PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

February 28, 2013

Advice Letter 4065-E

Brian K. Cherry
Vice President, Regulation and Rates
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Subject: Encroachment Agreement for Solar Array on PG&E Easement in Sutter County – Request for Approval Under Section 851

Dear Mr. Cherry:

Advice Letter 4065-E is effective February 13, 2013.

Sincerely,

Edward Randolph

Edward F. Randolph, Director
Energy Division

Pacific Gas and Electric Company

Brian K. Cherry
Vice President
Regulation and Rates

Mailing Address
Mail Code B10C
Pacific Gas and Electric Company
P.O. Box 770000
San Francisco, CA 94177

Fax: 415.973.6520

June 18, 2012

Advice 4065-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Encroachment Agreement for Solar Array on PG&E Easement in Sutter County – Request for Approval Under Section 851

Purpose

Pacific Gas and Electric Company ("PG&E") respectfully requests an order from the California Public Utilities Commission ("CPUC") authorizing PG&E under Public Utilities Code § 851 ("Section 851") to enter into an encroachment agreement ("the Agreement") with the Yuba Community College District ("the College District"). The Agreement regards the encroachment of a certain PG&E electric transmission line easement located in Sutter County, on property owned by the College District, by a proposed 300 kilowatt (kW) solar array ("the Solar Array") which currently would not conflict with PG&E's ability to operate the existing transmission line safely and reliably. A copy of the Agreement is attached hereto as **Attachment 1**. The College District estimates that it will save $300,000 annually by installing the Solar Array.

Background

In 1954, PG&E entered into an agreement (**Attachment 2**) with Robert and Dorothy Berg, and Florence and I. K. Vantress which granted PG&E the right to, among other things, establish a Right of Way for two independent transmission lines across their property.

In late-2011, the College District approached PG&E about constructing a Solar Array on land owned by the College District that is intersected by PG&E's Palermo-Pease Transmission Line ("the Transmission Line") and restricted by a PG&E easement. Since then, PG&E has consulted its internal transmission planning organization and determined that, as designed, the Solar Array would not hinder PG&E's ability to safely and reliably operate the Transmission Line.

In accordance with Resolution ALJ-244, Appendix A, Section IV, PG&E provides the following information related to the proposed transaction:

(1) Identity and Addresses of All Parties to the Proposed Transaction:

Pacific Gas and Electric Company
Ann H. Kim
Law Department
P.O. Box 7442
San Francisco, CA 94120
Telephone: (415) 973-7467
Facsimile: (415) 973-5520
Email: AHK4@pge.com

Yuba Community College District
Debbie Watson, District Counsel
222 N Sepulveda Blvd #1690
El Segundo, CA 90245
Telephone: (310) 640-0818
E-mail: dwatson@palg.net

(2) Complete Description of the Property Including Present Location, Condition and Use:

The property is located in the City of Marysville (Township 15N. Range 3E. Sec. 4) in the County of Sutter, California. The property is currently an undeveloped field that is crossed by PG&E's Palermo-Pease Transmission Line. A copy of the Solar Array design layout is provided in **Attachment 2**.

(3) Intended Use of the Property:

The College District intends to construct and maintain a 300 kW solar array on the property for the purpose of supplying Yuba Community College with renewable electricity. The College District estimates that they will save $300,000 annually by installing the Solar Array.

(4) Complete Description of Financial Terms of the Proposed Transaction:

Not Applicable. PG&E will receive no compensation for the encroachment agreement.

(5) Description of How Financial Proceeds of the Transaction Will Be Distributed:

Not Applicable. PG&E will receive no compensation for the encroachment agreement.

(6) Statement on the Impact of the Transaction on Ratebase and Any Effect on the Ability of the Utility to Serve Customers and the Public:

The encroachment agreement will not impact PG&E's ratebase as no PG&E assets are being disposed of with this transaction. Entering into this

encroachment agreement will neither interfere with the operations of the Transmission Line nor affect PG&E's ability to provide safe and reliable service to its customers and the public at large.

With its encroachment agreements, PG&E, as a standard practice, includes a "Restoration" condition which requires that the encroachment agreement grantee vacate the encroachment area within 90 days of receiving written notice to vacate from PG&E. The Restoration section is typically a required condition in PG&E's encroachment agreements so as to not restrict PG&E in its effort to safely and reliably operate its electric system, and not restrict it in its ongoing transmission planning efforts. As described in the introduction above, an encroachment agreement is being requested from PG&E by the College District to construct and maintain a 300 kW solar array. PG&E's transmission planning unit has determined that, as designed, the Solar Array would not conflict with PG&E's ability to safely and reliably operate the Transmission Line and that there are no plans on the horizon to install an additional transmission line in the area to be occupied by the proposed Solar Array.

(7) The Original Cost, Present Book Value, and Present Fair Market Value for Sales of Real Property and Depreciable Assets, and a Detailed Description of How the Fair Market Value Was Determined (e.g., Appraisal):

Not Applicable

(8) The Fair Market Rental Value for Leases of Real Property, and a Detailed Description of How the Fair Market Rental Value Was Determined:

Not Applicable

(9) For Fair Market Rental Value of the Easement or Right-of-Way and a Detailed Description of How the Fair Market Rental Value Was Determined:

Not Applicable

(10) A Complete Description of any Recent Past (Within the Prior Two Years) or Anticipated Future Transactions that May Appear To Be Related to the Present Transaction[1]:

PG&E is unaware of any recent past or anticipated future transactions that may appear to be related to the present transaction.

[1] During adoption of the Advice Letter pilot program in ALJ-186 (later followed by ALJ-202 and ALJ-244), this category of information was included to enable the CPUC to ensure that utilities were not seeking to circumvent the $5 million Advice Letter threshold by dividing what is a single asset with a value of more than $5 million into component parts each valued at less than $5 million, which is clearly not the case here. (*See* CPUC Resolution ALJ-186, issued August 25, 2005, mimeo, p.5.)

(11) Sufficient Information and Documentation (Including Environmental Review Information) to Indicate that All Criteria Set Forth in Section II of Resolution ALJ-244 Are Satisfied:

PG&E has provided information in this Advice Letter to satisfy the eligibility criteria under Resolution ALJ-244 in that:

- The activity proposed in the transaction will not require environmental review by the CPUC as a Lead Agency;
- The transaction will not have an adverse effect on the pubic interest or on the ability of PG&E to provide safe and reliable service to its customers at reasonable rates;
- The transaction will not materially impact the ratebase of PG&E; and
- The transaction does not warrant a more comprehensive review that would be provided through a formal Section 851 application.

(12) Additional Information to Assist in the Review of the Advice Letter:

No information is readily available other than what has already been included within this advice letter filing.

(13) Environmental Information

Pursuant to ALJ-244, the Advice Letter program applies to proposed transactions that will not require environmental review by the CPUC as a lead agency under CEQA either because: (a) a statutory or categorical exemption applies (the applicant must provide a notice of exemption from the Lead Agency or explain by an exemption applies), or (b) because the transaction is not a project under CEQA (the applicant must explain the reasons why it believes that the transaction is not a project), or (c) because another public agency, acting as the Lead Agency under CEQA, has completed environmental review of the project, and the Commission is required to perform environmental review of the project only as a Responsible Agency under CEQA.

a. <u>Exemption</u>

i. Has the proposed transaction been found exempt from CEQA by a government agency?

1. If yes, please attach notice of exemption. Please provide name of agency, date of Notice of Exemption, and State Clearinghouse number.

Not Applicable

2. If no, does the applicant contend that the project is exempt from CEQA? If yes, please identity the specific CEQA exemption or exemptions that apply to the transaction, citing to the applicable State CEQA Guideline(s) and/or Statute(s).

   Not Applicable

b. Not a "Project" Under CEQA

   i. If the transaction is not a "project" under CEQA, please explain why.

   Not Applicable

c. CPUC as a Responsible Agency under CEQA

   i. If another public agency, acting as the Lead Agency under CEQA, has completed an environmental review of the project and has approved the final CEQA documents, and the Commission is a Responsible Agency under CEQA, the applicant shall provide the following.

      1. The name, address, and phone number of the Lead Agency, the type of CEQA document that was prepared (Environmental Impact Report, Negative Declaration, Mitigated Negative Declaration), the date on which the Lead Agency approved the CEQA document, the date on which a Notice of Determination was filed.

Lead Agency Information	**Lead Agency:** Yuba Community College District **Address:** 2088 North Beale Road, Marysville, CA 95901 **Phone Number: (530) 741-6700**
CEQA Document	Mitigated Negative Declaration ("MND")
Date Approved by Lead Agency	July 11, 2012
Date Notice of Determination Filed	July 12, 2011

      2. A copy of all CEQA documents prepared by or for the Lead Agency regarding the project and the Lead Agency's resolution or other document approving the CEQA documents.

Copies of the Draft and Final MND are provided as **Attachments 3 and 4,** respectively. A copy of the Notice of Determination is provided as **Attachment 5**.

3. A list of section and page numbers for the environmental impacts, mitigation measures, and findings in the prior CEQA documents that relate to the approval sought from the Commission.

Environmental Impacts	Draft MND (**Attachment 3**) Pages 9-37
Mitigation Measures	Mitigation Monitoring and Reporting Program (**Attachment 4**) Pages 3-7
Findings	Draft MND (**Attachment 3**) Page 39

4. An explanation of any aspect of the project or its environmental setting which has changed since the issuance of the prior CEQA document.

   PG&E is currently unaware of any aspect of the project or its environmental setting which have changed since the issuance of the MND.

5. A statement of whether the project will require approval by additional public agencies other than the Commission and the Lead Agency, and, if so, the name and address of each agency and the type of approval required.

   The Draft Initial Study and Draft Mitigated Negative Declaration, and the Final Mitigated Negative Declaration did not identify any additional public agencies that will require approval for the project.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail by facsimile or electronically, any of which must be received no later than **July 9, 2012**, which is 21 days[2] after the date of this filing. Protests should be mailed to:

CPUC Energy Division
Attention: Tariff Unit, 4th Floor
505 Van Ness Avenue
San Francisco, CA 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Pacific Gas and Electric Company
Attention: Brian K. Cherry
Vice President, Regulation and Rates
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Facsimile: (415) 973-6520
E-mail: PGETariffs@pge.com

Effective Date

Pursuant to the review process outlined in Appendix A of Resolution ALJ-244, PG&E requests that this advice filing become effective by a Commission Resolution and that the advice letter be given an effective date of **August 2, 2012.** PG&E submits this advice letter as a Tier 3.

[2] The 20 day protest period concludes on a weekend. PG&E hereby moves this date to the following business day, consistent with the provisions in G.O. 96-B, Section 1.5.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and Appendix A. Address change requests and electronic approvals should be directed to e-mail PGETariffs@pge.com. Advice letter filings can also be accessed electronically at http://www.pge.com/tariffs.

Brian Cherry /sw

Vice President - Regulation and Rates

Attachments

Attachment 1 – Encroachment Agreement
Attachment 2 – Original Easement and Solar Array Design
Attachment 3 – Draft Mitigated Negative Declaration
Attachment 4 – Final Mitigated Negative Declaration
Attachment 5 – Notice of Determination for the Mitigated Negative Declaration

************** SERVICE LIST Advice 4065-E *************
APPENDIX A

Karen Clopton
Administrative Law Judge Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-2008
kvc@cpuc.ca.gov

Myra J. Prestidge
Administrative Law Judge Division
505 Van Ness Avenue
San Francisco, CA 94102
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tom@cpuc.ca.gov

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efr@cpuc.ca.gov

Brewster Fong
Division of Ratepayer Advocates
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bfs@cpuc.ca.gov

Andrew Barnsdale
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-3221
bca@cpuc.ca.gov

********** 3rd Party **********
Yuba Community College District
Debbie Watson, District Counsel
222 N Sepulveda Blvd #1690
El Segundo, CA 90245
Telephone: 310-640-0818
E-mail: dwatson@palg.net

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY
ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:	Contact Person: Shirley Wong
☑ ELC ☐ GAS	Phone #: (415) 972-5505
☐ PLC ☐ HEAT ☐ WATER	E-mail: slwb@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas ☐
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **4065-E** **Tier: 3**

Subject of AL: **Encroachment Agreement for Solar Array on PG&E Easement in Sutter County -- Request for Approval Under Section 851**

Keywords (choose from CPUC listing): **Agreements, Transmission Lines**

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: N/A

Resolution Required? ☑Yes ☐No

Requested effective date: **August 2, 2012** No. of tariff sheets: **0**

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Ave., San Francisco, CA 94102
EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company
Attn: Brian K. Cherry, Vice President, Regulation and Rates
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

Advice 4065-E
June 18, 2012

Attachment 1
Encroachment Agreement

RECORDING REQUESTED BY AND RETURN TO:

PACIFIC GAS AND ELECTRIC COMPANY
Land Services Office
2730 Gateway Oaks Drive, Suite 220
Sacramento, CA 95833

Location: City/Uninc_____
Recording Fee $_____
Document Transfer Tax $_____
[ ] This is a conveyance where the consideration and Value is less than $100.00 (R&T 11911).
[ ] Computed on Full Value of Property Conveyed, or
[ ] Computed on Full Value Less Liens & Encumbrances Remaining at Time of Sale

_____
Signature of declarant or agent determining tax

(APN 10-260-078)
LD: 2115-03-0395

ENCROACHMENT AGREEMENT

This Encroachment Agreement (this "**Agreement**") is made and entered into this ___ day of _____, 2012 by PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, hereinafter called "**PG&E**", and Yuba Community College District, hereinafter called "**Owners**."

RECITALS

A. Owners are the fee title owners of certain real property within the County of Sutter, State of California, Assessor's Parcel Number 10-260-078 (hereinafter, the "**Property**") legally described in **Exhibit "A"** attached hereto and made a part hereof.

B. PG&E is the owner of a certain easement and right-of-way (the "**Easement**") for the Palermo-Pease Transmission line and for all other purposes connected therewith, as set forth in the Grant of Easement dated August 27, 1954 and recorded in Book 429 of Official Records at page 214, Sutter County Records which provides in part that "first party shall not erect or construct any building or other structure, or drill or operate any well, within said strip." The portion of the Property encumbered by the Easement is hereinafter referred to as the "**Easement Area**."

C. Owners propose to construct a Solar Array including concrete foundations and other improvements associated therewith (the **"Improvements"**) on the Easement Area, the construction of which violates the prohibition against buildings or other structures contained in the Easement. The Easement Area and the portion of the Easement Area subject to such encroachment (the **"Encroachment Area"**) shown on the map attached as **Exhibit "B"** attached hereto and made a part hereof..

D. Owners have requested that PG&E grant permission for the construction of the Improvements within the Easement Area. PG&E has determined that the Improvements, to be constructed pursuant to plans and specifications approved by PG&E, do not interfere with the present full use of the Easement Area by PG&E, and PG&E is therefore willing to agree to allow such encroachment on the Easement Area on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owners and PG&E hereby agree as follows:

1. Consent to Encroachment. Notwithstanding the prohibition against erection or construction of buildings or structures in the Easement, PG&E hereby consents to the encroachment of the **Improvements** onto the Easement Area by approximately 100 feet, in the manner and location as more specifically set forth in **Exhibit "B"** subject to the terms and conditions set forth herein.

2. Governmental Approvals. This Agreement shall not become effective, notwithstanding that it may have been executed and delivered by the parties, and Owners shall not commence any activity hereunder, unless and until the California Public Utilities Commission (the **"CPUC"**) approves this Agreement by an order which is final, unconditional and unappealable (including exhaustion of all administrative appeals or remedies before the CPUC), and the terms and conditions of such CPUC approval are satisfactory to PG&E in its sole and absolute discretion. This Agreement is made subject to all the provisions of such approval, as more particularly set forth in CPUC Decision _____ (Application No. _____), in like manner as though said provisions were set forth in full herein.

3. **Termination; Restoration. This agreement shall not be subject to termination by PG&E for a period of five (5) years from the date of execution with the exception of an emergency situation. In the event of an emergency within the five (5) year period, PG&E, in its sole and absolute discretion, shall have the right to terminate this agreement. Subsequent to the five year period, PG&E may terminate Owners' rights under this agreement, at any time, upon ninety (90) days written notice to the Owners, if PG&E, in its sole and absolute discretion, should determine that Owners' use of the Easement Area is inconsistent with PG&E's operational needs in the future, or in any way interferes with, impairs or otherwise impedes PG&E's full use of facilities installed or that may be installed by PG&E in the vicinity of the Easement Area. Upon such termination, Owners, at Owners' sole cost and expense, shall remove all Improvements that encroach upon the Easement Area and shall repair and restore the Easement Area as nearly as possible to the condition that existed prior to the construction of said Improvements. Owners shall pay the entire cost of such removal**

and restoration, and PG&E shall have no liability for any costs caused by or related to any such termination. Owners further acknowledge that PG&E's termination right shall not be affected by any Improvements that Owners have made to the Easement Area, regardless of the nature or extent of those Improvements. Owners understand and agree that notwithstanding that Owners may have made a substantial investment in such improvements, Owners shall not be entitled to any compensation whatsoever for the termination of Owners' rights under this Agreement by PG&E. (Owners to initial here _____.

4. Indemnification; Release.

(a) Indemnification. Owners shall, to the maximum extent permitted by law, indemnify, protect, defend and hold harmless PG&E, its parent corporation, subsidiaries and affiliates, and their respective officers, managers, directors, representatives, agents, employees, transferees, successors and assigns (each, an "**Indemnitee**" and collectively, "**Indemnitees**") from and against all claims, losses (including, but not limited to, diminution in value), actions, demands, damages, costs, expenses (including, but not limited to, experts fees and reasonable attorneys' fees and costs) and liabilities of whatever kind or nature (collectively, "**Claims**"), which arise from or are in any way connected with the occupancy or use of the Easement Area by Owners or Owners' contractors, agents, or invitees, or the exercise by Owners of its rights hereunder, or the performance of, or failure to perform, Owners' duties under this Agreement, including, but not limited to, Claims arising out of: (1) injury to or death of persons, including but not limited to employees of PG&E; (2) injury to property or other interest of PG&E, Owners or any third party; (3) violation of any applicable federal, state, or local laws, statutes, regulations, or ordinances, including all legal requirements relating to human health or the environment, and including any liability which may be imposed by law or regulation; excepting only with respect to each Indemnitee, any Claim arising from its active negligence or willful misconduct of such Indemnitee or its agents or employees in the course of their employment. In the event any action or proceeding is brought against any Indemnitee for any Claim against which Owners are obligated to indemnify or provide a defense hereunder, Owners upon written notice from PG&E shall defend such action or proceeding at Owners' sole expense by counsel approved by PG&E, which approval shall not be unreasonably withheld, conditioned or delayed.

(b) Release. Owners accept all risk relating to its occupancy and use of the Easement Area. PG&E shall not be liable to Owners for, and Owners hereby waive, release, exonerate, discharge and covenant not to sue PG&E and the other Indemnitees from, any and all liability, whether in contract, tort or on any other basis, for any injury, damage, or loss resulting from or attributable, the use or occupancy of the Easement Area by Owners, or PG&E's operations and maintenance of PG&E's facilities installed by virtue of said Grant of Easement, except in the case of any Indemnitee, any injury, damage, or loss arising from the wrongful, negligent or willful acts or omissions of such Indemnitee.

5. Compliance with Laws. Owners shall, at its sole cost and expense, promptly comply with all laws, statutes, ordinances, rules, regulations, requirements or orders of municipal, state, and federal authorities now in force or that may later be in force, with the conditions of any permit, relating to Owners' use or occupancy of the Easement Area.

6. Alterations. Except for the Improvements authorized to be constructed pursuant to this Agreement, Owners shall not construct any additional buildings or structures on the Easement Area, nor shall Owners make any alteration, addition or improvement to the Easement Area that would increase the Encroachment Area, either horizontally or vertically. Owner shall not drill, bore or excavate on the Easement Area except in connection with construction of the Improvements pursuant to plans and specifications approved by PG&E, or a removal of the Improvements as required by this Agreement.

7. Damage or Destruction. In the event that the Improvements which encroach onto the Easement Area shall be destroyed or demolished, Owners shall not rebuild the Improvements on any part of the Easement Area except pursuant to plans and specifications approved by PG&E.

8. Condition of Easement Area. Subject to the terms of the Easement Owners accept the Encroachment Area and the Easement Area in its existing physical condition, without warranty by PG&E or any duty or obligation on the part of PG&E to maintain the Easement Area. Owners understand that numerous hazards, environmental or otherwise, may be located in, on, or underlying the Easement Area, and that hazardous materials may be used in connection with PG&E facilities that may be operated in the Easement Area, and agrees that entry onto the Easement Area is at Owners' sole risk and expense

9. Maintenance. Owners shall be responsible for the maintenance of the Improvements in good condition and repair, and Owners shall coordinate all activities regarding the maintenance of the Improvements to reasonably minimize any interference with the use by PG&E of the Easement Area, and Owners shall conduct its activities in such a manner so as not to endanger the Easement, the environment and human health and safety. Owners shall be responsible for remediation of any hazardous materials release caused by Owners, and to clean and remove debris and/or promptly repair any damages to the Easement Area following any entry or activity by Owners, returning the Easement Area to a like or better condition.

10. Reserved Rights. Intentionally Omitted

11. Insurance. Prior to the Effective Date of this Agreement, Owners shall procure, and thereafter Owners shall carry and maintain in effect at all times the following insurance: Worker's Compensation in compliance with applicable labor codes, acts, laws or statutes, state or federal, where Owners perform work and Employer's Liability insurance with limits not be less than $1,000,000 for injury or death, each accident; Commercial General Liability for bodily injury and property damage with limits of not less than $1,000,000 each occurrence/$2,000,000 aggregate; Business Auto, code 1 "any auto" combined single limit no less than $1,000,000 each accident. Owners are also responsible for causing its agents, contractors and subcontractors to comply with the insurance requirements of this Agreement at all relevant times.

12. Notice. Any notices or communications hereunder shall be in writing and shall be personally delivered or sent by first class mail, certified or registered, postage prepaid, or sent by national overnight courier, with charges prepaid for next business day delivery, addressed to the addressee party at its address or addresses listed below, or to such other address or addresses for a party as such party may from time to time designate by notice given to the other party. Notices shall be deemed received, if sent by personal delivery upon actual receipt by the party being sent the notice, or on the expiration of three (3) business days after the date of mailing, or on the following business day if sent by overnight courier

If to PG&E:

Pacific Gas and Electric Company
Land Rights Supervisor
1014 B, Mail Code N10A
P. O. Box 770000
San Francisco, CA 94177

If to Owners:

Yuba Community College District
George Parker
Director, Facilities Planning
2088 North Beale Road
Marysville, CA 95901

13. Governing Law. This Agreement shall in all respects be interpreted, enforced, and governed by and under the laws of the State of California.

14. Entire Agreement. This Agreement and the Deed, supersedes all previous oral and written agreements between and representations by or on behalf of the parties and constitutes the entire agreement of the parties with respect to the subject matter hereof. This Agreement may not be amended except by a written agreement executed by the parties.

15. Binding Effect. This Agreement and the covenants and agreements contained herein shall be binding upon, and shall inure to the benefit of, the parties hereto and their respective heirs, successors and assigns (subject to the provisions of Section 17 below). No assignment or delegation by Owners, whether by operation of law or otherwise, shall relieve Owners of any of its duties, obligations or liabilities hereunder, in whole or in part. The covenants of Owners hereunder shall run with the land.

16. Assignment. This Agreement and the rights of Owners hereunder are appurtenant to the Property presently owned by Owners and may not be separately assigned, transferred, conveyed or encumbered. Any purported assignment, transfer, conveyance or encumbrance violating the foregoing condition shall be void and of no effect.

17. Attorneys' Fees. Should either party bring an action against the other party, by reason of or alleging the failure of the other party with respect to any or all of its obligations hereunder, whether for declaratory or other relief, then the party which prevails in such action shall be entitled to its reasonable attorneys' fees (of both in-house and outside counsel) and expenses related to such action, in addition to all other recovery or relief. A party shall be deemed to have prevailed in any such action (without limiting the generality of the foregoing) if such action is dismissed upon the payment by the other party of the sums allegedly due or the performance of obligations allegedly not complied with, or if such party obtains substantially the relief sought by it in the action, irrespective of whether such action is prosecuted to judgment.

18. Survival of Obligations. Owners' obligations under Sections 3 and 4 of this Agreement, and all representations, warranties, indemnities or other provisions which by their nature survive termination shall survive the exercise of PG&E's termination rights pursuant to Section 3 of this Agreement.

19. No Waiver. No waiver with respect to any provision of this Agreement shall be effective unless in writing and signed by the party against whom it is asserted. No waiver of any provision of this Agreement by a party shall be construed as a waiver of any subsequent breach or failure of the same term or condition, or as a waiver of any other provision of this Agreement.

20. Captions. The captions in this Agreement are for reference only and shall in no way define or interpret any provision hereof.

21. Counterparts. This Agreement may be executed in identical counterpart copies, each of which shall be an original, but all of which taken together shall constitute one and the same agreement.

22. Recording. Owners hereby consent and agree to the recording by PG&E of this Agreement against the Property. Owners agree to sign any additional documents reasonably required to complete such recording.

23. Ratification of Deed. Except as modified by this Agreement in regard to the Property, all of the terms, conditions and provisions of the Deed shall remain in full force and effect and are hereby ratified and confirmed. To the extent the terms of the Deed are inconsistent with this Agreement, the terms of this Agreement shall control.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first set forth above.

"PG&E"	"Owners"
PACIFIC GAS AND ELECTRIC COMPANY, a California corporation	Yuba Community College District
By: Marvin Penner	Douglas B. Houston
Its: Manager Land Management	Chancellor

State of California
County of Yuba)

On May 8, 2012, before me, Claudette Marie Michel, Notary Public
Here insert name and title of the officer

personally appeared Douglas B. Houston

_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

CLAUDETTE MARIE MICHEL
COMM. # 1804135
NOTARY PUBLIC - CALIFORNIA
YUBA COUNTY
MY COMM. EXP. JUNE 25, 2012

WITNESS my hand and official seal.

Claudette Marie Michel
Signature of Notary Public

(Seal)

CAPACITY CLAIMED BY SIGNER

[ ] Individual(s) signing for oneself/themselves

[ ] Corporate Officer(s) of the above named corporation(s)

[ ] Trustee(s) of the above named Trust(s)

[ ] Partner(s) of the above named Partnership(s)

[ ] Attorney(s)-in-Fact of the above named Principal(s)

[ ] Other _____

State of California
County of _____)

On _____, before me, _____,
Here insert name and title of the officer

personally appeared _____

_____

_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ (Seal)
Signature of Notary Public

CAPACITY CLAIMED BY SIGNER

[ ] Individual(s) signing for oneself/themselves

[ ] Corporate Officer(s) of the above named corporation(s)

[ ] Trustee(s) of the above named Trust(s)

[ ] Partner(s) of the above named Partnership(s)

[ ] Attorney(s)-in-Fact of the above named Principal(s)

[ ] Other _____

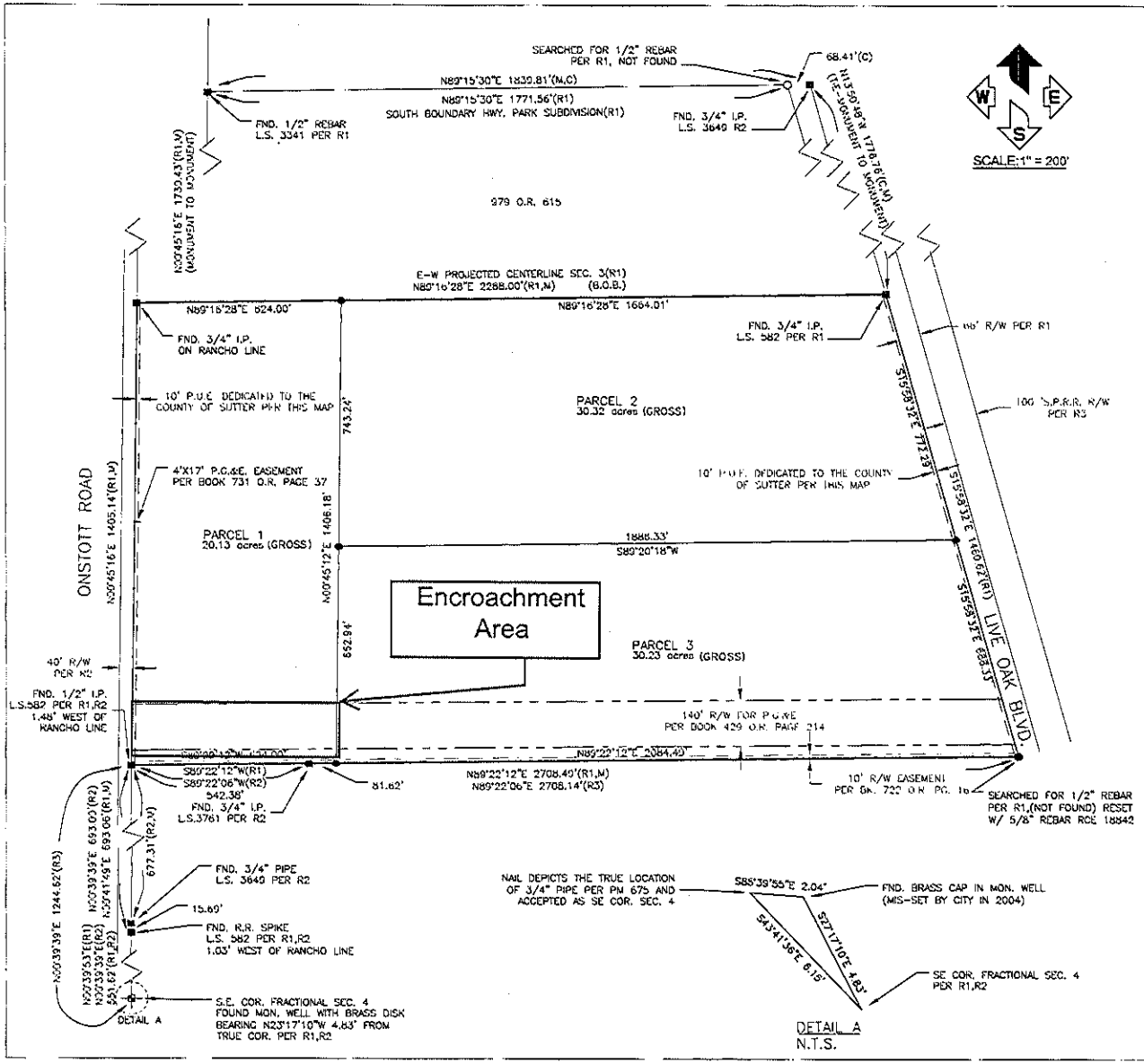
Exhibit "A"

Property description is located within the City of Yuba City:

Parcel 3 as shown upon the Parcel Map #1150 filed for record in Book 8 of Parcel Maps at page 20, Sutter County Records.

Exhibit "B"

20A



LEGEND:

- ● SET 5/8" REBAR W/PLASTIC CAP STAMPED "RCE 18842"
- ■ FOUND MONUMENT AS NOTED
- ⊕ SECTION CORNER, QUARTER SECTION CORNER
- O NOTHING FOUND OR NOTHING SET- CALCULATED POINT
- M MEASURED DATA
- C CALCULATED

REFERENCE:

- R1 R.O.S. BK10, PG. 132
- R2 P.M. 690 BK.4 P.M. PG. 40
- R3 R.O.S. BK.10, PG. 16

HORIZONTAL CONTROL INFORMATION

COORDINATES SHOWN ARE BASED ON THE NAD 83 (NSRS2007) ADJUSTMENTS FOR CALIFORNIA COORDINATE SYSTEM, ZONE 2. ALL DISTANCES SHOWN ARE GROUND. MULTIPLY BY 0.9999175 TO OBTAIN GRID DISTANCES. ROTATE BEARINGS SHOWN BY 0°14'54" COUNTER-CLOCKWISE TO OBTAIN GRID BEARINGS.

HORIZONTAL CONTROL TIE

MONUMENT	GRID BEARING	GRID DISTANCE	NORTHING	EASTING
FND 3/4"			2189962.083	6663191.424
	N02°41'10"E	1139.212'		
FND. 3/4" PIPE			2191100.043	6663244.914
	N44°01'34"E	2247.190'		
979 OR 615 SE			2191738.924	6667532.864

BASIS OF BEARINGS (B.O.B.)

THE BASIS OF BEARINGS FOR THIS MAP IS IDENTICAL TO THOSE AS SHOWN ON THE RECORD OF SURVEY FILED IN BOOK 10 OF SURVEYS AT PAGE 132 BETWEEN FOUND MONUMENTS AS SHOWN HEREON AND TAKEN AS N89°16'28"E.

PARCEL MAP # 1150

FOR

SARBJIT S. BASRAI, KAMALJIT K. BASRAI AND SUKHPAL K. BASRAI

BEING A DIVISION OF A PORTION OF THE SOUTH HALF OF THE PROJECTION OF SECTION 3, TOWNSHIP 15 NORTH, RANGE 3 EAST, M.D.B. & M. INTO THE NEW HELVETA RANCHO, COUNTY OF SUTTER, STATE OF CALIFORNIA

KEY & ASSOCIATES
CIVIL ENGINEERS
1646 POOLE BLVD.
YUBA CITY, CA
TEL: 530-674-1565

JULY 2008

JOB# 08-7208
SHEET 2 OF 2 SHEETS

Advice 4065-E
June 18, 2012

Attachment 2
Original Easement and Solar Array Design

DOUBLE LINE OF TOWERS
4-53

GM 122587
Calpotz 204422

65-246
215-03-0395

ROBERT RYLAND BERG and DOROTHY E. BERG, husband and wife, and FLORENCE ELIZABETH VANTRESS and I. K. VANTRESS, wife and husband,

hereinafter called first party, in consideration of value adequate therefor paid by PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, hereinafter called second party, the receipt whereof is hereby acknowledged, hereby grants to second party the right from time to time to erect, construct, reconstruct, replace, remove, maintain and use two independent lines of towers with such wires and cables as second party shall from time to time suspend therefrom for the transmission of electric energy, and for communication purposes, and all necessary and proper foundations, footings, crossarms and other appliances and fixtures for use in connection with said towers, wires and cables, together with a right of way, on, along and in all of the hereinafter described strip of those certain lands which are situate in the.....

.....County of.....Sutter....., State of California, and are described as follows, to-wit:

That certain parcel of land, situate in Rancho New Helvetia, Two tracts, bounded by a line which begins at the east quarter corner of Section 4, T. 15 N., R. 3 E., M. D. B. & M., and runs thence East, approximately 2310 feet to the southwesterly boundary line of the state highway extending between Yuba City and Gridley; thence southeasterly, along the southwesterly boundary line of said state highway, approximately 2720 feet to the northerly boundary line of the county road commonly known as Pease Road; thence westerly, along the northerly boundary line of said Pease Road, approximately 3100 feet to the easterly boundary line of said Section 4; said easterly boundary line being the westerly boundary line of said Rancho; thence northerly, along the easterly boundary line of said Section 4, approximately 2640 feet to the point of beginning.

The aforesaid strip extends entirely across said lands and is particularly described as follows, to-wit:

A strip of land of the uniform width of 140 feet lying 40 feet on the southerly, and 100 feet on the northerly, side of the line which begins at a point in the northeasterly boundary line of said lands from which the railroad spike (set in pavement) marking the northeast corner of said Section 4 bears N. 25° 16½' W. 6160.0 feet distant and runs thence S. 89° 33' W. 2700 feet, more or less, to the westerly boundary line of said lands.

5464

RECORDED AT THE REQUEST OF
PACIFIC GAS & ELECTRIC CO.
SEP 24 1954
at 37 min. past 1 o'clock
P M. Vol. 47 9 page 214
OFFICIAL RECORDS OF
SUTTER COUNTY, CALIFORNIA
C. M. Bough County Recorder
By ..... Deputy Recorder
Fee $2.70

Indexed Compared 64/1

First party, for the consideration aforesaid, further grants to second party, the right of ingress to and egress from said strip over and across said lands by means of roads and lanes thereon, if such there be, otherwise by such route or routes as shall occasion the least practicable damage and inconvenience to first party, provided, that such right of ingress and egress shall not extend to any portion of said lands which is isolated from said strip by any public road or highway, now crossing or hereafter crossing said lands.

First party shall have the right to use said strip for purposes not inconsistent with second party's full enjoyment of the rights hereby granted, provided that first party shall not erect or construct any building or other structure, or drill or operate any well, within said strip.

Second party shall have the further right to install, maintain and use gates in all fences which now cross or shall hereafter cross said strip.

Second party shall also have the right from time to time to trim and to cut down and clear away any and all trees and brush now or hereafter on said strip and shall have the further right from time to time to trim and to cut down and clear away any trees on either side of said strip which now or hereafter in the opinion of second party may be a hazard to said towers, wires or cables, by reason of the danger of falling thereon, provided, however, that all trees which second party is hereby authorized to cut and remove, if valuable for timber or wood, shall continue to be the property of first party, but all tops, lops, brush and refuse wood shall be burned or removed by second party.

Second party shall also have the right to mark the location of said strip by suitable markers set in the ground or on said towers, but said markers when set in the ground shall be placed in fences or other locations which will not interfere with any reasonable use first party shall make of said strip.

Second party shall repair any damage it shall do to first party's private roads or lanes on said lands, and shall indemnify first party against any loss and damage which shall be caused by the exercise of said ingress and egress, or by any wrongful or negligent act or omission of second party or of its agents or employees in the course of their employment.

The provisions hereof shall inure to the benefit of and bind the heirs, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF first party has executed these presents this 27 day of August 1954

Robert Rayland Berg

Florence Elizabeth Vantress

Executed in the presence of

Witness

Dorothy E. Berg

J. K. Vantress

DOCUMENTARY — UNITED STATES INTERNAL REVENUE — 165 ONE DOLLAR AND SIXTY-FIVE CENTS

DOCUMENTARY — UNITED STATES INTERNAL REVENUE — 80 EIGHTY CENTS

PREPARED ML D.C.F.

CHECKED 2/3 APR 22 '54

64½

PROJECT Pease Sub-Big Bend-Oakland 110 kv L.
AUTHORIZATION Gm. 122587
COST $4350.00

DRAFT No. 19951
MAP No. 204422
COPY TO H.O. Haberkorn
Colgate Division

824028 7-52 150 POL.

State of California,

City and County of San Francisco } ss.

On this 7th day of September A. D. One Thousand Nine Hundred and Fifty-four, before me, MARIE H. STANLEY, a Notary Public in and for said City and County, residing therein, duly commissioned and sworn, personally appeared J. W. Frost, known to me to be the same person whose name is subscribed to the within instrument, as a witness thereto, who, being duly sworn, deposed and said, that he resides in the County of San Mateo, State of California, that he was present and saw Robert Ryland Berg, Florence Elizabeth Vantress, Dorothy E. Berg and I. K. Vantress (personally known to him to be the persons described in and who executed the said instrument, as parties thereto), sign and execute the same, and that, at their request, he, the said affiant, thereupon subscribed his name as a witness thereto.

In Witness Whereof, I have hereunto set my hand and affixed my official seal, at my office, in the said City and County of San Francisco, the day and year in this certificate first above written.

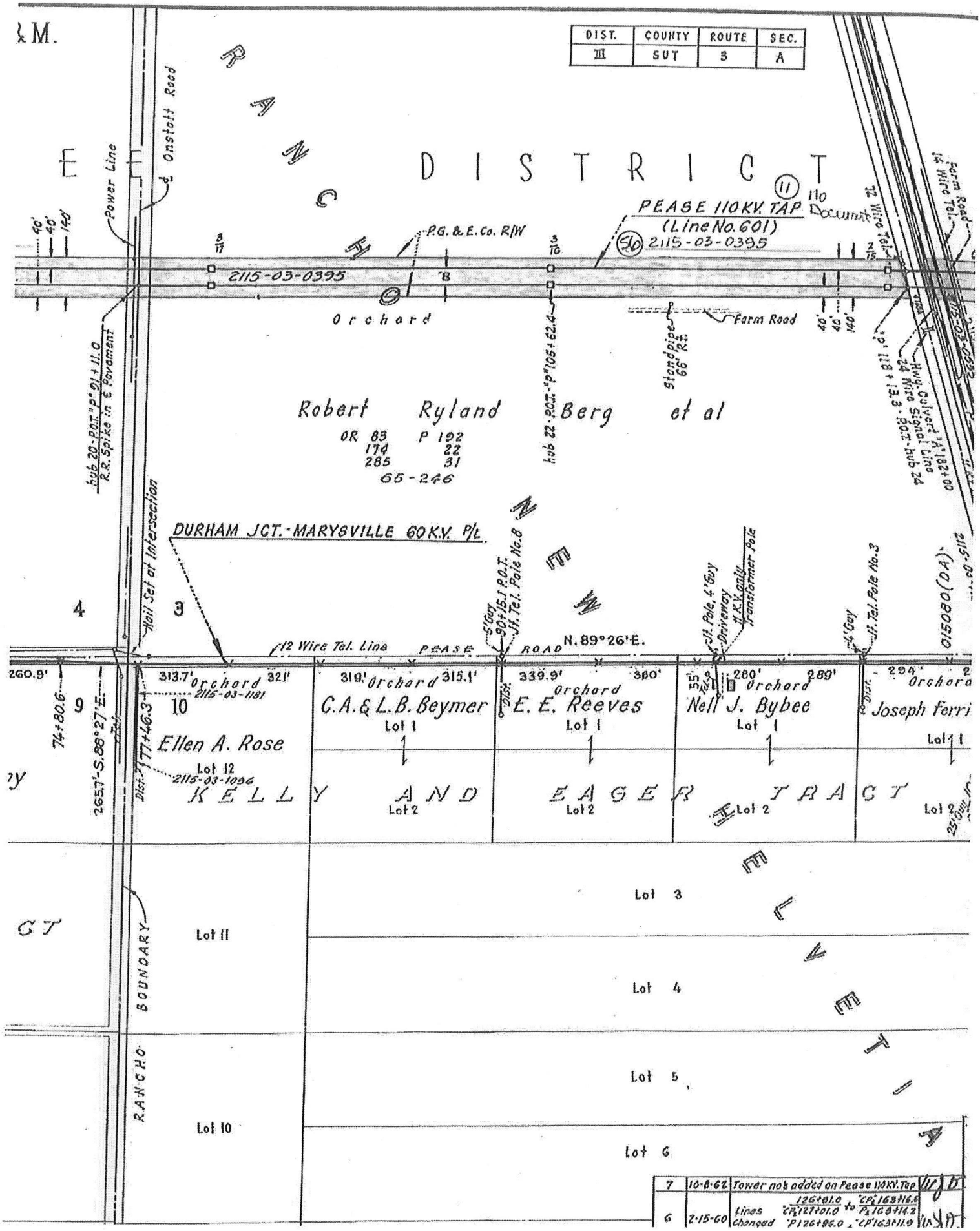
Marie H. Stanley

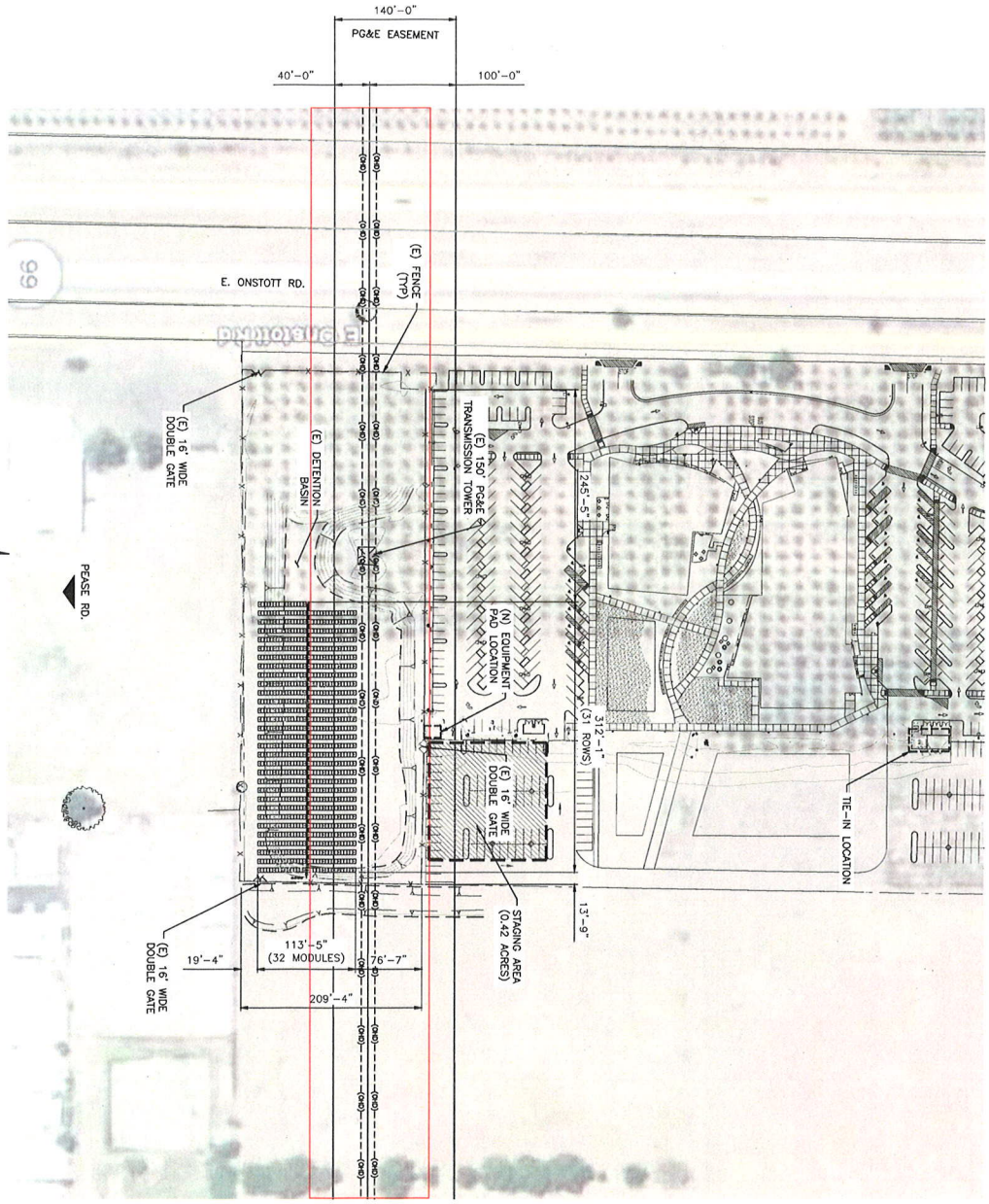
Notary Public in and for the City and County of San Francisco, State of California

My Commission Expires November 22, 1955

64

MICROFILMED
AUG - 1 '55


M.
RANCHO DISTRICT
DIST. | COUNTY | ROUTE | SEC.
III | SUT | 3 | A
PEASE 110 KV. TAP
(Line No. 601)
2115-03-0395
P.G. & E. Co. R/W
Onstott Road
Power Line
Orchard
Farm Road
Robert Ryland Berg et al
OR 83 P 192
174 22
285 31
65-246
DURHAM JCT.-MARYSVILLE 60 K.V. P/L
Hail Set at Intersection
12 Wire Tel. Line
PEASE ROAD
N. 89° 26' E.
Ellen A. Rose
Lot 12
2115-03-1096
C.A. & L.B. Beymer
Lot 1
E. E. Reeves
Lot 1
Nell J. Bybee
Lot 1
Joseph Ferri
Lot 1
KELLY AND EAGER TRACT
Lot 2
Lot 3
Lot 4
Lot 5
Lot 6
Lot 10
Lot 11
BOUNDARY
RANCHO
7 10-8-62 Tower no's added on Pease 110 KV. Tap
6 2-15-60 Lines Changed



1 STAGING & ACCESS PLAN
SCALE: 1/64" = 1'-0"

LEGEND

- ACCESS ROUTE
- (N) FENCE
- (N) GATE
- STAGING AREA

REVISIONS					
ISS	REV.	DESCRIPTION	DATE	DB	CB
A	-	ISSUE FOR PG&E REVIEW	10-24-11	RM	-

YUBA COMMUNITY COLLEGE
SUTTER
3301 E. ONSOTT ROAD
YUBA CITY, CA 95991

STAGING & ACCESS PLAN

ENGINEER'S STAMP

SUNPOWER
1414 HARBOUR WAY SOUTH
RICHMOND, CA 94804
(510) 540-0550

OPPORTUNITY	003785
PROJECT	10984
DATE DRAWN	9-23-11
DRAWN BY	RM

SHEET G-2.0

10/24/2011 7:22 PM

10984_G2_STAGING_ACCESS_PLAN.DWG

OWNER'S STATEMENT

THE UNDERSIGNED, BEING THE PERSONS HAVING RECORD TITLE INTEREST IN THE HEREON SUBDIVIDED LANDS, **DO HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS PARCEL MAP,** AND OFFER FOR DEDICATION, AND PARTICIPATE IN SAID OFFER OF DEDICATION AND DO HEREBY **DEDICATE** THE FOLLOWING:

1. EASEMENTS **INDICATED AS P.U.E (PUBLIC UTILITY EASEMENT) FOR, BUT NOT LIMITED TO OVERHEAD** AND UNDERGROUND ELECTRICAL, WATER, SEWER, GAS, STORM DRAINAGE, COMMUNICATION SERVICES STREETS INCLUDING CURB GUTTER AND SIDEWALKS, AND ALL APPURTENANCES THERETO

SARBJIT S. BASRAI _____ TITLE

KAMALJIT K. BASRAI _____ TITLE

SUKHPAL K. BASRAI _____ TITLE

ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF San Diego

ON 7-29-2008 BEFORE ME, F. MAHMOUDI, A Notary Public

PERSONALLY APPEARED SARBJIT S. BASRAI &

KAMALJIT K. BASRAI

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL

SIGNATURE F. Mahmoudi

F. MAHMOUDI Commission # 1709710 Notary Public - California San Diego County My Comm. Expires Oct 19, 2011

NOTARY'S NAME F. MAHMOUDI

MY COMMISSION EXPIRES 10-19-2011

PRINCIPAL PLACE OF BUSINESS DEL MAR, CA

ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF Sutter

ON 7/30/08 BEFORE ME, Dayna Silveira, Notary Public

PERSONALLY APPEARED Sukhpal K. Basrai

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL

SIGNATURE _____

NOTARY'S NAME Dayna Silveira

MY COMMISSION EXPIRES 11/5/12

PRINCIPAL PLACE OF BUSINESS Yuba City, CA, Sutter County

TAX COLLECTOR'S CERTIFICATE

I, JIM STEVENS, TAX COLLECTOR FOR THE COUNTY OF SUTTER, STATE OF CALIFORNIA DO HEREBY CERTIFY PURSUANT TO GOVERNMENT CODE SECTION 66492 THAT THE RECORDS OF MY OFFICE SHOW THAT THERE ARE NO LIENS AGAINST THE LANDS SHOWN HEREON OR ANY PART THEREOF FOR UNPAID TAXES OR SPECIAL ASSESSMENTS.

AS TO LIENS FOR TAXES NOT YET PAYABLE, I ESTIMATE THERE ARE TAXES IN THE AMOUNT OF $708.00 FOR 2008-2009 WHICH ARE A LIEN BUT NOT YET PAYABLE. I CERTIFY, PURSUANT TO GOVERNMENT CODE SECTION 66493, THAT SECURITY HAS BEEN DEPOSITED WITH THE COUNTY CONDITIONED UPON THE PAYMENT OF SAID TAXES NOT YET PAYABLE.

ASSESSOR'S PARCEL NUMBER 010-260-035

DATE 8-7-08

JIM STEVENS
TAX COLLECTOR OF THE COUNTY OF SUTTER

COUNTY OF SUTTER TREASURER TAX COLLECTOR CALIFORNIA

CLERK OF THE BOARD OF SUPERVISORS CERTIFICATE

I, DONNA M. JOHNSTON CLERK OF THE BOARD OF SUPERVISORS FOR THE COUNTY OF SUTTER, STATE OF CALIFORNIA DO HEREBY CERTIFY THAT I HAVE RECEIVED THE CERTIFICATE FROM THE TAX COLLECTOR OF THE COUNTY OF SUTTER REQUIRED BY GOVERNMENT CODE SECTION 66492.

I FURTHER CERTIFY THAT I HAVE RECEIVED A CERTIFICATE FROM THE TAX COLLECTOR STATING THAT THE SECURITY REQUIRED BY GOVERNMENT CODE SECTION 66493 HAS BEEN DEPOSITED.

DATE: 9/8/08

DONNA M. JOHNSTON
CLERK OF THE BOARD OF SUPERVISORS,
SUTTER COUNTY

BY: _____ DEPUTY

BOARD OF SUPERVISORS SUTTER CO. CA

CERTIFICATE OF ACCEPTANCE

THIS IS TO CERTIFY THAT THE INTEREST IN REAL PROPERTY OFFERED FOR DEDICATION TO SUTTER COUNTY IN THE OWNERS STATEMENT IS HEREBY ACCEPTED ON BEHALF OF THE BOARD OF SUPERVISORS PURSUANT TO AUTHORITY CONFERRED BY ORDINANCE NO. 1129 OF SAID BOARD ON AUGUST 25, 1992 AND GRANTEE CONSENTS TO RECORDATION THEREOF BY IT'S DULY AUTHORIZED OFFICER.

DOUGLAS R. GAULT
PUBLIC WORKS DIRECTOR

9/12/08
DATE

GENERAL NOTES

1. A SITE EVALUATION TO DETERMINE THE SUITABILITY OF THE PROPOSED PARCELS FOR UTILIZING ON-SIRE SEWAGE DISPOSAL HAS NOT BEEN CONDUCTED. ON-SITE SEWAGE SYSTEMS OR ANY USE THAT GENERATES SEWAGE OR WASTEWATER REGULATED BY THE DEPARTMENT AND/OR THE REGIONAL WATER QUALITY CONTROL BOARD SHALL NOT BE PERMITTED UNLESS ALL REQUIREMENTS OF SUTTER COUNTY ENVIRONMENTAL HEALTH DIVISION AND REGIOAL WATER QUALITY CONTROL BOARD IN EFFECT AT THE TIME OF DEVELOPMENT ARE MET.

2. ALL STRUCTURES PRODUCING WASTEWATER SHALL CONNECT TO THE PUBLIC SEWER WHEN IT IS AVAILABLE, PER THE UNIFORM PLUMBING CODE (UPC).

3. NO GRADING OR ALTERATION OF THE EXISTING TERRAIN THAT WOULD DIRECT ADDITIONAL WATERS TO THE COUNTY ROAD SHALL BE DONE WITHOUT THE APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS. ADDITIONALLY, NO GRADING OR ALTERATION OF THE EXISTING TERRAIN THAT WOULD DIRECT ADDITIONAL WATERS FROM ONE LOT TO ANY ADJACENT LOT IS ALLOWED.

4. WATER SUPPLY SHALL BE FROM INDIVIDUAL WELLS, LOCATED ON THE SUBJECTED PROPERTIES. (OFF-SITE PRIVATE WATER SUPPLIES ARE PROHIBITED UNLESS PROPER DOCUMENTATION OF EASEMENTS AND LEGAL CONTRACTS ARE PROVIDED).

COUNTY PLANNER'S STATEMENT

THIS MAP HAS BEEN EXAMINED THIS 4TH DAY OF SEPTEMBER, 2008 FOR CONFORMANCE WITH THE APPROVED TENTATIVE MAP AND CONDITIONS OF APPROVAL THEREOF, AS APPROVED BY THE SUTTER COUNTY PLANNING COMMISION ON FEBRUARY 20, 2008.

Lisa M. Wilson
SUTTER COUNTY PLANNER

ENGINEER'S STATEMENT

I, RONALD C. KEY HEREBY CERTIFY THAT I AM A REGISTERED CIVIL ENGINEER IN THE STATE OF CALIFORNIA, THAT I PREPARED THE WITHIN MAP FROM A SURVEY MADE BY ME OR UNDER MY DIRECTION IN JUNE 2008 THAT THE MONUMENTS WILL OCCUPY THE POSITIONS INDICATED BY NOVEMBER 2008 AND ARE OF THE CHARACTER INDICATED, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, AND THAT THIS SURVEY IS TRUE AND COMPLETE AS SHOWN.

Ronald C. Key
RONALD C. KEY RCE 18842
EXPIRES 6-30-09

REGISTERED PROFESSIONAL ENGINEER RONALD C. KEY No. 18842 EXP. 6/30/09 CIVIL STATE OF CALIFORNIA

COUNTY SURVEYOR'S STATEMENT

I HEREBY CERTIFY THAT I HAVE EXAMINED THIS MAP AND FIND THAT IT IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP AND ANY APPROVED ALTERATION THEREOF. I FURTHER CERTIFY THAT ALL PROVISIONS OF CHAPTER 2 OF THE SUBDIVISION MAP ACT AND ANY LOCAL ORDINANCES APPLICABLE AT THE TIME OF APPROVAL OF THE TENTATIVE MAP HAVE BEEN COMPLIED WITH. I AM SATISFIED THAT THE MAP IS TECHNICALLY CORRECT.

Jerry E. Orr
JERRY E. ORR
SUTTER COUNTY SURVEYOR
R.C.E. 21203 EXP. 9-30-09

9-15-08
DATE

REGISTERED PROFESSIONAL ENGINEER JERRY E. ORR CIVIL STATE OF CALIFORNIA

RECORDER'S STATEMENT

FILED THIS 17th DAY OF September 2008, AT 8:00 A.M IN BOOK 8 OF PARCEL MAPS, AT PAGE 20 AT THE REQUEST OF SARBJIT S. BASRAI

DONNA M. JOHNSTON
SUTTER COUNTY RECORDER

BY: R. Brown
DEPUTY

FILE NO 2008-0015705

FEE: $9.00

PARCEL MAP # 1150

FOR

SARBJIT S. BASRAI, KAMALJIT K. BASRAI AND SUKHPAL K. BASRAI

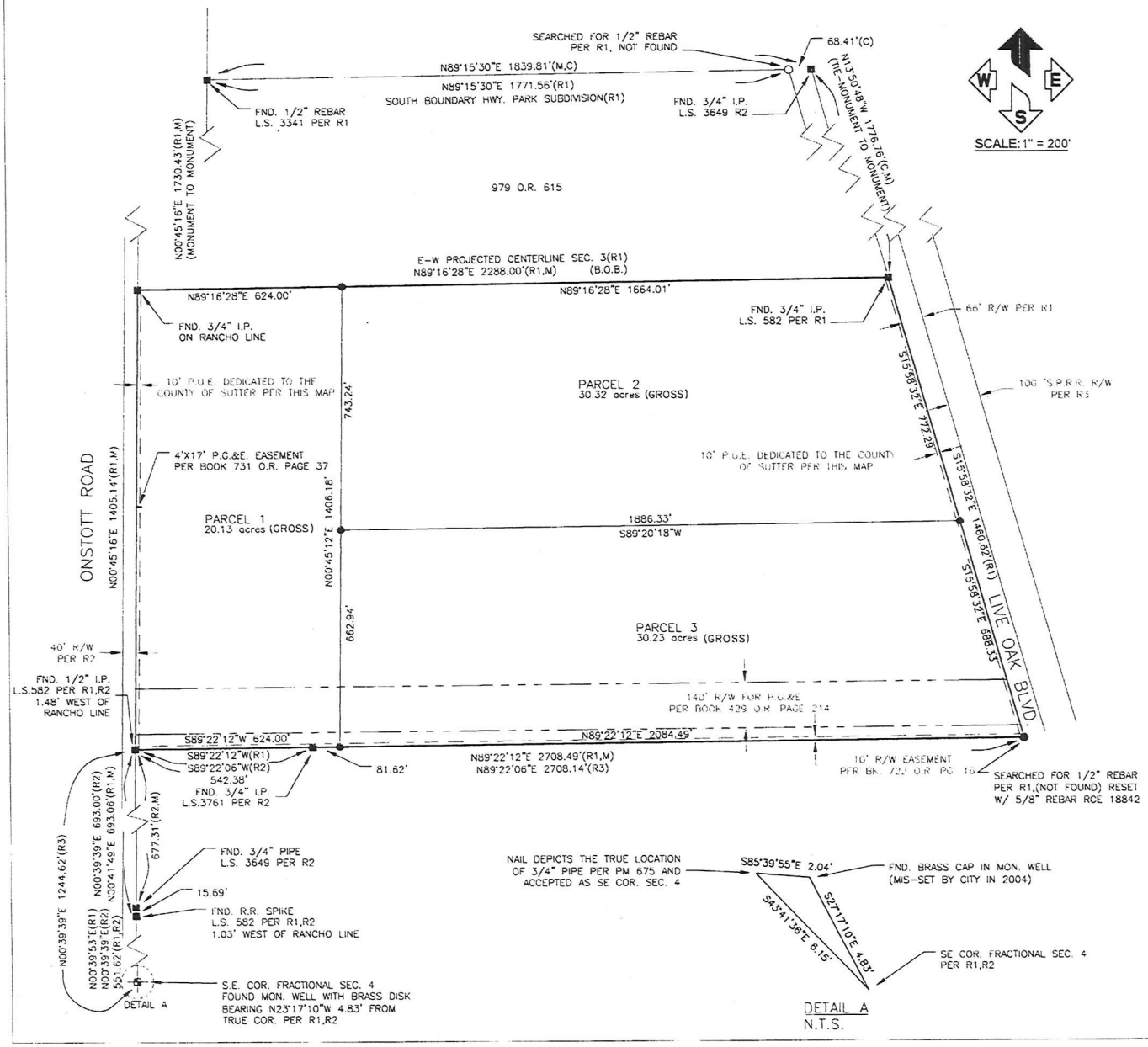
BEING A DIVISION OF A PORTION OF THE SOUTH HALF OF SECTION 3, TOWNSHIP 15 NORTH, RANGE 3 EAST, M.D.B. & M. COUNTY OF SUTTER, STATE OF CALIFORNIA

KEY & ASSOCIATES
CIVIL ENGINEERS
1646 POOLE BLVD.
YUBA CITY, CA
TEL: 530-674-1565

JULY 2008

JOB# 08-7206
SHEET 1 OF 2 SHEETS

20A



LEGEND:

- ● SET 5/8" REBAR W/PLASTIC CAP STAMPED "RCE 18842"
- ■ FOUND MONUMENT AS NOTED
- ⊕ SECTION CORNER, QUARTER SECTION CORNER
- ○ NOTHING FOUND OR NOTHING SET– CALCULATED POINT
- M MEASURED DATA
- C CALCULATED

REFERENCE:

- R1 R.O.S. BK10, PG. 132
- R2 P.M. 690 BK.4 P.M. PG. 40
- R3 R.O.S. BK.10, PG. 16

HORIZONTAL CONTROL INFORMATION

COORDINATES SHOWN ARE BASED ON THE NAD 83 (NSRS2007) ADJUSTMENTS FOR CALIFORNIA COORDINATE SYSTEM, ZONE 2. ALL DISTANCES SHOWN ARE GROUND. MULTIPLY BY 0.9999175 TO OBTAIN GRID DISTANCES. ROTATE BEARINGS SHOWN BY 0°14'54" COUNTER-CLOCKWISE TO OBTAIN GRID BEARINGS.

HORIZONTAL CONTROL TIE

MONUMENT	GRID BEARING	GRID DISTANCE	NORTHING	EASTING
EAGER			2189962.083	6665191.424
	N02°41'10"E	1139.212'		
T15N_R3E_04E			2191100.043	6665244.814
	N89°01'34"E	2287.580'		
979_OR_615_SE			2191138.924	6667532.064

BASIS OF BEARINGS (B.O.B.)

THE BASIS OF BEARINGS FOR THIS MAP IS IDENTICAL TO THOSE AS SHOWN ON THE RECORD OF SURVEY FILED IN BOOK 10 OF SURVEYS AT PAGE 132 BETWEEN FOUND MONUMENTS AS SHOWN HEREON AND TAKEN AS N89°16'28"E.

PARCEL MAP # 1150

FOR

SARBJIT S. BASRAI, KAMALJIT K. BASRAI AND SUKHPAL K. BASRAI

BEING A DIVISION OF A PORTION OF THE SOUTH HALF OF THE PROJECTION OF SECTION 3, TOWNSHIP 15 NORTH, RANGE 3 EAST, M.D.B. & M. INTO THE NEW HELVETA RANCHO, COUNTY OF SUTTER, STATE OF CALIFORNIA

KEY & ASSOCIATES
CIVIL ENGINEERS
1646 POOLE BLVD.
YUBA CITY, CA
TEL: 530-674-1565

JULY 2008

JOB# 08-7206
SHEET 2 OF 2 SHEETS

Advice 4065-E
June 18, 2012

Attachment 3
Draft Mitigated Negative Declaration

DRAFT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY

3301 EAST ONSTOTT ROAD

YUBA CITY, CALIFORNIA

PREPARED FOR:

YUBA COMMUNITY COLLEGE DISTRICT

MAY 25, 2011

OUR PROJECT NUMBER: SES110003

50 Goldenland Court, Suite 100 • Sacramento, CA 95835 • 916.928.4690

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY

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May 25, 2011

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY

3301 EAST ONSTOTT ROAD

YUBA CITY, CALIFORNIA

OUR PROJECT NUMBER: SES110003

1.0 INTRODUCTION

Yuba Community College District (YCCD) proposed to construct a Photo-Voltaic solar array at the new Sutter County Facility. The campus site is situated east of Onstott Road with a formal site address of 3301 Onstott Road, in Yuba City, California. The proposed improvements will cover an area approximately 1.77 acres in size. The construction will take part only on a portion of Sutter County Assessor's Parcel Number 010-260-76. The site is located within Section 3 of Township 15 North, Range 3 East, Mount Diablo Base and Meridian.

The planned improvements to the campus include construction of a 319.2 Kilowatt Peak Unit (kWp) ground tracking Photovoltaic (PV) solar array system. PV array will be located on the southern quarter of the subject parcel.

1.1 Overview and Regulatory Guidance

This document has been prepared by the Yuba Community College District (YCCD) (lead agency) for the YCCD Board of Trustees to evaluate the potential environmental effect of the proposed Yuba College, Sutter County Facility Solar Array project, located in Sutter County. This document has been prepared to satisfy the requirements of the California Environmental Quality Act (CEQA) (Pub. Res. Code Section 21000 et. seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et. seq.).

The Initial Study is a public document used by the decision-making lead agency to determine whether a project may have any significant effects on the environment. In the case of the proposed project, the YCCD, acting as lead agency, will use the Initial Study to determine whether the project has a significant effect on the environment. In accordance with CEQA Guidelines (Section 15064[a]), an environmental impact report (EIR) must be prepared if there is substantial evidence, such as results of the Initial Study, that a project may have significant effect on the environment. This is true regardless of whether the overall effect of the project would be adverse or beneficial. A negative declaration (ND) or mitigated negative declaration (MND) may be prepared if the lead agency determines that the project would have no potentially significant impacts or that revisions to the project, or measures agreed to by the applicant, mitigate the potentially significant impacts to a less than significant level (CEQA Guidelines Section 15063[f]).

CEQA Guidelines Section 15186 identifies specific requirements for environmental review and public disclosure of possible hazardous materials impacts when a project would involve a school or be located near a school site. This document has been prepared to meet those requirements. A complete list of the requirements of Sections 15186 as they relate to the proposed project is provided in Section 2.0, Project Description.

1.2 Previous Environmental Documentation

This document relies in part on the Sutter County Draft General Plan and Final General Plan Environmental Impact Report, drafted in September 2010 and adopted in February 2011.

1.3 Summary of Findings

Section 3.0 of this document contains the Environmental Checklist that identifies the potential environmental impacts, presented by environmental issue, and a brief discussion of each impact resulting from implementation of the proposed project. Based on the Environmental Checklist and the supporting environmental analysis provided in the document, completion of the proposed project would result in a less than significant impact for the following issues:

- Aesthetics
- Agricultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Greenhouse Gas Emissions
- Public Services
- Population and Housing
- Recreation
- Transportation/Traffic
- Utilities and Service Systems
- Biological Resources

Completion of the proposed project would result in less than significant impacts following implementation of prescribed mitigation for the following issues:

- Air Quality
- Cultural Resources
- Geology and Soils
- Noise

In accordance with CEQA Guidelines Section 15064(f)(2), a MND shall be prepared if "the lead agency determines there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment" after the implementation of the prescribed mitigation measures. There is no substantial evidence that the proposed project would have a significant effect on the environment, based on the available project information and environmental analysis presented in the document. Therefore, a proposed MND has been prepared in accordance with the CEQA Guidelines.

1.4 Public Review and Comments

This proposed Initial Study/Mitigated Negative Declaration is available for a 30-day review period beginning June 3rd, 2011 and ending July 5, 2011. Written comments must be submitted by 4:00 p.m. on July 5, 2011 to:

Robert Holmer, Principal Engineer
Neil O. Anderson and Associates
50 Goldenland Court, Suite 100
Sacramento, Ca 95834

Comments may be submitted by the same deadline by facsimile to (916) 928-4697.

Comments may also be submitted at the regular scheduled YCCD Board Meeting, scheduled for 4:00 p.m. on July 12, 2011 at the YCCD Board of Trustees Meeting, Yuba Campus, 2088 North Beale Road, Marysville, CA 95901.

2.0 PROJECT DESCRIPTION

2.1 Project Location and Site Characteristics

The proposed solar array improvement is situated in the Yuba City limits in Sutter County, California (**Figure 1** – Regional Location Map) on a portion of the Sutter County Assessor's Parcel Numbers 010-260-76. Highway 99 is located approximately 80 feet west of the site.

Figure 1 – Regional Location Map

The Yuba Community College, Sutter County Facility is currently under construction. The PV array will be constructed over a storm water detention basin on the south end of the campus. The site was recently graded and is un-vegetated (**Figure 2** – Site Map).

Figure 2 – Site Map (updated aerial photo from Google™)

2.2 Background and Need for the Proposed Project

The improvements will be part of the Yuba College, Sutter County Facility. There is a need for alternative power options across the entire country. The Yuba Community College District is committed to creating and utilizing forms of alternative energy in order to maintain and promote a healthy environment.

2.3 Project Objective

The objective of this project is to provide alternative electric energy in the form of a photo voltaic (PV) solar array that establishes a more efficient and self reliant form of power.

2.4 Elements of the Proposed Project

The planned construction improvements to the campus include a new 319.2 Kilowatt Peak Unit (kWp) ground tracking Photovoltaic (PV) solar array system. The campus site is currently under construction and scheduled for completion by year's end 2011.

The site is located in the City of Yuba. Department of general Services (DGS) will provide natural gas services for the site. The City of Yuba provides water services while the Sanitation District provides wastewater collection and treatment service. Pacific Gas and Electric Company (PG&E) provides electricity, and AT&T provides telephone service.

The campus includes on-site parking sufficient for the needs of the facility, as well as an on-site access road which allows entry to and exit from the site.

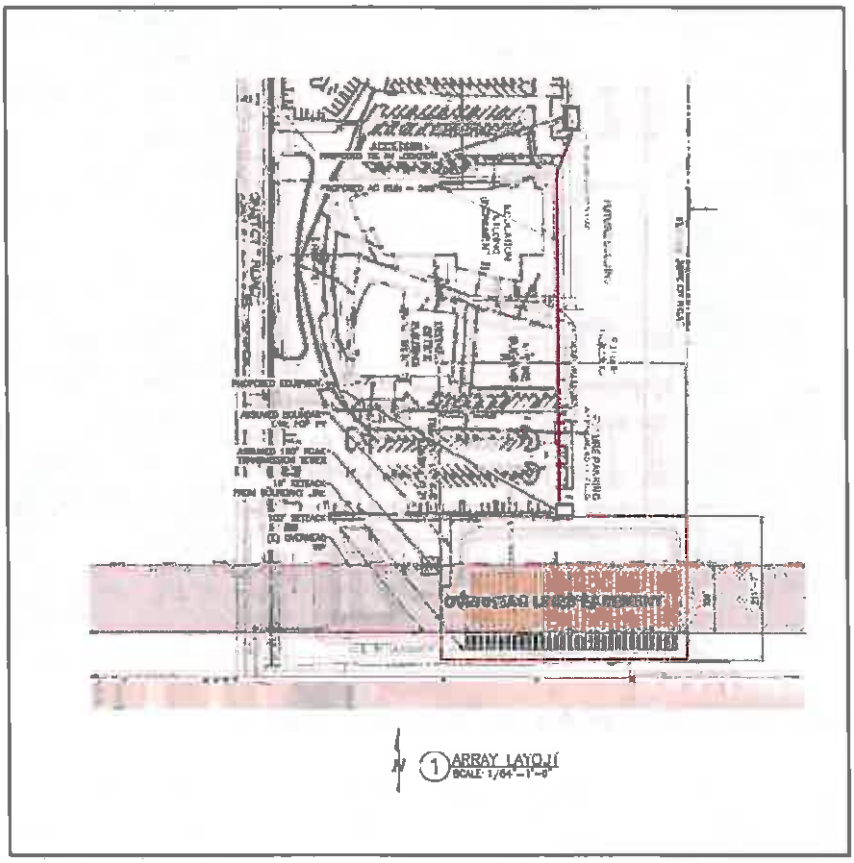

Figure 3 – Proposed Site Plans (Provided by YCCD)

Schedule

The YCCD plans to operate the proposed facility on a year round schedule. Operating hours will be typical of other school campuses with the campus; 7:00am-10:00pm Monday through Thursday and 7:00am - 5:00pm Fridays during the school year; 7:00am - 6:00pm during summer.

2.5 Surrounding Land Use

To the north of the site is an Orchard (AG-20, or 20 acre minimum). To the west is Onstott Road, followed by Highway 99. To the east there is an open field agricultural area. To the south is the incorporated area of Yuba City including residents and businesses.

2.6 Required Permits and Approvals

This Mitigated Negative Declaration will be used for the following direct and indirect actions regarding the proposed school.

- Approval of the proposed project by the YCCD Board of Trustees
- Review and approval by the California Community College Systems Office, California Department of General Services, Division of the State Architect

ADDITIONAL ENVIRONMENTAL REQUIREMENTS OF SCHOOL PROJECTS

State CEQA Guidelines Section 15186 identifies additional environmental requirements for school projects to ensure that potential health effects resulting from exposure to hazardous materials, waste, and substances are examined and disclosed, and that the lead agency consults with other agencies in this regard before a school project is considered for approval.

An IS/MND on a school project must contain sufficient information to determine whether:

- The property is the site of a current or former hazardous waste or solid waste disposal facility and, if so, whether the wastes have been removed;
- The property is a hazardous substance release site as identified by the California Department of Toxic Substances Control (DTSC);
- The property has buried or aboveground pipelines that carry hazardous substances (not including natural gas used to supply the school or neighborhood);
- The property is located within one-quarter mile of any facilities that might reasonably be anticipated to emit hazardous or acutely hazardous materials, substances or waste.

Additional subsequent approvals and other permits that may be required from local, regional, state, and federal agencies would include:

- County of Sutter and/or the Yuba City for encroachment permits and easements.
- Issuance of Regional Water Quality Control Board (RWQCB), National Pollutant Discharge Elimination System (NPDES) general permit under Section 402 of the Clean Water Act (CWA) for storm water drainage.
- Review and approval of construction plans by California Division of the State Architect.

3.0 ENVIRONMENTAL CHECKLIST FORM

3.1 Project Information

1. Project Title
Yuba College, Sutter County Facility Solar Array

2. Lead Agency Name and Address
Yuba Community College District
2088 North Beale Road
Marysville, CA 95901

3. Contact Person and Phone Number
George Parker
Director of Facilities Planning
Phone 530-634-7643

4. **Project Location**
   3301 East Onstott Road, Yuba City, CA
5. **Project Sponsor's Name and Address**
   Yuba Community College District
   2088 North Beale Road
   Marysville, CA 95901
6. **General Plan Designation**
   Public and Semi Public – Within Yuba City Boundary
7. **City Zoning**
   PF- Public Facility
8. **Description of Project**
   Construction of new Photo-Voltaic Solar Array
   Refer to Section 2.0, Project Description
9. **Surrounding Land Uses and Setting**
   Surrounding land uses include residential land, industrial land, and agricultural land.
10. **Other Public Agencies whose approval is required**
    - California Postsecondary Education Commission (CPEC) – College Educational Center Status
    - Division of State Architect – approval of school plans

3.2 Environmental Factors Potentially Affected

Environmental factors checked below would be potentially affected by this project; however, as indicated by the checklist and corresponding discussions on the following pages, such impacts can be mitigated to less than significant levels through the measures outlined therein.

☐ Aesthetics	☐ Agriculture & Forestry Resources	☒ Air Quality
☐ Biological Resources	☒ Cultural Resources	☒ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☒ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☒ Mandatory Findings of Significance

3.3 Determination

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of revisions in the project that have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are impose upon the proposed project, nothing further is required.

Signature: _____ Date: May 25, 2011

Printer Name: George Parker For: Yuba Community College District

3.4 Evaluation of Environmental Impacts

I. Aesthetics

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) The community college campus is currently under construction. This specific project would only add to the campus structures by constructing a solar array over the storm water detention basin planned for this campus. The elevation of these PV panels would be no higher than the surrounding general building skyline. Therefore, this project would virtually blend in with the campus and surrounding land use (**less than significant impact**).

b) No State "designated scenic highways" or "eligible scenic highways" are located within the vicinity of the project site.[1] There are no rock outcroppings, or historic buildings located on the project site. This is considered to be a **less than significant impact**.

c) The PV panels will be constructed over the storm water detention basin that is being constructed with the campus. This land has been designated as public and semi-public under the most recent County General Plan Update[2]. This use is within the reasonable application of this land use designation. The site is open and flat, with nothing currently on it. The existing

[1] California Department of Transportation, California Scenic Highway System, http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm
[2] Sutter County General Plan Update, September 2010, http://www.co.sutter.ca.us/doc/government/depts/cs/ps/gp/gp_documents

visual character would be relatively affected by this project with this modification. However, the modification would be very similar to the surrounding campus in general, and would not substantially degrade the existing visual character or quality of the site and its surroundings overall (**less than significant impact**).

d) The school is constructing an appropriate level of outdoor lighting for security purposes and for the safety and convenience of the public. However, all exterior lighting associated with the proposed project will be properly shaded or directed to the immediate school property and away from adjacent properties to eliminate glare on existing and future land uses and roadways. The light and glare from the proposed project would not significantly increase the amount of light and glare within the project's environment; this impact is considered **less than significant**.

II. Agricultural and Forestry Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
Would the project:					
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

e)	Involve other changes in the existing environment which, due to the location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a- e) The project is zoned Public Facility (PF).[3] The PV array is being constructed over a sotrm water detention basin. The project is not located on prime farmland, on property with an existing Williamson Act contract, or on forest land (**no impact**).

III. Air Quality

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c)	Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

[3] Yuba City, Community Development (530-822-4700), Personal Communication May 2, 2011.

a-b) Air quality is monitored, evaluated and regulated by federal, state, regional, and local regulatory agencies, including the United States Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and the Feather River Air Quality Management District (FRAQMD). The EPA, CARB, and FRAQMD develop rules and/or regulations to attain the goals or directives imposed by legislation.

Construction would proceed in two basic phases: the first phase would involve grading, and the second phase would involve actual construction of the PV array and subsequent utilities. Construction activities cause dust emissions that might be a nuisance to neighboring properties. However, construction impacts are considered to be short in duration.

Short-term emissions for this project are considered to be related to the construction phase of the project. Many emissions are generated during this type of construction; however, PM_{10} is the pollutant of greatest concern. PM_{10} emitted during construction is difficult to quantify due to the variety of equipment being used, its duration of use, weather conditions, and soil type. Emissions caused by construction projects may cause significant air quality impacts only in cases of very large or very intense construction projects. Implementation of **Mitigation Measure Air-1** will reduce construction PM_{10} impacts to a **less than significant** level.

Mitigation Measure Air-1

The following dust control measures will be implemented during construction:

- **All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.**
- **All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.**
- **All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled for fugitive dust emissions by utilizing application of water or by pre-soaking.**
- **When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.**
- **All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.**
- **Following the addition of materials to or the removal of materials from the surface of outdoor storage piles, said piles shall be effectively stabilized for fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.**

- **Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.**
- **Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.**
- **Limit traffic speeds on unpaved roads to 15 mph; and**
- **Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.**

c) As discussed above, Sutter County meets all the Federal and State air quality standards. Furthermore, the increase in emissions from the project would be short-term only and therefore less than significant. In addition, implementation of **Mitigation Measure Air-1** will reduce the temporary project-related construction impacts from PM_{10} emissions. For these reasons, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The impact is **less than significant.**

d) Sensitive receptors in the vicinity of the project site are the existing community college, and neighboring businesses/residences. As discussed under checklist questions a) and b), the temporary construction emissions would be mitigated. This would be a **less than significant impact.**

e) The proposed project involves the development of alternative PV power for educational facilities. This type of development is typically not associated with the generation of odors that would be considered objectionable to a substantial number of people. For this reason, the development of the proposed project would not result in the creation of objectionable odors that would affect a substantial number of people and **no impact** is expected.

IV. Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or indirectly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The Chapter 8 (Environmental Conservation) from the Yuba City General Plan, Chapter 9 (Environmental Resources) from the Sutter County General Plan, and the California Natural Diversity Database were reviewed in order to evaluate and assess the above Biological Resource questions[4].

[4] City of Yuba City, General Plan, Adopted April 4th, 2004, Resolution #04-049.

a-b) The area where the proposed facilities will be constructed include an open dirt lot. There are no rivers, or intermittent-ephemeral creeks near the site. There are no trees on site that within the specific project location. Therefore the project will not involve work in a creek or oak woodland.

The California Department of Fish and Game, California Natural Diversity Database (CNDD) map dated March 25, 2011 in conjunction with the USGS Sutter 7.5-minute quadrangle map, were reviewed in an effort to identify animal, plant and community elements in the vicinity of the subject property. A total of Twenty-one (21) animal and plant elements were identified on the CNDD map. There were no occurrences identified within one-half mile of the subject project. There were no endangered or threatened species identified within one-half mile of the subject property and no animal or plant occurrences were identified within one- half mile of the subject property therefore, there exists a **less than significant impact**.

c) The project site is not located within an area where wetlands are known to occur. No wetlands are present on the property. Therefore, **no impact** to federally protected wetlands is anticipated as a result of the proposed project.

d) The subject site is not located within a known waterfowl movement pathway. There are no developed riparian corridors that would be used for movement of fish or other terrestrial wildlife. **No impact** to the movements of native or migratory fish or wildlife species will occur from the development of the proposed project.

e-f) This project presents no known conflicts of local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This project also presents no known conflicts with any provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan **(no impact)**.

V. Cultural Resources

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c)	Directly or indirectly destroy a unique	☐	☒	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
	paleontological resource or site or unique geologic feature?				
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

a-b) A search of the National Register of Historic Places[5] and Office of Historic Preservation list of California Historical Landmarks[6] revealed no finds within the vicinity of the project.

The Northeast Center of the California Historical Resources Information System (CHRIS) files were searched. According to a letter[7] from Mimi Roeder of that agency, there are no recorded cultural resources or prehistoric archaeological sites within the project area. The State and Federal inventories list no historic properties with the project area. Furthermore, the project area has been previously surveyed for cultural resources with no finds occurring during that study[8].

The Native American Heritage Commission (NAHC) was contacted regarding Sacred Lands and, no files were found for the property.[9] Letters were sent to Native American individuals/organizations whom may have knowledge of cultural resources in the area.

In conclusion, there is a potential that prehistoric and historic resources could be located below the surface and may be encountered during construction activities. Therefore, it is possible that unrecorded subsurface deposits may be encountered during project-related construction activities. Implementation of **Mitigation Measure CR-1** would provide the necessary protocol should a resource be discovered during construction:

Mitigation Measure CR-1

In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the YCCD (or its representative) shall consult with a

[5] http://nrhp.focus.nps.gov/
[6] http://ohp.parks.ca.gov/?page_id=21425.
[7] Letter dated March 21, 2011.
[8] Offermann, Janis, 1992, Department of Transportation Negative Archaeological Survey Report:03-Yub/SUT-65, Extension of State Route 65 as a Connection between Routes 70 and 99 in Yuba and Sutter Counties, California, IC Report 7154
[9] Letter dated March 14, 2011.

qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, the YCCD (or its representative) and the archaeologist and/or paleontologist would meet to determine the appropriate avoidance measures.

If the discovery includes human remains, CEQA Guidelines Section 15064.5(e)(1) and (e)(2) shall be followed, which are as follows:

(e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

(A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

(B) If the coroner determines the remains to be Native American:

1. **The coroner shall contact the Native American Heritage Commission with 24 hours.**
2. **The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.**
3. **The most likely descendent may make recommendations to the land owner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or**

(2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.

(B) The descendant identified fails to make a recommendation; or

(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

c-d) No evidence of unique paleontological resources, unique geologic features or human remains was revealed by any of the investigations discussed in questions a) and b). Because the site is already an existing school site it is unlikely that any unique paleontological resources, unique geologic features or remains are present near the surface of the property. Implementation of **Mitigation Measure CR-1** would ensure the necessary protocol is followed should unique paleontological resources, unique geologic features or human remains be discovered during project-related construction, reducing any impacts to a **less than significant** level.

VI. Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d)	Be located on expansive soil, as defined in the California Building Code (2010), creating substantial risks to life or property?	☐	☐	☒	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a) A Geologic/Seismic Hazard Investigation Report was prepared for the Yuba College, Sutter Campus by Neil O. Anderson & Associates.[10] A copy of the report is presented in Appendix B. The objective of the report was to addresses potential geologic hazards such as general seismicity, potential surface rupture from faulting, earthquake-induced landsliding, volcanic hazards, inundation by tsunamis and seiches, flooding, inundation by dam failure, and subsidence where applicable.

A Geotechnical Investigation Report was prepared for the Sutter County Facility by Neil O. Anderson & Associates.[11] A copy of the report is presented in Appendix C. The investigation included excavating twelve (12) exploratory test borings.

i) **Faults** — According to the Geologic/Seismic Hazard Investigation Report, "the site does not lie within an Alquist-Priolo special studies zone. Nine (9) significant faults capable of generating earthquake induced ground motion at the site are located within 62 miles (100 kilometers) of the subject site." The potential for fault rupture on the site is considered low. For this reason, impacts resulting from rupture of a known earthquake fault are considered **less than significant**.

[10] Neil O. Anderson & Associates, August 13, 2009, Geologic/Seismic Hazard Investigation Report.
[11] Neil O. Anderson & Associates, November 2, 2009, Geotechnical Investigation Report.

ii) Seismic Ground Shaking — According to the Geologic/Seismic Hazard Investigation Report "16 earthquakes have occurred within approximately 31 miles (50 km) of the site with a magnitude greater than or equal to 4.0. The closest earthquake epicenter to the site occurred about 14.7 miles to the north of the site in 1976 with a local magnitude of 4.1. The earthquake catalog search confirms that the site is located in a seismically active area and ground shaking from future earthquakes should be expected."

Design of the school campus in conformance with the design parameters provided in the Geotechnical Report per the 2007 California Building Code should be sufficient to prevent significant damage from ground shaking during seismic events. This is considered a **less than significant impact**.

iii) Seismic-Related Ground Failure — According to the Geologic/Seismic Hazard Investigation "the site does not lie within an Alquist-Priolo special studies zone; therefore, there are no known active fault on or near the site. The potential for fault rupture of the ground is considered low." This is considered a **less than significant impact**.

iv) Landslides — According to the Geologic/Seismic Hazard Investigation Report this site is not considered susceptible to landsliding because of its low topographic relief and lack of hills/mountains in the vicinity of the site **(less than significant impact)**.

b) When the project is complete, the entire site will be covered in grass surface, hardscape, and landscaping. As a result, only wind erosion during construction activities need be addressed.

Use of **Mitigation Measure Geology-1** will reduce soil erosion impacts to a **less than significant** level:

Mitigation Measure Geology-1

> **In the event that significant wind erosion of soil is observed during construction activities, the soil surface shall be sufficiently wetted to minimize dust generation.**

c) The Geotechnical Investigation Report indicates that the site has no real issues of concern for the project construction on the site.

d) The site is located on non-expansive soils. Therefore, the site will experience a **less than significant impact** from expansive soils.

e) This site will not use a septic system, therefore **no impact** is anticipated.

VII. Greenhouse Gas Emissions

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No2 Impact
Would the project:					
a)	Generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b)	Conflict with an applicable plan, policy or regulation adoption for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a-b) Estimates of the emissions generated from the Project were made using a program called URBEMIS-2007. URBEMIS-2007 is a program that estimates the emissions that result from various land use development projects. Land use projects can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, educational facilities, office buildings, and industrial parks. URBEMIS-2007 contains default values for much of the information needed to calculate emissions.

The project's greenhouse gas emissions would be at a maximum of 3,588 lbs/day of CO2 during the construction phase of the project. With the expected construction phase of last one month the total would be around 53.82 tons/year of CO2. The 2020 greenhouse gas emissions limit for California, as adopted by ARB in December of 2007 is approximately 427 million metric tons of CO2. The annual emissions represent less than 1.26 10x-7 percent of the State total 2020 emissions limit. The total annual emissions of 53.82 tons/year from the project are also well under the 25,000 metric tons/year CO2 threshold used to classify major emitters. Therefore, the project would not be classified as a major source of greenhouse gas emissions. This is considered a **less than significant impact**.

VIII. Hazards and Hazardous Materials

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials to the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

a) Minor amounts of hazardous substances, such as cleaning, maintenance and landscaping supplies may be stored and used in and around the school site. The risk of explosion or release of any of these substances is minimal.

Any hazardous substances used at the site for cleaning, maintenance, and landscaping will be stored in a manner that complies with all applicable codes and ordinances, laws, or other pertinent requirements. Chemicals used in the school itself are typically stored according to guidelines set forth in the California Department of Education's *Science Safety Handbookfor California Public Schools* in order to minimize accidental releases. A list of chemicals to be stored and used at the proposed school will be submitted to Fire and Life Safety at the Department of the State Architect (DSA) for review prior to occupancy. For these reasons, a **less than significant** impact is expected.

b) As indicated under checklist question a), minor amounts of hazardous substances, such as cleaning, maintenance and landscaping supplies may be stored and used in and around the proposed school site. The quantities of these materials would be minimal, and therefore, the risk of explosion or release of any of these substances is considered **less than significant**.

c) **Air Emissions Facilities** — California Department of Education Code Section 17213(b); Public Resources Code Section 21151.8(a)(2); and the California Code of Regulations, Title 5, Section 14011(i) requires a school district, in consultation with the local air pollution control district, to identify facilities within a quarter mile of the proposed site that might reasonably be anticipated to emit hazardous air emissions or handle hazardous or acutely hazardous materials, substances, or waste. The Feather River Air Quality Management District (FRAQMD) is responsible for providing written notification of any findings to the school district.

A letter was submitted to the FRAQMD requesting the identification and review of all sites potentially emitting hazardous air emissions within one-quarter mile of the project site. The LCAQMD replied[12] that a Natural Gas Combustion/Particulate Matter Unit is located within a 1/4 mile of the site (1591 Pease Road, Yuba City, Ca). The letter response from LCAQMD is presented in Appendix A.

Based on the type of emissions these facilities are considered a **less than significant impact** related to air emissions facilities.

d) Hazardous Materials — The Environmental Data Research (EDR) Report noted that the site does not appear on any of the federal, state, or local regulatory agency databases searched for businesses and properties that handle hazardous materials or hazardous waste, including the list compiled pursuant to Government Code Section 65962.5.

Pipelines

No hazardous pipelines have been identified within 1,500 feet of the project site. Kinder Morgan[13] and PG&E were contacted regarding the presence of hazardous pipelines within 1,500 feet of the property. No pipelines jurisdictional to the State Fire Marshal are located in the immediate vicinity[14]. There is a **less than significant** impact from pipelines.

High Voltage Transmission Lines

Based on the findings of the EDR report, three high-voltage (over 50 kV) power transmission lines exist within a mile of the site. One crosses over the top above the proposed project location.

The potential for nuisance shocks would be minimized through grounding and other field-reducing measures that would be implemented in keeping with current SCE guidelines (reflecting standard industry practices). These field-reducing measures would maintain the generated fields within levels not associated with radio-frequency interference or audible noise.

The potential for hazardous shocks would be minimized through compliance with the height and clearance requirements of CPUC's General Order 95. Compliance with Title 14, California Code of Regulations, section 1250, would minimize fire hazards while the use of low-corona line design, together with appropriate corona-minimizing construction practices, would minimize the potential for corona noise and its related interference with radio-frequency communication in the area around the route.

Since electric or magnetic field health effects have neither been established nor ruled out for the transmission lines, the public health significance of any related field exposures cannot be characterized with certainty. The only conclusion to be reached with certainty is that the

[12] Letter dated April 11, 2011
[13] Letter dated April 19, 2011
[14] National Pipeline Mapping System, https://www.npms.phmsa.dot.gov/PublicViewer/composite.jsf

proposed lines' design and operational plan is already under acceptable California Building Code, which should be considered adequate to ensure that the generated electric and magnetic fields are managed. The long-term, mostly residential magnetic exposure of health concern in recent years would be insignificant for the proposed line given the absence of residences along the proposed route. On-site worker or public exposure would be short term and at levels expected for lines of similar design and current carrying capacity. Such exposure is well understood and has not been established as posing a substantial human health hazard.

Since the proposed project and transmission line interaction would be operated to minimize the health, safety, and nuisance impacts of concern to staff and would remain in its present route without nearby residences, staff considers the proposed design, maintenance, and construction plan as complying with the applicable laws. With already implementation of the conditions of certification proposed below, any such impacts would be **less than significant impact** with respect to CEQA.

Radon Potential

Radon is a colorless, odorless, and tasteless gas that is produced by the decay of uranium and radium. This naturally occurring, radioactive gas is produced in most soil or rock. As a result, all buildings have some radon, as does the outdoor air. Radon can move easily through any material that has pores or void spaces through which gases can move. Void spaces and pores are found in the soil beneath any building. Radon is a known human carcinogen. The Surgeon General has warned that radon is the second leading cause of lung cancer in the United States. Anyone living in a building with elevated radon concentrations may have an increased risk of contracting lung cancer over a period of years.

The National Radon Database has been developed by the United States Environmental Protection Agency and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 through 1992. Where necessary, data has been supplemented by information collected from private sources such as universities and research institutions.

The US EPA has classified Sutter County in Radon Zone 3, with predicted average indoor radon screening levels less than 2.0 pCi/L (picoCuries per liter of air; a picoCurie is equal to the radiation given off by a trillionth of a gram of radium). Twenty four (24) sites within the Yuba City area were tested. All sites tested contained less than 4 pCi/L. Therefore, impact to the site from radon is considered **less than significant**.

Serpentine Rock / Naturally Occurring Asbestos

Asbestos includes any of several minerals (chrysotile, tremolite, actinolite, crocidolite, anthophyllite, and amosite) which occur naturally in ultramafic rock formations and that readily separate into long, flexible fibers. These igneous ultramafic rocks (dunite, peridotite, pyroxenite, and hornblendite) form below the earth's surface at very high temperatures; as they are exposed by uplift and erosion, they may be altered to the metamorphic rock serpentinite.

Chrysotile, the most common asbestos mineral in California, forms fibrous crystals in small veins in serpentinite rock.[15]

Although the only way to definitively establish the presence or absence of asbestos at a site is through examination by a geologist, it is possible to make a reasonable assumption based upon the known locations of ultramafic rocks. According to the EDR Report the site is underlain by Quaternary basin deposits, and is not underlain by ultramafic rock. Therefore, the impact to the site from naturally occurring asbestos is considered to be **less than significant**.

Railroad Tracks

Based on review of the most recent topographic maps of the area,[16] the proposed project site is within 1,500 feet of the nearest railroad easement. However, there is little impact to this project because the project does not facilitate human interaction areas such as an arena or classroom which would create a potential human health hazard should a train accident occur. This is a solar array and therefore there is a **less than significant impact** to the site from railroad tracks.

Traffic Corridors

The proposed project site is located within 500 feet of a busy traffic corridor as defined in *Education Code* Section 17212(d)(9) and *Public Resources* Code 21151.8(c)(9). However, there is no long-term impact to the traffic corridors. Traffic movement will not be changed in design nor volume as this is a one-time construction with limited maintenance work thereafter. This is considered a **less than significant impact**.

e-f) The California Department of Education requires, per Education Code Section 17215, that all airport/heliport runways (public or private) located within two miles of a proposed school site be identified.

Based on review Google Earth Maps, the closest airport, Sutter County Airport, is over 3.5 miles southeast of the site. There is **no impact** to the site regarding safety from public airports.

g) The proposed project would not physically obstruct the existing circulation pattern within the surrounding neighborhood. The proposed buildings will facilitate the same traffic needs as it already currently has in use. The proposed project is not expected to interfere with an adopted emergency response or evacuation plan (**no impact**).

h) The project site is located within an area that consists of residential land and a community college campus. This is an area that lacks sufficient fuels for hazardous conditions in regards to wildland fires. Therefore, there is **no impact** from wildfires.

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[15] California Department of Conservation, Division of Mines and Geology, A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, August 2000.

[16] U.S. Geological Survey, 1991, 7.5-Minute Topographic Map of the Sutter Quadrangle, California.

IX. Hydrology and Water Quality

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☒

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g)	Place structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a) The State Water Resources Control Board (SWRCB) has adopted a National Pollutant Discharge Elimination System (NPDES) general permit for Storm Water Discharges Associated with Construction Activity (state permit) that requires every construction project greater than one acre to submit a Notice of Intent (NOI) for coverage, and prepare a Storm Water Pollution Prevention Plan (SWPPP). Under the conditions of the state permit, the project site will be required to eliminate or reduce unauthorized non-storm water discharges to waters of the nation, develop and implement a SWPPP for the project construction activities, and perform inspections of storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP. The project will comply with the terms and conditions of the NPDES, as approved by the State Water Resources Control Board under Section 402 of the Clean Water Act.

Storm water discharges following construction will be directed into an on-site storm water drainage system. The YCCD may be required to submit an application package to the Regional Water Quality Control Board to obtain coverage under the NPDES general permit and comply with the terms for storm water management and control.

The project would not violate nor be inconsistent with Federal, State or local portable water quality standards because water would be supplied by the Highlands Water Company, which is regulated by the California Department of Public Health who requires that portable water meet the State's drinking water standards.

The project would not violate any waste discharge requirements because wastewater disposal will be provided by the Yuba City Utilities Division, a division of the Department of Public Works. The treatment system of the Sanitation District currently meets all the waste discharge permit requirements.

Compliance with the NPDES general permit, development and implementation of a SWPPP, and the Regional Water Quality Control Board discharge requirements will ensure a **less than significant impact** to water quality.

b) The project would not have any impact on ground water supplies or quality because water will be supplied by the City. Because the project will comply with the requirements of the oversight agency, impacts to groundwater supplies will be **less than significant.**

c-d) Storm water discharges following construction will be directed into an on-site storm water drainage system. Because of its size and utilization of a storm water drainage system, the project would not significantly alter drainage patterns or the rate and amount of surface runoff. No streams are located near the project site; therefore, no alterations of stream courses, no substantial erosion will occur and no flooding will occur. The impact is considered **less than significant.**

e) Storm water runoff from streets and paved parking areas is known to carry petroleum hydrocarbons and trace metals into the storm drain system. Storm water discharges following construction will be directed into an on-site storm water drainage system. The overall impact is considered to be **less than significant**.

f) There are no industrial processes or significant sources of pollution within the project that would significantly degrade water quality. The water to this site will be provided by the City; **no impact** is anticipated

g-h) A review was conducted of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel number 0603940085B.

The project site is located within the 500-year flood zone (Zone X). Zone X is defined as "Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood" [17] **No impact** is anticipated.

i) If earthquake-induced flooding were to occur, it would originate from levees, small water storage areas, or dams. It is conceivable that seismic activity could weaken a levee, natural embankment, or dam during dry periods, facilitating future failure due to hydraulic phenomena (i.e. piping or sand boiling) during wet periods. There are no dams or levees in the drainage basin above the site (**no impact**).

[17] http://www.msc.fema.gov

j) A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin that varies in period. Seiches are often caused by tidal currents, landslides, earthquakes, and wind. Since the site is not located near a large body of water, the risk of flooding from a seiche is nil. **No impact** is anticipated from these sources.

X. Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) **No impact.** The proposed project would not result in the physical division of an established community. The site is currently used for school athletic fields and buildings.

b) The project site is Educational. There is **no impact** related to conflict in land use plans.

c) No habitat conservation plans or natural community conservation plans apply to the site. There would be **no impact** from the project.

XI. Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residence of the state?	☐	☐	☐	☒
b) Result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a-b) The site is not in an area containing any known mineral resources. The City's General Plan has not designated the site as a mineral resource. No mining or other mineral extraction activities occur on the site or in the vicinity. The project would have **no impact** on mineral resources.

XII. Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project cause:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project	☐	☐	☒	☐

	vicinity above levels existing without the project?				
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) The current background noise at the site is typical of a small college campus. The only sound that would be expected from the project would be during PV installation and maintenance. The overall impacts from such noise would be below any typical thresholds of significance **(less than significant)**.

b) There are no significant sources of groundborne vibration in the project area due to the project. The project is not anticipated to generate groundborne vibration (**no impact**).

c) Once constructed the proposed project would not generate continual or intermittent increases in ambient noise levels over those typical of current uses.

The proposed project is not anticipated to significantly increase existing noise levels; this is considered a **less than significant impact**.

d) Development of the proposed project would increase ambient sound levels during construction. This would temporarily affect noise-sensitive land uses (e.g., the adjacent residences) near the project site. Short-term construction-related noise impacts would be reduced to a **less than significant** level with implementation of Mitigation Measure Noise-1.

Mitigation Measure Noise-1

The YCCD shall ensure that the construction contractor implements the following noise reducing measures:

- All equipment shall have sound-control devices no less effective than those provided by the manufacturer. All equipment shall have muffled exhaust pipes.

- Stationary noise sources shall be located as far from sensitive receptors as possible.

e-f) Based on review of Google Earth maps the closest operating airport is over 3.5 miles to the northeast of the site. There is **no impact** regarding excessive noise levels from public airports or private airstrips.

XIII. Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) The proposed project is intended to serve the needs of existing community (**no impact**).

b-c) The proposed project site does not support any residential structures. The project would not result in the displacement of any existing housing. There is **no impact** from the proposed project.

XIV. Public Services

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	i) Fire protection?	☐	☐	☒	☐
	ii) Police protection?	☐	☐	☒	☐
	iii) Schools?	☐	☐	☐	☒
	iv) Parks?	☐	☐	☐	☒
	v) Other public facilities?	☐	☐	☐	☒

i) Fire Protection — The project site receives fire protection services from the Yuba City Fire Department.

A letter was sent to the Fire Protection District[18]. No comments have been made in response to our inquiry to date. In general, this project would require very little alteration to the existing fire department need for the general campus. Therefore, this is considered to be **less than significant.**

ii) Police Protection — The Yuba College, Sutter County Facility is patrolled by Yuba Community College District Police Department and the City of Yuba Police Department. The proposed project would not increase the need for additional staff or resources. Therefore, the project would have a **less than significant impact** on police protection in the area.

[18] Letter dated March 25, 2011.

iii) Schools —Implementation of the project would ensure **no impact** on surrounding schools.

iv) Parks — The proposed project would not increase the need for new or expanded park facilities. There is **no impact**.

iv) Other Public Facilities — The proposed project would not require the addition or expansion of other public services. There is **no impact**.

XV. Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) The project does not propose the construction of housing or to attract additional residents to the area, which typically generates a demand for parks and recreational facilities. Therefore, the project is expected to have **no impact** on existing parks and recreational facilities.

b) The project does not require the construction or expansion of recreational facilities that may have a physical effect on the environment. There is **no impact**.

XVI. Transportation / Traffic

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system. Including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b)	Conflict with an applicable congestions management program, including, but not limited to level of service standards and travel measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e)	Result in inadequate emergency access?	☐	☐	☐	☒
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or	☐	☐	☐	☒

otherwise decrease the performance or safety of such faculties?

a-b) This project would not create a long term traffic circulation impact. There will be **no impact** in connection with this project.

c) The project site is not located within flight areas which prohibit several land uses such as schools and day care centers. There will be **no impact** on air traffic patterns in connection with this project.

d) The project will not substantially increase hazards due to a design feature. The campus already includes on-site circulation with sufficient on campus parking spaces. The impact is considered to be **less than significant**.

e) Access for adequate emergency access, including a fire truck turn around already exists at the campus (**no impact**).

f) The site will be served by local roadway access with separate bus and private vehicle loading/unloading areas. There is **no impact**.

XVII. Utilities and Service Systems

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:					
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d)	Have sufficient water supplies available	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
	to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

a-b) The project will use no additional wastewater needs above the existing usage level. The impact will be **less than significant**.

c) The project will utilize the already existing retention basin. Storm water generated at the site will utilize this as well as normal storm drains associated with the city sewer. Solar arrays do not generally present any concern with their interaction with storm water and consequential contamination (**less than significant impact**).

d) The project will utilize the Yuba City Utilities District for water and wastewater collection and treatment services. Because the project will comply with the requirements of the supervising agency, impacts to groundwater supplies will be **less than significant**.

e) The Yuba City Utilities District will provide wastewater treatment. The impact will be **less than significant**.

f) Solid waste collection for the Campus is already provided by Yuba-Sutter Recology (formerly Yuba-Sutter Disposal, Inc,) 530-743-6933. There will be no ongoing waste collection for this project so there is considered to be a **less than significant impact**.

g) **No impact.** Solid waste collection is provided by Yuba-Sutter Recology (formerly Yuba-Sutter Disposal, Inc,) 530-743-6933, and there will be no ongoing waste collection for this project. Furthermore, the project will comply with applicable federal, state, or local regulations.

XVIII. Mandatory Findings of Significance

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) With the mitigation measures provided in the preceding checklist sections, the proposed project does not have the potential to significantly degrade the quality of the environment, including effects on animals, plants, or historic or prehistoric resources. Impacts of the proposed project are considered to be **less than significant** with implementation of mitigation.

b) The proposed project would not result in cumulatively considerable impacts. Mitigation measures have been incorporated into the project to reduce project-related impacts to a **less than significant** level.

c) The proposed project does not have environmental effects that could cause substantial adverse effects on human beings, either directly or indirectly. Mitigation measures have been incorporated into the project to reduce project-related impacts to a **less than significant** level.

4.0 SUMMARY OF MITIGATION MEASURES

This section represents the required mitigation measures identified in Section 3.0, Environmental Checklist. Implementation of these mitigation measures would reduce all impacts of the proposed project to a less than significant level. The YCCD has committed to implementing all required mitigation measures.

AIR QUALITY

Mitigation Measure Air-1

The following dust control measures will be implemented during construction:

- **All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.**
- **All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.**
- **All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled for fugitive dust emissions by utilizing application of water or by pre-soaking.**
- **When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.**
- **All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.**
- **Following the addition of materials to or the removal of materials from the surface of outdoor storage piles, said piles shall be effectively stabilized for fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.**

- **Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.**
- **Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.**
- **Limit traffic speeds on unpaved roads to 15 mph; and**
- **Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.**

CULTURAL RESOURCES

Mitigation Measure CR-1

In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the YCCD (or its representative) shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, the YCCD (or its representative) and the archaeologist and/or paleontologist would meet to determine the appropriate avoidance measures. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

If the discovery includes human remains, CEQA Guidelines Section 15064.5(e)(1) and (e)(2) shall be followed, which are as follows:

(e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:

(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

(A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

(B) If the coroner determines the remains to be Native American:

1. **The coroner shall contact the Native American Heritage Commission with 24 hours.**
2. **The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.**

3. The most likely descendent may make recommendations to the land owner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or

(2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.

(B) The descendant identified fails to make a recommendation; or

(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

GEOLOGY AND SOILS

Mitigation Measure Geology-1

In the event that significant wind erosion of soil is observed during construction activities, the soil surface shall be sufficiently wetted to minimize dust generation.

NOISE

Mitigation Measure Noise-1

The YCCD shall ensure that the construction contractor implements the following noise reducing measures:

- All equipment shall have sound-control devices no less effective than those provided by the manufacturer. All equipment shall have muffled exhaust pipes.
- Stationary noise sources shall be located as far from sensitive receptors as possible.

5.0 REPORT PREPARATION

Report Authors

Lead Agency

Yuba Community College District
George Parker, Director of Facilities

Consultants

Neil O. Anderson and Associates
Robert Holmer, Principal Engineer
Ryan King, Project Engineer
Daniel Kramer, Project Geologist
Geologic/Seismic Hazard Investigation
Geotechnical Investigation

KINDER MORGAN
ENERGY PARTNERS, L.P.
SFPP, L.P.

SFPP, L.P.
Operating Partnership

April 19, 2011

ENG 4-2-1 (930)
Reference #11-220

Ryan King
Project Engineer
Neil O Anderson & Associates
Suite 100
50 Goldenland
Sacramento CA 95834

RE: Hazardous pipeline search; Sutter County Facility Solar Array, Project SES110003

Dear Mr. King:

This is in response to your March 24, 2011, inquiry concerning the above referenced project.

Based on the information provided, Kinder Morgan has no conflict with the proposed project.

Please refer to our **File Reference Number 11-220** in any future communications concerning this project.

In the event the project scope changes, please resubmit your request.

Sincerely,

A. Dianne Sidorewicz CPS
Senior Administrator
Engineering

T: Quinn\letters\421(930)\11-220

Enclosure

Northeast Center of the
California Historical Resources
Information System

BUTTE
GLENN
LASSEN
MODOC
PLUMAS
SHASTA
SIERRA
SISKIYOU
SUTTER
TEHAMA
TRINITY

California State University, Chico
Building 25, Suite 204
Chico, California 95929-0377
Phone (530) 898-6256
Fax (530) 898-4413
neinfocntr@csuchico.edu

March 21, 2011

Neil O. Anderson & Associates
50 Goldenland Court, Suite 100
Sacramento CA 95834
ATTN: Mr. Ryan King

I.C. File # D11-22
Records Search

RE: Sutter County Facility Solar Array (CEQA)
T15N, R3E, Section 3
USGS Sutter 7.5' and Marysville 15' quads
11.4 acres (Sutter County)

Dear Mr. Wilkens,

In response to your request, a records search for the project cited above was conducted by examining the official maps and records for archaeological sites and surveys in Sutter County.

RESULTS:

Prehistoric Resources: According to our records, no prehistoric sites have been recorded in the project area or its vicinity. The project is located in a region utilized by Nisenan populations. Unrecorded prehistoric cultural resources may be located in the project area.

Historic Resources: According to our records, no historic sites have been recorded in the project area or its vicinity. Unrecorded historical cultural resources may be located in the project vicinity. The USGS Marysville (1954) 15' quad map indicates that the project is located on the New Helvetia Land Grant and contains orchards, while Berg, Onstott Road, Southern Pacific Railroad, Eager Road, Pease Road, a water tank, United States Route 99E, Feather River, levees, roads, and structures are located in the project vicinity.

Previous Archaeological Investigations: According to our records, the project area has been previously surveyed by professional archaeologists for cultural resources. The survey is listed below:

Offermann, Janis (California Department of Transportation)

1992 *Department of Transportation Negative Archaeological Survey Report: 03-Yub/SUT-65, Extension of State Route 65 as a Connection between Routes 70 and 99 in Yuba and Sutter Counties, California.* **IC Report 7154**

Literature Search: The official records and maps for archaeological sites and surveys in Sutter County were reviewed. Also reviewed: **National Register of Historic Places - Listed properties and Determined Eligible Properties** (1988, Computer Listings 1966 through 7-00 by National Park Service), **California Register of Historical Resources** (2010), **California Points of Historical Interest** (1992), **California Inventory of Historic Resources** (1976), **California Historical Landmarks** (1996), **Directory of Properties in the Historic Property Data File for Sutter County** (2010), **Handbook of North American Indians, Vol. 8, California** (1970), and **Historic Spots in California** (1966).

RECOMMENDATIONS:

Based upon the above information, the project appears to be located in an area considered to be sensitive for prehistoric and historical resources. The project area is located in a region utilized by prehistoric and historic populations. Native American populations used the local region for seasonal and/or permanent settlement, as well as for the gathering of plants, roots, seeds, domestic materials, and hunting seasonal game. Historically, the region was utilized for farming and ranching operations.

The project area has been previously surveyed for cultural resources (Offerman 1992). No cultural resources were identified in the current project area or portions of its vicinity as a result of that survey. However, due to the lack of recent archaeological work in the immediate project area or its vicinity, a new survey may be needed.

Therefore, due to lack of recent survey in the project area, we recommend that a professional archaeologist be contacted to conduct a cultural resources review of the project area. The project archaeologist will be able to offer recommendations for protection or

mitigation for any new cultural resources that may be encountered as a result of any potential cultural resource survey. The project archaeologist should also contact the appropriate local Native American representatives for information regarding traditional cultural properties that may be located within project boundaries for which we have no records. This person may also want to consult historic General Land Office (GLO) plat maps in order to aid in the identification of unrecorded historic sites, which may be located within project boundaries. For information regarding qualified archaeological professionals, please visit the CHRIS consultant list at http://www.chrisinfo.org/ for more information. A copy of the report listed above will be available to the project archaeologist upon request for an additional fee.

Additionally, if during any phase of the project, any potential prehistoric, protohistoric, and/or historic cultural resources are encountered, all work should cease in the area of the find pending an examination of the site and materials by the project archaeologist. This request to cease work in the area of a potential cultural resource find should be made a condition of project approval.

The charge for this record search is $150.00 (1 hour Information Center Time @ $150.00 per hour). Thank you for your dedication preserving California's irreplaceable cultural heritages, and please feel free to contact us if you have any questions or need any further information or assistance.

Sincerely,

Mim. Roeder, M.A.
Research Associate

FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT
Serving Sutter and Yuba Counties

1007 Live Oak Blvd. Suite B-3
Yuba City, CA 95991
(530) **634-7659**
FAX (530) **634-7660**
www.fraqmd.org

David A. Valler, Jr.
Air Pollution Control Officer

April 11, 2011

Ryan King, Project Engineer
Neil O. Anderson and Associates
50 Goldenland Ct. #100
Sacramento, CA 95834
Email: ryan.king@noanderson.com

RE: HAZARDOUS AIR EMISSIONS - PERMITTED FACILITIES WITHIN 1/4 MILE OF SCHOOL SITES (PROJECT NO. SES110003)

Dear Mr. King,

The Feather River Air Quality Management District (District) received your Public Records Act Request on March 28, 2011. You requested the District identify facilities within a 1/4 mile radius of a proposed school site projects that might reasonably be anticipated to emit hazardous air emissions. The District has searched the database and found three active permitted facilities within a quarter mile of the proposed school construction projects listed below.

The following table contains the District's review of the school site:

School Site	District Permit	Facility	Address	Hazardous Air Emissions
Sutter County Facility Solar Array, 3301 East Onstott Road, Yuba City, CA	34014	Wilbur Ranch Dryer	1591 Pease Road	Natural Gas Combustion, Particulate Matter

You also have asked what impact on air quality is anticipated with this project. This type of project would be expected to generate construction emissions and could result in some operational emissions, possibly due to maintenance on the solar array and chiller central plant. The project should not require a permit to operate from the air district, however if you have any questions regarding permitting please contact Mr. Tim Mitro at (530) 634-7659 ext 208. The project should implement standard fugitive dust control measures and submit a fugitive dust control plan to the District prior to beginning work. Please see attached documents for information on these items.

If you have questions regarding this information or require additional information, please contact Ms. Sondra Spaethe at (530) 634-7659 ext. 210.

Sincerely,

David A. Valler, Jr.
Air Pollution Control Officer

DAV/sls

File: Chron

Attachments: Fugitive Dust Control Plan; Standard Construction Phase Mitigation Measures; Local and State Laws Applicable to Fugitive Dust

Attachment A:
Feather River Air Quality Management District
Fugitive Dust Control Plan

This plan, upon signature and submittal to the FRAQMD, will serve as an approved Fugitive Dust Control Plan to be implemented at the designated site. This plan must be submitted by the project proponent and received at the air district prior to start of work.

The approved plan serves as an acknowledgment by the project proponent of their duty to address state and local laws governing fugitive dust emissions and the potential for first offense issuance of a Notice of Violation by the air district where violations are substantiated by District staff. This plan (along with standard mitigation measures for all projects and best available mitigation measures where applicable) shall be made available to the contractors and construction superintendent on the project site.

- Site Location: _____
- Project Type (circle all that apply): Residential Commercial Industrial Transportation
- List of responsible persons:

  Company:_____

  Office (name, title, address, phone): _____

  _____

  Field (name, title, phone): _____

- Projected Start and End Dates: _____
  (Day/Month/Year)

Project Proponent: _____ _____
Printed Name Company/Phone

Signature: _____ Title: _____

By signing this document I acknowledge that I have read the accompanying literature regarding state and local fugitive dust emission laws and understand that it is my responsibility as the project proponent to ensure that appropriate materials and instructions are available to site employees to implement fugitive dust mitigation measures (Attachment B) appropriate for each development phase of this project.

I further acknowledge that it is my responsibility to ensure that site employees are made formally aware of fugitive dust control laws, requirements, and available mitigation techniques, and that appropriate measures are to be implemented at the site as necessary to prevent fugitive dust violations.

Please Submit to: FRAQMD, 1007 Live Oak Blvd. Suite B-3, Yuba City, CA 95991 Attn: Planning
Phone: 530-634-7659 x210 FAX: 530-634-7660 Email: sspaethe@fraqmd.org

Attachment B
Feather River Air Quality Management District

Standard Construction Phase Mitigation Measures for All Projects

1. *Mandatory:* Implement the Fugitive Dust Control Plan

2. Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringelmann 2.0). Operators of vehicles and equipment found to exceed opacity limits shall take action to repair the equipment within 72 hours or remove the equipment from service. Failure to comply may result in a Notice of Violation.

3. The primary contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained prior to and for the duration of onsite operation.

4. Minimize idling time to 5 minutes – saves fuel and reduces emissions. (State idling rule: commercial diesel vehicles- 13 CCR Chapter 10 Section 2485 effective 02/01/2005; off road diesel vehicles- 13 CCR Chapter 9 Article 4.8 Section 2449 effective 05/01/2008)

5. Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.

6. Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.

7. Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require California Air Resources Board (ARB) Portable Equipment Registration with the State or a local district permit. The owner/operator shall be responsible for arranging appropriate consultations with the ARB or the District to determine registration and permitting requirements prior to equipment operation at the site.

Feather River Air Quality Management District
LOCAL AND STATE REGULATIONS APPLICABLE TO FUGITIVE DUST

I. FRAQMD Rules and Regulations

Note: The following District Rules and Regulations are enforced for each project regardless of lead agency or Board approved project CEQA mitigation requirements.

FRAQMD RULE 3.0 - VISIBLE EMISSIONS *(Adopted 6/91)*

As provided by Section 41701 of the California Health and Safety Code, a person shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminants for a period or periods aggregating more than three minutes in any one hour which is:

a. As dark or darker in shade as that designated as No. 2 on the Ringlemen Chart, as published by the United States Bureau of Mines; or

b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection 'a' above.

Enforcement: The District has trained staff capable of performing a Visible Emissions Evaluation (VEE). VEE courses are offered to regulators and the regulated community (for a fee) at regular intervals by staff of the California Air Resources Board.

FRAQMD RULE 3.16 - FUGITIVE DUST EMISSIONS *(Adopted 4/11/94)*

A. PURPOSE
The purpose of this Rule is to reasonably regulate operations which periodically may cause fugitive dust emissions into the atmosphere.

B. DEFINITION
For the purpose of this Rule, the following definitions shall apply:

B.1 Fugitive Dust: Solid airborne matter emitted from any non-combustion source.
B.2 Emergency: Any act of God, but only if the owner of the property from which fugitive dust emissions originate establishes for the Feather River Air Quality Management District, by a preponderance of evidence, that he or she took reasonable precautions in light of the relevant facts and circumstances to minimize emissions.
B.3 Property Line: Adjacent properties which are owned by the same person shall be considered the same property for the purpose of determining the property line.

C. REQUIREMENTS
A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation.

Reasonable precautions shall include, but are not limited to:

C.1 use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, construction of roadways, or the clearing of land;

C.2 application of asphalt, oil, water, or suitable chemical on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts;
C.3 other means approved by the Air Pollution Control Officer.

D. EXEMPTIONS
The provisions of this Rule shall not apply to the following:

D.1 Agricultural Operations
D.2 Currently unworked land designated as reclaimed for agriculture
D.3 An Emergency
D.4 Unpaved roads open to public travel (this inclusion shall not apply to industrial or commercial facilities).

II. State Laws

California Health and Safety Code

Section 41700. Except as otherwise provided in Section 41705, no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Section 41701. Except as otherwise provided in Section 41704, or Article 2 (commencing with Section 41800) of this chapter other than Section 41812, or Article 2 (commencing with Section 42350) of Chapter 4, no person shall discharge into the atmosphere from any source whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is: (a) As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subdivision (a).

California Vehicle Code

Section 23114 requires: No vehicle shall transport any aggregate material upon a highway unless the material is covered. Exception 23114(e)(4): Vehicles transporting loads of aggregate materials shall not be required to cover their loads if the load, where it contacts the sides, front, and back of the cargo container area, remains six inches from the upper edge of the container area, and if the load does not extend, at its peak, above any part of the upper edge of the cargo container area. For purposes of this section, "aggregate material" means rock fragments, pebbles, sand, dirt, gravel, cobbles, crushed base, asphalt, and other similar materials.

Pacific Gas and Electric Company

29 4th Street
Marysville, CA 95901
(530) 634-6405
jddo@pge.com

Josh Deadmore
Industrial Power Engineer
Service Planning Department

April 15, 2011

Ryan R. King
Project Engineer
Neil O. Anderson & Associates

RE: Pipeline Search & Proposed Impact
Sutter County Facility Solar Array (CEQA)
3301 East Onstott Road
Yuba City, CA
Portions of APN: 10-260-76

Dear Ryan:

Extension of natural gas and electric distribution facilities necessary to furnish permanent service within the subject development will be made in accordance with the appropriate tariffs on file and approved by the California Public Utilities Commission. The nearest available natural gas and electric facilities to Sutter Quadrangle 7.5' USGS topographic map (T15N, R3E, S3) are located as described below:

Gas: Located along E Onstott Road

Electric: Located along E. Onstott Rd

No financial arrangements by Yuba College are necessary at this time. When PG&E receives notification to build out at the location, we will provide service from the locations stated above.

Sincerely,

Josh Deadmore
Industrial Power Engineer
Pacific Gas and Electric

Pacific Gas and Electric Company

29 4th Street
Marysville, CA 95901
(530) 634-6405
jddo@pge.com

Josh Deadmore
Industrial Power Engineer
Service Planning Department

April 15, 2011

Ryan R. King
Project Engineer
Neil O. Anderson & Associates

RE: Pipeline Search & Proposed Impact
Sutter County Facility Solar Array (CEQA)
3301 East Onstott Road
Yuba City, CA
Portions of APN: 10-260-76

Dear Ryan:

Per your letter dated April 8, 2011, you have requested information about PG&E gas facilities located within1500 feet of the proposed improvements at the school site named above. PG&E does operate gas facilities in this area, all existing PG&E facilities are less than the 80 psi you designate as high pressure.

All work at this site shall be in accordance with the appropriate tariffs on file and approved by the California Public Utilities Commission. Please pay particular attention to all permitting requirements of the project. You should be sure to name PG&E service and interconnection facilities in all environmental studies and other mitigation procedures.

Sincerely,

Josh Deadmore
Industrial Power Engineer
Pacific Gas and Electric

Ryan King

From: Benjamin Moody [bmoody@yubacity.net]
Sent: Monday, March 28, 2011 5:17 PM
To: 'ryan.king@noanderson.com'
Subject: Pipeline Search
Attachments: SCAN0629_002.jpg; SCAN0629_001.jpg; SCAN5040_000.pdf

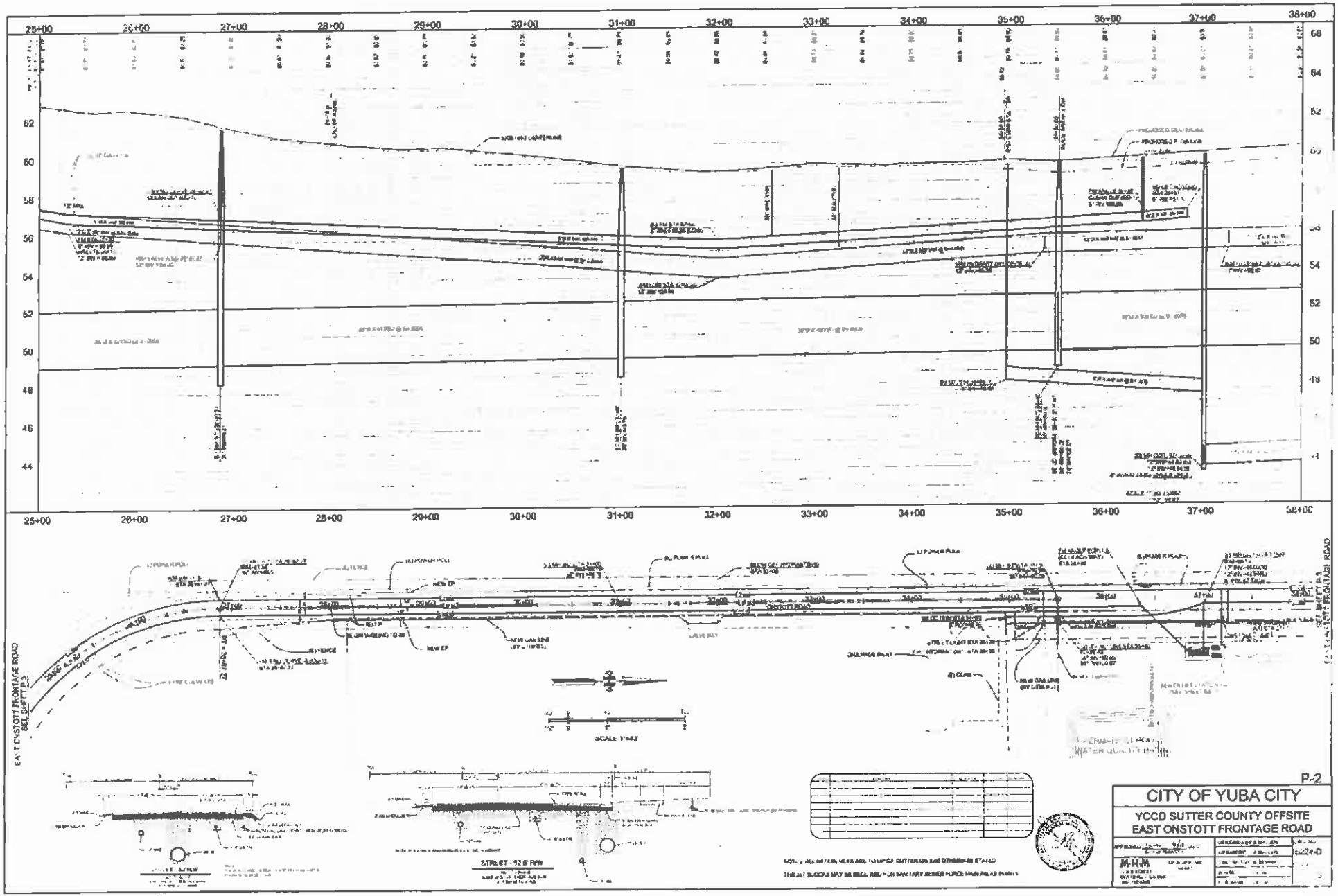
Expires: Thursday, March 31, 2011 12:00 AM

Challenge: ENGINEER
QM Action: none

Ryan, in response to your request for information regarding high pressure pipeline easements (project No. SES110003) I have attached a copy of the recently constructed offsite plans. The City is only aware of the utilities as shown in the developed plan. Please confirm with other affected utilities (PG&E, etc.) for additional information. Let me know if you need any additional information or if you have any questions. Thanks

-Ben Moody

Benjamin K. Moody
Associate Civil Engineer
City of Yuba City
1201 Civic Center Blvd.
Yuba City, CA 95993
(530) 822-4783, Fax (530) 822-4694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26+00
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31+00
32+00
33+00
34+00
35+00
36+00
37+00
38+00
EAST ONSTOTT FRONTAGE ROAD
SEE SHEET P-1
SEE SHEET P-3
STREET - 92.5' R/W
P-2
CITY OF YUBA CITY
YCCO SUTTER COUNTY OFFSITE
EAST ONSTOTT FRONTAGE ROAD
M.H.M
6024-D

CITY OF YUBA CITY

PROJECT PLANS FOR CONSTRUCTION ON

YCCD SUTTER COUNTY CAMPUS OFFSITE IMPROVEMENT PROJECT

YUBA CITY, CALIFORNIA

TO BE SUPPLEMENTED WITH STANDARD PLANS AND SPECIFICATIONS DATED MAY 2006, OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION

IMPROVEMENT PLANS

CITY PLAN NO. 5224-D

INDEX OF SHEETS

		DRAWING TITLE
[illegible]	[illegible]	TITLE SHEET
[illegible]	[illegible]	TOPOGRAPHIC SURVEY SHEET
[illegible]	[illegible]	UTILITY LAYOUT PLAN
[illegible]	[illegible]	EAST ONSTOTT FRONTAGE ROAD
[illegible]	[illegible]	EAST ONSTOTT FRONTAGE ROAD
[illegible]	[illegible]	EAST ONSTOTT FRONTAGE ROAD
[illegible]	[illegible]	PEASE ROAD
[illegible]	[illegible]	PRIVATE DRIVE
[illegible]	[illegible]	PAVEMENT DETAILS & STREET LIGHTING
[illegible]	[illegible]	EROSION CONTROL PLAN
[illegible]	[illegible]	CONSTRUCTION DETAILS
[illegible]	[illegible]	CONSTRUCTION DETAILS
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[illegible]	[illegible]	ROAD GRADING & [illegible] CHANNEL
[illegible]	[illegible]	SEWER LIFT STATION [illegible]
[illegible]	[illegible]	SEWER LIFT STATION LAYOUT
[illegible]	[illegible]	SEWER LIFT STATION [illegible] AREA
[illegible]	[illegible]	ELECTRICAL SYMBOLS [illegible]
[illegible]	[illegible]	INSTRUMENT SYMBOLS [illegible]
[illegible]	[illegible]	LIFT STATION PLAN
[illegible]	[illegible]	ELECTRICAL ONE-LINE DIAGRAM
[illegible]	[illegible]	ELECTRICAL PANEL ELEVATION
[illegible]	[illegible]	PUMP [illegible]
[illegible]	[illegible]	CONTROL PANEL SCHEMATICS
[illegible]	[illegible]	PLC I/O DIAGRAMS
[illegible]	[illegible]	ELECTRICAL SITE PLAN
[illegible]	[illegible]	ELECTRICAL DETAILS

[illegible] NOTES:

A. [illegible]

B. [illegible]

C. [illegible]

D. [illegible]

E. [illegible]

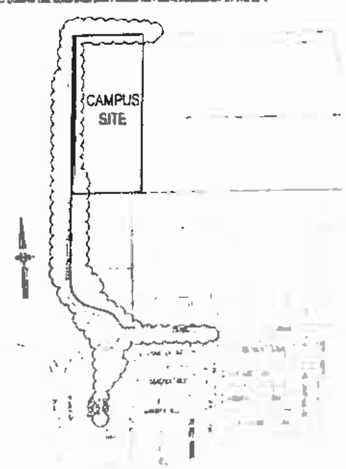
F. [illegible]

G. [illegible]

H. [illegible]

I. [illegible]

J. [illegible]



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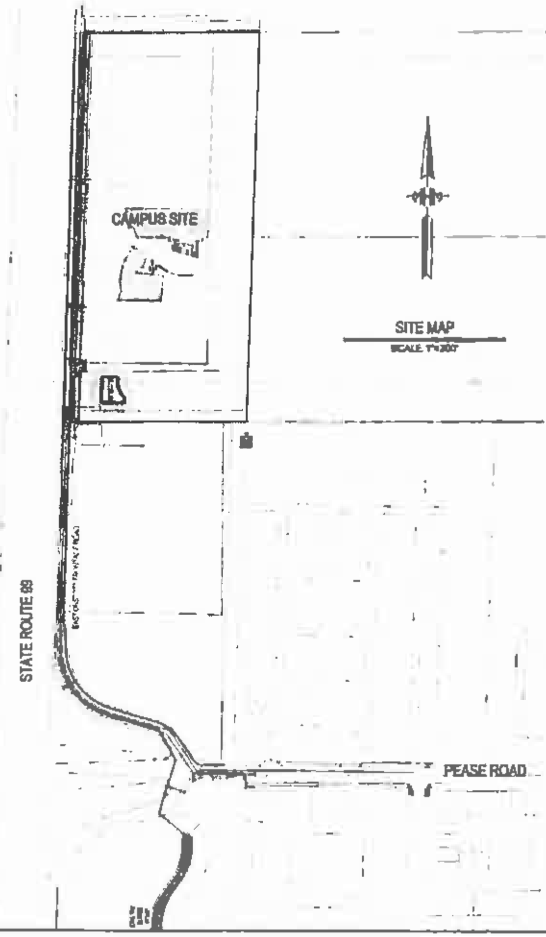
DATE OF PLANS [illegible]



SITE MAP
SCALE 1"=200'

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NOTE: THE CONTRACTOR SHALL POSSESS THE FOLLOWING CONTRACTOR'S [illegible] AT THE TIME THE CONTRACT IS AWARDED:

A. GENERAL ENGINEERING

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A. ANY EXCESS MATERIALS SHALL BE CONSIDERED THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AWAY FROM THE JOB SITE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

B. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING NOISE, ODOR, DUST, AND DEBRIS TO MINIMIZE IMPACTS ON SURROUNDING PROPERTIES AND ROADWAYS. THE CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION EQUIPMENT IS EQUIPPED WITH MANUFACTURER APPROVED MUFFLER BAFFLES. FAILURE TO DO SO MAY RESULT IN THE ISSUANCE OF AN ORDER TO STOP WORK.

C. IF ANY HAZARDOUS WASTE IS ENCOUNTERED DURING THE CONSTRUCTION ON THIS PROJECT, ALL WORK SHALL BE IMMEDIATELY STOPPED AND THE CITY INSPECTOR SHALL BE NOTIFIED IMMEDIATELY. WORK SHALL NOT PROCEED UNTIL CLEARANCE HAS BEEN ISSUED.

D. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC FLOW ON AFFECTED ROADWAYS DURING NON-WORKING HOURS, AND MINIMIZE TRAFFIC IMPACTS DURING CONSTRUCTION. THE CONTRACTOR SHALL BE REQUIRED TO FOLLOW TRAFFIC SAFETY MEASURES IN ACCORDANCE WITH THE CALTRANS "MANUAL OF TRAFFIC SAFETY CONTROLS FOR CONSTRUCTION AND MAINTENANCE ZONES." CITY OF YUBA CITY EMERGENCY SERVICE PROVIDERS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS IN ADVANCE (530) 822-4601 OF PROPOSED CONSTRUCTION SCHEDULED BY THE CONTRACTOR. COORDINATE NOTIFICATION WITH CITY INSPECTOR.

E. SOIL SHALL NOT BE TREATED WITH LIME OR OTHER CEMENTITIOUS MATERIAL WITHOUT PRIOR WRITTEN PERMISSION BY PUBLIC WORKS DEPARTMENT.

CONSTRUCTION STAKING NOTICE:
THESE PLANS HAVE BEEN PREPARED WITH THE INTENT THAT MHM INCORPORATED WILL BE PERFORMING THE CONSTRUCTION STAKING FOR THE COMPLETE PROJECT. MHM INCORPORATED CONSIDERS THE CONSTRUCTION STAKING TO BE THE FINAL PHASE OF PLAN CHECKING FOR POTENTIAL CONFLICTS OR ERRORS WITHIN THE DESIGN [illegible]. SHOULD THE DEVELOPER/CONTRACTOR UTILIZE ANY OTHER ENGINEERING AND/OR SURVEYING FIRM FOR THE PURPOSE OF CONSTRUCTION STAKING, [illegible] THE DEVELOPER/CONTRACTOR AND/OR HIS SURVEYOR SHALL ACCEPT FULL RESPONSIBILITY FOR THE LAYOUT OF THE PROJECT. MHM INCORPORATED [illegible] FOR ANY OF THE FACILITIES STAKED BY OTHERS BASED UPON THE INFORMATION CONTAINED HEREIN. THE DEVELOPER/CONTRACTOR SHALL ACCEPT [illegible] DESIGN CHANGES AND FINAL AS-BUILT RECORD DOCUMENTS.

CALL BEFORE YOU DIG
CALL "USA NORTH" TOLL FREE
811 OR 1-800-227-2600

UNDERGROUND SERVICE ALERT

WDID # 5S51C357543

APPROVED BY: ______ DATE: 3/17/10
GEORGE M. SALLAM, P.E., P.L.S.
PUBLIC WORKS DIRECTOR
CITY OF YUBA CITY
RCE 40466 EXP. 9-30-10
PLS 7104 EXP. 12-31-10

APPROVED BY: ______ DATE: 3-17-10
JAMES MATHEWS
FIRE MARSHAL
CITY OF YUBA CITY

SUBMITTED BY: ______ DATE: [illegible]
SEAN MINARD, P.E., P.L.S.
MHM INCORPORATED
RCE 62863 EXP. 12-31-10
PLS 8287 EXP. 12-31-10

CITY OF YUBA CITY
YCCD SUTTER COUNTY OFFSITE
TITLE SHEET
MHM
T-1

Ryan King

From: M DeSpain [mdespain@mechoopda-nsn.gov]
Sent: Friday, May 13, 2011 9:17 AM
To: Ryan King; Dennis Ramirez; S Knight
Subject: RE: Sutter County Facility Solar Array (CEQA)

QM Action: approved

Thank you for the notice, I would recommend that you contact the other Tribes in the area for further comments. If the other Tribes do not respond to your request, please contact me and I will present the data to my Tribal Council for review. At this time the Mechoopda Indian Tribe has no knowledge of Sacred Sites in this location, if any human remains or artifacts are found during the ground work. Please cease and desist all activities and follow the CA Health and Safety Code 7050.5 for further notification process. Thank you for your time in this matter. Michael

---

From: Ryan King [mailto:ryan.king@noanderson.com]
Sent: Wednesday, May 11, 2011 2:00 PM
To: Ryan King
Subject: Sutter County Facility Solar Array (CEQA)

To Whom It May Concern,

Our office has been retained by the Yuba Community College District to perform an Initial Study for the proposed construction of a new Photo-Voltaic (PV) Solar and Tracker Array system. The planned improvements to the campus include construction of a 1,175 kilowatt Peak Unit (kWp) solar and tracker array. The project area is located in the Sutter Quadrangle 7.5' USGS topographic map (T15N, R3E, S3). The boundaries of our investigation are depicted on the attached map.

We recently contacted the Native American Heritage Commission to conduct a Sacred Lands File. They provided us with a list of Native American individuals/organizations who may have knowledge of cultural resources in the project area. You were on the list, so we wanted to make contact with you in locating any areas of your knowledge that may potentially adversely impact with the proposed project area. If you have any input, questions or concerns, please contact myself, Ryan King, at ryan.king@noanderson.com or call my office at 916-928-4690.

Project Address:
3301 East Onstott Road
Yuba City, California
Portions of APN: 10-260-76
Our Project No. SES110003

Thank you for your assistance in this matter.

Sincerely,
NEIL O. ANDERSON & ASSOCIATES, INC.

Ryan R. King, PE
Project Engineer
916.928.4690
Fax 916.928.4697
50 Goldenland Ct. #100 ▪ Sacramento, CA 95834

STATE OF CALIFORNIA Edmund G. Brown Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

May 11, 2011

Ryan King
Neil O. Anderson & Associates
50 Goldenland Court #100
Sacramento, CA 95834

RE: Proposed Sutter County Facility Solar Array (CEQA): Sutter County.

Dear Mr. King:

A record search of the Sacred Lands File has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the Sacred Lands File does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you consult with all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

Katy Sanchez
Program Analyst

Enclosure

GEOLOGIC/SEISMIC HAZARD INVESTIGATION

SUTTER COUNTY FACILITY (J-01)

DISTRICT OFFICES & YUBA COLLEGE EDUCATIONAL FACILITIES

SUTTER COUNTY, CALIFORNIA

REPORT PREPARED FOR:

YUBA COMMUNITY COLLEGE DISTRICT

OUR PROJECT NUMBER: SGS090502

AUGUST 13, 2009

Daniel Kramer, Project Geologist
PG-8657

David Welch, Engineering Geologist
CEG-2151, CHG-653, PGP-1049

902 Industrial Way • Lodi, CA 95240 • 209.367.3701 • Fax 209.369.4228

GEOLOGIC / SEISMIC HAZARD INVESTIGATION
SUTTER COUNTY FACILITY (J-01)

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August 13, 2009

GEOLOGIC/SEISMIC HAZARD INVESTIGATION

SUTTER COUNTY FACILITY (J-01)

DISTRICT OFFICES & YUBA COLLEGE EDUCATIONAL FACILITIES

SUTTER COUNTY, CALIFORNIA

OUR PROJECT NUMBER: SGS090502

1.0 INTRODUCTION

This report presents the findings, conclusions, and recommendations of a seismic and geologic hazard investigation conducted for the Yuba Community College District. The site is the Sutter County Facility (J-01), District Offices and Yuba College Educational Facilities, located east of Highway 99 and south of Eager Road, in unincorporated Sutter County, California (Plate 1).

This report was prepared for the use of the architect and engineer, to assist in the evaluation and mitigation of earthquake-related hazards, liquefaction, and other geologic hazards which may affect the subject project. This report was prepared in accordance with generally accepted geologic and engineering practices. No warranty is expressed or implied. This report presents the results of our investigation.

1.1 Purpose and Scope

Our office was retained by Mr. Dave Bachman of the Yuba Community College District to prepare a Geologic/Seismic Hazard Report for the proposed project. Our investigation was guided by the California Geological Survey (CGS) Note 48 - Checklist for the Review of Geologic/Seismic Reports for California Public Schools, Hospitals, and Essential Services Buildings. Note 48 is used by the California Geological Survey (CGS) to review the geology, seismology, and geologic hazards evaluated in reports that are prepared under California Code of Regulations (CCR), Title 24, California Building Code (CGS, 2007).

The scope of work performed in this report includes review of published technical literature, topographic maps, geologic literature, aerial photos, and the safety element chapter of the Sutter County General Plan, as well as an on-site geologic reconnaissance. This investigation addresses potential geologic hazards such as general seismicity, potential surface rupture from faulting, earthquake-induced landsliding, volcanic hazards, inundation by tsunamis and seiches, flooding, inundation by dam failure, and subsidence where applicable.

1.2 Site and Project Description

At the time of our investigation, the project area was a peach and plum orchard. A site plan showing proposed building locations is presented in Plate 2; a recent aerial photograph of the site is presented in Plate 3.

The District Offices and Yuba College Educational Facilities project will consist of a 70,000 square foot, two-story building founded on spread footings with a concrete slab on grade. The project will include surface parking, drives, walkways, and landscaping. The site is approximately 15 acres in size.

The site coordinates are as follows: 39.1768 degrees latitude, -121.6337 degrees longitude (Google Earth™, 2009). The site is situated at an elevation of approximately 60 feet above mean sea level according to the a United States Geological Survey 7.5-minute topographic map (Plate 4). The closest drainage to the site, Feather River, is located approximately 0.9 miles to the east.

2.0 SOIL AND GROUNDWATER

2.1 Soil Conditions

The classification and distribution of soils at the site are presented in the *Online Soil Survey, California Soil Resources Lab*, (NRCS, 2009), shown on Plate 5. The soil survey indicated soils in the area are loamy alluvium derived from mixed sources. The following list details some of the characteristics of the soil type that exists on the site:

124— Conejo Loam
Drainage: Well Drained
Runoff: Very Slow
Shrink-swell potential: moderate

A concurrent geotechnical investigation is being completed by our firm. Please refer to the geotechnical report for foundation recommendations based on the site specific soil conditions. No potential hazards associated with the mapped soil units were observed.

2.2 Ground Water

According to the Department of Water Resources Online Data Center, no monitored water wells are located in the immediate vicinity of the site. Water level data for the four closest reported wells indicates that ground water was encountered at 13 to 30 feet below ground surface at wells in the area from 1980 through the present.

No ground-water contour map was available from the County or the State that could provide flow direction and gradient information below the site.

3.0 GEOLOGY AND GEOLOGIC HAZARDS

3.1 Local Geology

3.1.1 General

The subject site is located in the eastern portion of the Sacramento Valley within the Great Valley geomorphic province.

> *The Great Valley is an alluvial plain about 50 miles wide and 400 miles long in the central part of California. Its northern part is the Sacramento Valley, drained by the Sacramento River, and its southern part is the San Joaquin Valley, drained by the San Joaquin River. The Great Valley is a trough in which sediments have been deposited almost continuously since the Jurassic (about 160 million years ago). Great oil fields have been found in southernmost San Joaquin Valley and along anticlinal uplifts on its southwestern margin. In the Sacramento Valley, the Sutter Buttes, the remnants of an Isolated (inactive) Pliocene volcano, rise above the valley floor* (California Geological Survey, 2002).

The site is located within the Sacramento Valley; approximately 10 miles to the east are the foothills of the Sierra Nevada Province. Approximately 35 miles to the west is the coast range province. Tectonic processes involved with the Coast Ranges are a significant source of seismicity, faulting, and folding.

A geologic map was reviewed which shows the site is underlain by the Pleistocene age Modesto Formation, Upper member (Qmu) (Helley and Harwood, 1985). This unit generally consists of mixtures of unconsolidated, unweathered gravel, sand, silt, and clay (Plate 6, Geologic Map). The soil maps indicated that the surface materials at the site are sandy loam and clay loam mixtures.

3.1.2 Oil and Gas Exploration

Oil and gas well location maps were reviewed to locate any wells or test holes on the property or nearby. Well information can be used to evaluate the subsurface geology and estimate potential hazards associated with well operations, subsidence, or related environmental issues.

According to the map *Oil, Gas, and Geothermal Fields in California*, the site is not located within a "sedimentary basin with oil, gas, or geothermal production." The Department of Oil, Gas, and Geothermal Resources (DOGGR) Online Mapping System does not indicate any gas fields, active wells, or abandoned test holes on or near the site (Plate 7). The closest well is located approximately 2.5 miles northwest of the site; it is reportedly plugged. The potential hazards from oil and gas development are considered nil.

3.2 Faulting and Seismicity

The site does not lie within an Alquist-Priolo special studies zone. Nine (9) significant faults capable of generating earthquake induced ground motion at the site are located within 62 miles (100 kilometers) of the subject site (see Plate 8). A list of these faults is presented in Table 1. These and other faults located throughout California are studied as part of an on-going effort to create a probabilistic model to estimate earthquake induced ground motion for the State of California (CDMG, 1996 and 2002).

Table 1.
Significant Faults Located within 100 Km (62 Mi) of the proposed Sutter County Facility (J-01)
(CDMG, 1996, updated 2002).

Significant Earthquake Fault	Geometry	Slip Rate (mm/yr)	Mmax	Dist (Mi)
FOOTHILLS FAULT SYSTEM	n-rl-o	0.05	6.5	12.1
GREAT VALLEY 3	r	1.5	6.9	32.8
GREAT VALLEY 2	r	0.1	6.4	34.9
GREAT VALLEY 1	r	0.1	6.7	35.3
GREAT VALLEY 4	r	1.5	6.9	42.4
HUNTING CREEK – BERRYESSA	rl-ss	6.0	7.1	49.1
BARTLETT SPRINGS	rl-ss	6.0	7.6	49.5
CONCORD – GREEN VALLEY	rl-ss	5.0	6.2	58.1
GREAT VALLEY 5	r	1.5	6.6	61.6

Geometry- (ss) strike slip, (r) reverse, (n) normal, (rl) right lateral, (ll), left lateral, (o) oblique.

Dist (Mi) is epicentral distance. Mmax is maximum moment magnitude of earthquake.

3.2.1 San Francisco Bay Area Faults

The San Andreas Fault Zone is located about 85 miles to the southwest of the site. Two (2) of the biggest earthquakes in California occurred along the San Andreas Fault, the 1857 Fort Tejon earthquake of Mw 7.92 and the 1906 San Francisco earthquake of Mw 7.68.

The San Andreas Fault Zone is considered the active boundary between the North American tectonic plate to the east, the Pacific plate to the west, and the Juan de Fuca plate to the north. The San Andreas Fault is also regarded as the primary expression of movement along this boundary. Other parallel and related faults in the California Coast Ranges are considered lesser expressions of tectonic stresses that occur along the plate boundary. These faults make up the majority of the active faults in the Central California area.

3.2.2 Foothills Fault System

The edge of the Foothills Fault System, which roughly defines the Central Valley and the Sierra Nevada margin, lies about 10 miles east of the subject site. The zone is regarded as an aerial earthquake source that is based on poorly constrained Quaternary slip rates across the Bear Mountain and Melones Fault Zones (CDMG, 1996; Woodward-Clyde Consultants, 1978). Wakabayashi and Smith (1994) describe the Foothills Fault Zone as lacking evidence of active crustal shorting and note that deformation along the eastside of the Central Valley is extensional or transtensional. This fault zone has much less activity relative to the Central Coast area strike-slip faults and the CRCV boundary located along the west side of the Sacramento and San Joaquin Valley.

About 16 to 20 miles northeast of the site is location the Oroville Earthquake of 1975. The earthquake occurred on August 1, 1975 and was thought to be the result of filling the Oroville Reservoir. Surface rupture occurred on the Cleveland Hill Fault for 3.1 miles. The maximum magnitude of the earthquake was 6.1.

3.2.3 CRCV Boundary

The Coast Range-Central Valley (CRCV) geomorphic boundary (margin) is located approximately 35 miles west of the site. The CRCV boundary is underlain by a 310 mi (500 km) long seismically active fold and thrust belt (Wakabayashi and Smith, 1994). Wakabayashi and Smith (1994) point out that, for communities located along the western margin of the Central Valley, the CRCV, because of its proximity and the comparatively long distance to major strike-slip faults, may represent the most significant seismic hazard for the area.

Numerous earthquakes have occurred along the CRCV fold and thrust zone including the 1892 Vacaville-Winters earthquakes of magnitude (Mw) 6.8. The most recent large earthquake occurring along the CRCV fold and thrust zone was the 1983 Coalinga earthquake, magnitude (Mw) 6.5, which caused considerable damage in the Coalinga area. A summary of large damaging earthquakes thought to be associated with the CRCV fold and thrust zone is presented in Table 2.

Table 2.
Historic Large Earthquakes Associated with the CRCV Boundary
(Wakabayashi and Smith, 1994).

Year	Location and Comments	Mw (Moment Magnitude)
1892	Vacaville-Winters mainshock	6.8
1892	Vacaville-Winters aftershock	6.4
1892	Vacaville-Winters aftershock	5.8
1889	Antioch	6.3
1866	Near Patterson	5.9
1881	Near San Luis Reservoir	6.4

Year	Location and Comments	Mw (Moment Magnitude)
1905	Near Firebaugh	6.1
1885	Near Mendota	6.5
1983	Coalinga mainshock	6.5
1983	Coalinga aftershock	6.0
1985	Kettleman Hills (north dome)	6.1

The subject site will have potential for ground shaking because of its close distance to the CRCV seismically active fold and thrust belt and the nearby San Francisco Bay area faults. Wakabayashi and Smith (1994) point out that although eleven (11) magnitudes greater than or equal to six (6) have taken place on the CRCV boundary (Great Valley Fault), approximately 65% of the fault system has not yielded earthquakes of this size in historic time. Since Wakabayashi and Smith (1994) described the CRCV fold and thrust belt, it has since been sectioned into distinct fault segments by the California Geological Survey (CGS) and the United States Geological Survey (USGS). The general name of the fault is Great Valley (GV) followed by the segment number (CDMG, 1996). Earthquakes occurring on the closest segments (GV-3 and GV-2) to the site have a maximum moment magnitude (Mw) intensity of 6.9 and 6.4.

3.3 Earthquake Epicenters

The Advanced National Seismic System's earthquake catalog was searched for earthquakes of local magnitude greater than 4.0 occurring since 1900 for a radius of 31 miles (50 km) surrounding the site with the coordinates 39.176 degrees latitude and -121.633 degrees longitude. Table 3 presents a tabular listing of earthquake epicenters close to the site. The earthquake epicenters are sorted by distance from the site.

Table 3.
Earthquakes of Magnitude 4.0+ Occurring Within 31 miles (50 km) of the Site.

Site:	39.176 N	-121.633 W				
Date	Longitude	Latitude	Magnitude	Depth	Distance	Bearing
7/6/1976	-121.5212	39.405	4.1	5.04	23.7 km (14.7 mi)	N21E
8/1/1975	-121.5458	39.4322	5.7	4.97	24.6 km (15.3 mi)	N15E
8/1/1975	-121.5458	39.4432	4.1	2.71	25.5 km (15.8 mi)	N15E
8/2/1975	-121.548	39.4525	4.7	6.45	26.1 km (16.2 mi)	N14E
8/1/1975	-121.5338	39.469	4	7.82	28.1 km (17.4 mi)	N15E
8/2/1975	-121.4848	39.4378	5.2	1.82	28.3 km (17.6 mi)	N24E
8/11/1975	-121.4795	39.4493	5.1	2.03	29.5 km (18.3 mi)	N24E
8/16/1975	-121.4862	39.4583	4.3	2.22	29.7 km (18.5 mi)	N23E
8/3/1975	-121.5308	39.4883	4	9.26	29.8 km (18.5 mi)	N15E
8/2/1975	-121.5192	39.4862	4.6	7.55	30.1 km (18.7 mi)	N16E
8/2/1975	-121.5093	39.4797	4.1	5.75	30.1 km (18.7 mi)	N18E
8/3/1975	-121.5395	39.4962	4.7	8.87	30.1 km (18.7 mi)	N13E
9/26/1975	-121.485	39.4785	4.3	1.07	31.3 km (19.4 mi)	N21E
8/6/1975	-121.4885	39.4807	4	0.7	31.3 km (19.4 mi)	N21E
8/8/1975	-121.512	39.5012	4.9	8.27	31.7 km (19.7 mi)	N17E

Site: 39.176 N	-121.633 W					
Date	**Longitude**	**Latitude**	**Magnitude**	**Depth**	**Distance**	**Bearing**
9/27/1975	-121.5382	39.52	4.6	8.64	32.1 km (20.0 mi)	N13E

The search of the earthquake catalog indicated that 16 earthquakes have occurred within approximately 31 miles (50 km) of the site with a magnitude greater than or equal to 4.0. The closest earthquake epicenter to the site occurred about 14.7 miles (24 km) north of the site in 1976 with a local magnitude of 4.1. All the earthquakes listed appear to be associated with the 1975 Oroville Reservoir earthquake.

3.4 Estimated Ground Motion of the Site

3.4.1 Estimating Site Specific Ground Motion Using CBC 2007

Estimating the earthquake-induced ground motion for a site can be accomplished several different ways. The California Division of Mines and Geology Note 48 calls for a ground motion determination using 2007 California Building Code (CBC) seismic design parameters. From the geotechnical information gathered during our concurrent geotechnical report, we have assumed a typical soil type D for the analysis.

The new 2007 California Building Code adopted January 1, 2008 references the 2006 International Building Code and the ASCE 7-05 standard in lieu of the Uniform Building Code previously utilized by the State of California. The following is a table of the 2007 California Building Code Soil Parameters which may be used for seismic design of structures at the subject site:

Table 4.
Seismic Design Parameters.

2007 CALIFORNIA BUILDING CODE SEISMIC DESIGN PARAMETERS	
Site Class	D
Mapped Spectral Acceleration Value of Rock (Short Period), S_S	0.508g
Mapped Spectral Acceleration Value of Rock (1-Second Period), S_1	0.225g
Site (Amplification) Coefficient, F_a	1.393
Site (Amplification) Coefficient, F_v	1.951
Maximum Considered Earthquake/Site Modified (MCE) Spectral Response Acceleration Value (Short Period), S_{MS}	0.708g
Maximum Considered Earthquake/Site Modified (MCE) Spectral Response Acceleration Value (1-Second Period), S_{M1}	0.438g
Design Spectral Acceleration Value (Short Period), S_{DS}	0.472g
Design Spectral Acceleration Value (1-Second Period), S_{D1}	0.292g

A site latitude and longitude of 39.1768 degrees and -121.6337 degrees were utilized in conjunction with the tools provided by United States Geologic Survey web site. In accordance

with 2007 California Building Code, Section 1802.2.7.2, a ground acceleration of 0.19g (S_{DS}/2.5) should be anticipated.

3.4.2 Estimating Ground Motion Using CGS Fault Model

Estimation for ground motion can be also be found on the Probabilistic Seismic Hazards Mapping Ground Motion page of CGS's California fault and soil model using probabilistic methods. By entering the latitude and longitude, the CGS model has estimated a ground motion for the site of 0.173g for alluvium ground condition.

3.5 Geologic Hazards

3.5.1 Liquefaction Potential

Liquefaction is a loss of strength in soil when a cyclic stress, such as that caused by an earthquake, is applied to typical soils, such as loose saturated sands and silts. A cyclic stress applied to these soils causes them to densify, rapidly elevating the pore pressures, which causes the soil to act as a liquid. Factors that may affect the likelihood of liquefaction include the age of soils, density of soils, porosity, grain size, depth to groundwater, and potential ground acceleration from a seismic event.

A review of water levels in nearby wells indicates that depth to ground water in the area has fluctuated between 13 and 30 feet below ground surface from 1980 through the present (Section 2.2).

Based only on peak horizontal seismic acceleration, the potential settlement due to liquefaction is considered low at the site. The concurrent geotechnical investigation may quantify the liquefaction hazard of the site based on additional parameters such as soil grain size, actual depth of ground water, and soil density.

3.5.2 Aerial Photograph Analysis

Satellite aerial imagery from Terraserver™ and Google Earth™ were checked for cultural and geologic features. The Terraserver™ image is dated September 1998 and the Google Earth™ image is undated but recent. Imagery indicates the area surrounding the site is predominantly agricultural, though one residential subdivision is located to the south of the site. The photographs did not indicate any recognizable hazards at the site.

3.5.3 Fault Rupture Hazard

The site does not lie within an Alquist-Priolo special studies zone, and there are no known mapped surface faults on or adjacent to the Site. The Foothills Fault system exists to the east of the site. Blind thrust faults of the Great Valley system, as well as strike-slip faults of the Bay Area Fault system, exist to the west of the site (Active Fault Map, Plate 8). The Great Valley faults are buried relatively deeply at a low angle, approximately ½ mile deep. Historically, blind thrust faults do not cause surface rupture at the site due to their low angle geometry.

However, considerable shaking may occur due to the proximity of the fault to the site. Due to the large distance from any of the active faults within the greater area, surface rupture faulting is not expected at the site.

3.5.4 Earthquake-Induced Landsliding

This site is not considered susceptible to landsliding because of its low topographic relief and lack of hills/mountains in the vicinity of the site.

3.5.5 Volcanic Hazards

Six active volcanic hazard zones have been identified in California. The Clear Lake Volcanic Area is the closest to the subject property. The Clear Lake Volcanic area is approximately 60 miles west of the subject site. The Lassen Volcanic area is the next closest active zone to the subject site at approximately 90 miles to the north. The Owens Lake-Bishop Volcanic area is the next closest, located approximately 170 miles to the southeast of the subject site.

The procedures and methods used to evaluate potential volcanic hazards for the site are largely adopted from the work of Miller (1989). Hazards associated with volcanic events are first categorized and characterized into two groups, "Flowage Hazards" and "Tephra Hazards." Flowage hazards include pyroclastic flows, mud flows, directed blasts, and lava flows. Tephra hazards are primarily considered to be ash falls. Historic and geologic information on each of these types of events has been accumulated for volcanic centers around the world. Hazards associated with volcanic events can then be further categorized based on magnitude of an event and whether it is precedented or unprecedented for a particular volcanic area. Precedented events are associated with previous eruptions at the specific volcanic hazard zone. Unprecedented events refer to large cataclysmic events which are very infrequent, geologically.

Risk associated with potential volcanic hazards can then be evaluated as a function of distance from the volcanic center based on historic and geologic information defined in terms of four categories, (1) precedented combined flowage hazards, (2) unprecedented combined flowage hazards, (3) precedented tephra hazards, and (4) unprecedented tephra hazards.

Due to the close distance from the Clear Lake Volcanic area, and the type of eruptions likely produced, it is possible that a tephra ash fall event hazard could affect the site.

For precedented events associated with either the Owens Lake-Bishop Volcanic Area or the Lassen Volcanic Area, combined flowage hazards could be anticipated to extend 9+ miles from the volcanic center (Miller, 1989). For unprecedented events, flowage hazards are documented to reach distances of 25 to 31 miles from the center of the volcanic zone (Miller, 1989). For comparative purposes, the pyroclastic flow associated with the 1980 Mt. Saint Helens eruption reached as far as 17 miles from the volcanic center. The 1980 Mt. Saint Helens eruption Is a medium size eruption involving only 3 km^3 of material. Based on the fact that the Mono Lake-Bishop Volcanic Area is located 170 miles from the subject site, and the Lassen Volcanic Area is located 90 miles from the subject site, the subject property is too far from the nearest active

volcanic center to be impacted by either precedented or unprecedented volcanic flowage hazards.

At 60 miles from the Clear Lake Volcanic Area (or the Lassen Volcanic Area at 90 miles from the site) the subject property is close enough to be affected by either a precedented or unprecedented tephra (ash fall) event. For a precedented event, less than 2 inches are predicted at 90 miles from the Lassen Volcanic Area (CDMG, 1973). For an unprecedented event, anywhere between 10 centimeters to 80 centimeters of ash could potentially accumulate depending on the size of the event. However, the likelihood of tephra impact is a function of prevailing wind direction and strength, and the wind blows toward the southwest (from the Clear Lake/Lassen areas toward Williams and the subject site) only 2 percent of the time (Miller, 1989). Consequently, only 2 percent of the precedented or unprecedented events would be expected to deposit ash at the subject property. There is a low risk of volcanic hazards affecting the property because the frequency of eruptions is rare.

3.5.6 Inundation by Tsunamis and Seiches

Tsunamis, often incorrectly called tidal waves, are long period waves of water usually caused by underwater seismic disturbances, volcanic eruptions, or submerged landslides (Ritter and Dupre, 1972). There is no potential for tsunamis due to the large distance from the Pacific Ocean and the San Francisco Bay shore line. Therefore, tsunamis are not a potential hazard.

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin that varies in period. Seiches are often caused by tidal currents, landslides, earthquakes, and wind. Since the site is not located near a large body of water, the risk of flooding from a seiche is nil.

3.5.7 Flooding

A review was conducted of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel number 0603940085B.

The project site is located within the 500-year flood zone (Zone X). Zone X is defined as "Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood" (Plate 9).

3.5.8 Dam Failure Inundation

The Sutter County General Plan (1996) indicates that there are ten (10) reservoirs under the jurisdiction of the Division of Dam Safety, which could cause flooding in the county should a dam fail. These dams are as follows:

1) Oroville Dam - Feather River
2) New Bullards Bar Dam - Yuba River
3) Camp Far West Dam - Bear River
4) Lake Almanor Dam - Feather River

5) Thermalito Afterbay Dam - Feather River
6) Thermalito Forebay Dam - Feather River
7) Shasta Dam - Sacramento River
8) Whiskeytown Dam - Clear Creek (Sacramento River)
9) Folsom Dam - American River
10) Englebright Dam - Yuba River

The Sutter County General Plan indicated that these dams would cause varying degrees of inundation in Sutter County if they failed. No inundation maps were available from the General Plan, Sutter County Office of Emergency Services, or the State Office of Emergency Services. The Sutter County Office of Emergency Services indicated that most of Sutter County would be inundated from a failure of Oroville Dam. Other combinations of the Thermalito Forebay and Afterbay Dam dams would cause flooding of the site as well.

The potential for inundation due to a dam failure is regarded as low because dam failures are generally rare. Should a monitored dam weaken or begin to fail from a seismic event, the community would be notified to evacuate by the County Office of Emergency Services.

3.5.9 Subsidence

Subsidence of the land surface, as a result of the activities of man, has been occurring in California for many years. Subsidence can be divided, on the basis of causative mechanisms, into four types: groundwater withdrawal subsidence, hydrocompaction subsidence, oil and gas withdrawal subsidence, and peat oxidation subsidence (CDMG, 1973).

California Division of Mines and Geology Bulletin 198 (CDMG, 1973), indicates that the subject site is not within a known subsidence zone due to any of the four causes mentioned above. The Sutter County General Plan (1996) indicates the potential for subsidence from ground water pumping is low within the County due to the use of surface water by many households, as well as the ground water recharge capability of the Sacramento and Feather Rivers and runoff from Sierra Nevada snowmelt.

4.0 CONCLUSIONS

Based on the information presented in this investigation, the subject site appears to be suitable for construction provided our recommendations are followed. A brief summary of the results is presented below:

1. The site does not lie within an Alquist-Priolo special studies zone. There are no known active surface faults located near the project site. Blind thrust faults of the Great Valley Fault System exist 32.8 miles to the west, while the right lateral strike slip Hunting Creek-Berryessa Fault exists 49.1 miles to the west, and right lateral strike slip San Andreas Fault exists 95.4 miles to the west. These faults are seismically active and are expected to cause ground shaking in the future from earthquakes.

2. Due to the low seismic acceleration in the area, the potential for liquefaction is considered low. A more detailed discussion of the potential liquefaction hazard will be presented in the concurrent geotechnical report prepared by our office.

3. The subject site is not in an active gas/oil field. No production wells or test holes are located near the site.

4. The site is not considered susceptible to landsliding because of the low topographic relief.

5. Due to the location, the site is not susceptible to direct volcanic hazards. The possibility of tephra ash fall at the site during any large eruption may exist; however, the potential is considered to be low.

6. The site is not susceptible to tsunamis or seiches.

7. The site is within dam failure inundation zones. The probability of dam failure is low therefore the potential for inundation is also low. In the unlikely event of dam leakage or dam failure, the Sutter County office of Emergency Services would notify the community with evacuation instructions.

8. The property is located in Zone-X, areas within the 500-year flood zone.

9. According to the Sutter County General Plan, the site may be located in an area with low potential for subsidence from ground water pumping; however, subsidence in the area has not been observed.

5.0 LIMITATIONS

Our professional services were performed, our findings obtained, and our recommendations proposed in accordance with generally accepted geologic and engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied. Test findings and statements of professional opinion do not constitute a guarantee or warranty, expressed or implied.

The scope of this investigation did not include environmental assessment, investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater or air, on or below or around this site.

The recommendations, specifications, and methodologies presented herein were prepared and presented, in accordance to generally accepted practices at the time this document was prepared, and are true and correct to the best of our knowledge. No other warranty is expressed or implied. This document was prepared through the use of information and data provided by others. Neil O. Anderson and Associates in no way warrants the validity or accuracy of any information provided by these sources.

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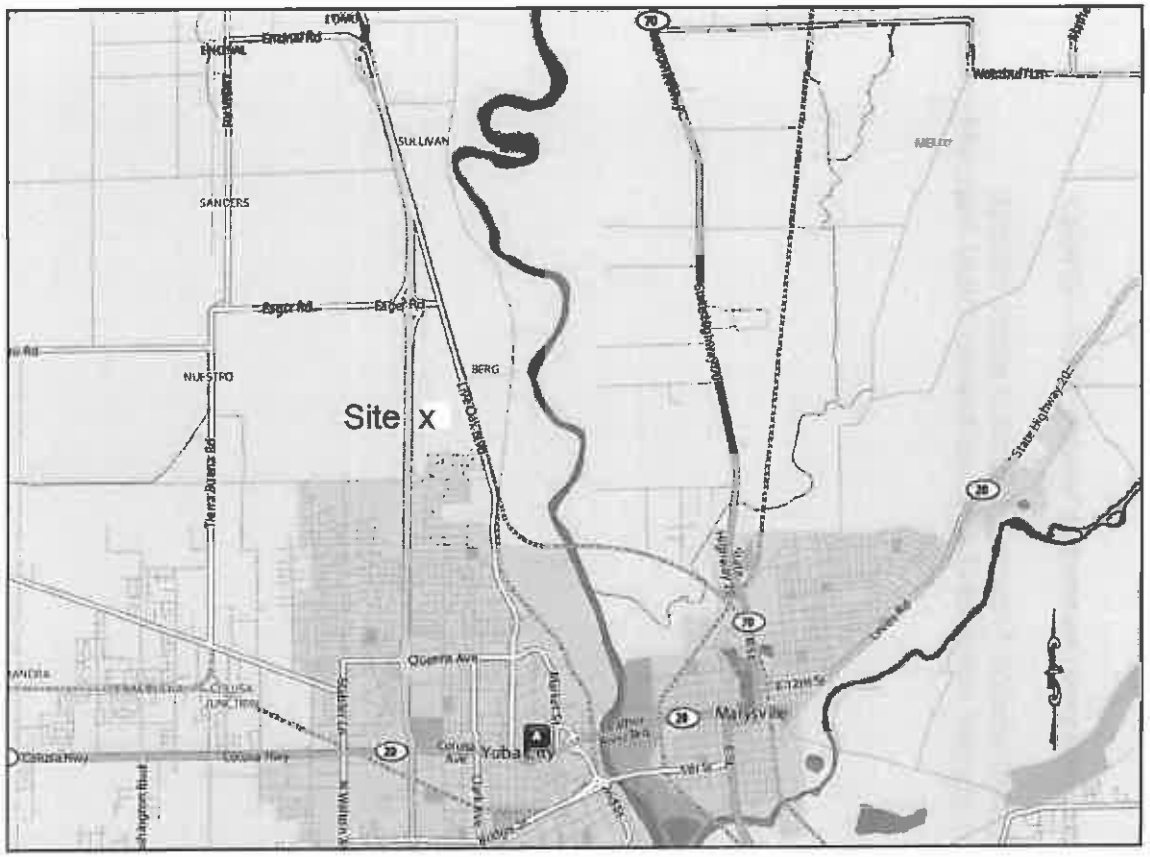

Map modified after yahoo.com maps.

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VICINITY MAP

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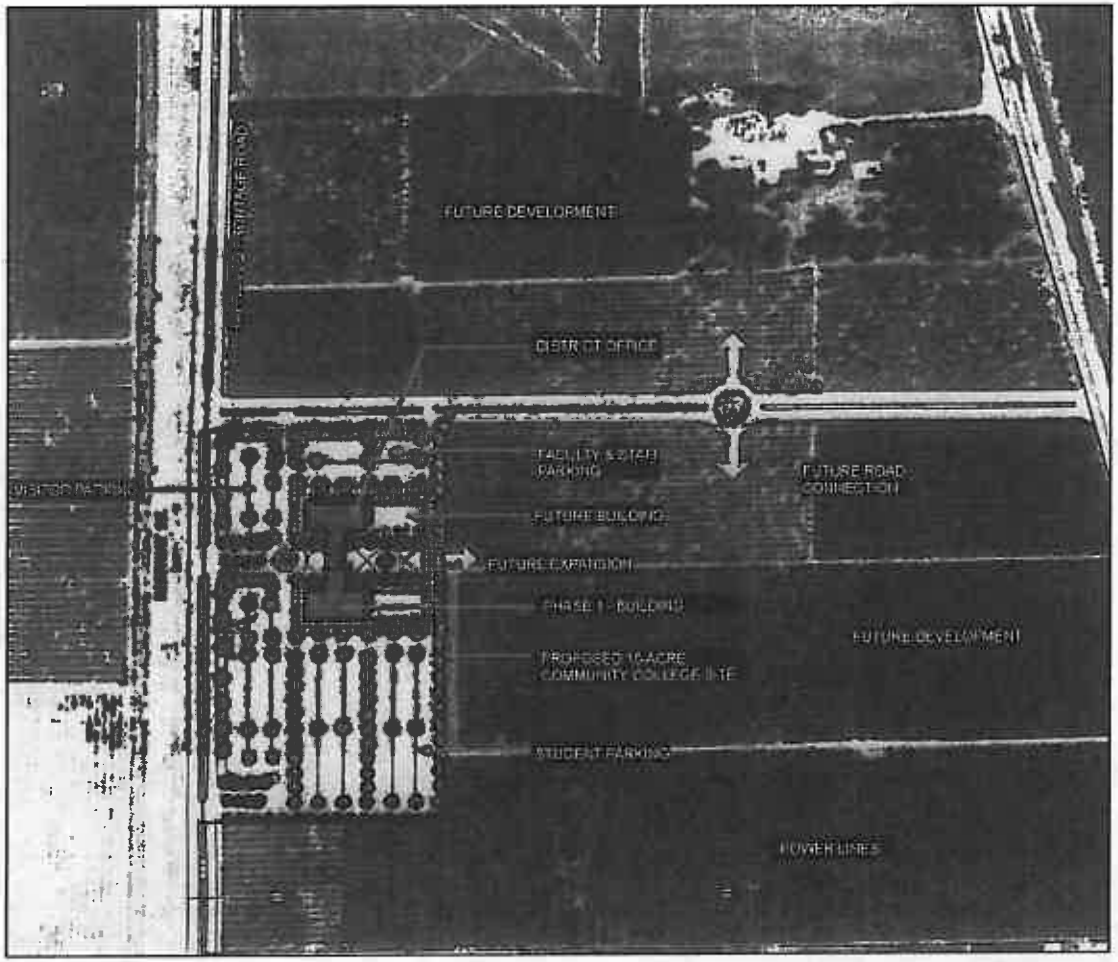

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PROPOSED DEVELOPMENT

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Recent aerial photograph from yahoo.com.

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AERIAL PHOTOGRAPH

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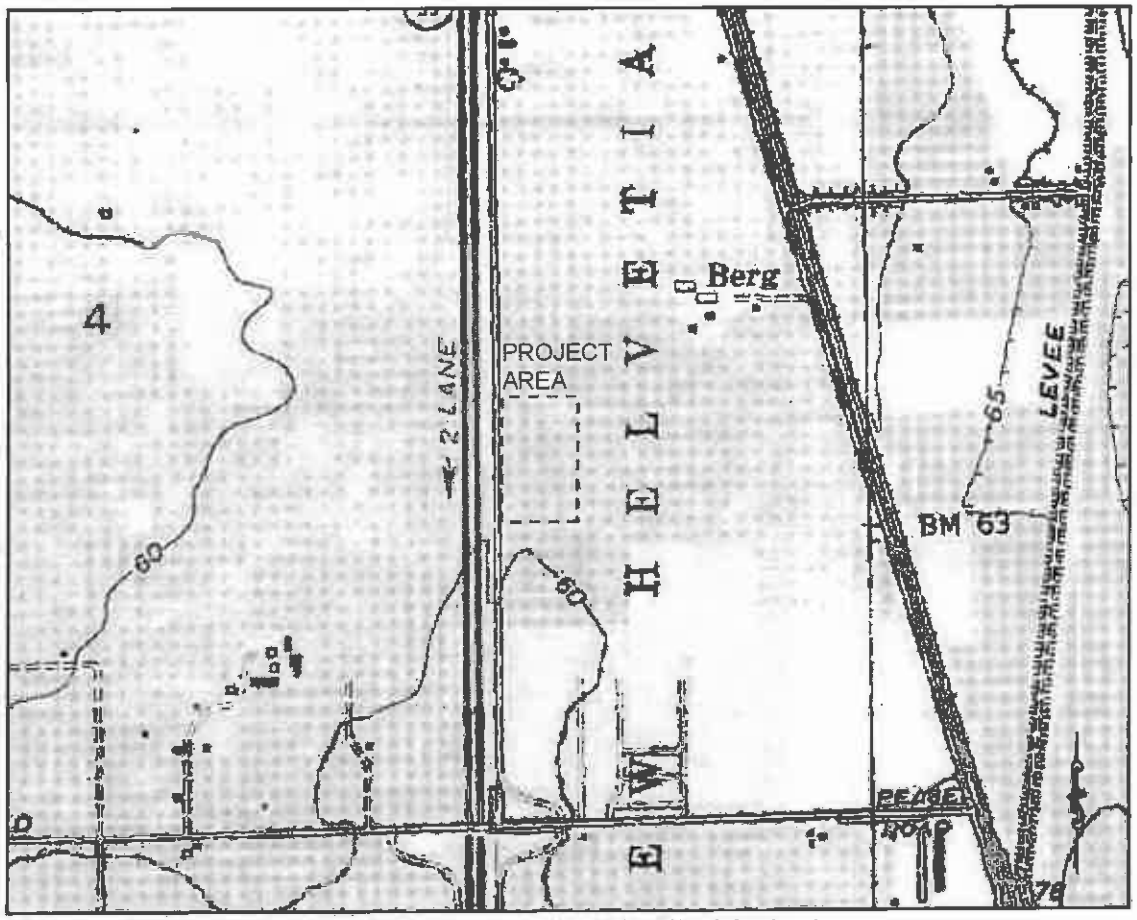

Topographic map base Sutter, CA (1973) and Yuba City, CA (1973) 7.5 minute USGS Quadrangles.

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TOPOGRAPHIC MAP

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Map modified after Natural Resources Conservation Center Web Soil Survey, http://websoilsurvey.nrcs.usda.gov.

SUTTER COUNTY

Map Unit Symbol	Map Unit Name
121	Columbia fine sandy loam, **frequently flooded, 0 to 2 percent slopes**
124	Conejo loam, **0 to 2 percent slopes**
125	Conejo loam, siltstone substratum, 0 to 2 percent **slopes**
126	Conejo-Tisdale **complex, 0 to 2 percent slopes**
127	Conejo-Urban **land complex, 0 to 2 percent slopes**
132	Gridley clay loam, **0 to 1 percent slopes**
135	Holillipah loamy sand, frequently flooded, 0 to 2 percent slopes
138	Liveoak sandy clay loam, 0 to 2 percent slopes
143	Marcum-Gridley clay loams, 0 to 1 percent slopes
145	Nueva loam, occasionally flooded, 0 to 1 percent slopes
163yu	Holillipah loamy sand, 0 to 1 percent slopes, frequently flooded
165	Shanghai silt loam, frequently flooded, 0 to 2 percent slopes
174	Tisdale clay loam, 0 to 2 percent slopes
177	Water

YUBA COUNTY

Map Unit Symbol	Map Unit Name
138	Columbia fine sandy loam, 0 to 1 percent slopes, occasionally flooded
139	Columbia fine sandy loam, 0 to 1 percent slopes, frequently flooded
142	Conejo loam, 0 to 1 percent slopes, occasionally flooded
163	Holillipah **loamy sand, 0 to 1 percent slopes, frequently flooded**
182	Kilaga **clay loam, 0 to 1 percent slopes**
183	Kilaga clay loam, **hardpan substratum, 0 to 1** percent slopes
185	Kimball loam, **0 to 1 percent slopes**
203	Perkins loam, **0 to 2 percent slopes**
254	WATER

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SOIL MAP

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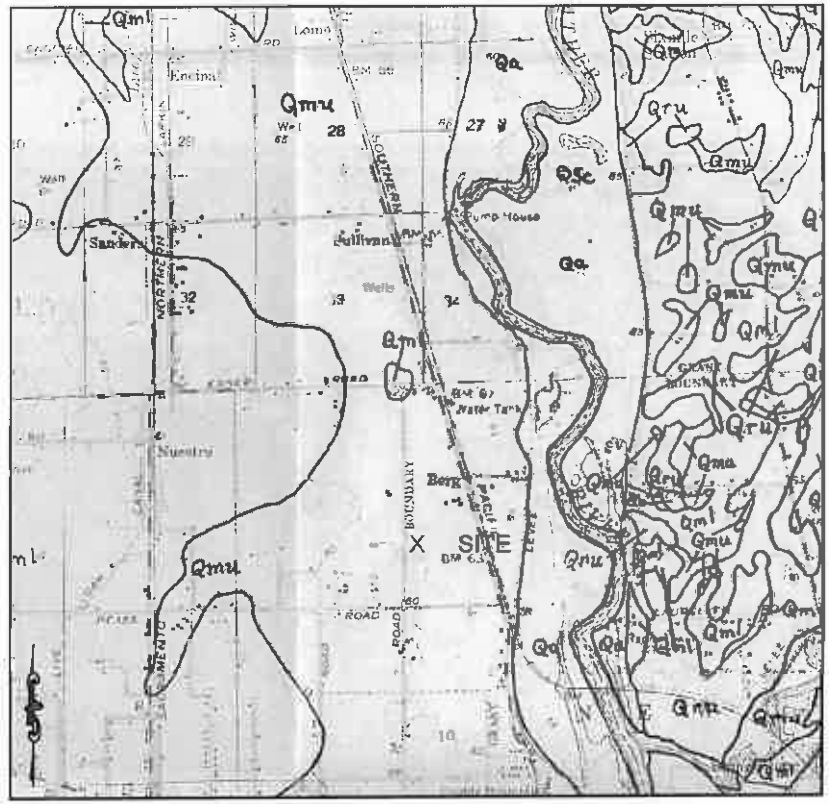

Geologic map modified after Helley and Harwood (1985).

GEOLOGIC LEGEND

Qsc STREAM CHANNEL DEPOSITS (Holocene) -- Unweathered deposits of open, active stream channels, usually in contact with modern surface waters.

Qa ALLUVIUM (Holocene) -- Unweathered gravel, sand and silt deposited by present day stream and river systems.

Qmu MODESTO FORMATION, UPPER MEMBER (Pleistocene) -- Unconsoliated, unweathered gravel, sand, silt, and clay.

Qml MODESTO FORMATION, LOWER MEMBER (Pleistocene) -- Unconsolidated, slightly weathered gravel, sand, silt, and clay.

Qru RIVERBANK FORMATION (Pleistocene) -- Upper member -- unconsolidated but compact, dark-brown to red alluvium composed of gravel, sand, silt and with minor clay.

Qa Boundary of geologic contact and unit symbol.

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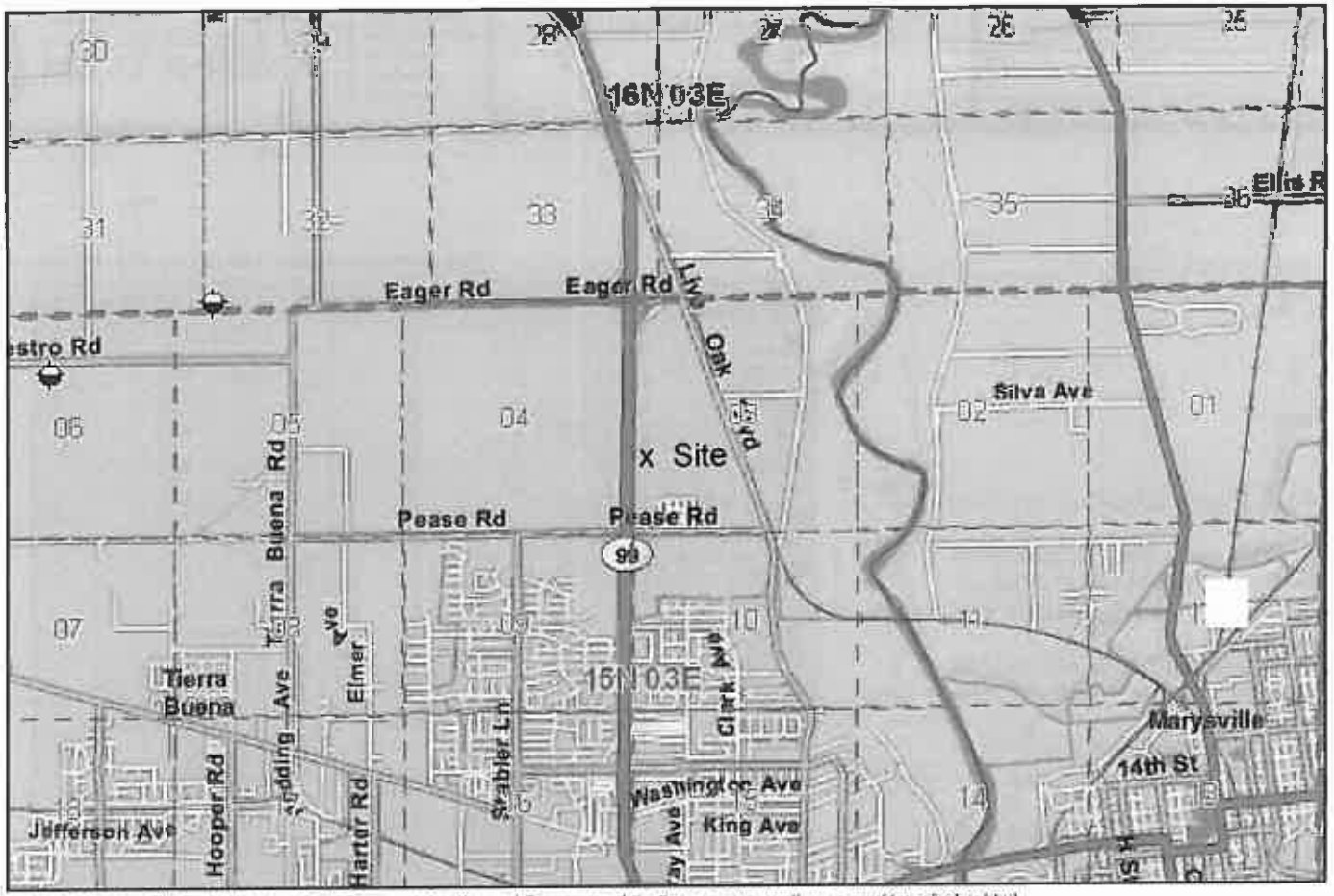

MAP SOURCE: California Division of Oil, Gas, and Geothermal Resources, http://maps.conservation.ca.gov/doms/index.html

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OIL AND GAS WELL MAP

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ACTIVE FAULT MAP

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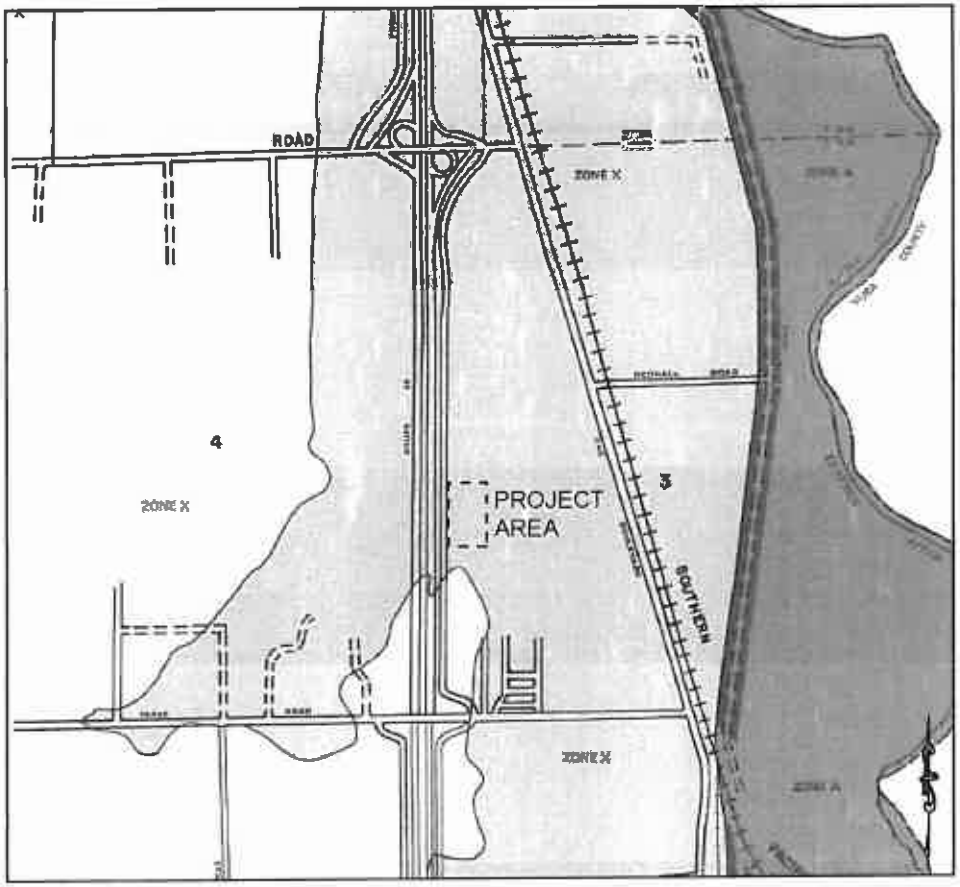

FEMA INSURANCE RATE FLOOD MAP
COMMUNITY PANEL NUMBER: 0603940085B
Map modified after FEMA Flood Insurance Maps at http://msc.fema.gov/

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** — No base flood elevations determined.
- **ZONE AE** — Base flood elevations determined.
- **ZONE AH** — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined
- **ZONE A99** — To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined
- **ZONE V** — Coastal flood with velocity hazard (wave action); no base flood elevations determined
- **ZONE VE** — Coastal flood with velocity hazard (wave action); base flood elevations determined

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** — Areas determined to be outside 500-year flood plain.
- **ZONE D** — Areas in which flood hazards are undetermined.

- Flood Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 — Base Flood Elevation Line; Elevation in Feet*
- D — D — Cross Section Line
- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*
- RM7X — Elevation Reference Mark

*Referenced to the National Geodetic Vertical Datum of 1929

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FEMA FLOOD INSURANCE MAP

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GEOTECHNICAL INVESTIGATION

SUTTER COUNTY FACILITY (J-01)

DISTRICT OFFICES & YUBA COLLEGE EDUCATIONAL FACILITIES

SUTTER COUNTY, CALIFORNIA

REPORT PREPARED FOR:

YUBA COMMUNITY COLLEGE DISTRICT

OUR PROJECT NUMBER: SGE090538

DECEMBER 21, 2009

50 Goldenland Ct. #100 • Sacramento, CA 95834 • 916.928.4690 • Fax 916.928.4697

NEIL O. ANDERSON
AND ASSOCIATES

GEOTECHNICAL
ENVIRONMENTAL
INSPECTIONS & TESTING
LABORATORY SERVICES
POOL ENGINEERING
POST TENSION DESIGN

December 21, 2009
Our Project Number: SGE090538

Mr. George Parker
Yuba Community College District
2088 North Beale Road
Marysville, California 95901

Subject: **Geotechnical Investigation**
Sutter County Facility (J-01)
District Offices & Yuba College Educational Facilities
Sutter County, California

Dear Mr. Parker:

The following report presents the findings and conclusions of our geotechnical investigation conducted at the subject site. The purpose of the report was to provide geotechnical recommendations for the site grading, foundations, slab support (including subgrade modulus), retaining walls, underground utility construction, corrosion protection, and pavement sections, as indicated in our revised proposal dated July 14, 2009. Recommendations for this project have been provided in the body of the report. Coordination between our office and your grading contractor will help reduce the potential for soil related problems.

Key information regarding this geotechnical report is presented on the following page. This information sheet has been provided to aid you in assessing the limitations of this geotechnical investigation as well as to indicate when additional information from our office may be required.

We appreciate the opportunity of working with you on this project and look forward to providing our services in the future. Please contact us if you have any questions.

Sincerely,
NEIL O. ANDERSON & ASSOCIATES, INC.

Ryan King, Staff Engineer
EIT No. 122451, B.Sc.

REGISTERED PROFESSIONAL ENGINEER
ROBERT HOLMER
No 2672
Exp. 12/11
GEOTECHNICAL
STATE OF CALIFORNIA
12/21/2009

Robert E. Holmer, Principal Engineer
Registered Geotechnical Engineer 2672

KEY INFORMATON REGARDING YOUR GEOTECHNICAL REPORT

➢ *The Applicability of Geotechnical Reports is Limited*

Geotechnical reports are written to provide test results, observations, and professional opinions regarding a specific site for a specific project. Reports are tailored to the client and are influenced by each client's risk management strategies, economical constraints, and personal preferences. Since each report is a "custom fit" for a particular client, reports should not be transferred to anyone else without first consulting the geotechnical engineer.

Each geotechnical report considers only the construction information and site boundaries that existed at the time of the investigation. Modification of construction plans, such as a change in the shape, size, weight, location, or intended use of a project, nullifies the recommendations contained in the report, unless the geotechnical engineer indicates otherwise. A geotechnical report can not be used for an adjacent site. Time and money can often be saved by consulting with the geotechnical engineer when circumstances change from those which existed when the report was written.

➢ *Site Conditions Can Change*

The conditions which existed at the time of a geotechnical investigation can change. Investigations can only report conditions at a particular time and place and no guarantee exists to ensure that recommendations will apply after natural or man made changes occur. Examples of some possible changes include: earthquakes, floods, fluctuations in groundwater, construction on or *next* to the site, and the addition or removal of soil. In addition, even the mere passing of time can affect site conditions. Consult with the geotechnical engineer to verify site conditions have not changed since the geotechnical report was completed.

➢ *Geotechnical Findings Are Comprised Primarily of Professional Opinions*

Even if typical 6 inch borings were spaced 5 feet apart across an entire site (typical borehole spacings are on the order of at least 10's or 100's of feet apart), *less than one percent* of the soil or rock on the site would actually be explored. From this limited exploration, the geotechnical engineer is called on to provide an opinion regarding the subsurface conditions across the site, provide appropriate foundation recommendations, and predict the response of subsurface materials to numerous scenarios using information from samples that may or may not be representative of the entire site. Obviously, most of the geotechnical report is based on the professional opinion of the geotechnical engineer. The actual subsurface conditions may significantly differ from those which were encountered during the geotechnical investigation. Consequently, the most effective method of managing the risks associated with a project is to retain the geotechnical engineer who provided the report throughout construction of the project.

➢ *Contact Your Geotechnical Engineer When in Doubt*

Time, money, and confusion can all be saved by simple explanations at critical moments. Please contact your geotechnical engineer whenever there is any doubt regarding subsurface conditions or their effect on part or all of any project.

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GEOTECHNICAL INVESTIGATION
SUTTER COUNTY FACILITY (J-01)
SUTTER COUNTY, CALIFORNIA

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December 21, 2009

GEOTECHNICAL INVESTIGATION

SUTTER COUNTY FACILITY (J-01)

DISTRICT OFFICES & YUBA COLLEGE EDUCATIONAL FACILITIES

SUTTER COUNTY, CALIFORNIA

OUR PROJECT NUMBER: SGE09-0538

1.0 INTRODUCTION

This report presents the findings, conclusions, and recommendations of a geotechnical investigation conducted for the proposed District Offices and Yuba College Educational Facilities to be constructed on E. Onstott Road in Sutter County, California. The District Offices and Yuba College Educational Facilities project will consist of a 70,000 square foot, two-story building founded on spread footings with a concrete slab on grade. We anticipate the structure may be constructed with wood or steel frame, masonry, or concrete tilt up. The project will also include surface parking, drives, walkways, and landscaping. Since the site is relatively flat, we expect that grading will consist of minor cuts and fills, less than 3 feet in vertical extent.

The geotechnical study conducted at this site was prepared for the use of the architect and engineer for application to the design of the building and grading plans in accordance with generally accepted geotechnical engineering practices. No warranty is expressed or implied. This report presents the results of this study.

2.0 SUMMARY OF CONCLUSIONS

1. The soils encountered during our field investigation were relatively consistent between the test holes. Subgrade soils generally consisted of medium stiff to stiff, sandy clays with a trace of silt that extended to a depth of 2½ to 11 feet below the existing ground surface. The upper sandy clays and silts were underlain by slightly cemented to cemented sandy silts and silty sands which in turn where underlain by sand with a trace of silt to the maximum depth explored of 40.0 feet. For a more detailed description of the soils encountered in the test holes see the Logs of Test Boring sheets. Groundwater was encountered in one of our test holes at a depth of 24½ feet at the time of our investigation.

2. Good surface drainage should be constructed to provide rapid removal of runoff away from the buildings.

3. We recommend the proposed buildings be founded on spread footings. Detailed design and construction criteria are presented in this report.

4. Flexible (asphalt) and rigid (concrete) pavement sections are provided for various traffic indices.

3.0 GENERAL SEISMIC PARAMETERS & SITE CONDITIONS

A geologic map of the area was reviewed and indicated the surface soils are described as Pleistocene Age Modesto Formation (Q_m). The Modesto Formation is the youngest Pleistocene alluvial terraces and fans deposits consisting of gravel, sand, silt, and clay. Following is a table of the 2007 California Building Code Soil Parameters[1] which may be used for design of structures at the subject site:

2007 CALIFORNIA BUILDING CODE SEISMIC DESIGN PARAMETERS	
Site Class	D
Mapped Spectral Acceleration Value of Rock (Short Period), S_S	0.508g
Mapped Spectral Acceleration Value of Rock (1-Second Period), S_1	0.225g
Site (Amplification) Coefficient, F_a	1.393
Site (Amplification) Coefficient, F_v	1.951
Maximum Considered Earthquake/Site Modified (MCE) Spectral Response Acceleration Value (Short Period), S_{MS}	0.708g
Maximum Considered Earthquake/Site Modified (MCE) Spectral Response Acceleration Value (1-Second Period), S_{M1}	0.438g
Design Spectral Acceleration Value (Short Period), S_{DS}	0.472g
Design Spectral Acceleration Value (1-Second Period), S_{D1}	0.292g

A site latitude and longitude of 39.17725° and -121.6338389° were utilized in conjunction with the tools provided by United States Geologic Survey web site. In accordance with 2007 California Building Code, Section 1802.2.7.2, a ground acceleration of 0.1888g (S_{DS}/2.5) should be anticipated.

[1] USGS Earthquake Ground Motion Parameters Version: 5.0.9a – 10/21/09

At the time of our initial site visit, the 20 acre site of the proposed District Offices and Yuba College Educational Facilities was covered with fruit orchards. During the course of our field exploration, the orchards were removed, the majority of shallow roots were grubbed out, and the field was disked. The site is bordered by E. Onstott Frontage Road to the west, agricultural orchards to the north and east, and a commercial building to the south. There were existing overhead high voltage power lines along the southern portion of the site in the east-west direction. The site is relatively flat and the surrounding area is majority rural, agriculture area with some minor residential areas to the southeast.

4.0 FIELD EXPLORATION AND LABORATORY TESTING

The field investigation conducted at this site consisted of drilling 17 exploratory test holes carried to depths of between 5 and 40.0 feet. The test holes were drilled with a truck mounted Mobile B-24 drill rig and a Simco drill rig, both utilizing 4-inch continuous flight solid stem auger. The locations of the test holes are shown in Appendix C on the Location Map, Plate No. 1. The locations of the test holes were determined by pacing from existing site features; hence, accuracy can be implied only to the degree that this method warrants.

Sampling of the drilled test holes was performed at various depths using a California Modified 2.5 inch o.d. split spoon sampler with stainless steel tube liners and an unlined Standard Penetration Test (SPT) sampler. The samplers were driven by a 140 pound hammer with a 30-inch drop. Blow counts required to drive the sampler every 6 inches for a total of 18 inches were recorded.

Soil samples obtained from the test holes were preserved in stainless steel tubes until the samples could be tested in the laboratory. Samples were taken to the laboratory of Neil O. Anderson & Associates, Inc., Sacramento, California and used for performing various laboratory tests. Tests performed consisted of unit weights, moisture contents, Minus No. 200 Wash, R-Value, expansion index, Atterberg Limits, Pocket Penetrometer readings, and corrosive soil evaluation. Graphical representation of the laboratory testing is presented in Appendix D. A summary of the test results are presented in Appendix C on the Log of Test Boring sheets, Plates 2 through 18.

5.0 SOIL CONDITIONS

Visual classification of each soil stratum encountered according to ASTM D2488 (Visual – Manual Procedure) was made in the field by a representative from our office at the time the test holes were drilled. The samples obtained were checked in the laboratory by an engineer and classification verified according to ASTM D2487. A classification and graphical representation of each soil encountered is presented on the Log of Test Boring sheets. The test boring legend is presented on Plate No. 19.

The soils encountered during our field investigation were relatively consistent between the test holes. Subgrade soils generally consisted of medium stiff to stiff, sandy clays with a trace of silt that extended to a depth of 2½ to 11 feet below the existing ground surface. The upper sandy clays and silts were underlain by slightly cemented to cemented sandy silts and silty sands which in turn where underlain by sand with a trace of silt to the maximum depth explored of 40.0 feet. For a more detailed description of the soils encountered in the test holes see the Logs of Test Boring sheets.

Test hole logs show subsurface conditions at the date and location indicated and it is not warranted that they are representative of subsurface conditions at other locations and times.

Three samples of the near surface sandy clays were tested in our laboratory for Atterberg Limits and exhibited liquid limits of 34 to 47, plasticity indexes of 16 to 19, and contained 77 to 88 percent silt and clay-sized particles (passing the No. 200 sieve). One sample of the sandy silt was deemed non-plastic and contained 58 percent silt and clay-sized particles (passing the No. 200 sieve). One sample of the silty sand was deemed non-plastic and contained 39 percent silt and clay-sized particles (passing the No. 200 sieve). Three samples of the sand with a trace of silt were deemed non-plastic and contained 2 to 3 percent silt and clay-sized particles (passing the No. 200 sieve). One sample of the near surface sandy clay was also tested for expansion index and rendered a value of 28. Laboratory testing indicates that the near surface sandy clay soil has a low expansion potential.

Groundwater was encountered in one of our test holes at a depth of 24½ feet at the time of our investigation. Groundwater conditions in the future could change due to rainfall, construction activities, irrigation, or other factors. The evaluation of these factors is beyond the scope of this study.

6.0 ANALYSIS FOR SEISMICALLY INDUCED LIQUEFACTION

The detailed analysis of earthquake induced liquefaction for the proposed site was completed for the purpose of determining the potential of liquefaction and any associated induced settlement.

Liquefaction is a loss of strength in soil when a cyclic stress, such as that caused by an earthquake, is applied to loose saturated sands and silts. A cyclic stress subjected to these soils causes them to densify rapidly elevating the pore pressures which causes the soil to act as a liquid. Factors that *may* affect the likelihood of liquefaction include the age and density of soils, *recent* depths to subsurface water (24½ feet) and the potential ground acceleration from a seismic event.

The results of the dynamic blow count testing performed during the drilling of the 40.0 foot boring and the 30 foot boring, borings B-1 and B-7 respectively, have been used in our liquefaction analysis. Blow counts were taken at various intervals and a liquefaction analysis of each distinct stratum has been performed. Our analysis of the potential for liquefaction at the site was performed using two methods (both are based on blow count result values obtained during drilling activities). The first, and probably the most commonly used method, is that proposed by the National Center for Earthquake Engineering Research (NCEER)[2]. This method results in a calculated factor of safety against liquefaction. The second method is a newer method proposed by R. B. Seed and result in a calculated probability of liquefaction[3].

As indicated, a Simco drill rig, utilizing 4-inch continuous flight augers was used to drill the 40.0 foot boring and a mobile B-24 drill rig, utilizing 4-inch continuous flight augers was used to drill the 30 foot boring. Our calculations are based on **corrected** blow counts; values of blow counts reported in the bore logs are also corrected.

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[2] Youd, Leslie T., Idriss, Izzat M., *Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils*, Technical Report NCEER-97-0022, December 31, 1997.

[3] Seed, R.B., *Recent Advances in Soil Liquefaction Engineering and Seismic Site Response Evaluation*, Proceedings of the Fourth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor W.D. Liam Finn, San Diego, California, March 26-31, 2001, Paper No. SPL-2.

As was mentioned, two methods of analysis were used to assess the liquefaction potential of the site. Both of these methods require the same data. Besides data obtained during field and laboratory testing, a value of peak ground acceleration at the site and a magnitude of the earthquake responsible for the peak ground acceleration is required. Our office used a magnitude of 6.7 from the Great Valley fault and a peak horizontal ground acceleration of 0.188g in our liquefaction analysis. The shear wave velocity was calculated to be 589 feet per second (180 meters per second) based on the in-situ down hole sampling. Saturated conditions and soil lithology from the test holes were utilized for design purposes. The following table shows the results of our liquefaction analysis.

LIQUEFACTION ANALYSIS			
Layer (depth below ground surface in feet)	**Factor of Safety based on NCEER method[1]**	**Probability of Liquefaction based on Seed et. al. method[2]**	**Comments**
0-5	**3.79**	**0.00**	Low potential for liquefaction
5-15	**2.70**	**0.00**	Low potential for liquefaction
15-40	**1.57**	**0.12**	Low potential for liquefaction

Note 1: A value less than 1.0 indicates liquefaction is predicted.
Note 2: The closer the value is to 1.0, the more probable liquefaction becomes.

The results of our analysis indicate that there is a low potential for liquefaction at this site due to the near surface soil's high clay content, depth to ground water and distance to a significant seismically active source. These calculations are applicable only to the soils encountered in our test holes.

7.0 DESIGN STUDIES AND RECOMMENDATIONS

From a soil engineering standpoint, our office concludes that the site is suitable for construction of the proposed buildings; however, all of the conclusions and recommendations presented in this report should be incorporated into the design and construction to help reduce the potential for soil and foundation problems. The primary geotechnical consideration that will influence the development of this site is the previous fruit orchard root balls that were not documented during removal.

7.1 Over-Excavation and Grading Recommendations

During our investigation, the fruit tree orchard that occupied the entire site (as illustrated on Plate 1-A) was cut down. We understand that the root balls were removed and the site grubbed out the substantial roots and vegetation. The site was then leveled, but the voids from backfill of the root balls were not compacted. Loose fill placed in the root ball voids can settle, causing damage to buildings and other improvements. **As a result, we recommend over-excavating the entire site and recompacting the over-excavated materials as compacted engineered fill.**

The site should initially be cleared of all surface organic growth, loose organic soil, and miscellaneous debris. After the site has been cleared, the entire project area (building pads and parking areas) should be over-excavated to a depth of 30 inches. The over-excavated materials shall be stockpiled for reuse. The stumps/roots of any fruit trees should be removed. During stump/root removal all roots greater than ½ inch in diameter should be grubbed out. After the project area has been over-excavated, the resulting subgrade should be scarified to a minimum depth of 12 inches; moisture conditioned, and re-compacted as specified in Appendix A, Engineered Fill Specifications, with the following modification:

> All on-site clay soil that is either scarified and re-compacted shall be placed and compacted to a minimum **90 percent relative compaction, at a minimum of 2 percent above optimum moisture content as determined in ASTM D1557**. If compaction or the required minimum moisture content has not been achieved, the fill or re-compacted subgrade will be considered unacceptable and reworking of the fill or subgrade shall be required.

After scarification and re-compaction of the subgrade, the stockpiled, over-excavated soils should be placed and compacted as engineered fill as specified in Appendix A with the noted modification. The onsite soils are suitable for use as engineered fill. **We anticipate soil shrinkage from the over-excavation and recompaction to be on the order of 10 to 15 percent**. The site civil engineer should anticipate the need for soil import accordingly. Any additional fill material should be non-expansive as specified in Appendix A. **A sample of any import engineered fill material should be submitted to our office for testing and approval prior to construction.** Engineered fill should extend a minimum of five feet beyond proposed foundation lines or under any perimeter sidewalks or other exterior concrete flat work. **A representative of our firm should be present during construction to observe site grading and test compaction**.

7.2 Spread Foundations

If grading is accomplished as specified, foundations for the proposed buildings/structures may consist of shallow, spread or continuous foundations bearing on compacted native soil, engineered fill, or a combination of both. The building structure foundation should be embedded a minimum depth of 18 inches below nearest surrounding grade and should be at least 12 inches wide. The structure foundation bearing on native soil or compacted engineered fill may be designed using a bearing capacity of 1,500 pounds per square foot (psf), for dead plus live loads. Bearing capacity may be increased by 1/3 for temporary wind and seismic loads.

If a higher bearing capacity is desired, footings may be supported on 24 inches of Caltrans Class II aggregate base compacted to at least 95%, or on lean mix concrete (2 sack mix). Footings constructed in this manner may be loaded to a bearing capacity of 4,000 psf, for dead plus live loads. Bearing capacity may be increased by 1/3 for temporary wind and seismic loads.

Potential settlement, either immediate or long term, of foundations constructed on native soils and loaded in the manner described above, should be less than 1 inch total and ½ inch differential across the width of the buildings. Care should be taken to understand settlements may vary based on actual loads and footing sizes.

To ensure footings have adequate support, special care should be taken when footings are located adjacent to trenches. The bottom of such footing should be at least 1 foot below an imaginary plane with an inclination of 1.5 horizontal to 1.0 vertical extending upward from the nearest bottom edge of the adjacent trench.

Lateral resistance for spread footing may be provided by assuming a passive pressure acting against the side of the footings equal to 350 pounds per cubic foot (pcf) equivalent fluid pressure. Lateral resistance may also be provided by computing friction between the bottom of the footing and the soil. A coefficient of friction of 0.35 should be utilized. If footings are cast against firm native soil, passive and frictional resistance may be combined but the passive resistance should be reduced by 50 percent.

7.3 Building Slabs

A modulus of subgrade reaction of 125 pounds per square inch per inch of deflection (pci) may be used for design of floor slabs at this site.

Moisture transmission through concrete slab-on-grade floors has been known to cause delamination, warping and other damage to floor coverings. Wood and vinyl floorings are particularly susceptible to damage. Neil O. Anderson & Associates does not profess to be experts in moisture proofing concrete slabs-on-grade, and our firm knows of no construction method that will completely eliminate the risk of damage. In order to provide some level of protection against damage, it is common practice in this area to place a capillary break and a vapor retarder beneath the slab.

There are additional measures that may be incorporated to further reduce, but not eliminate, the risk. Some (but not all) of these measures include: using concrete with a water-cement ratio less than 0.45, employing a qualified testing laboratory to provide materials testing and quality control during concrete placement and curing, using topical concrete sealers, installing water stops at cold joints between the foundation and slab on grade, sealing the vapor retarder where plumbing penetrations occur, limiting the use of vinyl and wood flooring, and testing the concrete slab for moisture transmission rates immediately prior to placement of floor coverings. These measures may be considered if additional protection is desired.

The following recommendations are commonly used in this area and we believe these measures should be incorporated to provide a minimum level of protection against damage.

Minimum Recommendations:

Four inches of clean ¾ inch gravel should be placed beneath the slabs on grade. The gravel should be covered by an impervious vapor retarder such as 10 mil sheet vinyl or equivalent. The vapor retarder should be continuous and lapped a minimum of 2 feet and draped down the side of the footings at least 1 foot. The vapor retarder should be covered by 2 inches of sand to protect it during construction and to aid in curing the concrete. This sand should meet the requirements of ACI 302.1R. However, we know from experience that most local sand will not meet these requirements. In our opinion, the sand should be a sand or silty sand containing no more than 20 percent passing the No. 200 sieve. Alternative materials must be approved by the geotechnical engineer prior to being brought to the site.

The sand should be moist but not saturated at the time of concrete placement. If the sand is saturated or free water is visible, the concrete should not be placed until the sand is dried sufficiently to only be moist or is replaced. If construction will take place in winter, sand may be substituted with 3/8 inch pea-gravel. The pea gravel may not be saturated. Free water must not be visible on the gravel. If the gravel is saturated, it must be dried sufficiently to only be moist or be replaced prior to placement of concrete.

Our office recommends the floor slab thickness and reinforcing design be determined by the project structural engineer. Exterior finish grades should be below the floor subgrade level unless special drainage and waterproofing features are employed to reduce the potential for moisture migration under the slab.

7.4 Winterization and Construction Equipment Mobilization

Cohesive soils located across the site can trap moisture from winter rains within the upper zones of the subgrade. This is known to cause unstable "pumping" subgrade conditions which can hinder the movement of grading equipment if construction is occurring in the winter or early spring. This should be taken into consideration when planning site grading during wet conditions. **We recommend including a lime treatment subgrade stabilization as a line item in the bidding process for this project.**

If desired the soils can be chemically treated with lime, fly ash, or cement to stabilize them so grading can proceed during wet conditions. Typically, about 4 percent of lime by dry weight is used to stabilize clayey soils for a depth of 12 to 18 inches. For a typical soil unit weight of about 110 pounds per cubic foot, the spread rate of the lime varies between about 4.4 pounds per square foot to 6.6 pounds per square foot depending on the depth of treatment. In some soils, a combination of lime and fly ash has been used successfully to stabilize the subgrade. Usually 2 to 3 percent of lime is used along with 2 to 4 percent of fly ash. Cement treatment is usually only used with coarse grained soils. All lime treatment operations shall be performed in general accordance with the latest requirements of Section 24 of the CalTrans Standard Specifications. The current CalTrans specifications for lime treatment are included as Appendix B of this report.

7.5 Retaining/Screen Walls

Site retaining walls may be constructed. Retaining walls will be subject to lateral earth pressures. Site retaining walls may be supported by a spread footing type foundation designed using the same parameters provided in Section 7.2 of this report.

The lateral earth pressure on a retaining wall depends on the height of the wall, type of backfill, slope of the backfill surface, and allowable horizontal movement on top of the wall. A calculated at-rest earth pressure of 55 pcf equivalent fluid density should be used for retaining walls which are restrained from rotating at the top. A calculated active earth pressure of 45 pcf equivalent fluid density should be used for site retaining walls which are allowed to rotate at the top. The above active earth pressure assumes the retaining wall will support a backslope no steeper than 5:1 (H:V). We have assumed the backfill will be the on-site soils. For lateral load resistance, footings may be designed with a passive earth pressure of 350 pcf. Equivalent fluid densities do not include allowances for surcharge loads or hydrostatic pressures. The hydrostatic pressure on the retaining walls should be relieved using drains behind the walls connected to tight lines. A typical retaining wall detail is presented in Appendix B on Plate 20.

7.6 Exterior Concrete Walkways & Flatwork

The subgrade soil that will support exterior concrete walkways and flatwork shall be prepared in accordance with Section 7.1 and Appendix A of this report. We recommend the concrete walkways and flatwork to be at least 4 inches thick and be reinforced with #3 bars spaced at 18 inches on center each way. At least 6 inches of Caltrans Class 2 aggregate base shall be placed beneath the slab. Aggregate base shall be compaction to at least 95% relative compaction.

7.7 Drainage

Special care should be taken to ensure adequate drainage is provided throughout the life of the structures. Properly designed and constructed foundations can be seriously damaged by neglecting to install and regularly verify performance of recommended drainage systems. Appropriate down spout extensions from roof drainage should fall on splash blocks a minimum of 2 feet from the structure or be connected to tight lines that drain away from the buildings. Any flatwork adjacent to the buildings should slope a minimum of 1 percent for a distance of 5 feet. Exposed exterior subgrade (soil or non-paved areas) should slope away from the structures at a minimum slope of ½ inch per foot for a distance of 8 to 10 feet beyond the building perimeters. If this grade is unable to be obtained, proper drainage inlets will need to be placed to carry surface water away from the foundations.

Care should be taken to ensure that landscaping is not excessively irrigated and to ensure that landscaping drains away from the structures. Implementation of adequate drainage for this project can affect the surrounding developments. Consequently in addition to designing and constructing drainage for the subject site, the effects of site drainage must be taken into consideration for surrounding sites.

7.8 Excavation

As indicated previously, sandy clay and silty sand/sandy silt soils were encountered in our test borings. Consequently, conventional excavating equipment may be utilized on this site. The contractor should plan his work accordingly.

7.9 Testing, Inspections and Review

Our office should be afforded the opportunity of reviewing the completed foundation and grading plans to verify that our recommendations have been properly interpreted and incorporated. Unless our office is allowed this opportunity, we disavow any responsibility from problems arising from failure to follow geotechnical recommendations or improper interpretation and implementation of our recommendations.

Our office should be retained to perform the recommended foundation inspections, grading observations and compaction testing. Unless we have been retained to provide these services, our office cannot be held responsible for problems arising during or after construction that could have been avoided had these services been performed. The fees for these services are in addition to that associated with this report.

8.0 EVALUATION FOR SOIL CORROSION

Neil O. Anderson & Associates, Inc. are not corrosion engineers. We are providing the following information for use by the design engineer. A competent corrosion engineer should be consulted to determine the necessary corrosion protection for the concrete and proposed underground utilities and if additional testing is warranted.

A total of two (2) soil samples were submitted to Sunland Analytical Laboratory in Rancho Cordova, California for testing. The tests performed on these samples included pH, resistivity, sulfate concentration, and chloride concentration. The results of these tests are presented below. The test results from the laboratory are included in the Log of Test Borings, Appendix D.

Boring ID	Depth, ft.	pH	Resistivity, ohm-cm	Sulfate concentration, ppm	Chloride concentration, ppm
B2	1-2.5	8.08	560	137.2	137.4
B8	3-4.5	7.46	1020	57.4	22.8

According to the ACI Code 318, Sections 4.3, sulfate concentrations between 0 ppm to 150 ppm are considered negligible. We tested sulfate concentrations between 0 ppm and 150 ppm in two test samples. For further information see the ACI Code 318, Sections 4.3 and 4.4.

The results for resistivity of these two (2) samples ranged from 560 to 1020 ohm-cm. Testing indicates the soils are severely corrosive towards buried ferrous metals. A generally accepted correlation between soil resistivity and corrosivity towards buried ferrous metals is provided below:

Minimum Resistivity, ohm-cm	Corrosion Potential
0-1,000	Severely corrosive
1,000-2,000	Corrosive
2,000-10,000	Moderately corrosive
Greater than 10,000	Mildly corrosive

These test results are only an indication of the potential corrosivity of the soils encountered in our test borings at the depths indicated. Other soils present on the site may produce widely varying test results. As previously mentioned above, a competent corrosion engineer should be consulted to determine the necessary corrosion protection for the proposed underground utilities and if additional testing is warranted. Laboratory test results are included in Appendix D.

9.0 PAVEMENT RECOMMENDATIONS

Four bulk samples were obtained from the near surface soils on the site. Due to similar soils, the samples were combined into two R-value specimens and were subjected to R-value tests in our laboratory. From the results of the R-value tests, a design R-value of 5 was utilized. As an alternative to conventional pavement sections, lime treatment of the subgrade soils may be performed to improve their physical support characteristics. This procedure involves treating the pavement subgrade soils with a certain percentage of high calcium quicklime, usually 3 to 5 percent based on the dry unit weight of the soil, for a depth of 12 to 18 inches. For estimating purposes, a spread rate of about 4.4 pounds per square foot may be used for a 12 inch mixing depth. The determination of the amount of lime to be used needs to be determined in the laboratory on samples of the subgrade soils. Lime treatment is performed after rough grading of the pavement areas is completed. Recommendations for both conventional and lime treated pavement sections are presented below.

Traffic indices of 3.5, 5.0, 6.0, and 7.0 were used to design the pavement sections for the site based on our experience with similar sites. **The project civil engineer should be afforded the opportunity of specifying the most appropriate traffic index for the proposed traffic and usage.** If a different traffic index is desired or required, please contact our office and a suitable recommended design can be provided. Flexible (asphalt) pavement sections have been designed according to the latest addition of the Cal Trans Highway design manual and using a 20-year pavement life. The pavement sections designs are shown below.

FLEXIBLE PAVEMENT SECTION DESIGN				
Subgrade R-Value	Traffic Index	Traffic	Pavement Section, inches	
			Asphalt Concrete	Aggregate Base
5	3.5	Auto Parking	2.5	6.0
5	5.0	Auto Drive	3.0	10.0
5	6.0	Fire Lane/Bus	3.5	12.5
5	7.0	Truck Drive	4.0	15.5

The recommended concrete pavement sections have been designed utilizing the Portland Cement Associations manual "Thickness Design for Concrete Highway and Street Pavements". Design is based on a 20 year pavement life. The rigid pavement sections are presented next:

RIGID (CONCRETE) PAVEMENT SECTION DESIGN				
Subgrade Strength	Traffic Pattern	Pavement Section, inches		
		Concrete Pavement	Compressive Strength, psi	Aggregate Base
low	6 trucks per day	6.0	4,000	4.0
low	13 trucks per day	7.0	4,000	6.0

The paving materials must conform to the requirements of the State of California, Department of Transportation, Standard Specifications, latest edition. Type B asphalt concrete and class 2 aggregate base should be used.

The lime treated pavement sections presented below are based on the following assumptions:

Lime treated subgrade soil will produce a minimum R-value of 50.
Lime treated subgrade soil will produce a minimum unconfined compressive strength of 200 pounds per square inch.
Since it is not possible to compact the subgrade soil beneath the lime treated portion, an additional 3 inches of lime treated soil has been added to the calculated pavement section.
Lime treated materials shall conform to the requirements in Section 24 of the Caltrans Standard Specifications, latest edition.

LIME TREATED FLEXIBLE PAVEMENT SECTIONS					
Subgrade R-Value	Traffic Index	Traffic	Pavement Section, inches		
			Asphalt Concrete	Aggregate Base	Lime Treated Subgrade
50	3.5	Auto Parking	2.0	3.0	12
50	5.0	Auto Drive	3.0	4.0	12
50	6.0	Fire Lane/Bus	3.0	5.0	12
50	7.0	Truck Drive	3.5	6.0	12

Lime treated subgrade has performed well under similar clay soil conditions. As previously mentioned, for estimating purposes, a spread rate of about 4.4 pounds per square foot may be used for a 12 inch mixing depth. The determination of the amount of lime to be used needs to be determined in the laboratory on samples of the subgrade soils at least two weeks prior to the start of grading operations. Lime treatment for the areas should be performed according to **Section 24 of the California Transportation Standard Specifications, latest edition, with special emphasis on the need to seal or cover with aggregate base the finished lime treated subgrade within 24 hours.** The lime treated subgrade should be compacted to dry densities in excess of 95 percent of the maximum dry density obtainable in the ASTM D1557 Compaction Test.

The pavement area should be stripped of all organic matter, loose soil, etc., and any required cuts or fills made. A minimum of 8 inches of compacted subgrade should be provided beneath the pavement sections. The subgrade should be compacted to dry densities in excess of 95 percent of the maximum dry density obtainable by the ASTM D1557 test method.

Studies have indicated that a major factor in extending pavement life is to provide adequate drainage for both the pavement surface and subgrade. Care should be made during the development of the grading plan to provide for good drainage. We recommend extruded curbs not be utilized for planters. Landscaped and irrigated planters that are constructed adjacent to pavement should have cut-off curbing constructed around them that extends a minimum of 4 inches into the subgrade soil. We recommend rigid concrete pavements in areas where heavy trucks, such as garbage trucks, will travel or make sharp turns. The above recommended pavement sections assume periodic maintenance, such as crack sealing, etc., will be performed over the life of the pavements.

10.0 UTILITY CONSTRUCTION

Based on Occupational Safety and Health Standards, the soils encountered in our test holes classify as Type A (clay) and Type C (sand) soils. Type A (clay) soils require a maximum slope of 1:1 (horizontal to vertical) and Type C (sand) require a maximum slope of 1½:1 (horizontal to vertical) for dry excavations less than 20 feet deep. The contractor should have a competent person identify all soils encountered in excavation and refer to OSHA and Cal-OSHA standards to determine appropriate methods to protect individuals working in excavations.

Backfill placed in trenches should be placed in approximately 8 inch lifts in uncompacted thickness. However, thicker lifts may be used, provided the method of compaction is approved by the soil engineer and the required minimum degree of compaction is achieved. Material should be compacted to at least 90 percent of the maximum dry density obtained by the ASTM D1557 test method. The upper 8 inches of trench backfill within pavement areas should be compacted to at least 95 percent relative compaction. Ground water was encountered in our test holes as shallow as 5½ feet. The grading contractor should anticipate trench dewatering during utility construction.

11.0 LIMITATIONS

The recommendations of this report are based on the information provided regarding the proposed construction as well as the subsoil conditions encountered at the test hole locations. If the proposed construction is modified or re-sited, or if it is found during construction that subsurface conditions differ from those described on the test hole logs, the conclusions and recommendations of the report should be considered invalid unless the changes are reviewed and the conclusions and recommendations modified or approved in writing.

The analysis, conclusions and recommendations contained in this report are based on the site conditions as they existed at the time we drilled our test holes. It was assumed that the test holes are representative of the subsurface conditions throughout the site. If there is a substantial lapse of time between the submission of our report and the start of the work at the site, or if conditions have changed due to natural causes or construction operations at or adjacent to the site, we urge that our report be reviewed to determine the applicability of the conclusions and recommendations considering the changed conditions and time lapse. This report is applicable only for the project and site studied. **This report should not be used after 3 years.**

Our professional services were performed, our findings obtained, and our recommendations proposed in accordance with generally accepted engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied. Test findings and statements of professional opinion do not constitute a guarantee or warranty, expressed or implied.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater or air, on or below or around this site. Any statements in this report or on the soil logs regarding odors noted or unusual or suspicious items or conditions observed are strictly for the information of our client.

APPENDIX A
Engineered Fill Specifications

SCOPE

Principal items of work included in this section are as follows:

A. Cleaning and Striping
B. Construction of Fill

A. CLEANING AND STRIPPING

Work includes cleaning and stripping of the building pad and surrounding area as indicated on the drawings. From this area remove all debris, irrigation lines, old pavement, trees, brush, roots, and vegetable ruin and grub out all large roots (1/2 inch or greater diameter) to a depth of at least two feet below the footing elevation. The vegetable materials and all materials from the cleaning operation shall be removed from the site.

B. CONSTRUCTION OF FILL

1. Preliminary Operations

After the cleaning and stripping operation and the cuts have been completed and before any fill is placed in any particular area, the existing surface shall be scarified to a depth of 8 inches and compacted to dry densities in excess of 90 percent of the maximum dry density as obtained by the Standard Test Methods for Laboratory Compaction Characteristics of Soil using Modified Effort, ASTM D1557 designation. The soil should be compacted at a moisture content at least 3 percentage points above the optimum moisture content. It may be necessary to adjust the moisture content of the subgrade soil by watering or aeration, to bring the moisture content of the soil near optimum in order that the specified densities can be obtained.

2. Source of Material

Engineered fill materials (on site or import) shall consist of sandy silts, sands, or sands and gravels unless stated otherwise in the report. Engineered fill material shall not contain rocks greater than 3 inches in greatest dimension and should be non-expansive in nature with a plasticity index less than 12.

At least seven days prior to the placement of any fill, the engineer shall be notified of the source of materials. Samples of the proposed fill shall be obtained to determine the suitability of the materials for use as engineered fill.

3. Placing and Compacting

Fill materials shall be spread in layers and shall have a uniform moisture content that will provide the specified dry density after compaction. If necessary to obtain uniform distribution of moisture, water shall be added to each layer by sprinkling and the soil disked, harrowed, or otherwise manipulated after the water is added. The layers of the fill material shall not exceed 8 inches and each layer shall be compacted with suitable compaction equipment to provide the specified dry densities.

4. Required Densities

The dry density of the compacted earth shall be at least 90 percent of the maximum dry density obtainable by the ASTM D1557 test method. The optimum moisture content and maximum dry density will be determined by the engineer and this information supplied to the contractor.

5. Seasonal Limits

No fill shall be placed during weather conditions which will alter the moisture content of the fill materials sufficiently to make adequate compaction impossible. After placing operations have been stopped because of adverse weather conditions, no additional fill material shall be placed until the last layer compacted has been checked and found to be compacted to the specified densities.

6. Control of Compaction

The density of the upper 6 inches of subgrade and of each layer of fill shall be checked by the engineer after each layer has been compacted. Field density tests shall be used to check the compaction of the fill materials. Sufficient tests shall be made on each layer by the engineer to assure adequate compaction throughout the entire area. If the dry densities are not satisfactory, the contractor will be required to increase the weight of the roller, the number of passes of the roller, or manipulate the moisture content as required to produce the specified densities.

APPENDIX B
Lime Stabilization
Caltrans Standard Specifications, Section 24

24-1.01 Description

This work shall consist of mixing lime and water with soil and compacting the mixture to the lines, grades and dimensions shown on the plans and as specified in these specifications and the special provisions.

24-1.02 Materials

Material to be stabilized shall be the native soil or embankment, containing no rocks or solids, other than soil clods, larger than 21/2 inches in any dimension. Removing and disposing of said rocks and solids larger than 21/2 inches, from native soil or embankment other than imported borrow, will be paid for as extra work as provided in Section 4-1.03D. Removing and disposing of said rocks and solids larger than 21/2 inches from imported borrow shall be at the expense of the Contractor.

Lime shall conform to the requirements in ASTM Designation: C 977 with the exception that when a 250 gram test sample of quicklime is dry sieved in a mechanical sieve shaker for 10 minutes and 30 seconds it shall conform to the following grading requirements:

Sieve Sizes	Percentage Passing
3/8"	98-100
No.100	0-25
No. 200	0-15

A Certificate of Compliance in accordance with the provisions in Section 6-1.07, 'Certificates of Compliance,' shall be furnished with each delivery of lime and shall be submitted to the Engineer with a certified copy of the weight of each delivery.

Water for mixing with soil and lime shall be free from oil and shall contain not more than 650 parts per million of chlorides as Cl, nor more than 1,300 parts per million of sulfates as S04. The water shall not contain an amount of impurities that will cause a reduction in the strength of the stabilized material.

24-1.03 General

The amount of lime to be added to the material to be stabilized shall be as specified in the special provisions.

All handling, spreading and mixing operations shall be conducted in such a manner that a hazard is not presented to construction personnel or the public. Lime shall be prevented from blowing by suitable means selected by the Contractor.

If lime of more than one type or from more than one source are used on the project, separate application rates will be determined for lime of each source or type. Lime from more than one source or of more than one type shall not be mixed.

The lime shall be protected from exposure to moisture until used and shall be sufficiently dry to flow freely when handled.

Lime shall not be spread while the ambient temperature is below 35' F., nor when the ambient temperature is expected to drop below 35' F. before mixing and compacting are be completed.

The in-place moisture of the material to be stabilized shall be maintained above the optimum moisture, as determined by California Test 373, during the mixing operation. During compaction, finish rolling and grading, sufficient water shall be added to the surface of the material to prevent the surface from drying until curing seal is applied.

No traffic other than the equipment performing the work will be al- lowed to pass over the spread lime, the mixed material or the compacted surface of the lime stabilized material. After application of the curing seal, no traffic will be permitted on the lime stabilized material for a period of 3 days. Damage to curing seal or lime stabllized material shall be repaired promptly by the Contractor at his expense, as directed by the Engineer.

24-1.04 Preparing Material

Unless otherwise ordered or approved by the Engineer, the material to be stabilized shall be placed to the lines, grades and dimensions shown on the plans and compacted to a relative compaction of not less than 90 percent, before lime is added. The surface of the material to be stabilized shall not vary more than 0.08-foot above or below the grade established by the Engineer, before lime is added.

24-1.05 Spreading

Lime shall be spread using equipment which will uniformly distribute the lime over the area to be stabilized.

Tailgate spreading of lime will not be permitted.

Lime shall be spread uniformly on the roadbed, and the rate of spread per square foot shall not vary by more than 10 percent of the rate designated by the Engineer.
Lime may be spread on the prepared material in either a slurry or dry form at the option of the Contractor. Hydrated lime shall not be spread in dry form. Either hydrated lime or quicklime may be used to prepare the slurry.

The distance which lime may be spread ahead of the mixing operation will be determined by the Engineer. In no case shall spread lime be al- lowed to remain exposed at the end of the work day.

Lime applied in slurry form shall be prepared and distributed using equipment and procedures capable of keeping the slurried lime in suspension and spreading the slurry uniformly over the area to be stabilized. The lime content of the slurry shall be as approved by the Engineer.

24-1.06 Mixing

Mixing lime and the material to be stabilized shall be conducted using equipment capable of mixing the materials uniformly to the depth specified.

Lime and the material to be stabilized may be mixed off site.

Mixing or remixing operations, regardless of the equipment used, shall continue until the material is uniformly mixed and free of streaks or pockets of lime. Prior to compaction, all mixed material other than rock or aggregate previously treated with asphalt, lime, or cement shall comply with the following grading requirements:

Sieve Sizes	Percentage Passing
1"	98 min.
No. 4	60 min.

When granular lime in dry form is used, the material shall be mixed at least twice. The first and final mixings shall not be performed on the same day.

When the stabilized material, exclusive of one-inch or larger clods, is sprayed with a phenolphthalein alcohol indicator solution, areas showing no color reaction will be considered evidence of inadequate mixing.

The depth of mixing of the lime stabilized material shall not vary more than 0.1-foot from the planned depth at any point. Mixing to a depth that exceeds the planned depth by 10 percent or more shall be considered evidence of an inadequate amount of lime and additional lime shall be added at the Contractor's expense.

The entire mixing operation shall be completed within 7 days of the initial spreading of lime, unless otherwise permitted by the Engineer.

24-1.07 Compaction

Compaction shall begin as soon as possible, but not more than 24 hours after final mixing.

Prior to initial compaction, maximum density will be determined on a composite of material from 5 random locations within the test area by California Test 216. The composite sample will be obtained after all mixing has been completed. The moisture content of the composite sample will be determined by California Test 226.

Initial compaction shall be by means of sheepsfoot or segmented wheel rollers. This shall be immediately followed with final compaction by rolling with steel drum or pneumatic-tired rollers. Vibratory rollers will not be allowed.

Where the required thickness is 0.50-foot or less, the mixture shall be compacted in one layer. Where the required thickness is more than 0.50- foot, the mixture shall be compacted in 2 or more layers of approximately equal thickness, and the maximum compacted thickness of any one layer shall not exceed 0.50-foot, except that the maximum compacted thick- ness of a single layer may be increased provided the Contractor can demonstrate to the Engineer that the equipment and method of operation will provide uniform distribution of the lime and the required compacted density throughout the layer.

Areas inaccessible to rollers shall be compacted to the required relative compaction by other means satisfactory to the Engineer.

The lime stabilized soil shall be compacted to a relative compaction of not less than 95 percent, except that the minimum relative compaction may be reduced to 92 percent provided the Contractor increases the lime content 0.5 percent at his expense.

The relative compaction will be calculated on the dry weight basis.

In-place density of the compacted lime stabilized material will be determined by California Test 231. A composite of material from a mini- mum of 5 random selected sites, taken at the time in-place density is determined, will be used to determine the in-place moisture content, by California Test 226.

24-1.08 Finish Rolling and Grading

The finished surface of the lime stabilized material shall be the grading plane and at any point shall not vary more than 0.08-foot above or below the grade established by the Engineer, except that when the lime stabilized material is to be covered by material which is paid for by the cubic yard, the surface of the finished lime stabilized material shall not extend above the grade established by the Engineer.

If the compacted material is above the grade tolerances specified in this section, the excess material shall be trimmed, removed, and dis- posed of. No loose material shall be left on the finished plane. Trimming of excess material shall not be conducted unless finish rolling can be completed within 2 hours after trimming.

All trimmed surfaces shall receive finish rolling consisting of at least one complete coverage with steel drum or pneumatic-tired rollers. Vibratory rollers will not be allowed. Minor indentations may remain in the surface of the finished material after final trimming and rolling. Under no circumstances will it be permissible to add new or trimmed lime stabilized material to fill low areas or to raise the grade of compacted lime stabilized material.

24-1.09 Curing

A curing seal, consisting of SS or CSS grade asphaltic emulsion, shall be furnished and applied to the surface of the top layer of lime stabilized material in accordance with the provisions in Section 94, 'Asphaltic Emulsions."

Curing seal shall be applied at a rate of between 0. 10- and 0.20-gallon per square yard of surface. The exact rate will be determined by the Engineer.

Curing seal shall be applied within 48 hours of completion of initial compaction and on the same day as trimming and finish rolling are completed. The curing seal shall be applied as soon after finish rolling as is practicable. The lime stabilized material shall be at optimum moisture when the curing seal is applied.

Curing seal shall not be placed when the atmospheric temperature is below 40' F.

Curing by water will not be allowed, unless authorized by the Engineer.

Damage to the curing seal shall be promptly repaired by the Contractor at his expense, as directed by the Engineer.

24-1.10 Measurement

Lime stabilization will be measured by the square yard, determined from horizontal measurements of the planned surface of the lime stabilized material.

Lime will be measured by the ton in accordance with the provisions in Section 9-1.01, 'Measurement of Quantities," except that if the minimum relative compaction is reduced to 92 percent, the quantity of lime to be paid for will be the weight of lime multiplied by the factor L / (L+0.5) where L equals the percent of lime ordered by the Engineer.

Bituminous curing seal will be measured as provided in Section 94, 'Asphaltic Emulsions."

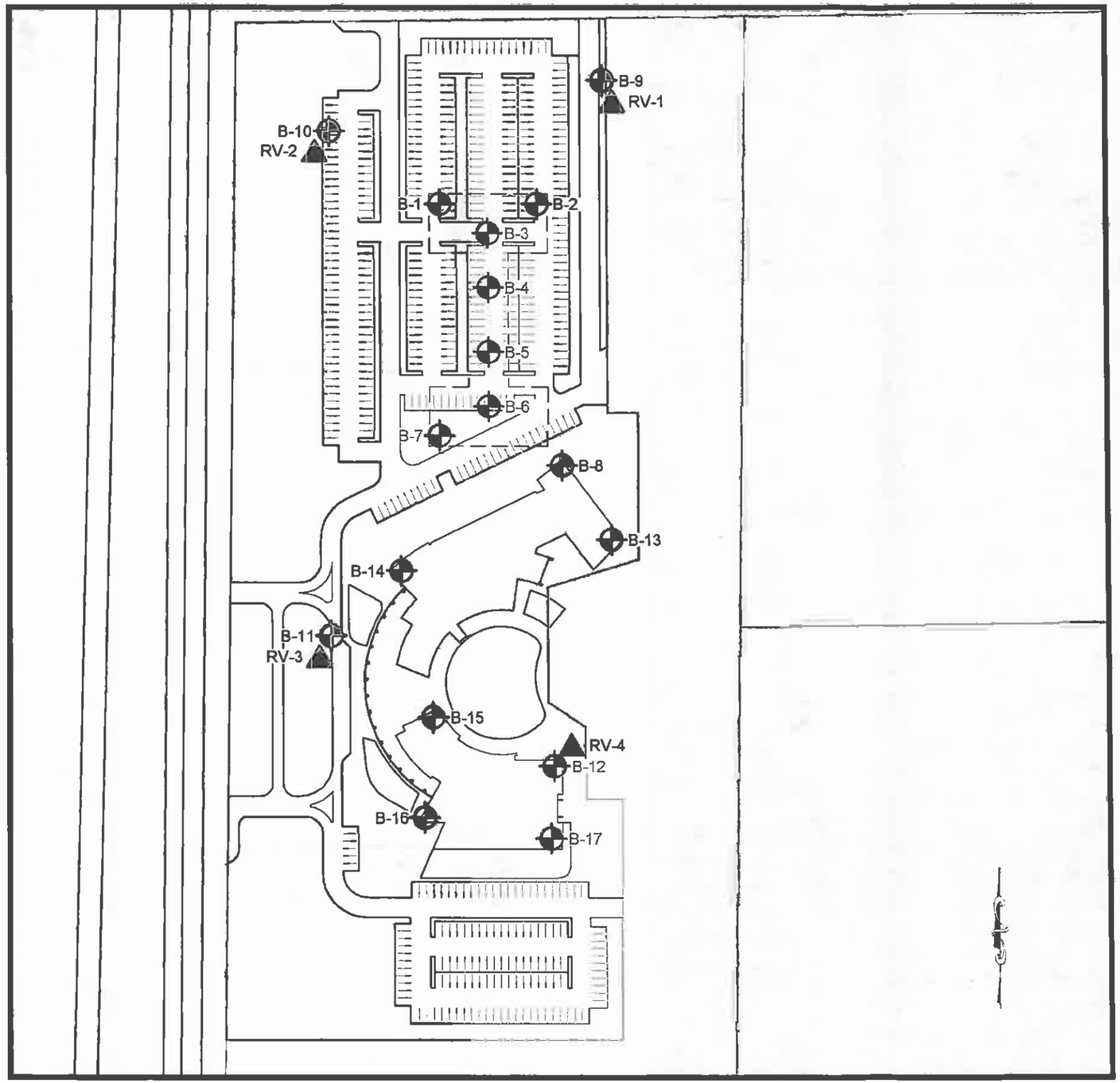
24-1.11 Payment

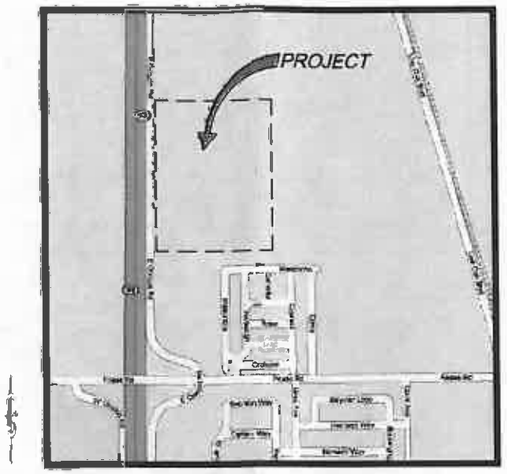
Items of work, measured as provided in Section 24-1.10, 'Measurement," will be paid for at the contract prices per square yard for lime stabilization, per ton for lime, and per ton for asphaltic emulsion (curing seal).

The above contract prices and payments shall include full compensation for furnishing all labor, materials, too], equipment, and incidentals, and for doing all the work involved in constructing the lime stabilization complete in place, as shown on the plans, and as specified in the specifications and the special provisions, and as directed by the Engineer.

Full compensation for preparing material, spreading lime and mixing and compacting the lime stabilized material shall be considered as included in the contract price paid per square yard for lime stabilization and no additional compensation will be allowed therefore.

No adjustment of compensation will be made for any increase or decrease in the quantity of lime required, regardless of the reason for such increase or decrease. The provisions in Section 4-1.03B, 'Increased or Decreased Quantities,' shall not apply to the item of lime.





VICINITY MAP
N.T.S.

LEGEND

- Approximate location of boring
- Approximate location of R-Value

Note: Boring locations are approximate.
Base plan provided by: TBP/ARCHITECTURE

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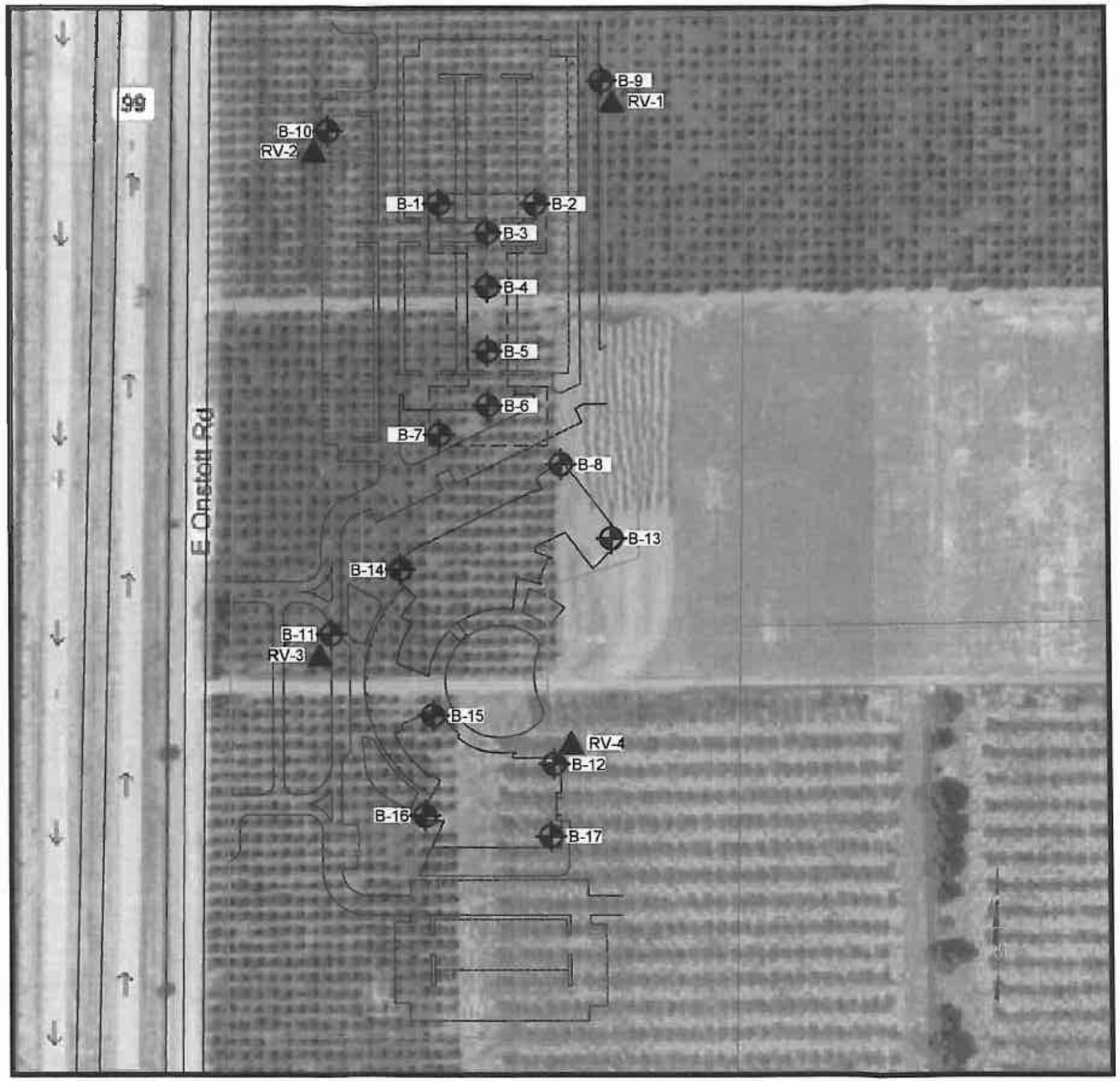
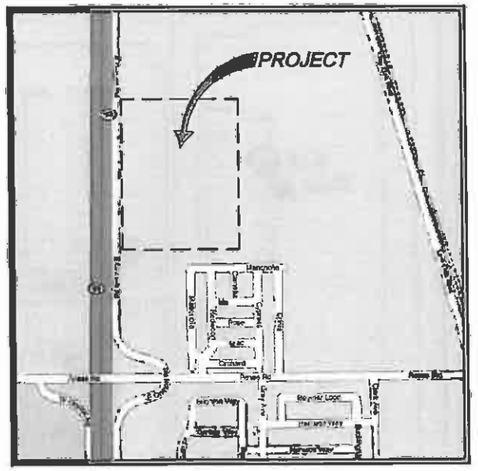
PROJECT: SUTTER COUNTY FACILITY (J-01)
SUTTER COUNTY, CALIFORNIA
APN: 10-260-76

CLIENT: YUBA COMMUNITY COLLEGE DISTRICT
2088 NORTH BEALE ROAD
MARYSVILLE, CALIFORNIA

JOB #:	5GE090538
DATE:	12/10/09
SCALE:	NONE
DRAWN BY:	E. NUÑEZ
CHECKED BY:	R. KING
SHEET #:	PLATE 1





VICINITY MAP
N.T.S.

LEGEND

- Approximate location of boring
- Approximate location of R-Value

Note: Boring locations are approximate.
Base plan provided by: MICROSOFT CORP. & NAVTAQ

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SCALE:	NONE
DRAWN BY:	E. NUÑEZ
CHECKED BY:	R. KING
SHEET #:	PLATE 1-A

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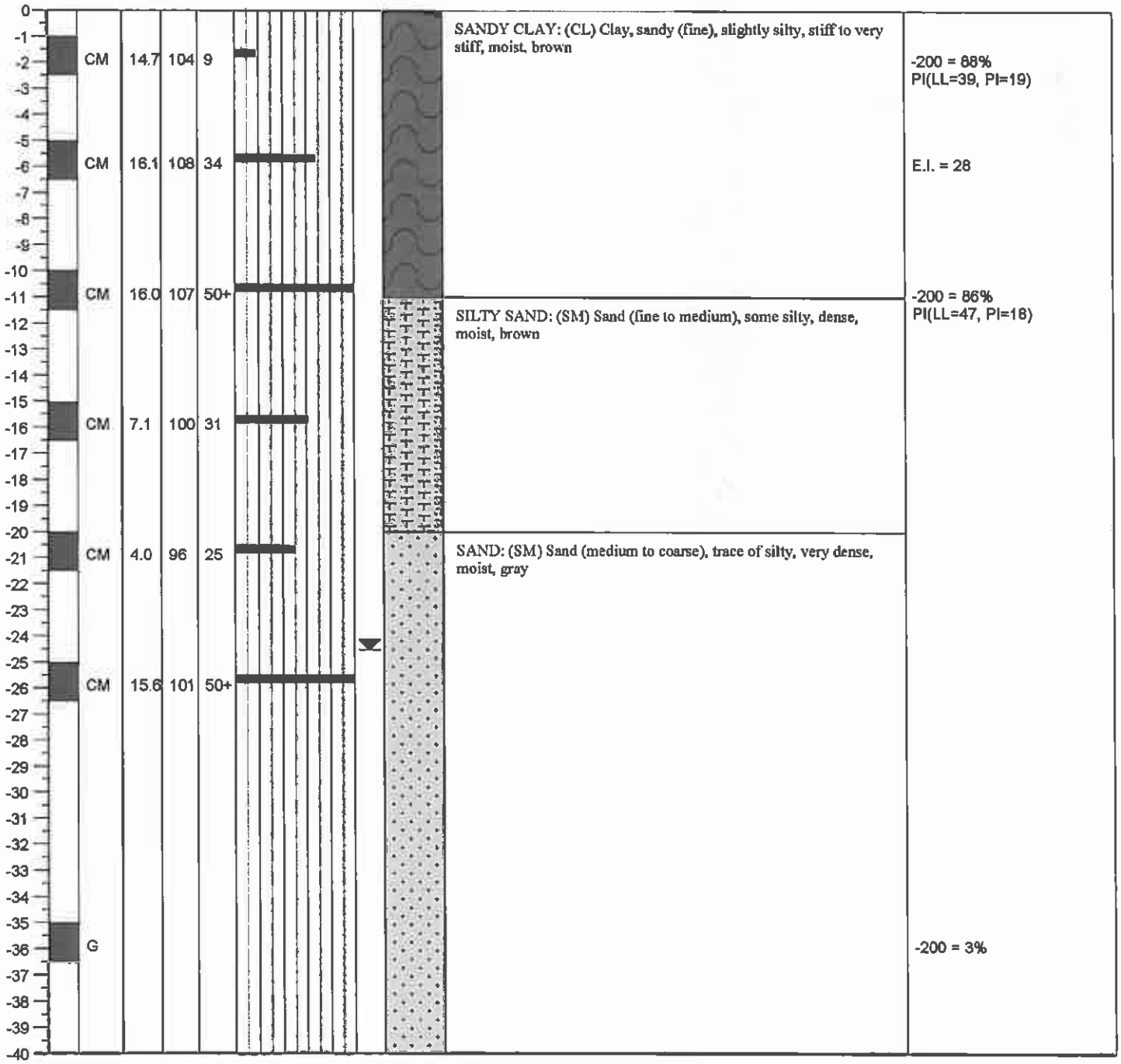
LOG OF TEST BORING

TEST BORING NUMBER

B-1

PROJECT NUMBER: **SGE090538**
DATE EXCAVATED: **7/13/2009**
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**
GROUND SURFACE ELEVATION: **0.0** Feet
LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**
DRILLING EQUIP.: **SIMCO TRUCK MOUNTED DRILL RIG**

PLATE NO. 2



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LOG OF TEST BORING

TEST BORING NUMBER

B-2

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **9/10/2009**

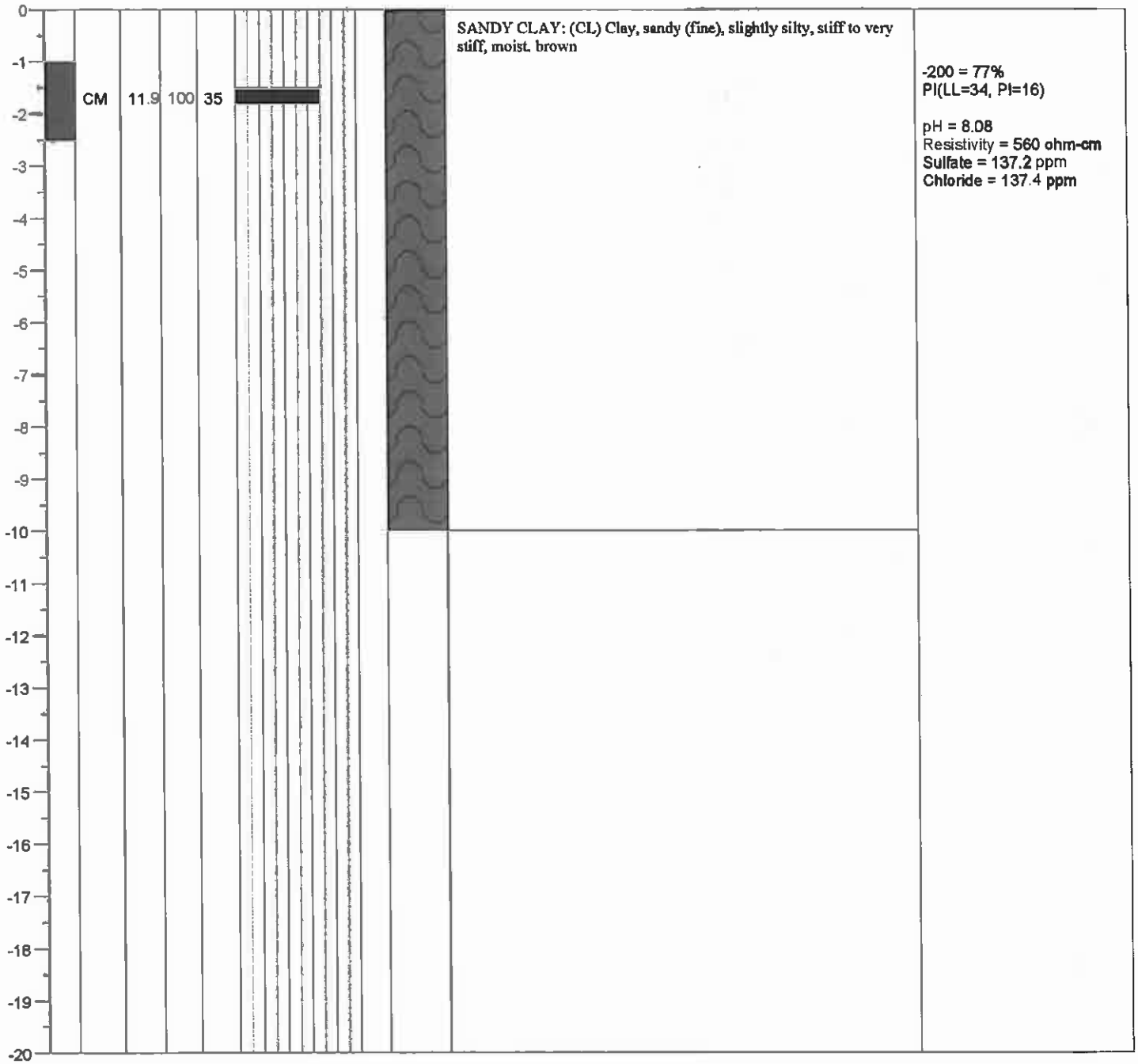
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 3



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LOG OF TEST BORING

TEST BORING NUMBER

B-3

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **9/10/2009**

PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

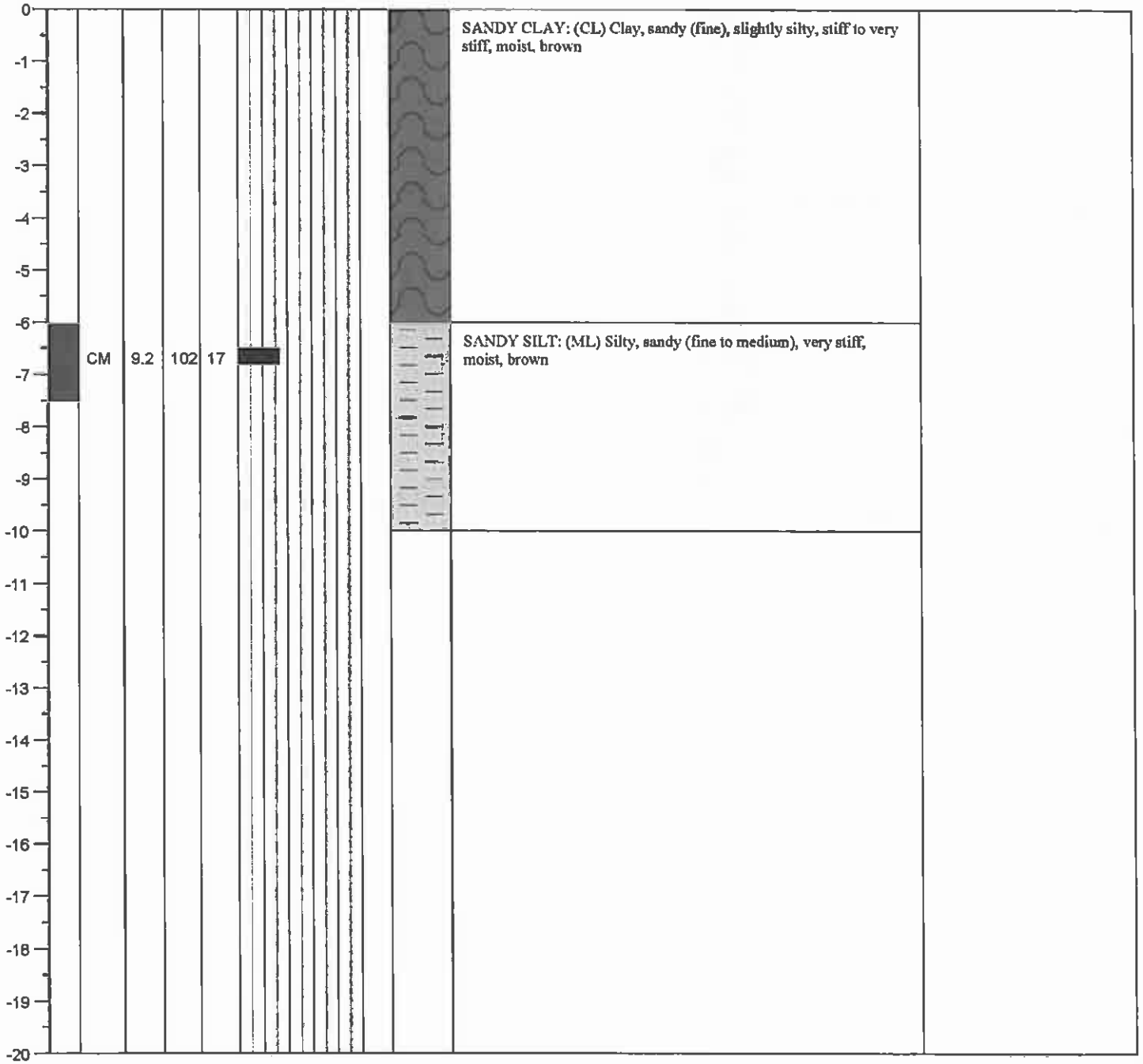
GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 4

Elevation, ft.	Sample	Sampling Method	Moisture, %	Dry Density, pcf	Blow Counts	Blow Count Histogram	Ground Water	Soil Lithology	Soil Lithology Description	Notes
0									SANDY CLAY: (CL) Clay, sandy (fine), slightly silty, stiff to very stiff, moist, brown	
-6		CM	9.2	102	17				SANDY SILT: (ML) Silty, sandy (fine to medium), very stiff, moist, brown	



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LOG OF TEST BORING

TEST BORING NUMBER

B-4

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **9/10/2009**

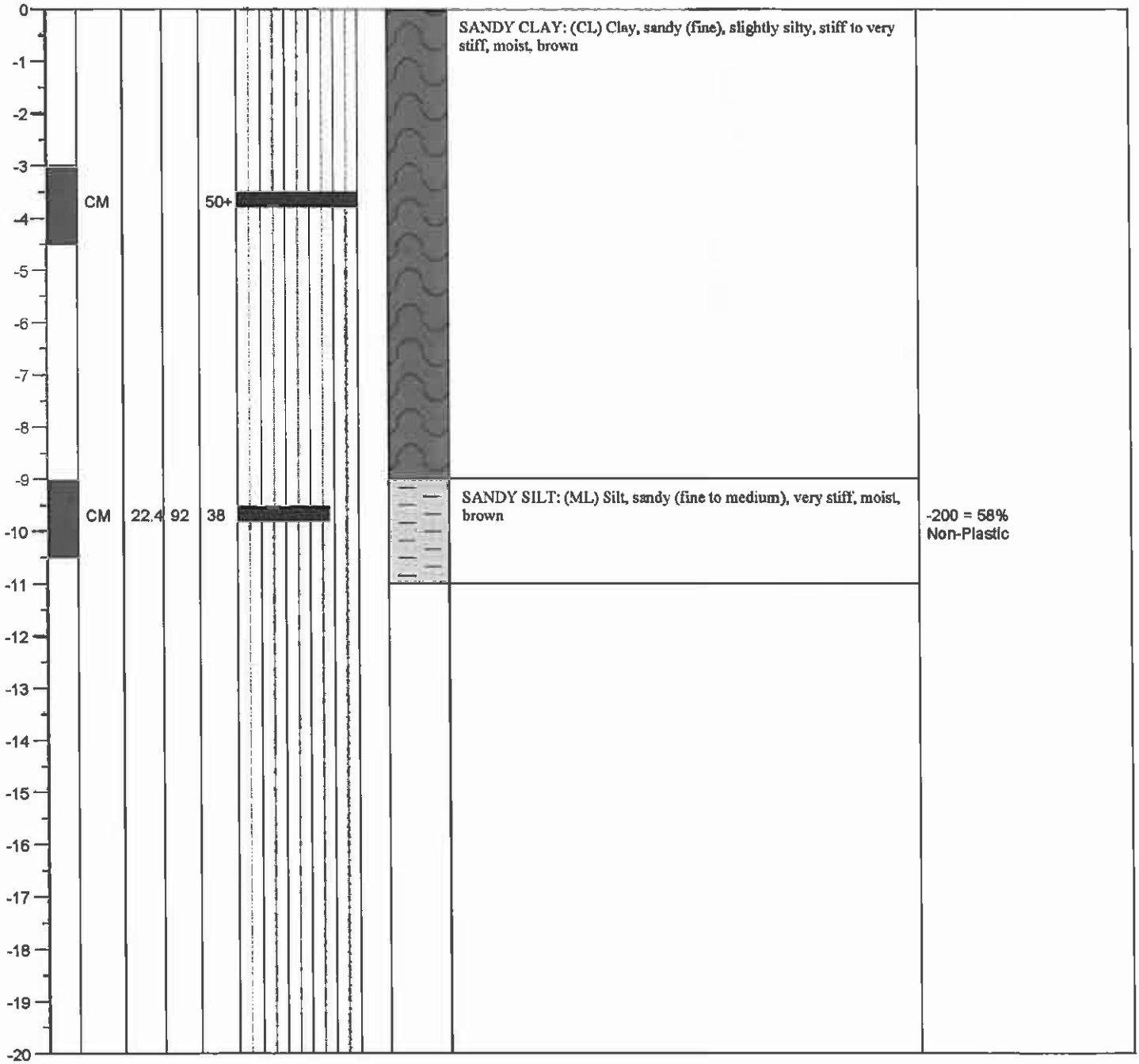
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 5



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LOG OF TEST BORING

TEST BORING NUMBER

B-5

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **9/10/2009**

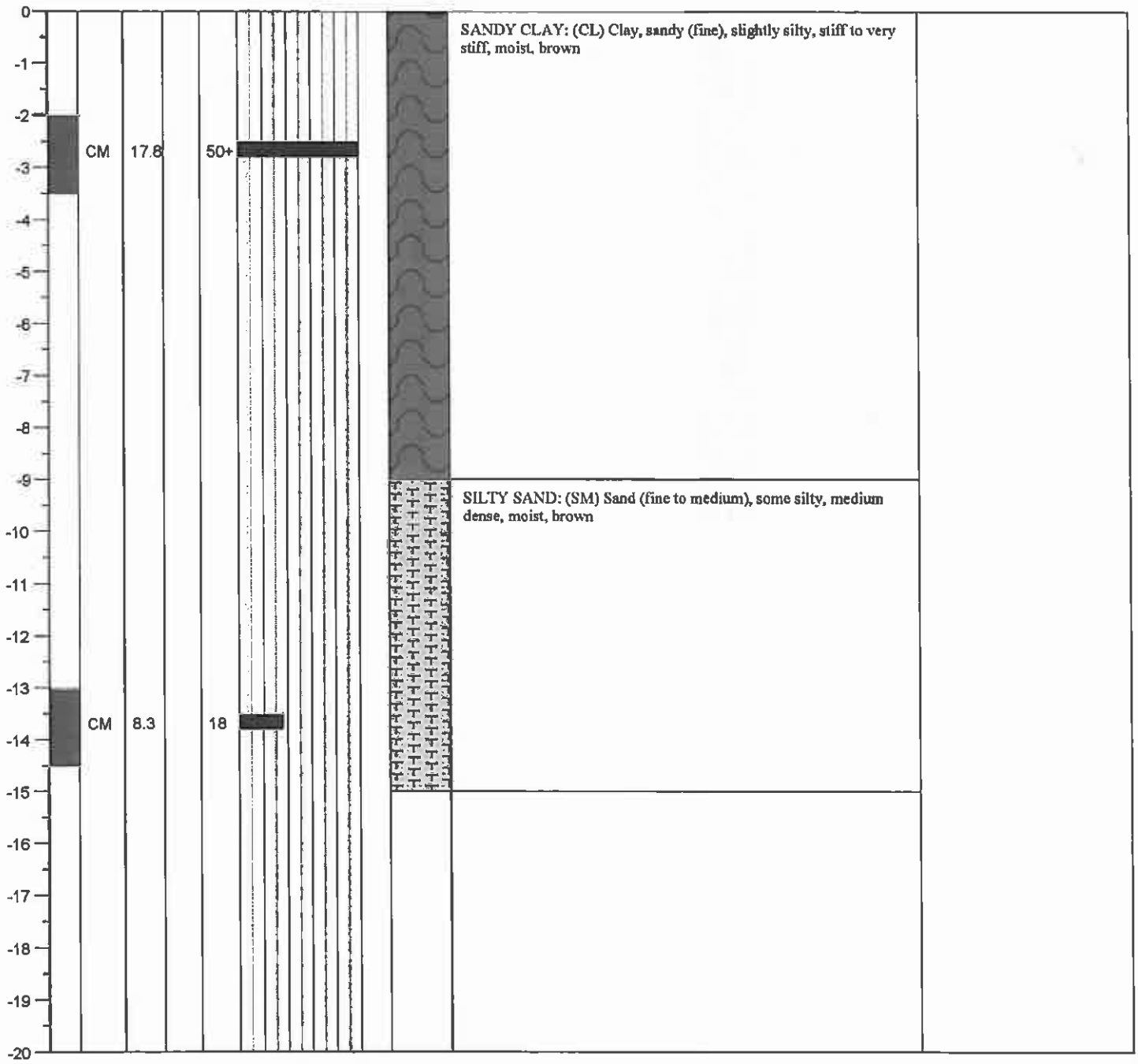
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 6



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50 Goldenland Court Suite 100
Sacramento, CA 95834
(916) 928-4690 FX (916) 928-4697

LOG OF TEST BORING

TEST BORING NUMBER

B-6

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **9/10/2009**

PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

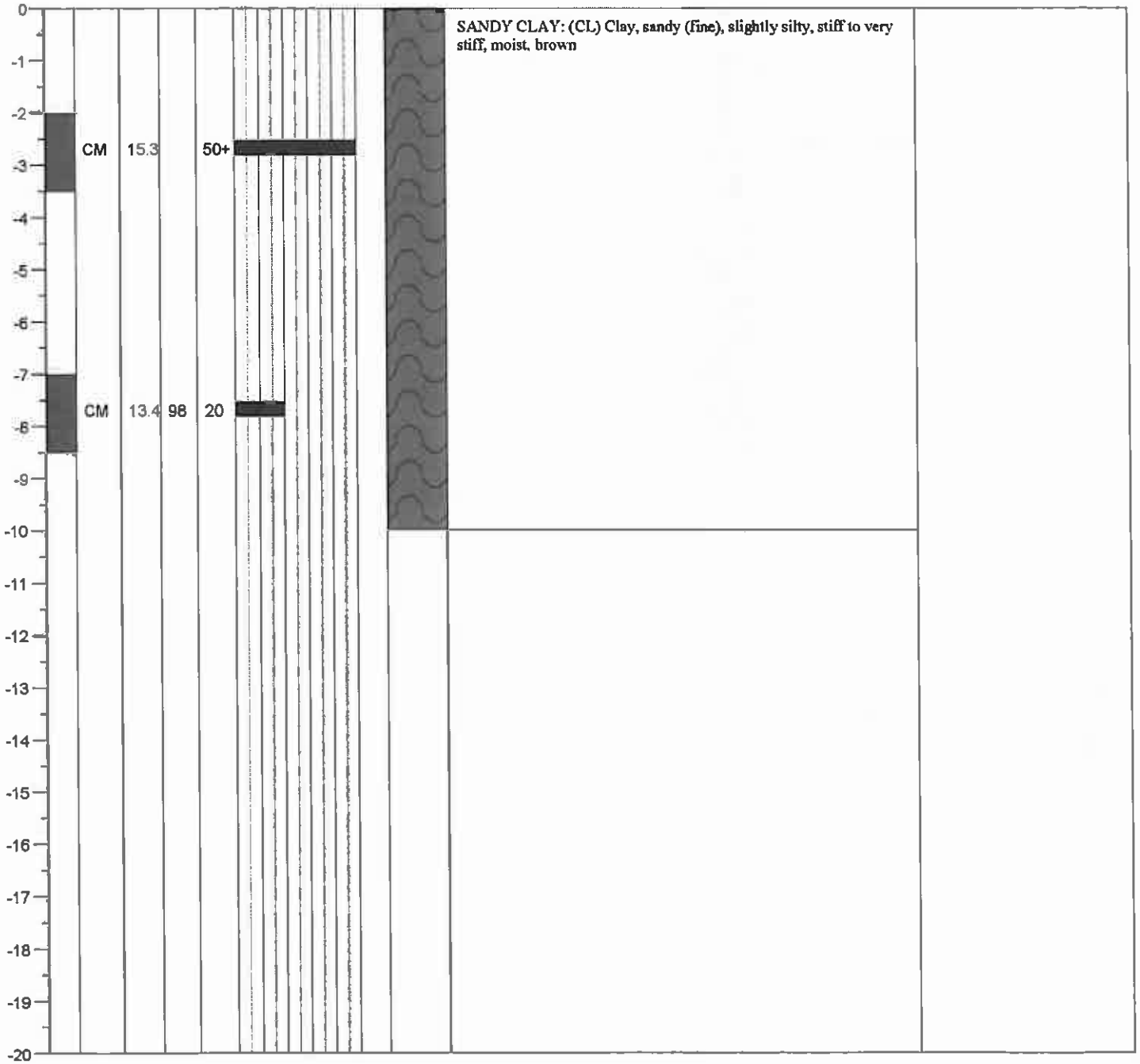
GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 7

Elevation, ft.	Sample	Sampling Method	Moisture, %	Dry Density, pcf	Blow Counts	Blow Count Histogram	Ground Water	Soil Lithology	Soil Lithology Description	Notes
0									SANDY CLAY: (CL) Clay, sandy (fine), slightly silty, stiff to very stiff, moist, brown	
-2		CM	15.3		50+					
-7		CM	13.4	98	20					



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(916) 928-4690 FX (916) 928-4697

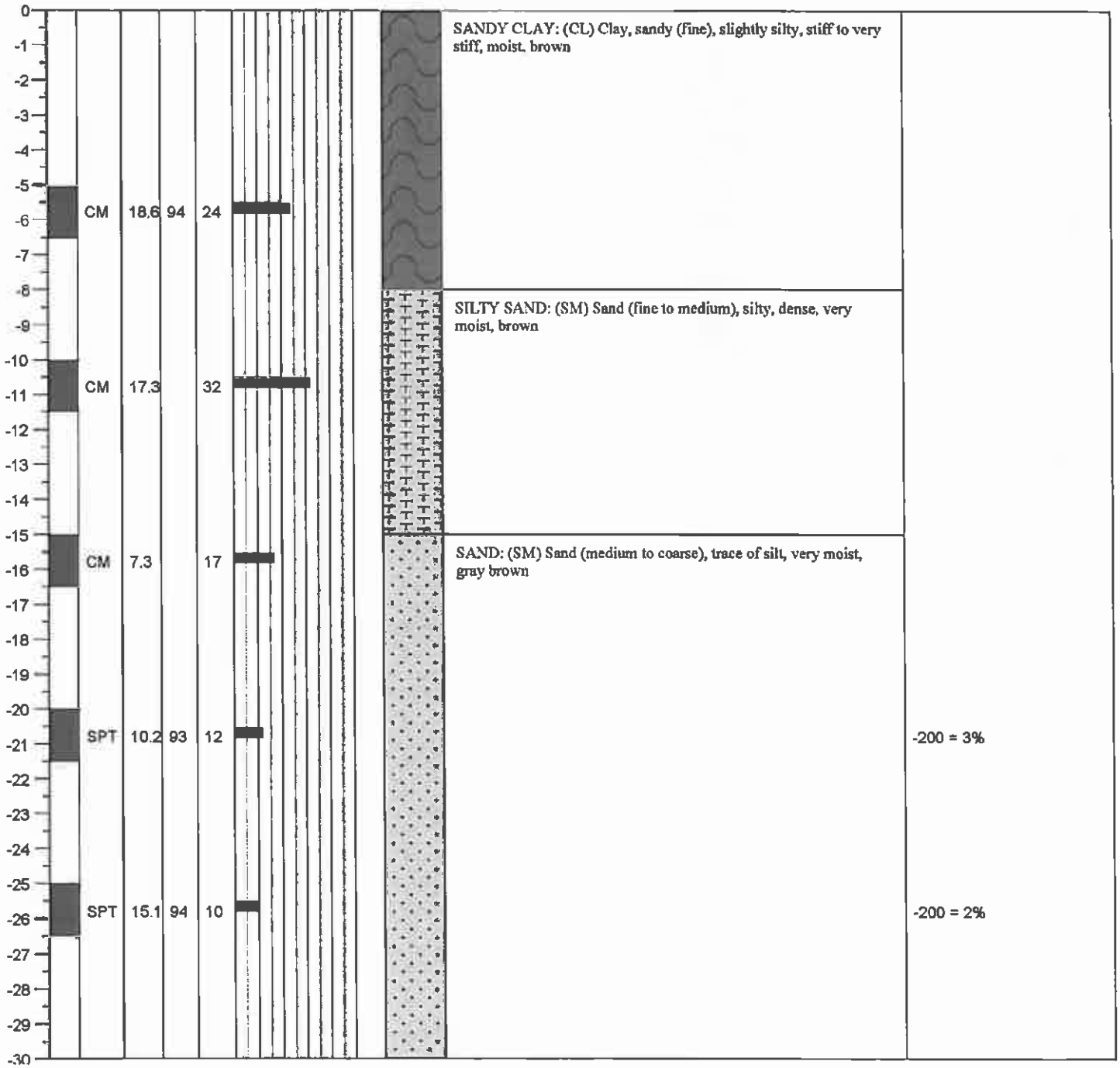
LOG OF TEST BORING

TEST BORING NUMBER

B-7

PROJECT NUMBER: **SGE090538**
DATE EXCAVATED: **9/10/2009**
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**
GROUND SURFACE ELEVATION: **0.0** Feet
LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**
DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 8



Neil O. Anderson & Assoc., Inc. 50 Goldenland Court Suite 100 Sacramento, CA 95834 (916) 928-4690 FX (916) 928-4697	**LOG OF TEST BORING**	TEST BORING NUMBER **B-8**

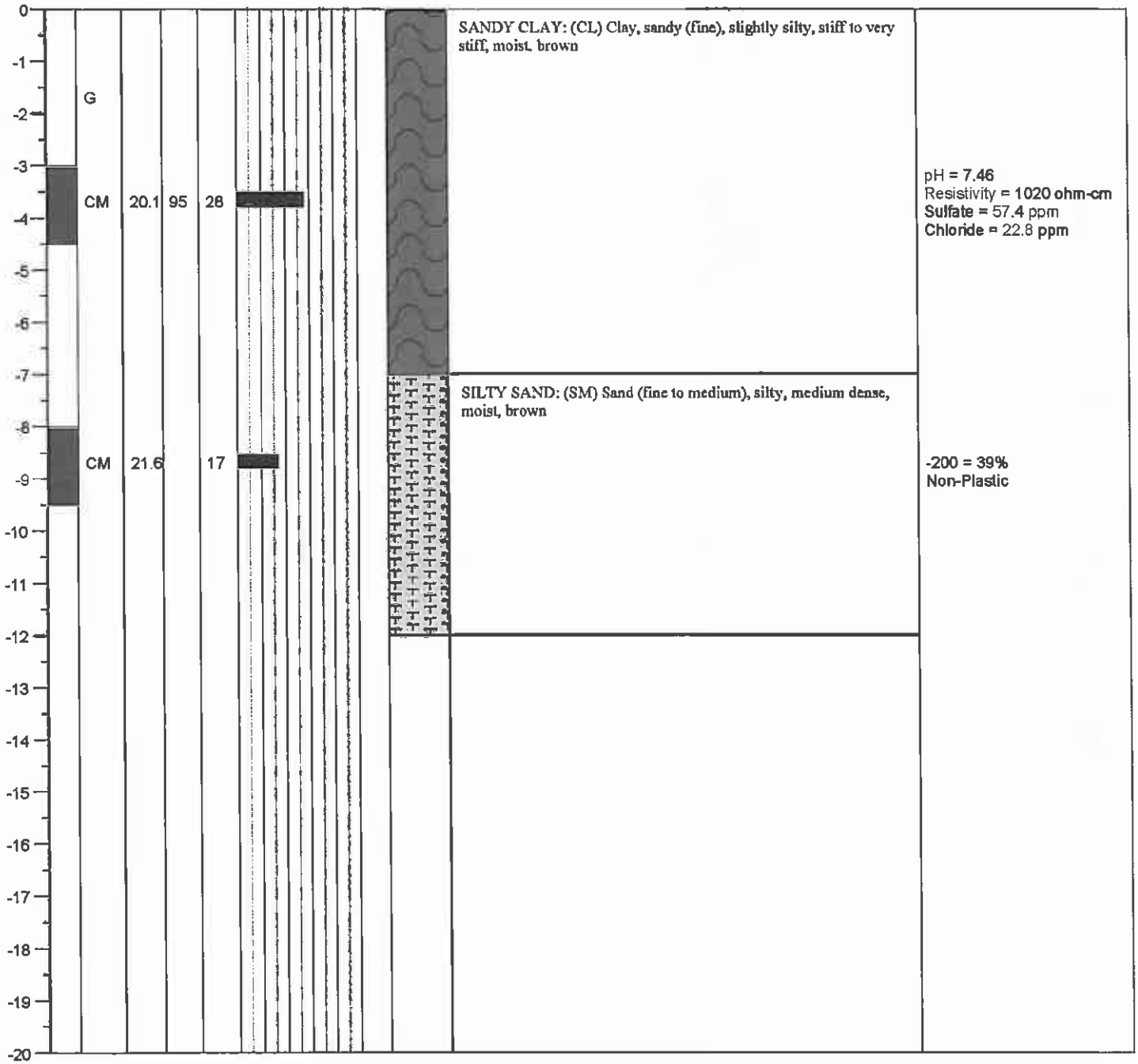
PROJECT NUMBER: **SGE090538** DATE EXCAVATED: **9/10/2009**

PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)** GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 9



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LOG OF TEST BORING

TEST BORING NUMBER

B-9, RV-1

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **9/10/2009**

PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

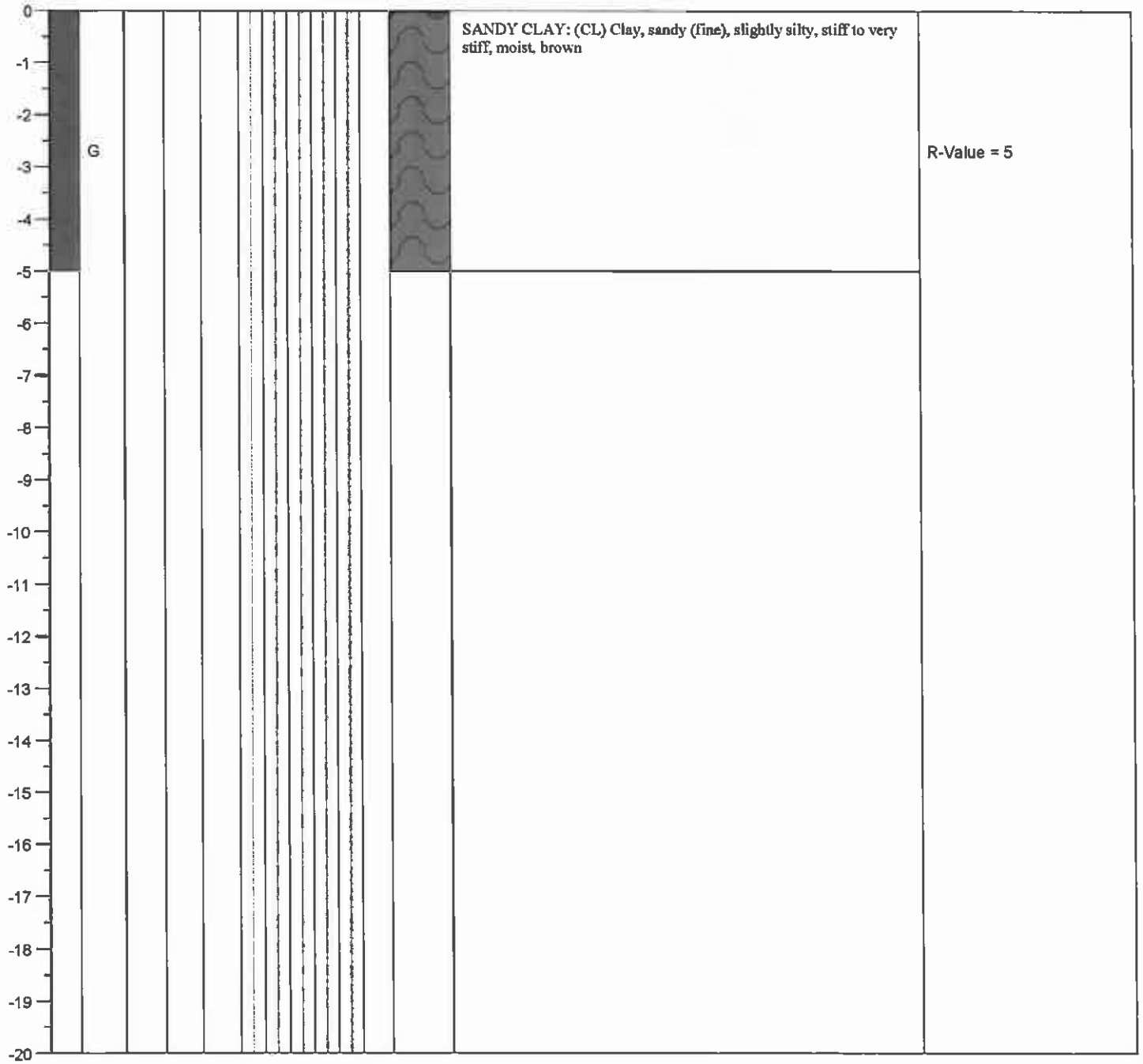
GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 10

Elevation, ft.	Sample	Sampling Method	Moisture, %	Dry Density, pcf	Blow Counts	Blow Count Histogram	Ground Water	Soil Lithology	Soil Lithology Description	Notes
0 to -5	G								SANDY CLAY: (CL) Clay, sandy (fine), slightly silty, stiff to very stiff, moist, brown	R-Value = 5

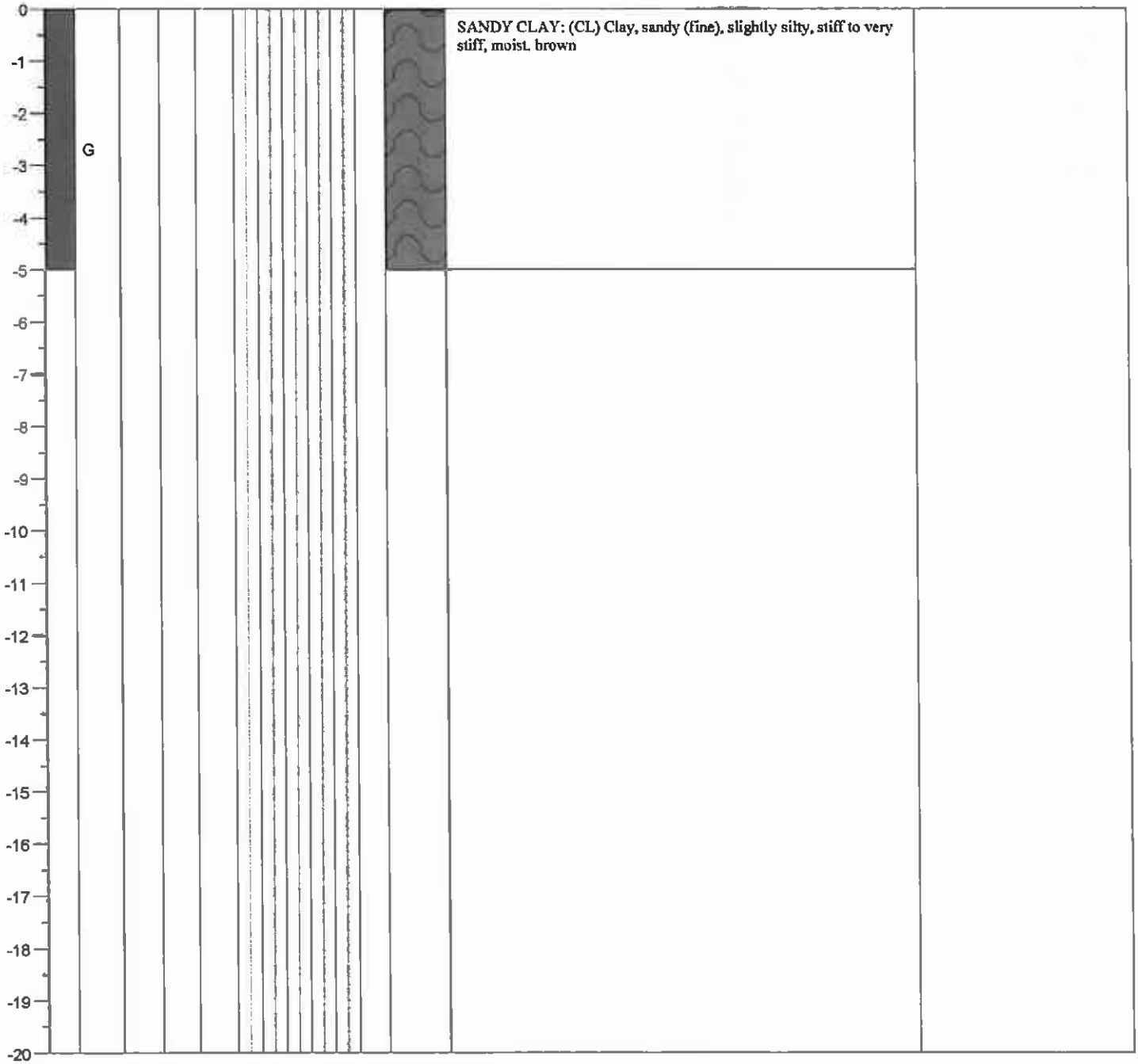


Neil O. Anderson & Assoc., Inc. 50 Goldenland Court Suite 100 Sacramento, CA 95834 (916) 928-4690 FX (916) 928-4697	**LOG OF TEST BORING**	TEST BORING NUMBER **B-10, RV-2**

PROJECT NUMBER: **SGE090538**
DATE EXCAVATED: **7/13/2009**
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**
GROUND SURFACE ELEVATION: **0.0** Feet
LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**
DRILLING EQUIP.: **SIMCO TRUCK MOUNTED DRILL RIG**

PLATE NO. 11

Elevation, ft.	Sample	Sampling Method	Moisture, %	Dry Density, pcf	Blow Counts	Blow Count Histogram	Ground Water	Soil Lithology	Soil Lithology Description	Notes
0 to -5	G								SANDY CLAY: (CL) Clay, sandy (fine), slightly silty, stiff to very stiff, moist. brown	

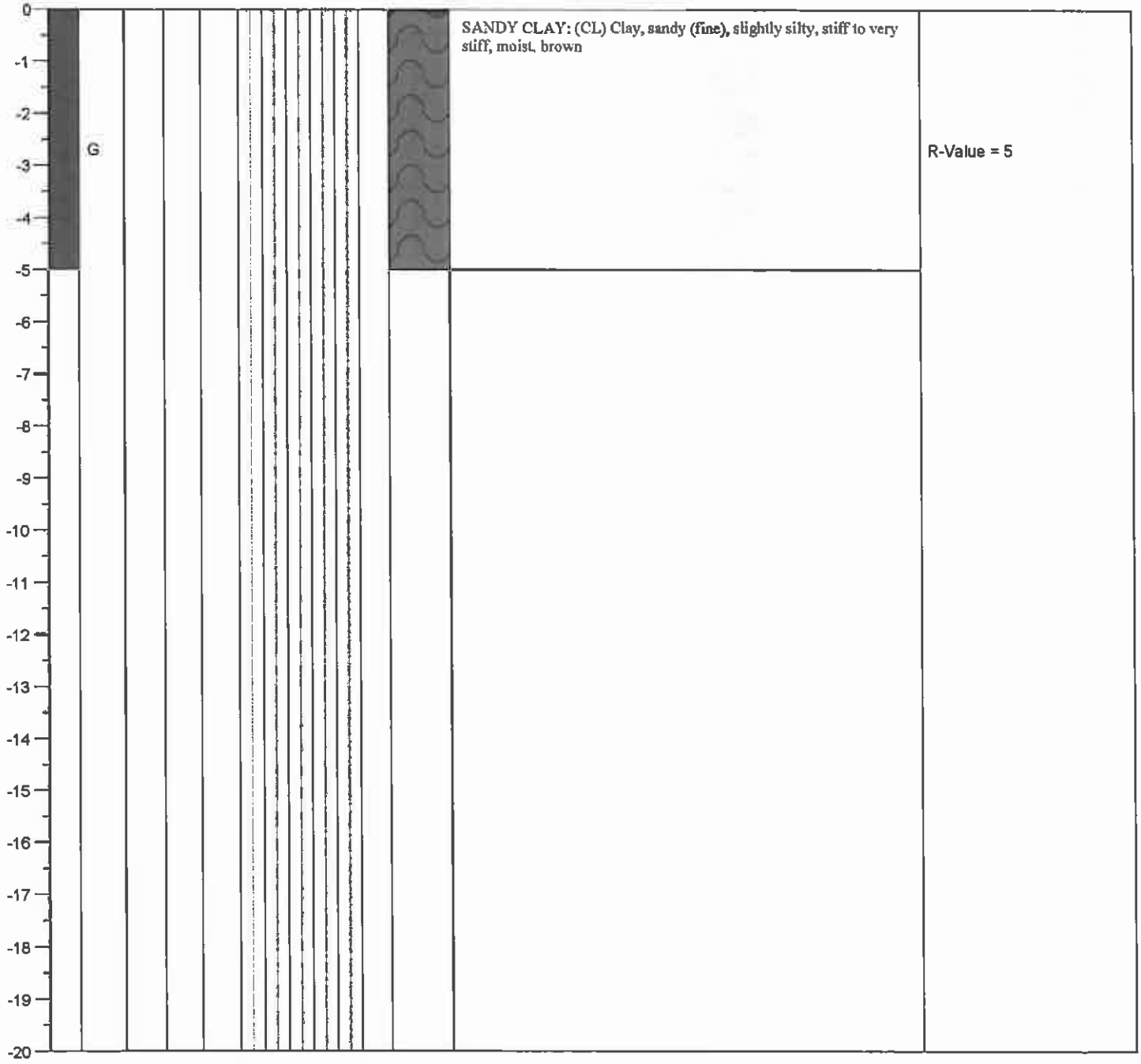


Neil O. Anderson & Assoc., Inc. 50 Goldenland Court Suite 100 Sacramento, CA 95834 (916) 928-4690 FX (916) 928-4697	LOG OF TEST BORING	TEST BORING NUMBER B-11, RV-3

PROJECT NUMBER: SGE090538
DATE EXCAVATED: 7/13/2009
PROJECT NAME: SUTTER COUNTY FACILITY (J-01)
GROUND SURFACE ELEVATION: 0.0 Feet
LOCATION: E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA
DRILLING EQUIP.: SIMCO TRUCK MOUNTED DRILL RIG

PLATE NO. 12

Elevation, ft.	Sample	Sampling Method	Moisture, %	Dry Density, pcf	Blow Counts	Blow Count Histogram	Ground Water	Soil Lithology	Soil Lithology Description	Notes
0 to -5	G								SANDY CLAY: (CL) Clay, sandy (fine), slightly silty, stiff to very stiff, moist, brown	R-Value = 5
-5 to -20										



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Sacramento, CA 95834
(916) 928-4690 FX (916) 928-4697

LOG OF TEST BORING

TEST BORING NUMBER

B-12, RV-4

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **7/13/2009**

PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

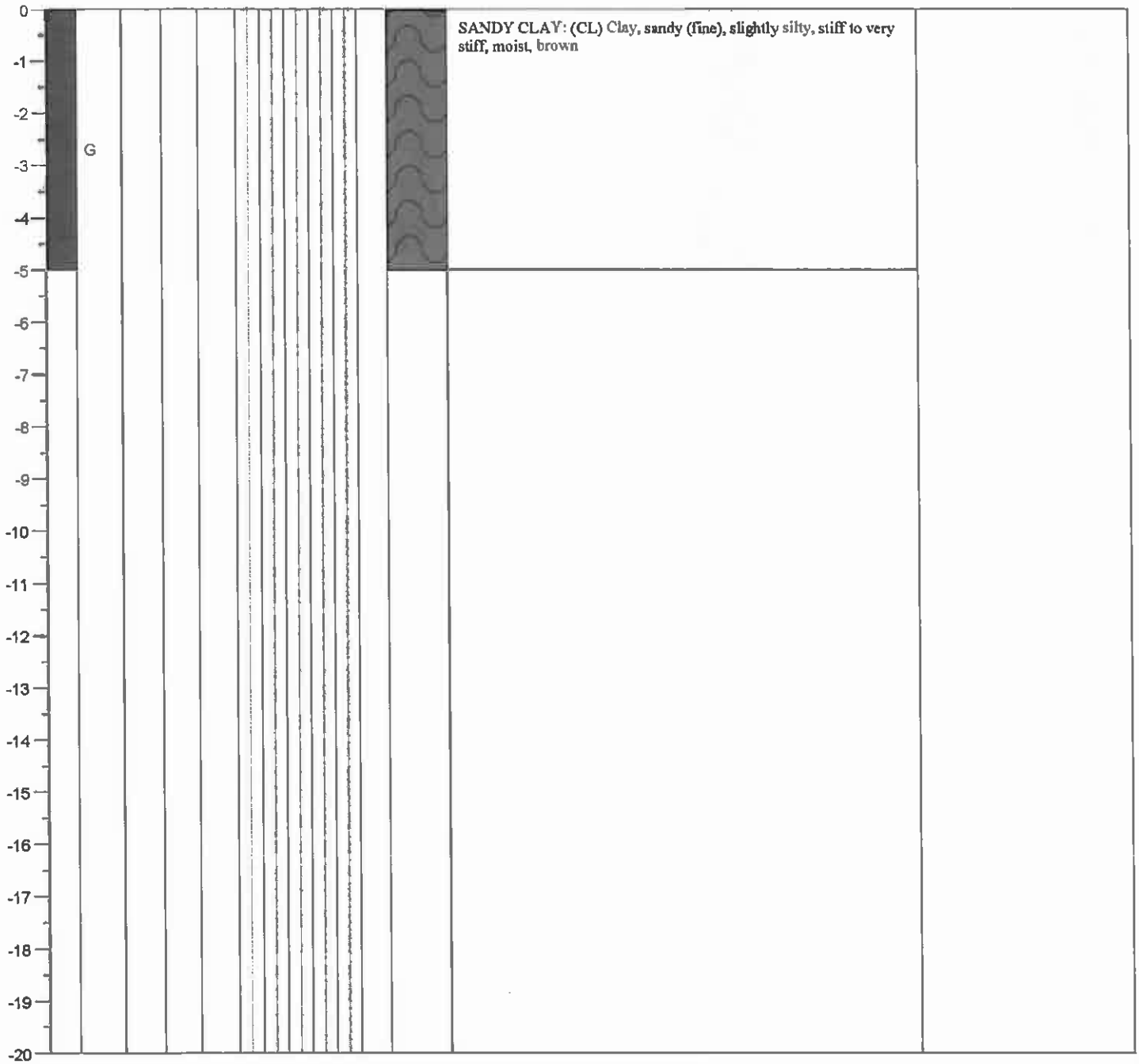
GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **SIMCO TRUCK MOUNTED DRILL RIG**

PLATE NO. 13

Elevation, ft.	Sample	Sampling Method	Moisture, %	Dry Density, pcf	Blow Counts	Blow Count Histogram	Ground Water	Soil Lithology	Soil Lithology Description	Notes
0 to -5	G								SANDY CLAY: (CL) Clay, sandy (fine), slightly silty, stiff to very stiff, moist, brown	



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(916) 928-4690 FX (916) 928-4697

LOG OF TEST BORING

TEST BORING NUMBER

B-13

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **11/23/2009**

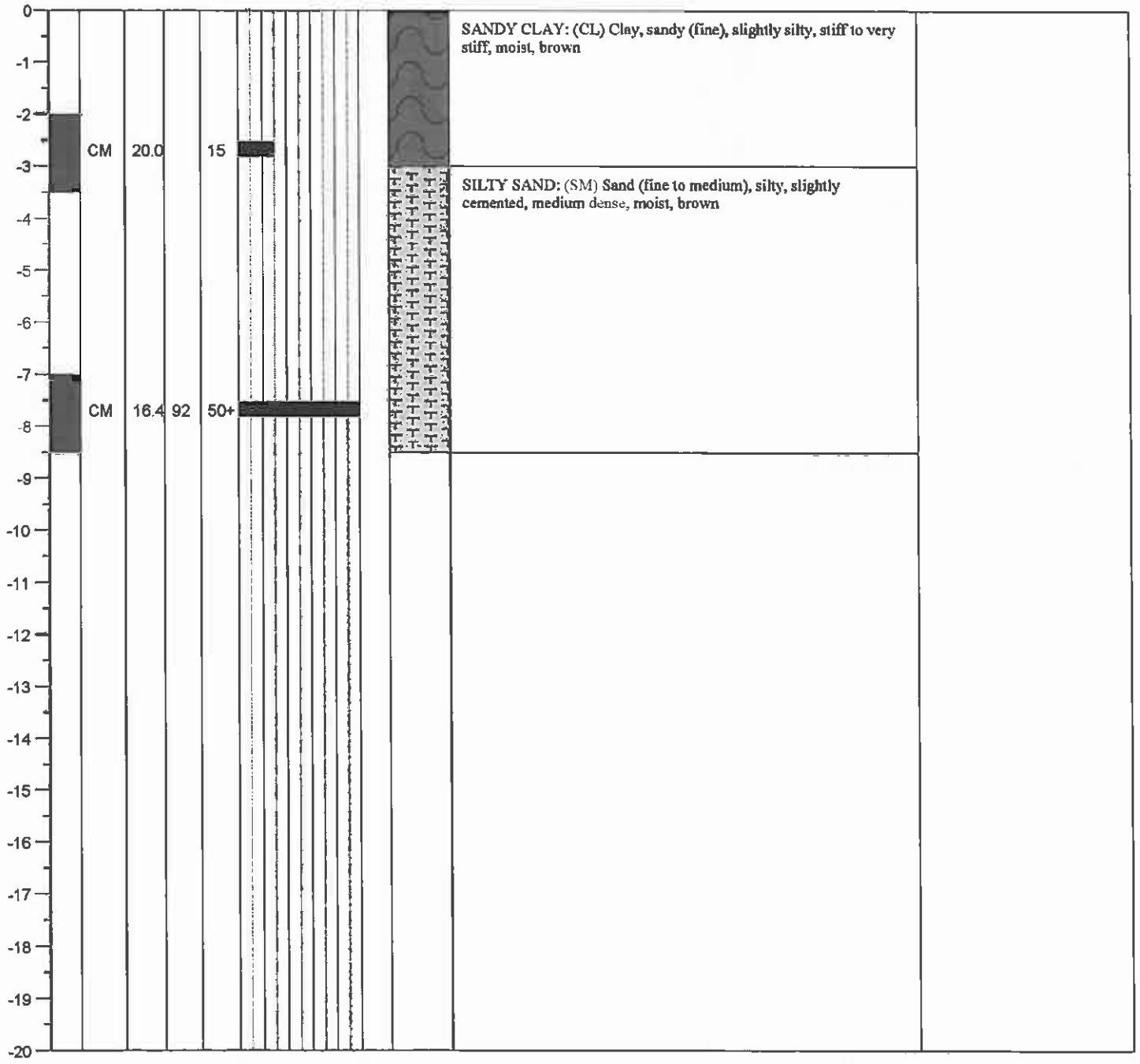
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 14



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Sacramento, CA 95834
(916) 928-4690 FX (916) 928-4697

LOG OF TEST BORING

TEST BORING NUMBER

B-14

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **11/23/2009**

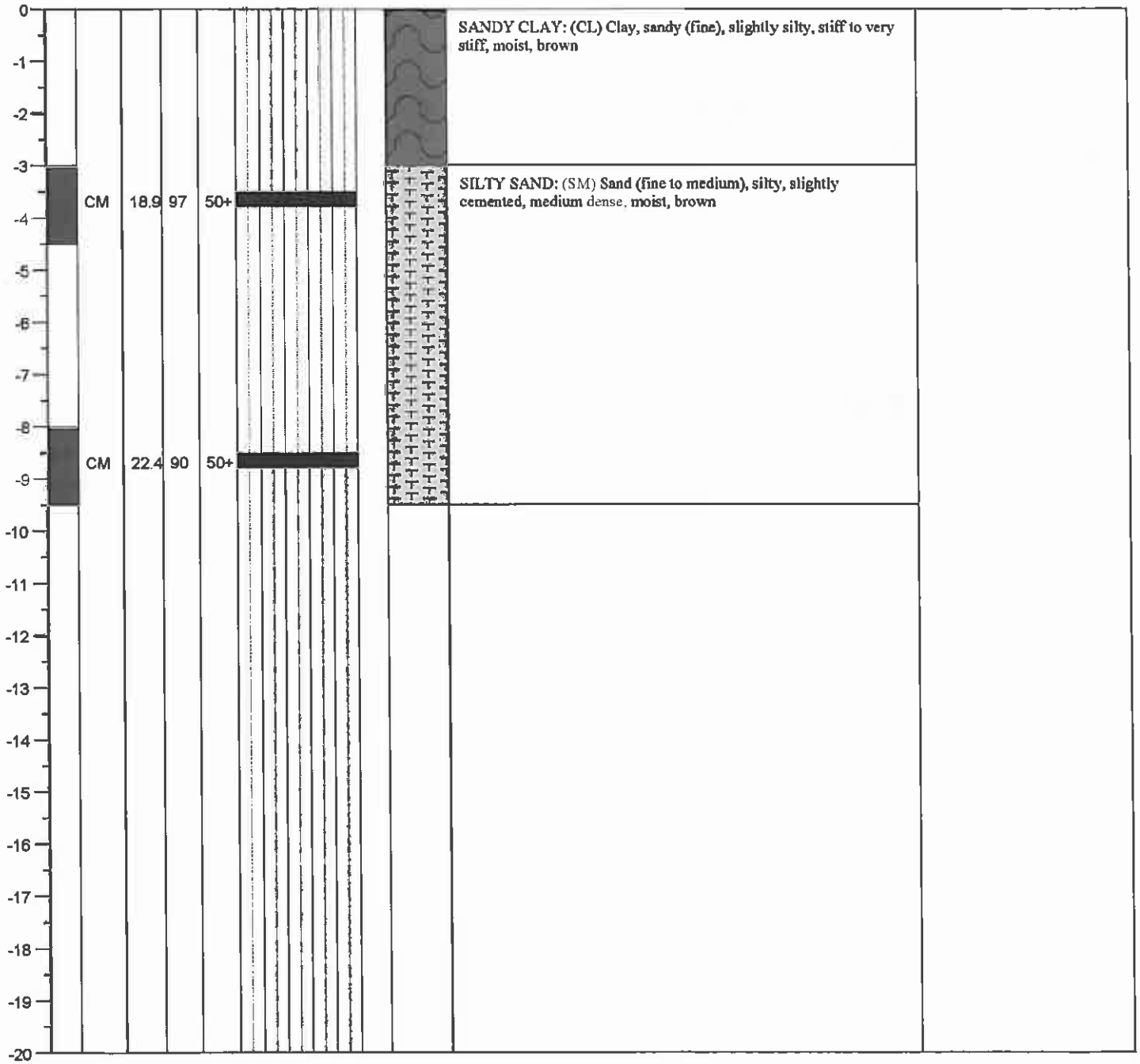
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 15



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Sacramento, CA 95834
(916) 928-4690 FX (916) 928-4697

LOG OF TEST BORING

TEST BORING NUMBER

B-15

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **11/23/2009**

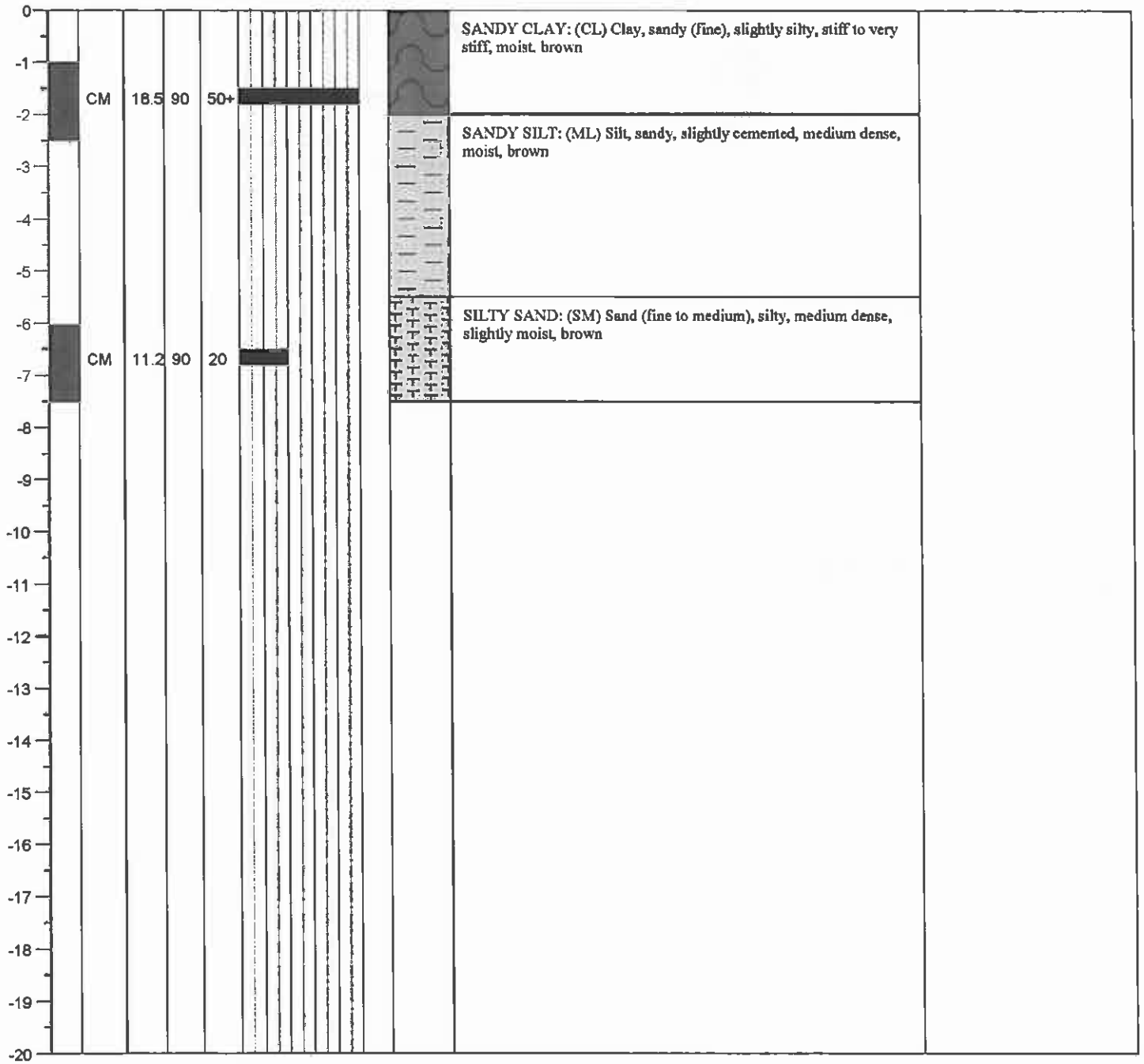
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 16



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Sacramento, CA 95834
(916) 928-4690 FX (916) 928-4697

LOG OF TEST BORING

TEST BORING NUMBER

B-16

PROJECT NUMBER: **SGE090538**
DATE EXCAVATED: **11/23/2009**
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**
GROUND SURFACE ELEVATION: **0.0** Feet
LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**
DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 17

Elevation, ft.	Sample	Sampling Method	Moisture, %	Dry Density, pcf	Blow Counts	Blow Count Histogram	Ground Water	Soil Lithology	Soil Lithology Description	Notes
0									SANDY CLAY: (CL) Clay, sandy (fine), slightly silty, stiff to very stiff, moist, brown	
-5		CM	15.1	95	50+				SANDY SILT: (ML) Silt, sandy, slightly cemented, medium dense, moist, brown	
-10		CM	25.2		50+					
-20										

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Sacramento, CA 95834
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LOG OF TEST BORING

TEST BORING NUMBER

B-17

PROJECT NUMBER: **SGE090538**

DATE EXCAVATED: **11/23/2009**

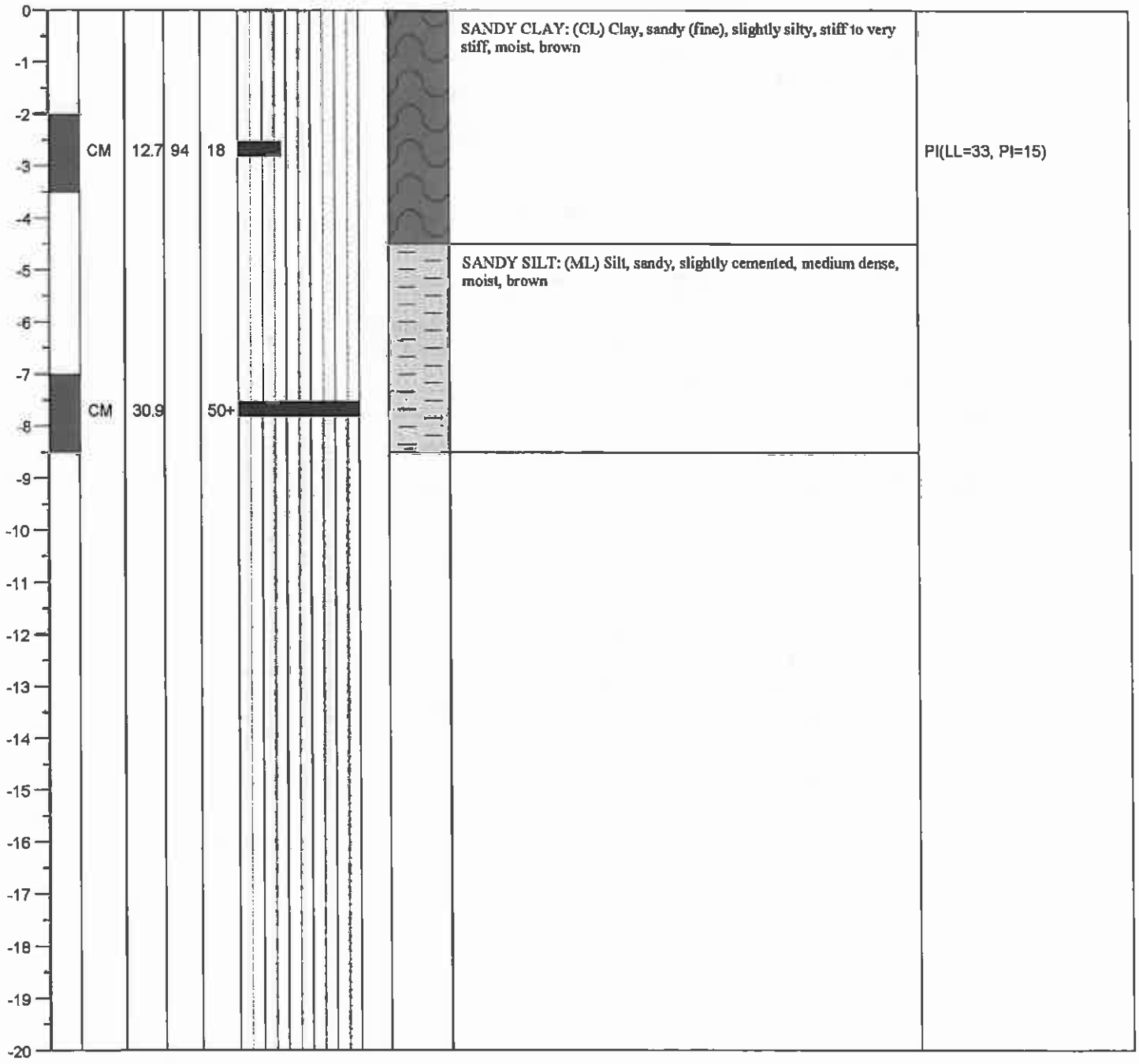
PROJECT NAME: **SUTTER COUNTY FACILITY (J-01)**

GROUND SURFACE ELEVATION: **0.0** Feet

LOCATION: **E. ONSTOTT FRONTAGE ROAD, SUTTER COUNTY, CA**

DRILLING EQUIP.: **B-24 MOBILE DRILL RIG**

PLATE NO. 18



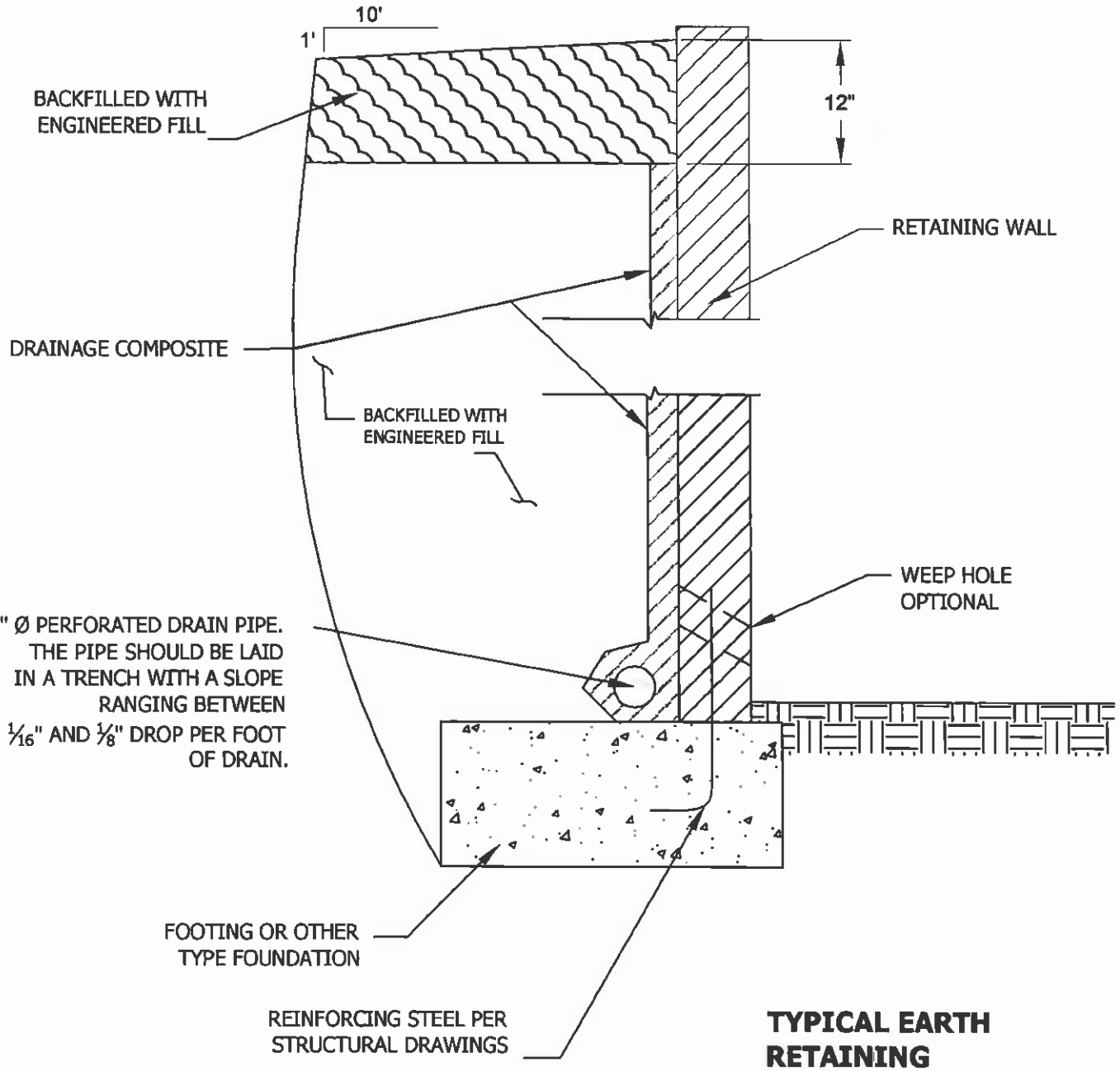
UNIFIED SOIL CLASSIFICATION SYSTEM AND BORING LOG SYMBOLS

	DESCRIPTION	MAJOR DIVISIONS		
GW	Well-graded gravels, gravel sand mixtures, little or no fines.	Clean gravels (little or no fines)	Gravel and gravelly soils More than 50% of coarse fraction retained on No. 4 sieve	Coarse grained soils more than 50% larger than No. 200 sieve
GP	Poorly-graded gravels, gravel sand mixtures, little or no fines			
GM	Silty gravels, gravel-sand-clay mixtures	Sands with appreciable amount of fines		
GC	Clayey gravels, gravel-sand-clay mixtures			
SW	Well-graded sands, gravelly sands, little or no fines	Clean sand (little or no fines)	Sands and sandy soils More than 50% of coarse fraction passing No. 4 sieve	
SP	Poorly-graded sands, gravelly sands, little or no fines			
SM	Silty sands, sand-silt mixtures	Sands with appreciable amount of fines		
SC	Clayey sands, sand-silt mixtures			
ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	Liquid limit less than 50	Silts and clays	Fine grained soils more than 50% smaller than No. 200 sieve
CL	Inorganic clays of low to medium plasticity, gravelly clays, lean clays			
OL	Organic silts and organic silty clays of low plasticity			
MH	Inorganic silts, micacious or diatomaceous fine sand or silty soils	Liquid limit greater than 50	Silts and clays	
CH	Inorganic clays of high plasticity, fat clays			
OH	Organic clays of medium to high plasticity, organic silts			
PT	Peat, humas swamp soils with high organic content	Highly organic soils		

DEPTH (FEET)	SAMPLE	SAMPLE TYPE	TEST TYPE	NOTES
	PS	**Push Sample**	Plasticity	pl
	SPT	**Drive Sample**, 2.0" o.d., 1.38" i.d., sampler driven with 140 lb. hammer, 30" drop (Standard Penetration Test, SPT).	Grain Size Analysis Uniformity Coefficient Coefficient of Gradation Coefficient of Consolidation Specific Gravity Shrink/Swell Direct Shear Unconfined Compression Triaxial Compression Pocket Penetrometer Torvane Shear Consolidations	gr Cu Cc Cv sg s/s ds uc tx p ts c
	CM	**Drive Sample**, 2.5" o.d., 1.92" i.d., sampler driven with 140 lb. hammer, 30" drop, with 6" tube liners (California Modified, CM).		
	ES	**Ely Sample**, Used to determine unit weight.		
	HS	**Hand Sampler**, 2.0" o.d. sampler driven with 10 lb. hammer, 18" drop, with 4" tube liners.		
	GS	**Grab Sample**, disturbed sample taken from auger tailings and sealed in plastic bag.		

Plate Number 19

NEIL O. ANDERSON
AND ASSOCIATES



TYPICAL EARTH RETAINING WALL DRAIN

PLATE NO. 20

Sunland Analytical

11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

Date Reported 10/21/2009
Date Submitted 10/15/2009

To: Ryan King
Neil O. Anderson & Associates
50 Goldenland Ct #100
Sacramento, CA 95834

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : SGEOP0538/SUTTER CO Site ID : B2-1-I.
Thank you for your business.

* For future reference to this analysis please use SUN # 56899-115159.

EVALUATION FOR SOIL CORROSION

Soil pH	8.08	
Minimum Resistivity	0.56 ohm-cm (x1000)	
Chloride	137.4 ppm	00.01374 %
Sulfate	137.2 ppm	00.01372 %

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422

Sunland Analytical

11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

Date Reported 10/21/2009
Date Submitted 10/15/2009

To: Ryan King
Neil O. Anderson & Associates
50 Goldenland Ct #100
Sacramento, CA 95834

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : SGEOP0538/YUBA CO Site ID : B8-1-II.
Thank you for your business.

* For future reference to this analysis please use SUN # 56899-115160.

EVALUATION FOR SOIL CORROSION

Soil pH	7.46	
Minimum Resistivity	1.02 ohm-cm (x1000)	
Chloride	22.8 ppm	00.00228 %
Sulfate	57.4 ppm	00.00574 %

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422

Advice 4065-E
June 18, 2012

Attachment 4
Final Mitigated Negative Declaration

MITIGATED NEGATIVE DECLARATION

YUBA COMMUNITY COLLEGE DISTRICT

YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY

3301 EAST ONSTOTT ROAD

YUBA CITY, CALIFORNIA

PREPARED FOR:

YUBA COMMUNITY COLLEGE DISTRICT

JULY 11, 2011

OUR PROJECT NUMBER: SES110003

50 Goldenland Court, Suite 100 ▪ Sacramento, CA 95834 ▪ 916.928.4690

July 11, 2011

MITIGATED NEGATIVE DECLARATION

YUBA COMMUNITY COLLEGE DISTRICT

YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY

3301 EAST ONSTOTT ROAD

YUBA CITY, CALIFORNIA

OUR PROJECT NUMBER: SES110003

INTRODUCTION

This Mitigated Negative Declaration (MND) in conjunction with our original Initial Study (IS) dated June 1, 2011, serves as the complete IS/MND for this specific project. This report is being prepared as a subsequent article to the original draft IS and incorporates additional changes and edits to that document. These revisions and edits are based on the comments that we received during our 30 day review period and are intended to address and/or mitigate any issues of concern.

This document has been prepared by the Yuba Community College District (YCCD) (lead agency) for the YCCD Board of Trustees to evaluate the potential environmental effect of the proposed Photo-Voltaic (PV) Solar Array at the new Sutter County Facility at 3301 East Onstott Road in Yuba, Sutter County, California.

Because this action is discretionary in nature, it is subject to the California Environmental Quality Act (CEQA). This document has been prepared to satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

PROJECT DESCRIPTION AND LOCATION

Yuba Community College District (YCCD) proposed to construct a Photo-Voltaic solar array at the new Sutter County Facility. The campus site is situated east of Onstott Road with a formal site address of 3301 Onstott Road, in Yuba City, California. The proposed improvements will cover an area approximately 1.77 acres in size. The construction will take part only on a portion of Sutter County Assessor's Parcel Number 010-260-76. The site is located within Section 3 of Township 15 North, Range 3 East, Mount Diablo Base and Meridian.

The planned improvements to the campus include construction of a 319.2 Kilowatt Peak Unit (kWp) ground tracking Photovoltaic (PV) solar array system. The PV array will be located on the southern quarter of the subject parcel.

The objective of this project is to provide alternative electric energy in the form of a photo voltaic (PV) solar array that establishes a more efficient and self reliant form of power.

The site is located in the City of Yuba. Department of General Services (DGS) will provide natural gas services for the site. The City of Yuba provides water services while the Sanitation District provides wastewater collection and treatment service. Pacific Gas and Electric Company (PG&E) provides electricity, and AT&T provides telephone service.

ENVIRONMENTAL DETERMINATION

An initial study was prepared to assess the potential effects of the Yuba College, Sutter County Facility Solar Array project, and the respective significance of those effects. Based on the Environmental Checklist and the supporting environmental analysis provided in the document, completion of the proposed project would result in a less than significant impact for the following issues:

- Aesthetics
- Agricultural Resources
- Biological Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Public Services
- Population and Housing
- Recreation
- Transportation/Traffic
- Utilities and Service Systems
- Greenhouse Gas Emissions

Completion of the proposed project would result in less than significant impacts following implementation of prescribed mitigation for the following issues:

- Air Quality
- Cultural Resources
- Geology and Soils
- Noise

DOCUMENTS AVAILABLE FOR REVIEW

The draft Mitigated Negative Declaration and Initial Study conducted for the proposed Community School was available for review at the following location:

Yuba Community College District
Administration Office
2088 North Beale Road
Marysville, Ca

PUBLIC REVIEW PERIOD

This proposed Initial Study/Mitigated Negative Declaration was available for a 30-day review period beginning June 3rd, 2011 and ending July 5, 2011. Written comments were to be submitted by 4:00 p.m. on July 5, 2011 to:

Robert Holmer, Principal Engineer
Neil O. Anderson and Associates
50 Goldenland Court, Suite 100
Sacramento, Ca 95834

Comments were to be submitted by the same deadline by facsimile to (916) 928-4697. Comments could have also been submitted at the regular scheduled YCCD Board Meeting, scheduled at 4:00 p.m. on July 12, 2011 at the YCCD Board of Trustees Meeting, Yuba Campus, 2088 North Beale Road, Marysville, CA 95901.

CHANGES AND EDITS TO THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

No changes made to the Initial Study/ Mitigated Negative Declaration dated June 1, 2011.

RESPONSE TO WRITTEN COMMENTS INITIAL STUDY/MITIGATED NEGATIVE DECLARATION YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY

Letter No. 1
California Regional Water Quality Control Board
June 29, 2011

Comment No. 1

Discharges whose project disturb one or more acres of soil or where projects disturb less than one acre, but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under General Permit for Storm Water Discharged Associated with Construction Activities. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground such as stock piling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Response

Comment noted. As stated on page 28 of the Initial Study, a SWPPP will be prepared for this project. The project will comply with the terms and conditions of the NPDES, as approved by the State Water Resources Control Board under Section 402 of the Clean Water Act.

APPENDIX A:
COMMENT LETTERS SUBMITTED
TO MERCED COUNTY OFFICE OF EDUCATION

California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair

Linda S. Adams
Acting Secretary for
Environmental Protection

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
(916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

Edmund G. Brown Jr.
Governor

29 June 2011

RECEIVED
JUL 05 2011
Measure J Bond Program
AECOM

George Parker
Yuba Community College District
2088 North Beale Road
Marysville, CA 95901

CERTIFIED MAIL
7010 1670 0002 0652 9332

COMMENTS TO DRAFT MITIGATED NEGATIVE DECLARATION, YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY PROJECT, SCH NO. 2011062010, YUBA COUNTY

Pursuant to the State Clearinghouse's 2 June 2011 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Draft Mitigated Negative Declaration* for the Yuba College, Sutter County Facility Solar Array Project, located in Yuba County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed for the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916)557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification
If an USACOE permit, or any other federal permit, is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. Water Quality Certification must be obtained prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements
If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

If you have questions regarding these comments, please contact me at (916) 464-4745 or gsparks@waterboards.ca.gov.

Genevieve Sparks

Genevieve (Gen) Sparks
Environmental Scientist
401 Water Quality Certification Program

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento

APPENDIX B:
NOTICING DOCUMENTATION

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916)445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH# _____

Project Title: Yuba College, Sutter County Facility Solar Array
Lead Agency: Yuba Community College District — Contact Person: George Parker
Mailing Address: 2088 North Beale Road — Phone: 530-634-7643
City: Marysville — Zip: 95901 — County: Yuba

Project Location:
County: Sutter — City/Nearest Community: Yuba City
Cross Streets: East Onstott Road and Pease Road — Zip Code: 95991
Lat/Long.: 39.1768 N -121.6337 W — Total Acres: 13 Acres
Assessor's Parcel No.: 010-260-76 — Section: 3 — Twp: 15N — Range: 3E — Base: MDBM
Within 2 Miles: State Hwy #: 70 — Waterways:
Airports: — Railways: — Schools: Sutter County Facility

Document Type:
CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☒ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other

RECEIVED
JUN 02 2011
3:40 p.m.
STATE CLEARING HOUSE

Local Action Type:
☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Develop. ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other School

Development Type:
☐ Residential: Units _____ Acres _____
☐ Office: Sq Ft _____ Acres _____ Employees _____
☐ Commercial: Sq Ft _____ Acres _____ Employees _____
☐ Industrial: Sq Ft _____ Acres _____ Employees _____
☐ Educational: _____
☐ Recreational: _____
Total Acres (approx.) 0.10
☐ Water Facilities: Type _____ MGD _____
☐ Transportation: Type _____
☐ Mining: Mineral _____
☒ Power: Type Solar Array Watts 319,200
☐ Waste Treatment: Type _____
☐ Hazardous Waste: Type _____
☐ Other: _____

Project Issues Discussed in Document:
☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☐ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☒ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☒ Sewer Capacity
☒ Soil Erosion/Compact./Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☐ Vegetation
☐ Water Quality
☒ Water Supply/Groundwater
☐ Wetland/Riparian
☒ Wildlife
☐ Growth Inducing
☒ Land Use
☐ Cumulative Effects
☐ Other

Present Land Use/Zoning/General Plan Designation:
The site is occupied with Yuba College, Sutter Facility. The Yuba City general plan has zoned the property Public Facility.

Project Description: (Please use a separate page if necessary)
The Yuba Community College District is proposing to construct a new 319.2 Kilowatt Peak Unit (kWp) ground tracking Photovoltaic (PV) solar array system.

APPEAL-DEMOCRAT

1530 Ellis Lake Drive, Marysville, CA 95901
(530) 741-2345

This space is for the County Clerk's filing stamp.

Affidavit of Publication

(2015.5 C.C.P)

STATE OF CALIFORNIA,

Counties of Yuba and Sutter

Neil O. Anderson & Associates

Public Notice

I am not a party to, nor interested in the above entitled matter. I am the principal clerk of the printer and publisher of THE APPEAL-DEMOCRAT, a newspaper of general circulation, printed & published in the City of Marysville, County of Yuba, to which Newspaper has been adjudged a newspaper of general circulation by The Superior Court of the County of Yuba, State of California under the date of November 9, 1951, No. 11481, and County of Sutter to which Newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Sutter, State of California under the date of May 17, 1999, Case No. CV PT99-0819 that the notice of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

June 6, 2011

I declare under penalty of perjury
that the foregoing is true and correct.
Executed at Marysville, California

June 7, 2011

Date: _____

Kelly Smith

(Signature)

PROOF OF PUBLICATION

PUBLIC NOTICE

The Yuba Community College District (YCCD) will consider adoption of the Mitigated Negative Declaration for Yuba College, Sutter Facility and Yuba College Solar Array & Central Plant at an YCCD Board of Trustees Meeting on July 12, 2011. This meeting will be held at 4:00 p.m. at the Yuba College Campus located at 2088 North Beale Road, Marysville, CA 95901.

The proposed Mitigated Negative Declaration was made available for a 30-day review period from June 3, 2011 to July 5, 2011. Comments received by the YCCD during the public review period will be considered as a part of its deliberation regarding adoption of the Mitigated Negative Declaration. A copy of the proposed Mitigated Negative Declaration and related documents may be reviewed at the YCCD Administration Office located at 2088 North Beale Road, Marysville, during normal business hours. Telephone number (530) 741-6700.

For further information contact: Rob Holmer, Project Manager, at 50 Goldenland Court Suite 100, Sacramento, California 95834. Telephone number (916) 928-4690.

June 6, 2011 Ad #00120324

APPENDIX B:
NOTICING DOCUMENTATION

MITIGATION MONITORING AND REPORTING PROGRAM
YUBA COLLEGE, SUTTER COUNTY FACILITY SOLAR ARRAY

July 2011

Prepared for:

Yuba Community College District
2088 North Beale Road, Marysville, CA 95901
Contact: George Parker, Director of Facilities Planning
(530) 634-7643

Prepared by:

Neil O. Anderson & Associates, Inc.
50 Goldenland Court, Suite 100
Sacramento, CA 95835

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The California Environmental Quality Act (CEQA Section 21081.6(a)(1) of the Public Resources Code requires public agencies, as part of the certification of an Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND), to prepare and approve a reporting or monitoring program. This program should be structured to ensure that changes to the project that the Yuba Community College District (YCCD) has adopted to mitigate or avoid significant environmental impacts are carried out during project implementation.

The Mitigation Monitoring and Reporting Program (MMRP) contained herein is intended to satisfy the requirements of CEQA as they relate to the Yuba College, Sutter County Facility Solar Array (IS)/Mitigated Negative Declaration (MND). The MMRP is intended to be used by the YCCD staff and/or project mitigation monitoring agent(s) under hire to the YCCD, participating agencies, and mitigation monitoring personnel during construction and implementation of the project. The intent of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures. The MMRP will consist of the following components:

COMPLIANCE CHECKLIST

Table 1 contains a compliance monitoring checklist that provides a synopsis of all adopted mitigation measures, the entity responsible for their implementation, the entity responsible for monitoring, and the timing of implementation. All the mitigation measures presented in **Table 1** will be incorporated into the proposed project.

IMPLEMENTATION AND MONITORING OF MITIGATION MEASURES

Since the mitigation measures will be incorporated into the project, implementation and monitoring of mitigation measures will occur at various stages of implementation of the project, which may include, but are not limited to, the following:

- Implementation of development and design standards, guidelines, and programs for the proposed project.
- Reviewing construction plans and equipment staging/access plans to ensure conformance with adopted mitigation measures.
- Grading, site preparation; and construction of the proposed project.
- On-site, day-to-day monitoring of construction activities.

- Ensuring contractor knowledge of and compliance with all appropriate permit conditions and the MMRP.

- Verifying the accuracy and adequacy of contract working.

- Having the authority to require correction of activities that violate project permit conditions or mitigation measures.

- Acting in the role of contact for property owners or any other affected personnel who wish to register observations of violations of project permit conditions or mitigation. Upon receiving any complaints, the inspector shall immediately contact the construction representative. The inspector shall be responsible for verifying any such observations and for developing any necessary corrective actions in consultation with the construction representative of Sutter County and the City of Yuba.

- Obtaining assistance as necessary from technical experts such as archaeologists in order to develop site-specific procedures for implementing the mitigation measures.

- Maintaining a log of all significant interactions, violations of permit conditions or mitigation measures, and necessary corrective measures.

Responsibility of implementation and monitoring of mitigation measures will typically reside with YCCD staff and/or project mitigation monitoring agent(s) under hire to the YCCD as described in **Table 1.**

TABLE 1
MITIGATION MONITORING PROGRAM

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
AIR QUALITY					
Mitigation Measure Air-1 The following dust control measures will be implemented during construction: • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover. • All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled for fugitive dust emissions by utilizing application of water or by pre-soaking. • When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously	Yuba Community College District or designee.	Yuba Community College District	Verification of compliance with measures. Periodic site inspection to ensure mitigation measures are being applied.	During construction.	

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden.) • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized for fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. • Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday. • Any site with 150 or more vehicle trips per day shall prevent carryout and trackout. • Limit traffic speeds on unpaved roads to 15 mph; and • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.					

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
CULTURAL RESOURCES					
Mitigation Measure Cultural Resources-1 In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the YCCD (or its representative) shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, the YCCD (or its representative) and the archaeologist and/or paleontologist would meet to determine the appropriate avoidance measures. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards. If the discovery includes human remains, CEQA Guidelines Section 15064.5 (e)(1) and (e)(2) shall be followed, which are as follows: (e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken: (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is	Yuba Community College District or designee.	Yuba Community College District or designee in coordination with County Coroner and Native American Heritage Commission.	Verification of contract wording on construction plans. Verification of compliance with measures. Periodic site inspection to ensure mitigation measures are being applied.	Prior to site construction and during construction.	

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
required, and (B) If the coroner determines the remains to be Native American: 1. The coroner shall contact the Native American Heritage Commission with 24 hours. 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. 3. The most likely descendent may make recommendations to the land owner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. (A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission. (B) The descendant identified fails to make a recommendation; or the landowner or his authorized representative rejects the					

Mitigation Measure	Implementing Responsibility	Monitoring Responsibility	Compliance Standards	Timing	Verification of Compliance (Initials and Date)
recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.					
GEOLOGY					
Mitigation Measure Geology -1 In the event that significant wind erosion of soil is observed during construction activities, the soil surface shall be sufficiently wetted to minimize dust generation.	Yuba Community College District or designee.	Yuba Community College District	Verification of compliance with measures. Periodic site inspection to ensure mitigation measures are being applied.	During construction.	
NOISE					
Mitigation Measure Noise-1 The YCCD shall ensure that the construction contractor implements the following noise reducing measures: • All equipment shall have sound-control devices no less effective than those provided by the manufacturer. All equipment shall have muffled exhaust pipes. • Stationary noise sources shall be located as far from sensitive receptors as possible.	Yuba Community College District or designee.	Yuba Community College District	Verification of compliance with measures. Periodic site inspections to ensure mitigation measures are being applied.	Prior to and during construction.	

Advice 4065-E
June 18, 2012

Attachment 5
Notice of Determination for the Mitigated Negative Declaration

Notice of Determination

To: ☒ Office of Planning and Research
For U.S. Mail: P.O. Box 3044 Sacramento, CA 95812-3044
Street Address: 1400 Tenth Street Sacramento, CA 95814

☒ County Clerk
County of: Sutter
Address: 433 2nd Street
Yuba City, CA 95991-5504

From: Public Agency: Yuba Community College District
Address: 2088 North Beale Road
Marysville, CA 95901
Contact: George Parker
Phone: 530-634-7643

Lead Agency (if different from above):
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 and 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): N/A

Project Title: Yuba College, Sutter County Facility Solar Array

Project Location (include County) 3301 East Onstott Road in Yuba, Sutter County, California

Project Description: The planned improvements to the campus include construction of a 319.2 Kilowatt Peak Unit (kWp) ground tracking Photovoltaic (PV) solar array system. PV array will be located on the southern quarter of the subject parcel.

This is to advise that the Yuba Community College District (☒ Lead Agency or ☐ Responsible Agency) has approved the above described project on July 11, 2011 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the Mitigated Negative Declaration, is available to the General Public at: Yuba Community College District
2088 North Beale Road
Marysville, CA 95901

Signature (Public Agency) _____ Title Director, Facilities Planning
Date 7/12/11

Date received for filing at OPR:

PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV

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California Public Utilities Commission
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City of Palo Alto Utilities
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International Power Technology
Intestate Gas Services, Inc.
Lawrence Berkeley National Lab
Los Angeles Dept of Water & Power
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North Coast SolarResources
Northern California Power Association
Occidental Energy Marketing, Inc.
OnGrid Solar
Praxair
R. W. Beck & Associates
RCS, Inc.
Recurrent Energy
SCD Energy Solutions
SCE
SMUD
SPURR
San Francisco Public Utilities Commission
Seattle City Light
Sempra Utilities
Sierra Pacific Power Company
Silicon Valley Power
Silo Energy LLC
Southern California Edison Company
Spark Energy, L.P.
Sun Light & Power
Sunrun Inc.
Sunshine Design
Sutherland, Asbill & Brennan
Tecogen, Inc.
Tiger Natural Gas, Inc.
TransCanada
Turlock Irrigation District
United Cogen
Utility Cost Management
Utility Specialists
Verizon
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
eMeter Corporation