

JOHN WAIHEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 821
HONOLULU, HAWAII 96809

WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

MANABU TAGOMORI
Dan T. Kochi

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT

CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION PROGRAM

LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT
QUALITY CONTROL

JAN 22 1992

FILE NO.: OA-11/14/91-2498
DOC. NO.: 2425E

MEMORANDUM

TO: The Honorable Brian J. J. Choy, Director
Office of Environmental Quality Control

FROM: William W. Paty, Chairperson
Board of Land and Natural Resources

SUBJECT: Document for Publication in the OEQC Bulletin
Environmental Assessment for Conservation District Use
Application for the Construction of the Maunawili
Demonstration Trail, Koolaupoku, Oahu TMK: 4-2-1: 1

The above mentioned Chapter 343 document was reviewed and a negative declaration was declared based upon the environmental assessment provided with the CDUA.

Please feel free to call me or Cathy Tilton of our Office of Conservation and Environmental Affairs, at 587-0377, if you have any questions.

1992-02-08-0A-FEA - Maunawili Trail

February 1983

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 621
HONOLULU, HAWAII 96809

DEPARTMENT MASTER APPLICATION FORM

FOR DLNR USE ONLY

Reviewed by _____
Date _____
Accepted by _____
Date _____
Docket/File No. _____
180-Day Exp. _____
EIS Required _____
PH Required _____
Board Approved _____
Disapproved _____
Well No. _____

(Print or Type)

I. LANDOWNER/WATER SOURCE OWNER
(If State land, to be filled in by Government Agency in control of property)

Name _____
Address _____

Telephone No. _____
SIGNATURE _____
Date _____

II. APPLICANT (Water Use, omit if applicant is landowner)

Name Division of Forestry & Wildlife
Address 1151 Punchbowl Street
Room 325, Kalanimoku Building
Honolulu, HI 96813

Telephone No. 548-8850

Interest in Property Construction of a
trail.

(Indicate interest in property; submit written evidence of this interest)

*SIGNATURE [Signature]
Date 2/20/83

*If for a Corporation, Partnership, Agency or Organization, must be signed by an authorized officer.

III. TYPE OF PERMIT(S) APPLYING FOR

- () A. State Lands
- () B. Conservation District Use
- () C. Withdraw Water From A Ground Water Control Area
- () D. Supply Water From A Ground Water Control Area
- () E. Well Drilling/Modification

IV. WELL OR LAND PARCEL LOCATION REQUESTED

District Ko'olaupoko

Island Oahu

County Honolulu

Tax Map Key 4-2-010-1

Area of Parcel 0
(Indicate in acres or sq. ft.)

Term (if lease) _____

INFORMATION REQUIRED FOR ALL USES

I. Description of Parcel

- A. Existing structures/Use. (Attach description or map).
- B. Existing utilities. (If available, indicate size and location on map. Include electricity, water, telephone, drainage, and sewerage).
- C. Existing access. (Provide map showing roadways, trails, if any. Give street name. Indicate width, type of paving and ownership).
- D. Vegetation. (Describe or provide map showing location and types of vegetation. Indicate if rare native plants are present).
- E. Topography; if ocean area, give depths. (Submit contour maps for ocean areas and areas where slopes are 40% or more. Contour maps will also be required for uses involving tall structures, gravity flow and other special cases).
- F. If shoreline area, describe shoreline. (Indicate if shoreline is sandy, muddy, rocky, etc. Indicate cliffs, reefs, or other features such as access to shoreline).
- G. Existing covenants, easements, restrictions. (If State lands, indicate present encumbrances.).
- H. Historic sites affected. (If applicable, attach map and descriptions).

II. Description: Describe the activity proposed, its purpose and all operations to be conducted. (Use additional sheets as necessary).

III. Commencement Date: 9/1991

Completion Date: 1993

IV. TYPE OF USE REQUESTED (Mark where appropriate) (Please refer to Title 13, Chapter 2)

- 1. Permitted Use (exception occasional use);
DLNR Title 13, Chapter 2, Section 11(c); Subzone R,P.
- 2. Accessory Use (accessory to a permitted use):
DLNR Title 13, Chapter 2, Section _____; Subzone _____.
- 3. Occasional Use: Subzone _____.
- 4. Temporary Variance: Subzone _____.
- 5. Conditional Use: Subzone _____.

Area of Proposed Use Approximately 9 miles (3 ft. wide)
(Indicate in acres or sq. ft.)

Name & Distance of Nearest Town or Landmark
Kailua - 4 miles

Boundary Interpretation (If the area is within 40 feet of the boundary of the Conservation District, include map showing interpretation of the boundary by the State Land Use Commission).

Conservation District Subzone R-P
County General Plan Designation Preservation

V. FILING FEE

1. Enclose \$50.00. All fees shall be in the form of cash, certified or cashier's check, and payable to the State of Hawaii.
2. If use is commercial, as defined, submit additional public hearing fee of \$50.00.

INFORMATION REQUIRED FOR CONDITIONAL USE ONLY

I. Plans: (All plans should include north arrow and graphic scale).

- A. Area Plan: Area plan should include but not be limited to relationship of proposed uses to existing and future uses in abutting parcels; identification of major existing facilities; names and addresses of adjacent property owners.
- B. Site Plan: Site plan (maps) should include, but not be limited to, dimensions and shape of lot; metes and bounds, including easements and their use; existing features, including vegetation, water area, roads, and utilities.
- C. Construction Plan: Construction plans should include, but not be limited to, existing and proposed changes in contours; all buildings and structures with indicated use and critical dimensions (including floor plans); open space and recreation areas; landscaping, including buffers; roadways, including widths; offstreet parking area; existing and proposed drainage; proposed utilities and other improvements; revegetation plans; drainage plans including erosion sedimentation controls; and grading, trenching, filling, dredging or soil disposal.
- D. Maintenance Plans: For all uses involving power transmission, fuel lines, drainage systems, unmanned communication facilities and roadways not maintained by a public agency, plans for maintenance shall be included.
- E. Management Plans: For any appropriate use of animal, plant, or mineral resources, management plans are required.
- F. Historic or Archaeological Site Plan: Where there exists historic or archaeological sites on the State or Federal Register, a plan must be submitted including a survey of the site(s); significant features; protection, salvage, or restoration plans.

II. Subzone Objective: Demonstrate that the intended use is consistent with the objective of the subject Conservation District Subzone (as stated in Title 13, Chapter 2).

DOCUMENT FOR PUBLICATION IN THE OEQC BULLETIN

Date: 08 / 28 / 91

Prepared by: Div. of Forestry & Wildlife

The document is a (check all that apply)

| | | | |
|-----------------------|-------|------------------------|-------|
| Chapter 205A Document | () | Negative Declaration | (x) |
| Chapter 343 Document | (x) | EIS Preparation Notice | () |
| NEPA Document | () | Draft EIS | () |
| | | Final EIS | () |
| | | Acceptance Notice | () |

Is the document a supplemental EIS? Yes () No (x)

Title of Proposed Action or Project: Construction of the Maunawili Demonstration Trail - Na Ala Hele Program

Location: Island Oahu District Ko'olaupoko

Type of Action (check one): Applicant () Agency (x)

Name of Proposing Applicant or Agency: Div. of Forestry & Wildlife

Name of Contact: Herbert Kikukawa - Curt Cottrell

Address: 1151 Punchbowl St., Rm. 325

City: Honolulu State: Hawaii Zip Code: 96813

Phone: (808) 548-8850

Name of Preparer or Consultant: Div. of Forestry & Wildlife

Name of Contact: Curt Cottrell

Address: 1151 Punchbowl St., Rm. 325

City: Honolulu State: Hawaii Zip Code: 96813

Phone: (808) 548-8850

Accepting Authority: _____

Estimated Project Cost:

| | |
|---------------|----------------------|
| Federal Funds | \$ _____ |
| State Funds | \$ <u>14,000.00+</u> |
| County Funds | \$ _____ |
| Private Funds | \$ _____ |
| TOTAL | \$ _____ |

Document Preparation Cost:

| | |
|---------------|--------------------|
| Neg Dec/EA | \$ <u>6,000.00</u> |
| Draft EIS | \$ _____ |
| Sup Draft EIS | \$ _____ |
| Sup Final EIS | \$ _____ |
| TOTAL | \$ _____ |

EA Trigger (check all that apply)

- (x) Use of State or County Lands or Funds
- (x) Use of Conservation District Lands
- () Use of Shoreline Setback Area
- () Use of Historic Site or District
- () Use of Lands in the Waikiki Special District
- () Use Requiring an Amendment to a County General Plan

NOTE: For answers to any question on Page 10 or 11, please contact the Office of Environmental Quality Control at (808) 548-6915.

[OEQC Form 89-01 (1/89)
Page 1 of 2]

Description of Parcel

1. Existing structures/Use:

The existing use of the project area is watershed. At the west end of the trail is a water catchment tank for the St. Stephens Seminary. The proposed trail corridor passes this tank for approximately 20 feet. (See Exhibit #1)

2. Existing utilities:

In addition to the water catchment tank, there are two 138 kv transmission lines suspended at approximately the halfway point along the proposed trail corridor. At Aninani Nui ridge, there are two 46 kv lines suspended above the trail corridor. (See Exhibit #1)

3. Existing access:

At this point in time, the access points are located at the Nuuanu Pali Wayside Park, and near the end of Waikupanaha Street in Waimanalo, along the Old Government Road. The goal of Oahu Na Ala Hele is to create a comprehensive trail system that in the future may incorporate further access points, such as Maunawili Falls and Olomana. (See enclosed map with the Environmental Assessment)

4. Topography:

The proposed trail will be roughly aligned on the 900 contour interval, descending down to about the 600 foot level at Aniani Nui Ridge. (See exhibit #1)

5. Existing encumbrances:

(See exhibit #2)

Objectives of Resource and Protective Subzones

Title 13, Chapter 2, Section 11 defines the role of the Protective (P) subzone to protect valuable resources in such designated areas as restricted watersheds; marine, plant, and wildlife sanctuaries, significant historic, archaeological, geological, and volcanological features and sites; and other designated unique areas. Of the permitted uses within the (P) subzone, the following apply directly to the establishment of a trail corridor in this area:

- * Recreation which requires no physical facilities
- * Maintenance and protection of desired vegetation, including removal of dead, deteriorated and noxious plants
- * Programs for the control of animal and plant population, to include hunting
- * Monitoring, observing and measuring natural resources

Title 13, Chapter 2, Section 13 defines the objective of the Resource (R) subzone to develop with proper management, areas to ensure sustained use of the natural resources of those areas. The same permitted uses apply to the (R) subzone as do the (P) subzone.

The trail corridor will pass through both of these subzones, and the permitted uses listed above are components of the Division of Forestry and Wildlife's overall construction, maintenance and use program for trails within the Na Ala Hele system.

JOHN WAIHEE
GOVERNOR OF HAWAII



WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

KEITH W. AHUE
MANABU TAGOMORI
DAN T. KOCHI

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
PROGRAM
LAND MANAGEMENT
STATE PARKS
WATER RESOURCE MANAGEMENT

June 17, 1991

MEMORANDUM

TO: Kurt Cottrell
Forestry and Wildlife Division

FROM: Don Hibbard, Administrator
State Historic Preservation Division *DH*

SUBJECT: Archaeological Inventory Survey of a
Na Ala Hele Trail Corridor at Maunawili
Kailua, Ko'olaupoko, O'ahu
TMK: 4-2 various

We have reviewed this report. The field methods, which involved five archaeologists walking repeated sweeps through the survey area, were thorough and we believe that the six sites that have been assigned State site numbers constitute all of the historic sites in the survey area.

We disagree with the significance assessments for three sites, however. Sites 50-80-14-4375, -4376, and -4378 may have a prehistoric component, but direct evidence for this possibility has not been collected. Here the question of the altitudinal limits of prehistoric agriculture on O'ahu comes to the fore, with implications for agricultural technology, inland settlement, and population growth. Therefore, we believe that these sites are still likely to yield information important for history and prehistory, and thus remain significant. We agree with the significance assessments for the other three sites: site 50-80-14-4374, the Old Pali Road, is significant because it represents a major event in State history and is an excellent example of its type; site 50-80-14-4377, a charcoal kiln, has now yielded sufficient information to be considered "no longer significant;" and site 50-80-14-4379, an alignment of boulders, is not significant. We request that these significance assessments be changed or that arguments be presented in support of alternative assessments.

We agree with the report that the trail will have "no effect" on any of the six sites, which are found off the proposed trail route.

JOHN WAIHEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 621
HONOLULU, HAWAII 96809

August 8, 1991

WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
KEITH W. AHUE
ELBERTS K. LANGRISH
MARABU TAGOMORI
RUSSELL N. FUKUMOTO
Dan T. Kochi
AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
LAND MANAGEMENT
STATE HISTORIC PRESERVATION
STATE PARKS
WATER AND LAND DEVELOPMENT

MEMORANDUM

TO: Na Ala Hele
Oahu District

ATTN: Curt Cottrell

FROM: Ralston H. Nagata
State Parks Administrator

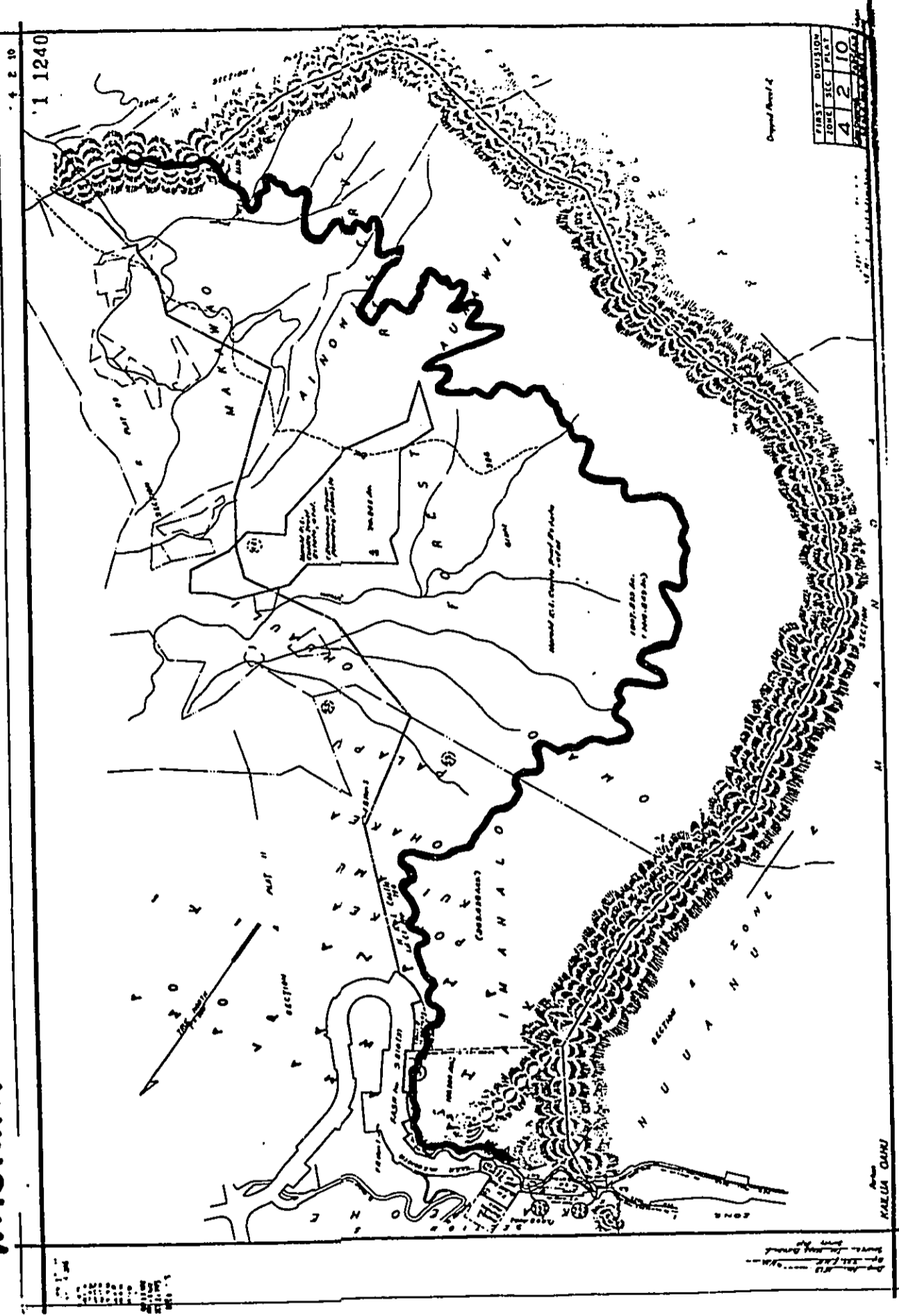
SUBJECT: Pali Lookout Trailhead for Maunawili Demonstration
Trail re your memo of 8/5/91

The only possible concern we can identify with the subject project is parking. Normally there are vacant stalls available except during the usual mid morning surge of tour groups. However, almost all the existing car parking is for short periods of time rather than time periods of several hours we would anticipate for visitors who are hiking.

While no serious parking problems are anticipated, we request that hikers be advised to car pool and park along the entrance road in order to avoid conflicts with short term parking needs. You may also wish to advise hikers not to leave valuables in their cars and be sure to lock them.

If parking conflicts should occur, we may adjust our parking area management in order to continue to provide adequate parking for the short term parking needs of visitors to the lookout.

APPROXIMATE ALIGNMENT OF MAUNAWILI TRAIL



| FIRST | DIVISION |
|-------|----------|
| ZONE | SECTION |
| 4 | 2 |
| 10 | |

Original Survey of

MAUNAWILI CANYON

EXHIBIT A ←
Transfer Certificate of Title

CONVERTED
TO LCATS

No. 249,288

This is to Certify that -JAMES CHRISTIAN CASTLE-, -JAMES GORDON MC INTOSH-, and -HAWAIIAN TRUST COMPANY, LIMITED-, a Hawaii corporation, TRUSTEES of the trust estate created by Article Eighth of the Will and of the Estate of Harold K. L. Castle, deceased, whose principal place of business and post office address is Kaneohe Ranch, Castle Junction, Kaneohe, Oahu, State of Hawaii, are the owners in fee simple, IN TRUST, of an undivided 69.0272416% interest, of land situate at Kailua, District of Koolaupoko, City and County of Honolulu, State of Hawaii, described as follows:

FIRST: LOT 5, area 88.554 acres, Map 10, and
LOT 4-B-4-B-1, area 720.569 acres, Map 16,

the maps referred to herein are filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application No. 754 of Harold Kainalu Long Castle;

SECOND: LOTS: 19, area 2.425 acres, Map 2, and
PART 1, area 0.9 acre, Map 1;

the maps referred to herein are filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application No. 306 of Edith Beatrice Williams;

Being the remainder of the land described in Transfer Certificate of Title No. 230,913, being all of the land described in Transfer Certificate of Title No. 230,915 and portion of the land described in Transfer Certificate of Title No. 241,130 issued to James Christian Castle, Trustee and others.

NOTE: Lot 19 has access across Easement 3 to a government road, as set forth by Land Court Order 23398.

And it is further certified that said land is under the operation and provisions of Chapter 501 of the Hawaii Revised Statutes, and that the title to said land is registered under said Chapter, subject however, to any of the encumbrances mentioned in Section 501-82 of said Hawaii Revised Statutes which may be subsisting, and subject also to:

1. Easement 1 across Lot 19, 30 feet wide for storm drain purposes, Map 2, Land Court Orders 23398 and 25819.
2. As to Lot 4-B-4-B-1:
 - a. Easements 1 and 2, each 10 feet wide for storm drain, and Easement 3, for roadway purposes, Map 16, Land Court Order 23396.
 - b. Easements 4 and 5, each 20 feet wide for storm drain, Map 16, Land Court Order 25816.
 - c. Easements 7, 8 and 9, Map 24, Land Court Order 35829.
 - d. Grant 171296, easements to develop &c and take such amounts of water as can be conveyed by means of a 1-inch pipe, in favor of Roman Catholic Bishop of Honolulu.
 - e. Restriction of Access Rights in favor of the State of Hawaii by Deed 142771.
 - f. Lease of Right of Way 409376 in favor of Hawaiian Electric Company, Inc. The interest of the grantee in said Lease of Right of Way was assigned to Hawaiian Trust Company, Limited, Trustee, as security to Trust Mortgage 45945, as amended, by Assignment 409377.
 - g. Grant 480451 in favor of Hawaiian Electric Company, Inc. The interest of the grantee in said Grant was assigned to Hawaiian Trust Company, Limited, Trustee, as security to Trust Mortgage 45945, as amended, by Assignment 480452.
 - h. Grant 598154 for drainage and slope purposes in favor of the State of Hawaii.
 - i. Grant 767894 in favor of Hawaiian Electric Company, Inc. and Hawaiian Telephone Company. The interests of the grantees in said Grant were assigned to Hawaiian Trust Company, Limited, Trustee, as security to Trust Mortgages 45945 and 56356, as amended, by Assignments 767895 and 767896.
3. As to Lot 5:
 - a. Restriction of vehicle Access Rights, Map 10, Land Court Order 16997.
 - b. Easement 6, Map 23, Land Court Order 35828; subject to Grant 598154 for drainage and slope purposes in favor of the State of Hawaii.
4. As to Part I:
 - a. An easement for a public highway over and across said land of a length of one hundred thirty-four feet and a width of thirty feet, adjoining Course 7, as shown on Map 1 of Land Court Application No. 306.
 - b. Easement A for drainage purposes, Map 1, Land Court Order 25819.

Witness, the Honorable --ROBERT WON BAE CHANG-- Judge of the Land Court at Honolulu, in the City and County of Honolulu, State of Hawaii, the 27th day of MAY in the year NINETEEN HUNDRED AND EIGHTY-THREE at -3- o'clock and -29- minutes in the after-noon.

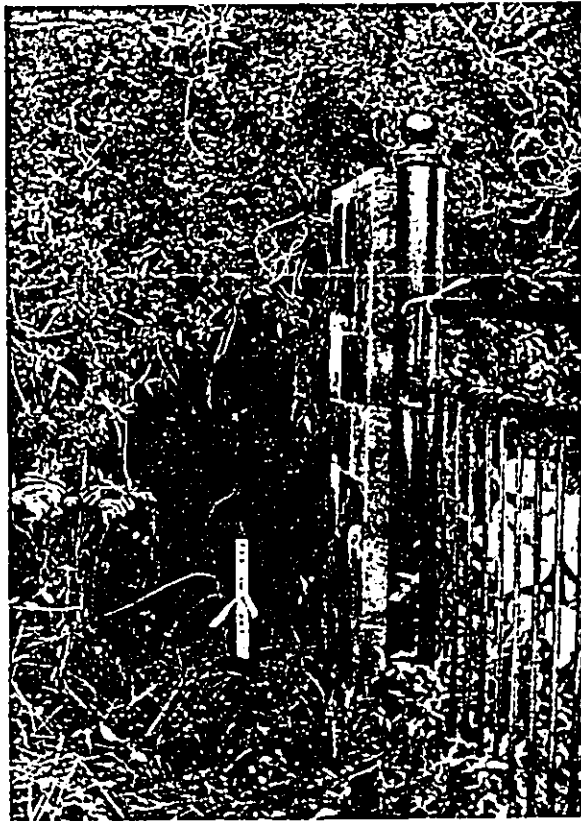
Attest, with the Seal of Said Court,


Assistant Registrar.

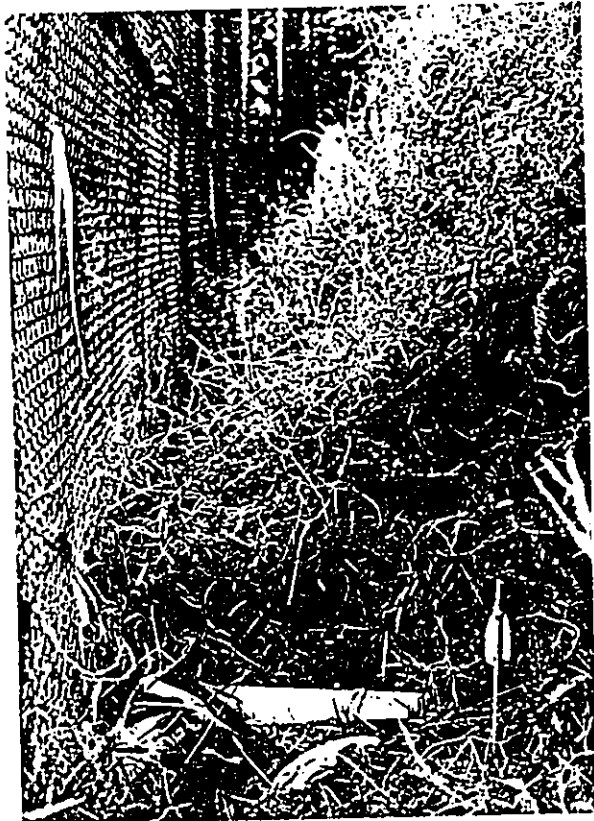
MEMORANDA OF ENCUMBRANCES, ETC., ON THE LAND DESCRIBED IN THIS CERTIFICATE 249288

| DOCUMENT NUMBER | KIND | RUNNING IN FAVOR OF | TERMS | DATE OF INSTRUMENT | DATE OF REGISTRATION | | | | SIGNATURE OF ASSISTANT REGISTRAR | DISCHARGE |
|--|--|---|---|--------------------|----------------------|-----|----|---------------------------------|----------------------------------|-----------|
| | | | | | YEAR & MONTH | DAY | HR | MIN | | |
| LAND COURT ORD No. 68339 1483014 | Notice Lis Pendens Civil 80-3057 | Death of James Gordon McIntosh of James Castle McIntosh State of Hawaii | Death of James Gordon McIntosh and the appointment as Successor Trustee of the 4-B-4-B-1 & 6 Encumbrance for written judgment of 12/23/83 | Dec 23 1983 | 1983 Dec 29 | 3 | 29 | Edith J. Kuroki S. J. Kuroki | | |
| | | | | Aug 9 1986 | 1987 Jul 29 | 8 | 01 | | | |
| | | | A true copy as of Dec. 13, 1989 Attest: <i>Walter Cabaye</i> Assistant Registrar Land Court | | | | | | | |

PROPOSED
TRAILHEAD AT
PALI LOOKOUT/
OLD PALI ROAD



PROPOSED TRAIL
ROUTE
1/2 MILE FROM
LOOKOUT



1 MILE FROM
PALI LOOKOUT



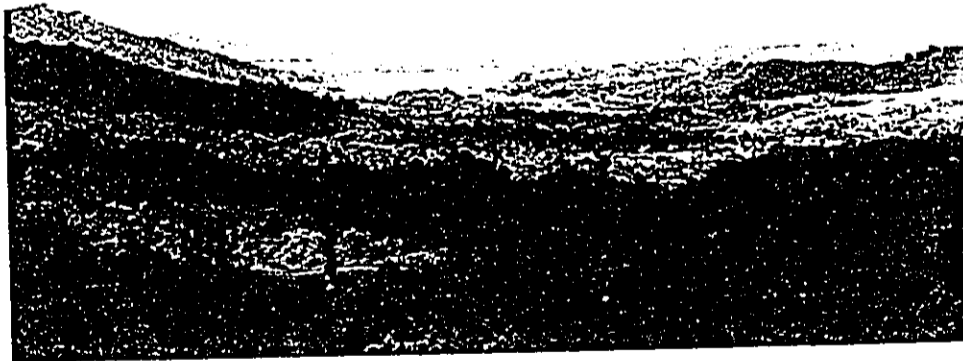
1/2 MILE
FROM PALI
LOOKOUT



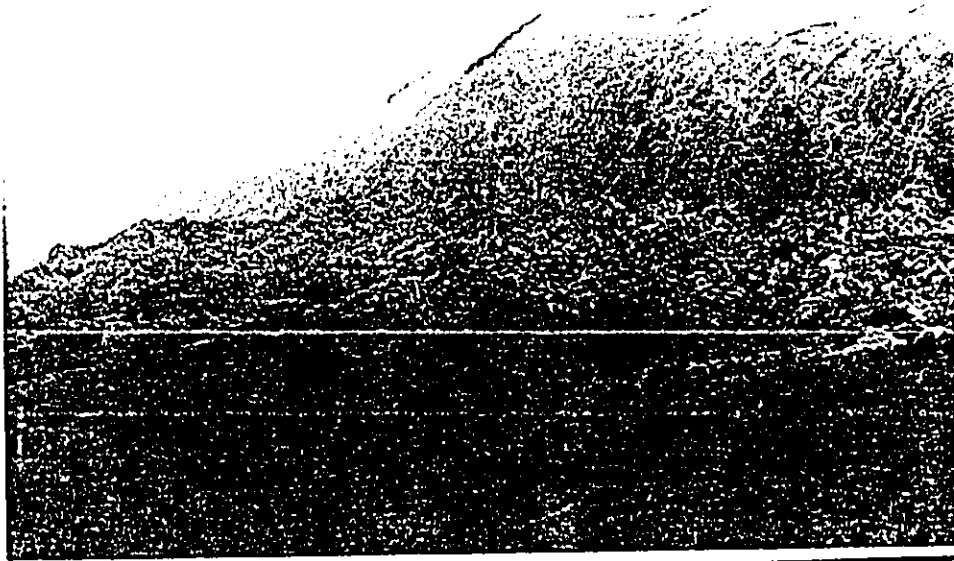
2 MILES
FROM PAU
LOOKOUT



VIEWS FROM
PROPOSED
TRAIL ROUTE



VIEWS FROM
PROPOSED
TRAIL ROUTE



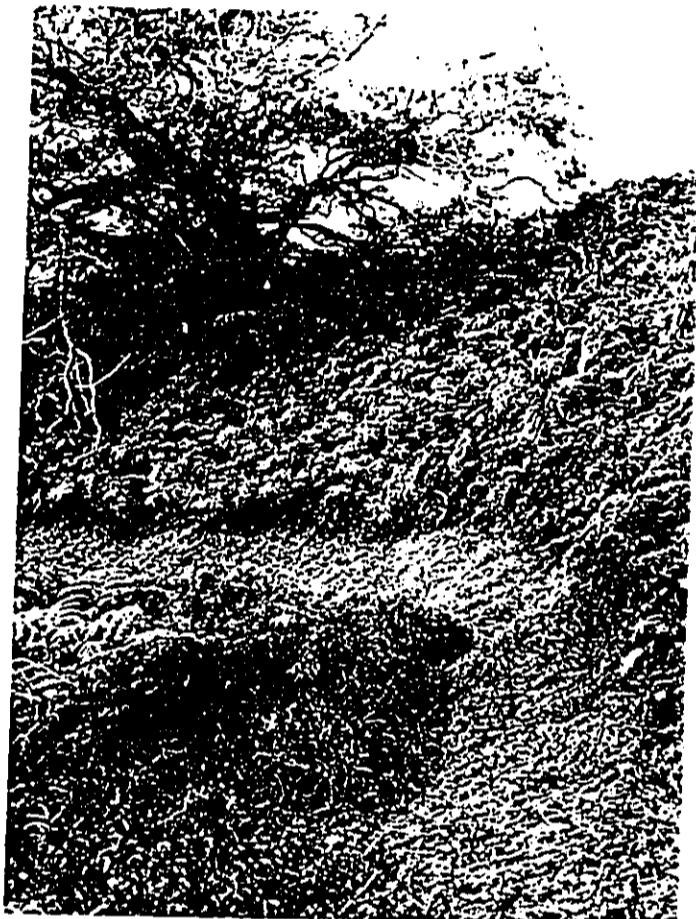
ULUHE FERN
ALONG
PROPOSED
ROUTE

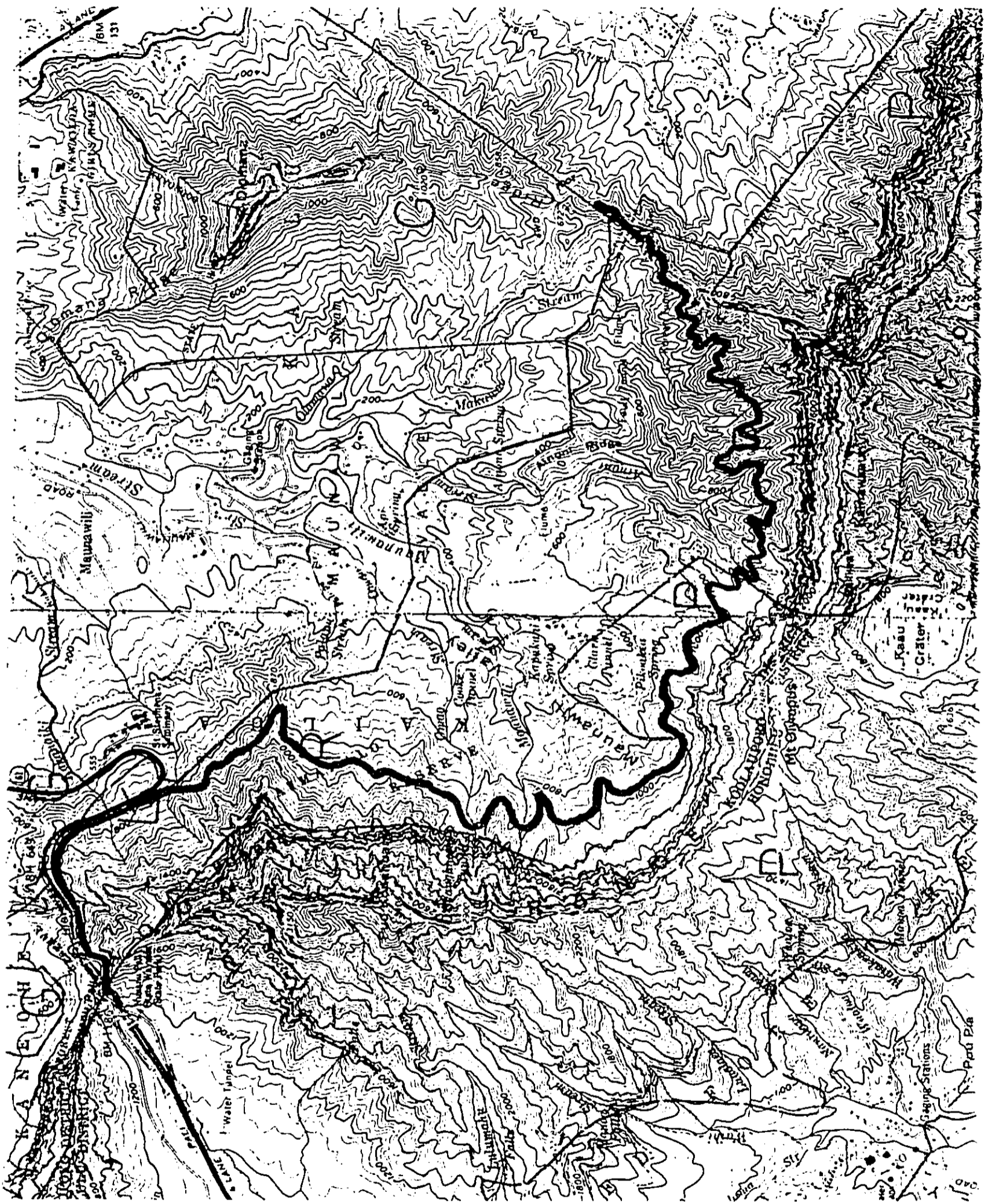


SLOPING
THE PROPOSED
ROUTE —
TREE FERNS
AND I'A I'A
ALONG THE
ROUTE



PARTIAL CLEARING OF ULUHE
FOR THE CULTURAL AND FLORA/FAUNA
SURVEYS.





NOTICE OF
DETERMINATION OF NEGATIVE DECLARATION
MAUNAWILI DEMONSTRATION TRAIL, ISLAND OF OAHU

- I. Proposing agency: Department of Land and Natural Resources
Division of Forestry and Wildlife
- II. Approving Agency: Department of Land and Natural Resources
Division of Forestry and Wildlife

III. Summary of Proposed Action

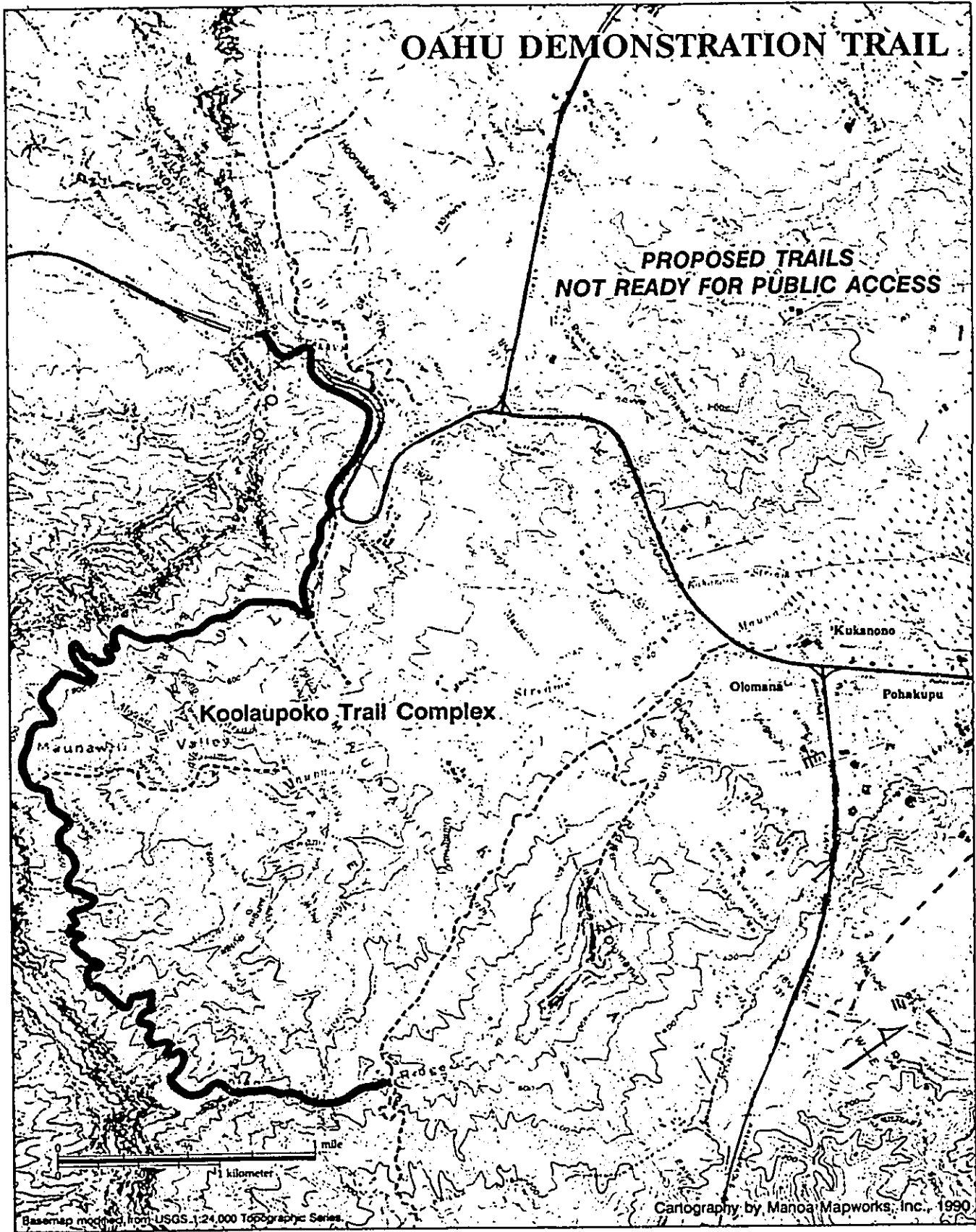
The Division of Forestry and Wildlife, Oahu District, proposes to construct a forest trail on State owned land in the Maunawili area, extending from the Nuuanu Pali State Wayside Park, through Maunawili Valley, to Aniani Nui ridge in Waimanalo. Upon completion of this project, forest recreation opportunities will be greatly expanded for Windward Oahu.

IV. Determination

With this Notice, the Division hereby files a Notice of Negative Declaration. Evidence presented in the attached Environmental Assessment indicates that no endangered or rare flora and fauna are present in the project area. There are some incidental historical/archaeological features present in a section of the proposed project area. However, it has been determined that the proposed activity presents no hazard to these features. In addition, the proposed project is consistent with the Land Use designations.

V. Further Information

Herbert H. Kikukawa, Oahu Forestry Manager
1151 Punchbowl Street, Room 325
Honolulu, Hawaii 96813
(808) 548-8850



MAUNAWILI TRAIL

ENVIRONMENTAL ASSESSMENT FOR THE
CONSTRUCTION OF THE MAUNAWILI DEMONSTRATION TRAIL

SECTION I

DESCRIPTION OF PROPOSED PROJECT

I. IDENTIFICATION

- A. Proposing Agency: Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW), Na Ala Hele Program, Oahu District.
- B. Approving Agency: DLNR, DOFAW.
- C. Agencies Consulted: DLNR Divisions, The Nature Conservancy of Hawaii, Cultural Surveys of Hawaii.

II. INTRODUCTION

The Division proposes to construct a trail on State owned land in the Maunawili area. Chapter 198D, Hawaii Revised Statutes, directs the Na Ala Hele Program (administered by DOFAW) to identify and develop existing, proposed and potential trails and accesses, in addition to classifying and providing an inventory of all trails and accesses. Demonstration Trails have been selected to illustrate the program's potential in acquiring and managing trails in a variety of settings and governmental jurisdictions. The Board of Land and Natural Resources approved the Na Ala Hele Program Plan on June 28th, 1991. Section II, page 3, of the Program Plan explains in greater detail the concept of demonstration trails in the Maunawili area.

The Maunawili Demonstration Trail, upon completion, would extend from the Nuuanu Pali State Wayside Park, (utilizing a segment of the Old Pali Road) through Maunawili Valley, to Aniani Nui ridge: TMK 4-2-10:1. The alignment would approximately follow the 900 ft. contour interval. This proposed trail will provide future linkage possibilities for a comprehensive Ko'olaupoko Trail Complex - an assortment of existing and proposed trails and access totalling approximately 15 miles. The proposed Maunawili Trail, the core of the complex, will extend approximately 8-10 miles.

III. PROJECT GOAL

The goal of the proposed project is to expand outdoor recreation opportunities such as hiking, running, mountain biking, bird watching, photography and nature study for the residents of Windward Oahu and Honolulu. Expanding the trail system will ease the traffic on other trails, provide the public with greater opportunity to explore natural settings

within an otherwise inaccessible area and set an example for future trail installation projects that Na Ala Hele may pursue. In addition to increasing recreation potential, a trail corridor in this area will provide access for monitoring and eradication of introduced flora and fauna, access points for fire suppression, and generally increase the state's ability to effectively manage the watershed.

IV. PROJECT OBJECTIVE

As mentioned in the introduction, the Maunawili Demonstration Trail will create a trail corridor through the Maunawili Valley, and provide a possible linkage to other existing and potential trails.

The proposed project consists of the following: Construction of a foot trail that will follow Na Ala Hele Trail and Access specifications: 3 ft. walking tread, approximately 2 ft. lateral and 7 ft. verticle clearing. These specifications promote public safety while still providing an aesthetic recreational experience. Brush clearing and minor excavation will occur to establish the correct walking tread width, along with the application of techniques that reduce soil erosion and accelerated runoff. Upon completion of construction, redwood and metal trail signs bearing the Na Ala Hele logo, trail name(s), and directional arrows will be installed to provide adequate information for the users.

SECTION II DESCRIPTION OF THE AFFECTED ENVIRONMENT

I. PHYSICAL CHARACTERISTICS

A. Climate/Topography

The area of the Maunawili trail is generally wet, receiving approximately 100 inches of rain annually. Trail construction techniques include the periodic placement of water diversion bars to reduce erosion and facilitate controlled runoff from the trail.

The majority of the proposed project lies on steep slopes that contain numerous small valleys and gullies. Surface soils are deep and well-drained. Some sections of the trail would cross small drainages, which are composed of stone and shallow soil.

B. Noise

There is considerable vehicular noise for three quarters of a mile into the trail from the Nuuanu Pali entrance, diminishing to the existing ambient noise of natural sounds: wind, bird calls, rustling leaves and occasionally running water.

C. Economics

Due to the distance of the trail from any residence, no adverse economic impacts are expected. The proposed trail corridor is above land that is leased for the propagation of bananas, but there is no anticipated detrimental impact.

D. Historical/Archaeological

Cultural Surveys Hawaii (CSH) has determined that while there are occurrences of archaeological features located near the proposed project, there is no anticipated adverse impact associated with the projected increase in pedestrian traffic. CSH has even suggested the possibility of utilizing some of the archaeological features in an interpretive setting.

CSH did note that a future access trail to the proposed project is in the vicinity of a Bishop Museum site, and that if this access were promoted, a supplementary archaeological survey should be considered. Should any new archaeological or historical sites be encountered, the Historic Preservation Office of DLNR will immediately be notified and all work will stop.

II. BIOLOGICAL CHARACTERISTICS

A biological survey of the proposed project describing in detail the biological characteristics of the area has been completed by the Hawaii Heritage Program of the Nature Conservancy. The survey recognized five general vegetation types: Variable Non-native, with four types of native: Koa Lowland Mesic Forest, Mamaki Lowland Wet Shrubland, 'Ohi'a/Uluhe Lowland Wet Forest, and Uluhe Lowland Wet Shrubland. The gulches generally are dominated by Non-native vegetation, while the ridgetops consist mainly of native vegetation. The survey did not encounter any rare or endangered flora and fauna.

III. SOCIO/ECONOMIC CHARACTERISTICS

A. Population

The Maunawili Demonstration Trail will be located above the communities of Maunawili Valley and Kailua, with an access located just west of Waimanalo. At Maunawili Elementary School on 3/15/91, DOFAW held a public meeting to determine if there would be any opposition to this trail by the local community. The people in attendance supported the proposed project.

B. Land Use

Land use in the project area is primarily watershed and recreation. The State Land Use designation for the proposed trail corridor is Conservation. Adjacent land use located below the proposed project area consists of banana propagation, the lessees of this State owned land are Luluku Banana Growers Association and Hawaii Sugar Planters Association.

IV. Land Tenure

The proposed trail corridor is located on land that was condemned by the State - State vs. Castle, et al., Civ. No. 86-3057, First Circuit.

SECTION III

SUMMARY OF IMPACTS AND MITIGATIONS

The project consists of the removal of vegetation by clearing with chainsaws and machetes, then digging and grading with hand tools.

I. SHORT-TERM IMPACTS

A. Noise

There will be an increase in ambient noise levels throughout the duration of the project. Noise levels at 50 feet, generated by workers and small motorized equipment (chainsaws and weed eaters) can range from 5 to 100 decibels.

B. Air Quality

There will be no significant affects to the air quality during construction.

C. Water Quality

No adverse affect to water quality is anticipated. Located on the Pali Look-Out side, approximately three quarters of a mile from the proposed trail head, is a water catchment tank for St. Stevens Seminary. The proposed trail alignment is adjacent to this tank for approximately 20 feet. Phone contact was made with St. Stevens on 3/15/91 and DOFAW made a commitment that should any vandalism occur as a result of trail use, DOFAW will initiate appropriate action to correct and prevent future vandalism.

II. LONG TERM IMPACTS

As a result of trail construction, it is expected that generally ruderal, exotic species will appear along the trail corridor. Subsequent maintenance by DOFAW and volunteer groups would attempt to suppress and eliminate the exotic species that may re-occur along the trail corridor. During construction, every effort will be made to preserve and enhance existing native species that occur along this trail corridor. Since the area already contains mostly exotic, ruderal vegetation, this project does not constitute a significant impact.

SECTION IV

ALTERNATIVES

I. NO ACTION

The Maunawili Demonstration trail is the backbone of the proposed Ko'olaupoko Trail Complex, and is an integral component of the statewide Na Ala Hele Demonstration Trail program. The goals of the Division and the Na Ala Hele Program include increasing the opportunity for the public to enjoy State and privately owned forest lands in this manner, by not completing the project, the Division falls short of its goals. Upon completion, this trail will greatly increase the recreational opportunities of the residents of the immediate area and the rest of Oahu.

SECTION V

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES

The irreversible resources committed would be the present vegetation cleared during trail construction, and the commitment of labor and capital.

SECTION VI

SIGNIFICANCE OF PROJECT IMPACTS

The proposed project will have impact on the environment. This impact would manifest itself directly from the walking tread or indirectly from the increased possibility of fires because of careless hikers, erosion caused by exposure, and the expansion of alien species. Following proper trail construction techniques, monitoring and maintenance, this narrow walking trail would be of minimal direct impact to the surrounding environment.

The proposed trail will greatly assist in the expansion of forest recreation, the management of this watershed, and may help to alleviate the strain on other Oahu trail systems - such as the Makiki-Tantalus complex. Also, this trail will serve as the backbone to a future network of linkage trails to other trail systems, greatly expanding recreational opportunities for the public.

As mentioned previously, there are no endangered, threatened or rare flora or fauna encountered on the proposed trail corridor and all of the native plants occurring along the proposed trail are found in the surrounding area and generally occur in the Koolau Mountains. The Archaeological Inventory Survey indicates that no changes in the proposed alignment of the trail corridor or any further archaeological work in association with trail construction is recommended. Also as mentioned previously, there is a potential for adverse impact resulting from vandalism to the St. Stevens water tank, and DOFAW will respond with the appropriate corrective action should this occur. As a result of these and other factors presented in this Assessment, the Division recommends that an Environmental Impact Statement not be required.