	3.5	5.46	ND,ND	Bottom Sample
H2-6B	6/21/2022	3.5	4.77	ND,ND	Bottom Sample
H2-7B	6/21/2022	3.5	4.36	ND,ND	Bottom Sample
H2-8B	6/21/2022	3.5	5.54	18,10	Bottom Sample
H2-1S	6/21/2022	1.75	10.7	ND,17	Sidewall Sample
H2-2S	6/21/2022	1.75	9.61	ND,ND	Sidewall Sample
H2-3S	6/21/2022	1.75	5.92	ND,ND	Sidewall Sample
H2-4S	6/21/2022	1.75	7.92	ND,ND	Sidewall Sample
H2-5S	7/14/2022	3	17	11,ND	Sidewall Sample
H2-6S	7/14/2022	3		380,131	Verification Only
H2-6S1	7/14/2022	3	12	28,12	Sidewall Sample
H2-6S2	7/14/2022	3	13	25,31	Sidewall Sample
H2-7S	7/14/2022	3	60	51,62	Sidewall Sample
H2-9B	7/14/2022	3.5	17	ND,17	Bottom Sample
H2-10B	7/14/2022	3.5	24	18,34	Bottom Sample
	DTSC ⁽¹⁾	•	80		
	EPA ⁽²⁾		400		

Notes:

ND: not detected

ft bgs: feet below ground surface mg/kg: milligrams per kilogram

XRF: X-Ray Fluorescence

(1): California Department of Toxic Substance Control (DTSC) Office of Human Health Risk (HERO, 2018)

RSLs Human Health Risk Assessment (HHRA) Note 3

(2): United States Environmental Protection Agency (EPA) Regional Screening Levels for Residential

Soil (RSL-mg/kg) November 2017

--: not applicable



Table 4

Area 2 - Soil Sample C-12 Lead Analytical Results Los Angeles Unified School District Roosvelt High School

456 South Matthews Street Los Angeles, California

				Laboratory Analytical Results	XRF Analytical Results
Sample Location	Comple Tune	Date Sampled	Depth (ft bgs)	Lead	
Sample Location	Sample Type			(mg/kg)	Lead (mg/kg)
				EPA 6010B	
C-12-1	SW	7/16/2021	1.0	12	25
C-12-2	SW	7/16/2021	1.0	7.0	16
C-12-3	SW	7/16/2021	1.0	17	22
C-12-4	В	7/16/2021	2.0	7.1	<10
C-12-5	В	7/16/2021	2.0	26	30
C-12-6	SW	7/16/2021	1.0	32	15
C-12-7	SW	7/16/2021	1.0	46	58
C-12-8	SW	7/16/2021	1.0	27	11
	DTSC ⁽¹⁾		80	80	
EPA ⁽²⁾				400	400

Notes:

ft bgs: feet below ground surface

J: estimated value between the MDL and laboratory RDL

MDL: method detection limit mg/kg: milligrams per kilogram RDL: reporting detection limit SW = excavation sidewall sample

B = excavation bottom sample

(1): California Department of Toxic Substance Control (DTSC) Office of Human Health Risk (HERO, 2018)

RSLs Human Health Risk Assessment (HHRA) Note 3

(2): United States Environmental Protection Agency (EPA) Regional Screening Levels for Residential

Soil (RSL-mg/kg) November 2017

*: Arsenic screening level based on California background level

--: not applicable

			Laboratory Analytical	XRF Field Screening	
	5	5	Results	Results	
Sample Location	Date Sampled	Depth (ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B	2000 (1116) 116)	
2-S1	9/23/2021	2.0	23	30	Sidewall Sample
2-S2	9/23/2021	2.0	51	45	Sidewall Sample
2-S3	9/23/2021	2.0	19	33	Sidewall Sample
2-S4	9/23/2021	2.0	88	20	Sidewall Sample
2-S5	9/23/2021	2.0	13	29	Sidewall Sample
2-S6	9/23/2021	2.0	16	25	Sidewall Sample
2-30 2-B1	9/23/2021	3.0	15	25 27	Bottom Sample
2-B1 2-B2		2.0	20	30	Bottom Sample
	9/23/2021		1.5		•
CL-S1	10/8/2021	6.0		1.0	Sidewall Sample
CL-S2	10/8/2021	6.0	1.4	ND	Sidewall Sample
CL-S3	10/8/2021	6.0	1.1	23	Sidewall Sample
CL-S4	10/8/2021	6.0	1.4	27	Sidewall Sample
CL-B1	10/8/2021	8.0	1.3	16	Bottom Sample
CRA-2-S1	11/1/2021	4.0	15	ND	Sidewall Sample
CRA-2-S2	11/1/2021	4.0	49	48	Sidewall Sample
CRA-2-S3	11/1/2021	4.0	44	33	Sidewall Sample
CRA-2-S4	11/1/2021	4.0	230	63	Sidewall Sample
CRA-2-S4A	11/3/2021	4.0		96	Verification Only
CRA-2-S4B	11/3/2021	4.0	14	26	Sidewall Sample
CRA-2-S4C	11/3/2021	4.0	8.5	ND	Sidewall Sample
CRA-2-B1	11/1/2021	4.5	22	ND	Bottom Sample
CRA-2-B2	11/1/2021	4.5	41	61	Bottom Sample
CRA-2-B3	11/3/2021	4.5	4.8	ND	Bottom Sample
AUD-2-S1	11/1/2021	2.0	4.7	ND	Sidewall Sample
AUD-2-S2	11/1/2021	2.0	12	ND	Sidewall Sample
AUD-2-S3	11/1/2021	2.0	8.1	ND	Sidewall Sample
AUD-2-B1	11/1/2021	2.5	13	ND	Bottom Sample
IM-2-S1	11/1/2021	3.0	9.9	ND	Sidewall Sample
IM-2-S2	11/1/2021	3.0	2.8	ND	Sidewall Sample
IM-2-S3	11/1/2021	3.0	3.8	ND	Sidewall Sample
IM-2-S4	11/1/2021	3.0	3.2	ND	Sidewall Sample
IM-2-S5	11/1/2021	3.0	3.7	ND	Sidewall Sample
IM-2-S6	11/1/2021	3.0	3.2	ND	Sidewall Sample
IM-2-S7	11/3/2021	4.0	11	ND	Sidewall Sample
IM-2-B1	11/1/2021	3.5	13	ND	Bottom Sample
IM-2-B2	11/1/2021	3.5	14	ND	Bottom Sample
IM-2-B3	11/3/2021	4.5	7.5	ND	Bottom Sample
5-S1	11/3/2021	2.0	30	ND	Sidewall Sample
5-S2	11/3/2021	2.0	13	ND	Sidewall Sample
5-S3	11/3/2021	2.0	28	29	Sidewall Sample
5-S4	11/3/2021	2.0	8.5	ND	Sidewall Sample
5-S5	11/3/2021	2.0	36	46	Sidewall Sample
5-S6	11/3/2021	2.0		190	Verification Only
5-B1	11/3/2021	3.0	21	34	Bottom Sample
4-S6	11/3/2021	3.0	6.4	ND	Sidewall Sample



	1		Laboratory Analytical	VDF Field Carponing	
			Laboratory Analytical Results	XRF Field Screening	
Cample Lesation	Date	Depth	Results	Results	Commonts
Sample Location	Sampled	(ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B		
4-S7	11/3/2021	3.0	13	46	Sidewall Sample
4-S8	11/3/2021	3.0	4.8	ND	Sidewall Sample
4-S9	11/3/2021	3.0	5.1	ND	Sidewall Sample
4-S10	11/3/2021	3.0	6.4	ND	Sidewall Sample
4-S11	11/3/2021	3.0	97	54	Sidewall Sample
4-S12	11/3/2021	3.0	10	ND	Sidewall Sample
4-S13	11/3/2021	3.0	36	32	Sidewall Sample
4-S14	11/3/2021	3.0	19	ND	Sidewall Sample
4-S15	11/3/2021	3.0	7.3	ND	Sidewall Sample
4-S16	11/3/2021	3.0	62	33	Sidewall Sample
4-S17	11/3/2021	3.0	150	222	Sidewall Sample
4-S18	11/3/2021	3.0	33	45	Sidewall Sample
4-S19	11/3/2021	3.0	310	236	Sidewall Sample
4-S20	11/3/2021	3.0	17	ND	Sidewall Sample
4-S21	11/3/2021	3.0	13	ND	Sidewall Sample
4-S22	11/3/2021	3.0	11	ND	Sidewall Sample
4-S23	11/3/2021	3.0	47	40	Sidewall Sample
4-S24	11/5/2021	3.0	85	97	Sidewall Sample
4-S25	11/5/2021	3.0	42	53	Sidewall Sample
4-S26	11/5/2021	3.0	12	ND	Sidewall Sample
4-S27	11/5/2021	3.0	41	39	Sidewall Sample
4-S28	11/5/2021	3.0	5.9	ND	Sidewall Sample
4-S29	11/5/2021	3.0	30	29	Sidewall Sample
4-S30	11/5/2021	3.0	29	36	Sidewall Sample
4-B5	11/5/2021	4.0	17	ND	Bottom Sample
4-B6	11/5/2021	4.0	7.5	ND	Bottom Sample
4-B7	11/5/2021	4.0	6.3	ND	Bottom Sample
4-B8	11/5/2021	4.0	18	ND	Bottom Sample
4-B9	11/5/2021	4.0	5.3	ND	Bottom Sample
4-B13	11/5/2021	4.0	550	68	Bottom Sample
4-B14	11/5/2021	4.0	5.3	ND	Bottom Sample
4-B15	11/5/2021	4.0	42	40	Bottom Sample
4-B16	11/5/2021	4.0	6.7	ND	Bottom Sample
4-B17	11/5/2021	4.0	4.5	ND	Bottom Sample
4-B18	11/5/2021	4.0	13	ND	Bottom Sample
4-B19	11/5/2021	4.0	5.9	ND ND	Bottom Sample
4-B20	11/5/2021	4.0	80	85	Bottom Sample
4-B21	11/5/2021	4.0	5.5	ND	Bottom Sample
4-B21 4-B22	11/5/2021	4.0	25	ND	Bottom Sample
4-B23	11/5/2021	4.0	8.1	ND	Bottom Sample
4-B24	11/5/2021	4.0	56	45	Bottom Sample
4-B25	11/5/2021	4.0	73	115	Bottom Sample
4-B26	11/5/2021	4.0	75 75	62	Bottom Sample
4-B27	11/5/2021	4.0	61	43	-
4-B1	11/3/2021	4.0 4.0	9.6	50	Bottom Sample
					Bottom Sample
4-B2	11/23/2021	4.0	32	31	Bottom Sample



			Laboratory Analytical	XRF Field Screening	
	Date Sampled	Depth (ft bgs)	Results	Results	
Sample Location			Lead (mg/kg)	Load (readles)	Comments
			EDA CO10D	Lead (mg/kg)	
	<u> </u>	l .	EPA 6010B		
4-B3	11/23/2021	4.0	29	39	Bottom Sample
4-B4	11/23/2021	4.0	63	26	Bottom Sample
4-B10	11/23/2021	4.0	19	29	Bottom Sample
4-B11	11/23/2021	4.0	16	47	Bottom Sample
4-B12	11/23/2021	4.0	20	40	Bottom Sample
4-B13A	11/23/2021	5.0	4.6	ND	Bottom Sample
4-B20A	11/23/2021	5.0	5.6	ND	Bottom Sample
4-S1	11/23/2021	3.0	5.0	ND	Sidewall Sample
4-S2	11/23/2021	3.0	31	55	Sidewall Sample
4-S3	11/23/2021	3.0	25	ND	Sidewall Sample
4-S4	11/23/2021	3.0	26	39	Sidewall Sample
4-S5	11/23/2021	3.0	42	52	Sidewall Sample
4-S31	11/23/2021	3.0	37	ND	Sidewall Sample
4-S32	11/23/2021	3.0	4.9	ND	Sidewall Sample
4-S19A	11/23/2021	3.0		107	Verification Only
4-S19D	11/23/2021	3.0	5.1	ND	Sidewall Sample
4-S19E	11/23/2021	3.0	9.0	ND	Sidewall Sample
4-S19F	11/23/2021	3.0	22	28	Sidewall Sample
4-S17A	11/23/2021	3.0		580	Verification Only
4-S17B	11/23/2021	3.0		350	Verification Only
4-S17C	11/23/2021	3.0		100	Verification Only
4-S17D	11/23/2021	3.0		470	Verification Only
4-S17E	11/23/2021	3.0		138	Verification Only
4-S17F	11/24/2021	3.0		91	Verification Only
4-S17H	11/23/2021	3.0	32	57	Sidewall Sample
4-S17G	11/23/2021	3.0	23	37	Sidewall Sample
CRA-2-S4D	11/23/2021	3.0	23	38	Sidewall Sample
CRA-2-S4E	11/23/2021	3.0	18	ND	Sidewall Sample
4-S24A	11/23/2021	3.0	8.4	ND	Sidewall Sample
5-S6B	11/23/2021	3.0	16	46	Sidewall Sample
5-S6A	11/23/2021	3.0	20	65	Sidewall Sample
DTSC ⁽¹⁾			80	80	2 /20112111 20111
	EPA ⁽²⁾			400	
EPA ⁽⁻⁾			400	400	



456 South Matthews Street Los Angeles, California

	Data	Donth	Laboratory Analytical Results	XRF Field Screening Results	
Sample Location	Date Sampled	Depth (ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B		

Notes:

ND: not detected

RED indicates the value exceeds the DTSC SLs BLUE indicates a step out verification sample

ft bgs: feet below ground surface

J: estimated value between the MDL and laboratory RDL

MDL: method detection limit mg/kg: milligrams per kilogram RDL: reporting detection limit

XRF: X-Ray Fluorescence Spectrometer (Innovix lpha-4000 or Thermo Scientific Niton XL-2)

(1): California Department of Toxic Substance Control (DTSC) Office of Human Health Risk (HERO, 2020)
*: Human Health Risk Assessment (HHRA) Note Number 3 - DTSC Modified Screening Levels - June 2020

**: HHRA Note Number 11 - Southern California Ambient Arsenic Screening Level - December 2020

(2): United States Environmental Protection Agency (EPA) Regional Screening Levels for Residential

Soil (RSL-mg/kg) May 2021

--: not applicable

Verification: XRF only sample location to determine adequacy of excavation

Sample ID: 1-S1 = [Excavation Number 1] - [Sidewall Sample Number 1 (clockwise around perimeter from north wall)]

Sample ID: 1-B1 = [Excavation Number 1] - [Bottom Sample Number 1 (left to right from northwest corner)]



	_		Laboratory Analytical Results	XRF Field Screening Results	
Sample ID	Date Sampled	Depth (ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B	EPA 6200	
CB1-1	6/16/2023	4	15		
CB1-2	6/16/2023	4	13		
CB1-3	6/16/2023	4	23		
CB1-4	6/16/2023	4	8.4		
CB1-5	6/16/2023	4	6.8		
CB1-6	6/16/2023	4	15		
CB1-7	6/16/2023	4	7.2		
CB1-8	6/16/2023	4	6.6		
CB1-9	6/16/2023	4	15		
CB1-1S	6/16/2023	2	12		
CB1-2S	6/16/2023	2	9.7		
CB1-3S	6/16/2023	2	9.8		
CB1-4S	6/16/2023	2	22		
CB1-5S	6/16/2023	2	16		
CB1-6S	6/16/2023	2	37		
CB1-7S	6/16/2023	2	11		
CB1-12	6/16/2023	4	4.9		
CB1-13	6/16/2023	4	36		
CB1-14	6/16/2023	4	34		
CB1-15	6/16/2023	4	5.8		
CB1-8S	6/16/2023	2	26		
CB1-9S	6/16/2023	2	18		
CB1-10S	6/16/2023	2	16		
CB1-10	6/16/2023	4	5.6		
CB1-11	6/16/2023	4	5.0		
CB1-16	6/16/2023	4	16		
CR1-2-1	6/19/2023	4	5.6	ND,ND	
CR1-2-2	6/19/2023	4	4.3	ND,10.9	
CR1-2-3	6/19/2023	4	5.8	21.5,23.4	
CR1-2-1S	6/19/2023	2	6.2	ND,16.2	
CR1-2-2S	6/19/2023	2	5.8	10.5,12.6	
CR1-2-3S	6/19/2023	2	5.5	13.2,19.3	
DTSC ⁽¹⁾			80	0*	
EF	PA ⁽²⁾		40	00	



Table 6

Area 6 Lead and Arsenic Impacted Soil Removal Results Los Angeles Unified School District Roosevelt High School

456 South Matthews Street Los Angeles, California

			Laboratory	XRF Field	
	Data	Donath	Analytical Results	Screening Results	
Sample ID	1 '	Depth (ft bgs)	Lead (mg/kg)	Lead (mg/kg)	Comments
			EPA 6010B	EPA 6200	

Notes:

ND: not detected

RED indicates the value exceeds the DTSC SLs

ft bgs: feet below ground surface

J: estimated value between the MDL and laboratory RDL

MDL: method detection limit mg/kg: milligrams per kilogram RDL: reporting detection limit

XRF: X-Ray Fluorescence Spectrometer (Innovix α-4000)

(1): California Department of Toxic Substance Control (DTSC) Office of Human Health Risk (HERO, 2020)

*: Human Health Risk Assessment (HHRA) Note Number 3 - DTSC Modified Screening Levels - June 2020

**: HHRA Note Number 11 - Southern California Ambient Arsenic Screening Level - December 2020

(2): United States Environmental Protection Agency (EPA) Regional Screening Levels for Residential

Soil (RSL-mg/kg) May 2021

--: not applicable

