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San Lorenzo Unified School District

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March 13, 2012

Mr. Mark Detterman
Alameda County Health Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: Work Plan
San Lorenzo High School
50 E. Lewelling Blvd.
San Lorenzo, California

Dear Mr. Detterman,

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

Karen Langmaid
Director of Operations
San Lorenzo Unified School District

EquoLogic

Mr. Mark Detterman
Alameda County Health Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

March 13, 2012
Project 409-02.01

RE: **Work Plan**
San Lorenzo High School
50 E. Lewelling Blvd.
San Lorenzo, California

Dear Mr. Detterman,

EquoLogic, on behalf of the San Lorenzo Unified School District (SLUSD), has prepared the following soil and groundwater investigation work plan. The work plan was requested by Alameda County Health Services Agency (ACHSA) in a letter to SLUSD dated January 5, 2012.

BACKGROUND

On August 18, 2010, a 6,000-gallon heating oil underground storage tank (UST) was removed from San Lorenzo High School. The location of San Lorenzo High School (Site) is shown on **Figure 1**. The excavation and tank removal were documented in a report by Golden Gate Tank Removal, Inc. (GGTR) titled *Closure Report for Underground Storage Tank, 50 E Lowelling Boulevard, San Lorenzo, CA 94580* dated October 19, 2010. After removal of the UST, confirmation soil samples were collected at a depth of 12 feet below grade (bg). Samples were analyzed for total petroleum hydrocarbons as diesel (TPH-d) and as motor oil (TPH-mo). There is no specific test for heating oil. TPH in either TPH-d or TPH-mo carbon range could be heating oil. TPH-d concentrations were found up to 3,470 milligrams per kilogram (mg/kg) in soil and is assumed to represent heating oil. TPH-mo was not detected in soil samples. Additionally benzene, toluene, ethylbenzene, and xylene (BTEX) and fuel oxygenates were analyzed for, however, all were non-detectable at varying limits of detection.

A grab groundwater was collected from the UST excavation. The sample was analyzed for TPH-d and TPH-mo, BTEX, and fuel oxygenates. TPH-d was detected at 12.1 parts per million (ppm). All other parameters were below the method detection limit.

HYROGEOLOGIC CONDITIONS

GGTR reported that the soil observed in the UST excavation was primarily clay. Groundwater was observed seeping into the UST excavation that was 12 feet deep. Groundwater is found at a depth of approximately 8.5 to 10 feet bg in shallow groundwater monitoring wells at the Kawahara Nursery located across Ashland Boulevard from the Site. The groundwater flow direction at the nursery in November 2011 was to the northwest. Borings at the nursery encountered primarily clay with thin sand and gravel layers to a total depth explored of 20 feet bg.

WORK PLAN

EquoLogic proposes to sample soil and groundwater in the area of the former UST and remote fill port in order to establish the lateral and vertical extent of petroleum hydrocarbons. All appropriate permits will be obtained prior to commencing field work. An underground utility survey will be performed prior to field work in order to avoid damage to any lines during soil borings. Three borings are proposed in the area of the former UST and one boring adjacent to the former remote fill port (**Figure 2**). Borings will be performed using direct-push technology. The drilling company performing the work will have a C-57 license. Borings will be advanced to a depth of approximately 24 feet bg, approximately 12 feet below the base of the UST excavation. Vertical migration of petroleum hydrocarbons is anticipated to be limited by the clay soil beneath the former UST and shallow groundwater.

Soil samples will be collected at 5-foot intervals and at the bottom of the boring. Soil samples will be obtained by pushing or driving a 4-foot long sampler into the ground. The sampler will contain clear acetate liners. Portions of the liner containing soil at the required depth will be cut and preserved with Teflon sheets and tight fitting plastic caps. Soil samples will be monitored in the field for the presence of petroleum hydrocarbons with a photo-ionization detector (PID). Soil borings will be logged by a geologist using the Unified Soil Classification system. A grab groundwater sample will be collected from each boring using a clean stainless steel bailer. Water samples will be decanted into 40 milliliter glass vials with chemical preservative. Both soil and groundwater samples will be stored in an ice chest for shipment to a California certified laboratory.

Soil and groundwater samples will be analyzed for TPH-d, TPH-mo, and BTEX compounds by EPA Methods 8015. EquoLogic will prepare a report containing a written description of field activities, boring logs stamped by a California professional geologist, boring location map, table containing laboratory

results, and certified analytical laboratory report. The report will contain recommendations for any additional field work.

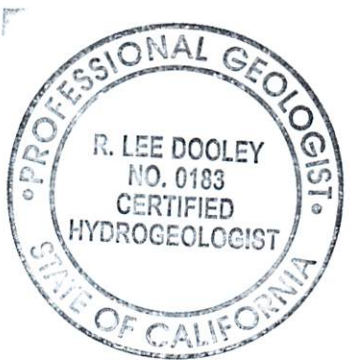
LIMITATIONS

The descriptions, conclusions, and recommendations contained in this report represent EquoLogic's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by EquoLogic, the data from those reports is used "as is" and is assumed to be accurate. This report is based upon a specific scope of work requested by the client. The Contract between EquoLogic and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were conducted. This report is intended only for the use of EquoLogic's Client and anyone else specifically listed on this report. EquoLogic will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, EquoLogic makes no express or implied warranty as to the contents of this report.

You can contact me at (408) 656-2505 or by email at ldooley@equologicgroup.com.

Sincerely,

R Lee Dooley

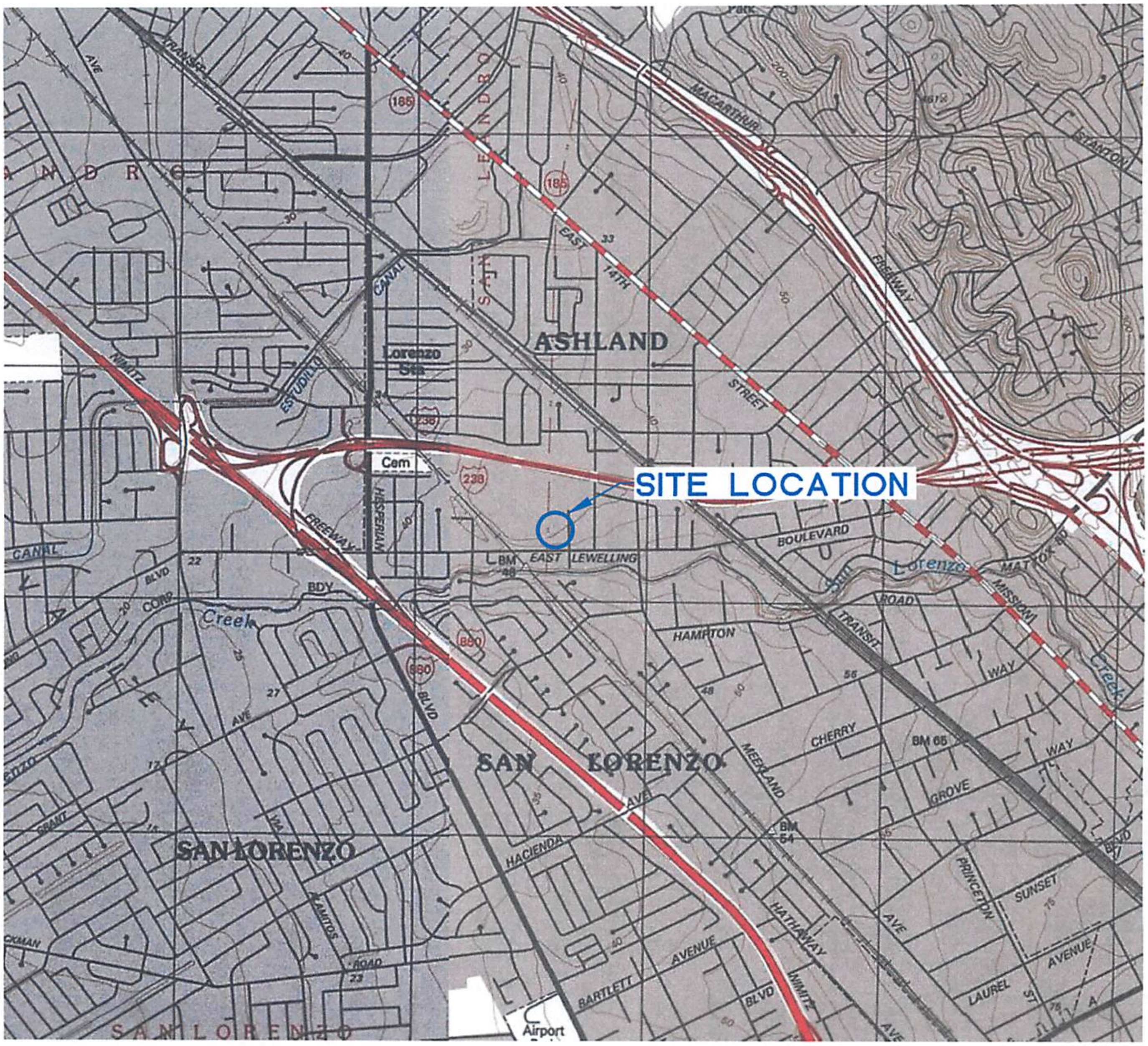


Lee Dooley
Senior Hydrogeologist
CHG 183

Attachments

Figure 1 – Site Location Map
Figure 2 – Boring Location Map

Cc: San Lorenzo Unified School District, c/o Karen Langmaid, 15510 Usher Street, San Lorenzo, CA 94580



QUADRANGLE LOCATION

N

SCALE IN FEET

0 2,000

Ref.
W644/409.01.01/4090101-SLM.DWG

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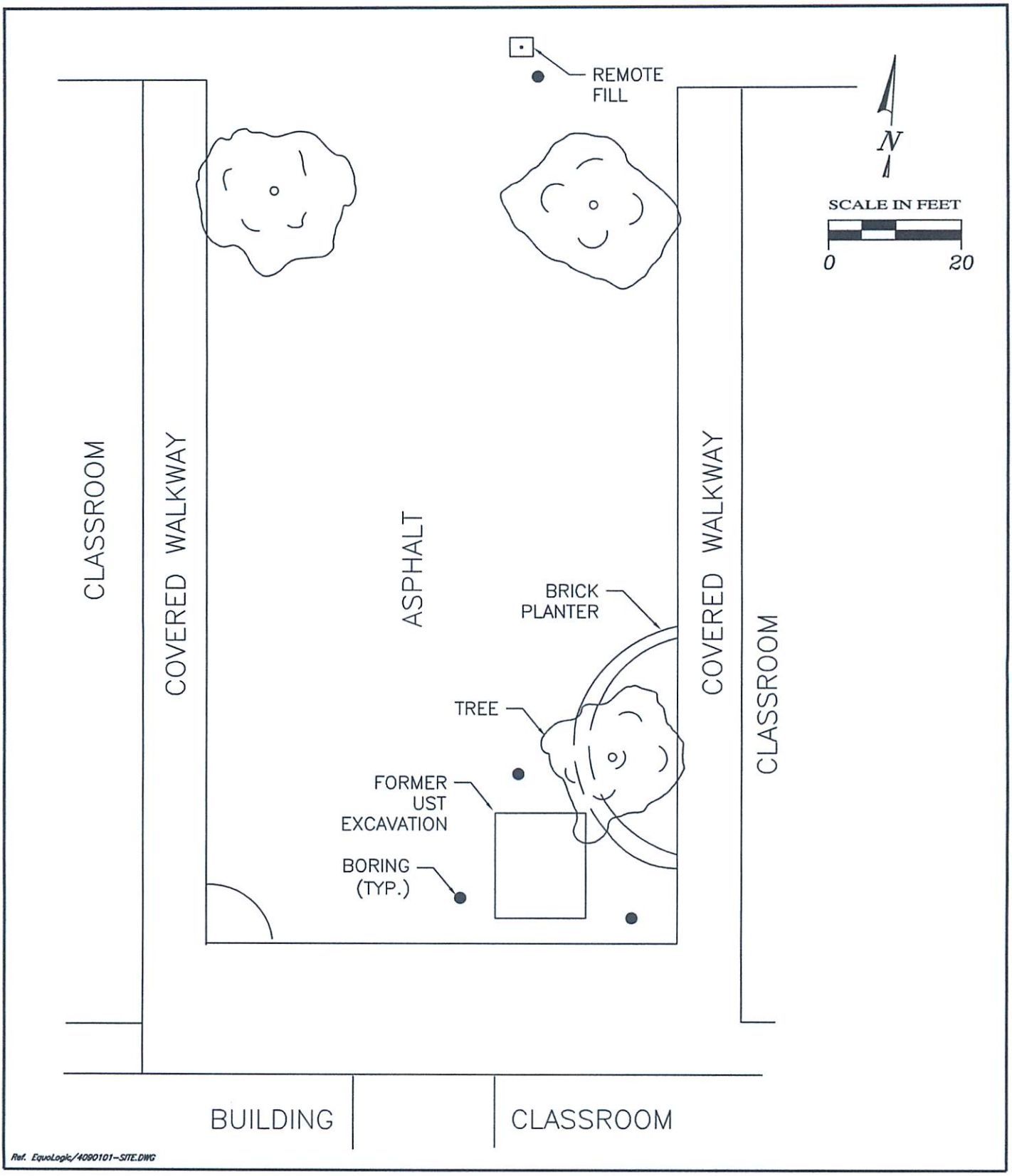
SITE LOCATION MAP

SAN LORENZO HIGH SCHOOL
50 E. LOWELLING BLVD
SAN LORENZO, CALIFORNIA

FIGURE:
1
PROJECT:
409.01.01



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BORING LOCATION MAP

SAN LORENZO HIGH SCHOOL
50 EAST LOWELLING BLVD.
SAN LORENZO, CALIFORNIA

FIGURE:
2
PROJECT:
409.01.01