

Attachment D

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PRELIMINARY ENDANGERMENT ASSESSMENT (PRC 21155.1)

**1860-1868 North Western Avenue
Los Angeles, California**

December 14, 2017

1.0 Introduction

Leymaster Environmental Consulting, LLC (LEC) prepared this preliminary endangerment assessment pursuant to California Public Resources Code section 21155.1(a)(4) for the property located at 1860-1868 North Western Avenue and 5440-5448 West Franklin Avenue in Los Angeles, California (the Property) (Figure 1 – Site Vicinity Map) in connection with the proposed mixed-use residential and commercial development transit priority project. Consistent with the requirements of California Public Resources Code section 21155.1(a)(4), this assessment, which was prepared by environmental assessors, determines the existence of hazardous substance releases on the site and determines the potential for exposure of future occupants to significant health hazards from any nearby property or activity. In addition, this assessment includes a discussion of the mitigation measures to address the release of hazardous substances and mitigate to a level of insignificance the effects of any releases and potential exposure in compliance with state and federal requirements.

2.0 Background

The Property consists of five parcels totaling approximately 0.91 acres, and is located on the southeast corner of the intersection between Western and Franklin Avenues in the City of Los Angeles, California. A Valero service station currently occupies the western half of the Property, and residential housing is on the eastern half. Topography at the site is relatively level with commercial developments on the northwest, west and southwest adjacent properties. Residential housing is on the north, east and southeast adjacent properties.

According to the Baseline Site Summary Report prepared by Stantec Consulting Services, Inc. (Stantec), the Site was undeveloped land as shown on Sanborn fire insurance maps from 1907 and 1913, until the southern portion of the Site was developed with a five building apartment complex by 1919. A 1928 aerial photograph indicated an unidentified building on the north-central portion of the property. City of Los Angeles permit records indicated the construction of the service station was permitted in 1925. Stantec reported a gasoline service station was present in the northwestern portion of the Site on the 1938 aerial photograph, and a residence was located on the east side of the property. The southern portion of the Site remained an apartment complex until it was removed in the early 1970s.

As described by Stantec, a gasoline service station appears to have existed at the Site

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from its initial construction to the present, with a total of five configurations. The first generation gasoline service station features indicated an L-shaped fueling canopy on the northwest corner of the Site; one portion of the canopy fronting Franklin Avenue to the north, and the other portion of the canopy fronting North Western Avenue to the west. A building housing a tire and battery facility and a greasing facility was shown at the center of the Site trending east-west.

The second generation gasoline service station features were shown to include three gasoline USTs (tank sizes are unknown) located at the northwest portion of the Site. A remote fill port for the gasoline USTs was shown in the northeast portion of the Site. Three fuel dispenser islands were present; one fronting Franklin Avenue to the north and two fronting North Western Avenue to the west. One station building containing two hydraulic lifts was shown at the northeastern portion of the Site, trending north-south. One used-oil UST (volume unknown) was located southwest of the station building, near the center of the Site and one rectangular-shaped garage on the east side. Four gasoline USTs (one 8,000-gallon supreme tank, one 6,000-gallon supreme tank, one 3,000-gallon unleaded tank and one 6,000-gallon leaded tank) were present in the northwest portion of the Site.

The third generation gasoline service station features consisted of three gasoline USTs (one 5,000-gallon tank and two 10,000 gallon tanks) at the south-central portion of the Site, aligned east-west. Two fuel dispenser islands were shown at the western portion of the Site, aligned north-south. One station building (current station building location) was shown to the east of the gasoline USTs.

The fourth generation gasoline USTs and fuel dispensers were located on the southwestern portion of the property. There was one 5,000 gallon and two 10,000 gallon USTs present (Stantec, 2014).

The current and fifth generation gasoline station features are three 12,000-gallon double-wall USTs containing gasoline (supreme unleaded, plus unleaded and unleaded) located in the northwest portion of the property, aligned north-south, parallel to North Western Avenue. Three fuel dispenser islands, an "Auto Service Building" with two hydraulic lifts and an oil-water separator, and a 1,000-gallon double-wall fiberglass UST containing used-oil are also present. Two fuel dispenser islands are located south of the gasoline USTs; the islands are aligned north-south. The third fuel dispenser island is located near the north-central property boundary, fronting Franklin Avenue; the island is aligned east-west. The Site automotive service building is in the south-central portion of the property,

aligned north-south. The used-oil UST is located outside the southeast corner of the building.

The five gasoline station configurations and building features are depicted on Figure 2 – Site Map (Stantec, 2014).

3.0 Geology and Hydrogeology

The Site is located at an elevation of approximately 430 feet above mean sea level with a local topographic gradient to the south. The Site is located on the southern foothills of the Santa Monica Mountains. The subsurface beneath the Site is described as consisting of alluvium from ground surface to about 40 feet below ground surface (bgs), underlain by bedrock (Modelo Formation) to the maximum depth of 100 feet bgs. The alluvium consists of fine-grained soils from the surface to about 30 feet bgs, followed by 10 feet of predominantly coarse-grained soils between the fine-grained unit and the bedrock. An increase of fine-grained soils toward the southern edge of the Site was observed at 75 feet bgs. McLaren/Hart (McLaren) described the subsurface material as consisting primarily of highly compacted sandy silt and sand to the maximum exploration depth of 115 feet bgs (McLaren, 1992).

According to the California Department of Water Resources (CDWR) California's Ground Water Bulletin 118, the Site is located in the South Coast Hydrologic Region; Los Angeles Subregion, Hollywood Groundwater Basin (4 11.02). Groundwater beneath the Site has been historically measured at depths ranging from approximately 60 feet bgs (MW-3) to 97 feet bgs (MW-2) from 1988 to 1996. The groundwater flow direction has historically been to be southwest (McLaren, 1992 and Fugro, 1996).

4.0 Previous Environmental Investigations

Soil and Groundwater Assessment – 1988

In 1988, Leighton conducted a Phase II assessment following the discovery of a possible turbine leak at the west end of one of the 10,000-gallon gasoline USTs located at the Site (fourth generation). Soil borings LA-1, LA-2, and LA-3 were advanced at the west, south, and east ends of the fourth generation gasoline USTs to evaluate potential petroleum hydrocarbons in soil and groundwater. Borings LA-1 and LA-3 were advanced

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to 40 feet bgs), and LA-2 was advanced to 100 feet bgs. LA-2 was also completed as a groundwater monitoring well (MW-1) with a screened interval from 75 to 100 feet bgs. A total of 24 soil samples from the three borings were analyzed for TPH as gasoline. Based on a review of the soil analytical data, the report concluded that soil impacted by gasoline above reporting limits had not occurred and no further investigation of the subsurface soil was warranted. Static groundwater was encountered at approximately 82 feet bgs in LA-2. A groundwater sample was collected from well MW-1. Laboratory results indicated trace benzene concentrations and a TPHg concentration of 150 milligrams per Liter (mg/L). The report was submitted to the City of Los Angeles Fire Department for review. Since groundwater impacts were reported, the matter was referred to the Los Angeles Regional Water Quality Control Board (RWQCB). The borehole and well locations are shown on the Site Map included as Figure 2.

UST Removal and Soil Assessment – 1990

The fourth generation gasoline USTs (one 5,000-gallon tank and two 10,000-gallon tanks) and a third generation 1,000-gallon used-oil UST were removed from the Site under the direction of GTI in August 1990. The steel USTs were installed in 1971 and, upon removal, had signs of pitting and rusting but no evidence of holes. Four soil samples collected during the removal activities were submitted for laboratory analysis of BTEX and TPHg. The soil samples contained maximum concentrations of benzene at 1.7 micrograms per kilogram (mg/kg), toluene at 13 mg/kg, ethylbenzene at 6.2 mg/kg, xylenes at 46 mg/kg and TPHg at 660 mg/kg in sample 1. The overburden soil represented by samples 1, 2, 3 and 4 that was excavated during tank removal was used to backfill the excavation.

Soil samples UO-1 and UO-2 were collected approximately 12 feet bgs in the used oil tank excavation, and eight soil samples (U-1, U-2, U-3, SU-1, SU-2, SU3, R-1, and R-2) were collected from approximately 17 feet bgs in the gasoline UST excavation. The maximum benzene concentration from the gasoline USTs excavation was 51 mg/kg in soil sample SU-3 collected at the west end of the former supreme unleaded tank at a depth 16 feet bgs. The maximum toluene, ethylbenzene, xylenes and TPHg concentrations from the gasoline USTs excavation was 460 mg/kg, 140 mg/kg, 780 mg/kg, and 6,200 mg/kg, respectively, in soil sample U-3 collected at the west end of the former unleaded tank at a depth 16 feet bgs. A total of 15 soil samples were collected at depths of 2 to 3 feet bgs from beneath the former fuel dispenser islands and product piping. The maximum BTEX and TPHg concentrations of 1.8 mg/kg, 3.3 mg/kg, 17 mg/kg, 110 mg/kg, and 830 mg/kg, respectively, were detected in soil sample L2

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collected near the north end of the product line run. Boring locations are shown on the Site Map included as Figure 2.

Soil Vapor Extraction Well Installation - 1990

In 1990, RES advanced five boreholes in the petroleum-impacted areas. Boreholes B1, B2 and B3, and one SVE well VW-1 were installed on the western side of the former fourth generation gasoline USTs. SVE well VW-2 was installed near the north end of the product line run in the vicinity of soil sample L2. The boreholes were advanced to depths ranging from 20 to 75 feet bgs. SVE well VW-1 was installed to 75 feet bgs and screened from 15 to 74 feet bgs, and VW-2 was installed to 20 feet bgs, and screened from 5 to 19 feet bgs. Groundwater was not encountered during the subsurface investigation. A total of 11 soil samples were analyzed for TPH and BTEX. The maximum benzene concentration reported was 53 mg/kg in a soil sample collected from VW-1 at a depth of 30 feet bgs. The maximum toluene, ethylbenzene, xylenes, and TPH concentrations reported were 250 mg/kg, 99 mg/kg, and 460 mg/kg and 6,100 mg/kg, respectively, in a soil sample collected from VW-1 at a depth of 45 feet bgs.

A vent test was conducted in VW-1 and VW-2, and the results indicated that the subsurface conditions at the Site were suitable for a vapor extraction system to remediate the soil. No active remediation system is known to have operated at the site.

A map showing the boreholes and SVE well locations are shown on the Site Map included as Figure 2.

Monitoring Well Installation and Groundwater Assessment - 1992

In March 1992, McLaren Hart installed groundwater monitoring wells MW-2, MW-3, and MW-4 at the Site. The wells were advanced to depths ranging from 105 to 115 feet bgs. MW-2 was screened from 75 to 110 feet bgs, MW-3 was screened from 75 to 105 feet bgs, and MW-4 was screened from 80 to 110 feet. Groundwater was measured at depths ranging from approximately 66 to 93 feet bgs. The groundwater flow direction was calculated to be southwest at a hydraulic gradient of 0.31 feet per foot (ft/ft). Groundwater samples collected from wells MW-1 to MW-4 were analyzed for BTEX. The maximum benzene and ethylbenzene concentrations were detected in MW-1, at 0.091 mg/L and 0.0011 mg/L, respectively. The maximum toluene and xylene concentrations were detected in MW-4, at 0.022 mg/L and 0.020 mg/L, respectively. The maximum allowable concentration of 0.001 mg/L for benzene was exceeded, and the

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consultant concluded that the extent of hydrocarbons in soil was adequately defined by previous investigations.

Case Closure and Monitoring Well Abandonment – 1996

In October 1996, the RWQCB issued a case closure letter for the site that stated no further action related to the UST release was required. Monitoring wells MW-1 through MW-4, and SVE wells VW-1 and VW-2 were abandoned according to industry standards.

Fuel Dispenser Removal Soil Assessment, and Closure - 1997

In 1997, four fuel dispensers were removed and upgraded at the Site. BEI collected four soil samples at depths of approximately 3 feet bgs from beneath the removed fuel dispensers and were analyzed for BTEX, methyl tert-butyl ether (MTBE), TPHg, and total lead. One additional background sample was collected at a depth of approximately two feet bgs from a planter on Site and was considered to be a background lead concentration sample. Trace contaminant concentrations were detected in soil.

Based on soil sample results, a “No Further Action” letter was issued by the City of Los Angeles Fire Department.

Partial Baseline Assessment – 2004

In 2004, SECOR advanced three boreholes (BA-1, BA-3, and BA-8) of the previously proposed eight boreholes were completed at the site. BA-1 and BA-8 were completed to 75 feet and 35 feet bgs, respectively. Four soil samples from unknown depths were submitted for laboratory analysis. BA-3 was only completed to five feet bgs. No contaminants were detected above laboratory reporting limits in the collected soil samples.

The borehole locations are shown on Figure 2 – Site Map.

Site Assessment Report – 2013

In February 2013, boreholes BAA-1 through BAA-6 were advanced at the site using a direct-push rig under the direction of Stantec. Boring BAA-1 was completed to 25.5 feet bgs adjacent to the existing 12,000 gallon gasoline USTs. Borings BAA-2 through BAA-4 were advanced to 15.5 feet bgs near the fuel dispensers, and BAA-5 was advanced to

20.5 feet bgs near the existing 1,000 gallon used oil UST. Two soil samples were analyzed from each boring (the highest PID reading, and the bottom of each boring). Trace TPH-g concentrations were detected in BAA-1 and BAA-2 at 15.5 feet bgs, at 0.3 and 0.7 mg/kg, respectively. No other gasoline constituents were detected above laboratory reporting limits in the collected soil samples.

The borehole locations are shown on Figure 2 – Site Map.

Groundwater Monitoring – 1988-1996

Groundwater monitoring was conducted in wells MW-1 through MW-4 between 1988 and 1996. Groundwater depth ranged between approximately 73 feet bgs in MW-3 to 85 feet bgs in MW-4 during a 1996 monitoring event. Groundwater flow was southwest at a hydraulic gradient of 0.1 ft/ft. Maximum BTEX concentrations were 0.0028 mg/L (MW-1), 0.0039 mg/L (MW-3), and 0.0010 mg/L (MW-4), respectively. Ethylbenzene and TPHg were not detected above laboratory reporting limits.

5.0 Potential Areas of Concern

Given the historic and ongoing gas/service station use on the Property, associated equipment remains on the site and will need to be removed prior to redevelopment. As discussed in greater detail below, mitigation measures are provided to address the removal of equipment and any associated releases. Underground storage tanks, dispensers, piping, and clarifiers will be removed under permit and the oversight of the City of Los Angeles Fire Department (LAFD). Sampling completed during the removal of the underground structures will determine if the subsurface has been affected by the service station operations. Based on previous environmental investigations, gasoline-impacted soil remains in the general vicinity of VW-1, west of the former fourth generation USTs, and in the vicinity of L2 in the northwestern portion of the site. Limited hydraulic oil contamination may be present in the vicinity of former and current hydraulic lifts.

6.0 Mitigation Measures

The mitigation measures described below address the proper characterization and remediation of identified impacted materials in accordance with applicable LAFD requirements and require the preparation and implementation of a Construction Soil Management Plan. In addition, mitigation measures are included to address potential

vapor intrusion risk associated with a nearby dry cleaning operation and the gasoline service station use. As discussed in greater detail below, a vapor barrier will be installed if necessary based on the analytical results of soil testing conducted pursuant to the mitigation measures described below. With incorporation of the mitigation measures set forth below to address the release of hazardous substances, the effects of any releases and the potential for exposure of future occupants will be less than significant and in compliance with state and federal requirements.

Underground Storage Tanks

- Prior to excavation, the Applicant shall prepare a survey of the Site using ground-penetrating radar or equivalent means to locate USTs, clarifiers, drains or other potentially contaminated equipment.
- If any USTs are discovered during the pre-excavation survey, they shall be properly registered and permanently abandoned by removal in accordance with LAFD requirements and SCAQMD Rule 1149, as applicable.

Construction Soil Management Plan

- Prior to excavation or in connection with removal of any USTs, a technician shall perform boring tests in accordance with applicable LAFD requirements of (1) soil near any USTs, clarifiers, drains or other potentially contaminated equipment discovered by pre-excavation survey; and (2) soil in portions of the property where historical conditions indicate potential contamination, including nearby historical dry cleaning operations. If soils impacted with hazardous chemicals and/or petroleum products are encountered during redevelopment or discovered by pre-excavation survey, a licensed Professional Geologist or Professional Engineer shall oversee proper characterization and remediation of identified impacted materials in accordance with applicable LAFD requirements.
- In addition, a Construction Soil Management Plan shall be required to guide the redevelopment of the below-grade portions of the property. The Plan shall be prepared by a Professional Geologist or Professional Engineer and address the historical conditions known about the property's history in addition to any potential sources of contamination discovered during the pre-excavation survey, and present the appropriate methods and protocol for management of encountered conditions in compliance with all applicable laws and regulations, including SCAQMD Rule 1166.

- As part of the Construction Soil Management Plan, a technician shall be on the Site during demolition, excavation, and grading phases to sample and screen any residual contaminants, should they be encountered. The technician shall use visual identification (such as discolored soils) and/or a screening meter to identify any residual contaminants, should they be encountered. If potential residual contamination is observed based on the visual identification or the screening meter, excavation and grading within such area shall be temporarily halted and redirected around the area, and testing to characterize the material shall occur either onsite in a mobile laboratory or off-site in a remote laboratory consistent with LAFD requirements and/or SCAQMD Rule 1166, as appropriate. Contaminated materials shall be identified, segregated, and tracked as to their extent on the site.
- If the above testing to characterize the material identifies any soils containing contaminants at levels of concern based on LAFD requirements, such soils shall be either remediated on-site prior to reuse or removed and disposed of in accordance with all applicable laws and regulations, including those promulgated by the California Department of Toxic Substances Control (DTSC), to the satisfaction of LAFD. All necessary approvals shall be obtained from the lead enforcement agency including, but not limited to, the Los Angeles County Fire Department Health and Hazardous Materials Division.

Vapor Intrusion Into Indoor Air Space

- A vapor barrier may be necessary based on the analytical results of soil testing conducted pursuant to Mitigation Measures 6 through 9 above. If after the USTs are removed and, if necessary, soil is remediated, soil testing indicates that some residual contamination remains at the Site, the potential for vapor intrusion into the indoor air space at the Site shall be evaluated by a Professional Geologist or Professional Engineer using the methodology outlined in the California Department of Toxic Substances Control (DTSC) Vapor Intrusion Guidance for Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (2011) and the US EPA Model for Subsurface Vapor Intrusion into Buildings (EPA 2004; Johnson and Ettinger 1991) and the appropriate default and/or site specific factors. If the evaluation indicates that the predicted indoor air concentrations would exceed human health screening levels, a vapor barrier will be completed. Where required based on the evaluation, all new construction shall install a

thicker chemical proof moisture/vapor barrier as directed by the Professional Geologist or Professional Engineer in accordance with applicable guidelines and regulations. These barriers include sheet membranes (usually 40–60 mil high-density polyethelene (HDPE) but can be polyethylene, polyvinylchloride, or EPDM (ethylene propylene diene monomer rubber) or fluid-applied membranes (Fluid-applied or cured-in-place membranes are spray-applied to a specific thickness (e.g., 60 mil), according to the EPA’s “Indoor Air Vapor Intrusion Mitigation Approaches”).

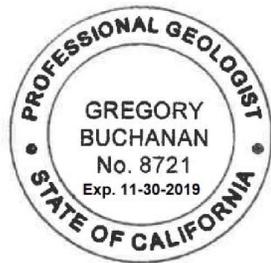
With implementation of the mitigation measures described above, the effects of any releases of hazardous substances will be mitigated to a level of insignificance, and there will be no health risks to future occupants of the Property.

If you have any questions regarding this report, please contact the undersigned.

Sincerely,

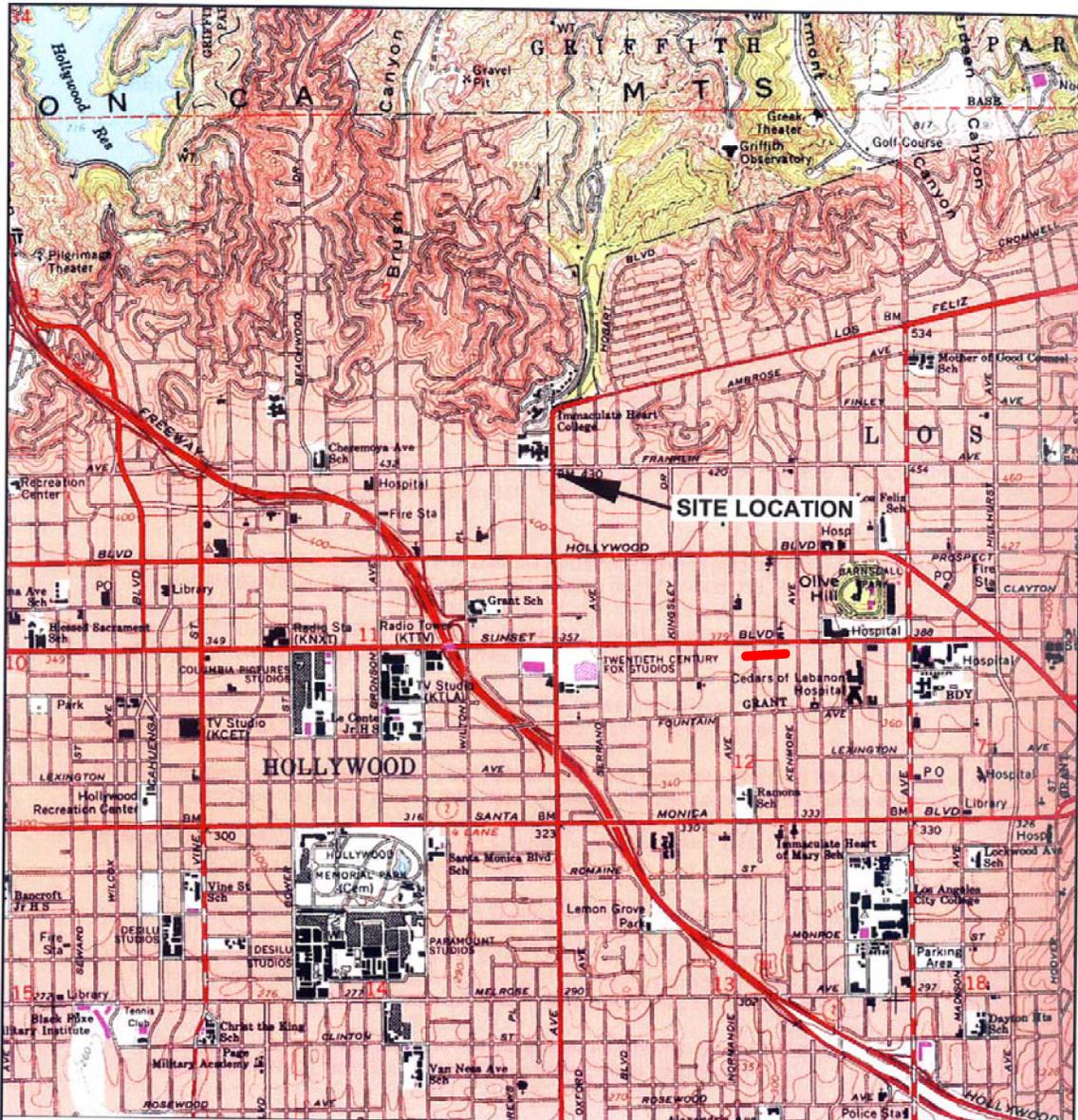


Greg Buchanan, PG
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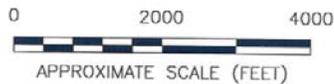


Mark Leymaster, EP
Professional Engineer
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FIGURES



SOURCE:
USGS 7.5 MINUTE
TOPOGRAPHIC MAP—
HOLLYWOOD, CA QUADRANGLE
1966, PHOTOREVISED 1981



 Stantec 4444 CENTERVILLE ROAD, SUITE 140 WHITE BEAR LAKE, MINNESOTA 55127 PHONE: (651) 255-5050 FAX: (651) 255-5060	FOR: CHEVRON STATION NO. 9-0659 1868 N. WESTERN AVENUE LOS ANGELES, CALIFORNIA		FIGURE: 1	
	JOB NUMBER: 213202200	DRAWN BY: KM	CHECKED BY: CVE	APPROVED BY: CVE

FILEPATH:W:\ACTIVE\CHEVRON\213202208-LA (9-0659)\213202208-SLM.dwg\Kmitche\Nov 20, 2012 at 9:19\Layout: FIGURE 1

Leymaster Environmental Consulting, LLC

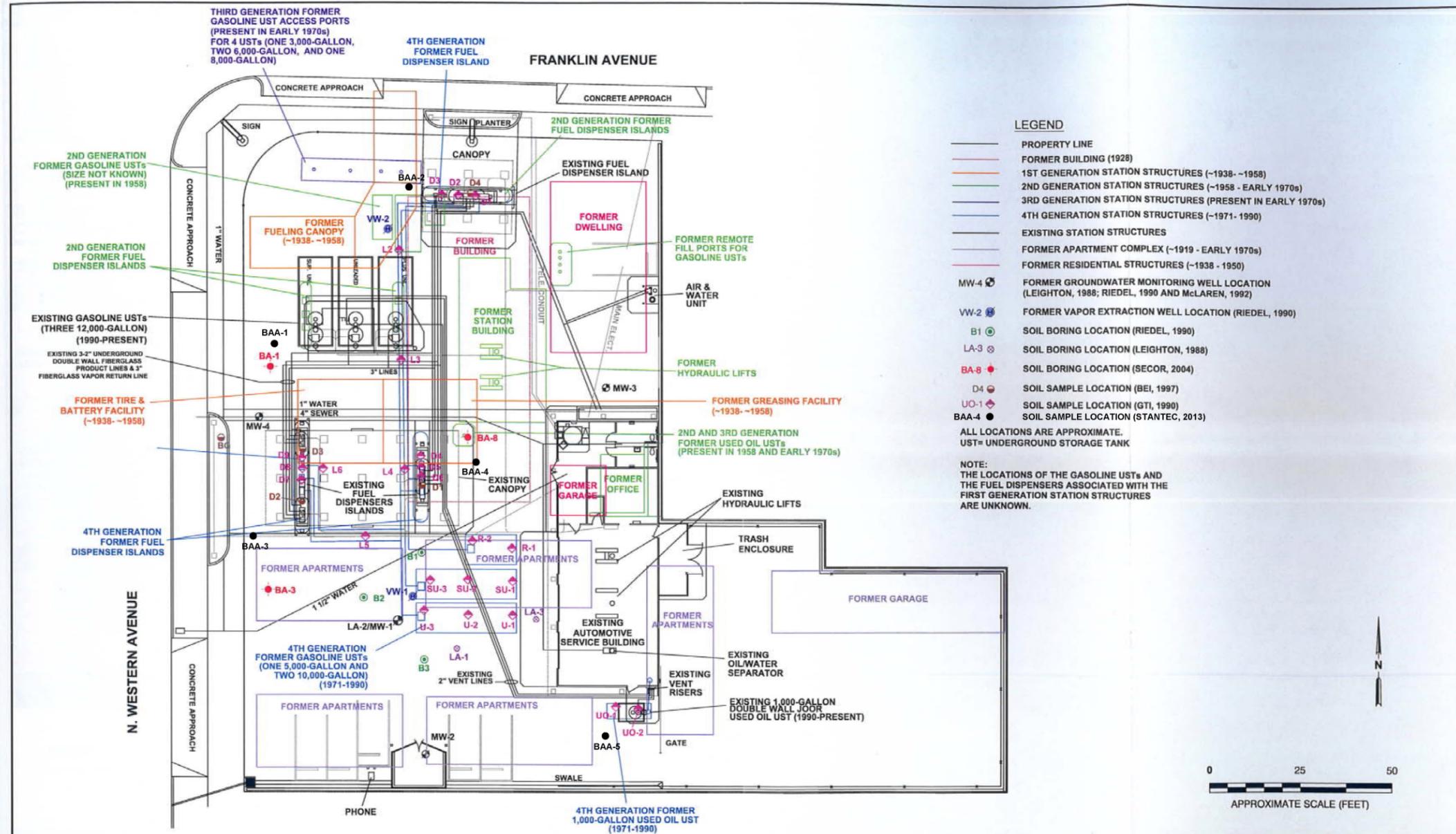
5500 E. Atherton Street, Suite 210
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Site Vicinity Map

1868 North Western Avenue
Los Angeles, CA

Figure 1

October 30, 2017



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<p>4444 CENTERVILLE ROAD, SUITE 140 WHITE BEAR LAKE, MINNESOTA 55110 PHONE: (651) 255-5050 FAX: (651) 255-5060</p>	FOR:	CHEVRON STATION NO. 9-0659 1868 N. WESTERN AVENUE LOS ANGELES, CALIFORNIA	SITE MAP	FIGURE: 2
	JOB NUMBER:	213202208	DRAWN BY:	KM
	CHECKED BY:	SM	APPROVED BY:	CVE
				DATE: 11/20/12

Leymaster Environmental Consulting, LLC

5500 East Atherton Street
Suite 210
Long Beach, California 90815

Site Map

1868 North Western Avenue
Los Angeles, CA

Figure 2 October 30, 2017