

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE



September 6, 2019

Advice Letter 5574-E

Erik Jacobson
Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

**SUBJECT: Daniel Water Well Easement Agreement - Request for Approval Under
Public Utilities Code Section 851 and Pursuant to General Order 173**

Dear Mr. Jacobson:

Advice Letter 5574-E is effective as of August 02, 2019.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division



July 3 2019

Advice 5574-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Daniel Water Well Easement Agreement - Request for Approval Under Public Utilities Code Section 851 and Pursuant to General Order 173

Purpose

Pacific Gas and Electric Company (PG&E or the Company) requests Public Utilities Commission (CPUC or Commission) approval under Public Utilities Code Section 851 (Section 851) and General Order (GO) 173 to grant an easement to Mary Daniel (Daniel) for the installation, operation, maintenance and use of two (2) domestic water wells, each located on separate parcels of land owned by Daniel, where PG&E owns all surface and subsurface water and water rights.

PG&E's Hydro Generation team has determined that the construction and approval of these domestic wells will not interfere with PG&E's operations or PG&E's ability to provide safe and reliable utility service to its customers. In addition, these domestic wells will not be adverse to the public interest.

Background

PG&E is the owner of certain surface and subsurface water and water rights, together with the right of taking, diverting, and appropriating all such waters, which have been and continue to be used for generating electricity at PG&E's Battle Creek Project in the area located in and around the community of Manton, California. PG&E's rights are memorialized in an indenture (Indenture) recorded in 1984 with the Counties of Shasta and Tehama, which is included hererin as Attachment 1. The Indenture establishes a procedure by which PG&E could relinquish and/or convey certain water rights and states the terms and conditions whereby PG&E could grant an easement for the extraction of water by a property owner for domestic purposes.

Daniel owns two (2) residential lots on Battleview Drive in Shasta County, identified as Assessor Parcel Numbers (APN) 703-310-023 ("Lot 23") and 703-320-001 ("Lot 25"). Lots 23 and 25 (collectively, the "Properties") are shown on the Shasta County

Assessor Parcel Maps included as Attachment 2. Lots 23 and 25 are subject to the Indenture. A single-family home is constructed on Lot 25. Lot 23 is currently vacant. Daniel intends to reside in the home located on Lot 25 and construct an additional structure onto Lot 23.

Daniel has requested an easement (Easement) from PG&E to extract subsurface water via domestic water wells pursuant to the terms of the Indenture, as described in section (c) below. Shasta County will not issue water well permits to Daniel until PG&E grants the Easement. PG&E has agreed to grant the Easement to Daniel, as it has determined that the wells will not interfere with PG&E's operations or PG&E's ability to provide safe and reliable utility service to its customers. A copy of the proposed Easement is included as Attachment 3.

In accordance with General Order 173, Rule 4, PG&E provides the following information related to the proposed transaction:

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

Pacific Gas and Electric Company	Mary Daniel
Molly Zimney	864 Olive Street
Law Department	Red Bluff, CA 96080
P.O. Box 7442	Telephone: (530) 526-9641
San Francisco, CA 94120	
Telephone: (415) 973-6840	
Facsimile: (415) 973-5520	
Email: MEZ3@pge.com	

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

The Properties are located on Battleview Drive in Manton, California. The Properties are shown on Attachment 2 as Lot 23 and Lot 25. Lot 25 currently has a single-family home constructed on the property. Lot 23 is currently a vacant parcel. The Properties are owned by Daniel. PG&E is the owner of certain surface and subsurface water and water rights on the Properties, together with the right of taking, diverting, and appropriating all such waters, which have been and continue to be used for generating electricity at PG&E's Battle Creek Project in the area located in and around the community of Manton, California.

(c) Intended Use of the Property:

Lot 25 currently has a single-family home constructed on the property. Lot 23 is currently a vacant parcel. Daniel intends to reside in the home located on Lot 25 and construct an additional structure on Lot 23.

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

PG&E will receive a one-time payment of \$1950 (Consideration) for the Easement.

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

Any net compensation received by PG&E from Daniel will be credited to Other Operating Revenue and be used to reduce the generation revenue requirement in future general rate cases, consistent with conventional cost-of-service ratemaking.

(f) 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 water rights described in this application are associated with PG&E's non-nuclear, hydroelectric generation-related facilities. As such, there is no PG&E book value associated with this transaction, and there is no effect on PG&E's rate base as a result of the proposed easement.

(g) 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.

(h) 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.

(i) The Fair Market Value of the Easement or Right-of-Way, and a Detailed Description of How the Fair Market Value Was Determined:

The fair market value for the Consideration was calculated by PG&E's Power Generation Team. The Power Generation Team calculated the generation value (in price per kwh) of one acre foot (AF) of water passing through PG&E generation facilities within the FERC Project No. 1121 (Battle Creek) system. The Consideration compensates PG&E for twice the value of potential lost generation for a fifty (50) year time period (i.e., generation value of one AF x 2 x 50 years). Pursuant to the easement document (Attachment 3), one AF of water is the maximum amount of water that is allowed to be consumed per annum.

(j) 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:

There are no recent past transactions (within the prior two years) that are related to this transaction.

(k) Sufficient Information and Documentation (Including Environmental Information) to Show that All of Eligibility Criteria Set Forth in Rule 3 of General Order 173 are Satisfied:

PG&E has provided information in this Advice Letter to satisfy the eligibility criteria under General Order 173 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 public 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 rate base of PG&E; and
- The transaction does not warrant a more comprehensive review that would be provided through a formal Section 851 application.

(l) 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 submittal.

(m) Environmental Information

Pursuant to General Order 173, the Advice Letter program applies to proposed transactions that will not require environmental review by the CPUC as a lead agency under the California Environmental Quality Act ("CEQA") because: (a) a statutory or categorical exemption applies (the applicant must provide a Notice of Exemption from the Lead Agency or explain why an exemption applies), (b) 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) 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.

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

c. Shasta County as a Responsible Agency under CEQA

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:

- a. 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.

Shasta County was the Lead Agency who conducted environmental review for the development of the lots located within the Manton Heights Subdivision, Tract No. 1523, which includes the Properties. Attachment 4 contains Resolution No. 5593 dated December 9, 1982, where the County Planning Commission approved a Final Environmental Impact Report (EIR) for residential development of the Manton Heights Subdivision, Tract No. 1523. Attachment 5 contains Resolution No. 5594, where the County Planning Commission approved the subdivision tract map. The tract map was further modified by Resolution No. 5747 (May 26, 1983) and extended by Resolution No. 6382 (January 10, 1985). Following certification of the EIR and recordation of the tract map, the County now issues ministerial building permits for residential construction activities within the Manton Heights Subdivision, Tract No. 1523, including water well permits.

It is the opinion of PG&E that the necessary environmental review was sufficiently completed by Shasta County as the Lead Agency during the development of the Manton Heights Subdivision, Tract No. 1523, by approval of the EIR and recording of the tract map.

A copy of the EIR and Resolution No. 5593 are attached as Attachment 4. Resolution numbers 5594, 5747, 6382 and a copy of the recorded tract map (17 Maps 79), are attached as Attachment 5.

Lead Agency	County of Shasta Planning Commission Department of Resource Management 1855 Placer Street Redding, CA 96001 (530) 225-5532
Type of CEQA Document Prepared	Environmental Impact Report #19-78 Manton Heights Subdivision, Tract 1523 (Attachment 4)

Date Approved	December 9, 1982 Resolution No. 5593 (Attachment 4)
---------------	--

- b. 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.

See Attachment 4.

- c. 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.

Attachment 4, Page 86.

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

Not Applicable.

- e. 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 project does not require approval by additional public agencies other than the Commission and the Lead Agency.

Protests

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than July 23, 2019, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 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 shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

Pursuant to the review process outlined in General Order 173, PG&E requests that this Tier 2 advice letter become effective on August 2, 2019, which is 30 days from the date of submittal.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and/or via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittal can also be accessed electronically at: <http://www.pge.com/tariffs>.

/S/

Erik Jacobson
Director, Regulatory Relations

Attachment 1 – Indenture

Attachment 2 – Property Maps (Shasta County Assessor Parcel Maps)

Attachment 3 – Well Easement

Attachment 4 – EIR and Resolution 5593

Attachment 5 – Resolutions 5594, 5747, 6382, and recorded tract map for Tract No. 1523, Manton Heights Private Road Subdivision (17 Maps 79)

***** SERVICE LIST for Advice 5574-E *****
APPENDIX A

Jonathan Reiger
Legal Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 355-5596
jzr@cpuc.ca.gov

Mary Jo Borak
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-1333
bor@cpuc.ca.gov

Robert (Mark) Pocta
Public Advocates Office
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703- 2871
robert.pocta@cpuc.ca.gov

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

*****AGENCIES*****

Paul Hellman, Director
Shasta County Department of Resource
Management, Building Division
1855 Placer Street, Suite 102
Redding, CA 96001
Phone: (530) 225-5761
Fax: (530) 245-6468

*****3rd Parties*****

Mary Daniel
864 Olive Street
Red Bluff, CA 09080
Telephone: (530) 526-9641



ADVICE LETTER 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:

- ELC GAS WATER
 PLC HEAT

Contact Person: Annie Ho
 Phone #: (415) 973-8794
 E-mail: PGETariffs@pge.com
 E-mail Disposition Notice to: AMHP@pge.com

EXPLANATION OF UTILITY TYPE
 ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5574-E

Tier Designation: 2

Subject of AL: Daniel Water Well Easement Agreement - Request for Approval Under Public Utilities Code Section 851 and Pursuant to General Order 173

Keywords (choose from CPUC listing): Agreements, Section 851

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted 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:

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date: 8/2/19

No. of tariff sheets: N/A

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:

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

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

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Attachment 1 - Indenture

3916

2131-01-0295

9414

3010-9931 Manton, Water and Transmission Rights at
12 83 4

AFTER RECORDING, RETURN TO:

PACIFIC GAS AND ELECTRIC CO

FOR RECORDER'S USE ONLY

P. O. BOX 340
RED BLUFF,
CA 96080

BOOK 981 PAGE 509
RECORDED AT REQUEST OF
PACIFIC GAS AND ELECTRIC CO.
AT 11:30 (MIN. PAST) 3P

RECORDED AT REQUEST OF
Pacific Gas & Electric Co.,
AT 4:15 (MIN. PAST) 4P
OFFICIAL RECORDS SHASTA COUNTY, CALIF

MAR 27 1984

APR 4 1984

OFFICIAL RECORDS
TEHAMA COUNTY, CALIFORNIA
FLOYD A. HICKS

Fee \$

17-

Recorder

Recorder Fee \$ 17.00

INDENTURE

THIS INDENTURE is made by PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, hereinafter called PGandE, and affects certain premises situate in the Counties of Shasta and Tehama, State of California, within which PGandE is the owner of certain rights.

Under and by virtue of various documents filed for record in the offices of the County Recorders of said Shasta and Tehama Counties, as set forth in EXHIBIT "A" attached hereto, PGandE is the owner of certain surface rights and easements, and of all surface and subsurface water and water rights, together with the right of taking, diverting and appropriating all waters, within said premises, which waters have been and are now being put to beneficial use generating electricity at PGandE's Battle Creek Project.

Said premises are subject to development and the owners thereof may from time to time require the right from PGandE to install, operate, maintain and use a water well within said premises. PGandE is generally willing to grant such right provided that, upon review of each individual case, such grant shall not adversely affect its ability to serve the general public efficiently. PGandE is also willing to relinquish certain of its surface rights and easements which shall be deemed no longer necessary or useful to PGandE in

- 1 -

P. G. & E. CO.
COPY

BOOK 2048 PAGE 212

BOOK 981 PAGE 509



2131010295

the performance by it of its duties to the public. The purpose of this indenture is to stipulate the terms and conditions to facilitate the future conveyance and/or relinquishment of such right.

NOW, THEREFORE, in consideration of the foregoing, PGandE hereby declares:

A. The form of grant to be used for the conveyance of such right shall be in the form of EXHIBIT "B" attached hereto and hereby made a part hereof;

B. The form of relinquishment to be used to eliminate the encumbrances of certain surface rights and easements which shall be deemed no longer necessary or useful to PGandE in the performance by it of its duties to the public, shall be in the form of EXHIBIT "C" attached hereto and hereby made a part hereof; and

C. Said conveyance, by reference therein to this indenture, shall be further made subject to the following terms and conditions in the same manner as though fully set forth therein, namely:

(1) Exploration for a well shall be at such locations as are mutually acceptable to PGandE and the grantee therein and shall cease when an adequately producing well is established; any other wells on said lands shall be closed and capped in accordance with State regulations;

(2) No more than one (1) operative well shall be located on the lands described in the form of conveyance as executed;

(3) Grantee therein shall provide PGandE with a copy of the well log for every well dug or drilled pursuant to the terms and conditions set forth herein within ten (10) days after said log is submitted to the appropriate county agency; said copy shall be transmitted to PGandE's Red Bluff Office, 814 Main Street, Red Bluff, California 96080, Attention: Division Electric Superintendent;

(4) No pump with a capacity which exceeds that set forth in said form of conveyance as executed shall be used in connection with said well, and PGandE reserves the right to test any pump and meter used; any such test shall be at

- 2 -

P. G. & E. CO.
COPY

BOOK 2048 PAGE 213

BOOK 981 PAGE 510

PGandE's expense, unless it is shown that grantee therein has exceeded the quantity of water allowed under the terms set forth herein, in which instance second party shall pay all costs of such test;

(5) Water extracted from said well shall be limited to the quantity of water specified in said form of conveyance as executed and shall be limited to domestic and home gardening uses, and a domestic nonporous lined swimming pool with a surface area not to exceed 800 square feet, and such uses shall be only for the benefit of the lands described in said form of conveyance as executed; if it is verified by PGandE that the quantity of water extracted from said well is in excess of that quantity specified in said form of conveyance as executed, grantee therein shall pay on demand to PGandE, as a penalty, two times the then value of the electric energy producible by such excess quantity at PGandE's Battle Creek Project. Said value shall be based on the incremental cost of the most expensive replacement generation then in use by PGandE.

(6) In the event grantee therein shall subdivide the lands described in said form of conveyance as executed, then, and in that event, water taken from said well shall be limited to the use only on, and for the benefit of, the subdivision parcel on which the well is located, and the party responsible for the subdivision of said lands shall acquire an additional grant of conveyance in the form hereinbefore described as EXHIBIT "B" for each newly created parcel before any well exploration may commence thereon;

(7) No water, either from said well, or from natural surface run-off, shall be stored in reservoirs or holding tanks, provided, however, that grantee therein shall be allowed to construct, maintain and use a domestic swimming pool and one (1) covered holding tank with a capacity not to exceed 1,000 gallons;

(8) Grantee therein shall not take, divert, or appropriate water from any flume, ditch, aqueduct, natural drainage channel, spring or stream within or which

now crosses, or shall hereafter be constructed by PGandE and be within or cross, the lands described in said form of conveyance as executed;

(9) Grantee therein shall, at grantee's sole cost and expense, install and maintain a domestic water meter as near as practicable to said pump in order to accurately meter all water pumped from said well;

(10) PGandE reserves the right to enter upon the lands described in said form of conveyance as executed at any reasonable time for the purposes of reading and testing the water meter and testing said well and said pump as hereinbefore provided, and for the purpose of monitoring the terms and conditions set forth herein;

(11) PGandE does not warrant the existence or continuous availability of well water and further makes no warranty as to the fitness of said well water for domestic use. Any water taken from said well and used for domestic purposes shall be at grantee's sole risk and PGandE assumes no risk, liability or responsibility for the potability of said well water;

(12) The absence of well water of sufficient quality or quantity shall not require PGandE to refund the consideration paid for the execution of said form of conveyance;

(13) Grantee therein shall save harmless PGandE, its directors, officers, and employees against any and all loss and liability arising out of grantee's failure to fully perform as set forth herein and shall reimburse PGandE for all costs, including reasonable attorney's fees, incurred by PGandE in enforcing the terms and conditions set forth herein;

(14) Upon any breach of any of the terms and conditions set forth herein by grantee therein or any successor or assign of grantee, PGandE may, at its option, terminate any easements, quitclaims or permits appertaining to said breaching party's real property; and

(15) The waiver by PGandE of any breach of any term, covenant, and condition contained herein or any default in the performance of any obligations hereunder shall not be deemed to be a waiver of any other breach or default of the same or any other term, covenant, condition, or obligation. Nor shall any waiver of any incident of breach or default constitute waiver of same.

Except as expressly set forth herein, this indenture shall not in any way alter, modify or terminate PGandE's interest in and to said water and water rights.

Dated January 20, 19 84.

Seal

PACIFIC GAS AND ELECTRIC COMPANY

By

R. K. Miller
R. K. Miller
Vice President - General Services

Attested

Taylor
Secretary

Approved by
BOARD OF DIRECTORS

MAR 21 1984 D. Ballis
Date Assistant Secretary

Shasta
General
78-223
lt

Prepared EKC

APPROVED
[Signature]
MANAGER LAND DEPT.

PG & E CO.—APPROVED	
DIV'N. <u>211</u> <u>72-83</u>	LAND <u>PAW</u>
DESC.	OPER. <u>MA</u>
LAW <u>THM</u>	ENG'R.

- 5 -

P. G. & E. CO.
COPY

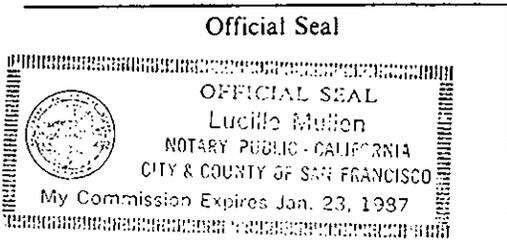
BOOK 2048 PAGE 216

BOOK 981 PAGE 513

STATE OF CALIFORNIA
County of San Francisco } ss.

On this 20th day of January in the year 1984, before me, Lucille Mullen
a Notary Public for the State of California, personally appeared R. K. Miller
personally known to me (or proved to me on the basis of satisfactory evidence to be the person(s) who executed the within instrument as
Vice President-General Services, or on behalf of Pacific Gas and Electric Company,

a corporation, and acknowledged to me that the corporation executed it pursuant to its by-laws or a resolution of its board of directors.



Lucille Mullen

Notary Public for the State of California

BOOK 2048 PAGE 217

EXHIBIT "A"

Recap of Fee Deeds out by PGandE within which rights were reserved for water appurtenant to said property, rights to construct, reconstruct electric pole or tower lines, telephone lines, ditches, flumes, aquaducts, roads, bridges, and ingress on and egress from properties to exercise all of said rights and easements reserved:

<u>L.D. No.</u>	<u>Grantee</u>	<u>Dated</u>	<u>Recorded</u>	<u>Location/Remarks</u>
2131-02-0014	"Forward"	11/15/48	V.305, P.84 Shasta County	Sections 31, T.31N., R.2E., Sections 1, 2, 11, 14, 15, 16, T.30N., R.1E., Sections 5, 6, 8 & 18, T.30N., R.2E., (all inclusive reservations)
2430-01-0069	"Fuller"	4/28/24	B.1, P.152 Shasta County	Sections 27, 26, & 25, T.30N., R.1W., (all inclu- sive reservations)
2430-01-0039	"Delashmutt"	2/16/28	B.1007, P.615 Shasta County B.9, P.237 Tehama County	Sections 35, 36, 25 and 34, T.30N., R.1W., (all inclu- sive reservations)
2131-02-0006	"Kimball"	7/16/30	B.58, P.342 Shasta County	Section 33, T.31N., R.2E., (all inclusive reservations)
2131-02-0025	"McCarty"	2/01/27	B.28, P.100 Shasta County	Section 1 & 2, T.31N., R.2E., (all inclusive reser- vations)
2131-02-0058	"Blodgett"	4/28/24	B.1, P.99 Shasta County	Sections 30 & 29, T.31N., R.2E., (all inclusive reser- vations)
2430-01-0029	"Null"	11/15/27	V.33, P.287 Shasta County	Section 21, T.30N., R.1W., (all inclusive reseryations)
2430-01-0030	"State of CA"	3/03/52	V.364, P. 1 Shasta County	Sections 20 & 29, T.30N., R.1W., (all inclusive reser- vations), except 0.50 CFS of water from Darrah Creek for domestic and minor irrigation, water flowing through Pacific Power Ditch, but water to be returned before Coleman Siphon, the right to divert and use for fish hatching water from Darrah Creek but water shall be returned to Darrah Creek above Asbury Pumping Station.

<u>L.D. No.</u>	<u>Grantee</u>	<u>Dated</u>	<u>Recorded</u>	<u>Location/Remarks</u>
2430-01-0064	"Hall"	11/18/20	B.147, P.256 Shasta County	Sections 8, 9 and 16, T.30N., R.1W., (all inclu- sive reservations)
2131-01-0041	"Abbott"	6/17/40	B.171, P.8 Shasta County	Section 34, T.31N., R.1E., (all inclusive reservations), except Grantee's rights to use water flowing from the spring located in the S-1/2 of the SE-1/4 of the NE- 1/4 of Section 34 for domestic purposes.
2131-01-0052	"Green"	4/23/45	V.231, P.76 Shasta County	Section 35, T.31N., R.1E. (all inclusive reservations)
2130-01-0062	"Meyer"	4/03/25	V.25, P.477 Shasta County	Sections 21 and 20, T.30N., R.1E., (all inclusive reser- vations)
2130-01-0075	"Ogburn"	4/06/55	V.276, P.291 Tehama County	Sections 28 and 29, T.30N., R.1E. (all inclusive reser- vations)
2130-01-0088	"Ward"	9/16/24	V.2, P.305 Shasta County	Section 21, T.30N., R.1E. (all inclusive reservations)
2130-01-0171	"DeLaMontanya"	12/02/24	V.14, P.261 Shasta County B.124, P.32 Tehama County	Section 22, T.30N., R.1E. (all inclusive reservations)
2130-01-0165	"DeLaMontanya"	4/09/45	B.488, P.400 Shasta County B.163, P.206 Tehama County	Section 22, T.30N., R.1E. (all inclusive reservations)
2130-01-0173	"Stone"	3/05/26	B.14, P.301 Shasta County B.121, P.249 Tehama County	Sections 20, 30 and 29, T.30N., R.1E., (all inclu- sive reservations)
2130-01-0007	"Null"	7/22/26	V.25, P.434 Shasta County	Sections 17 and 16, T.30N., R.1E. (all inclusive reser- vations), except grantee's right to use water from a spring near S.W. corner of the NE-1/4 of the NW-1/4 of Section 16.

<u>L.D. No.</u>	<u>Grantee</u>	<u>Dated</u>	<u>Recorded</u>	<u>Location/Remarks</u>
2129-01-0035	"Fullbright"	11/06/25	B.121, P.196 Tehama County	Sections 2, 3, 5, 6 and 11, T.29N., R.1E. (all inclusive reservations)
2130-02--0027	"Keeran"	9/21/21	B.153, P.332 Shasta County	Section 16, T.30N., R.2E (all inclusive reservations)
2131-01-0013	"Busekist"	8/08/44	V.250, P.1 Shasta County	Section 33, T.31N., R.1E. (all inclusive reservations)
2430-02-0028	"Thatcher"	7/21/28	B.44, P.72 Shasta County V.12, P.489 Tehama County	Sections 19, 20, 29 and 30, T.30N., R.1W., Section 25, T.30N., R.2W. (all inclusive reservations)
2430-02--0037	"Thatcher"	12/13/26	V.25, P.483 Shasta County V.12, P.273 Tehama County	Sections 33, 34 and 26, T.30N., R.2W., (all inclu- sive reservations)
2131-01-0019	"Evans"	9/11/62	V.719, P.149 Shasta County	Sections 25, and 36, T.31N., R.1E., PGandE re- served all natural springs, water, creeks or ditches and all water from springs, together with right of access to same, and speci- fically reserved a route describing an electric T/D pole line. Except Grantees can drill a well at location which will not interfere with water flow from springs or creeks and ditches, and also may build 3 fishing ponds at approved locations but must release through PGandE creeks and ditches. Building restric- tion area described also.

To more specifically locate the properties with the sections shown, refer to the recorded documents.

EXHIBIT "B"

EASEMENT

PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, as owner of all surface and subsurface water and water rights within the lands described herein, hereinafter called first party, in consideration of value paid by _____, hereinafter called second party, the receipt whereof is hereby acknowledged, hereby grants to second party the right, subject to termination as hereinafter set forth, to install, operate, maintain and use one (1) water well within the parcel of land situate in the County of _____, State of California, described as follows:

(Insert description of lands)

The maximum quantity of water to be extracted from said well shall be limited to a maximum of _____ acre foot (_____ cubic feet or _____ gallons) per annum. Pump capacity shall not exceed _____ gallons per minute.

This grant is made subject to all of the terms and conditions set forth in that certain indenture made by Pacific Gas and Electric Company dated _____ and recorded in Book _____ of Official Records at page _____, _____ County Records, in the same manner as though fully set forth herein.

BOOK 2048 PAGE 221

BOOK 981 PAGE 518

Second party agrees to notify first party in writing of any sale or subdivision of said parcel of land. Said notice shall be mailed to first party's Red Bluff office, 814 Main Street, Red Bluff, California 96080, Attention: Division Electric Superintendent.

The interest in real property hereby conveyed is no longer necessary or useful to first party in the performance by it of its duties to the public.

The provisions hereof shall inure to the benefit of and bind the successors and assigns of the respective parties hereto, and all covenants shall apply to and run with the land.

IN WITNESS WHEREOF, the parties hereto have executed these presents this

_____ day of _____, 19____.

First Party:

Second Party:

PACIFIC GAS AND ELECTRIC COMPANY _____

By _____

R. K. Miller
Vice President - General Services

Attested _____

AFTER RECORDING, RETURN TO:

FOR RECORDER'S USE ONLY

EXHIBIT "C"

AGREEMENT

THIS AGREEMENT is made by and between _____,
hereinafter called first party, and PACIFIC GAS AND ELECTRIC COMPANY, a
California corporation, hereinafter called second party, and affects certain lands of first
party, situate in the County of _____, State of California, described as follows:

(Insert description of lands)

Second party is the owner of certain rights and easements in, on, over and across all
of said lands, under and by virtue of the reservations contained in the deed from Pacific
Gas and Electric Company to _____ dated _____
and recorded in Book _____ of Official Records at page _____, _____ County
Records.

Said reservations are set forth in said deed dated _____ as follows:

"reserving unto said Pacific Gas and Electric Company, its succes-
sors and assigns, however, all water rights appurtenant to said lands and
the easement of taking, diverting and appropriating to its or their use all
waters constituting part and parcel of said lands and the easement of
constructing, reconstructing, enlarging, replacing, repairing, maintaining
and operating any and all pole lines and tower lines for the transmission

and distribution of electricity, and private telephone lines, and any and all ditches, flumes or other aqueducts for conveying water upon, over and across said lands, of such kinds and capacities and along such routes as may from time to time be selected by said company, its successors or assigns, and the right of ingress thereto and egress therefrom upon, over and across said lands, and also the right to construct, enlarge, maintain and use such roads and bridges over and across said lands as said company, its successors or assigns, may from time to time deem proper in the conduct of its or their business of generating, transmitting and distributing electricity; provided, however, that the right to use all foreign waters which the party of the second part, his heirs or assigns, shall conduct to said lands by means of his own conduits or aqueducts and which shall be vested in the party of the second part, his heirs and assigns, shall continue to remain vested in the party of the second part, his heirs and assigns."

First party plans to subdivide and develop said lands and desires that second party relinquish certain of its rights and easements reserved in said deed dated _____ and second party is willing so to do.

NOW THEREFORE, in consideration of value paid by first party to second party, the receipt whereof is hereby acknowledged, second party hereby quitclaims to first party the portions of the rights and easements within said lands of first party as reserved by second party in said deed dated _____ described as follows:

(Insert specific rights and easements to be quitclaimed)

As so modified the rights in, on, over and across said lands as reserved in said deed dated _____ are hereby confirmed in second party on the terms and conditions therein set forth.

Except as expressly set forth herein, this agreement shall not in any way alter, modify or terminate any provision of said deed dated _____.

The rights and easements hereby quitclaimed are no longer necessary or useful to second party in the performance by it of its duties to the public.

The provisions hereof shall inure to the benefit of and bind the successors and assigns of the respective parties hereto and all covenants shall apply to and run with the land.

IN WITNESS WHEREOF the parties hereto have executed these presents this _____ day of _____, 19__.

First Party:

Second Party:

PACIFIC GAS AND ELECTRIC COMPANY

By

R. K. Miller
Vice President - General Services

Attested _____

- 3 -

9414

COMPARED

BOOK 2048 PAGE 225

BOOK 981 PAGE 522

INDEX

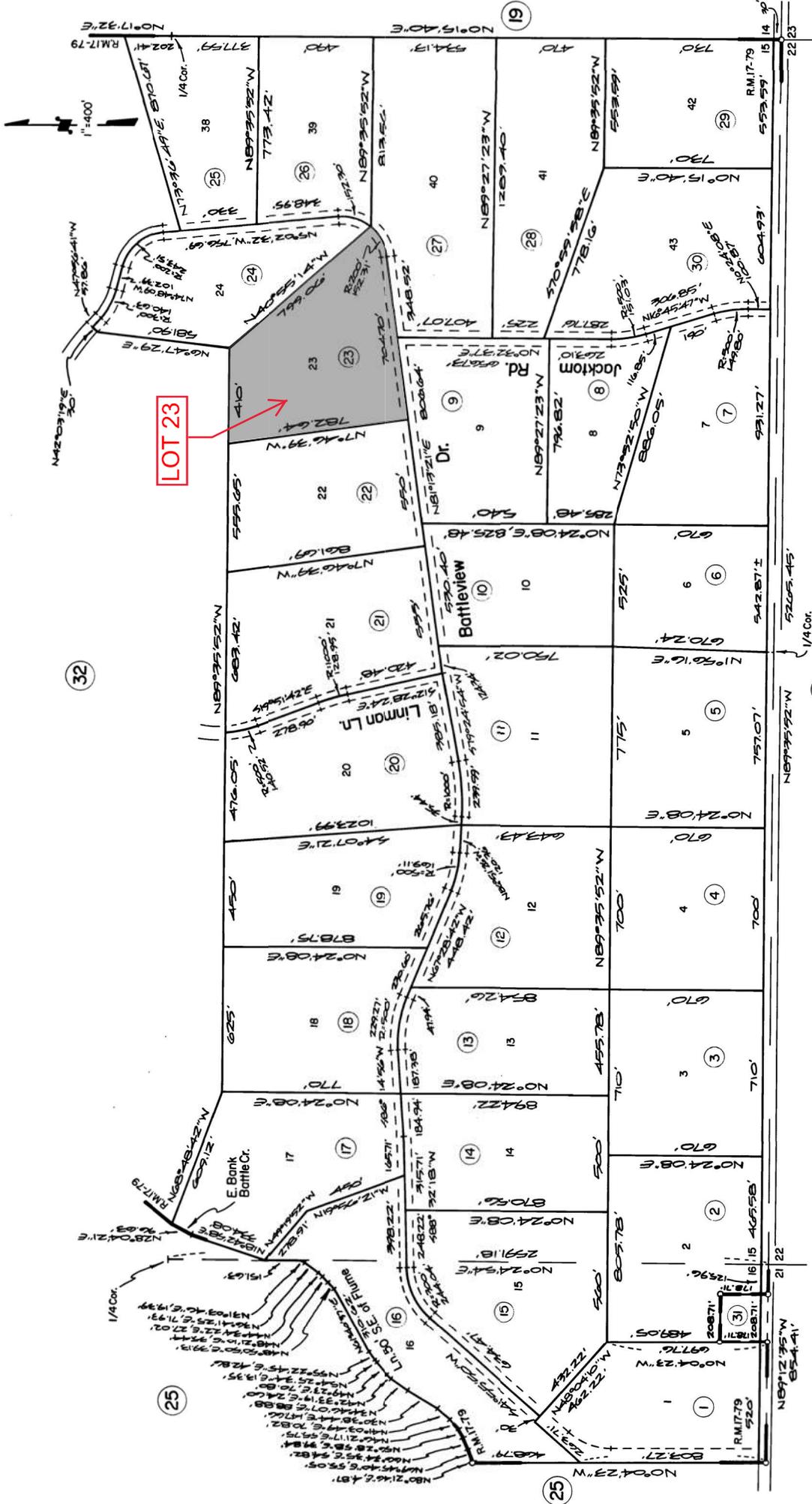


Attachment 2 – Property Maps

(Shasta County Assessor Parcel Maps)

Por. Sec's 15, 8, 16, T. 30N., R. 1E.

703-31

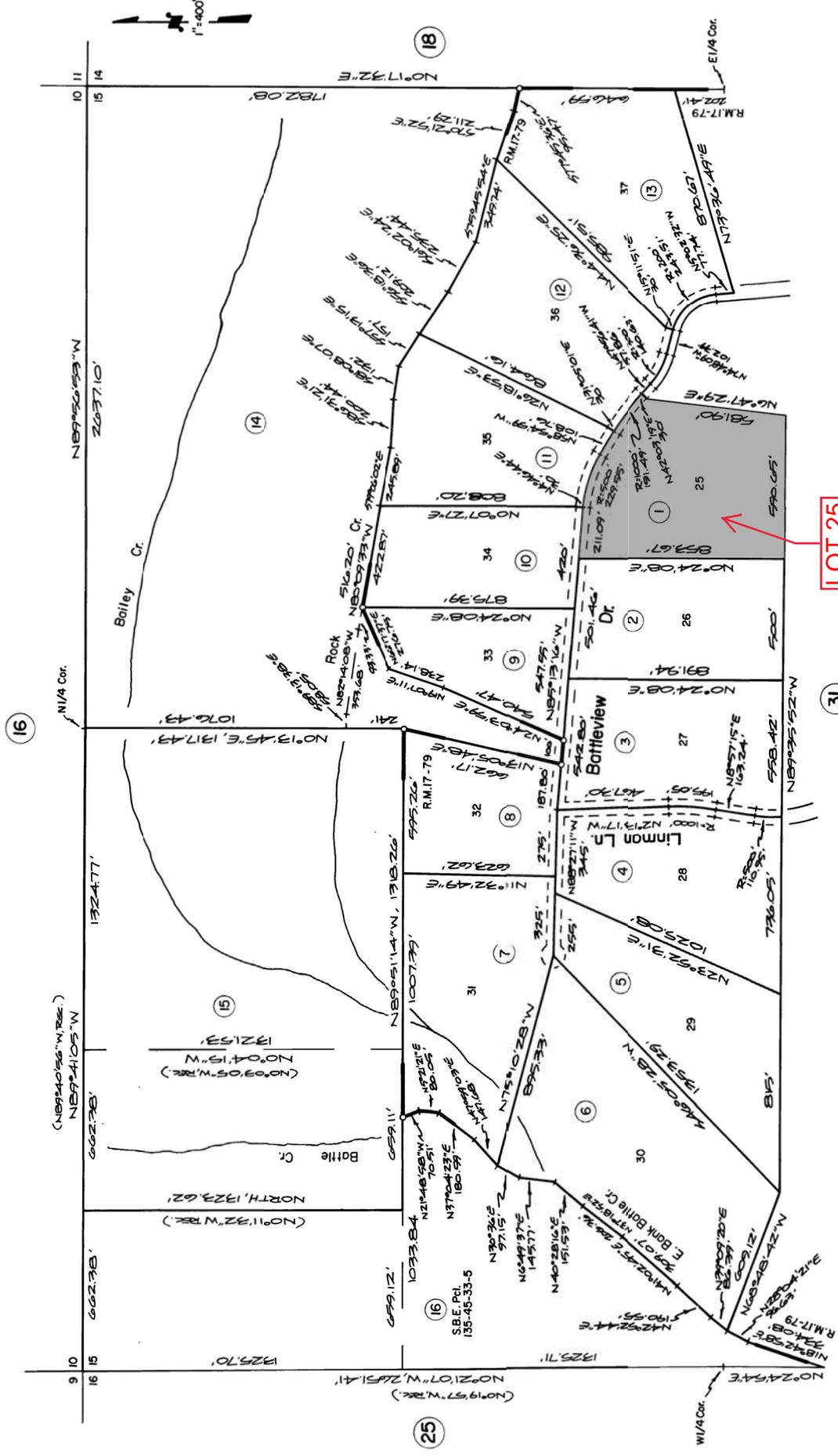


Por. Manton Hgts, per R.M. 17-79
L.S. 45-42,

Assessor's Map Bk. 703, Pg. 31
County of Shasta, Calif.
1985

Por. Sec. 15, T.30N., R.1E.

703-32



Por. Manton Hgts., per R.M.17-79
L.S.45-42

Assessor's Map Bk. 703, Pg. 32
County of Shasta, Calif.
1985

Attachment 3 – Well Easement

RECORDING REQUESTED BY AND RETURN TO:

PACIFIC GAS AND ELECTRIC COMPANY
245 Market Street, N10A, Room 1015
P.O. Box 770000
San Francisco, California 94177

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
- Exempt from the fee per GC 27388.1 (a) (2); This document is subject to Documentary Transfer Tax

(SPACE ABOVE FOR RECORDER'S USE ONLY)

Signature of declarant or agent determining tax

LD# 2130-01-10003

WELL EASEMENT

PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, as owner of all surface and subsurface water and water rights within the lands described herein, hereinafter called first party, in consideration of value paid by MARY DANIEL, hereinafter called second party, the receipt whereof is hereby acknowledged, hereby grants to second party the right, subject to termination as hereinafter set forth, to install, operate, maintain and use one (1) water well within each of the parcels of land situated in the unincorporated area of the County of Shasta, State of California, described as follows:

(APN: 703-310-023, 703-320-001)

Lot 23 and Lot 25 as shown upon the map entitled "Tract No. 1523, Manton Heights Private Road Subdivision" filed for record June 6, 1985 in Volume 17 of Maps at page 79, Shasta County Records.

The maximum quantity of water to be extracted from said well shall be limited to a maximum of one (1) acre foot per annum. Pump capacity shall not exceed 30 gallons per minute.

This grant is made subject to all of the terms and conditions set forth in that certain indenture made by Pacific Gas and Electric Company dated January 20, 1984 and recorded in Book 2048 of Official Records at page 212, Shasta County Records, in the same manner as though fully set forth herein.

Second party agrees to notify first party in writing of any sale or subdivision of said parcel of land. Said notice shall be mailed to first party's Redding Land Rights Office, 3600 Meadowview Drive, Redding, CA 96002, Attention: Land Agent, Hydro Support.

The interest in real property hereby conveyed is no longer necessary or useful to first party in the performance by it of its duties to the public.

The provisions hereof shall inure to the benefit of and bind the successors and assigns of the respective parties hereto, and all covenants shall apply to and run with the land.

IN WITNESS WHEREOF the parties hereto have executed these presents this _____ day of _____, 20_____.

First Party:

Second Party:

PACIFIC GAS AND ELECTRIC COMPANY,
a California corporation

By _____
Sarah Hug
Manager
Hydro Support

Mary Daniel

Area 6 – North Valley
Land Service Office: Redding
Line of Business: Hydro (24)
Business Doc Type: Conveyances Out
USGS location: 21.30.01.15.12, 21.30.01.15.13, 21.30.01.15.21, 21.30.01.15.24
FERC License Number(s): N/A
PG&E Drawing Number(s): N/A
LD of any affected documents: N/A
LD of any Cross-referenced documents: 2131-01-0295
TYPE OF INTEREST: 11
SBE Parcel Number: N/A
(For Quitclaims, % being quitclaimed) N/A
Order# 2047428
JCN: N/A
County: Shasta
Utility Notice Numbers (if applicable) N/A
851 Approval Advice Letter No. _____
Prepared By: RGRR
Checked By: S2P0

Attachment 4

Environmental Impact Report #19-78, Manton
Heights Subdivision, Tract 1523

and

Resolution No. 5593 (December 9, 1982)

Planning Commission of the County of Shasta

INTRODUCTION TO PROPOSED FINAL E.I.R. #19-78

MANTON HEIGHTS SUBDIVISION

TRACT 1523

OCTOBER, 1982

This Project originally began in 1978 and was contemplated as a 36 lot subdivision on approximately 490 acres. The Project went through various transitions and was delayed by archaeological investigations and by a determination of consistency with the County General Plan.

In 1981, the Project was revised to create 43 lots with an average size of 11 acres together with a 96 acre (±) remainder. The subdivision was reviewed by the ~~Board of Supervisors and was determined to be consistent with the General Plan.~~ *PC.* *a preliminary determination of consistency with the G.P. was made*

The original E.I.R. was prepared in 1978 and 1979, but was not finally adopted. The revised E.I.R. contained herein consists of the original draft E.I.R., together with appendices for the original draft and with updated additions.

land The revised Project results in no impacts not already addressed in the original E.I.R.; however, some previously identified impacts no longer constitute significant impacts on the environment due to changes in State Law. S.B. 803, Chapter 264, Statutes of 1982, restricted or limited significant impacts on the environment to those relating to air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Service impacts are no longer considered to be "significant effects on the environment". Because of this change in State Law, a revised summary of impacts and mitigation measures follows this introduction.

Figure A-1 shows the revised Project layout and new lot numbering system so that a correlation can be made between the original and revised projects. The Project Site Map, Figure 2, on Page 3, shows the originally proposed subdivision. This is the map that should be referred to when reading the document.

Appendices 1-11 were part of the original draft E.I.R. and are contained herein in their original form. Appendix 12 has been added and consists of comments received in 1978 and 1979 pertaining to the original draft. Appendix 13 is our response to the written comments of Appendix 12.

Appendix 14 contains more recent correspondence received for the Project during 1982.

Appendix 15 contains comments received in response to the 1982 recirculation of the Revised Draft E.I.R. Appendix 16 is our response to those comments.

Since the preparation of the original document, the Bailey Creek Hydroelectric Project has been developed partially on this site. A small diversion dam has been constructed on Rock Creek at the rear of Lot 34, and a bridge has been constructed across Rock Creek. The hydroelectric Project traffic uses the road alignments within this proposed subdivision, and roads have already been constructed.

As indicated in the original document, the roads and drainage facilities in this subdivision will be privately owned by a Property Owner's Association. The Association will have the power to assess annual dues on each property owner by majority vote. The Association will be established in accordance with County requirements. Also, road and drainage construction and all grading will be in conformance with the requirements of the Shasta County Department of Public Works.

This document will be reviewed by the County and circulated, as required, to the appropriate officials for final comments.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

1. An important archaeological site (The Southern Yana Village) may be further disturbed or destroyed.

Mitigations: Establishment of a fenced Resource Conservation Zone (Green Belt) to include the sensitive area delineated in Figure 4 on lot 34. This zone would prohibit development and reduce access to the sensitive area. ~~Elimination of property taxes on the parcel could help to alleviate any financial hardship such zoning would place on the landowner.~~

*Modified by
Contract and
report
[Signature]*

Future landowners of the proposed lots should be informed of the scientific and cultural value of the sites to reduce the possibility of accidental or inadvertent disturbance of the sites. Landowners should also be informed of the potential health hazard, Valley Fever, associated with disturbing such sites.

Archaeologists from the District 2 Clearinghouse should periodically inspect the area to ascertain the extent of any disturbance that might occur. Recurring vandalism might require that more stringent protective measures be developed for the areas.

2. A rare and endangered (or threatened) plant species may be eliminated or reduced in number.

Mitigations: Prohibit development and vegetation removal in sensitive areas shown in Figure 4 and along the creek canyon slopes. A single Resource Conservation zone, 250 feet on each side of Rock Creek, may protect all sensitive areas.

need

3. Hunting and the introduction of domestic pets into the area will result in increased pressure on wildlife populations. Development of the site will attract certain small carnivores and rodent species, which may become a nuisance.

*See
DPA letter
p. 2*

Mitigations: By Deed Restrictions, hunting will be forbidden within the subdivision; pets will be confined to the vicinity of homesites, and fencing will conform to the recommendations of Fish and Game. Refuse should be wrapped in plastic and stored in metal containers prior to removal to the transfer facility south of Manton.

4. Wildlife habitat, particularly shelter areas, will be reduced.

Mitigations: Whenever possible, locate home in existing clearings and limit vegetation removal to that necessary for adequate fire protection. Disruption of existing habitat may benefit some species while displacing others.

The following Governmental Agencies are expected to utilize this E.I.R. in their decision making processes for the noted actions:

1. Shasta County Planning Commission - Subdivision approval.
2. Possibly the California Department of Water Resources, Division of Water Rights.

*Send copy
of updated
comments*

MANTON HEIGHTS
DRAFT
ENVIRONMENTAL IMPACT REPORT

PREPARED FOR THE COUNTY OF SHASTA BY

ECO-ANALYSTS
169 COHASSET ROAD, #4
CHICO, CALIFORNIA 95926
(916) 342-5991
9 MAY 1978



TABLE OF CONTENTS

SUMMARY	i
I. PROJECT DESCRIPTION	1
II. PHYSICAL ENVIRONMENT	1
A. Topography	1
B. Geology	1
C. Soils	5
D. Geologic Hazards	5
E. Hydrology	8
1. Surface Water	8
2. Ground Water	8
F. Airshed	9
1. Climate	9
2. Air Quality	9
III. HISTORICAL ENVIRONMENT	10
IV. BIOLOGICAL ENVIRONMENT	12
A. Habitat	12
B. Wildlife	14
V. SOCIO-ECONOMIC ENVIRONMENT	15
A. Land Use	15
B. Conformance with General Plan	16
C. Access	16
1. Roads	16
2. Mustang Field	16
D. Public Service Agencies	17
1. Fire	17
2. Sheriff	17
3. Schools	18
E. Utilities	18
F. Waste Disposal	18
1. Solid Wastes	18
2. Sewage	18
VI. IMPACTS AND MITIGATION MEASURES	19
A. Significant Adverse Impacts which may Occur if the Proposal is Implemented	19
B. Adverse Impacts which Cannot be Avoided if the Proposal is Implemented	21
VII. ALTERNATIVES	21
VIII. GROWTH INDUCING IMPACTS	23

APPENDICES

1. References
2. Persons and Organizations Contacted
3. Report of District Archaeologist
4. Plants
5. Wildlife
6. Birds
7. Reptiles and Amphibians
8. Energy Conservation
9. Statement of Qualifications of Preparer
10. Statements Concerning Ground Water Rights
11. Mobile Source Emissions

LIST OF FIGURES

- | | |
|--|----|
| 1. Location Map | 2 |
| 2. Site Map | 3 |
| 3. Soils Map | 6 |
| 4. Archaeologically and Biologically Sensitive Areas | 11 |
| 5. Plant Communities | 13 |

SUMMARY

The project site consists of 490± acre parcel located in southeastern Shasta County. The proposal requests that the site be subdivided into 36 lots averaging 13.5 acres each.

The slope of the site averages 5 percent. Soils include sandy and stony loams. Potential geologic hazards include: small landslides or rock falls, slight volcanic hazard, erosion, ground shaking and liquifaction.

Surface water features on or near the site include three perennial streams, a man-made ditch and a small stock pond. The potential for groundwater or surface water contamination is slight, provided wells and septic systems are properly located, constructed and sealed.

Air quality in the area is generally good to excellent. The proposal should have no significant effect on air quality.

Three historic and nine prehistoric sites are located on the site. A Resource Conservation zone is suggested as a possible method of preserving these sites.

An isolated population of a rare plant, *Fritillaria Eastwoodiae* is located at the site. This species requires protection, and can be included in the archaeologically sensitive zone.

The Southern Bald Eagle, a rare and endangered bird, may include a portion of the site in its hunting range. The actual presence of this species was not recorded during the survey.

There may be a conflict between Mustang Field and the proposed development. This conflict should be minimal because the flight pattern generally used when approaching or leaving the field does not cross the project site.

Access to Rock Creek will be required for fire suppression.

Potential adverse impacts are:

1. Destruction of an important archaeological site.
2. Elimination or reduction in number of an endangered plant species.
3. Alteration of wildlife density and species composition.

4. Alteration of wildlife density and species composition.
5. Increased potential for wildfire.
6. Increased potential for water pollution.
7. Increased demands for public services.
8. Potential conflict between Mustang Field and land use within the site.

Alternatives considered are:

1. Higher density development.
2. Planned Area Clusters.
3. Recreation ranch.
4. No project.

I. PROJECT DESCRIPTION

This draft EIR covers the proposed subdivision of a 490± acre site into 36 individual lots averaging 13.5 acres each. An additional 89± acres of the original parcel will remain undivided because of its inaccessibility (see Fig. 2).

The development site is located on Rock Creek Road approximately 1 mile north of Manton. It covers nearly all of Section 15 and a small portion of Section 16 of T30N, R1E, M.D.B.M. (see Figs. 1 and 2). Shasta County designates the project as Tract #1523, Manton Heights.

The subdivider will establish private roads and sell lots. Buyers may build homesites or use their land for recreational activity. Few buyers are expected to establish year round residences in the development. Water is to be provided by individual on-site wells. Sewage disposal will be by individual septic tank systems.

The Technical Advisory Committee of Shasta County requested an EIR with specific emphasis on the proximity of Mustang Field, traffic and road conditions, fire protection and water availability.

On-site surveys by teams of specialists were conducted in late March and early April 1978.

II. PHYSICAL ENVIRONMENT

A. Topography.

That portion of the site marked for development is a series of gently rolling ridges. Elevation ranges from approximately 2,120 to 2,460 feet. Average slope is 5 percent. The site is bounded to the north and northwest by steep canyons which are nearly vertical in areas of basalt outcroppings. Rock Creek canyon separates the development area from the remaining lands portion of the site (see Fig. 2).

B. Geology.

From oldest to youngest, the rock units in and beneath the site are: (1) Eocene (60-40 million years old) clay-bearing sediments, probably at depths of 500 to 1000 feet (Paulsen 1968); (2) late Pliocene (4-3 million years old) volcanic mudflows and volcanic sediments of the Tuscan Formation; (3) late Pliocene basalt flows, exposed over about two-thirds of the site; and (4) Pleistocene (1 million years old) pumice tuff, exposed over the remainder of the site.

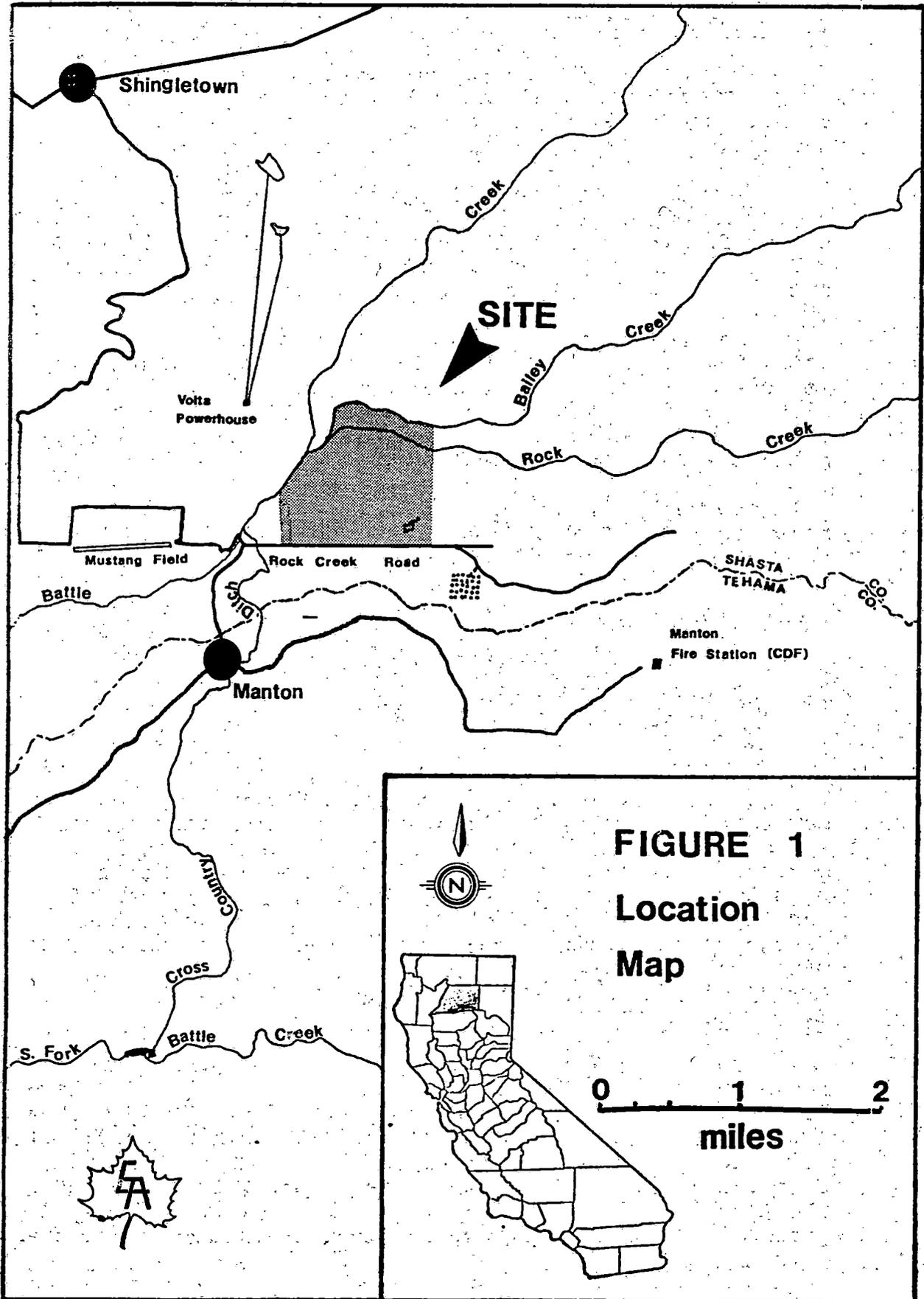


FIGURE 1
Location
Map

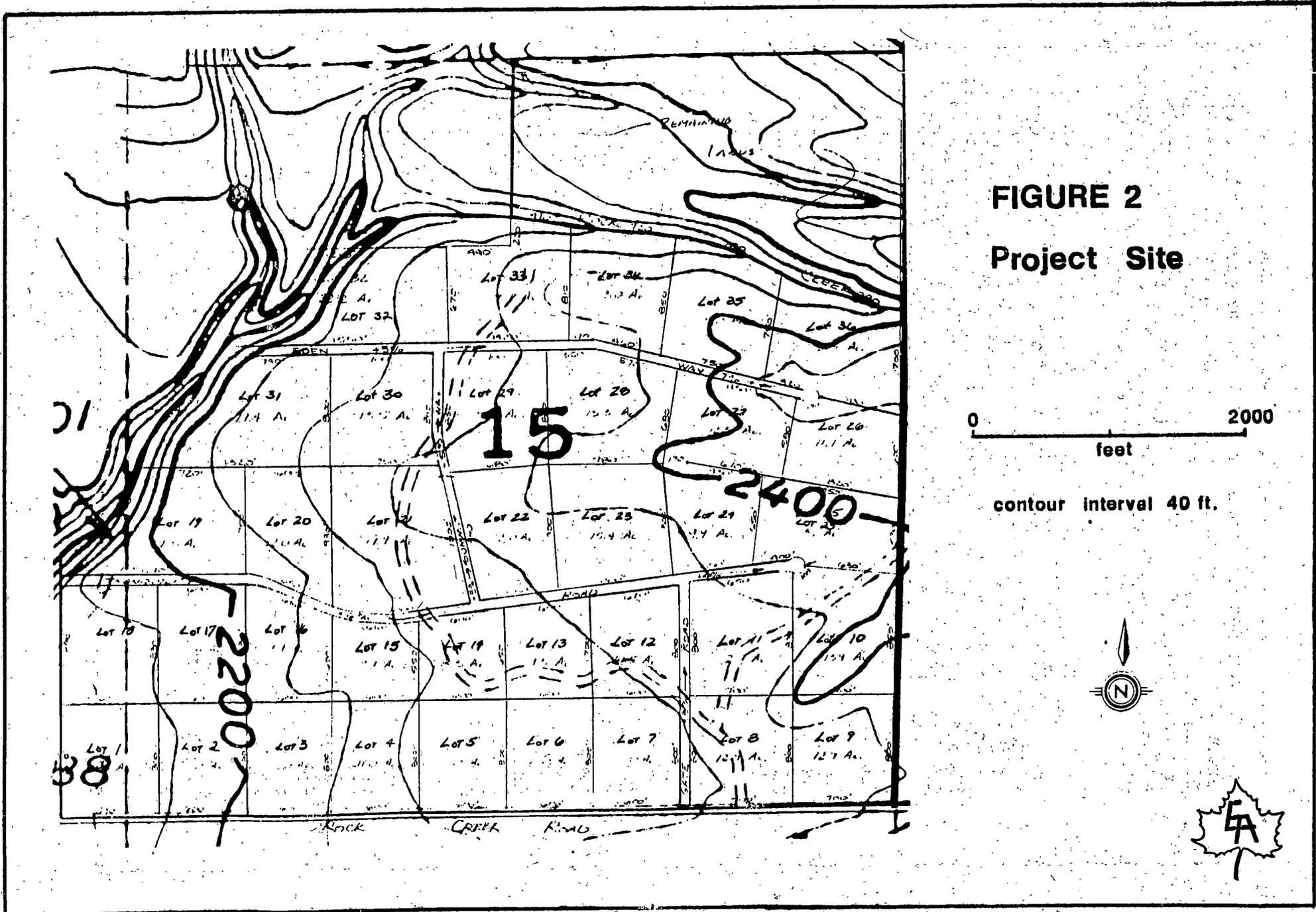


FIGURE 2
Project Site

0 2000
feet

contour interval 40 ft.



Clayey Eocene sands of low average permeability are exposed intermittently on the south flank of Shingletown Ridge, from 1 to 3 miles west of the site. They are not exposed south of the base of the Ridge, but very possibly extend southeastward beneath the site. If so, they represent a zone within and below which adequate supplies of domestic water are not likely to be encountered.

Volcanic sediments and mudflows of the Tuscan Formation are exposed in the south part of Shingletown Ridge north and northwest of the site, where rock strata are inclined southward. In the canyon of South Fork Battle Creek, 3 1/2 miles south of the site, these same rocks are almost flat-lying and are exposed between elevations of 1600 and 2400 feet. They probably underlie all of the site at depths not greater than 200-300 feet. In the eastern part of the site, south of Rock Creek and above the 2440 ft. contour, scattered rocky debris appears to be Tuscan Formation material, possibly representing a small hill or ridge carved in the unit by eroding streams after the Tuscan Formation had been deposited. Thus, Tuscan might underlie some of the eastern part of the project site at shallower depths than is the case elsewhere in the area.

Light to medium-gray basalt is exposed over much of the site. Exposures in canyon walls on and near the site show that it consists of a series of flows that slope gently west or southwest, cut by numerous vertical and sub-horizontal fractures (joints). On flat or gently-sloping areas, the basalt weathers to a reddish-brown clayey soil that contains abundant sub-angular to sub-rounded loose fragments of rock, ranging in size from less than an inch up to 3 or 4 feet across. In the canyon of Battle Creek along the west boundary of the project, the basalt is at least 160 feet thick.

White- to buff-colored pumice tuff is exposed mainly in the northwestern and western part of the project. It ranges from loose non-cohesive sandy debris to material that is compact and cohesive enough to support low steep bluffs. The pumice tuff is unusually permeable. It was erupted from a source several miles east of the site, and covered the earlier eroded basalt. Its original thickness and extent have been modified by later erosion, so that it is difficult to estimate its present thickness accurately. Probably the thickest part is near Lot 34; maximum thickness in the site is probably about 60 feet. Because of its unusual permeability, it does not retain water well enough to be a favorable unit for production of water.

C. Soils.

The predominant soil type of the project area is Cohasset stony loam (see Fig. 3). This dark reddish brown soil has moderate permeability and variable runoff and erosion potential. The water holding capacity is 7 to 9 inches. Depth to bedrock is 48 to 60+ inches. Stones cover 1-3 percent of the surface and comprise 15-25 percent of the entire profile.

Cohasset stony loam generally supports woodland, but is suited to irrigated pasture and orchards at elevations below 4000 feet. The agricultural capability of this soil is limited because of the erosion potential and stoniness. Careful management of this soil is necessary for long term productivity.

Properly constructed leach fields and septic tanks for low density development should function adequately in this soil.

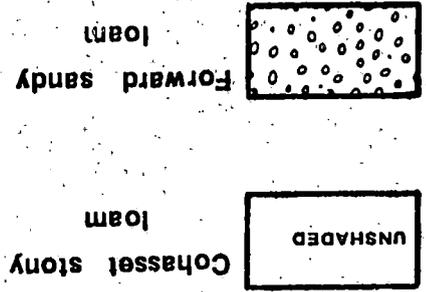
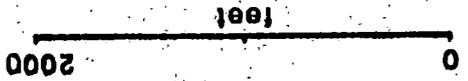
The other major soil type of the site is Forward sandy loam. This well-drained soil is underlain at depths of 20 to 48 inches by consolidated rhyolitic tuff. At the surface, Forward stony loam is light brownish gray. Permeability of the soil is moderately rapid, runoff is generally high, and erosion is moderate to high.

The soil supports woodland and is generally unsuited for cultivation. Due to the coarse texture and relative steepness commonly associated with Forward sandy loam, this soil is not well suited for septic tanks and leach fields. Because of the low density of the proposed project, however, properly constructed septic systems in the soil should prove adequate provided they are properly located. Since the proposed project is based on large parcels, properly located and constructed septic systems should provide adequate treatment of liquid wastes. If this is not satisfactory, modified mound systems can be developed for those lots that are entirely on Forward sandy loam.

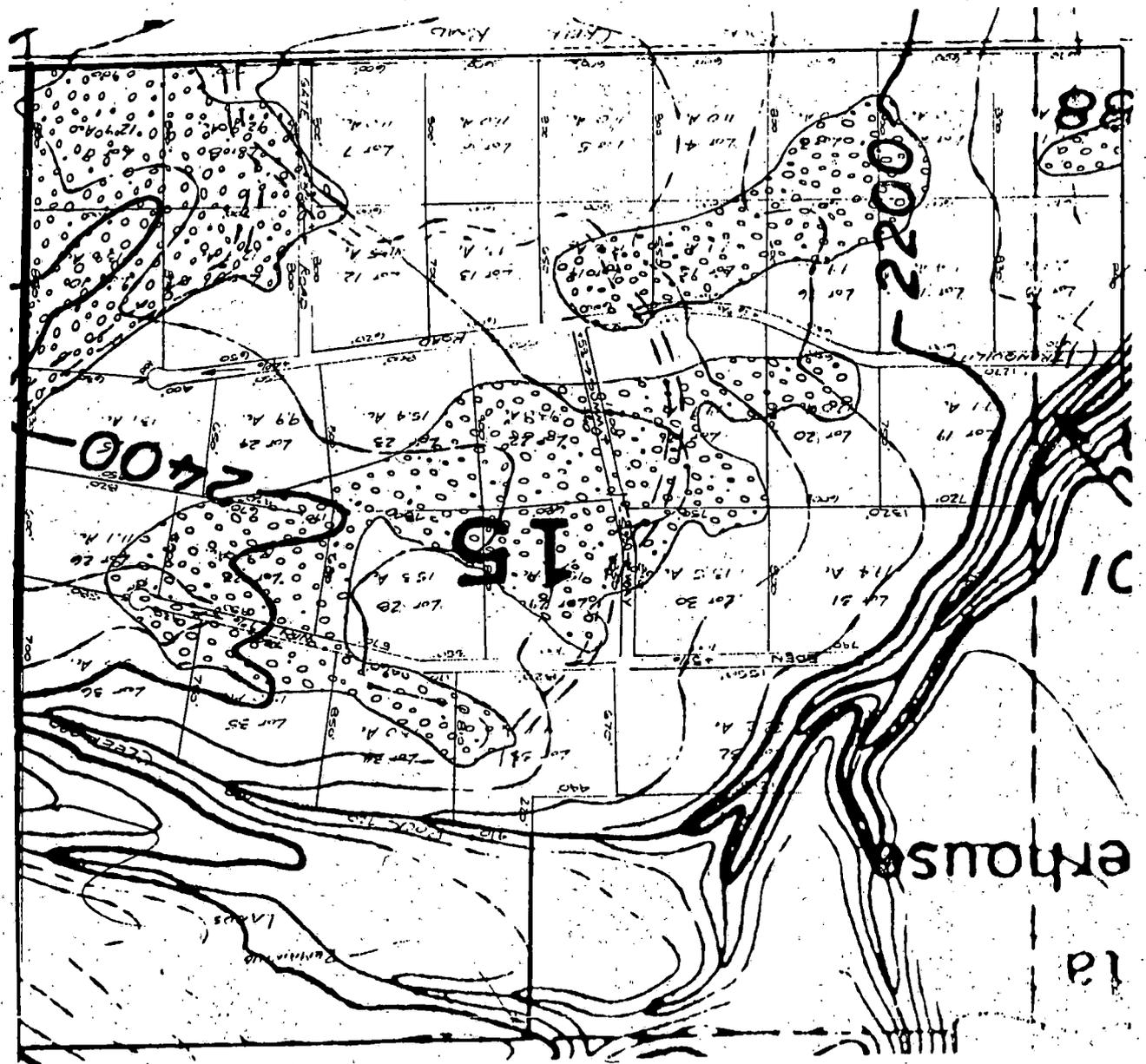
D. Geological Problems and Hazards.

The following are not expected to be problems in the area: loss of mineral resources (the pumice tuff, useful for road base and light-weight aggregate, is exposed extensively to the east of the site), expansive soils, flooding, fault displacement, subsidence, and water availability.

Small landslides or rock falls could be a problem close to the canyon rims of Battle and Rock Creeks. Large blocks of jointed basalt, some of which probably represent past falls or slumps, are present on canyon slopes. The potential hazard can be mitigated by not building structures too close to the canyon rims.



Soils
FIGURE 3



A potential volcanic hazard is present, but is very slight. Lassen Peak, about 20 miles to the east, is probably not extinct. It is very unlikely, however, that a lava flow could reach the site because of the nature of the intervening topography. Such hazard as exists would be from a volcanic-ash eruption, in which fine particles of volcanic rock (ash) might be explosively erupted vertically and then carried laterally by the wind. Blankets of ash 1/2 to 1 foot thick could add 100 to 200 pounds per square foot to the roofs of homes and outbuildings. However, because the probability of eruption is low, and because east winds are uncommon in this area, it seems extremely unlikely that damage or injury at this site would result from a volcanic-ash eruption centered near Lassen Peak.

Erosion activity is not a potential problem on the basalt or soils derived from it. However, the pumice is soft and loose enough in places that steep cuts or scalped patches on slopes might be subject to accelerated erosion. In contrast, some compact parts of the tuff are so permeable that surface runoff is not an effective agent of erosion. The problem of local erodability can be mitigated by not making overly-steep cuts and by using erosion-control techniques on any sloping scalped patches that are necessary.

No known active faults are in or near the project site. The nearest known active faults are 80 miles to the south and southeast (Mohawk Valley fault, eastern Plumas County, and Cleveland Hill fault, Butte County).

Few earthquakes have been felt in the Red Bluff area during the last 100 years; of 12 felt earthquakes listed by Guyton and Scheel (1974), two originated in or near Lassen Park (1936, 1946) and one in or near Red Bluff (1884); the others came from outside Tehama and Shasta Counties. Alfors et al. (1973) show the general area of this project as being subject to a maximum earthquake intensity of VI or VII on the Modified Mercalli scale. (Intensity refers to felt effects of an earthquake; VII includes cracking of masonry in well-constructed frame houses, and breaking of weak chimneys.) In general, ground-shaking effects of an earthquake are minimized on rock or on hard, dry, compact, cohesive soil. Effects tend to be maximized on soft, loose, non-cohesive soils; further, if such soils are saturated when shaken by an earthquake, the possibility of damage to structures by ground lurching or liquifaction is even greater. Effects on non-cohesive soils are potentially more damaging on slopes than on flat areas.

The pumice tuff on the site appears in places to be loose and only weakly-cohesive. If drainage should be impaired during heavy winter rains, local areas of saturation might occur that could make the physical condition of the tuff even worse.

A registered engineering geologist or soils engineer should be consulted to evaluate the potential problem of ground response by the pumice tuff during an earthquake, and to determine what, if any, remedial measures are necessary for specific lots and construction proposals.

E. Hydrology.

1. Surface Water

Surface hydrologic features on or near the site include Bailey Creek, Rock Creek, and the North Fork of Battle Creek, Cross Country Ditch, and a small stock-watering pond (see Fig. 1). Water in the ditch is diverted from Battle Creek and supplies the domestic water needs of Manton before powering the generators at South Powerhouse 3.5 miles south of the project site.

The overall impact of the project on these features should be minimal because of the low density of proposed development. Sediment from construction sites on the erodible pumice soils could be a significant surface water pollutant. Sediment production can be reduced by eliminating deep cuts and using erosion-control techniques on any sloping scalped patches. Septic tank effluent moving laterally through pumice or fractured basalt also has a potential for contaminating surface water. The risk of such contamination can be minimized with proper construction of leach fields, and by locating such fields as far from streams as possible.

2. Ground Water

The principal aquifers underlying the site are the Pliocene basalt and mudflows described in the Geology section. It is estimated that mudflows underlie all of the site at depths not greater than 200-300 feet. These mudflows, known as the Tuscan Formation, consist of relatively impermeable volcanic flows between which are lenses and layers of relatively permeable volcanic sand and gravel. As a whole, Tuscan Formation generally yields low to moderate amounts of water, with considerable variation in yield both vertically and horizontally. The basalt, overlying the Tuscan Formation, is exposed over much of the site. Because of extensive jointing of the basalt, and the probable separation of flows by thin permeable strata of volcanic sand and gravel, the unit as a whole is probably

moderately permeable. Well yields in this type of rock are estimated to be 20 to 100 gpm, with the yield varying widely from well to well, and with depth. (See Appendix 10).

Ground water degradation as related to septic-effluent disposal is a problem that could be troublesome in that part of the project site covered by the pumice tuff described in the Geology section. The tuff is very permeable and relatively unweathered, lacking clays that aid in slowing percolation in most soils. Leach-line effluent could travel long distances laterally without significant treatment. This is especially true if the descending effluent should encounter an impermeable sloping layer, such as a clay stratum in the tuff or a buried clayey basaltic soil at the base of the tuff.

Direct contamination of groundwater by septic effluent is unlikely, as water probably will be obtained from depths of 200-300 feet. Nevertheless, groundwater might be affected if laterally-moving effluent in the pumice could enter an incorrectly cased or sealed well.

Both problems can be mitigated by properly casing and sealing wells, especially in the pumice (casing should extend below the base of the pumice), and by placing leach lines -- especially on sloping ground in the pumice -- in such positions that effluent will not cross lot boundary lines. Accomplishing this latter objective might require: testing of liquid travel paths, including use of dyes and shallow observation wells; expansion of lot sizes; and/or rearrangements of lots on the pumice to take into account the slope of the ground and likely effluent travel paths.

F. Airshed.

1. Climate

The climate of the area is upland Mediterranean. Hot dry summers and cool moist winters prevail. Precipitation at the Volta Powerhouse averages 33 inches annually. Thunderstorm activity in the area causes summer rainfall to be slightly higher than in the Sacramento Valley. Snowfall is not uncommon, but no long-term average for the area is available. The highest temperature ever recorded at Volta Powerhouse was 110°F., but the station's mean maximum temperature for July is 94.1°F. The mean monthly low for January is 34°F. Temperatures as low as 10°F. have been recorded. Wind data are not available.

2. Air Quality

Air quality in the area is generally excellent. At lower elevations, particulate matter from agricultural and

other burning caused some concern, but prevailing wind conditions and low persistent inversions prevent valley-generated pollutants from reaching the project area. The proposed project will increase particulates during and after construction. This can be minimized by watering during construction and using the sandy volcanic tuff and gravel for the private roads. A slight increase in pollutants due to the greater traffic volumes will also occur. (See Appendix 11).

III. HISTORICAL ENVIRONMENT

Records of the District 2 Clearinghouse of the Society for California Archaeology were reviewed before site reconnaissance. Field surveys were conducted in late March and early April 1978 by the District 2 Archaeologist and an assistant (see Appendix 3).

Three historic and nine prehistoric sites were recorded during the surveys. The prehistoric sites are mainly concentrated along the south bank of Rock Creek and on the ridge between Rock and Bailey Creeks. A large village site covers the ridge designated as lots 33-36. This may be the Southern Yana Village of K'ui'ha, sketched by Ishi, the last of the Yahi Indians (cf. Kroeber p. 344). There is a small lithic scatter in the vicinity of lots 18 and 20, but this has been disturbed by prior activities and no longer possesses historical or research value. The historic homestead sites were occupied by earlier landowners, and only the rock foundations, truck dumps and rock walls remain.

The Southern Yana Village site and surrounding areas (see Figure 4) have special archaeological value and should be protected against destruction. The Society for California Archaeology recommends that, as an alternative to No Project, the landowner enter into an agreement with the society to preserve the archaeological resources. A non-exclusive easement to the properties overlying the sensitive areas should be provided.

Any development on surrounding lands will result in some losses due to vandalism and souvenir collecting. This may be minimized by advising new landowners of the importance of leaving the sites undisturbed. New residents should also be advised of a potential health hazard associated with disturbance of any village site. Spores of the Valley Fever fungus, Coccidiomycosis immitis, have been isolated in other Indian sites in the Sacramento Valley and adjacent foothills, and in the recent past, at least three groups of archaeology students have been infected after inhaling airborne spores from disturbed camp and village sites.

erhaus

01

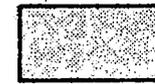
38

15

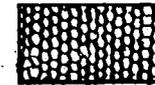
2400

2200

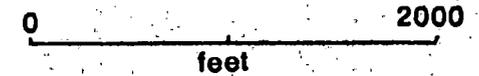
FIGURE 4
Archaeologically and
Biologically Sensitive
Areas ■



Archaeological
Area



Locations of
Fritilaria Phaeantha



IV. BIOLOGICAL ENVIRONMENT

A. Habitat.

The entire parcel shows signs of repeated disturbance by man, primarily due to brush clearing, homesite development and cattle grazing. It is located in a transition zone between low and middle elevation plant communities with a more diverse flora than those areas at higher or lower elevations.

The primary plant community is Foothill Woodland, with large brushed-out clearings (see Figure 5). Narrow strips of Riparian habitat occur along Bailey Creek, Rock Creek and North Fork of Butte Creek. The north slopes of these canyons contain a mixed conifer forest, with some Foothill Woodland species.

Foothill Woodland: This habitat type covers the largest portion of the study area. It is characterized by a very dense cover of trees and shrubs. The plants of this community are adapted to withstand the extreme summer heat and drought. Foothill Woodland is also recognized as a fire community, where many of the plants are adapted to regenerate quickly following a fire. The dense nature of the vegetation on this site provides a potential fuel for wildfires, which are likely to occur in late summer when the area becomes extremely dry. Fortunately, past brush clearing activities have reduced the amount of accumulated litter on the ground.

The dominant woody plants of the Foothill Woodland include Buck Brush, Digger Pine, Blue Oak, Interior Live Oak, California Black Oak, Dwarf Barberry, Poison Oak, White Leaf Manzanita, Perry Manzanita and Yerba Santa. In cleared areas, there are herbaceous plants including many native wildflowers and some introduced annual grasses and forbs.

There are a few Ponderosa Pine, widely scattered Sugar Pine, and Incense Cedar within the study area. These trees are more common at higher elevations.

Heavily disturbed areas consist of established roads and grazing areas which have been cleared in earlier years. Subsequent grazing has prevented the reestablishment of brush species. Dominant plants in these disturbed areas include native annuals such as Johnny Tuck, Lupine, Yarrow, Buttercup, Blue Dicks and Henderson's Shooting Star, as well as an assortment of introduced annual grasses and forbs. Introduced domestic plants, including Black Walnut, Apple, Almond, Blackberry, Periwinkle and Lilac were concentrated near old homesites in the area.

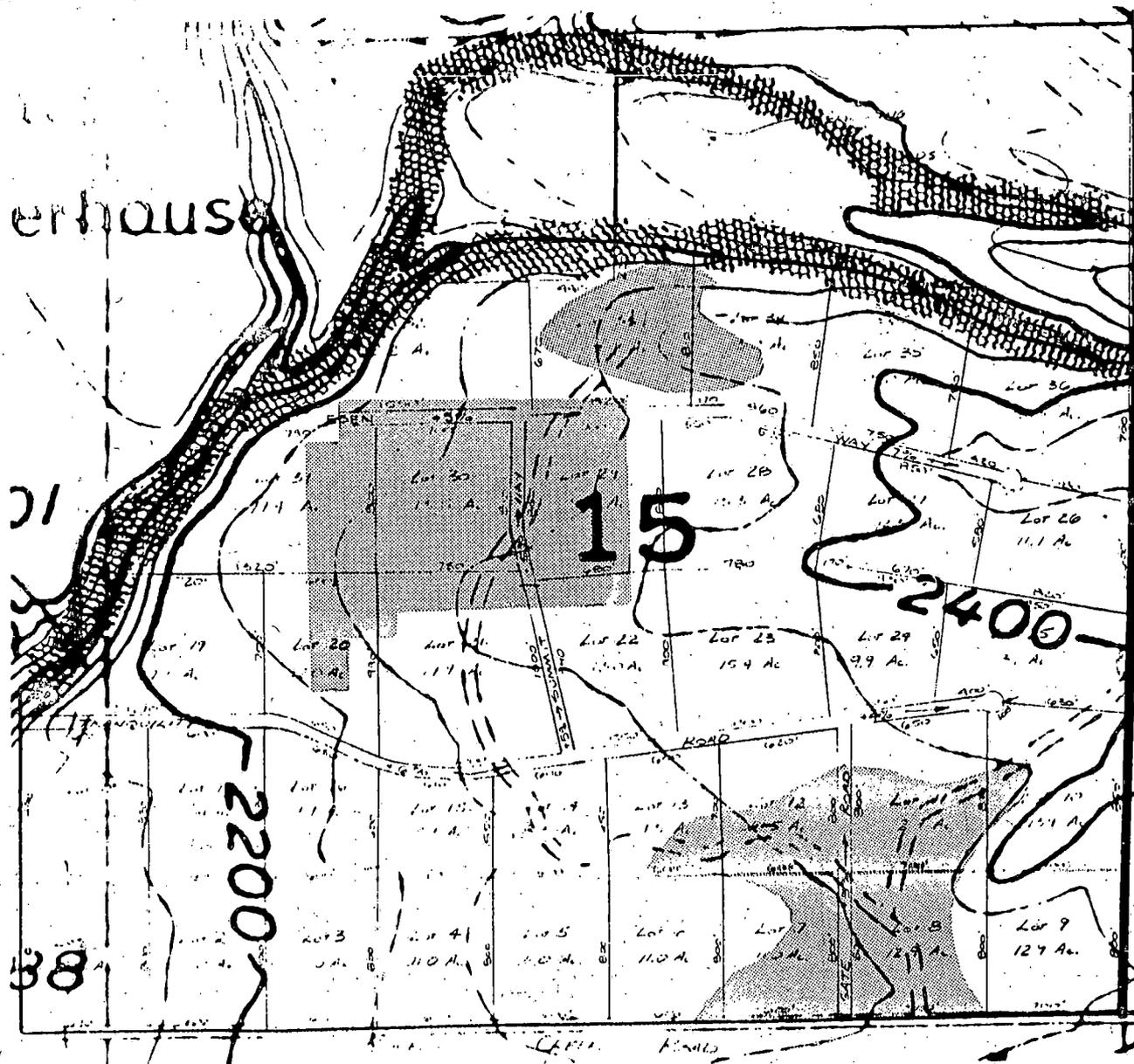
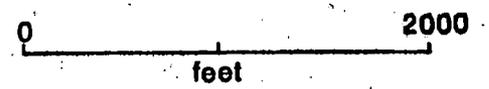
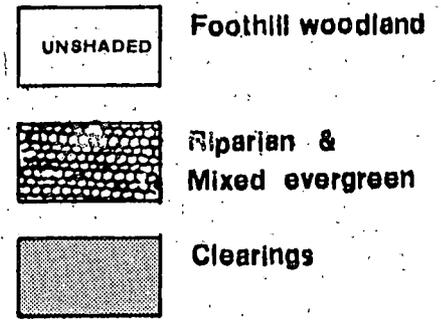


FIGURE 5
Plant Communities



Riparian: A narrow strip of water dependant trees and shrubs occurs along the edge of the creeks in the area. Dominant plants include White Alder, Oregon Oak, Willows, Elderberry and Wild Grape.

Mixed Evergreen Forest: The presence of Mixed Evergreen Forest in the study area is a function of the microclimate created on the north facing canyons above the creeks. Many species of this vegetation type cannot withstand the hot, dry conditions of the ridge tops and south exposed canyon walls. The Mixed Evergreen Forest on this site represents an extension of elevational range, a common phenomenon along creeks flowing between two major life zones.

The dominant trees of the Mixed Evergreen Forest include: Douglas Fir, California Nutmeg, Big Leaf Maple, Canyon Oak, California Black Oak, and California Bay. Characteristic shrubs and herbs are Gooseberry, Thimbleberry, Wild Rose, Columbine, Bunchberry, Wild Ginger and Frillium among others.

A list of the plant species recorded during the field surveys in April 1976 is listed in Appendix 4.

One rare and endangered plant, Butte Fritillaria (Fritillaria Eastwoodiae) was located at the interfaces of Mixed Evergreen Forest and Foothill Woodland. (See Figure 4). This is a northward extension for this species, which is most common in Butte County, but is also known from isolated finds in El Dorado, Fresno, Napa and Plumas Counties.

The two narrow strips on the south sides of Rock and Bailey Creek contain approximately 30 plants of this species. F. Eastwoodiae was determined to be rare and partially endangered by the California Native Plant Society (CNPS) in 1976. In 1977, CNPS published a status report suggesting that the taxonomic classification be confirmed, and if confirmed, that this species be relisted as threatened rather than endangered. The Federal Register listed the plant as endangered in 1976.

The overlap of occurrence between this rare plant and the archaeologically sensitive area warrants restrictive zoning for the area. A Resource Conservation Zone, with no allowable development and no property tax assessments would aid in the protection of these resources and would also limit financial costs to the landowner and Shasta County.

B. Wildlife.

The surface water and mixed plant communities on and adjacent to the proposed project support a wide variety of birds, mammals, reptiles and amphibians (see Appendices 5

(through 7). Valley Quail, Brewer's Blackbirds, and a variety of passerine birds were the most obvious occupants of the site during the surveys. The mixture of vegetation types, presence of permanent water and altitude will support a wide variety of birds, with considerable seasonal variation. Raptors include hawks, owls and possibly the Southern Bald Eagle. Battle Creek provides suitable habitat for this rare and endangered species, and the project site may be part of a more extensive feeding territory.

Common mammals on the area include ground squirrels, gophers, grey squirrels, jackrabbits, and small carnivores. The site is part of the wintering grounds of the Cow Creek Black-tailed Mule Deer herd. Local Department of Fish and Game Biologists believe that 50-75 deer may use the project site as an overwintering area.

Increased human activity on this site will have a variety of direct and indirect impacts upon the wildlife population. Direct impacts will include increased hunting pressure on both game and non-game species. Indirect impacts will include habitat removal and the introduction of domestic pets.

While improvement of lots for seasonal or year-round use will eliminate some habitat and drive away those species with a low tolerance for man's presence, other species, more tolerant of man, will increase. Small carnivores and rodents will be attracted to developed areas and may become nuisances. The clearing of chaparral and the introduction of exotic plant species could also increase the food potential for deer, rabbits and quail.

Any domestic pets which are allowed to roam freely within the site will cause more long-term deleterious effects to wildlife than will the actual development of homesites. Domestic pets should be confined to the vicinity of the homesite to reduce their predation on wildlife and to protect the pets from wild carnivores that may be infected with rabies.

V. SOCIOECONOMIC ENVIRONMENT

A. Land Use.

The site has historically been used as improved rangeland. Cattle pens and a small storage shed located near the proposed intersection of Gate Road and Rock Creek Road are the only structures standing within the site. Surrounding lands have similar uses. Three homes are situated on large parcels along the south side of Rock Creek Road.

Intensive agriculture in the vicinity appears to be limited to a young vineyard located 1/4 mile S.E. of the site. The vineyard is approximately 30 acres in size.

B. Conformance with General Plan.

The site lies in an area designated as A-U or agricultural upland by the Land Use Element of the Shasta County General Plan. Primary uses in A-U areas include forestry, grazing and related light agriculture. On a smaller scale, the site is zoned Rural-Residential with five acre minimum parcel sizes. Uses permitted within this district include single family dwelling, not including trailers, farming and limited animal husbandry. Additional uses are allowed with the issuance of a use permit.

The proposed project conforms with existing zoning. The developer may request a rezone of the property to increase the minimum parcel sizes to preclude further division of proposed lots.

C. Access.

1. Roads

The property is adjacent to Rock Creek Road, a paved, two lane country road. The site is situated 1.5 miles north of the community of Manton, 25 miles northeast of Red Bluff. Additional access is provided by the road from Shingletown, seven road miles north of the site.

The recreational nature of the proposed project should result in a slight increase in traffic on area roads. Such traffic will be seasonal, concentrated on summer weekends. Existing traffic appears to follow a similar pattern. The limited traffic data which are available for the area indicate significantly increased volumes during holidays, weekends and deer season.

2. Mustang Field

The site is located 3,800 feet to the east of Mustang Field, a small unpaved airfield with a 3,400 foot runway (see Figure 1). According to the former owner of the strip, Bruce Barron, most approaches and departures are from or towards the west, although occasional flights do approach from the east. Use of the airfield is sporadic, averaging perhaps 20 flights per month, with weekend fly-ins, involving up to 100 planes, occurring three or four times a year. Aircraft using the field are primarily small personal planes, although twin-engine planes can and do use the field occasionally.

The field has a record of useful service. It sometimes serves as an alternate destination for small planes when fog or inclement weather in the Sacramento Valley forces closure of fields there. The runway at Mustang Field, being 1000 feet longer and 2000 feet lower, is less hazardous than the strip at Shingletown. During 10 years of operation, only one mishap has occurred at the field, the result of pilot error.

D. Public Service Agencies.

1. Fire

Fire protection at the site will be provided by the Shasta County Fire Department and the California Division of Forestry. During the forest fire season, a total of 4 engines from the Manton and Shingletown Division of Forestry stations can respond to structural fires on the site. Response times are approximately 5 and 20 minutes respectively. In winter, the Shasta County Fire Department dispatches one engine from each of the following stations: Manton Volunteers, Shingletown Volunteers, and the Redding Municipal Airport. Response times are 10, 25 and 40 minutes respectively. The water holding capacity of these engines averages 500 gallons each.

Recommendations concerning on-site water supply, street names, points of egress, etc. will be made by the District Ranger of the California Division of Forestry prior to approval of the subdivision map.

It is suggested that a 10,000 gallon (minimum) storage tank or a 1-5 acre pond be provided at the site. Residential swimming pools could also serve as an emergency water supply. Tanks and pools should be fitted with couplings compatible with those of the fire department.

Brush should be cleared for a distance of 100 feet from each home site and outbuilding area. Replanting for landscaping should be limited to fire-resistant native California species which are also drought resistant.

2. Sheriff

Police protection at the site is provided by the Shasta County Sheriff's resident deputy in Shingletown. Service to the area is by call only, no regular patrols of the area are provided. Response time is 30 minutes. Common problems in areas of this nature include: vandalism, theft, trespassing, and family disputes. The existing level of service could be upgraded, but this is not foreseen for the near future.

3. Schools

Any elementary age school children from the development would be bussed to Manton School in Manton. The school presently houses 66 students in grades K through 8. Capacity is 100 students.

High school students would attend Red Bluff Union High School. Current enrollment is 1600 with capacity being 1750. A decline in enrollment is anticipated for the 1978-79 school year, but enrollment should stabilize in the following years. All students are bussed.

E. Utilities.

1. Pacific Gas and Electric Company

P.G. & E. maintains a 22,000 volt transmission line along Rock Creek Road adjacent to the site. Extension of service into the area will require approximately 5 months lead time. Service will be above ground.

2. Tuolumne Telephone Company

The site lies within the service area of Tuolumne Telephone Company. The adequacy of existing phone lines along Rock Creek Road will be determined prior to service requests by developers of the site.

F. Waste Disposal.

1. Solid Wastes

Since there is no regular refuse collection service for the area, residents will need to dispose of their own domestic refuse. Organic materials should be stored in plastic bags, inside metal garbage cans to avoid fly breeding and to reduce attractiveness to scavenging wild animals. Refuse can then be transported to the county transfer station dump, south of Manton.

2. Sewage

Residential dwellings will require septic tank systems and leach fields. Contamination of groundwater supplies is possible because a major portion of the site is covered by a coarse granular pumice soil. All wells should be cased into the underlying geologic formation and should be a minimum of 100 feet upgradient from leach lines. If year-round residences are established, all sewage systems should include at least 2 leach fields, with a switch box to alternate use on a six-month or annual basis. Development of lots having the pumice soil may require the importation of soil from the Cohasset stony loam areas of the site to reduce percolation rates and improve filtration for some leach fields.

VI. IMPACTS AND MITIGATION MEASURES

A. Significant Adverse Impacts which may Occur if the Proposal is Implemented.

1. An important archaeological site (The Southern Yana Village) may be further disturbed or destroyed.

Mitigations: Establishment of a Resource Conservation Zone to include the sensitive area delineated in Figure 4. This zone would prohibit development and reduce access to the sensitive area. Elimination of property taxes on the parcel could help to alleviate any financial hardship such zoning would place on the landowner.

Future landowners of the proposed lots should be informed of the scientific and cultural value of the sites to reduce the possibility of accidental or inadvertent disturbance of the sites. Landowners should also be informed of the potential health hazard, Valley Fever, associated with disturbing such sites.

Archaeologists from the District 2 Clearinghouse should periodically inspect the area to ascertain the extent of any disturbance that might occur. Recurring vandalism might require that more stringent protective measures be developed for the areas.

2. A rare and endangered (or threatened) plant species may be eliminated or reduced in number.

Mitigations: Prohibit development and vegetation removal in sensitive areas shown in Figure 4 and along the creek canyon slopes. A single Resource Conservation zone may protect all sensitive areas.

3. Wildlife habitat, particularly shelter areas, will be reduced.

Mitigations: Whenever possible, locate home in existing clearings and limit vegetation removal to that necessary for adequate fire protection. Disruption of existing habitat may benefit some species while displacing others.

4. Hunting and the introduction of domestic pets into the area will result in increased pressure on

wildlife populations. Development of the site will attract certain small carnivores and rodent species, which may become a nuisance.

Mitigations: Hunting should be restricted to legal in-season game species. Pets should be confined to the vicinity of homesites. Refuse should be wrapped in plastic and stored in metal containers prior to removal to the transfer facility south of Manton.

5. Development of the site will increase the potential for wildfire.

Mitigations: Brush free zones should be established around each homesite. Homeowners should landscape their yards with fire-resistant species. Open fires should be prohibited except for brush removal projects under the supervision of the Shasta County/CDF fire department. A pond or other storage facility should be developed on-site to provide a water supply for fire suppression. The pond should have a capacity of 1 to 5 acre/feet, while a tank or pressurized system of lower capacity might be adequate.

6. The potential exists for groundwater and/or surface water pollution on or near the site.

Mitigations: Wells located in pumice soils should be cased through the pumice and into the underlying basalt. Wells should also be provided with a surface concrete sanitary seal. Septic tanks and leach fields should be located down-gradient from wells and away from canyon rims in areas with adequate soil depth to provide the filtering necessary to remove sewage contaminants.

7. Demands for public services will increase. The demand for roads, police and fire protection, schools, and sanitary disposal facilities will increase as buyers begin to develop and use their lots.

Mitigations: Increased services can be provided without significantly altering existing facilities. In addition, sufficient tax revenues will be generated by the development to compensate for most increased service demands.

8. Potential conflict between Mustang Field and the proposed development. This impact should be minimal because the majority of flights take-off and land at the western end of the strip, and because of the low density proposed.

Mitigations: Locate homesites away from the airport flight line.

B. Adverse Impacts which Cannot be Avoided if the Proposal is Implemented.

1. Wildlife density and species composition will be altered.
2. The demand for public services will increase.
3. The potential for wildfire on the site will increase.

VII. ALTERNATIVES

A. Higher Density.

The current zoning of rural residential, 5 acre minimums would allow much smaller lots, and more parcels than are currently being proposed.

1. Advantages

The owners could develop a greater number of lots and achieve the same economic goals without allowing any development activity in the archaeologically and biologically sensitive areas.

2. Disadvantages

The volcanic tuff soils allow too rapid subsurface movements of water and would increase the potential for groundwater or surface water contamination. The increased intensity of development would cause other impacts upon the biological and physical environment to be greater. The likelihood of disturbance of the Indian village and other archaeological sites would increase with the greater numbers of people in the area. In addition, more homes would be under the flight path of the occasional aircraft landing or taking off from Mustang Field.

B. Planned Area Clusters.

Homesites could be clustered in 3 or 4 areas, with owners entering into joint tenancy agreements for the remainder of the property. Strips of individually owned properties are another possibility.

1. Advantages

Concentrating homesites reduces the need for large scale vegetation removal. Homesites would not need to be located near the archaeologically and biologically sensitive areas. Security for unoccupied homes would be improved. In addition, less energy would be required to deliver public services to clustered homesites. The clusters would be sited away from the airport flight path.

2. Disadvantages

Since most prospective buyers are believed to use this area to achieve privacy, clustering could reduce the desirability of the subdivision and result in only partial build-out. The service demand potential will remain the same but with less compensating property tax revenues. Conversely, a P.A.C. development could encourage use as primary housing and year-round residency, increasing overall impacts.

C. Recreation Ranch.

A ranch headquarters, with surrounding guest cottages, could be established in the cleared area near Rock Creek Road.

1. Advantages

This proposal would concentrate development in the most man-altered area and eliminate the need for habitat alteration elsewhere.

2. Disadvantages

Potential disturbance of the archaeologically and biologically sensitive area would remain the same or might even increase. Increased disturbance is possible because guests of the ranch might be less careful about protecting the natural and historical resources of the area. Greater numbers of people could use the property if such a facility were developed.

D. No Project.

1. Advantages

The problems related to human inhabitation of the site, i.e., demand for public services, fire hazard, potential for disturbance of archaeologically and biologically sensitive areas and reduction of wildlife populations, would be reduced or eliminated.

2. Disadvantages

Problems related to vegetation removal and soil movement would not necessarily be reduced. Rangeland improvement or other agricultural activity could still occur if the proposal were not implemented.

VIII. GROWTH-INDUCING IMPACTS

Successful completion of this project could encourage owners of nearby undeveloped subdivisions to reactivate their projects. Other property owners could initiate new subdivision proposals, increasing the probability of permanent residential use and related impacts.

APPENDIX

APPENDIX 1

REFERENCES

- Alfors, J.T., et al., 1973 Urban Geology Master Plan for California: Calif. Div. Mines & Geology, Bull. 198, 112 p.
- Barbour, Michael G. and Jack Major (Editors) 1977, Terrestrial Vegetation of California, Wiley
- California Department of Fish and Game, 1976 "At the Crossroads"
- California Native Plant Society, 1974. Inventory of Rare and Endangered Vascular Plants of California. Spc. Publ. No. 1
- California Natural Areas Coordinating Council, 1975. Inventory of California Natural Areas. Shasta Co. 451948AD
- Guyton, J.W., and Scheel, A.L., 1974, Earthquake Hazard in North-East California: Calif. State Univ. at Chico Regional Programs Monograph No. 1, 33 p.
- Jennings, C.W., 1975, Fault map of California: Calif. Div. Mines & Geology Geologic Data Map No. 1, scale 1:750,000.
- Kroeber, A.L., 1976. Handbook of the Indians of California. Dover Publications.
- Munz, Philip A. and David Keck, 1975. A California Flora Guide (with supplement) Univ. Calif. Press.
- Paulsen, Wessley, W., 1968. Geologic Report on Lassen Village. Correspondance (letter to Mr. Lapedota)
- Paulsen, W.W., 1968. Private report on groundwater in and near Lassen Village development, Sections 15, 14, & 13, T30N/R1E, and Section 18, T30N/R2E.
- Shasta County Zoning Maps, 1968. General Plan Report Mountain, 1976 Land Use, Regulation and Planning Ordinance Code
- U.S. Soil Conservation Service, Soil Survey of Shasta Co., 1974.

APPENDIX 2

PERSONS AND ORGANIZATIONS CONTACTED

Shasta County

Dept. of Public Works - Al Lowe, Associate Traffic Engineer.

Sheriff's Office - Jerry McCarthy, Undersheriff

Department of Public Health - Fred Morrison, Sanitation

Department of Planning - Will Ramsdell, Staff Planner

State of California

Div. of Forestry - Phil Sizemore, Fire Captain

CalTrans - O.E. Smith, Aviation Consultant

Red Bluff Union High School - Dean Healey, Vice Principal

Manton School - Ray Dunn, Principal

P.G. & E. - Mel Rajanen, New Business Clerk, Individual Homes

Tuolumne Telephone Company - Bob East, Lassen Division Engineer

Individuals

Bruce Barron, former owner of Mustang Field



SOCIETY FOR CALIFORNIA ARCHAEOLOGY

District 2 Clearinghouse

April 15, 1978

Albert J. Beck, PhD.
Eco-Analysts
P.O. Box 1187
Chico, CA 95926

Dear Dr. Beck,

I have completed an archaeological reconnaissance of the proposed Manton Heights Subdivision. The approximately 500 acre parcel is located just northeast of the community of Manton in southern Shasta County (T30N, R1E, portions of Sections 15 and 16, M.D.B.&M.). Bailey Creek and Battle Creek form the northern and northwestern boundaries of the parcel. Rock Creek flows through the property and joins with Bailey Creek before they both join Battle Creek. Rock Creek road marks the southern limit of the parcel.

In general the property is characterized by large flats which stretch between low ridges and knolls. The stream courses which dissect the parcel have formed steep, rugged and rocky canyons. The predominant vegetation consists of oaks, pines, chaparral and grasses. Over large areas of the property chaparral growth is so dense that it is virtually impossible to penetrate. The vegetation along the stream courses is very dense and noticeably more lush.

Prehistorically this area was occupied by the Yana Indians, specifically the Southern Yana. They lived principally on Battle Creek but held Paynes' Creek, Antelope Creek and several smaller streams. The Yana suffered heavily at the hands of the whites during the early years of contact and most of their culture was lost before they could be studied by ethnographers. Much of our knowledge of them comes from the southernmost division, the Yahi.

As was characteristic of hunting and gathering peoples in this area of California, the Yana were a mobile population, moving seasonally as specific resources became available. Winter villages were occupied somewhat longer than those inhabited during other seasons. These villages consisted of weather-proof structures, probably of the conical bark variety. Summer dwellings were thatched affairs built principally for shade.

Archaeologically, research has focused primarily to the south in Yahi country. However, a number of surveys have



SOCIETY FOR CALIFORNIA ARCHAEOLOGY

District 2 Clearinghouse

centered on areas to the north in Yana territory. The archaeological site record files, maintained at California State University, Chico, indicate that a number of sites have been recorded in the vicinity of the Manton Heights subdivision. Most are associated with stream courses but cave sites are commonly found away from streams.

My reconnaissance of the proposed subdivision was conducted on March 29 and April 3, 1978. I was assisted by Gail Smart. The survey covered the entire parcel with the exception of the area north of Bailey Creek. This area is part of the "Remaining Lands" section and presumably will not be developed. The survey was intensive and all areas that could reasonably be expected to contain archaeological resources were examined. Special attention was given to the northern portion of the property in the vicinity of Rock Creek, Battle Creek and Bailey Creek. Our survey efforts were inhibited in some areas by impenetrable chaparral. These areas are easily identified on the aerial photograph of the project area.

A total of twelve (12) archaeological sites was recorded during the survey. Nine of the sites are prehistoric Indian sites. The remaining three sites are remnants of historic homesteads (rock foundations, trash dumps and rock walls) which appear to date to the turn-of-the-century. The sites have been assigned State of California site numbers (CA-SHA-735 through CA-SHA-746) and the records are on file at the district clearinghouse at California State University, Chico.

The sites are located principally along the south bank of Rock Creek and on the ridge between Rock Creek and Bailey Creek. An historic site (CA-SHA-743) and a small lithic scatter of aboriginal origin (CA-SHA-735) are located away from the creeks in the vicinity of Lots 18 and 20 of the subdivision.

The sites found along Rock Creek are for the most part classified as lithic scatters of chipped stone tools. Subsurface materials may also be present at these sites. One site, however, is a large village site which may be the Southern Yana village of K'uwih'a. The location of this village was recorded by ethnographers early in this century.

It is apparent that the area is highly sensitive archaeologically. As it is presently designed, the proposed subdivision will directly or indirectly impact a number of significant archaeological resources. Indirect impact in the form of possibly increased vandalism to the sites will be difficult to mitigate against short of abandoning the project. However, revision of the subdivision plan to



SOCIETY FOR CALIFORNIA ARCHAEOLOGY
District 2 Clearinghouse

exclude specific lots is one alternative that would allow the developer to subdivide his property while at the same time avoiding direct impact and minimizing indirect impact to the archaeological resources. Towards this end I would recommend that Lots 33-36 be deleted entirely and be left open space land. The "remaining lands" section of the property north of Rock Creek should also be excluded from development.

A second alternative would involve proceeding with the development as currently planned with the stipulation that the property owner(s) would enter into an agreement with the Society for California Archaeology to preserve the archaeological resources intact. Such an agreement would include deeding to the Society for California Archaeology a non-exclusive easement to the properties containing archaeological sites for the purpose of insuring that they are being preserved.

As mentioned above, Lots 18 and 20 contain archaeological sites, however, these sites have been disturbed to the extent that they no longer retain significant historical or research value and subdivision of the property will not adversely affect them.

If you have any questions concerning this matter, please feel free to contact me or Keith Johnson (895-5397).

Sincerely yours,

Richard E. Markley

Richard E. Markley
District Archaeologist

APPENDIX 4

PLANTS KNOWN TO OCCUR ON THE PROJECT SITE

TREES

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Broad-leaf Maple	<i>Acer macrophyllum</i>
White Alder	<i>Alnus rhombifolia</i>
Incense Cedar	<i>Calocedrus decurrens</i>
Black Oak	<i>Juglans nigra</i>
Sugar Pine	<i>Pinus lambertiana</i>
Ponderosa Pine	<i>Pinus ponderosa</i>
Digger Pine	<i>Pinus sabiniana</i>
*Almond	<i>Prunus amygdalus</i>
Douglas Fir	<i>Pseudotsuga menziesii</i>
Canyon Live Oak	<i>Quercus chrysolepis</i>
Blue Oak	<i>Quercus douglasii</i>
Oregon Oak	<i>Quercus garryana</i>
Black Oak	<i>Quercus kelloggii</i>
Interior Live Oak	<i>Quercus wielizenii</i>
Willow	<i>Salix sp</i>
California Nutmeg	<i>Torreya californica</i>
California Bay	<i>Umbellularia californica</i>
*Common Apple	<i>Malus sylvestris</i>

SHRUBS

Yarrow	<i>Achillea sp</i>
Parry Manzanita	<i>Arctostaphylos manzanita</i>
Whiteloaf Manzanita	<i>Arctostaphylos vicida</i>
Barberry	<i>Berberis pumilosa</i>
Spine Bush	<i>Calycanthus occidentalis</i>
Buck Bush	<i>Ceanothus cuneatus</i>
Redbud	<i>Cercis occidentalis</i>
California Coffee Berry	<i>Rhamnus californica</i>
Squaw Bush	<i>Rhus trilobota</i>
Wild Current	<i>Ribes sp</i>
Wild Rose	<i>Rosa sp</i>
Blackberry	<i>Rubus sp</i>
Elderberry	<i>Sambucus sp</i>
Poison Oak	<i>Toxicodendron diversiloba</i>
Periwinkle	<i>Vinca major</i>
California Grape	<i>Vitis californica</i>
Mountain Spray	<i>Wolodiscus discolor</i>
Deer Brush	<i>Ceanothus integerrimus</i>
*introduced species	

APPENDIX 4 (cont.)

FORBS, GRASSES AND FERNS

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Fiddleneck	<i>Amsinckia</i> sp
Columbine	<i>Aquilegia formosa</i>
Wild Ginger	<i>Asarum hartwegii</i>
Loco Weed	<i>Astragalus</i> sp
Blue Dicks	<i>Brodiaea pulchella</i>
Yellow Star Tulip	<i>Calochortus manophyllus</i>
Red Larkspur	<i>Delphinium nudicaule</i>
Pacific Bleeding Hearts	<i>Dicentra pacifica</i>
Henderson's shooting Star	<i>Dodecathean henersonii</i>
Horse Tails	<i>Equisetum hyemale</i>
Butte Fritillary	<i>Fritillaria Eastwoodiae</i>
Bedstraw	<i>Galium nuttallii</i>
Wild Geranium	<i>Geranium molle</i>
Woodland Star	<i>Lithophragma</i> sp
Lupine	<i>Lupinus</i> sp
Johnny Tuck	<i>Orthocarpus erianthus</i>
Owl Clover	<i>Orthocarpus</i> sp
Indian Warrior	<i>Pedicularis densiflora</i>
Popcorn Flower	<i>Plagiobotrys</i> sp
Buttercup	<i>Ranunculus occidentalis</i>
Jointed Charlock	<i>Raphanus raphanistium</i>
Thimble Berry	<i>Rubus parviflorus</i>
Saxifrage	<i>Saxafraga</i> sp
Red Stemmed Filaree	* <i>Erodium cicutarium</i>
Big Heron Bill	* <i>Erodium botrys</i>
Yellow Star Thistle	* <i>Centaurea solstitialis</i>
Brome Grass	* <i>Bromus</i> spp
Fescues	* <i>Festuca</i> spp
Gold Backed Fern	<i>Pityrogramma triangularis</i>
Sword Fern	<i>Polystichum munitum</i>
Braken Fern	<i>Pteridium aquilinum</i>
Cliff Brake	<i>Pellaea</i> sp

* introduced species

APPENDIX 5

MAMMALS KNOWN OR SUSPECTED TO USE THE PROJECT AREA

* = Presence verified during survey

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Pallid Bat	<i>Antrozous pallidus</i>
Little Brown Bat	<i>Myotis spp</i>
Mexican Free-tailed Bat	<i>Tadarida brasiliensis</i>
*Black-tailed Jackrabbit	<i>Lepus californicus</i>
*Brush Rabbit	<i>Sylvilagus bachmani</i>
*California Ground Squirrel	<i>Citellus beecheyi</i>
*Western Grey Squirrel	<i>Sciurus griseus</i>
*Pocket Gopher	<i>Thomomys bottae</i>
Deer Mouse	<i>Peromyscus maniculatus</i>
Brush Mouse	<i>P. boylii</i>
California White-footed Mouse	<i>P. californicus</i>
Dusky-footed Woodrat	<i>Neotoma fuscipes</i>
California Meadow Mouse	<i>Microtus californicus</i>
American Porcupine	<i>Erethizon dorsatum</i>
Coyote	<i>Canis latrans</i>
Grey Fox	<i>Urocyon cinereoargenteus</i>
Black Bear	<i>Ursus americanus</i>
Ring-tail	<i>Bassariscus astutus</i>
*Raccoon	<i>Procyon lotor</i>
Spotted Skunk	<i>Spilogal putorius</i>
*Striped Skunk	<i>Mephitis mephitis</i>
Bobcat	<i>Lynx rufus</i>
*Mule Deer	<i>Odocoileus hemionus</i>

APPENDIX 6

BIRDS KNOWN OR EXPECTED TO OCCUR ON THE PROJECT SITE

* = Presence verified during survey

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Wood Duck	<i>Aix sponsa</i>
*Turkey Vulture	<i>Cathartes aura</i>
Cooper's Hawk	<i>Accipiter cooperi</i>
*Western Red-tailed Hawk	<i>Buteo borealis</i>
Golden Eagle	<i>Aquila chrysaetos</i>
Pigeon Hawk	<i>Falco columbarius</i>
*American Kestrel	<i>Falco sparverius</i>
*California Quail	<i>Lophortyx californica</i>
*Killdeer	<i>Charadrius vociferus</i>
Band-tailed Pigeon	<i>Columba fasciata</i>
Mourning Dove	<i>Zenaidura macroura</i>
Barn Owl	<i>Tyto alba</i>
Screech Owl	<i>Otus asio</i>
Pygmy Owl	<i>Glaucidium gnoma</i>
Burrowing Owl	<i>Speotyto cunicularia</i>
Common Nighthawk	<i>Chordeiles minor</i>
Black-chinned Hummingbird	<i>Archilochus alexandri</i>
Anna's Hummingbird	<i>Calypte anna</i>
Rufous Hummingbird	<i>Selasphorus rufus</i>
*Red-shafted flicker	<i>Colaptes cafer</i>
Acorn Woodpecker	<i>Balanosphyra formicivora</i>
Yellow-bellied Sapsucker	<i>Sphyrapicus thyroideus</i>
Downy Woodpecker	<i>Dryobates pubescens</i>
Nuttall's Woodpecker	<i>Dryobates nuttalli</i>
Western Kingbird	<i>Tyrannus melancholicus</i>
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
Black Phoebe	<i>Sayornis nigricans</i>
Western Flycatcher	<i>Empidonax difficilis</i>
Western Wood Peewee	<i>Myiochanes richardsoni</i>
Violet-green Swallow	<i>Tachycineta thalassina</i>
*Barn Swallow	<i>Hirundo erythrogaster</i>
Steller's Jay	<i>Cyanocitta stelleri</i>
*California Jay	<i>Aphelocoma californica</i>
Yellow-billed Magpie	<i>Pica nuttalli</i>
Common Crow	<i>Corvus brachyrhynchos</i>
Plain Titmouse	<i>Baeolophus inornatus</i>
Common Bushtit	<i>Auriparus flaviceps</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Brown Creeper	<i>Certhia familiaris</i>
Wrentit	<i>Chamaea fasciata</i>

APPENDIX 6

BIRD LIST CON'T

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
House Wren	<i>Troglodytes aedon</i>
Bewick's Wren	<i>Thryomanes bewicki</i>
*Mockingbird	<i>Mimus polyglottos</i>
California Thrasher	<i>Toxostoma redivivum</i>
*Robin	<i>Turdus migratorius</i>
Western Bluebird	<i>Sialia mexicana</i>
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>
Ruby-crowned Kinglet	<i>Corthylio calendula</i>
Cedar Waxwing	<i>Bombycillaz cedrorum</i>
Phainopepla	<i>Phainopepla nitens</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>
*Starling	<i>Sturnus vulgaris</i>
Hutton's Vireo	<i>Vireo huttoni</i>
Warbling Vireo	<i>Vireo gilvus</i>
Orange-crowned Warbler	<i>Vermivora celata</i>
Yellow Warbler	<i>Dendroica aestiva</i>
Black-throated Gray Warbler	<i>Dendroica nigrescens</i>
Yellow-breasted Chat	<i>Icteria virens</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>
House-Sparrow	<i>Passer domesticus</i>
*Western Meadowlark	<i>Sturnella neglecta</i>
Bullock's Oriole	<i>Icterus bullockii</i>
*Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
*Brown-headed Cowbird	<i>Molothrus ater</i>
Western Tanager	<i>Piranga ludoviciana</i>
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Evening Grosbeak	<i>Hesperiphona vespertina</i>
Purple Finch	<i>Carpodacus purpureus</i>
House Finch	<i>Carpodacus mexicanus</i>
Pine Siskin	<i>Spinus pinus</i>
American Goldfinch	<i>Spinus tristis</i>
Lesser Goldfinch	<i>Spinus psaltria</i>
Lawrence's Goldfinch	<i>Spinus lawrencei</i>
Rufous-sided Towhee	<i>Pipilo erythrophthalmus</i>
*Brown Towhee	<i>Pipilo fuscus</i>
*Vesper Sparrow	<i>Pooecetes gramineus</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>
Slate-colored Junco	<i>Junco hyemalis</i>
Oregon Junco	<i>Junco oreganus</i>
Chipping Sparrow	<i>Spizella passerina</i>
*White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Song Sparrow	<i>Melospiza melodia</i>

APPENDIX 7

COMMON NAME

SCIENTIFIC NAME

REPTILES AND AMPHIBIANS

Western Toad	<i>Bufo borealis</i>
Pacific Treefrog	<i>Hyla regilla</i>
Yellow-legged Frog	<i>Rana boylei</i>
Bullfrog	<i>Rana catesbeiana</i>
Western Fence Lizard	<i>Sceloporus occidentalis</i>
Northern Alligator Lizard	<i>Gerrhonotus coeruleus</i>
Western Whiptail	<i>Cnemidophorus tigris</i>
Garter Snakes	<i>Thamnophis spp.</i>
Western Ringneck Snake	<i>Diadophis amabilis</i>
Racer	<i>Coluber constrictor</i>
Gopher Snake	<i>Pituophis catenifer</i>
Common Kingsnake	<i>Lampropeltus getulus</i>
Western Rattlesnake	<i>Crotalus viridis</i>

APPENDIX 8

ENERGY CONSERVATION

The large lot sizes will allow all buildings to be situated in a manner which will maximize energy conservation. All homes should face south, with reduced window areas on the north and west sides. Roof overhangs should be a minimum of 3.5 feet in width, with additional overhang on the south side for summer shading. There will be no heat island effect in this development because of the large lot sizes, so insulation should be greater than that required for urban areas -- R-21 should be used in the roof and R-13 in the walls. Roofs should be covered with a light colored material.

Solar water heaters should be installed rather than electric or propane units. Any fireplaces should be equipped with heatolators, or similar devices, to more efficiently capture produced heat. Chimineys should be equipped with large mesh screens to prevent sparks from escaping and causing brushfires.

All windows should be double glazed or coated with a heat reflecting screen.

APPENDIX 9

Qualifications of Preparer

QUALIFICATIONS OF PREPARER

Albert J. Beck Project Manager - Principal Analyst

Education: A.A. College of San Mateo 1955
A.B. Univ. of California, Davis 1957 (Zoology)
M.A. Univ. of California, Davis 1961 "
Ph.D. Univ. of California, Davis 1966 "

Special Schools:

1959 - Basic Preventative Medicine Course, U.S. Army
1962 - Marine Biology, Hopkins Marine Station, Stanford U.
1964 - 67 -IBM courses in programming and machine handling
(FORTRAN, IBM 1300, 360 series, 1420)
1973 - EIR's CEQA & Quidelines, California State Univ., Chico
1977 - CEQA Update, Office of Planning and Research

Field Survey Experience:

1956-1958 Dept. of Veterinary Public Health, Univ. of California, Davis,
Zoonotic virus surveys in small mammals, California and Western
Arizona

1958-1960 U.S. Army Medical Svc. Corps, Preventative Medicine Specialist,
Insect and Rodent surveys, Water and sewage plant inspections,
communicable disease surveys.

1960(summer) South Carolina State Bd. of Health, Medical Entomologist II,
Mosquito, rodent and carnivore surveys, Control measure supervision.

1962(summer) California State Bd. Health, Vector Control, Small mammal and
ectoparasite surveys.

1960-1965 Advanced degree field research, bats and small rodents,
Population studies, Parasite behavior studies.

1965-1969 Univ. of California International Center for Medical Research
& Training, Research Parasitologist
Inst. for Medical Research, Medical Zoologist, Kuala Lumpur,
West Malaysia

1969-1973 University of California, School of Public Health, Research
Vertebrate Zoologist, Sacramento Valley Arbovirus Field Sta.,
Bird and mammal surveys, Virus isolation and surveillance.

1973-date Established "Eco-Analysts" for environmental surveys and
impact analysis.

Professional Memberships:

Charter Member of: Association of Environmental Professionals
Society of Vector Ecologists
Wildlife Disease Association

Member of: American Society of Mammalogists
Malaysian Society Tropical Medicine and Parasitology
Sigma Xi
American Association for the Advancement of Science

APPENDIX 10
STATEMENTS CONCERNING
GROUND WATER RIGHTS

Mantion Hts.

Rudy T.

PACIFIC GAS AND ELECTRIC COMPANY

1255 SACRAMENTO STREET • BOX 1827 • REDDING, CALIFORNIA 96001 • (916) 241-2231

S. F. SVENSSON
DISTRICT MANAGER

031

January 12, 1978

Shasta County Planning Department
1855 Placer Street
Redding, California 96001



Gentlemen:

The map of tentative tract #1523 for Fred Lindauer, P. O. Box 615, Red Bluff, California 96080, and being a portion of Sections 15 and 16, T. 30 N., R. 1 E., M. D. B. & M., has been reviewed. On the map, shown in red, are the approximate distances to 12 KV electric power that could serve the proposed tract.

This letter is also to notify you that at one time this Company owned the land that is proposed to be subdivided. When the land was sold by deed dated November 15, 1948, and recorded in Volume 305 of Official Records at page 84, in the Office of the Shasta County Recorder, the following was reserved to the grantor, its successors, and assigns: (a) all water rights appurtenant to said real property, (b) the right to divert and appropriate to its or their use all water constituting part and parcel of said real property, (c) the easements of constructing, reconstructing, enlarging, replacing, repairing, maintaining and operating over and across said real property at any and all times and locations any and all pole lines and tower lines for the transmission of electricity and private telephone service, (d) the easements of constructing, reconstructing, enlarging, repairing, maintaining and operating over and across said real property any and all ditches, flumes or other aqueducts of such kinds and capacities and along such routes as may from time to time be selected by first party, its successors or assigns, for conveying water, (e) the right to construct, enlarge, maintain and use such roads and bridges over and across said real property as first party, its successors or assigns, may from time to time deem proper in the conduct of its or their business of generating, transmitting and distributing electricity or conveying water, and (f) the right of ingress on and egress from said real property in reaching and exercising any and all of said rights and easements.

Since all of these reservations still apply to the land we do not believe it is appropriate for the Planning Commission to act on the map. If we can be of any further assistance in this matter please let us know. Mr. John Swetka, 814 Main Street, Red Bluff, Ca., telephone 527-5880, is available to answer any questions you might have on this matter.

Sincerely,
S. F. Svensson
S. F. Svensson
District Manager

June 5, 1978

STATEMENT REGARDING GROUND WATER RIGHTS

Sections 15 and 16, Township 30 North Range 1 East MDB&M

By Fred and Lorna Lindauer, Antelope Blvd., Red Bluff, Calif.

1. Pacific Gas & Electric (PG&E) was at one time owner of this land. When it sold the land, it excepted from the sale and reserved to itself, its successors and assigns all water rights appurtenant to the land and the easement of taking, diverting and appropriating to its or their use all waters constituting part and parcel of said land.

2. As a result, PG&E and its successors and assigns have prior water rights over owners of the land to all water on or under the land which PG&E or its successors or assigns use beneficially.

3. The seller has no knowledge of any present successors or assigns of PG&E in the ownership of such water rights.

4. To the seller's knowledge PG&E makes no direct use of groundwater under the land referred to herein at present, but uses the flow of streams in the general area to generate hydro-electric power.

5. A consulting engineer,* who is registered as a geologist and certified as an engineering geologist by the State of California has advised that in his opinion;

- a) that groundwater can be obtained for beneficial use on this land by wells drilled to a depth of 200 to 300 feet, and
- b) that this groundwater does not contribute to the flow of streams used by PG&E.

6. A lawyer** experienced in California water rights law has advised that owners of land being sold herein can pump and use this groundwater without violating PG&E's prior water rights if P G & E makes no direct use of the groundwater, and if the groundwater does not contribute to the flow of streams used by PG&E.

7. The above statements were issued in December 1975, wells have been drilled in accordance with the above and Pacific Gas & Electric has been kept informed.

* Certified Geologist - Wessley Paulsen, Route 2, Box 2479K, Auburn, Ca. 95603

** Attorney (Water Rights) - Adolph Moskovitz, 555 Capitol Mall, Sacramento, Ca. Suite 855, 95814

Signed Frederic J. Lindauer 6/5/78
Frederic J. Lindauer
Antelope Blvd., Red Bluff, Calif.

APPENDIX 11

MOBILE SOURCE EMISSIONS

Remote subdivisions generate greater amounts of air pollutants than do similar developments in, or adjacent to, urban areas. This is because of the greater distances to urban services and areas of employment. Potential emission rates for the Manton Heights subdivision were calculated using the method required by the Shasta County Health Department and that of Caltrans and the State Air Resources Board.

The Shasta County method assumes higher emission rates per mile because area vehicles have a higher percentage of altered or disconnected emission control devices. Individual subdivision lots were estimated to generate four trip ends daily. The length of a trip was determined by averaging the distance of a trip to the nearest retail and professional service center with the distance to the nearest employment area. With this method, we assumed all prepared lots would be developed as year round residences, with Red Bluff being the center for business and employment. These assumptions provide for a "worst case" analysis.

The State model for mobile emissions assumes a specific mixture of vehicles (e.g. 77.4% automobiles), 20% cold starts, 27% hot starts, an average winter temperature of 45°F, and an average summer temperature of 75°F. Twelve lots were assumed to contain year-round or regular residents, with one member of the family being employed in Red Bluff. Twenty lots were assumed to have only vacation, weekend or seasonal use. Four

lots were not considered to be saleable or buildable because of their Resource Conservation status. An average road speed of 50 mph was used to establish emission rates. No calculations were made for lead, since lead emissions are declining with the increased use of no-lead gasolines.

MOBILE EMISSIONS - MANTON HEIGHTS

	Shasta County Formula (lbs/day)	State Formula
Total Hydrocarbons	80	3.09
Oxides of Nitrogen	48	4.64
Carbon Monoxide	453	17.55
Lead	16	
Exhaust Gases	863,654 (cubic feet/day)	

APPENDIX 12

COMMENTS RECEIVED ON ORIGINAL DRAFT E.I.R. (1978-1979):

1. Department of Fish and Game
2. California Water Quality Control Board
3. Pacific Gas and Electric
4. California Department of Transportation, Division of Aeronautics
5. William Johnson, Project Engineer, to Department of Fish and Game
6. Department of Fish and Game



DEPARTMENT OF FISH AND GAME

P. O. Box 1480
Redding, CA 96001
(916) 246-6511



August 8, 1978

Mr. Robert L. Wall, Planning Director
Shasta County Planning Department
1855 Placer Street
Redding, CA 96001

Dear Mr. Wall:

We have reviewed the draft Environmental Impact Report for the Manton Heights Subdivision - Tract 1523.

In general the report is adequate in its assessment of the impacts on wildlife in the area.

We do not agree, however, with the statement made on page 15 that "clearing of chaparral and the introduction of exotic plant species could increase the food potential for deer, rabbits and quail." This seems to imply that these species would benefit by the conversion of native vegetation to exotic plants. While it is true that some wildlife species can adapt to high levels of human disturbance and are often attracted by ornamental plants, garbage disposal sites, gardens, etc., the loss of native habitat will be more deleterious than the artificial benefits associated with such development.

We support the mitigation recommendations made on page 19. These include a Conservation Zone to preserve riparian habitat and the preservation of native vegetation by locating homesites and access roads in existing clearings. We strongly urge the developer to incorporate these concepts in the plan.

Thank you for the opportunity to comment on this report.

Very truly yours,

John M. Hayes
for A. E. Naylor
Regional Manager
Region 1

cc: EIO Analysts

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
CENTRAL VALLEY REGION**

Shasta Cascade Watershed Branch office:
1815 Sacramento Street
Redding, California 96001
Phone: (916) 246-6376
ATSS: 442-6376

11 August 1978



Ms. Lynda Thompson
Shasta County Planning Dept.
1855 Placer Street
Redding, CA 96001

Dear Ms. Thompson:

Subject: EIR, Manton Heights Subdivision - Tract 1523

We have reviewed the subject EIR for the 36 lot subdivision and find the proposed method of sewage disposal may have an adverse affect on water quality.

The poor soil condition described in the report indicates that suitable disposal sites for sewage disposal may not be available for this development and the majority of the proposed lots will not meet the criteria specified in the Shasta County Land Division standards.

If the developer wishes to pursue the feasibility of using "modified mound systems" as presented in the report it will be necessary to submit design information for review by the Regional Water Quality Control Board as well as the County Health Department.

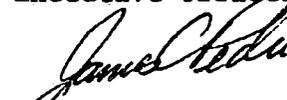
The draft EIR should also be correct to address possible water quality impacts from erosion and runoff; more specifically:

1. What measures will be taken in design and construction of roads to prevent soil erosion.
2. Describe what bank stabilization methods will be employed in potential hazard areas.

If you have any questions regarding this matter, please contact this office.

Sincerely,

JAMES A. ROBERTSON
Executive Officer


By: James C. Pedri
Engineer-in-Charge

cc: Shasta County Health Dept.
Eco Analysts

PACIFIC GAS AND ELECTRIC COMPANY

PG&E

814 MAIN STREET • BOX 340 • RED BLUFF, CALIFORNIA 96080 • (916) 527-5880

R. J. LARUE, JR.
DIVISION MANAGER

031, 610.4, 001.8

August 15, 1978



Shasta County Planning Commission
1855 Placer Street
Redding, California 96001

Gentlemen:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report on Manton Heights Subdivision - Tract 1523.

Reference is made to page 8 of the report, paragraph E - Hydrology.

1. Surface Water. The statement about this Company's Cross Country Ditch supplying the town of Manton with water is not correct.

Due to prior water rights and changes in diversion, this Company does allow diversion of water from the ditch at three locations -- to a residence, the Manton Store and trailer park, but not to the town of Manton.

In our comments, by letter dated January 12, 1978, on the Map of Manton Heights Subdivision - Tract 1523, we mentioned all the various rights reserved by this Company on the subject land. Since that date, we have not been contacted by anyone concerning these reservations.

In spite of the difference of opinion with regard to sub-surface water, it is our opinion that the other reservations in their present form make the land unuseable for normal residential purposes. It is our intention to not remove or modify these reservations in any way until a satisfactory agreement can be negotiated which will adequately compensate and/or protect the Company's water rights for generation losses based on water consumption use resulting from well drilling.

It is our recommendation that the approval of this subdivision be deferred until the developer makes suitable arrangements to have the reservations removed or modified in such a manner that potential buyers of the lots will be able to utilize their property.

Sincerely,

A. E. Henderson

A. E. Henderson
Division Electric Superintendent

cc: Shasta County Health Dept.
EIO-Analysts Page 58 of 86
Attachment 4

DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS
1120 "N" STREET
SACRAMENTO, CA 95814
(916) 322-3090



August 16, 1978

Shasta County Planning Department
1724 West Street
Redding, CA 96001

Gentlemen:

Draft Environmental Impact Report #19-78
- Manton Heights Subdivision, Tract 1523

The Division of Aeronautics, Department of Transportation, has reviewed and evaluated the above referenced Draft Environmental Impact Report. The evaluation concentrates on those concerns that are germane to our statutory responsibilities; i.e., airport safety and noise impacts from airport operations.

We have no specific comments to submit with respect to the report. It is the general policy of the Division to discourage development of residential areas or other incompatible land uses in and about airports, especially on extended runway centerlines within one mile of the airport. Our analysis of the relationship of this proposed development to Mustang Field leads us to the conclusion that the impacts of crash hazards and noise from airport operations will be minimal. The location of the airport, the left hand traffic pattern, the limited number of landings and takeoffs (predominantly to the west) preclude a significant number of flights over the project site. This greatly minimizes the crash hazard impact and will keep to a minimum the noise impacts.

However, the project site is in an area of low ambient noise levels. Consequently, aircraft noise from Mustang Field might be more intrusive than would be the case in an area of higher ambient noise levels. Therefore, prospective buyers of residential homes in this development should be informed of the possibility of noise intrusion from aircraft operations at Mustang Field. This could preclude future complaints against the airport.

The Division has no discretionary approval authority over the project. Subject to the comments above, the environmental assessment and documentation are adequate for our purposes.

Shasta County Planning Dept.
Page 2
August 16, 1978

Thank you for the opportunity to comment.

Sincerely,



G. A. MILLER, Deputy Chief
Division of Aeronautics

DEPARTMENT OF FISH AND GAME

P. O. Box 1480
 Redding, CA 96001
 (916) 246-6511



July 17, 1979

Mr. Robert L. Wall, Director
 Shasta County Planning Department
 1855 Placer Street
 Redding, CA 96001

Dear Mr. Wall:

We have reviewed final EIR 19-78 for Manton Heights Subdivision, Tract Number 1523, in Shasta County. We believe the mitigation measures proposed in the EIR plus the additional mitigation measures presented in Mr. William C. Johnson's letter of July 5, 1979, (attached), adequately mitigate the fish and wildlife impacts of the project.

In 1978, we began working with the developer to incorporate some specific mitigation measures in the development to reduce the fish and wildlife impacts. The measures included:

- OK 1) An open space easement of 250 feet along Rock Creek in the project area. The easement is measured at right angles from the center line of the creek to reduce the human encroachment impact upon the stream environment. This also provides a wildlife corridor.
- OK 2) We recommend larger parcel sizes. The developer changed from five-acre to ten-acre parcel size. This reduces the human density by 50 percent.
- OK 3) We recommend perimeter fencing restrictions which the developer has incorporated as Deed Restrictions. The fencing will be either a four-wire barbed wire fence, four feet high, with the bottom wire 18 inches above the ground, or a standard wooden fence, four feet high, with the bottom board 18 inches above the ground. This fence criteria will allow free movement of deer through the project area. Deer prefer to crawl under fences rather than jumping over them.
- OK 4) We recommend the area be zoned B.S.M. so that no further divisions can take place. The developer has agreed to this recommendation.

Mr. Robert L. Wall

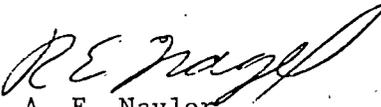
-2-

July 17, 1979

We believe the County should incorporate the mitigation measures approved by the developer as conditions for approval of the project.

If you have any questions regarding our comments, please contact Tom Stone of our Redding Office at 246-6544.

Very truly yours,


for A. E. Naylor
Regional Manager, Region 1

cc: William C. Johnson

Attachment

CIVIL ENGINEERING
SUBDIVISIONS
SURVEYING
STRUCTURES
PLANNING

WILLIAM C. JOHNSON, R.C.E.

CIVIL ENGINEERS -- SURVEYORS

628 MAIN STREET

RED BLUFF, CALIFORNIA 96080
(916) 527-4650

Date: ~~June~~ ^{July} 5, 1979

Subject: Tract No. 1523,
Manton Heights Subdivision,
E.I.R.

State of California
Department of Fish and Game
Region One
P. O. Box 1480
Redding, California 96001

Attention: Tom Stone

Dear Tom:

The following information is to confirm our conversation of July 3, 1979, with regard to the additional mitigation measures to affect fish and wildlife within subject subdivision.

The subdivision consists of 43 lots of more than 10 acres in size on the average, with the smallest being 8.3 acres and largest being 96.8 acres. It lies within Section 15, Township 30 North, Range 1 East, M.D.M., in Shasta County, California, and is bounded on the South by Manton Road, on the West by Battle Creek and Rock Creek, on the North by Bailey Creek approximately along the northerly edge, and on the East by the East line of Section 15. There are existing roads throughout the site in the approximate location as shown on the tentative map.

Fencing within the subdivision will be restricted by deed restriction recorded with the subdivision map. The fencing will be limited to a four strand barbed wire fence, a maximum height of four feet with the bottom wire being at a minimum of 18 inches from the ground and a maximum of 4 feet high. Any special provisions for fencing a garden area may be authorized in writing by the Department of Fish and Game. The zoning is to be a B:SM which prevents further divisions of any lot created within this subdivision. We are creating a 250 foot open-space corridor each side of the center line of Rock Creek and Battle Creek for preservation of riparian vegetation and wildlife dependent upon the creek. This will effect Lots 19, 20, 36, 37, 38, 39, 40, 41, 42 and 43.

It is important to note that from the original conception of a subdivision within this area, that the parcel sizes have been doubled, thereby reducing the density in half.

RECEIVED

JUL 6 1979

Department of Fish & Game
Region 1

State of California
Department of Fish and Game
Attention: Tom Stone

-2-

July 5, 1979

Within the deed restrictions there will be a "no hunting" provision included which will protect and enhance the area for wildlife purposes.

We believe that this covers all the items that we discussed as mitigation measures that are of concern to the Department of Fish and Game. Would you please draft a letter to the Shasta County Planning Commission with regard to the project and your findings, with a copy to us. We would appreciate this as soon as possible since this project has been hanging fire for a long time.

Sincerely,



William C. Johnson

WCJ/TDe
cc: Fred Lindauer

APPENDIX 13

RESPONSE TO COMMENTS IN APPENDIX 12:

1. COMMENT: Comments noted.
D.F.G.

2. COMMENT: "The poor soil condition described in the Report indicates that suitable disposal sites for sewage disposal may not be available for the development, and the majority of the proposed lots will not meet the criteria specified in the Shasta County Land Division Standards."
C.W.Q.C.B.

RESPONSE: Since preparation of the original E.I.R., considerable additional testing has been completed for each lot in the Subdivision. Sewage disposal sites were located on each lot. Each site was approved by the Health Department as meeting all Health Department criteria.

3. COMMENT: "In spite of the difference of opinion with regard to sub-surface water, it is our opinion that the other reservations in their present form make the land unuseable for normal residential purposes. It is our intention to not remove or modify these reservations in any way until a satisfactory agreement can be negotiated which will adequately compensate and/or protect the Company's water rights for generation losses based on water consumption use resulting from well drilling."
P.G. & E.

RESPONSE: Continuing negotiations with P.G. & E. have resulted in an ^{agreement} ~~agreement~~ from P.G. & E. to sell subsurface water rights to the Developer for \$ 700.00 per lot. The Owners have a choice of purchasing these water rights or of selling the lots with the issue unresolved. Most landowners in the area have apparently drilled wells without the permission of P.G. & E. and have not been challenged. Potable ground water is generally deeper than 100 feet, and it is unlikely that domestic withdrawal of this water will have any effect on the Company's generation capacity.

*prop has been worked
to resolve this issue
prior to res. of rep*

APPENDIX 13 (continued)

4. COMMENT: "Aircraft noise from Mustang Field might be more intrusive than would be the case in an area of higher ambient noise level."
CAL TRNS:
DIVISION OF
AERONAUTICS

RESPONSE: The above statement is true; however, aircraft use of Mustang Field is very light. Flights over this site should not represent a significant problem, as noted in your letter and the E.I.R.

5. COMMENT: Comments noted.
D.F.G.
7-17-79

APPENDIX 14

RECENT CORRESPONDENCE (1982) REGARDING THE MANTON HEIGHTS SUBDIVISION:

1. Department of Fish and Game
2. Pacific Gas and Electric
3. Society for California Archaeology
4. A Re-Evaluation of the Cultural Significance of Archaeological Sites in Manton Heights Subdivision
5. Memo from Shasta County Air Pollution Control Office

DEPARTMENT OF FISH AND GAME

P.O. BOX 1480
REDDING, CALIFORNIA 96099
(916) 246-6511



April 6, 1982

RECEIVED

APR 11 1982
SHASTA COUNTY
PLANNING

Mr. Joe Hunter, Director
Shasta County Planning Dept.
1855 Placer Street
Redding, CA 96001

Dear Mr. Hunter:

The following comments regard TR #1523, Manton Heights Subdivision:

According to our records, we initially commented on August 8, 1978, on a draft E.I.R. for a project at this site. At that time we indicated that the report adequately addressed the major wildlife impacts that would result from this proposal. We also felt that the mitigation proposals presented were worthwhile and should be included in the project.

On July 17, 1979, we commented in response to the final E.I.R. 19-78. It was our position that the mitigation measures proposed, plus additional measures outlined in Mr. William C. Johnson's letter of July 5, 1979, would effectively mitigate the impacts on wildlife.

We believe our past comments are still appropriate provided that all prior mitigative features are included as part of this revised project.

If you have questions regarding our comments, please contact Tom Stone at 246-6544.

Very truly yours,

for *John M. Hayes*
A. E. Naylor
Regional Manager
Region 1

Mr. Joe Hunter, Planning Director
April 16, 1982
Page 2

For the benefit of both the County and future land purchasers, we wish to reaffirm this Company's position of not relinquishing any of the reserved rights until an agreement has been reached with the developer, and request the County to incorporate in the CC&R's the fact that this is a disputed area.

If you have any questions, please phone Mr. J. R. Capel, 527-5880.

Sincerely,

A. E. Henderson

A. E. Henderson
Division Electric Superintendent

Encls.

cc Fred Lindauer
P. O. Box 615
Red Bluff, Ca. 96080



SOCIETY for CALIFORNIA ARCHAEOLOGY

APR 12 1982

SHASTA COUNTY
PLANNING

Mr. Pat Cecil
Shasta County Planning Department
1855 Placer Street
Redding, California 96001

April 6, 1982

Dear Mr. Cecil:

We have reviewed our records concerning the Manton Heights Subdivision, and it is with considerable concern that we receive your report of the destruction of CA-SHA-737, however inadvertent the action may have been. From the information available to us, the site may have played a central role in the local land use system, and its loss would be a major one.

Our files indicate that Keith Johnson met with C. W. Bachman (letter of April 2, 1979), at which time the decision was made to designate CA-SHA-737 a non-building area. We have no record of the subsequent destruction of the site or of Mr. Johnson having stated that the site is no longer significant.

Since surface disturbance does not automatically render a site insignificant, it is our recommendation that the site area be inspected by a professional archaeologist to determine if, in fact, the site is no longer significant or if mitigation measures will still need to be implemented.

Given the finite, non-renewable nature of archaeological sites, the loss of any site is viewed with concern, but this is especially so when the site involved has been judged significant in the environmental review process.

Excluding the problem of CA-SHA-737, we find the stipulated measures for the protection of the cultural resources within the subdivision area to be adequate. Please keep us informed of the decisions made with regard to this matter.

Sincerely yours,
Makoto Kowta
Makoto Kowta
Regional Coordinator

OFFICERS 1981-82

PRESIDENT
Russell L. Kaldenberg
(Bureau of Land Management)
P.O. Box 821
Forest Falls, CA 92339

PRESIDENT-ELECT
Gary S. Breachini
(Archaeological Consulting)
P.O. Box 3377
Salinas, CA 93912

IMMEDIATE PAST-PRESIDENT
Linda B. King
(West Valley College)
1089 Broadway Avenue
San Jose, CA 95125

NORTHERN VICE-PRESIDENT
Michael Boynton
(U.S. Forest Service)
358 French St.
Willows, CA 95988

SOUTHERN VICE-PRESIDENT
Charles S. Bull
(RECON)
1094 Cudahy Place, Suite 204
San Diego, CA 92110

SECRETARY
Maryanne Fazio
(Archaeological Consultant)
1504 Grove St.
Berkeley, CA 94709

TREASURER
Jane Gothold
(Pacific Coast
Archaeological Society)
10121 Pounds Avenue
Whittier, CA 90603

BUSINESS OFFICE MANAGER
Gale Carpenter
Anthropology Department
California State University
Fullerton, CA 92634
(714) 773-3977

SOCIETY COUNSEL
Dr. Daniel D. Whitney
Attorney at Law
Ryneerson Mansion
2441 E Street
San Diego, CA 92102

**NEWSLETTER
EDITOR-IN-CHIEF**
Ronald V. May
6044 Estelle St.
San Diego, CA 92115

ASSOCIATE EDITORS
Charles S. Bull
(RECON)
Richard L. Carrico
(WESTEC)
3211 Fifth Avenue
San Diego, CA 92103

A RE-EVALUATION OF THE CULTURAL SIGNIFICANCE OF
CA-SHA-736, 737 AND 738
LOCATED IN MANTON HEIGHTS SUBDIVISION
SHASTA COUNTY, CALIFORNIA

Prepared for: Fred Lindauer
P.O. Box 615,
Red Bluff, CA 96080

Prepared by: ARK II
Anthropological Resource Management
P.O. Box 4651,
Redding, CA 96099

11 July 1982

A RE-EVALUATION OF THE CULTURAL SIGNIFICANCE OF
CA-SHA-736, 737 AND 738
LOCATED IN MANTON HEIGHTS SUBDIVISION
SHASTA COUNTY, CALIFORNIA

INTRODUCTION

In June of 1982, this firm was contacted by the owner and developer of MANTON HEIGHTS SUBDIVISION, Mr. Fred Lindauer, to re-evaluate the cultural significance of three archaeological sites that had been located during a survey conducted in 1978 by Richard E. Markley, District Archaeologist, Society for California Archaeology. Should the present re-survey concur with the evaluation of 1978, I was asked to give specific recommendations for possible mitigation.

During the 1978 field survey, Mr. Markley located three historical and nine prehistorical sites. This report concerns only three of these sites.

CA-Sha-736 (MANTON HEIGHTS #2):

Three separated unmortared rock foundations in an area of surface litter of historical material (ceramics, glass and metal) were located within Lot 33 of the subdivision immediately east of a newly-developed road to Rock Creek.

CA-Sha-737 (MANTON HEIGHTS #3):

This prehistoric site covers the crest of a descending ridge, east of CA-Sha-736 and south of Rock Creek within Lots 34, 35 and 36. The site, some 125 by 50 meters, is discernable by a mid-den discoloration (a darkening of the soil in contrast to the light gray, ashy soil of the surrounding soils), the presence of the surface of obsidian and basalt waste flakes/tools and organic evidence (bone and charcoal) and at least four shallow house pits.

The site has been tentatively identified by Markley as the Southern Yana village of K'ui'ha.

CA-Sha-738 (MANTON HEIGHTS #4):

This site, immediately northeast of CA-Sha-737 and within Lot 36, is a small concentration of obsidian and basalt waste flakes with some mid-den discoloration.

In Markley's report (Appendix 3 in the final E.I.R. #19-78, Shasta County Planning Department), he found that CA-Sha-736, 737 and 738 were culturally significant. Certain recommendations were made as means to mitigate the possible direct and indirect adverse impacts resulting from the implementation of the proposed subdivision plans. Markley's basic recommendation was "that Lots 33-36 be deleted entirely [from the project] and be left open space land...."

"A second alternative would involve proceeding with the development as currently planned with the stipulation that the property owner(s) would enter into an agreement with the Society for California Archaeology to preserve the archaeological resources intact. Such an

agreement would include deeding to the Society for California Archaeology a non-exclusive easement to the properties containing archaeological sites for the purpose of insuring that they are being preserved."

On June 19th, with Mr. Fred Lindauer, and on July 10, 1982, I re-surveyed the three sites. Based on my own surface survey and the study of all related documents, I have concluded that Mr. Markley's original evaluation of the cultural significance of the three sites based on surface evidence is correct. Further documentation of this surface evidence of the significance to comply more fully with the present interpretation of the standards for evaluating the cultural significance of a site as applied by the State Historical Preservation Office to the National Register of Historical Places including sub-surface testing if Markley's recommendations that Lots 33-36 not be followed.

Should his recommendations be followed, I would further recommend that the area be fenced to preclude any secondary or indirect impact caused by the increased population in the area resulting from the subdivision. These secondary impacts could take the form of foot paths, bike or four-wheel trails, or the grazing of cattle. The area of the site should be allowed to revert to native vegetation.

Should it not be feasible to delete the area from the project, I

recommend the following:

1. CA-Sha-736 be accurately mapped and data recovered by a scientifically-controlled excavation to supply information about the period of occupation, architectural features and the function of the homestead. This archaeological investigation should be supplemented by a document search for historical data.
2. Since it was not possible to determine from surface evidence the depth of the deposit, the mitigation procedure should be a two stage investigation:
 - a. Both CA-Sha-737 and CA-Sha-738 be tested by a small number of test units. This would not only give information as to the depth of the midden deposit, ratio of recovery of data and the kinds of data present in the site but would also support or not support Markley's and my judgment of significance.
 - b. Should either or both CA-Sha-737 and 738 be judged, based on sub-surface testing, not to be significant because of midden disturbance, lack of recoverable data or other reasons, then the sites can be declared not culturally significant, and the project will have no adverse impact.
3. Should either or both CA-Sha-737 and 737 be substantiated by the testing as culturally significant, then a scientifically-controlled excavation by a qualified archaeologist be conducted to supply data based on a valid research design.
4. The excavation should result in a final report, and copies should be placed in local libraries and archives. All artifacts, records and photographs should be placed in a qualified, local archive to be available for future study.

Should these recommendations be followed, CA-Sha 736, CA-Sha-737 and CA-Sha-738 will be deemed not significant, and the project will have no further impact on these cultural resources.

Submitted by

James Dotta
Archaeologist

Inter-Office Memorandum

SHASTA COUNTY HEALTH SERVICES

TO: John Strahan, Planner
Planning Department

DATE: August 19, 1982

FROM: Richard B. Booth, Air Pollution Control Officer

RBB RECEIVED
AUG 19 1982

SUBJECT: Manton Heights Project

SHASTA COUNTY
PLANNING

1. The assumption that all the lots would be used year-round is a conservatively high one, even when the report states differently. This assumption is OK and allows us to look at the worst-case emission estimate.
2. I believe the use of four (4) trip ends per day per lot is low and should be revised to at least six (6).
3. In the future please note that the APCD will be using the latest runs of the EMFAC6C mobile emission inventory to generate emission factors for use in reports such as this. We are required by law to use this inventory for planning purposes both on the local and state level. Please discontinue using the inventory done by Shasta County APCD; the discrepancies when compared to the EMFAC6C are gigantic, and many of the assumptions made in it are not valid.
4. Emissions from the gravel roads are calculated below:

Emission Factor EPA (Range)
3 lbs/VMT - 5.3 lbs/VMT

Factor Based on Thornthwaite Equation
E = 2.8 lbs/VMT

Use 3 lbs/VMT as an average factor

43 lots
2.5 miles of graveled road
2 trips per day per lot
average length of trip on gravel road: approximately 1 mile
emissions generated for 265 days per year

258 lbs/day or 34 tons/year

5. These emissions are an incremental increase but at present would not be significant. A portion of these emissions have been included in district emission projections already incorporated into our inventory based on our normal growth rates.

RBB:1km

STAFF ADVISORY MEETING

September 15, 1982

STAFF DRAFT E.I.R. #319-78

MANTON HEIGHTS SUBDIVISION, TRACT NO. 1523

To Planning Department 9-20-82

The Department of Public Works recommends that the following modifications or addendums be added to clarify the following items of concerns regarding the subject E.I.R.

<u>Item No.</u>	<u>Page, Paragraph and Sentence</u>	<u>Comments</u>
1.	Pg. 1, 1st para., 1st sentence	Current tentative map should be added to document. Current tentative map (Revised Map #5) has 43 lots proposed -- not 36 lots as stated. Also the average lot size and remainder parcel have been changed from 13.5 acres and 39 acres to 11.4 acres and 96 acres respectively.
2.	Pg. 1, 1st para., 2nd sentence	Access to remainder parcel has been provided with the construction of the access road for Bailey Creek Hydro Project.
3.	Pg. 1, 3rd para., 1st sentence	This sentence refers to private roads but should include a discussion of maintenance entity and financing for upkeep of private roads. Financial viability of entity is also a point of concern. Entity should be subject to review and approval by County Counsel.
4.	Figure 2	The map shown is not the latest tentative map (Revised Map #5). Revised Tentative Map #5 should be included in document.
5.	Figure 3	Same as comment for Item #4 (Figure 2), but should be adequate as it relates to soil type classification.
6.	Pg. 10, 1st para., 3rd sentence	A discussion of impacts to residents from dust generated from gravel road would be appropriate, including disadvantages over paved (A.C.) roads.
7.	Pg. 16, Sec. C, Access - 1. Roads	This section should discuss formation of maintenance entity, including financing for maintenance of private roads and drainage facilities associated with them.
	Appendix 11	Air Quality should include the effects of the gravel road for dust impacts.
	2nd para.	The 4 trip ends per day for individual lots appear low; 6 to 7 would be more realistic.

APPENDIX 15

COMMENTS RECEIVED ON REVISED DRAFT E.I.R. (1982):

1. California Department of Transportation, Division of Aeronautics
2. Department of Anthropology, California State University, Chico
3. California Department of Forestry
4. Pacific Gas and Electric
5. California Regional Water Quality Control Board.

DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS
1120 "N" STREET
SACRAMENTO, CA 95814
(916) 322-3090



RECEIVED

OCT 6 1982

SHASTA COUNTY
PLANNING

October 4, 1982

Mr. Joe E. Hunter
Planning Department
County of Shasta
1855 Placer Street
Redding, CA 96001

Dear Mr. Hunter:

This is in response to your request for our review of the revised Draft Environmental Impact Report (DEIR) for the Manton Heights Subdivision located one mile northeast of the community of Manton.

Your environmental document indicates that the proposal is 3,800 feet east of the Mustang Airport, with most airport approaches and departures from or toward the west. It does indicate that there may be a conflict between the airport and the proposal, but that the conflict will be minimal due to the predominant flight path not crossing the project site.

We feel the environmental document has adequately addressed our concerns regarding the potential for noise and safety impacts the airport may present upon the proposal. We concur with the conclusions reached in your environmental document.

Sincerely,

MARK F. MISPAGEL, Chief
Division of Aeronautics

A handwritten signature in cursive script, appearing to read "Burd Miller for".

Burd Miller, Chief
Office of Environmental Services

100

California
Archaeological
Inventory

Information Center



BUTTE	SHASTA
GLENN	SISKIYOU
PLUMAS	TEHAMA
LASSEN	TRINITY
MODOC	

Department of Anthropology
California State University, Chico
Chico, CA 95929
(916) 895-6256

Oct. 11, 1982

RECEIVED

OCT 15 1982

SHASTA COUNTY
PLANNING

Joe Hunter
Shasta County Planning Department
1855 Placer Street
Redding, CA 96001

re: Revised Draft E.I.R. #19-78, Manton Heights
Subdivision Tract 1523

Dear Mr. Hunter,

We have reviewed the archaeological component of the revised Draft E.I.R. for the Manton Heights Subdivision Tract 1523. We are in general agreement with the proposed mitigation measure for the archaeological sites which may be impacted by the development. The establishment of a resource conservation zone appears to be an acceptable means of protection for these important cultural resources. Additionally, this zone will offer some protection for a rare and endangered plant species and, thus, would appear to be the most practical solution to mitigate the negative impacts of the proposed project.

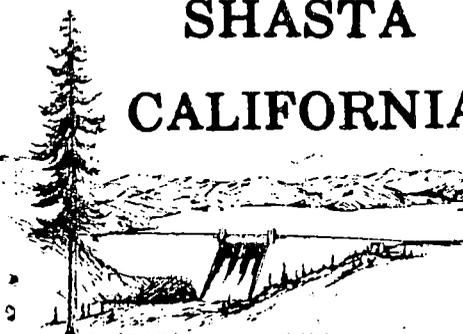
Thank you for the opportunity to comment on this project.

Sincerely,

Dr. Makoto Kowta
Northeast Information Center Coordinator

SHASTA COUNTY FIRE DEPARTMENT CALIFORNIA DEPARTMENT OF FORESTRY

COOPERATIVE FIRE PROTECTION



1050 PARKVIEW AVENUE
REDDING, CALIF. 96001
(916) 243-1436

GARY L. BUZZINI
COUNTY FIRE WARDEN
RANGER-IN-CHARGE

VOLUNTEER FIRE COMPANIES

BELLA VISTA
BIG BEND
CASSEL
CENTERVILLE
CLOVERDALE
HAT CREEK
IGO-ONO
JONES VALLEY
KESWICK
MILLVILLE
MONTGOMERY CREEK
OAK RUN
OLD STATION
PALO CEDRO
SHASTA COLLEGE
SHASTA LAKE
SHINGLETOWN
WHITMORE

October 18, 1982
E1

Mr. Joe Hunter,
Director
Shasta County Planning Dept.
1855 Placer Street
Redding, California 96001

Re: Manton Height Subdivision
Tract 1523

Dear Mr. Hunter:

The CDF/SCFD position remains unchanged from our initial response on September 18, 1981.

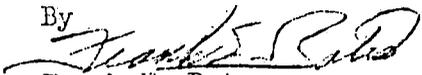
Drafting access should be provided for fire fighting equipment on Battle Creek and Rock Creek. The design of this access should be approved by CDF/SCFD. In addition, the bridge over Rock Creek should meet the standards found in the "Fire Safety Standards for Land Divisions and Subdivisions".

Thank you for the opportunity to respond to this development. If you have any further questions, please feel free to call me at 243-1436.

Sincerely,

Gary L. Buzzini
County Fire Warden

By


Frank E. Bates
Deputy Fire Warden - Administration

RECEIVED

OCT 18 1982

SHASTA COUNTY
PLANNING DEPT.

dtm

cc: FPO

PACIFIC GAS AND ELECTRIC COMPANY

PG&E + 814 MAIN STREET • BOX 340 • RED BLUFF, CALIFORNIA 96080 • (916) 527-5880

R. J. LA RUE, JR.
DIVISION MANAGER

RECEIVED

OCT 21 1982

SHASTA COUNTY
PLANNING

October 18, 1982

Mr. Joe E. Hunter, Director
County of Shasta, Planning Department
1855 Placer Street
Redding, CA 96001

Attention: Patrick Cecil

Gentlemen:

Thank you for the opportunity to review the revised EIR for the Manton Heights Sub-Division. The concerns we raised in our previous correspondence have yet to be resolved.

As to specific areas of the EIR we offer the following comments:

Pg. 8, Para. E, 1. Surface water - the statement that the Cross Country DITCH serves the domestic water needs of Manton is inaccurate - there are only 3 diversions from the "Canal." Please refer to our letter of August 15, 1978.

Pg. 18, Para. E. Utilities - statement should read "PGandE maintains a 12,000 volt distribution line ..."

Appendix 13, Para. 3. RESPONSE; first sentence. This sentence is in error. PGandE has not reached agreement with anyone in regards to the reserved rights. An offer was made to the developer which would have resolved the issue of the surface and sub-surface rights. The offer was not accepted.

We have no additional comments to make at this time.

Sincerely,

A E Henderson

A. E. Henderson
Division Electric Superintendent

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
CENTRAL VALLEY REGION**

Shasta Cascade Watershed Branch office:
100 E. Cypress Avenue
Redding, California 96002
Phone: (916) 246-6376

19 October 1982

Mr. Pat Cecil
Shasta County Planning Department
1855 Placer Street, Room 102
Redding, California 96001

MANTON HEIGHTS SUBDIVISION

We have reviewed the consultant's soils information submitted for the subject subdivision.

Our review indicates that the soils meet the Shasta County Subdivision Standards. We therefore have no objection to the use of individual septic tank leachfield systems for this development.

If you have any questions, please contact me at the above phone number or address.


JAMES O. KRAUSE
Staff Engineer

JOK:glh

cc: Shasta County Health Department, Redding
Evergreen Engineering Corporation, Red Bluff ✓

APPENDIX 16

RESPONSE TO COMMENTS IN APPENDIX 15:

1. COMMENT: Comments noted.

CAL TRANS:
DIV. OF
AERONAUTICS

2. COMMENT: Comments noted.

DEPT. OF
ANTHROPOLOGY
CAL STATE, CHICO

3. COMMENT: Drafting access should be provided for fire fighting equipment on Battle Creek and Rock Creek. The design of this access should be approved by CDF/SCFD. The bridge over Rock Creek should meet the Standards found in the "Fire Safety Standards for Land Divisions and Subdivisions".

RESPONSE: Drafting access is available from Rock Creek at the existing bridge site or at the small dam site located approximately 500 feet east of the bridge. Access to Battle Creek is not possible, because it is in a very deep canyon; however, the P.G. & E. ditch is readily available and possibly could be used in an emergency.

The bridge over Rock Creek was built by the hydro electric plant owner. It has been designed for heavy truck traffic and is single lane. It only serves the remainder parcel in this subdivision and is very adequate for that purpose. ~~It may, or may not, meet County Standards; however, it is existing, and there is no plan to do added work to it.~~

4. COMMENT: Comments noted.

P.G. & E.

Conditions of Approval will require the bridge to meet Co. fire Safety standards.

5. COMMENT: Comments noted.

C.W.Q.C.B.

file
copy

RESOLUTION NO. 5593

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF SHASTA CERTIFYING FINAL ENVIRONMENTAL IMPACT REPORT 19-78 FOR TENTATIVE TRACT 1523, INITIATED BY FRED LINDAUER.

WHEREAS, the Shasta County Planning Commission has reviewed and considered Environmental Impact Report 19-78, prepared for Tentative Tract 1523, initiated by Fred Lindauer, in accordance with Board of Supervisors' Resolution No. 80-59 (Procedures for the Administration of the California Quality Act); and

WHEREAS, a public hearing was held on said Environmental Impact Report on December 9, 1982; and

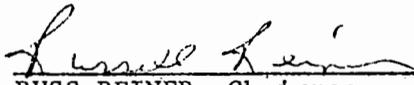
WHEREAS, the Shasta County Planning Commission has considered the comments received during the review and comment period on the draft Environmental Impact Report and considered the responses to those comments; and

WHEREAS the Environmental Impact Report identifies potential significant effects on the environment involving archaeological resources and rare plants, both of which are mitigable to below a level of significance.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the County of Shasta, certifies final Environmental Impact Report 19-78 prepared for Tentative Tract 1523, initiated by Fred Lindauer as having been completed in compliance with the California Environmental Quality Act, the State CEQA Guidelines, and Shasta County environmental guidelines.

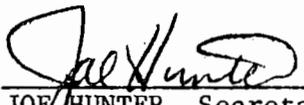
DULY PASSED this 9th day of December, 1982, by the following vote:

- AYES: Commissioners Murray, Albaugh, Bosworth, Prielipp and Reiner
- NOES: None
- ABSENT: None
- ABSTAIN: None



 RUSS REINER, Chairman
 Planning Commission
 County of Shasta
 State of California

ATTEST:



 JOE HUNTER, Secretary
 Planning Commission
 County of Shasta
 State of California

Attachment 5

Resolution No. 5594 (December 9, 1982)

Resolution No. 5747 (May 26, 1983)

Resolution No. 6382 (January 10, 1985)

Planning Commission of the County of Shasta

and

Tract No. 1523, Manton Heights Private Road
Subdivision, filed for record on June 6, 1985 in
Volume 17 of Maps at page 79, Shasta County
Records.

RESOLUTION NO. 5594

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF SHASTA APPROVING A TENTATIVE LAND DIVISION MAP IDENTIFIED AS TRACT 1523, FILED BY FRED LINDAUER, SUBJECT TO CERTAIN CONDITIONS.

WHEREAS, the Planning Commission of the County of Shasta has considered tentative Tract 1523, filed by Fred Lindauer, in accordance with Part 7, Land Use Regulations and Planning; Division 4, Subdivisions, of the Shasta County Ordinance Code; and

WHEREAS, said tentative map was referred to various affected public and private agencies, County Departments and the Staff Advisory Committee for review and comments, and

WHEREAS, a public hearing was held on said map on December 9, 1982 and

WHEREAS, the County Environmental Review Officer has reviewed the tentative map and recommends a specific environmental finding; and

WHEREAS, the Shasta County Planning Commission finds that:

1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant environmental effects thereof as identified in the final EIR, in that, potential impacts to identified archaeological resources and to rare plants are mitigated by the designation of non-disturbance areas, to be maintained in their natural condition.
2. The tentative map, together with the provisions for its design and improvement is consistent with the objectives, policies, general land uses and programs of the General Plan.
3. That no evidence has been presented which would require denial under Section 66474 of the Map Act.

NOW, THEREFORE, BE IT RESOLVED that the Shasta County Planning Commission hereby approves tentative Tract 1523, filed by Fred Lindauer, subject to the following listed conditions.

1. The requirements of all concerned governmental agencies having jurisdiction by law, including but not limited to the issuance of appropriate permits, shall be met.
2. If, in the course of development, any previously identified archaeological, historical, or paleontological resources are discovered, construction activities in the affected area shall cease and a qualified archaeologist

shall be contacted to review the site and advise the County of the site's significance. If the findings are deemed significant by the Environmental Review Officer, appropriate mitigations shall be required.

3. Approval of this map is contingent upon approval for rezoning to "R-R-BSM" (parcels 1 through 43 and the remainder parcel), and "O-S" (250' each side of the centerline of Rock Creek and 100' each side of the centerline of Battle Creek), and/or appropriate zone district(s).
4. Road names shall be approved by the Planning Department.
5. Show 250' each side of the centerline of Rock Creek and 100' each side of the centerline of Battle Creek on the final map as non-disturbance areas to be maintained in a natural condition.
6. Note on the final map that the project is located in "Open Range" and is subject to all restrictions pertaining to "Open Range".
7. Dispose of all vegetation cleared for construction purposes. Any burning of brush shall be in compliance with Air Pollution Control District regulations and SCFD/CDF requirements.
8. Provide fire protection as indicated in the SCFD/CDF letter dated 11/22/82, or other alternative, to be approved by SCFD/CDF.
9. Final copies of the CC&R's shall be reviewed and approved by the Planning Department prior to the recording of the final map.
10. Note in CC&R's that any changes to the approved CC&R's must be reviewed and approved by the Planning Department prior to recordation.
11. Under the direction of an archaeologist approved by the Environmental Review Officer, complete the following mitigation measure prior to recording of the final map for Tract 1523:

Since it was not possible to determine from surface evidence the depth of the deposit, the mitigation procedure should be a two stage investigation:

1. Both CA-Sha-737 and CA-Sha-738 be tested by a small number of test units. This would not only give information as to the depth of the midden deposit, ratio of recovery of data and the kinds of data present in the site but would also support or not support the judgment of significance.
2. Should either or both CA-Sha-737 and 738 be judged, based on sub-surface testing, not to be significant because of midden disturbance, lack of recoverable data or other reasons, then the sites can be declared not culturally significant, and the project will have no adverse impact.

Should either or both CA-Sha-737 and 738 be substantiated by the testing as culturally significant, then a scientifically-controlled

excavation by a qualified archaeologist be conducted to supply data based on a valid research design. The excavation should result in a final report, and copies should be placed in local libraries and archives. All artifacts, records, and photographs should be placed in a qualified local archive to be available for future study.

12. The face of the final map shall be annotated with this note: "An on-site sewage disposal system shall be located only within the disposal area indicated for parcel(s) 1 through 43 and remainder parcel". The disposal area for said parcel(s) shall be delineated on the final map.
13. Any proposed grading which will create cuts or fills for roads, driveways, building sites, drainage ways or ditches on parcels shall be reviewed and approved by the Department of Environmental Health as meeting County Sewage Disposal Standards requirements prior to the start of said grading.
14. Any remaining open testing pits/excavations located on the subject property shall be properly backfilled so as to be in compliance with Sub-section A(6) (b) of Section XIII of the 1980 Sewage Disposal Standards prior to DEH approval of the map for recordation.
15. Obtain encroachment permit(s) from the Department of Public Works (Subdivision Engineering) and construct road connection(s) as directed at the following location(s):

Jacktom Rd. and Rock Creek Rd.
Battleview Drive and Rock Creek Rd.
16. a) Construct and offer to dedicate to Shasta County the private roads for future road purposes to the following standards:

Street Name: Jacktom Road, Battleview Road, Linman Land
Standard: Private residential (20' wide, 6" Class 3 aggregate base, with double chip seal within a 60' right-of-way)
- b) Construct a cul-de-sac at the end of the following street to the standard indicated:

Battleview Drive - 45' radius surface to the same standard as Battleview Drive with a 50' radius right-of-way.
- c) Prior to filing of the final map, the developer shall form a maintenance entity, as approved by County Counsel, to assume responsibility for the maintenance of private roads. The developer shall pay all fees associated with said formation and shall retain responsibility for the maintenance of the private roads until the entity is financially able to assume the maintenance function.
17. Dedicate to Shasta County the following street(s):

Rock Creek Rd. - 30 feet from existing centerline within subdivision boundary

18. Offer for dedication to Shasta County future streets on an alignment acceptable to Department of Public Works as follows:

From Battleview Drive to the east subdivision boundary.
19. Construct drainage facilities as approved by the Department of Public Works.
20. Provide adequate drainage easements as approved by the Department of Public Works to allow construction of drainage facilities.
21. The subdivider shall install all street signs, traffic delineation devices, warning and regulatory signs, guard rail, barricades, and other similar devices where required by the Department of Public Works. Signing shall be in conformance with the Department of Public Works standards and the current State of California Uniform Sign Chart. The installation of traffic devices shall be subject to review and modifications after construction is complete. The Department of Public Works will, at the subdivider's request and expense, install the signs.
22. Prior to filing of the final map, the developer shall form a County service area or other maintenance entity, as approved by County Counsel, to assume responsibility for the disposal of refuse. The developer shall pay all fees associated with said formation and shall retain responsibility for the maintenance of the facilities until the entity is financially able to assume the maintenance function. The Director of Public Works may waive the requirements of this condition if Tehama County relieves Shasta County of its obligation to participate in the funding of the operation of the solid waste disposal transfer site which serves the area in which this development is proposed. It is intended that the fee will be charged only to those lots upon which a structure is built and residential use is established.
23. Prior to filing the final map the existing bridge to the remainder parcel shall be certified by a registered civil engineer as meeting current County Fire Safety Standards for subdivisions.
24. Improvement plans shall be approved by the Division of Environmental Health and the Department of Public Works.
25. Supply evidence, to be reviewed and approved by the Division of Environmental Health and County Counsel, that the water rights issue with PG&E has been resolved for the extraction of subsurface waters for domestic use or provide an alternate water supply acceptable to the Division of Environmental Health.
26. Under the direction of a botanist, identify on the final map, the area on the remainder parcel where the rare plants identified in EIR 19-78 are located, and designate as a non-disturbance area.

WHEN IMPROVEMENTS MAY BEGIN

No work, other than clearing for purposes of surveying, shall begin until construction plans and necessary permits have been

approved per Sections 4201, 4230, and 4231, Shasta County Ordinance Code; and Parcel Map Road Standards as adopted by Resolution No. 80-28 of the Shasta County Board of Supervisors on February 5, 1980.

NOTE: This tentative map will expire 24 months from the date of approval unless an extension of time is applied for by the applicant and granted by the approving agency in accordance with adopted ordinances and established policy.

NOTE: Unless otherwise noted, all listed conditions must be completed prior to recordation of the parcel/final map.

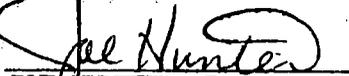
DULY PASSED this 9th day of December, 1982, by the following vote:

AYES: Albaugh, Prielipp, Bosworth, Reiner
NOES: Murray
ABSENT: None
ABSTAIN: None



RUSS REINER, Chairman
Planning Commission
County of Shasta
State of California

ATTEST:



JOE HUNTER, Secretary
Planning Commission
County of Shasta
State of California

RESOLUTION NO. 5747

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF SHASTA APPROVING A MODIFICATION OF CONDITION OF APPROVAL NUMBER 25 OF RESOLUTION NO. 5594 FOR A LAND DIVISION MAP IDENTIFIED AS TRACT 1523, FILED BY FRED LINDAUER.

WHEREAS, the Planning Commission of the County of Shasta has considered tentative Tract 1523, filed by Fred Lindauer, in accordance with Part 7, Land Use Regulations and Planning; Division 4, Subdivisions, of the Shasta County Ordinance Code; and

WHEREAS, said tentative map was referred to various affected public and private agencies, County Departments and the Staff Advisory Committee for review and comments; and

WHEREAS, the Planning Commission has previously approved said map on December 9, 1982, per Resolution No. 5594; and

WHEREAS, the applicant has requested a modification of condition of approval number 25, involving water supply; and

WHEREAS, a public hearing was held on said request for modification on May 26, 1983; and

WHEREAS, the County environmental Review Officer has reviewed the tentative map and recommends a specific environmental finding; and

WHEREAS, the Shasta County Planning Commission finds that:

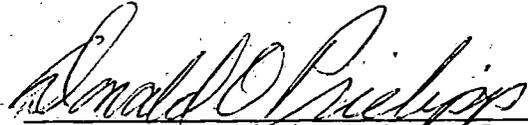
1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant environmental effects thereof as identified in the final EIR, in that, potential impacts to identified archaeological resources and to rare plants are mitigated by the designation of non-disturbance areas, to be maintained in their natural condition.
2. The tentative map, together with the provisions for its design and improvement, is consistent with the objectives, policies, general land uses and programs of the General Plan.
3. That no evidence has been presented which would require denial under Section 66474 of the Map Act.
4. That a modification of condition number 25 is appropriate, to clarify its intent to require a resolution of the dispute over water rights prior to the creation of parcels, in order to assure that the proposed parcels are suitable for their intended rural residential use, and to eliminate the implication that the County would actually determine water rights.

NOW, THEREFORE, BE IT RESOLVED that the Shasta County Planning Commission hereby approves a modification of condition of approval number 25 of Resolution No. 5594, for tentative Tract 1523, filed by Fred Lindauer, as indicated below:

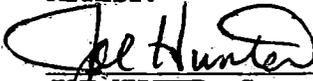
25. So that it is assured that the lots created can be used for their intended rural residential use, provide one of the following, prior to recordation of the final map, as evidence that the water rights dispute with PG&E has been resolved:
- a. A signed agreement with PG&E, to be reviewed and approved by County Counsel, allowing for the extraction of subsurface water for all lots to be created.
 - b. A court decision, determining that the future owners of each lot created have the right to extract subsurface water.

DULY PASSED this 26th day of May, 1983, by the following vote:

AYES:	Commissioners Bosworth, Murray, Prielipp, Albaugh
NOES:	None
ABSENT:	Commissioner Reiner
ABSTAIN:	None


DON PRIELIPP, Vice Chairman for
STEPHEN ALBAUGH, Chairman
Planning Commission
County of Shasta
State of California

ATTEST:


JOE HUNTER, Secretary
Planning Commission
County of Shasta
State of California

RESOLUTION NO. 6382

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF SHASTA APPROVING AN EXTENSION OF TIME FOR A TENTATIVE LAND DIVISION MAP IDENTIFIED AS TRACT 1523, MANTON HEIGHTS SUBDIVISION, FILED BY FRED LINDAUER, SUBJECT TO CERTAIN CONDITIONS.

WHEREAS, the Planning Commission of the County of Shasta has considered tentative Tract 1523, Manton Heights Subdivision, filed by Fred Lindauer, in accordance with Part 7, Land Use Regulations and Planning; Division 4, Subdivisions, of the Shasta County Ordinance Code; and

WHEREAS, said tentative map was referred to various affected public and private agencies, County Departments and the Staff Advisory Committee for review and comments; and

WHEREAS, a public hearing was held on January 10, 1985, on the request for an extension of time; and

WHEREAS, the County Environmental Review Officer has reviewed the tentative map and recommends a specific environmental finding; and

WHEREAS, the Shasta County Planning Commission finds:

1. That an extension of time to June 9, 1986, may be granted in accordance with local ordinance Section 4235 and the State Subdivision Map Act, Section 66452.6 (E).
2. That no evidence has been presented which would substantiate denial of the extension of time.
3. That there have been no changes in the circumstances which would warrant review of a new tentative map.

NOW, THEREFORE, BE IT RESOLVED that the Shasta County Planning Commission hereby adopts the following environmental finding: EIR #19-78

BE IT FURTHER RESOLVED that the Shasta County Planning Commission hereby approves an extension of time until June 9, 1986, for tentative Tract 1523, Manton Heights Subdivision, filed by Fred Lindauer, subject to the following listed conditions:

1. The requirements of all concerned governmental agencies having jurisdiction by law, including but not limited to the issuance of appropriate permits, shall be met.
2. If, in the course of development, any previously identified archaeological, historical, or paleontological resources are discovered, construction activities in the affected area shall cease and a qualified archaeologist shall be contacted to review the site and advise the County of the site's significance. If the findings are deemed significant by the Environmental Review Officer, appropriate mitigations shall be required.

3. Road names shall be approved by the Planning Department.
4. Shows 250' each side of the centerline of Rock Creek and 100' each side of the centerline of Battle Creek on the final map as non-disturbance areas to be maintained in a natural condition.
5. Note on the final map that the project is located in "Open Range" and is subject to all restrictions pertaining to "Open Range".
6. Dispose of all vegetation cleared for construction purposes. Any burning of brush shall be in compliance with Air Pollution Control District regulations and SCFD/CDF requirements.
7. Provide fire protection as indicated in the SCFD/CDF letter dated 11/22/82, or other alternative, to be approved by SCFD/CDF.
8. Final copies of the CC&R's shall be reviewed and approved by the Planning Department prior to the recording of the final map.
9. Note in the CC&R's that any changes to the approved CC&R's must be reviewed and approved by the Planning Department prior to recordation.
10. Under the direction of an archaeologist approved by the Environmental Review Officer, complete the following mitigation measure prior to recording of the final map for Tract 1523:

Since it was not possible to determine from surface evidence the depth of the deposit, the mitigation procedure should be a two stage investigation:

1. Both CA-Sha-737 and CA-Sha-738 be tested by a small number of test units. This would not only give information as to the depth of the midden deposit, ratio of recovery of data and the kinds of data present in the site but would also support or not support the judgment of significance.
2. Should either or both CA-Sha-737 and 738 be judged, based on sub-surface testing, not to be significant because of midden disturbance, lack of recoverable data or other reasons, then the sites can be declared not culturally significant, and the project will have no adverse impact.

Should either or both CA-Sha-737 and 738 be substantiated by the testing as culturally significant, then a scientifically-controlled excavation by a qualified archaeologist be conducted to supply data based on valid research design. The excavation should result in a final report, and copies should be placed in local libraries and archives. All artifacts, records, and photographs should be placed in a qualified local archive to be available for future study.

11. The face of the final map shall be annotated with this note: "An on-site sewage disposal system shall be located only within the disposal area indicated for parcel(s) 1 through 43 and remainder parcel". The disposal area for said parcel(s) shall be delineated on the final map.

12. Any proposed grading which will create cuts or fills for roads, driveways, building sites, drainage ways or ditches on parcels shall be reviewed and approved by the Department of Environmental Health as meeting County Sewage Disposal Standards requirements prior to the start of said grading.
13. Any remaining open testing pits/excavations located on the subject property shall be properly backfilled so as to be in compliance with Sub-section A(6) (b) of Section XIII of the 1980 Sewage Disposal Standards prior to DEH approval of the map for recordation.
14. Obtain encroachment permit(s) from the Department of Public Works (Subdivision Engineering) and construct road connection(s) as directed at the following location(s):

Jacktom Road and Rock Creek Road
Battleview Drive and Rock Creek Road
15. a) Construct and offer to dedicate to Shasta County the private roads for future road purposes to the following standards:

Street Name: Jacktom Road, Battleview Road, Linman Lane
Standard: Private residential (20' wide, 6" class 3 aggregate base with double chip seal within a 60' right-of-way)
- b) Construct a cul-de-sac at the end of the following street to the standard indicated:

Battleview Drive - 45' radius surface to the same standard as Battleview Drive with a 50' radius right-of-way.
- c) Prior to filing of the final map, the developer shall form a maintenance entity, as approved by County Counsel, to assume responsibility for the maintenance of private roads. The developer shall pay all fees associated with said formation and shall retain responsibility for the maintenance of the private roads until the entity is financially able to assume the maintenance function.
16. Dedicate to Shasta County the following street(s):

Rock Creek Road - 30 feet from existing centerline within subdivision boundary.
17. Offer for dedication to Shasta County future streets on an alignment acceptable to Department of Public Works as follows:

From Battleview Drive to the east subdivision boundary.
18. Construct drainage facilities as approved by the Department of Public Works.
19. Provide adequate drainage easements as approved by the Department of Public Works to allow construction of drainage facilities.

20. The subdivider shall install all street signs, traffic delineation devices, warning and regulatory signs, guard rail, barricades, and other similar devices where required by the Department of Public Works. Signing shall be in conformance with the Department of Public Works standards and the current State of California Uniform Sign Chart. The installation of traffic devices shall be subject to review and modifications after construction is complete. The Department of Public Works will, at the subdivider's request and expense, install the signs.
21. Prior to filing of the final map, the developer shall from a County service area or other maintenance entity, as approved by County Counsel, to assume responsibility for the disposal of refuse. The developer shall pay all fees associated with said formation and shall retain responsibility for the maintenance of the facilities until the entity is financially able to assume the maintenance function. The Director of Public Works may waive the requirements of this condition if Tehema County relieves Shasta County of its obligation to participate in the funding of the operation of the solid waste disposal transfer site which serve the area in which this development is proposed. It is intended that the fee will be charged only to those lots upon which a structure is built and residential use is established.
22. Prior to filing the final map the existing bridge to the remainder parcel shall be certified by a registered civil engineer as meeting current County Fire Safety Standards for subdivisions.
23. Improvement plans shall be approved by the Division of Environmental Health and the Department of Public Works.
24. So that it is assured that the lots created can be used for their intended rural residential use, provide one of the following, prior to recordation of the final map, as evidence that the water rights dispute with PG&E has been resolved:
 - a. A signed agreement with PG&E, to be reviewed and approved by County Counsel, allowing for the extraction of subsurface water for all lots to be created.
 - b. A court decision, determining that the future owners of each lot created have the right to extract subsurface water.
25. Under the direction of a botanist, identify on the final map, the area on the remainder parcel where the rare plants identified in EIR 19-78 are located, and designate as a non-disturbance area.

No work, other than clearing for purposes of surveying, shall begin until construction plans and necessary permits have been approved per Sections 4201, 4230, and 4231, Shasta County Ordinance Code and Development Standards.

NOTE: Unless otherwise noted, all listed conditions must be completed prior to recordation of the parcel/final map.

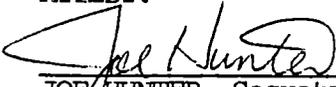
DULY PASSED this 10th day of January, 1985, by the following vote:

AYES: Riis, Kight, Hickie, Fust
NOES: None
ABSENT: Prielipp
ABSTAIN: None



IRWIN FUST, Vice Chairman
Planning Commission
County of Shasta
State of California

ATTEST:



JOE HUNTER, Secretary
Planning Commission
County of Shasta
State of California

OWNER'S CERTIFICATE

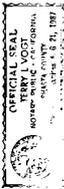
WHEREBY CERTIFY THAT WE ARE THE OWNERS OF, OR HAVE SOME RIGHT, TITLE, OR INTEREST IN, AND TO CONVEY THE SAME TO THE PERSONS WHOSE NAMES ARE SET FORTH IN THIS MAP, AND THAT WE MAKE THE ONLY PERSONS WHOSE CONSENT IS NECESSARY TO PASS A CLEAR TITLE TO SAID PROPERTY AND NECESSARY TO THE PREPARATION AND RECORDATION OF SAID MAP AS SHOWN WITHIN THE COLORED BORDERS, LINES AND MARGINS OF THIS MAP AND PUBLIC UTILITY EASEMENTS, THE EVIDENCE OF WHICH IS SET FORTH IN THE COLORED BORDERS, LINES AND MARGINS OF THIS MAP AND PUBLIC UTILITY EASEMENTS, AND THE PRIVATE ROADS, DRIVEWAYS AND FENCE LOCATIONS AS SHOWN WITHIN SAID MAP AND WITHIN SAID BORDERS, LINES AND MARGINS.

Fredrick J. Lindauer
Frederick J. Lindauer
La. Forward
La. Forward
NOTARY PUBLIC

NOTARY CERTIFICATE

STATE OF CALIFORNIA
COUNTY OF Tehama } ss
ON August 8, 1984 BEFORE ME,
Terry J. Vogt, a Notary Public
in and for said State, personally appeared _____
and acknowledged to me that he executed the foregoing instrument as the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

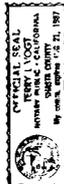
Terry J. Vogt
Terry J. Vogt
NOTARY PUBLIC



NOTARY CERTIFICATE

STATE OF CALIFORNIA
COUNTY OF Tehama } ss
ON August 8, 1984 BEFORE ME,
Terry J. Vogt, a Notary Public
in and for said State, personally appeared
La. Forward }
La. Forward }
on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

Terry J. Vogt
Terry J. Vogt
NOTARY PUBLIC



CERTIFICATE OF ENGINEER

I, ROGER J. FROSLIE, REGISTERED CIVIL ENGINEER, HEREBY CERTIFY THAT THIS MAP CORRECTLY REPRESENTS A SURVEY MADE UNDER MY SUPERVISION AND THAT THE SAME IS TRUE AND CORRECT IN ALL CHARACTER AND ACCURACY AS SHOWN ON THE MAP AT THE TIME OF THE SURVEY TO BE RETRACTED.

Roger J. Frosli
ROGER J. FROSLIE
REGISTERED CIVIL ENGINEER



CERTIFICATE OF APPROVAL BY COUNTY SURVEYOR

RICHARD W. CUREN, COUNTY SURVEYOR OF SHASTA COUNTY, HEREBY CERTIFY THAT I HAVE EXAMINED THIS MAP AND THAT THE SAME IS TRUE AND CORRECT IN ALL CHARACTER AND ACCURACY AS SHOWN ON THE MAP AT THE TIME OF APPROVAL AS APPROVED BY THE SHASTA COUNTY PLANNING COMMISSION ON DECEMBER 9, 1982, THAT ALL THE PROVISIONS OF THE CALIFORNIA 'SUBDIVISION MAP ACT', AS AMENDED, AND ANY CODES APPLICABLE AT THE TIME OF APPROVAL OF SAID TENTATIVE MAP HAVE BEEN COMPLIED WITH AND THAT THIS MAP IS TECHNICALLY CORRECT.

RICHARD W. CUREN
COUNTY SURVEYOR, SHASTA COUNTY, CALIFORNIA
BY: *Richard W. Curen*
DEPUTY COUNTY SURVEYOR 6-6-85
RAZE



CERTIFICATE OF COUNTY TAX COLLECTOR

JACQUES C. WILSON, TAX COLLECTOR OF SHASTA COUNTY, HEREBY CERTIFY THAT THERE ARE NO LIENS FOR UNPAID STATE, COUNTY OR LOCAL TAXES OR SPECIAL ASSESSMENTS AGAINST ANY PART THEREOF EXCEPT WITHIN SUBDIVISION OR EASEMENTS NOT YET PAYABLE AGAINST SAID SUBDIVISION OR ANY PART THEREOF, AND THAT THIS CERTIFICATE DOES NOT INCLUDE ANY ASSESSMENTS OF ANY ASSESSMENT DISTRICT, THE BONDS WHICH HAVE NOT YET BECOME A LIEN AGAINST SAID LAND OR ANY PART THEREOF.

Jacques C. Wilson
TAX COLLECTOR, COUNTY OF SHASTA, CALIFORNIA 6-6-85
Jacques C. Wilson

CERTIFICATE OF COUNTY HEALTH OFFICER

S. J. PINK, M.D., HEALTH OFFICER OF SHASTA COUNTY, CALIFORNIA, HEREBY CERTIFY THAT THE HEALTH AND SANITATION CONDITIONS ESTABLISHED ON THE TENTATIVE MAP AND ANY ALTERATIONS THEREOF AS APPROVED BY THE SHASTA COUNTY PLANNING COMMISSION ON DECEMBER 9, 1982, HAVE BEEN MET OR GUARANTEED.

S. J. PINK, M.D.
SHASTA COUNTY HEALTH OFFICER
S. J. Pink
RAZE

CERTIFICATE OF APPROVAL BY SECRETARY OF SHASTA COUNTY PLANNING COMMISSION

Joe Hunter, SECRETARY OF SHASTA COUNTY PLANNING COMMISSION, HEREBY CERTIFY THAT I HAVE EXAMINED THIS MAP, THAT THE SUBDIVISION AS SHOWN HEREON IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP AND THAT ANY ALTERATIONS THEREOF AS APPROVED BY THE SHASTA COUNTY PLANNING COMMISSION, ON DECEMBER 9, 1982.

Joe Hunter
SECRETARY OF SHASTA COUNTY PLANNING COMMISSION
SHASTA COUNTY, CALIFORNIA 5-21-85
RAZE

BASIS OF BEARINGS

THE BEARING IN BOOK 17052 WAS SHOWN IN BOOK 17051 OF LAND SURVEYS AT PAGE 12. THIS BEARING WAS SHOWN IN BOOK 17051, AND ALL DISTANCES AND DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF. THE BORDER INDICATES THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED BY THIS MAP.

CERTIFICATE OF CLERK OF BOARD OF SUPERVISORS

AMN REED, CLERK OF THE BOARD OF SUPERVISORS OF SHASTA COUNTY, HEREBY CERTIFY THAT I HAVE APPROVED THE WITHIN MAP ON THE DAY OF JUNE 19, 1984, AND ACCEPTED ON BEHALF OF THE PUBLIC, ALL PARCELS OF LAND OFFERED FOR DEDICATION FOR PUBLIC ROAD EASEMENTS, PUBLIC UTILITY EASEMENTS, AND THE PRIVATE ROADS FOR POLICE AND FIRE PROTECTION ONLY, IN ACCORDANCE WITH THE TERMS OF THE ORDER OF DEDICATION, AND DOES NOT ACCEPT ANY PARCELS OF LAND AND EASEMENTS OFFERED FOR DEDICATION FOR PRIVATE ROAD EASEMENTS, PRIVATE ROAD EASEMENTS, PUBLIC UTILITY EASEMENTS, OR FOR ANY OTHER PUBLIC USE.

AMN REED
CLERK OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SHASTA, STATE OF CALIFORNIA
BY: *Ann Reed*

CERTIFICATE OF COUNTY RECORDER

FILED AT THE REQUEST OF RICHARD W. CUREN, THIS DAY OF JUNE 1984, IN VOLUME 17052 OF MAPS AT PAGE 12, RECORDS OF SHASTA COUNTY, CALIFORNIA.

Marion J. Kelly
Marion J. Kelly
SHASTA COUNTY RECORDER
FEE: 16.00

NOTES:

- 1. THE LANDS COVERED BY THIS SUBDIVISION ARE SUBJECT TO THE RESTRICTIONS PERTAINING TO "AREA CHANGE" REVISIONS.
- 2. INDICATES SEWERAGE DISPOSAL SYSTEM SHALL BE LOCATED ONLY WITHIN THE DISPARCEL AREA ALLOCATED FOR PARCELS 1 THROUGH 13 AND REMAINDER PARCEL.



TRACT 1 P 1923

MALTRON HEIGHTS

FOR PRIVATE ROAD SUBDIVISION

FREDRICK J. LINDAUER

BEING A SUBDIVISION OF A PORTION OF THE SE 1/4 OF SECTION 10 AND A PORTION OF THE NE 1/4 OF SECTION 11, T4N, R12E, S1E, UNINCORPORATED TERRITORY OF SHASTA CO., CA.

PREPARED BY:

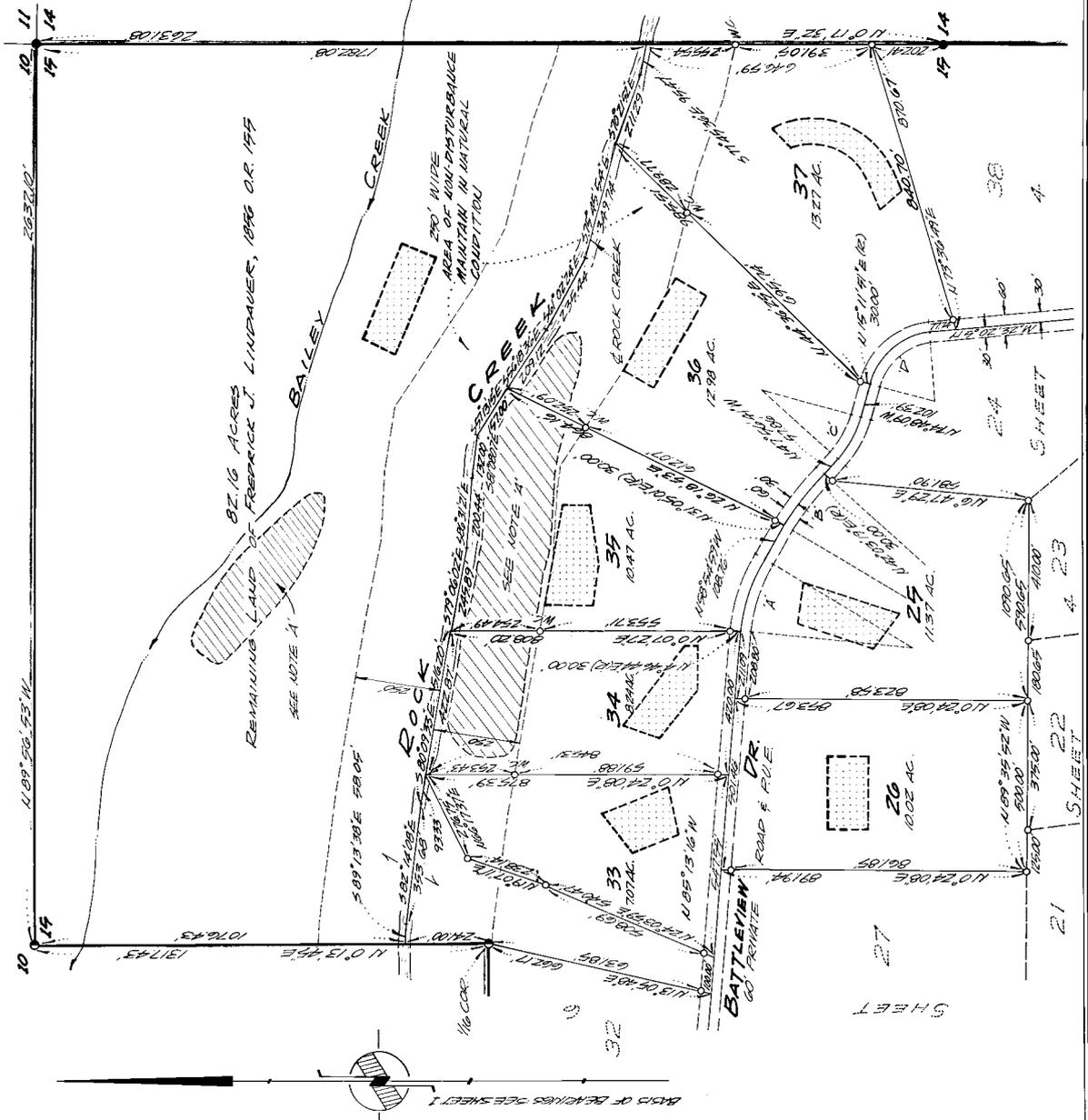
EVERGREEN ENGINEERING CORP
RED BLUFF, CA

JUNE 1985 SHEET 1 OF 6

LEGEND
SEE SHEET 2

Note 'A'
Cross Hatched Areas Indicate Sites
of Creeks and Channelled Flows...
ARTIFICIAL DISTURBANCE
AREA OF NON-DISTURBANCE

LINE	BEARING	DISTANCE	AREA
A	20° 17' 17"	500.00'	229.97'
B	0° 59' 18"	1000.00'	191.19'
C	20° 57' 28"	300.00'	140.03'
D	69° 15' 37"	200.00'	243.57'



TRACT 19 1923

MALTON HEIGHTS

FOR: PRIVATE ROAD SUBDIVISION

FREDRICK J. LINDAUER

BEING A SUBDIVISION OF A PORTION OF THE SE 1/4 OF SEC. 16, AND A PORTION OF SEC. 15, T. 30 N., R. 1 E., MAP 10, IN THE UNINCORPORATED TERRITORY OF SHASTA CO. CA.

PREPARED BY:
EVERGREEN ENGINEERING CORP.
RED BLUFF, CA.
SCALE: 1" = 200' DATE 1985 SHEET 5 OF 6

17 MAPS-79

LEGEND ~
SEE SHEET Z

PROPERTY LINE COURSES EAST BANK OF BATTLE CREEK

1. N 39° 09' 20" E 86.59'
2. N 42° 52' 44" E 190.55'
3. N 44° 02' 49" E 309.07'
4. N 37° 08' 52" E 208.36'
5. N 40° 28' 16" E 151.53'
6. N 6° 49' 37" E 144.77'
7. N 30° 36' 00" E 97.15'
8. N 47° 59' 03" E 147.68'
9. N 37° 04' 23" E 180.59'
10. N 15° 27' 17" E 80.05'
11. N 27° 48' 53" W 101.51'

N°	RUN	CURVE	R	L
A.	97.00'	20.00'	33.86'	
B.	88.55'	20.00'	30.0'	
C.	44.55'	20.00'	15.0'	
D.	88.55'	50.00'	7.5'	
E.	58.54'	50.00'	5.25'	
F.	127.28'	50.00'	10.5'	

TRACT NO 4523

MANTON HEIGHTS

FOR PRIVATE ROAD SUBDIVISION

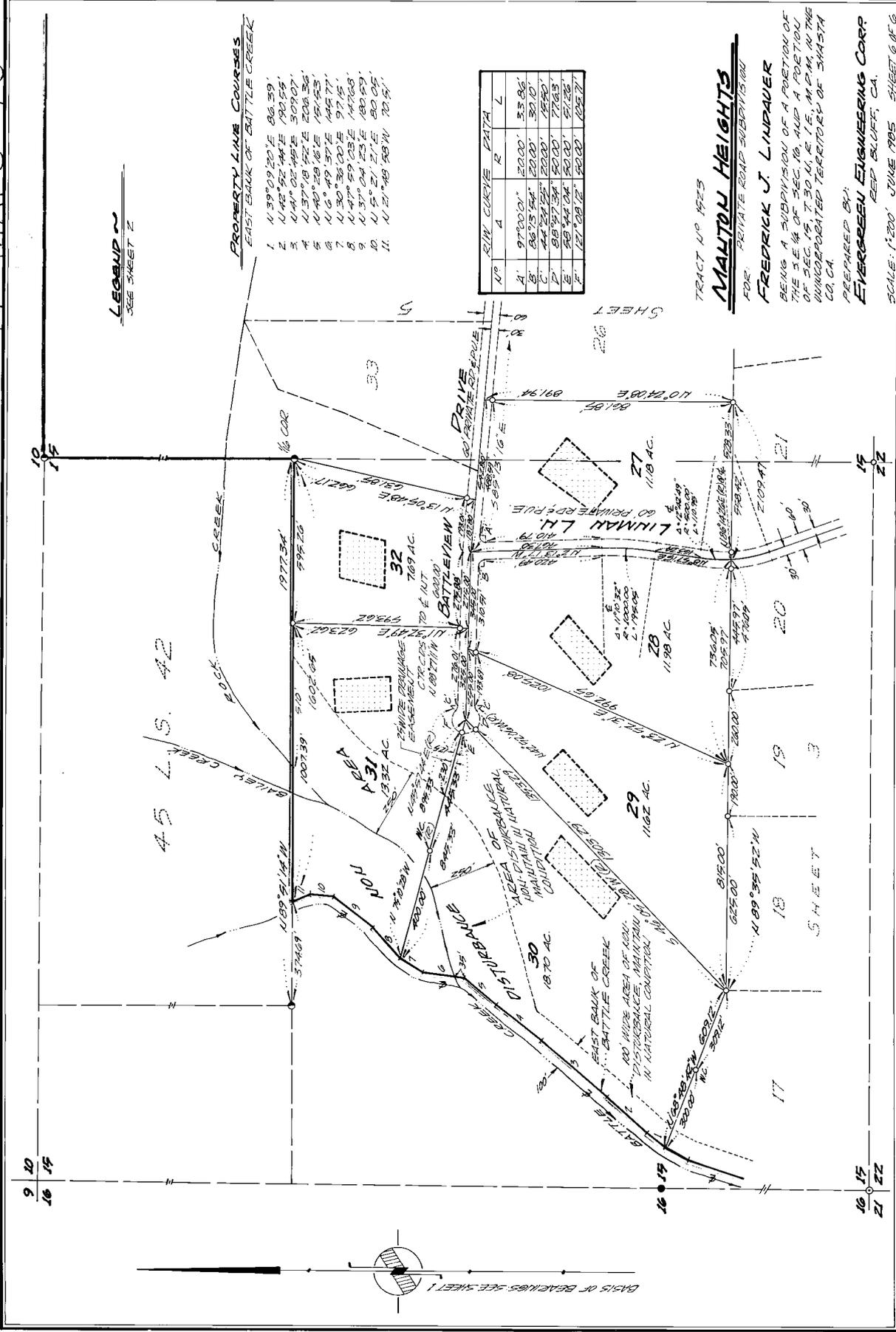
FREDRICK J. LINDAUER

BEING A SUBDIVISION OF A PORTION OF THE 3 E 1/4 SEC 16 AND A PORTION OF SEC 15 T 30 N R 12 E, MAP 179, IN THE UNINCORPORATED TERRITORY OF SANJUAQUIN COUNTY, CALIFORNIA

PREPARED BY:

EVERGREEN ENGINEERING CORP.

1200' JUNE 1985 SHEET 6 OF 6



BASES OF DEGREES - SEE SHEET 1

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Praxair
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	
	Energy Management Service	
Alta Power Group, LLC	Engineers and Scientists of California	Redwood Coast Energy Authority
Anderson & Poole	Evaluation + Strategy for Social Innovation	Regulatory & Cogeneration Service, Inc.
	GenOn Energy, Inc.	SCD Energy Solutions
Atlas ReFuel	Goodin, MacBride, Squeri, Schlotz & Ritchie	
BART	Green Charge Networks	SCE
	Green Power Institute	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Hanna & Morton	
P.C. CalCom Solar	ICF	SPURR
California Cotton Ginners & Growers Assn	International Power Technology	San Francisco Water Power and Sewer
California Energy Commission	Intestate Gas Services, Inc.	Seattle City Light
California Public Utilities Commission	Kelly Group	Sempra Utilities
California State Association of Counties	Ken Bohn Consulting	Southern California Edison Company
Calpine	Keyes & Fox LLP	Southern California Gas Company
	Leviton Manufacturing Co., Inc. Linde	Spark Energy
Cameron-Daniel, P.C.	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
Casner, Steve	Los Angeles Dept of Water & Power	Sunshine Design
Cenergy Power	MRW & Associates	Tecogen, Inc.
Center for Biological Diversity	Manatt Phelps Phillips	TerraVerde Renewable Partners
City of Palo Alto	Marin Energy Authority	Tiger Natural Gas, Inc.
	McKenzie & Associates	
City of San Jose	Modesto Irrigation District	TransCanada
Clean Power Research	Morgan Stanley	Troutman Sanders LLP
Coast Economic Consulting	NLine Energy, Inc.	Utility Cost Management
Commercial Energy	NRG Solar	Utility Power Solutions
County of Tehama - Department of Public Works		Utility Specialists
Crossborder Energy	Office of Ratepayer Advocates	
Crown Road Energy, LLC	OnGrid Solar	Verizon
Davis Wright Tremaine LLP	Pacific Gas and Electric Company	Water and Energy Consulting Wellhead Electric Company
Day Carter Murphy	Peninsula Clean Energy	Western Manufactured Housing Communities Association (WMA)
		Yep Energy
Dept of General Services		
Don Pickett & Associates, Inc.		
Douglass & Liddell		