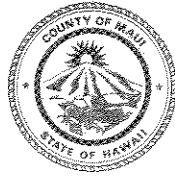


ALAN M. ARAKAWA
Mayor
MICHAEL W. FOLEY
Director
WAYNE A. BOTEILHO
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

September 23, 2005

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OFC. OF ENVIRONMENTAL
QUALITY CONTROL

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

RE: Final Environmental Assessment (FEA) for the Volcano Group
Parking Lot located in the Lahaina National Historic Landmark
District at 741 Wainee Street, Lahaina, Island of Maui, Hawaii
(EA 2005/0001) (SMX 2005/0041)

The Maui Planning Department accepts the Final Environmental Assessment (FEA) for the subject project, and hereby issues a Finding of No Significant Impact (FONSI). Please publish the FEA in the **October 8, 2005**, Office of Environmental Quality Control (OEQC) Environmental Notice.

We have enclosed a completed OEQC Publication Form and four (4) copies of the FEA. If you have any questions, please call Ms. Kivette Caigoy, Environmental Planner, of our office at 270-7735.

Sincerely,

Handwritten signature of Michael W. Foley in black ink.

MICHAEL W. FOLEY
Planning Director

MWF:KAC:lar
Enclosures

c: Kivette A. Caigoy, Environmental Planner
Livit Callentine, Staff Planner
Raymond Cabebe, Chris Hart & Partners
EA Project File
General File
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2005-10-08 MA FONSI VOLCANO GROUP PARKING LOT

OCT - 8 2005
FILE COPY

FINAL
HRS CHAPTER 343
ENVIRONMENTAL ASSESSMENT

VOLCANO GROUP PARKING LOT

*741 · Wainee · Street
Lahaina · Maui · Hawaii
TMK: (2) 4-6-009:024*

Prepared for:

Volcano Group Maui, LLC
1111 Bishop Street, Suite 505
Honolulu, Hawaii 96813

Prepared by:

Chris Hart and Partners
Landscape Architecture and Planning
1955 Main Street, Suite 200
Wailuku, Hawaii 96793
Phone: 242-1955
Fax: 242-1956

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

05 SEP 28 P 3:04

RECEIVED



SEPTEMBER 2005

FINAL
HRS CHAPTER 343
ENVIRONMENTAL ASSESSMENT

VOLCANO GROUP PARKING LOT

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SEPTEMBER 2005



TABLE OF CONTENTS

I. PROJECT INFORMATION..... 1

- A. PREFACE..... 1
- B. PURPOSE OF THE REQUEST..... 1
- C. PROJECT PROFILE..... 1
- D. IDENTIFICATION OF THE APPLICANT 1
- E. ACCEPTING AGENCY..... 2
- F. CONSULTANT 2
- G. PRE-CONSULTED AGENCIES & PRIVATE INTERESTS 2
- H. CONSULTED PUBLIC AGENCIES 2

II. DESCRIPTION OF THE PROPERTY AND PROPOSED ACTION 3

- A. PROPERTY LOCATION 3
- B. EXISTING LAND USE..... 3
- C. LAND USE DESIGNATIONS 3
- D. DESCRIPTION OF PROPOSED ACTION 4
- E. ALTERNATIVES..... 4
 - 1. *No action*..... 4
 - 2. *Alternatives* 4

III. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES..... 6

- A. PHYSICAL ENVIRONMENT 6
 - 1. *Land Use*..... 6
 - 2. *Topography and Soils* 7
 - 3. *Flood and Tsunami Zone* 8
 - 4. *Terrestrial Biota (Flora and Fauna)* 9
 - 5. *Air Quality* 9
 - 6. *Noise Characteristics*..... 10
 - 7. *Archaeological/Historical Resources* 11
 - 8. *Visual Resources*..... 12
- B. SOCIO-ECONOMIC ENVIRONMENT..... 12
- C. PUBLIC SERVICES..... 12
- D. INFRASTRUCTURE..... 12
 - 1. *Roadways* 12
 - 2. *Drainage*..... 13
 - 3. *Water*..... 13
 - 4. *Wastewater*..... 13
 - 5. *Energy*..... 13

IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS..... 14



A.	STATE LAND USE LAW	14
B.	GENERAL PLAN OF THE COUNTY	14
C.	WEST MAUI COMMUNITY PLAN	14
D.	COUNTY ZONING	15
E.	SPECIAL MANAGEMENT AREA ASSESSMENT APPLICATION	16
1.	<i>Submittals</i>	16
2.	<i>Assessment</i>	17
F.	HRS CHAPTER 343 SIGNIFICANCE CRITERIA	20
V.	FINDINGS AND CONCLUSIONS	23
VI.	REFERENCES.....	24



ATTACHMENTS

FIGURES

- Figure No. 1: Regional Location
- Figure No. 2: Tax Map Key
- Figure No. 3: Aerial Map
- Figure No. 4: Zoning Map
- Figure No. 5: Community Plan Map
- Figure No. 6: Flood Hazard Map
- Figure No. 7: Soils Map
- Figure No. 8: Site Photographs
- Figure No. 9: Preliminary Grading Plan
- Figure No. 10: Landscaping Plan

APPENDICES

- Appendix A: Ownership Documents
- Appendix B: Preliminary Drainage Report
- Appendix C: Zoning and Flood Confirmation Form
- Appendix D: Valuation/Cost Estimate
- Appendix E: Comment Letters and Responses
- Appendix F: Archaeological Inventory Survey



I. PROJECT INFORMATION

A. PREFACE

This Environmental Assessment and Special Management Area Minor application has been filed on behalf of Volcano Group Maui, LLC, the owners of a parcel identified as Tax Map Key (2) 4-6-009:024, Lahaina, Maui, Hawaii.

B. PURPOSE OF THE REQUEST

The intent of the owners is to construct a 36-stall asphalt concrete parking lot with a pay station, landscaping, and fencing. This Final Environmental Assessment (EA) has been prepared to describe and analyze the impacts associated with this action and is required since the property is in the Lahaina Historic District which is a National Historic Landmark. This Final EA has been prepared in compliance with Chapter 343, Hawaii Revised Statutes (HRS), Section 5 (4), which states an environmental assessment shall be required for actions which "propose any use within any historic site as designated in the National Register or Hawaii Register as provided for in the Historic Preservation Act of 1966, Public Law 89-665, or chapter 6E"; and Chapter 200, Hawaii Administrative Rules, Environmental Impact Statement Rules.

C. PROJECT PROFILE

Proposed Project: 36-Stall Parking Lot
Lot Size: 12,365 square feet
Existing Land Use: Vacant
Address: 741 Waivee Street
Lahaina, Maui, Hawaii
Access: Waivee Street

D. IDENTIFICATION OF THE APPLICANT

Land Owners: Volcano Group Maui, LLC



Address: 1111 Bishop Street, Suite 505
Honolulu, Hawaii 96813
Phone/Fax: Phone: (808) 536-6411
Fax: (808) 538-1992
Contact: Mr. James Steiner, Jr.

E. ACCEPTING AGENCY

Name: Department of Planning, County of Maui
Address: 250 South High Street
Wailuku, Hawaii 96793
Phone/Fax: Phone: (808) 270-7735
Fax: (808) 270-7969
Contact: Mr. Michael W. Foley

F. CONSULTANT

Land Use Planners: Chris Hart & Partners, Inc.
1955 Main Street, Suite 200
Wailuku, Maui, Hawaii 96793-1706
Phone/Fax: Phone: 808-242-1955
Fax: 808-242-1956
Contact: Mr. Rory Frampton

G. PRE-CONSULTED AGENCIES & PRIVATE INTERESTS

A. COUNTY OF MAUI

1. Department of Planning

H. CONSULTED PUBLIC AGENCIES

The Draft Environmental Assessment for the for the Volcano Group Parking Lot was published on March 23, 2005. Publication initiated a 30-day public review period ending on April 21, 2005. The Draft EA was mailed to agencies below and all comment letters and responses are found in Appendix "E".

A. STATE OF HAWAII

1. Department of Land and Natural Resources, Historic Preservation Division
2. Office of Hawaiian Affairs
3. Office of Environmental Quality Control

II. DESCRIPTION OF THE PROPERTY AND PROPOSED ACTION

A. PROPERTY LOCATION

The subject property is located within Lahaina town, on Wainee Street between Dickensen Street and Panaewa Street, Lahaina, Maui, Hawaii; TMK: (2) 4-6-009:024. (See: Figure No. 1 "Regional Location", No. 2 "Tax Map Key", & No. 3 "Aerial Map").

B. EXISTING LAND USE

The subject parcel contains a 160 square foot shed built in 1986. The parcel is currently vacant, but has been used for vehicle storage by towing and auto rental companies and various small businesses.

C. LAND USE DESIGNATIONS

State Land Use Classification:	Urban
County Zoning:	B-2 Community Business (See: Figure No. 4, "Zoning Map")
West Maui Community Plan:	B Business Commercial (See: Figure No. 5, "Community Plan Map")

Flood Zone Designation:

C Minimal flooding

(See: Figure No. 6, "Flood Zone Map")

Special Designations:

Special Management Area, Lahaina Historic District, National Historic Landmark

D. DESCRIPTION OF PROPOSED ACTION

The Applicant is requesting a Special Management Area permit to construct a 36-stall asphalt concrete parking lot with a pay station, landscaping, and a 6-foot high wood fence (See: Figure No. 9).

E. ALTERNATIVES

1. No action

Analysis. As noted previously, the West Maui Community Plan and County Zoning designates the area for business use. The subject request seeks to construct a parking lot which is an allowable use in the business district.


The "No Action" alternative would maintain the current state of property. The partially paved property is currently vacant with a 160 square foot shed.

2. Alternatives

Analysis. Alternate uses and configurations were considered at the beginning of the project. A summary of these alternatives is presented below:

Commercial Building. This option would involve the construction of a commercial building. Based on the lot size, the maximum floor area would be 24,730 square feet with a maximum height of 6 stories. Setbacks would only be required where the property abuts residential districts (northwest and southwest boundaries). Lot coverage would be limited by the required off-street parking (49 stalls). The applicant could expect to realize an increased economic benefit. However, this alternative would be costly and would eliminate an open buffer lot between a commercial district (to the south) and a residential area (to the north).

Alternative Site. This option would require that the applicant find and develop another property. The subject property would remain as is. However, the applicant does not



own another suitable site and the land costs involved in acquiring a suitable site could be high.



III. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Land Use

Existing Conditions. The project area is located on the *makai* side of Wainee Street between Panaewa Street and Dickenson Street in historic Lahaina town. In the immediate area is a patchwork of developed and undeveloped urban zoned land, intermixed with residential, public, and commercial uses.

The subject property is situated adjacent to single-family residential to the northwest. Across Wainee Street, to the north are apartments and to the northeast is a Catholic church and cemetery. To the southeast are business-commercial uses and to the southwest are vacant lots (See: Figure No. 3, "Aerial Map").

The following is a description of zoning, community plan designations, and existing land uses adjacent to the subject property:

North:	<u>State Land Use:</u> Urban <u>Zoning:</u> A-1 Apartment <u>Community Plan:</u> Multi-Family Existing uses. Apartments.
East:	<u>State Land Use:</u> Urban <u>Zoning:</u> Public/Quasi-Public <u>Community Plan:</u> Public/Quasi-Public Existing uses. Cemetery, church.
South:	<u>State Land Use:</u> Urban <u>Zoning:</u> B-2 Community Business <u>Community Plan:</u> Business/Commercial Existing uses. Commercial building.



West:

State Land Use: Urban

Zoning: R-1 Residential

Community Plan: Public/Quasi-Public &
Business/Commercial

Existing uses. Single family dwellings & vacant
lots.

Potential Impacts and Mitigation Measures. The project site is located in an area of Lahaina which features a range of urban land uses. The proposed parking lot will be compatible with the surrounding existing uses. A five (5) foot high fence will be constructed along the boundaries adjacent to the residential area.


2. Topography and Soils

Existing Conditions. The project site is relatively flat and approximately 75 percent paved with asphalt, including a small area of concrete. According to the Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, prepared by the United States Department of Agriculture, Soil Conservation Service, August 1972, the soil classification found on the project site is the Ewa silty clay loam (EaA), 0 to 3 percent slopes (See: Figure No. 7, "Soils Map"). Ewa silty clay loam is derived from basic igneous rock. This soil has a slight erosion hazard and runoff is very slow.

The site was used at one time as storage for towed cars and trucks and maintenance of rental motorcycles and cars. Currently, stormwater runoff flows in the *makai* (southwest) direction and a portion enters an existing drain inlet leading to an unregistered drywell.

A Phase I Environmental Site Assessment was prepared by EKNA Services Inc. in August 2004. The report concluded that:

- No apparent environmentally adverse or detrimental effects were detected as a result of past or present use of the site.
- There was no direct evidence of petroleum hydrocarbon and/or hazardous substance/waste contamination at the property.

-
- 
- There was no direct evidence that subsurface contaminants from nearby facilities have migrated to the soils and ground water beneath the assessed property to cause adverse environmental conditions.

Potential Impacts and Mitigation Measures. The Phase I Environmental Site Assessment recommends that no further environmental investigation is considered to be necessary, however if the existing drywell is found to be an injection well, it should be closed or registered. The existing drywell will be removed. The proposed project should have no adverse impact upon the topography and soils of the subject property.

3. Flood and Tsunami Zone

Existing Conditions. According to Panel Number 150003 0163C dated August 3, 1998, of the Flood Insurance Rate Map, prepared by the United States Federal Emergency Management Agency, the project site is situated within Zone C. Zone C is an area of minimal flooding. (See: Figure No. 6, "Flood Insurance Rate Map"). The site is at the edge of the tsunami evacuation area.

Potential Impacts and Mitigation Measures. The proposed project will provide adequate facilities for drainage control and retention of storm water generated by the proposed project onsite (See: Appendix "B" & Section III.D.2). This shall preclude any appreciable onsite erosion.

The following measures will be taken to control erosion during the site development period:

- Minimize time of construction.
- Retain existing ground cover until latest date to complete construction.
- Early construction of drainage features.
- Use temporary area sprinkles in non-active construction areas when ground cover is removed.
- Use temporary berms and cut-off ditches, where needed, for control of erosion.
- Thoroughly water graded areas after construction activity has ceased for the day and on weekends.
- Install silt screens wherever appropriate.

With the incorporation of the proposed drainage system improvements as well as the erosion control measures, the proposed development will not have a significant impact on its downstream neighbors or the ocean and its beaches.

4. Terrestrial Biota (Flora and Fauna)

Existing Conditions. The project site has been in residential use for at least 50 years. Trees on site include mango, palm and monkeypod. Other vegetation found on site includes various shrubs, grasses and weeds. Feral mammals typically found in this area include mongoose, cats, rats, and mice. Avifauna commonly found in this area includes the common mynah, sparrow, barred dove, and house finch.


Potential Impacts and Mitigation Measures. There are no known significant habitats of rare, endangered or threatened species of flora and fauna located on the subject property. Therefore rare, endangered, or threatened species of flora and fauna will not be impacted by the proposed action.

5. Air Quality

Existing Conditions. Air quality refers to the presence or absence of pollutants in the atmosphere. It is the combined result of the natural background and emissions from many pollution sources. The impact of land development activities on air quality in a proposed development's locale differs by project phase (site preparation, construction, occupancy) and project type. In general, air quality in the Lahaina area is considered relatively good. Non-point source emissions (automobile) are not significant to generate a high concentration of pollutants. The relatively high quality of air can also be attributed to the region's exposure to wind, which quickly disperses concentrations of emissions. The Lahaina area is currently in attainment of all criteria pollutants established by the Clean Air Act, as well as, the State of Hawaii Air Quality Standards.

Potential Impacts and Mitigation Measures. Air quality impacts attributed to the proposed project could include dust generated by the short-term construction related activities. Site work such as grading and building construction, for example, could generate airborne particulate. Adequate dust control measures that comply with the provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust, will be implemented during all phases of construction. Some of these measures will include:

- Providing adequate water source on site prior to start-up of construction activities.

-
- 
- Landscaping and rapid covering of bare areas, including slopes, beginning with the initial grading phase.
 - Controlling of dust from shoulders, project entrances, and access roads.
 - Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities.
 - Controlling of dust from debris hauled away from project site.

The proposed project is for the benefit of the existing businesses in the area so it is not expected to increase the volume of traffic in the region, which would increase vehicular emissions such as carbon monoxide. Thus, the proposed project is not anticipated to be detrimental to local air quality.

6. Noise Characteristics

Existing Conditions. The noise level is an important indicator of environmental quality. In an urban environment, noise is due primarily to vehicular traffic, air traffic, heavy machinery, and heating, ventilation, and air-conditioning equipment. Ramifications of various sound levels and types may impact health conditions and an area's aesthetic appeal. Noise levels in the vicinity of the project area are generally low. Traffic noise from Honoapiilani Highway and noise associated with the businesses and residential uses nearby are the predominant source of background noise in the vicinity of the subject property.

Potential Impacts and Mitigation Measures. In the short-term, the proposed project could generate some adverse impacts during construction. Noise from heavy construction equipment, such as material-carrying trucks and trailers, would be the dominant source of noise during the construction period. To minimize construction related impacts to the surrounding neighbors, the developer will limit construction activities to normal daylight hours, and adhere to the Department of Health's Administrative Rules, Chapter 11-46, Community Noise Control."

The proposed project is expected to serve existing business and public uses in the area. In the longer-term, the proposed project should not significantly impact existing noise conditions in the area due to the relatively small increase in traffic generated by the project.



7. Archaeological/Historical Resources

Existing Conditions. Based on available information, the subject property was in residential use since at least 1914. Historical maps indicate that at one time there were, at the most, five structures, presumably residential, on the property. The site was vacant from around the mid-1970s until 1986, when a 160 square foot shed was constructed and the site was used for commercial purposes. Approximately three-quarters of the site is paved with asphalt concrete, including a small area covered by concrete. In general, Lahaina has been considered a sensitive area for cultural deposits and burial sites.

An archaeological inventory survey was conducted in June 2005 by Scientific Consultant Services and accepted by the State Historic Preservation Division of the Department of Land and Natural Resources on September 12, 2005 (See: Appendix "E"). The survey recorded three subsurface features collectively identified as State Site 50-50-04-5701. This site correlates with habitation in the 1920s to 1930s. The SHPD concurs with the report that, "The site is significant under Criterion D and has the potential to yield important information to understanding the prehistory and history of the area."

The project site does not contain any known cultural resources. Nor are there any traditional or customary native Hawaiian activities practiced at the project site. There are also no known cultural activities practiced on adjacent properties, therefore the proposed action does not restrict access to offsite cultural activities.

Potential Impacts and Mitigation Measures. Since the site has been used for residential and commercial purposes for at least 90 years, it is unlikely that significant sub-surface archaeological or cultural resources will be discovered or disturbed during construction. However, should cultural deposits or burial remains be found during construction, all work will be stopped in that area and the SHPD will be consulted for proper analysis and treatment. Since the SHPD has stated that "monitoring is an appropriate mitigation to alleviate impacts to historic properties during construction", an archaeological monitoring plan will be prepared and submitted for review. No cultural activities are practiced on the project site or on adjacent properties, therefore the proposed action will not have an adverse effect on the cultural beliefs, practices, and cultural resources of native Hawaiians or any other ethnic group.



8. Visual Resources

Existing Conditions. The subject parcel provide views of the West Maui Mountains, Haleakala and the Pacific Ocean.

Potential Impacts and Mitigation Measures. No unique public scenic resources or adjacent views will be impacted by proposed action. Therefore the proposed project is not anticipated to significantly impact public view corridors, or the visual character of the site and its immediate environs.

B. SOCIO-ECONOMIC ENVIRONMENT

Potential Impacts and Mitigation Measures. The proposed action will not cause an increase in the population of Lahaina nor will it have a significant effect on the economy. Hence, there are no impacts on the socio-economic environment.

C. PUBLIC SERVICES

Potential Impacts and Mitigation Measures. Since the development plans are for a parking lot, the proposed action will not extend existing public services (recreational facilities, police and fire protection, schools, medical facilities and solid waste) limits; therefore, there is no impact on public services.

D. INFRASTRUCTURE

1. Roadways

Existing Conditions. Wainee Street, which provides access to the project site, is a secondary road running parallel to Honoapiilani Highway. It traverses along the northeastern boundary of the subject parcel and intersects Dickenson Street to the south and Panaewa Street to the north. Dickenson Street provides access to Honoapiilani Highway and Front Street, the two primary links in Lahaina. Wainee Street falls under the jurisdiction of the County of Maui.

Potential Impacts and Mitigation Measures. The parking lot is expected to service existing business and public uses in the area. Therefore, the proposed project is not expected to generate additional traffic along Wainee Street.



2. Drainage

Existing Conditions. Onsite runoff currently sheet flows generally in the northeast to southwest direction across the parcel. The drainage system onsite consists of a concrete swale on the *makai* end of the existing pavement which conveys a portion of surface runoff to an existing catch basin. The catch basin is connected to a small drywell. The present onsite runoff is estimated at 0.9 cubic feet per second (cfs).

Potential Impacts and Mitigation Measures. Total storm water runoff after development of the proposed project will be 1.1 cfs, a net increase of 0.2 cfs (See: Appendix "B"). The existing drainage system will be removed. Onsite storm water runoff will be captured by a proposed grated inlet catch basin and conveyed to a subsurface perforated drainline which will be filtered. Overflow from the subsurface drain will be allowed to continue downstream along the existing drainage pattern and will be no more than the existing surface runoff volume currently leaving the property.

3. Water

Existing Conditions. The subject parcel is serviced by a 5/8" water meter.

Potential Impacts and Mitigation Measures. Water from the public system will be used for irrigation of the proposed landscaping.

4. Wastewater

There will be no sanitary fixtures on site.

5. Energy

Existing Conditions. There is a Maui Electric Company meter on the property, but service to the property is currently inactive.

Potential Impacts and Mitigation Measures. Only the automated pay station and parking lot lighting will require electrical power. Service will be activated at completion of the proposed project.

Due to these limited uses, the proposed action will not significantly increase demand on existing infrastructure (roadways, drainage, water, wastewater, and energy); therefore, there is no significant impact on existing infrastructure.

■

IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE LAW

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes four major land use districts into which all lands in the State are placed. These districts are designated Urban, Rural, Agricultural, and Conservation. The subject property is within the Urban District. The proposed parking lot is consistent with uses within the Urban District.

B. GENERAL PLAN OF THE COUNTY

The General Plan of the County of Maui (1990 update) provides long-term goals, objectives, and policies directed toward improving living conditions in the County. The following General Plan Themes, Objectives and Policies are applicable to the proposed project:

I. B. Land Use

Objective No. 2: To use the land within the County for the social and economic benefit of all the County's residents.

Policies:

(a) *Mitigate environmental conflicts and enhance scenic amenities, without having a negative impact on natural resources.*

C. WEST MAUI COMMUNITY PLAN

Nine community plan regions have been established in Maui County. Each region's growth and development is guided by a community plan, which contains objectives and policies in accordance with the Maui County General Plan. The purpose of the



community plan is to outline a relatively detailed agenda for carrying out these objectives.

The subject property is located within the West Maui Community Plan area which was adopted by ordinance No. 2476 on February 27, 1996. The West Maui Community Plan designation for the subject property is currently Business Commercial.

LAND USE

Goal

An attractive, well-planned community with a mixture of compatible land uses in appropriate areas to accommodate the future needs of residents and visitors in a manner that provides for the stable social and economic well-being of residents and the preservation and enhancement of the region's open space areas and natural environmental resources.

Objectives and Policies for Lahaina Town

1. *The area bounded by Honoapiilani Highway and Front Street define Lahaina town. Within this core, allow higher density commercial and civic activities with lower density residential uses on the periphery to emphasize the importance of Lahaina town as the regional service center and an attraction to residents and visitors alike.*
12. *Provide parking that is adequately marked or assigned and conveniently located in retail commercial shopping areas, at public parking sites and at major commercial complexes. Where appropriate, multi-decked parking structures may be allowed.*

Analysis: The proposed parking lot will provide parking opportunities for surrounding commercial and public uses. Thus, the proposed action will have a positive impact on public facilities and services.

D. COUNTY ZONING

The project site is County zoned B-2 Community Business. The proposed parking lot is an allowable use within the B-2 district.



E. SPECIAL MANAGEMENT AREA ASSESSMENT APPLICATION

1. Submittals

Special Management Area Assessment Application.

See: Front attachment.

Evidence that the applicant is the owner or lessee of record of the real property or a notarized letter of authorization from the legal owner if the applicant is not the owner and evidence that the authorization is from the legal owner.

See: Appendix "A"

A certified shoreline survey, if the land abuts the shoreline (2 sets, including 1 original).

Not Applicable. A certified shoreline survey is not required because the property does not abut the shoreline.

Two (2) sets of a plot plan of the land drawn to scale on which the proposed action is to occur. Submit two (2) sets, including one (1) original .

See: Figure No. 9

Two (2) sets of a plan designating in dimensions the location of the proposed action on the land. If structures are included in the action, the plans shall also show a dimensioned floor plan, sections, elevations, and other physical features. Said plans must be dated.

See: Figure No. 10

Photographs identifying the area where the proposed action is to occur.

See: Figure No. 8

Signed Zoning and Flood Confirmation Form.

See: Appendix "C"

Total cost or fair market value as estimated by an architect, engineer, or contractor licensed by the Department of Commerce and Consumer Affairs, State of Hawaii; or, by the administrator of Department of Public Works, Development Services Administration.

The estimated value of the subject project is \$104,500.00 (See: Appendix "D").



2. Assessment

The environmental setting of the property (description of property):

The project area is located on the *makai* side of Wainee Street between Panaewa Street and Dickenson Street in historic Lahaina town. In the immediate area is a patchwork of developed and undeveloped urban zoned land, intermixed with residential, public, and commercial uses.

The subject property is situated adjacent to single-family residential to the northwest. Across Wainee Street, to the north are apartments and to the northeast is a Catholic church and cemetery. To the southeast are business-commercial uses and to the southwest are vacant lots.

Based on available information, the subject property was in residential use since at least 1914. Historical maps indicate that at one time there were, at the most, five structures, presumably residential, on the property. The site was vacant from around the mid-1970s until 1986, when a 160 square foot shed was constructed and the site was used for commercial purposes. Approximately three-quarters of the site is paved with asphalt concrete, including a small area covered by concrete. The parcel is currently vacant, but has been used for vehicle storage by towing and auto rental companies and various small businesses.

Description of anticipated impacts:

(A) Affects natural or cultural resources (i.e., historic site, excavation on vacant land):

The project site does not contain any known natural or cultural resources. There are no traditional or customary native Hawaiian activities practiced at the project site. There are also no known cultural activities practiced on adjacent properties, therefore the proposed action does not restrict access to offsite cultural activities.

Results of an archaeological inventory survey conducted in June 2005 are discussed in Section III.A.7. Since the site has been used for residential and commercial purposes for at least 90 years, it is unlikely that sub-surface archaeological or cultural resources will be discovered or disturbed during construction. However, should cultural deposits or burial remains be found during construction, all work will be stopped in that area and the State Department of Land and Natural Resources, Historic Preservation Division will be consulted for proper analysis and treatment.



(B) Curtails the range of beneficial uses of the environment:

The site is a vacant parcel which is in an area community planned for business and commercial uses. It is also county zoned for B-2 Community Business and the proposed action is consistent with the mixed uses of the area.

(C) Conflicts with the county's or the state's long-term environmental policies or goals (i.e. State Plan, County General Plan, and Community Plan):

The proposed action will not conflict with the county's or the state's long-term environmental policies or goals. The proposed action triggers an environmental review requirement, according to Section 11-200-6, Hawaii Administrative Rules, because it is located in the Lahaina Historic District which is a National Historic Landmark.

(D) Affects the economic or social welfare and activities of the community, county, or state:

The proposed action is limited to the construction of a 36-stall asphalt paved parking lot and will not substantially affect the economic or social welfare and activities of the community, county, or state. The action will have a positive affect by creating an opportunity for free enterprise in the creation of additional construction jobs in the short term and adding to the parking inventory in Lahaina town.

(E) Involves secondary impacts, such as population changes (i.e. increase/decrease) and increased effects on public facilities, streets, drainage, sewage, and water systems, and pedestrian walkways (i.e. increased demands and deficiencies):

The proposed action is limited to the construction of a 36-stall asphalt paved parking lot and will not involve substantial secondary impacts, such as population changes and increased effects on public facilities, streets, drainage, sewage, water systems and pedestrian walkways. The property is serviced by existing adequate infrastructure facilities including roadways, water, and electricity.

(F) By itself has no significant adverse effects but cumulatively has considerable effect upon the environment (i.e. increased traffic and deficiencies in services) or involves a commitment for larger actions (i.e. more public infrastructure, such as, roads, waterlines, sewers, etc.):



The proposed action will not have a significant adverse effect, nor will it have a cumulative effect upon the environment or involve a commitment for larger actions. The construction of a 36-stall asphalt paved parking lot will be short term and limited to the immediate area of the proposed building site.

(G) Affects a rare, threatened, or endangered species of animal or plant, or its habitat (i.e. wetlands, natural area reserve, refuge):

There are no known rare, threatened, or endangered species of animal or plant, or its habitat on the property.

(H) Is contrary to the state plan, county's general plan, appropriate community plans, zoning and subdivision ordinances:

The proposed action is not contrary to the state plan (Urban), county general plan, and the West Maui Community Plan (Business/Commercial) (See: Figure No. 3), or county zoning (B-2 Community Business). The subdivision ordinances do not apply to the proposed development.

(I) Affects air or water quality or ambient noise levels (i.e. construction impacts):

The proposed action will not detrimentally affect air or water quality or ambient noise levels. During construction of the building there will be a slight increase in localized noise levels. The construction work is a short-term activity limited to the immediate area of the proposed building site, and mitigating measures required by State and County agencies will be implemented. The project will comply with the County's Grading Ordinance and will institute Best Management Practices in order to avoid negative impacts to nearshore waters from construction related runoff.

(J) Located in and does it affect an environmentally sensitive area, such as flood plain, shoreline, dunes, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh waters, or coastal waters:

The proposed structure is located approximately 600 feet from the shoreline. The project site lies within the "C" flood zone which has minimal or no flooding.

The proposed action will not affect an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh waters or coastal waters.



(K) Alters natural land forms (i.e. cut and fill, retaining walls) and existing public views to and along the shoreline:

The project site is relatively flat and is 75 percent paved with asphalt which includes a small area of concrete. The 36-stall parking lot is a low profile project and is not expected to alter existing views. As previously noted, the site is approximately 600 feet from the shoreline and thus does not have any views to the shoreline. A 6-foot high wood fence along the residential boundaries will be constructed to create a visual buffer.

(L) Is contrary to the objectives and policies of chapter 205A, HRS:

As discussed above, the proposed action will not have a significant impact on shoreline processes, lateral shoreline access or known cultural or historic resources. Also, the project is not located in the vicinity of the shoreline and will not impact a particularly sensitive habitat or ecosystem. The project is limited to a 36-stall parking lot and will not lead to a commitment for larger actions. As such, the project is not anticipated to result in a "cumulative impact or significant environmental or ecological effect on the SMA". Therefore the proposed action is not contrary to the objectives and policies of HRS chapter 205A.

F. HRS CHAPTER 343 SIGNIFICANCE CRITERIA

A finding of no significant impact (FONSI) is anticipated and therefore an environmental impact statement will not be required for the proposed action. This determination has been made in accordance with the following significance criteria specified in Section 11-200-12 of the Department of Health rules relating to Environmental Impact Statements:

- A. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.*

As documented in this report, the proposed project will not result in the loss or destruction of any natural or cultural resource.

- B. *Curtails the range of beneficial uses of the environment.*

Since the site has been used for residential and commercial purposes for at least 90 years, it is unlikely that the project will curtail the range of beneficial uses of the environment in the project vicinity.



- C. *Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.*

The project is being developed in compliance with the state's long term environmental goals. As documented in this report, adequate mitigation measures will be implemented to minimize the potential for negative impacts to the environment.

- D. *Substantially affects the economic or social welfare of the community or state.*

The project will add 36 stalls to the parking inventory in Lahaina. As documented in this report, there will be no significant negative long term impacts to the socio-economic environment.

- E. *Substantially affects public health.*

There are no special or unique aspects of the project which will have an impact on public health.

- F. *Involves substantial secondary impacts, such as population changes or effects on public facilities.*

The proposed project will not lead to an impact on population levels since there is no residential component. By providing additional parking in the Lahaina area, the proposed project has a positive impact on public facilities.

- G. *Involves a substantial degradation of environmental quality.*

Mitigation measures will be implemented during construction to minimize negative short term impacts such as noise, soil erosion and air quality. The project design will incorporate a drainage system that will minimize degradation of the environmental quality.

- H. *Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.*

The project does not involve a commitment for larger actions on behalf of the applicant or any public agency. In terms of cumulative impacts, the project site is



situated within the State Urban District and in proximity to developed public, residential and commercial areas. Infrastructure and utilities are adequate to service the proposed project. Therefore, the project will not result in cumulative negative impacts on the environment.

- I. *Substantially affects a rare, threatened, or endangered species, or its habitat.*

There are no known rare, threatened, or endangered species or habitat at the project site.

- J. *Detrimentially affects air or water quality or ambient noise levels.*

As documented, there will be short term impacts on air quality and ambient noise levels during construction; however, mitigation measures will be employed to minimize these impacts. Adverse long-term impacts are not anticipated.

- K. *Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion prone area, geologically hazardous land, estuary, fresh water, or coastal waters.*

The site is not an environmentally sensitive area. Compliance with County grading requirements will be met.

- L. *Substantially affects scenic vistas and view planes identified in county or state plans or studies.*

Due to the low profile characteristics of a single level parking lot, this type of development typically does not impact view planes. Therefore, the proposed project will not negatively affect any scenic views in the area.

- M. *Requires substantial energy consumption.*

Since the only energy requirements will be for the automated pay station and lighting, the energy consumption of the proposed project is considered insignificant.



V. FINDINGS AND CONCLUSIONS

This Final Environmental Assessment and application for a Special Management Area permit on a 12,365 square foot site at Lahaina, Maui, Hawaii, parcel (2) 4-6-009:024 analyzes the environmental and socio-economic impacts associated with the applicant's proposal to construct a 36-lot parking lot.

The proposed action is not anticipated to result in environmental impacts to surrounding properties, near shore waters, natural resources, and/or archaeological and historic resources on the site or in the immediate area. Since the development only involves asphalt concrete paving, installation of an automated pay station, fencing, and landscaping, public infrastructure and services including roadways, sewer and water systems, medical facilities, police and fire protection, parks, and schools, are adequate to serve the property. The proposed action will not impact public view corridors and will not produce significant adverse impacts upon the visual character of the site and its immediate environs.

The subject property is situated within the State's Urban District and is community planned for Business/Commercial development and County zoned B-2 Community Business. The Applicants' proposal is consistent with the land use designations. As such, the proposed action is consistent with the objectives and policies contained within the West Maui Community Plan, as well as, State Land Use Law, and County Zoning. The authority has considered all agency comments on the Draft Environmental Assessment. No public comments have been offered.

Based on the foregoing analysis and conclusion, the proposed action will not result in significant impacts to the environment and is consistent with the requirements of HRS Chapter 343. A Finding of No Significant Impact (FONSI) is warranted. Since the proposed project valuation is less than \$125,000.00, approval of the Special Management Area permit application as a minor permit is warranted.



VI. REFERENCES

- County of Maui, Department of Planning. 1991. *The General Plan of the County of Maui, 1990 Update*. Wailuku, Hawaii.
- County of Maui, Department of Planning. 1996. *West Maui Community Plan*. Wailuku, Hawaii.
- County of Maui, Office of Economic Development. 2003. *Maui County Data Book*. Wailuku, Hawaii.
- EKNA Services Inc. 2004. *Phase I Environmental Site Assessment*. Honolulu, Hawaii.
- Federal Emergency Management Agency. Revised August 3, 1998. *Flood Insurance Rate Map*. Community Panel Map Number 150003 0163 C.
- U.S. Department of Agriculture, Soil Conservation Service in Cooperation with the University of Hawaii, Agricultural Experiment Station. 1972. *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. Washington, D.C.
- Wilson Okamoto & Associates, Inc. 2003. *Maui Infrastructure Assessment Update*. Honolulu, Hawaii.

FIGURES

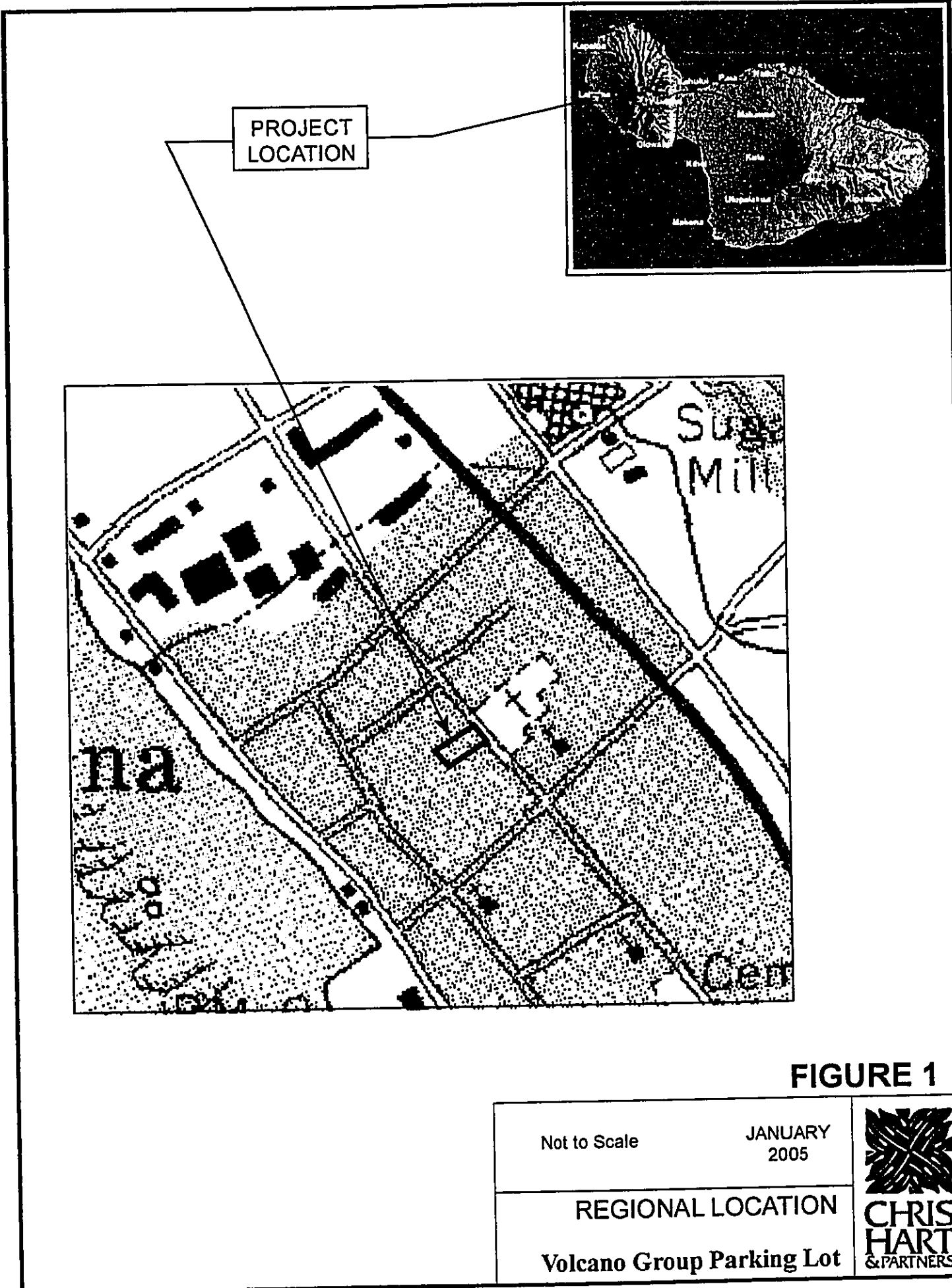



FIGURE 1

Not to Scale	JANUARY 2005	
<p>REGIONAL LOCATION</p> <p>Volcano Group Parking Lot</p>		

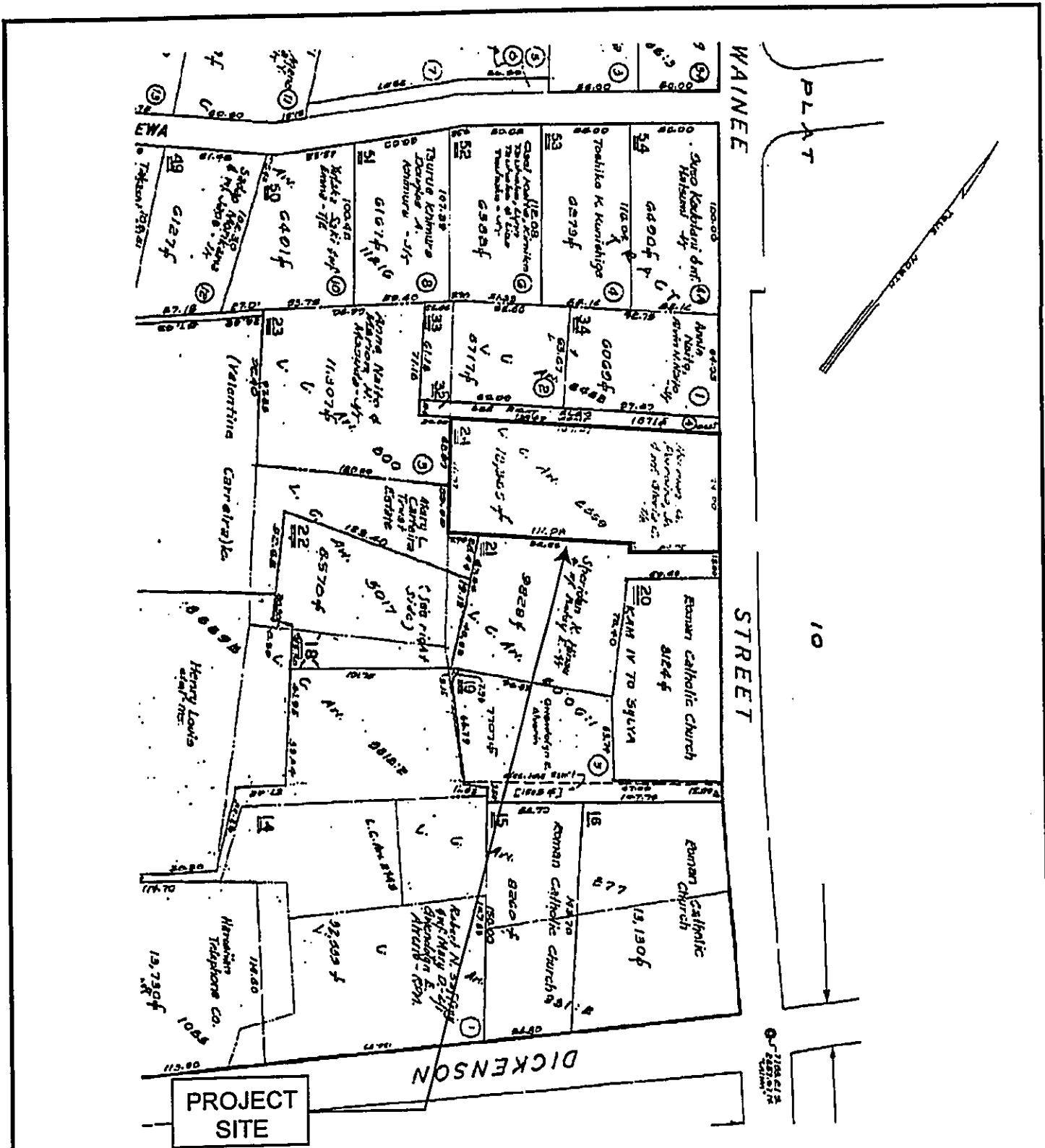


FIGURE 2

TAXATION MAPS BUREAU		
TERRITORY OF HAWAII		
SECOND DIVISION		
ZONE	SEC.	PLAT
4	6	09
CONTAINING PARCELS		

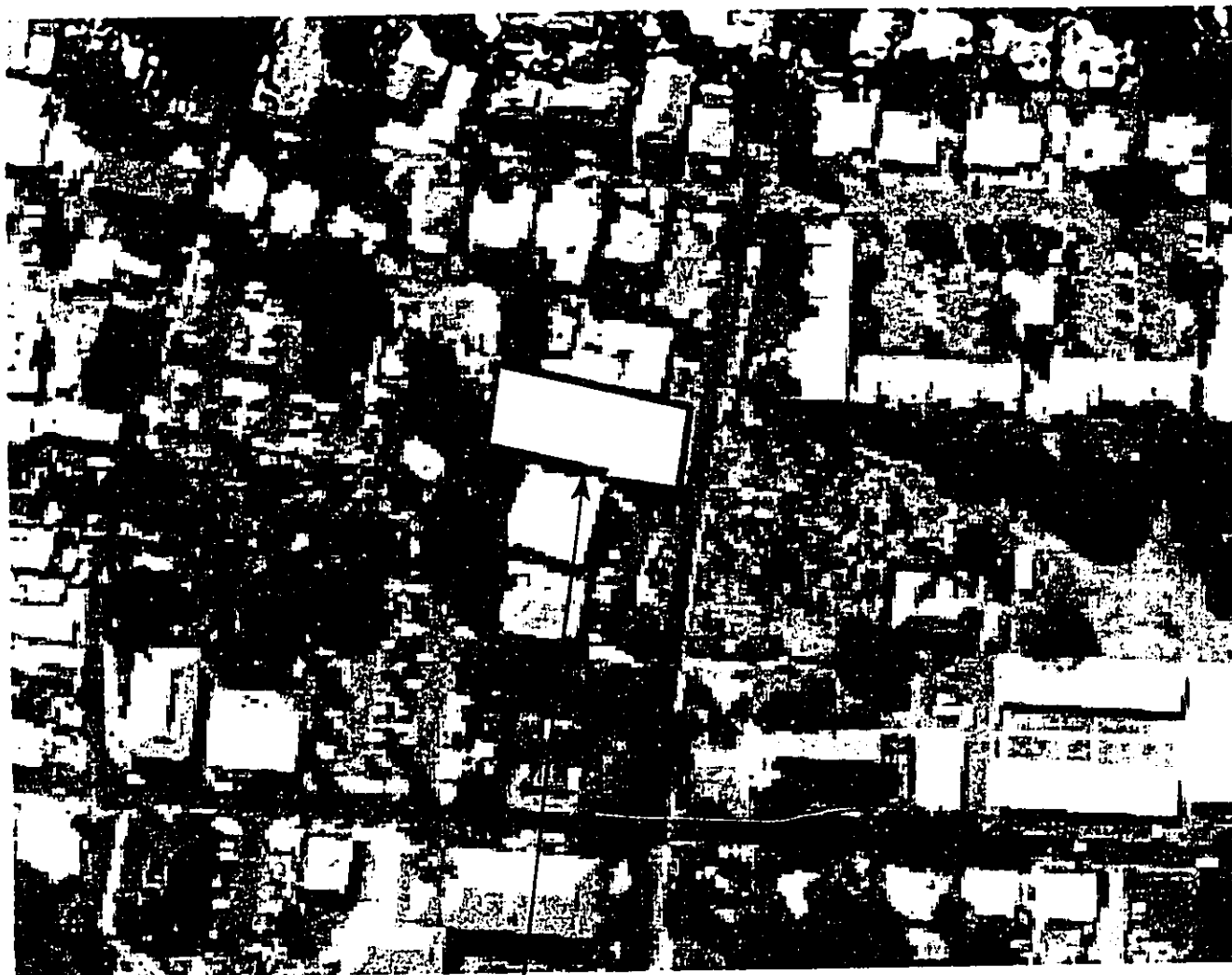
Parcel 24
Not to Scale

JANUARY
2005

TAX MAP

Volcano Group Parking Lot





PROJECT
SITE

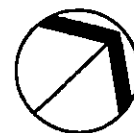
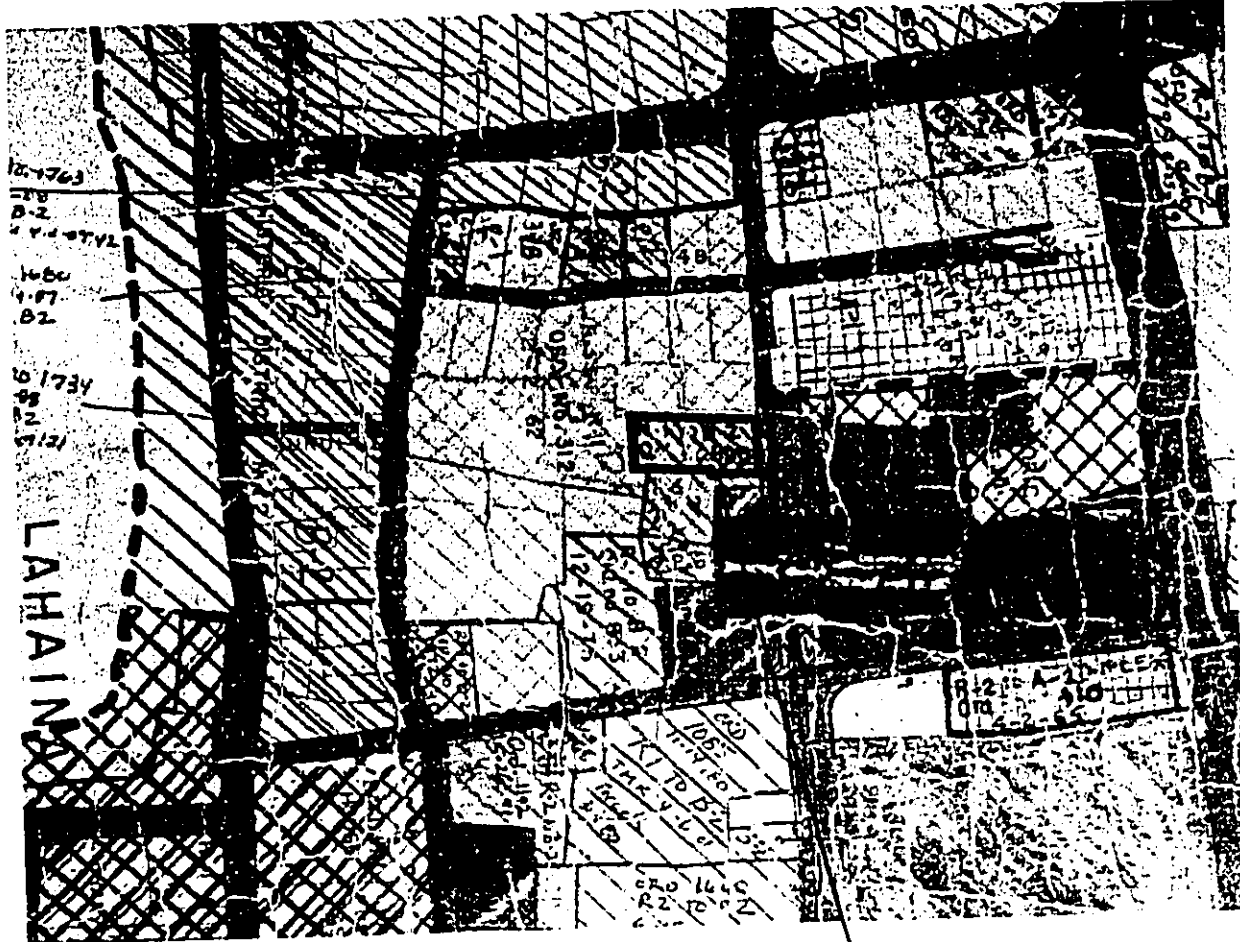


FIGURE 3

Aerial photo taken on May 24, 2000	JANUARY 2005	
AERIAL MAP Volcano Group Parking Lot		



PROJECT SITE














-  Single Family Residential
-  Multi-Family Residential
-  Business
-  Hotel
-  Public/Quasi-public



FIGURE 4

JANUARY 2005	 CHRIS HART & PARTNERS
MAUI COUNTY ZONING Volcano Group Parking Lot	




-  Single Family
-  Multi-family
-  Hotel
-  Business/Commercial
-  Open Space
-  Park
-  Public

PROJECT SITE



FIGURE 5

<p>JANUARY 2005</p>	
<p>WEST MAUI COMMUNITY PLAN Volcano Group Parking Lot</p>	

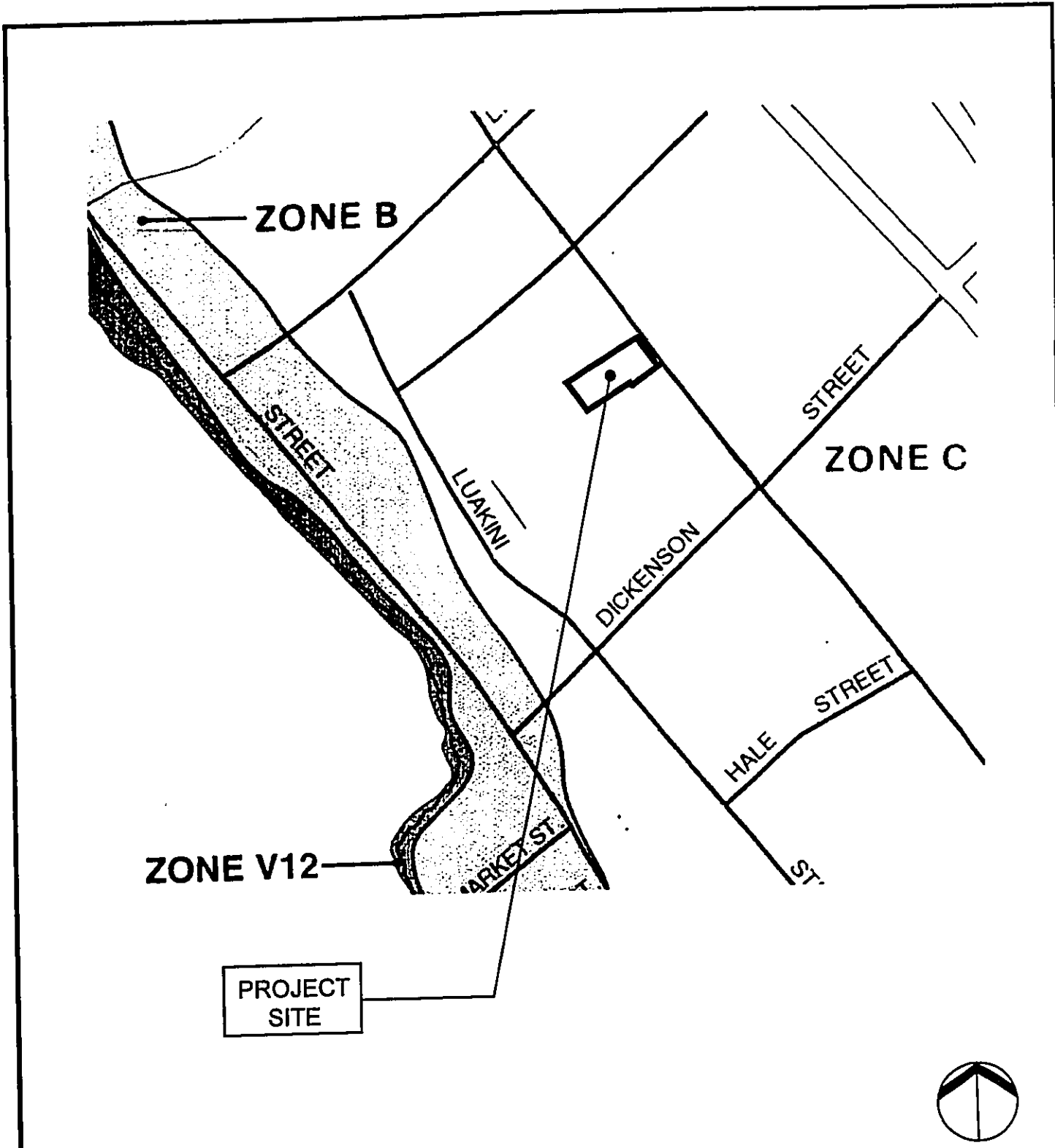


FIGURE 6

Flood Insurance Rate Map
 Maui County, Hawaii
 Community Panel Number
 150003 0163 C
 Map Revised:
 August 3, 1998

Not to Scale JANUARY
 FEMA Flood Insurance Map 2005

FLOOD MAP
 Volcano Group Parking Lot



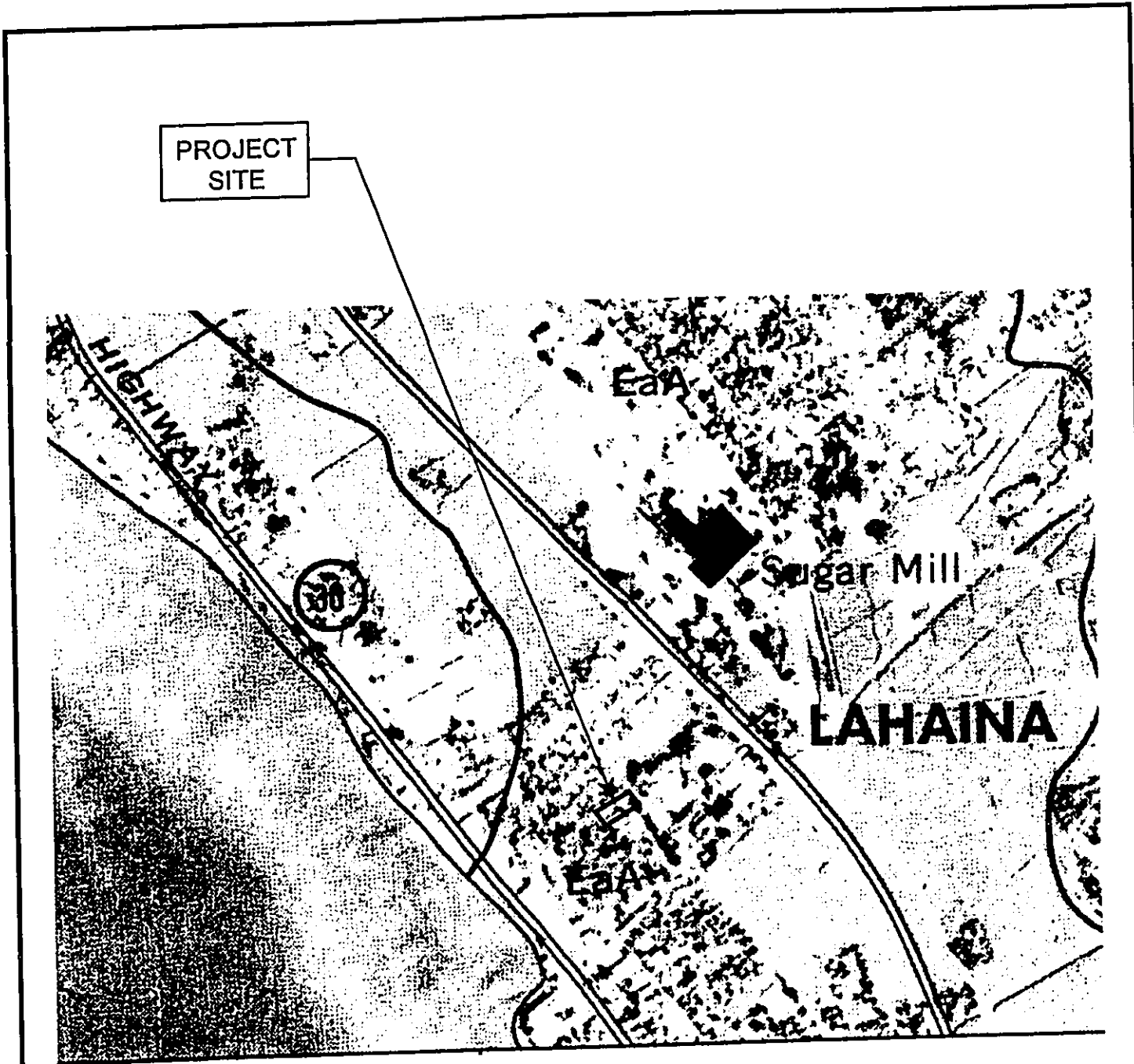


FIGURE 7

Not to Scale

JANUARY
2005

SOILS MAP

Volcano Group Parking Lot



**CHRIS
HART
& PARTNERS**

Source: State of Hawaii, *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai*, April 1972



Photo 1: Looking at the eastern corner of the property from Wainee Street. At center, 160 square foot shed on the property.



Photo 2: Looking down the residential driveway that abuts the northwestern boundary.

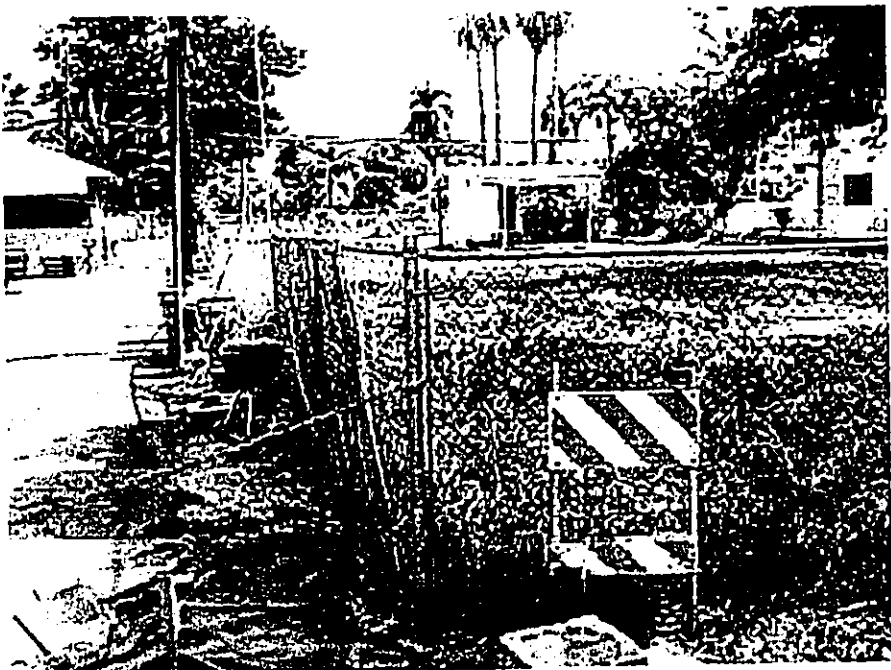
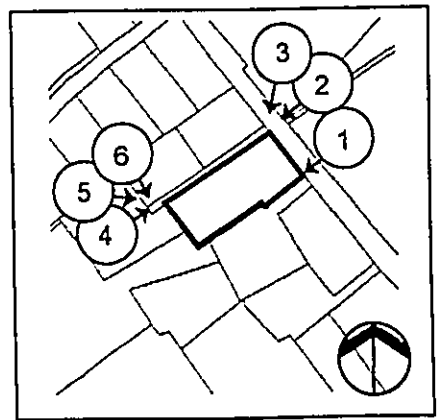


Photo 4: View along northwest boundary from western corner. Cemetery across Wainee Street visible in the distance.



Photo 5: View of paved and non-paved areas on the property.





entia driveway that abuts the

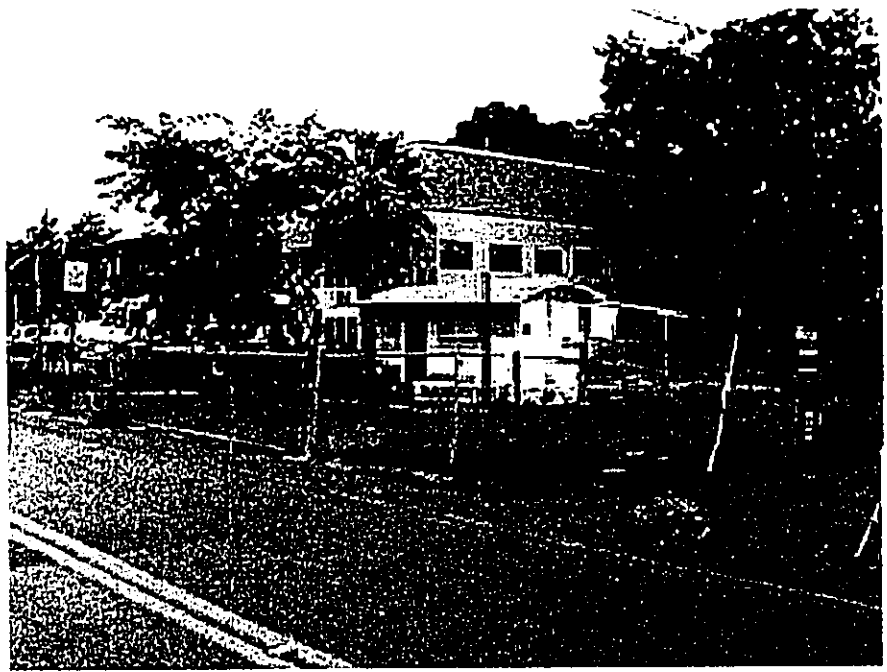
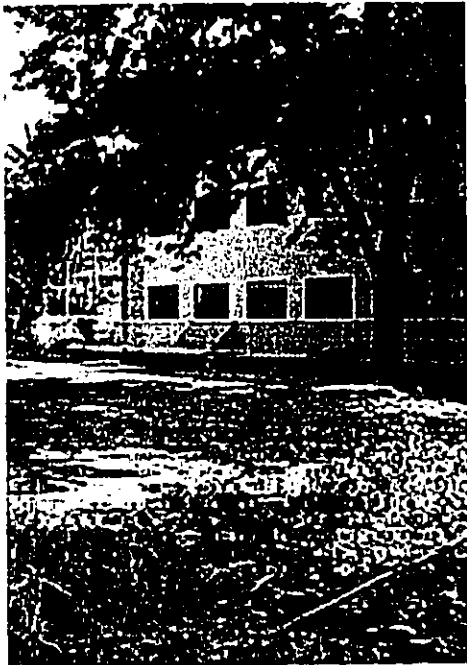


Photo 3: View of the north corner of the property. Commercial building on parcel 21 is visible behind the shed.



-paved areas on the property.



Photo 6: View along southwest boundary. Commercial building on parcel 21 overlooks site of proposed parking lot.

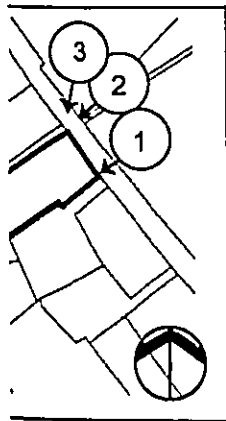

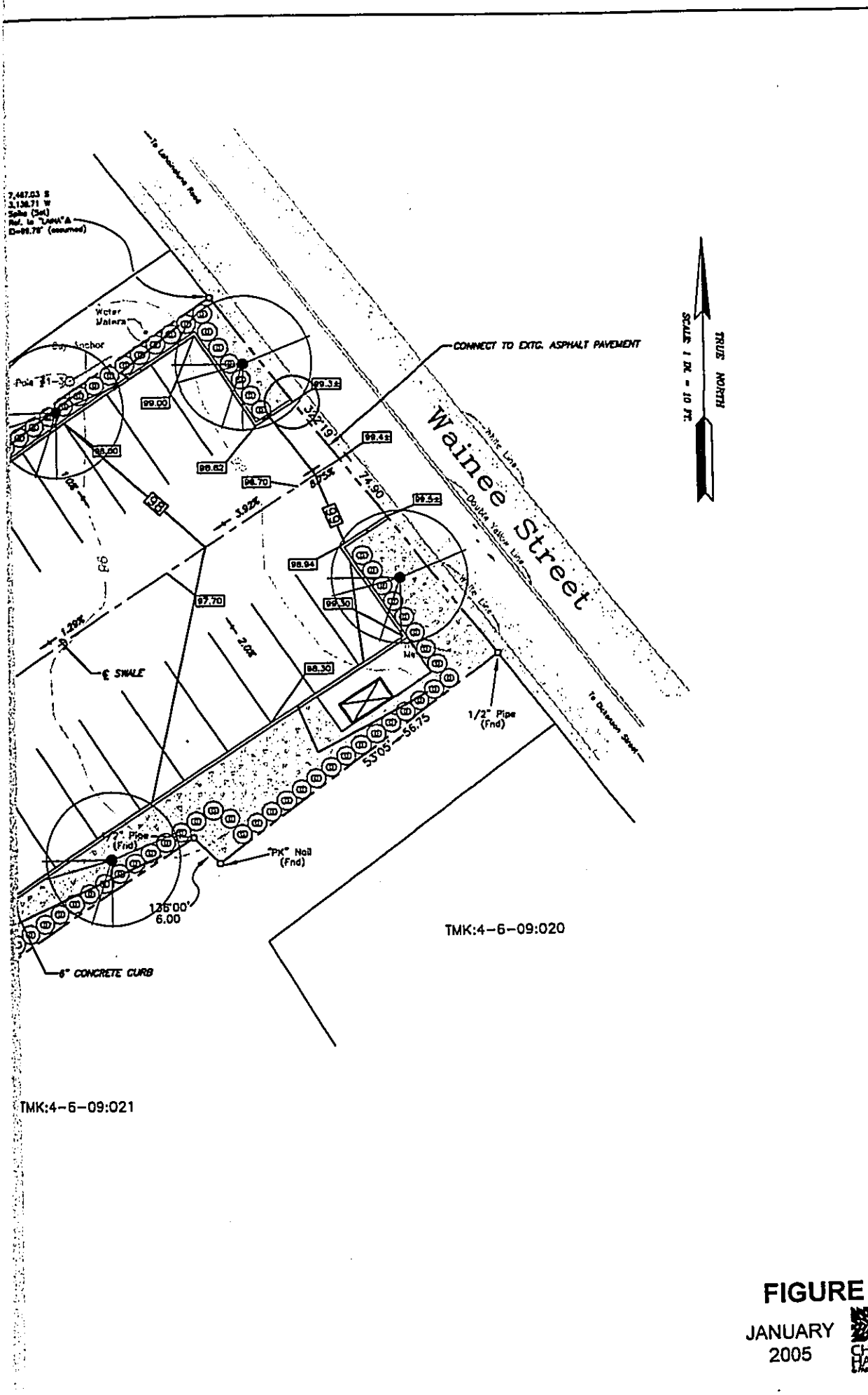


FIGURE 8

Photo taken 10/26/2004	JANUARY 2005	 CHRIS HART & PARTNERS
PHOTOGRAPHS Volcano Group Parking Lot		



OTOMO
 ENGINEERING, INC.
 CONSULTING CIVIL ENGINEERS
 200 S. HIGH STREET, STE. 102
 HONOLULU, HAWAII 96813
 PHONE: (808) 242-0032
 FAX: (808) 242-3779



THE WORK AND SERVICES OF ME OR UNDER MY SUPERVISION AND CONTROL IN CONNECTION WITH THIS PROJECT SHALL BE LIMITED TO THE SCOPE OF THE PROFESSIONAL ENGINEERING ACT AND THE RULES AND REGULATIONS OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS.

SIGNATURE _____ DATE _____
THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS OF THE JOB AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

VOLCANO LLC PARKING
 LAHANA, MAUI, HAWAII
 TMK: (2) 4-6-008: 024
 PRELIMINARY GRADING PLAN

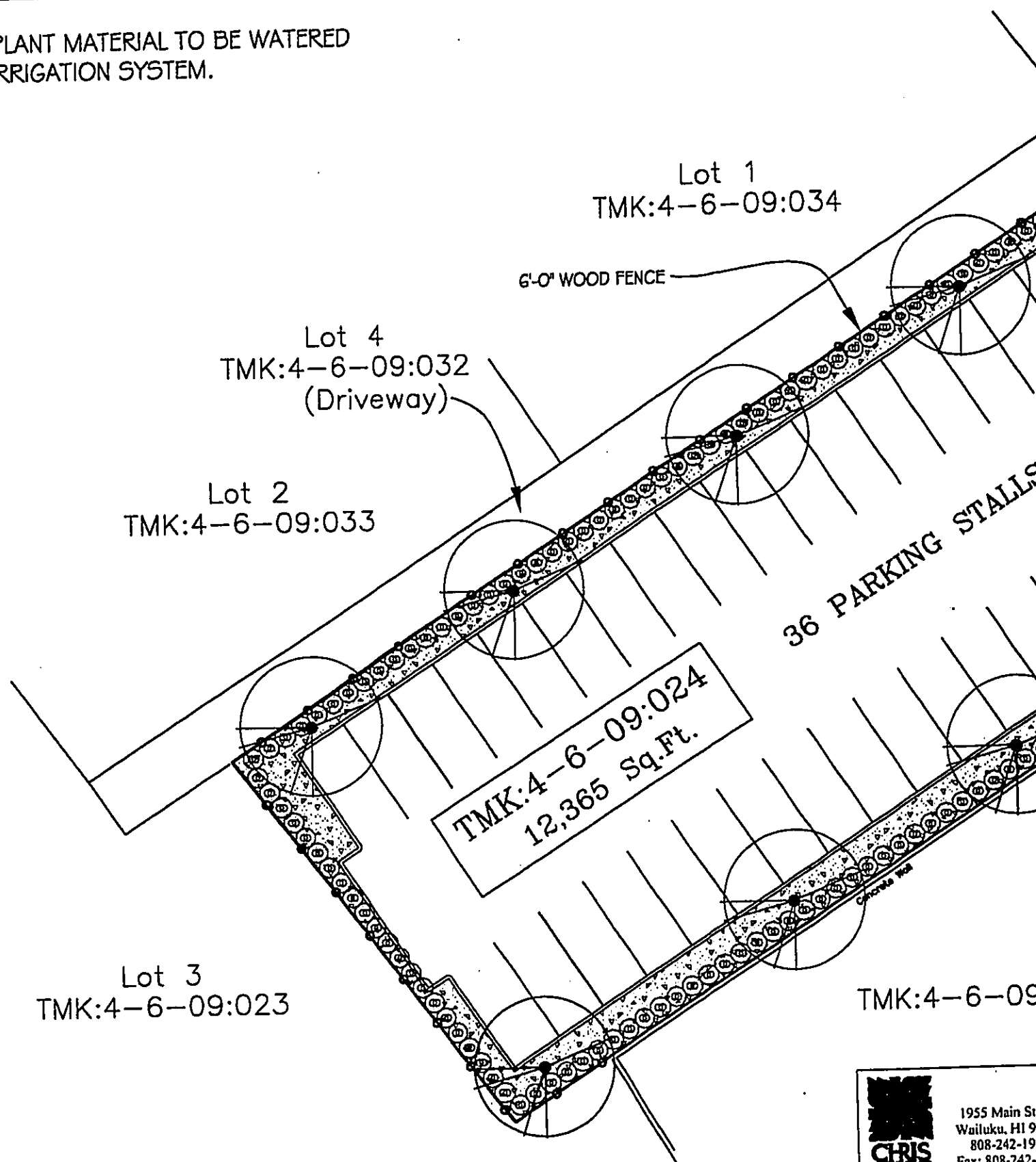
REVISION	DATE	NOTE
▲		
▲		
▲		
▲		
▲		
▲		

DESIGNED BY: M.M.M.
 CHECKED BY: S.A.O.
 PROJECT NO.: 2004-74
 DRAWING NAME: PRELM-GRAD
 DATE: 1-11-05

SHEET NO.
1
 OF SHEETS

FIGURE 9
 JANUARY 2005

NOTE: ALL LANDSCAPE PLANT MATERIAL TO BE WATERED USING AN AUTOMATIC IRRIGATION SYSTEM.



CHRIS HAKI & PARTNERS
1955 Main St
Wailuku, HI 9
808-242-19
Fax: 808-242-

TMK:4-6-09:017

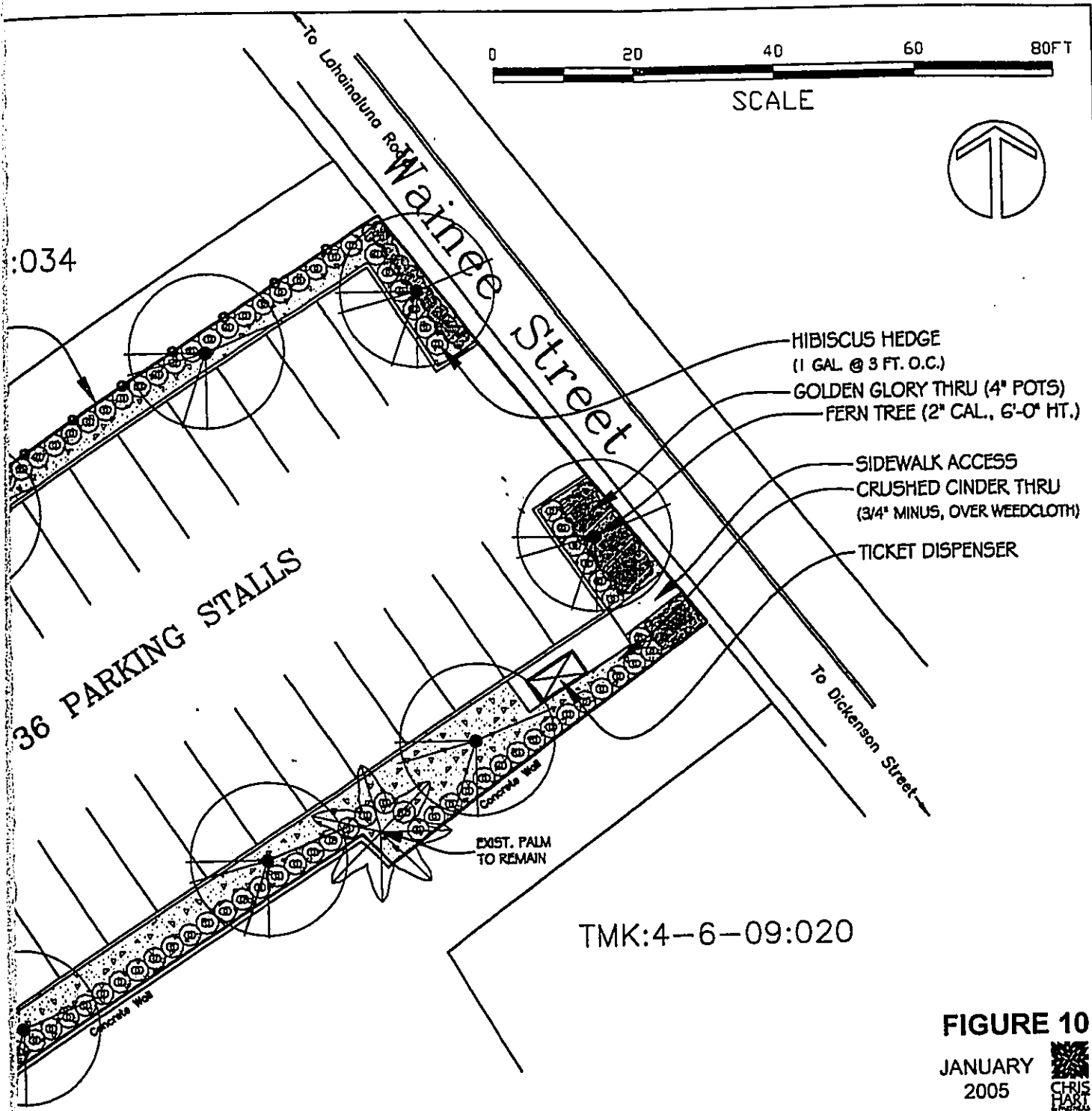


FIGURE 10
 JANUARY 2005

REVISED DEC. 28/04

TMK:4-6-09:021

	1955 Main Street Wailuku, HI 96793 808-242-1955 Fax: 808-242-1956		Volcano Group Maui, LLC Lahaina, Maui, Hawaii			
	PARKING LOT PLAN					
	Drawn/Checked DS RF	Proj. Num. 0000	Date DEC 1, 2004	Sheet 1 OF 1	Scale 1" = 20'	

APPENDICES

APPENDIX A
Ownership Documents



R-666 STATE OF HAWAII
 BUREAU OF CONVEYANCES
 RECORDED
 OCT 08, 2004 08:01 AM
 Doc No(s) 2004-207238



BY CARL T. WATANABE
 REGISTRAR OF CONVEYANCES
 CONVEYANCE TAX: \$825.00

20 1/4 Z3

LAND COURT SYSTEM	REGULAR SYSTEM
AFTER RECORDATION: RETURN BY MAIL (X) PICK UP ()	
FIRST HAWAIIAN BANK COMMERCIAL LOAN CENTER 2339 KAMEHAMEHA HWY RM 447 HONOLULU HI 96819 LYNETTE Y. TOYOTA	TG: 200439839-1 TGE: A4-101-3035 Barbara Paulo
Tax Map Key No. (2) 4-6-009-024	Total Pages: 8

WARRANTY DEED

KNOW ALL BY THESE PRESENTS:

THAT WAYNE RONSMAN, as Successor Trustee under that certain unrecorded Declaration of Trust dated October 21, 1983, with full powers to sell, mortgage, lease or otherwise deal with the land, and WAYNE J. RONSMAN, as Trustee for the Masao Nagasako Residuary Trust, with full powers to sell, mortgage, lease or otherwise deal with the land (collectively, "Grantor"), in consideration of TEN AND NO/100 UNITED STATES DOLLARS (U.S. \$10.00) and other valuable consideration paid by VOLCANO GROUP MAUL, LLC, a Hawaii limited liability company, whose post office address is 1111 Bishop Street, STE 505, Honolulu, Hawaii 96813 ("Grantee"), receipt whereof is hereby acknowledged, does hereby grant, bargain, sell and convey all of that certain real property more particularly described in Exhibit "A" attached hereto and expressly incorporated herein by this reference, unto Grantee, as TENANT IN SEVERALTY, in fee simple.

AND the reversions, remainders, rents, issues and profits thereof and all of the estate, right, title and interest of Grantor, both at law and in equity, therein and thereto;

TO HAVE AND TO HOLD the same, together with all rights, easements, privileges and appurtenances thereon and thereunto belonging or appertaining or held and enjoyed therewith, unto Grantee, absolutely and forever, according to the tenancy set forth hereinabove;

AND Grantor, in consideration of the premises, does hereby covenant and agree with Grantee that Grantor is lawfully seized in fee simple of said real property and rights; that the

same are free and clear of and from all encumbrances, except as described herein, and except for the lien of real property taxes not yet by law required to be paid; that Grantor has good right and title to sell and convey said real property as aforesaid; and that Grantor will WARRANT AND DEFEND the same unto Grantee forever against the lawful claims and demands of all persons.

AND the terms "Grantor" and "Grantee" as and when used herein or any pronouns used in place thereof, shall mean and include the masculine, feminine or neuter, the singular or plural number, individuals, trustees, partnerships, companies or corporations, and their and each of their respective successors, heirs, personal representatives, successors-in-trust, and assigns, according to the context thereof. All obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention shall be clearly expressed elsewhere herein.

AND each pertinent party hereto is executing this instrument solely in such party's capacity (or capacities, as the case may be) as Trustee(s) (or Co-Trustee(s) or Successor Trustee(s), as the case may be) as aforesaid, and is not assuming any personal liability in such party's individual capacity. Any recovery against each such pertinent party based on this instrument shall be limited to the assets of such party's Trust(s) referred to above.

AND the undersigned hereto agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and said counterparts shall together constitute one and the same instrument, binding all of the parties hereto, notwithstanding that all of the parties are not signatories to the original or the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of this instrument, duplicate, unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.

(The remainder of this page is intentionally left blank.)

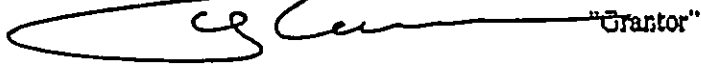
IN WITNESS WHEREOF, the parties hereto have executed these presents this 31st
day of August 2004

Wayne Ronsman



WAYNE RONSMAN, as Successor Trustee
aforesaid

Wayne Ronsman as Trustee aforesaid
WAYNE J. RONSMAN, as Trustee aforesaid

 "Grantor"

VOLCANO GROUP MAUI, LLC, a Hawaii
limited liability company

By Volcano Management Corp., a Hawaii
corporation

By _____
Name:
Title:

By _____
Name:
Title:

"Grantee"

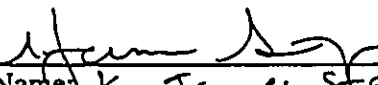
IN WITNESS WHEREOF, the parties hereto have executed these presents this _____
day of _____.

WAYNE RONSMAN, as Successor Trustee
aforesaid

WAYNE J. RONSMAN, as Trustee aforesaid
"Grantor"

VOLCANO GROUP MAUI, LLC, a Hawaii
limited liability company

By Volcano Management Corp., a Hawaii
corporation

By 
Name: K. James Steine, Jr.
Title: Vice President

By _____
Name:
Title:

"Grantee"

STATE OF ARIZONA

COUNTY OF Maricopa



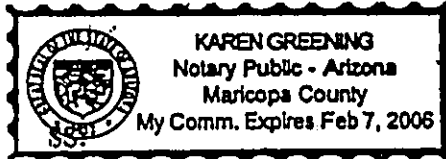
SS:

On this 31st day of August 2004, before me appeared WAYNE RONSMAN, as Successor Trustee under that certain unrecorded Declaration of Trust dated October 21, 1983, to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the free act and deed of such person(s), and if applicable, in the capacities shown, having been duly authorized to execute such instrument in such capacities.

Karen Greening
Name: Karen Greening
Notary Public, in and for said State
My commission expires: 2-7-06

STATE OF ARIZONA

COUNTY OF Maricopa



On this 31st day of August 2004, before me appeared WAYNE J. RONSMAN, as Trustee for the Masao Nagasaki Residuary Trust, to me personally known, who, being by me duly sworn or affirmed, did say that such person(s) executed the foregoing instrument as the free act and deed of such person(s), and if applicable, in the capacities shown, having been duly authorized to execute such instrument in such capacities.

Karen Greening
Name: Karen Greening
Notary Public, in and for said State
My commission expires: 2-7-06

EXHIBIT "A"


All of that certain parcel of land (being portion of the land(s) described in and covered by Land Commission Award 8559 to C. Kanaina) situate, lying and being on the southerly side of Wainee Street at Lahaina, Island and County of Maui, State of Hawaii, and thus bounded and described:

Beginning at a 1/2 inch pipe at the northerly corner of this lot, on the southerly side of Wainee Street, the coordinates of which referred to Government Survey Triangulation Station "LAINA" being 7,467.03 feet south and 3,138.71 feet west and running by azimuths measured clockwise from true South:

- | | | | |
|----|-------------|--------|---|
| 1. | 322° 19' | 74.90 | feet along the southerly side of Wainee Street to a 1/2 inch pipe; |
| 2. | 53° 05' | 56.75 | feet along Deed of Kamehameha IV to Sylva to a "+" cut on concrete; |
| 3. | 136° 00' | 6.00 | feet along Royal Patent 1692 and 662, Land Commission Award 5006, Apana 1 to Kalena to a 3/4 inch pipe (found); |
| 4. | 56° 47' 20" | 111.28 | feet along Royal Patent 1692 and 662, Land Commission Award 5006, Apana 1 to Kalena to a 1/2 inch pipe; |
| 5. | 143° 26' | 71.97 | feet along Royal Patent 1842, Land Commission Award 5017 to Kuahi and Royal Patent 1738, Land Commission Award 500 to Ukikihi to a 1 1/2 inch pipe (found); |
| 6. | 236° 35' | 167.41 | feet along Lot 4 (10 feet wide private roadway) to the point of beginning and containing an area of 12,365 square feet, more or less. |

Being the property conveyed to YOSHIE NAGASAKO, also known as JANE NAGASAKO, as Trustee under that certain unrecorded Declaration of Trust dated October 21, 1983, as to an undivided 23.5786% interest, and WAYNE J. RONSMAN, as Trustee for the Masao Nagasako Residuary Trust, as to an undivided 76.4214% interest, as Tenants in Common, by that certain Deed dated July 31, 1993, recorded at the Bureau of Conveyances of the State of Hawaii as Document No. 93-178676.

Notes: 1. The records in the Bureau of Health Statistics reveal the death of YOSHIE NAGASAKO on February 3, 1996 at Lahaina, Hawaii.

- 
2. Wayne Ronsman is Successor Trustee under said unrecorded Declaration of Trust dated October 21, 1983.

SUBJECT, HOWEVER, to the following:

1. Issuance of a patent of Land Commission Award Number 8559 to C. Kanaina.

END OF EXHIBIT "A"

EXHIBIT "A"
(Page 2 of 2)

APPENDIX B
Preliminary Drainage Report

PRELIMINARY DRAINAGE REPORT

FOR

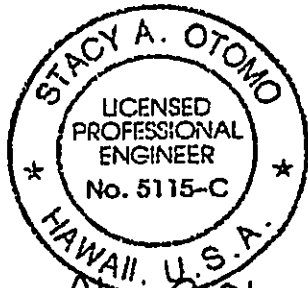
VOLCANO, LLC PARKING

Lahaina, Maui, Hawaii

T.M.K.: (2) 4-6-009: 024

Prepared For:

**Volcano, LLC
c/o Chris Hart & Partners
1955 Main St., Ste. 200
Wailuku, Maui, Hawaii 96793**



Stacy A. Otomo

Prepared By:



**CONSULTING CIVIL ENGINEERS
305 SOUTH HIGH STREET, SUITE 102
WAILUKU, MAUI, HAWAII 96793
PHONE: (808) 242-0032
FAX: (808) 242-5779**

January 2005

TABLE OF CONTENTS

- I. INTRODUCTION
- II. SITE LOCATION AND PROJECT DESCRIPTION
- III. EXISTING TOPOGRAPHY AND SOIL CONDITIONS
- IV. EXISTING DRAINAGE CONDITIONS
- V. FLOOD AND TSUNAMI ZONE
- VI. PROPOSED DRAINAGE PLAN
- VII. HYDROLOGIC CALCULATIONS
- VIII. CONCLUSION
- IX. REFERENCES

EXHIBITS

- 1 Location Map
- 2 Vicinity Map
- 3 Soil Survey Map
- 4 Flood Insurance Rate Map

APPENDICES

- A Hydrologic Calculations

**PRELIMINARY DRAINAGE REPORT
FOR
VOLCANO, LLC PARKING
Lahaina, Maui, Hawaii**

I. INTRODUCTION

The purpose of this report is to examine both the existing and proposed drainage conditions for the proposed project.

II. SITE LOCATION AND PROJECT DESCRIPTION

The subject parcel is identified as T.M.K.: (2) 4-6-009: 024 It is bordered by Wainee Street to the east, and existing homes to the north, south, and west. Approximately two-thirds of the parcel is covered by asphalt pavement. There is a wooden building in the middle of the paved area.

The proposed project includes constructing a 36 parking stall parking lot.

III. EXISTING TOPOGRAPHY AND SOIL CONDITIONS

The existing ground slopes generally in the northeast to southwest direction from elevation 100 feet above mean sea level along the northeast boundary to elevation 96 feet along the southwest boundary, with an average slope of approximately 1.9%.

According to the "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii (August, 1972)," prepared by the United States Department of Agriculture Soil Conservation Service, the soils within the project site are classified as Ewa silty clay loam (EaA). On this soil, runoff is very slow and the erosion hazard is no more than slight.

IV. EXISTING DRAINAGE CONDITIONS

Onsite runoff sheetflows generally in the northeast to southwest direction across the parcel. At the makai end of the existing pavement is a concrete swale which conveys a portion of the surface runoff from the pavement to an existing catch basin. The catch basin is connected to a small drywell which would temporarily store the surface runoff.

It is estimated that the present onsite runoff for a 50-year, 1-hour storm from the entire project site is 0.9 cfs.

V. FLOOD AND TSUNAMI ZONE

According to Panel Number 150003 0163C of the Flood Insurance Rate Map, August 3, 1998, prepared by the United States Federal Emergency Management Agency, the project site is situated in Flood Zone C. Flood Zone C represents areas of minimal flooding.

VI. PROPOSED DRAINAGE PLAN

After the development of the proposed project, it is estimated that the 50-year storm runoff will be 1.1 cfs, a net increase of 0.2 cfs. Onsite runoff will be intercepted by the proposed grated catch basin located at the makai end of the parking area. The runoff will be conveyed to a proposed onsite subsurface drainage system, which will be located beneath the paved parking. The subsurface drainage system consists of a perforated drainline embedded in crushed rock which will be wrapped with a layer of filter fabric. Surface runoff entering the perforated pipe will be allowed to exfiltrate into the ground. The system has been designed and sized to accommodate the increase in surface runoff volume from a 50 year storm created by the proposed project. Overflow from the proposed subsurface drain will continue downstream along the existing drainage pattern and will be no more than the existing surface runoff volume currently leaving the property.

The drainage design criteria shall be to minimize any alterations to the natural pattern of the existing onsite surface runoff.

VII. HYDROLOGIC CALCULATIONS

The hydrologic calculations are based on the "Drainage Master Plan for the County of Maui," and the "Rainfall Frequency Atlas of the Hawaiian Islands," Technical Paper No. 43, U.S. Department of Commerce, Weather Bureau.

Rational Formula Used: $Q = CIA$

Where Q = rate of flow (cfs)

C = rainfall coefficient

I = rainfall intensity for a duration equal to the time of concentration (inches/hour)

A = drainage area (Acres)

See Appendix A for Hydrologic Calculations

VIII. CONCLUSION

The proposed development is expected to generate a 50-year storm runoff of 1.1 cfs, with an increase of 0.2 cfs. Onsite runoff will be captured the proposed grated inlet catch basin and conveyed the a subsurface drain. Overflow from the subsurface drain will be released and allowed to continued downstream as exisiting surface runoff is doing.

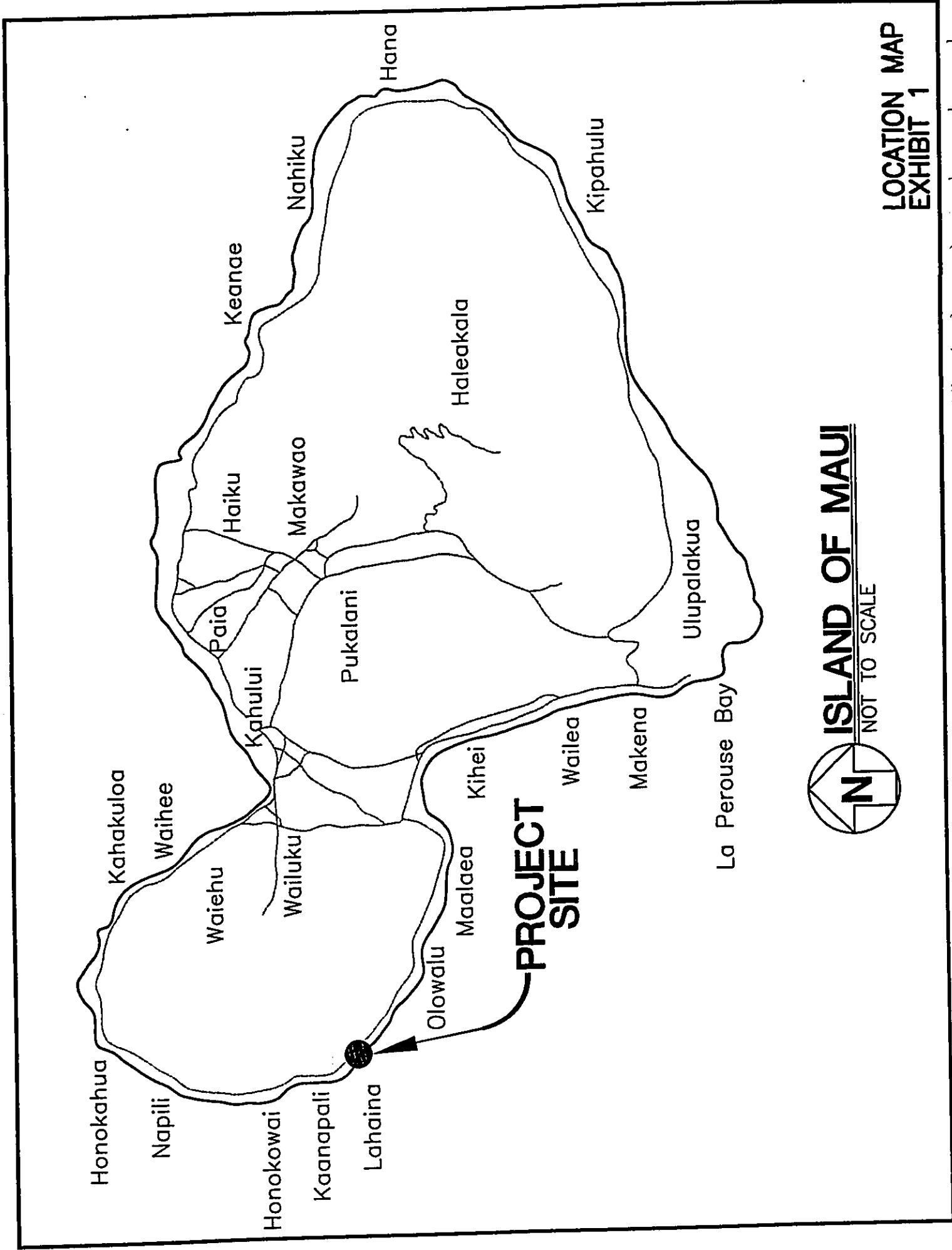
Therefore, it is our professional opinion that the proposed development will not have an adverse effect on the adjoining or downstream properties.

IX. REFERENCES

- A. Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii, prepared by U.S. Department of Agriculture, Soil Conservation Service, August, 1972.
- B. Erosion and Sediment Control Guide for Hawaii, prepared by U.S. Department of Agriculture, Soil Conservation Service, March, 1981.
- C. Rainfall-Frequency Atlas of the Hawaiian Islands, Technical Paper No. 43, U.S. Department of Commerce, Weather Bureau, 1962.
- D. Flood Insurance Rate Maps of the County of Maui, September, 1989.
- E. Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui, prepared by the Department of Public Works and Waste Management, County of Maui, 1995.

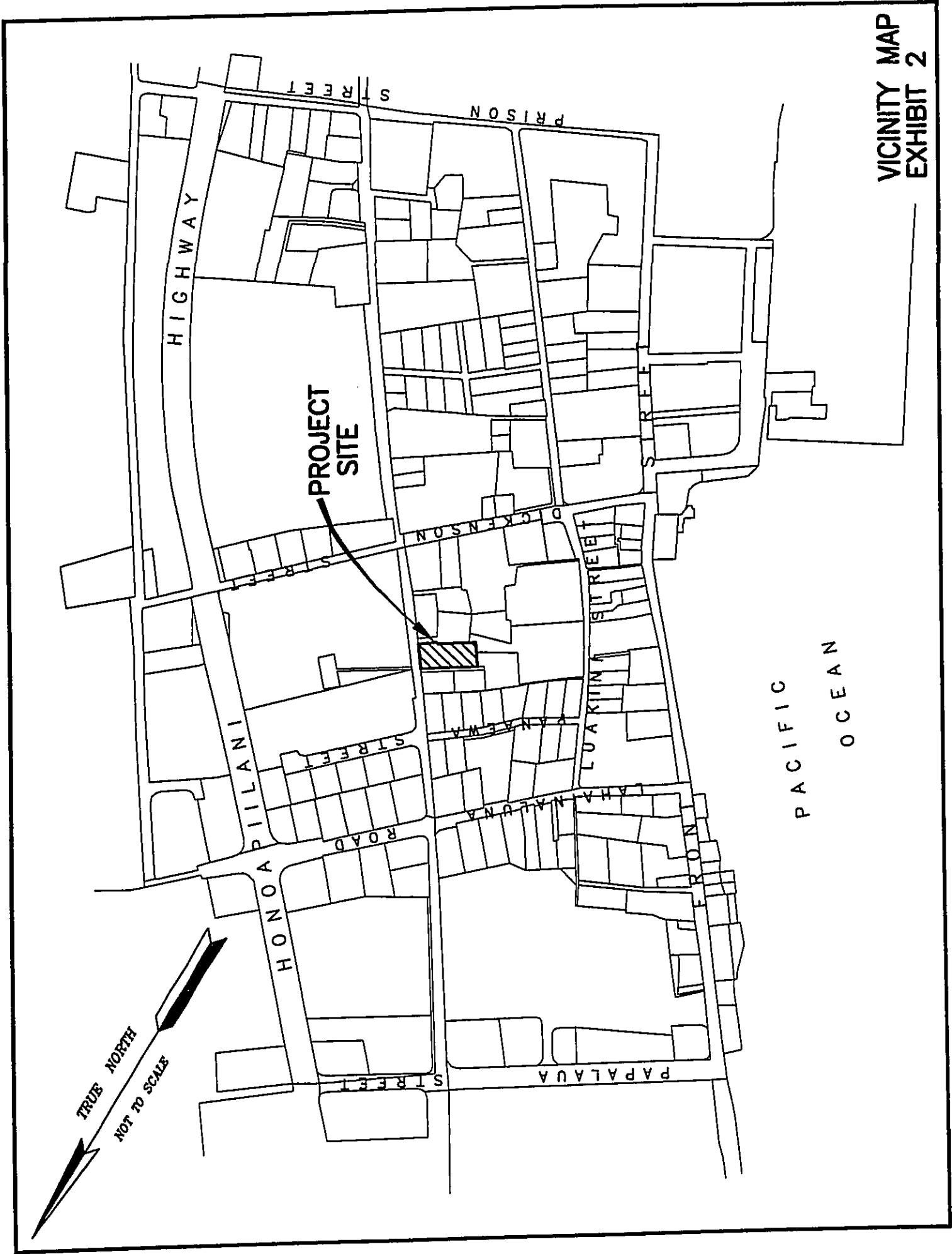
EXHIBITS

- 1 Location Map**
- 2 Vicinity Map**
- 3 Soil Survey Map**
- 4 Flood Insurance Rate Map**

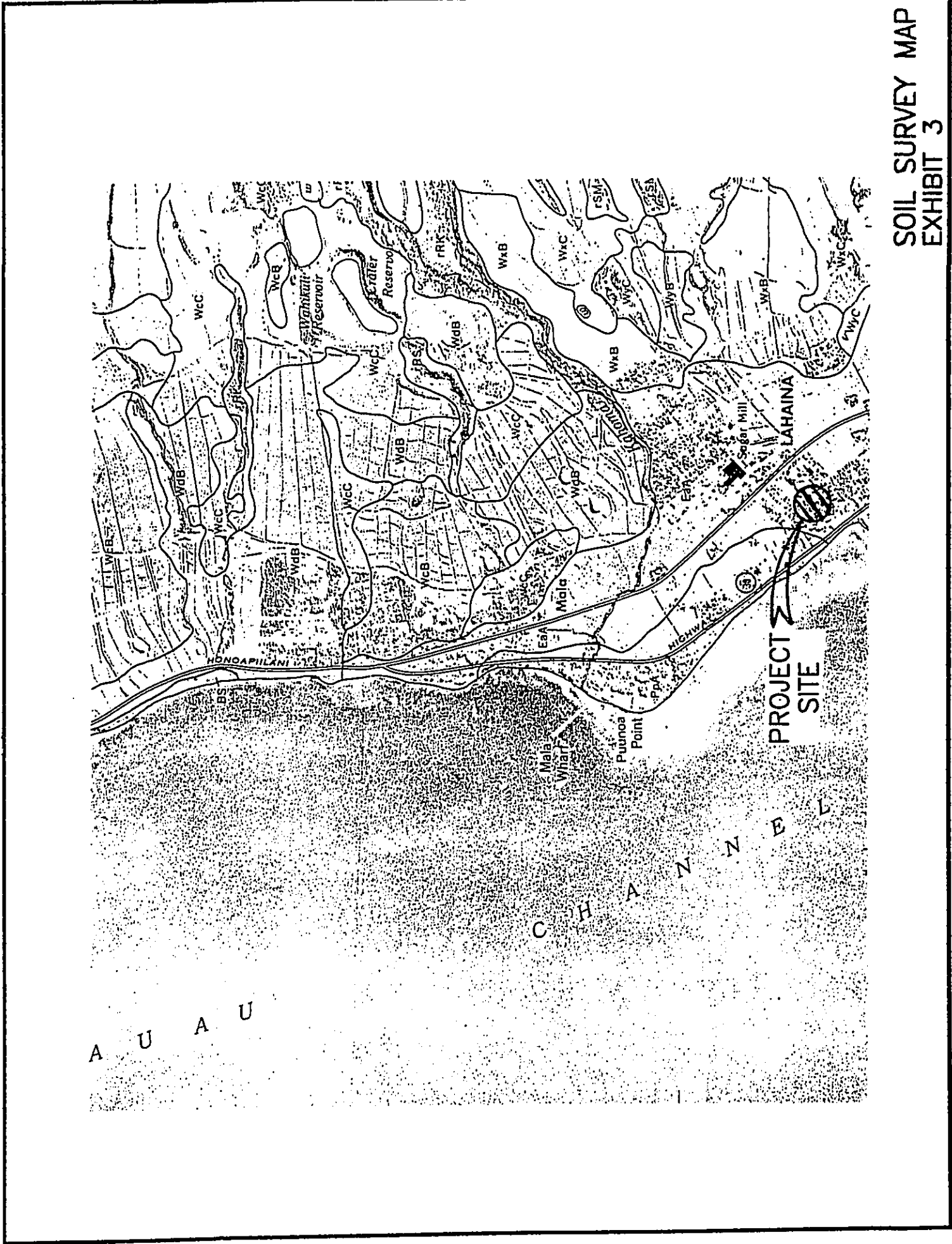


ISLAND OF MAUI
NOT TO SCALE

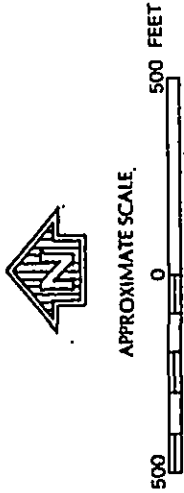
LOCATION MAP
EXHIBIT 1



VICINITY MAP
EXHIBIT 2



SOIL SURVEY MAP
EXHIBIT 3



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

MAUI COUNTY, HAWAII

PANEL 163 OF 400
(SEE MAP INDEX FOR PANELS NOT PRINTED)

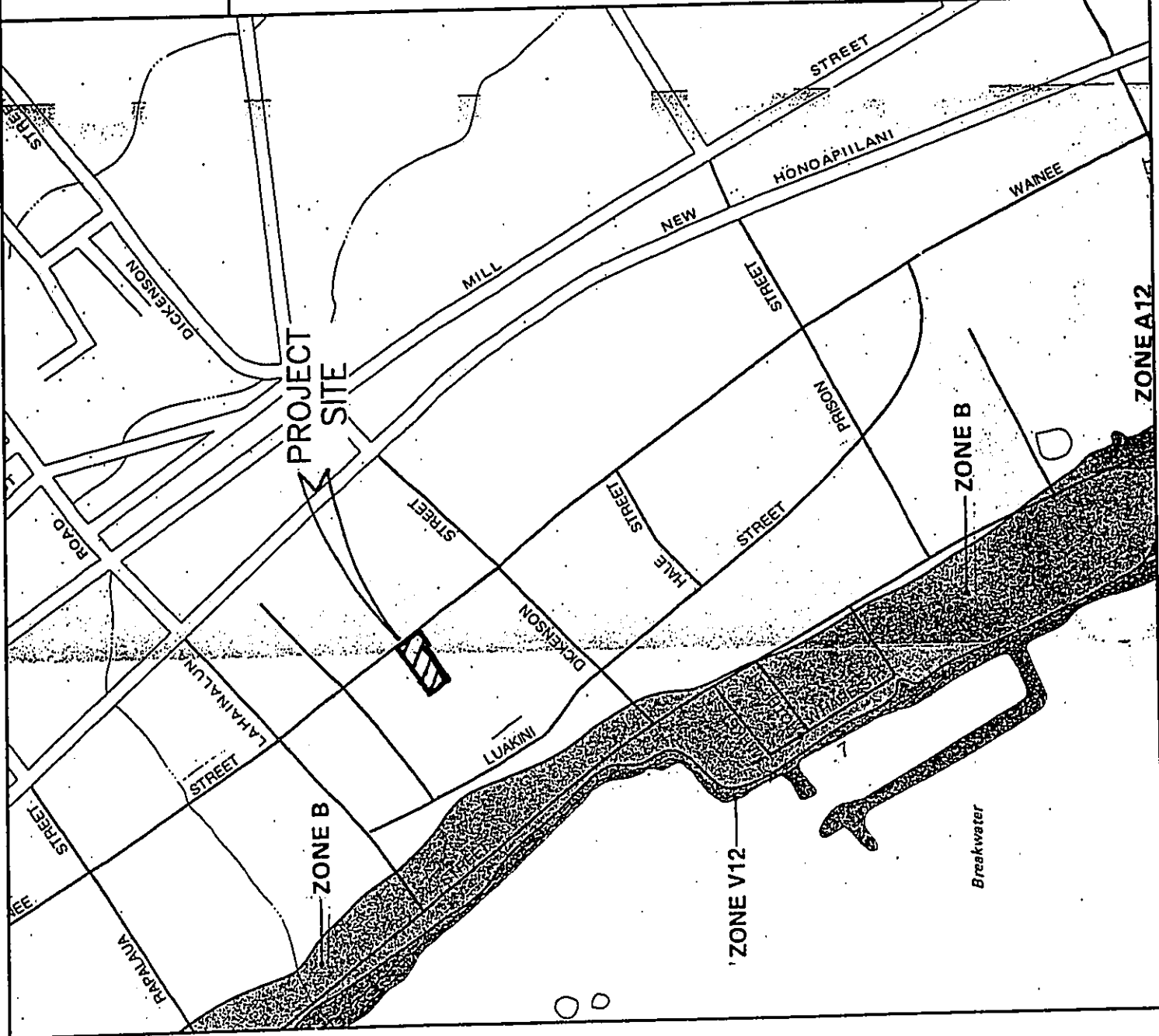
COMMUNITY-PANEL NUMBER
150003 0163 C

MAP REVISED:
AUGUST 3, 1998



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



PROJECT SITE

APPENDIX A
HYDROLOGIC CALCULATIONS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
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Hydrologic Calculations

Purpose: Determine the increase in surface runoff from the development of the proposed project based on a 50-year storm.

A. Determine the Runoff Coefficient (C):

UNDEVELOPED CONDITIONS:

Infiltration (High)	= 0.00
Relief (Flat)	= 0.00
Vegetal Cover (Good)	= 0.03
Development Type (Open)	= <u>0.15</u>
C	= 0.18

PAVEMENT AREAS:

Infiltration (Negligible)	= 0.20
Relief (Flat)	= 0.00
Vegetal Cover (None)	= 0.07
Development Type (Pavement)	= <u>0.55</u>
C	= 0.82

ROOF AREAS:

Infiltration (Negligible)	= 0.20
Relief (Steep)	= 0.08
Vegetal Cover (None)	= 0.07
Development Type (Roof)	= <u>0.55</u>
C	= 0.90

LANDSCAPED AREAS:

Infiltration (Medium)	= 0.07
Relief (Flat)	= 0.00
Vegetal Cover (Good)	= 0.03
Development Type (Landscape)	= <u>0.15</u>
C	= 0.25

EXISTING CONDITIONS:

$$\text{WEIGHTED C} = 0.59$$

DEVELOPED CONDITIONS:

$$\text{WEIGHTED C} = 0.70$$

- B. Determine the 50-year 1-hour rainfall:

$$i_{50} = 2.5 \text{ inches}$$

Adjust for time of concentration to compute Rainfall Intensity (I):

Existing Condition:

$$T_c = 9 \text{ minutes}$$

$$I = 5.3 \text{ inches/hour}$$

Developed Condition:

$$T_c = 8 \text{ minutes}$$

$$I = 5.6 \text{ inches/hour}$$

- C. Drainage Area (A) = 0.28 Acres

- D. Compute the 50-year storm runoff volume (Q):

$$Q = CIA$$

Existing Conditions:

$$\begin{aligned} Q &= (0.59)(5.3)(0.28) \\ &= 0.9 \text{ cfs} \end{aligned}$$

Developed Conditions:

$$\begin{aligned} Q &= (0.70)(5.6)(0.28) \\ &= 1.1 \text{ cfs} \end{aligned}$$

The increase in runoff due to the proposed development is $1.1 - 0.9 = 0.2$ cfs.

APPENDIX C
Zoning and Flood Confirmation Form



COUNTY OF MAUI
DEPARTMENT OF PLANNING
ZONING AND FLOOD CONFIRMATION REQUEST FORM

APPLICANT: Chris Hart & Partners, Inc. TELEPHONE: 242-1955
 ADDRESS: _____
 PROJECT NAME: Volcano Group Parking Lot
 ADDRESS AND/OR LOCATION: 741 Wainee Street, Lahaina
 TMK: NUMBER(S): 4-6-009:024

ZONING INFORMATION

STATE LAND USE Urban COMMUNITY PLAN B Commercial, Business
 COUNTY ZONING B-2 Community Business

OTHER SPECIAL DISTRICTS

- Special Management Area
- Shoreline Setback Area
- Country Town Design District
- Lahaina National Historic Landmark District
- Maui Redevelopment Area
- Other _____

FLOOD INFORMATION

FLOOD HAZARD AREA* ZONE C

BASE FLOOD ELEVATION _____ MEAN SEA LEVEL, 1929 NATIONAL GEODETIC
 VERTICAL DATUM OR FOR FLOOD ZONE A0, FLOOD DEPTH _____

FLOODWAY []Yes []No

FLOOD DEVELOPMENT PERMIT IS REQUIRED []Yes []No

*For FLOOD HAZARD AREA ZONES B OR C; A FLOOD DEVELOPMENT PERMIT would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

FOR COUNTY USE ONLY

REMARKS /COMMENTS : _____
 Additional information required.
 Information submitted is correct.
 Correction has been made and initialed.

REVIEWED AND CONFIRMED BY :

 SIGNATURE DATE
 ZONING ADMINISTRATION AND ENFORCEMENT DIVISION

APPENDIX D
Valuation/Cost Estimate

Rory,

Here's the anticipated cost for the project:

Demolition	\$ 10,000
Fine Grading	6,000
2" A.C. Pavement	12,000
6" Untreated Base	17,000
Grated Catch Basin	4,500
36" Perforated Drain	7,500
Concrete Curb	6,000
Striping & Signage	2,000

ESTIMATED COST \$ 65,000

Electrical: \$30,000
Landscape and irrigation: \$9,500

TOTAL ESTIMATED: \$104,500

OTOMO ENGINEERING, INC.
305 S. High Street, Suite 102
Wailuku, Hawaii 96793
Phone: (808)242-0032
Fax: (808)242-5779

APPENDIX E
Comment Letters and Responses

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENGINEERING
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KABOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

September 12, 2005

Michael Dega, Ph.D.
Scientific Consultant Services
711 Kapiolani Blvd. Suite 975
Honolulu, HI 96813

LOG NO: 2005.1808
DOC NO: 0509MK13

Dear Dr. Dega:

SUBJECT: Historic Preservation Review - 6E-42 - Archaeological Inventory Survey Special Management Area Assessment and HRS Chapter 343 Environmental Assessment for the Proposed Volcano Group Parking Lot (Subject I.D.: EA 2005/0001 and SMX 2005/0041) Panaewa Ahupuaa, Lahaina District, Maui TMK: (2) 4-6-009:024

Thank you for the opportunity to review this report which our staff received on July 26, 2005 (Morawski and Dega 2005, *An Archaeological Inventory Survey on An Approximately 12,365 Foot² Property Located on Wainee Street in Lahaina, Ahupuaa of Panaewa, District of Lahaina, Maui Island, Hawaii [TMK (2) 4-6-009:024]*)... Scientific Consultant Services, Inc., ms. We have previously commented on the above application and recommended an archaeological inventory prior to initiation of plans for the 36 stall asphalt concrete parking lot with pay station, landscaping and a 6-foot high wooden fence.

The background section acceptably establishes the ahupuaa settlement pattern and predicts the likely site pattern in the project area. The historical information provided summarizes the history of the post-contact period land uses. The summary of previous archaeological work in the area provides a baseline for the current work. The parcel consists of a single Land Commission Award, LCA 8559, belonging to C Kanaina, and awarded as a house lot. The general area is within the Historic Lahaina District, comprising the port town of the 1800s, as well as remnants of habitation and agricultural use from the pre-contact period.

The survey has adequately covered the project area documenting one historic property in the project area. Subsurface testing consisted of the excavation of seven backhoe trenches. SIHP 50-50-03-5701 consists of an historic habitation deposit, with three features. Feature 1 consisted of a subsurface scatter immediately beneath the modern grass layer at the south end of Stratigraphic Trench 1. Bottle glass, stoneware, porcelain, and faunal materials were identified. Feature two was

Michael Dega
Page 2

identified within Stratigraphic Trench 2 and consisted of an amorphous pit comprised of charcoal flecking, along with historic glass, ceramic and metal materials. The charcoal flecking is consisted with refuse burning, and the majority of the artifacts date to the 1920s and 1930s. Subsurface Feature 3 was located within Stratigraphic Trench 7 and consisted of sparse ornamental glass, again reflecting historic habitation use of the subject parcel. Several rounded small basalt cobbles were utilized to fill the feature pit, which has been interpreted as a possible posthole.

We concur that Site 50-50-03-5701 is significant under Criterion "D" and has the potential to yield information important to understanding the prehistory and history of the area.

We also agree that monitoring is an appropriate mitigation to alleviate impacts to historic properties during construction. We will await the submittal of an archaeological monitoring plan.

We find this report to be acceptable. As always, if you disagree with our comments or have questions, please contact Dr. Melissa Kirkendall (Maui/Lanai SHPD 243-5169) as soon as possible to resolve these concerns.

Aloha,


MELANIE A. CHINEN, Administrator
State Historic Preservation Division

MK: kf

c: Bert Ratte, DPWEM, County of Maui
Michael Foley, Director, Dept of Planning, 250 S. High Street, Wailuku, HI 96793
Maui Cultural Resources Commission, Dept. of Plng, 250 S. High Street, Wailuku, HI 96793
Rory Frampton, Chris Hart and Partners, FAX 242-1956
Raymond Cabebe, Chris Hart and Partners, FAX 242-1956

May-12-05 02:24pm From-DEPT OF PLANNING COUNTY OF MAUI

808-242819

T-598 P.01/02 F-015

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GOVERNOR OF HAWAII



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ROBERT MASUDA
DEPUTY DIRECTOR - LAND

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

05 MAY 12 P1:31

DEPT OF PLANNING
COUNTY OF MAUI
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
801 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

Post-it® Fax Note	7671	Date	5/12	# of pages	2
To	R. CABEBE	From	K. CAGGIO		
Co./Dept		Co.			
Phone #		Phone #			
Fax #		Fax #			

May 6, 2005

Mr. Michael Foley, Planning Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

LOG NO: 2005.0943
DOC NO: 0505CD08

Dear Mr. Foley,

SUBJECT: Chapter 6E-42 Historic Preservation Review – Applications for Special Management Area Assessment and HRS Chapter 343 Environmental Assessment for the Proposed Volcano Group Parking Lot (Subject I.D.: EA 2005/0001 and SMX 2005/0041) Lahaina, Lahaina District, Island of Maui TMK: (2) 4-6-009:024

Thank you for the opportunity to review and comment on the Applications for Special Management Area Assessment (SMX) and HRS Chapter 343 Environmental Assessment (EA) for the proposed Volcano Group Parking Lot, which was received by our staff on March 10, 2005. A search of our records indicates an archaeological inventory survey has not been conducted of the subject property.

Based on the submitted documents, we understand the proposed undertaking consists of the construction of a 36-stall asphalt concrete parking lot with a pay station, landscaping, and a 6-foot high wooden fence. We further understand the subject property is currently vacant and has been used in the past for vehicle storage and various small businesses.

A search of our records indicates an archaeological inventory survey has not been conducted of the subject property. The project area is located within the boundaries of the Historic Lahaina District (SIHP 50-50-03-3001), which comprises the port town of the 1800s and is likely to have once been the location of pre-contact farming and perhaps scattered houses. Our records indicate the subject property and the surrounding area was very significant during the historic period. Evidence of this includes Land Court Awards which were issued for this property and the surrounding properties during the Mahele of the 1850s; the Roman Catholic Church property on adjacent parcel 21 formerly belonged to Kamehameha IV; and the Historic Aus Site (SIHP 50-50-03-1797), which consists of ten subsurface pit features containing materials dating to the

Mr. Michael Foley, Planning Director
Page 2

historic period, is located on the parcel immediately east and adjacent to this property. Thus, we do not concur with submitted EA which states on page 10 that given the previous land alterations conducted on the property that "...it is unlikely that sub-surface archaeological or cultural resources will be discovered or disturbed during construction...).

Given the above information, we believe it is likely historic sites and/or the remnants of previously disturbed sites may be present in the subsurface deposits of this property. Therefore, in order to determine the effect of the proposed undertaking on historic sites, we recommend that no action be taken on the subject SMX application until an archaeological inventory survey has been conducted of the subject property to determine whether significant historic sites are present. An acceptable report documenting the findings of the survey will need to be submitted to this office for review. If significant historic sites are identified, a mitigation plan may need to be developed, in consultation with this office, and executed.

If you have any questions, please call Cathleen A. Dagher at 692-8023.

Aloha,

Nathan Noyche

for Melanie Chinen, Administrator
State Historic Preservation Division

CD:jen

LINDA LINGLE
GOVERNOR OF HAWAII



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186
E-mail: ceqc@health.state.hi.us

April 8, 2005

Mr. Michael Foley
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Foley:

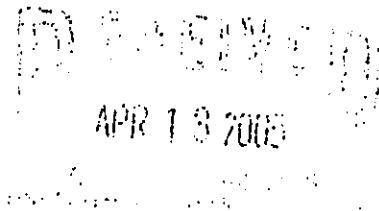
Subject: Draft EA for the Volcano Group Parking Lot, Lahaina

Thank you for the opportunity to review the subject document. We have no comments. Should you have any questions, please call Jeyan Thirugnanam at 586-4185.

Sincerely,

Genevieve Salmonson
Genevieve Salmonson
Director

c: Chris Hart and Partners





05 MAR -3 11 59

DEPT OF PLANNING
COUNTY OF MAUI

TRANSMITTAL

RECEIVED

TO: Mr. Michael W. Foley, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

DATE: March 2, 2005
PROJECT: Volcano Group
Parking Lot Draft EA
& SMA Assessment
(EA 2005/0001, SMX
2005/0041)
SUBJECT: Revised Assessment

Attention: Kivette Caigoy

THE FOLLOWING ARE ENCLOSED:

	FOR APPROVAL	FOR YOUR USE	AS REQUESTED
x	FOR YOUR REVIEW AND COMMENT	FOR YOUR INFORMATION	OTHER

COPIES	DATE	DESCRIPTION
2	01/2005	Draft EA & SMA Assessment for Volcano Group Parking Lot (revised)

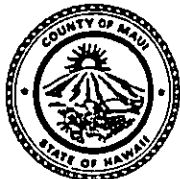
REMARKS:

Kivette,
Impacts to cultural resources are addressed in Section III.A.7 "Archaeological/Historical Resources" on page 10.
Please call if you have any questions.

COPY TO:

BY: Raymond Cabebe

ALAN M. ARAKAWA
Mayor
MICHAEL W. FOLEY
Director
WAYNE A. BOTEILHO
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

February 22, 2005

RECEIVED
FEB 28 2005

CLERK OF THE COUNTY OF MAUI
LAND USE & PLANNING DIVISION

Mr. Rory Frampton
Chris Hart & Partners
1955 Main Street, Ste 200
Wailuku, HI 96793

Dear Mr. Frampton;

RE: Pre-Consultation for the Draft Environmental Assessment for the Proposed Volcano Group Parking Lot located at TMK: 4-6-009: 024, 741 Wainee Street, Lahaina, Island of Maui, Hawaii (EA 2005/0001) (SMX 2005/0041)

The Maui County Planning Department (Department) has reviewed the above-referenced document and requires that the following information be addressed in the Draft EA in order to continue processing the document:

- A Cultural Impact Assessment.

Thank you for your cooperation. Should you require further clarification, please contact Ms. Kivette Caigoy, Environmental Planner, at 270-7735.

Sincerely,

A handwritten signature in black ink that reads "M. W. Foley".

MICHAEL W. FOLEY
Planning Director

MWF:KAC:dm

c: Wayne Boteilho, Deputy Planning Director
Kivette Caigoy, Environmental Planner
Livit Callentine, Staff Planner
EA Project File
General File
K:\WP_DOCS\PLANNING\EA\2005\0001_VolcanoParkingLot\preconsultationcomments.wpd

APPENDIX F
Archaeological Inventory Survey

SCS Project 584-1

**AN ARCHAEOLOGICAL INVENTORY SURVEY
ON AN APPROXIMATELY 12,365 FOOT² PROPERTY
LOCATED ON WAINEE STREET IN LAHAINA,
AHUPUA'A OF PANAWEA, DISTRICT OF LAHAINA,
MAUI ISLAND, HAWAII
[TMK (2) 4-6-009:024]**

Prepared by:
Lauren Morawski B.A.
and
Michael F. Dega Ph.D.
July 2005

Prepared for:
Volcano Group Maui LLC
1111 Bishop Street, Suite 505
Honolulu, HI 96813

SCIENTIFIC CONSULTANT SERVICES Inc.


711 Kapiolani Blvd. Suite 975 Honolulu, Hawaii 96813

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ABSTRACT

Archaeological Inventory Survey was performed on an approximately 12,365 square feet lot located on Wainee Street in Lahaina. The survey consisted primarily of subsurface testing using a mechanical excavator. During the course of excavation one subsurface scatter and two subsurface pit features were recorded. Both the subsurface scatter collection and the pit features contained historic materials likely related to habitation in the area during the late 1920s through the 1930s. Subsurface Feature 2 contained bottles and bottle fragments, both whiteware bowl rim and base ceramic sherds, a metal *o`o* (hoe), charcoal, and a fragment of a plastic comb. Subsurface Feature 3 contained glass fragments, possibly candle holder or lamp chimney, and a large quantity of homogenous small rounded basalt cobbles. This feature has been interpreted as a lua (outhouse) or possibly a posthole. The subsurface scatter yielded glass bottles, glass bottle fragments, stoneware sherds, whiteware sherds, porcelain sherds, and indiscriminate faunal materials. These three features have been subsumed under the State Site 50-50-04-5701.

TABLE OF CONTENTS

ABSTRACT.....	ii
TABLE OF CONTENTS.....	iii
LIST OF FIGURES	iv
INTRODUCTION	1
PROJECT AREA DESCRIPTION/ENVIRONMENTAL SETTING	5
LOCATION	5
GEOLOGY, SOILS, AND VEGETATION.....	5
TRADITIONAL AND HISTORIC SETTING.....	6
TRADITIONAL SETTING.....	6
LAND TENURE.....	8
POST <i>MÁHELE</i> LAND USE	10
PREVIOUS ARCHAEOLOGY IN NEARBY PARCELS	15
METHODOLOGY	18
FIELD METHODS.....	18
LABORATORY METHODS.....	20
ARCHAEOLOGICAL INVENTORY SURVEY RESULTS.....	20
SURVEY.....	20
SUBSURFACE TESTING.....	22
Stratigraphic Trench 1 (ST-1).....	22
Stratigraphic Trench 2 (ST-2).....	23
Stratigraphic Trench 3 (ST-3).....	23
Stratigraphic Trench 4 (ST-4).....	26
Stratigraphic Trench 5 (ST-5).....	26
Stratigraphic Trench 6 (ST-6).....	28
SUBSURFACE FEATURE 2 (SF-2)	28
Stratigraphic Trench 7 (ST-7).....	31
SUBSURFACE FEATURE 3 (SF-3)	31
DISCUSSION AND CONCLUSIONS	31
SIGNIFICANCE ASSESSMENTS AND RECOMMENDATIONS.....	35
REFERENCES	36

LIST OF FIGURES

Figure 1: USGS Map (Lahaina Quadrangle) of Project Area..... 2

Figure 2: Tax Map Key [TMK 4-6-009] Depicting the Project Area and State Site 50-50-04-1797 (Aus Site). 3

Figure 3: Construction Plan View Depicting Stratigraphic Trench and Subsurface Feature Locations..... 4

Figure 4: Section Profile 1 of Archaeological Sites Along Front Street..... 11

Figure 5: Sectional Profile 2 of Archaeological Sites Along Front Street..... 12

Figure 6: General Land Use Map of Lahaina in 1884. 13

Figure 7: General Land Use Map of Lahaina in 1914. 14

Figure 8: Photo 1 Showing Aus Site (from Fredericksen 1988)..... 16

Figure 9: Photo 2 Showing Aus Site (from Fredericksen 1988)..... 16

Figure 10: General Overview Project Area. View to North. 19

Figure 11: ST-1 Artifacts. 21

Figure 12: Overview of Drainage Box and Septic Area. 21

Figure 13: Wooden Structure on Property. 22

Figure 14: ST-1 Northwest Profile. 23

Figure 15: ST-2 Post-excavation. 24

Figure 16: ST-2 Southeast Profile..... 24

Figure 17: ST-3 Post-excavation. 25

Figure 18: ST-3 North Profile..... 25

Figure 19: ST-4 Pre-excavation. View to Northeast..... 26

Figure 20: ST-4 Profile West..... 27

Figure 21: ST-4 Southeast Profile with Trash. 27

Figure 22: ST-5 Profile South..... 28

Figure 23: ST-6 Profile Showing SF-2. 29

Figure 24: ST-6 Profile Showing SF-2. View to West. 30

Figure 25: ST-6 Artifacts. 30

Figure 26: ST-7 View North. 32

Figure 27: ST-7 Profile East. 32

Figure 28: ST-7 Profile Showing SF-3. 33

Figure 29: ST-7 Profile with SF-3 in View. 34

Figure 30: ST-7 Artifacts..... 34

INTRODUCTION

Scientific Consultant Services (SCS), Inc. conducted Archaeological Inventory Survey on an approximately 12,365 square foot parcel located within the Lahaina Historic District (State Site 50-50-03-3001), *ahupua`a* of Panaewa, Lahaina District (formerly Kaanapali District), Maui Island, Hawai`i [TMK: (2) 4-6-009:24] (Figures 1 and 2). Fieldwork consisted primarily of subterranean mechanical testing, though it also included a pedestrian survey of the parcel. SCS personnel Laura O'Rourke, Ph.D., and Lauren Morawski, B.A., conducted fieldwork in June 2005. Michael Dega, Ph.D., was the Principal Investigator.

Archaeological Inventory Survey of the project area was conducted to determine the presence/absence of archaeological sites and cultural deposits in subsurface contexts through mechanical testing of undisturbed sections of the parcel. The objectives of the Inventory Survey were to determine if significant archaeological sites occurred on the parcel and to provide recommendations to the State Historic Preservation Division (SHPD) concerning site mitigation within the project area environs. The project area had not formerly undergone any archaeological investigations and in order to obtain applications for development within the Special Management Area an Archaeological Inventory Survey was required by the State of Hawai`i Department of Land and Natural Resources (Doc No: 0505CD08). The likelihood of finding sites was very high as the subject parcel and the surrounding area are documented in Land Court Awards (LCAs), which were issued for the property and all surrounding properties. In addition numerous other historical records indicate the general area of the parcel as areas of habitation for *ali`i* and *maka`ānana*, as well as foreigners both during traditional times and later after contact particularly during the height of the whaling industry centered in and around Lahaina town. The property directly to the east was documented in 1988 and is known as the Aus Site, State Site 50-50-03-1797 (Fredericksen 1988). In addition to the fieldwork, survey and subterranean testing, historical and archaeological background research was conducted in order to determine the most concise history of the parcel.

One new archaeological site, consisting of three features, was recorded on the parcel during the survey (Figure 3). This site, which was subsequently assigned State Site Number 50-50-04-5701, consisted of two subterranean pit features and a subsurface scatter of historic debris. The site was likely used for habitation. The identified features were used for trash deposition in relation to this habitation feature. In general, glass samples collected from the subsurface scatter and one of the pit features fell into the 1920s and '30s time frame. Additionally, one glass bottle sample recovered from a subterranean pit was dated to 1904 to 1907. However, a plastic comb

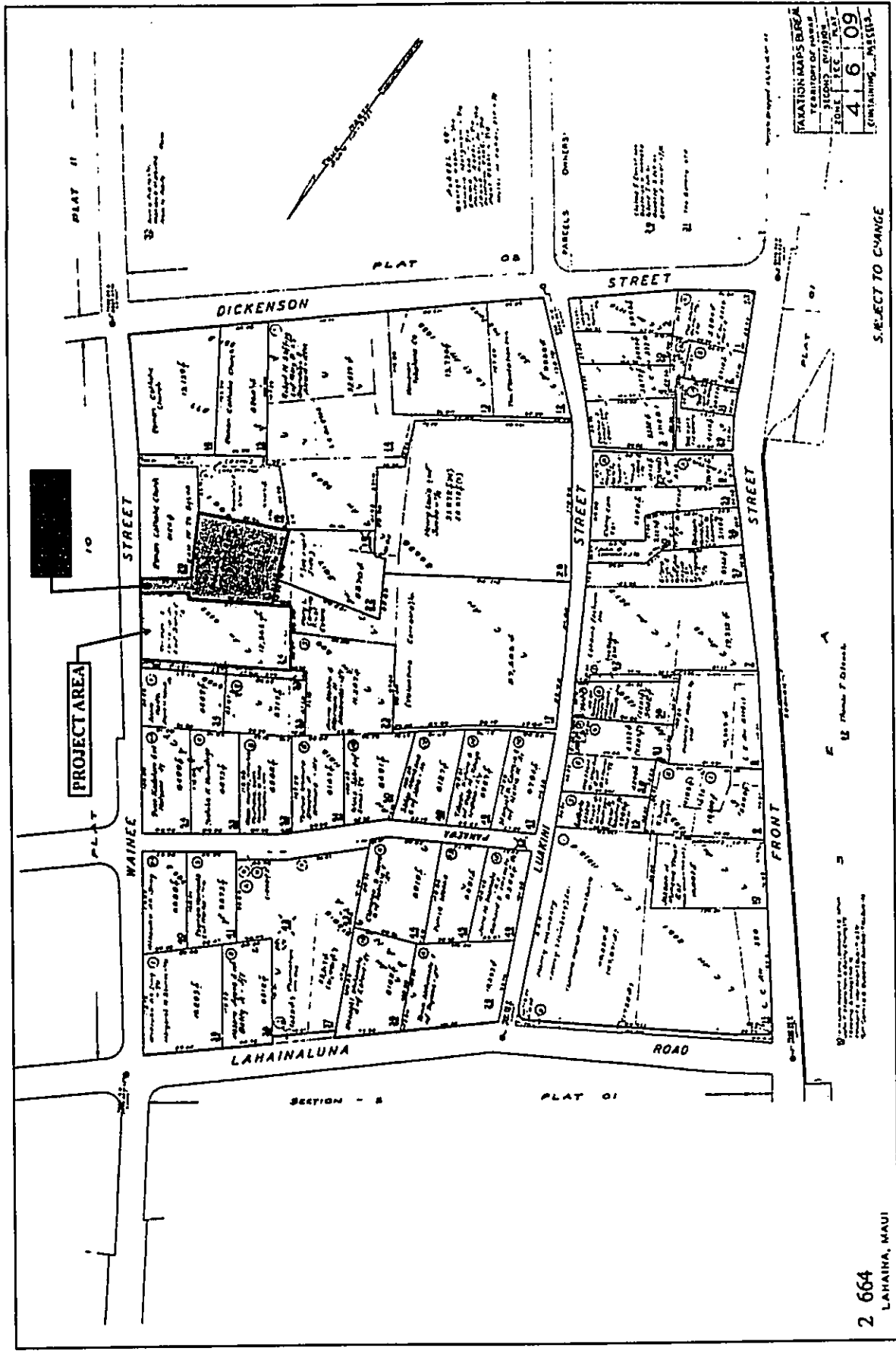


Figure 2: Tax Map Key [TMK 4-6-009] Depicting the Project Area and State Site 50-50-04-1797 (Aus Site).

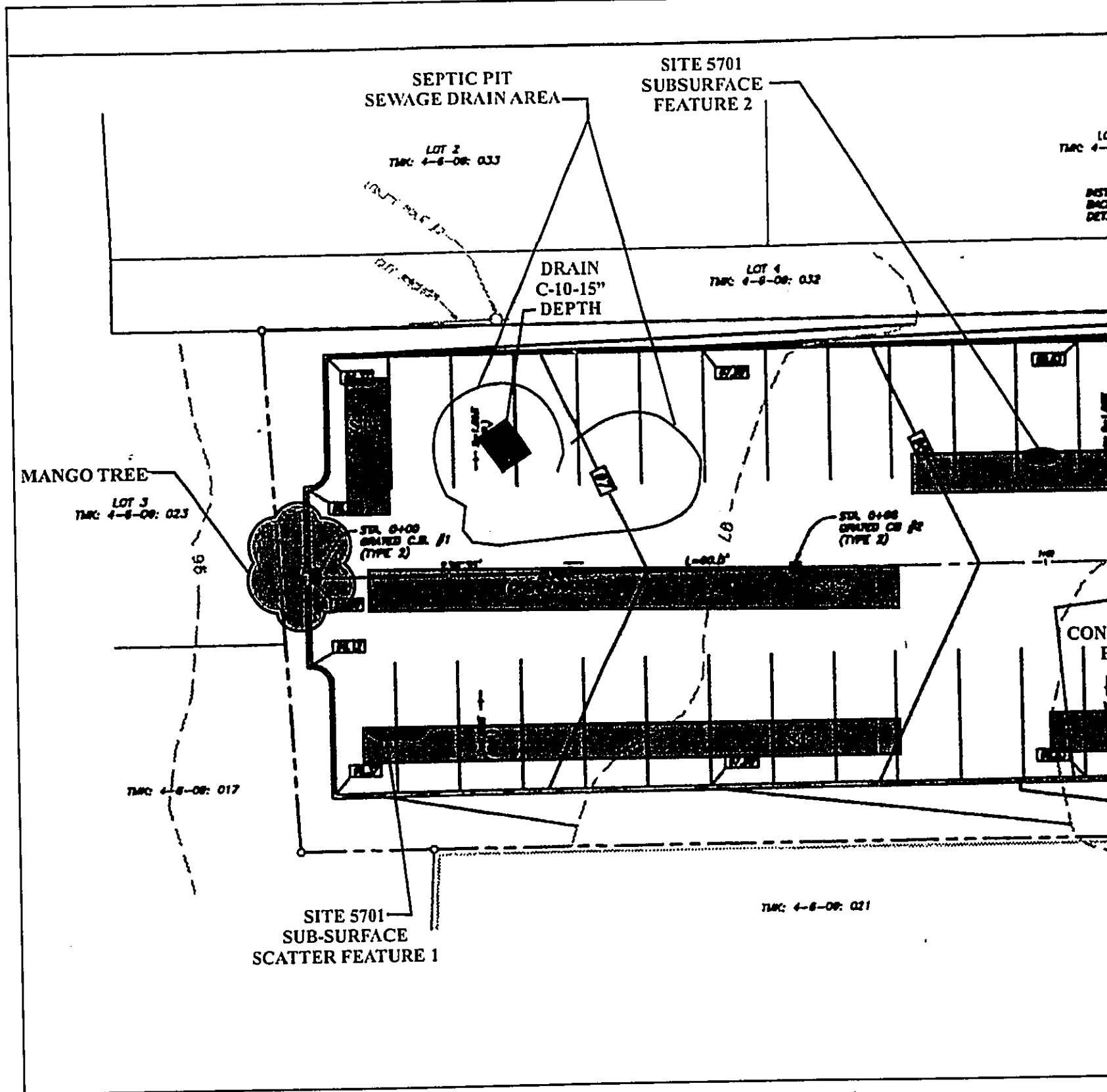


Figure 3: Construction Plan View Depicting Stratigraphic Trench and Subsurface Feature Locations.

SITE 5701
SUBSURFACE FEATURE 3

LOT 1
TRAC 4-8-08: 034

INSTALL 3/4" REDUCED PRESSURE
BACKFLOW PREVENTER (SEE DIB
DET. V-8)

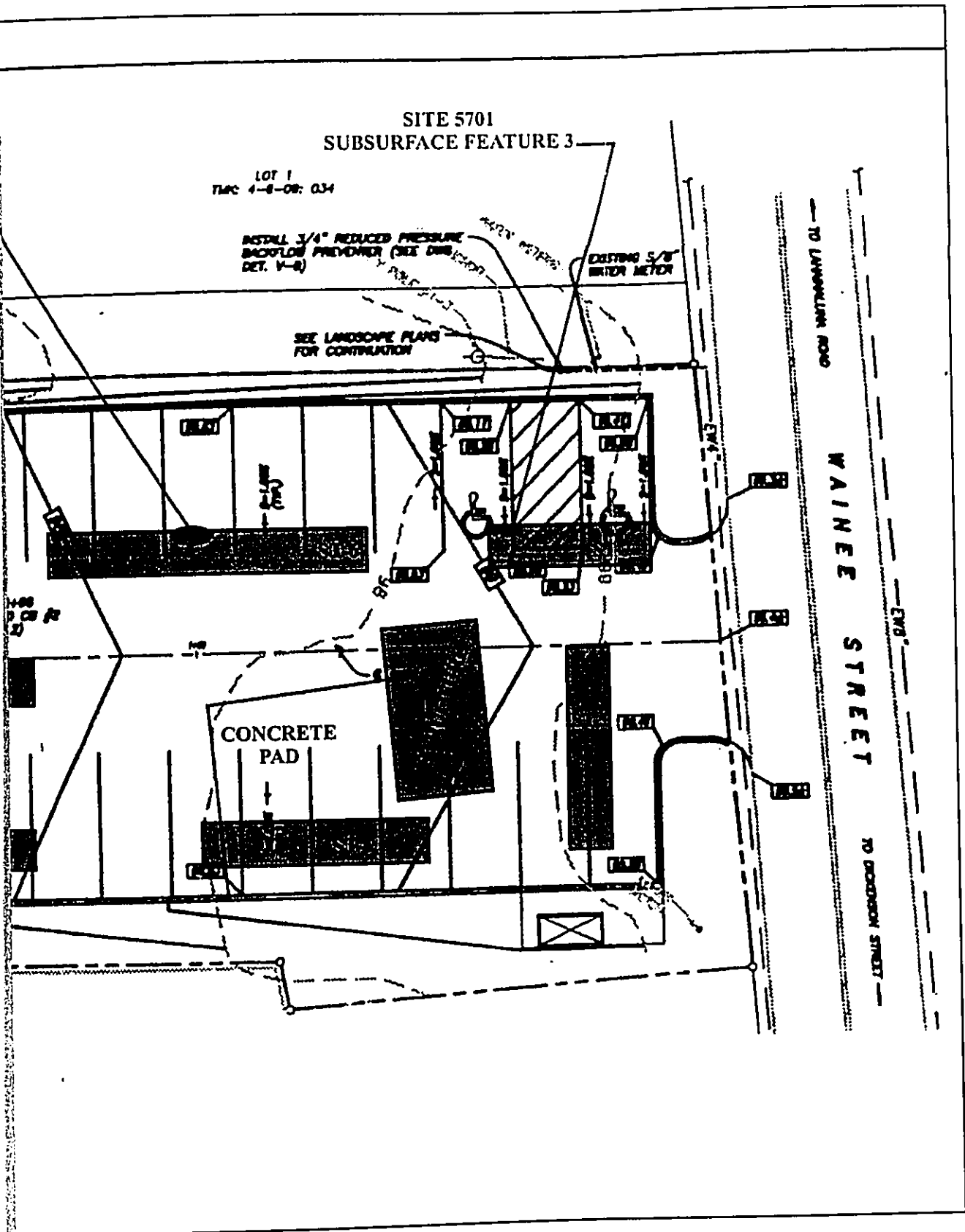
EXISTING 5/8"
WATER METER

SEE LANDSCAPE PLANS
FOR CONTRIBUTION

TO LANARKIAN ROAD

WAINEE STREET

TO BOBBSON STREET



recovered within the same general provenience complicates the later historic period date (of the 20s and 30s).

PROJECT AREA DESCRIPTION/ENVIRONMENTAL SETTING

LOCATION

The parcel under investigation lies on the *makai* side of Wainee Street, across the street from the U.S. Seaman's cemetery, within the confines of Lahaina town and the Lahaina Historic District (State Site -3001). Lahaina is located on the south-western facing slopes of the West Maui Mountains surrounding 'Eke crater and Pu'u Kukui. The project area is located on the gentle flat lands that fan out between Kanaha and Kahoma streams that flow westward from Kahoolewa Ridge just above Lahaina. The project area is located in the coastal portion of the *ahupua`a* of Panaewa. This *ahupua`a* is located to the south and east of the coastal Moalii *Ahupua`a* and just north of Kuia *ahupua`a*, within the District of Lahaina. The subject parcel is bounded by Wainee Street on the northeast side, residential lots to the north and southwest, and to the south and east is a commercial business complex with parking lot. The property's elevation is as much as 12 meters above mean sea level (amsl).

GEOLOGY, SOILS, AND VEGETATION

The island of Maui was formed through the merging of two volcanoes, Haleakalā and the West Maui volcano. West Maui is a deeply dissected volcano that rises to its highest elevation of 5,788 feet amsl at Puu Kukui. East Maui is dominated by Haleakalā, which rises approximately 10,025 feet amsl (Foote *et al.* 1972:8). The project area is located on the leeward side of the West Maui Mountains on the nearly level coastal slopes of Kahoolewa Ridge.

Soils in the project area have been classified as part of the Pulehu-Ewa-Jaucas (Foote *et al.* 1972 Sheet 94). The Ewa series soil type dominates the area of the subject parcel and the main soil type is Ewa silty clay loam. According to Foote *et al.* (1972:8, 30), Ewa silty clay loam developed in alluvium weathered from basic igneous rock, coral, and seashells. Ewa soils have a surface layer and subsoil of dark reddish brown, friable silty clay loam. Their substratum is alluvium weathered from basic igneous rock. This soil was generally used for sugarcane and house sites. During representative testing, variation in soil regimes was minimal, colors varied only slightly from reddish brown to brown. This reddish brown-brown silty clay strata and substrata dominated all below surface profiles.

Vegetation in the area was minimal as the majority of the lot was covered in asphalt. One large mango tree (*Mangifera indica*) exists in the southwestern boundary of the parcel. Another

large tree in the Acacia family grows along the eastern side of the parcel. Various introduced weeds and grass have sprung up within cracks in the asphalt and around the small wooden structure that sits in the front of the parcel.

TRADITIONAL AND HISTORIC SETTING

The project area is located within the traditional district of Lahaina. Lahaina town was recorded as a Historic District and assigned State Site 50-50-03-3001 in 1962 and amended to include a second district in 1967 (Belt Collins 1992:II-1). Lahaina has a varied history ranging from the traditional fishing and cultivation of early Hawaiians, the residence and surfing grounds of various members of the *ali`i* class, and a period of island unification involving high ranking *ali`i* from other Moku-puni (islands) in Hawai`i. Later, Maui became the capital of commercial whaling in the Pacific in the early to mid 1800's, and then it was later a base for sugar plantation and, eventually, tourism.

TRADITIONAL SETTING

Kalo (taro) was a food staple throughout the Hawaiian Islands, and its vitality depended largely on available water. Hawaiians developed extensive irrigated taro terraces (*lo`i*) and drainage systems (*auwai*) that provided water for these terraces. Kanaha and Kahoma (Mahoma), streams fed extensive *auwai* systems that flooded *kalo* systems throughout Panaewa and neighboring *ahupua`a*. Water utilization was regulated through time schedules ranging from a few hours to a few days. Ownership of resources as essential as water was not sustainable in a society that depended heavily on communal accessibility. Such fragility of access and distribution, was, therefore, greatly vulnerable to the tides of conflict and warfare. Samuel Kamakau (1992:74) illustrates the conflict of 1738 by the Big Island chief Alapa`i, after a full year of war preparation:

What was the war like? It employed the unusual method in warfare of drying up the streams of Kaua`ula, Kanaha, and Mahoma. (which is the stream near Lahainaluna) The wet taro patches and the brooks were dried up so that there was no food for the forces of Ka-uhi or for the country people. Alapa`i's men kept close watch over the brooks of Olowalu, Ukumehame, Wailuku, and Honokawai. When Pele-io-holani heard that Alapa`i was at Lahaina he gathered all his forces at Honokahua and at Honolua. At Honokawai an engagement took place between the two armies, and the forces of Alapa`i were slaughtered and fled to Keawawa. There Alapa`i heard that Pele-io-holani had landed at Honokahua and had an army stationed at Keawawa, and he disposed his forces, some on sea and some on land. Although Pele-io-holani had but

640 men against Alapa'i's 8,440 from the 6 districts of Hawai'i, there were among them some famous warriors, such as Hana, a warrior intimate of Pele-io-holani, Malama-kuhi-'ena, Moko-ka-la'i, Kulepe, 'Opu-hali, Kuakea, Lono-nui-akea, Pa-i-kahawai, Kawelo-iki-a-kula, and Ka-mahu-a-koai'e. Pele-io-holani intended to unite his forces with those of Ka-uhi, but Alapa'i's men held Lahaina from Ukumehame to Mala on the north, and in attempting to aid Ka-uhi, Pele-io-holani became involved in difficulty. The hardest fighting, even compared with that at Napili and at Honokahua in Ka'anapali, took place on the day of the attack at Pu'unene. Pele-io-holani was surrounded on all sides, mauka and makai, by the forces of Alapa'i, led by Ka-lani-'opu'u and Keoua. The two ruling met there again, face to face, to end the war and became friends again, so great had the slaughter been on both sides....

Lahaina is reknown traditionally and historically for its verdant and abundant groves of breadfruit. Elspeth Sterling's *Sites of Maui* references Lahaina as second only to Puna, Hawai'i as a favorable location for breadfruit culture (1998). In the section of her book addressing the significance and meaning of the naming of Lahaina, Sterling points to an interpretation from Thrum involving the history of the naming of the place now known as Lahaina. Thrum (1909) proposes that "others say the original name was Lele." Here, Lele is interpreted as a "flying piece of the kuleana, that which is near the shore." Thrum (1909) points out that as Lahaina fronts the shoreline this application does apply. E.S.C. Handy in Sterling points out that Lahaina is referred to in traditional *mele*'s (songs) as *ka malu ulu o Lele* (the breadfruit shade tree of Lele) (1998:17). In Mary Kawena Pukui's *Place Names of Hawai'i*, Lahaina is mentioned as being associated with the Kaua'ula wind (1974:127). This Kaua'ula wind is referenced as being the cause of destruction of churches and building in Lahaina in 1828 and again in 1858 (Pukui 1974).. Pukui also points out that the changed spelling and old pronunciation of Lahaina was Lāhainā, meaning cruel sun.

Cultural practices in the area also included the cultivation of 'uala (sweet potato). 'Uala was cultivated as a basic food source in the Hawaiian Islands. 'Uala proved more favorable to farmers in some respects because it flourishes in more difficult climates and needs substantially less water to grow than most high-yielding crops cultivated during traditional times. 'Uala is also beneficial as it matures in three to six months and requires much less labor exertion in planting as opposed to nine to eighteen months for taro (Handy and Handy 1972:127).

E.S.C. Handy in *Hawaiian Planter* discusses the proliferation of fishing settlements and isolated fishermen houses all the way from Kihei to Honokahua and mentions the cultivation of

'uala in the red *lepo* (sandy soil) near the shore. Handy points out that this coast is the most favorable on Maui for fishing and that *kula* lands (uplands) were ideal for the cultivation of sweet potato (1940:159). According to Handy, the *ali'i* Kaka'alaneo lived on Keka'a Hill in Lahaina District. Keka'a became the capital of Maui during his reign as well as an area of intense cultivation (106). Abraham Fornander discusses how Kaka'alaneo planted *kukui* and *'ulu* at Lahaina village (1916/17 Vol.5:540-41).

According to Thrum in *Hawaiian Annual* an infamous *ali'i* called Hua, who reigned prior to the 10th century, is credited with the construction of the first temple on Maui (1909:44). Hua, who is referred to as Hua-a-Pohukaina and as Hua-a-Kapuaimanaku names by which his father was also known, was reportedly born in Lahaina and this was the site of the first *heiau* in Maui. Hua, reported by Thrum, was known for constructing two *heiau* in Lahaina and another Hua, two generations later is credited with constructing a third. The ruins of three additional Heiau are reported by Thrum, are said to belong to, or just prior to the reign of Kahekili.

Lahaina was known as a *pu'uhonua* or place of refuge in Maui. The *pu'uhonua* at Lahaina was associated with Ka'ahumanu who inherited her lands from her husband Kamehameha. Samuel Manaiakalani Kamakau in *Ruling Chiefs of Hawai'i* discusses how Ka'ahumanu's lands Waipukua in Waihe'e, Kalua'aha in Molokai, and Pu'umau in Lahaina were declared as places where people could be saved from death (1961:312).

Fornander, as well as Kamakau, discusses how Lahaina figured prominently in battles between various island chiefs. In the early 1700s, wars between Alapa'inui of Hawai'i, in conjunction with Kamehamehanui of Maui against Kauhi (Kamehamehanui's brother) occurred. Alapa'inui established his headquarters at Lahaina village, the rest of his army extending along the coast from Honokowai to Ukumehame. With the pending arrival of Peleioholani from O'ahu, who was to assist Kauhi, Alapa'inui destroyed the *kalo* patches and broke down *'auwai* belonging to the followers of Kauhi in the vicinity of Lahaina. Eventually the forces met:

...The fortune of the battle swayed back and forth from Honokowai to near Lahaina; and to this day heaps of human bones and skulls, half buried in various places in the sand, attest to the bitterness of the strife and carnage committed [Fornander 1969 Vol. II:140].

LAND TENURE

The land tenure system in prehistoric Hawai'i was rooted in a different epistemological

framework than the subsequent colonially-imposed framework that is understood today as land ownership. The idea of holding land was not synonymous with owning it, but is described as closer to a trusteeship between the *ali`i nui* (ruling chiefs) of the island and the traditional Hawaiian *akua* (gods) Lono and Kane (Handy and Handy 1972:41). Each island was divided into *moku* (districts) that were solely geographical subdivisions. The number of these *moku* depended upon the size of each island. *Moku* were partitioned into smaller landholding units known as *ahupua`a* that were governed by *ali`i* or designated *konohiki*. The *ahupua`a* varied in size, but ideally encompassed land from the mountain to the sea, providing the chiefs and *maka`ainana* (people who cultivated the land) with the opportunity to recover both terrestrial and marine resources. All persons from chiefs to commoners were entitled to portions

The prehistoric/traditional period in the Hawaiian Islands came to an end with the arrival of Captain Cook on Kaua`i in 1778. The years to follow would drastically change the political, agricultural, and social relationships and patterns of the Hawaiian Kingdom. Destabilization of Hawaiian society was further intensified by the profound reformation of traditional land systems. In 1848, the *Māhele* curtailed communal access to land. The *Māhele* system led to the introduction and implementation of privatization that required both chiefs and commoners to retain private land title (Kame`eleihiwa 1992). If properly informed of the procedures, Hawaiians were permitted to claim lands on which they had worked or lived.

Under the *Māhele* and the first Land Commission of the Trust Territory of Hawai`i, lands were allocated in three ways. A third of all lands became Crown Lands belonging to the *ali`i*, a third was distributed to the chiefs, and a third was awarded to the general populace, which were represented by a large portion of foreigners as well as Hawaiians during this time. The first Land Commission was formed in 1845, during which time all individuals holding land were now required by new, Western notions of law to submit their claims or forfeit their land

While LCA records inherently establish historic land utilization in Hawai`i (during the *Māhele*), documented testimony from many land recipients have also demonstrated continuous generational occupation of the land. Settlement patterns illustrated in the LCA records highlight the multi-functional land use practices related to habitation and agriculture and perhaps the clear connection of these strategies.

The current project area consists of an individual LCA. This LCA, 8559, belonging to original claimant Kanaina, C. This house lot was described in testimony by Polea, who attested to C. Kanaina ownership of four house lots in Lahaina called Keawaiki, Homanamana, Ilikahi,

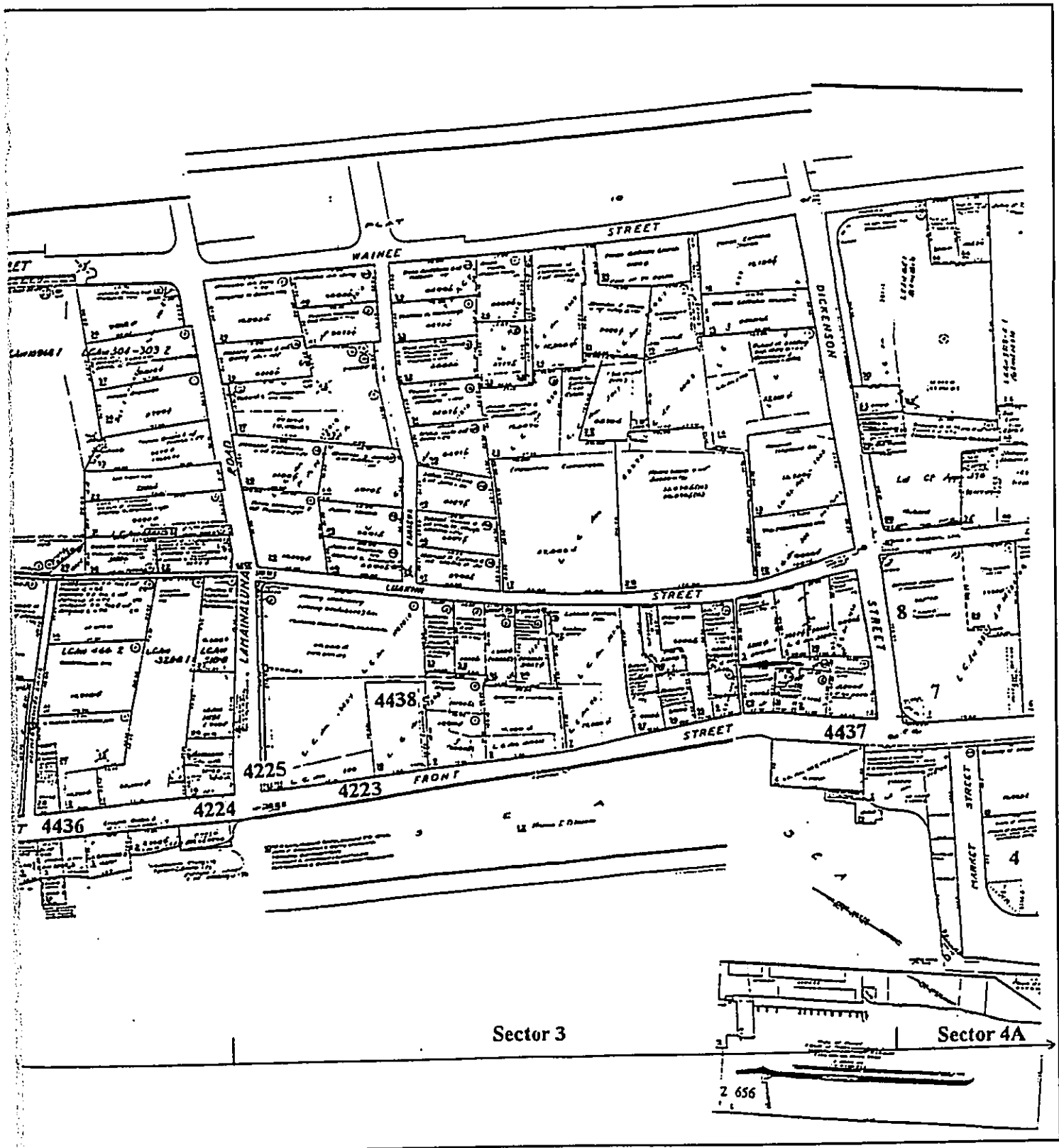
and Paeohi. The house lot Paeohi, our current study area, is described as being bounded by: "Mauka by Graveyard, Olowalu by Lot Kamehameha's land Kalena's land, makai by Kalolou's, Kaanapali by Kamakini's land" (Waihona Aina 2002). Polea attested that, "The lot in Paeohi, he received from Kaiahua in the year 1829" (Waihona Aina 2002). Another witness Onoonokaia, swore that this houselot in Paeohi Lahaina is bounded "Mauka by a 'Puou' a land, Olowalu by Kalena's land, keaka's land, Makai by Ukikili's land, Kaanapali by Kamakini's land. Land from Kaiahua in 1837. No objections" (Waihona Aina 2002).

In addition to the LCA for the parcel, every adjoining parcel also contains an individual LCAs indicating the value of land in Lahaina. The parcel to the west LCA 500 was a house lot claimed by M. Ukikiki. Testimonial witness Keawekuli, swore that this house lot had been given to Ukikiki by Kalolou, who had received this interest from Kamamalu. Kamamalu had received this from LihoLiho and the boundaries were "on the west is Loinui. On the south are the houses of Kelawea and on the north is Kamakini's mud house" (Waihona Aina 2002). The parcel directly south LCA 5017 belonged to Kauhi and contained "some kihapais and some lo'i which were received from Keaweluaole" (Waihona Aina 2002). The parcel to the northwest LCA 08452 belonged to Keohokalole, mother of Liliuokalani and Kalakaua. This award contained; a *mala* of taro, *hala*, three plots of sweet potato, five coconut trees, and two *koa/kou* trees (Waihona Aina 2002). Another LCA 8559B to the south was claimed by William Lunalilo and C. Kanaina this was also described as a house lot. The property directly to the east was formerly owned by Kamehameha IV prior to it's acquisition by the Roman Catholic Church. A Waihona Aina Māhele database search revealed 20 LCAs in Panaewa Ahupua'a, many of which are located on the TMK 4-6-009. LCAs predominate in parcels neighboring the present study area these are likely habitation as well.

Overall, the general pattern of LCA use in the direct area, and in adjacent parcels, appears to have been habitation and agricultural pursuits. As a stream used to run down Dickenson Street to the east water was readily available for *lo'i* and sweet potato as well as breadfruit and Kou trees. The project area is within the general vicinity of royal residences as well (Figures 4, 5, and 6).

POST MĀHELE LAND USE

After the *Māhele* land use in the present study area in Lahaina continued generally as habitation (Figure 7). The General Land Use Map shows habitation on the parcel in 1914 and the results of the present study provide positive reinforcement that residential use of the parcel continued until at least the 1930s. The former tenant on the parcel prior to its purchase by



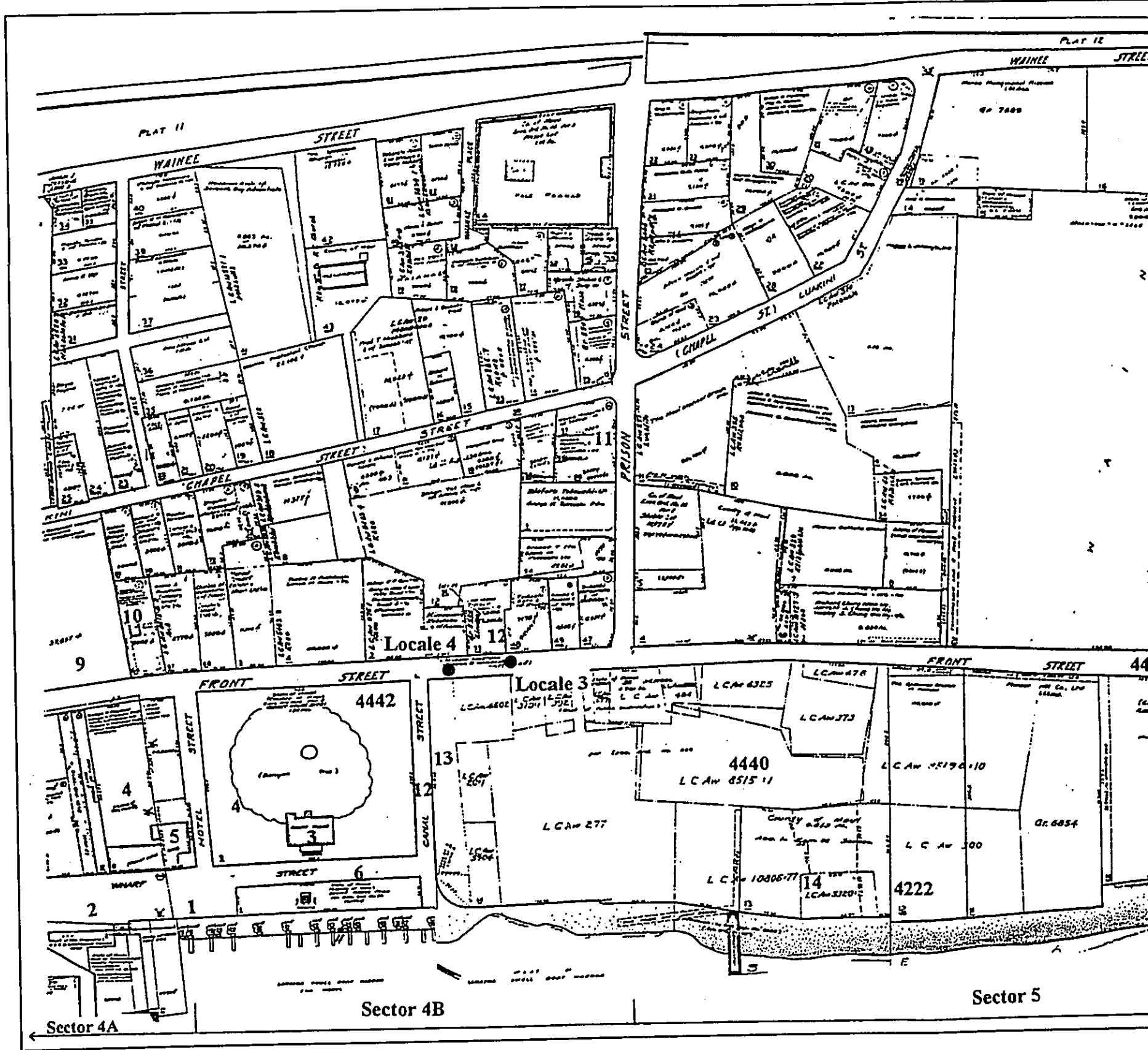
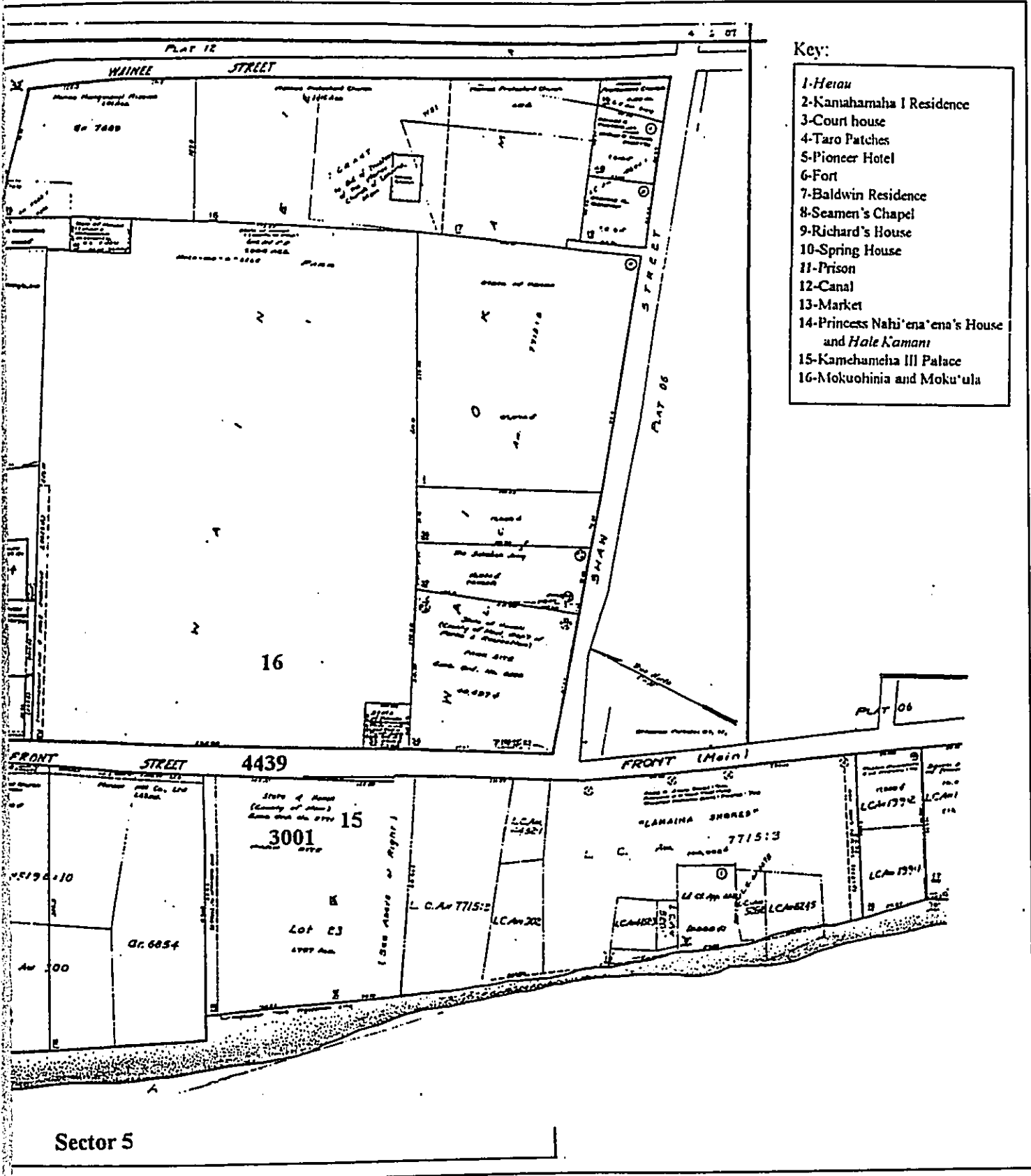


Figure 5: Sectional Profile 2 of Archaeological Sites Along Front Street.



- Key:
- 1-Hetau
 - 2-Kamahamaha I Residence
 - 3-Court house
 - 4-Taro Patches
 - 5-Pioneer Hotel
 - 6-Fort
 - 7-Baldwin Residence
 - 8-Seamen's Chapel
 - 9-Richard's House
 - 10-Spring House
 - 11-Prison
 - 12-Canal
 - 13-Market
 - 14-Princess Nahi'ena'ena's House and Hale Kamani
 - 15-Kamehameha III Palace
 - 16-Mokuohinia and Moku'ula

Sector 5

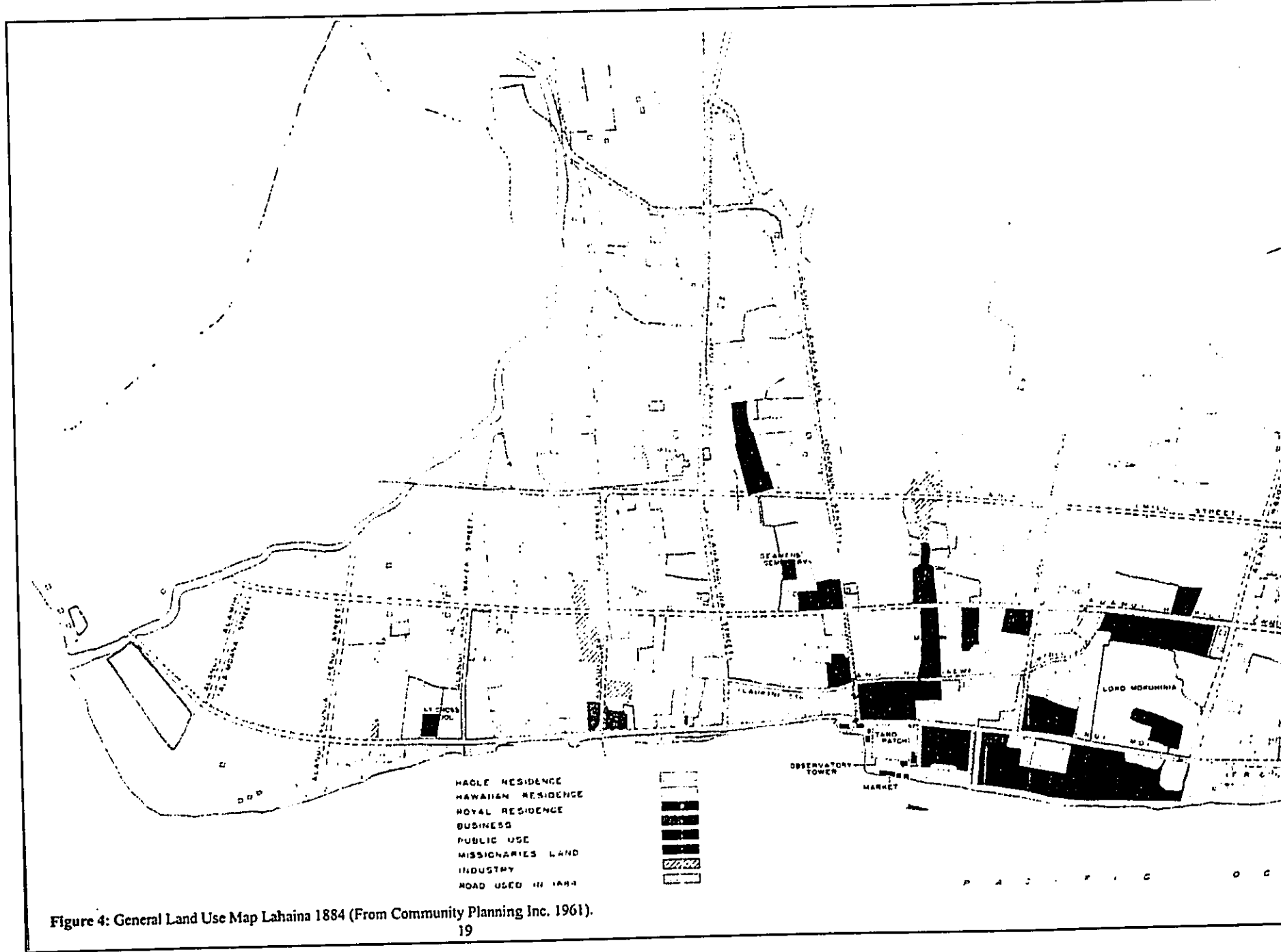
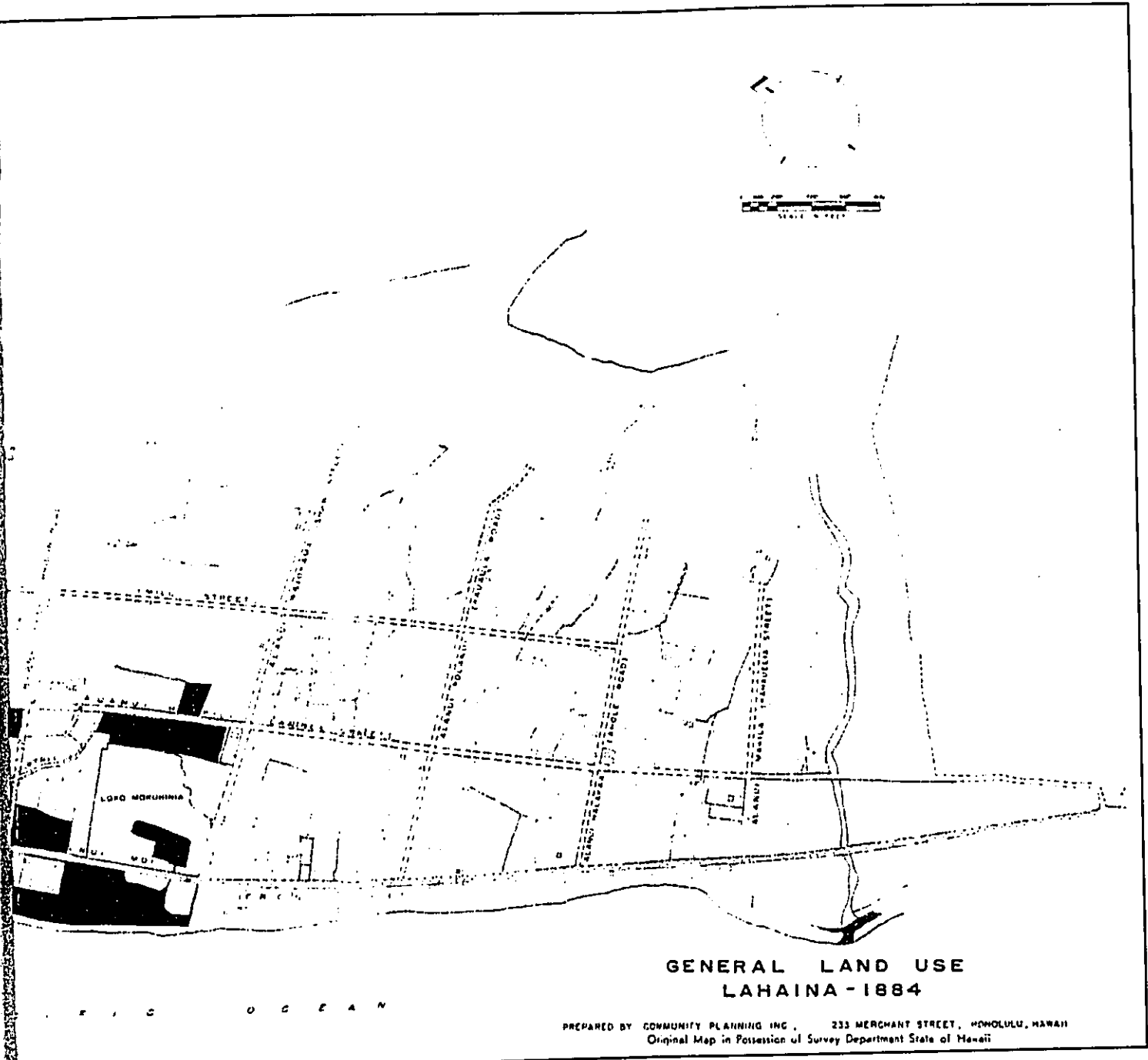


Figure 6: General Land Use Map of Lahaina in 1884.



**GENERAL LAND USE
LAHAINA - 1884**

PREPARED BY COMMUNITY PLANNING INC., 233 MERCHANT STREET, HONOLULU, HAWAII
Original Map in Possession of Survey Department State of Hawaii

PACIFIC OCEAN

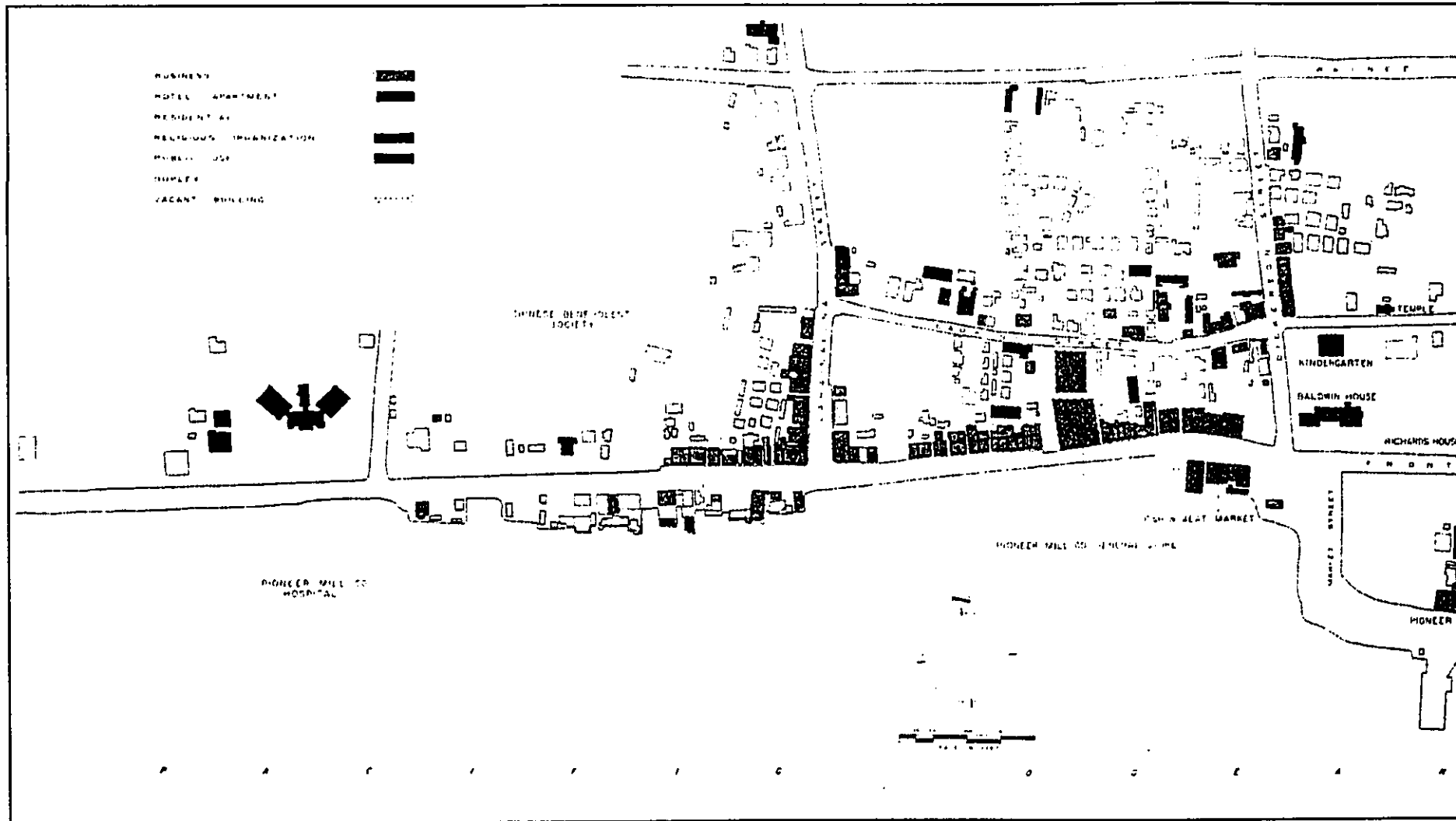
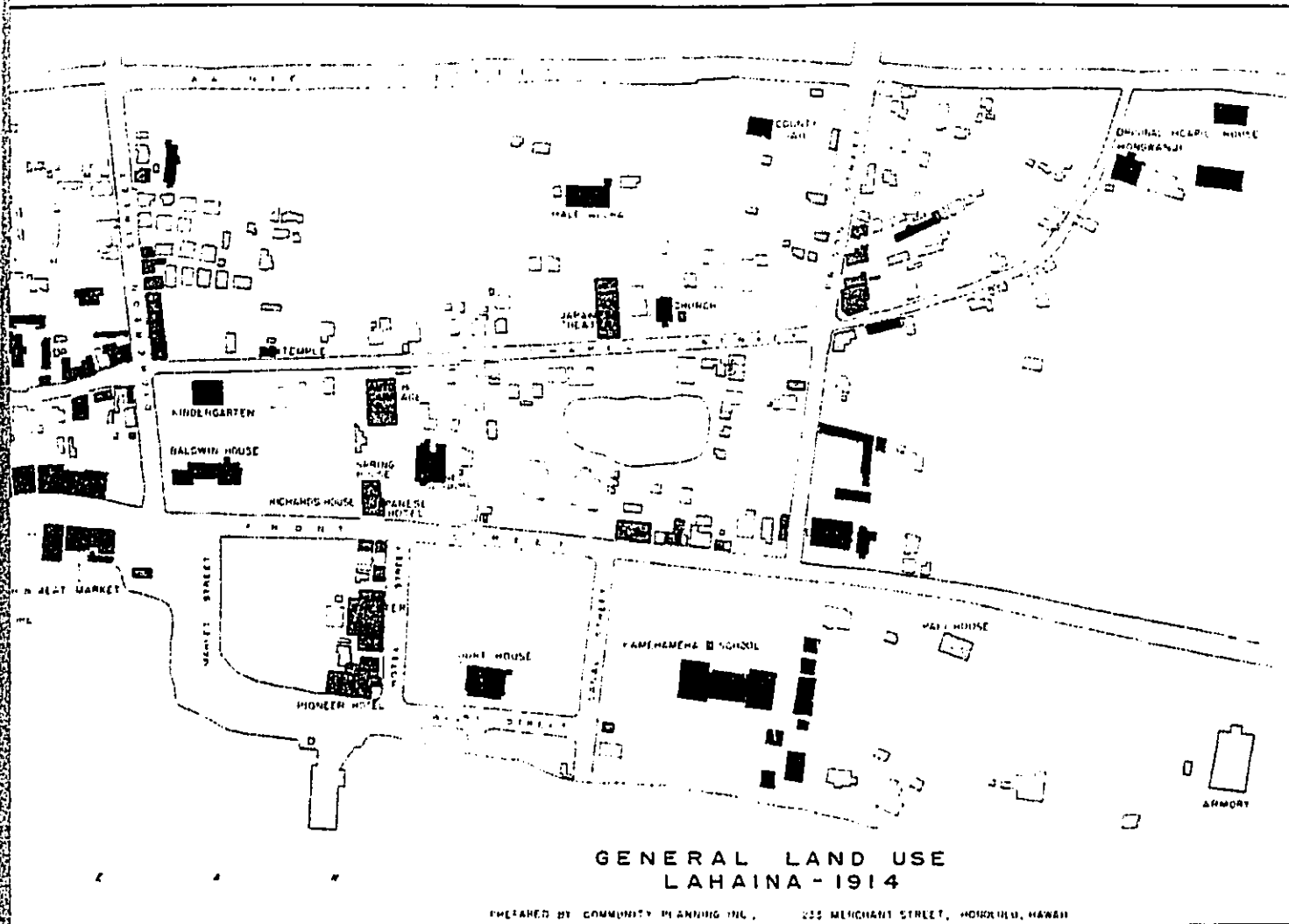


Figure 7: General Land Use Map of Lahaina in 1914.



Volcano Group L.L.C. was an automobile towing business, which is believed to have been established in 1960 to 70s. Photos taken from the rooftop of the adjacent parcel during Inventory Survey of the Aus Site show parked cars covering the lot (Figures 8 and 9).

PREVIOUS ARCHAEOLOGY IN NEARBY PARCELS

In 1995, the Bishop Museum conducted archaeological studies at Moku`ula, which is located a few blocks south of the present study area. For a comprehensive look at Lahaina historiography and the archaeological sites and features located at Moku`ula, please see *Moku`ula: History and Archaeological Excavations at the Private Palace of King Kamehameha III in Lahaina Maui* edited by Paul Christian Klieger, Ph.D. produced in 1995 by the Bishop Museum.

No specific archaeological studies were conducted on the subject parcel TMK:4-6-009:24. However, a fair number of studies have been conducted over the years in the direct vicinity the adjacent parcel to the southeast, and in the general area, which were primarily focused on improvements related to the Front Street area. These studies have resulted in the documentation of numerous traditional and post-contact sites. Most of these have been identified as habitation plots, *lo`i*, burials, and refuse pits.

Archaeological Inventory Survey and subsequently Archaeological Data Recovery were conducted on the parcel on the Oluwalu side (east) of the project area TMK:4-6-009:21 by the Fredericksens' in 1998 and in 1989. This parcel, formerly owned by Kamehameha IV and then the Roman Catholic Church, contained 10 subsurface pit features dating from the mid to late 19th century (Fredericksen 1989:24). These features, State Site 50-50-04-1797, were subsequently identified as habitation features. The Fredericksens reported that the site, recorded as the AUS site, was generally utilized throughout the early post contact period and most likely continuously until the 1970s. The Fredericksens identified a feature within the upper stratum of Test Trench 9 that contained trash dating to 1979. This feature was located along the boundary line that separates parcel 21 from 24, the current project area. This correlates with rubbish identified under the concrete pad within the area of ST-4 in the current project area (can of silly string). The Fredericksens report that the area was formerly known as the *Chinese Camp* and perhaps some of the remnant pieces of ceramic found during this survey relate to this occupation.

In 1988, Rosendahl (Haun 1988, cited in Burgett *et al.* 1996) conducted a subsurface survey on the *mauka* and *makai* lands abutting Front Street. Excavations revealed a cultural layer and a *lo`i* field layer. Artifacts collected included traditional artifacts and volcanic glass

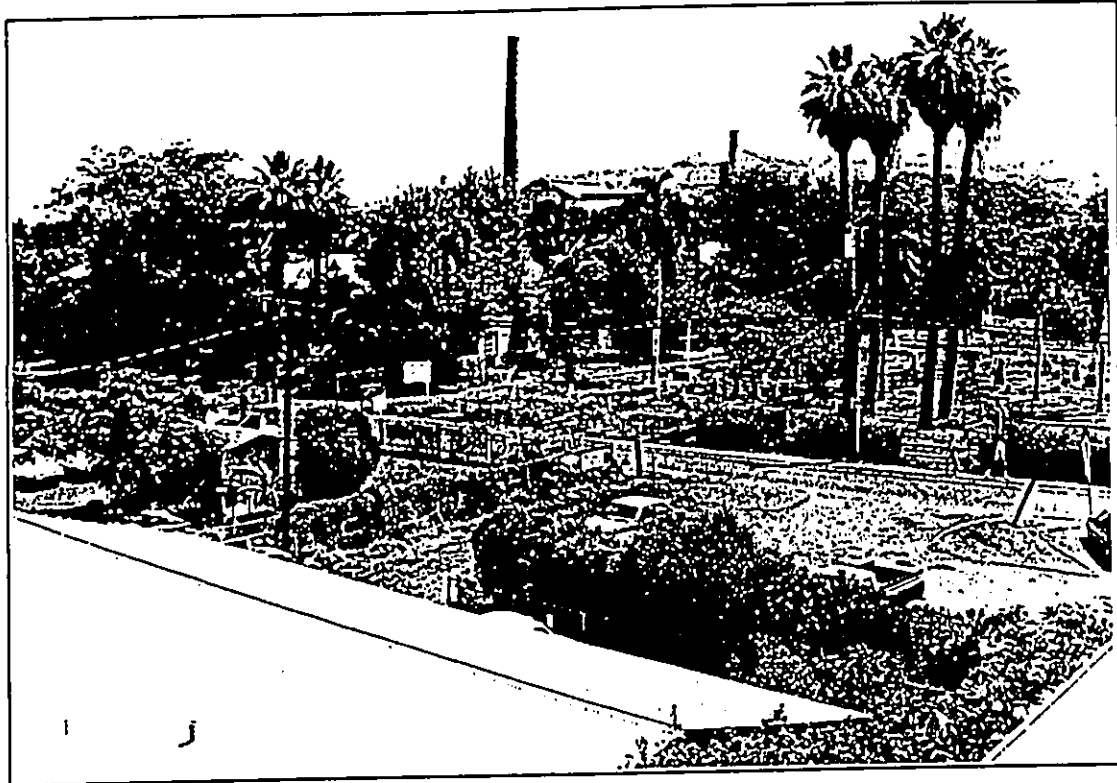


Figure 8: Photo 1 Showing Aus Site (from Fredericksen 1988).

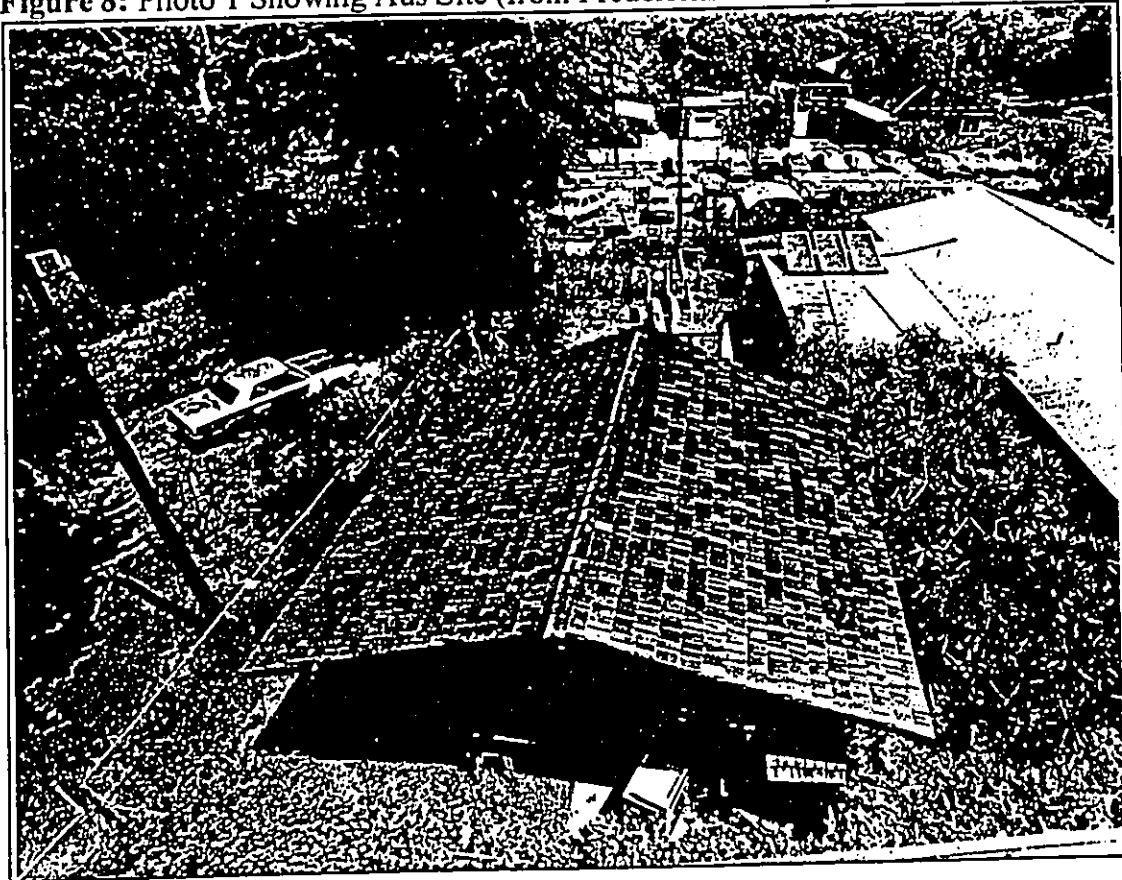


Figure 9: Photo 2 Showing Aus Site (from Fredericksen 1988).

and shell midden. Charcoal submitted for radiocarbon analysis yielded a date range of A.D. 1260 to 1640.

In 1989, Kennedy excavated a parcel (TMK: 4-6-08:12) and recovered construction materials and domestic wares dating from late historic times—including red bricks, coral blocks, glass, and ceramics (Kennedy 1889).

McGerty *et al.* (1998) conducted Archaeological Monitoring on Front Street in Lāhainā, which led to the identification of both pre-Contact and historic features. A total of 13 archaeological sites were identified and recorded. Habitation deposits with associated subsurface features including refuse pits, fire pits, shell midden, and postholes were identified and recorded. Artifacts associated with these features included basalt preforms, volcanic glass cores and debitage, various ornaments, and abraders. McGerty *et al.* (1998) also recovered historic artifacts manufactured in the 19th and 20th centuries, such as horseshoes, buttons, bricks, ceramics, slate, and glass bottles. Radiocarbon samples from a lower cultural stratum dated the site to A.D. 1450 to 1660, firmly within traditional times (McGerty *et al.* 1998). This same project also yielded prehistoric burials.

In 1999, Borthwick and Hammatt recorded a cultural layer that included pre- and post-Contact features which indicate prolonged use of the location. The site is located at the Lahaina Court House and was subsequently assigned State Site 50-50-03-4754. In 2000, Fredericksen and Fredericksen documented a burial site directly across Front Street from the Lahaina Courthouse. This site was recorded as State Site 50-50-03 4978.

During improvements to King Kamehameha III Elementary School's electrical system in 2000, Fredericksen and Fredericksen identified four new archaeological sites with multiple components. These sites were recorded as State Sites 50-50-03-4982, -4983, -4984, and -5174. As these sites were identified during limited subsurface excavation relating to construction improvements the full spatial extent of these sites remains unknown. Nine *in situ* burials, a secondary burial, and ten probable burial features were identified during the course of the construction mitigation (Fredericksen 2001:12). In addition, previously disturbed human remains were identified at Site -4984. Site -4983 consisted of a remnant subsurface habitation layer with associated postholes and hearths in addition to burials. Site -4982 overlays -4983 and both were heavily impacted by construction of the school facilities. These sites are located within LCA 277 awarded to William Charles Lunalia. Site -5174 consisted of a post-Contact *'ili`ili* pavement with an associated refuse pit. This site is also located within LCA 277 and is believed

to be associated with residences associated with this award parcel. Radiocarbon samples submitted from Site -4983 indicate occupation of that part of the site from the late pre-Contact period through early post-Contact times. Site -4984 is located within LCA 10806.77 awarded to Kamehameha III and his sister Nahi'ena'ena and LCA 5320 awarded to Asa Ka'eo, kahili bearer for Kauikeaouli (2001:6). These LCAs were listed as house lots and 10806.77 was named Pa Halekamani by Nahi'ena'ena who lived in a traditional *hale* on the property. Asa Ka'eo testified that Halekamani contained seven houses and a fishpond.

Calis (2002) conducted Archaeological Monitoring near Front Street in Lahaina. Archaeological deposits relating to historic use of the area in the form of porcelain and glass artifacts dating from 1904 through the 1920s and 1930s were identified in subsurface contexts and designated as State Site Number 50-50-03-5180.

METHODOLOGY

Inventory Survey fieldwork was conducted by two members of the SCS staff in June 2005. The primary goal of this project was to determine the presence and absence of archaeological sites within the project area through systematic pedestrian surface survey and representative subsurface testing. One significant site was identified during the survey. The site was subsequently assigned State Site 50-50-04-5701. The site consisted of a subsurface scatter and two subsurface pit features containing glass bottles, ceramics, metal, and plastic. Both field and laboratory work were completed for this project. The methodology used for each phase is outlined below.

FIELD METHODS

There were two components to this project: pedestrian survey and testing. Pedestrian survey was minimal as the parcel is flat and approximately seventy percent of the parcel is covered with asphalt (Figure 10). Photographic documentation of the parcel was completed using a digital camera. Pedestrian survey did not lead to the identification of sites, but did lead to assessing areas most amenable to testing. As a large sewage drain and septic pit exists on the parcel this area was avoided during the testing process.

As is illustrated in Table 1 and Figure 3, seven stratigraphic trenches were mechanically excavated by backhoe to test various subsurface regions of the parcel. Stratigraphic trenches were placed throughout the parcel, avoiding the aforementioned septic and sewage pit areas, in order to provide representative coverage of the subject parcel.

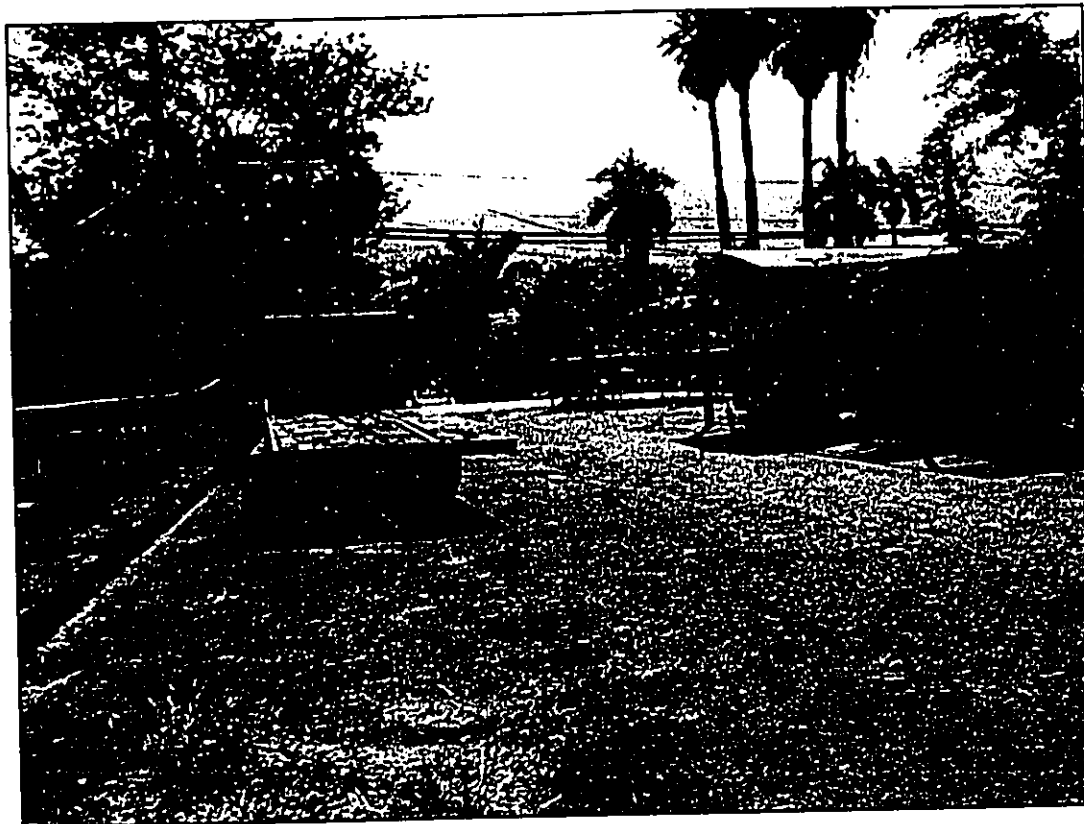


Figure 10: General Overview Project Area. View to North.

Table 1: Stratigraphic Trench Designation, Dimensions, and Area Excavated.

Trench No.	Length (m)	Width (m)	Depth below surface (m)	Area (m ²)	Volume (m ³)
ST-1	14.0	0.8	1.5	11.2	16.8
ST-2	14.0	0.8	1.4	11.2	15.7
ST-3	7.0	0.8	1.5	5.6	8.4
ST-4	9.0	0.8	1.4	7.2	12.6
ST-5	6.7	0.8	1.4	5.4	7.5
ST-6	8.0	0.8	1.2	6.4	7.7
ST-7	6.0	0.8	1.1	4.8	5.3
Total	—	—	—	51.8	74.0

All trench excavation depths were measured in meters below surface (mbs). Soil colors were recorded using Munsell color charts, soil composition was recorded with the aid of the U.S. Department of Agriculture Soil Survey Manual on standard soil stratigraphy forms, and as no variation in stratigraphy was observed recordation consisted of multiple photographs of each excavated trench and trench placement location were taken at each locale. All stratigraphic trenches were plotted on plan view construction maps. Stratigraphic trenches yielding cultural materials were photographed and stratigraphic profiles were drawn of both subsurface features.

Samples were collected and labeled with provenience. Both subsurface features were also plotted on plan view construction maps. One soil and charcoal (combined matrix) sample was taken during the project from Subsurface Feature 1. However, due to datable materials such as glass bottles and a plastic comb this sample will not be submitted for radiocarbon analysis. No additional soil samples were collected as no charcoal or evidence of oxidized/reduced layers (typically concomitant with early agricultural pursuits) were identified during testing.

LABORATORY METHODS

Laboratory work consisted of cleaning and analyzing collected samples. Samples were analyzed by SCS personnel. Additional laboratory work was limited to digital drafting of plan view maps and stratigraphic profiles for reporting purposes. Photographs and maps were digitized for archival purposes. All field notes, maps, artifacts, samples, and photographs pertaining to this project are currently being curated at the SCS facilities in Honolulu.

ARCHAEOLOGICAL INVENTORY SURVEY RESULTS

One site consisting of three features was identified and recorded on the parcel. Feature 1 consisted of a subsurface scatter just underlying the modern grass root layer. This feature was located in the south end of Stratigraphic Trench-1 (ST-1). This feature's collection yielded glass bottles, glass bottle fragments, stoneware sherds, whiteware sherds, porcelain sherds, and faunal materials, subsequently identified as small mammal, likely rodent, and chicken (Figure 11). Subsurface Feature 2 contained bottles and bottle fragments, both whiteware bowl rim and base ceramic sherds, a metal *o'o* (hoe), charcoal, and a fragment of a plastic comb. This feature was interpreted as a refuse pit. Subsurface Feature 3 contained glass fragments, possibly candle holder or lamp chimney, and a large quantity of homogenous small rounded basalt cobbles. This feature may have been a *lua* or outhouse. These features have been subsumed under the State Site 50-50-04-5701. Both the near surface collection and the subsurface pits contained historic materials likely related to habitation in the area during the late 1920s and 1930s.

SURVEY

Survey of the parcel immediately revealed a septic pit and sewage drain on the unpaved south end of the parcel (Figure 12). The rest of the parcel was covered with a base layer of asphalt, with a small wooden structure towards the front of the parcel (Figure 13). The most recent use for the parcel was a towing company that stored cars on the parcel. A photo taken from the adjacent parcel during Data Recovery excavations at the Aus Site 1797 show the parcel full of cars in 1988. As the parcel was paved systematic survey was accomplished quickly and no surface archaeological features were identified.

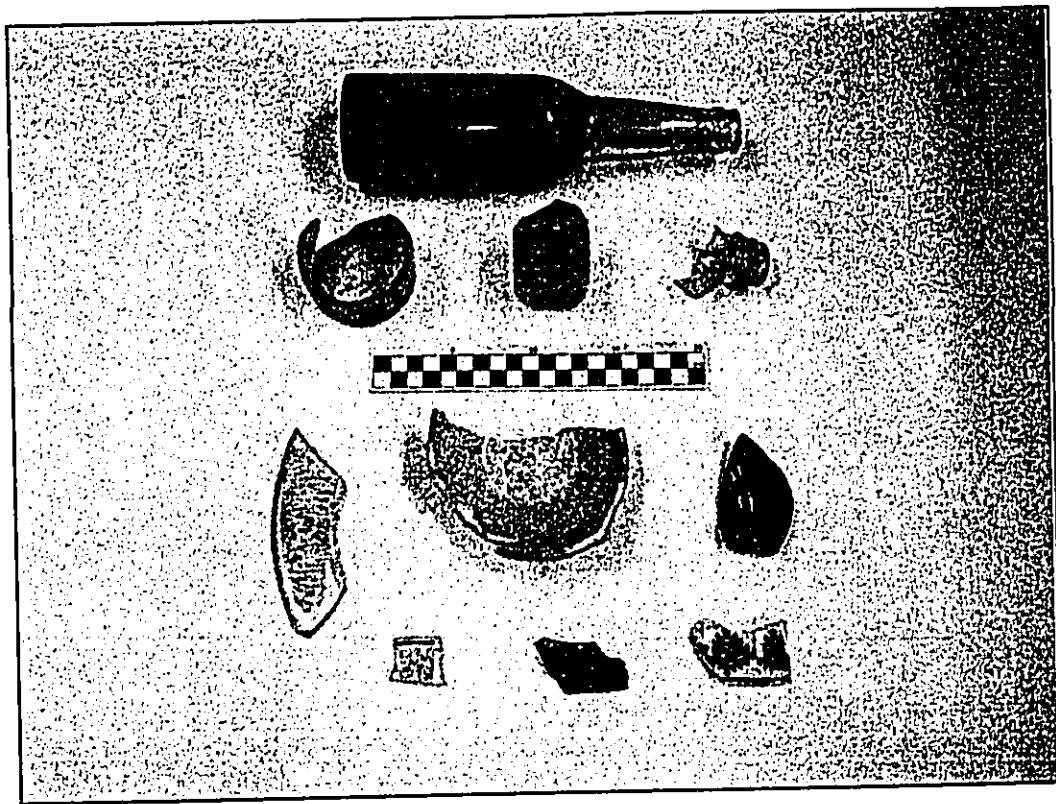


Figure 11: ST-1 Artifacts.

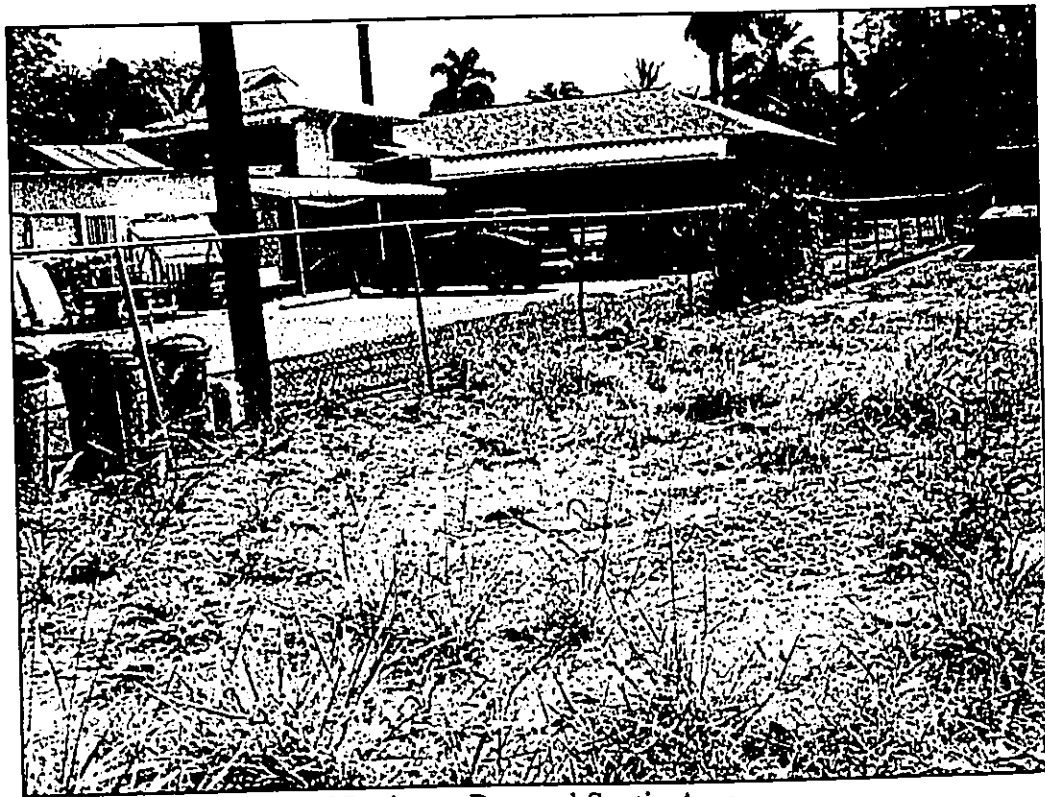


Figure 12: Overview of Drainage Box and Septic Area.

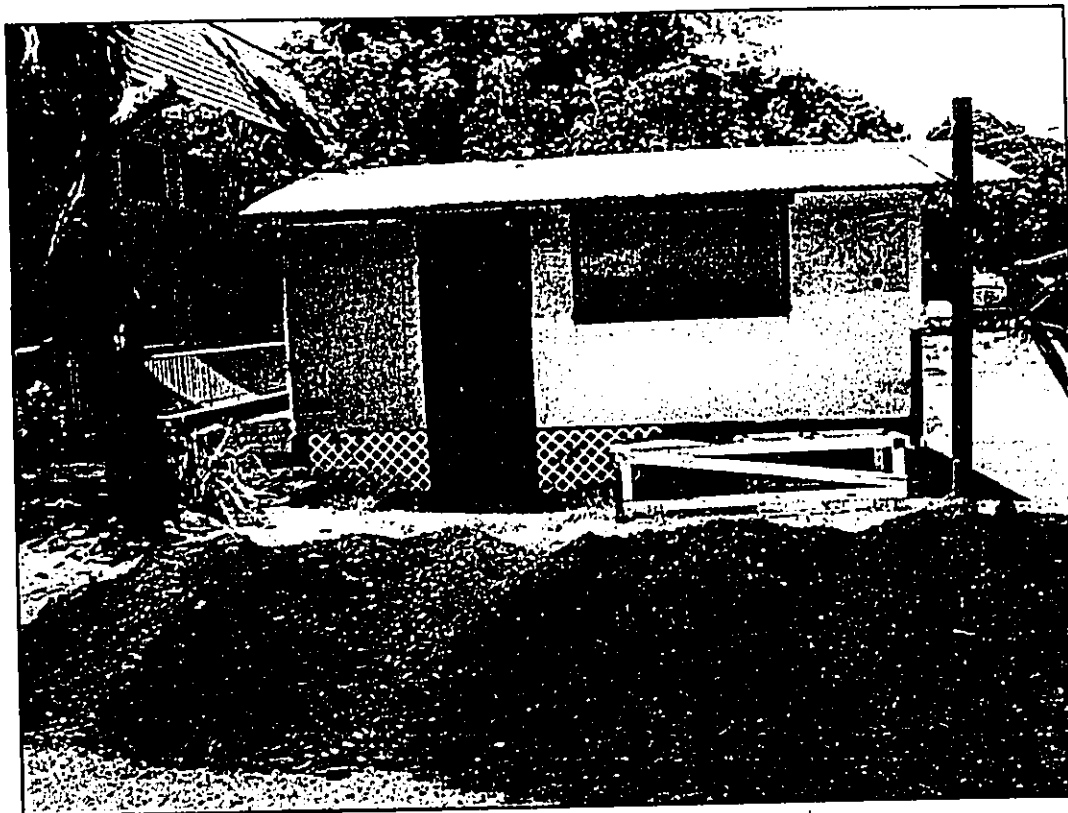


Figure 13: Wooden Structure on Property.

SUBSURFACE TESTING

Seven stratigraphic trenches (ST) of varying length and uniform depth were excavated across representative portions of the project area (see Table 1). Trenching was aimed at exposing subsurface strata to assess the presence/absence of subterranean architecture and/or cultural deposits. Stratigraphic trench locations (n=7) were selected in representative areas of the parcel that did not exhibit major disturbances, that is septic and sewage drain area, and that were accessible and amenable to mechanical testing. This testing strategy allowed for researchers to observe soil stratigraphy across the parcel in limited yet variable topographic contexts. Descriptions of each trench are provided below. Soils identified were predominately Ewa silty clay loam, identified as Layer II in this report, and are typical of soils associated with the area. This layer is primarily composed of *in situ* derived clay sediments and were typically used for sugar cane and habitation.

Stratigraphic Trench 1 (ST-1)

ST-1 was oriented northeast-southwest at 40°/220°. The trench measured 14.0 m in length, 0.8 m in width and was excavated to a maximum depth of 1.5 m. There was no stratigraphic variation from the surface to the base of excavation (Figure 14). Soil consisted of a dark, reddish-brown (5YR 3/3 to 3/4) silty loam. This trench contained a large quantity of

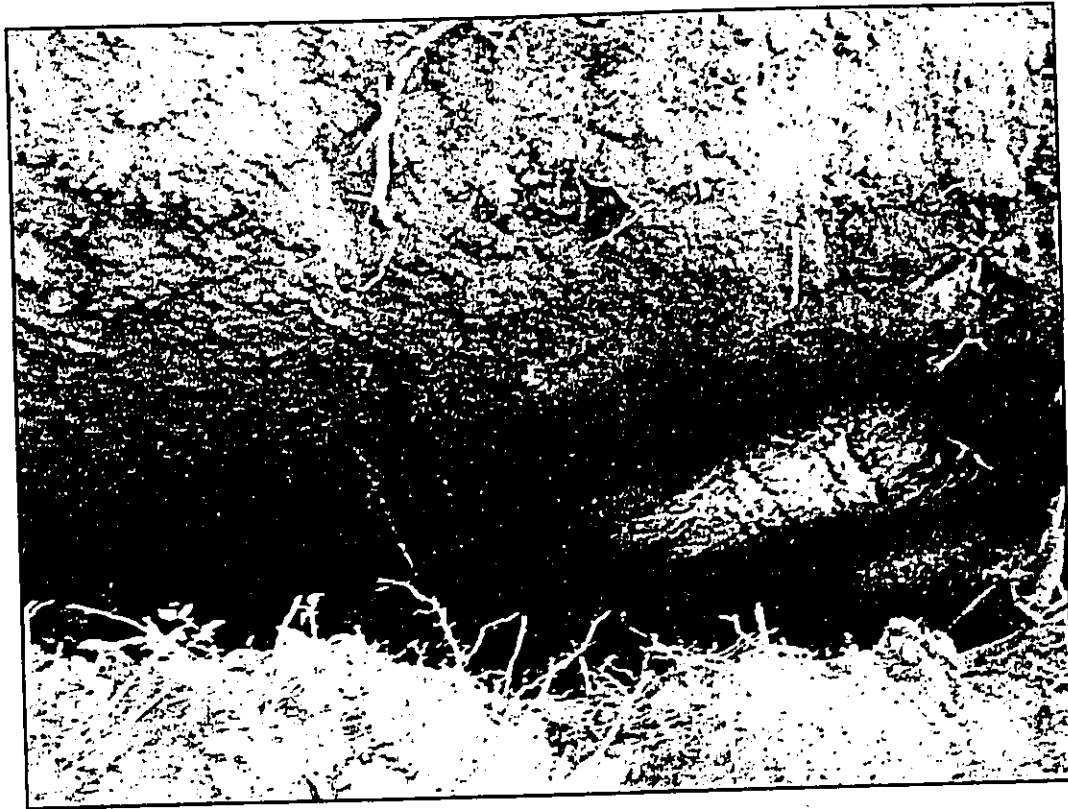


Figure 14: ST-1 Northwest Profile.

mango tree roots. Several bottles were observed just below the grass surface at the south end of the trench (Figure 15). This feature was identified and recorded as Feature-1.

Stratigraphic Trench 2 (ST-2)

ST-2 was oriented northeast/southwest at 45°/225°. The trench measured 14.0 m in length, 0.8 m in width, and was excavated to a maximum depth of 1.4 m (Figure 16). There was no stratigraphic variation from the surface to the base of excavation (Figure 17). Soil consisted of a dark, reddish-brown (2.5YR 3/4) silty loam. No cultural materials were observed or recorded in ST-2.

Stratigraphic Trench 3 (ST-3)

ST-3 was oriented northwest-southeast at 135°/315° (Figure 18). The trench measured 7.0 m in length, 0.8 m in width, and was excavated to a maximum depth of 1.5 m. There was minimal stratigraphic variation from the surface to the base of excavation (Figure 19). Soil consisted of a dark, reddish-brown silty loam that varied slightly in color to a darker brown silty loam (5YR 3/3- to 3/4 and 2.5YR 3/4).



Figure 15: ST-2 Post-excavation.

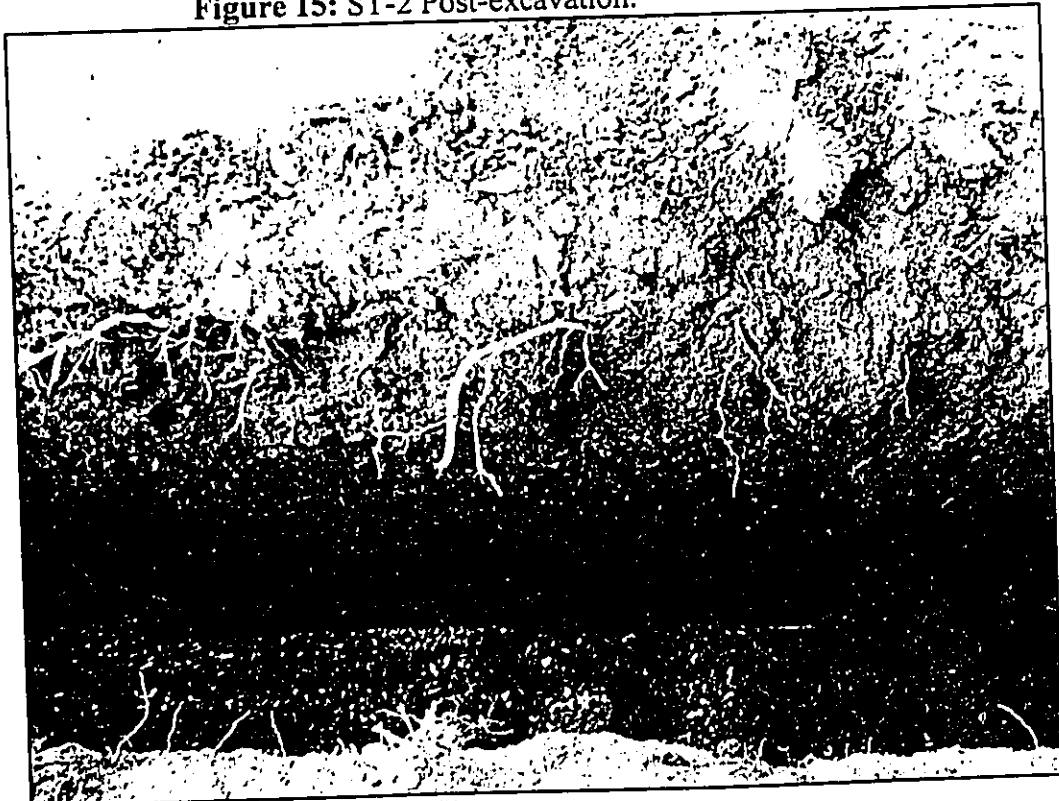


Figure 16: ST-2 Southeast Profile.



Figure 19: ST-4 Pre-excavation. View to Northeast.

Stratigraphic Trench 4 (ST-4)

ST-4 was oriented northeast-southwest at $40^{\circ}/220^{\circ}$ (Figure 20). The trench measured 9.0 m in length, 0.8 m in width, and was excavated to a maximum depth of 1.4 m. There was no stratigraphic variation from the surface to the base of excavation (Figure 21). Soil underlying asphalt consisted of a dark, reddish-brown (5YR 3/3 to 3/4) silty loam that contained a modern trash deposit in the south end under a concrete over layer that is associated with the structure on the parcel.

Stratigraphic Trench 5 (ST-5)

ST-5 was oriented northeast-southwest at $135^{\circ}/315^{\circ}$. The trench measured 6.7 m in length 0.8 m in width and was excavated to a maximum depth of 1.4 m. There was no stratigraphic variation from the surface to the base of excavation (Figure 22). Soil underlying asphalt consisted of a dark, reddish-brown (5YR 3/3 to 3/4) silty loam.



Figure 20: ST-4 Profile West.



Figure 21: ST-4 Southeast Profile with Trash.

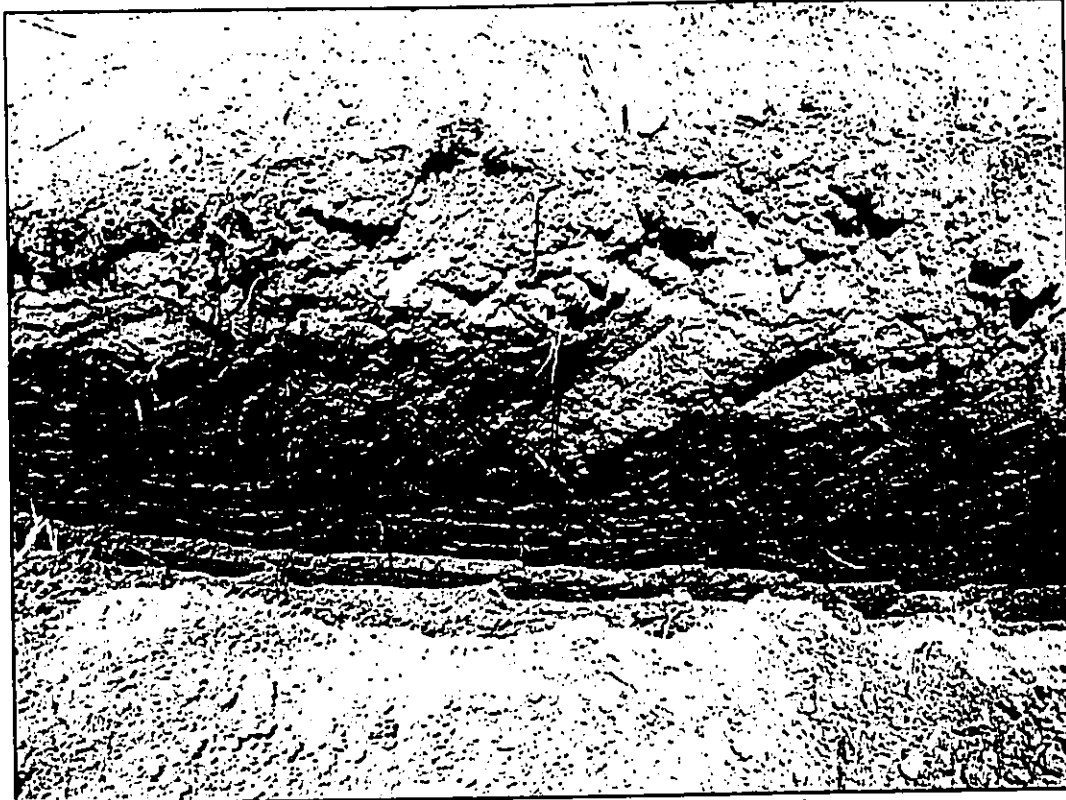


Figure 22: ST-5 Profile South.

Stratigraphic Trench 6 (ST-6)

ST-6 was oriented northeast-southwest at 40°/220°. The trench measured 8.0 m in length, 0.8 m in width, and was excavated to a maximum depth of 1.2 m. Subsurface Feature 2 (SF-2) was encountered during the excavation of this trench. Aside from SF-2, the trash pit with associated scattered charcoal flecking within the pit fill there was no stratigraphic variation within the trench when compared to the stratigraphy of other trenches on the parcel. Soil consisted of a dark, reddish-brown (5YR 3/3 to 3/4) silty loam.

SUBSURFACE FEATURE 2 (SF-2)

SF-2 was located within ST-6 (see Figure 3). The feature was encountered at 0.3 mbs and extended to 1.2 mbs the base of excavation. There was a noticeable concentration of bottle glass and ceramics from 0.7 m to 1.0 mbs (Figure 23). The feature was amorphous but was generally pit shaped and measured 0.4 to 0.5 m in diameter (Figure 24). The matrix of the feature was naturally derived *in situ* sediments which exhibit charcoal flecking indicative of burning events associated with the refuse pit. SF-2 was most evident in the western wall of the trench, it appears in the east well but very vaguely with no discernable boundaries. Cultural materials recovered include glass bottles and bottle fragments, both whiteware bowl rim and base ceramic sherds, a metal *o'o* (hoe), charcoal, and a fragment of a plastic comb (Figure 25). One bottle collected from this feature was analyzed and was determined to be manufactured at

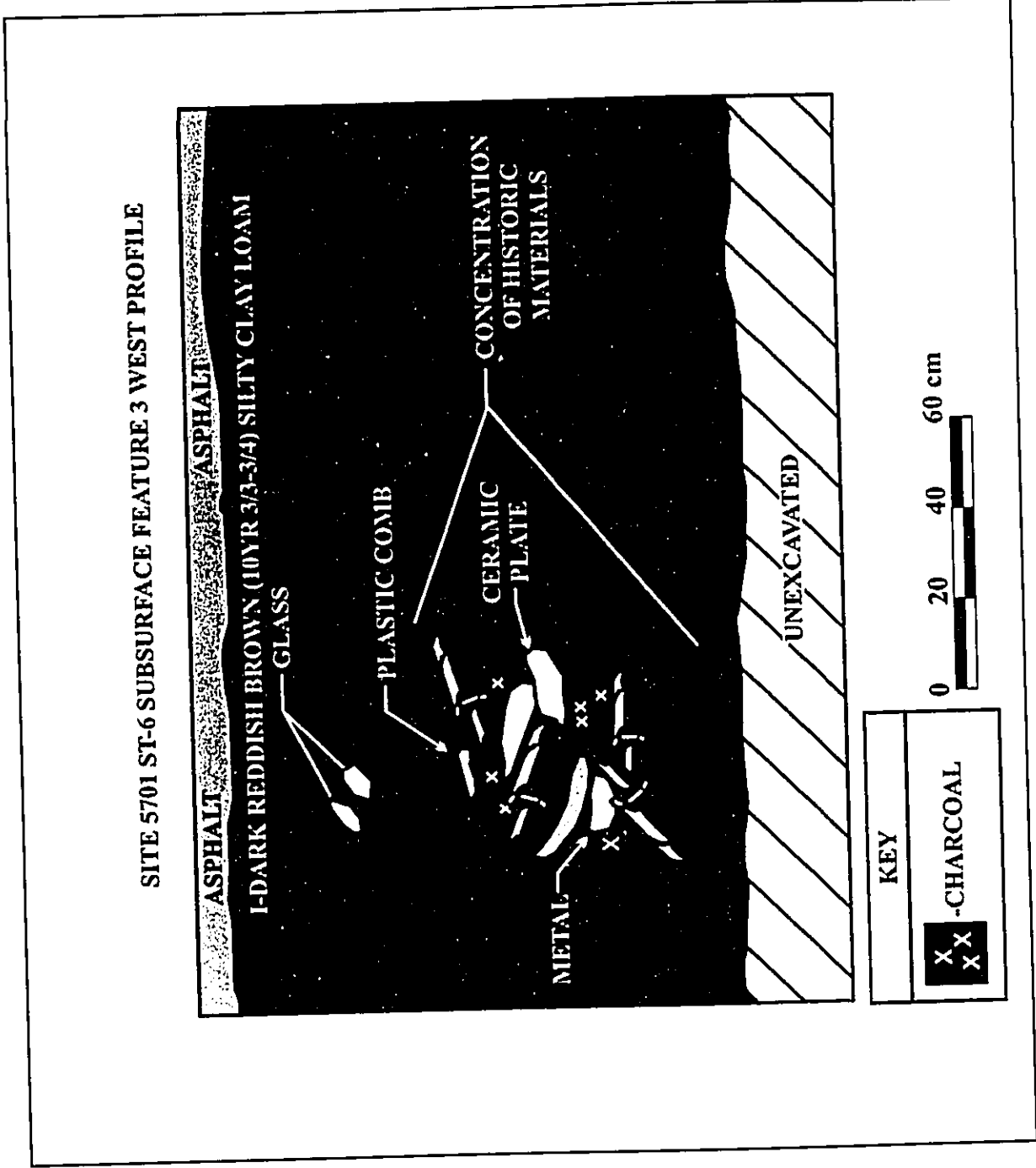


Figure 23: ST-6 Profile Showing SF-2.

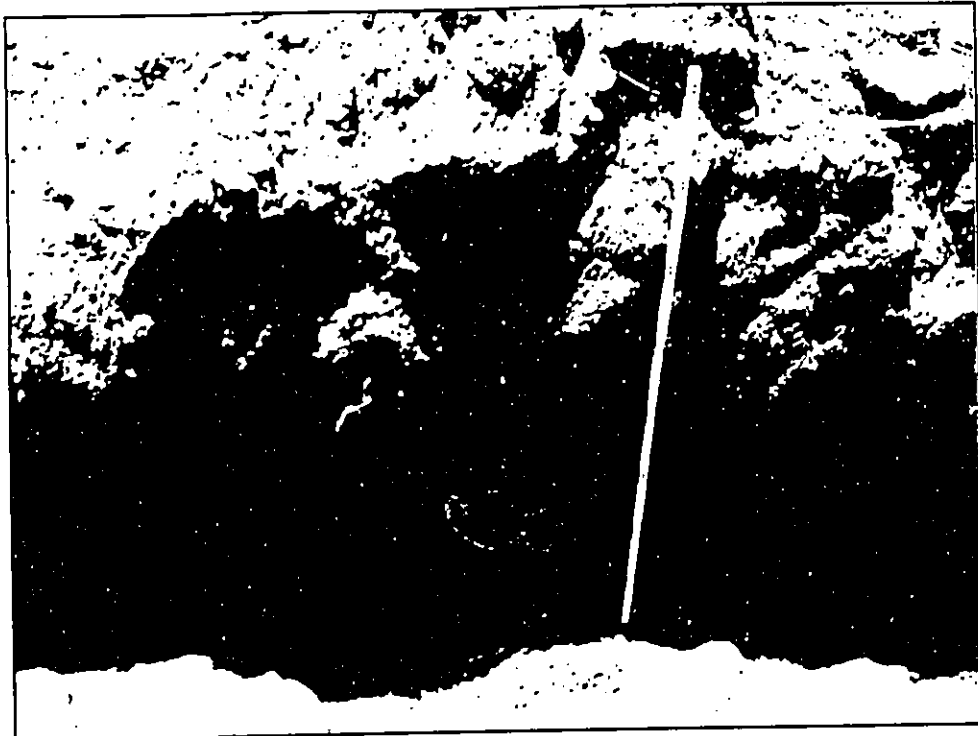


Figure 24: ST-6 Profile Showing SF-2. View to West.

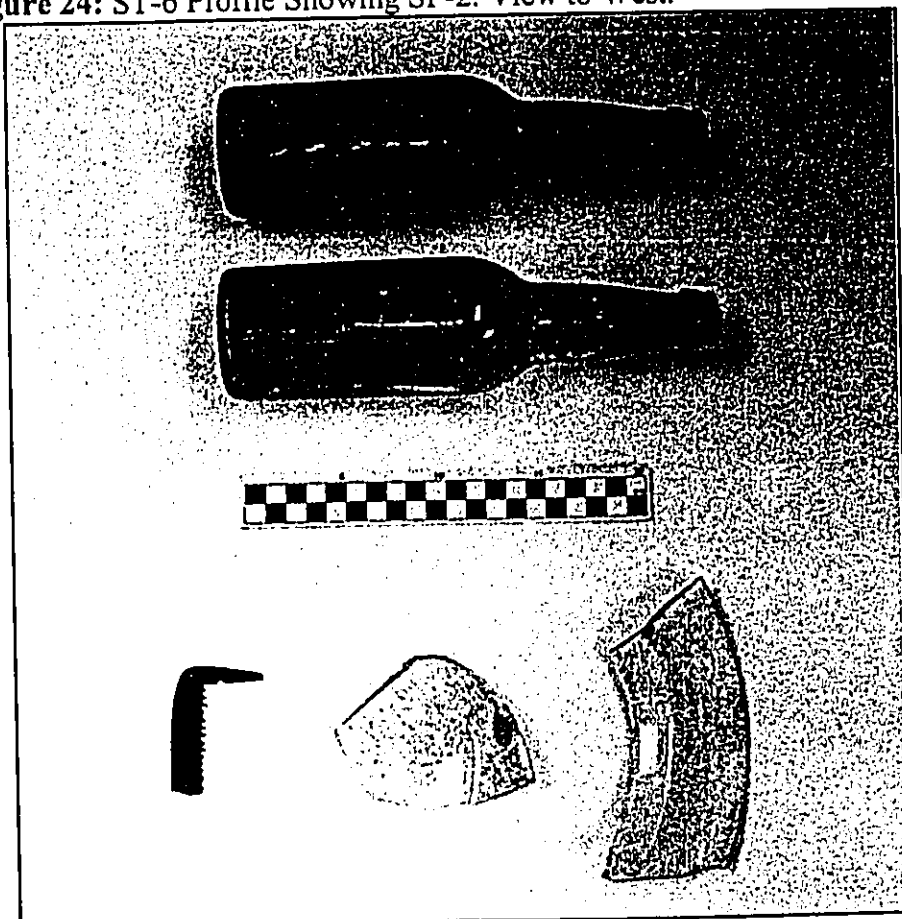


Figure 25: ST-6 Artifacts.

Adolphus Busch Glass Manufacturing Co., the manufacturers stamp indicates this bottle was produced between 1904 and 1907. Additionally a piece of plastic comb was recovered from the feature at 0.6 mbs. All materials recovered relate to habitation activities on or around the parcel. Based on the materials recovered it is estimated that this feature correlates with habitation on the parcel in the late 1920s to 1930s. For a full inventory of collected materials see Appendix 1 in the back of this report.

Stratigraphic Trench 7 (ST-7)

ST-7 was oriented northeast-southwest at 40°/220° (Figure 26). The trench measured 6.0 m in length 0.8 m in width and was excavated to a maximum depth of 1.1 m. Subsurface Feature 3 (SF-3) was encountered at the south end of ST-7. Again there was no stratigraphic variation from the surface to the base of excavation, or when compared to other trenches across the parcel (Figure 27). Soil underlying asphalt consisted of a dark, reddish-brown (5YR 3/3 to 3/4) silty loam.

SUBSURFACE FEATURE 3 (SF-3)

SF-3 was located within ST-7 (see Figure 3). The feature was encountered at 0.4 mbs and continued to 1.1 mbs (Figure 28). Feature may continue below excavated portions of the trench. The feature was pit shaped and measured 0.3 m in diameter. The soil matrix of the feature was naturally derived *in situ* sediments which exhibit charcoal flecking indicative of burning events associated with a refuse pit. The feature was comprised of a large number of homogenous water rounded small basalt cobbles used to fill in an excavated area (Figure 30). Cultural materials recovered include ornamental glass, possibly lantern or votive candle (Figure 31), and charcoal. The sparse amount of materials recovered from this feature makes functional assessments difficult. However, based on other features located at the same general subsurface provenience it can be assumed that materials recovered relate to habitation activities on or around the parcel. Based on the location, proximity to other features, and materials recovered it is estimated that this feature correlates with habitation on the parcel in the late 1920s to 1930s. The function of this particular feature is proposed as either a *lua* or possibly a posthole.

DISCUSSION AND CONCLUSIONS

Archaeological Inventory Survey investigations were conducted on a 12,365 square feet parcel located on Wainee Street in Lahaina, ahupua`a of Panaewa, District of Lahaina, Maui Island, Hawai'i [TMK: 4-6-009:24]. This Inventory Survey included archival research, survey, and representative subsurface testing. Archival research provided the most direct correlation to traditional land use over time. In terms of survey and subsurface testing traditional use of the

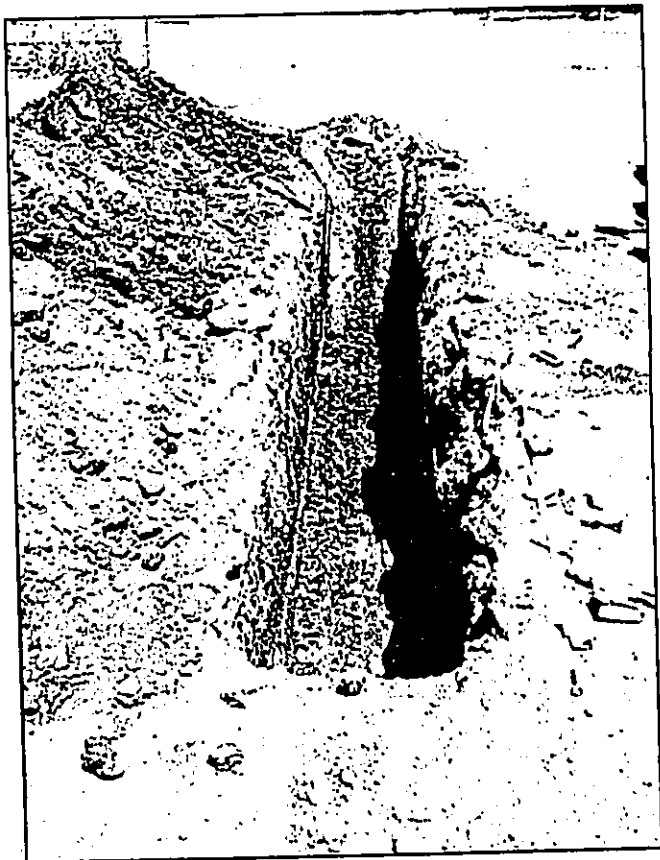


Figure 26: ST-7 View North.

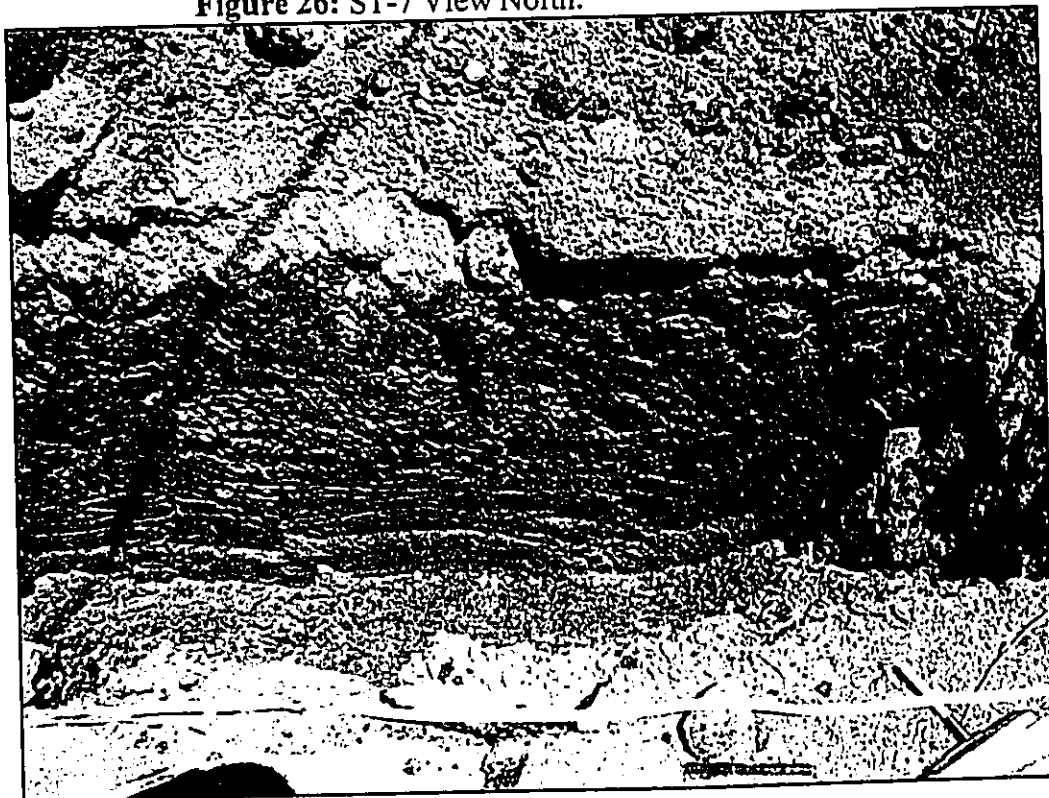


Figure 27: ST-7 Profile East.

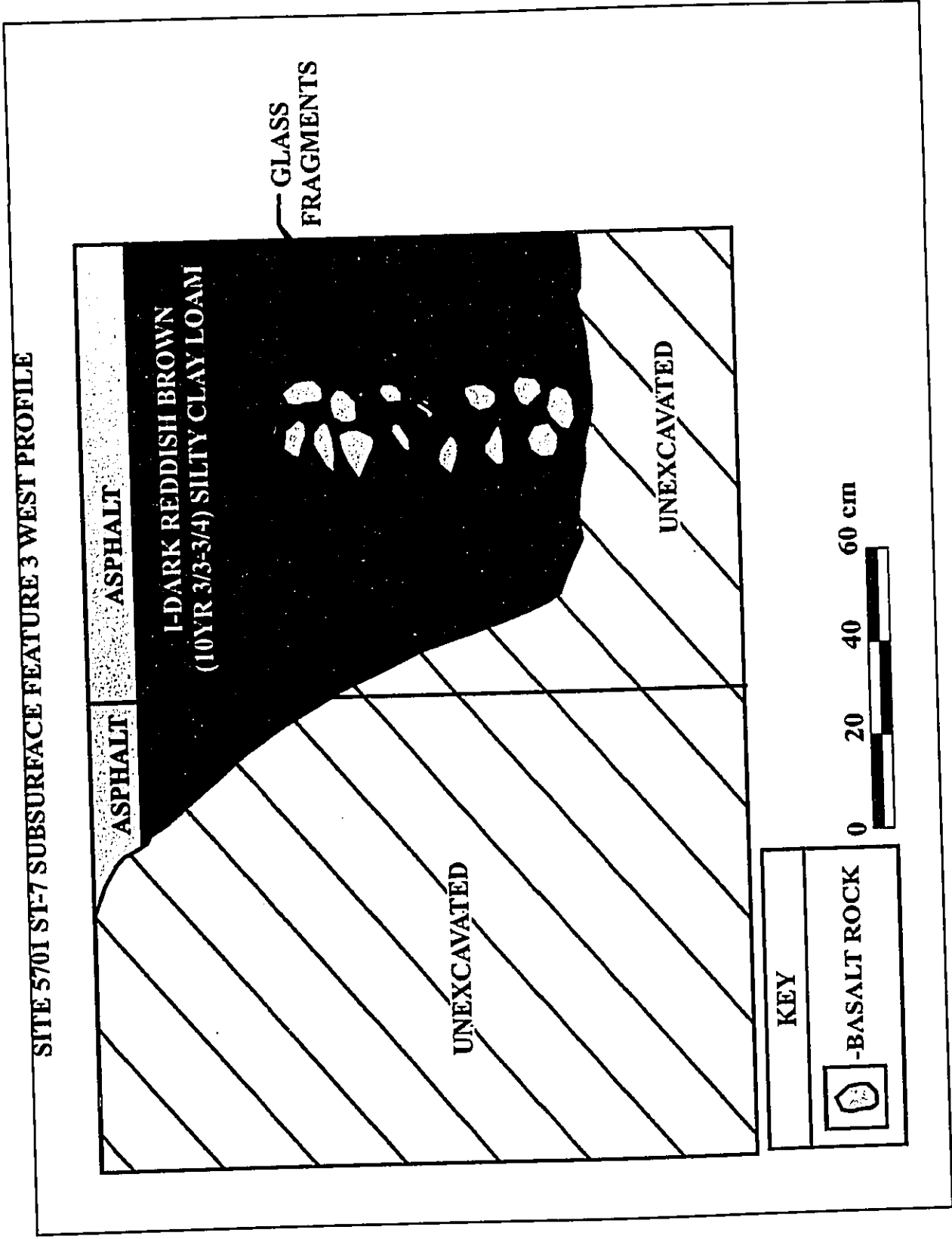


Figure 28: ST-7 Profile Showing SF-3.



Figure 29: ST-7 Profile with SF-3 in View.

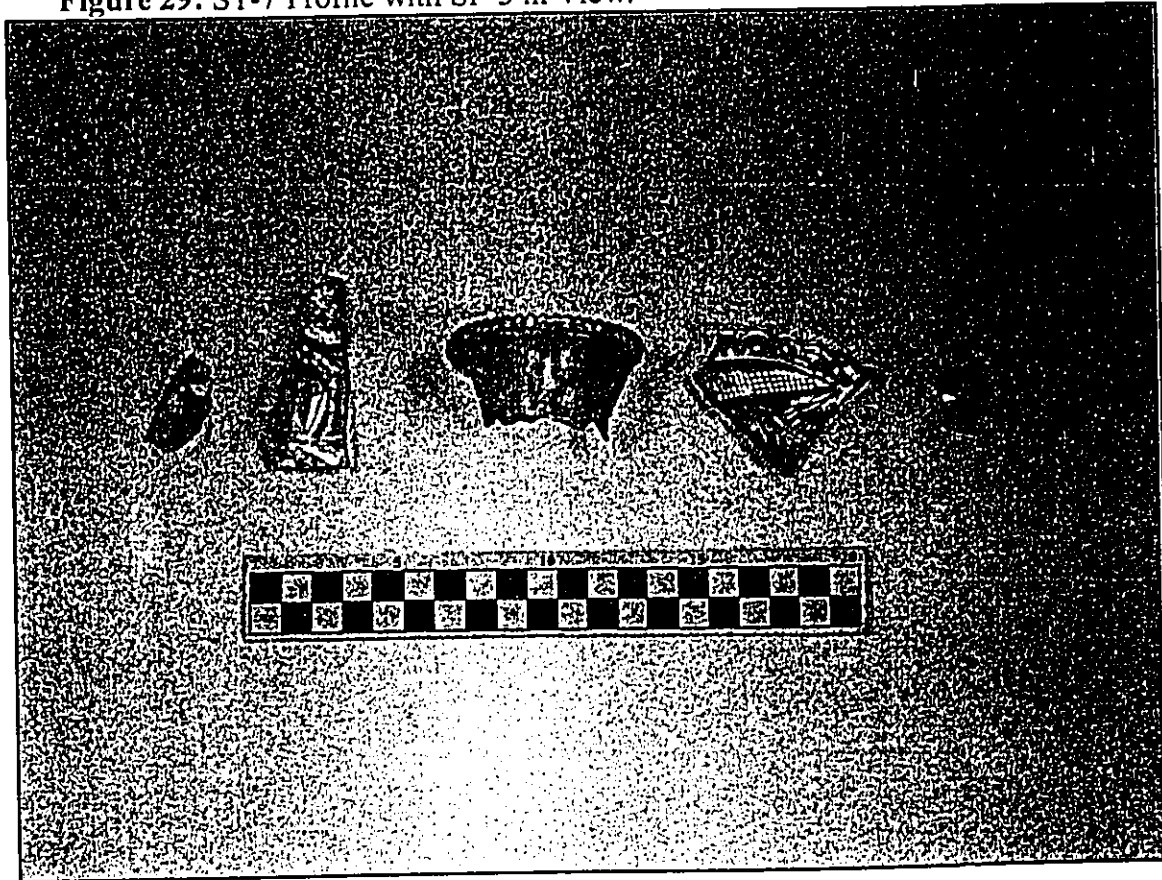


Figure 30: ST-7 Artifacts.

project area remains relatively enigmatic as no archaeological evidence (artifacts, deposits, soils, botanical remains) to support traditional land use were recovered. Historical records point to habitation on the parcel just after the *Māhele*, and later maps (see Figure 7) show habitation on the parcel as well. State Site 50-50-04-5701 identified on the property correlates with habitation in the 1920s to 1930s indicating that the parcel was likely used as habitation over several generations during the historic period.

SIGNIFICANCE ASSESSMENTS AND RECOMMENDATIONS

One site, State Site 50-50-04-5701, was identified during Archaeological Inventory Survey of the property. Significance evaluations are based on Rules Governing Procedures for Historic Preservation (DLNR 2001; Chap.275). The site is significant under Criterion A based on its association with events that have made important contributions to broad patterns in history. The site is significant under Criterion D as it is likely to yield important information for research on traditional and historic cultural practices. The site has been recorded and yielded adequate information and no further work is necessary. Based on the results of the Archaeological Inventory Survey, it is unlikely that additional research would contribute significantly to furthering our understanding of traditional Hawaiian history or the history of the post-Contact period in Hawai'i.

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