

**GEOTECHNICAL ENGINEERING
SERVICES REPORT**

For the
**PROPOSED SCHILLING PLACE
TENANT IMPROVEMENTS**

**1441 Schilling Place, Salinas,
California**

Prepared for
**County of Monterey - Department of
Public Works**
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901

Prepared by
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PSI PROJECT NO. 575-988-01

February 29, 2016



February 29, 2016

Ms. Judy Jeska
Project Manager III
County of Monterey - Department of Public Works
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901

Subject: Geotechnical Engineering Services Report
Schilling Place Tenant Improvements
1441 Schilling Place
Salinas, California
PSI Project No. 0575-988


Dear Ms. Jeska:

Professional Service Industries, Inc. (PSI) is pleased to transmit our Geotechnical Engineering Services Report for the above-referenced project in Salinas, California. This report includes the results of field and laboratory testing, geotechnical recommendations for retaining wall foundation design and pavement design, as well as general site development.

We appreciate the opportunity to perform this Geotechnical Study and look forward to continued participation during the design and construction phases of this project. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.


Ezekiel R. Robles, PE
Project Engineer
PE No. C80689





Michael Place, PE
Principal Consultant

575-988-1 (Monterey County_Schilling Place - Salinas - Geotechnical Report)

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1.0 PROJECT INFORMATION

1.1 Project Authorization

Professional Service Industries, Inc. (PSI) is pleased to submit our Geotechnical Engineering Services Report for the proposed Schillings Place tenant improvements in Salinas, California. Our work was performed in general accordance with our proposal number 575-128272 dated December 16, 2016. Written authorization, in the form of an email providing D.O. No. 3000-00000-10652, was provided by Ms. Judy Jeska of the County of Monterey on January 28, 2016.

1.2 Site Location and Description

The subject site is located at 1441 Schilling Place in Salinas, California (see Figure 1 – Site Location Map).

Based on the provided Wald Ruhnke and Dost Architect Site Plans dated October 20, 2015, the site is a Monterey County Government Center and the project consists of the redesign of a portion of the main parking lot. As part of this relocation, new parking lots, two 1 to 2 foot retaining walls, and new sidewalks will be constructed.

The site relatively level, with an elevation, estimated from the Google Earth of approximately 58 feet above mean sea level.

1.3 Project Understanding

PSI understands from information provided by Ms, Jeska, that the proposed improvements includes the following;

- Proposed New Pavements
- Proposed New 1 and 2 Foot Retaining Walls
- Proposed New Walkways

Other improvements may include utilities and concrete flatwork. We assume that final grades will be close to existing site elevations and that cuts and fills will be limited to 2 feet. Should any of the above information or assumptions made by PSI be inconsistent with the planned construction, we request that you contact us immediately to allow us to make any necessary modifications to our recommendations.

1.4 Purpose and Scope of Services

The purpose of our geotechnical evaluation was to assess the subsurface soil conditions at the site in order to provide appropriate recommendations for site preparation, retaining wall and pavement design. Our evaluation was in general accordance with the scope of work outlined in our Proposal Number 575-128272 dated December 16, 2016.



Our scope of services included 5 Standard Penetration Test (SPT) borings, drilled to a maximum depth of approximately 9 feet bgs in the area of the proposed new improvements, and the preparation of this geotechnical report. This report briefly outlines the testing procedures, presents available project information, describes the site and subsurface conditions, and presents geotechnical recommendations regarding the following:

- Our understanding of the project
- A description of the site surface and existing pavement conditions
- Logs of the soil borings
- Figures showing site location and boring locations at the site
- A discussion of subsurface conditions encountered including pertinent soil properties
- Presentation of laboratory test results
- An evaluation of the data as it relates to the proposed site development
- Comments and recommendations relating to other observed conditions which could impact the pavements
- PSI will provide corrosion design parameter information

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air on or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for information purposes only.



2.0 SUBSURFACE EXPLORATION

2.1 Site Geology

The subject site is located within a large region known as the Coast Ranges geomorphic province. This province is characterized by extensively folded, faulted, and fractured earth materials. These structural features trend in a northwesterly direction and make up the prominent system of northwest-trending mountain ranges separated by straight-sided sediment-filled valleys (CGS, 2002).

The subject site is situated approximately 1-½ miles east of the Salinas River. Our observations and analysis of readily available, pertinent geologic literature (Dibblee, 2006) indicate that the subject site is underlain by Holocene-aged (Quaternary) alluvial gravel, sand and clay of valley areas (Qa).

2.2 Pre-Field Activities

Prior to initiation of field drilling activities, PSI outlined the site in white paint, staked the boring locations and contacted Underground Service Alert (USA) a minimum of 48 hours prior to beginning work to locate any potential buried utilities.

2.3 Subsurface Explorations

In order to evaluate soil conditions at the site, 5 soil borings were advanced using a truck-mounted, solid flight auger drill rig provided and operated by HEW Drilling Company of Palo Alto, California.

At the completion of drilling, the borings were backfilled to the soil cuttings back to original grade. Locations of the soil borings are shown on Figure 2. Logs of the soil borings are presented in Appendix A. During the drilling operations, PSI Geologist, Mr. Brand Burfield was on site and logged and collected soil samples from the borings.

During the sampling procedure, Standard Penetration Tests (SPT) were performed in accordance with ASTM D1586 and relatively undisturbed samples were obtained in general accordance with ASTM D3550. The SPT for soil borings is performed by driving a 2-inch diameter split-spoon sampler into the undisturbed formation located at the bottom of the advanced borehole with repeated blows of a 140-pound hammer falling a vertical distance of 30-inches. The number of blows required to drive the sampler the last 12-inches of an 18-inch penetration depth is a measure of the soil consistency. For ASTM D-3550 (California Modified Sampler), the split barrel sampler possesses a 3-inch O.D. and is driven in the same manner as the SPT. The blow count obtained from the California Modified sampler should be reduced by approximately 40 percent to obtain a rough correlation to SPT blow counts (N-value). Samples were identified in the field, placed in sealed containers and transported to the laboratory for further classification and testing.



2.4 Subsurface Conditions

In the areas explored during drilling, the surface was either landscaping area or asphalt pavement. The asphalt pavement sections ranged from 2 to 5 inches of asphalt over 7 to 12 inches of aggregate base. The asphalt surface was generally underlain by loose to medium dense sand to an approximate depth of 2 to 5 feet below existing ground surface (bgs). The sand was generally underlain by stiff to very stiff silty clay to the total depth explored of 9 feet. No bedrock was encountered in any of our borings.

The above subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs, included in Appendix A, should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratification, penetration resistance, locations of the samples and laboratory test data. The stratification shown on the boring logs represents the conditions only at the actual boring locations at the time of our exploration. Variations may occur and should be expected between boring locations. The stratification that represents the approximate boundary between subsurface materials and the actual transition may be gradual. The samples that were not altered by laboratory testing will be retained for 30 days from the date of this report and will then be discarded.

2.5 Groundwater

Groundwater was not at the time of drilling. According to the State Geotracker website a site approximately 1,000 feet southwest of the subject site at 1511 Abbott Street in Salinas, California indicates that the highest recorded groundwater was measured at approximately 14 feet bgs. Based on current groundwater levels, excavations shallower than 10 feet are not expected to encounter groundwater. Groundwater is not expected to significantly affect the proposed construction. It is possible that transient, saturated ground conditions at shallower depths could develop at a later time due to periods of heavy precipitation, landscape watering, leaking water lines, or other unforeseen causes. Variations in groundwater levels should be expected seasonally, annually, and from location to location.

2.6 Laboratory Evaluation

Selected samples of the subsurface soils were returned to our laboratory for further evaluation to aid in classification of the materials, and to help assess their strength, expansive nature, plasticity and compressibility characteristics. The laboratory evaluation consisted of visual and textural examinations, moisture and density tests, and sieve analysis (passing #200 sieve). Sulfate, chloride, pH and resistivity testing were also performed to evaluate the corrosive potential of the site soils. A brief discussion of the laboratory tests performed and a portion of the test results are presented in Appendix B. The remaining test results are shown on the boring logs (Appendix A).

3.0 SEISMIC CONSIDERATIONS

3.1 Regional Seismicity

Generally, seismicity within California can be attributed to faulting due to regional tectonic movement. This includes the Riconada Fault, Hayward Fault, the San Andreas Fault and most parallel and subparallel faulting within the State. The portion of California which includes the subject site is considered seismically active. Seismic hazards within the site can be attributed to potential groundshaking resulting from earthquake events along nearby or more distant faults.

3.2 Seismic Analysis

According to the Alquist-Priolo Special Studies Zones Act of 1972 (revised 1994) active faults are those that have shown movement during the last 11,000 years (i.e., Holocene time). This site is not currently situated within a mapped Earthquake Fault Zone (CDMG, 1982).

The project site is located within a municipality that employs the 2013 California Building Code (CBC), the locally adopted version of the International Building Code, 2012 edition. As part of this code, the design of structures must consider dynamic forces resulting from seismic events. These forces are dependent upon the magnitude of the earthquake event as well as the properties of the soils that underlie the site. As part of the procedure to evaluate seismic forces, the code requires the evaluation of the Seismic Site Class, which categorizes the site based upon the characteristics of the subsurface profile within the upper 100 feet of the ground surface. To define the Site Class for this project, we have interpreted the results of soil test borings drilled within the project site and estimated appropriate soil properties below the base of the borings to a depth of 100 feet as permitted by the code. The estimated soil properties were based upon our experience with subsurface conditions in the general site area.

Based upon our evaluation, the subsurface conditions within the site are consistent with the characteristics of a Site Class “D” as defined in Table 20.3-1 of the ASCE 7-10. The associated USGS-NEHRP (2009) probabilistic ground acceleration values and site coefficients for the general site area were obtained from the USGS geohazards web page: <http://earthquake.usgs.gov/designmaps/us/application.php> and are presented in Table 1.

Table 1: Ground Motion Values*

Period (sec)	Mapped MCE Spectral Response Acceleration (g)		Site Coefficients		Adjusted MCE Spectral Response Acceleration (g)		Design Spectral Response Acceleration (g)	
	S_s	1.611	F_a	1.0	S_{Ms}	1.611	S_{Ds}	1.074
1.0	S_1	0.585	F_v	1.5	S_{M1}	0.877	S_{D1}	0.585

*2% Probability of Exceedance in 50 years for:
 Latitude 36.65335°N and Longitude 121.62061°W
 MCE = Maximum Considered Earthquake



4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of obtained from our exploration and analysis, the primary geotechnical considerations to the proposed site development are as follows:

1. Variable strength of near surface soils
2. Potentially expansive near surface soils
3. Moisture sensitive near surface soils

It is our opinion that the hazards identified should not preclude the development of the proposed retaining walls and pavements, and that the site is suitable to receive the proposed improvements as long as the recommendations presented in this report are incorporated into design and construction.

The proposed construction at the site should be performed in accordance with the following recommendations, the current edition of the California Building Code and local governmental standards which have jurisdiction over this project. Our recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions encountered. If there are any changes in these project criteria, including project location on the site, a review should be made by PSI to determine if modifications to the recommendations are warranted.

Once final design plans and specifications are available, a general review by PSI is recommended as a means to check that the evaluations made in preparation of this report are correct and that earthwork and foundation recommendations are properly interpreted and implemented.

4.1 Site Preparation

Initial site preparation should include stripping of any vegetation that is present within the proposed improvement areas and demolition of any interfering pavements. Prior to construction, the location of any existing underground utility lines within the construction area should be established. Provisions should be made to relocate any interfering utility lines within the construction area to appropriate locations.

In proposed new pavement areas, after site clearing and cutting to subgrade level, we recommend the subgrade soils be proof rolled with heavy rubber-tired construction equipment approved by and in the presence of the Geotechnical Engineer, or their representative. Any soil that excessively deflects or ruts during proof rolling should be removed as recommended by the Geotechnical Engineer. Following proof rolling and any needed over-excavation, the subgrade soil should be scarified to a minimum depth of 12 inches, moisture conditioned to 1 to 3 percent above optimum moisture content and recompacted to a minimum 90 percent relative density (based on ASTM Test Method D1557). However, the upper 12 inches of subgrade should be compacted to at least 95% of the soil's maximum dry density.



Wet Weather Grading Considerations - The near surface silty clay soils are moisture sensitive and subgrade stability problems (pumping) are expected to occur during wet and cool weather conditions, which typically occur between November and April. If grading occurs during these climatic conditions, subgrade stability problems are expected and it may be necessary to stabilize the subgrade with a coarse aggregate material, possibly with a geogrid or geotextile. Typically, a coarse aggregate thickness of about 12 to 18 inches is sufficient to stabilize a pumping subgrade. It may also be desired/beneficial to stabilize the subgrade with hydrated lime or cement, dependent upon the soil types and conditions encountered. Specific subgrade stabilization recommendations should be provided by the geotechnical engineer based on the conditions encountered at the time of grading.

4.2 Engineered Fill

Fill materials, including both native and import soil, should be free of organic or other deleterious materials and have a maximum particle size of 3 inches or less. Engineered Fill should be low expansive (Expansion Index (EI)<50) and moisture conditioned to about 1 to 3 percent above optimum moisture content prior to compaction. All Engineered Fill should be compacted to at least 90 percent of the maximum dry density as determined by ASTM Designation D1557. The subgrade soils in all areas to receive fill or support surface improvements should be scarified to a depth of 12 inches, moisture conditioned to about 1 to 3 percent above optimum moisture content and compacted to at least 90% of the soil's maximum dry density, per ASTM D-1557.

Fill should be placed in maximum loose lifts of 8 inches and should be moisture conditioned and compacted at 1 to 3 percent above the optimum moisture content. If water must be added, it should be uniformly applied and thoroughly mixed into the soil by disking or scarifying. Each lift of compacted, engineered fill should be tested by a representative of the geotechnical engineer prior to placement of subsequent lifts. The edges of compacted fill should extend 3 feet beyond the edges of buildings prior to sloping.

We recommend that at the time of initial site stripping and grading, that PSI be retained to observe and document the subgrade conditions to evaluate placement and compaction of structural fill.

4.3 Excavations

Excavation and construction operations may expose the on-site soils to inclement weather conditions. The stability of exposed soils will rapidly deteriorate due to precipitation or the action of heavy or repeated construction traffic. Accordingly, foundation area excavations and pavement subgrade areas should be adequately protected from the elements, and from the action of repetitive or heavy construction loading.

4.3.1 Excavations/Slopes

Excavations extending below a 1H:1V (horizontal to vertical) plane extending down from any adjacent footings should be shored for safety. All excavations should be evaluated by a representative of the geotechnical engineer during construction to allow any modifications to be



made due to variation in the soil types. All work should be performed in accordance with Department of Labor Occupational Safety and Health Administration (OSHA) guidelines. Job site safety is the responsibility of the project contractor.

In Federal Register, Volume 54, No. 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, part 1926, subpart P". This document was issued to better insure the safety of personnel entering trenches or excavations. It is mandated by this federal regulation that excavations, whether they be utility trenches, basement excavations, or footing excavations, be constructed in accordance with the new OSHA guidelines.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal state regulations.

We are providing this information solely as a service to our client. PSI does not assume responsibility for construction site safety or the contractor's or other parties' compliance with local, state, and federal safety or other regulations.

4.3.2 Trench Backfill

Except where extending perpendicular under proposed foundations, utility trenches should be constructed outside a 1:1 projection from the base-of-foundations. Trench excavations for utility lines, which extend under structural areas should be properly backfilled and compacted.

Utilities should be bedded and backfilled with clean sand or approved granular soil to a depth of at least 1 foot over the pipe. This backfill should be compacted to a firm condition for pipe support. All required trench backfill should be mechanically compacted in layers to at least 90% of maximum dry density based on ASTM D1557. Flooding should not be permitted.

The remainder of the backfill shall be typical on-site soil or imported soil which should be placed in lifts not exceeding 8 inches in thickness, moisture conditioned to plus or minus 3 percent above the optimum moisture content, and mechanically compacted to at least 90 percent of maximum dry density (based on ASTM D1557).

Some settlement of the backfill may be expected and any utilities within the trenches or concrete walks supported on the trench backfill should be designed to accept these differential movements.



4.4 Retaining Walls

Retaining walls may be supported by conventional shallow continuous (strip) footings bearing in competent native stiff/medium dense or better soils or suitably compacted engineered fill soils above stiff/medium dense or better native soils. A net allowable bearing pressure of 2,000 psf may be used for the design, provided the retaining wall footings extend to a minimum depth of 18 inches below lowest adjacent finished grade. The allowable soil bearing pressure may be increased by one-third for loads of short duration, including wind and seismic forces. The project structural engineer should determine minimum footing widths, depth and reinforcements requirements.

The following lateral earth pressures should be used for the design of retaining walls and below grade walls backfilled with suitable granular soils.

Table of Equivalent Fluid Weight (pcf)		
Wall Type	Level Backfill	2:1 Sloped Backfill (Ascending)
Active	35	60
At-Rest (fixed at top)	45	70
Passive	250	175

The above values assume backfill soils within 5 feet of the walls will have a very low expansion potential and free-draining condition. If conditions other than those covered herein are anticipated, the geotechnical engineer should provide the equivalent fluid pressures on an individual basis.

Below-grade walls and retaining walls should include a positive foundation drainage system. A typical wall drain consists of a minimum 4-inch diameter rigid perforated pipe surrounded by ¾-inch crushed rock and wrapped in a non-woven geotextile fabric (consisting of Mirafi 140N or approved equivalent). This system typically is installed directly on top of the retaining wall footing on the retained soil side of the wall. Perforations in the drain pipe should be placed facing down. The gravel pack around the pipe should be brought up to within one foot of the soil surface. The subsurface drainage system should be tied to the storm drainage system, allowed to daylight down slope, or collected in a sump and pumped out. Cleanouts should be installed at regular intervals and each bend of the drainage pipe.

Retaining wall backfill should consist of approved granular material. This fill material should be compacted to at least 90% of the maximum dry density (as determined by ASTM D1557). Flooding or jetting of the backfill should not be permitted. Granular backfill should be capped with relatively impervious fill to seal the backfill and reduce the potential for saturation.

Cantilever or restrained walls subject to uniform surcharge loads should be designed for an additional uniform lateral pressure equal to one-half. The intensity of the surcharge load acting over the entire height of the wall. It should be noted that the use of heavy compaction



equipment in close proximity to retaining structures can result in wall pressures exceeding design values and corresponding wall movement greater than normally associated with the development of active conditions. In this regard, the contractor should take appropriate precautions during the backfill placement.

Lateral loads may be resisted by friction and/or passive earth pressure. The design may incorporate an allowable passive earth pressure of 250 psf per foot of depth below a depth of 1 foot, provided that the footing concrete is poured tightly against firm native soil or properly compacted fill materials. An allowable friction coefficient of 0.35 may be used at the concrete-soil interface.

The foundation subgrade should be observed by a representative of PSI prior to steel or concrete placement. Soft or loose soil zones encountered at the bottom of the foundation excavations should be removed as directed by the geotechnical engineer.

Surface run-off water should be drained away from the excavations and not be allowed to pond. If possible, the foundation concrete should be placed during the same day the excavation is made. If it is required that foundation excavations be left open for more than one day, they should be protected to reduce evaporation or entry of moisture.

4.5 Drainage Considerations

Water should not be allowed to collect in the foundation excavations or on prepared subgrades of the construction area either during construction. Following construction, water should not be allowed to pond adjacent to the building foundations or adjacent to concrete flatwork. Undercut or excavated areas should be sloped toward one corner to facilitate removal of any collected rainwater, or positive runoff. The on-site soils are susceptible to erosion. The contractor should exercise care in creating drainage paths for water during the construction phase of the project. Curbing adjacent to landscaped areas should be designed deep enough to act as a barrier between the landscape irrigation and the subgrade soil. Surface run-off from roofs, parking areas, etc., should be tightlined to the storm sewer or other approved disposal areas.

4.6 Pavement Recommendations

While specific traffic loads and volumes for the project have not been provided, we are providing recommended light-duty, and heavy-duty pavement sections, which have been successfully utilized for this type of development in the project area with similar traffic loading. For these preliminary pavement sections, we have assumed an R-value of 15 for the site subgrade soils and a Traffic Index (TI) of 5 for the light-duty and TI of 6.5 heavy-duty pavements. R-value testing should be performed on the actual pavement subgrade material at the time of site grading.



Asphaltic Concrete (AC):

Light Duty (Automobile Parking; TI=5)

- 3 inches Asphalt Concrete (Caltrans Standard Specs. Section 39)
- 8½ inches Class II Aggregate Base (Caltrans Standard Specs. Section 26)

Heavy Duty (Entrance and Drive Lanes; TI=6.5)

- 4 inches Asphalt Concrete (Caltrans Standard Specs. Section 39)
- 11½ inches Class II Aggregate Base (Caltrans Standard Specs. Section 26)

Once site grading has been completed, we recommend that supplemental R-value testing be performed to confirm that the design R-value is consistent with the as-graded subgrade soil conditions and/or to provide final pavement section recommendations. All aggregate base and the upper 12 inches of subgrade should be compacted to at least 95 percent of the maximum dry density as determined by ASTM Designation D1557.

Concrete pavement is recommended in areas that receive continuous repetitive traffic such as loading areas and parking lot entrances. Due to heavy wheel loads and impact loads, concrete pavements, should have a minimum thickness of 7 inches, with an underlying 6 inch thick section of Class II Aggregate Base (AB). Portland Cement Concrete pavement sections should incorporate appropriate steel reinforcement and crack control joints as designed by the project structural engineer. We recommend that sections be as nearly squared as possible and no more than 15 feet on a side. A minimum 3,500 psi mix is recommended. The actual design should also be in accordance with design criteria specified by the governing jurisdiction.

Asphalt Concrete (AC), Portland Cement Concrete, and Class II aggregate base should conform to and be placed in accordance with the latest revision of the California Department of Transportation Standard Specifications and American Concrete Institute (ACI) codes. Aggregate base should be compacted to a minimum of 95 percent of the maximum dry density as determined by the modified Proctor (ASTM D1557) prior to placement of AC. Subgrade preparation for pavement areas is included in the Site Preparation section of this report.

The above recommended pavement sections represent minimum design thicknesses and, as such, periodic maintenance should be anticipated. Also, these recommended pavement sections should be confirmed or modified by your Civil Engineer, based on actual traffic and the owner's requirements. The pavement section materials and construction should comply with the Caltrans Standard Specifications and local municipality requirements.

Where pavement areas are adjacent to heavily landscaping areas, we recommend some measures of moisture control be taken to prevent the subgrade soils from becoming saturated. It is recommended that the concrete curbing adjacent to the landscape areas extend into the prepared subgrade to reduce the potential for irrigation water to saturate the subgrade soils.

4.7 Corrosivity

Testing was performed to evaluate the corrosivity of the on-site soils and the potential for attack on concrete and subsurface utility pipes, specifically cast iron and ductile iron. The testing included pH, sulfate, chloride and electrical resistivity. The results of the chemical analysis are as follows:

Boring Number	Sample Depth (feet)	pH	Resistivity (ohm-cm)	Water Soluble Sulfates (ppm)	Water Soluble Chlorides (ppm)
B-2 and B-3	1 to 5	8.0	720	30.3	12.8

Concrete mix design should follow the minimum requirements of the CBC. Laboratory test results indicate the tested soil possesses a negligible degree of corrosivity with respect to concrete. Therefore, special concrete mix designs are not considered necessary to mitigate the effects of high sulfate soils. Final concrete mix design should be evaluated after sulfate tests have been performed on the actual subgrade material.

Corrosivity testing was also performed to determine whether the on-site soils have the potential to attack subsurface utility pipes, specifically cast iron and ductile iron. Based on the resistivity test results, the soils are characterized as being *extremely corrosive* to cast iron or ductile iron piping (Roberge, 1999). PSI does not practice in the field of corrosion engineering. We recommend that a qualified corrosion engineer be consulted to determine if special corrosion protection is warranted for this site. Testing for corrosivity of any fill soils should be conducted during site grading to verify our recommendations.

4.8 Construction Monitoring

It is recommended that PSI be retained to examine and identify soil exposures created during project construction in order to document that soil conditions, including the nature of the undocumented fill encountered at the site, are as anticipated. We further recommend that any structural fills be continuously observed and tested by our representative in order to evaluate the thoroughness and uniformity of their compaction. If possible, samples of fill materials should be submitted to our laboratory for evaluation prior to placement of fills on site. Costs for the recommended observations during construction are beyond the scope of this current consultation.



5.0 GENERAL

Our conclusions and recommendations described in this report are subject to the following general conditions:

5.1 Use of Report

This report is for the exclusive use of the County of Monterey Department of Public Works and their representatives to use for the design of the proposed project described herein and preparation of construction documents. The data, analyses, and recommendations may not be appropriate for other structures or purposes. We recommend that parties contemplating other structures or purposes contact us. In the absence of our written approval, we make no representation and assume no responsibility to other parties regarding this report.

After the plans and specifications are more complete, the geotechnical engineer should be retained and provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents.

5.2 Limitations

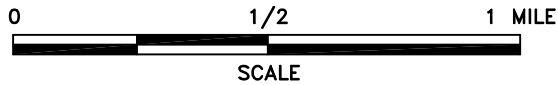
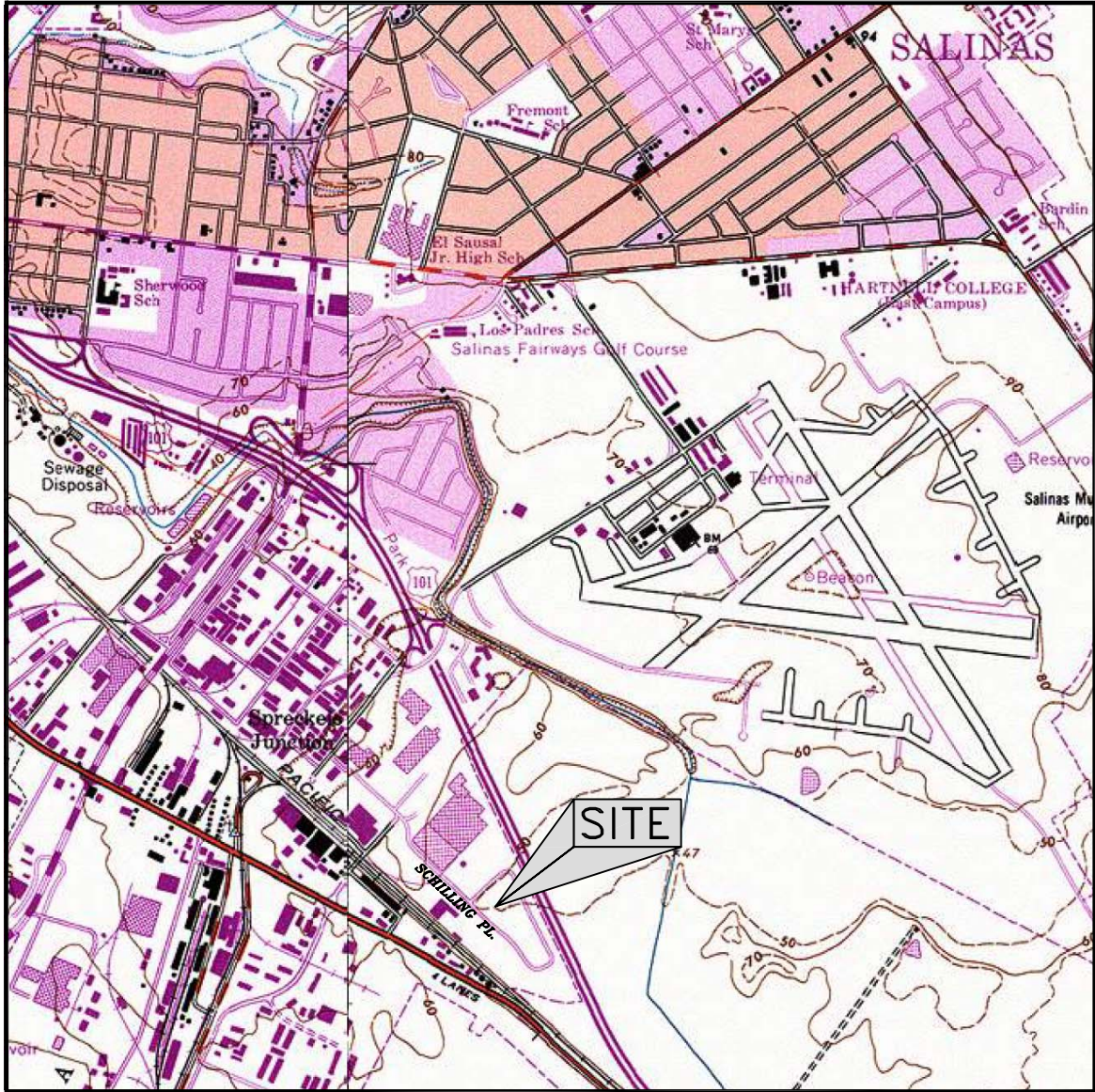
The recommendations contained in this report are based on the available subsurface information obtained by PSI, and design details furnished for the proposed project. If there are any revisions to the plans for this project, or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be notified immediately to determine if changes in the foundation recommendations are required. If PSI is not retained to perform these functions, PSI will not be responsible for the impact of those conditions on the project.

PSI did not provide any service to investigate or detect the presence of moisture, mold or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence of the amplification of the same. Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. Client further acknowledges that site conditions are outside of PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or recurrence of mold amplification.

Services performed by PSI for this project have been conducted with that level of care and skill ordinarily exercised by members of the profession currently practicing in this area. No warranty, expressed or implied, is made.



FIGURES



REFERENCE:

U.S.G.S. NATIVIDAD AND SALINAS CALIFORNIA, 7.5 MINUTE SERIES TOPOGRAPHIC MAPS, DATED 1981.



*Information
To Build On*
Engineering • Consulting • Testing

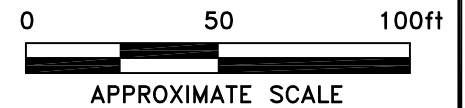
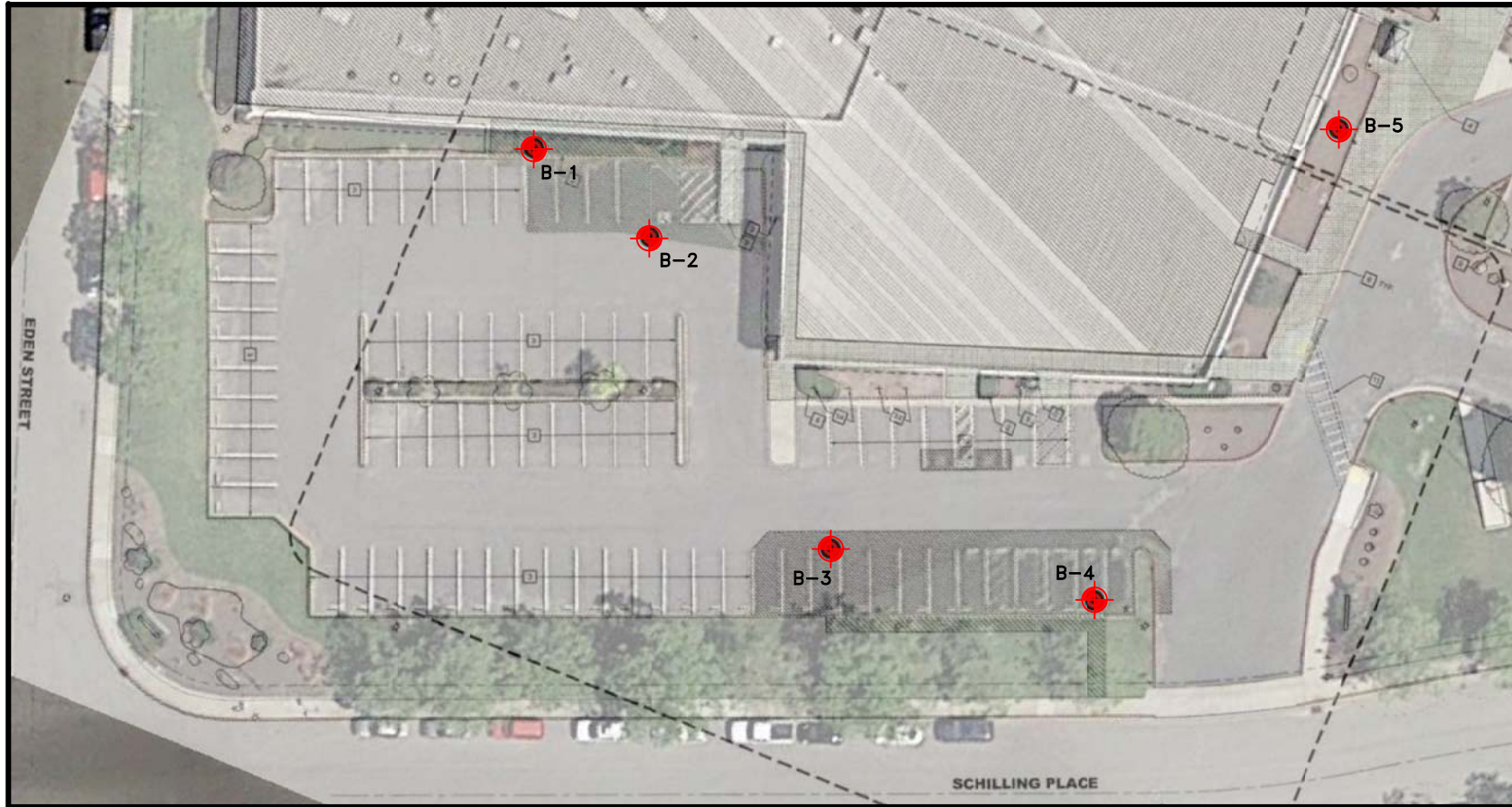
4703 Tidewater Avenue, Suite B
Oakland, California 94601
(510) 434-9200

Project Name:
PROPOSED PARKING IMPROVEMENTS
1441 SCHILLING PLACE, SALINAS, CALIFORNIA

Drawn By: B.B.	Date: 2/16	File No.: 988-1-1	Figure No.: 1
--------------------------	----------------------	-----------------------------	-------------------------

Title:
SITE LOCATION MAP

Approved By: E.R.	Project No.: 575-988-1
-----------------------------	----------------------------------




LEGEND

B-5  - APPROXIMATE SOIL BORING LOCATION

NOTE

BASE TAKEN FROM WALD RUHNKE & DOST ARCHITECTS, LLP, "MONTEREY COUNTY GOVERNMENT CENTER, 1441 SCHILLING PLACE, SALINAS, CA, 93901, DEMO ENLARGED SITE PLAN," DATED 10/19/2015, OVERLAIN ON A GOOGLE EARTH AERIAL PHOTO DATED 4/13/2015.




 Information To Build On Engineering • Consulting • Testing		4703 Tidewater Avenue, Suite B Oakland, California 94601 (510) 434-9200		
		Project Name: PROPOSED PARKING IMPROVEMENTS 1441 SCHILLING PLACE, SALINAS, CALIFORNIA	Drawn By: B.B.	Date: 2/16
Title: SITE PLAN AND BORING LOCATION MAP		Approved By: E.R.	Project No.: 575-988-1	

APPENDIX A
EXPLORATION LOGS

DATE STARTED: 2/11/16
 DATE COMPLETED: 2/11/16
 COMPLETION DEPTH: 9.0 ft
 BENCHMARK: N/A
 ELEVATION: N/A
 LATITUDE: 36.65335°
 LONGITUDE: -121.62061°
 STATION: N/A OFFSET: N/A

DRILL COMPANY: HEW Drilling
 DRILLER: Perfecto LOGGED BY: B. Burfield
 DRILL RIG: CME75
 DRILLING METHOD: Solid Flight Auger
 SAMPLING METHOD: Mod CAL & SPT
 HAMMER TYPE: Automatic
 EFFICIENCY: N/A
 REVIEWED BY: ER

BORING B-1

Water 



BORING LOCATION: _____

REMARKS:

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	STANDARD PENETRATION TEST DATA		Additional Remarks
								Moisture, %	STRENGTH, tsf	
0						Sandy SILT, medium olive-brown, moist, firm, fine to medium sand (Landscaping Area)	ML			
				1	18	Silty CLAY, dark olive-brown, moist, firm, trace fine to coarse sand and fine gravel	CL-ML	0-2-4 N=6		
				2	18	SAND, light brown, moist, loose, fine to medium sand, trace silt	SP	4-4-6 N=10		DD = 121 pcf
5				3	18	Silty CLAY, medium olive, moist, stiff				Passing #200 = 77%
				4	18	some fine to medium sand, trace rootlets and organics	CL-ML	3-4-5 N=9		
								4-8-9 N=17		DD = 114 pcf



Professional Service Industries, Inc.
 4703 Tidewater Avenue, Suite B
 Oakland, CA 94601
 Telephone: (510) 434-9200

PROJECT NO.: 575-988
 PROJECT: County of Monterey
 LOCATION: 1441 Schilling Pl.
 Salinas, CA

DATE STARTED: 2/11/16
DATE COMPLETED: 2/11/16
COMPLETION DEPTH: 6.5 ft
BENCHMARK: N/A
ELEVATION: N/A
LATITUDE: 36.65335°
LONGITUDE: -121.62061°
STATION: N/A **OFFSET:** N/A
REMARKS:

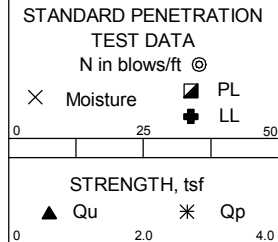
DRILL COMPANY: HEW Drilling
DRILLER: Perfecto **LOGGED BY:** B. Burfield
DRILL RIG: CME75
DRILLING METHOD: Solid Flight Auger
SAMPLING METHOD: Mod CAL & SPT
HAMMER TYPE: Automatic
EFFICIENCY: N/A
REVIEWED BY: ER

BORING B-2

Water

BORING LOCATION:

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	Moisture, %	STRENGTH, tsf	Additional Remarks
0	0					2 inches of asphalt over 12 inches of aggregate base				
				1	18	SAND, light brown, moist, medium dense, fine to coarse sand, trace silty, trace fine gravel	SP 12-8-10 N=18			DD = 104 pcf
5	5			2	18	Silty CLAY, medium olive-brown, moist, stiff, few fine to medium sand, trace rootlets and organics	CL-ML 3-5-8 N=13			DD = 121 pcf



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 Oakland, CA 94601
 Telephone: (510) 434-9200

PROJECT NO.: 575-988
PROJECT: County of Monterey
LOCATION: 1441 Schilling Pl.
 Salinas, CA

DATE STARTED: 2/11/16 **DRILL COMPANY:** HEW Drilling
DATE COMPLETED: 2/11/16 **DRILLER:** Perfecto **LOGGED BY:** B. Burfield
COMPLETION DEPTH: 6.5 ft **DRILL RIG:** CME75
BENCHMARK: N/A **DRILLING METHOD:** Solid Flight Auger
ELEVATION: N/A **SAMPLING METHOD:** Mod CAL & SPT
LATITUDE: 36.65335° **HAMMER TYPE:** Automatic
LONGITUDE: -121.62061° **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** ER

BORING B-3

Water

BORING LOCATION:

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	STANDARD PENETRATION TEST DATA		Additional Remarks
								Moisture, %	STRENGTH, tsf	
0						5 inches of asphalt over 5 inches of aggregate base				
				1	18	SAND, light brown, moist, medium dense, fine to coarse sand, few fine gravel, trace silt	SP	18-10-7 N=17		
				2	18	Silty CLAY, dark olive-brown, moist, stiff		3-6-9 N=15		Passing #200 = 80%
5				3	18	medium olive-brown, very stiff	CL-ML	7-15-21 N=36		DD = 71 pcf



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 Oakland, CA 94601
 Telephone: (510) 434-9200

PROJECT NO.: 575-988
PROJECT: County of Monterey
LOCATION: 1441 Schilling Pl.
 Salinas, CA

DATE STARTED: 2/11/16 **DRILL COMPANY:** HEW Drilling
DATE COMPLETED: 2/11/16 **DRILLER:** Perfecto **LOGGED BY:** B. Burfield
COMPLETION DEPTH: 9.0 ft **DRILL RIG:** CME75
BENCHMARK: N/A **DRILLING METHOD:** Solid Flight Auger
ELEVATION: N/A **SAMPLING METHOD:** Mod CAL & SPT
LATITUDE: 36.65335° **HAMMER TYPE:** Automatic
LONGITUDE: -121.62061° **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** ER

BORING B-4

Water

BORING LOCATION:

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	STANDARD PENETRATION TEST DATA		Additional Remarks
								N in blows/ft	Moisture, %	
0						3 inches of asphalt over 7 inches of aggregate base				
				1	18	SAND, light brown, moist, medium dense, fine to coarse sand, few fine gravel, trace silt	SP	11-18-10 N=28		
				2	18	Silty CLAY, dark brown, moist, stiff				
						medium olive-brown		5-6-10 N=16		DD = 80 pcf
5				3	18	medium olive, very stiff	CL-ML	7-14-16 N=30		DD = 82 pcf Passing #200 = 88%
				4	18			5-10-12 N=22		



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 Oakland, CA 94601
 Telephone: (510) 434-9200

PROJECT NO.: 575-988
PROJECT: County of Monterey
LOCATION: 1441 Schilling Pl.
 Salinas, CA

DATE STARTED: 2/11/16 **DRILL COMPANY:** HEW Drilling
DATE COMPLETED: 2/11/16 **DRILLER:** Perfecto **LOGGED BY:** B. Burfield
COMPLETION DEPTH: 6.5 ft **DRILL RIG:** CME75
BENCHMARK: N/A **DRILLING METHOD:** Solid Flight Auger
ELEVATION: N/A **SAMPLING METHOD:** Mod CAL & SPT
LATITUDE: 36.65335° **HAMMER TYPE:** Automatic
LONGITUDE: -121.62061° **EFFICIENCY:** N/A
STATION: N/A **OFFSET:** N/A **REVIEWED BY:** ER

BORING B-5

Water

BORING LOCATION:

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	STANDARD PENETRATION TEST DATA		Additional Remarks
								Moisture, %	STRENGTH, tsf	
0						Sandy SILT, dark brown, damp to moist, firm, fine to coarse sand, few organics (Landscaping Area)	ML			
				1	18	Silty CLAY, dark olive-brown, moist, firm, few rootlets and organics	4-4-6 N=10			DD = 76 pcf
				2	18	trace rootlets and organics	CL-ML 2-3-5 N=8			
5				3	18	dark olive-gray, stiff	3-6-7 N=13			DD = 77 pcf



Professional Service Industries, Inc.
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 Oakland, CA 94601
 Telephone: (510) 434-9200

PROJECT NO.: 575-988
PROJECT: County of Monterey
LOCATION: 1441 Schilling Pl.
 Salinas, CA

APPENDIX B
LABORATORY TEST RESULTS

LABORATORY TEST RESULTS

Laboratory Testing Program

Laboratory tests were performed on representative soil samples to determine their relative engineering properties. Tests were performed in general accordance with test methods of the American Society for Testing Materials or other accepted standards. The following presents a brief description of the various test methods used.

Classification - Soils were classified visually according to the Unified Soil Classification System. Visual classifications were supplemented by laboratory testing of selected samples in general accordance with ASTM D2487. The soil classifications are shown on the Boring Logs in Appendix A.

In-Situ Moisture/Density - The in-place moisture content and dry unit weight of selected samples were determined using relatively undisturbed samples from the linear rings of a 2.38 inch I.D. modified California Sampler. The moisture content of representative SPT samples was also determined. The dry unit weight and moisture contents are shown on the boring logs.

Percent Pass #200 Sieve – Grain size testing was performed on representative samples of the onsite soils, in general accordance with ASTM C117. The percent passing the #200 sieve is shown on the Boring Logs.

Soil Sulfate / Chloride Test – In order to estimate the concrete degradation potential of soils, the soluble sulfate and chloride content of a representative sample of the on-site soil, provided in the text of this report, was determined in accordance with EPA Test Method 300.0.

pH (Potential of Hydrogen) – The measure of acidity or alkalinity of a material is referred to as the pH factor, which increases with alkalinity and decreases with acidity. The corrosivity potential of iron increases with low pH (4-5), while the corrosivity potential of copper increases with high pH (10-11). The pH value of a representative sample of the on-site soil, provided in the text of this report, was determined in accordance with EPA Test Method 9045B.

Resistivity – The electrical resistivity of a soil is a measure of its resistance to electrical current flow. Corrosion of buried ferrous metals is an electrochemical process which is related to the flow of electrical current from the metal to the soil. Lower electrical resistivity (higher currents) result from higher moisture and chemical contents in the soil. Resistivity is minimal when the soil is saturated. The resistivity of a representative sample of the on-site soil, provided in the text of this report, was determined in accordance with AASHTO Test Method T 288-91.





25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

24 February 2016

Brand Burfield
PSI -- Oakland
4703 Tidewater Ave Ste B
Oakland, CA 94601
RE: Monterey - Schilling

Enclosed are the results of analyses for samples received by the laboratory on 02/20/16 08:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine RunningCrane
Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

PSI -- Oakland
4703 Tidewater Ave Ste B
Oakland CA, 94601

Project: Monterey - Schilling
Project Number: 575-988
Project Manager: Brand Burfield

Reported:
02/24/16 16:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-2 + B-3 (1'-5')	T160345-01	Soil	02/11/16 00:00	02/20/16 08:20

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

PSI -- Oakland 4703 Tidewater Ave Ste B Oakland CA, 94601	Project: Monterey - Schilling Project Number: 575-988 Project Manager: Brand Burfield	Reported: 02/24/16 16:56
---	---	-----------------------------

DETECTIONS SUMMARY

Sample ID: B-2 + B-3 (1'-5') **Laboratory ID:** T160345-01

Analyte	Result	Reporting		Method	Notes
		Limit	Units		
pH	8.0	0.1	pH Units	EPA 9045B	O-04
Chloride	12.8	10.0	mg/kg	EPA 300.0	
Sulfate as SO4	30.3	10.0	mg/kg	EPA 300.0	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane

Katherine RunningCrane, Project Manager



25712 Commercentre Drive
 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

PSI -- Oakland 4703 Tidewater Ave Ste B Oakland CA, 94601	Project: Monterey - Schilling Project Number: 575-988 Project Manager: Brand Burfield	Reported: 02/24/16 16:56
---	---	-----------------------------

B-2 + B-3 (1'-5')
T160345-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

SunStar Laboratories, Inc.

Conventional Chemistry Parameters by APHA/EPA/ASTM Methods

pH	8.0	0.1	pH Units	1	6022223	02/22/16	02/22/16	EPA 9045B	O-04
-----------	------------	-----	----------	---	---------	----------	----------	-----------	------

Anion Scan by EPA Method 300.0

Chloride	12.8	10.0	mg/kg	1	6022222	02/22/16	02/24/16	EPA 300.0	
Sulfate as SO4	30.3	10.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane

Katherine RunningCrane, Project Manager



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 Lake Forest, California 92630
 949.297.5020 Phone
 949.297.5027 Fax

PSI -- Oakland 4703 Tidewater Ave Ste B Oakland CA, 94601	Project: Monterey - Schilling Project Number: 575-988 Project Manager: Brand Burfield	Reported: 02/24/16 16:56
---	---	-----------------------------

Conventional Chemistry Parameters by APHA/EPA/ASTM Methods - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6022223 - General Preparation

Duplicate (6022223-DUP1)	Source: T160345-01		Prepared & Analyzed: 02/22/16							
pH	8.10	0.1	pH Units		8.02			0.993	20	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane

Katherine RunningCrane, Project Manager

PSI -- Oakland
4703 Tidewater Ave Ste B
Oakland CA, 94601

Project: Monterey - Schilling
Project Number: 575-988
Project Manager: Brand Burfield

Reported:
02/24/16 16:56

Anion Scan by EPA Method 300.0 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6022222 - General Preparation

Blank (6022222-BLK1)

Prepared: 02/22/16 Analyzed: 02/24/16

Chloride	ND	10.0	mg/kg							
Sulfate as SO4	ND	10.0	"							

LCS (6022222-BS1)

Prepared: 02/22/16 Analyzed: 02/24/16

Chloride	85.4	10.0	mg/kg	100		85.4	70-130			
Sulfate as SO4	80.5	10.0	"	100		80.5	70-130			

Matrix Spike (6022222-MS1)

Source: T160339-01

Prepared: 02/22/16 Analyzed: 02/24/16

Chloride	155	10.0	mg/kg	99.2	104	51.2	70-130			QM-05
Sulfate as SO4	91.2	10.0	"	99.2	40.1	51.6	70-130			QM-05

Matrix Spike Dup (6022222-MSD1)

Source: T160339-01

Prepared: 02/22/16 Analyzed: 02/24/16

Chloride	149	10.0	mg/kg	99.8	104	45.5	70-130	3.51	20	QM-05
Sulfate as SO4	90.5	10.0	"	99.8	40.1	50.6	70-130	0.793	20	QM-05

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane

Katherine RunningCrane, Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

PSI -- Oakland
4703 Tidewater Ave Ste B
Oakland CA, 94601

Project: Monterey - Schilling
Project Number: 575-988
Project Manager: Brand Burfield

Reported:
02/24/16 16:56

Notes and Definitions

- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
- O-04 This sample was received and analyzed outside the EPA recommended holding time.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane, Project Manager

Chain of Custody Record

SunStar Laboratories, Inc.
 25712 Commercentre Dr
 Lake Forest, CA 92630
 949-297-5020

Client: PSI
 Address: 4703 TIDEWATER AVE, ANAHEIM CA 94601
 Phone: 510 434-9200 Fax: 510 434-7276
 Project Manager: BREND BURGESS

Date: 2/19/16 Page: 1 Of 1
 Project Name: MANHATTAN - SCHAUBS
 Collector: B. BURGESS Client Project #: 575-988
 Batch #: T160345 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	PH	CHLORIDE	SULFATE	Laboratory ID #	Comments/Preservative	Total # of containers
<u>B-2-B-3(1-51)</u>	<u>2/11/16</u>	<u>---</u>	<u>SUR</u>	<u>SUR</u>													<u>01</u>		
<i>[Handwritten signature across the top of the table]</i>																			
Relinquished by: (signature) _____ Date / Time _____																			
Relinquished by: (signature) _____ Date / Time _____																			
Relinquished by: (signature) _____ Date / Time _____																			
Received by: (signature) _____ Date / Time _____																			
Received by: (signature) _____ Date / Time _____																			
Received by: (signature) _____ Date / Time _____																			
Chain of Custody seals (N/A/N/A)															Total # of containers				
Seals Intact? (N/A/N/A)															3.1				
Received good condition/cold																			
Turn around time: <u>48 hr</u>																			

Sample disposal instructions: Disposal @ \$2.00 each _____ Return to client _____ Pickup _____

COC133078

SAMPLE RECEIVING REVIEW SHEET

BATCH# T160345

Client Name: PSI - oakland

Project: Monterey - Schilling

Received by: Kyler

Date/Time Received: 2/20/16 8:20

Delivered by: Client SunStar Courier GSO FedEx Other _____

Total number of coolers received 1 Temp criteria = 6°C > 0°C (no frozen containers)

Temperature: cooler #1 3.3 °C +/- the CF (- 0.2°C) = 3.1 °C corrected temperature

cooler #2 _____ °C +/- the CF (- 0.2°C) = _____ °C corrected temperature

cooler #3 _____ °C +/- the CF (- 0.2°C) = _____ °C corrected temperature

Samples outside temp. but received on ice, w/in 6 hours of final sampling. Yes No* N/A

Custody Seals Intact on Cooler/Sample Yes No* N/A

Sample Containers Intact Yes No*

Sample labels match COC ID's Yes No*

Total number of containers received match COC Yes No*

Proper containers received for analyses requested on COC Yes No*

Proper preservative indicated on COC/containers for analyses requested Yes No* N/A

Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. Yes No*

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date

YM 2/20/16

Comments:

WORK ORDER

T160345

Client: PSI -- Oakland	Project Manager: Katherine RunningCrane
Project: Monterey - Schilling	Project Number: 575-988

Report To:

PSI -- Oakland
 Brand Burfield
 4703 Tidewater Ave Ste B
 Oakland, CA 94601

Date Due:	02/24/16 17:00 (2 day TAT)		
Received By:	Kyler Mondello	Date Received:	02/20/16 08:20
Logged In By:	Kyler Mondello	Date Logged In:	02/20/16 09:07

Samples Received at:	3.1°C		
Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirmed	No		

Analysis	Due	TAT	Expires	Comments
T160345-01 B-2 + B-3 (1'-5') [Soil] Sampled 02/11/16 00:00 (GMT-08:00) Pacific Time (US &				
300.0 - F, Cl, Br, SO4	02/24/16 15:00	2	03/10/16 00:00	Sulfate & Chloride only
pH soil 9045	02/24/16 15:00	2	02/18/16 00:00	