

COUNTY OF SANTA CRUZ  
PLANNING DEPARTMENT

Date: May 26, 1999  
Agenda Item: No. I  
Time: After 9:00 a.m.

284

### STAFF REPORT TO THE PLANNING COMMISSION

APPLICATION NO. : 98-0804

APN: 089-09 1-22

APPLICANT: Gary Paul

OWNER: Lloyd and June Ohelo

PROJECT DESCRIPTION: Proposal to rezone Assessor's Parcel Number 089-09 1-22 from the Special Use ("SU") zone district to the Timber Production ("TP") zone district. Requires a rezoning.

LOCATION: The southwest side of Harmon Gulch Road (875 Harmon Gulch Road) about one mile from the intersection of Harmon Gulch and Bear Creek Roads.

FINAL ACTION DATE: Exempt from the Permit Streamlining Act (Legislative Action)

PERMITS REQUIRED: Zoning Ordinance Amendment

ENVIRONMENTAL DETERMINATION: Statutory exemption from CEQA per section 1703

COASTAL ZONE: yes -XX-no APPEALABLE TO CCC: yes XX-no

#### PARCEL INFORMATION

PARCEL SIZE: 11.5 acres

EXISTING LAND USE: PARCEL: Rural residential and timber production

SURROUNDING: Rural residential, vacant rural and timber production

PROJECT ACCESS: Harmon Gulch Road

PLANNING AREA: San Lorenzo Planning Area

LAND USE DESIGNATION: "R-M" Mountain Residential

ZONING DISTRICT: "SU" Special Use

SUPERVISORIAL DISTRICT: Fifth

#### ENVIRONMENTAL INFORMATION

<u>Item</u>	<u>Comments</u>
a. Geologic Hazards	a. None mapped
b. Soils	b. Lompico-Fehon complex,
c. Fire Hazard	c. None mapped
d. Slopes	d. 5 to 75%
e. Env. Sen. Habitat	e. Ephemeral watercourse
f. Grading	f. Minimal proposed - existing logging roads, a few new skid trails proposed * *
g. Tree Removal	g. Future Timber Harvest Proposed **
h. Scenic	h. Not located in a designated scenic area
i. Drainage	i. N/A
j. Traffic	j. N/A
k. Roads	k. N/A
l. Parks	l. N/A
m. Sewer Availability	m. Septic in place
n. Water Availability	n. Well, in place

- o. Archeology                      o. Mapped Sensitive Archeologic Resource Area, no archeologic resources noted during Timber Harvest Review \* \*

\*\* Report was required - Timber Management Plan (Exhibit H)

#### SERVICES INFORMATION

W/in Urban Services Line: - y e s XX n o

Water Supply:                      Private Well

Sewage Disposal:                      Septic

Fire District:                      Boulder Creek Fire Service District

Drainage District:                      Zone 8

#### ANALYSIS & DISCUSSION

##### Background

In August 1997, the Board of Supervisors was informed that the County had the authority to regulate the location of timber harvesting through its zoning ordinance. As a result, the Board adopted Interim Ordinances 4476 and 4469 allowing timber harvesting only in the following zone districts: Timber Production (TP), Park and Recreation (PR), Mineral Extraction (M-3), and Special Use (SU) provided the SU zoned property is also located within a designated Timber Resource area. As a result of these actions, a number of properties with commercially viable timber resources could not be managed and harvested as timber producing properties. The County's General Plan Policy on Timber Resources is to "encourage timberland owners to apply for Timber Production Zoning where appropriate." In order to facilitate rezoning timberlands in non-timber harvesting zone districts to Timber Production, the Board of Supervisors adopted a resolution on April 14, 1998 establishing a flat fee of \$750 to process a rezoning to the Timber Production zone district.

On November 13, 1998, the County Planning Department accepted this application for a rezoning to Timber Production (TP). This is a proposal to rezone an 11.5 acre parcel from the Special Use (SU) zone district to the Timber Production (TP) designation. County Code Section 13.10.375 (c) zoning to the TP district specifies the six criteria which must be met in order to rezone to TP. This project qualifies for a statutory exemption (Exhibit F) in accordance with the California Environmental Quality Act and the County Environmental Review Guidelines (Article 17, Section 1703).

##### Project Setting

The project site is located in the San Lorenzo Valley planning area with access off of Harmon Gulch Road, a private road, about one mile from the intersection of Harmon Gulch and Bear Creek Roads (Exhibit A). The subject parcel is roughly 1.5 gross acres and is currently developed with a single family dwelling. The dwelling is located on the more gently sloping

clearing on the parcel. Approximately one-half acre of the parcel is utilized for residential related uses. The property slopes up towards the south and southwest and away from Harmon Gulch Road and the Ohelo residence. The topography, except at the home site, is generally steep with slopes of 20 to 60+%. There are two class III (ephemeral) watercourses located on the property, running approximately south to north. These drainage channels are heavily shaded by redwoods and lack characteristic riparian vegetation. These channels all drain into Harmon Gulch Creek - an intermittent to perennial stream.

The property is heavily forested with second growth redwood with a few Douglas firs. About 1.5 acres on the south side of the property are predominantly hardwood forest with a few conifers. This property was clear cut at the turn of the century. Only one old growth tree remains on the property and its location is mapped in the Timber Management Plan. Approximately four acres of the parcel which lies within a mapped Timber Resource area were selectively harvested under THP I-98-165 SCR in 1998. A number of parcels surrounding the subject parcel have been logged between 1987 and 1998 (Exhibit D). A high proportion of these properties are not located within a mapped Timber Resource area.

As demonstrated in the Timber Management Plan and verified in the field, the subject property is capable of producing at least 15 cubic feet of timber per acre annually, meeting the definition of timberland.

The parcel is bordered on the north, northwest and northeast by SU zoned properties, and by RA zoned parcels to the south. The Zoning Map for APN 089-091-22 and the surrounding parcels is included as Exhibit C.

#### General Plan & Zoning Consistency

The project site has a 1994 General Plan land use designation of Mountain Residential. The northwest third of the property is located within a mapped Timber Resource designated area (Exhibit D). This parcel is currently zoned Special Use. The Special Use and Timber Production zoning districts implement the Mountain Residential General Plan designation, as specified in Section 13.10.170 of the County Code.

In accordance with County Code Section 13.10.375, Special Standards and Conditions for the Timber Production (TP) District, the project meets the following six criteria for rezoning to Timber Production:

1. A map has been submitted with the legal description or assessor's parcel number of the property to be rezoned (Exhibit B).
2. A Timber Management Plan, dated November 9, 1998, prepared by a registered professional forester has been submitted for the property (Exhibit H). The Timber Management Plan has been reviewed and accepted by the Planning Department as meeting

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minimum standards (Exhibit I).

3. The parcel currently meets the timber stocking standards as set forth in Section 4561 of the Public Resources Code and the Forest Practice Rules for the district in which the parcel is located.

4. The parcel is timberland, as the entire parcel is capable of producing a minimum of 15 cubic feet of timber per acre annually and approximately one third of the parcel is located within a mapped Timber Resource area.

5. The uses on the parcel are in compliance with the Timber Production Zone uses set forth in Section 13.10.372.

6. The land area to be rezoned is in the ownership of one person, as defined in Section 38106 of the Revenue and Taxation Code, and is comprised of at least five acres in area.

### Conclusion

All of the criteria have been met for rezoning this parcel to the Timber Production zoning designation. All required findings can be made to approve this application and the rezoning is consistent with the General Plan policies and land use designations.

Please see Exhibit E ("Findings") for a complete listing of findings and evidence related to the above discussion.

### RECOMMENDATION:

Staff recommends that your Commission adopt the attached Resolution (Exhibit G), sending a recommendation to the Board of Supervisors for approval of Application No. 98-0804 based on the attached findings (Exhibit E) and approval of the determination that the project is statutorily exempt from CEQA (Exhibit F).

### EXHIBITS

- A. Location Map
- B. Assessor's Parcel Map
- C. Zoning Map
- D. Timber Resource and Harvest Activity Map
- E. Findings
- F. Notice of Exemption from CEQA
- G. Planning Commission Resolution
- H. Timber Management Plan by Gary Paul, dated November 9, 1998
- I. TMP Review Memo dated February 19, 1999

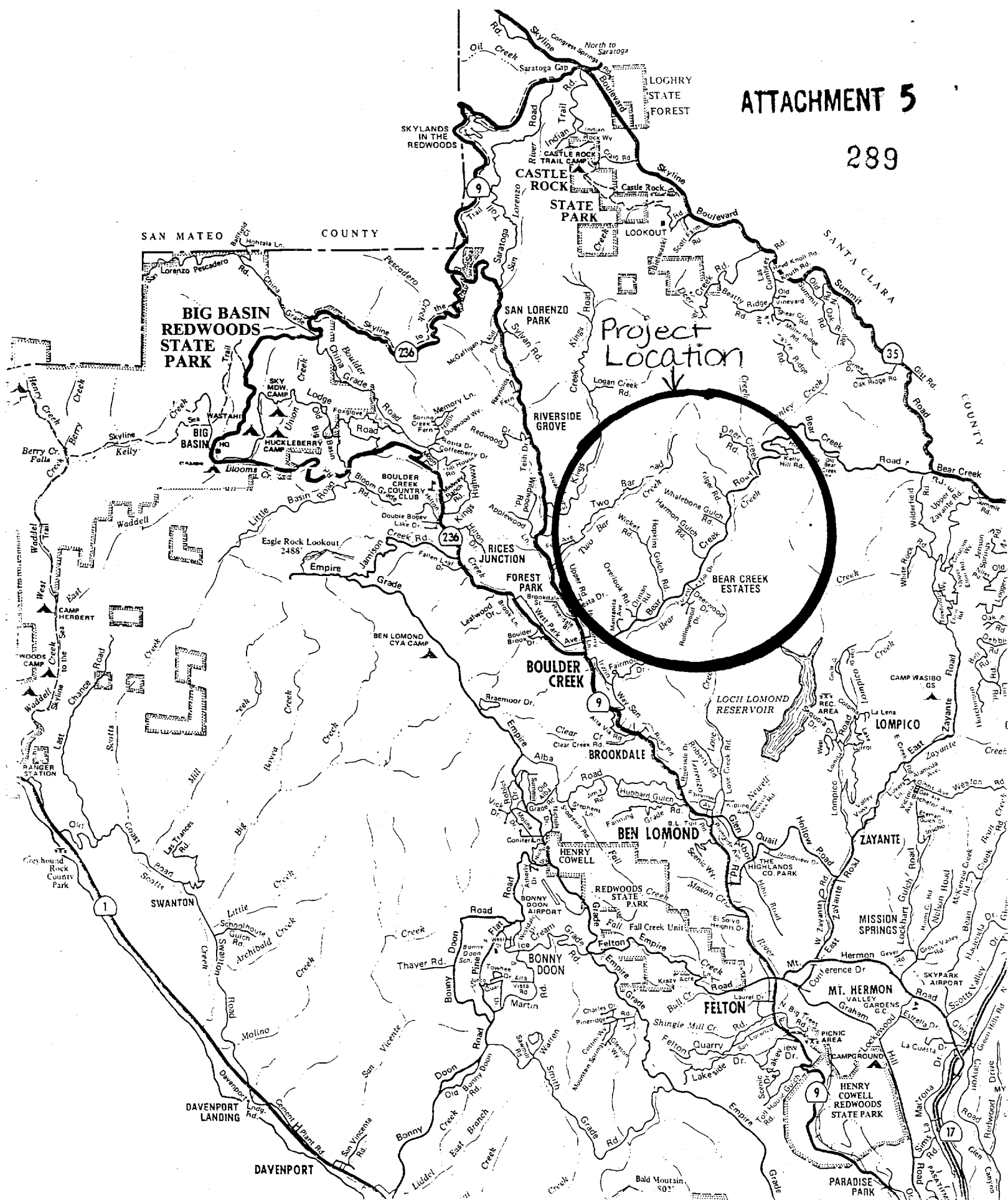
Gary Paul for Ohelo  
Application No.: 98-0804  
APN: 089-091-22

ATTACHMENT 5

SUPPLEMENTARY REPORTS AND INFORMATION REFERRED TO IN THIS REPORT ARE ON FTLE AND AVAILABLE FOR VIEWING AT THE SANTA CRUZ COUNTY PLANNING DEPARTMENT, AND ARE HEREBY MADE A PART OF THE ADMINISTRATIVE RECORD FOR THE PROPOSED PROJECT.

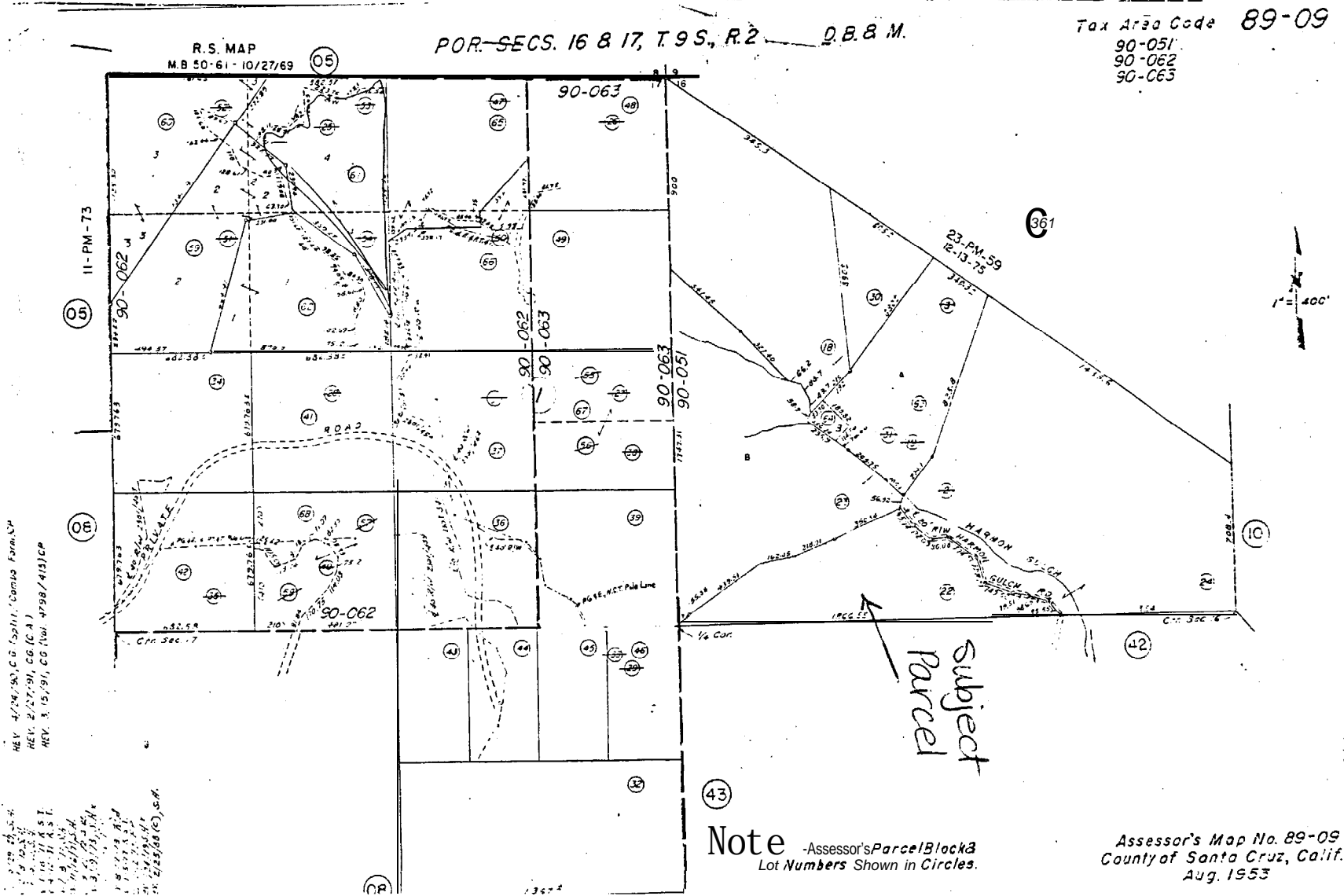
Report Prepared By: Cathleen Carr  
Cathleen Carr  
Santa Cruz County Planning Department  
701 Ocean Street, 4th Floor  
Santa Cruz CA 95060  
Phone Number: (408) 454-3225

Report reviewed by: Martin J. Jacobson  
Martin J. Jacobson, AICP  
Principal Planner  
Development Review



Location Map

# Assessor's Parcel Map



SCALE (FT/INCH) = 763  
 WIDTH IN FEET = 6,055.22  
 DEPTH IN FEET = 4,760.58

REQUEST ID: 98-0804



Zoning Map

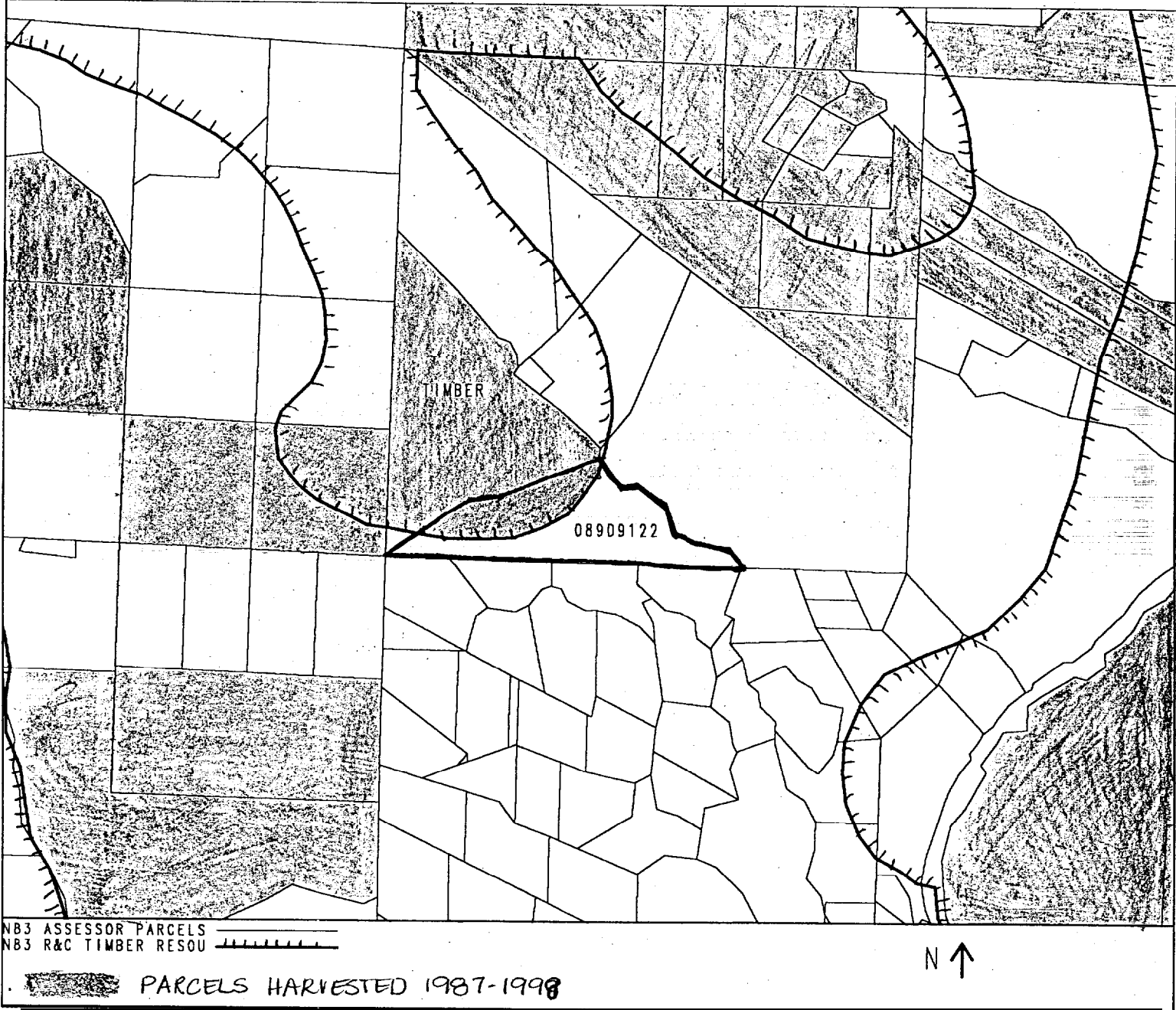
EXHIBIT C

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SCALE (FT/INCH) = 763  
WIDTH IN FEET = 6,055.22  
DEPTH IN FEET = 4,760.58

REQUEST ID: 98-0804



ATTACHMENT 5

293

LLOYD OHELO PROPERTY  
Santa Cruz County, California

FOREST MANAGEMENT PLAN

GARY PAUL  
FORESTRY CONSULTANT


  
\_\_\_\_\_  
Gary Paul, RPF #1829  
November 9, 1998

EXHIBIT F  
55

INDEX

PREFACE..... 1 234

FOREST MANAGEMENT OBJECTIVES ..... 1

GENERAL DESCRIPTION OF PROPERTY..... 1

GEOLOGY AND SOILS..... 2

BIOLOGIC RESOURCES..... 2

TIMBER STAND DESCRIPTION..... 3

TIMBER STAND DATA..... 4

ALLOWABLE HARVEST AND CUTTING CYCLE..... 5

FIRE PROTECTION ..... 5

EROSION HAZARD..... 6

URBAN INTERFACE CONSIDERATIONS ..... 6

TIMBER STAND IMPROVEMENT ..... 6

MANAGEMENT RECOMMENDATIONS ..... 7

LOCATION MAP..... 8

SITE MAP..... 9

PARCEL MAP....., .10

APPENDIX:

1998 TIMBER HARVEST PLAN

## PREFACE

In June, 1998, Gary Paul, Forestry Consultant, was commissioned by Lloyd Ohelo to prepare a Forest Management Plan for a 11.5 acre ownership of timberland off Harmon Gulch Rd., near Boulder Creek. The management plan is required by the County in connection with Mr. Ohelo's application to have the property placed in Timberland Preservation Zoning (TPZ).

This management plan is designed to assist the landowner in the management of the resources on the property. The plan describes the property and management goals, identifies problems and opportunities, and outlines management activities needed to meet the owner's objectives.

The management plan incorporates currently available resource data, and field data and observation.

## FOREST MANAGEMENT OBJECTIVES

The owner desires to manage this forest land for the long-term production of merchantable timber. This goal is to be achieved without degrading the quality of other forest resources, such as soils, watershed, wildlife, recreation, and aesthetics. In addition, all future activities will recognize the need to reduce the potential of wildfire.

The immediate objective is to obtain Timber Production Zoning, which will allow management of the property consistent with these objectives. Timber management objectives are to convert the even-aged timber stands into an uneven-aged condition, using a level of harvest that may be sustained over time.

## GENERAL DESCRIPTION OF PROPERTY

The Ohelo property is located in the Bear Creek drainage, approximately 3 miles northeast of Boulder Creek in Santa Cruz County, California. The property is located approximately 1/2 mile north of Bear Creek Rd.. Access is off Harmon Gulch Rd., a private graveled road maintained by a private road association. The area is primarily rural, with several homes in the immediate vicinity of the Ohelo property. Ohelo maintains his residence on the property. The property consists of one parcel, APN 089-091-22, located in Section 16, T.9 S., R.2 W. zoned Special Use. A portion of the property has the Timber Resource overlay map.

The total property is approximately 11.5 acres in extent mostly covered by commercial redwood timberland. A small patch of pure hardwood occupies approximately 1.5 acres on the south side of the property. About .5 acre is in grass or is removed from timber production from residential use. The property has primarily a east facing aspect. Slopes range from moderate to steep in the western corner of the property. Elevations range from 800 feet in Harmon Gulch on the east side of the property to 1000 feet at the west corner of the property. Mean annual rainfall is 48 inches.

The property is drained by Class 3 watercourses (ephemeral streams which run in response to heavy rainfall) which run through the heart of the property. Harmon Gulch Creek is a Class 2 watercourse (generally perennial streams providing aquatic habitat), as indicated by riparian vegetation, such as water-loving ferns.

No historical or archaeological sites are present on the property. The property was surveyed for such sites during the preparation of the 1998 timber harvest plan. 296

## GEOLOGY AND SOILS

The property is underlain by the San Lorenzo formation-Rices mudstone member, which is mudstone and siltstone with laminated shale.

The soil type on the property is the Lompico-Felton complex. This commercial forest soil is deep and well drained, with sandy loam surface soils of about 7-19" in thickness. Weathered sandstone is found at about 48". Permeability is moderately rapid, and effective rooting depth is 20-40". Runoff is rapid to very rapid, and the erosion hazard is high to very high. These soils are well suited to timber production. Site index is 150 or high Site III.

The Cooper Clark Landslide Map does not show any questionable or active landslides on the property. No landslides or unstable areas were noted in the field.

(Note: Geology and soils maps were not provided, as rock units and soil types are the same throughout the property.)

## BIOLOGIC RESOURCES

### WILDLIFE

Wildlife found on the property is typical of the Santa Cruz Mountains. The wildlife habitat relationship (WHR) classification for the tree dominated habitat is 4D, meaning the average tree size is between 11-24" DBH, and the canopy closure is dense, between 60-100%. Characteristics of late succession stands are not present. There are no snags and no down logs remaining from the turn of the century logging.

Any potential logging operations on the property will generally improve forage for a variety of small and large mammals. Resulting prey base will increase raptor use. It is recommended that any cull logs generated from any logging operations be left in the woods for wildlife use. Trees that are identified as dying, and which would yield a snag, should also be left for wildlife.

### Rare, threatened, and endangered species:

The property is within the range of the red-legged frog. The nearest known sighting of the frog is at an unidentified location in the Bear Creek drainage. The only perennial water on the site is the Harmon Gulch Creek, which is intermittently dry during the summer. Pools are generally shallow, less than 6" in depth. These pools are too shallow to provide significant habitat for red-legged frogs.

Approximately 1/2 mile downstream, in Bear Creek, is found a steelhead trout run, and a restorable Coho salmon stream, according to the Calif. Dept. of Fish and Game. Any timber harvest would be subject to the 2090 Agreement between CDF and Fish and Game, which provides mitigation measures for the protection of Coho salmon. Mitigation measures for fish on the property would only be related to generation of sediment in the Class 3 and 2 watercourses. See Erosion Hazard discussion.

Habitat for Species of Special Concern in the County, as listed in the County General Plan, should not be affected by selective harvesting as allowed in the local area.

PLANTS:

Rare, threatened, and endangered species

The property is not within the range of any RTE species and none were noted on the site.

Ancient trees:

One ancient tree was left on the site from the turn of the century logging. This is noted on the site map and will be preserved.

**TIMBER STAND DESCRIPTION**

The property is primarily redwood in the overstory, with a typical mixture of hardwoods, including tanoak, madrone, live oak, and bay. Approximately 1 acre on the south side of the property is pure hardwood, primarily madrone. Approximately 80-90% of the overstory is occupied by conifers. No disease or insect problems were noted in the timber stand. The understory generally consists of small hardwoods and poison oak.

The age of the stand is 95-100 years old, being a result of clearcutting which took place ca. 1900. The second growth stand which resulted grew vigorously for approximately 30-40 years. Growth slowed as the trees grew larger and closer together, and began competing for available water, nutrients, and sunlight.

Four acres of the property (the area within the Timber Resource overlay map) was selectively harvested in 1998, utilizing a tractor system. Approximately 50% of the total timber volume was removed, from about 40% of the trees over 18" DBH (60% of the trees over 26" DBH, 15% of the trees between 18-24" DBH). Volume and spacing were the primary considerations in tree removal, that is to increase the available nutrients and light to individual stems. Stump sprouting from this harvest should be vigorous, as there is good light availability to the stumps.

The 1998 harvest is the beginning of the creation of an uneven age stand. 1999 stump sprouts will create a new age class of future timber. Subsequent harvests, as discussed below, will create further age classes in the stand, resulting in more younger, smaller trees than currently exists. Distribution of larger tree sizes (18"+ DBH) is expected to remain in the same relative proportions as currently exists (See Stand Data below) under the proposed harvest regime.

The goal of future selective harvests will be to produce adequate light for vigorous stump sprouting, to promote growth on residual trees, to promote continued production of high quality redwood timber by maintaining good spacing and good distribution of diameter classes, and to maintain an aesthetically pleasing forest.

## TIMBER STAND DATA

(All redwood)

## NET VOLUME PER ACRE BY DIAMETER CLASS

Board Feet (Pre 1998 harvest)

<u>12- 16"</u>	<u>18-24"</u>	<u>26-34"</u>	<u>36"+</u>	<u>Total</u>
950	8340	24800	12530	46,620

## TOTAL NET VOLUME DIAMETER CLASS

Board Feet (Pre 1998 harvest)

<u>12-16"</u>	<u>18-24"</u>	<u>26-34"</u>	<u>36"+</u>	<u>Total</u>
7600	66,720	198,400	100,240	372,960

## NUMBER OF TREES PER ACRE BY DIAMETER CLASS

(Pre 1998 harvest)

<u>12- 16"</u>	<u>18-24"</u>	<u>26-34"</u>	<u>36"+</u>	<u>Total</u>
15	29	30	9	83

## TOTAL NUMBER OF TREES BY DIAMETER CLASS

(Pre 1998 harvest)

<u>12- 16"</u>	<u>18-24"</u>	<u>26-34"</u>	<u>36"+</u>	<u>Total</u>
120	232	240	72	664

**Limitation:** This data is based on a field sample, a 50% inventory of the timberland on the proposed TPZ parcel. This data should only be used as a guide for management purposes, and should not be extended or taken out of context for other purposes.

**GROWTH, ALLOWABLE HARVEST AND CUTTING CYCLE**

299

Growing site is Site 155 or high Site III. Growth rate was estimated to be 2% in 1996. The leave stand is expected to increase its growth rate to 3% as a result of the 1998 and future harvests, due to increased spacing between the residual trees.

The 1998 harvest occurred on 4 acres of the 8 acre timber stand. This harvest concentrated on volume and spacing considerations. Approximately 22,000 board feet/acre was removed on the 4 acres, or about 47% of the volume. Approximately 60% of the trees over 26" DBH were harvested. Approximately 15% of the trees between 18-24" DBH were removed. The overall cut was 40% of the trees over 18" DBH. A similar cut is proposed in the future for the 4 acres of timber which does not have the timber overlay.

The resultant leave stand, after the property is completely harvested, is expected to grow vigorously at an increased rate of about 3% per year, yielding approximately 730 board feet/acre/year, or about 5840 board feet/year over the entire timbered area. Although State law allows for a harvest every 10 years, due to the small size of the timbered area it is recommended that the cutting cycle be maintained at 15-20 years, to maximize the volume removed in each cycle, and to minimize neighborhood impacts.

At the projected growth rate, a growth only harvest of approximately 88,000 board feet could occur in 2014, or 117,000 board feet in 2019. The second cut should be in the range of 40-50% of the trees 18"+ DBH, again concentrating on the larger diameter classes. The second cut should further increase the growth rate of the stand to approximately 4% per year, as the stand will be slightly more open, giving more space to larger trees retained in the stand.

Since the stand volume will be further reduced in the second cut, the increased growth rate will occur on fewer stems. Thus, the overall growth will stay at about 730 board feet/acre. A third cut could then occur 15-20 years following the second, and remove similar volumes to what would be expected in the second cut.

**FIRE PROTECTION**

Fire protection for the site has been addressed, in part, by the creation of a defensible fire space around the Ohelo residence (150 foot radius around house), through use of a Fire Safe Exemption granted by the Dept. of Forestry. This area is about 1.5 acres in extent, and will be managed for fire protection by removing enough stems within the timber stand, so that a discontinuity is created between the residual tree crowns.

Water capacity from the owner's wells should be adequate to fight a fire, if necessary. The skid trail constructed for the 1998 harvest will provide access to the forest for fire fighting equipment. The 1998 and future harvests will help reduce fire hazard by thinning redwood groves and intermixed hardwoods, thus reducing the ladder fuels in the area. Vegetation maintained within 30 feet of the residence should be fire resistant species. The house chimney should have a spark arrestor, and the roof should be kept free of leaves and needles.

**EROSION HAZARD**

Potential erosion hazard on the property is centered on the existing landing, which is



immediately above the residential access road, and within 100 feet of the Class 2 watercourse. This landing has been covered with mulch for the winter period. In the future, the landing should be mulched before each winter period, or covered with rock. The main skid trail accessing the forest was waterbarred in conjunction with the 1998 timber harvest. Waterbars in all trails should be maintained by the owner, so that they are functional in the winter period.

Any new roads or trails developed on the property should be waterbarred concurrent with construction. New fill slopes should be covered with grass seed (annual rye or Santa Cruz erosion control mix (25 lbs./acre) and straw mulch. Other areas on the property, which are cleared of vegetation for any reason, should be seeded and mulched.

### **URBAN INTERFACE CONSIDERATIONS**

The primary urban interface consideration is that of log truck traffic on 1 mile of a narrow road, Harmon Gulch Rd., which also is used for residential access for a number of homes. Full sized trucks were used for the 1998 timber harvest without incident. A survey of the road surface before and after operations indicated that no significant impact occurred to the rocked surface from this small operation.

Since the operation is small and can be done within two weeks, noise and dust impacts are not long lasting. As mentioned above regarding the cutting cycle, a 15-20 year cycle is recommended over a 10 year cycle, in part to reduce neighborhood impacts.

### **TIMBER STAND IMPROVEMENT**

Since the timber stand has a high density of redwood and is relatively fully stocked, there is no need to do inter-planting of conifers between the redwood clumps. However, it would be desirable to thin multiple stump sprouts from harvesting to about 2-3 dominant sprouts per stump. This should be done approximately 5 years following the harvest. Thinnings should be lopped to 30" above ground for fire protection reasons.

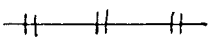
**MANAGEMENT RECOMMENDATIONS**

1. Establish a 15 to 20 year cutting cycle of growth only harvests.
2. Maintain defensible space for 150 feet around the residence by removing stems within redwood groves, so that there is a discontinuity between the crowns of the trees within the groves. Fire resistant species should be planted within 30 feet of the residence.
3. Mulch or rock the log landing before the winter period. Monitor and maintain waterbars in all skid trails.
4. Trees identified as dying should be retained in future harvests for wildlife habitat.
5. Cull logs should be left in the woods for wildlife habitat.
6. Thin sprouts to 2-3 per stump about 5 years after harvest.

OHELO PROPERTY N  
Harmon Gulch ↑  
Santa Cruz Co., CA

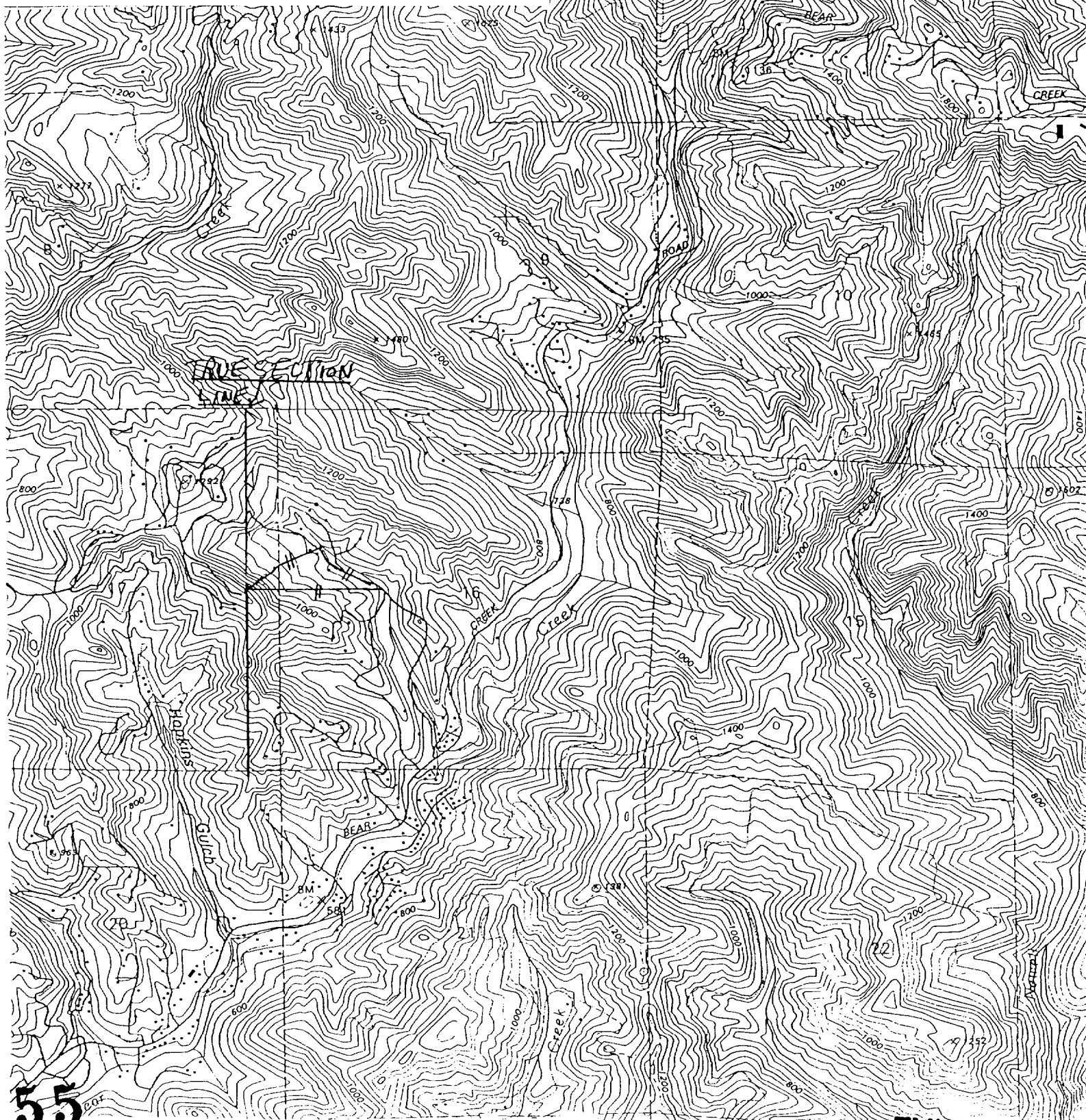
T.9 S. R.2 W. Sect. 16  
Scale 1:24000 CI 40'

LOCATION MAP

Harvest boundary 

ATTACHMENT 5

302

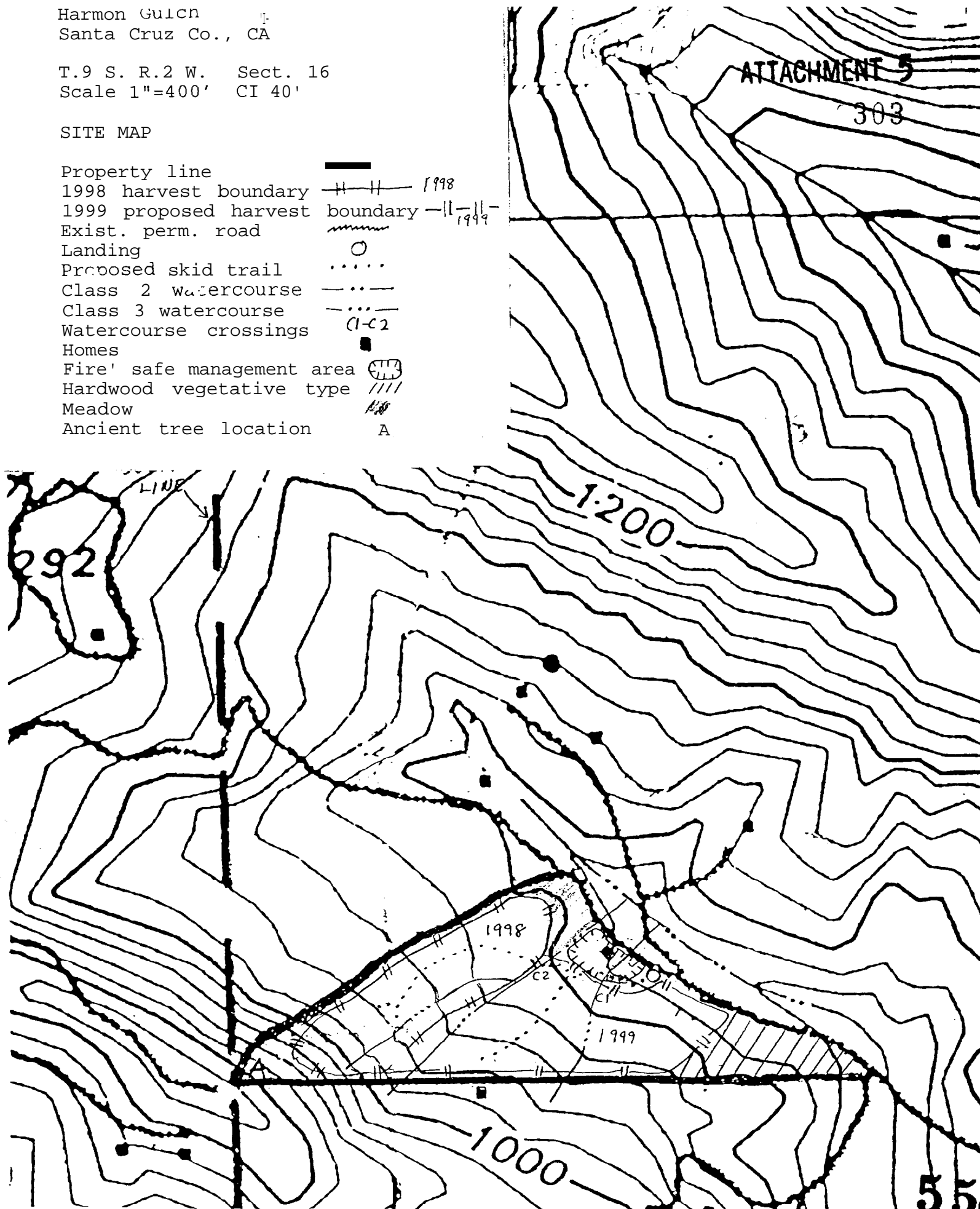


Harmon Gulch  
Santa Cruz Co., CA

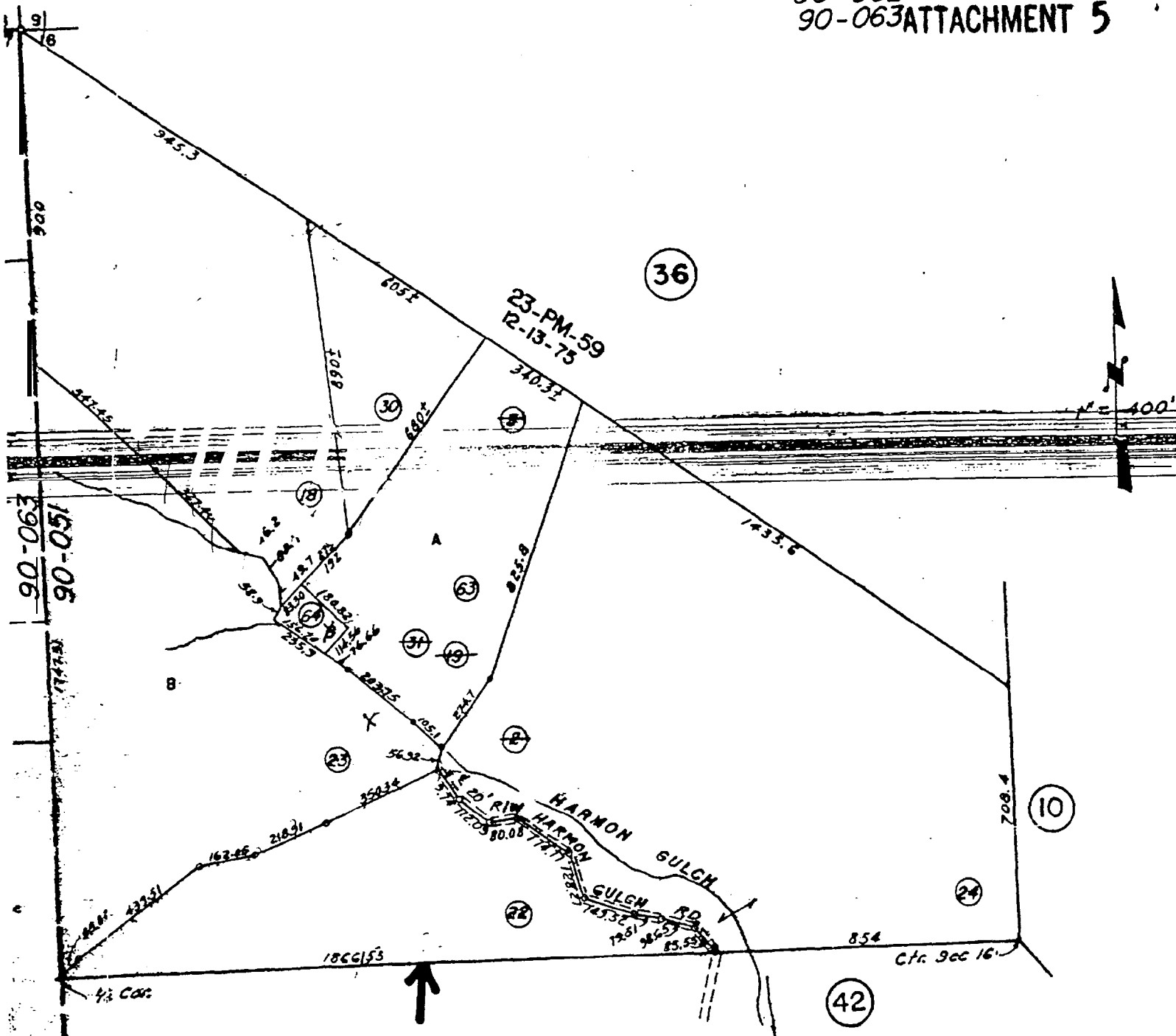
T.9 S. R.2 W. Sect. 16  
Scale 1"=400' CI 40'

SITE MAP

Property line	—
1998 harvest boundary	—  —  — 1998
1999 proposed harvest boundary	—  —  — 1999
Exist. perm. road	~~~~~
Landing	○
Proposed skid trail	.....
Class 2 watercourse	—..—
Class 3 watercourse	—...—
Watercourse crossings	(1-2)
Homes	■
Fire safe management area	▨
Hardwood vegetative type	////
Meadow	
Ancient tree location	A



90-051 304  
90-062  
90-063 ATTACHMENT 5



# CHELO

REVISED

DATE

D MAP NOB

Note - Assessor's Parcel Block & Lot Numbers Shown in Circles.

Assessor's Map No. 89-C  
County of Santa Cruz, Cal.

EXHIBIT H

**ATTACHMENT 5**

**(305**

**APPENDIX**

**55**

**EXHIBIT H**

**OFFICES**  
DEPARTMENT OF FORESTRY  
AND FIRE PROTECTION  
RM-63 (1-98)

THP No. 1-98-103 SLK  
Dates Rec'd MAY 07 1998  
**Attachment 5**  
Date Filed MAY 11 1998  
Date Approved JUN 11 1998  
Expires JUN 11 1998  
Extensions 1) 1 2) 1

1. \_\_\_\_\_ 7. \_\_\_\_\_
2. \_\_\_\_\_ 8. \_\_\_\_\_
3. \_\_\_\_\_ 9. \_\_\_\_\_
4. \_\_\_\_\_ 10. \_\_\_\_\_
5. \_\_\_\_\_ 11. \_\_\_\_\_
6. \_\_\_\_\_ 12. \_\_\_\_\_

If this is a Modified THP, check box

☐

This Timber Harvesting Plan (THP) form, when properly completed, is designed to comply with the Forest Practice Act (FPA) and Board of Forestry rules. See separate instructions for information on completing this form. NOTE: The form must be printed legibly in ink or typewritten. The THP is divided into six sections. If more space is necessary to answer a question, continue the answer at the end of the appropriate section of your THP. If writing an electronic version, insert additional space for your answer. Please distinguish answers from questions by font change, bold or underline.

SECTION I - GENERAL INFORMATION

This THP conforms to my/our plan and upon approval. I/we agree to conduct harvesting in accordance therewith. Consent is hereby given to the Director of Forestry and Fire Protection, and his or her agents and employees, to enter the premises to inspect timber operations for compliance with the Forest Practice Act and Forest Practice Rules.

1. TIMBER OWNER(S) OF RECORD: Name Lloyd Ohelo  
Address P.O. Box 1361  
City Boulder Creek State CA Zip 95006 Phone 408-338-2859  
Signature Lloyd Ohelo Date 5-5-98

NOTE: The timber owner is responsible for payment of a yield tax. Timber Yield Tax information may be obtained at the Timber Tax Division, State Board of Equalization, P.O. BOX 942879, Sacramento, California 94279-0001.

2. TIMBERLAND OWNER(S) OF RECORD: Name Same as #1.  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_
3. LICENSED TIMBER OPERATOR(S): Name Unknown at this time Lic. No. \_\_\_\_\_  
(If unknown, so state. You must notify CDF of LTO prior to start of operations)  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_
4. PLAN SUBMITTER(S): Name Same as #1.  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_  
(If submitter is not 1, 2, or 3 above he/she must sign below and provide explanation of authority.)  
Signature \_\_\_\_\_ Date \_\_\_\_\_

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COAST AREA OFFICE  
RESOURCE MANAGEMENT

Name Unknown at this time.

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

b. ☒ Yes ☐ No Will the timber operator be employed for the construction and maintenance of roads and landings during conduct of timber operations? If no, who is responsible? **307**

c. Who is responsible for erosion control maintenance after timber operations have ceased and until certification of the Work Completion Report? If not LTO, then written agreement must be provided per 1050 (c).

LTO for first winter. After that, timberland owner.

6. a. Expected date of commencement of timber operations:

☐ date of THP conformance, or ☒ 5 days after date of conformance (date)

b. Expected date of completion of timber operations:

☒ 3 years from date of THP conformance, or ☐ \_\_\_\_\_ (date)

7. The timber operation will occur within the:

☒ COAST FOREST DISTRICT

☒ Southern Subdistrict of the Coast F.D.

☐ The Tahoe Regional Planning Authority Jurisdiction

☒ A County with Special Regulations, identify:

Santa Cruz County

☐ SOUTHERN FOREST DISTRICT

☐ High use subdistrict of the Southern F.D.

☐ Special Treatment Area(s), identify:

☐ NORTHERN FOREST DISTRICT

☐ Other \_\_\_\_\_

8. Location of the timber operation by legal description:

Base and Meridian:

☒ Mount Diablo

☐ Humboldt

☐ San Bernardino

Section	Township	Range	Acreage	County	Assessor's Parcel Number
<u>16</u>	<u>9s.</u>	<u>2w.</u>	<u>4</u>	<u>Santa Cruz</u>	<u>089-091-22</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

TOTAL ACREAGE 4 (Logging Area Only)

• Optional

Planning Watershed(s) (Optional) Bear Creek

9. ☐ Yes ☒ No Has a Timberland Conversion been submitted? If yes, list expected approval date or permit number and expiration date if already approved. \_\_\_\_\_

10. ☐ Yes ☒ No Is there an approved Sustained Yield Plan for this property? Number \_\_\_\_\_; Date app. \_\_\_\_\_

☐ Yes ☒ No Has a Sustained Yield Plan been submitted but not approved? Number \_\_\_\_\_; Date sub. \_\_\_\_\_

11. ☐ Yes ☒ No Is there a THP or NTMP on file with CDF for any portion of the plan area for which a report of satisfactory stocking has not been issued by CDF?  
If yes, identify the THP or NTMP number(s): \_\_\_\_\_



13 RPF preparing the THP: Name Gary Paul  
Address 5521 Scotts Valley Dr. #235  
City Scotts Valley State CA Zip 95066 Phone 408-438-8968 308

- a. ☒ Yes ☐ No I have notified the plan submitter(s), in writing, of their responsibilities pursuant to Title 14 CCR 1035 of the Forest Practice Rules.  
☒ Yes ☐ No I have notified the timber owner and the timberland owner of their responsibilities for compliance with the Forest Practice Act and rules, specifically the stocking requirements of the rules and the maintenance of erosion control structures of the rules.
- b. ☒ Yes ☐ No I will provide the timber operator with a copy of the portions of the approved THP as listed in 14 CCR 1035 (e). If "no", who will provide the LTO a copy of the approved THP?

I or my supervised designee will meet with the LTO prior to commencement of operations to advise of sensitive conditions and provisions of the plan pursuant to Title 14 CCR 1035.2 .

I have the following authority and responsibilities for preparation and administration of the THP and timber operation. (Include both work completed and work remaining to be done):

Preparation of THP. Marking of timber. Monitor progress of operation. Advise LTO regarding contents of THP and compliance with Rules. Authority to amend THP.

- d. Additional required work requiring an RPF which I do not have the authority or responsibility to perform:

None.

- e. After considering the rules of the Board of Forestry and the mitigation measures incorporated in this THP, I have determined that the timber operation:

☐ will have a significant adverse impact on the environment. (Statement of reasons for overriding considerations contained in Section III)

☒ will not have a significant adverse impact on the environment.

Registered Professional Forester: I certify that I, or my supervised designee, personally inspected the THP area, and this plan complies with the Forest Practice Act, the Forest Practice Rules and the Professional Foresters Law. If this is a Modified THP, I also, certify that: 1) the conditions or facts stated in 14 CCR 1051 (a) (1) - (16) exist on the THP area at the time of submission, preparation, mitigation, and analysis of the THP and no identified potential significant effects remain undisclosed; and 2) I, or my supervised designee will meet with the LTO at the THP site, before timber operations commence, to review and discuss the contents and implementation of the Modified THP.

Signature Gary Paul Date 4-30-98

NOTE: If a provision of this THP is proposed that is different than the standard rule, the explanation and justification should normally be included in Section III unless it is clearer and better understood as part of Section II.

809  
ATTACHMENT 5

14. a. Check the Silvicultural methods or treatments allowed by the rules that are to be applied under this THP. Specify the option chosen to demonstrate Maximum Sustained Production (MSP) according to 14 CCR 913 (933, 953). 1 1 If more than one method or treatment will be used show boundaries on map and list approximate acreage for each.

☐ Clearcutting a c . ☐ Shelterwood Prep. Step \_\_\_\_\_ ac. ☐ Seed Tree Seed Step \_\_\_\_\_ ac  
☐ Shelterwood Seed Step \_\_\_\_\_ ac. ☐ Seed Tree Removal Step \_\_\_\_\_ ac  
☐ Shelterwood Removal Step \_\_\_\_\_ ac.

☒ Selection 4 ac. ☐ Group Selection \_\_\_\_\_ ac. ☐ Transition \_\_\_\_\_ ac.

☐ Commercial Thinning \_\_\_\_\_ ac. ☐ Sanitation Salvage \_\_\_\_\_ ac.

☐ Special Treatment Area \_\_\_\_\_ ac. ☐ Rehab. of Understocked Area \_\_\_\_\_ ac. ☐ Fuelbreak \_\_\_\_\_ ac.

☐ Alternative \_\_\_\_\_ ac. ☐ Conversion \_\_\_\_\_ ac. ☐ Non-Timberland Area \_\_\_\_\_ ac

Total acreage 4 ac. (Explain if total is different from that listed in 8.) MSP option chosen (a) ☐ (b) ☐ (c) ☒

b. If Selection, Group Selection, Commercial Thinning, Sanitation Salvage or Alternative methods are selected the post harvest stocking levels (differentiated by site if applicable) must be stated. Note mapping requirements of 1034 (x) (12).

Site II, 100 sq.ft.

c. ☐ Yes ☐ No Will evenage regeneration step units be larger than those specified in the rules (20 acre tractor, 30 acre cable)? If yes, provide substantial evidence that the THP contains measures to accomplish any of subsections (A) - (E) of 14 CCR 913 (933, 953).1(a) (2) in Section III of the THP. List below any instructions to the LTO necessary to meet (A) - (E) not found elsewhere in the THP. These units must be designated on map and listed by size.

d. Trees to be harvested or retained must be marked by or marked under the supervision of the RPF. Specify how the trees will be marked and whether harvested or retained. RPF or designee will mark trees with a horizontal stripe on two sides at breast height and a base mark.

☐ Yes ☒ No Is a waiver of marking by the RPF requirement requested? If yes, how will LTO determine which trees will be harvested or retained? If yes and more than one silvicultural method, or Group Selection is to be used, how will LTO determine boundaries of different methods or groups?

e. Forest Products to be Harvested: Sawlogs, fuelwood, burls.

f. ☐ Yes ☒ No Are group B species proposed for management?  
☐ Yes ☒ No Are group B or non-indigenous A species to be used to meet stocking standards?  
☐ Yes ☒ No Will group B species need to be reduced to maintain relative site occupancy of A species.  
If any answer is yes, list the species, describe treatment, and provide the LTO with necessary felling guidance.

g. Other instructions to LTO concerning felling operations. None.

h. ☐ Yes ☒ No Will artificial regeneration be required to meet stocking standards?

i. ☐ Yes ☒ No Will site preparation be used to meet stocking standards?  
If yes, provide the information required for a site preparation addendum.

j. If the rehabilitation method is chosen provide a regeneration plan as required by 14 CCR 913(934, 954).4(b).

EXHIBIT H  
55

15. a. ☒ Yes ☐ No Is this THP within an area that the Board of Forestry has declared a zone of infestation or infection pursuant to PRC 471 2-4718? If yes, identify feasible measures being taken to mitigate adverse infestation or infection impacts from the timber operation. See 917(937, 957).9(a).

ATTACHMENT.- 5

- b. ☐ Yes ☒ No If outside a declared zone, are there any insect, disease or pest problems of significance in the THP area? If yes, describe the proposed measures to improve the health, vigor and productivity of the stand(s).

See Attachment to Section II, No. 15.

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#### HARVESTING PRACTICES

16. Indicate type of yarding system and equipment to be used:

GROUND BASED'		CABLE		SPECIAL	
a.	<input checked="" type="checkbox"/> Tractor, including end/long lining	d.	<input type="checkbox"/> 1 Cable, ground lead	g.	<input type="checkbox"/> Animal
b.	<input checked="" type="checkbox"/> Rubber tired skidder, Forwarder	e.	<input type="checkbox"/> Cable, high lead	h.	<input type="checkbox"/> 1 Helicopter
c.	<input type="checkbox"/> Feller buncher	f.	<input type="checkbox"/> Cable, Skyline	i.	<input type="checkbox"/> Other _____

- All tractor operations restrictions apply to ground based equipment.

17. Erosion Hazard Rating: Indicate Erosion Hazard Ratings present on THP. [Must match EHR worksheets]

Low ☐ Moderate ☐ High ☒ Extreme ☐

If more than one rating is checked, areas must be delineated on map to 20 acres in size (10 acres for high and extreme EHRs in the Coast District).

18. Soil Stabilization:

In addition to the standard waterbreak requirements describe soil stabilization measures or additional erosion control measures to be implemented and the location of their application. See requirements of 916 (936, 956).7.

See Attachment to Section II, No. 18.

19. ☐ Yes ☒ No Are tractor or skidder constructed layouts to be used? If yes, specify the location and extent of use:

No

20. ☐ Yes ☒ No Will ground based equipment be used within the area(s) designated for cable yarding? If yes, specify the location and for what purpose the equipment will be used?

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21. Within the THP area will ground based equipment be used on:

- a. ☐ Yes ☒ No Unstable soils or slide areas? Only allowed if unavoidable. COAST AREA OFFICE  
b. ☐ Yes ☒ No Slopes over 65%? RESOURCE MANAGEMENT  
c. ☒ Yes ☐ No Slopes over 50% with high or extreme EHR?  
d. ☐ Yes ☒ No Slopes between 50% and 65% with moderate EHR where heavy equipment use will not be restricted to the limits described in 14 CCR 914 (934, 954).2(f)(2)(i) or (ii)?  
e. ☐ Yes ☒ No Slopes over 50% which lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake?

If a. is yes provide site specific measures to minimize effect of operations on slope stability and provide explanation and justification as required per 14 CCR 914 (934, 954).2(d). CDF requests the RPF consider flagging tractor road locations if a) is yes. If b., c., d. or e. is yes: 1) the location of tractor roads must be flagged on the ground prior to the PHI or start of operations if a PHI is not required, and 2) you must clearly explain the proposed exception and justify why the standard rule is not feasible or would not comply with 914 (934, 954).

The location of heavy equipment operation on unstable areas or any use beyond the limitations of the standard rules must be shown on the map. List specific instructions to the LTO below.

See Attachment to Sections II and III, No. 21.

(revised 6-4-98)

WINTER OPERATIONS

23. a. ☐ Yes ☒ No Will timber operations occur during the winter period? If yes, complete c) or d). State in space provided if exempt because yarding method will be cable, helicopter, or balloon.
- b. ☐ Yes ☒ No Will mechanical site preparation be conducted during the winter period. If yes, complete d)
- c. ☐ I choose the in-lieu option as allowed in 14 CCR 914 (934, 954).7(c). Specify below the procedures listed in subsections (1) and (2), and list the site specific measures for operations in the WLPZ and unstable areas as required by subsection (3), if there will be no winter operations in these areas, so state.
- d. ☐ I choose to prepare a winter operating plan per 14 CCR 914 (934, 954).7 (b).

NOTE: All water breaks and rolling dips must be installed by October 15 or as prescribed above. For the purposes of installing drainage facilities and structures, waterbreaks, and rolling dips, the winter period is from October 15 to May 1.

ROADS AND LANDINGS

24. Will any roads be constructed? ☐ Yes ☒ No, or reconstructed? ☐ Yes ☒ No. If yes, check items a through g.
- Will any landings be constructed? ☐ Yes ☒ No, or reconstructed? ☐ Yes ☒ No. If yes, check items h through k:
- a. ☐ Yes ☒ No Will new or reconstructed roads be wider than single lane with turnouts?
- b. ☐ Yes ☒ No Are logging roads proposed in areas of unstable soils or known slide-prone areas?
- c. ☐ Yes ☒ No Will new roads exceed a grade of 15% or have pitches of up to 20% for distances greater than 500 feet? Map must identify any new or reconstructed road segments that exceed an average 15% grade for over 200 feet.
- d. ☐ Yes ☒ No Are roads to be constructed or reconstructed, other than crossings, within the WLPZ of a watercourse? If yes, completion of THP Item 27 a. will satisfy required documentation.
- e. ☐ Yes ☒ No Will roads be located across more than 100 feet of lineal distance on slopes over 65%. or or slopes over 50% which are within 100 feet of the boundary of a WLPZ?
- f. ☐ Yes ☒ No Will any roads or watercourse crossings be abandoned?
- g. ☐ Yes ☒ No Are exceptions proposed for flagging or otherwise identifying the location or roads to be constructed?
- h. ☐ Yes ☒ No Will any landings exceed one half acre in size? If any landing exceeds one quarter acre in size or requires substantial excavation the location must be shown on the map.
- i. ☐ Yes ☒ No Are any landings proposed in areas of unstable soils or known slide prone areas?
- j. ☐ Yes ☒ No Will any landings be located on slopes over 65% or on slopes over 50% which are within 100 feet of the boundary of a WLPZ?
- k. ☐ Yes ☒ No Will any landings be abandoned?
25. If any section in item 24 is answered yes, specify site-specific measures to reduce adverse impacts and list any additional or special information needed by the LTO concerning the construction, maintenance and/or abandonment of roads or landings as required by 14 CCR Article 12. Include required explanation and justification in THP Section III.

WATERCOURSE AND LAKE PROTECTION ZONE (WLPZ) AND DOMESTIC WATER SUPPLY PROTECTION MEASURES:

26. a. ☒ Yes ☐ No Are there any watercourse or lakes which contain Class I through IV waters on or adjacent to the project area? If yes, list the class, WLPZ or ELZ width, and protective measures determined from Table I and/or 14 CCR 916.4 (c) [936.4 (c)], 956.4 (c)] of the WLPZ rules for each watercourse. Specify if Class III or IV watercourses have WLPZ, ELZ or both.

27. Are site specific practices proposed in-lieu of the following standard WLPZ practices?

- No**
- a. ☒ Yes ☐ No Prohibition of the construction or reconstruction of roads, construction or use of tractor roads or landings in Class I, II, III, or IV watercourses, WLPZs, marshes, wet meadows, and other wet areas except as follows:
- (1) At prepared tractor road crossings.
  - (2) Crossings of Class III watercourses which are dry at time of timber operations.
  - (3) At existing road crossings.
  - (4) At new tractor and road crossings approved by Department of Fish and Game.
- b. ☐ Yes ☒ No Retention of non-commercial vegetation bordering and covering meadows and wet areas?
- c. ☐ Yes ☒ No Directional felling of trees within the WLPZ away from the watercourse or lake?
- d. ☐ Yes ☒ No Increase or decrease of width(s) of the WLPZ(s)?
- e. ☐ Yes ☒ No Protection of watercourses which conduct class IV waters?
- f. ☐ Yes ☒ No Exclusion of heavy equipment from the WLPZ except as follows:
- (1) At prepared tractor road crossings.
  - (2) Crossings of Class III watercourses which are dry at time of timber operations.
  - (3) At existing road crossings.
  - (4) At new tractor and road crossings approved by Department of Fish and Game.
- g. ☐ Yes ☒ No Establishment of ELZ for Class III watercourses unless sideslopes are <30% and EHR is low?
- h. ☐ Yes ☒ No Retention of 50% of the overstory canopy in the WLPZ?
- i. ☐ Yes ☒ No Retention of 50% of the understory in the WLPZ?
- j. ☐ Yes ☒ No Are any additional in-lieu or any alternative practices proposed for watercourse or lake protection?

NOTE: A yes answer to any of items a. through j. constitutes an in-lieu practice. If any item is answered yes, refer to 14 CCR 916 (936, 956).1 and address the following for each item checked yes: 1. The RPF shall state the standard rule, 2. Explain and describe each proposed practice; 3. Explain how the proposed practice differs from the standard practice; 4. The specific location where it shall be applied, see map requirements of 14 CCR 1034(x)(15) and (16); 5. Provide in THP Section III an explanation and justification as to how the protection provided is equal to the standard rule and provides for the protection of the beneficial uses of water per 14 CCR 916 (936, 956).1 (a). Reference the in lieu and location to the specific watercourse to which it will be applied.

28. a. ☒ Yes ☐ No Are there any landowners within 1000 feet downstream of the THP boundary whose ownership adjoins or includes a class I, II, or IV watercourse(s) which receives surface drainage from the proposed timber operations? If yes, the requirements of 14 CCR 1032.10 apply. Proof of notice by letter and newspaper should be included in THP Section V. If No, 28 b. need not be answered.
- b. ☐ Yes ☒ No Is an exemption requested of the notification requirements of 1032.10? If yes, explanation and justification for the exemption must appear in THP Section III. Specify if requesting an exemption from the letter, the newspaper notice or both.
- c. ☐ Yes ☒ No Was any information received on domestic water supplies that required additional mitigation beyond that required by standard Watercourse and Lake Protection rules? If yes, list site specific measures to be implemented by the LTO.

29. ☐ Yes ☒ No Is any part of the THP area within a Sensitive Watershed as designated by the Board of Forestry? If yes, identify the watershed and list any special rules, operating procedures or mitigation that will be used to protect the resources identified at risk?

#### HAZARD REDUCTION:

30. a. ☒ Yes ☐ No Are there roads or improvements which require slash treatment adjacent to them? If yes, specify the type of improvement, treatment distance, and treatment method.

31. ☐ Yes ☒ No Will piling and burning be used for hazard reduction? See 14 CCR 917 (937, 9571.1-1 1 for specific requirements. Note: LTO is responsible for slash disposal. This responsibility cannot be transferred.

BIOLOGICAL AND CULTURAL RESOURCES

32. a. ☒ Yes ☐ No Are any plant or animal species, including their habitat, which are listed as rare, threatened or endangered under federal or state law, or a sensitive species by the Board, associated with the THP area? If yes, identify the species and the provisions to be taken for the protection of the species.  
b. ☐ Yes ☒ No Are there any non-listed species which will be significantly impacted by the operation? If yes, identify the species and the provisions to be taken for the protection of the species.

See Attachment to Sections II and III, No.32

33. ☐ Yes ☒ No Are there any snags which must be felled for fire protection or safety reasons? If yes, describe which snags are going to be felled and why.

34. ☐ Yes ☒ No Are any Late Succession Forest Stands proposed for harvest? If yes, describe the measures to be implemented by the LTO that avoid long-term significant adverse effects on fish, wildlife and listed species known to be primarily associated with late succession forests.

35. ☐ Yes ☒ No Are any other provisions for wildlife protection required by the rules? If yes, describe.

36. a. ☒ Yes ☐ No Has an archaeological survey been made of the THP area?  
b. ☒ Yes ☐ No Has a current archaeological records check been conducted for the THP area?  
c. ☐ Yes ☒ No Are there any archaeological or historical sites located in the THP area? Specific site locations and protection measures are contained in the Confidential Archaeological Addendum in Section VI of the THP, which is not available for general public review.

37. ☐ Yes ☒ No Has any inventory or growth and yield information designated "trade secret" been submitted in a separate confidential envelope in Section VI of this THP?

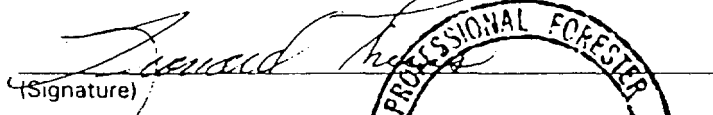
38. Describe any special instructions or constraints which are not listed elsewhere in Section II.

See Attachment to Section II. No. 38.

DIRECTOR OF FORESTRY AND FIRE PROTECTION

This Timber Harvesting Plan conforms to the rules and regulations of the Board of Forestry and the Forest Practice Act:

By:

(Signature)   
(Printed Name) Leonard E. The  
No. 216  
STATE OF CALIFORNIA

6/23/98  
(Date)

Acting Deputy Chief, Forest Practice  
(Title)

No. 14: Silviculture

Rule 913.8(a) will be applied. Approximately 50% of the conifer trees 18"+ DBH will be harvested. Only damaged conifer trees under 18" DBH will be cut. Stocking standard to be met is 100 sq. ft. of basal area for Site II lands.

Pursuant to Rule 913.1 l(c)(2), MSP is met for this THP by complying with Rule 913.1(c)(1)(A), the seed tree retention standards for unevenaged management, and being the retention of at least 8 seed trees per acre 18" DBH+, or 4 seed trees per acre at least 24" DBH+. In addition, MSP is met by complying with the basal area standard for Rule 913.8(a) of 100 sq.ft. for Site II timberland.

No. 15: Pests

Although no pine species are present within the THP boundary, the plan area is within the Zone of Infestation for Pine Pitch Canker. No pines will be removed from the site, so no special measures are needed for treatment of such material

No. 18: Soil stabilization measures

All skid trails located in swales where waterbars will not be effective will be tractor slash packed.

The landings will be seeded with annual rye (25 lbs./acre) and covered with 1" of straw mulch over the entire exposed surface.

The proposed skid trail will be seeded with annual rye at 25 lbs./acre. The end of the proposed skid trail segment that turns to the south and ends in a swale above a Class 3 watercourse shall be seeded and mulched or slash packed to the first uphill waterbar.

See also No. 21 and 38.

No. 21: Equipment operations on steep slopes.

An exception is proposed to Rule 914.2(f)(1)(i), heavy equipment on slopes over 50% with high erosion hazard rating. The location where this will occur is on the proposed skid trail for approximately 120 feet past crossing C2.

Mitigation: The trail will be tractor slash packed.

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No. 26: Watercourses.

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Class 3:COAST AREA OFFICE  
RESOURCE MANAGEMENT

The measures proposed for this THP are: 1) the removal or stabilization of any woody debris deposited in the watercourse before October 15, 2) removal of temporary crossings and deposited soil before October 15, and 3) A 2.5 foot (slopes under 30%) to 50 foot (slopes over 30%) equipment limitation zone (ELZ) is established. Equipment will only operate on designated trails and crossings within the ELZ. The ELZ will be flagged before the preharvest inspection. Where tractors operate within the ELZ, these trails will be slash packed. Crossings may, alternatively, be

covered with seed and straw mulch to the first waterbar.

No. 30: Hazard reduction

**No.** There is a fire protection zone for a residence on the property and an adjacent property. Shrub within 200 feet of the residences will be lopped to within 12" of the ground.

32: Listed Species

Coho salmon, steelhead trout, and red-legged frog are listed species in the THP area.

For Coho salmon, the following 2090 rules are implicated and followed by this THP: 4.4. 1- An ELZ is established for the Class 3 watercourse. No equipment will operate in the ELZ, except on designated trails and crossings, and tractor crossings have been flagged; 4.4.2-Operations will avoid disturbance to LWD in the Class 3 watercourse.

Steelhead will also be protected by the 2090 measures. There has been a red-legged frog sighting somewhere in the Bear Creek watershed. Its specific location is **unknown**. There **are no** deep pools in the Class 2 watercourse which would serve as breeding habitat. Since there are no winter operations proposed, no potential take of individual frogs should occur.

No. 38: Other Special Instructions

1. Watercourse crossings:

C1: Dip crossing. Seed and mulch or slash mulch to first uphill waterbar

C2: Dip crossing. Seed and mulch or slash mulch to first uphill waterbar.

2. Caution-Log Truck" signs will be placed in both directions on Bear Creek Rd. at the intersection with Harmon Gulch Rd. and in two locations in both directions on Harmon Gulch Rd. between Bear Creek Rd. and the operation.

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COAST AREA OFFICE  
RESOURCE MANAGEMENT

(revised 6-4-98)

EXHIBIT H  
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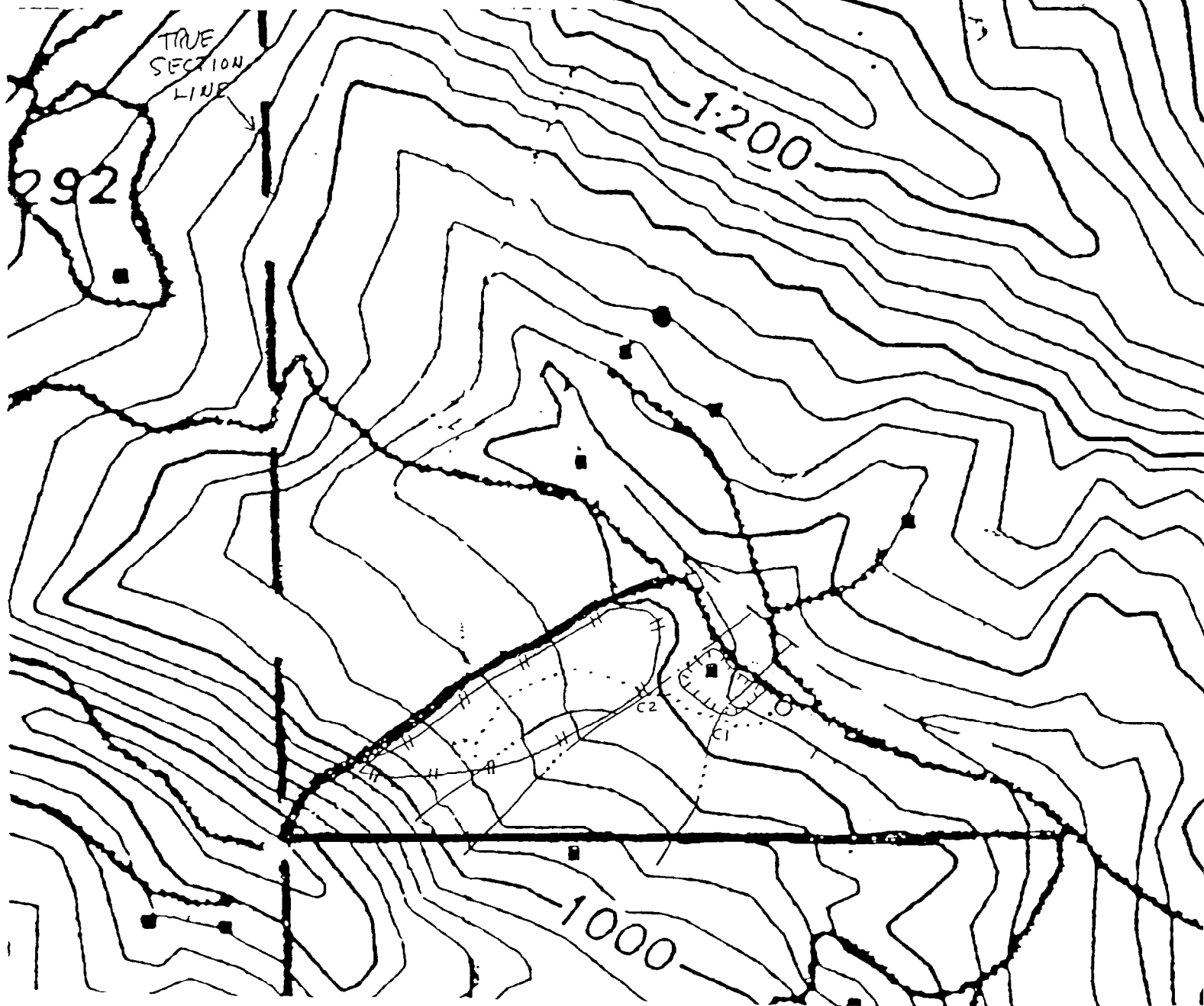


T.9 S. Fi.2 W. Sect. 16  
Scale 1"=400' CI 40'

TIMBER HARVEST PLAN MAP

Property line —————  
Harvest boundary —||—||—  
Exist. perm. road ————  
Landing 0  
Proposed skid trail .....  
Class 2 watercourse —...—  
Class 3 watercourse —...—  
Watercourse crossings C1-C2  
Homes ■  
Fire safe exemption area ————

316  
ATTACHMENT 5



General Description of the THP Project Area and Watershed

The 4 acre THP project site is a well-stocked second growth forest, composed of predominately redwood in the overstory, with a component of Douglas fir, and associated tanoak, madrone, and live oak. Undergrowth species are typical of the Santa Cruz Mountains.

The second growth conifer forest appears to be approximately 90-100 years old, a result of the clearcutting in the early 1900's. Conifer stocking is 70-80% of the total crown canopy and the growing site is Site II.

Soil types on the site is the Lompico-Felton complex, with sandy loam surface soils, and are moderately deep and well drained. Bedrock is at about 48 inches in depth. These soils are well suited to the production of timber according to the Soil Survey of Santa Cruz County.

The site is located in the Harmon Gulch drainage, a sub-drainage of the Bear Creek watershed. Anadromous fish are present in Bear Creek. A Class 2 watercourse is located below the THP area. The Bear Creek watershed consists of mostly timbered areas with areas of residential development throughout the watershed.

The project site is stable. No new landslides were noted from the recent, heavy storms of February 1998. The terrain is gentle to steep.

Elevations in the harvest area range from 800 feet in the creek at the eastern harvest boundary to 1000 feet in the draw at the western harvest boundary.

The project site is accessed by Harmon Gulch Rd., a 1 lane private rocked road, off Bear Creek Rd.

Project Alternatives Analysis

The purpose of the project is to achieve an economic return from the property and to maintain the growth and overall health of the forest for long term timber production, and for reduction of fire hazard.

The need for the project from a societal perspective, includes maintaining a high flow of high quality redwood timber products to the economy, maintaining the forest products industry, providing a source of employment, avoiding waste of timber resources, contributing to a base for sustainable resources for the economy and maintaining forest health.

Possible alternatives to the project include:

1. The Project as Proposed. The THP presents the project as proposed.
2. No Project. The site would remain as is, but the opportunity for harvest would be lost at this time. Redwood crowns are crowded and the overall growth rate of the forest has probably decreased to 2%.
3. Alternative Land Uses. No other possible alternative land uses exist, other than the existing residential use and timber production. The properties are not suitable for farming.
4. Timing of the Project. Carrying out the project at a different time within the decade would not be feasible, as the owners desire income from their properties at this time.
5. Alternative Site. No other sites exist for this project. These are the sole timbered ownerships

- of these parties.
5. Public Acquisition. No public agency has expressed an interest in acquiring the property. The location is probably not suitable for a park, as heavy recreational traffic would overburden the access road. Further, the area has a residential use that would not be compatible for a park.

0318

No. 21: Equipment operations on steep slopes.

An exception is proposed to Rule 9 14.2(f)(1)(i), heavy equipment on slopes over 50% with high erosion hazard rating. The location where this will occur is on the proposed skid trail for approximately 120 feet past crossing C2.

Mitigation: The trail will be tractor slash packed.

Explanation and justification: The standard rule would require the use of a cable logging machine, and would have to be placed high on the hill above the area accessed by the proposed trail. This would require a new road to be built in that location. Besides being unfeasible, this would result in more disturbance and impact, then the skid trail which requires no cutting into the slope as it runs directly up the slope. With the mitigation measure, the exception will provide more protection than use of the standard rule.

No. 32: Listed Species

The Natural Diversity Database maps at Roy Webster's office and biotic resources maps at the CDF Felton office were examined for RTE species and County General Plan species of special concern. No source consulted indicated any plant species of concern to be found in the project area or overlapping the project area.

Coho salmon now listed, are associated with the Bear Creek watershed, as a potential recovery stream. Steelhead trout are found in Bear Creek. The harvest area is also within the range of the red-legged frog. See discussion below under "Watershed Resources". No other animal species of concern is associated or found in the THP area.

There is no known marbled murrelet use of the area and no on-site nor nearby suitable habitat. All seven questions on the marbled murrelet prefilming consultation checklist are negative. No trees with limbs large enough to be suitable murrelet habitat have been identified in the field.

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SECTION IV  
CUMULATIVE IMPACTS ANALYSIS

**ATTACHMENT 5**

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Cumulative Impacts Checklist

1. Do the assessment areas of resources that may be affected by the proposed project contain any past, present, or reasonably foreseeable future projects? Yes.

CDF Felton office records indicate the following timber harvest projects completed, occurring, or proposed within the past 10 years in the watershed assessment area, which is the Bear Creek watershed (includes Deer Creek).

<u>THP #(all SCR)</u>	<u>Acres</u>
1-98-100	30
1-98-050	58
1-97-256	128
1-97-045	46
1-96-518	84
1-96-369	32
1-95-549	17
1-95-491	80
1-95-311	5
1-95-024	47
1-94-421	38
1-94-371	8
1-94-280	4
1-94-182	18
1-94-141	40
1-94-023	40
1-93-240	240
1-93-154	15
1-93-153	16
1-93-129	36
1-92-327	90
1-92-322	20
1-92-154	20
1-92-421	38
1-92-093	22
1-91-232	22
1-90-774	46
1-90-700	40
1-90-308	64
1-90-047	11
1-89-652	95
1-88-793	95
1-88-684	38
1-88-605	39
1-88-424	10
1-88-05	14
 TOTAL	 1646 acres

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RESOURCE MANAGEMENT

(revised 6-4-98)

**55**  
**EXHIBIT H**

This accounts for approximately 18% of the 9000 acre watershed assessment area over the past ten years. All plans were by the Selection method. Estimated tractor acreage is 95% overall. Estimated yarder acreage is 5% overall. All plans used tractor logging for at least part of the operation. Impacts from timber harvest are mitigated by the Forest Practice Rules and special mitigations developed for each THP. 0320

Other human projects have affected all resources, including homes, retreats, driveways, and roads. Most activities are currently regulated by the County, which uses the permit process and its erosion control ordinance to control impacts from residential use. No new significant development or agricultural projects in the area have been presented to the County Planning Dept.

2. Are there any continuing significant adverse impacts from past or present land use activities that may add to the impacts of the proposed project? Yes.

Current residential usage, including road maintenance problems, may continue to have an effect on all resources. These may be in the form of accelerated erosion, displacement of wildlife, and loss of visual resource. Again, mitigation of ongoing problems is affected by County ordinances, or other resource monitoring agencies.

3. Will the proposed project, as presented, in combination with past, present, and reasonably foreseeable future projects, identified in items #1 and #2 above, have a reasonable potential to cause or add to significant cumulative impacts in any of the following resource subjects?

Watershed:	No, after mitigation.
Soil Productivity:	No, after mitigation.
Biological:	No, after mitigation.
Recreation:	No reasonably potential significant effects.
Visual:	No reasonably potential significant effects.
Traffic:	No, after mitigation.

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4. Resources Assessment Areas and Analysis

(1) Watershed Resources

Assessment area: The assessment area is the 9000 acre Bear Creek watershed. Rationale: This is the area in which past, present, and future projects, including this THP, are most likely to have an impact on the beneficial uses of water of Bear Creek.

Watercourse conditions:

Harmon Gulch Creek, a Class 2 watercourse, flows downslope of the harvest area. This watercourse shows evidence of being aggraded and gravel embedded. Large woody and other organic debris is present in moderate amounts. Bank cutting and downcutting were observed. Bank mass wasting was not observed. The stream is of moderate gradient and there are a few shallow pools. Streamside vegetation, primarily conifers and hardwoods, is present.

Class 3 watercourses are in good condition and are typical of the area. On site sediment inputs were not noted.

Potential impacts:

Sedimentation: Potential sedimentation effects from harvesting primarily relate to road construction, landsliding, and harvesting activities within a WLPZ or ELZ. This harvest proposes no operations within the WLPZ. Tractors will operate at two skid trail crossings within the ELZ. These areas will be covered with slash. Class 3 watercourse crossings will be mulched and stabilized.

Water temperature: Water temperature will not be implicated as there are no operations within the WLPZ.

Organic debris: Organic debris will not be implicated as there are no operations within the WLPZ.

Chemical contamination: No landings will be used within the WLPZ or ELZ. Chemical spills will, thus, not impact watercourses. No other existing contaminations were noted. No use of chemicals for road surface stabilization is contemplated.

Peak flow: Peak flow will not be altered by selective cutting under Rule 9 13.8(a).

Coho salmon analysis:

According to the CDF&G Memorandum dated 2-6-96 from Nelson/Anderson to Steele, Harmon Gulch Creek suffers from the following habitat deficiencies for Coho salmon: 1. Sedimentation of the creek from improper grading of private roads and homesites, and lack of vegetation around homesites; 2. Degraded water quality from septic systems and stormwater runoff; 3. Lack of streamflow from water diversions during critical summer flows; 4. Hydrology of the streambed has been modified from the improper placement of culverts and bridges.

Potential impacts from this harvest operation will not affect the restoration of Coho to Bear Creek and the San Lorenzo River due to the following mitigations: Sedimentation-Bare soils from equipment operations within the ELZ will be mulched as discussed above. The RPF did not identify significant sedimentation problems from the current use of this property, other than those proposed for mitigation.

Red-legged frog:

There has been an red-legged frog sighting of undetermined location in the Watershed Assessment Area (See Attached Checklist). Potential habitat areas, such as deep pools, are not present in or nearby the harvest area. No winter operations are proposed. Thus, no impact to individuals or potential habitat from the operation should occur.

In light of the above factors, and with the proposed mitigation measures, there will be no adverse effect on sedimentation, stream water temperature, organic debris, chemical contamination, or peak flow, and no reasonable potential for the project to cause or add to significant adverse cumulative effects to watershed resources, including Coho salmon, steelhead trout, and red-legged frog habitat.

(2) Soil Productivity

Assessment Area: The assessment area for soils productivity is the harvest area. Rationale:

revised (6-4-98)

EXHIBIT 55

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ATTACHMENT 5  
COAST AREA OFFICE  
RESOURCE MANAGEMENT  
321

Factors which potentially influence soil productivity must physically affect the harvest area. See Technical Rule Addendum #2.

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ATTACHMENT 5

Some loss of productivity occurs due to dedication of areas for use as landings, haul roads, and tractor trails. In this plan, approximately 750 feet of new skid trail is proposed. Trails are generally proposed to avoid redwood clumps. Only a few redwoods will have to be removed for skid trails. No new landings or roads are proposed.

Overall site productivity is protected through the implementation of selection harvesting pursuant to Rule 9 13.8(a), which requires the retention of trees with healthy, full crowns, and a well distributed residual stand.

The current proposed harvest will improve the spacing of the residual trees resulting in an increased growth rate on the leave trees. Stump sprouting from the proposed harvest should be vigorous due to the increased availability of light. It is estimated that the growth rate of the residual stand will increase from 2 to 4%.

Compaction from the use of tractors and skidders may reduce soil productivity, but studies are not clear as to the significance of the actual long term effect. Nutrient losses could also effect long term growth. This usually occurs when slash is burned, or otherwise removed following harvest.

The present operation proposes logging for slash removal. In such cases, nutrient recycling is promoted, and no adverse effect should result.

In light of the above factors, the project will not have a reasonable potential for the project to cause or add to significant adverse cumulative effects on soil resources.

### (3) Biological Resources

Assessment Area: The project area and the area within 1/2 mile of the project boundary.  
Rationale: The expanded area accounts for mobile species which may enter the project area or are likely to be within range of the biological influence of the project.

The habitat in this area is primarily second growth redwood and Douglas fir timber, with typical associated hardwood and undergrowth species. Openings in the forest stand are found where there is residential development and cultivated areas. Species associated with this habitat are typical bird and mammal populations.

Wildlife habitat should be maintained by the selection system, which maintains a relatively continuous forest canopy. No removal of structure is proposed, such as snags. Nest or den trees will be maintained, if identified in the field. No removal of hardwood trees is proposed, other than those damaged by the harvesting operation. The harvest should increase diversity within the stand, by promoting a multi-layered canopy, resulting in improved wildlife habitat.

Short term displacement of mammals and birds may occur during the operation. The adjoining land should accommodate animals displaced, as there is not a significant residential component in the area, which is largely wildland. Recolonization of the project site should occur shortly after the completion of operations.

WHR classification for the project area is 4D. The proposed selective harvest will not change the WHR rating. The forest does not contain functional characteristics of late succession

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RESOURCE MANAGEMENT

EXHIBIT H

stands, which include large down logs, and significant numbers of snags. There are some old growth residuals. The largest-and most desirable from a wildlife standpoint-will be retained. 323

As a result of the foregoing factors, the project will not have a reasonable potential to cause or add to significant cumulative impacts on biological resources.

## ATTACHMENT 5

### (4) Recreational Resources

Assessment Area: The area within 300 feet of the THP area. Rationale: Recreational impacts are likely to be largely confined to this range. See Technical Rule Addendum #2.

There is no adjoining area available for public recreation. Consequently, there is no reasonable potential for adverse cumulative effects on recreational resources.

### (5) Visual Resources

Assessment Area: The logging area that is readily visible to significant numbers of people who are no further than 3 miles from the operation. Rationale: Visual impacts minimal to those greater than 3 miles away. See Technical Rule Addendum #2.

The proposed operation is not visible to the public. Under Rule 913.8(a), which permits removal of a maximum of 60% of the trees which are 1 8"+ DBH, visual impact from logging is not significant. This cutting rule was adopted in Santa Cruz County largely for its ability to protect the scenic qualities of the forest, as well as for protection of long range productivity. Slash and debris which is generated by the operation will be a minor impact immediately after the operation, but when lopped, crushed and scattered as required by the Rules, its visual impact is reduced. Within 1-2 years, the forest floor regains its former natural appearance.

Under the Rules, this THP will not have reasonable potential to cause or add to significant cumulative impacts on visual resources.

### (6) Traffic Resources

Assessment Area: Harmon Gulch Rd. to Bear Creek Rd., west to Highway 9. Rationale: County roads to State Highways. See Technical Rule Addendum 42.

The operation proposes approximately 5-8 logging truck loads per day for a period of 1 months. Bear Creek Rd. is 2 lane road used primarily by local residents and commuters.

Log hauling has been conducted safely for many years on comparably narrow roads in Santa Cruz County. Due to the quality of the haul roads, significant adverse traffic effects are not expected as a result of operations under this THP. The following mitigation measure is proposed: "Caution-Log Truck" signs will be placed in both directions on Bear Creek Rd. at the intersection with Harmon Gulch Rd. and in two locations in both directions on Harmon Gulch Rd. between Bear Creek Rd. and the operation.

Under the Rules and with the proposed mitigation measure, this THP will not have reasonable potential to cause or add to significant cumulative impacts on traffic resources.

### 5. Sources of Information

Santa Cruz County Assessor's Office (Assessors' Parcel Maps) and Surveyor's Office

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*revised 6-4-98*

EXHIBIT 5



(Survey Maps). 701 Ocean St., Santa Cruz, CA 95060, 408-454-2002, 454-2 160.  
Soil Survey of Santa Cruz County, USDA, 1980.  
Natural Diversity Data Base information.  
Past and Present THP maps and information, CDF Felton office.  
Santa Cruz County Biotic Resources map.  
Castle Rock quadrangle map.

324

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SECTION V  
CONFIDENTIAL DOCUMENTS

325

ATTACHMENT 5

55  
EXHIBIT H

NOTE

Information concerning archeological sites has been removed from this THP 1-98-165 SCR, in accordance with the policy of the Office of Historic Preservation as adopted by the State Historical Resources Commission under the authority of Public Resources Code 5020.4.

Copies of the information have been sent to the following locations to facilitate review of the project:

1. CDF field unit - Felton
2. Reviewing Archeologist, Mark Gary, Santa Rosa (Region Office)

The original copy of this material is maintained in a confidential file at CDF Region I Headquarters, 135 Ridgway Avenue, Santa Rosa, CA 95401.

SECTION VI  
MISCELLANEOUS ATTACHMENTS

0327  
ATTACHMENT 5

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EXHIBIT H

I certify that the all individuals and entities on the mailing list provided with this THP were mailed a copy of the Notice of Intent/Domestic Water Supply Inquiry and Location Map at least **10** days before submission of this THP.

  
\_\_\_\_\_  
GARY PAUL RPF

Dated: 4-30-98

## Monitoring Form for 2090 Mitigations - Form 2 (THP)

0329

THP# \_\_\_\_\_

Landowner J. P. O.

Inspector (CDF, RPF\* or designee) \_\_\_\_\_

Date 4-30-98Current Accumulated Rainfall, July 1 - June 30 season (Recommended) 70"

Applicability Category	Implementation Quality Code	Effectiveness Code
N - does not pertain to operation	1 - high quality	1 - improved habitat protection
Y - pertains to operation	2 - adequate quality	2 - maintain habitat protection
1 - conforms to rule	3 - inadequate quality	3 - decreased habitat protection
2 - alternative practice	4 - significantly inadequate	4 - significantly decreased habitat protection
	5 - not installed	

Rule (2090)	Applicability Category - RT Y or N 1 or 2		Implementation Quality Code RPF* CDF/DFG		Effectiveness Code RPF* CDF/DFG	
<i>Class I Watercourses</i>						
4.1 85% / 75% canopy retention						
<i>Both Class I and Class II Watercourses</i>						
4.2.1 no sediment from roads w/in WLPZ						
4.2.2 WLPZ roads rocked, abandoned, stabilized						
4.2.3 WLPZ trails trashed						
4.2.4 <100sq.ft. exposed soil in WLPZ						
4.2.5 WLPZ tree marking						
4.2.6 LWD recruitment						
4.2.7 3 year erosion control						
<i>proposed alternatives</i>						
<i>Class II Watercourses</i>						
4.3 75% canopy retention						
<i>Class III Watercourses</i>						
4.4.1 flagged trail crossings	Y	1				
insert # of crossings here	2					
4.4.1 equipment exclusion zones	Y	1				
4.4.2 protection of LWD in channel	Y	1				
4.4.3 no soil movement into the channel	N					
from site preparation activity						
<i>proposed alternatives</i>						
<i>Any Watercourse (other mitigations)</i>						
4.5 DFG approval of mitigation	N					
<i>Type 4 Watercourses Only</i>						
4.6.1 flow reductions						
4.6.2 instream activity during critical stages						
of life cycle						

STATE OF CALIFORNIA  
BOARD OF FORESTRY  
ESTIMATED SURFACE SOIL  
EROSION HAZARD

ATTACHMENT 5

0330

I. SOIL FACTORS

*Lompico Felton Complex*

A. SOIL TEXTURE	FINE	MEDIUM	COARSE	FACTOR RATING	
1. DETACHABILITY	LOW	MODERATE	HIGH	23	
RATING	1-9	10-18	19-30		
2. PERMEABILITY	SLOW	MODERATE	RAPID	1	
RATING	5-4	3-2	1		

B. DEPTH TO RESTRICTIVE LAYER OR BEDROCK

	SHALLOW	MODERATE	DEEP		
	1'-19"	20'-39"	40'-60" (+)	3	
RATING	15-9	8-4	3-1		

C. PERCENT SURFACE COARSE FRAGMENTS GREATER THAN 2 MM IN SIZE INCLUDING ROCKS OR STONES

	LOW	MODERATE	HIGH		
	(-) 10-39%	40-70%	71-100%	8	FACTOR RATING
RATING	10-6	5-3	2-1		

SUB TOTAL  $\Delta$  35

II. SLOPE FACTOR

SLOPE	5-15%	16-30%	31-40%	41-50%	51-70%	71-80% (+)	
RATING	1-3	4-6	7-10	11-15	16-25	26-35	13

III. PROTECTIVE VEGETATIVE COVER REMAINING AFTER DISTURBANCE

	LOW	MODERATE	HIGH	
	0-40%	41-80%	81-100%	4
RATING	15-8	7-4	3-1	

IV. TWO-YEAR, ONE HOUR RAINFALL INTENSITY (Hundredths Inch)

	LOW	MODERATE	HIGH	EXTREME	
	(-) 30-39	40-59	60-69	70-80	15
RATING	1-3	4-7	8-11	12-15	

TOTAL SUM OF FACTORS  $\Delta$  67

EROSION HAZARD RATING

< 50	50-65	66-75	> 75	
LOW	MODERATE	HIGH	EXTREME	

THE DETERMINATION IS  $\Delta$  High

YES

NO

II. Have the frogs been observed in the river basin in which the THP area is found?	Go to III	End of Assessment
---	-----------	-------------------

III. What is status of each frog observation in the river basin? (Fill out table, then go to IV)

PROXIMITY TO THE THP

Unknown

ATTACHMENT 5331

DATE OF OBSERVATION

Unknown

AGE OF INDIVIDUAL OBSERVED (Egg, Tadpole, Juvenile, Adult)

Unknown

OTHER NOTES

IV. Have frogs been observed in the THP area or in the area immediately downstream of the THP?

Go to VII

Go to V

V. Has at least one (1) frog been observed within reasonable movement distance of the THP area via riparian corridors?

Go to VII

Go to VI

VI. Has at least one (1) frog been observed within reasonable movement distance of the THP area via upland habitats?

Go to VII

End of Assessment

VII. Evaluate the THP area and areas in the vicinity of the THP for the presence of the habitat types. (Fill out table, then go to VIII).

AQUATIC HABITATS (creeks, stream, ponds, marshes, and deep pools and backwaters)

RIPARIAN HABITAT (seeps, springs, bogs, and areas of saturated ground; includes ferns, horsetails, sedges and moisture loving trees - maples, alders, willows, etc.)

UPLAND HABITAT

SUITABLE BREEDING HABITAT

OTHER

VIII. Are there aquatic habitats within or immediately downstream of the THP area that may be affected by the THP activities?	Identify Mitigations from VIII A' - Then Go to IX	Go to IX
IX. Are there any riparian habitats within the THP area that may be affected by timber harvest activities?	Identify Mitigations from IX A' in THP - Then Go to X	Go to X
X. Are there any upland habitats within the THP area that may be affected by timber harvest activities?	Identify Mitigations from X A' in THP	End of Assessment

EXHIBIT H  
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0332

# Proof of Publication

(7015.5 C.C.P.)

## NOTICE OF INTENT TO HARVEST TIMBER

STATE OF CALIFORNIA }  
COUNTY OF SANTA CRUZ } SS

### NOTICE OF INTENT TO HARVEST TIMBER/ DOMESTIC WATER SUPPLY INQUIRY

Timber Harvesting Plan (THP) will soon be submitted to the California Department of Forestry and Fire Protection (CDF). This Notice with map is being provided prior to submission of the THP so that the THP submitter may be advised of domestic water supplies taken from watercourses within 1000 feet downslope of the proposed harvest. Please send such information to the Forester identified below within 10 days.

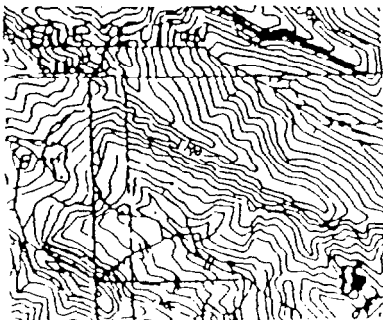
The THP will be available for public review and purchase at CDF's Felton and Santa Rosa offices after it has been submitted approx. 10 days from now. The cost to obtain a copy is 12.5 cents for each page, 12.50 minimum per request. Concerns or questions regarding the THP should be directed to CDF, Santa Rosa for public input incorporation into an Official Response document.

CDF P.O. Drawer F-2  
Felton, CA 95018  
(408) 335-6740 or 335-6353

CDF P.O. Box 570  
Santa Rosa, CA 95402  
(707) 5762959

The Plan Submitters and Timberland Owner is Lloyd Phelps. The 4 acre THP is located in Santa Cruz County, Sect. 16, T 9 S, R 2 W., approx. 3 miles northeast of Boulder Creek. Harmon Gulch Creek flows through the plan area. The harvesting method is Selection. Rule 913.8(a). There is an overhead electrical power line within the THP area. The Forester is Gary Paul, 5521 Scotts Valley Dr., 95066, Scotts Valley, CA 95066. The earliest date for the Director's determination on the plan is June 13, 1998.

Harvest boundary -it--#---J+



ARL 19 (8516)

I, the undersigned say,

That I am over the age of eighteen and not interested in the above entitled matter; that I am now, and, at all time embraced in the publication herein mentioned, was, the principal clerk of the printer of the Santa Cruz County Sentinel, a daily newspaper printed, published and circulated in the said county and adjudged a newspaper of general circulation by the Superior Court of the County of Santa Cruz, State of California, under proceeding No. 25,794; that the advertisement, of which the annexed is a true printed copy, was published in the above named newspaper on the following dates, to-wit:

April 19, 1998

I Certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at Santa Cruz, California April 19, 1998

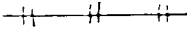
Signature

Kathleen Kowale

Harmon Gulch  
Santa Cruz Co., CA

T.9 S. R.2 W. Sect. 16  
Scale 1:24000 CI 40'

LOCATION MAP

Harvest boundary 

ATTACHMENT 5

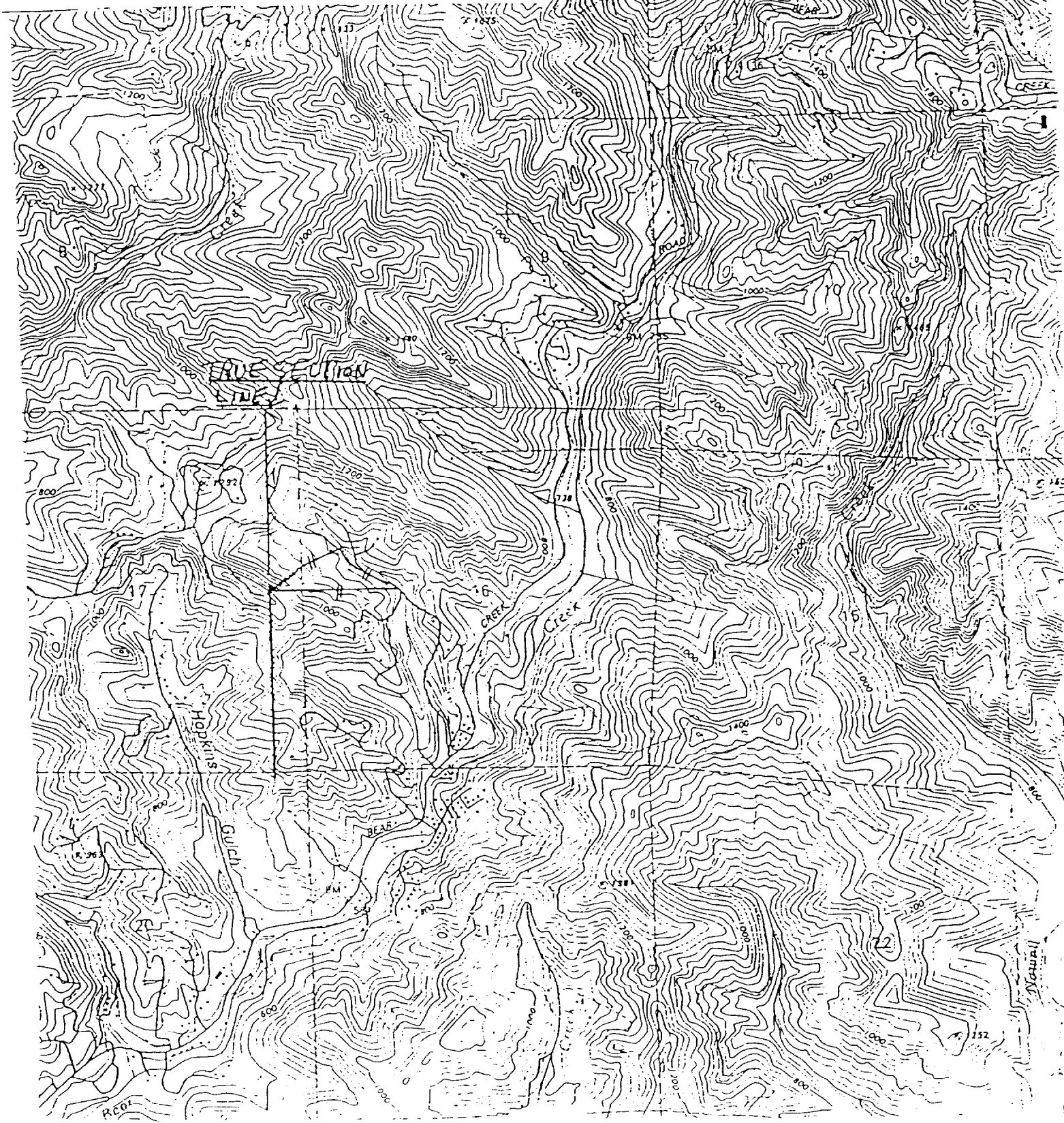


EXHIBIT 55

THP# 1-98-165 SRK Landowner Gheho

Inspector (CDF, RPF or designee) Steve Vaccaro

Date 5/26/98 0334

Current Accumulated Rainfall, July 1 -June 30 season (Recommended) 70"

ATTACHMENT 5

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Applicability Category	Implementation Quality Code	Effectiveness Code
N - does not pertain to operation	1 - high quality	1 - improved habitat protection
Y - pertains to operation	2 - adequate quality	2 - maintain habitat protection
1 - conforms to rule	3 - inadequate quality	3 - decreased habitat protection
2 - alternative practice	4 - significantly inadequate	4 - significantly decreased habitat protection
	5 - not installed	

Rule (2090)	Applicability Category - RT Y or N 1 or 2	Implementation Quality Code RPF' CDF/DFG	Effectiveness Code RPF' CDF/DFG
<u>Class I Watercourses</u>			
4.1_35% / 75% canopy retention	N		
<u>Both Class I and Class II Watercourses</u>			
4.2.1_ no sediment from roads within WLPZ	N		
4.2.2_ WLPZ roads rocked, abandoned, stabilized	N		
4.2.3_ WLPZ trails trashed	N		
4.2.4_ <100sq.ft. exposed soil in WLPZ	N		
4.2.5_ WLPZ tree marking	N		
2.6_ LWD recruitment	N		
2.7_ 3 year erosion control	Y		
<u>proposed alternatives</u>			
<u>Class II Watercourses</u>			
4.3_75% canopy retention	N		
<u>Class III Watercourses</u>			
4.4.1_ flagged trail crossings	Y		
insert # of crossings here	2		
4.4.1_ equipment exclusion zones (ELZ)	Y		
4.4.2_ protection of LWD in channel	Y		
4.4.3_ no soil movement into the channel	Y		
from site preparation activity			
<u>proposed alternatives</u>			
<u>Any Watercourse other mitigations</u>			
4.5_ DFG approval of mitigation	N		
<u>Type 4 Watercourses Only</u>			
4.6.1_ flow reductions			
4.6.2_ instream activity during critical stages			
of life cycle			

Notes:

RPPS please attach appropriate rule number

rev. 3/97

# COUNTY OF SANTA CRUZ

INTER-OFFICE CORRESPONDENCE

ATTACHMENT 5

DATE: February 19, 1999

TO: Cathleen Carr, Project Planner

FROM: Dave Hope, Senior Resource Planner

SUBJECT: Proposal to Rezone Ohelo (SU) parcel to TPZ APP# 98-0804

0335

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The Timber Management Plan (TMP) submitted for this application meets the minimum standards for management plans set by the County of Santa Cruz.

This property meets the growing standards for timber of at least 15 cubic feet per acre per year.

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EXHIBIT 10