



Stantec Consulting Services Inc.
3875 Atherton Road, Rocklin CA 95765-3716

July 20, 2016

Attention: Mr. Karl Kurka
Environmental Program Manager
City of Sacramento
General Services
915 I Street, 2nd Floor
Sacramento, CA 95814

Dear Mr. Kurka,

Reference: Work Plan for Additional Soil Sampling, City of Sacramento Mangan Pistol and Rifle Range, 2140 34th Avenue, Sacramento, CA

Stantec Consulting Services, Inc. (Stantec) has prepared this *Work Plan for Additional Soil Sampling* (Work Plan) for the City of Sacramento Mangan Pistol and Rifle Range located at 2140 34th Avenue, Sacramento, California (the Site). This Work Plan has been prepared in response to communication received from the County of Sacramento Environmental Management Department (Sacramento EMD) regarding the data presented in Stantec's *Interim Task 1 Site Data Report* (Report), dated July 14, 2016. The Report presented preliminary data collected during site investigation activities described under Task 1 in the *Revised Site Characterization Work Plan* prepared by Stantec and dated June 16, 2016. Task 1 investigation activities consisted of collecting surface soil data from portions of Mangan Park surrounding the gun range, and investigation of the storm drain lateral present beneath the parking lot south of the building. The Site location is illustrated on Figure 1, and the Site and vicinity are illustrated on Figure 2.

Scope of Work

In an email dated July 15, 2016, the Sacramento EMD and the Department of Toxic Substances Control (DTSC) requested additional step-out sampling at sample locations EU1-58, EU1-65, and EU3-83, based on the results of surface soil samples collected at these locations. Lead data collected during the Task 1 investigation are illustrated on Figure 3. Stantec proposes collecting step-out samples 12.5 and 25 feet to the north, south, east, and west at these three sample locations (as depicted on Figure 3) within one-inch of the surface and six inches below ground surface (bgs) to further delineate the concentrations of lead in soil. Additionally, Stantec will collect samples at the three original sample locations at a depth of six inches bgs to delineate the vertical extent of lead concentrations. Soil samples will be collected in the same manner as described in the Report, and will be analyzed for total lead using EPA Method 6010B after sieving using a Number 60 mesh screen. The samples collected from six inches bgs from the step-out locations will be submitted to the laboratory on hold pending results of the surface samples. The deeper samples from each location will be analyzed if surface sample lead concentrations exceed 80 milligrams per kilogram (mg/kg).

Design with community in mind



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Mr. Karl Kurka
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**Reference: Work Plan for Additional Soil Sampling, City of Sacramento Mangan Pistol and Rifle Range, 2140
34th Avenue, Sacramento, CA**

Proposed Schedule

Stantec proposes completing the onsite sampling within one week of approval of this work by the Sacramento EMD. A report of the findings of the additional sampling will be issued within three weeks of completion of the field work.

If you have any questions regarding the work performed, please contact the undersigned.

Regards,

Stantec Consulting Services Inc.

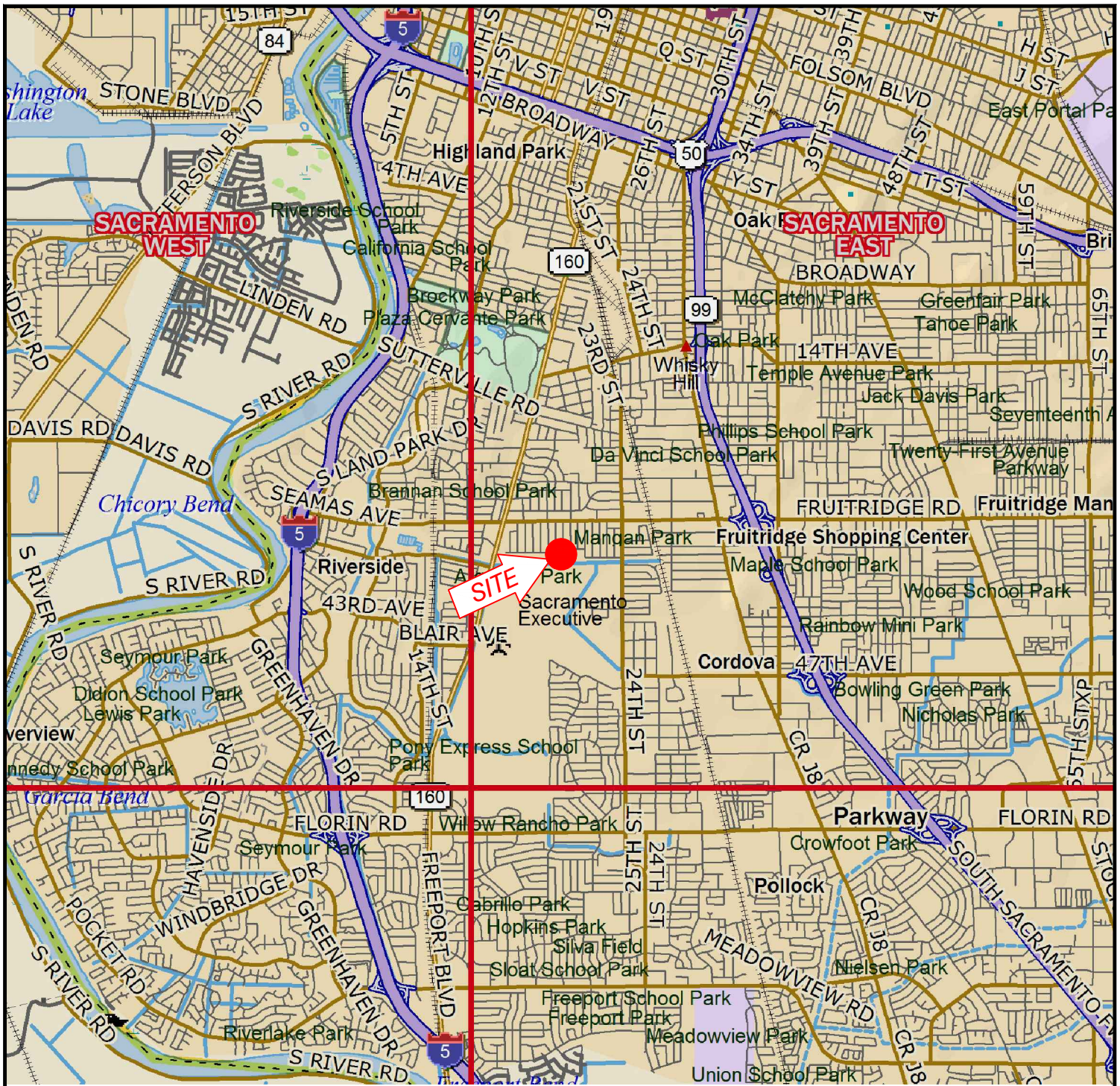
A handwritten signature in blue ink that reads "Neil Doran".

Neil Doran, P.G.
Senior Geologist
Phone: (916) 472-3933
Neil.Doran@stantec.com

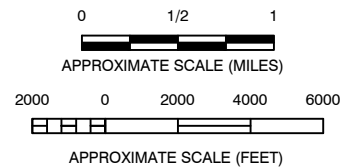
A handwritten signature in blue ink that reads "Danielle Manning".

Danielle Manning
Project Manager
Phone: (916) 472-3926
danielle.manning@stantec.com

Attachment: Figure 1 – Site Location Map
Figure 2 – Site Plan and Vicinity Map
Figure 3 – Soil Lead Concentrations and Proposed Sample Locations




CALIFORNIA



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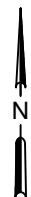
REFERENCE: DELORME TOPO MAP, SACRAMENTO EAST, CALIFORNIA

	FOR: CITY OF SACRAMENTO MANGAN PARK MANGAN PISTOL & RIFLE RANGE 2140 34th AVENUE SACRAMENTO, CA 95822-3157		FIGURE: 1	
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LEGEND

----- MANGAN PARK PROPERTY LINE (APPROXIMATE)



0 100 200



APPROXIMATE SCALE IN FEET

REFERENCE: THIS MAP IS BASED ON GOOGLE EARTH AERIAL IMAGE.

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FOR: CITY OF SACRAMENTO
MANGAN PARK
MANGAN PISTOL & RIFLE RANGE
2140 34th AVENUE
SACRAMENTO, CA 95822-3157

SITE PLAN AND VICINITY MAP

FIGURE:

2

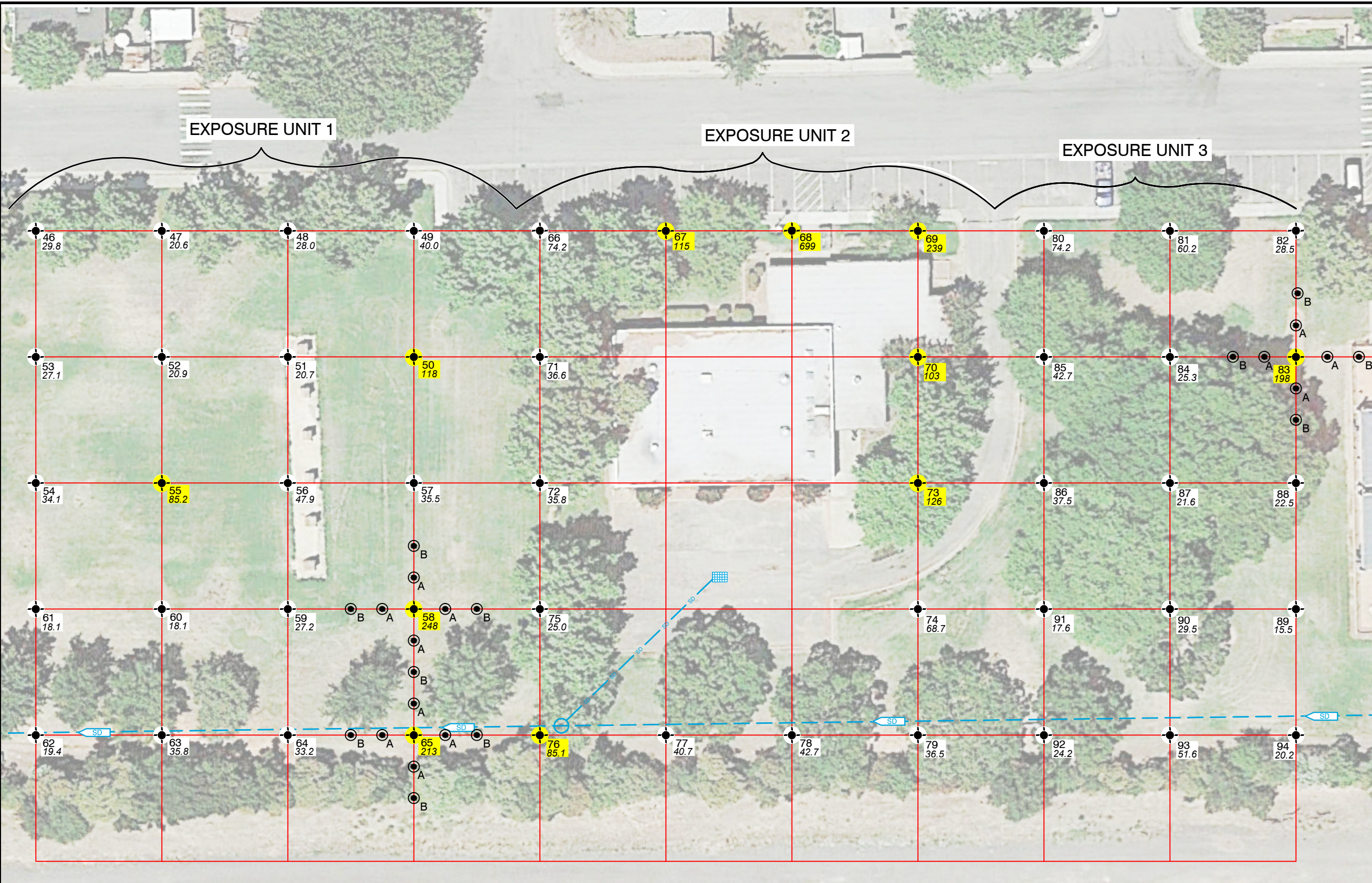
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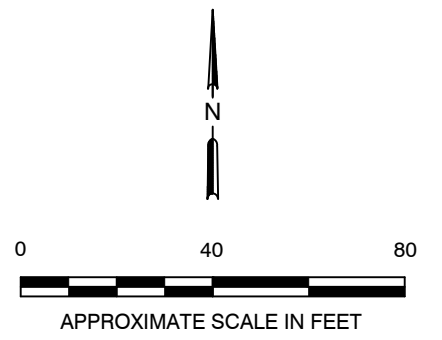
APPROVED BY:
NHD

DATE:
05/16/16



LEGEND

- SAMPLE LOCATION
- 85 — SAMPLE ID
- 42.7 — LEAD CONCENTRATION IN SOIL (mg/kg)
- mg/kg MILLIGRAM PER KILOGRAM
- NOTE: SOIL SAMPLES COLLECTED FROM UPPER 1 INCH OF SOIL
- HIGHLIGHTED** CONCENTRATION ABOVE 80.0 mg/kg
- PROPOSED SAMPLE LOCATION (FROM UPPER 1 INCH AND 6 INCHES BELOW GRADE)
- STORM DRAIN SUMP
- STORM DRAIN LATERAL (APPROXIMATE 4ft BELOW GRADE)
- STORM DRAIN (APPROXIMATE 10ft BELOW GRADE)



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	FOR: CITY OF SACRAMENTO MANGAN PARK MANGAN PISTOL & RIFLE RANGE 2140 34th AVENUE SACRAMENTO, CA 95822-3157	SOIL LEAD DATA AND PROPOSED SAMPLE LOCATIONS		FIGURE: 3
	JOB NUMBER: 185703375	DRAWN BY: STA/MDR	CHECKED BY: DM	APPROVED BY: NHD