ENGINEERING GEOLOGY INVESTIGATION

September 30, 2019
SL11365-1

Client:
R & R Construction
Attn: C.J. Rudolph
1428 9th Street
Santa Monica,
California 90401

Project name:
Heritage Ranch RV Storage
Heritage Road
APN: 012-191-073
Paso Robles,
California

Dear Mr. Rudolph:

1.0 INTRODUCTION

This report presents the results of the geologic investigation for the proposed RV and boat storage development to be located at the end of Heritage Road within Heritage Ranch, APN: 012-191-073, in the Lake Nacimiento area of San Luis Obispo County, California. See Figure 1: Area Location Map for the general location of the project area, which was obtained from the computer program *TopoView*.

Figure 1: Area Location Map

1.1 Site Description

Heritage Ranch RV Storage is located at 35.7350 degrees north latitude and 120.8979 degrees west longitude at a general elevation of 850 feet above mean sea level. The property is approximately irregular. The nearest intersection is where Heritage Road intersects Heritage Loop Road approximately 400 feet to the southeast of the property. The project property will hereafter be referred to as the "Site." See Figure 2: Site Plan for the general layout of the Site.

The Site is approximately level with a slight gradient which slopes to southwest. Surface drainage follows the topography to the southwest and flows to Heritage Road. Annual grasses and oak trees currently vegetate the Site.

1.2 Project Description

The proposed RV and boat storage are to be located northeast of the end of Heritage Road. Development is to consist of an office building and covered storage buildings with associated roadways and landscapes. The structures are anticipated to be one or two stories in height.

At the time of the preparation of this report, the proposed office and storage buildings are to be constructed using light wood framing. The proposed development is to be on a cut pad. Retaining walls are proposed along the hillsides.

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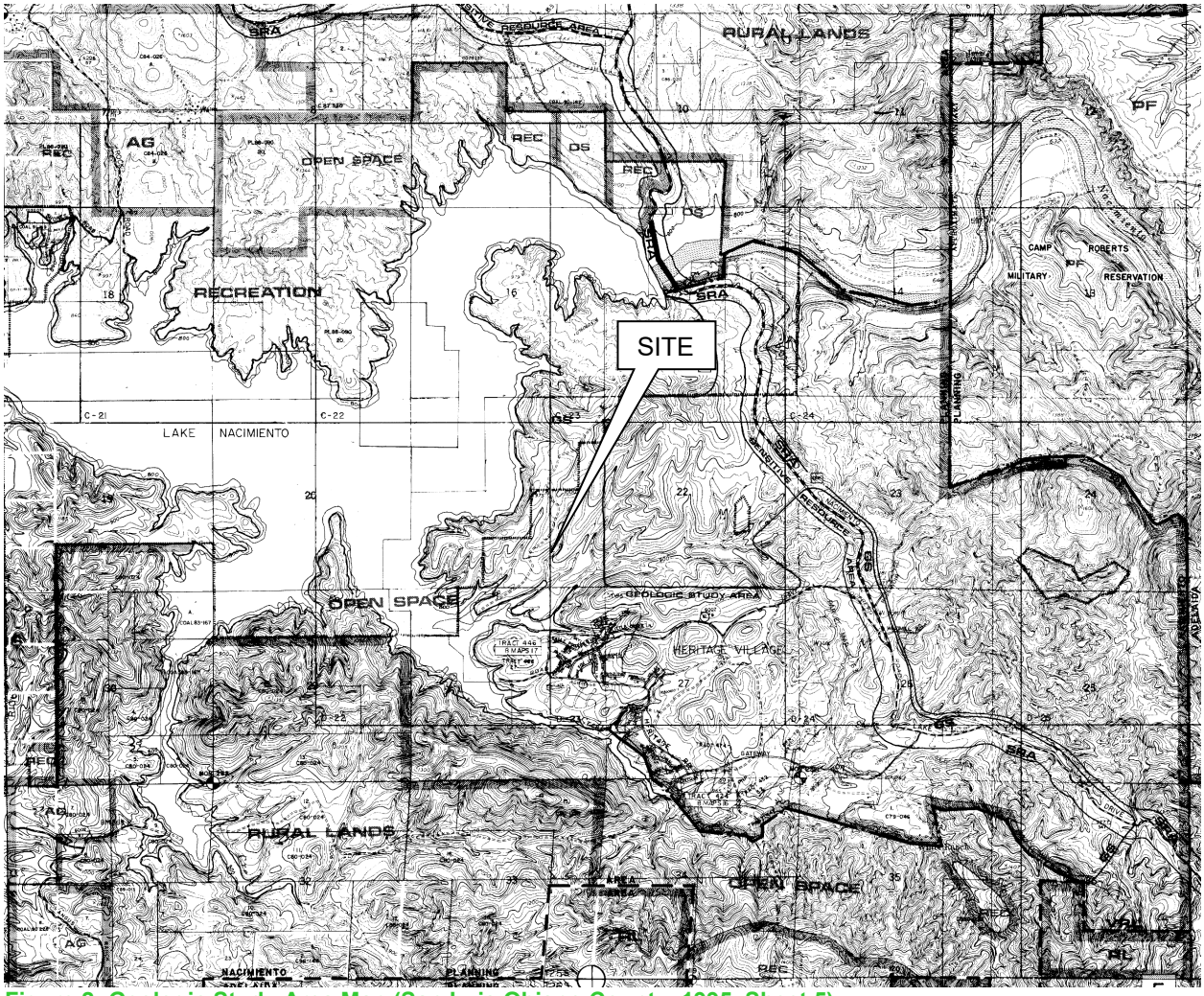

Figure 2: Geologic Study Area Map (San Luis Obispo County, 1995, Sheet 5)

2.0 PURPOSE AND SCOPE

The purpose of this investigation was to evaluate engineering geologic hazards at the Site and to develop conclusions and recommendations regarding site development. The scope of this investigation consisted of:

1. Review of historical aerial photographs, pertinent published and unpublished geotechnical studies and literature, and geologic maps for the subject project area.

2. A field study consisting of site reconnaissance and subsurface exploration including exploratory trenches in order to formulate a description of the sub-surface conditions at the Site.

3. A review of regional faulting and seismicity hazards.

4. A review of landslide potential, surface and groundwater conditions, and liquefaction hazards.

5. Development of recommendations for site preparation.

6. Preparation of this report that summarizes our findings, conclusions, and recommendations regarding engineering geology aspects of the project.

3.0 GEOLOGIC RECOMMENDATIONS

The proposed development is geologically suitable provided that the recommendations provided herein are implemented. The following are recommended for implementation at the Site.

1. It is recommended that numerical slope stability analyses be conducted on fill slopes constructed steeper than 2-to-1 (horizontal to vertical). Locally steeper slopes may be allowed depending on the results of a slope stability analysis.

2. It is recommended that numerical slope stability analyses be conducted on cut slopes constructed steeper than 1.5-to-1 (horizontal to vertical). It is recommended that erosion control measures and revegetation of cut slopes be implemented immediately after the completion of grading.

3. Isolated seepage within formational units should be anticipated. Surface drainage facilities (graded swales, gutters, positive grades, etc.) are recommended at the base of cut slopes that allow surfacing water to be transferred away from the base of the slope. The project designer is recommended to offer specific design criteria for mitigation of water drainage behind walls and other areas of the site. This is especially imperative upslope of retaining walls for residences. Subsurface drainage systems should not be connected into conduit from surface drains and should not connect to downspout drainage pipes.

4. Surface drainage should be controlled to prevent concentrated water-flow discharge onto either natural or constructed slopes. Surface drainage gradients should be planned to prevent ponding and promote drainage of surface water away from building foundations, edges of pavements and sidewalks or natural or man-made slopes. For soil areas we recommend that a minimum of two (2) percent gradient be maintained.

5. Excavation, fill, and construction activities should be in accordance with appropriate codes and ordinances of the County of San Luis Obispo. In addition, unusual subsurface conditions encountered during grading such as springs or fill material should be brought to the attention of the Engineering Geologist and Soils Engineer.

6. Rock rip-rap is recommended for concentrated drainage outfall locations that do not discharge onto paved or exposed rock surfaces. It is recommended that geotextile fabric (Enkamat 7010 or similar) be placed underneath the rip-rap and installed per the manufacturer's recommendations.

7. Gutters are recommended to be installed along all sloped rooflines. Gutter downspouts should not allow concentrated drainage to discharge near the residence foundations but rather should convey the water in solid piping away from the residence and toward drainage facilities.

4.0 ENGINEERING GEOLOGY

4.1 Regional Geology

The Site is located in the vicinity of the San Luis Range of the Coast Range Geomorphic Province of California. The Coast Ranges lie between the Pacific Ocean and the Sacramento-San Joaquin Valley and trend northwesterly along the California Coast for approximately 600 miles between Santa Maria and the Oregon border.

The Site lies within a geologic terrain unit known as the Salinian block (Burch and Durham, 1970). The block is characterized by a basement of Cretaceous age (145 to 65 million years before present) Granitic rock. The block is bounded by the San Andreas Fault to the northeast and the Nacimiento Fault to the southwest.

4.2 Local Geology

Locally, the site is located within Atascadero Formation as depicted on Plate 1, Site Engineering Geology Map. Burch and Durham, 1970 mapped the Site as underlain by Cretaceous and Tertiary age Unnamed Formation (Tku) and Dibblee, 2007 mapped the Site as underlain by Holocene age Alluvial Deposits (Qa) and Cretaceous age Atascadero Formation (Kas) units. Alluvial Deposits underlain by Atascadero Formation sandstone was encountered in trenches and during surface mapping of the Site. Artificial fill was observed in a localized area. It is assumed foundations will be founded within competent Atascadero Formation (or fill derived from Older Alluvial Deposits/Atascadero Formation). Information derived from subsurface exploration was used to classify subsurface soil and formational units and to supplement geologic mapping.

4.2.1 Fill

A localized area of fill was observed in the middle of the proposed development. It is assumed the fill is a previous stockpile of material and was not compacted. The fill was encountered in trench T-2 to a depth of 2 feet. The fill consisted of very light brown silty SAND with concrete and jute netting. It is assumed the fill will be removed or reprocessed as engineered fill.

4.2.2 Alluvial Deposits

Dibblee, 2007 map the southern portion of the Site as within Alluvial Deposits (Qa). Dibblee, 2007 describes the Alluvial Deposits as “Alluvial sand and gravel of major stream channels.” The Alluvial Deposits was mapped throughout the site and was encountered within the exploratory trenches. Six trenches were excavated to determine the depth to formational units and determine the quality of the formational material. The Alluvial Deposits at the site was observed to consist of very light brown silty SAND (SM) encountered in a slightly moist to dry condition to a depth of 3 feet below ground surface. Plate 1 depicts Alluvial Deposits (Qoa) throughout the proposed building area. Trench logs are presented in Appendix A.

4.2.3 Atascadero Formation

Dibblee, 2006 map the Site as within Atascadero Formation (Kas). Dibblee, 2007 describes the Atascadero Formation as “Sandstone, light gray to light brown, thick-bedded, coherent, arkosic, micaceous, includes lenses of cobble conglomerate of meta andesitic volcanic and plutonic rocks and thin lenses of micaceous claystone.” The Atascadero Formation was mapped in the hillsides and was encountered within the exploratory trenches. Six trenches were excavated to determine the depth to formational units and determine the quality of the formational material. The Atascadero Formation at the site was observed to consist of brown sandstone encountered in a massive, moderately weathered, moderately fractured and slightly moist condition. Plate 1 depicts Atascadero Formation units (Kas) in the hillsides surrounding the proposed development. Trench logs are presented in Appendix A.

4.3 Surface and Ground Water Conditions

Surface drainage follows the topography west toward existing drainage courses, which then flows toward Heritage Road. Surface drainage should be directed away from proposed structures and slopes. No springs or seeps were observed at the project. Groundwater was not observed within the trenches. Drainage gullies are located within the western portion of the site.

4.4 Active Faulting and Coseismic Deformation

The Alquist-Priolo Earthquake Fault Zoning Act passed in 1972 requires that the State Geologist establish Earthquake Fault Zones around the surface traces of active faults and to issue appropriate maps. The subject site is not located within an Earthquake Fault Zone (Jennings, 2010).

Many faults are mapped throughout the San Luis Range of varying types, lengths, and age. An active fault is one that shows evidence of displacement within the last 11,000 years (Recent epoch). A fault which displaces deposits of late Pleistocene age (500,000 to 11,000 years) but with no evidence of Recent movement is termed potentially active. Inactive fault is one that displace rocks of early Pleistocene or older (500,000 years or older).

Table 1: Distance and Moment Magnitude of Closest Faults

Closest Active Faults to Site	Approximate Distance (miles)	Moment Magnitude (Mw)
Hosgri/San Simeon Fault	18.0	7.3
San Andreas Fault	27.0	6.9
Los Osos Fault	33.0	6.8

The closest known active portion of a Holocene age fault is an active portion of the San Simeon Fault Zone that is located approximately 18 miles southwest of the Site (Jennings, 2010). Plate 3 is a Regional Fault Map for the area. The San Andreas fault is the most likely active fault to produce ground shaking at the Site although it is not expected to generate the highest ground accelerations because of its distance from the Site.

4.4.1 Rinconada Fault Zone

Dibblee, 1976 states that the nearly vertical dipping Rinconada fault in the vicinity of the subject Site is termed the San Marcos segment of the Rinconada Fault. This San Marcos segment extends from Paso Robles to the San Antonio Reservoir for a distance of 23 kilometers (15 miles), and is continuous north-westward into that generally known as the Espinosa fault (Dibblee, 1976, p.23). Movement on San Marcos segment is predominantly right lateral strike-slip with local or apparent relative vertical displacement. The San Luis Obispo County Safety Element states “The Rinconada fault is inferred to be part of a zone of including the Jolon, San Marcos, Espinosa, and Reliz faults that extends from Monterey Bay southward to its juncture with the Nacimiento fault (Hart 1976; 1986)” (San Luis Obispo County, 1999).

The San Luis Obispo Safety Element (San Luis Obispo County, 1999) describes the Rinconada Fault as “Based on Hart (1985), CDMG (1996), has assigned a long-term slip rate of 3 mm/yr to the fault. Hart (1985) indicates that evidence of late Quaternary displacement of the fault is indirect but fairly strong based on a preponderance of well-defined, large-scale geomorphic features. Hart further states that the lack of geomorphic features in young alluvium, normally associated with strikeslope faults, suggests the fault has been inactive during the Holocene time. Nonetheless, CDMG considers the Rinconada fault to be potentially active.”

The Rinconada fault or a splay of the Rinconada fault (San Marcos segment) has been mapped as trending approximately 2.0 miles northeast of the Site (Jennings, 2010). Burch and Durham, 1970 mapped the San Marcos fault (San Marcos segment of Rinconada fault) approximately 5.0 miles northeast of the site. Dibblee, 2007 depicts a splay of the Rinconada fault as approximately 2.0-mile northeast of the site.

4.5 Landslides

Burch and Durham, 1970 and Dibblee, 2007 did not map landslides in the vicinity of the property. During site mapping and review of aerial photography, landslides were not observed at the Site. There appears to be a low potential for landslide to affect the proposed development. If proposed development is located in the immediate vicinity of steep existing slopes (i.e. eastern portion of the site), deepened footings may be required to achieve the required distance to daylight for descending slopes. Plate 4 presents an aerial photograph. There is a low rockfall potential to affect the proposed development based on the lack of boulders upslope of the proposed development.

4.6 Flooding and Severe Erosion

The site is not located within or near the 100-year or 500-year flood zone based on Federal Emergency Management Agency flood zone maps (FEMA, 2012).

The surficial and formational deposits are subject to erosion where not covered with vegetation or hardscape. The potential for severe erosion is considered low provided that vegetation and erosion control measures are implemented immediately after the completion of grading.

4.7 On-site Septic Systems

No septic system is proposed. The project will utilize a community sewer system.

4.8 Hydrocollapse of Alluvial Fan Soils

The potential for hydro collapse of subsurface materials is considered low due to the absence of alluvial fan material at the Site. It is assumed foundations will be founded in competent Atascadero Formation units.

5.0 SISMOLOGY AND CALCULATION OF EARTHQUAKE GROUND MOTION

5.1 Seismic Hazard Analysis and Structural Building Design Parameters

Estimating the design ground motions at the Site depends on many factors including the distance from the Site to known active faults; the expected magnitude and rate of recurrence of seismic events produced on such faults; the source-to-site ground motion attenuation characteristics; and the Site soil profile characteristics. According to section 1613 of the 2016 CBC (CBSC, 2016), all structures and portions of structures should be designed to resist the effects of seismic loadings caused by earthquake ground motions in accordance with the ASCE 7: Minimum Design Loads for Buildings and Other Structures, hereafter referred to as ASCE7-10 (ASCE, 2013). The Site soil profile classification (Site Class) can be determined by the average soil properties in the upper 100 feet of the Site profile and the criteria provided in Table 20.3-1 of ASCE7-10.

Spectral response accelerations, peak ground accelerations, and site coefficients provided in this report were obtained using the computer-based Seismic Design Maps tool available from the Structural Engineers Association of California (SEAOC, 2018). This program utilizes the methods developed in ASCE 7-10 in conjunction with user-inputted Site location to calculate seismic design parameters and response spectra (both for period and displacement) for soil profile Site Classes A through E.

Site coordinates of **35.7350** degrees north latitude and **-120.8979** degrees east longitude were used in the web-based probabilistic seismic hazard analysis (SEAOC, 2018). Based on the results from the in-situ tests performed during the field investigation, the Site was defined as **Site Class C**, “Very Dense Soil and Soft Rock” profile per ASCE7-10, Chapter 20. Relevant seismic design parameters obtained from the program area summarized in Table 2: Seismic Design Parameters.

Table 2: Seismic Design Parameters

Site Class	**C**, "Very Dense Soil and Soft Rock"
Seismic Design Category	**D**
1-Second Period Design Spectral Response Acceleration, S_{D1}	**0.416g**
Short-Period Design Spectral Response Acceleration, S_{DS}	**0.866g**
Site Specific MCE Peak Ground Acceleration, PGA_M	**0.495g**

6.0 LIQUEFACTION

The County of San Luis Obispo Safety Element maps the property within a low liquefaction potential (San Luis Obispo County, 1999). The liquefaction potential at the property is considered low based upon the assumed deep depth to groundwater and shallow depth to Atascadero Formation.

7.0 TSUNAMIS AND SEICHES

Tsunamis and seiches are two types of water waves that are generated by earthquake events. Tsunamis are broad-wavelength ocean waves and seiches are standing waves within confined bodies of water, typically reservoirs. As the property is at an elevation over 850 feet and distance to the Pacific Ocean, the potential for a tsunami to affect the Site is low.

Flooding associated with a seismic event (seiche) is considered low due to the absence of a body of water upslope of the property.

8.0 HAZARDS FROM GEOLOGIC MATERIALS

8.1 Expansive Soils

The potential for expansive soil at the Site is low based on laboratory testing in the concurrent Soils Engineering Report, expansion index of 0.

8.2 Naturally Occurring Asbestos

Naturally occurring asbestos is associated with serpentinite rock units within the Franciscan Complex. Serpentinite was not observed within the trenches. There is a low potential for natural occurring asbestos to be present at the property due to the absence of Franciscan Complex units.

8.3 Radon and Other Hazardous Gases

The potential for radon or other hazardous gases is low due to the absence of Monterey Formation formational units and other identified radon producing formations.

9.0 GRADING OPERATIONS, CUT AND FULL, SUBDRAINS

Based on the depth of Atascadero Formation units encountered at the site, it is anticipated that the foundations will be excavated into competent formational. Conventional grading equipment may be used for excavations. The Soils Engineering Report provides additional foundation and construction recommendations. Based on the field investigation, subdrains are not anticipated at this time, however this may be reevaluated at the time of construction.

Construction inspections and testing during all grading and excavating operations should be performed by the project Soils Engineer/Engineering Geologist. Section 1705.6A of the 2016 CBC (CBSC, 2016) requires the following inspections by the Soils Engineer/Engineering Geologist as shown in Table 3: Required Verification and Inspections of Soils:

Table 3: Required Verification and Inspections of Soils

Verification and Inspection Task	Continuous During Task Listed	Periodically During Task Listed
1. Verify materials below footings are adequate to achieve the design bearing capacity.	-	X
2. Verify excavations are extended to proper depth and have reached proper material.	-	X
3. Perform classification and testing of controlled fill materials.	-	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill.	X	-
5. Prior to placement of controlled fill, observe sub-grade and verify that site has been prepared properly.	-	X

10.0 ADDITIONAL SERVICES

The recommendations contained in this report are based on exploratory trenches and on the continuity of the sub-surface conditions encountered. It is assumed that GeoSolutions, Inc. will be retained to perform the following services:

1. Consultation during plan development.

2. A preliminary plan review regarding the locations of proposed improvements and development once grading and drainage plans are available.

3. Final plan review of final grading and drainage documents prior to construction.

4. Additionally, construction observation by the Engineering Geologist and/or Soils Engineer may be necessary to verify sub-surface conditions during excavation activities.

5. Final grading report and as-built map in accordance with County Guidelines for Engineering Geology Reports, Item 29 (San Luis Obispo County Department of Planning and Building, 2016).

11.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed during our study. Should any variations or undesirable conditions be encountered during the development of the Site, GeoSolutions, Inc. should be notified immediately and GeoSolutions, Inc. will provide supplemental recommendations as dictated by the field conditions.

This report is issued with the understanding that it is the responsibility of the owner or his/her representative to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project, and incorporated into the project plans and specifications. The owner or his/her representative is responsible to ensure that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they are due to natural processes or to

the works of man on this or adjacent properties. Therefore, this report should not be relied upon after a period of 3 years without our review nor should it be used or is it applicable for any properties other than those studied. However, many events such as floods, earthquakes, grading of the adjacent properties and building and municipal code changes could render sections of this report invalid in less than 3 years.

Thank you for the opportunity to have been of service in preparing this report. If you have any questions or require additional assistance, please feel free to contact the undersigned at (805) 543-8539.

Sincerely,
GeoSolutions, Inc.

Jeffrey Pfost, CEG 2493
Principal Engineering Geologist

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REFERENCES

American Society of Civil Engineers (ASCE). *Minimum Design Loads for Buildings and Other Structures,* ASCE Standard 7-10, ASCE, Reston, VA, 2013.

Burch, S.H., and Durham, D.L., 1970, Complete Bouguer gravity and general geology of the Bradley, San Miguel, Adelaida, and Paso Robles Quadrangles, California: U.S. Geological Survey, Professional Paper 646-B, scale 1:62,500.

California Building Standards Commission (CBSC). (2016). 2016 California Building Code, California Code of Regulations, Title 24. Part 2, Vol. 2.

Dibblee, T.W., and Minch, J.A., 2007, *Geologic Map of the Lime Mountain Quadrangle,* San Luis Obispo County, California. Dibblee Geologic Foundation. Dibblee Foundation Map DF-285. Scale 1:24,000.

Federal Emergency Management Agency (FEMA), 2012, *Flood Insurance Rate Map*, San Luis Obispo County, California, Community-Panel Number 06079C0350G, dated November 16, 2012.

Jennings, C.W., 2010, *Fault Activity Map of California,* California Geologic Survey, Data Map No. 6, Scale 1:750,000.

San Luis Obispo County, Department of Planning and Building, 1995, *Land Use Element Map*, Sheet 5, dated May 25, 1995.

San Luis Obispo County, Department of Planning and Building, 1999, *Safety Element*, San Luis Obispo County General Plan, dated December, 1999.

San Luis Obispo County, Department of Planning and Building, 2013, *County Guidelines for Engineering Geology Reports*, updated October, 2013.

Structural Engineers Association of California (SEAOC), *Seismic Design Maps*, accessed September 9, 2019. <https://seismicmaps.org/>.

United States Geological Survey. *MapView – Geologic Maps of the Nation*. Internet Application. USGS, accessed September 9, 2019. <http://ngmdb.usgs.gov/maps/MapView/>.

United States Geological Survey. *TopoView*. Internet Application. USGS, accessed September 9, 2019. <http://ngmdb.usgs.gov/TopoView/>

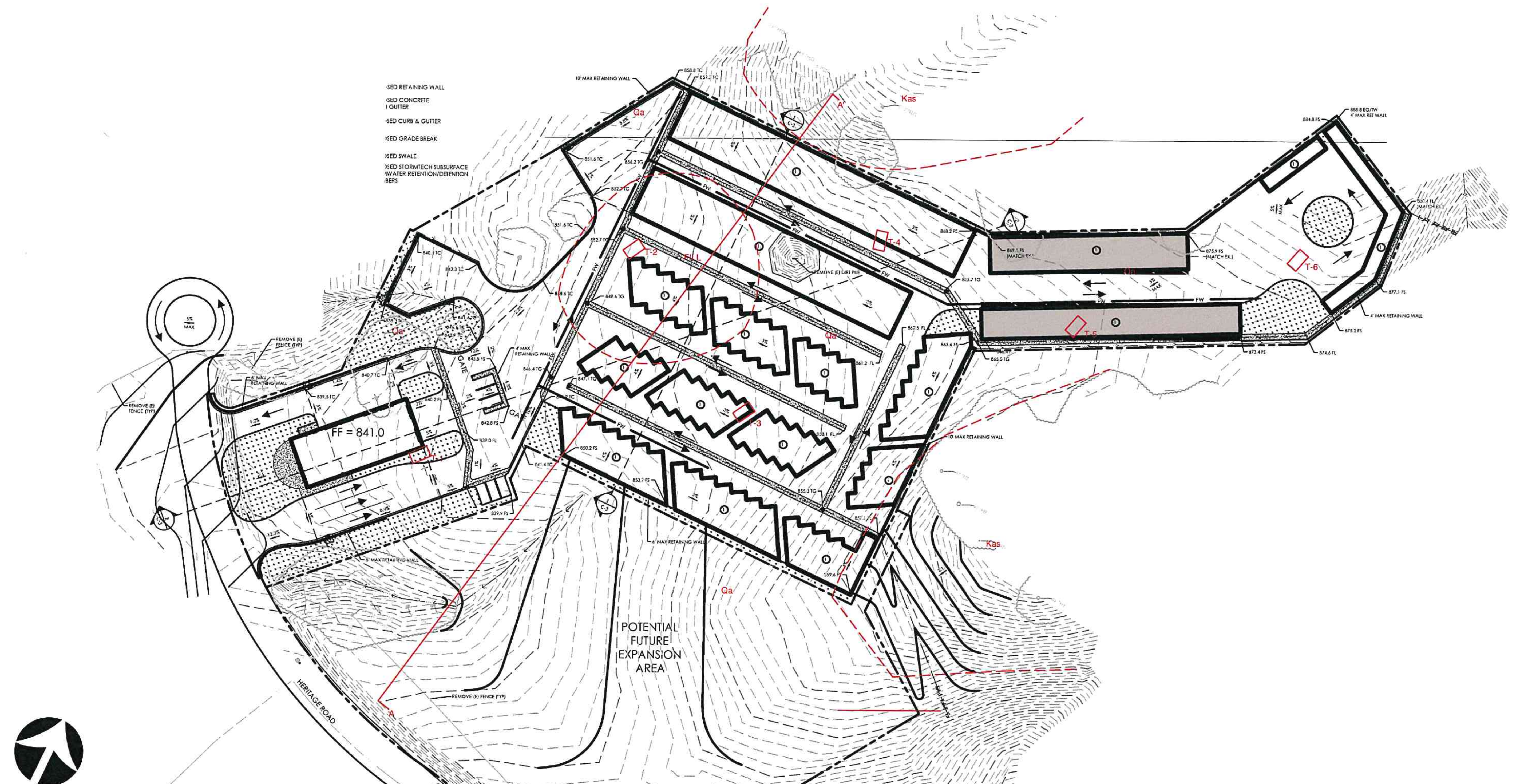
PLATES

Plate 1A, 1B - Site Engineering Geologic Map and Site Cross Section

Plate 2A,2B – Regional Geologic Map and Legend, Dibblee, 2007

Plate 3 – Regional Fault Map, Jennings, 2010

Plate 4 – Aerial Photograph, Google Earth, 2019



1" = 100'

LEGEND

FILL- FILL
Qa-ALLUVIAL DEPOSITS (HOLOCENE AGE)
Kas-ATASCADERO FORMATION(PALEOCENE AGE)
CONTACT(DASHED WHERE APPROXIMATE)
TRENCH LOCATION
CROSS SECTION

SITE ENGINEERING GEOLOGY MAP

HERITAGE RANCH RV STORAGE, HERITAGE RANCH ROAD
PASO ROBLES, CALIFORNIA

PLATE
1A

PROJECT
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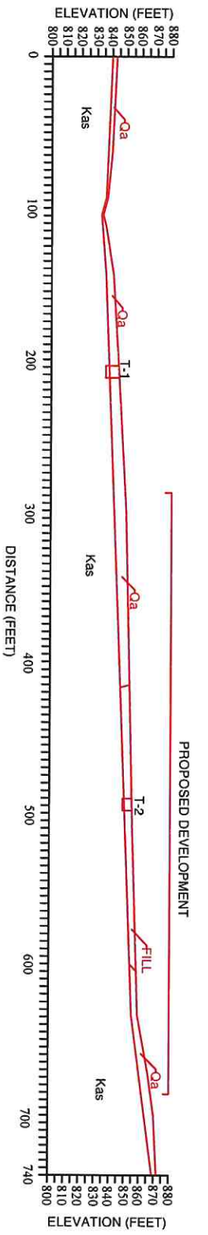

LEGEND

FILL- FILL

Qa-ALLUVIAL DEPOSITS (HOLOCENE AGE)

Kas-ATASCADERO FORMATION(PALEOCENE AGE)

CONTACT

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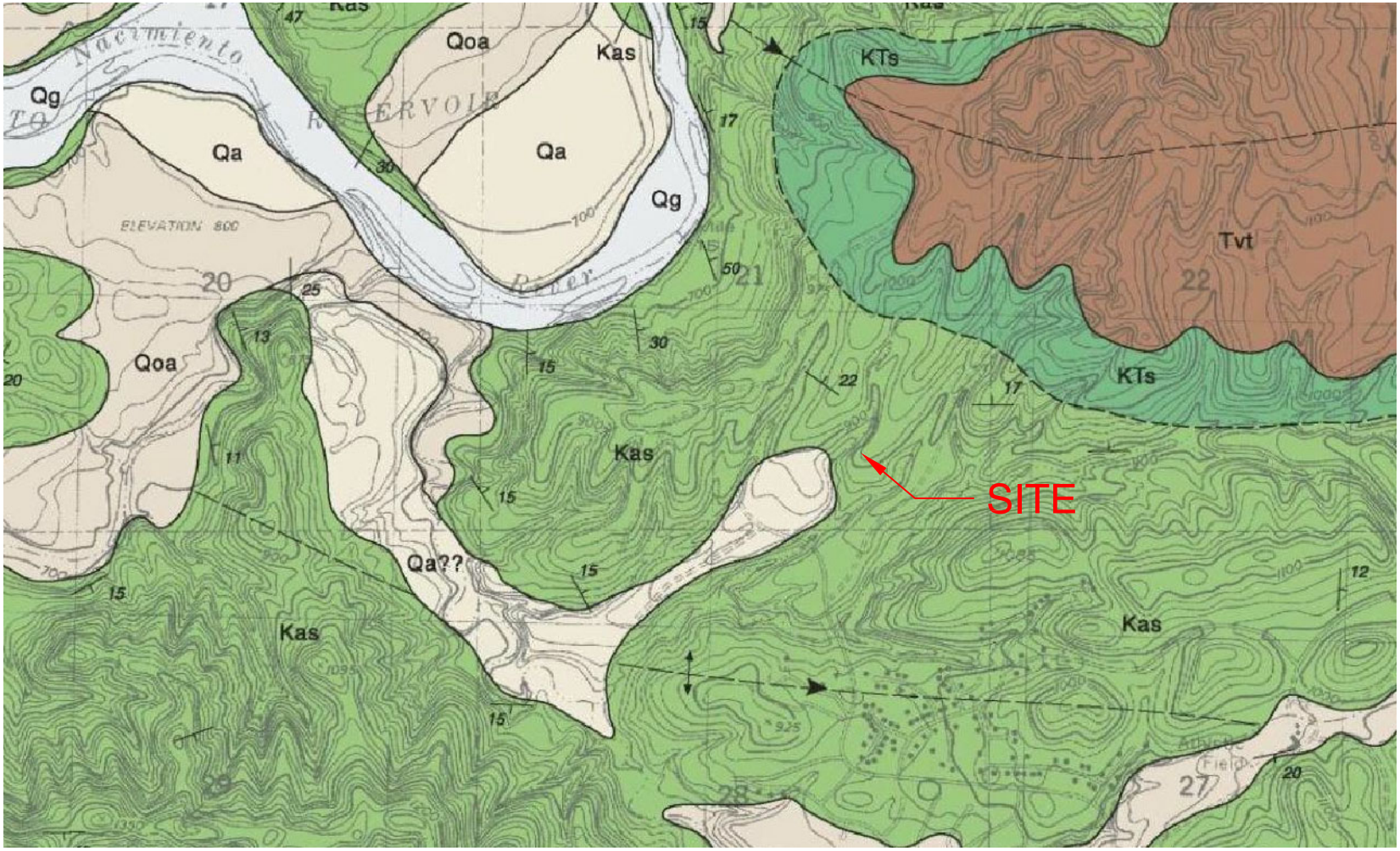
SITE CROSS SECTION

HERITAGE RANCH RV STORAGE, HERITAGE RANCH ROAD
PASO ROBLES, CALIFORNIA

PLATE
1B

PROJECT
SL11365-1



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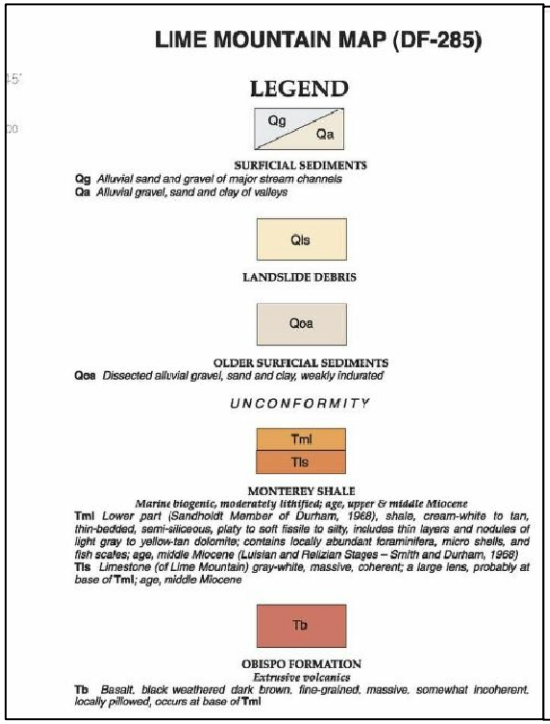
REGIONAL GEOLOGY MAP

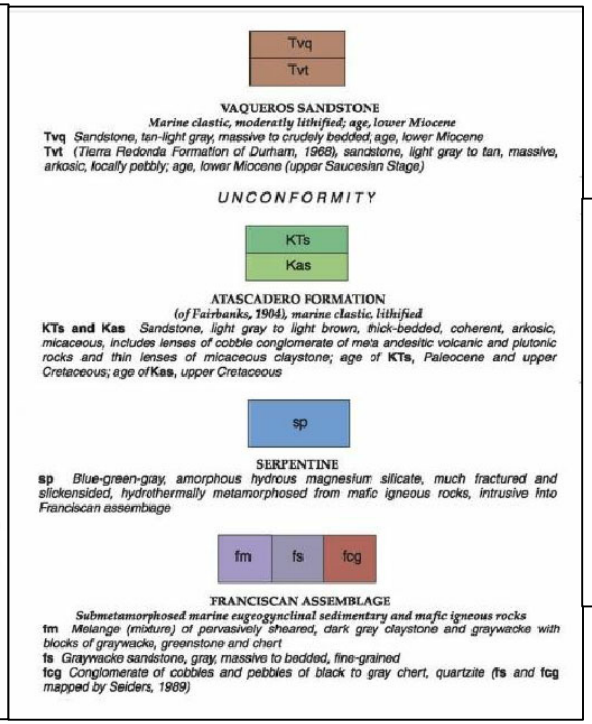
(DIBBLEE, 2007)

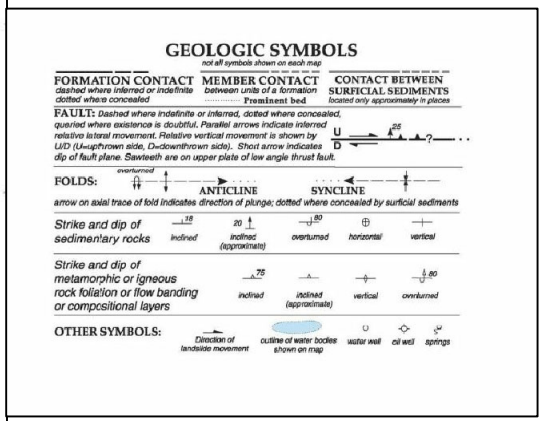
HERITAGE RANCH RV STORAGE, HERITAGE RANCH ROAD
PASO ROBLES, CALIFORNIA

PLATE
2A

PROJECT
SL11365-1







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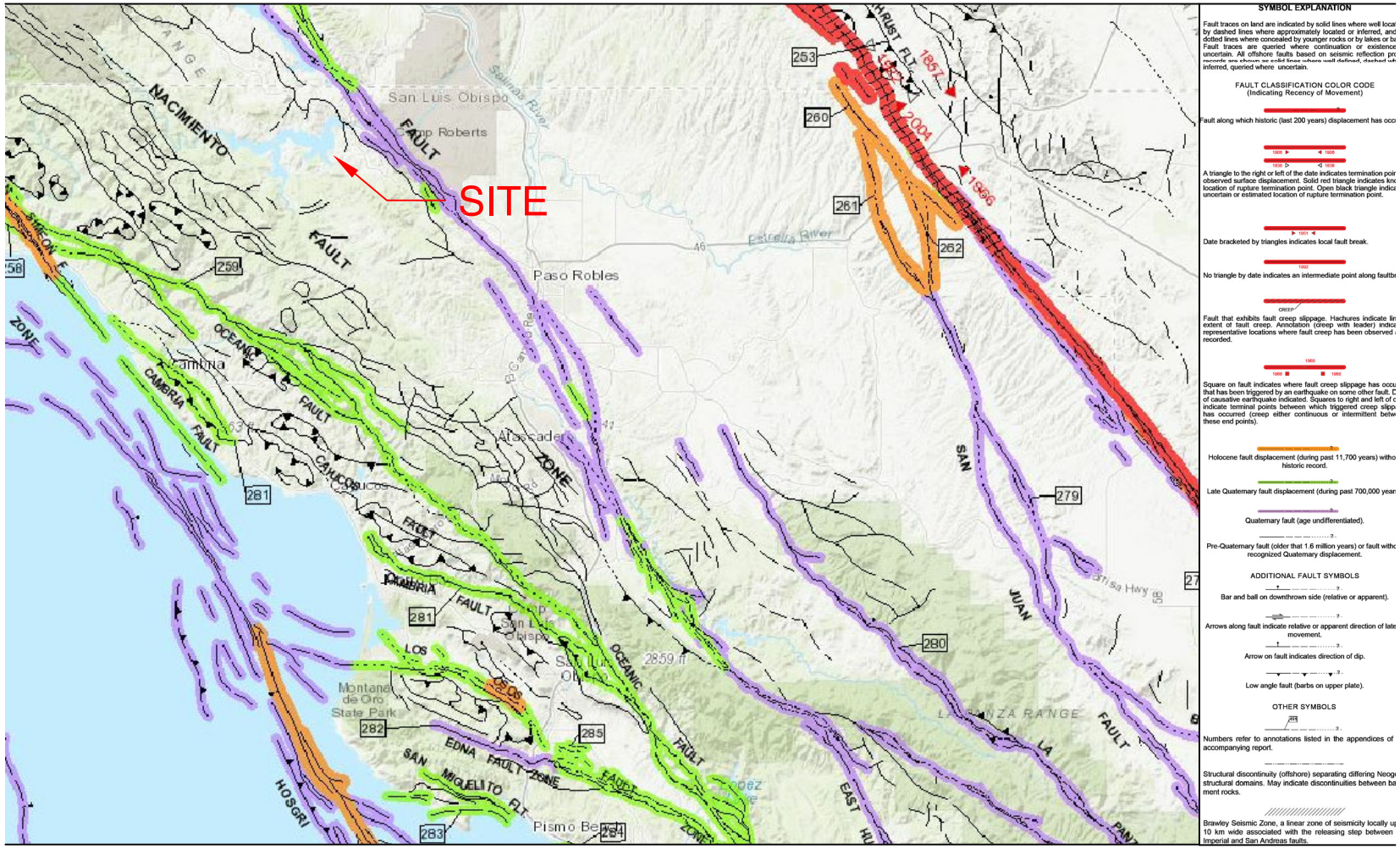
REGIONAL GEOLOGY MAP LEGEND

(DIBBLEE, 2007)

HERITAGE RANCH RV STORAGE, HERITAGE RANCH ROAD
PASO ROBLES, CALIFORNIA

PLATE
2B

PROJECT
SL11365-1



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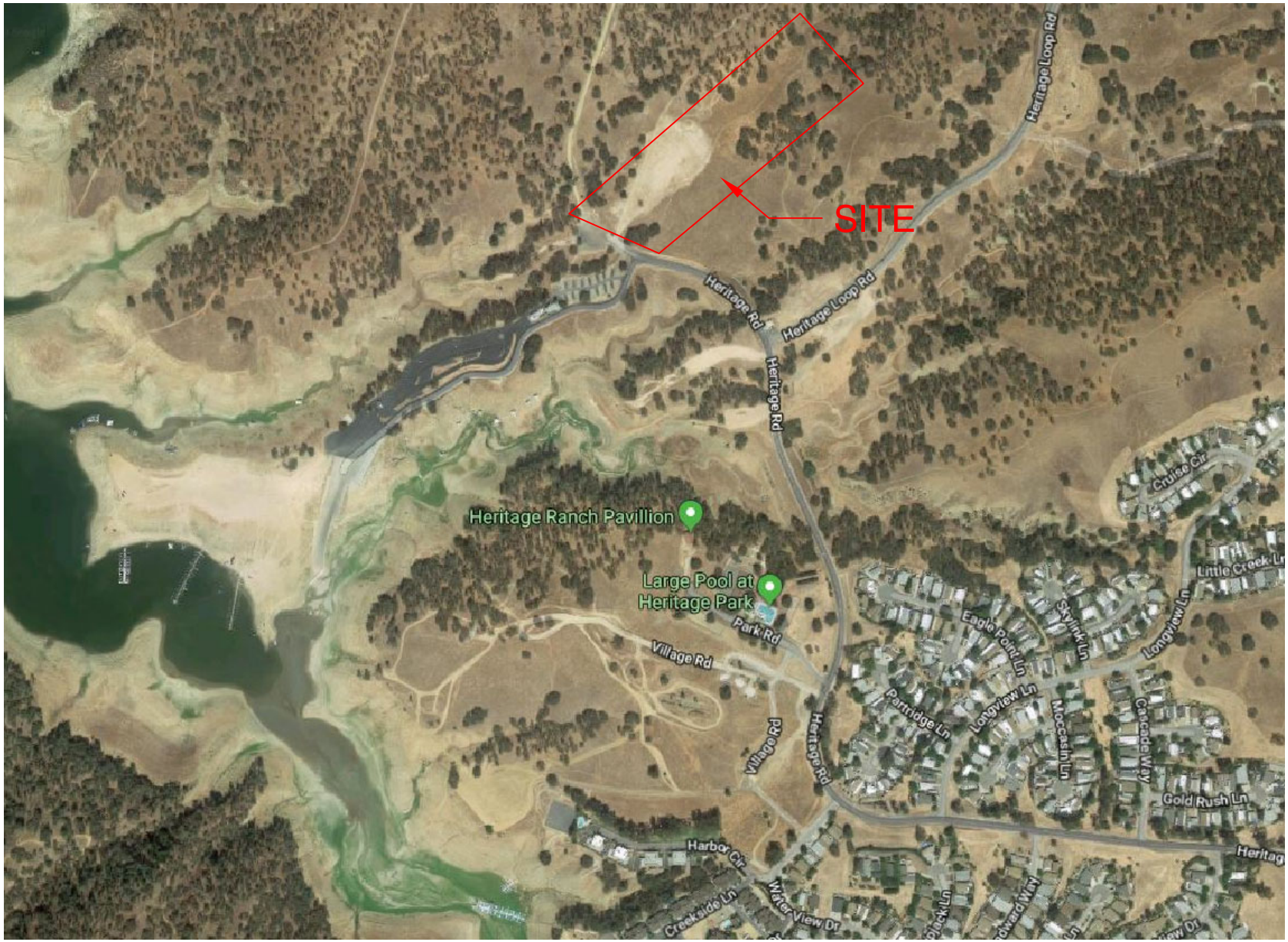
GeoSolutions, Inc. 220 High Street San Luis Obispo, California (805) 543-8539	**REGIONAL FAULT MAP** (JENNINGS, 2010) HERITAGE RANCH RV STORAGE, HERITAGE RANCH ROAD PASO ROBLES, CALIFORNIA	PLATE 3 PROJECT SL11365-1



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AERIAL PHOTOGRAPH

(GOOGLE EARTH IMAGE, 2019)
HERITAGE RANCH RV STORAGE, HERITAGE RANCH ROAD
PASO ROBLES, CALIFORNIA

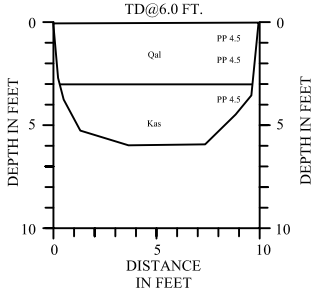
PLATE
4

PROJECT
SL11365-1

APPENDIX A

Trench Logs

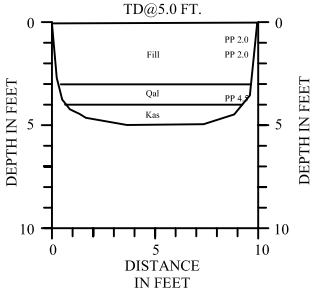
T-1
TD@6.0 FT.



Qal
very light brown silty SAND (SM), dry, roots at 3', alluvial deposits

Kas
brown SANDSTONE slightly moist, moderately fractured, massive, Atascadero Formation

T-2
TD@5.0 FT.

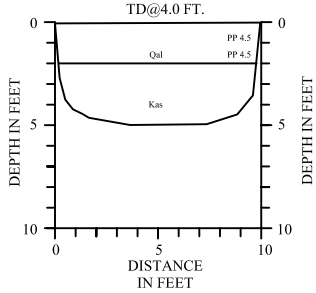


FILL
very light brown, sandy SILT(ML), dry, concrete

Qal
very light brown, silty SAND (SM), slightly moist, alluvial deposits

Kas
brown SANDSTONE, slightly moist, moderately weathered, moderately fractured, massive, Atascadero Formation

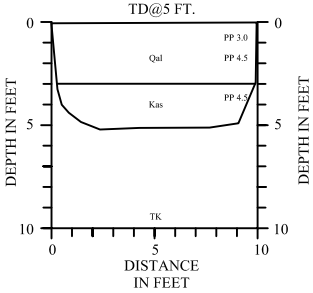
T-3
TD@4.0 FT.



Qal
very light brown, silty SAND (SM), slightly moist, alluvial deposits

Kas
brown SANDSTONE, slightly moist, moderately weathered, moderately fractured, massive, Atascadero Formation

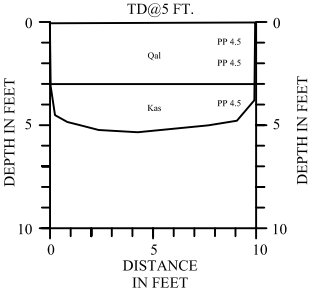
T-4
TD@5 FT.



Qal
very light brown, silty SAND (SM), slightly moist, alluvial deposits

Kas
brown SANDSTONE, slightly moist, moderately weathered, moderately fractured, massive, Atascadero Formation

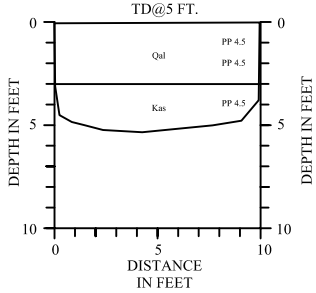
T-5
TD@5 FT.



Qal
very light brown, silty SAND (SM), slightly moist, alluvial deposits

Kas
brown SANDSTONE, slightly moist, moderately weathered, moderately fractured, massive, Atascadero Formation

T-6
TD@5 FT.



Qal
very light brown, silty SAND (SM), slightly moist, alluvial deposits

Kas
brown SANDSTONE, slightly moist, moderately weathered, moderately fractured, massive, Atascadero Formation

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