



ATKINS
ENVIRONMENTAL
HELP, INC.

Phase II Environmental Site Assessment & Limited Subsurface Investigation Report

AEH Project #: OTM615A
November 5, 2015

Property Identification:

Old Town Newhall Mixed Use Project

City Block Bounded by: Lyons Avenue / Railroad Avenue / 9th Street / Main Street
Newhall, California 91321

Prepared for:

Old Town-Main, LLC
a division of



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1.0 EXECUTIVE SUMMARY

The project site is located in a northern portion of Newhall, California, bounded by *Lyons Avenue* to the north, *Railroad Avenue* to the east, *9th Street* to the south, and *Main Street* to the west. Although originally undisturbed land, this property became a lumber yard when it was first developed. A small concrete batch plant was then added, followed by an auto parts store. Over time, this city block became the home of the *Carroll Chevrolet* dealership and several auto repair and body shop enterprises. It also supported an auto rental facility, plus a former community center. The *City of Santa Clarita* purchased the property some years ago and now all the buildings have been removed. The north half of the property serves as a parking lot currently. The south half of the property remains idle.

Atkins Environmental HELP, Inc. (AEH) was hired to perform a Limited Phase II Environmental Site Assessment (ESA) in conjunction with geotechnical work as part of the preparation for further redevelopment. The redevelopment will be comprised of mixed use retail and multi-tenant dwelling units along the western flank of the property and facing *Lyons Avenue*. In the southeastern quadrant will be a multi-story parking structure. In the northeastern portion is planned a multi-level independent movie theater.

A good portion of this city block will have subterranean parking dedicated to the residential use. Excavation for this subterranean feature will require removal of three (3) known underground storage tanks (USTs), a concrete filled wastewater interceptor (clarifier), an idle wastewater collection sump, at least one (1) large vehicle frame straightener, and a vehicle hoist. This is a list of the known or visible surface features representing impediments to redevelopment presently.

Initial subsurface investigation was preceded by a Ground Penetrating Radar (GPR) survey to establish whether other subsurface features existed. Previous environmental work and this GPR survey were relied on to perform a Limited Phase II ESA in conjunction with the geotechnical work necessary for redevelopment. This limited subsurface investigation recommends removal of the USTs, the clarifier, wash sump, frame straightener, and hoist to make ready for redevelopment. No pervasive subsurface contamination was identified through this current round of subsurface investigation. Large areas of stained soil required removal during redevelopment of two gas stations to the immediate north of the target property, as part of its' redevelopment into the Newhall Library. Subsurface work performed in 2007 found stained soil at the northern central portion of the target property which was estimated at the time at 20 cubic yards. This may be underestimated and not the only area of tainted soil. Whether other subsurface impact exists can be best assessed upon excavation, where contemporaneous removal (site mitigation) can be accomplished with confirmation sampling, as excavation proceeds.

Because USTs exist at the target property, the Los Angeles County DPW will need to issue tank removal permits. Oversight of the tank extractions will be performed by the Los Angeles County Fire Department.

The tank, clarifier, hoist, frame straightener, and sump removal projects should be able to be handled as one overall site clearance project. As part of this site clearance project, a "no further action" letter will be sought from the Los Angeles County Department of Public Works (DPW) which will represent a green light for further redevelopment.



2.0 INTRODUCTION

2.1 Objectives

The objectives of this subsurface investigation are presented below. It is clear **Old Town-Main, LLC** (the client or user) is interested in obtaining sound data concerning actual property conditions – data which is valid scientifically. This data will be used to inform evaluations, conclusions, and the ultimate course of action.

- Objective 1:** Assess whether there has been a release of hazardous substances on or in connection with the target property within the meaning of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), for purposes including landowner liability protections afforded by this act (i.e., innocent landowner, bona fide prospective purchaser, and contiguous property owner).
- Objective 2:** Provide information relevant to identifying, defining and implementing landowner “*continuing obligations*,” per the criteria established under CERCLA (e.g., taking *reasonable steps* to prevent or limit exposures to *hazardous substances* released previously). A primary intent is to maintain the CERCLA landowner liability protections.
- Objective 3:** Develop threshold knowledge regarding the *presence of substances* on this property within the scope of the CERCLA definition of a “brownfield site” and as required for qualifying for brownfields *remediation* grants from the EPA Brownfields Program.
- Objective 4:** Provide information relevant to identifying, defining and evaluating property conditions associated with *target analytes* which may pose risk to human health or the environment, or risk of bodily injury to persons on the property giving rise to potential liability in tort.
- Objective 5:** Provide due diligence relevant to evaluating and allocating *business environmental risk* in transactional and contractual contexts, including transferring, financing and insuring this property.
- Objective 6:** Provide information to support disclosure of liabilities and contingent liabilities in financial statements and securities reporting.



3.0 BACKGROUND

3.1 Site Description and Features

The subject property is a city block in Newhall, California bounded by *Lyons Avenue* (north), *Railroad Avenue* (east), *9th Street* (south) and *Main Street* (west). The property is devoid of buildings presently. The property is situated within a retail commercial area at the north end of Old Town Newhall. To the north across *Lyons Avenue* is the *Old Town Newhall Library* and associated parking. Further to the north and west are areas of residential housing, single family homes mostly. To the east across *Railroad Avenue* are railroad tracks followed by *Newhall Creek* (best described as a dry gulch) and undeveloped or vacant land. To the south down *Main Street* is retail and commercial land use. To the west is more retail and office land use for several blocks.

There are several large concrete slabs and asphalt areas in various physical conditions on the target property which served as parking or as floors for buildings onsite previously. These buildings have since been razed. The property is paved for the most part. Where there is no paving, crushed rock has been laid down to suppress dust and enable vehicle parking.

This assessment has been prepared for Mr. Jason Tolleson and Ms. Tai Lane, who serve as a Principal and Development Manager respectively for **Serrano Development Group**. The division of **Serrano Development Group** considering purchase of the target property is **Old Town-Main, LLC**. The current owner of the target property is the **City of Santa Clarita**. **Old Town-Main, LLC** and its representatives will distribute the report as necessary. For inquiries regarding this report, please contact Mr. B. J. Atkins at (800) 750-0622.

3.2 Physical Setting

Note: Registered professional geologists with the United States Geological Survey (USGS), etc. provided the following descriptions of physical setting for this target property.

The Santa Clarita Valley can be described as a semi-arid river valley with rolling hills, bounded by the *San Gabriel Mountains* to the east and south, the *Santa Susana Mountains* to the west, and the *Tehachapi Mountains* to the north. Elevation of the Santa Clarita Valley varies from about 1,000' above mean sea level in the west to about 1,600' above mean sea level in the east. The target property is flat effectively, situated just west of *Newhall Creek* just before it passes under *Railroad Avenue*.

The valley floor is composed of alluvium from rivers and streams. Since *Newhall Creek* flanks the target property to the east, this site is also presumed to be comprised of alluvial deposits, including sand and gravel at depth, but the reader is directed to the soils report being prepared for this site by **Geocon West, Inc.**, which performed the geotechnical soil sampling. **AEH** was asked to coordinate with **Geocon West Inc.**, and make use of the geotechnical soil sampling process for the purpose of this Phase II ESA.



3.3 Site History and Land Use

The property has been in commercial and retail use since it was developed originally in 1918 as *Newhall Lumber* followed by *Hammond Lumber* until about 1940. During this time period, it was reported one resident (caretaker) occupied a dwelling in the north central portion of the lumber yard property.

Through the 1940's, it appears this site was used for car sales (*Carroll Chevrolet*) and other retail enterprises. By the 1950's up through 2013, other occupants at the property were known to have included several retail enterprises, several auto body / maintenance and repair shops, a community center (youth center), and an auto rental business.

3.4 Adjacent Property Land Use

The target property is bordered by *Lyons Avenue*, *Railroad Avenue*, *9th Street*, and *Main Street*. Residential dwellings were to the south and west, historically. These were replaced by retail land use including restaurants, vehicle repair, and a very small oil and gas store. Today, to the west, retail land use dominates with restaurants and vehicle maintenance / repair remaining. To the east is *Railroad Avenue*, followed by railroad tracks and undeveloped, then residential, property. To the north is *Old Town Newhall Library*, which replaced a commercial land use involving vehicle repair / maintenance (known as *Auto Service Plus*), which replaced a *Shell* gas station (constructed in about 1969). A *Unocal* gas station was located where the main *Old Town Newhall Library* sits presently. Before 1969, the property to the north appeared to be under residential land use.

3.5 Summary of Previous Assessments

This city block has had several previous environmental assessments. Phase I and II Environmental Site Assessments (ESAs) were performed which identified underground storage tanks (USTs), asbestos and lead as issues in certain parts of the property.

To the north central portion of the property is what is thought to be a waste oil tank buried some 2-to-3 feet below the surface. This tank may have stored gasoline (vehicle fuel) initially, and then waste oil later. A Phase II Subsurface Investigation performed in 2007 identified subsurface hydrocarbon impact presumed to be associated with an unauthorized release from this reported waste oil tank. Hydrocarbon (gasoline & diesel) impact was identified down to 20' below ground surface (bgs) in this area.

Use of this tank for waste oil storage was reported by the previous tenant operating a vehicle collision repair center at this site in 2007. Soil borings performed at the time proceeded to 40' bgs in 3 locations across this site. Forty-four (44) samples were taken with three indicating subsurface hydrocarbon impact (gasoline, diesel, and oil range organics) at 15' and 20' bgs near this tank.



In the area of this reported waste oil tank, one sample at 15' bgs identified gasoline concentrations above the Regional Water Quality Control Board's maximum soil screening level. Another boring at 15' and 20' bgs indicated gasoline and diesel above these soil screening levels.

At least one other vehicle related device (thought to be a frame straightener) was abandoned long ago in the north central portion of the target property. Two ~14" diameter steel canisters, presumed to penetrate the subsurface at least 8' bgs and contain hydraulic fluid, are associated with this system. No evidence of a related UST was observed at this specific location, so the hydraulic fluid storage may have been intrinsic to each device (canister).

One steel bordered depression remains in the concrete just west of this frame straightening system. This steel edging is presumed to be the top rim of a former vehicle wash sump abandoned long ago. This sump must be removed to accommodate the planned redevelopment.

The GPR survey detected saturated soil conditions at what was known to be another vehicle wash station, serving the former auto rental yard. This area is presumed to have also served *Carroll Chevrolet*. This vehicle wash area is near the center of the target property about midway between UST 1 and UST 3. It is not known if VOCs or hydrocarbons are present at depth in addition to considerable near surface soil moisture in this area, as the soil vapor survey performed in 2007 included only the northern most and southwestern parcels.

The soil vapor survey work done in conjunction with and just prior to previous (2007) soil borings indicated no VOCs were detected near the surface on the northern most and southwestern parcels.

Lead was detected in paint (residual overspray) along the edges of a former spray booth used by *Wanjon Auto Body & Paint* which occupied the southeast corner of the site at the time. Remnants of this former spray booth can be located along the southern boundary of the property, near the southeast corner. This lead residual was removed in 2007.

In preparation for this Phase II, Ground Penetrating Radar (GPR) was used in an attempt to identify any further subsurface features. A vehicle hoist (two subsurface rams, etc.) were identified in the southwest corner of the property with what is thought to be a related hydraulic fluid reservoir as an underground storage tank (UST) just to the east. Adjacent, and 10' further east of this UST, is an abandoned clarifier which is now concrete filled. This clarifier appears to be a two chamber interceptor piped south to a sewer lateral under 9th Street, with a clean out or sample box between.

During the GPR survey, a third UST was identified just southeast of the center of this city block. The contents of this UST (estimated at 1,500 gallons) are unknown.



4.0 WORK PERFORMED AND RATIONALE

Based on the information presented in the Summary of Previous Assessments and Site Description and Features sections above, it is clear vehicle repair and maintenance activities dominated this site in the past and may have resulted in subsurface impact. In an attempt to establish if pervasive release(s) had occurred, a series of seven (7) soil borings intended to provide geotechnical information were also used for environmental evaluation. To optimize this drilling opportunity, environmental sampling took place in conjunction with the geotechnical sampling at these 7 locations.

To the degree possible, the geotechnical sampling locations were modified slightly to accommodate the environmental evaluation. For example, the geotechnical boring near what was reported as a waste oil tank at the northern central portion of the property was moved closer to the known location of this UST in order to further delineate this known unauthorized release. The same is true at the southwestern portion of the property where the geotechnical boring was relocated to between what was thought to be a hydraulic fluid reservoir underground storage tank and an idle (concrete filled) clarifier location. Finally, the underground storage tank discovered near the center portion of the property became the target of another geotechnical boring. The sampling location was modified some 25' south and east to just northwest of this UST.

Through slight alteration of the geotechnical sampling locations and knowledge of previous land use, the environmental rationale for where to sample was identified. The target analytes centered on the use of VOCs, fuel and oil range organics, pH to determine if former cement plant operations or battery acid releases might have caused impacts to the soil. Heavy metals analysis was used to determine if engine repair / maintenance, accumulation within waste oil or deposition of shavings had caused significant subsurface impact.

In short, piggybacking on the geotechnical borings enabled a limited subsurface environmental assessment. Certain of the soil samples were analyzed for the target compounds described above to establish whether previous site operations had given rise to substantial subsurface contamination on the property.

4.1 Scope of Assessment

AEH presented a proposal including a scope of work and cost estimate for a Phase II Site Assessment of the target property intended to establish whether subsurface environmental impact is present on this site. This assessment was intended to identify whether past known land uses on the target property had resulted in significant subsurface impact. The scope of work for this assessment is paraphrased below:

- TASK 1** Coordinate a ground penetrating radar survey across the site in an attempt to determine if underground storage tanks are still present under this city block, marking at the surface substantial subsurface features found by this imaging work.



- TASK 2** Coordinate with the geotechnical consultant to secure environmental soil samples using the same hollow stem auger technology up to 30' below ground surface (bgs) at selected locations. Nominal surface location adjustments were made based on previous known site operations. Perform or coordinate environmental soil sample extraction, required sampler decontamination, and completion of sampling protocol elements. Coordinate with the drill and geotechnical crew in conjunction with performance of the geotechnical soil sampling event.
- TASK 3** Coordinate sampling and analytical to include up to 7 borings. Analytical methods for soil will include EPA Method 8015 Carbon Range – Full Scan, CAM Metals by EPA Method 6010B / 7000 for the presence of heavy metals regulated by both Federal and State EPA. Soil pH (EPA Method 150.1) may also be analyzed in addition to VOCs by EPA Method 8260B. Soil samples will be screened to establish whether subsurface impact is present.
- TASK 4** Prepare a Phase II ESA or Closure Report, signed and stamped by a Qualified Environmental Professional and Registered Professional Engineer (PE). It will be prepared according to the “ASTM E1903-11 – Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process” with the intent for use in securing a No Further Action (NFA) or site closure letter.

The purpose of this report is to aid the project proponents as a wide-ranging environmental snapshot of this city block, including whether the presence of previous industrial activities, related hazardous materials management or structures at this project site have resulted in residual surficial or subsurface contamination which may serve as an impediment to redevelopment. The intent is to establish whether or not *recognized environmental conditions* exist.

4.2 Exploration, Sampling, and Test Screening Methods

Seven (7) soil sample points were located across the entire property. Boring locations were selected to enable geotechnical soil characterization across the site. A limited subsurface environmental investigation occurred concurrently. These samples were extracted utilizing a hollow stem auger. This sampling technique enables appropriate geotechnical evaluation while at the same time affording the environmental investigator a limited opportunity to establish whether pervasive subsurface impact has occurred or significant *recognized environmental conditions* exist. It can also begin the process of identifying vertical and lateral extent of migration of contaminants, if appropriate. These sample points were distributed throughout the property.

Environmental soil samples were capped, labeled, entered on a Chain-of-Custody, chilled, and shipped on ice to an environmental testing laboratory.



In each boring, environmental samples were collected from 2.5', 10' and 20' bgs. In four (4) of the seven (7) borings were advanced to 30' bgs where environmental soil samples were also taken.

All samples were submitted to a state-certified laboratory. Certain of the samples below 2.5' bgs were analyzed, and others were held pending results from the samples taken at 2.5' bgs. All seven 2.5' bgs samples were subjected to CAM Metals analysis using EPA Method 6010B / 7000CAM; a full range Carbon Scan for gasoline, diesel, and heavy oil by EPA Method 8015M; analysis for the presence of volatile organic compounds (VOCs) by EPA Method 8260B; and soil pH by EPA Method 9045C.

On completion of the fieldwork, this written report was prepared containing field observations, laboratory data, conclusions, and recommendations. This report also contains copies of analytical data with chain-of-custody documentation, as well as site sketches, and other graphics as needed. Isoconcentration maps for each identified VOC compound would be included normally, but no VOC contamination was identified in the samples taken, obviating the need for such maps. The format follows the ASTM standard designation E-1903-11.

4.3 Chemical Analytical Methods

The requested analytical methods are affixed to the chain of custody. Soil matrix samples were analyzed using one or more of the following procedures:

- EPA Method 9045C, Soil and Waste pH;
- EPA Method M8015D, TPH as Diesel and Heavy Hydrocarbons Using GC/FID;
- EPA Method M8015G, TPH as Gasoline and Light Hydrocarbons Using GC/FID;
- EPA Method 8260B, Volatile Organic Compounds by GC/MS (SW846); or
- EPA Method 6010B/7000CAM, Title 22 Metals (SW-846).

4.4 Soil Matrix Sampling

All 7 of the geotechnical boring locations also served as environmental soil sampling locations. Soil samples were collected at 2.5', 10' and 20' bgs, with certain samples taken at 30' bgs. All samples were submitted to American Environmental Testing Laboratories (AETL), a California State Certified lab.

Since the primary compounds of concern are related to petroleum hydrocarbons and fuel constituents, several of the 10', 20' and one of the 30' bgs soil samples were submitted to AETL for carbon range and VOC analysis. The analysis of soil matrix samples was driven by their proximity to areas of concern on the property such as near the UST locations. Specific soil samples (sample B3) were analyzed for pH, metals, full carbon range scan (fuels), and VOCs to determine if previous operations on this site had caused significant subsurface impact.



5.0 PRESENTATION AND EVALUATION OF RESULTS

5.1 Subsurface Conditions

5.1.1 Geology

Registered Professional Geologists from the United States Geological Survey or USGS were responsible for providing the following geologic description.

The Santa Clarita Valley lies within the Transverse Ranges' Geomorphic Province, which is characterized by east-west trending mountain ranges and valleys formed by compressional forces across the big bend of the San Andreas Fault. The Transverse Ranges are relatively young geomorphic features which will continue to evolve under the current tectonic interaction between the Pacific and North American plates. The Santa Clarita Valley is underlain primarily by a thick sequence of Tertiary-age (2 to 65 million years old) sedimentary rocks. The sedimentary sequence rests on a basement complex composed of Mesozoic (older than 65 million years) and Precambrian (older than 500 million years) metamorphic and igneous rock bodies. Mantling the Tertiary sequence is a relatively thin section of Quaternary-age (younger than two million years) sedimentary rock and recent sediments. The San Gabriel Fault bisects the study area along a northwest-southeast direction. Pre-Pliocene rock units to the northeast of this fault are markedly different from those to the southwest of the fault (Dibblee, 1982).

The southwest portion of Valley is underlain primarily by marine and non-marine sedimentary rocks divided among the Modelo, Towsley, Pico, and Saugus Formations. The sedimentary sequence overlies a basement complex composed chiefly of Mesozoic-age metamorphic and igneous rocks. The Modelo, Towsley, and early Pico Formations were deposited in a marine environment at depths greater than 600 feet. These formations interfinger, have similar rock characteristics, and are differentiated primarily on the basis of fossils found within them. The Modelo, Towsley, and Pico Formations are comprised of bedded siltstone, mudstone, siliceous shale, and conglomerate.

The northeastern portion of the Valley is underlain by marine and non-marine sedimentary rocks of the San Francisquito, Vasquez, Mint Canyon, Castaic, and Saugus Formations. This sedimentary sequence overlies a basement complex which includes Precambrian-age anorthosite and Mesozoic-age granite and schist. The late Cretaceous-Paleocene age San Francisquito Formation roughly consists of 7,500 feet of deep marine deposits which include alternating beds of tan sandstone, dark gray shale, and gray to brown pebble conglomerate. The Vasquez Formation is composed of roughly 4,000 feet of red to gray claystone, sandstone, and conglomerate. Locally, andesite and basaltic lava flows comprise the lower portion of the Vasquez Formation. The Vasquez Formation is a river deposit of Oligocene age (about 25 to 40



million years old). The upper Miocene (5 to 10 million years old) Mint Canyon Formation unconformably overlies the Vasquez Formation. The Mint Canyon Formation consists of roughly 5,500 feet of stream-laid cobble-pebble conglomerate with associated sandstone and claystone.

The upper Miocene Castaic Formation is a marine deposit of dark gray, micaceous shale with minor sandstone interbeds. The upper Pliocene-Pleistocene Saugus Formation overlies the Castaic Formation in the northeastern portion of the Valley. The chiefly non-marine Saugus Formation is as much as 1,600 feet thick and unconformably overlies the Castaic and Mint Canyon Formations (Jahns, 1954).

In other words, most of the Santa Clarita valley is composed of sedimentary rocks ranging from 30 million years old to about 1.8 million years old. The valley floor is composed of alluvium from rivers and streams. Some of the oldest rocks in Southern California are located within five miles of the SCV. They are a part of the San Gabriel Basement Complex and have been dated to about 1.7 billion years old.

5.1.2 Hydrogeology

Registered Professional Hydrogeologists employed by the United States Geological Survey or USGS were responsible for providing the following hydrogeologic description.

The topography of the Santa Clarita Valley is dominated by the Santa Clara River and the surrounding highlands. The Santa Clara River, which is the valley's primary drainage course, flows westward through the valley from Soledad Canyon in the east into the Santa Clarita Valley. The headwaters of the river are located east within the San Gabriel Mountains. While the floodplain of the Santa Clara River is fairly flat, most of the topography within the valley area is rugged and is characterized by steep sided canyon lands. Elevations range from about 400 feet above mean sea level near the western boundary of the valley along the Santa Clara River to over 4,000 feet above mean sea level within the San Gabriel Mountains in the southeastern extreme of the Valley.

A southern branch of the Santa Clara River joins the main river course near Saugus. The Santa Clara River and its tributaries form a dendritic drainage pattern in the western half of the valley and a trellis drainage pattern in the eastern half of the planning area. Year-round tributaries consist of the south-flowing Castaic Creek, Bouquet Canyon Creek, San Francisquito Creek, Mint Canyon Creek, and the north-flowing Newhall and Placerita Creeks. North-flowing seasonal tributaries consist of streams emanating from Salt, Potrero, Elsmere, Sand, and Oak Spring Canyons. South-flowing ephemeral tributaries consist of the streams within Tick, San Martinez Chiquito, and San Martinez Grande Canyons. Castaic Lake, a manmade impoundment, is the



largest surface water body within the Santa Clarita Valley, with a maximum storage capacity of 323,700 acre feet of fresh water.

The valley is served by two local aquifers: a surficial Alluvial Aquifer, plus a deeper and more aerially extensive aquifer residing in the Saugus Formation. These two aquifers are in direct hydraulic connection and together comprise the DWR-designated Santa Clara River Valley East Subbasin.

5.2 Analytical Results

Several soil matrix samples were analyzed by EPA Methods 8260B for VOCs, 9045C (pH), and 6010B / 7000 (CAM Metals). These analyses were performed by American Environmental Testing Labs (AETL) in Burbank, a California Certified Lab (DOHS / Environmental Laboratory Accreditation Program – ELAP # 1541). The soil matrix laboratory results are also attached in **Appendix C**. A tabular summary of soil matrix fuel constituent concentration, soil and waste pH data is provided below.

5.2.1 Volatile Organic Compounds

Method: **8260B by GC/MS (SW846)**

Date Sampled: **10/05/15**

Method Detection Limit (MDL)		Benzene 1.0 ug/Kg	Toluene (Methyl benzene) 1.0 ug/Kg	Ethylbenzene 1.0 ug/Kg	Xylenes 1.0 ug/Kg
Sample ID	Lab ID				
B1@ 2.5'	78551.01	ND	ND	ND	ND
B1@ 10'	78551.02	ND	ND	ND	ND
B1@ 20'	78551.03	ND	ND	ND	ND
B1@ 30'	78551.04	ND	ND	ND	ND
B2@ 2.5'	78551.05	ND	ND	ND	ND
B3@ 2.5'	78551.09	ND	ND	ND	ND
B3@ 10'	78551.10	ND	ND	ND	ND
B3@ 20'	78551.11	ND	ND	ND	ND
B4@ 2.5'	78551.12	ND	ND	ND	ND
B4@ 10'	78551.13	ND	ND	ND	ND
B5@ 2.5'	78551.16	ND	ND	ND	ND
B5@ 10'	78551.17	ND	ND	ND	ND
B5@ 20'	78551.18	ND	ND	ND	ND
B6@ 2.5'	78551.19	ND	ND	ND	ND
B6@ 10'	78551.20	ND	ND	ND	ND
B7@ 2.5'	78551.23	ND	ND	ND	ND
USEPA Regional (Soil) Screening Levels (RSL) in mg/kg		1.16	4,890	5.78	647

USEPA Region Screening Tools for Chemical Contaminants. – RSL Calculator:

http://epa-prgs.ornl.gov/cqi-bin/chemicals/csl_search

ND= Analyte was not detected in the sample at or above MDL.



5.2.2 Total Petroleum Hydrocarbons (TPH) as Gasoline, Light Hydrocarbons and TPH as Diesel / Heavy Hydrocarbons

Method: M8015G Using GC/FID

Date Sampled: 10/05/15

		TPH as Gasoline and Light HC (C4-C12)	TPH as Diesel (C13-C22)	TPH as Heavy Hydrocarbons (C23-C40)	TPH Total as Diesel and Heavy HC (C13-C40)
<i>Method Detection Limit (MDL)</i>		0.100 mg/Kg	1.0 mg/Kg	1.0 mg/Kg	1.0 mg/Kg
Sample ID	Lab ID				
B1@ 2.5'	78551.01	ND	ND	ND	ND
B1@ 10'	78551.02	ND	ND	ND	ND
B1@ 20'	78551.03	ND	ND	ND	ND
B1@ 30'	78551.04	ND	ND	ND	ND
B2@ 2.5'	78551.05	ND	*ND	*208	*208
B2@ 10'	78551.06	ND	ND	ND	ND
B3@ 2.5'	78551.09	ND	ND	ND	ND
B3@ 10'	78551.10	ND	ND	ND	ND
B3@ 20'	78551.11	ND	ND	ND	ND
B4@ 2.5'	78551.12	ND	ND	ND	ND
B4@ 10'	78551.13	ND	ND	ND	ND
B5@ 2.5'	78551.16	ND	*ND	*334	*334
B5@ 10'	78551.17	ND	ND	ND	ND
B5@ 20'	78551.18	ND	60.9	290	351
B6@ 2.5'	78551.19	ND	ND	ND	ND
B6@ 10'	78551.20	ND	ND	ND	ND
B7@ 2.5'	78551.23	ND	ND	ND	ND
Maximum Screening Levels		500	1,000	10,000	10,000
RSL		81.7	108	3,130	3,130

*Method Detection Limit (MDL) = 2.0 mg/Kg

ND= Analyte was not detected in the sample at or above MDL.



5.2.3 Title 22 Metals

Method: **6010B/7000CAM (SW-846)**

Date Sampled: **10/05/15**

Method Detection Limit (MDL)		Cadmium	Chromium	Copper	Lead	Nickel	Zinc
		1.3 mg/Kg	2.5 mg/Kg	2.5 mg/Kg	2.5 mg/Kg	2.5 mg/Kg	2.5 mg/Kg
Sample ID	Lab ID						
B1@ 2.5'	78551.01	ND	3.28J	5.68	ND	2.51J	21.2
B1@ 10'	78551.02	ND	2.79J	20.8	ND	ND	19.8
B2@ 2.5'	78551.05	ND	2.98J	12.5	2.62J	2.69J	26.7
B3@ 2.5'	78551.09	ND	8.70	17.6	3.22J	5.90	50.2
B3@ 10'	78551.10	ND	4.27J	207	ND	2.84J	85.2
B3@ 20'	78551.11	ND	6.16	17.5	ND	3.73J	26.3
B4@ 2.5'	78551.12	ND	ND	15.8	ND	ND	22.5
B4@ 10'	78551.13	ND	ND	17.2	ND	ND	20.8
B5@ 2.5'	78551.16	ND	8.05	8.58	9.09	5.81	38.4
B5@ 10'	78551.17	ND	7.20	14.3	ND	4.70J	33.6
B6@ 2.5'	78551.19	ND	2.79J	11.1	ND	ND	16.3
B7@ 2.5'	78551.23	ND	3.41J	18.4	ND	ND	32.5
TTLC (mg/Kg)		100	2,500	2,500	1,000	2,000	5,000
RSL Calculator (mg/Kg)		77.8	N/A	3,130	400	825	23,500

J= Analyte was detected. However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).

ND= Analyte was not detected in the sample at or above MDL.

Pursuant to 22CCR§66261.24 TTLC = Total Threshold Limit Concentration; if the metal concentration exceeds these values the soil would be considered hazardous waste by California law. If concentrations exceed the TTLC and an agency requires site mitigation, excavation must be to at least 5' bgs.

USEPA Region Screening Tools for Chemical Contaminants. – RSL Calculator: http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search

Background Zinc concentrations in soil (California data - Bradford et. al, 'Background Concentrations of Trace and Major Elements in California Soils,' Kearney Foundation Special Report, UC Riverside and Cal EPA DTSC March 1996), can be as high as 145 mg/kg.

Since land use at the target property will change, use of the RSL Calculator to establish soil screening levels seems justifiable. Confirmation of actual agency approved soil screening levels can only be confirmed in conference with Cal EPA DTSC. Based on the results and site conditions encountered, such negotiation does not seem warranted at this time.

5.2.4 Soil and Waste pH

Method: **9045C**

Date Sampled: **10/05/15**

Method Detection Limit (MDL)		pH
		1.0 pH Units
Sample ID	Lab ID	
B1@ 2.5'	78551.01	8.52
B1@ 10'	78551.02	8.73
B2@ 2.5'	78551.05	8.13
B3@ 2.5'	78551.09	8.21
B3@ 10'	78551.10	8.47
B4@ 2.5'	78551.12	8.68
B5@ 2.5'	78551.16	11.0
B6@ 2.5'	78551.19	8.97
B7@ 2.5'	78551.23	9.23
"Characteristic" Hazardous Waste		2 ≤ pH ≤ 12.5

The soil or waste is considered hazardous by characteristic (Pursuant to 22 CCR § 66261.22 Hazardous Waste Threshold by characteristic for Corrosivity) if the pH is equal to or less than two (2), or equal to or greater than 12.5, when mixed with an equivalent weight of water. Based on the results and site conditions encountered, the soil samples tested are non-hazardous, so site mitigation or treatment does not seem warranted at this time.



6.0 INTERPRETATION AND CONCLUSIONS

Below please find a discussion centered specifically on each of the areas assessed. The objectives of this work effort include whether any *recognized environmental conditions* exist or whether there has been a release of hazardous substances on or in connection with the target property. Of particular concern is whether a pervasive subsurface impact to soil has occurred in relation to previous site operations or the underground storage tanks identified or discovered. Since more than 50% of the UST systems known to exist have leaked, it is reasonable to assume these UST systems may have leaked in the past. Each area where an UST system is known to exist on this property was evaluated with specific target analytes based on their behavior or fate & transport (migration potential).

- UST 1** Geotechnical soil boring B1 was relocated to be adjacent to the known UST location based on the GPR survey. Samples were extracted at 2.5', 10', 20' and 30' bgs. The 2.5' bgs sample was analyzed for full hydrocarbon range (or fuels survey), heavy metals analysis, pH, and VOCs. The same is true of the 10' bgs sample at this location. The 20' and 30' bgs samples were analyzed for the presence of fuels and VOCs.

None of the soil samples in boring B1 analyzed for gasoline, diesel, or heavy hydrocarbons, indicated the presence of these hydrocarbons above the soil screening levels used by either the US EPA or the Los Angeles Regional Water Quality Control Board (LARWQCB). Previous sampling around this UST at depth indicated hydrocarbon impact above known screening levels, so during the excavation phase, it is expected tainted soil will be encountered in proximity to this UST once it is removed. This stained soil will need to be treated and recycled or disposed. Although estimated in 2007 at 20 cubic yards, it is difficult to estimate exactly how much impacted soil will require removal.

- UST 2 and Clarifier** This area of concern was evaluated with soil samples from geotechnical boring B5. This UST is thought to be a hydraulic fluid reservoir. Hydraulic fluid is not defined by the Department of Transportation (DOT) as a hazardous substance; however, hydrocarbon releases associated with this UST (if there is stained soil) may be required to be removed as special waste. Sampling below this tank and its associated vehicle hoist is likely to be required during a tank / hoist removal project. Past industrial operations in this area also make this a prudent action.

The clarifier immediately to the east of this UST is now concrete filled. No previous environmental assessment data showing sampling near or below this clarifier in association with its closure was identified. Regardless, the hoist, UST and clarifier must be removed during the excavation phase to make way for subterranean parking. If stained soil is encountered, it will need to be removed.

Analysis was performed on the soil samples extracted along with the geotechnical work. Analysis of this soil did not indicate the presence of fuel or oil hydrocarbons. VOCs were not encountered. pH was elevated but not found to be in the hazardous range. Heavy metals above screening levels were not encountered.



UST 3 This UST was identified during the Ground Penetrating Radar (GPR) survey. The content of this tank is unknown. The geotechnical boring in proximity to this tank was relocated to be adjacent to the tank in an attempt to determine if previous operations or contents had leaked, causing subsurface contamination. The four sets of analytes tested all proved non-detect (i.e., fuels, heavy metals, pH and VOC were not above soil screening levels).

The investigation tasks undertaken to evaluate the conditions envisioned by the conceptual model outlined in Section 6.2 below indicate no pervasive release had occurred, so assumptions giving rise to the conceptual model were refuted.

Once the tank extraction projects are underway, the required under tank and piping samples might reveal hydrocarbon impact above soil screening levels; tainted soil might be encountered. If either is the case, site mitigation would be required but, the data gathered and results seem to indicate site mitigation may not be necessary or would be limited (i.e., not pervasive in nature and scope).

Also this tank may have been filled with sand or concrete slurry upon previous abandonment. This will not be known until the tank is revealed and cold chiseling done to establish condition.

Frame Straightener Removal This is an older vehicle repair technique which required hydraulic power to straighten bent vehicle frames. In this case two ~14" canisters are buried to an estimated depth of 8' bgs, about 18' apart within in one service bay of the former Carroll Chevrolet dealership. These canisters may contain hydraulic fluid, so care must be taken during their removal and sampling to confirm no pervasive leaks may be required.

Vehicle Wash Areas and Related Sump Removal One steel bordered depression remains in the concrete just west of this frame straightening system. This steel edging is presumed to be the top rim of a former vehicle wash sump abandoned long ago. This sump must be removed to accommodate the planned redevelopment. Sampling below this sump area and the vehicle wash area discovered just to the south during the GPR Survey should be performed to confirm no subsurface hydrocarbon impact.

Vinyl Asbestos Floor Tile A remnant amount of asbestos containing vinyl floor tile was identified on the slab of the former Auto Collision Center building in the northwest corner of the property. This building has now been razed. About 250 square feet including two layers of vinyl asbestos floor tile will need to be removed or abated prior to slab removal and subsequent surface disturbance. This asbestos abatement project will be managed separately from the UST and subsurface feature clearance project.



6.1 Recognized Environmental Conditions / Potential Release Areas

This report section contains a summary description of likely release areas or areas where there is a likely presence of subsurface contamination. It is divided into the areas assessed as described in Section 6.0 above.

UST 1 Previous sampling around this UST at depth indicated hydrocarbon impact above known screening levels, so during the excavation phase, it is expected tainted soil will be encountered in proximity to this UST once it is removed. Estimated in 2007 at 20 cubic yards, it is difficult to estimate exactly how much impacted soil will require removal.

UST 2 and Clarifier This UST is thought to be a hydraulic fluid reservoir. A hydrocarbon release (if there is stained soil) constitutes a *recognized environmental condition*.

The clarifier immediately to the east of this UST is now concrete filled. No previous environmental assessment data showing sampling near or below this clarifier in association with its closure was identified. The hoist, UST and clarifier must be removed. If stained soil is encountered, it may need to be removed.

UST 3 This UST was identified during the Ground Penetrating Radar (GPR) survey. The content of this tank is unknown. Upon extraction, tainted soil might be encountered, and site mitigation would be required. The presence of this UST is a *recognized environmental condition*.

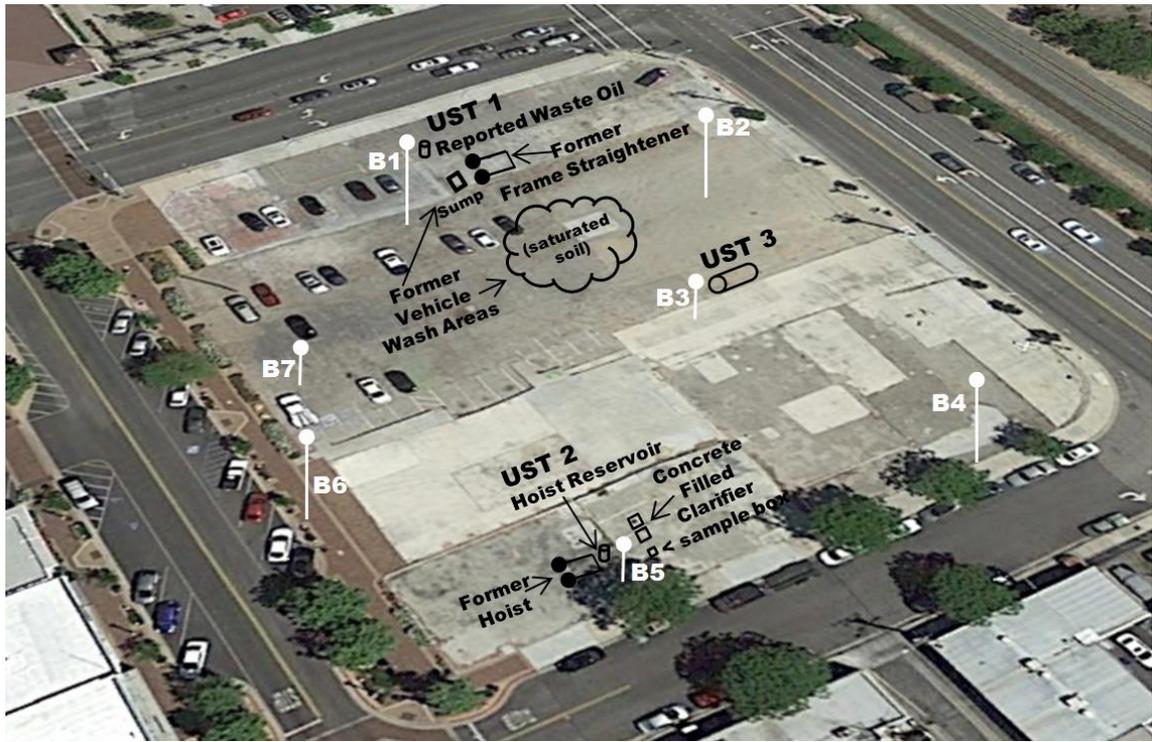
Frame Straightener Removal This is an older vehicle repair technique which required hydraulic power to straighten bent vehicle frames. In this case two ~14" canisters are buried to an estimated depth of 8' bgs, about 18' apart within in one service bay of the former Carroll Chevrolet dealership. These canisters may contain hydraulic fluid, so care must be taken during their removal and sampling to confirm no pervasive leaks may be required.

Vehicle Wash Areas and Related Sump Removal Both these areas represent *recognized environmental conditions*. Sampling below this sump area and the vehicle wash area discovered just to the south during the GPR Survey should be performed to confirm no subsurface hydrocarbon impact.

Vinyl Asbestos Floor Tile This *recognized environmental condition* is about 250 square feet including two layers of vinyl asbestos floor tile will need to be removed or abated prior to slab removal and subsequent surface disturbance.



6.2 Conceptual Model/Validation / Adequacy of Investigations



Summary of Target Analytes (Date Sampled: 10/05/15)

Sample ID	Lab ID	Fuels / Oils	Metals	pH	VOCs
B1@ 2.5'	78551.01	✓	✓	✓	✓
B1@ 10'	78551.02	✓	✓	✓	✓
B1@ 20'	78551.03	✓	N/A	N/A	✓
B1@ 30'	78551.04	✓	N/A	N/A	✓
B2@ 2.5'	78551.05	✓	✓	✓	✓
B2@ 10'	78551.06	✓	N/A	N/A	N/A
B2@ 20'	78551.07	N/A	N/A	N/A	N/A
B2@ 30'	78551.08	N/A	N/A	N/A	N/A
B3@ 2.5'	78551.09	✓	✓	✓	✓
B3@ 10'	78551.10	✓	✓	✓	✓
B3@ 20'	78551.11	✓	✓	N/A	✓
B4@ 2.5'	78551.12	✓	✓	✓	✓
B4@ 10'	78551.13	✓	✓	N/A	✓
B4@ 20'	78551.14	N/A	N/A	N/A	N/A
B4@ 30'	78551.15	N/A	N/A	N/A	N/A
B5@ 2.5'	78551.16	✓	✓	✓	✓
B5@ 10'	78551.17	✓	✓	N/A	✓
B5@ 20'	78551.18	✓	N/A	N/A	✓
B6@ 2.5'	78551.19	✓	✓	✓	✓
B6@ 10'	78551.20	✓	N/A	N/A	✓
B6@ 20'	78551.21	N/A	N/A	N/A	N/A
B6@ 30'	78551.22	N/A	N/A	N/A	N/A
B7@ 2.5'	78551.23	✓	✓	✓	✓
B7@ 10'	78551.24	N/A	N/A	N/A	N/A
B7@ 20'	78551.25	N/A	N/A	N/A	N/A

Fuels = Looking for gasoline, diesel, or heavy oil releases in soil
Metals = Looking for waste oil, metal grindings, residual chromium, etc. in soil.
pH = Looking for remnants of battery acid releases to soil.
VOC = Looking for residual subsurface impact from parts cleaning or solvent use.
N/A = Not analyzed based on no impact or concentrations below soil screening levels in samples above.



6.3 Absence, Presence, Degree, Extent of Target Analysis

Target analytes as described in the Conceptual Model Validation (Section 6.2 above) were not confirmed to be present in this subsurface investigation above soil screening levels. Certain of these target analytes were sampled and confirmed present above soil screening levels in the 2007 subsurface investigation.

UST 3 Very little is known about the subsurface below this tank. The tank extraction project will enlighten and inform whether site mitigation is needed. Target analytes above soil screening levels were not identified.

6.4 Other Concerns (for example, qualifications or limitations of assessment)

The work of this Phase II Environmental Site Assessment or Subsurface Investigation was limited by the geotechnical boring locations selected. Samples were selected judiciously to identify whether a surface contamination had occurred (2.5' bgs samples) or whether significant contamination existed at depth (10', 20' and 30' bgs samples) indicating a pervasive contamination condition. For this reason, the data collected is limited by virtue of the number of soil borings and soil samples collected. This evaluation can be viewed as a screening assessment indicating no pervasive problems exist in association with samples taken. More will be determined during the turnkey site clearance project.

The identification of stained soil at depth in the 2007 subsurface investigation remains a concern.

6.5 Conclusions / Objectives Met

The information and data pertinent to each area assessed is discussed above. In the opinion of this assessor, the samples gathered and analyses performed seems to indicate a significant release of hazardous substances has not occurred in connection with the target property within the meaning of CERCLA for the purposes of included landowner liability protections afforded by CERCLA. The 2007 data seems to support this same conclusion. Only further fieldwork / excavation will establish actual subsurface environmental conditions.

The only continuing obligation the landowner may have would revolve around whether a substantial subsurface impact is identified during the site clearance phase of this overall project. The prospective buyer should consider crafting a purchase and sale agreement which limits their exposure by recognizing the potential for existence of subsurface impact and the current lack of information regarding extent of this impact. The final agreement should either distance the prospective buyer from this liability or partner with the current owner to manage / mitigate this liability in a fair and equitable fashion.



No known attempt to secure grant money under the provisions of US EPA's Brownfields Program is known to exist. The limited nature of this assessment, the nature and extent of previous subsurface investigations at this site, the absence of target analytes at depth with few exceptions, suggest a remediation grant would not be a meaningful option, at least not until after the tank extraction process has occurred and more is known about the presence of contaminants at depth.

Based on the soil sampling and analyses performed, no risk to human health or the environment was identified. This should be reevaluated during the site clearance phase of this overall project. Risk to bodily injury or persons on the property does appear present in the form of uneven paving and the presence of vinyl asbestos floor tile. Slab removal will control the trip and fall hazards which abound at this site presently. The asbestos exposure risk can be controlled through a proper asbestos abatement project.

Since there have been at least two rounds of environmental assessments on this property, one indicating subsurface hydrocarbon impact, and this one, which documented the absence of certain target analytes, due diligence would dictate controlling business environmental risk through a purchase and sale transaction crafted properly (as discussed above) to distance the current and prospective owner(s) from long term liability through the transfer, financing, and insuring of this property. This same contract should support disclosure of liabilities and contingent liabilities in financial statements and securities reporting.

In conclusion, the objectives outlined in Section 2.1 were met. As described, this assessment was limited and the conclusions cannot be considered complete until all site mitigation work is done, required confirmation sampling has occurred, the data interpreted and reported accurately.



7.0 RECOMMENDATIONS (IF APPLICABLE)

A turnkey site clearance project is recommended for the target property.

Five (5) areas on the project site are known to contain *recognized environmental conditions*. The first is UST related and will require individual underground storage tank extraction projects for three known USTs. It is recommended these projects be combined into one tank removal project, although each UST will be approached separately. Second will be removal of the concrete filled clarifier. Third is the removal of the vehicle hoist, frame straightener, and associated hydraulic canisters. Fourth is removal of vehicle wash areas including the steel rimmed sump.

The fifth area containing a *recognized environmental condition* is the extreme northwestern corner of the property where a vinyl asbestos floor tile abatement project should be performed. The aerial extent of this tile is estimated at 250 square feet and a containment can be built around and over this area to abate the tile properly. Because most of this tile was removed (disturbed) during building demolition, the South Coast Air Quality Management District (SCAQMD) may demand this formal asbestos abatement project work be performed only after development and acceptance of a Procedure 5 workplan.

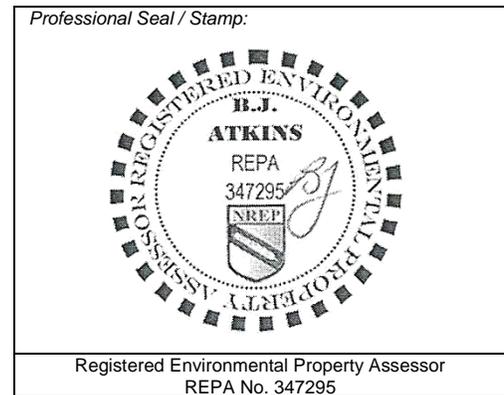
In summary, two environmental projects are recommended for the target property. One is a turnkey site clearance project. The other is the asbestos abatement project discussed above.



8.0 SIGNATURE OF PHASE II ASSESSOR WITH TYPED NAME [AND PROFESSIONAL LICENSE NUMBER AND SEAL, IF APPLICABLE]

B. J. Atkins

Signature: **B. J. Atkins**
President, *Atkins Environmental HELP, Inc.*



E. L. Bolden, Jr.

Signature: **Edward L. Bolden, Jr.**
Registered Professional Engineer



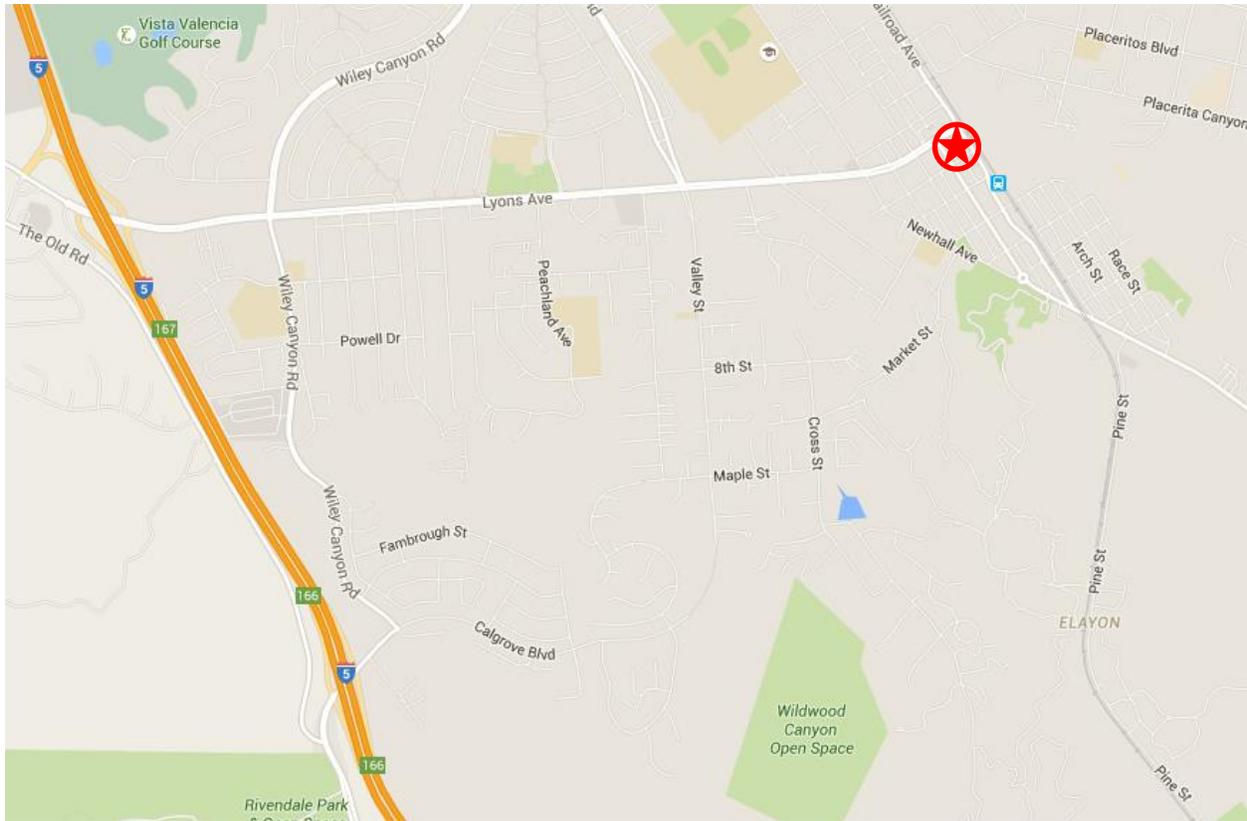
DISCLAIMER

This report has been prepared solely for the use of the parties to this realty transaction and their agents as it pertains to the property known as "Old Town Newhall Mixed Use Project" in Newhall, California. Any reliance on this report by third parties shall be at such party's sole risk. *AEH's* services have been performed in accordance with applicable state and local ordinances, and accepted generally practices in the environmental sciences. No other warranty, either express or implied, is made.

Atkins Environmental HELP, Inc. is not responsible or liable for any claims or damages associated with interpretation of available information. Site exploration identifies actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and analytical testing are extrapolated by geoscientists who then render an opinion about overall subsurface conditions. Actual conditions in areas not sampled may differ from predictions. This report should not be regarded as a guarantee no further contamination, beyond which was detected in our investigation, is present beneath the property. In the event changes to the property occur, or additional, relevant information about the property is brought to our attention, the recommendations contained in this report may not be valid unless these changes and additional relevant information are reviewed and the recommendations of this report are modified or verified in writing.



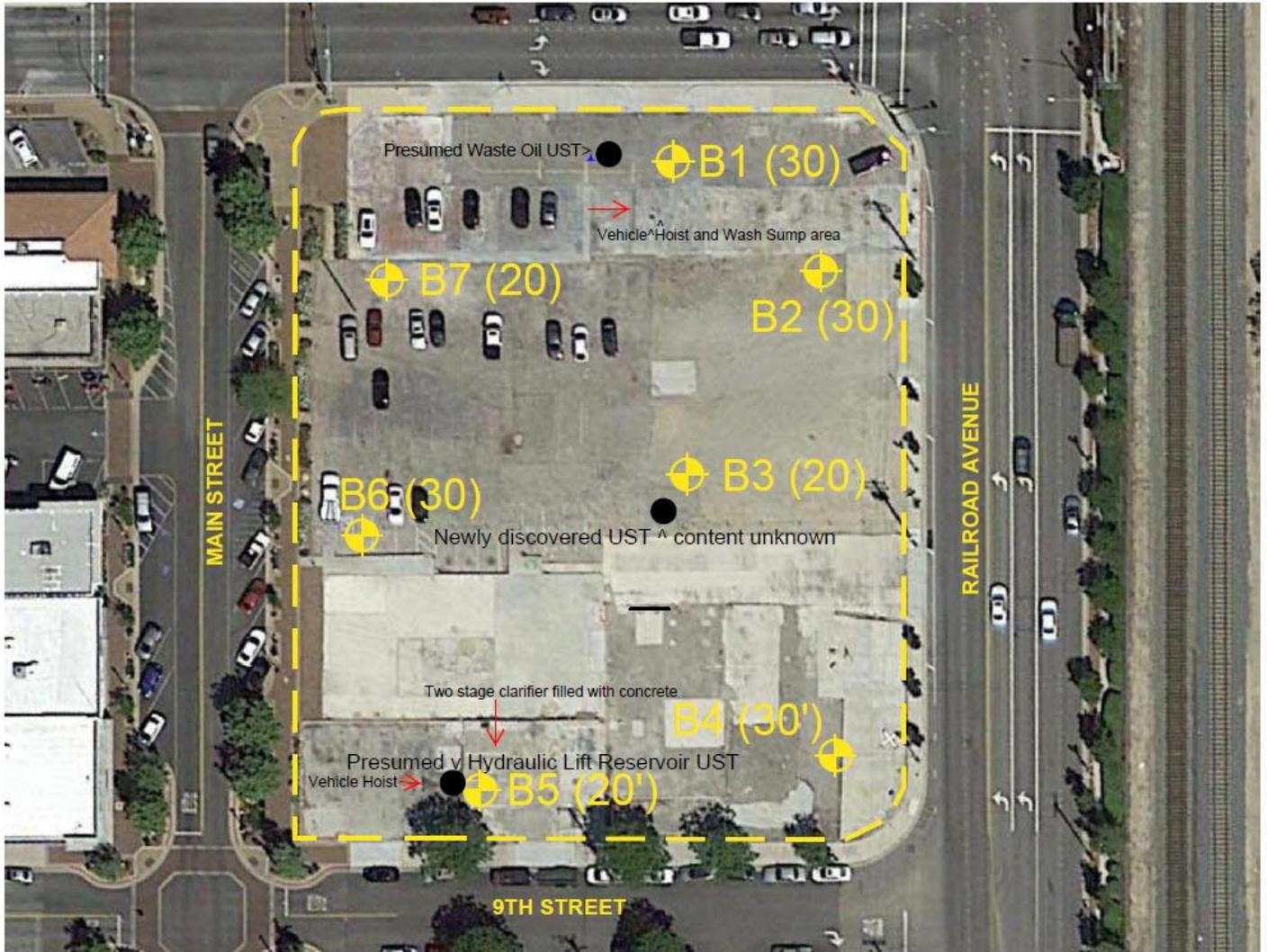
Appendix A Vicinity Map





Appendix B Site Map / Facility Maps (Soil Boring Locations)

Figure 1 – Site Map with Sampling Locations



 LOCATION OF PROPOSED BORING

 LOCATION OF SUBJECT SITE



Appendix C **Chain of Custody and Laboratory Results**

See attached file: [Analytical Results 10-5-15 Sample Date.pdf](#)



Appendix D Site Photographs



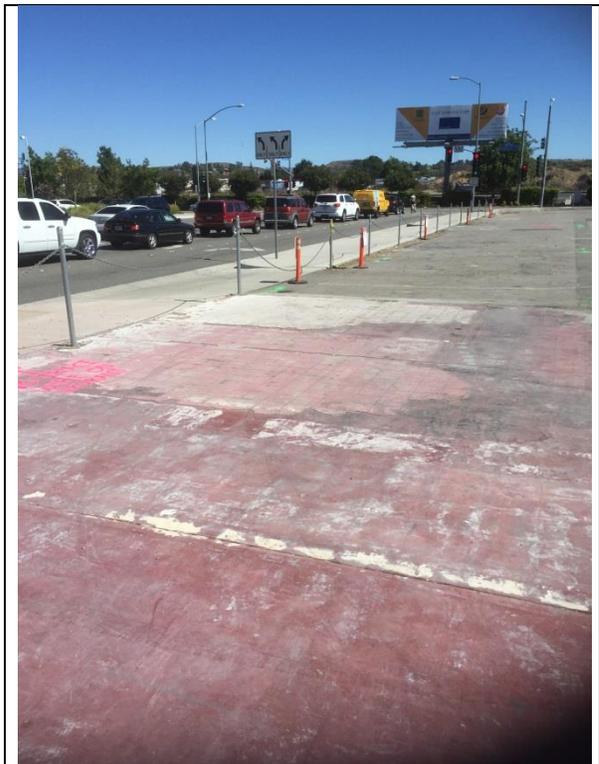
View to north across western flank of project site



Auger rig advancing boring B6



Advancing geotechnical / environmental soil boring



Vinyl asbestos floor tile (requiring abatement)



Appendix E EDR Radius Map™ Report with GeoCheck®

See attached file: [EDR Report.pdf](#)