

Phase I Environmental Site Assessment

BEAVER CREEK PROPERTY

Douglas Boulevard
Granite Bay, California
WKA No. 10191.01
July 24, 2014

Prepared for:

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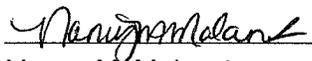
Phase I Environmental Site Assessment

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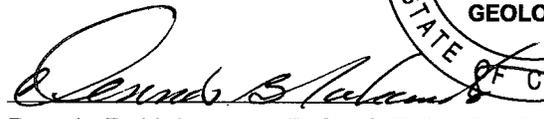
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Wallace-Kuhl & Associates (WKA), on behalf of the Meritage Homes, prepared this Phase I Environmental Site Assessment for the Beaver Creek Property located along Douglas Boulevard in Granite Bay, California. We declare that, to the best of our professional knowledge and belief, the report preparer and reviewer meets the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312 and has the "specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312." Resumes of the key staff who prepared this report are included in Appendix A.

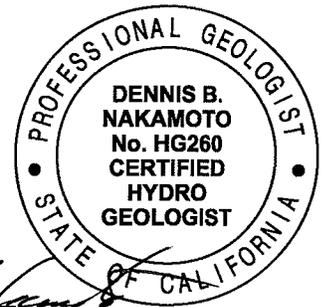
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- B ASTM E 1527-13 User Questionnaire and Helpful Documents Checklist
- C EDR® Radius Map Report Executive Summary
- D Preliminary Screen for Vapor Encroachment Conditions Matrix

Attached CD contains: EDR® Reports: (Radius Map Report, Aerial Photographic Decade Package, Historical Topographic Maps, Sanborn Map Search), Lien Search Report and Phase I ESA, Beaver Creek Property (WKA No. 10191.01 dated July 24, 2012).



Phase I Environmental Site Assessment

BEAVER CREEK PROPERTY

WKA No. 10191.01

EXECUTIVE SUMMARY

The purpose of this Phase I Environmental Site Assessment (ESA) was to assess the Beaver Creek Property (herein referred to as Site) for evidence of Recognized Environmental Conditions (RECs) resulting from current and/or former Site activities. The Site is located along Douglas Boulevard in Granite Bay, California (Figures 1, 2, 3, and 4) and is comprised of 17.1 acres of undeveloped land having Placer County Assessor's Parcel Number (APN): 048-151-001 (Figure 3). The following presents a list of observations and findings identified during the preparation of this report:

- The historical land use research dating back to the late 1800s revealed that the central portion of the Site was dredged for mining in the late 1800s or early 1900s. The Site has been undeveloped land since at least 1944.
- WKA observed a small pile of asphalt and miscellaneous debris, including but not limited to, tires, beverage containers, pots and pans, and various pieces of scrap metal, scattered throughout the northern portion of the Site.
- A stockpile of soil is located on the northeastern portion of the Site. The area of the stockpile measured approximately 3,600 square feet. A 2005 geotechnical investigation identified fill materials in a test pit excavated on the western portion of the Site during a 2005 geotechnical investigation. No information regarding the origin of the stockpiled soils or the fill materials is available.
- Dredge tailings are located on the central portion of the Site in the vicinity of Strap Ravine, which transects the central portion of the Site.
- WKA prepared a Soil Sampling and Laboratory Analyses Report, dated July 24, 2013 (WKA July 2013 Report), to evaluate dredge tailings and soil reported to have been imported to the Site for chemical concentration that would pose a threat to human health under a residential exposure scenario. WKA evaluated dredge tailing samples to determine if any of the California Assessment Manual listed 17 (CAM 17) metals were present at concentrations exceeding its California Human Health Screening Levels for residential exposures. WKA evaluated imported fill samples according to guidance for soil originating from agricultural land and from residential/acceptable commercial land described in the California Department of Toxic Substances Control (DTSC) *Information Advisory Clean Imported Fill Material*, dated October 2001. Laboratory analysis of soil samples collected from the imported soil stockpile revealed concentrations of total



petroleum hydrocarbon as motor oil (TPH-mo), which were below the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESL) for a residential land. The ESLs were used because they are the only published exposure threshold for TPH-mo. Concentrations of arsenic in the import fill material and dredge tailings were below the Department of Toxic Substances Control's action level of 12 milligrams per kilogram. Laboratory result for organochlorine pesticides, organophosphorus pesticides, chlorinated herbicides, volatile organic compounds, semi-volatile organic compounds, and PCBs fell below its respective laboratory reporting limit. Concentrations of MTBE, benzene, toluene, xylenes, and ethylbenzene, and TPH-as-gasoline and TPH-as-diesel were also at concentrations below laboratory their respective laboratory reporting limits. WKA's July 2014 Report presented a professional opinion that the concentrations of constituents detected in dredge tailings and in imported soil did not pose an unacceptable threat to human health under a residential exposure scenario.

- According to an environmental lien search, no environmental liens are associated with the Site.
- The portion of the Site around Strap Ravine is located within a Special Flood Hazard Area inundated by the 100-year regulatory floodplain, as designated by the Federal Emergency Management Agency (FEMA). The floodplain map is provided on the CD attached to the back cover of this report.
- Given the documentation reviewed concerning the neighboring agency listed facilities, none of the facilities reviewed is likely to have a negative impact on the Site. Based on the completion of the vapor encroachment condition (VEC) screening matrix, WKA concludes a VEC can be ruled out because a VEC does not or is not likely to exist.

WKA has performed this ESA in conformance with the scope and limitations of ASTM Standard Practice E 1527-13 for the Beaver Creek Property. This assessment has revealed no evidence of RECs in connection with the Site.



Phase I Environmental Site Assessment
BEAVER CREEK PROPERTY
WKA No. 10191.01

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) was to evaluate the Beaver Creek Property (herein referred to as Site) for evidence of potential Recognized Environmental Conditions (RECs) resulting from current and/or former site activities as defined by the American Society of Testing and Materials (ASTM) Standard E 1527-13 (ASTM, 2013).

According to the ASTM, “this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser* limitations on CERCLA [Comprehensive Environmental Response, Compensation and Liability Act] liability (hereinafter, the “*landowner liability protections*,” or “*LLPs*”): that is, the practice that constitutes “*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice” as defined at 42 U.S.C. §9601(35)(B).”

WKA performed this ESA in general conformance with the ASTM Standard E 1527-13 and the scope and limitations defined in Wallace-Kuhl & Associates (WKA) proposal, 3PR14156, dated July 1, 2014.

1.2 Scope of Services

WKA has completed this ESA for the Site shown on Figures 1 through 3. Mr. Rob Wilson with Meritage Homes authorized WKA to proceed with this assessment via email on July 7, 2014.

The scope of this assessment included the following:

- Conduct a site reconnaissance for visual evidence of surface contamination and potential sources of subsurface contamination;
- Conduct a visual inspection of the adjoining properties for evidence of RECs
- Conduct interviews with the following, as available:
 - Key site manager,
 - Major occupants,



- Past and present owners, operators,
- Government and/or agency personnel, and,
- Inquiries conducted at abandoned sites may include interviews with owners or occupants of neighboring or nearby properties;
- Conduct a records review, which included the following:
 - Physical setting documents to determine regional geology, general soil information, and local and regional groundwater conditions,
 - Historical information, including but not limited to, Sanborn maps, topographic maps, aerial photographs, ownership records, building department records, local street directories, zoning and land use records, and prior assessments, as available,
 - Environmental records, including federal, state, tribal, and county regulatory agency lists that will help identify RECs on the Site and the adjoining properties, and,
 - Based on the outcome of the database search, review of specific regulatory agency files for identified contaminated facilities in order to evaluate whether the listed facilities are hazardous materials threats to the Site;
- Conduct a preliminary screen for vapor encroachment conditions on the Site per ASTM E2600-10;
- Review of the completed *ASTM E 1527-13 User Questionnaire (Questionnaire)* regarding Recorded Environmental Liens, activity and use limitations (AULs), relationship of the purchase price to the fair market value of the Site, and any specialized knowledge of the Site;
- Review of environmental liens and AULs reports, as provided; and
- Prepare a final report of the results of the ESA.

1.3 Special Terms and Conditions

No special terms or conditions to the WKA Professional Services Agreement or the WKA scope of services were requested or performed during the preparation of this report.

Meritage Homes authorized WKA to perform a search for recorded environmental liens and Activity and Use Limitations (AULs) for the Site. Discussion regarding the search is included in Section 4.3.5 of this report.



1.4 User Provided Information

WKA provided Meritage Homes a copy of the User Questionnaire and the Helpful Documents checklist. Mr. Rob Wilson, Meritage Homes, completed the documents and returned them to WKA. Discussion regarding his responses is provided in the following section. A copy of the completed questionnaire is included in Appendix B.

In summary, Mr. Wilson was not aware of any records of environmental liens or AULs currently recorded against the Site. Mr. Wilson stated he does not possess specialized knowledge or experience related to the Site. Mr. Wilson stated that he is not aware of any obvious indicators that point to the presence or likely presence of contamination at the Site.

Mr. Wilson was aware of existing "Helpful Documents" as defined in Section 10.8.1 of the ASTM Standard as noted on the "Helpful Documents Checklist" included in Appendix B. These reports are a Phase I ESA, dated August 4, 2005, and a Geotechnical Engineering Investigation, dated August 15, 2005, prepared for the Site by Geocon Consultants, Inc. (Geocon) and . Mr. Wilson provided copies of the reports to WKA, with discussion regarding the reports presented in Section 4.2.10.



2.0 SITE DESCRIPTION

2.1 Site and Vicinity General Characteristics

The Site is located along Douglas Boulevard in Granite Bay, California (Figures 1 and 2). The Site is comprised of Placer County Assessor's Parcel Number (APN) 048-151-001, totaling approximately 17.1 acres of undeveloped land (Figure 3). Surrounding land use consisted of rural residences.

2.2 Site Reconnaissance

WKA conducted a visual site reconnaissance on July 11, 2014. Figures 5a through 5c provide color photographs of the Site taken during the site reconnaissance.

On the day of field reconnaissance the Site was undeveloped land. The central portion of the Site, in the vicinity of Strap Ravine, is overgrown with dense berry shrubs and other volunteer vegetation. The northern and southern portions of the Site were wooded land with moderate volunteer grasses. A large soil stockpile is located on the northwestern portion of the Site. The stockpile measures approximately 11 feet tall and is approximately 150 feet long by 100 feet wide. WKA noted miscellaneous debris, including but not limited to, tires, beverage containers, pots and pans, and various pieces of scrap metal, scattered throughout the northwestern portion of the Site. WKA observed a pile of asphalt on the northwestern portion of the Site. Two holes that appeared to be associated with former mining activities were observed on the northeastern portion of the Site. One hole is located to the north of the stockpiled soil and was approximately six feet deep. A second hold is located to the south of the stockpiled soil and was approximately four feet deep.

2.2.1 Municipal Infrastructure and Utilities

Pacific Gas and Electric (PG&E) provides electricity and natural gas to the Site vicinity. Placer County SMD #2 provides sanitary sewer to the Site vicinity. San Juan Urban Water provides potable water to the Site vicinity.

2.3 Adjoining Properties

The Site is bounded to the north Douglas Boulevard followed by residences. Rural residences and wooded land are located to the east, south, and west of the Site.



3.0 INTERVIEWS

Interviews with various persons familiar with the site vicinity, including representatives of public agencies, were conducted for the purpose of identifying past and present uses, which may have contributed to RECs on the Site. Results of those interviews are discussed in the following sections.

3.1 Owner or Key Site Manager

WKA interviewed Mr. Scott Stiewig, Rahimian Family Assess Management, regarding the Site. Mr. Stiewig stated that he works for the owners of the property as an accountant. Mr. Stiewig stated that Folsom Oak Tree has owned the property since 1989. Mr. Stiewig is not aware of any development that has occurred at the Site. He stated that a Phase I ESA and Geotechnical Engineering Report were prepared in 2005 to determine if the property could be subdivided for development (See Section 4.2.10). Mr. Stiewig is not aware of any aboveground or underground storage tanks, wells, or septic systems that may have been located at the Site. He stated that is not aware of any soil sampling conducted of the dredge materials or fill materials identified in previous report. Mr. Stiewig is not aware of any environmental liens that have been recorded for the Site.

3.2 Occupants (Multi-family or Major)

The Site is not occupied.

3.3 Past and Present Owners, Operators, and/or Occupants

WKA did not receive information regarding past owners during completion of this report.

3.4 State and/or Local Government Officials

WKA contacted the Placer County Environmental Health Department (PCEHD) regarding files for the surrounding facilities. A representative from PCEHD responded that no facilities were identified for the unnamed facility reportedly located at Douglas Boulevard and Seeno Avenue that was listed on the Historical Cortese database. Files were available for facilities located at 8842 Quail Lane and 4410 Douglas Boulevard. Information reviewed at the PCEHD is provided in Section 4.3.



3.5 Abandoned Properties

As referenced in 40 CFR Part 312, in the case of inquiries conducted at “abandoned properties,” as defined in §312.23(d), “where there is evidence of potential unauthorized uses of the Site or evidence of uncontrolled access to the Site, the environmental professional’s inquiry must include interviewing one or more (as necessary) owners or occupants of neighboring or nearby properties from which it appears possible to have observed uses of, or releases at, such abandoned properties...” No evidence of potential unauthorized uses, or evidence of uncontrolled access to the Site was observed. The Site is not considered an abandoned property and therefore, WKA did not interview owners or occupants of neighboring properties.



4.0 RECORDS REVIEW

The purpose of the records review is to obtain and review information concerning the current and historical use of the Site and adjoining properties that would help identify the presence of RECs in connection with the Site. The records review included review and discussion of the following, as available:

- Physical Setting Source(s);
- Historical Use Information; and,
- Environmental Record Sources.

4.1 Physical Setting Source(s)

The Site is depicted on the 1980 United States Geological Survey (USGS) 7.5 Minute topographic map of the *Folsom, California Quadrangle* as wooded land and dredge tailings. The Site is located within Section 9, Township 10 North, Range 7 East, Mount Diablo Base and Meridian, at an elevation of approximately +260 feet relative to mean sea level (msl).

4.1.1 Regional and Local Geology

The Site is located on the Great Valley geomorphic province of California, a large, elongate, northwest-trending structural trough, generally constrained to the west by the Coast Ranges and to the east by the foothills of the Sierra Nevada Range (Norris and Webb, 1990). The Great Valley consists of two valleys lying end-to-end, with the Sacramento Valley to the north and the San Joaquin Valley to the south.

The Sacramento and San Joaquin Valleys have been filled to their present elevations with thick sequences of sediment derived from both marine and continental sources. The sedimentary deposits range in thickness from relatively thin deposits along the eastern valley edge to more than 25,000 feet in the south central portion of the Great Valley (Norris and Webb, 1990). The sedimentary geologic formations of the Great Valley province vary in age from Jurassic to Quaternary, with the older deposits being primarily marine in origin. Younger sediments are continentally derived and were typically deposited in lacustrine, fluvial, and alluvial environments with their main source being the Sierra Nevada Range.

The 1981 USGS *Geologic Map of the Sacramento Quadrangle, California*, shows the Site to be underlain by the dredge tailings, the Mesozoic dioritic formation, and the lone formation.



4.1.2 Soil Survey

The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) has created a web-based service for accessing soil information. According to the NRCS Web Soil Survey (WSS) the majority of the near-surface soils on the Site consist of Caperton-Andregg coarse sandy loams, 2 to 15 percent slopes; Cometa-Fiddymont complex, 1 to 5 percent slopes; Rubble land; and Xerorthents, placer areas (USDA, 2014). A copy of the soil report is included on the attached CD.

4.1.3 Regional and Local Groundwater

The Site is located within the California Department of Water Resources (DWR) defined Sacramento Valley Groundwater Basin of the Sacramento River Hydrologic Region. WKA searched data on the DWR website and found no DWR monitored groundwater wells within one-half mile of the Site (DWR, 2014).

WKA also searched the State Water Resources Control Board's (SWRCB) GeoTracker website for quarterly groundwater monitoring reports completed for facilities in the immediate vicinity of the Site. No facilities are located within one-half mile of the Site.

4.2 Historical Use Information

WKA reviewed historical information to develop a history of the previous uses of the Site and surrounding area, in order to evaluate the Site and adjoining properties for evidence of RECs. Standard historical sources reviewed during the preparation of this report included the following, as available:

- Sanborn® Maps;
- Topographic Maps;
- Oil and Gas Well Maps;
- Aerial Photographs;
- Ownership Records;
- Building Department Records;
- Local Street Directories;
- Zoning and Land Use Records;
- Other Historical Sources; and,
- Prior Assessments.

Discussion of these historical sources is provided in the following sections.



4.2.1 Sanborn® Maps

Sanborn® Maps with coverage of the Site were obtained through Environmental Data Resources, Inc. (EDR®). EDR® is a national commercial provider of environmental database information. Sanborn® Maps are detailed drawings of site development, and were typically used by fire insurance companies to determine site fire insurability. According to EDR®, Sanborn® Map coverage of the Site is not available (EDR®, 2014a).

4.2.2 Topographic Maps

Historical USGS topographic maps with coverage of the Site and outlying land areas were reviewed. Topographic maps with coverage of the Site dated 1893, 1914, 1944, 1954, 1967, 1975, and 1980 were available for review (EDR®, 2014b). Copies of the topographic maps compiled by EDR® with coverage of the Site are included on the CD attached to the back cover of this report. Table 1 notes the changes in the vicinity of the Site.

Table 1		
Year	Scale	Observations
1893	1:125,000	The site and vicinity are located in an undeveloped portion of Placer County. Strap Ravine is noted.
1914	1:31,680	The site and vicinity are not mapped.
1944	1:62,500	Site: A creek and dredge tailings are noted transecting the central portion of the site from east to west. North: Vacant land. East: Dredge tailings are noted. South: Vacant land. West: Dredge tailings are noted.
1954	1:24,000	Site: Strap Ravine is labeled on the central portion of the site. Wooded areas are noted to the north and south of the dredge tailings. North: No significant changes noted. East: Dredge tailings are noted. South: A trail road and structure are noted. West: No significant changes noted.
1967	1:24,000	Site: No significant changes noted. North: No significant changes noted. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.



Table 1		
Year	Scale	Observations
1975	1:24,000	Site: No significant changes noted. North: Additional structures are noted. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.
1980	1:24,000	Site: No significant changes noted. North: No significant changes noted. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.

4.2.3 Oil and Gas Well Maps

Review of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) website showed that the Site is not located in a designated natural gas field. No DOGGR wells are located on or within at least one mile of the Site (DOGGR, 2014).

4.2.4 Aerial Photographs

Historical aerial photographs of the Site and general vicinity were compiled by EDR[®]. Photographs covering the years 1952, 1957, 1961, 1984, 1993, 1999, 2005, 2006, 2009, 2010, and 2012 were available for review (EDR[®], 2014c). Table 2 notes the changes on the property and in the vicinity.

Table 2		
Year	Scale	Observations
1952	1" = 500'	Site: Partially wooded land. North: Douglas Boulevard followed by grass-covered land. East: Partially wooded land. South: Partially wooded land and a rural residence are visible. West: Partially wooded land.
1957	1" = 500'	No significant changes are noted for the site or the vicinity.
1961	1" = 500'	Site: Wooded land. North: Cleared and graded land is visible. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.



Table 2		
Year	Scale	Observations
1984	1" = 500'	Site: Wooded land. North: Cleared and graded land is visible. East: No significant changes noted. South: Additional residences are visible. West: No significant changes noted.
1993	1" = 500'	Site: No significant changes noted. North: Residences are visible. East: No significant changes noted. South: No significant changes noted. West: No significant changes noted.
1999	1" = 500'	No significant changes are noted for the site or the vicinity.
2005	1" = 500'	No significant changes are noted for the site or the vicinity.
2006	1" = 500'	No significant changes are noted for the site or the vicinity.
2009	1" = 500'	No significant changes are noted for the site or the vicinity.
2010	1" = 500'	No significant changes are noted for the site or the vicinity.
2012	1" = 500'	No significant changes are noted for the site or the vicinity.

4.2.5 Ownership Records

Ownership information was obtained through ParcelQuest[®], an on-line distributor of "Assessor-Direct property information throughout the State of California." The ownership entity for the Site was listed as "Folsom Oak Tree" (ParcelQuest[®], 2014).

4.2.6 Building Department Records

WKA contacted the Placer County Community Development Resource Agency regarding any building permits on-file for the Site. Ms. Michelle Paris, Placer County, responded that no building permits have been issued for the Site APN.



4.2.7 Local Street Directories

Local street directories with coverage of the Site and adjoining properties were obtained from EDR[®] (EDR[®], 2014d). These documents contain business listings based on street number identifiers. The Site does not have a current address and no historical address is known; therefore, the Site would not have been listed in city directories. A copy of the EDR[®] City Directory (EDR[®], 2014d) is provided on the CD attached to the back cover of this report.

4.2.8 Zoning and Land Use Records

The Site is zoned "00" vacant (ParcelQuest, 2014).

The portion of the Site around Strap Ravine is located within a Special Flood Hazard Area inundated by the 100-year regulatory floodplain, as designated by the Federal Emergency Management Agency (FEMA). The floodplain map is provided on the CD attached to the back cover of this report.

4.2.9 Other Historical Sources

Review of additional historical sources was not warranted in order for the Environmental Professional to make a determination as to evidence of potential RECs on the Site.

4.2.10 Prior Assessments

WKA reviewed a Phase I ESA, dated August 4, 2005, prepared for the Site by Geocon Consultants, Inc. (Geocon). Geocon reported that in 2005 the Site was undeveloped land covered with mature trees, shrubs, poison oak, and a heavy growth of annual grasses. Geocon noted the presence of Strap Ravine that transected the central portion of the Site from east to west. Geocon reported that a pile of old wood that may have been a former structure was located near the western property boundary. Piles of tires and debris were observed on the northern and southern portions of the Site. Geocon noted that a geologic map of the area noted the presence of dredge tailings on the Site. Geocon concluded that no recognized environmental conditions were noted for the Site. Geocon recommended that all debris on the Site be properly disposed and that if residential development is planned the dredge tailings should be sampled to evaluate for potential impacts from metals (primarily mercury) in the soil.

WKA reviewed a Geotechnical Engineering Investigation report for the proposed Beaver Creek residential subdivision project (Site), dated August 15, 2005, prepared by Geocon. Geocon excavated fourteen exploratory trenches using a backhoe to approximate depths ranging from



12 to 19 feet below ground surface (bgs) at various locations across the Site. Geocon's Figure 2 showing the locations of the exploratory trenches is attached to this proposal for reference. Review of exploratory trench logs show subsurface soil conditions consist of fill material, alluvium, dredge tailings, and decomposed to weathered Mesozoic dioritic intrusive rock of the Rocklin Pluton at varying depths across the Site.

The fill material was observed within the northwestern and northeastern portions of the Site in exploratory trenches T4 and T6, respectively (Geocon Figure 2). Approximately two feet of fill material was observed in trench T4, which consisted of light brown silty sand intermixed with miscellaneous debris (pieces of sheet metal, plastic, glass and clay pipe). Trench 6 was excavated from stockpile that measured 10 to 12 feet tall. Approximately 11 feet of fill material was observed in trench T6, which consisted of loose to medium-dense silty clay. Geocon described the fill material at the two locations as being underlain by decomposed to weathered dioritic rock. Fill material was not observed in the other exploratory trenches. Geocon did not provide information regarding the origin of the fill materials.

Dredge tailings were observed in exploratory trenches T5 and T7, located within the central portion of the Site, up to approximate depths of 14 feet bgs (Geocon Figure 2). Dredge tailings were also observed in exploratory trenches T12, T13, and T14 located within the southeast portion of the Site south of Strap Ravine, up to approximate depths of 13 feet bgs (Geocon Figure 2). The dredge tailings were described by Geocon as generally consisting of well-graded sand with small gravel, poorly graded sand, silty sand with gravel, and clayey gravel. The dredge tailings were the primary geotechnical constraint identified in Geocon's geotechnical engineering investigation.

WKA prepared a Soil Sampling and Laboratory Analyses Report, dated July 24, 2014, for the site. WKA evaluated dredge tailing samples to determine if any of the California Assessment Manual listed 17 (CAM 17) metals were present at concentrations exceeding its California Human Health Screening Levels for residential exposures. WKA also evaluated imported fill samples according to guidance for soil originating from agricultural land and from residential/acceptable commercial land described in the California Department of Toxic Substances Control (DTSC) *Information Advisory Clean Imported Fill Material*, dated October 2001. Laboratory analysis of soil samples collected from the imported soil stockpile revealed concentrations of total petroleum hydrocarbon as motor oil (TPH-mo), which were below the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESL) for a residential land. The ESLs were used because they are the only published exposure threshold for TPH-mo. Concentrations of arsenic in the import fill material and dredge tailings were below the Department of Toxic Substances Control's action level of 12 milligrams per kilogram. Laboratory result for organochlorine pesticides, organophosphorus pesticides,



chlorinated herbicides, volatile organic compounds, semi-volatile organic compounds, and PCBs fell below its respective laboratory reporting limit. Concentrations of MTBE, benzene, toluene, xylenes, and ethylbenzene, and TPH-as-gasoline and TPH-as-diesel were also at concentrations below laboratory their respective laboratory reporting limits. WKA's July 2014 Report presented a professional opinion that the concentrations of constituents detected in dredge tailings and in imported soil did not pose an unacceptable threat to human health under a residential exposure scenario.

4.3 Environmental Record Sources

4.3.1 Regulatory Agency Databases

EDR[®] was contacted to provide a summary of facilities listed on regulatory agency databases (EDR[®], 2014e). Table 3 summarizes the researched ASTM required *Standard Environmental Record Sources*, as well as several *Additional Environmental Record Sources*, as defined in Sections 8.2.1 and 8.2.2 of the ASTM Standard. For additional reference, the Executive Summary of the EDR[®] report is included in Appendix C. A copy of the entire EDR[®] report is included on the CD attached to the back cover of this report.

Table 3			
	<i>EDR Listed Database</i>	<i>ASTM E 1527-13 Search Distance</i>	No. of Facilities Listed (within Search Radius)
Federal			
Federal NPL Site List	<i>NPL</i>	1-mile	0
Federal Delisted NPL Site List	<i>Delisted NPL</i>	1/2-mile	0
Federal CERCLIS List	<i>CERCLIS</i>	1/2-mile	0
Federal CERCLIS NFRAP Site List	<i>CERCLIS NFRAP</i>	1/2-mile	0
Federal RCRA CORRACTS Facilities List	<i>CORRACTS</i>	1-mile	0
Federal RCRA Generators List:			
Small Quantity and Large Quantity Generators	<i>RCRA SQG</i>	Site & adjoining	0
	<i>RCRA LQG</i>		0
Landfills and Solid Waste Management Units	<i>RCRA TSDf</i>	1/2-mile	0
Federal Institutional Control / Engineering Control Registries	<i>US ENG Controls</i>	Site only	0
	<i>US INST Controls</i>		0
Federal ERNS List	<i>ERNS</i>	Site only	0
State			
State-equivalent NPL (Hist. Cal-Sites)	<i>Hist. Cal-Sites</i>	1-mile	0
State-equivalent CERCLIS	<i>RESPONSE</i>	1/2-mile	0



Table 3			
	<i>EDR Listed Database</i>	<i>ASTM E 1527-13 Search Distance</i>	No. of Facilities Listed (within Search Radius)
State Landfill and/or Solid Waste Disposal Site	<i>SWF/LF (SWIS)</i>	1/2-mile	0
	<i>WMUDS/SWAT</i>		0
State Leaking Underground Storage Tanks	<i>LUST- Reg 5 Geotracker</i>	1/2-mile	0
Tribal Leaking Underground Storage Tanks	<i>Indian LUST</i>	1/2-mile	0
State Registered Underground Storage Tanks	<i>UST</i>	Site & adjoining	0
Tribal Registered Underground Storage Tanks	<i>Indian UST</i>	Site & adjoining	0
State Registered Aboveground Storage Tanks	<i>AST</i>	Site & adjoining	0
State Institutional Control Registries	<i>DEED</i>	Site only	0
State Voluntary Cleanup Sites	<i>VCP</i>	1/2-mile	0
Additional Environmental Record Sources			
Hazardous Waste & Substances Sites List	<i>CORTESE</i>	1/2-mile	0
DTSC EnviroStor (includes Cal-Sites)	<i>EnviroStor</i>	1-mile	4
SLIC	<i>SLIC - Reg 5</i>	1/2-mile	0
Cleaner Facilities	<i>Drycleaners</i>	1/4-mile	0
HAZNET	<i>HAZNET</i>	1/4-mile	2
Local - County			
Placer County Master List	<i>Pla Co MS</i>	1/2-mile	8

Review of the EDR[®] report indicates the Site is not listed on any of the EDR[®] databases. Regulatory information reviewed concerning the nearest facility in each cardinal direction identified within its respective ASTM search distance is detailed below.

The Citi Casters Co facility, 8842 Quail Lane, was located 0.08 miles south of the site. The facility is listed on the Placer County Master List database. According to the EDR report, asbestos containing materials from the facility were disposed of at a landfill in 1997. WKA contacted PCEHD regarding files for this facility. No files were available for Citi Caster Co., but a file was available for Clear Channel KQJK, which is located at 8842 Quail Lane. According to a Hazardous Materials Inspection Report, dated December 4, 2013, a 500-gallon propane aboveground storage tank associated with a generator and 2 compressed gas cylinders were located at the facility. No violations were noted for the facility at the time of the inspection. Based on the information reviewed during this assessment, this facility is not suspected of negatively impacting the site at this time.

The Station #4 facility, 4410 Douglas Boulevard, was located 0.08 miles west of the site. The facility is listed on the Placer County Master List database. According to the EDR report, a diesel storage tank was located at the facility. WKA reviewed information regarding the facility



at the PCEHD. According to the PCEHD file, a 500-gallon diesel underground storage tank (UST) was located at the facility. An undated, handwritten note in the file indicated that the UST had been removed from the facility. According to Quarterly Groundwater Monitoring Reports for the Shell Gasoline Station, located at 3999 Douglas Boulevard, located 0.4 miles from the facility and 0.8 miles from the Site, the direction of groundwater flow was reported to the southwest, away from the site. Based on the information reviewed during this assessment, this facility is not suspected of negatively impacting the site at this time.

The Rancho Del Oro facility, Olive Ranch Road, was located 0.5 miles north of the site. The facility is listed on the DTSC EnviroStor database. According to a DTSC letter, dated May 20, 2009, the facility received a no further action status. Based on the information reviewed during this investigation, this facility is not suspected of negatively impacting the site at this time.

An unnamed facility, located at Douglas Boulevard and Seeno Avenue, was 0.7 miles east of the Site. The facility is listed on the Historical Cortese database. According to the EDR report, an incident was reported at this located in October 1990. WKA searched the Regional Water Quality Control Board's GeoTracker website and the Department of Toxic Substances Control's (DTSC) EnvironStor websites for facilities located in the area of Douglas Boulevard and Seeno Avenue, but was unable to identify this facility. WKA requested records from the Placer County Environmental Health Department (PCEHD) for this location, but the PCEHD was unable to locate any records. Based on the lack of assessment information for this facility, this facility is not suspected of negatively impacting the site at this time.

The Olive Ranch facility, 4977 Olive Ranch Road, was located 0.8 miles northeast of the site. The facility is listed on the DTSC EnviroStor database. According to a DTSC letter, dated December 3, 2007, the facility received a no further action status. Based on the information reviewed during this investigation, this facility is not suspected of negatively impacting the site at this time.

The Douglas Ranch School facility, Olive Ranch Road/Olive Grove Drive, was located 0.9 miles northeast of the site. The facility is listed on the DTSC EnviroStor database. According to the DTSC EnviroStor website the facility received a no further action status as of April 6, 2000. Based on the information reviewed during this investigation, this facility is not suspected of negatively impacting the site at this time.



4.3.2 Preliminary Screen for Vapor Encroachment Conditions

WKA conducted a preliminary screening for vapor encroachment conditions (VEC) beneath the Site using the Tier 1 vapor encroachment screening evaluation¹. The Tier I screening included performing a *Search Distance Test* to identify if there are any known or suspect contaminated properties surrounding or upgradient of the Site within specific search radii, and a *Chemicals of Concern (COC) Test* (for those known or suspect contaminated properties identified within the *Search Distance Test*) to evaluate whether or not COC are likely to be present. The Vapor Encroachment Screening Matrix is included in Appendix D.

Based on the completion of the VEC-screening matrix, a VEC can be ruled out because a VEC does not or is not likely to exist.

4.3.3 Environmental Lien Search

According to a July 10, 2014, Environmental Lien Search Report prepared by JSR Vetting Services, LLC, no environmental liens or activity or use limitations (AULs) were recorded for the Site. A copy of the Environmental Lien Search Report is included on the CD attached to the back cover of this report.

¹ The Preliminary Screen for Vapor Encroachment Conditions was based on the guidelines presented in the ASTM E 2600-10 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*.



5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Data Gaps

The time intervals between the Standard Historical Sources (i.e., topographic maps, aerial photographs, other historical sources) exceeded the ASTM minimum five-year period. However, the use of the Site appears unchanged within the time gaps, and therefore, research of the Site use during the time gaps is not required by the ASTM Standard (Refer to *Section 8.3.2.1 – Intervals* of the ASTM E 1527-13 standard).

It is the opinion of WKA that no significant data gaps were identified during the preparation of this report that affects the ability of the Environmental Professional to identify RECs on the Site.

5.2 Conclusions

The historical land use research dating back to the late 1800s revealed that the central portion of the Site was dredged for mining in the late 1800s or early 1900s. The Site has been undeveloped land since at least 1944.

A small pile of asphalt and miscellaneous debris, including but not limited to, tires, beverage containers, pots and pans, and various pieces of scrap metal, were observed scattered throughout the northern portion of the Site.

A stockpile of soil is located on the northeastern portion of the Site. The area of the stockpile measured approximately 3,600 square feet. Fill materials were identified in a test pit excavated on the western portion of the Site during a 2005 geotechnical investigation. No information regarding the origin of the stockpiled soils or the fill materials is available.

Dredge tailings are located on the central portion of the Site in the vicinity of Strap Ravine, which transects the central portion of the Site.

WKA prepared a Soil Sampling and Laboratory Analyses Report, dated July 24, 2013 (WKA July 2013 Report), to evaluate dredge tailings and soil reported to have been imported to the Site for chemical concentration that would pose a threat to human health under a residential exposure scenario. WKA evaluated dredge tailing samples to determine if any of the California Assessment Manual listed 17 (CAM 17) metals were present at concentrations exceeding its California Human Health Screening Levels for residential exposures. WKA evaluated imported fill samples according to guidance for soil originating from agricultural land and from residential/acceptable commercial land described in the California Department of Toxic



Substances Control (DTSC) *Information Advisory Clean Imported Fill Material*, dated October 2001. Laboratory analysis of soil samples collected from the imported soil stockpile revealed concentrations of total petroleum hydrocarbon as motor oil (TPH-mo), which were below the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESL) for a residential land. The ESLs were used because they are the only published exposure threshold for TPH-mo. Concentrations of arsenic in the import fill material and dredge tailings were below the Department of Toxic Substances Control's action level of 12 milligrams per kilogram. Laboratory result for organochlorine pesticides, organophosphorus pesticides, chlorinated herbicides, volatile organic compounds, semi-volatile organic compounds, and PCBs fell below its respective laboratory reporting limit. Concentrations of MTBE, benzene, toluene, xylenes, and ethylbenzene, and TPH-as-gasoline and TPH-as-diesel were also at concentrations below laboratory their respective laboratory reporting limits. WKA's July 2014 Report presented a professional opinion that the concentrations of constituents detected in dredge tailings and in imported soil did not pose an unacceptable threat to human health under a residential exposure scenario.

According to an environmental lien search, no environmental liens are associated with the Site.

The portion of the Site around Strap Ravine is located within a Special Flood Hazard Area inundated by the 100-year regulatory floodplain, as designated by the Federal Emergency Management Agency (FEMA). The floodplain map is provided on the CD attached to the back cover of this report.

Given the documentation reviewed concerning the neighboring agency listed facilities, none of the facilities reviewed is likely to have a negative impact on the Site. Based on the completion of the vapor encroachment condition (VEC) screening matrix, WKA concludes a VEC can be ruled out because a VEC does not or is not likely to exist.

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 for the Beaver Creek Property. Any exceptions to, or deletions from, this practice are described in Section 5.4 of this report. This assessment has revealed no evidence of RECs in connection with the Site. A full copy of this ESA report, in a .pdf format, is included on the attached CD.

5.3 Recommendations

Based on the conclusions presented and the documentation contained herein, WKA makes the following recommendations:

- All debris should be properly disposed.



5.4 Exceptions and/or Deletions

No exceptions or deletions from the ASTM E 1527-13 standard were made during the performance of this ESA.

5.5 Additional Services

Non-scope considerations, such as assessment for naturally occurring asbestos (NOA), wetlands evaluation, indoor air quality, laboratory testing of the soils and groundwater beneath the Site for environmental contaminants (such as agricultural-related pesticides, termiticides, polychlorinated biphenyls [PCBs], or arsenic and lead), and assessments for asbestos containing materials and lead-based paint were not included or requested as part of this ESA. Additionally, this ESA included conducting a Tier 1 vapor encroachment screening in accordance with the *ASTM E 2600-10 Vapor Encroachment Screening on Property Involved in Real Estate Transactions*.



6.0 LIMITATIONS

The statements and conclusions in this report are based upon the scope of work described above and on observations made only on the date of the field reconnaissance, July 11, 2014. Work was performed using a degree of skill consistent with that of competent environmental consulting firms performing similar work in the area. Information regarding the Site that is *publicly available* and *practically reviewable*, as described in the ASTM standard, was obtained. Additional research or receipt of information regarding the Site that was not disclosed or available to WKA during this assessment may result in revision of the conclusions. The conclusions in this report should be reevaluated if site conditions change. No recommendation is made as to the suitability of the Site for any purpose. The results of this assessment do not preclude the possibility that materials currently or in the future defined as hazardous are present on the Site, nor do the results of this work guarantee the potability of groundwater beneath the Site. This report is applicable only to the investigated Site and should not be used for any other property. No warranty is expressed or implied.

This report is viable for one year from the publication date of the report provided the following components are updated within 180 days of the date of purchase or (for transactions not involving an acquisition) the date of the intended transaction:

- Interviews with current owners/occupants and/or in order to identify changes in Site conditions or uses since the publication date of this report
- Searches for recorded environmental cleanup liens
- Visual inspection of the Site and of adjoining properties with emphasis on changes in conditions or uses since the publication date of this report
- A current review of federal, state, tribal and county databases
- The declaration by the environmental professional responsible for the assessment.

Environmental Site Assessments completed more than one year prior to the date of purchase must be reviewed and updated in order for the *Environmental Site Assessment* to be considered valid per Section 4.6 (*Continued Viability of Environmental Site Assessment*), and Sections 4.7 and 8.4 (*Prior Assessment Usage*) of the ASTM E 1527-13 Standard.



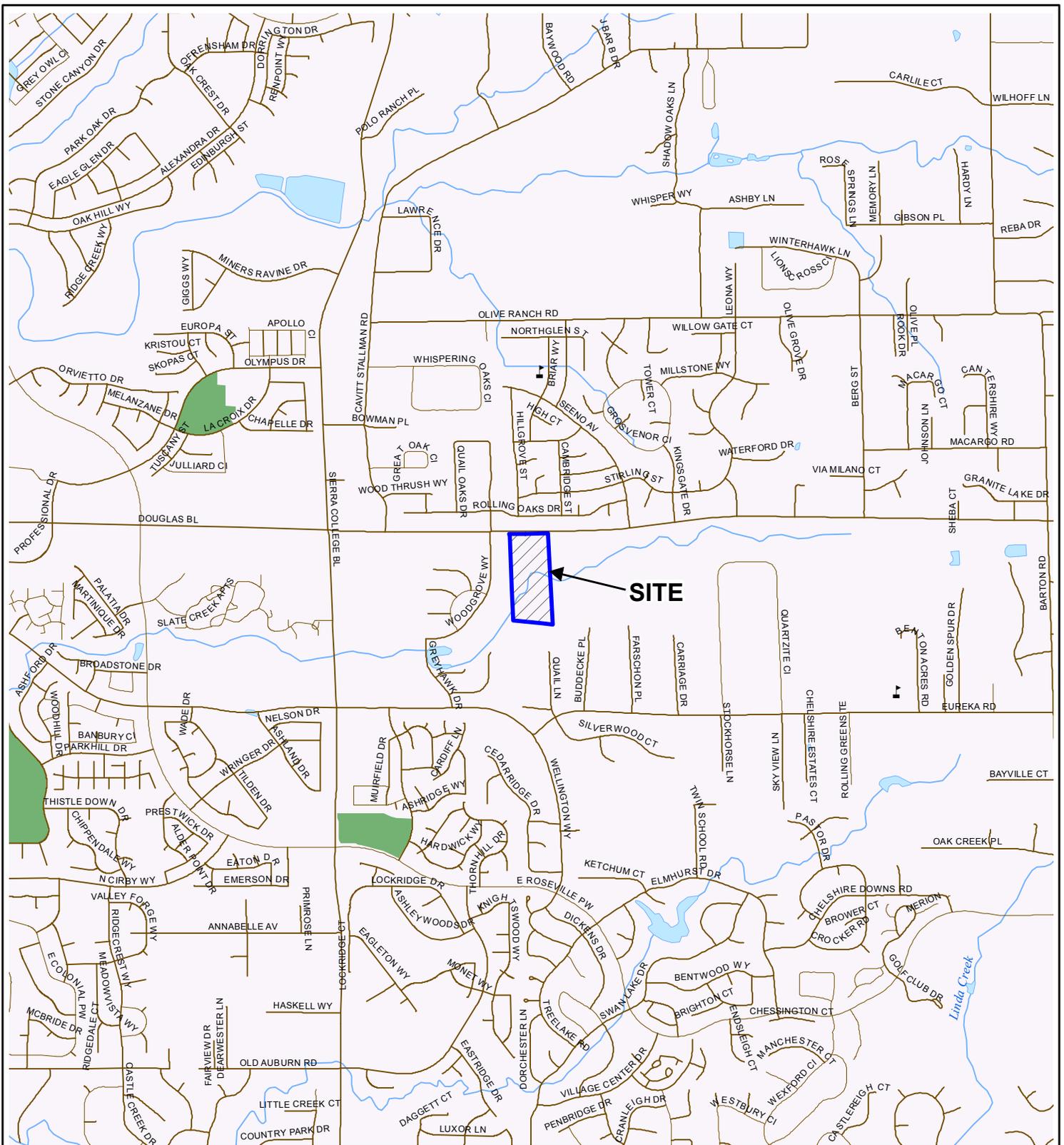
7.0 REFERENCES

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- Wagner, D.L., et al, State of California Department of Mines and Geology, 1981, *Geologic Map of the Sacramento Valley and Sierra Foothills, California* [map]. 1:250,000, Regional Geologic Map Series, Map No. 1A (Geology). Capitol Heights, MD: William Heintz Map Corporation.



FIGURES



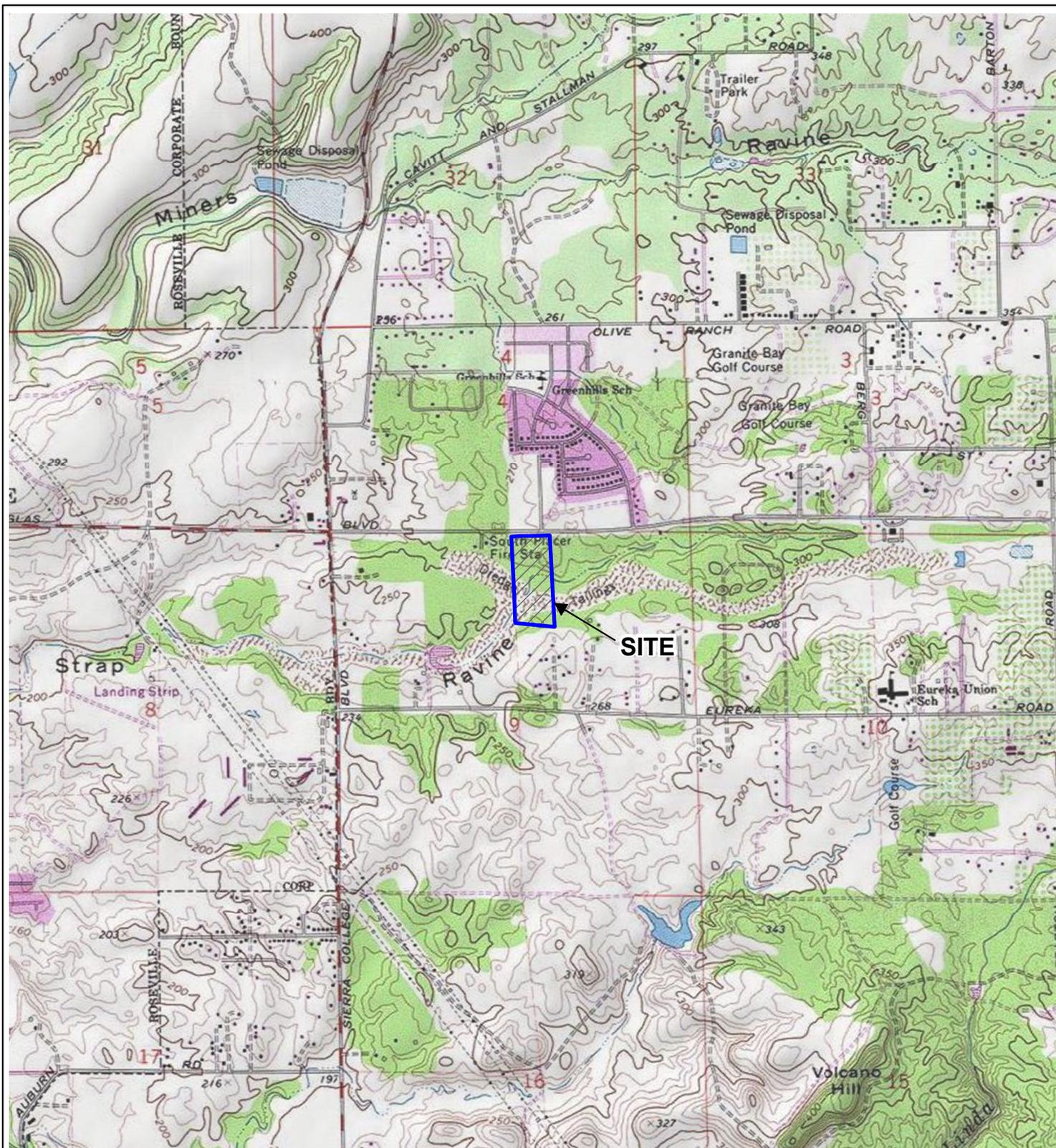


Street data courtesy of Placer County.
 Hydrography courtesy of the U.S. Geological Survey
 acquired from the GIS Data Depot, December, 2007.
 Projection: NAD 83, California State Plane, Zone II

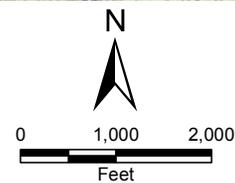


VICINITY MAP
BEAVER CREEK
 Granite Bay, California

FIGURE 1	
DRAWN BY	TJC
CHECKED BY	NMM
PROJECT MGR	DBN
DATE	7/14
WKA NO. 10191.01	

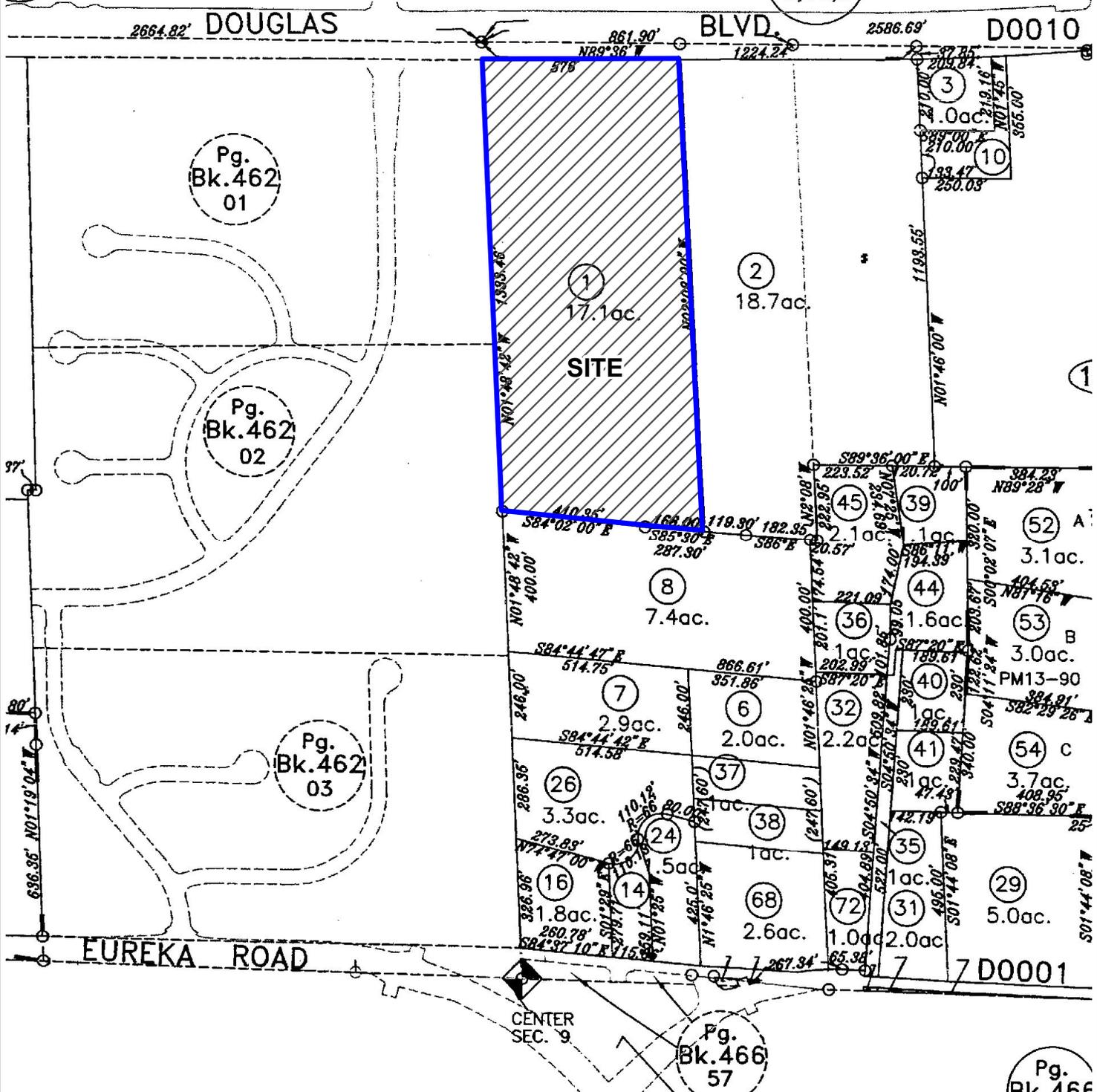


Adapted from U.S. Geological Survey 7.5 minute topographic maps of the Folsom quadrangle, California, 1978 and the Rocklin quadrangle, California, 1981.
 Projection: NAD 83, California State Plane, Zone II



TOPOGRAPHIC MAP
BEAVER CREEK
 Granite Bay, California

FIGURE 2	
DRAWN BY	TJC
CHECKED BY	NMM
PROJECT MGR	DBN
DATE	7/14
WKA NO. 10191.01	



Adapted from the Placer County Assessor's
 Map Book 48, Page 15.
 Projection: NAD 83, California State Plane, Zone II



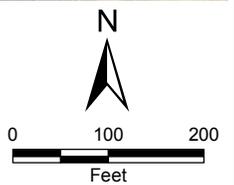
PARCEL MAP
BEAVER CREEK
 Granite Bay, California

FIGURE 3	
DRAWN BY	TJC
CHECKED BY	NMM
PROJECT MGR	DBN
DATE	7/14
WKA NO. 10191.01	



Adapted from a Google Earth aerial photograph,
 dated August 14, 2013.
 Projection: NAD 83, California State Plane, Zone II

Legend
 Site boundary



AERIAL SITE MAP
 BEAVER CREEK
 Granite Bay, California

FIGURE 4	
DRAWN BY	TJC
CHECKED BY	NMM
PROJECT MGR	DBN
DATE	7/14
WKA NO. 10191.01	



Looking west at the general view of the northern portion of the Site.



Looking south at the general view of the central portion of the site.



Looking southwest at the general view of the northern portion of the Site.



Looking southeast at the stockpile of soil on the northwestern portion of the Site.



COLOR PHOTOGRAPHS
BEAVER CREEK PROPERTY
 Granite Bay, California

FIGURE 5a	
DRAWN BY	NMM
CHECKED BY	DBN
PROJECT MGR	DBN
DATE	7/14
WKA NO. 10191.01	



Looking at a discarded tire.



Looking at pots and pans that have been discarded at the Site.



Looking at a piece of scrap metal that has been dumped.



Looking at wood and metal debris located on the northwestern portion of the Site.



COLOR PHOTOGRAPHS
BEAVER CREEK PROPERTY
 Granite Bay, California

FIGURE 5b	
DRAWN BY	NMM
CHECKED BY	DBN
PROJECT MGR	DBN
DATE	7/14
WKA NO. 10191.01	



Looking at the pile of asphalt on the northwestern portion of the Site.



Looking at the hole located to the north of the debris pile.



Looking at the hold located to the south of the debris pile.



Looking at the general view of the southern portion of the Site.



COLOR PHOTOGRAPHS
BEAVER CREEK PROPERTY
 Granite Bay, California

FIGURE 5c	
DRAWN BY	NMM
CHECKED BY	DBN
PROJECT MGR	DBN
DATE	7/14
WKA NO. 10191.01	

APPENDIX A
RESUMES



NANCY M. MALARET
PROJECT ENVIRONMENTAL SCIENTIST

Ms. Malaret has been employed in the environmental field since 2003. She graduated from University of California, Davis with a degree in Hydrologic Science.

Ms. Malaret worked for the Florida Department of Health for four years. She assisted with the coordination of sampling potable water wells throughout the state of Florida. Ms. Malaret used GIS mapping techniques to identify private potable wells located near commercial and industrial facilities that may have contaminated the groundwater. She coordinated the sampling of the wells and the analysis of water samples collected. She worked with the Florida Department of Environmental Protection to place filters on the private wells with contaminated water. Ms. Malaret also worked with the Health Assessment Team at the Florida Department of Health. She conducted human health risk assessments based on groundwater and soil data collected during contamination assessments of industrial facilities. Ms. Malaret used the Agency for Toxic Substances and Disease Registry's Public Health Assessment Guidelines to evaluate resident's risk of illness from exposure to contaminated groundwater and surface soils. Ms. Malaret used Risk Assistant software to determine dose estimates and compared the results with toxicological studies. Ms. Malaret's human health risk assessments focused on sites with Volatile Organic Compounds, Semi-volatile Organic Compounds, and metals contamination.

Ms. Malaret has six years of experience in due diligence. Her Phase I Environmental Site Assessment experience includes wooded, rural, and urban properties. Her investigations have involved multiple parcel sites with extensive history, large-scale residential subdivisions, office buildings, gasoline stations, dry cleaners, and heavy equipment manufacturing and repair facilities. Ms. Malaret has conducted multiple corridor assessments along roadways being prepared for expansion or improvements. She also conducted a Hazardous, Toxic, and Radioactive Waste Assessment for the United States Army Corps of Engineers on a 20-mile stretch of the St. Johns River in Jacksonville, Florida. Ms. Malaret conducted soil and groundwater sampling associated with Phase II Environmental Site Assessments. Ms. Malaret coordinated long-term groundwater sampling events for sites with residual petroleum contamination.

Ms. Malaret has worked with communities impacted by contamination, local, state, and federal government agencies, banks and developers.

Moody Property, Vacaville, CA: Ms. Malaret managed the Phase I Environmental Site Assessment of a 38.5-acre property of undeveloped land located in Vacaville to support the redevelopment of the property into a residential development.

Mercantile Property, Rancho Cordova, CA: Ms. Malaret managed the Phase I Environmental Site Assessment of a 4.1-acre property developed with a commercial building. Evaluation of regulatory facilities within the site vicinity included the former Aerojet Facility.

Woodmere Property, Folsom, CA: Ms. Malaret managed the Phase I Environmental Site Assessment of a 2.5-acre property developed with an office building. Historical research of the property included evaluating former mining operations at the site.

HIGHER EDUCATION:

University of California, Davis
Bachelor of Science, Hydrologic Science (1999)

DENNIS B. NAKAMOTO
SENIOR HYDROGEOLOGIST

Mr. Nakamoto has 33 years of experience in the fields of environmental consulting, groundwater studies, site characterization, remediation construction oversight, and regulatory compliance. As Senior Hydrogeologist, Mr. Nakamoto manages projects and mentors professionals regarding studies of anthropogenic and naturally occurring constituents including: petroleum hydrocarbons, metals (e.g. arsenic and lead from pesticide application and aerially deposited lead), chlorinated hydrocarbons, pesticides and herbicides, and naturally occurring asbestos in soil and groundwater. His projects include studies of soil, soil vapor, and groundwater contaminants with focus on human health risk assessment and identification of environmental risk assessment, groundwater resource and supply with focus on well design, well rehabilitation and aquifer characterization. Mr. Nakamoto is experienced in the interpretation of downhole geophysical data from surveys including, electric logs, gamma and natural gamma logs, neutron logs, and acoustic logs. He is experienced in the groundwater well drilling methods and the application of well construction methods, including some applications from the petroleum industry. He has groundwater extraction well designs have successfully addressed issues such as excessive sand production, selective screen intervals to exclude undesirable groundwater quality and corrosive aquifer conditions.

SELECTED PROJECT EXPERIENCE

Risk Based Cleanup, Future Sacred Heart Elementary School, Sacramento, California: Mr. Nakamoto worked on behalf of Catholic Health Care West, Sacramento Diocese and the Sacred Heart Parish to establish appropriate soil remediation goals for lead, chlordane, and dieldrin in soil at the future Sacred Heart Elementary School site. He represented Sacred Heart Parish in negotiations with Catholic Health Care West to identify appropriate site characterization and mitigation efforts. He represented Sacred Heart Parish in meetings with the California Department of Toxic Substances Control to establish statistically derived risk-based values to determine site-specific cleanup levels for the chemicals present in soil. Mr. Nakamoto also represented the project during City of Sacramento Council meetings and Community Relations Building meetings. He provided technical oversight, on behalf of Sacred Heart Parish and Catholic Health Care West, of site remediation activities, including disposal of RCRA hazardous wastes.

Brownfield Development, Prospective Purchaser Agreement, Sacramento, California: Mr. Nakamoto served as the lead environmental consultant that successfully negotiated a 2006 Prospective Purchasers Agreement (PPA) between the Central Valley Regional Water Quality Control Board (CVRWQCB) and Signature Properties for a residential development proposed within the area of large-scale groundwater contamination. Negotiations with the PPA required focused consensus building and close coordination with CVRWQCB staff and counsel.

Preliminary Endangerment Assessment, Rancho Cordova, California: Mr. Nakamoto assisted a Land Developer in successfully securing

DTSC approval of a Preliminary Endangerment Assessment (PEA) on land proposed for residential development in Rancho Cordova, California. His detailed analyses of data demonstrated that variability of metal concentrations in selected soil samples were not representative of the actual metal concentrations in site soil. This demonstration allowed DTSC to concur that soil within the property did not pose a threat to the residential development.

Naturally Occurring and Anthropogenic Metals and Pesticides, Various Locations: Mr. Nakamoto has extensive experience in studies of metals and pesticides in soil and groundwater. He is highly experienced in establishing sample collection density to characterize a property. He evaluates chemical concentrations using statistical reduction of data, which DTSC accepts for determining whether chemical concentrations across the entire site pose a threat to the proposed future land use.

7th Street Extension, Sacramento, CA: Performed Environmental Oversight Authority monitoring for the \$25 million project connecting downtown Sacramento to the Richards Boulevard (North Sacramento are) by extending 7th Street across the former Sacramento Locomotive Works Yard, a former Superfund property. One element of this project was the below grade crossing at the Union Pacific Railroad track line. Excavation at this location revealed the presence of material suspected to be foundry slag. Laboratory analysis of carefully selected samples showed the material was not foundry slag. Other issues resolved during this project included handling and discharge of groundwater from dewatering activities and

DENNIS B. NAKAMOTO

participation in the community relations team activities.

Federal Courthouse Building, Sacramento, CA:

Served as EOA for this project, which was the first development of the former Sacramento Locomotive Works Yard Superfund Site. Closely coordinated with the City of Sacramento, DTSC, Union Pacific Railroad Company, and the Project managers, General Services Administration. During this project, several areas of concern were studied that included:

- ♦ Leaking Underground Storage Tanks
- ♦ Features deemed of Archeological interest
- ♦ Presence of Stoddard's solvent in soil
- ♦ Presence of oil containing total and soluble metal concentrations exceeding California thresholds for hazardous wastes

Fire Station Number 5 Replacement, City of Sacramento, CA:

The initial project involved preparation and implementation of a work plan for characterizing an historic landfill previously identified as lying beneath a portion of the station property. Construction of the new Fire Station building required that a portion of the historic landfill be excavated. Soil sample analyses revealed total and soluble lead concentrations in soil at some locations exceeded hazardous thresholds established by either California or Federal standards.

Preliminary Endangerment Assessments – Various Locations (CA):

Adelane High School Parking Lot,

Roseville: Former residential property where weathering of paint surfaces had resulted in the presence of lead containing paint chip in soil. Laboratory analysis of soil samples confirmed the vertical and lateral distribution of lead containing paint chips in soil. Excavation activities allowed for removal of the impacted soil for appropriate disposal.

HIGHER EDUCATION:

University of California, Davis, California
B.S. Geology (1977)

Eureka School Assessment, Granite Bay – PEA performed to address the potential presence of pesticide residues in soil historically operated as an olive orchard. Close coordination with DTSC, regarding planning the sample collection plan, allowed for DTSC determination that the property posed no threat to the proposed use as a school facility.

Thermalito Union School District, Oroville – The initial Environmental Site Assessment (ESA) activities revealed the proposed school site was historically supported agricultural and automotive repair facility activities. Based on presenting initial ESA findings, DTSC approved expanding the ESA scope to include analyzing soil samples for pesticide residues and metals in surface soil. Completing the sampling and analysis activities concurrent with the ESA resulted in the District saving considerable time and expense.

Railroad Transportation Facilities, Various

Locations (CA, NV): Conducted studies of soil and groundwater contamination at various railroad facilities operated by the Southern Pacific Transportation Company and the Union Pacific Railroad Company. These sites were located throughout California and Nevada. Studies regarding compliance with the Toxic Pits Cleanup Act (TPCA), as well as studies of railroad contamination, resulted in properties being designated Superfund properties. Contaminants at these properties included:

- ♦ Bunker Oil and its related carcinogenic compounds related to storage tank operations
- ♦ Metal contamination related to metal works and refinishing activities
- ♦ Soil pH and contaminated related to lead acid battery maintenance activities
- ♦ Chlorinated solvents related to industrial cleaning activities
- ♦ Asbestos related to locomotive rehabilitation activities

PROFESSIONAL REGISTRATIONS:

California

Professional Geologist No. 3863, California,
Certified Engineering Geologist No.1353
Certified Hydrogeologist No. 260

Oregon

Professional Geologist and an Engineering
Geologist No. E 1535

Wyoming

Professional Geologist No. PG 2157

APPENDIX B
ASTM E 1527-13 User Questionnaire
and Helpful Documents Checklist



E 1527-13 USER QUESTIONNAIRE (cont.)
BEAVER CREEK PROPERTY

Questions 6 continued:

(c.) What, if any, spills or other chemical releases have taken place at the *property*?

(d.) What, if any, environmental cleanups have taken place at the *property*?

(7.) As the *user* of this ESA, based on your knowledge and experience related to the *property* are there any obvious indicators that point to the presence or likely presence of contamination at the *property*? No

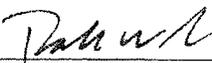
COMPLETION:

I have completed this User Questionnaire to the best of my knowledge and provided all information to the environmental professional as of the following date:

Completed by: Rob Wilson

Date: July 14, 2104

Title: Forward Planning Manager

Signature: 

Phone Number: 707-359-2026

Relationship to the Site (i.e., owner, lender, property manager): Employed by Buyer



**HELPFUL DOCUMENTS
BEAVER CREEK PROPERTY**

Are you aware of any of the below-listed reports, as they relate specifically to the property?

Yes No (if yes, please check all that apply):

- Environmental Site Assessment reports (Phase I ESA, Asbestos sampling reports, etc.)
- Environmental Compliance Audit reports
- Geotechnical Reports
- Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits)
- Registrations for underground or above ground storage tanks
- Registrations for underground injection systems
- Material Safety Data Sheets
- Community Right-to-Know plan
- Safety Plan
- Reports regarding Hydrogeologic conditions on the property or surrounding area
- Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property
- Hazardous waste generator notices, or reports
- Environmental Impact Reports (draft and/or final)
- Risk assessments
- Recorded AULs

If any of the above listed documents are available, will copies be provided to WKA for review?

Yes No

Completed by Rob Wilson

Date: July 14, 2014

Title: Forward Planning Manager

Signature: 



APPENDIX C
EDR® Radius Map Report Executive Summary



Beaver Creek
Douglas Boulevard
Granite Bay, CA 95746

Inquiry Number: 3997926.2s
July 08, 2014

The EDR Radius Manual Report with GeoCheck®



6 & 7 Manning Road, 4th floor
Sudbury, ON N3H 4G4
Tel: 519-452-4000
www.edrinc.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

DOUGLAS BOULEVARD
GRANITE BAY, CA 95746

COORDINATES

Latitude (North): 38.7422000 - 38° 44' 31.92"
Longitude (West): 121.2158000 - 121° 12' 56.88"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 655065.5
UTM Y (Meters): 4289472.5
Elevation: 261 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 38121-F2 FOLSOM, CA
Most Recent Revision: 1980

North Map: 38121-G2 ROCKLIN, CA
Most Recent Revision: 1981

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20120706, 20120628
Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST..... Geotracker's Leaking Underground Fuel Tank Report
SLIC..... Statewide SLIC Cases
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST..... Active UST Facilities

EXECUTIVE SUMMARY

AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
Toxic Pits..... Toxic Pits Cleanup Act Sites
CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST..... Facility Inventory Database
SWEEPS UST..... SWEEPS UST Listing

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens Listing
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated

EXECUTIVE SUMMARY

DOT OPS.....	Incident and Accident Data
DOD.....	Department of Defense Sites
FUDS.....	Formerly Used Defense Sites
CONSENT.....	Superfund (CERCLA) Consent Decrees
ROD.....	Records Of Decision
UMTRA.....	Uranium Mill Tailings Sites
US MINES.....	Mines Master Index File
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS.....	Section 7 Tracking Systems
ICIS.....	Integrated Compliance Information System
PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
FINDS.....	Facility Index System/Facility Registry System
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
CA BOND EXP. PLAN.....	Bond Expenditure Plan
NPDES.....	NPDES Permits Listing
UIC.....	UIC Listing
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
WIP.....	Well Investigation Program Case List
ENF.....	Enforcement Action Listing
EMI.....	Emissions Inventory Data
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
PRP.....	Potentially Responsible Parties
LEAD SMELTERS.....	Lead Smelter Sites
PCB TRANSFORMER.....	PCB Transformer Registration Database
2020 COR ACTION.....	2020 Corrective Action Program List
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PROC.....	Certified Processors Database
Financial Assurance.....	Financial Assurance Information Listing
EPA WATCH LIST.....	EPA WATCH LIST
WDS.....	Waste Discharge System
US FIN ASSUR.....	Financial Assurance Information
MWMP.....	Medical Waste Management Program Listing
COAL ASH DOE.....	Steam-Electric Plant Operation Data
HWT.....	Registered Hazardous Waste Transporter Database
HWP.....	EnviroStor Permitted Facilities Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat.....	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry Cleaners

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

RGA LF..... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/05/2014 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>RANCHO DEL ORO</i> Status: No Further Action	<i>OLIVE RANCH ROAD APN 04</i>	<i>N 1/2 - 1 (0.593 mi.)</i>	<i>12</i>	<i>20</i>
<i>OLIVE RANCH</i> Status: No Further Action	<i>4977 OLIVE RANCH ROAD</i>	<i>NNE 1/2 - 1 (0.798 mi.)</i>	<i>13</i>	<i>23</i>
<i>DOUGLAS RANCH SCHOOL</i> Status: No Further Action	<i>OLIVE RANCH ROAD/OLIVE</i>	<i>NE 1/2 - 1 (0.882 mi.)</i>	<i>14</i>	<i>25</i>
<i>ROLLING GREENS GOLF COURSE</i> Status: No Further Action	<i>5572 EUREKA ROAD</i>	<i>ESE 1/2 - 1 (0.986 mi.)</i>	<i>15</i>	<i>28</i>

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>STATION #4</i>	<i>4410 DOUGLAS BLVD</i>	<i>WNW 0 - 1/8 (0.087 mi.)</i>	<i>1</i>	<i>8</i>

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>Not reported</i>	<i>DOUGLAS BLVD. & SEENO</i>	<i>E 1/8 - 1/4 (0.151 mi.)</i>	<i>4</i>	<i>9</i>

CA PLACER CO. MS: Placer County Master List of Facilities includes Aboveground Hazardous Material tanks, Underground Storage tanks, Site Clean-up sites.

A review of the CA PLACER CO. MS list, as provided by EDR, and dated 03/10/2014 has revealed that there are 8 CA PLACER CO. MS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>STATION #4</i>	<i>4410 DOUGLAS BLVD</i>	<i>WNW 0 - 1/8 (0.087 mi.)</i>	<i>1</i>	<i>8</i>
<i>CITI CASTERS CO</i>	<i>8842 QUAIL LANE</i>	<i>S 0 - 1/8 (0.089 mi.)</i>	<i>A2</i>	<i>8</i>
<i>AT&T MOBILITY - GRANITE BAY HS</i>	<i>9225 WELLINGTON WAY</i>	<i>S 1/4 - 1/2 (0.407 mi.)</i>	<i>C7</i>	<i>12</i>
<i>GRANITE BAY HIGH SCHOOL</i>	<i>1 GRIZZLY WAY</i>	<i>S 1/4 - 1/2 (0.424 mi.)</i>	<i>C9</i>	<i>12</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>WALGREENS #6036</i>	<i>4051 DOUGLAS BLVD</i>	<i>WNW 1/4 - 1/2 (0.347 mi.)</i>	<i>B5</i>	<i>11</i>
<i>ARCO AM/PM -SIERRA DOUGLAS INC</i>	<i>4021 DOUGLAS BLVD</i>	<i>WNW 1/4 - 1/2 (0.347 mi.)</i>	<i>B6</i>	<i>11</i>
<i>WALMART #5980</i>	<i>4080 DOUGLAS BLVD</i>	<i>WNW 1/4 - 1/2 (0.418 mi.)</i>	<i>D8</i>	<i>12</i>
<i>ELITE CLEANERS</i>	<i>4060 DOUGLAS BLVD 111</i>	<i>WNW 1/4 - 1/2 (0.439 mi.)</i>	<i>D10</i>	<i>14</i>

EXECUTIVE SUMMARY

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NEFF RENTAL	8455 SIERRA COLLEGE BLV	WNW 1/2 - 1 (0.507 mi.)	11	15

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2012 has revealed that there are 2 HAZNET sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CITI CASTERS CO	8842 QUAIL LANE	S 0 - 1/8 (0.089 mi.)	A2	8
KRCX RADIO	8842 QUAIL LN	S 0 - 1/8 (0.089 mi.)	A3	9

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

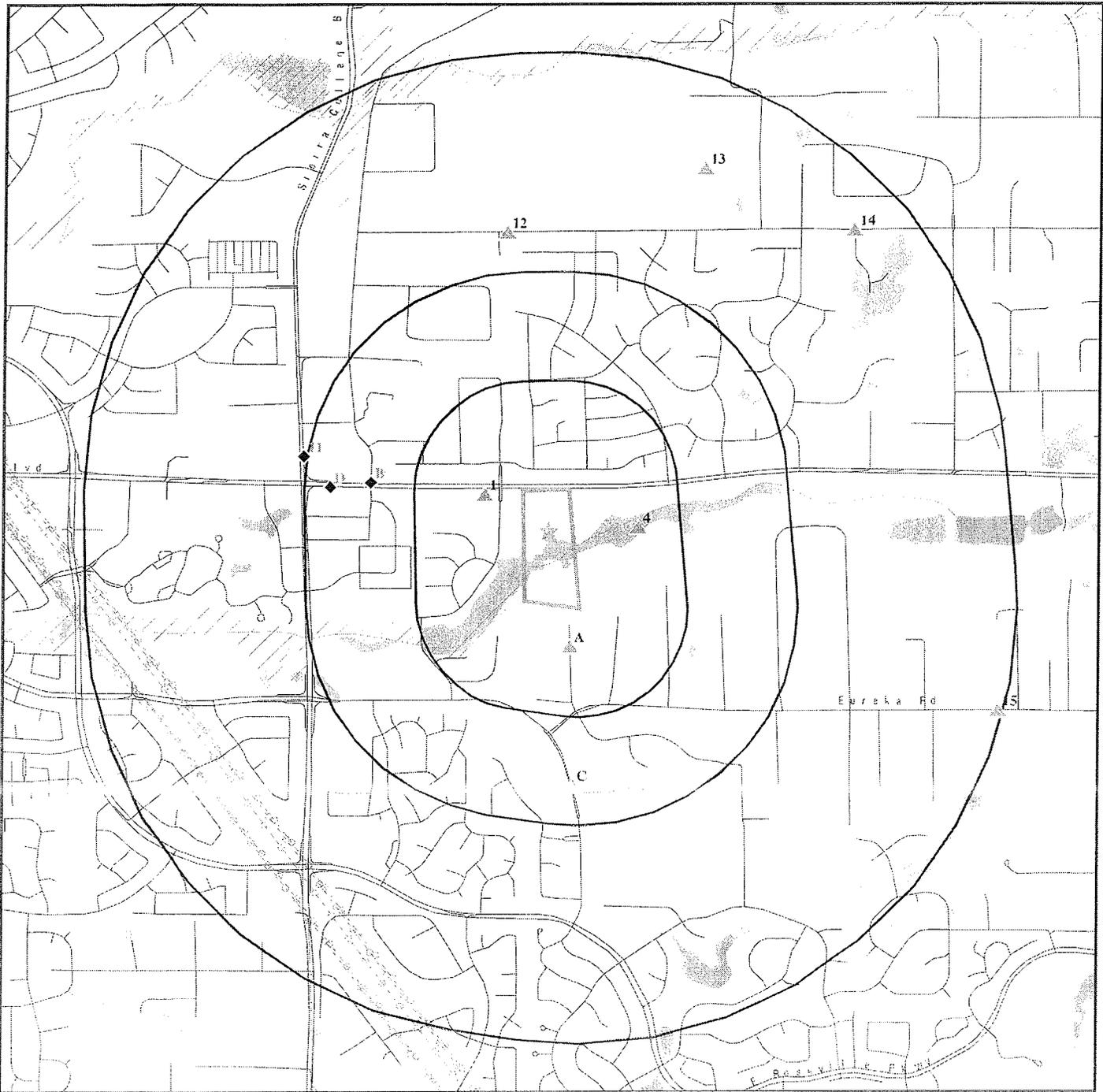
Site Name

Database(s)

MOTO PHOTO
FLAT IRON WEST INC

HAZNET
HAZNET

OVERVIEW MAP - 3997926.2s



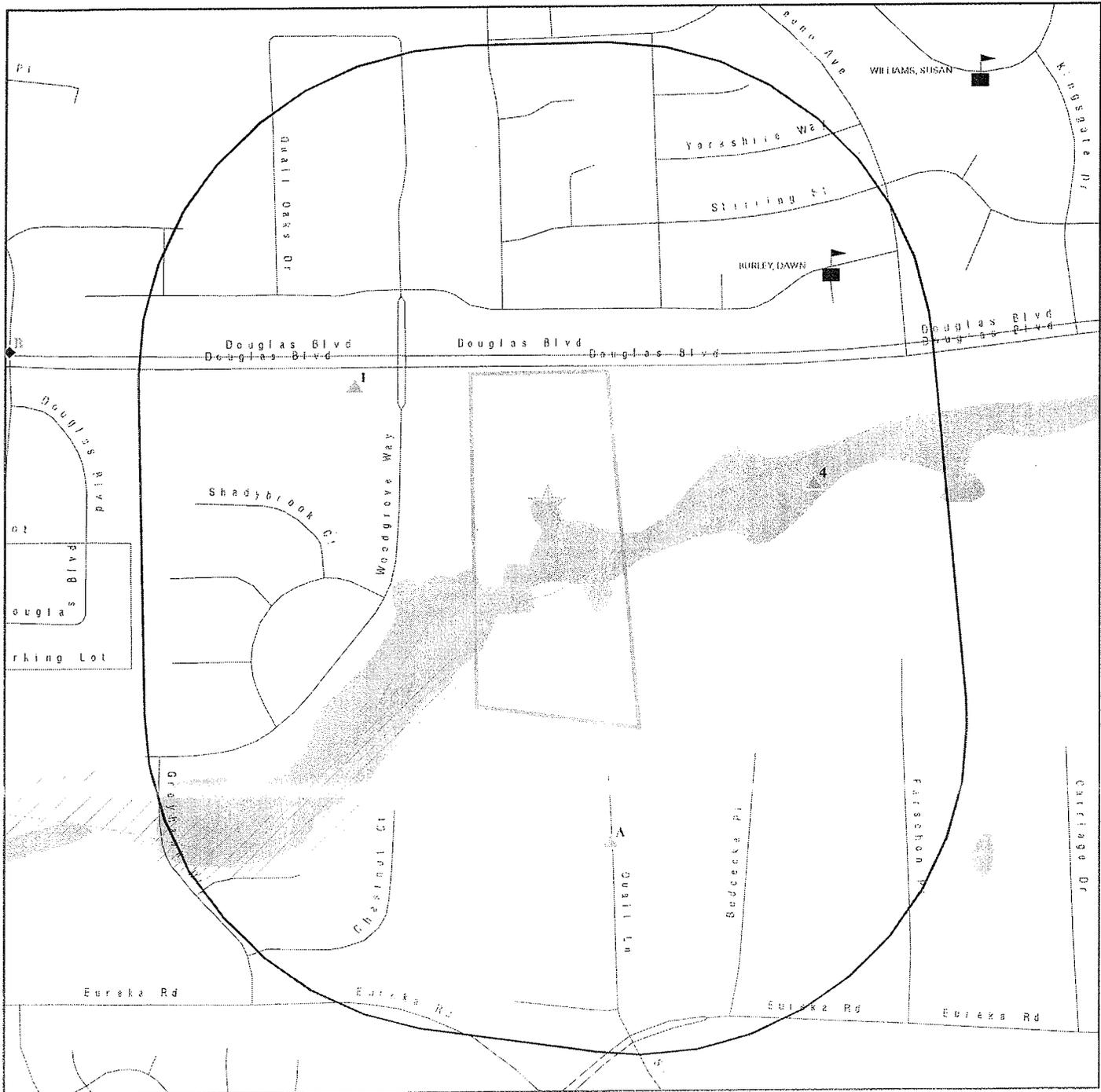
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Beaver Creek
 ADDRESS: Douglas Boulevard
 Granite Bay CA 95746
 LAT/LONG: 38.7422 / 121.2158

CLIENT: Wallace - Kuhl & Associates
 CONTACT: Nancy Malaret
 INQUIRY #: 3997926.2s
 DATE: July 08, 2014 4:19 pm

DETAIL MAP - 3997926.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p>SITE NAME: Beaver Creek ADDRESS: Douglas Boulevard Granite Bay CA 95746 LAT/LONG: 38.7422 / 121.2158</p>	<p>CLIENT: Wallace - Kuhl & Associates CONTACT: Nancy Malaret INQUIRY #: 3997926.2s DATE: July 08, 2014 4:21 pm</p>
--	--

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.250		0	0	NR	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		0	0	0	4	NR	4
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0
AST	TP		NR	NR	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	TP		NR	NR	NR	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		1	0	NR	NR	NR	1
SWEEPS UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		0	1	0	NR	NR	1
CA PLACER CO. MS	0.500		2	0	6	NR	NR	8
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	0.250		2	0	NR	NR	NR	2
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST	0.500		0	0	0	NR	NR	0
RGA LF	0.500		0	0	0	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

APPENDIX D

Preliminary Screen for Vapor Encroachment Conditions Matrix



Screen for Vapor Encroachment Conditions Matrix
BEAVER CREEK
WKA No. 10191.01

Phase I ESA Screen for Vapor Encroachment Conditions (VEC) matrix includes a (1) **Search Radius Test**, (2) **Chemicals of Concern Test (COC)**, and (3) a **Critical Distance Test**^[1].

(1) Search Radius Test: Are there any known or suspect contaminated sites in the primary area of concern within the corresponding search radii? (if yes, see attached Table A).

Yes **No**

If No, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If Yes, then:

(2) Chemicals of Concern^[2] **Test:** Are COC likely to be present within the area of concern for those known or suspect contaminated sites identified based on the Search Distance Test?

Yes **No**

If No, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If Yes, then:

If Yes, check all COC that apply on attached Table B.

(3) Critical Distance Test: A plume test to determine whether or not COC in the contaminated plume(s) may be within the critical distance.

(3a) Is information related to the contaminated(s) plume available (i.e. isoconcentration maps, site drawings, etc.)?

Yes **No**

(3b) If **No**, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If **Yes**, then:

(3c) Is the site less than 100 feet to the nearest edge of a contaminated [non-petroleum hydrocarbon] plume(s)?

Yes **No**

(3d) Is the site less than 30 feet to the nearest edge of a dissolved petroleum hydrocarbon plume(s)?

Yes **No**

If the distance from the nearest edge of a contaminated plume to the nearest existing or planned structure on the site is less than 100 feet for non-petroleum hydrocarbon COC, or less than 30 feet for dissolved petroleum hydrocarbons, then it is presumed that a VEC *currently* exists beneath the site. If the distance from the nearest edge of the contaminated plume is greater than or equal to 100 feet for non-petroleum hydrocarbons, or 30 feet for dissolved petroleum hydrocarbon chemicals of concern, then it is presumed unlikely that a VEC *currently* exists beneath the site.

(4) Is it likely that a VEC *currently* exists beneath the site?

Yes **No**

If Yes, then recommend performing a full scope VEC assessment according to ASTM E 2600-10.

[1] Based on guidance presented in the ASTM E 2600-10 Standard.

[2] Chemical(s) of concern (COC): See attached table for typical chemicals of concern (as presented in Appendix X6.1 of the ASTM E 2600-10 Standard).



Soil Sampling and Laboratory Analyses Report

BEAVER CREEK

Douglas Boulevard

Granite Bay, Placer County, California

WKA No. 10191.03

July 24, 2014

Prepared for:

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Meritage Homes

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Vacaville, California 95688

Prepared By:

Wallace-Kuhl & Associates

3050 Industrial Boulevard

West Sacramento, California 95691

WALLACE KUHL

Soil Sampling and Laboratory Analyses Report
BEAVER CREEK
Douglas Boulevard
Granite Bay, Placer County, California
WKA No. 10191.03

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APPENDIX

- A Laboratory Analytical Reports and Chain-of-Custody Documentation



Soil Sampling and Laboratory Analyses Report
BEAVER CREEK PROPERTY

Douglas Boulevard
Granite Bay, Placer County, California

WKA No. 10191.03

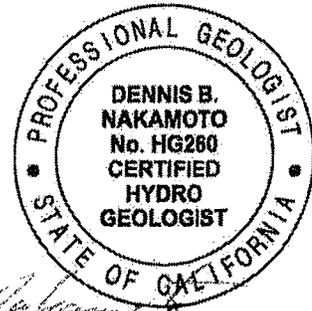
July 24, 2014

On behalf of Meritage Homes, Wallace-Kuhl & Associates (WKA) prepared this Soil Sampling and Laboratory Analyses Report for the Beaver Creek Property located along Douglas Boulevard in Granite Bay, Placer County, California. The report was prepared in a manner consistent with the level of care and skill ordinarily exercised by professional geologists and environmental scientists. This report was prepared under the supervision of a California Professional Geologist.

WALLACE-KUHL & ASSOCIATES



Nelson Pi, MS, EIT
Staff Engineer



Dennis B. Nakamoto, PG, CEG, CHG
Senior Hydrogeologist

Soil Sampling and Laboratory Analyses Report

BEAVER CREEK

Douglas Boulevard

Granite Bay, Placer County, California

WKA No. 10191.03

July 24, 2014

1.0 INTRODUCTION

Wallace Kuhl & Associates (WKA) has prepared this Surface Soil Sampling Report to describe activities performed to complete a Phase II Environmental Site Assessment (ESA) of the Beaver Creek Property (Site). The Site is located along Douglas Boulevard in Granite Bay, Placer County, California (Figure 1). The Site consists of 17.1 acres of undeveloped land having Placer County Assessor's Parcel Number (APN) 048-151-011. The purpose of this Phase II ESA was to evaluate dredge tailings and imported soil observed on-site during a previously completed geotechnical engineering investigation.

2.0 BACKGROUND

2.1 Site History

A 2005 Geocon Consultants, Inc. (Geocon) Phase I ESA report described the Site as undeveloped land covered with mature trees, shrubs, poison oak, and a heavy growth of annual grasses. The Geocon Phase I ESA described that the central portion of the Site was dredged for mining in the late 1800s or early 1900s. Geocon reported that historical aerial photographs indicated the Site has been undeveloped land since 1944.

Geocon also prepared a Geotechnical Engineering report, dated August 2005, for the Site. Geocon dug fourteen exploratory trenches to depths ranging between 12 and 19 feet below ground surface (bgs) at the locations shown in Figure 2. Geocon's exploratory trench logs show subsurface soil ranging from imported fill material, alluvium, dredge tailings, and decomposed to weathered Mesozoic dioritic rock of the Rocklin Pluton. Geocon described imported fill as loose to medium dense silty-clay that was exposed in trenches T4 and T6, which are located in the northeastern portion of the Site. No soil exposed in the remaining 12 trenches was described as imported fill material. Geocon reported observing dredge tailings to a depth 14 feet bgs in trenches T5 and T7, which are located in the central portion of the Site. Geocon also observed dredge tailings in trenches T12, T13, and T14, present to a depth of 13 feet bgs. A stockpile of imported fill was discovered near the center of the Site and occupies a 3,600 square foot area. Geocon noted that the stockpile is 10 to 12 feet above surrounding elevation.



2.2 Site Description

The Site is bounded by Douglas Boulevard to the north. Vacant land, residences, and Woodgrove Way bound the Site to the west. A residential development and vacant land fall along the eastern and southern boundaries of the Site. At the time of sampling, the Site was undeveloped and covered with thick vegetation. Strap Ravine transects the central portion of the Site from east to west.

3.0 OBJECTIVE

The purpose of soil sampling activities was to evaluate dredge tailings and locations identified to contain imported soil. WKA evaluated dredge tailing samples to determine if exceedances of the California Human Health Screening Levels for California Assessment Manual listed 17 (CAM 17) metals were present. WKA evaluated imported fill samples according to guidance for soil originating from agricultural land and from residential/acceptable commercial land described in the California Department of Toxic Substances Control (DTSC) *Information Advisory Clean Imported Fill Material*, dated October 2001.

4.0 FIELD ACTIVITIES

Prior to field activities, WKA marked the Site and contacted Underground Service Alert (USA) for a Dig Permit a minimum of 48 hours prior to collecting soil samples. WKA collected soil samples using hand-sampling equipment at each location shown in Figure 3. Soil samples S1-A, S1-B, and S2 were collected near Geocon's exploratory trenches T4 and T6. Samples S1-A and S1-B, collected near T6, were collected from the soil stockpile at depths in the intervals of two to three feet and five to six feet from the top of the stockpile. Sample S2 was collected at a depth between 0.5 and one-foot from a location near Geocon's exploratory trench T4.

Five samples (S3, S4, S6, S7, and S8) were collected in soils identified as dredge tailings. These samples were collected near exploratory trenches TP5, TP7, TP12, TP13, and TP14. The dredge tailing samples were collected in the interval of zero and 0.5 feet bgs. One additional background sample was collected (S5-BK) at a location outside of the imported fill material and dredge material at an interval between two and 2.5 feet bgs.

WKA collected each sample in four or eight-ounce glass jars with Teflon lined lids that were labeled to indicate a unique sample ID, time and date collected, sample location, and sampler's identification. WKA cleaned the sample collection equipment between each sample using a



solution of Alconox™ and distilled water followed by triple rinsing using distilled water. Samples were preserved on ice during transport to the laboratory with completed chain-of-custody forms.

5.0 LABORATORY ANALYSIS

The soil samples were sent to Excelchem Environmental Services (Excelchem), a California Department of Public Health certified laboratory (ELAP No. 2119), for analysis. Excelchem analyzed each imported fill sample discretely for the following constituents:

- *Total Petroleum Hydrocarbons (TPH)-as-diesel and TPH-as-motor oil* by modified EPA Method 8015;
- *TPH-as-gasoline* by EPA Method 8260B;
- *The five fuel oxygenates: methyl-tert butyl ether (MTBE), disopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), tert-amyl methyl ether (TAME), and tert-butanol (TBA)* by EPA Method 8260B;
- Volatile organic compounds (VOCs) by EPA Method 8260B;
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270C;
- Organochlorine pesticides (OCPs) by EPA Method 8081A
- Organophosphorus pesticides (OPPs) by EPA Method 8141A;
- Chlorinated herbicides by EPA Method 8151A;
- CAM 17 metals by EPA Method 6000/7000 series; and,
- Polychlorinated biphenyls (PCBs) by EPA Method 8082.

Excelchem analyzed each dredge material samples and the background sample discretely for CAM 17 metals by EPA Method 6000/7000 series. Complete laboratory reports can be found in Appendix A.

6.0 FINDINGS

A complete summary of laboratory results can be found in Tables 1 through 6. Table 1 shows detections of TPH-as-motor oil at concentrations exceeding its laboratory reporting limit. No concentration of the remaining fuel related contaminants (TPH-as-diesel, TPH-as-gasoline, MTBE, and BTEX) was present at a concentration exceeding its laboratory detection limits. The



concentrations of TPH-as-motor oil (10.8 and 11.1 milligrams per kilogram (mg/kg)) found in Site soil were compared to the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels (ESLs) for a residential land use because no other regulatory guidance exists for petroleum hydrocarbons. Both TPH-as-motor oil concentrations are less than its residential ESL of 100 mg/kg. This comparison indicates that the imported fill material poses no threat to human health or the environment based on the petroleum hydrocarbon related products analyzed.

Table 2 presents results for the CAM 17 metals analyses. The results show similar detections between the background sample, fill material, and dredge tailings. The detected values were compared to the residential CHHSL for each contaminant. Detections of arsenic in dredge tailing samples, S4 and S7, were 2.5 mg/kg and 1.9 mg/kg, respectively. Arsenic was detected at 1.3 mg/kg in the background sample (S5-BK). Each of the three results exceed arsenic's residential CHHSL of 0.07 mg/kg. However, this limit was established based on arsenic contribution from human sources. Arsenic is a naturally occurring contaminant that is often detected above the residential CHHSL. There is no indication that arsenic found at the Site originated from human sources. The California Department of Toxic Substances Control (DTSC) threshold for naturally occurring arsenic in soil at sensitive land use properties is 12 mg/kg. The detected levels of arsenic fall below 12 mg/kg. No other CAM 17 listed metal was present at a concentration exceeding its CHHSL, meaning the levels detected for all CAM 17 metals do not pose a risk to human health or the environment based on a residential land use. Laboratory findings show constituents analyzed in the suite of OCPs, OPPs, chlorinated herbicides, VOCs, SVOCs, and PCBs (Tables 3 through 6) to fall below laboratory detection limits. These results indicate that these constituents are not present or present at concentrations posing an unacceptable risk to human health or the environment.

7.0 CONCLUSIONS

WKA collected eight soil samples from areas identified to contain imported fill and dredged material. One additional background sample was also collected in an area absent of fill and dredged material. Each laboratory result for OCPs, OPPs, chlorinated herbicides, VOCs, SVOCs, and PCBs fell below its respective laboratory reporting limit. Concentrations of MTBE, BTEX, and TPH-as-gasoline and TPH-as-diesel were also at concentrations below laboratory their respective laboratory reporting limits.

WKA concludes that the finding of TPH-as-motor oil in soil at concentrations much less than 100 mg/kg indicates that levels of petroleum hydrocarbon and its related compounds present in soil do not pose a threat to human health under a residential exposure scenario. No concentration



of MTBE, BTEX, and TPH-as-gasoline and TPH-as-diesel was present in soil at a concentration exceeding its respective laboratory reporting limit.

Arsenic is a naturally occurring contaminant that is often detected above the residential CHHSL. There is no indication that arsenic found at the Site originated from human sources. The California Department of Toxic Substances Control (DTSC) threshold for naturally occurring arsenic in soil at sensitive land use properties is 12 mg/kg. The detected levels of arsenic fall below 12 mg/kg. No other CAM 17 listed metals was present at a concentration exceeding its CHHSL, meaning the levels detected for all CAM 17 metals do not pose a risk to human health or the environment based on a residential land use.

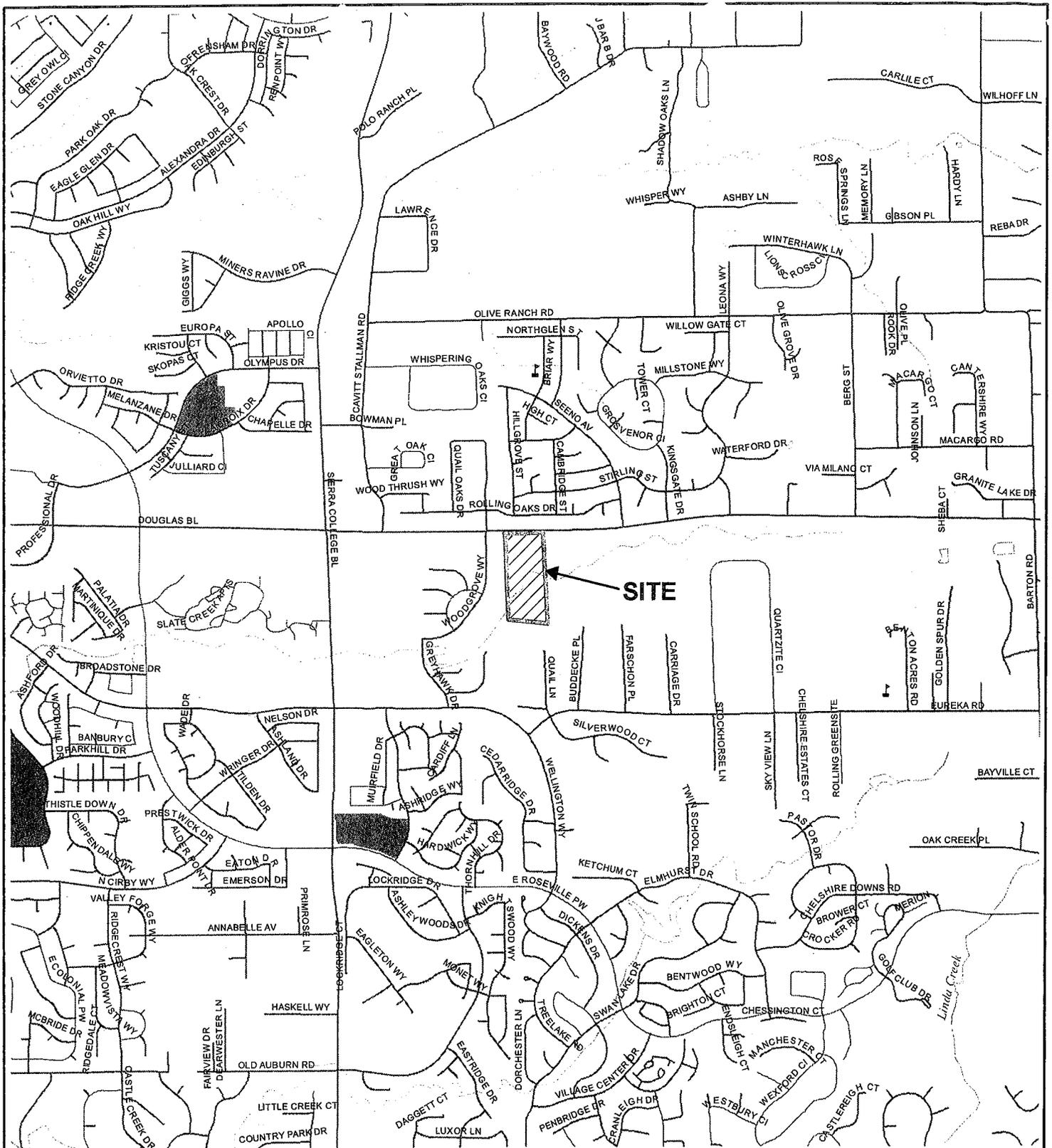
8.0 LIMITATIONS

The statements and results presented in this report are based upon the scope of work described above and on observations made on the dates of WKA's applicable fieldwork. The summary report was prepared in a manner consistent with the level of care and skill ordinarily exercised by Professional Geologists. Work was performed using a degree of skill consistent with that of competent environmental consulting firms performing similar work in the area. No recommendation is made as to the suitability of the property for any purpose. The result of the investigation does not preclude the possibility that materials currently, or in the future, defined as hazardous are present on the site. This report is applicable only to the investigated site and should not be used for any other site. No warranty is expressed or implied.



FIGURES





Street data courtesy of Placer County.
 Hydrography courtesy of the U.S. Geological Survey
 acquired from the GIS Data Depot, December, 2007.
 Projection: NAD 83, California State Plane, Zone II



VICINITY MAP
BEAVER CREEK PROPERTY
 Granite Bay, California

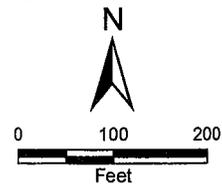
FIGURE 1	
DRAWN BY	TJC
CHECKED BY	MAT
PROJECT MGR	MAT
DATE	7/14
WKA NO. 10191.03	



Adapted from a Google Earth aerial photograph,
 dated August 14, 2013.
 Projection: NAD 83, California State Plane, Zone II

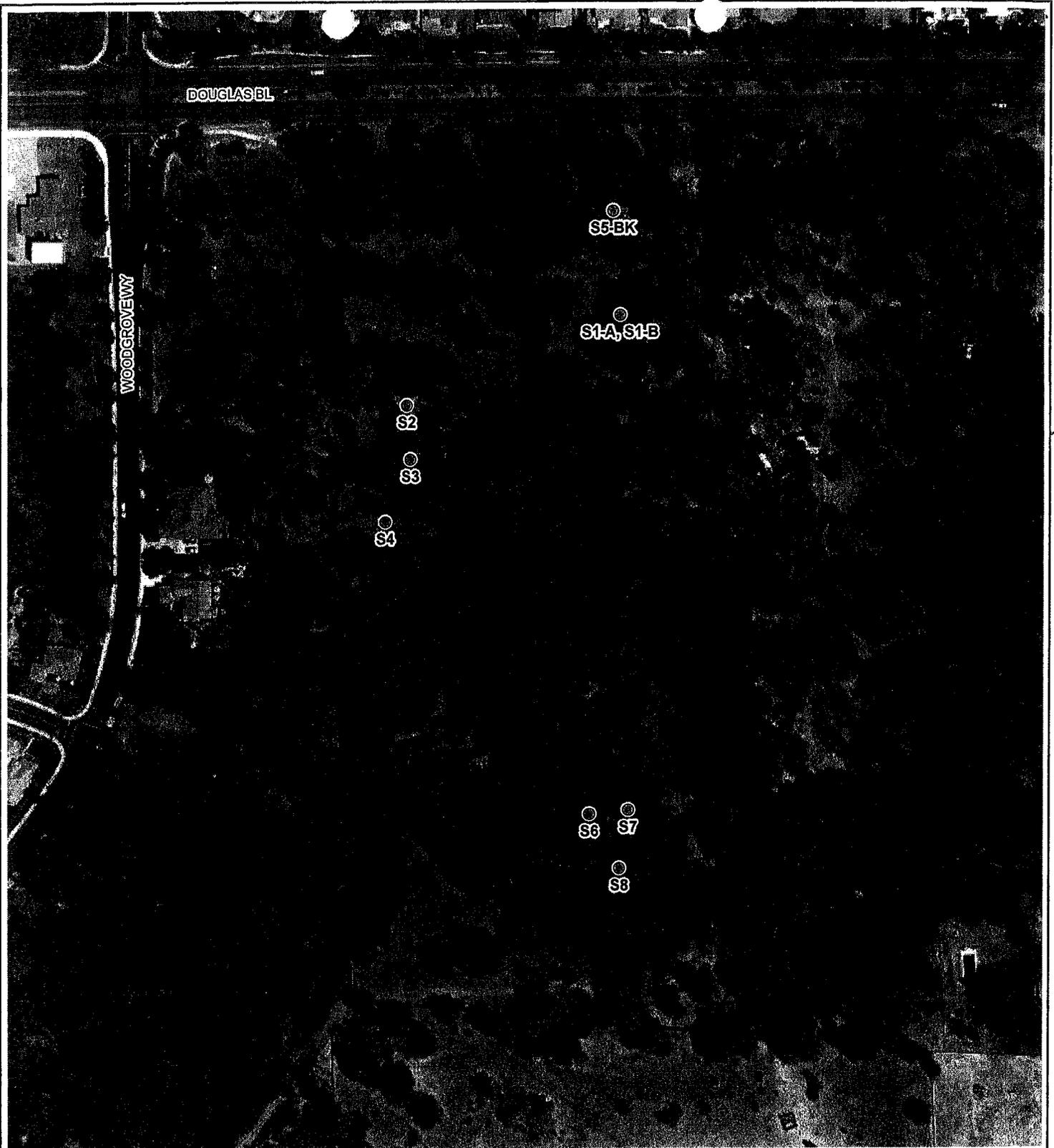
Legend

-  Site boundary
-  Approximate GEOCON trench location



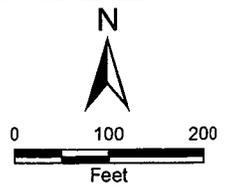
AERIAL SITE MAP
BEAVER CREEK
 Granite Bay, California

FIGURE 2	
DRAWN BY	TJC
CHECKED BY	MAT
PROJECT MGR	MAT
DATE	7/14
WKA NO. 10191.03	



Adapted from a Google Earth aerial photograph,
 dated August 14, 2013.
 Projection: NAD 83, California State Plane, Zone II

Legend
 [] Site boundary
 ○ Soil sample location



SAMPLE LOCATION MAP
BEAVER CREEK
 Granite Bay, California

FIGURE 3	
DRAWN BY	TJC
CHECKED BY	MAT
PROJECT MGR	MAT
DATE	7/14
WKA NO. 10191.03	

TABLES



Table 1
 Summary of Soil Analytical Results for Petroleum Hydrocarbon Products
BEAVER CREEK PROPERTY
 WKA No. 10191.03

Sample ID	Location	EPA 8015M		EPA 8260B							
		TPH as Motor Oil	TPH as Diesel	TPH as Gasoline*	MTBE	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Xylenes, Total
		Concentrations reported in milligrams per kilogram (mg/kg) unless otherwise noted									
S1-A	Fill Material	11.1	<1.00	<1.00	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010
S1-B	Fill Material	10.8	<1.00	<1.00	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010
S2	Fill Material	<10.0	<1.00	<1.00	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010
ESL	Residential	100	100	100	0.023	0.044	2.9	3.3	-	-	2.3

Notes:
 ESL - Environmental Screening Level (San Francisco Bay Regional Water Quality Control Board)
 MTBE - Methyl-t-butyl ether
 *Gasoline Range Hydrocarbons in Lab Report

Table 2
 Summary of Soil Analytical Results for CAM 17 Metals
BEAVER CREEK PROPERTY
 WKA No. 10191.03

Sample ID	Location	EPA 6010B/7471A											
		Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium
Concentrations reported in milligrams per kilogram (mg/kg)													
S1-A	Fill Material	<1.0	<1.0	37	<0.5	<1.0	14.1	<5.0	7.2	4.6	<1.0	7.4	<1.0
S1-B	Fill Material	<1.0	<1.0	65.6	<0.5	<1.0	18.1	6.7	7.5	3	<1.0	10.1	<1.0
S2	Fill Material	<1.0	<1.0	22.1	<0.5	<1.0	6.7	<5.0	2.8	1.4	<1.0	2.9	<1.0
S3	Dredge Tailing	<1.0	<1.0	3.2	37.3	<1.0	22.7	<5.0	9.9	6.9	<1.0	6.7	<1.0
S4	Dredge Tailing	<1.0	2.5	99	0.5	<1.0	16.5	5.5	10.2	34.9	<1.0	9.4	<1.0
S6	Dredge Tailing	1.8	<1.0	25.9	<0.5	<1.0	9.2	<5.0	3.3	4.6	<1.0	3	<1.0
S7	Dredge Tailing	1.3	1.9	83.7	0.6	<1.0	30.7	<5.0	8.4	11.8	<1.0	10.6	<1.0
S8	Dredge Tailing	<1.0	<1.0	28.7	<0.5	<1.0	9.6	<5.0	5	2.1	<1.0	4.8	<1.0
S5-BK	Background	<1.0	1.3	65.5	0.5	<1.0	25	7.1	9	2.6	<1.0	12.8	<1.0
CHHSL	Residential	30	0.07*	5200	16	1.7	100000	660	3000	80	380	1600	380

Sample ID	Location	EPA 6010B/7471A			
		Thallium	Vanadium	Zinc	Mercury
Concentrations reported in milligrams per kilogram (mg/kg)					
S1-A	Fill Material	<2.0	17.3	15.1	0.054
S1-B	Fill Material	<2.0	23	17.8	0.022
S2	Fill Material	<2.0	9.1	5.9	0.043
S3	Dredge Tailing	<2.0	35.5	16.7	0.085
S4	Dredge Tailing	<2.0	26.6	34.7	0.041
S6	Dredge Tailing	<2.0	10	9.3	0.024
S7	Dredge Tailing	<2.0	24.4	24.7	0.057
S8	Dredge Tailing	<2.0	13.6	12.1	0.068
S5-BK	Background	<2.0	34.1	26.4	<0.010
CHHSL	Residential	5	530	23000	18

Notes:
 CHHSL - California Human Health Screening Levels
 *The 0.07 mg/kg concentration is based on level for arsenic from human activity. Naturally occurring arsenic may be above this
 DTSC Schools Division is currently employing an arsenic concentration of 12 mg/kg as a screening level risk management threshold

Table 4
 Summary of Soil Analytical Results for Organophosphorus Pesticides
BEAVER CREEK PROPERTY
 WKA No. 10191.03

Sample ID	Location	EPA Method 8141A																	
		Dimethoate	Diazinon	Disulfoton	Parathion-methyl	Ronnel	Malathion	Dursban (Chlorpyrifos)	Fenthion	Parathion	Trichloronate	Gardona (Strophos)	Tokuthion (Prothios)	Merphos	Fensulfothion	Bolstar	EPN	Azinphos-methyl	Cumaphos
Concentrations reported in micrograms per kilogram (ug/kg)																			
S1-A	Fill Material	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
S1-B	Fill Material	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
S2	Fill Material	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200

Notes:
 < less than laboratory reporting limit(s)
Bold detected concentration

Table 6
 Summary of Soil Analytical Results for VOCs, SVOCs, and PCBs
 BEAVER CREEK PROPERTY
 WKA No. 10191.03

Sample ID	Location	EPA Method 8270C		EPA 8082	
		Dichlorodifluoromethane	Remaining VOCs	SVOCs	Aroclor 1016 Aroclor 1260
Concentrations reported in milligrams per kilogram (mg/kg)					
S1-A	Fill Material	<0.005	All Additional VOCs are Less Than Their Respective Method Reporting Limits	All SVOCs are Less Than Their Respective Method Reporting Limits	All PCBs are Less Than Their Respective Method Reporting Limits
S1-B	Fill Material	<0.005			
S2	Fill Material	0.005			

Notes:
 bgs below ground surface
 < less than laboratory reporting limit(s)
Bold detected concentration

APPENDIX A

**Laboratory Analytical Reports
and
Chain-of-Custody Documentation**

