MEMORANDUM

TO: The Honorable Russel S. Nagata, Comptroller
    Department of Accounting and General Services

SUBJECT: Final Environmental Impact Statement for the Site
          Selection for the New Kihei Public Library

I am pleased to accept the Final Environmental Impact Statement for the Site Selection for the New Kihei Public Library as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes. This environmental impact statement will be a useful tool in the process of deciding if the action described therein should be allowed to proceed. My acceptance of the statement is an affirmation of the adequacy of that statement under applicable laws and does not constitute an endorsement of the proposed action.

When the decision is made regarding the proposed action itself, I expect the proposing agency to consider if the societal benefits justify the environmental impacts which will likely occur. These impacts are adequately described in the statement and, together with the comments made by reviewers, provide a useful analysis of the proposed action.

[signature]

JOHN WAIHEE

cc: Mr. Brian J. J. Choy
FINAL
ENVIRONMENTAL IMPACT STATEMENT
FOR THE SITE SELECTION FOR
THE NEW KIHEI PUBLIC LIBRARY

KIHEI, MAUI

PREPARED FOR:
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

PREPARED BY:
FUKUNAGA AND ASSOCIATES, INC.

JUNE 1991
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE
SITE SELECTION FOR THE
NEW KIHEI PUBLIC LIBRARY
KIHEI, MAUI

This environmental document is prepared pursuant to Chapter 200 of Title 11, Administrative Rules, Department of Health, "Environmental Impact Statement Rules".

PROPOSING AGENCY:
Department of Accounting and General Services
State of Hawaii

ACCEPTING AUTHORITY:
Governor, State of Hawaii

Responsible Official: RUSSELL NAGATA, COMPTROLLER
DATE 7/1/91

Prepared By:
Fukunaga and Associates, Inc.
Consulting Engineers
Honolulu, Hawaii
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE</td>
<td>i</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>I. PROJECT DESCRIPTION</td>
<td></td>
</tr>
<tr>
<td>A. Study Purpose</td>
<td>I-1</td>
</tr>
<tr>
<td>B. Present Conditions</td>
<td>I-1</td>
</tr>
<tr>
<td>C. Project Need</td>
<td>I-3</td>
</tr>
<tr>
<td>D. Proposed Project</td>
<td>I-3</td>
</tr>
<tr>
<td>E. Library Development Requirements</td>
<td>I-4</td>
</tr>
<tr>
<td>II. PROJECT SETTING</td>
<td></td>
</tr>
<tr>
<td>A. Regional Overview</td>
<td>II-1</td>
</tr>
<tr>
<td>B. Land Use Plans, Policies, and Controls</td>
<td>II-1</td>
</tr>
<tr>
<td>1. Hawaii State Plan</td>
<td>II-1</td>
</tr>
<tr>
<td>2. State Land Use Designation</td>
<td>II-4</td>
</tr>
<tr>
<td>3. Kihei-Makena Community Plan</td>
<td>II-4</td>
</tr>
<tr>
<td>4. County Zoning</td>
<td>II-7</td>
</tr>
<tr>
<td>5. Flood/Tsunami Hazard</td>
<td>II-7</td>
</tr>
<tr>
<td>6. Underground Injection Control</td>
<td>II-9</td>
</tr>
<tr>
<td>7. Special Management Area</td>
<td>II-9</td>
</tr>
<tr>
<td>C. Infrastructure</td>
<td>II-11</td>
</tr>
<tr>
<td>1. Water</td>
<td>II-11</td>
</tr>
<tr>
<td>2. Sewer</td>
<td>II-11</td>
</tr>
<tr>
<td>3. Drainage</td>
<td>II-12</td>
</tr>
<tr>
<td>4. Electrical/Telephone</td>
<td>II-13</td>
</tr>
<tr>
<td>5. Gas</td>
<td>II-13</td>
</tr>
<tr>
<td>6. Highway/Street Network</td>
<td>II-13</td>
</tr>
<tr>
<td>D. Site Selection Area Environment</td>
<td>II-14</td>
</tr>
<tr>
<td>1. Existing Land Use</td>
<td>II-14</td>
</tr>
<tr>
<td>2. Land Ownership</td>
<td>II-15</td>
</tr>
<tr>
<td>3. Climate</td>
<td>II-15</td>
</tr>
<tr>
<td>4. Flora</td>
<td>II-16</td>
</tr>
<tr>
<td>5. Fauna</td>
<td>II-16</td>
</tr>
<tr>
<td>6. Geology/Hydrology</td>
<td>II-16</td>
</tr>
</tbody>
</table>
### TABLE OF CONTENTS (CONT'D)

7. Soils  
  _page II-18
8. Wetlands  
  _page II-18
9. Archaeological/Historical Sites  
  _page II-19
10. Scenic Characteristics  
    _page II-19
11. Topography  
    _page II-19

**E. Socioeconomic Characteristics**  
1. Population  
   _page II-19
2. Employment and Income  
   _page II-19
3. Public Services  
   _page II-20

**III. IDENTIFICATION OF POTENTIAL SITES**

A. Site Selection Methodology  
   _page III-1

B. Minimum Site Criteria  
   _page III-1

C. Potential Sites  
   _page III-2

1. Candidate Site A--Kihei Community Complex  
   _page III-6

2. Candidate Site B--Future County Civic Center  
   _page III-10

3. Candidate Site C--Waiohuli Beach Homesteads  
   _page III-12

4. Candidate Site D--Adjacent to Kalama Park  
   _page III-15

5. Candidate Site E--Adjacent to Kihei School  
   _page III-17

**IV. EVALUATION OF CANDIDATE SITES**

A. Site Evaluations  
   _page IV-1

1. Building Site Criteria  
   _page IV-1
   a. Environmental Characteristics  
      _page IV-1
   b. Roadways and Utilities  
      _page IV-3
   c. Accessibility  
      _page IV-4

2. Community Criteria  
   _page IV-5
   a. Government  
      _page IV-5
   b. Community Effects  
      _page IV-7

3. Cost Considerations  
   _page IV-8

B. Summary of Evaluations  
   _page IV-9

1. Summary of Building Site Criteria Evaluation  
   _page IV-9
TABLE OF CONTENTS (CONT'D)

2. Summary of Community Criteria Evaluation  IV-11
3. Summary of Cost Considerations  IV-13
4. Overall Evaluation Summary  IV-13

V. PROBABLE IMPACTS AND MITIGATIVE MEASURES

A. Short-term Impacts  V-1
   1. Construction Noise  V-1
   2. Air Quality  V-2
   3. Construction Wastes  V-2
   4. Water Quality  V-2
   5. Public Health and Safety  V-2
   6. Flora/Fauna  V-2
   7. Economic  V-3
   8. Archaeological/Historical  V-3

B. Long-term Impacts  V-3
   1. Flora/Fauna  V-3
   2. Social  V-4
   3. Public Health and Safety  V-4
   4. Displacement  V-6
   5. Infrastructure  V-10
   6. Traffic  V-11

VI. ALTERNATIVES TO THE PROPOSED ACTION  VI-1

A. No action  VI-1

B. Expansion of existing libraries  VI-1

C. Leasing of privately-owned space  VI-1

VII. THE RELATIONSHIP BETWEEN LOCAL SHORT TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG TERM PRODUCTIVITY  VII-1

VIII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES  VIII-1

IX. LIST OF NECESSARY APPROVALS  IX-1

X. AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED IN THE PREPARATION OF THIS DOCUMENT  X-1

XI. EIS PREPARATION NOTICE COMMENTS AND RESPONSES  XI-1
XII. EIS PUBLIC REVIEW PHASE, COMMENTS AND RESPONSES  

XIII. LIST OF PREPARERS OF THIS DOCUMENT  

XIV. APPENDICES  
A. List of Potential Sites  
B. Candidate Site Evaluations  
C. Archaeological Inventory Survey  
D. References
PREFACE

This environmental document is prepared pursuant to the requirements of Chapter 343, Hawaii Revised Statutes and Title 11, Chapter 200, Department of Health, Administrative Rules.

The document incorporates the methodology and results of the Site Selection Report which was prepared to identify the most suitable sites for the proposed new Kihei Public Library. Five (5) candidate sites were identified in the Site Selection Report. The purpose of the Site Selection Report is to identify and compare the relative advantages and disadvantages of each of the five sites to facilitate discussion and decision-making, rather than to recommend a preferred site.

Based on information presented in the Site Selection Report, the Hawaii State Public Library System has tentatively selected Site D, Adjacent to Kalama Park, for the new public library. Site C, Waiohuli Beach Homesteads was selected as an alternative site.

This document includes an assessment of the five sites with regard to EIS requirements. Because a tentative site selection has been made, discussions relating to archaeology and traffic are limited to Site D, Adjacent to Kalama Park.
**SUMMARY: EVALUATION RATINGS AND PROJECT COSTS**

**SUMMARY OF EVALUATION RATINGS**

<table>
<thead>
<tr>
<th>G = Good</th>
<th>KIHEI COMMUNITY</th>
<th>FUTURE COUNTY COMPLEX</th>
<th>WAIOHULI BEACH HOMESTEADS</th>
<th>ADJACENT TO KALAMA PARK</th>
<th>ADJACENT TO KIHEI SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>F = Fair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P = Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SITE A** | **SITE B** | **SITE C** | **SITE D** | **SITE E**

| Building Site Criteria Total (Environmental, Roadways & Utilities, Accessibility) |
| (G) | 9 | 6 | 6 | 8 | 5 |
| (F) | 4 | 3 | 6 | 3 | 5 |
| (P) | 0 | 4 | 1 | 2 | 2 |

| Community Criteria Total (Government, Community Effects) |
| (G) | 3 | 5 | 3 | 5 | 5 |
| (F) | 4 | 3 | 4 | 2 | 3 |
| (P) | 2 | 1 | 2 | 2 | 1 |

| Totals for Building Site & Community Criteria |
| (G) | 12 | 11 | 9 | 13 | 11 |
| (F) | 8 | 6 | 10 | 5 | 8 |
| (P) | 2 | 5 | 3 | 4 | 3 |

| SUMMARY OF PROJECT COSTS |
| (in thousands of 1990 dollars) |
| On-site Imp. | 525 | 435 | 440 | 460 | 415 |
| Off-site Imp. | 260 | 500 | 110 | 60 | 0 |
| Land Acquisi- | 620* | 5 | 540 | 640* | 20 |
| tion/Site Value |
| Subtotal | 1,405 | 940 | 1,090 | 1,160 | 435 |
| Engr. & Cont. | 280 | 190 | 220 | 230 | 85 |

| Total Estimated Project Cost |
| 1,685 | 1,130 | 1,310 | 1,390 | 520** |
| 2,020*** |

* Site value for State-owned land under County jurisdiction.
** Assumes infrastructure provided by the Piilani Village project, with complete installation by 1995.
*** If earlier occupancy date is desired, project cost is estimated to increase by approximately $1.5 million (providing offsite sewer, water, electrical, drainage and roads).
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE
SITE SELECTION FOR THE
NEW KIHEI PUBLIC LIBRARY
KIHEI, MAUI

SUMMARY

A. Responsible Office:
Russel S. Nagata
Comptroller
Department of Accounting and General Services
State of Hawaii
P.O. Box 119
Honolulu, Hawaii 96810
Contact: Charles Inatsuka (808) 548-5703

B. Accepting Authority: Governor

C. Name of Action: Site Selection for the New Kihei Public Library

D. Description of Proposed Action:
A new public library is proposed in Kihei to serve the
Maalaea, Kihei, Wailea and Makena areas on the Island of
Maui. This new facility would provide a permanent library
to replace the Kihei Library Station. The existing facility
is located in a classroom building in the old school complex
on South Kihei Road, now known as the Kihei Community
Complex. The nearest full service libraries are located in
Wailuku and Kahului.

E. Candidate Sites:
Five candidate sites have been identified, as follows:

<table>
<thead>
<tr>
<th>Candidate Site</th>
<th>TMK</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Site A--</td>
<td>3-9-06:11</td>
<td>2.0 ac. min.</td>
</tr>
<tr>
<td>Kihei Community Complex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Site B--</td>
<td>2-2-02: por. 54</td>
<td>2.0 ac. min.</td>
</tr>
<tr>
<td>Future County Civic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Site C--</td>
<td>3-9-11:18</td>
<td>2.31 acres</td>
</tr>
<tr>
<td>Waialaeki Beach Homesteads</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Site D—
Adjaacent to Kalama
Park 3-9-12:13 1.9 acres

5. Site E—
Adjacent to Kihei
School 2-2-02: por. 42 2.0 ac. min.

F. Project Setting:

Maui is the second largest County in the State of Hawaii in
terms of land mass, with an area of 1,161.6 square miles.
The County includes the islands of Maui, Lanai, Kahoolawe
and most of Molokai. Maui is the largest of the four
islands with an area of 728.6 square miles (Reference 8).

Maui is the third most populous County in the State of
Hawaii. In 1988, the island of Maui had a resident
population of 84,000, accounting for 90% of Maui County’s
population (Reference 10).

The Hawaii State Library System operates six libraries on
Maui—Kihei, Lahaina, Wailuku, Kahului, Makawao and Hana.
The proposed Kihei Public Library will service South Maui,
to include communities in Maalaea, Kihei, Wailea and Makena.
The Kihei Public Library will be located within the
community of Kihei between the areas mauka of the Piilani
Highway and makai of South Kihei Road.

G. Relationship to Plans, Policies and Controls

Land use considerations pertinent to the proposed public
library sites are as follows:

- Hawaii State Plan
- State Land Use Designation
- Kihei-Makena Community Plan
- County Zoning
- Flood/Tsunami Hazard
- Underground Injection Control
- Special Management Area

The above plans, policies and controls are considered in the
evaluation of each site.

H. Probable Impacts

Impacts associated with the proposed action can be
classified as having short-term and long-term effects.
Short-term site-related impacts are primarily those related
to construction activities, such as noise, air quality,
water quality, erosion, traffic and public health and
safety. Long-term site impacts are those impacts
anticipated due to the operation of the facility, such as
effects on flora, fauna, social, public health and safety,
displacement, infrastructure, and traffic.

The short-term impacts associated with the proposed action which cannot be avoided are those related to construction activity. Current State rules and regulations should be adequate to mitigate any adverse impacts.

Both negative and beneficial long-term impacts are associated with the proposed action. Minimal effects are anticipated due to the development of any of the five sites since all are near or have been subject to development. All sites are presently vacant, with the exception of the existing library site (Site A), minimizing disruption of the existing community. The library is compatible with surrounding land uses and with the exception of Site B, with the availability of existing infrastructure. Beneficial impacts include the increased selection of library material and larger and more accessible facilities.

Long-term negative impacts are some increase in traffic on nearby streets and loss of open space resources in the rapidly developing Kihei area.

I. Alternatives Considered

1. No Action

   The "no action" alternative would mean that the Kihei library station would continue to remain in operation. This alternative is unacceptable to the community since the facility is inadequate to serve the needs of the existing population. This alternative is even more unrealistic in view of the unprecedented growth that Kihei is experiencing.

   This alternative would preclude the project's goal of ensuring the provision of adequate and accessible library facilities for the Maalaea, Makena, Kihei and Wailea population, forcing the public to commute to Wailuku or Kahului.

2. Expansion of Existing Library Station

   Renovation and expansion of the existing Kihei Library Station would not be feasible due to the age of the structure (approximately 46 years old) and lack of available building area to convert to library use. Efficient use of the area would involve demolition of one or more of the existing structures on the site and construction of a new facility.
3. Leasing of Privately-owned Space

Leasing of space has short-term advantages but would be viable in the long-term due to uncertainties in lease rents and tenure. Lack of control over future expansion capabilities is also a consideration which would tend to favor the proposed action.

J. Relationship of Local Short-term Uses and the Enhancement of Long-term Productivity

1. Short-term Uses

The proposed public library project will involve short-term uses of the local environment during the construction phase. The negative and positive aspects of these short-term impacts were discussed in Section V. The adverse impacts include temporarily increased noise and traffic in the area. The short-term benefits include increased economic activity due to construction expenditures related to the project.

2. Long-term Productivity

The long-term benefits from the proposed project will be due to the availability of library resources to the public living within the Kihei, Makena, Haalaea and Wailea areas. The library can be considered both a recreational and educational resource which will help maintain and enhance the productivity of the general populace by providing a source of information.

The libraries are also used as meeting halls where groups such as the neighborhood board, school clubs and athletic leagues can gather. This contributes to the long-term productivity of the community by providing a forum for social groups and by encouraging community participation, which leads to an increased quality of life.

K. Irreversible and Irretrievable Commitments of Resources

The commitment of resources can be divided into three categories:

1. Long-term Commitment of Land

The proposed action involves the commitment of two acres of land for a public library facility, precluding consideration of the land for other uses.
2. Construction Commitments

The construction of the facility will involve the irreversible and irretreivable use of energy (electricity and fuel), water, labor, materials and capital investment.

3. Operational Commitments

The completed public library facility will require the irreversible and irretreivable commitment of energy, water, labor, and materials to operate and maintain the facility.
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1</td>
<td>Location Map</td>
<td>I - 2</td>
</tr>
<tr>
<td>II-1</td>
<td>Site Selection Area Map</td>
<td>II - 2</td>
</tr>
<tr>
<td>II-2</td>
<td>State Land Use Map</td>
<td>II - 5</td>
</tr>
<tr>
<td>II-3</td>
<td>Maui County Kihei-Makena Community Plan</td>
<td>II - 6</td>
</tr>
<tr>
<td>II-4</td>
<td>Flood/Tsunami Hazard Zones</td>
<td>II - 8</td>
</tr>
<tr>
<td>II-5</td>
<td>General Information Map</td>
<td>II - 10</td>
</tr>
<tr>
<td>II-6</td>
<td>Acquifer Classifications for Island of Maui</td>
<td>II - 17</td>
</tr>
<tr>
<td>III-1</td>
<td>Kihei Area Map</td>
<td>III - 4</td>
</tr>
<tr>
<td>III-2</td>
<td>Candidate Site &quot;A&quot; - Location Map</td>
<td>III - 7</td>
</tr>
<tr>
<td>III-3</td>
<td>Candidate Site &quot;A&quot; - Planned Development</td>
<td>III - 9</td>
</tr>
<tr>
<td>III-4</td>
<td>Candidate Site &quot;B&quot; - Location Map</td>
<td>III - 11</td>
</tr>
<tr>
<td>III-5</td>
<td>Candidate Site &quot;C&quot; - Location Map</td>
<td>III - 13</td>
</tr>
<tr>
<td>III-6</td>
<td>Candidate Site &quot;D&quot; - Location Map</td>
<td>III - 16</td>
</tr>
<tr>
<td>III-7</td>
<td>Candidate Site &quot;E&quot; - Location Map</td>
<td>III - 18</td>
</tr>
<tr>
<td>III-8</td>
<td>Candidate Site &quot;E&quot; - Piilani Village Master Plan</td>
<td>III - 20</td>
</tr>
<tr>
<td>V-1</td>
<td>Candidate Site &quot;A&quot; - Flood/Tsunami Hazard Zones</td>
<td>V - 5</td>
</tr>
<tr>
<td>V-2</td>
<td>Candidate Site &quot;C&quot; - Flood/Tsunami Hazard Zones</td>
<td>V - 7</td>
</tr>
<tr>
<td>V-3</td>
<td>Candidate Site &quot;D&quot; - Flood/Tsunami Hazard Zones</td>
<td>V - 8</td>
</tr>
</tbody>
</table>

LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-1</td>
<td>Minimum Criteria Ratings for Potential Sites</td>
<td>III - 3</td>
</tr>
<tr>
<td>III-2</td>
<td>Description of Candidate Sites</td>
<td>III - 5</td>
</tr>
<tr>
<td>IV-1</td>
<td>Evaluation Ratings Summary</td>
<td>IV - 15</td>
</tr>
<tr>
<td>IV-2</td>
<td>Ratings Summary by Category</td>
<td>IV - 16</td>
</tr>
<tr>
<td>IV-3</td>
<td>Land Acquisition Cost</td>
<td>IV - 17</td>
</tr>
<tr>
<td>IV-4</td>
<td>Project Cost Summary</td>
<td>IV - 18</td>
</tr>
</tbody>
</table>
I. PROJECT DESCRIPTION

A. Study Purpose

A new public library is proposed in Kihei to serve the Maalaea, Kihei, Wailea and Makena areas on the Island of Maui (see Figure I-1 Location Map). This report is intended to accomplish the following:

1. To identify potential sites for the public library within the Kihei area. Through an evaluation process the alternatives are to be narrowed to a list of three to six sites for further review and evaluation.

2. To assess each candidate site in accordance with requirements of Chapter 343, Hawaii Revised Statutes and the Department of Health's Title 11, Chapter 200, "Environmental Impact Statement Rules".

B. Present Conditions

The Hawaii State Library System is made up of the Hawaii State Library and five library districts: East Oahu, West Oahu, Hawaii, Kauai, and Maui. It also operates the Library for the Blind and Physically Handicapped.

The Maui Library District has a total of eight libraries, one location on Lanai, six on Maui and one on Molokai. The circulation for the year ended June 30, 1988 was 522,886, as compared to circulations of 987,397 on Hawaii, 430,221 on Kauai and 4,571,941 on Oahu (Reference 8). The libraries on the island of Maui are located in Wailuku, Kahului, Makawao, Hana, Lahaina, and Kihei (see Figure I-1).

The population in Kihei increased over 340 per cent between 1970 and 1980, from 1643 to 7262 (Reference 1). In 1979, the Kihei Community Association requested that the State Librarian establish a library in Kihei in light of the population growth. In 1981, the Kihei Library Station opened under the auspices of the Kihei Community Association and with the support and supervision of the Wailuku Public Library. In 1988 the Kihei Library became a Maui District Library.

The existing Kihei Library Station operates out of the old Kihei Public School and present site of the Kihei Community Complex (See Figure I-1). The library occupies less than 2000 square feet of space within an old classroom building. Also located on the 4.4 acre site (TMK: 3-9-06:11) are a County Parks and Recreations office, restrooms, Kihei Youth Center,
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
volleyball and basketball courts, and meeting halls.

The land is owned by the State of Hawaii and is used by the County (Department of Human Concerns) under Executive Order 2958 for "Recreation Center Site". The present library is maintained by the County as part of the Community Complex. Minor repairs and alterations are made by volunteers. Two full-time librarians staff the library with student helpers and janitor personnel.

This site selection report has been initiated to determine and evaluate the most feasible sites for the new Kihei public library.

C. Project Need

The service area for the proposed Kihei Public Library is South Maui, including Maalaea, Kihei, Wailea, and Makena. The 1980 population for the Kihei service area was 7262 (Reference 1). As a planning guideline, the County's Kihei-Makena Community Plan projected a resident population of 22,900 persons over the next twenty years (year 2000). The Hawaii State Library System proposes a facility for the year 2000 population projection of 22,900 persons, which provides the basis for establishing building size and site area.

D. Proposed Project

The proposed project, initiated by the Department of Accounting and General Services, is the selection of a site for a new public library, to be located within the Kihei community. The facility will contain the following features:

1. Driveway or access road from existing road to parking area.
2. Paved parking area.
3. Utilities to provide water, electricity, sewer, and telephone service.
4. Drainage improvements to take care of on-site drainage.
5. Landscaping.

The work shall be completed before the Kihei Public Library is closed.
E. Library Development Requirements

1. Building Area Requirements

The project will provide space for a lobby, large group room, librarian's office, staff workroom, storage stack area, store-room and meeting/conference room. Additional areas include a staff lounge, public toilets, mechanical/electrical room and a ground maintenance room.

Library area requirements are based on community population. The 15,550 square foot (net) facility being requested by the Hawaii State Public Library System is the largest standard size facility and is based on a "large" community population (defined as being greater than 15,000). The new facility will replace a facility under 2000 square feet.

The Library System is planning to request construction and equipment funding in Fiscal Biennium 1991-1993. Assuming construction funding in 1991, the space requirement (15,550 net square feet) for the public library will be based on the projected area population greater than 15,000 (estimated at 22,900 in the year 2000).

2. Parking Requirements

A minimum of 52 off-street parking spaces are required for the library, in accordance with the Maui County Zoning Code which states that one parking space shall be provided for every 300 square feet of building. Consideration should also be given to providing group room parking on-site, at a ratio of one stall per 100 square feet of meeting room area (approximately 16 stalls). Paved parking and loading spaces shall be provided in accordance with the County's Off-Street Parking and Loading Ordinance. Appropriate landscaping and fencing shall also be provided around parking areas.

3. Land Area Requirements

The projected land requirement for the proposed public library is determined to be 2.0 acres. This minimum is based on facility requirements for a projected population greater than 15,000 (estimated at 22,900 in the year 2000).
4. Construction

The project will involve the following construction activities:

a. Site clearing and earthwork
b. Trenching and backfilling for utility lines and building foundations.
c. Laying concrete masonry units.
d. Carpentry, drywall, glasswork, flooring and roofing.
e. Landscaping.
f. Paving for driveways, walkways and parking.

5. Use of Public Funds or Land

The project will be funded by public Capital Improvement Program (CIP) appropriations from the State Legislature. In an effort to minimize tenant relocation and land acquisition costs, State lands will be given first consideration in the selection of sites.

6. Development Schedule

The project consists of constructing a new public library facility and re-establishing the existing operations into the new building. The Library System is scheduled to request construction funds in Fiscal Biennium 1991-1993. Until the new facility is constructed, the Kihei Public Library will continue to operate within the Kihei Community Complex.

The project schedule is dependent on the selection of lands, and in the case of private lands, implementation of acquisition proceedings. Selection of State-owned land would eliminate some of these proceedings.

Additional factors affecting project schedule, which are site dependent, include meeting the State’s requirements relating to the EIS (Chapter 343, Hawaii Revised Statutes) and obtaining necessary government approvals.

Relocation of any existing land tenants may also impact the construction of the facility.
II. PROJECT SETTING

A. Regional Overview

Maui is the second largest of the Hawaiian Islands, with an area of 728.8 square miles. Maui County is made up of four major islands—Maui, Lanai, Kahoolawe, and Molokai, and in terms of land mass is the second largest County with 1,161.6 square miles. Maui County is the third most populous County with a resident population of 93,000 in 1988 (Reference 10).

Tourism is Maui's prime industry with a westbound visitor count of 2,001,870 in 1986 and 1,884,050 in 1988 (Reference 10). Kihei had a total of 8 hotels and 59 condominiums in February 1989, with a total of 4,810 rooms (Reference 16). The construction boom associated with the new hotels has provided job and investment opportunities.

Agriculture plays a major role in Maui, with sugar, pineapple, vegetables, protea, cocoa and wine grapes currently being produced.

Scientific research is becoming an increasingly important industry on Maui, including space-related facilities in Science City on Haleakala, defense research development conducted in Federal facilities on Haleakala, and bioengineering and tropical agriculture research.

Sites were selected from the area extending from Mokulele Highway to Kilohana Street (near Kamaole Beach), and extending makua of Piilani Highway and makai of Kihei Road (see Figure II-1 Site Selection Area Map).

B. Land Use Plans, Policies, and Controls

The following land use plans, policies, and controls apply to the service area:

1. Hawaii State Plan

The Hawaii State Plan sets forth Hawaii's goals, objectives, and policies to provide general direction to the State and to detail priority directions which indicate areas of Statewide concern. The proposed Kihei Public Library facility supports the following goals, objectives and policies of the Hawaii State Plan:
SITE SELECTION AREA

Island Of Maui

County Of Maui
SITE SELECTION AREA MAP
Kihei, Maui, Hawaii
a. Socio-cultural advancement - education

Objective  Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.

Policies
i. Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.

ii. Promote programs and activities that facilitate the acquisition of basic skills such as reading, writing, computing, listening, speaking and reasoning.

b. Socio-cultural advancement - leisure

Objective  Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic and recreational needs for present and future generations.

Policies
i. Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently.

ii. Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.

iii. Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources.

II - 3
iv. Increase opportunities for appreciation and participation in the creative arts, including the literary, theatrical, visual, musical, folk and traditional art forms.

2. State Land Use Designation

The State Land Use Commission regulates the use of lands through classification of land as either Urban, Rural, Agricultural, or Conservation. The intent of the land classification is to accommodate growth and development and to retain the natural resources of the area.

Any land use district boundary amendments would require a public hearing by the Maui Planning Commission, and review and final approval by the County Council.

A Special Use Permit would require Maui Planning Commission approval.

The major portion of the site selection area below Piilani Highway is within the State's Urban District (see Figure II-2 State Land Use Map). Pockets of Rural District land are located near Piilani Highway. The areas mauka of Piilani Highway are, for the most part, within the State Agriculture Use District. Large areas within the Urban Use District include part of the Research and Technology (R&T) Park, Silversword Golf Course and Maui Meadows Subdivision in Wailea.

3. Kihei-Makena Community Plan

The Kihei-Makena Community Plan (see Figure II-3 Maui County Kihei-Makena Community Plan) was adopted on June 24, 1980 as Ordinance No. 1052, mandated by the Maui County General Plan and Charter of Maui County (1977). The Maui County General Plan is guided by the Hawaii State Plan and sets forth the broad objectives and policies for the long-range development of the County.

The Community Plan provides a more detailed scheme for implementing these objectives and policies, as related to development within the specific Kihei-Makena region until the year 2000. The plan outlines the sequence, standards, and patterns of future developments.

The Community Plan does not specifically address the need for a new public library facility, except indirectly in a recommendation concerning
iv. Increase opportunities for appreciation and participation in the creative arts, including the literary, theatrical, visual, musical, folk and traditional art forms.

2. State Land Use Designation

The State Land Use Commission regulates the use of lands through classification of land as either Urban, Rural, Agricultural, or Conservation. The intent of the land classification is to accommodate growth and development and to retain the natural resources of the area.

Any land use district boundary amendments would require a public hearing by the Maui Planning Commission, and review and final approval by the County Council.

A Special Use Permit would require Maui Planning Commission approval.

The major portion of the site selection area below Piilani Highway is within the State's Urban District (see Figure II-2 State Land Use Map). Pockets of Rural District land are located near Piilani Highway. The areas mauka of Piilani Highway are, for the most part, within the State Agriculture Use District. Large areas within the Urban Use District include part of the Research and Technology (R&T) Park, Silversword Golf Course, and Maui Meadows Subdivision in Wailea.

3. Kihei-Makena Community Plan

The Kihei-Makena Community Plan (see Figure II-3 Maui County Kihei-Makena Community Plan) was adopted on June 24, 1980 as Ordinance No. 1052, mandated by the Maui County General Plan and Charter of Maui County (1977). The Maui County General Plan is guided by the Hawaii State Plan and sets forth the broad objectives and policies for the long-range development of the County.

The Community Plan provides a more detailed scheme for implementing these objectives and policies, as related to development within the specific Kihei-Makena region until the year 2000. The plan outlines the sequence, standards, and patterns of future developments.

The Community Plan does not specifically address the need for a new public library facility, except indirectly in a recommendation concerning
population. The recommendation of the Community Plan is to "coordinate all future developments with provisions for adequate services to ensure that infrastructure development and public services keep pace with defacto (total) population demands".

A Community Plan amendment would require a public hearing by the Maui Planning Commission, and review and final approval by the County Council. Consideration of the Community Plan's implementation plan were incorporated into the criteria used for selection of the library sites.

4. County Zoning

Maui County Zoning within the Kihei site selection area includes Residential, Multi-family, Hotel, Business, Industrial, Agricultural, and Civic Improvement Districts. A public library facility is specifically permitted within Hotel, Community Business (B-2), and Central Business (B-3) districts. A library is also a permitted use, though subject to interpretation, within Residential (R1, R2, & R3) and Multiple Family (A-1, A-2, Duplex) districts, falling under the category of a "State building for public use". A library is also similar to a school facility, which is a permitted use within a residential district.

The zoning districts for the selected candidate sites are shown in Section III.

5. Flood/Tsunami Hazard

The Federal Emergency Management Agency's Flood Insurance Rate Map (FIRM), panels 15003-0255B dated June 1, 1981 and 15003-0255C dated September 6, 1989, designates the Kihei shoreline as an area of 100-year coastal flood inundation with velocity. Base flood elevations and flood hazard factors have been determined for these Zone V10 and V18 areas (see Figure II-4 Flood/Tsunami Hazard Zones).

Further inland, low-lying areas are within the 100-year flood with depths between one and three feet. These areas of 100-year flood inundation are predominantly around the five streams which collect run-off from Haleakala's slopes: Kulanihakoi, Waipuilani, Keokea, Kamaole, and Lilicholo. The majority of the Kihei area is within one of various Zone A designations. Projects on sites within a tsunami and/or flood
zone must conform to County Ordinance 1145, pertaining to flood hazard districts.

Most of Kihei's rainfall is produced by high intensity Kona storms occurring during the winter months. These short duration storms occur only a few days of the year and tend to create flooding problems, covering low-lying areas both during and after the storm.

6. Underground Injection Control

The State of Hawaii, Department of Health's Underground Injection Control Program (July 6, 1984) delineates areas in which underground disposal may be permitted. In general, underground disposal is permitted in areas makai of the Underground Injection Control (UIC) line.

In Kihei, the UIC line generally runs along the 600 foot elevation contour, mauka of Piilani Highway. The entire site selection area is makai of the UIC Line where underground sewage disposal is allowed (see Figure II-5 - General Information Map). However, the area is within a proposed "critical wastewater disposal area", as designated by the Maui County Wastewater Advisory Committee, prohibiting use of cesspools as a means of disposal. The State Department of Health has also issued a blanket prohibition on private sewage treatment if there is no assurance that the project will eventually tie into the County system.

7. Special Management Area

The coastal areas within Kihei, from the shoreline to Piilani Highway, are within the County's Special Management Area (SMA) and are subject to Chapter 205-A of the Hawaii Revised Statutes as amended and Article II, Special Management Area Rules and Regulations of the County of Maui. (See Figure II-5).

The County regulates development of lands within the SMA through a review and permit process. Article II, Section 2-8 and 2-9 of the Special Management Area provides that "No development within the Special Management Area shall be approved unless the Authority has first found that:

(1) The development will not have any substantial adverse environmental or ecological effect except as such adverse effect is minimized to the extent
practicable and clearly outweighed by public health, safety, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options.

(2) The development is consistent with the objectives and policies as enumerated in Chapter 205A, Hawaii Revised Statutes.

(3) The development is consistent with the county general plan, zoning, subdivision, and other applicable ordinances."

C. Infrastructure

1. Water

The island of Maui is served by five separate County water systems: Central Maui, Makawao, Kula, Hana, and Lahaina. In Fiscal Year 1987, water withdrawn for the Kihei-Makena Community Plan region from the Central Maui sources amounted to 7.08 million gallons per day (MGD) (Reference 5). The Central Maui Water System serves the Kihei area, Wailuku-Kahului, Sprecklesville, and Paia. Water is transmitted from wells and tunnels in the West Maui Mountains to Makena, through transmission lines running through the isthmus, along South Kihei Road, Piilani Highway, and Wailea Alanui Drive. Higher areas, such as the Kihei Heights and Maui Meadows subdivisions, are serviced by pump/reservoir systems.

2. Sewer

The County Public Works Department operates the Kihei Sewage Treatment Plant (STP) and sewer system in Kihei. The County’s sewer main runs within South Kihei Road with branch mains extending mauka and makai of South Kihei to serve existing subdivisions. Sewage is transported to the Kihei STP by a combination of gravity sewer lines, pump stations, and force mains. All sites are within the County’s service limits and will require connection to the public sewers, in accordance with Section 11-62-06(b) of the State DOH’s wastewater rules.

The Kihei STP has a design capacity of 4.0 million gallons per day (MGD) and is located above Piilani Highway, south of the Silversword Golf Course.
Sewage from Kihei and Wailea is currently being treated at this plant.

The existing plant is operating at capacity and the County is currently expanding the existing Kihei STP to 6.0 MGD. Completion of the expansion is expected to be completed by mid-1991.

Maui County Ordinance No. 1787 allocated the 2.0 MGD expansion—1.2 MGD for long-term residential developments and the remaining 800,000 gallons for other uses. Sewage capacity is allocated according to the order of building permit issuance. The County cannot guarantee that sewage capacity will be available at the time of building permit application. The County Council has stated that they may waive the application of the ordinance if it is shown that the project will have a minimal impact on sewage flow, and is necessary to the public health, safety and welfare. It is anticipated that the facility will have minimal impact on the sewer system, but sewer requirements will need to be confirmed as design of the facility progresses.

The construction of the library will commence after the scheduled mid-1991 completion of the plant expansion. Should the expansion be delayed, temporary private sewage treatment may have to be considered. As stated earlier, the State Department of Health has issued a blanket prohibition on private sewage treatment, unless there is some assurance that the facility will be tied into the County system as capacity becomes available.

3. Drainage

Drainage within the Kihei area generally sheet flows from the mauka areas into one of the five natural gulches. The gulches empty onto low lying areas near South Kihei Road, causing most of Kihei to be submerged during Kona storms. The existing drainage system throughout Kihei consists of scattered unlined channels, drain lines, pipe or box culverts, and road side ditches. Masterplanned improvements, including lined channels, box culverts and outlets to the ocean, have not been constructed due to lack of funds.

Piilani Highway improvements consist of gutters, box culverts and bridge structures over the gulches.
4. Electrical/Telephone

Electrical power is supplied by Maui Electric, a subsidiary of Hawaiian Electric Co., Inc., for industrial and residential use on Maui (Reference 8).

Hawaiian Telephone Co. provides telephone service throughout Maui County.

5. Gas

Pipeline utility service is provided in Kahului and Wailuku by Gasco, Inc., a subsidiary of Pacific Resources, Inc. Other sections of Maui are served by tank and bottled propane (Reference 8).

6. Highway/Street Network

North Kihei Road and Mokulele Highway are two-lane highways connecting the Kihei area to West Maui, Wailuku, Kahului, and "Upcountry". North Kihei becomes South Kihei Road south of the Mokulele Highway intersection. South Kihei Road is a two-lane road which follows the coastline. Posted speed limits are between 20 to 30 miles per hour (mph).

Piilani Highway is a two-lane highway which runs parallel to and mauka of South Kihei road, beginning at North Kihei Road and terminating at Kilohana Drive. Posted speed limits on Piilani Highway are between 45 and 55 mph.

Piilani Highway and South Kihei Road are connected by minor roads running mauka-makai: Kilohana Drive, Keonekai Road, Kanani Road, Lipoa Street, Ohukai Street and Uwapo Road.

The Kihei Traffic Master Plan dated October 1989 was prepared by Austin, Tsutsumi and Associates, Inc. for the Department of Public Works, County of Maui. The plan included evaluations of the existing roadway network and provided recommendations for future improvements. The report stated that Piilani Highway is underutilized as a primary arterial highway. South Kihei Road, on the other hand has as much traffic, or sometimes more traffic, than Piilani Highway.

The proposed road master plan includes a hierarchical classification of roads as follows:
1. Piilani Highway -- Will ultimately be a high-capacity, limited access highway. Future plans are for a four-lane divided facility with grade-separated interchanges at major cross roads and restricted access at-grade intersections at minor roads.

2. South Kihei Road -- Planned to be improved from a two-lane undivided road to a four-lane secondary arterial with restricted driveway access.

3. Ka'ono'ulu Street, Welakahao Road and two new roads will be designated as major east-west connector roads between Piilani Highway and South Kihei Road.

4. A new North-South Collector Road will extend from Piilani Highway north of Mokulele Highway, to Kilohana Drive, opposite Wailea Alanui Drive.

5. Minor East-West Connector Roads were designated with restricted access at Piilani Highway-- Uwapo Road/Kalwahine Street, Chukai Road, Waipuilani Road, Lipoa Street, Kanani Road, and Keonekai Road.

D. Selection Area Environment

1. Existing Land Use

Land uses in Kihei are a mixture of single-family residential, multi-family residential, hotel and business/commercial.

Significant land uses are as follows:

Transportation Facilities (Kihei Boat Launching Ramp)

Shopping Centers (Azeka Shopping Center, Star Market)

Hotels (Seibu, Wailea)

Educational Facilities (Kihei Elementary School and Lokelani Intermediate School)

Recreational: (Reference 1)

   Kihei Elementary School -- State, fields, courts, playground

II - 14
Kalama Beach Park -- County, shoreline sports, picnicking, field sports

Kamaole Park I, II & III -- County, shoreline sports, picnicking

Kealia Pond -- State, wildlife refuge, nature appreciation

Wailea Golf Courses -- Private, golf courses

Wailea Tennis Center -- Private, tennis courts

Seibu Golf Course -- Private, golf course

Kihei Boat Ramp -- State, launching ramp, parking

Kihei District Park -- County, fields and courts, playground

Silversword Golf Course -- Private, golf course

2. Land Ownership

As of Fall 1988, of Maui's 448,170 acres, 70.8% of the land was privately owned, 22.8% was owned by the State government, 6% was owned by the Federal and the remainder, by the County of Maui (Reference 10).

The majority of the property within the study area is privately owned and in residential or hotel use.

3. Climate

Kihei is located on the south side of the island of Maui, in the rain shadows of Haleakala and the West Maui mountains. Temperatures range from an average minimum of 62 degrees F in February to an average maximum of 90 degrees F in July. Average annual precipitation is less than 15 inches per year (Reference 15).

Winds are generally from the northeast except during the winter months when storms are usually accompanied by south winds. The Kihei-Makena shoreline areas are also subject to unpredictable local winds from Kalama Park to Cape Kinau. These winds are created as the trades increase in velocity as they travel between the West Maui
Mountains and Haleakala and meet the eddy current of the trades deflected along the southeast slopes of Haleakala.

4. Flora

The zonation of plants is closely related to climatic factors. The most important climatic factor for elevations below 5000 feet is average annual precipitation (Reference 15).

The predominant vegetation zone within Kihei is made up of kiawe and lowland shrubs. Characteristic vegetation within this zone includes kiawe, koa haole, finger grass and pili grass. Pili grass is a native Hawaiian species. There are no known endangered species of flora within the Kihei area (Reference 15).

Residential areas are planted with fruit trees, vegetable gardens, common landscaping trees, bushes, and ornamental plants.

5. Fauna

Mammals common to the island of Maui include the bat, axis deer, dog, goat, mongoose, pig, cat, mouse and rat. Birds which are associated with the prevalent vegetation type in Kihei (xerophytic forest, shrub land and grass land) include the cardinal, barred dove, spotted dove, mockingbird, golden plover, pueo, ricebird, and white eye. Of these birds, all but the native Hawaiian pueo and the indigenous golden plover, are introduced species (Reference 15).

6. Geology/Hydrology

Maui is made up of two separate volcanoes with a connecting isthmus formed by the flows of both. The West Maui Mountains is the older of the shield volcanoes and has valleys and peaks carved by numerous streams. The younger volcano, Haleakala, is a giant dome with the classic rounded form of a shield volcano.

East Maui is divided into four aquifer sectors. Kihei is within the Central Sector, which starts within the isthmus and extends to the northwest and southwest rift zones of Haleakala (See Figure II-6 Hydrology - Central Aquifer Sector). The Central aquifer sector is the most developed groundwater site in East Maui (Reference 5).
AQUIFER CLASSIFICATIONS FOR ISLAND OF MAUI

FIGURE II-6
Andesitic rocks of the Kula volcanic series and basaltic rocks of the Hana volcanic series make up the surface of East Maui. These formations overlay the oldest formation -- the Honomanu volcanic series, which is also the "premier" aquifer formation for East Maui (Reference 5).

7. Soils

The predominant soils within the area belong to the Pulehu-Ewa-Jaucas association, characterized as deep, nearly level to moderately sloping, well-drained and excessively drained soils. These soils have a moderately fine- to coarse-textured subsoil or underlying material and are commonly found on alluvial fans and in basins (Reference 14).

Soil near Piilani Highway belongs to the Waikaoa-Keahua-Molokai association. These low upland soils are moderately deep to deep and nearly level to moderately steep. The soils are well-drained and overlies a moderately fine textured subsoil (Reference 14).

Agricultural lands have been classified by the Land Study Bureau, with designations A to E. Small pockets of type A and B soils, which are suitable for agriculture, are found in Kihei. Most of these areas are located near Kealia pond, where alluvium has deposited.

Classification of soil types found within each of the selected sites is included in Section IV.

8. Wetlands

The U. S. Fish and Wildlife Service's (USFWS) "National Wetlands Inventory Map" identifies wetlands within the Kihei area. The most prominent area is the Kealia Pond near Kihei's north end. Major areas are shown on Figure II-5.

The Corps of Engineers conducted a reconnaissance survey of wetlands in Kihei in June 1990. Based on the survey findings, a generalized wetland location map was prepared and issued as a "Special Public Notice, Kihei, Maui, Wetland Locations" dated 24 July 1990. The wetlands and one drainage, Waipuilani Gulch, which are under the Corps' regulatory jurisdiction, are shown on Figure II-5. Under Section 404 of the Clean Water Act, a permit from the Corps is required to discharge dredged or fill material into designated wetlands or the drainageway. Consultation with the Corps is recommended prior to development of
these areas within Kihei for more detailed wetland boundary delineation.

9. Archaeological/Historical Sites

There are no known sites listed on the National Register of Historic Places in the selection area. However, there are two archaeological sites listed on the State Register—Pond site near TMK 3-9-01:85 (Site #1288) and an old church located on TMK: 3-9-01:12 (see Figure II-5).

10. Scenic Characteristics

The predominant scenic feature in the Kihei area is the panoramic ocean view, including views of the islands of Kahoolawe, Lanai and Molokini. The gentle slopes of Haleakala provide a backdrop to Kihei town and the West Maui Mountains can be seen in the distance as one looks towards Maalaea.

11. Topography

The lowlands of the Kihei area, from the coast to Kihei Road, are at elevations between 5 to 6 feet above Mean Sea Level (MSL). Between Kihei Road and Piilani Highway, the slopes of Haleakala gently rise (approximately 5%) from 5 feet to 90 feet MSL. The gentle slope accounts for the numerous gullies and poorly defined surface drainage pattern (Reference 7).

E. Socioeconomic Characteristics

1. Population

Residential population on the island of Maui grew 3.3% from July 1, 1987 to 84,200 as of July 1, 1988. The resident population in Kihei as of the 1980 census was 5,644. In 1988 the two largest population centers on Maui were Kahului (12,978 persons) and Wailuku (10,260 persons) (Reference 10).

The Kihei-Makena Community Plan recommends the use of a projected year 2000 resident population of 22,900 persons, for planning purposes. The actual population of the Kihei area will probably be higher due to unprecedented growth being experienced in the area.

2. Employment and Income

The annual average job count in 1988 for Maui County reflects the major role the tourism
industry plays in the Island's economy. There were 47,100 jobs in Maui as of 1988, roughly 9.0% of the State's total. Jobs within the hotel industry accounted for 17.30% (8,150 jobs) as compared to approximately 5.2% (2,550 jobs) employed by sugar, pineapple and other agriculture industries.

In 1988 the island of Maui had an annual average unemployment rate of 3.0% (1,450 persons) and the County of Maui had a 3.3% unemployment rate. The State's unemployment rate averaged 3.2% in 1988. The State's average annual earnings of workers under the Hawaii Employment Security Law averaged $20,454 in 1988, and Maui County workers averaged $18,032 (Reference 10).

3. Public Services

Major public facilities within the service area are discussed below:

a. Recreation

Public parks within the area:

Kihei Elementary School Park
Kalama Beach Park
Kamaole Parks I, II, III
Kihei District Park

b. Schools

Educational facilities within Kihei include the Kihei Elementary and Lokelani Intermediate schools. Enrollment in 1988 for Kihei Elementary was 1013 and for Lokelani Intermediate was 268. The Department of Education projected an enrollment of 1332 for Kihei Elementary and 440 for Lokelani Intermediate in 1994 (Reference 11).

c. Police Protection

Police protection for the proposed Kihei Public Library will be provided by the County Police Substation.

d. Fire Protection

Fire protection for the proposed facility will be provided by the Maui County Fire Station located on Kihei Road near Kalama Park.

II - 20
e. Health Care Facilities

Health care on Maui is provided by general hospitals in Wailuku, Hana, and Kula. In 1987, 153 acute beds were available (Reference 1).

f. Transportation

Ground

Facilities for ground transportation in Kihei include the State's two-lane roads, Piilani Highway and South Kihei Road, interconnected by minor streets. These arterials link Kihei to Lahaina, Wailuku, Kahului, and Makena.

No bus service is available in Kihei.

Ocean

Kahului Harbor is a deep-water harbor with container freight facilities. It is the island's only State commercial harbor.

Kihei Boat Launching Ramp, located near Kamaole Beach Park, is a State facility providing parking and launching facilities for small boats.

Air

The island of Maui is served by the State's Kahului Airport which can accommodate scheduled commercial airline flights as well as general aviation and general cargo. The airport is currently being enlarged to handle increased passenger traffic.
III. IDENTIFICATION OF POTENTIAL SITES

A. Site Selection Methodology

The site selection process involves two steps. The initial step of the site selection process involves the preliminary identification of areas warranting study, based on a set of minimum evaluation criteria. The criteria includes size and shape; consistency with land use plans, policies, and controls; accessibility; existing land development; compatibility with future developments; and tsunami and flood hazards.

The site selection area was limited to the Kihei community, between the area mauka of Piilani Highway and the area makai of South Kihei Road. Although Kihei proper generally extends from Mokulele Highway to Kilohana Drive, the service area extends to include Maalaea, Makena, and Wailea. Because the major concentration of residential population lies within Kihei, the site selection area was limited to Kihei proper.

The site selection area was first screened for potential sites. Lots selected in the initial screening met the basic criteria of having existing access, and were 2 acres or larger. Lots completely within a Coastal High Hazard District or within an area traversed by a gulch (without a completed detailed flood study), were not considered. Due to the high price of real estate within the Kihei area, lots within multi-family or hotel designated areas were not considered, with primary emphasis placed on identifying publicly-owned areas with P or PK designations.

A set of minimum criteria was then used to reduce the field of potential sites. The advantages and disadvantages of each site were evaluated to provide the basis for comparing the sites.

B. Minimum Criteria

A set of minimum criteria reflecting general site requirements and physical land development constraints was used to screen potential sites for further evaluation as candidate sites. The following set of minimum criteria was utilized:

1. Tenant displacement

   The site should be developable with minimal disruption to the existing community. Displacement of existing residences, businesses or public uses is undesirable.
2. Wetlands

The site should not be within an identified wetlands area, as determined by the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers.

3. Location

The site should be visible from a main road or located near a well-known town "landmark".

4. Planned Developments

Sites should not be located on land where there are known developments planned (for example, single-family or multi-family housing developments, or County master-planned roadways). Information regarding planned developments was obtained from various County and State agencies.

5. Subdivision

For privately owned land larger than two acres, the land should be of such size and shape that subdivision of a 2-acre portion would not be a "problem" (i.e. result in creation of an undevelopable or unsaleable remnant parcel for the land owner).

C. Potential Sites

A total of 23 sites were initially considered as potential sites for the Kihei Public Library (see Figure III-1 Kihei Area Map and Appendix A for listing). Six sites were found to meet all minimum criteria and were selected for further consideration as candidate sites. Table III-1 summarizes the rating of each potential site as "good" or "poor" for each criteria.

The Research and Technology (R&T) Park met the selection criteria and was initially selected as a candidate site. Consideration of the site was also based on preliminary site selection efforts by the Kihei Community Association in the later 1980's and discussions documented in the feasibility study prepared for the R&T Park. At that time, those discussions favored a public library with a specialty collection (technology-based) supporting the R&T Park activities and the Kihei public.

The facility presently proposed is a community-type library with a collection for the general public. Because a community library is not in line with the research and technology-oriented character of the park,
<table>
<thead>
<tr>
<th>Site</th>
<th>Tenant Displacement</th>
<th>Wetlands</th>
<th>Location</th>
<th>Planned Dev.</th>
<th>Subd. Candidate Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>12</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>N/A</td>
</tr>
<tr>
<td>15</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>18</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>19</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>N/A</td>
</tr>
<tr>
<td>20</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>22</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>23</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>N/A</td>
</tr>
<tr>
<td>Location</td>
<td>Ownership</td>
<td>TMK</td>
<td>Area (Acres)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site A Kihei Community</td>
<td>State of Hawaii (County of Maui-Exec. Order 2958)</td>
<td>3-9-06:11</td>
<td>2.0 min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site B Future County Civic</td>
<td>Haleakalā Ranch Co. 2-2-02:por.54</td>
<td>3-9-11:18</td>
<td>2.0 min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site C Waiohuli Beach</td>
<td>Edward M. &amp; Joan C. Tamori</td>
<td>3-9-12:13</td>
<td>1.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homesteads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site D Adjacent to Kalama</td>
<td>State of Hawaii (County of Maui-Exec. Order 3058)</td>
<td>3-9-06:11</td>
<td>2.0 min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site E Adjacent to Kihei</td>
<td>Haleakalā Ranch Co. 2-2-02:por. 42</td>
<td>3-9-11:18</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
the R&T Park directors requested that the site be eliminated from further consideration as a library site.

The site was eliminated from the list of candidate sites in consideration of their request and also noting the disadvantage of its relatively distant location from Kihei proper. The study will, therefore, discuss the evaluation of the five remaining candidate sites.

A more detailed evaluation of the five candidate sites was made in Section IV, concerning soils and topography, adequacy of infrastructure, traffic, archaeology, building site criteria, community criteria and cost considerations.

D. Description of the Candidate Sites

The five candidate sites are listed on Table III-2.

1. Candidate Site A -- Kihei Community Complex.

The site is at the entrance to Kihei, between South Kihei Road and Kenolio Road near Uwapo Road (See Figure III-2 Candidate Site A-Location Map). The 4.4 acre site, often referred to as "Old Kihei School" or the "Kihei Community Complex", presently houses the existing Kihei Library Station, Youth Center, restroom, volleyball and basketball courts, Department of Parks and Recreation office, and meeting halls. The property is surrounded by single-family and multi-family uses and Project District 2 (a commercial project).

The site is owned by the State of Hawaii and is used by the County of Maui, Department of Human Concerns as a "Recreation Center Site" under Executive Order 2958. Current County zoning is for Park use. The State Land Use designation is urban and the Kihei-Makena Community Plan designation is for park use.

The site is currently landscaped with grass, shrubs, trees and concrete sidewalks. Structures are single-story and of concrete masonry unit and wooden construction.

Off-street parking stalls are situated along the site's South Kihei Road frontage.

The site is connected to an 8" sewer line in Kenolio Road. Water service is provided by a 2" line along its south boundary and a 6" line along South Kihei Road. However, water system
improvements to provide fire protection will likely be required.

The site is within the County's Special Management Area (SMA), requiring an SMA permit for all proposed improvements.

The site is at an approximate elevation of 7 feet above Mean Sea Level (MSL). The makai portion (approximately one-fifth) of the site is within the Coastal High Hazard District, an area of 100-year flooding with velocity hazards (Zone V18). The mauka portion is within the Flood Fringe District. The area is designated Zone A4, an area of 100-year flooding with base flood elevations ranging from 11.0 feet MSL (along Kenolio Road) to 12.0 feet MSL (along South Kihei Road). A Dept. of the Army permit would not be required for project construction.

The site is located outside of any wetland areas as designated by the Army Corps of Engineers or the U.S. Fish and Wildlife Service.

If this site is selected, it is recommended that the facility be located approximately 80 feet mauka of South Kihei Road, outside of the Coastal High Hazard District. Construction within the Flood Fringe District will require that the lowest habitable floor be elevated to or above the regulatory flood elevation.

Onsite drainage presently sheet flows across the site towards a low point in its northwestern corner adjacent to South Kihei Road.

The site was selected as a candidate due to its relatively flat terrain, its dual access from both Kenolio and South Kihei Roads, and recognition of the site as the present location of the Kihei Library.

The site is reserved for open park space and recreational use by Executive Order 2958. The County has plans for additional park facilities north of the site, contributed by the developer of the Aina Kihei townhouse development along Kenolio and Uwapo Roads. Along with the park improvements, the developer will be realigning and widening a portion of Kenolio Road (See Figure III-3 Candidate Site A - Planned Developments). Approximately 780 feet of County standard road (56 foot right-of-way, curb, gutter, and sidewalk) will be constructed mauka of the existing two-lane road. The road alignment appears to be in

III - 8
accordance with the North-South Phase I roadway proposed in the Kihei Traffic Master Plan. With the proposed roadway improvements, drainage above Kenolio Road will be collected in catch basins and drainagelines connected to an existing 8' x 3' box culvert crossing under South Kihei Road into the ocean.

Both Kenolio Road and South Kihei Road are 40' road rights-of-way. The County has stated that a minimum 50' right-of-way is to be improved along county roads. The County would require that Kenolio Road be widened to a 50' right-of-way along the site's frontage (approximately 250 feet). Widening would also be required along South Kihei Road. Minimum improvements include County Standard concrete curb, gutter and sidewalk. Underground utilities would also have to be relocated, as required, to comply with the widened rights-of-way.

The County does not have any immediate plans for building additional facilities within the Kihei Community Complex. The optimum site for the new library would be in its existing location, requiring demolition of the existing concrete masonry unit and wood structure. Meeting halls and restrooms would need to be relocated in another facility. The 2 acre site required by the new facility would also require removal of the existing open grassed area and paved basketball court. Selection of this site would require coordination and concurrence with the County on the joint-use of the property.

The surrounding area is presently characterized by open space, but lots mauka of Kenolio Road are zoned for multi-family and single-family homes. The area is already experiencing development as the demand for housing in Kihei increases.

2. Candidate Site B -- Future County Civic Center.

The future County Civic Center is located mauka of Piilani Highway and adjacent to Waipuilani Gulch. The site is currently unoccupied and is covered with brush. The parcel (TMK: 2-2-02; por. 55) is presently owned by Haleakala Ranch Co. The County is currently negotiating with Haleakala Ranch (Baldwin Pacific) for use of a 5 acre site for a police and fire substation (see Figure III-4 Candidate Site B - Location Map).

The Kihei-Makena Community Plan designation is for public (P) use. The State Land use classification
and County zoning are for agricultural use. A Special Use Permit or State land use district boundary amendment would be required. County rezoning from agricultural to public use would also be required. The site is outside of the County's SMA and will not require an SMA permit for project construction.

Based on the FIRM, the site is within Zone C, an area of minimal flooding. A Dept. of the Army permit will not be required for project construction.

The site is not within a Corps or U.S. Fish and Wildlife Service designated wetland.

Sewer lines are unavailable along Piilani Highway. The nearest County sewer is approximately 700' makai of Piilani Highway.

The nearest County water line (a 36" transmission line) is located approximately 900 feet north of the site. No water lines along Piilani Highway are available for connection.

The nearest development is located north of the site--the Silversword Golf Course. Planned developments within the vicinity include the Research and Technology (R&T) Park, mauka of the Silversword Golf Course, and the Baldwin Pacific development, makai of Piilani Highway. Agricultural uses are also located nearby.

Access would be from the heavily used Piilani Highway, which would provide ready vehicular access, but which does not easily accommodate left turn movements and pedestrian traffic to and from the library. The proposed County Fire and Police Station will provide an 80' road right-of-way intersecting Piilani Highway which may be used to access the library site depending on project scheduling.

3. Candidate Site C -- Waiohuli Beach Homesteads

The 100,612 square foot (2.31 acres) site in the heart of Kihei town, is a privately owned lot within Waiohuli Beach Homesteads, identified as TMK: 3-9-11:18. South Kihei Road runs along its mauka boundary and Halama Street runs along its makai boundary. The parcel is surrounded by single-family residential uses (see Figure III-5 Candidate Site C - Location Map).

The lot is relatively flat and irregular in shape,
due to a 10,000 square foot lot (TMK: 3-9-11:58) carved out of its corner along South Kihei Road. The lot is presently vacant and overgrown with grass, shrubs, and mature coconut, kiawe, and ironwood trees. The adjacent lot on its northern boundary is similar in size and shape and has several homes scattered on the parcel.

The area is zoned by the county for residential use (R-3). The County Zoning code does not specifically state that a library is a permitted use within residential zoning. This, however, is subject to interpretation, since a library seems to fall into the general permitted use for "State buildings for public use" and is also in line with the permitted use for a school.

Rezoning action is not anticipated to be required. The Kihei-Makena Community Plan designates the area for single-family use. A community plan amendment would be required to revise the designation to public use.

The site is within the State Land Use Urban District. A boundary amendment would not be required.

The upper one-third of the site and a small area along Halama Street are located within a Flood Fringe District (Zone AH) with a base flood elevation of 7 feet MSL. A narrow portion of the site along South Kihei Road is within zone AO with an average depth of inundation of 1.0 feet. The remaining area is within Zone C, area of minimal flooding. A Dept. of the Army permit will not be required for project construction.

The site is not within a Corps or U.S. Fish and Wildlife Service designated wetland.

The entire site is within the County's SMA and will require an SMA permit review.

Both South Kihei Road and Halama Street provide for two lanes of traffic with no shoulder improvements. South Kihei Road is a 50' right-of-way and Halama Street is a 40' right-of-way. The County has stated that it will require that existing roadways be widened to a minimum of 56' and must be improved with County Standard concrete curb, gutter and sidewalks. The project would have to provide approximately 110' of improvements along South Kihei Road and 130' of improvements along Halama Street. Underground utilities would also have to be relocated, as required, to comply
with the widened rights-of-way.

The site is served by an 8" sewer line within Halama Street. 6" County water lines exist in Halama Street and South Kihei Road. However, water system improvements to provide fire protection will likely be required.

The site was selected because of its central location, approximately three-fourths of a mile north of Lipoa Street, and dual access off of South Kihei Road and Halama Street. The site is under single ownership and is presently vacant.

4. Candidate Site D -- Adjacent to Kalama Park.

The 1.93 acre site (THK: 3-9-12:13) is owned by the State of Hawaii and is reserved for use by Maui County as an "Addition to Kalama Park" under Executive Order 3058. The site is located in the heart of Kihei Town between Kalama Park's southern boundary and Waimahaihai Street (see Figure III-6 Candidate Site D - Location Map). The County Fire Station is located on the site's mauka boundary, directly below South Kihei Road.

The County's Kihei-Makena Community Plan designates the site for public/quasi-public use (P). The site is within the State Land Use Urban District. The County Zoning is currently for park use. However, the County has stated that the intended zoning will be Public/Quasi-public within which a public library is a permitted use. The lot is within the County's SMA, requiring an SMA permit for project construction. The site is below the State's UIC line.

The majority of the lot is within an area of 100-year shallow flooding. Along Waimahaihai Street the site is within Zone AH (with a flood elevation of 7 feet above MSL). Near Kalama Park the site is within Zone AO (flood depth of 1 foot). A small portion of the site is within Zone C, area of minimal flooding. A Dept. of the Army permit will not be required for project construction.

The site is not within a Corps or U.S. Fish and Wildlife Service designated wetland.

The site is undeveloped and overgrown with mature kiawe trees. The vicinity is generally "mixed use", consisting of residential homes and a plant nursery along Waimahaihai Street, businesses mauka of South Kihei Road, and Kalama Park and the County Fire Station adjacent.
The site is served by an 8" sewer line within Waimahahai Street. A 6" water main and fire hydrants are located in Waimahahai Street. However, water system improvements to provide fire protection will likely be required.

Waimahahai Street is a 40' unimproved road right-of-way. The road provides for two-way traffic with parking along its unpaved shoulders. The County would require that improvements be put in along the project's 370' road frontage, providing for a 56' minimum right-of-way with County standard concrete curb, gutter, and sidewalk. Relocation of underground utilities would also be required to comply with the widened right-of-way.

The site is attractive in that access is not directly off of South Kihei Road and the facility would be compatible with the existing community. The site is presently vacant but the County Parks and Recreation Department has indicated that a soccer field and restroom facility is planned for the site. As with Site A, if this site is selected, concurrence and coordination with the County would be required.

5. Candidate Site E -- Adjacent to Kihei School

The 188.4 acre site is located adjacent to Kihei Elementary and Iokelani Intermediate Schools within TWK:2-3-02: por. 42, makai of Piilani Highway between Kulanihakoi and Keokea Gulches (see Figure III-7 Candidate Site E - Location Map). Haleakala Ranch Co. owns the property and Baldwin Pacific Corp. and Malama Development Corp (joint venture) are currently developing the site in accordance with the County's Kihei-Makena Community Plan requirements for Project District 5 (PD 5). The 188 acre Piilani Village will provide a mix of 48 single-family and 33 multi-family units, commercial development and park areas.

As part of the project, a 13-acre site on the South end of Kihei School will be dedicated to the County of Maui for a community park. Site E is to be located within this park area.

State Land Use classification is urban. County zoning is for park use and will require rezoning action. The Kihei-Makena Community Plan designates the area for park use in Project District No. 5, requiring a community plan amendment. The County has indicated that the area is intended to be used for park purposes.
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
The site is served by an 8" sewer line within Waimahaiai Street. A 6" water main and fire hydrants are located in Waimahaiai Street. However, water system improvements to provide fire protection will likely be required.

Waimahaiai Street is a 40' unimproved road right-of-way. The road provides for two-way traffic with parking along its unpaved shoulders. The County would require that improvements be put in along the project's 370' road frontage, providing for a 56' minimum right-of-way with County standard concrete curb, gutter, and sidewalk. Relocation of underground utilities would also be required to comply with the widened right-of-way.

The site is attractive in that access is not directly off of South Kihei Road and the facility would be compatible with the existing community. The site is presently vacant but the County Parks and Recreation Department has indicated that a soccer field and restroom facility is planned for the site. As with Site A, if this site is selected, concurrence and coordination with the County would be required.

5. Candidate Site E -- Adjacent to Kihei School

The 188.4 acre site is located adjacent to Kihei Elementary and Lokelani Intermediate Schools within TMK:2-2-02: por. 42, makai of Pillani Highway between Kulanihakoi and Keokena Gulches (see Figure III-7 Candidate Site E - Location Map). Haleakala Ranch Co. owns the property and Baldwin Pacific Corp. and Malama Development Corp (joint venture) are currently developing the site in accordance with the County's Kihei-Makena Community Plan requirements for Project District 5 (PD 5). The 188 acre Pillani Village will provide a mix of 45 single-family and 33 multi-family units, commercial development and park areas.

As part of the project, a 13-acre site on the South end of Kihei School will be dedicated to the County of Maui for a community park. Site E is to be located within this park area.

State Land Use classification is urban. County zoning is for park use and will require rezoning action. The Kihei-Makena Community Plan designates the area for park use in Project District No. 5, requiring a community plan amendment. The County has indicated that the area is intended to be used for park purposes.
The site is gently sloping from elevation 30 to 70 feet MSL and is overgrown with grass and scattered kiawe trees.

Existing access is off of Lipoa Street, which connects Piilani Highway with South Kihei Road. Lipoa Street has approximately 22 feet of pavement, with curb and gutter along one side of the street from Kihei Road to Kihei School.

Development within the area now consists of the elementary and intermediate schools, single-family homes, and the new Maui Sun Hotel. Proposed developments include the 270-unit Lipoa Plaza Condominium and Piilani Village. Proposed improvements within the adjacent school site include future buildings, a baseball field, playfield and paved courts.

The site is within the County's SMA and will require an SMA permit review.

The entire site is within Zone C, an area of minimal flooding and will not require a Dept. of the Army permit for project construction. Drainage from the adjacent Kihei School is collected in grated inlets and drain lines emptying into an existing unlined drainage channel. Runoff from the area mauka of Piilani Highway passes through a 60-inch culvert and into a natural drainage channel running along the site's northern boundary.

The area is outside of any Corps or U.S. Fish and Wildlife Service designated wetlands.

Utilities serving the school are located in Lipoa Street. The 8" sewer main runs along Lipoa Street to South Kihei Road. Eight and 12" water lines within Lipoa Street connect to the County's 18" main running along the site's western boundary.

Baldwin-Malama's proposed Piilani Village project will provide some improvements to the park site prior to dedication to the County, including minimal grading and a landscape buffer between the park and surrounding school & residential lots. As part of the project a portion of the North-South Collector road will be constructed from Lipoa Street south to the park site, and from Lipoa Street north to the proposed commercial area. The Piilani Village project will include a network of roadways connecting to the North-South Collector and Piilani Highway. A paved bikeway and pedestrian walkway will be built along the entire
length of the road easement for the proposed North-South Collector Road, linking the residential areas of the commercial and residential areas (See Figure III-8 Candidate Site - Piilani Village Master Plan).

The Piilani Village project will also provide utility connections to the site, including sewer, water, drainage, and underground electrical and telephone systems. Improvements to Lipoa Street to Piilani Highway are being made as a cooperative effort between DAGS and the Piilani Village project.

The Piilani Village project will be built in increments over a 5-year period, starting in 1990 with development of the portion north of the school and progressing towards the south end. It is anticipated that improvements to the park and North-South Collector Road will be completed towards the end of the project, sometime in 1995.
IV. EVALUATION OF CANDIDATE SITES

A. Site Evaluations

The candidate sites meeting the minimum site criteria were further evaluated in the following areas:

Building Site Criteria -- the physical parameters, including environmental characteristics, roadway, utilities, and access, which define site development and operational constraints and opportunities.

Community Criteria -- factors which enable evaluation of site development in terms of governmental/land use compatibility and the relationship of the facility to the surrounding community.

Cost Considerations -- assessment of project cost, including on-site and off-site improvements, land acquisition, and demolition of existing structures.

Each of the selected sites were rated "good", "fair", or "poor", with respect to the building site and community criteria. A discussion of the criteria and rating scales used and an evaluation of each site follows.

1. Building Site Criteria
   a. Environmental Characteristics

Environmental characteristics used to evaluate each site include slope, shape, and general stability for foundation.

   1) Slope

      Good -- The average slope of the site is less than 5%

      Fair -- The average slope of the site is between 5 and 8%

      Poor -- The average slope of the site is greater than 8%

   2) Shape

      The site should be generally rectangular in shape and should be oriented in such a way that the library can be sited with northern exposure. This is to take advantage of lighting and possible use of northeasterly trade winds in the event of air conditioning failure.

IV - 1
Good -- The site is generally rectangular in shape with a length to width ratio of 1.5 : 1 to 2.0 : 1, with the long side having northern exposure.

Fair -- The site is fairly rectangular in shape with a length to width ratio of 1 : 1 to 1.5 : 1, with the long side having northern exposure.

Poor -- The site is highly irregular in shape with a length to width ratio greater than 2 : 1, and/or cannot accommodate requirement for northern exposure.

3) **General Stability for Foundations**

The criteria relates to the suitability of the soil for use as fill material under roadways. The Soil Conservation Service Report R43, "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii" includes a rating system indicating suitability based on an interpretation of the following engineering parameters: compressibility, workability, stability, shear strength, erodibility, plasticity and location of water table. The Soil Conservation Service rating system of "good", "fair", and "poor" is utilized to rate each site.

4) **Soil Depth for Site Work**

Good -- Soil strata consists of non-rocky soils with a depth to bedrock greater than 10 feet. The greater depth to bedrock facilitates construction of utility systems and roads and lot grading.

Fair -- Soil strata consists of 6 to 10 feet of non-rocky soil to bedrock.

Poor -- Soil strata consists of 0 to 5 feet of soil to bedrock.

5) **Natural Beauty**

Good -- The site has some natural beauty in the form of trees, plants, rock formations, etc., which can be preserved and integrated into the design of the facility.
b. Roadways and Utilities

6) Adequacy of Roadways

Good -- The roadways serving the site are adequate to accommodate immediate and long-term traffic projections for the facility.

Fair -- The roadways serving the site are inadequate and will require widening or other improvements to meet the immediate and long-term needs of the facility.

Poor -- Construction of roadways is required to provide access to the proposed facility.

7) Adequacy of Water Service

Good -- The site has adequate water pressure and capacity available to meet ultimate building complex needs.

Fair -- The existing water service is insufficient but adequate service can be developed which will meet interim and ultimate needs of the building complex.

Poor -- The site has inadequate water service and will require the development or major extension of a water system to specifically meet building complex needs.

8) Adequacy of Sewer Service

Good -- The site has adequate sewer lines available to meet the needs of the proposed facility.

Fair -- The site will have adequate sewer service which is being developed to serve interim and ultimate needs of the proposed facility.

Poor -- The site has inadequate sewer service and will require the development or extension of sewer lines to meet the proposed facility.
9) **Adequacy of Drainage Facilities**

Good -- The site has adequate drainage facilities available to meet ultimate library needs.

Fair -- The site will have adequate drainage facilities which are being developed to serve interim and ultimate needs of the library.

Poor -- The site does not have adequate drainage facilities and may require the development of a drainage system to specifically meet library needs.

10) **Adequacy of Power and Communication**

Good -- The site has adequate existing electrical and telephone systems available to meet ultimate building complex needs.

Fair -- The site will have adequate power and communications which are being developed to serve interim and ultimate needs of the building complex.

Poor -- The site has insufficient power and communications available and will require improvement of these services to serve building complex needs.

c. **Accessibility**

11) **Automobile Access**

Good -- The site will have roadway frontage along one short side and one long side.

Fair -- The site will have roadway frontage along either one long side or two short sides.

Poor -- The site will have roadway frontage along one short side only.

12) **Pedestrian Access**

Good -- The site has pedestrian access to the facility from three sides.

Fair -- The site has pedestrian access from two sides.

Poor -- Access to the site is limited to one side.

IV - 4
13) Traffic Flow

Good -- The site is off a major roadway passing through the service area with excess capacity.

Fair -- Access to the site is via a through street with excess capacity.

Poor -- Access to the site is via a dead-end street to the facility.

2. Community Criteria
   a. Government

   Government criteria includes the following land use plans, policies, controls and proposals: State Land Use, Special Management Area Rules & Regulations, National Flood Insurance Program, County Zoning Ordinance, and Kihei-Makena Community Plan.

14) State Land Use Designation

Good -- The site is within the Urban district, permitting urban-related developments without undergoing a boundary amendment.

Fair -- The site is within an Agriculture or Conservation district and is adjacent to the Urban district. A Special Use Permit or a boundary amendment would be required. Approval of a boundary amendment is more likely when development is adjacent to the Urban boundary.

Poor -- The site is within an Agricultural or Conservation district and is not adjacent to the Urban district. A Special Use Permit or a boundary amendment would be required. Approval of a boundary amendment is less likely for noncontiguous development.

15) Special Management Area (SMA)

Development of sites within the Special Management Area require a SMA permit and are subject to Chapter 205-A of the Hawaii Revised Statutes as amended and Article II, SMA Rules and Regulations of the County of Maui.

Good -- The entire site is outside of the SMA.

IV - 5
Fair -- A portion of the site is within the SMA.

Poor -- The entire site is within the SMA.

16) National Flood Insurance Program

Development of sites within a designated flood hazard district -- Floodway district, Flood Fringe district, and Coastal High Hazard district, must be in compliance with the National Flood Insurance Program as administered by Maui County through flood hazard prevention ordinances. The flood hazard districts are delineated on the Federal Emergency Management Agency's Flood Insurance Rate Maps (FIRM).

Good -- The entire site is outside of the flood hazard district.

Fair -- A major portion of the site is outside of the flood hazard district, with occupied structures outside of the flood hazard district.

Poor -- A major portion of the site is within the flood hazard district.

13) County Zoning Ordinance

Good -- The site is zoned Hotel, Community Business (B-2), Central Business (B-3), or Public (P).

Fair -- The site is zoned Residential (R-1, R-2, R-3), Multiple family (A-1, A-2, Duplex), or Park (PK). Either zoning interpretation or rezoning action will be required.

Poor -- The site does not have any zoning designation or is zoned for uses other than Hotel, Community/Central Business, Residential, Multiple Family, Public, or Park. Rezoning action will be required.

18) Kihei-Makena Community Plan (MCP)

Good -- The project conforms to the MCP, with a Public/Quasi-Public Use designation.

Fair -- The site is designated for park, single-family, multi-family, business, project district or open space use, which may

IV - 6
be compatible with the MCP depending upon the extent of development surrounding the project area. A community plan amendment would be required.

Poor -- The project does not conform to the MCP and the purpose significantly differs from the MCP. The site is designated for conservation, agriculture, rural, industrial or airport use which is incompatible with a public library. A community plan amendment would be required.

b. Community Effects

Each site was evaluated based on its potential impact on the community. Factors considered included existing use and displacement, interference with institutions, surrounding land use, land ownership and proximity to the civic center.

19) Existing Use and Community Displacement

Good -- The site is vacant and may be acquired without relocating any family, farm, or business.

Fair -- The site may be acquired without relocating any combination of less than five families, businesses or farms.

Poor -- The site cannot be acquired without the relocation of any combination of five or more families, businesses or farms.

20) Surrounding Land Use

The proposed facility should provide minimal disruption to the existing community activity.

Good -- The site is vacant or underutilized and is surrounded by compatible use activities, such as public or commercial facilities.

Fair -- The site is occupied and is surrounded by government related offices or commercial operations resulting in disruption of the existing business or government activity.

Poor -- The site is surrounded by incompatible uses, such as industrial activities.

IV - 7
21) Land Ownership

Good -- The site is owned by the Federal, State, or County government, minimizing both acquisition cost and project completion time.

Fair -- The site is owned by less than three individuals or businesses.

Poor -- The site is owned by three or more individuals or businesses.

22) Aesthetic Value

Good -- The site is not an aesthetic asset to the community and will not interfere with scenic vistas when it is developed into a public library.

Fair -- The site has some aesthetic value to the community or may partially obstruct scenic vistas when it is developed into a public library facility.

Poor -- The site is an aesthetic asset to the community or will obstruct scenic vistas if it is developed into a public library facility.

3. Cost Considerations

To further compare the relative merits of the potential sites, cost estimates were prepared for land acquisition, and on-site and off-site improvements.

a. Land Acquisition

(1) Land value and value of existing improvements were estimated using the assessments included in the 1989 Real Estate Atlas of the State of Hawaii, 2nd Tax Division (Reference 6). The assessed valuation may not be an accurate market assessment of land value, but is used for comparison of the relative values of the sites. In the case of State-owned land, acquisition costs may be nil.

(2) Existing improvement valuations were assumed to approximate costs for relocation of existing on-site uses.

b. On-Site Improvement Costs

Improvement costs were estimated for each
site for demolition, clearing and grubbing, earthwork, roadway and parking areas, drainage, sewer, electrical power, telephone, and landscaping within the library boundary based on a typical layout plan. Adjustments were made for clearing and grubbing, earthwork, and demolition costs which vary among the sites.

Water system improvements include the County's water storage assessment charge and the installation of meters and lines for hookup with water mains. Drainage improvements require the installation of sewer laterals from the building to the existing sewer main. Electrical power and telephone improvements include installation of conduits and necessary wire.

Roadway improvement costs were estimated for driveway, drop-off, and parking areas, including pavement, curbs and gutters.

Landscaping costs include topsoil, grassing and sprinkler system.

c. Off-Site Improvement Costs

Off-site improvements include water, sewer, drainage and roadway costs outside of the project boundaries which are necessary for the project.

B. Summary of Evaluations

The purpose of the Site Selection Report is to present an evaluation of the sites, discussing relative advantages and disadvantages of each, which can be used to facilitate the selection of a preferred site by the appropriate agency.

Results of the evaluation based on building site criteria, community criteria, and cost considerations are discussed below. Evaluation ratings for each candidate site are included in Appendix B.

1. Summary of Building Site Criteria Evaluation

Table IV-1 summarizes the evaluation of each site based on building site criteria.

With respect to environmental characteristics, all five sites had average slopes less than 5%. The Waiohuli Beach Homesteads site had a "poor" width to length ratio but will be able to accommodate the required building area. Soils in the Kihei Community Complex, County Civic Center, and Kihei School sites, were rated "good" with respect to general soil stability for foundations. The remaining two sites have "poor" soils with erodible characteristics.

Soil depth at three sites was rated "good" with
substratum generally consisting of sandy material. The County Civic Center and Kihei School sites had less than 4 feet to bedrock and were rated "poor".

The Kihei Community Complex and Kalama Park sites were rated "good" with respect to natural beauty due to the large existing trees surrounding the site and the open space settings. The Waiohuli Beach Homesteads site has large trees on the property which may not be able to be integrated into the design due to the long and narrow shape of the site, and was rated "fair". The County Civic Center and Kihei School sites were also rated "fair" due to the lack of existing natural beauty in the form of trees or formations.

Four sites were rated "good" for adequacy of roadways. The Kihei School site was rated "fair" because road improvements planned by Baldwin-Malama's Piilani Village project must be in place before the site can be utilized. Access to the site prior to placement of those improvements will require temporary use of the Kihei School parking lot (which is subject to Dept. of Education approval) or construction of a temporary roadway along the North-South Collector alignment.

Water service was rated "fair" for the Waiohuli Beach, Kalama Park, and Kihei Community Complex sites. Although service is available from the County system, improvements to provide fire protection will likely be required. The Kihei School site was rated "good" because the Piilani Village project will provide water service to the proposed park site. The County Civic Center site was rated "poor" because the nearest major transmission line is about 1000 feet north of the site across Piilani Highway.

Sewer service was rated "good" at the Waiohuli Beach, Kalama Park and Kihei Community Complex sites since the existing sites are served by the County system. The Kihei School site was rated "good" because the Piilani Village project will provide sewer service to the proposed park site and an 8" sewer line is also available within Lipoa Street presently serving the Kihei School.

Sewer lines are unavailable for connection along Piilani Highway for the County Civic Center site which was rated "poor". The nearest line is approximately 800' makai of Piilani Highway in Kulanihakoi Street, directly below the Piilani Village project. Although the site is below the UIC line, the State's policy has been to reject projects which cannot provide assurance that connection to the County Sewer system will be made. Should this site be selected, coordination with the County is recommended to seek a possible cost-sharing alternative in conjunction with their proposed Police and Fire Station project.
Drainage systems for all sites were rated "fair" due to lack of existing infrastructure near the sites and considering the drainage problems faced by all of the low-lying areas in Kihei. The Kihei School site was rated "fair" because although the Piilani Village project will provide drainage systems incidental to roadway construction, evaluation of the drainage from the existing gully traversing the site (from mauka to makai along the site's north end) is required.

A flood control channel along the Kalama Park side of Site D was planned by the County to handle discharge from Keokea Stream (Reference 7). The stream has since been diverted above Piilani highway, eliminating the channel requirement. The required off-site drainage improvements, if any, will be determined during the permit and plan review process.

Electrical and telephone systems are available at all sites.

Auto accessibility at all sites was rated "fair" because all sites either had road frontage along one long side or two short sides. The County Civic Center site was rated "fair", although left turn movements entering and exiting the site may be difficult due to the volume and speed of traffic on Piilani Highway.

Pedestrian access for the Kihei Community Complex and Waiohuli Beach Homesteads was "fair" with access provided along two sides. All other sites had "poor" pedestrian access, along one side only. Pedestrian access to the County Civic Center is presently unavailable from Piilani Highway since the highway does not include a sidewalk area. If pedestrian access is required, improvements including off-shoulder sidewalks and possibly a pedestrian overpass would be required. These improvements would have to be coordinated with the County's future plans to expand Piilani Highway from two lanes to four lanes and to construct an interchange directly below the site's northern boundary.

Traffic flow is generally "good" for all sites with the exception of the Kihei School site, which was rated "fair" since the project must rely on the Piilani Village project for improvement of Lipoa Street and for construction of a portion of the North-South Collector road.

2. Summary of Community Criteria Evaluation

Table IV-1 summarizes the evaluation of each site based on community criteria.

Four of the sites were rated "good" with respect to their urban State Land Use designation. The County Civic
Center was rated "fair" because the area is designated for agriculture use, but is also contiguous to urban areas.

Of the five sites, only the County Civic Center site was rated "good" with respect to the SMA. All other sites were rated "poor" since they are all makai of Piilani Highway and were therefore within the SMA.

With respect to the National Flood Insurance Program, the Kihei Community Complex, Waiohuli Beach Homesteads, and Kalama Park sites were rated "poor" since they are within designated flood hazard districts. A portion of Kihei Community Complex is also within a coastal high hazard district. The Kihei School and County Civic Center sites were rated "good" since they are outside of flood hazard districts.

Ratings with respect to the County Zoning Ordinance were "fair" for Waiohuli Beach Homesteads with designation of R-3. A library is not a specifically stated permitted use within a residential district and is subject to interpretation by the County. The County Civic Center site was rated "poor" due to its agriculture designation and will require rezoning. The Kalama Park, Kihei Community Complex, and Kihei School sites were rated "fair" due to their "Park" designations and will require rezoning.

The County Civic Center and Kalama Park sites were rated "good" with respect to the Kihei-Makena Community Plan. Both sites are designated for public use. The Kihei Community Complex and Kihei School sites were rated "fair" since those sites have been designated for park use. The Waiohuli Beach Homestead site was rated "fair" since it is designated for single-family use.

Four sites are presently vacant and were rated "good" with respect to existing use and community displacement. Two of these sites, Kihei School and Kalama Park, are not being used presently but are planned for park use. The Kihei Community Complex site was rated "fair" since the library facility may have to displace existing facilities (such as meeting rooms and rest rooms). These facilities are heavily used by various community-based functions and their demolition could impact the community. It is recommended that these displaced facilities be integrated into the library facility as much as possible.

All facilities were rated "good" with respect to surrounding land use. The Kihei Community Complex is adjacent to multi-family and single-family homes, Project District 2 (a commercial project), the existing beach park and a proposed public park site directly north. The County Civic Center is presently undeveloped but the County is proceeding with plans for a new Fire and Police Station. The Piilani Village residential project will be located near
the Civic Center, directly makai of Piilani Highway. Waiehu Beach Homesteads is a residential area and is located near the Central Kihei district. The Kalama Park site is surrounded by residential homes on two sides, and Kalama Park and the fire station on the remaining sides. The site is also close to business-zoned areas. A concern expressed by the Library System on a matter related to surrounding land use has to do with the proximity of Site D to Kalama Park and the potential use of the library parking lot by park users. The Kihei School site is in the center of the Piilani Village planned development, near residences, schools and future commercial areas.

Sites owned by the State of Hawaii, Kihei Community Complex and Kalama Park were rated "good" in terms of land ownership. Both these sites, however, are designated for use by the County under Executive Order and would either require cancellation of the Executive Order or working out an agreement with the County for use of the site for the project. The Kihei School site was rated "good" because the 13-acre park site, although presently owned by Haleakala Ranch, is planned for dedication to the County. The County Civic Center and Waiehu Beach Homesteads sites were rated "fair" since they are privately owned. Subdivision of a two-acre lot from Haleakala's larger parcel would be required for the County Civic Center site. The County is presently negotiating with Haleakala Ranch on acquiring a 5 acre site for the future Fire and Police Station within the Civic Center site.

All sites were rated "fair" for aesthetic value to the community since development of any of the sites would result in loss of open space.

3. Summary of Cost Considerations

A summary of land acquisition and development costs is shown on Tables IV-3 and IV-4. A more detailed explanation of the development costs is included in Appendix B.

On-site improvements were essentially comparable at all sites with the main cost differences relating to earthwork, demolition and clearing. On-site costs for the Kihei Community Complex site were higher due to the demolition of the existing library structure and other nearby structures, as well as the cost for placing fill to raise the finished floor elevation of the facility above the 100-year base flood. The Kalama Park site would also require elevation of the structure above the base flood level and higher clearing costs for the removal of large trees and heavy growth. The Kihei School site would incur the least on-site cost because minimal clearing and grading will be provided by the Piilani Village project as part of the park improvements.

With respect to off-site improvements, the County
Civic Center site would incur major costs for off-site sewer and water due to its location outside of the County's service area. For the Kihei Community Complex, Waiohuli Beach Homesteads, and Kalama Park sites, water transmission main extensions will probably be required to provide adequate fire protection.

It is assumed that off-site utilities and roadways servicing the Adjacent to Kihei School site would be constructed as part of the Piilani Village development with an anticipated completion date sometime in 1995. For purposes of comparing this site with the other candidate sites, which are not dependent on other developments for infrastructure, construction costs were estimated for grading and paving an access road, and constructing off-site sewer, water, electrical and drainage improvements. These costs were estimated for improvements built independently of the Piilani Village project.

Estimated land acquisition was estimated at $20,000 for the County Civic Center site and $540,900 for the Waiohuli Beach Homesteads site, based on tax assessment figures for 1989. The three remaining sites are either State-owned or will be dedicated to the County in the future.

4. Overall Evaluation Summary

A summary of the criteria evaluation results and estimated costs associated with the development and acquisition of each site is shown on Table IV-5.
**TABLE IV-1. EVALUATION RATINGS SUMMARY**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KIHEI</td>
</tr>
<tr>
<td></td>
<td>COMN.</td>
</tr>
<tr>
<td></td>
<td>COMPLEX</td>
</tr>
<tr>
<td></td>
<td>A</td>
</tr>
</tbody>
</table>

**Building Site Criteria**

A. Environmental Characteristics

1. Slope         G  G  G  G  G
2. Shape         G  G  P  G  G
3. General Stability
   for Foundations      G  G  P  P  G
4. Soil Depth For Site Work     G  P  G  G  G
5. Natural Beauty       G  F  F  G  F

B. Roadways and Utilities

6. Adequacy of Roadways    G  G  G  G  F
7. Adequacy of Water Service F  P  F  F  G
8. Adequacy of Sewer Service G  P  G  G  G
9. Adequacy of Drainage System F  F  F  F  F
10. Adequacy of Electrical and
    Telephone Systems       G  G  G  G  G

c. Accessibility

11. Automobile Access    F  F  F  F  F
12. Pedestrian Access    F  P  F  P  P
13. Traffic Flow         G  G  G  G  F

**Community Criteria**

A. Government

14. State Land Use Designation    G  F  G  G  G
15. Special Management Area       P  G  P  P  P
16. National Flood Insurance
    Program                     P  G  P  P  G
17. County Zoning Ordinance      F  P  F  F  F
18. Kihei-Makena Community Plan  F  G  F  G  F

B. Community Effects

19. Existing Use and Community
    Displacement              F  G  G  G  G
20. Surrounding Land Use       G  G  G  G  G
21. Land Ownership             G  F  F  G  G
22. Aesthetic Value            F  F  F  F  F

IV - 15
TABLE IV-2. RATINGS SUMMARY BY CATEGORY

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SITE</th>
<th>KIHEI COMM.</th>
<th>COUNTY CIVIC COMPLEX</th>
<th>WAIOHULI CTR.</th>
<th>BEACH HNSTD.</th>
<th>KALAMA PARK</th>
<th>KIHEI SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>D</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(FREQUENCY OF RATING)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Building Site Criteria

A. Environmental Characteristics
- Good: 5, 3, 2, 4, 3
- Fair: 0, 1, 2, 0, 1
- Poor: 0, 1, 1, 1, 1

B. Roadways and Utilities
- Good: 3, 2, 3, 3, 3
- Fair: 2, 1, 2, 2, 2
- Poor: 0, 2, 0, 0, 0

C. Accessibility
- Good: 1, 1, 1, 1, 0
- Fair: 2, 1, 2, 1, 2
- Poor: 0, 1, 0, 1, 1

Community Criteria

A. Government
- Good: 1, 3, 1, 2, 2
- Fair: 2, 1, 2, 1, 2
- Poor: 2, 1, 2, 1, 1

B. Community Effects
- Good: 2, 2, 2, 3, 3
- Fair: 2, 2, 2, 1, 1
- Poor: 0, 0, 0, 0, 0

IV - 16
### TABLE IV-3. LAND ACQUISITION COST

<table>
<thead>
<tr>
<th>SITE</th>
<th>TMX</th>
<th>VALUE/ACRE</th>
<th>ACREAGE</th>
<th>SITE VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  KIHEI COMMUNITY COMPLEX</td>
<td></td>
<td>$309,500</td>
<td>2.0</td>
<td>$619,000 *</td>
</tr>
<tr>
<td>B  FUTURE COUNTY CIVIC CENTER</td>
<td>2-2-2: por. 54</td>
<td>$2,500</td>
<td>2.0</td>
<td>$5,000</td>
</tr>
<tr>
<td>C  WAICHULI BEACH HOMESTEADS</td>
<td></td>
<td>$235,174</td>
<td>2.3</td>
<td>$540,900</td>
</tr>
<tr>
<td>D  ADJACENT TO KALAMA PARK</td>
<td></td>
<td>$331,036</td>
<td>1.93</td>
<td>$638,900 *</td>
</tr>
<tr>
<td>E  ADJACENT TO KIHEI SCHOOL</td>
<td>2-2-2: por. 42</td>
<td>$10,000</td>
<td>2.0</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

* Site value for State-owned land based on 1989 Real Estate Atlas
TABLE IV-4. PROJECT COST SUMMARY

<table>
<thead>
<tr>
<th>SITE COSTS ($000)</th>
<th>KIHEI</th>
<th>COUNTY</th>
<th>WAIOHULI</th>
<th>KALAMA</th>
<th>KIHEI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMM.</td>
<td>CIVIC</td>
<td>BEACH</td>
<td>PARK</td>
<td>SCHOL.</td>
</tr>
<tr>
<td></td>
<td>COMPLEX</td>
<td>CTR.</td>
<td>HMSTD.</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>a) On-site Improvements</td>
<td>$525</td>
<td>$435</td>
<td>$440</td>
<td>$460</td>
<td>$415</td>
</tr>
<tr>
<td>b) Off-site Improvements</td>
<td>260</td>
<td>500</td>
<td>110</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>Water &amp; Sewer</td>
<td>620**</td>
<td>5</td>
<td>540</td>
<td>640**</td>
<td>20</td>
</tr>
<tr>
<td>c) Land Acquisition/Site Value</td>
<td>1,405</td>
<td>940</td>
<td>1,090</td>
<td>1,160</td>
<td>435</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,605</td>
<td>1,260</td>
<td>2,130</td>
<td>2,190</td>
<td>2,175</td>
</tr>
<tr>
<td>a) thru c)</td>
<td>280</td>
<td>190</td>
<td>220</td>
<td>230</td>
<td>25</td>
</tr>
<tr>
<td>Engineering &amp; Contingency (20%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$1,685</td>
<td>1,130</td>
<td>1,310</td>
<td>1,390</td>
<td>520***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,020****</td>
</tr>
</tbody>
</table>

* Costs, expressed in 1990 dollars, are for planning evaluation purposes only and are based on the County's assessed property tax valuations.

** Site value for State-owned land.

*** Assumes infrastructure provided by Piilani Village project, with complete installation by 1995

**** If earlier occupancy date is desired, project cost is estimated to increase by approximately $1.5 million (providing off-site sewer, water, electrical, drainage and roads).
V. PROBABLE IMPACTS AND MITIGATIVE MEASURES

A. Short-term Impacts

The anticipated short-term impacts which may affect the candidate sites and/or nearby areas, as a result of the proposed public library facility, are discussed in this section. Short-term impacts are generally those associated with construction activities such as grading, utility installations, construction of structures, and increased traffic at the site.

The following section describes the anticipated construction noise, air quality, construction wastes, water quality, public health and safety, flora/fauna, economic, and archaeological/historical short-term impacts.

1. Construction noise

Residences and businesses near the library site may be sensitive to increased noise levels generated during construction. Sources of noise will be equipment required for construction activities, such as excavation and removal of spoil material and importation of material. To mitigate any adverse impacts, construction activities will be restricted to normal working hours. The contractor shall be responsible for the proper maintenance of construction equipment to minimize equipment noise. The contractor will be required to obtain a noise permit if noise levels are in excess of those specified under Title 11, Administrative Rules, Department of Health, Chapter 45, are anticipated.

Heavy vehicles required for construction must be in compliance with Title 11, Administrative Rules, Department of Health, Chapter 42, Vehicular Noise Control for Hawaii.

2. Air Quality

Ambient air quality is expected to be temporarily impacted as a result of construction activities. The contractor will be responsible for minimizing dust generated, particularly during grading operations, in accordance with the State Department of Health's Public Health Regulations, Chapter 60 on Air Pollution Control. The Contractor will be required to implement preventive measures, such as water sprinkling and dust screens, to prevent particulate matter from becoming airborne and traveling off-site.

Ambient air quality may also be adversely affected.
by emissions from construction equipment and other
motor vehicles. The Contractor will be required to
minimize emissions through proper vehicle
maintenance.

3. Construction Wastes

The Contractor will be required to dispose of his
construction wastes offsite in a proper disposal
site. No clearing and grubbing material shall be
disposed of at the County sanitary landfill. The
Contractor shall be required to submit a solid waste
management plan to the Department of Public Works
for approval.

4. Water Quality

The proposed library would not adversely affect
water quality in the area. None of the sites are
contiguous to streams or the ocean. The design
engineer will be required to develop detailed
drainage and erosion control plans, including, but
not limited to, hydrologic and hydraulic
calculations, scheme for controlling erosion and
disposal of runoff water, and an analysis of the
soil loss using the HESL erosion formula. The plan
shall verify that grading and runoff water generated
by the project will not have adverse impacts on
adjacent or downstream properties. The Contractor
will be required to implement erosion control
practices in accordance with State and County
erosion control standards to minimize impacts.

5. Public Health and Safety

The Contractor shall be responsible for taking
appropriate measures to ensure public health and
safety throughout the life of the construction
project. Construction areas will be secured with
safety signs and devices as required by State and
County regulations during non-work hours (night,
weekends, and holidays).

6. Flora/Fauna

There are no known rare or endangered species of
flora or fauna in or around any of the candidate
sites.

7. Economic

The short-term economic impacts resulting from the
construction of the library include the additional
job opportunities for local construction workers, as
well as business for local material suppliers and retail businesses.

8. Archaeological/Historical

An archaeological inventory survey was conducted on Candidate Site D, Adjacent to Kalama Park, by Paul H. Rosendahl, Ph.D., Inc. (PHRI). The objective of the inventory survey was to provide information appropriate to and sufficient for the preparation of the EIS, concerning the presence or absence of, and potential impacts of the project on, any sites of possible archaeological significance within the site. The archaeological field work, conducted in November 1980, consisted of a surface survey with subsurface testing. No archaeological remains were found. However, the archaeologist recommends that construction monitoring be required if the project's site work includes grading of the existing sand dunes along the site's makai boundary.

A copy of the archaeological inventory survey is attached as Appendix C.

B. Long-term Impacts

Long-term impacts are generally those impacts which are anticipated due to the operation of the public library. These impacts will affect the environment proximate to the site, as well as to the infrastructure within the area.

The following section describes the anticipated impact on flora/fauna, social, public health and safety, displacement, infrastructure, and traffic.

1. Flora/Fauna

There are no known existing rare or endangered species of flora at any of the candidate sites. The existence of any endangered species is unlikely based on the alteration of sites by prior agricultural and urban activities.

Any loss of vegetation as a result of clearing and grubbing of the site will be offset by landscaping put in as part of the library facility.

No rare or endangered species of fauna are known to exist on any of the candidate sites. Impacts to existing fauna, such as rats and mongoose, are not considered adverse impacts. Planting of trees and shrubs will provide nesting areas for birds commonly found within the area.
2. Social

The community will benefit from the additional facilities provided by the new library facility. The larger facility will encourage the use of the facility by more members of the community than can presently be served by the existing library station.

3. Public Health and Safety

Criteria for public health involves evaluation of demands on existing police, fire protection, emergency medical and health services. The proposed project involves the re-establishment and expansion of the existing library facility, and with the exception of Site A, at a different location. No additional demands will be generated for public services.

Criteria for safety involves evaluation of the sites with respect to hazards such as flooding, tsunami, erosion, and landslide. As part of the site selection criteria, candidate sites were sought that have the major portion of the site located outside of areas subject to these hazards.

Information on flood/tsunami hazards are based on the Flood Insurance Rate Maps (FIRM) dated June 1, 1981, and September 6, 1989. The FIRM indicates that approximately one-fifth of the Kihei Community Complex (Site A) is located in a coastal high hazard district (Zone V18), an area of 100-year flooding with velocity. The mauka portion is within a Zone A4 flood fringe district, with a flood elevation of 11 to 12 feet above MSL (see Figure V-1 Site A Flood/Tsunami Hazard Zones). If this site is selected, the facility should be located outside of the Zone V18 area, approximately 80 feet mauka of South Kihei Road. Construction within the flood fringe district will require that the finished floor elevation be built to or above the 11-12 foot elevation. Existing ground elevations slope from approximately 10 to 8 feet above MSL, mauka to makai.

Site B, the Future County Civic Center, is within Zone C, an area of minimal flooding. No special building design considerations will be required at this site to mitigate flooding.

The upper one-third of the Waiohuli Beach Homesteads site (Site C), and a small area along Halama Street, is subject to 100-year flooding with a base flood elevation of 7 feet above MSL (Zone AH). A narrow portion of the site along South Kihei Road is within
Zone A0, with an average depth of inundation of 1.0 feet. The lower two-thirds of the site is within Zone C, an area of minimal flooding (see Figure V-2 Site "C" Tsunami/Flood Hazard Zonings). If the site is selected the building should be located within the Zone C area, with parking located within the Zone A0 and Zone AH areas. Location of the building within the Zone AH area will require that the finished floor elevation should be at or above the 7 foot elevation.

Approximately one-half of Site D, Adjacent to Kalama Park, is within the flood fringe district and is subject to shallow flooding at a depth of 1 foot (Zone A0). The remaining portion of the site bordering Kalama Park is within Zone AH with a base flood elevation of 7 feet MSL. A small portion is within Zone C, area of minimal flooding (see Figure V-3 Site "D" Tsunami/Flood Hazard Zonings). Construction of the facility at this site will require raising the finished floor elevation one foot above existing ground or above elevation 7 feet MSL, whichever is greater. The existing ground slopes from approximately 7 feet at its mauka end to 4.5 feet at its makai end.

Site E, Adjacent to Kihei School, is within an area of minimal flooding, Zone C. However, an existing drainage-way runs through the proposed 13-acre park and a detailed evaluation will need to be made to determine its flooding characteristics and to identify any flooding hazards it may pose to the library facility.

With regard to soil erosion and landslides, all areas are outside of known hazard areas.

4. Displacement

One of the main criteria used in the selection of sites for the proposed facility was to locate sites which were vacant and would not require displacement of families or businesses. The intent was to minimize disruption of existing living patterns. Impacts to surrounding land uses is also a consideration of displacement, where the project could indirectly cause future displacement of surrounding families or businesses which may be adversely impacted by the development.

The Kihei Community Complex currently houses the existing Kihei Library Station facility. Construction of a larger library facility at the site will require demolition of buildings which are currently heavily used for various community-based
functions. The displacement of these activities could be mitigated by incorporating some of the functions of the old facilities into the new library (e.g. meeting rooms). The site is surrounded by single-family and multiple family uses, a church, and the commercial PD-2 development. The library facility is considered a permitted use in business-zoned districts and should not have any adverse impacts on the PD-2 development, nor should be adversely impacted by the commercial development.

The Future County Civic Center site is currently vacant and will not displace any existing uses. The fire and police station complex being planned by the County should not be adversely impacted by the library facility.

The Waipahu Beach Homesteads site is presently vacant. Construction of the facility at this site will not require displacement of any families or businesses. The surrounding area is made up of single family homes. To minimize adverse impacts to the surrounding residential areas visual and sound barriers (i.e. walls, landscaping) can be incorporated into the design of the facility.

The site Adjacent to Kalama Park is presently vacant and use of the site would not require displacement of families or businesses. The County Parks Department, however, has indicated that the site is planned to be used for a soccer field, as an addition to Kalama Park. Use of the site would therefore result in displacement of the future soccer field. Adverse impacts resulting from the loss of the future soccer field could possibly be mitigated by having the State provide park improvements in another area in exchange for use of this site. The facility should have minimal impact on the surrounding park, fire station, residential homes, and plant nursery business. Visual and sound barriers (e.g. landscaping, walls) could be incorporated into the facility design to minimize impacts to the homes.

The site Adjacent to Kihei School is vacant but is intended for use as a community park. Construction of the facility at this site will require displacement of future park facilities. Any adverse impacts due to the displacement could be mitigated by the State providing County park improvements in exchange for use of the County site. Impacts to the surrounding school, and future park and residences could be minimized through the use of visual and sound barriers such as landscaping and walls.
5. Infrastructure

An evaluation of off-site infrastructure systems—sewer, water, and storm drainage, was conducted for each of the five sites.

The public library facility will have the following water demands based on Department of Water Supply criteria for "schools and parks"—3,400 gallons per day (gpd) average daily demand, 5,100 gpd maximum daily demand and 10,200 gpd peak hour demand. Fire flow of 2,000 gallons per minute (gpm) for a 2-hour duration is required for "schools, neighborhood businesses, and small shopping centers". The existing County water system can provide consumative use for the four sites makai of Piilani Highway. For the Kihei Community Complex, Waiohuli Beach Homesteads, and Kalama Park sites transmission main extensions will probably be required to provide adequate fire protection. For Site B, Future County Civic Center, major distribution lines will be required to be constructed as part of the proposed project to service the County Civic Center.

Water service will be subject to prevailing policies and rules of the Department of Water Supply.

All sites with the exception of the Future County Civic Center are within the County's sewer service limits. A sewer main will have to be included in the project to provide connection to the County system. All sites are subject to limitations imposed by the current sewage treatment plant capacity. As stated earlier, approximately 800,000 gallons per day of treatment capacity will be made available to non-residential users by the end of mid-1991. The treatment capacity will be allotted to projects at the time of building permit issuance.

As stated earlier, the County Council may be able to waive the application of the Ordinance to this project if it is shown that the project will have a minimal impact on sewage flow, and is necessary to the public health, safety and welfare. Actual sewer requirements will be determined as the design of the facility progresses.

Off-site drainage improvements are not proposed at any of the five sites. Although the Kihei Community Complex, Waiohuli Homesteads, and Adjacent to Kalama Park sites are in flood prone areas no improvements are proposed as part of this project since the problem is Kihei-wide. The EIS for the "Kihei Drainage Project" indicated a channel to be built
between Kalama Park and Site D. As mentioned previously, the flow from Keokea Stream has since been diverted above Piilani Highway and no longer flows through the area. The County does not have any plans to construct any of the other master-planned improvements due to lack of funding. Any requirements for off-site drainage improvements will be determined during the permit and plan review process by the County.

Off-site drainage systems for the site Adjacent to Kihei School will be provided by the Piilani Village project with the road construction. Run-off from the Future County Civic Center will be accommodated by discharging into existing facilities along Piilani Highway or through dissipation into on-site dry wells.

Design and construction of the proposed public library facility will be coordinated with existing and planned infrastructure. Minimal impacts are anticipated due to the connection of on-site utilities to existing off-site infrastructure. The existing and planned capacities of the various systems should be adequate to accommodate the proposed library without major utility expansion work.

6. Traffic

The public library facility will generate additional traffic and will have long-term impacts to local roadways. The degree and extent to which the facility will impact local traffic was evaluated for each of the five sites, addressing traffic congestion, traffic hazards and alternate access routes. A more detailed traffic assessment was prepared for the preliminarily selected Site D, Adjacent to Kalama Park.

Site A - Kihei Community Complex

Access to the Kihei Community Complex will be from South Kihei Road and Kenolio Road. South Kihei Road is a two-lane undivided road with 22 feet of pavement and paved shoulders. Master-planned improvements include widening of South Kihei Road to a four-lane secondary arterial road with restricted driveway access. Widening of South Kihei Road should be accommodated for by providing a road setback, should this site be selected. Actual improvements to be included in the library project would have to be determined by the County. Kenolio Road, along the mauka side of the site, is a
two-lane local road with 20 feet of pavement and
unpaved shoulders. The portion of Kenolio Road
fronting the Kihei Village townhouse development is
being realigned and widened in accordance with the
Kihei Traffic Master Plan, with a 56-foot road
right-of-way with concrete curb, gutter, and
sidewalk. Widening of the portion of Kenolio Road
along the site with County Standard curb, gutter and
sidewalk improvements will also be required.
The library facility should have minimal impact on
both South Kihei Road and Kenolio Road since the
existing library and other Kihei Community Complex
functions are already there. The library facility
will improve the parking situation for the Complex
by providing stalls for use by library users,
instead of having stalls for shared-use.

Pedestrians utilize the shoulders along both roads
to access the site.

**Site B - Future County Civic Center**

Access to the County's police and fire stations in
the future Civic Center area will be provided by a
80-foot road right-of-way extending from Piilani
Highway, a two-lane primary arterial road. Piilani
Highway will ultimately be a high-capacity, limited
access highway. The highway is planned to be
widened to a four-lane divided facility with grade-
separated interchanges at major cross roads. There
are no provisions for non-motorized traffic (i.e.
pedestrians or bicycles) either along or for
crossing the highway. Improvements necessary for
safe pedestrian access would include
sidewalks/bikeways and an elevated pedestrian
crossing.

Because of the high speed traffic along Piilani
Highway left turn movements out of the future Civic
Center area towards Wailea may be difficult during
peak hour traffic times.

The library facility will have minimal impact on
Piilani Highway which is presently underutilized as
a primary arterial highway, with most of the traffic
traveling along South Kihei Road.

**Site C - Waiohuli Beach Homesteads**

Waiohuli Beach Homesteads has vehicular and
pedestrian access from South Kihei Road and
Waimahaihai Street. The library will have minimal
impact on the already congested Kihei Road.
Traffic generated by the library is compatible with
the traffic currently being generated by the
commercial areas and park south of the site-- Kihei Town Center, Kukui Mall and Kalama Park.

While the site is ideal in that "looped" traffic flow can be provided by South Kihei Road and Halama Street, reducing congestion at a South Kihei entrance/exit, the additional traffic on Halama Street may adversely impact the residences along the now relatively unused roadway. Halama Street is a two lane road with unpaved shoulders that connects to Kihei Road at Waimahaihai Street and Welekahao Road. Adverse impacts may be minimized by possibly limiting traffic along the Halama Street end of the site to exiting traffic, or for use by emergency, service, or staff vehicles only.

**Site D - Adjacent to Kalama Park**

The site adjacent to Kalama Park is located off of South Kihei Road on Waimahaihai Street, a 40-foot road right-of-way with unpaved shoulders. Traffic along the road is now generally limited to local residents. The Waimahaihai St. - Kihei Road intersection is not signalized. Traffic from the proposed library facility could also access Kihei Road by traveling makai on Waimahaihai Street onto Halama Street and then onto Kihei via Welekahao Road (similar to Site C).

Significant traffic generators along Kihei Road are south of the site -- Kalama Park, Kihei Town Center and Kukui Mall. Since areas adjacent to the site are generally mixed use, including a County fire station, homes, park and plant nursery, adverse impacts to the surrounding area should be minimal.

The Kihei Traffic Master Plan indicated existing peak hour traffic counts for South Kihei Road at the Welekahao and Auhana Road intersection as follows:

<table>
<thead>
<tr>
<th></th>
<th>A.M.</th>
<th>P.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northbound</td>
<td>437</td>
<td>729</td>
</tr>
<tr>
<td>Southbound</td>
<td>400</td>
<td>599</td>
</tr>
</tbody>
</table>

Level of service (LOS) for a continuous roadway is "C" during A.M. peak hour and is "E" during P.M. peak hour traffic. The study recommended that South Kihei Road eventually be widened to four lanes with exclusive left-turn lanes at major and minor connector road intersections.

The volume of traffic generated by the proposed library facility was approximated by utilizing data

V - 13
for the Kahului Library. Kahului library is of similar size (16,070 sq. ft.) and serves a population of 22,923—similar in size to the Kihei Community Plan year 2000 projection of 22,900. Kahului Library serves approximately 1,520 users/week. Based on an average 8 hour day and 5 day work week, approximately 38 people/hour could be expected. Assuming the worst case of all 38 people driving an auto and an average stay of one hour, approximately 76 trips could be expected within an hour.

The existing Kihei library has about one-thirteenth of the users presently utilizing the Kahului facility and as such would have minimal impact on traffic along Waimahaihai and South Kihei Roads. The projected year 2000 population, however, will necessitate improvements such as dedicated left turn lanes along South Kihei Road into Waimahaihai St.

It is recommended that the required improvements be coordinated with the South Kihei Road work to insure conformance with the Kihei Traffic Master Plan. Local traffic congestion along South Kihei Road will continue to worsen until Piilani Highway, the North-South Collector Road and South Kihei road widening are completed.

Site E - Adjacent to Kihei School

The site adjacent to Kihei School will have access along the new North-South Collector roadway, a portion of which will be constructed as part of the Piilani Village project. The 80-foot road right-of-way with concrete curb, gutter and sidewalk will connect the site to subdivision roadways within the proposed single and multi-family unit subdivision and to Lipoa Street. The roadways will be more than adequate for the residential, school, library, commercial and park traffic.

Pedestrian access will be facilitated by the sidewalks along the Collector road as well as the bike/pedestrian path along the roads main shoulder. This path will be paved and landscaped as part of the Piilani Village project, providing off-street circulation between both ends of the Piilani Village project.

Pedestrian access is also facilitated by the existing concrete sidewalks running along Lipoa Street between Kihei Road and Kihei School.
VI. ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

The "no action" alternative would mean that the Kihei library station would continue to remain in operation. This alternative is unacceptable to the community since the facility is inadequate to serve the needs of the existing population. This alternative is even more unrealistic in view of the unprecedented growth that Kihei is experiencing.

This alternative would preclude the project's goal of ensuring the provision of adequate and accessible library facilities for the Maalaea, Makena, Kihei and Wailea population, forcing the public to commute to Kahului or Wailuku.

B. Expansion of Existing Library Station

Renovation and expansion of the existing Kihei Library Station would not be feasible due to the age of the structure (approximately 46 years old) and lack of available building building area to convert to library use. Efficient use of the area would involve demolition of one or more of the existing structures on the site and construction of a new facility.

C. Leasing of Privately-owned Space

Leasing of space has short-term advantages but would not be not viable in the long-term due to uncertainties in lease rents and tenure. Lack of control over future expansion capabilities is also a consideration which would tend to favor the proposed action.
VII. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

A. Short-term Uses

The proposed public library project will involve short-term uses of the local environment during the construction phase. The negative and positive aspects of these short-term impacts were discussed in Section V. The adverse impacts include temporarily increased noise and traffic in the area. The short-term benefits include increased economic activity due to construction expenditures related to the project.

B. Long-term Productivity

The long-term benefits from the proposed project will be due to the availability of library resources to the public living within the Kihei, Makena, Maalaea and Wailea areas. The library can be considered both a recreational and educational resource which will help maintain and enhance the productivity of the general populace by providing a source of information. The libraries are also used as meeting halls where groups such as the neighborhood board, school clubs and athletic leagues can gather. This contributes to the long-term productivity of the community by providing a forum for social groups and by encouraging community participation, which leads to an increased quality of life.
VIII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The commitment of resources can be divided into three categories:

A. Long-term Commitment of Land

The proposed action involves the commitment of two acres of land for a public library facility, precluding consideration of the land for other uses.

B. Construction Commitments

The construction of the facility will involve the irreversible and irretreivable use of energy (electricity and fuel), water, labor, materials and capital investment.

C. Operational Commitments

The completed public library facility will require the irreversible and irretreivable commitment of energy, water, labor, and materials to operate and maintain the facility.
### IX. LIST OF NECESSARY APPROVALS

<table>
<thead>
<tr>
<th>Permit/Approval</th>
<th>Kihei Community Complex</th>
<th>Future County Civic Ctr</th>
<th>Waiohulu Beach Homestead</th>
<th>Adj to Kalama Park</th>
<th>Adj to Kihei School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning Change/Interpretation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Special Mgt Area Use Permit</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kihei-Makena Community Plan Amendment</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>State Land Use Boundary Amendment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Subdivision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Plan Approval</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>National Flood Insurance</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Building Permit</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sewer Connection</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Work w/in State Right-of-Way</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Work w/in County Right-of-way</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Grading Permit</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

IX - 1
X. AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED IN THE PREPARATION OF THIS DOCUMENT

A. FEDERAL AGENCIES

Department of the Army -- U.S. Army Engineer District, Honolulu
Department of the Interior -- Fish and Wildlife Service
Department of Agriculture -- Soil Conservation Service

B. STATE AGENCIES

Department of Accounting and General Services
Department of Agriculture
Department of Business and Economic Development
Department of Education
Department of Health
Department of Human Services
Department of Land and Natural Resources
Department of Transportation
University of Hawaii, Environmental Center
State House of Representatives, State Senate

C. COUNTY AGENCIES

Department of Parks and Recreation
Department of Public Works
Department of Water Supply
Office of Economic Development
Planning Department
County Council/Office of the Mayor

D. INDIVIDUALS/ORGANIZATIONS

Haleakala Ranch
Hawaiian Telephone Co.
Kihei Community Association
Library Advisory Commission
Mr. and Mrs. Edward Tamori
Maui Electric Co., Ltd.
The Gas Company
XI. EIS PREPARATION NOTICE COMMENTS AND RESPONSES

The following agencies, organizations, and individuals were consulted in the review of the EIS Preparation Notice for the Site Selection of the Kihei Public Library. A total of 12 letters were received.

<table>
<thead>
<tr>
<th>DATE</th>
<th>ADDRESSEE</th>
<th>Comments Rec’d</th>
<th>DAGS Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Federal Agencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of the Army</td>
<td>10/4/90</td>
<td>11/23/90</td>
</tr>
<tr>
<td></td>
<td>U.S. Army Engineer District, Honolulu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of the Interior</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Fish and Wildlife Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of Agriculture</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Soil Conservation Service</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td><strong>State Administration/Agencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Honorable Joseph M. Souki</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Representative</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Honorable Mamoru Yamasaki</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Senator</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of Accounting</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>and General Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of Agriculture</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Department of Business, Economic Development, and Tourism</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Land Use Commission</td>
<td>9/21/90</td>
<td>11/23/90</td>
</tr>
<tr>
<td></td>
<td>Department of Education</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Department of Health</td>
<td>11/16/90</td>
<td>12/11/90</td>
</tr>
<tr>
<td></td>
<td>Department of Human Services</td>
<td>9/18/90</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Department of Land and Natural Resources</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Department of Transportation</td>
<td>10/10/90</td>
<td>11/21/90</td>
</tr>
<tr>
<td></td>
<td>University of Hawaii</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Center</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td><strong>County Administration/Agencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Honorable Goro Hokama</td>
<td>9/27/90</td>
<td>11/30/90</td>
</tr>
<tr>
<td></td>
<td>County Council Chairman</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Honorable Hannibal Tavares</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Mayor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of Parks and Recreation</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Department of Public Works</td>
<td>10/19/90</td>
<td>11/28/90</td>
</tr>
<tr>
<td></td>
<td>Department of Water Supply</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td></td>
<td>Office of Economic Development</td>
<td>none</td>
<td>not req’d</td>
</tr>
<tr>
<td>Organization</td>
<td>Date Responded 1</td>
<td>Date Responded 2</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>Planning Department</td>
<td>10/2/90</td>
<td>11/20/90</td>
<td></td>
</tr>
<tr>
<td>(2 letters)</td>
<td>10/8/90</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maui Electric Company, Ltd.</td>
<td>10/12/90</td>
<td>11/23/90</td>
<td></td>
</tr>
<tr>
<td>Hawaiian Telephone Co.</td>
<td>11/12/90</td>
<td>11/27/90</td>
<td></td>
</tr>
<tr>
<td>The Gas Co.</td>
<td>none</td>
<td>not req'd</td>
<td></td>
</tr>
<tr>
<td><strong>Private Organizations/Individuals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haleakala Ranch</td>
<td>none</td>
<td>not req'd</td>
<td></td>
</tr>
<tr>
<td>Kihei Community Association</td>
<td>9/28/90</td>
<td>11/20/90</td>
<td></td>
</tr>
<tr>
<td>Library Advisory Commission</td>
<td>none</td>
<td>not req'd</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Edward Tamori</td>
<td>none</td>
<td>not req'd</td>
<td></td>
</tr>
</tbody>
</table>
Site C (THK 3-9-11: 1B). Portions of the parcel are in Zone AH (areas of 100-year shallow flooding), with a base flood elevation of 7 feet MSL; Zone AO (areas of 100-year shallow flooding), with an average depth of inundation of 1.0 feet MSL; and Zone C.

Site D (THK 3-9-12: 13). Portions of the parcel are in Zone AH, with a base flood elevation of 7.0 feet MSL; Zone AO, with an average depth of inundation of 1.0 feet MSL; and Zone C.

Site E (THK 2-02-02: por. 42). The entire parcel is in Zone C.

Sincerely,

Kinko Chong
Director of Engineering
NOV 23 1980

Mr. Kinuk Cheung
Director of Engineering
U. S. Army Engineer District, Honolulu
Department of the Army
Fort Shafter, Hawaii 96856-5440

Dear Mr. Cheung:

Subject: Kihei Public Library
EIS Consultation Phase

Thank you for your October 1, 1980 letter stating that a Department of the Army permit would not be required for any of the five sites. The Hawaii State Public Library System has tentatively selected Site D, Adjacent to Keakea Park, for the future library and Site C, Kalanianaole Homesteads, as an alternative site. Your comments regarding the Flood Insurance Rate Map classifications for each of the sites will be incorporated into the Draft EIS.

We appreciate your input for this project.

Very truly yours,

[Signature]
State Controller
September 20, 1990

Russel S. Nagata, State Controller
Department of Accounting and
General Services, State of Hawaii
1151 Punchbowl Street
P.O. Box 119
Honolulu, HI 96810

Dear Mr. Nagata:

Subject: EISPM for Site Selection for the
Kuhi Public Library

We have no comments to offer except that based on Figure
11-2, "State Land Use Map", all sites except Site B, are
designated within the State Land Use Urban District. Site B is
designated within the State Land Use Agricultural District and
may require a special use permit or a land use district
boundary amendment.

Thank you for the opportunity to comment.

Sincerely,

ESTHER UEDA
Executive Officer

Ms. Esther Ueda
Executive Officer
Land Use Commission
Department of Business, Economic
Development and Tourism
State of Hawaii
Old Federal Building, Room 104
335 Merchant Street
Honolulu, HI 96813

Dear Ms. Ueda:

Subject: Kuhi Public Library
EIS Consultation Phase

Thank you for your September 20, 1990 comments on the
subject project. Site B, Adjacent to Palama Park, has been
tentatively selected for the future library by the Hawaii
State Public Library System and Site C, Waipouli Beach
Homes, as an alternative site. The requirements for a
special use permit or land use district boundary amendment for
Site B are noted on the Draft EIS.

Very truly yours,

RUSSEL S. NAGATA
State Controller
MEMORANDUM

To: The Honorable Russell S. Nagata, Comptroller
   Department of Accounting &
   General Services

From: Director of Health

Subject: Environmental Impact Assessment for Site Selection for the Kīhei Library
   To Serve: Malaekahāna, Kīhei, Wailuku and Makana
   Kīhei, Maui, Hawaii

We have reviewed the materials on the subject project submitted by your office. The
following comments are offered:

Proposed sites A, C & D are not recommended due to its close proximity to the
shoreline. Since parking for beach activities are limited in the Kīhei area, there may
be a misuse of the proposed public facility with parking area.

Site "E" lacks existing sewer and water lines, however it will be within the planned
County Civic Center and is recommended.

Site "F" is the second choice. However, the need for a high school in the Kīhei area
has not been established yet and may not be best served by a library at this site.

Wastewater Disposal

The subject area is in a proposed critical wastewater disposal area as
determined by the Maui County Wastewater Advisory Committee. In this
future, no cesspools will be allowed as a means of disposal.

At this time, details of the wastewater treatment and disposal from the project
are general in nature. It has been determined that the subject project is within
a County Sewer system service area.

Section 11-62-06(b) of the wastewater rules requires that projects within
sewered areas connect to the public sewers. As this project is within a
Honorable John C. Lewin
Director of Health
State of Hawaii
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Lewin:

Subject: Kihau Public Library

Thank you for your November 15, 1990 comments on the subject project. The Hawaii State Public Library System has tentatively selected Site B, Adjacent to Kihau Park, for the future public library and Site C, Kauai Public Library Annex, as an alternative site. Our responses to your comments are as follows:

1. Site Selection: Your position against Sites A, C, and D for the reasons given and your position for Sites B and E will be included in the Draft EIS. The following comments are offered:
   a. Site A was considered to be a viable site. However, its location far from the center of Kihau, the demolition of existing facilities, and the County's proposal to develop the site into a recreation center was considered to be negative impacts.
   b. The County Department of Planning has expressed concern that Piliwai Highway would act as a barrier to Sites B for library users on non-motorized vehicles. This barrier and the lack of adequate infrastructure are major objections to this site.
   c. We feel that the advantages of Sites C and D outweigh the potential misuse of parking at these sites. The problem can be avoided with proper design and security measures.

2. Wastewater Disposal:
   a. The Draft EIS will state that the area is within the proposed "critical wastewater disposal area", as designated by the Maui Wastewater Advisory Committee, and that cesspools will not be allowed as a means of disposal.
   b. Thank you for the information that all sites are within the County's sewer system service area. Construction of an "offsite" sewer line would be required at Site B.
   c. The Draft EIS will state that connection to County sewer system will be required at all five candidate sites in accordance with Section 11-62-06(b) of the wastewater rules.

We appreciate your input for this project.

Very truly yours,

[Signature]

State Comptroller
TO: Mr. Russell S. Nagata, State Comptroller  
Dept. of Accounting and General Services  
FROM: Winona E. Rubin  
Subject: EISP - Kula Public Library  

Thank you for the opportunity to review this project. We have no comment at this time.

[Signature]
MEMORANDUM

TO:    The Honorable Russel S. Nagata, Controller
       Department of Accounting and General Services

FROM: Edward Y. Hirata
       Director of Transportation

SUBJECT: Environmental Impact State Preparation Notice
          Kihei Public Library, Kihei, Maui

Thank you for your notice of September 11, 1990 requesting our review of the subject EISPN.

A traffic assessment should be prepared for this project and submitted for our review and approval. The proposed project will bear all costs of any required improvements.

Mr. Edward T. Hirata
Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Hirata:

Subject: Kihei Public Library
         EIS Consultation Phase

Thank you for your October 9, 1990 comments on the subject project. The Hawaii State Public Library System has tentatively selected Site D, Adjacent to Kahana Park, for the future public library and Site C, Wailea Estates, as an alternative site.

A discussion of potential traffic impacts for Site D will be included in the Draft EIS.

Very truly yours,

Robert J. Nagata
State Comptroller
September 25, 1990

Mr. Russel S. Magata
State Controller
Department of Accounting and General Services
1151 Punchbowl Street
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Magata:

SUBJECT: KIHEI PUBLIC LIBRARY (PAP 90-207)

Thank you for the opportunity to review the Environmental Impact Statement (EIS) Preparation Notice for the Kihei Public Library.

I fully support a new public library in Kihei to serve the rapidly growing Kihei, Waiola and Nakana areas on Maui. The current facility is grossly inadequate to serve the projected resident population of 22,500 persons by the year 2000.

I would like to offer the following information and comments for your consideration.

GENERAL INFORMATION

Site A: Kihei Community Complex

TNX: 3-9-92: 11
Owner: State of Hawaii (County of Maui - Executive Order 1958)
Area: 4.4 acres
State Land Use Classification: Urban
Kihei-Nakana Community Plan Designation: Park
County zoning: Park

Site B: Future County Civic Center

TNX: 2-3-92: portion of 54
Owner: Kuleakala Ranch
State Land Use Classification: Agriculture
Kihei-Nakana Community Plan Designation: Public
County zoning: Agriculture

The property is located north of Pilihali Highway. It is surrounded by public and agricultural uses; and Pilihali Highway.

Site C: Palihali Beach

TNX: 3-9-11: 18
Owner: Edward M. and Joan Tamori
Area: 2.11 acres
State Land Use Classification: Urban
Kihei-Nakana Community Plan Designation: Single Family
County zoning: R-3 Residential District

The parcel is located in the heart of Kihei Town, makai of South Kihei Road. It is surrounded by single family residential uses.

Site D: Adjacent to Kalama Park

TNX: 3-9-12: 13
Owner: State of Hawaii (County of Maui - Executive Order 1958)
Area: 1.95 acres
State Land Use Classification: Urban
Kihei-Nakana Community Plan Designation: Public
County zoning: Park

The property is located in Kihei Town, makai of South Kihei Road and adjacent to Kalama Park. It is surrounded by public and single family uses and Kalama Park.
Site E: Adjacent to Kihel School

THX: 2-3-52: portion of 42
Owner: Maleska Ranch
State Land Use Classification: Urban
Kihel-Makena Community Plan Designation: Park
County zoning: Agriculture

The property is located makai of Piliaili Highway
adjacent to Kihel Elementary School and Lokilani
Intermediate School. It is surrounded by Project
District 5, a residential project; single family,
light industrial, and public uses. The north-south
arterial roadway proposed in the Kihel Traffic Master
Plan will border the property's western boundary.

ISSUES FOR CONSIDERATION:

1. Sewer availability. How will construction of the
library coincide with the availability of wastewater
treatment capacity at the Kihel Wastewater Treatment
Plant? Of the 3 million gallons per day of expansion
capacity at the Kihel Wastewater Treatment Plant,
Ordinance No. 1787 allocated 1.2 million gallons per
day for long-term residential developments, and the
remaining 1.8 million gallons for other uses. Sewage
capacity is allocated according to the order of
building permit issuance. The County Council may
waive the application of the ordinance if it is shown
that the project will have a minimal impact on sewage
flow, and is necessary to the public health, safety
and welfare.

2. Wetlands. The EIS should consider whether the site
is located within a wetland area, and guarantees that
proper mitigative measures will be implemented.

3. Compatibility with surrounding uses. How will
compatibility with commercial development be
addressed? Sites A and E are adjacent to proposed
commercial projects.

4. Traffic. Sites A and E will abut the proposed
north-south arterial road. How will construction of
the new roadway impact construction of the library?
Will access to the library be from the new
north-south arterial road?

Site B is located makai of Piliaili Highway. What
road improvements would be required to ensure the
safety of children crossing the Highway?

5. Ownership. Sites B, C, and E are under private
ownership. Selection of these sites would require
implementation of acquisition proceedings resulting
in added costs and a longer development schedule.
Sites A and D are owned by the State of Hawaii;
hence, land acquisition costs and development delays
due to acquisition proceedings would be reduced.

6. Land Use Changes. With the exception of site C,
selection of the other sites would require one or
more land use changes. A district boundary
amendment, community plan amendment, or change in
zoning would require a public hearing by the Maui
Planning Commission, and review and final approval by
the County Council.

Again, thank you for the opportunity to comment on the EIS
Preparation Notice for the Kihel Public Library. I would
appreciate a copy of the draft EIS once it is available for
review.

Respectfully submitted,

GORO HOKAMA
Council Chair

attachment
PAP207:MISS1:ds
The Honorable Goro Hokusai
Council Chair
County Council
County of Maui
200 South High Street
Wailuku, Maui, Hawaii 96793
Dear Mr. Hokusai:

Subject: Kihei Public Library
EIS Consultation Phase

Thank you for your September 25, 1990 comments regarding
the subject project. The Hawaii State Public Library System
has tentatively selected Site D, Adjacent to Kahana Park, for
the future public library and Site E, Waikulua Beach Home-
steads, as an alternative site. Our responses to your
comments are as follows:

General Information

1. General Information - The information regarding
zoning, land classification and surrounding land use
for each of the five sites will be incorporated in
the Draft EIS.

2. Site E, Adjacent to Kihei School - The Planning
Department has informed us that the County zoning
for the site is for park use in accordance with the
Project District 3 (PD-3) development plan, rather
than agriculture. Based on PD-5 information, we
have reviewed, commercial areas, rather than
industrial, are included within the project.

Issues for Consideration

1. Sewer Availability - Funding for construction of the
library is currently scheduled for the 1991 fiscal
biennium, by which time upgrade of the sewage treat-
ment plant may be completed. We acknowledge that
under the present ordinance, sewer treatment capa-
city is allocated according to the order of building
permit issuance and therefore the availability of
sewer capacity for this project cannot be assured.
The possibility that the County Council may waive
the application of the ordinance if the project has
minimal impact on sewage flow and is necessary to
the public health, safety and welfare will be noted
in the Draft EIS.

2. Wetlands - The Draft EIS will indicate that all
sites are outside of areas that have been designated
as wetlands by the Corps of Engineers and the U. S.
Fish and Wildlife Service.

3. Compatibility with Surrounding Uses - Under the
zoning ordinance, libraries are a permitted use in
commercial districts. The type of users and the
amount of traffic generated by the library will
probably be more compatible with commercial areas
than other zoning districts.

4. Traffic - The Kihei Traffic Master Plan proposed
a roadway to be located south of Site A, Kihei
Community Complex. This roadway, which is being
constructed as part of the Kihei Village townhouse
development, is located directly south of the existing
Kihei Library station and will connect Waio Road to Kenolio Road. The roadway will have no
impact on the proposed library facility. Access to
the proposed facility may be from either Kenolio
Road or South Kihei Road. A discussion of the
planned development within the area will be included
in the Draft EIS.

Site E, Adjacent to Kihei School abuts the proposed
North-South Collector Road. Access to the site will
be from the portion of the collector road being
constructed as part of the Pilamal Village project.
Should the construction of the library precede the
completion of the Pilamal Village project, either a
temporary access through Kihei School or construc-
tion of a portion of the road improvements will need
to be considered. A discussion of the planned
development within the area will be included in the
Draft EIS.
Improvements necessary to facilitate access of Site B, Future County Civic Center by pedestrians or persons on non-motorized vehicles include elevated pedestrian crossing and sidewalks. These improvements are mentioned in the Draft EIS but are not proposed to be included in the project. The difficulty in crossing the highway is noted as a consideration in the evaluation of the sites.

5. Ownership - We concur with your comments concerning advantages of selecting public versus privately-owned land and note that, although Site E is currently under private ownership, the land will be dedicated to the County as a park site. Therefore, acquisition of the site would also involve the County. Acquisition of Site A or B would also involve the County since the sites are currently under County jurisdiction by Governor's Executive Order.

6. Land Use Changes - Your comments regarding necessary approvals for land use changes will be incorporated into the Draft EIS.

The Planning Department has indicated that the zoning code does not specifically state that a library is a permitted use within residential districts, requiring some interpretation for Site C.

The State Land Use Commission noted that obtaining a Special Use Permit is an option to the boundary amendment process.

We appreciate your input for this project.

Very truly yours,

[Signature]

State Controller
State of Hawaii  
Dept. of Accounting & General Services  
P.O. Box 119  
Honolulu, Hawaii 96810

Attn: Mr. Charles Inatsuka  
Public Works Division

Subject: Kilei Public Library  
EIS Consultation Per  
Your letter 101723.4

We have reviewed the above request and offer the following comments:

1. Sites A, C & D are within the transis and/or flood zone. As such, the project on these sites must conform to Ordinance 1145, pertaining to flood hazard districts.

2. Sites B & E do not appear to have adequate infrastructure (i.e., water, sewer, electricity and/or telephone).

3. That roadway and/or widening lots shall be required to provide for at least 56% rights-of-way and improved to County standards, to include but not be limited to, pavement widening, construction of curb, gutter and sidewalk, and relocation of utilities underground.

4. Detailed drainage and erosion control plans including, but not limited to, hydrologic and hydraulic calculations, scheme for controlling erosion and disposal of runoff water, and an analysis of the soil loss using the HERS erosion formula, should be prepared. The plan shall provide verification that the grading and runoff water generated by the project will not have an adverse effect on the adjacent and downstream properties.

5. That paved parking and loading spaces be provided per the County’s Off-Street Parking and Loading Ordinance. In addition, appropriate landscaping and fencing shall be provided.

6. That the existing Kilei Wastewater Treatment Plant is operating at capacity. A plan to expand the plant has been formulated. However, the planned expansion is not contemplated to be completed by mid 1991. The County cannot guarantee that sewage capacity will be available at time of building permit application.

7. That no clearing and grubbing material shall be disposed of at the County sanitary landfill. The developer shall submit a solid waste management plan acceptable to the Department of Public Works. For additional information, the developer is requested to contact the Solid Waste Division.

If further clarification is required, please contact Francis O. Pakunaga of the Land Use and Codes Administration at 243-7373.

Yours very truly,

[Signature]
K. Pakunaga  
Director of Public Works

cc: Engineering Division  
Wastewater Reclamation Division  
Solid Waste Division  
Planning Department
Mr. Alvin K. Fukunaga
Director
Department of Public Works
259 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Fukunaga:

Subject: Kalani Public Library
EIS Consultation Phase

Thank you for your October 19, 1990 comments on the subject project. The County of Hawaii Public Library System has tentatively selected Site B, Kalani Park, for the site public library and Site C, Wailea Beach Park, as an alternative site. Our responses to your comments are as follows:

1. Flood Hazard Districts - The Draft EIS will require that projects on Sites A, C, and D which are within the tsunami and/or flood zones must conform to Ordinance 1145, pertaining to flood hazard districts.

2. Infrastructure - Sites B and C presently do not have adequate infrastructure. However, adequate infrastructure for site B will be provided with the construction of the Waikea Village project. The Draft EIS will discuss the infrastructure to be provided by the library project and that which will be provided by other planned projects.

3. Roadway - The requirement that the roadway right-of-way must have a minimum width of 56 feet and meet Maui County Standards, will be included for all sites.

4. Drainage and Erosion Control - The Draft EIS will state that detailed drain and erosion control plans for the selected project site will be prepared during the design of the project.

5. Parking - The Draft EIS will state that parking and loading spaces will be provided in accordance with the County's Off-street Parking and Loading Ordinance. In addition, landscaping and fencing will be provided in accordance with County requirements.

6. Sewer - Thank you for the additional information on the wastewater treatment plant. Your letter states that the treatment plant expansion "is not contemplated to be completed by mid-1991." Based on further clarification with Mr. Genise of your office, we understand that the first phase of plant expansion will be completed by the end of 1990 and the second phase will be completed by mid-1991. The Draft EIS will state that the treatment plant expansion is expected to be completed by mid-1992.

7. Solid Waste - Thank you for the information on solid waste. The Draft EIS will include information concerning requirements for disposal of clearing and grubbing material and for preparation of a solid waste management plan.

Very truly yours,

[Signature]
State Comptroller
Mr. Russel S. Nagata
State Controller
Department of Accounting
and General Services
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Nagata:

Subject: Kīhei Public Library
EIS Consultation Phases

The Planning Department has reviewed the Environmental Impact Statement Preparation Notice for site selection for the Kīhei Public Library. Our review finds that the information contained in the report pertaining to the Special Management Area and the appropriate zoning designations for a proposed library site are accurate.

In addition, you are advised that all sites with the exception of site B are located within the Special Management Area and are subject to Chapter 205-A of the Hawaii Revised Statutes as amended and Article II, Section 2 of the Special Management Rules and Regulations of the County of Maui.

Article II, Section 2-9 of the Special Management Area provides that "No development within the Special Management Area shall be approved unless the Authority has first found that:

(1) The development will not have any substantial adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options.

Thank you for the opportunity to comment on this matter. If further clarification is required, please contact this office.

Very truly yours,

Christopher L. Hart
Planning Director

cc: John Min
Ann Cua
October 2, 1990
Mr. Russell S. Hagata, State Controller
State of Hawaii
Department of Accounting and General Services
P.O. Box 119
Honolulu, Hawaii 96810

Attn: Charles Imatsu

Dear Sir:

Re: Kihei Public Library

His Consultation Phase.

With reference to the above, this office would offer the following comments on a proposed public library for the Kihei area of Maui.

In the project description, under the title Project Need reference is made to “East Maui”. The Kihei area is normally referred to as “South Maui”. Also, notwithstanding the population projection of 23,909 persons by year 2000 indicated in the Kihei/Makena Community Plan, the actual population of the Kihei area will be higher due to unprecedented growth experienced in the area. In the Project Description the matter of accommodating group room parking at a ratio of 1 stall per 100 sq. ft. and potential off-site drainage improvements should be considered. Finally in the section dealing with infrastructure, reference is made to the Kihei Traffic Master Plan. Section D(6)(3) names the ha'akau/ka'ahal roadways one of which should be Ka'ahulau not Kaeoohi.

Site specifically we note that five sites have been selected for consideration as candidate sites for the proposed library. The obvious choice would be a site as centralizing as possible and which can offer good access to the resident catchment area. Sites C, D, and E would offer the centralized criterion with sites C and D probably offering the best access. To utilize site A would likely require demolition of some of the existing facilities which could impact the community as the existing buildings are heavily used for various community based functions. Site B, although central located and accessible...
Mr. Christopher L. Hart  
Director of Planning  
Planning Department  
County of Maui  
250 South High Street  
Wailuku, Maui, Hawaii 96793

Dear Mr. Hart:

Subject: Kihei Public Library  
EIS Consultation Phase

Thank you for your September 25, and October 2, 1990 comments on the subject project. The Hawaii State Public Library System has tentatively selected Site D, Adjacent to Kalama Park, for the future library and Site C, Kalama Beach Homesteads, as an alternative site. Our responses to your comments are as follows:

1. **Project Description:** Reference to Kihei being in "East Maui" has been revised to "South Maui."

2. **Population:** A statement about the likelihood of population growth in Kihei exceeding the projected year 2000 figure of 22,900 will be incorporated into the Draft EIS.

3. **Parking:** The stall requirements for group room parking at a ratio of 1 per 100 square feet for meeting facilities will be added to the project description.

4. **Off-site Drainage Improvements:** A statement will be included in the Draft EIS regarding possible requirements for the off-site drainage improvements as determined during the permit and plan review process by the County.

5. **Infrastructure:** Spelling of roadway Ka'ono'ulu will be corrected.

6. **Site A:** The potential impact of the demolition of the existing facilities on the community will be included.

7. **Site B:** A discussion of the potential impact of Pillani Highway as a barrier to persons using non-motorized vehicles will be included.

8. **Site C:** Although the Zoning Ordinance does not specifically state that a library is a permitted use within a residential district (R-3), it is our interpretation that a library is a permitted use within the broadly defined category of "building used by government for public purposes." Use of the site for a library would also be quite similar to using the site for a school, which is permitted within Zone R-3. We have included a statement in the Draft EIS, that a zoning interpretation would be required and that the necessity of rezoning action is unlikely, for the reasons stated above.

9. **Site D:** A statement regarding the County's "intended" zoning of public/quasi-public for the site has been included in our discussions.

10. **Site E:** The County's intention to utilize the site in accordance with the site's park zoning designation will be noted.

11. **Special Management Area:** Citing of State and County regulations governing sites within the SMA will be included in the Draft EIS.

We appreciate your input and will continue to keep you apprised.

Very truly yours,

[Signature]
State Comptroller

Page 2
October 11, 1990

Mr. Charles Inatsuwe
Project Coordinator
Department of Accounting and General Services
1151 Punchbowl Street
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Inatsuwe:

Re: Kihei Public Library
EIS Consultation Phase

We have reviewed the subject Kihei Public Library and have no comments. Please be aware that due to the increased construction activity on Maui, Maui Electric Company, Limited, may need a lead time of six months to a year to acquire certain equipment. This long lead time, along with design, permitting, and other processes, could further prolong the request for electrical service to the library.

Thank you for the opportunity to comment on the subject study. If there are any questions, please contact Reginald Foo at 871-2385.

Sincerely,

Edward L. Reinhardt
Manager, Engineering

Edward L. Reinhardt
Manager, Engineering

Mr. Edward L. Reinhardt
Manager, Engineering
Maui Electric Company, Ltd.
210 West Kamehameha Avenue
P. O. Box 398
Kahului, Maui, Hawaii 96732-0398

Dear Mr. Reinhardt:

Subject: Kihei Public Library
EIS Consultation Phase

Thank you for your October 11, 1990 letter stating that a lead time of six months to one year will be required by Maui Electric Company, Ltd. for equipment acquisition. Your letter will be included in the Draft EIS for consideration by the involved agencies in developing the project schedule.

The Hawaii State Public Library System has tentatively selected Site B, Adjacent to Palama Park, for the future public library and Site C, Wailuku Beach Park, as an alternative site.

Very truly yours,

TERRIE TANAKA
State Public Works Engineer
Nov. 5, 1990

State of Hawaii
Dept. of Accounting and General Services
P.O. Box 119
Honolulu, HI 96810

Attn: Russ Nagata

Subject: Kihei Public Library

We have reviewed the proposed library sites and find no conflict at this time. However, the rapid growth of the Kihei area may attribute to delay in providing telephone service. This condition can be reduced with early notification of the approved site and help in establishing communications with the electrical consultant preparing the working drawings.

We look forward to working with you and your consultant. If you have any questions you may contact Mr. William Murphy of GSP Engineering at 242-5261 or our Engineering Department at 242-5102.

Sincerely,

William Murphy
GSP Engineer

Ronald K. Saito
Supervising GSP Engineer

Mr. Ronald K. Saito
Supervising GSP Engineer
GTE Hawaiian Telephone Co., Inc.
P.O. Box 370
Wailuku, Maui, Hawaii 96793

Dear Mr. Saito:

Subject: Kihei Public Library

EIS Consultation Phase

Thank you for your November 2, 1990 letter stating that you have not found any conflicts at any of the library candidate sites. However, we note that early coordination between our agencies is recommended to minimize any delay in providing telephone service.

The Hawaii State Public Library System has tentatively selected Site D, Adjacent to Kahului Beach, for the future public library and Site C, Kihei Beach Homes, as an alternative site.

Very truly yours,

Tedane Tominaga
State Public Works Engineer
September 26, 1990

Mr. Russel S. Nagata
State Comptroller
Department of Accounting and General Services
P.O. Box 19
Honolulu, Hawaii 96810

Re: Kihel Public Library
Letter dated September 11, 1990

Dear Mr. Nagata:

The timing for comments by October 5, 1990, does not allow us enough time to fully assess public opinion in our area regarding the four library sites: A, C, D, and E.

The four sites all considered favorable locations and the community is most pleased at the prospect of a public library in our fast growing area.

Site E, located next to Kihel schools, is most favored by parents; at least at our meeting of September 17th, but any of the proposed sites would be acceptable.

Sincerely,

[Signature]

[Name]
President

[Stamp]
Mr. Gene Thompson  
President  
Kahului Community Association  
P.O. Box 652  
Kahului, Maui, Hawaii 96753  

Dear Mr. Thompson:

Subject: Kahului Public Library  
HIS Consultation Phase

Thank you for your September 26, 1990 comments regarding the subject project. The Hawaii State Public Library System has tentatively selected Site D, Adjacent to Kalana Park, for the future library and Site C, Waiholi Beach Homesites, as an alternative site.

Please note that our study involves evaluation of five sites, not four as you have indicated.

We appreciate your informing us of the results of the poll taken at your September meeting, indicating parent's preference for Site E. Our preliminary evaluation of the five sites favors Sites C and D for the following reasons:

Site D, Adjacent to Kalana Park seems to offer the best potential for development as a library site, with major advantages being its ownership by the State, availability of utilities, the "public" Kahului Community Plan designation, and central location. The County Planning Department has also stated that based on their preliminary evaluation they might favor Site D since it is "more in keeping with good planning objectives and would be more in compliance with local plans".

Site C, Waiholi Beach Homesites is an alternative to Site D. Although it is privately-owned, utilities are available and the location is central.

Our major reservations about Site E, Adjacent to Kihei School concern the timing of the Pilani Village Project as related to the library project. The library facility will rely on road and utility improvements to be constructed by the Pilani Village Project which are scheduled for completion sometime in 1995. Construction of the library prior to completion of these improvements would involve either acquiring temporary access and utility connections through Kihei School, or incurring additional cost to construct a portion of the Pilani Village improvements.

The County Planning Department has also commented that Site E is designated for park use within Project District 3, and is intended to be used for that purpose.

Very truly yours,

[Signature]

UHOA TAKAHARA  
State Public Works Engineer

C:the
XII. EIS PUBLIC REVIEW PHASE, COMMENTS AND RESPONSES

The following agencies, organizations and individuals provided comments on the Site Selection Study and Draft EIS. A total of 15 comment letters were received.

An asterisk (*) indicates those with comments which required responses. The comment and response letters reproduced in this section. All other letters did not require responses and are reproduced in this section.

A. Federal Agencies

1. Department of the Army, U.S. Army Engineer District, Honolulu
2. Department of the Navy

B. State Agencies

1. Department of Business and Economic Development
2. Department of Defense
*3. Department of Health
4. Department of Land and Natural Resources
5. Department of Transportation
*6. Environmental Center, University of Hawaii
7. Office of Environmental Quality Control
8. Department of Agriculture
9. Office of State Planning
10. Housing Finance and Development Corporation

C. County Agencies

*1. Department of Human Concerns
*2. Department of Public Works
3. Department of Water Supply

D. Organizations and Individuals

*1. Kihei Community Association
March 6, 1991

TO:         Russel S. Nagata, Comptroller
            Department of Accounting & General Services

FROM:      Director of Health

SUBJECT: Draft Environmental Impact Statement for the Site Selection for the New Kihei Public Library
           Kihei, Maui
           Site A—Kihei Community Complex
           TMK: 3-5-06: 11
           Site B—Future County Civic Center
           TMK: 2-2-02: Portion 24
           Site C—Waihau Beach Homesteads
           TMK: 3-9-11: 12
           Site D—Adjacent to Kalama Park
           TMK: 3-8-12: 12
           Site E—Adjacent to Kihei School
           TMK: 2-2-02: Portion 42

We have reviewed the material on the subject project submitted by your office. We have the following comments:

Noise and Radiation

The facility should be designed to minimize potential noise impact on adjacent residences from stationary equipment such as air conditioning units and exhaust fans.

Further, please note that under section V-A-1 titled Construction Noise, the provisions of Department of Health, Administrative Rules, Chapters 11-42 and 11-43 applies only to the island of Oahu. However, mitigative measures toward minimizing noise disturbances from construction activities should also be implemented on the neighbor islands.

Wastewater

The alternative sites for the subject project are within the County sewer service system. As stated in Section 11-62-06(b) of the Administrative Rules Chapter 11-62, "Wastewater Systems", all projects within county sewer service areas shall be connected. However, we do reserve the right to review all detailed wastewater plans for conformance to applicable rules.

Should you have any further questions, please contact Harold Yee of the Wastewater Branch at telephone 543-8287.

cc: OSQC
    Fukunaga & Associates

Mr. Choy
March 6, 1991
Page 2
Honorable John Lewin  
Director  
Department of Health  
State of Hawaii  
Honolulu, Hawaii  

Dear Dr. Lewin:

Subject: Kibei Public Library  
Draft EIS (Public Review Phase)

Thank you for your March 6, 1991 comments on the draft EIS. Our responses to your comments are as follows:

1. **Noise and Radiation**
   
   During the design phase, measures to minimize potential noise impact on adjacent residences from both permanent stationary equipment and construction activities will be incorporated in accordance with applicable codes and regulations.

2. **Wastewater**

   We concur with your statements which are included in the draft EIS. During the design phase, we will coordinate the wastewater plans with your department.

We appreciate your input for this project.

Very truly yours,

RUSSEL KAMWA  
State Comptroller
Draft Environmental Impact Statement (EIS)
New Kailua Public Library Site Selection
Kailua, Oahu

The referenced project includes the building of a 15,500 square foot public library on one of five sites under consideration within the Kailua service area.

The Environmental Center has reviewed this Draft EIS with the assistance of Glenn Shepherd, former geologist of Mau Community College; and Jacqueline Miller and Lee Lytton, Environmental Center.

General Comment
Given the nature and scale of the proposed action, the document was found to be well prepared and presented a reasonable methodology for analyzing a number of diverse sites.

Project Need (page 1-3)

The year 2000 population projection of 22,900 for the planning area, which is used as the basis for the facility’s site and site area, appears to be low. Maui County’s Office of Economic Development estimates that the existing population of the population of the Kailua to Makena to be already almost 14,400. As correctly pointed out, the area is experiencing unprecedented growth. A longer term, more realistic planning view should be discussed in this section.

It is also unclear if the alternative sites include room for expanding both the building and the required parking area due to growth.
However, should the design process uncover elements that would significantly affect the environment or propose any extraordinary grading or construction techniques, a revised assessment would be prepared.

3. Soils

We did not attempt to verify the 1972 U. S. Soils Conservation Service survey with core samplings from the various sites. However, we feel that the survey results should be representative of the general characteristics of the area and are sufficient for the purposes of evaluation. Upon selection of a final site, a soil investigation will be undertaken to insure that any potential soil problems are mitigated.

4. Traffic

The section on traffic assesses the degree and extent to which the facility will impact local traffic at each of the five sites. Therefore, it is closely aligned with the County's Kihei Traffic Master Plan (KTMP) which projects full development of the area by the year 2008. Please note that required improvements follow recommendations contained in the KTMP.

The poor rating for pedestrian access of Alternative D is a measure of the site's physical constraints which allow access only from one side of the property. It is not a measure of accessibility afforded by physical facilities such as off-site pedestrian paths and walkways which are beyond the jurisdiction of the HSPS. We included this criterion because we feel that it is better to enter the library site from three sides rather than one.

The existing right-of-way of Waikapalala Street is 46 feet. The 56 feet right-of-way mentioned in the Public Works Department's consultation letter is a future requirement the County will impose for the area. This setback requirement will be included as part of the site requirements for the library. Therefore, since the taking of lands for the road right-of-ways will be a County function, we feel that such impacts should be addressed by the County when they implement such requirements.

Dr. John Harrison
Environmental Coordinator
Environmental Center
University of Hawaii at Hilo
2530 Campus Road
Hilo, Hawaii 96722

Dear Dr. Harrison:

Thank you for your February 22, 1991 comments on the Draft EIS for the New Kihel Public Library. Our responses to your comments are as follows:

1. Project Need:

   a. Although numerous population projections have been made for the Kihel area, we are using the population projection of 22,900 for the year 2000 in the Kihel/Kaahumanu Community Plan which reflects the current public sentiment to control the rate of growth. Please note that the County is currently in the midst of a General Plan review that will attempt to address the rate of growth throughout the island.

   b. The alternative sites were sized on the basis of providing sufficient space for a projected building size of 25,500 square feet and appropriate parking areas. Given the current information on population projections, the Hawaii State Public Library System feels that these sites are adequate for any anticipated growth.

2. Proposed Project:

   Since this is a site selection and environmental assessment process, all of the pertinent environmental concerns will be addressed and exposed.
5. Land Use Plans, Policies and Controls

The Hawaii State Public Library System develops policies and goals for the operation of public libraries throughout the State. On Maui this is done in concert with input from the Maui Library Advisory Commission (LAC). The "service plan" and future goals are continually discussed in the deliberations between the Maui LAC and State Library System.

6. Public Health and Safety

Approximately one-half of the preferred alternative is within the flood fringe district and is subject to shallow flooding to a depth of one-foot during the 100-year storm. This problem can be mitigated by raising the finished floor elevation above elevation seven feet MSL.

Although construction of a facility within a flood plain may be questionable, we feel that the flood problems in this area are mitigable.

Very truly yours,

RUSSELL H. NAGATA
State Comptroller
January 22, 1991

Honorable John Waihee, Governor  
State of Hawaii  
c/o The Office of Environmental Quality Control  
465 S. King Street, Room 304  
Hilo, Hawaii 96720

Dear Governor Waihee:

Subject: Environmental Impact Statement For The New Kihei Public Library

The Office of Economic Development have reviewed the subject Environmental Impact Statement and find that, in general, it has adequately identified and addressed the major environmental impacts which can be anticipated to result from the proposed project.

However, we feel that there is a need to address the possibility of a multi-purpose use of the facility, i.e., after-school program. If this is possible, then the site next to the Kihei School would be the prime site.

We have no other comments to offer at this time; however, we thank you for the opportunity to review and express our comments.

Very truly yours,

FRED MATSUMOTO  
Economic Development Coordinator

cc: DAVE  
1300 Punchbowl Street  
Kalakaua Bldg., Room 430  
Honolulu, HI 96814  
Attn: Charles Inouye  
Ryne S. Fukumaga  
c/o Fukumaga & Associates, Inc.  
1208 Kapalani Blvd., 2nd Floor  
Honolulu, HI 96814

MAR 25 1991

Mr. Fred Matsumoto  
Economic Development Coordinator  
Economic Development Division  
Department of Human Concerns  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793

Dear Mr. Matsumoto:

Subject: Kihei Public Library  
Draft EIS (Public Review Phase)

Thank you for your January 22, 1991 comments on the draft EIS for the subject project.

Your comment favoring the site next to Kihei School has merit. The problem is that this site depends on extensive infrastructure development for the adjacent Piliulu Village project. Since these improvements are not anticipated until 1995, such infrastructure costs would have to be borne by the State.

We appreciate your input for this project.

Very truly yours,

TEUANE TOWHAG  
State Public Works Engineer

CJ/kn
March 1, 1991

Office of Environmental Quality Control

March 1, 1991

Governor, State of Hawaii
C/O Office of Environmental Quality Control
465 South King Street, Room 104
Honolulu, Hawaii 96813

Georges:

Re: Site Selection for the New Kailua Public Library at Kailua,
Kailua, Hawaii (2-2-02:42; 54; 3-9-06:11; 3-9-11:16; 3-9-12:13)

We have reviewed the subject application and offer the
following comments:

1. That the architect and owner is advised that some project sites
are subject to possible tsunami and flood inundation. As such,
said project must conform to Ordinance No. 1145, pertaining to
flood hazard districts.

2. That road widening lots be provided for the adjoining halves of
adjacent County streets to provide for a future 56-foot
right-of-way and improved County standards, to include but
not be limited to, pavement widening, construction of curb,
gutter, and sidewalk, and relocation of utilities underground.
Said lot shall be dedicated to the County upon completion of
the improvements.

3. That the existing roadways do not meet County standards based
on roads located in urban districts.

4. That a final detailed drainage and erosion control plan for
each site including, but not limited to, hydrologic and
hydraulic calculations, scheme for controlling erosion and
disposal of runoff water, and an analysis of the soil loss
using the RUSLE erosion formula, be submitted for our review and
approval. The plan shall provide verification that the grading
and runoff water generated by the project will not have an
adverse effect on the adjacent and downstream properties.

5. That paved parking spaces, loading spaces, appropriate
landscaping, and fencing be provided per the County's
Off-Street Parking and Loading Ordinance.

6. That a library is a permitted use at Sites A, C, D, and E.
Site B is within the State Land Use agricultural district
and requires a special use permit from the County's Maui Planning
Commission.

7. That sites within the County's special management area (SMA),
requires SMA permit for all proposed improvements.

8. That bicycle accessibility be considered at all proposed sites
and addressed in the site selection.

9. That vehicle, pedestrian, and bicycle circulation patterns be
analyzed at the "on-site" and "off-site" areas.

10. That on Page II-11, please note corrections, 4.0 million
gallons per day (MGD) instead of 4.2 MGD, and 6.0 MGD instead of
6.2 MGD.

11. That the existing Kailua Wastewater Treatment Plant is operating
at capacity. A plan to expand the plant has been formulated
and under construction. The project is contemplated to be
completed by the end of May, 1991.

12. That no clearing and grubbing material shall be disposed of at
the County sanitary landfill. The developer shall submit a
solid waste management plan acceptable to the Department of
Public Works. For additional information, the developer is
requested to contact the Solid Waste Division.

If you have any questions, please contact the Land Use and
Codes Administration at 243-7373.

Very truly yours,

George N. Kaya
Director of Public Works

cc: Maui County Planning Department
DAGS
Pakosaga & Assoc., Inc.
Mr. George N. Kaya
Director
Department of Public Works
County of Maui
250 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Kaya:

Subject: Kihei Public Library
Draft EIS (Public Review Phase)

Thank you for your March 1, 1991 comments on the subject project. We offer the following responses to your comments:

1. The project will meet the requirements of Ordinance No. 1145, pertaining to flood hazard districts.

2. The project will be designed in accordance with County standards and include 64-foot wide road widening lots. Road widening lots will be dedicated to the County upon completion of construction.

3. We acknowledge that the roadways in the project service area do not meet County standards for roads located in an urban district.

4. A drainage and erosion control plan will be submitted for County approval during the design phase of the project.

5. Paved parking and loading spaces, landscaping and fencing shall meet the requirements of the County Off-Street Parking and Loading Ordinance.

6. We acknowledge that a library is a permitted use at Sites A, C, D, and E and that Site B is located within the State Land Use agricultural district which requires a special use permit from the Maui County Planning Commission.

7. We acknowledge that construction within the County Special Management Area (SMA) will require an SMA permit.

8. Bicycle access was considered in the rating of the candidate sites as part of the site selection process.

9. Vehicle, pedestrian and bicycle circulation patterns and impacts will be analyzed during the design phase of the project.

10. The EIS will be revised to show that the current and future design capacities of the Kihei Wastewater Treatment Plant are 4.0 MGD and 6.0 MGD, respectively.

11. We acknowledge that the Kihei Wastewater Treatment Plant is operating at capacity and that expansion of the plant is expected to be completed by the end of May 1991.

12. A solid waste management plan will be submitted for County approval during the design phase of the project.

We appreciate your input for this project.

Very truly yours,

[Signature]

TUlane TOMINAGA
State Public Works Engineer

Mr. George N. Kaya
Ltr. No. (P)1639.1
In general, taking full advantage of the beautiful view from the site could make the new Kīhei Library a superior facility.

Be assured of the cooperation and support of our association and the community for this long-awaited addition to our rapidly growing area.

Sincerely,

Gene Thompson, President

cc: Mr. Meyer Ueoka
    Mrs. Mary Helen Ivey
Mr. Gene Thompson  
President  
Kihei Community Association  
P.O. Box 662  
Kihei, Maui, Hawaii 96753

Dear Mr. Thompson:

Subject: Kihei Public Library  
Draft EIS (Public Review Phase)

Thank you for your February 8, 1991 comments on the subject project. Upon initiation of the design phase, we will request our consultant to consider your suggestions on the building and site design.

We appreciate your input for this project.

Very truly yours,

[Signature]

Tsuane Tomihaga  
State Public Works Engineer

CC: jd
February 19, 1991

Dr. Bruce Anderson
Acting Interim Director
Office of Environmental Quality Control
465 South King Street, Room 104
Honolulu, Hawaii 96813

Dear Dr. Anderson:

We have reviewed the Draft Environmental Impact Statement for the Site Selection for the New Kuehi Public Library, Kailua, Hawaii. Our comments in response to the Preparation Notice (letter dated October 1, 1990) have been incorporated into the document. We have no additional comments.

Sincerely,

[Signature]

Clarence S. Oili
Acting Director, of Engineering

Copies furnished:

Department of Accounting and General Services
1351 Punchbowl Street
Kalanikukaua Building, Room 430
Honolulu, Hawaii 96813

Royce S. Fukunaga
C/o Fukunaga and Associates, Inc.
1388 Rapialani Boulevard, 2nd Floor
Honolulu, Hawaii 96814

The Office of Environmental Quality Control
465 South King Street, Room 104
Honolulu, HI 96813

Gentlemen:

SITE SELECTION FOR THE NEW KUEHI PUBLIC LIBRARY

The Draft Environmental Impact Statement (DEIS) for Site Selection for the new Kuehi Public Library, Kailua, Hawaii has been reviewed, and we have no comments to offer. Since we have no further use for the DEIS, it is being returned to your office.

Thank you for the opportunity to review the draft.

Sincerely,

[Signature]

[Name]

W.A. Max
Assistant Base Civil Engineer

By direction of the Commander
January 23, 1991

The Honorable John Waihee
Governor, State of Hawaii
State Capitol
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: Site Selection for the New Kihel Public Library
Kihel, Maui
DRK: 2-2-02-32, 54; 3-9-06:11; 3-9-11:18; 3-9-12:13

We wish to inform you that we have no comments to offer on the subject environmental impact statement preparation notice.

Thank you for the opportunity to review the document.

Sincerely,

Barbara Kim Stanton
Acting Director

cc: Charles Inatsuka, Department of Accounting and General Services
    Boyce S. Fukunaga, Fukunaga and Associates, Inc.
    Dr. Marvin T. Miura, Office of Environmental Quality Control

BKS:DRK/kheisz23

January 22, 1991

Governor, State of Hawaii
c/o The Office of Environmental Quality Control
455 South King Street, #404
Honolulu, Hawaii 96813

Dear Governor:

Site Selection for the New Kihel Public Library:

Thank you for providing us the opportunity to review the above subject project.

We have no comments to offer at this time regarding this project.

Sincerely,

Larry M. Matsumoto
Lieutenant Colonel
Hawaii Air National Guard
Contracting & Engineering Officer

cc: Mr. Charles Inatsuka, Dept. of Accounting & General Services
    Mr. Boyce S. Fukunaga
    Fukunaga and Associates, Inc.
MEMORANDUM

TO: Russell S. Nagata, Comptroller
Department of Accounting and General Services

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT: Chapter 68 Compliance -- Review of the Draft EIS
The Site Selection for the New Kihel Public Library on Maui

February 22, 1991

Thank you for the opportunity to review and comment on this document.

This document identifies five candidate sites for the New Kihel Library and the site (site D) adjacent to Kalama Park (TMK 3-9-1211) has been selected for the new public library.

Our comments are limited to historic preservation concerns which are addressed in pages 11-19 (item 9) and V-3 (item 8) of this document. Page 11-19 is accurate in stating there are no sites listed on the National Register in the site selection area. The two historic sites mentioned as listed on the Hawaii Register of Historic Places (item 9) are not located in the selected site or the other candidate sites.

In page V-3, this document states that an archaeological inventory survey was conducted in the selected site and that no archaeological sites were identified. It also states that the archaeologist recommends archaeological monitoring during grading. The survey report has been attached to the Draft EIS as Appendix C. We reviewed this report and we concur with its findings and recommendation. It appears that this project will have "no effect" on significant historic sites, with monitoring to cover contingency concerns.

Should you have any questions, please contact Me. Annie Griffin at 587-0012.

cc: Boyce Fukunaga, Fukunaga & Associates, Inc.
The Office of Environmental Quality Control

MEMORANDUM

TO: Dr. Bruce Anderson, Deputy Director
Office of Environmental Quality Control

FROM: Edward Y. Hirata
Director of Transportation

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT,
SIZE SELECTION FOR THE NEW KHEI PUBLIC LIBRARY, KHEI, MAUI

March 11, 1991

Thank you for your transmittal of January 14, 1991, requesting our review of the subject DEIS.

The placement of the proposed public library at the tentatively selected site (adjacent to Kalama Park), or the alternative site (Waikapu Beach Homesteads) will not impact our State highway facilities.
To: Office of Environmental Quality Control

From: Yukio Kitagawa, Chairperson
Board of Agriculture

Subject: Draft Environmental Impact Statement (EIS) for Site Selection for New Kihel Public Library
Department of Accounting and General Services

The Department of Agriculture has reviewed the subject document and finds that the selection of any one of the proposed sites will not have an adverse impact upon the agricultural resources of the area or the plans, programs, and activities of the Department.

Thank you for the opportunity to comment.

cc: Department of Accounting and General Services
Fukunaga and Associates, Inc.
February 28, 1991

To: Governor, State of Hawaii
   C/O OSOC

From: Joseph K. Conant
   Executive Director

Subject: DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE SITE SELECTION FOR THE NEW KIHEI PUBLIC LIBRARY

Thank you for the opportunity to review the subject report. We have no comments to offer.

Enclosed is the draft EIS.

Yours,

Enclosure

c: Charles Inatsuka, DACS
   Royce S. Fukunaga, Fukunaga and Associates, Inc.
January 29, 1991

Honorable Governor John Waihe'e  
c/o Office of Environmental  
Quality Control  
465 South King Street, Room 104  
Honolulu, Hawaii 96813

Dear Governor Waihe'e:

Re: Environmental Impact Statement  
Site Selection for the New Kihel Public Library

Please be advised that Fukunaga and Associates, Inc. has been in contact with us regarding the foregoing. They have indicated that supplemental information relating to fire protection at each site will be included in the revised EIS.

They have indicated that they will continue to be in contact with us on the information to be added to the revised EIS.

Sincerely,

[Signature]

Ray W. Shikuma  
Director

cc: Department of Accounting and General Services  
1151 Punchbowl Street  
Kalani Building, Room 430  
Honolulu, Hawaii 96813  
Attn: Charles Iwatsuka

Boyce S. Fukunaga  
c/o Fukunaga and Associates, Inc.  
1306 Kapolei Boulevard, 2nd Floor  
Honolulu, Hawaii 96814

"By Water All Things Flow and Life"
XIII. LIST OF PREPARES OF THIS DOCUMENT

FUKUNAGA & ASSOCIATES, INC.

Royce S. Fukunaga: President
Stanford University, BSCE 1963
Stanford University, MSCE 1964
Registered Professional Engineer, Hawaii, 1967

Beverly G. Ing: Project Engineer
University of Hawaii, BSCE 1981
Registered Professional Engineer, Hawaii, 1986

Edlyn Hayashida: Graphic Designer
APPENDIX A
LIST OF POTENTIAL SITES

This appendix includes a list of the twenty-three sites identified during the initial selection process as potential sites for the public library facility. Each site was evaluated using a set of minimum criteria to identify a smaller number of candidate sites.
# APPENDIX A
## POTENTIAL SITES

<table>
<thead>
<tr>
<th>SITE TMK</th>
<th>OWNER</th>
<th>AREA (AC)</th>
<th>EXISTING USE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-9-06:11</td>
<td>STATE OF HI, EX. ORD. CO. MAUI</td>
<td>4.4</td>
<td>COM. CTR OLD KIHEI SCHOOL—</td>
<td></td>
</tr>
<tr>
<td>2-2-2:54</td>
<td>HALEAKALA RANCH</td>
<td>2,920.48</td>
<td>VACANT FUTURE CO. CIVIC CTR.—</td>
<td></td>
</tr>
<tr>
<td>2-2-2:58-62</td>
<td>R&amp; T PARTNERS</td>
<td>VACANT</td>
<td>RAT PARK</td>
<td></td>
</tr>
<tr>
<td>3-9-06:19</td>
<td>AKEA’S BUILDING CORP.</td>
<td>5.1</td>
<td>POST OFC., POST OFFICE TO BE RELOCATED</td>
<td></td>
</tr>
<tr>
<td>3-9-04:61</td>
<td>STATE OF HAWAII</td>
<td>11.5</td>
<td>BOAT RAMP APPROX. 8 ACS AVAILABLE</td>
<td></td>
</tr>
<tr>
<td>3-9-35:1</td>
<td>PIMENTAL</td>
<td>7.51</td>
<td>HOUSE LISTED @ $2.25 MILLION</td>
<td></td>
</tr>
<tr>
<td>3-9-35:2</td>
<td>STOOPS</td>
<td>7.6</td>
<td>HOUSES LISTED @ $2.5 MILLION</td>
<td></td>
</tr>
<tr>
<td>3-9-35:48</td>
<td>CHANG</td>
<td>5</td>
<td>SUBDIVISION</td>
<td></td>
</tr>
<tr>
<td>3-9-01:149</td>
<td>KANONOLU RANCH</td>
<td>81</td>
<td>VACANT FLOOD MET AREA, FUTURE HOUSING</td>
<td></td>
</tr>
<tr>
<td>2-2-42:42</td>
<td>HALEAKALA RANCH</td>
<td>188.41</td>
<td>VACANT PITILANI VILLAGE PROJECT</td>
<td></td>
</tr>
<tr>
<td>3-9-40:86</td>
<td>AKINA</td>
<td>2</td>
<td>VACANT OFF WELEKAHOA</td>
<td></td>
</tr>
<tr>
<td>3-9-27:1</td>
<td>AKINA</td>
<td>10.5</td>
<td>HOUSE FUTURE HOUSING</td>
<td></td>
</tr>
<tr>
<td>3-9-07:7</td>
<td>MANN</td>
<td>7.2</td>
<td>VACANT LISTED AT $5.8 MILLION</td>
<td></td>
</tr>
<tr>
<td>3-9-09:13</td>
<td>STATE OF HAWAII</td>
<td>6</td>
<td>VACANT REGULATION RESERVOIR</td>
<td></td>
</tr>
<tr>
<td>3-9-09:28</td>
<td>ROMAN CATHOLIC CHURCH</td>
<td>4.2</td>
<td>CHURCH</td>
<td></td>
</tr>
<tr>
<td>3-9-10:19</td>
<td>APO</td>
<td>6.1</td>
<td>VACANT POSSIBLE WETLANDS</td>
<td></td>
</tr>
<tr>
<td>3-9-11:17</td>
<td>AKINA</td>
<td>2.5</td>
<td>HOUSES</td>
<td></td>
</tr>
<tr>
<td>3-9-11:18</td>
<td>TAMORI</td>
<td>2.3</td>
<td>VACANT CANDIDATE SITE C</td>
<td></td>
</tr>
<tr>
<td>3-9-12:13</td>
<td>STATE OF HI, EX. ORD. CO. MAUI</td>
<td>1.9</td>
<td>VACANT ADDITION TO KALAMA PARK — CANDIDATE SITE D</td>
<td></td>
</tr>
<tr>
<td>3-9-17:26</td>
<td>KIRCHMEYER</td>
<td>3.1</td>
<td>VACANT FUTURE N-S COLLECTOR</td>
<td></td>
</tr>
<tr>
<td>3-9-17:31</td>
<td>AMERICAN REFLEX</td>
<td>3.14</td>
<td>VACANT LISTED AT $1.42 MILLION</td>
<td></td>
</tr>
<tr>
<td>3-9-17:23</td>
<td>MOHALA ASSOC.</td>
<td>3.26</td>
<td>VACANT DEDICATED TO MAUI CO.—</td>
<td></td>
</tr>
<tr>
<td>2-22-2:por 42</td>
<td>HALEAKALA RANCH</td>
<td>188.41</td>
<td>VACANT FUTURE PARK SITE TO BE DEDICATED TO MAUI CO.—</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B
CANDIDATE SITE EVALUATION

This appendix includes results of each candidate site evaluation relative to building site and community criteria and cost considerations. Descriptions of the criteria are contained in Section IV of this EIS for the new Kihei Public Library.
A. BUILDING SITE AND COMMUNITY CRITERIA RESULTS

Site A: Kihei Community Complex
TMK 3-9-06: 11

Building Site Criteria

a. Environmental Characteristics

1) Slope.................................Good
   Average slope is less than 5%.

2) Shape.................................Good
   A rectangular 2.0 acre site with L:W
   ratio of 2 to 1 can be accommodated
   within the existing 4.4 acre site.

3) General Soil Stability for Foundation......Good
   Soil Phase:
   Pulehu silt loam, 0 to 3% slopes (PpA).
   Coarse, gravelly or sandy
   alluvium at depth of 5 feet. High shear
   strength.

   Dune land (DL) consisting of drifted and
   piled sand, along South Kihei Road.

4) Soil Depth for Site Work...................Good
   Description: 5 feet of silt loam to coarse,
   gravelly or sandy alluvium substratum.

5) Natural Beauty............................Good
   Existing scenic views, plants, etc.: Yes
   Potential for beautification: Yes
   Crossed by overhead lines: No

b. Roadways and Utilities

6) Adequacy of Roadways....................Good
   Frontage along South Kihei Road and
   Kenolio Road.

7) Adequacy of Water Service.................Fair
   6" cast iron waterline available within
   South Kihei Road. 2" galvanized line runs
   along South boundary. Fire hydrant is
   located on South Kihei Road.

8) Adequacy of Sewer Service.................Good
   8" gravity interceptor sewer is located in
   South Kihei Road and Kenolio Road. 2" force
   main in South Kihei Road runs to sewage pump
   station at corner of South Kihei and Uwapo Roads.

9) Adequacy of Drainage Facilities..........Fair
Drainage from area presently allowed to sheet flow across South Kihei Road towards ocean.

10) Adequacy of Electrical & Telephone Service...Good Overhead lines available along South Kihei Kenolio Road.

c. Accessibility

11) Automobile Access.........................Fair Access provided on two short sides along South Kihei Road and Kenolio Road.

12) Pedestrian Access.........................Fair Number of sides access available: 2

13) Traffic Flow...............................Good South Kihei Road is major arterial road. Kenolio Road is local through-road being widened by Aina Kihei townhouse development.

Community Criteria

a. Government

14) State Land Use Designation..............Good District Designation: Urban

15) Special Management Area....................Poor Entire site within SMA. SMA permit required.

16) National Flood Insurance Program..........Poor Makai portion of site is within Coastal High Hazard District (V18). Majority of site is within the Flood Fringe District (A4), base flood elev=11.0 to 12.0 ft. MSL

17) County Zoning Ordinance....................Fair Zoning designation: Park Rezoning required.

18) Kihei-Makena Community Plan..............Fair Land Use Category: Park County plan amendment required.

b. Community Effects

19) Existing Use and Community Displacement......Fair Some of the existing uses may have to be integrated into the new public library facility. Youth Center and Parks and Recreation office would remain on the 4.4 acre site.
20) Surrounding Land Use ......................... Good
Beach park, Park District 2 commercial
development, and single family and
multi-family homes surround the area.

21) Land Ownership ............................. Good
Site is owned by the State of Hawaii and is
occupied by the County of Maui, Department
of Human Concerns, under Executive Order 2958
for "Recreation Site". Agreement with the
County would have to be reached to use site.

22) Aesthetic Value ............................. Fair
The site has some aesthetic value to the
community: Yes
The facility will obstruct scenic vistas: No
Site B: Future County Civic Center
TMK 2-2-02: por. 54

Building Site Criteria

a. Environmental Characteristics

1) Slope........................................Good
   Average slope is less than 4%.

2) Shape........................................Good
   A rectangular 2.0 acre site with L:W
   ratio of 2 to 1 can be accommodated
   within Civic Enter area.

3) General Soil Stability for Foundation........Good
   Soil Phase: Waikoa extremely stony silty
   clay loam (WID2), well-drained.

4) Soil Depth for Site Work.....................Poor
   Depth to Bedrock: 20 to 40 inches.

5) Natural Beauty................................Fair
   Existing scenic views, plants, etc.: No
   Potential for beautification: Yes
   Crossed by overhead lines: No

b. Roadways and Utilities

6) Adequacy of Roadways.........................Good
   Site fronts Piilani Highway, with one
   12' lane in each direction, 10 foot paved
   shoulders and gutters.

7) Adequacy of Water Service....................Poor
   Nearest available service is 36" concrete
   pipe approximately 850 feet north of site.
   Water line will have to be extended mauka of
   Piilani Highway.

8) Adequacy of Sewer Service....................Poor
   Sewer lines unavailable above Piilani
   Highway. Area is below the State's UIC line
   and must be sewered.

9) Adequacy of Drainage Facilities.............Fair
   Drainage facilities along Piilani Highway
   fronting the project consist of a bridge
   crossing at Waipunani Gulch and a box
   culvert approximately 1000 feet north.

10) Adequacy of Electrical & Telephone Service...Good

B-5
c. Accessibility

11) Automobile Access................................Fair
   Frontage to be provided on Piilani Highway.
   Left-turn movements entering and exiting
   facility may be difficult due to volume
   and speed of traffic along Piilani Highway.

12) Pedestrian Access..................................Poor
   Number of sides access available: 1
   No sidewalks or pedestrian crossings
   provided along Piilani Highway.
   Elevated pedestrian walkway would be
   required to accommodate pedestrian access.

13) Traffic Flow.........................................Good
   Piilani Highway is major arterial road.

Community Criteria

a. Government

14) State Land Use Designation.......................Fair
    District Designation: Agriculture
    Adjacent to Urban District (located below
    Piilani Highway). Special Use Permit or
    State Land Use district boundary amendment
    required.

15) Special Management Area..........................Good
    Site is outside of SMA.

16) National Flood Insurance Program...............Good
    Entire site is within Zone C, area of minimal
    flooding.

17) County Zoning Ordinance.........................Fair
    Zoning designation: Agriculture
    Rezoning required.

18) Kihei-Makena Community Plan...................Good
    Land Use Category: Public/Quasi-public

b. Community Effects

19) Existing Use and Community Displacement......Good
    Site is vacant.

20) Surrounding Land Use..............................Good
    Planned facilities within County Civic Center
    include police and fire station. Phase III-B
    of R&T Park and Silversword Golf Course are
    directly adjacent.
21) Land Ownership............................................Fair
Land is owned by single land owner.

22) Aesthetic Value............................................Fair
The site has some aesthetic value to the
community: Yes
The facility will obstruct scenic vistas: No
Site C: Waiohuli Beach Homesteads
TNK 3-9-11: 18

Building Site Criteria

a. Environmental Characteristics

1) Slope.................................................Good
   Average slope is less than 5%.

2) Shape...............................................Poor
   L:W ratio is greater than 2:1. TMK:3-9-11:58
   is carved out of the northeast corner of
   property. Northern exposure can be
   accommodated.

3) General Soil Stability for Foundations......Poor
   Soil Phase: Jaucas Sand (JaC), a poor,
   unstable, and highly erodible soil.
   Workability is difficult.

4) Soil Depth for Site Work.......................Good
   Substratum consists of sandy soil.

5) Natural Beauty....................................Fair
   Existing scenic views, plants, etc.: No
   Potential for beautification: Yes
   Crossed by overhead lines: No

b. Roadways and Utilities

6) Adequacy of Roadways.........................Good
   Site fronts South Kihei Road and Halama
   Street.

7) Adequacy of Water Service...................Fair
   6" cast iron water line available within
   South Kihei Road and Halama Street. Five
   hydrants are located within 250 feet of the
   site.

8) Adequacy of Sewer Service....................Good
   27" gravity line is available within South
   Kihei Road. 8" gravity line available within
   Halama Street.

9) Adequacy of Drainage Facilities............Fair
   Drainage from area presently allowed to
   sheet flow across Halama Street.

10) Adequacy of Electrical & Telephone Service...Good
    Existing overhead power and communications
    service available.
c. Accessibility

11) Automobile Access.......................... Fair
   Access on two short sides along South
   Kihei Road and Halama Street.

12) Pedestrian Access.......................... Fair
   Number of sides access available: 2

13) Traffic Flow.............................. Good
   South Kihei Road is major arterial. Halama
   Street is local through-street.

Community Criteria

a. Government

14) State Land Use Designation.............. Good
    District Designation: Urban

15) Special Management Area................... Poor
    Entire site is within SMA.
    SMA permit required.

16) National Flood Insurance Program........... Poor
    Within Flood Fringe District, Zone AH with
    base flood elevation of 7 feet, Zone AO
    With 1 foot flood depth. Portion is outside
    of flood district, Zone C, area of minimal
    flooding.

17) County Zoning Ordinance.................... Fair
    Zoning Designation: R-3 (Residential)
    Zoning permitted use interpretation
    required. Rezoning action not
    anticipated.

18) Kihei-Makena Community Plan............... Fair
    Land Use Category: SF (Single-Family)
    Community plan amendment required.

b. Community Effects

19) Existing Use and Community Displacement..... Good
    Site is vacant.

20) Surrounding Land Use......................... Good
    Site is surrounded by residential lots.
    Business area and Kalama Park are 900 feet
    south of site.

21) Land Ownership.............................. Fair
    Site is owned by one land owner.
22) Aesthetic Value
The site has some aesthetic value to the community: Yes
The facility will obstruct scenic vistas: No
Site D: Adjacent to Kalama Park
TWK 3-9-12: 13

Building Site Criteria

a. Environmental Characteristics

1) Slope......................................................Good
   Average slope is less than 5%.

2) Shape.....................................................Good
   L:W ratio = 1.7 to 1.

3) General Soil Stability for Foundations......Poor
   Soil Phase: Dune land (DL), very severe
   erosion hazard.

4) Soil Depth for Site Work.........................Good
   Substratum consists of sandy soil.

5) Natural Beauty.........................................Good
   Existing scenic views, plants, etc.: Yes
   Potential for beautification: Yes
   Crossed by overhead lines: No

b. Roadways and Utilities

6) Adequacy of Roadways.........................Good
   Waimahaihai Street is 40 foot County road
   right-of-way.

7) Adequacy of Water Service......................Fair
   6" cast iron water line located within
   Waimahaihai Street. Three hydrants are
   located within 250 feet of the site.

8) Adequacy of Sewer Service......................Good
   8" gravity sewer line is available within
   Waimahaihai Street, connecting to 36" line
   within South Kihei Road.

9) Adequacy of Drainage Facilities...............Fair
   Existing runoff from area presently
   sheet flows toward ocean.

10) Adequacy of Electrical & Telephone Service...Good

C. Accessibility

11) Automobile Access.................................Fair
    Frontage of long side of site is along
    Waimahaihai Street.

12) Pedestrian Access.................................Poor
    Number of sides access available: 1

B-11
13) Traffic Flow.................................Fair
   Access is not directly off major arterial.
   Access off of South Kihei provided by
   Waimahihai Street. Halama Street connects
   to Waimahihai Street and provides through-
   access back to South Kihei Road.

Community Criteria

a. Government

14) State Land Use Designation..................Good
    District Designation: Urban

15) Special Management Area.....................Poor
    Entire site within SMA.
    SMA permit required.

16) National Flood Insurance Program............Poor
    Site is within the Flood Fringe District and
    is subject to 100-year shallow flooding, Zone
    AH (flood elevation of 7 feet above MSL) and
    Zone AO (average flood depth of 1 foot).

17) County Zoning Ordinance.....................Fair
    Zoning designation: Park
    Rezoning required. County has indicated
    that intended zoning is for public/quasi-
    public use.

18) Kihei-Makena Community Plan..................Good
    Land Use Category: Public/Quasi-public

b. Community Effects

19) Existing Use and Community Displacement.....Good
    Site is vacant.

20) Surrounding Land Use..........................Good
    Site is adjacent to County Fire Station,
    Kalama Park, residential areas, plant
    nursery, and commercial areas mauka of
    South Kihei Road.

21) Land Ownership..............................Good
    Site is owned by the State of Hawaii and is
    reserved for use by the County of Maui for
    "Addition to Kalama Park" (Executive Order 3058).
    Agreement with the County would be required for
    use of site.

22) Aesthetic Value..............................Fair
    The site has some aesthetic value to the
    community: Yes
    The facility will obstruct scenic vistas: No

B-12
Site E: Adjacent to Kihei School
TMK: 2-2-02: por. 42

Building Site Criteria

a. Environmental Characteristics

1) Slope_____________________________. Good
   Average slope is less than 5%.

2) Shape_____________________________. Good
   A rectangular 2.0 acre site with L:W
   ratio of 2 to 1 can be accommodated
   within the 13 acre park site.

3) General Soil Stability for Foundations......Good
   Soil Phase: Waiakea extremely stony silty
   clay loam (WID2) and Puuone sand (PZUE).
   Majority of the 15 acre site is within
   Waiakea extremely silty clay loam which has
   good characteristics for use as road fill.
   Less than one-third of the 13 acre site is
   within the Puuone sand area.

4) Soil Depth for Site Work..................Poor
   Depth to bedrock: 20 to 40 inches

5) Natural Beauty________________________. Fair
   Existing scenic views, plants, etc.: No
   Potential for beautification: Yes
   Crossed by overhead lines: No

b. Roadways and Utilities

6) Adequacy of Roadways.....................Fair
   The Piilani Village project will provide
   construction of a portion of the North-South
   Collector Road to the park site with a
   network of subdivision roadways.
   Improvements will also be made by Piilani
   Village/DAGS to increase capacity of
   Lipoa Street.

7) Adequacy of Water Service..................Good
   18" cast iron and 36" concrete pipe water
   lines run along makai boundary. The Piilani
   Village project will provide water service to
   the planned park site, however, water connection
   could also be made to existing main in Lipoa
   Street.

8) Adequacy of Sewer Service..................Good
   The Piilani Village project will provide sewer
   to the planned park site, however, sewer service
   could also be made to existing main in Lipoa St.
9) Adequacy of Drainage Facilities.................Fair
Drainage facilities incidental to the road
construction will be provided by the Piilani
Project, however, a natural gully runs
through the park site and will require
evaluation should the site be selected.

10) Adequacy of Electrical & Telephone Service...Good
Existing overhead power and communications
service is available.

c. Accessibility

11) Automobile Access.............................Fair
The portion of the North-South Collector
fronting the library is to be constructed
as part of the Piilani Village project.
Should the library be built independent
of the Piilani Village project, temporary
access through the Kihei School parking
lot may have to be arranged; or a portion
of the Collector road will have to be con-
structed as part of the library project.

12) Pedestrian Access...............................Poor
Number of sides access available: 1
Access will be provided off the North-South
Collector to be constructed as part of the
Piilani Village project. The "poor" rating
is based on the number of sides access is
available from and does not reflect the
generally "good" accessibility that will
be provided by Piilani project's planned
sidewalks and bikeways.

13) Traffic Flow.........................................Good
Good traffic flow would be provided with
completion of the North-South Collector
fronting the site and proposed subdivision
road network planned in the Piilani Project.

Community Criteria

a. Government

14) State Land Use Designation....................Good
District Designation: Urban

15) Special Management Area.......................Poor
Entire site is within SMA.
SMA permit required.

16) National Flood Insurance Program.............Good
Entire site is outside of the flood hazard
district.

B-14
17) County Zoning Ordinance....................Fair
Zoning designation: Park
Rezoning required.

18) Kihei-Makena Community Plan...............Fair
Land Use Category: Park
Community plan amendment required.
County has indicated that area is
intended for park use.

b. Community Effects

19) Existing Use and Community Displacement......Good
Site is vacant.
APPENDIX C

ARCHAEOLOGICAL INVENTORY SURVEY
Archaeological Inventory Survey
Potential Kihei Public Library Site D

Land of Kamaole, Wailuku District
Island of Maui (TMK:3-9-12:13)

by

Theresa K. Donham, M.A.
Supervisory Archaeologist

Prepared for

State of Hawaii
Department of Accounting and General Services
c/o Fukunaga & Associates
1388 Kapiolani Blvd., 2nd Floor
Honolulu, Hawaii 96814

December 1990
At the request of Mr. Royce S. Fukunaga of Fukunaga & Associates, Inc., representing the State of Hawaii - Department of Accounting and General Services, Paul H. Rosendahl, Ph.D., Inc. (PHRD) conducted an archaeological inventory survey of the approximately 1.93-acre potential Kihei Public Library Site D, located at Kihei, in the Land of Kamuela, Wailuku District, Island of Maui (TMK:3-9-12:13). The survey was conducted November 14, 20, and 24, 1990. Field work consisted of a total surface pedestrian survey and a subsurface auger coring.

All cultural material identified during the surface survey appeared to be secondary refuse, deposited within the modern era (post-1940). The majority of the refuse observed was most likely deposited within the last twenty years. No archaeological sites were recorded during the surface survey. Two features previously identified as possible archaeological features were relocated and determined to be portions of a relatively long secondary deposit of pushed soil and disturbed structural stone derived from an unknown source.

No cultural deposits or non-recent cultural materials were located during the subsurface survey, which consisted of 14 systematically spaced auger corings.

Findings of the surface and subsurface survey indicate that there is a relatively undisturbed sand dune formation in the western portion of the project area. No cultural remains were identified here during auger coring; however, subsurface deposits and features such as human burials are known to be present in coastal dunes. If this natural feature is modified in the process of property development, archaeological monitoring is recommended. Monitoring is also recommended if the secondary deposit of structural material is moved, in order to determine if possible intact portions of a feature, such as a wall, are present beneath the deposit.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Scope of Work</td>
<td>1</td>
</tr>
<tr>
<td>Project Area Description</td>
<td>1</td>
</tr>
<tr>
<td>Previous Archaeological Work</td>
<td>2</td>
</tr>
<tr>
<td>Summary of Historic Documentary Research</td>
<td>6</td>
</tr>
<tr>
<td>Field Methods and Procedures</td>
<td>7</td>
</tr>
<tr>
<td>FINDINGS</td>
<td>9</td>
</tr>
<tr>
<td>Surface Findings</td>
<td>9</td>
</tr>
<tr>
<td>Subsurface Findings</td>
<td>10</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>13</td>
</tr>
<tr>
<td>Discussion</td>
<td>13</td>
</tr>
<tr>
<td>Recommendations</td>
<td>13</td>
</tr>
<tr>
<td>REFERENCES CITED</td>
<td>14</td>
</tr>
<tr>
<td>APPENDIX: LIMITED HISTORICAL DOCUMENTARY RESEARCH</td>
<td>A-1</td>
</tr>
</tbody>
</table>

by Lehua Kalima, B.A.
ILLUSTRATIONS

Figure
1. Project Location Map ................................................................. 3
2. Project Area Location Map .......................................................... 4
3. Auger Core Location Map ............................................................. 8
A-1 Map of Klhei Area with Site Locations .................................. A-7

TABLE

Table
1. Summary of Auger Cores ............................................................. 11
BACKGROUND

This report presents the results of an archaeological inventory survey conducted at the potential Kīhei Public Library Site D, located at Kīhei in the Land of Kamakie, Wailuku District, Island of Maui (TMK-3-9-12:13). The survey was conducted by Paul H. Rosendahl, Ph.D., Inc. (PHRI) at the request of Mr. Royce S. Fukunaga of Fukunaga & Associates, Inc., on behalf of their client, the State of Hawaii - Department of Accounting and General Services. The overall purpose of the survey was to make a general assessment, in conjunction with the preparation of an Environmental Impact Statement (EIS), concerning the presence or absence of, and potential impacts of the project on, any sites of possible archaeological significance within the project area.

Surface survey of the 1.93-acre parcel was conducted November 14, 1990; subsurface survey consisting of 14 systematically spaced auger corings, was conducted November 20 and 26, 1990. All field work was conducted by Supervisory Archaeologist Theresa K. Donham, M.A., and Supervisory Archaeologist Diane Guerriero, B.A. Twenty-seven labor-hours were expended during the field work portion of the survey.

Described in this final report are project objectives and the scope of work, field methods and procedures, and survey findings. Also included is background information, such as previous archaeological work and historic documentary research. Recommended further actions are also discussed.

SCOPE OF WORK

The basic purpose of an inventory survey is to identify—to discover and locate on available maps—all sites and features of potential archaeological significance. An inventory survey is extensive rather than intensive in scope, and is conducted basically to determine the presence or absence of archaeological resources within a specified project area. This level of survey indicates both the general nature and variety of archaeological remains present, and the general distribution and density of such remains. It permits a general significance assessment of the archaeological resources and facilitates formulation of realistic recommendations and estimates for any subsequent mitigation work as might be necessary or appropriate. Such work could include further data collection involving detailed recording of sites and features, and selected test excavations; and possibly subsequent data recovery research excavations, construction monitoring, interpretive planning and development, and/or preservation of sites and features with significant scientific research, interpretive, and/or cultural values.

The basic objectives of the present inventory survey were: (a) to identify all sites within the project area; (b) to evaluate the potential general significance of all identified resources; (c) to determine the possible impacts of proposed development on the identified resources; and (d) to define the general scope of any subsequent data collection and/or other mitigation work that might be necessary or appropriate.

Based on a review of available background literature, general familiarity with the Kīhei/Kula area, and based on discussions with Mr. Fukunaga of Fukunaga & Associates, the following specific tasks were determined to constitute an appropriate scope of work for the survey:

1. Conduct limited archaeological and historical documentary background research involving review and evaluation of readily available archaeological and historical literature, historic documents and records, and cartographic sources relevant to the immediate project area;

2. Conduct a 100%-coverage surface survey of the entire project area;

3. Conduct limited subsurface testing (by hand-powered coring tools) of appropriate and accessible portions of the project area (a) to determine the presence or absence of potentially significant buried cultural features or deposits, and (b) to obtain suitable samples for age determination analyses; and

4. Analyze background and field data, and prepare appropriate reports.

PROJECT AREA DESCRIPTION

The potential Kīhei Public Library Site D is a 1.93-acre undeveloped property situated at the northern end of Kīalima...
Beach Park (Figures 1 and 2). It is bounded on the north by Waimahai Street, on the west by Kihei Fire Station, on the south by Kalama Park, and on the west by private residences. The parcel is rectangular and measures approximately 68.6 m N-S by 113.9 m E-W. The exact elevation of the project area could not be determined from available maps; it appears to range around 3.0 m above mean sea level (AMSL). The surface elevation of most of the project area is currently below that of the adjacent parcels to the south and east, which have apparently been filled for development. Remnants of three shallow drainage channels cross the property on a north-south axis. A linear dune formation, also oriented north-south, is present at the western end of the property. The dune rises an average of 1.50 m above the level of most of the project area.

The project area is situated approximately 105.0 m from the shoreline, and approximately 70.0 m south of the Kokee-Kamaole Aku'a boundary. In terms of traditional Hawaiian settlement patterns, the project area is within the coastal settlement zone, a band generally defined as extending 400-600.0 m inland of the shoreline. This zone was utilized for permanent and temporary habitation in conjunction with a variety of subsistence and economic activities. Subsistence activities included plant cultivation, livestock husbandry, fishing, aquaculture, and marine and terrestrial plant gathering. Ceremonial and burial sites were located in the coastal zone, and were most common in or near the areas of aggregated permanent habitation.

The climate of the Kihei area is characteristically hot and arid, with day time temperatures ranging between 80 and 90 degrees F, and night temperatures between 70 and 75 degrees F. Annual rainfall averages around 10-12 inches.

The low-lying portion of the project area, which comprises about 75-80% of the project area, is within the 100-year flood hazard zone. The ground water level is relatively shallow here, and is subject to rising after moderate amounts of rainfall. During the subsurface survey, which was conducted during and immediately after a brief period of rainfall, ground water entered all auger corings located in low lying areas. The surface of the water table ranged from 0.93 to 1.45 m below ground surface.

The Soil Conservation Service includes the project area within a zone of dune lands, which consists of hills and ridges of drifting aeolian sand (Foote et al. 1972:29). In general, the sand which comprises dune land is derived from coral and marine shells; it generally remains unsorted, and soil zones are undeveloped. The coraline dune land is most evident in the western portion of the project area. The low-lying portion of the project area contains a surface deposit of alluvial silts and clays, which overlie layers of cemented sand and submerged coarse beach sands. This deposition is discussed in further detail below.

Vegetation within the project area consists predominantly of koa-kaole (Nueranna leucocarpa [Lam.] de Wit) and kiawe (Alseveria palioides [Humb. and Bong.] ex Wild.). Most of these trees are mature, and several are quite large. A number of the larger trees appear to be on the verge of falling, or have fallen. In addition to the naturally fallen trees, push-piles of kiawe are present around the perimeter of the project area, and are a major impediment to access. In general, kiawe deadfall or push piles cover approximately 40% of the total surface area of the project area. Ground cover is relatively sparse over most of the open portions of the project area, and a surface duff layer of koa-kaole beans and leaf litter is present. There are numerous patches of grass, and small vine plants.

Due to its proximity to residential and commercial areas, the project area has been subjected to repeated use as a refuse dump site. Flies of recent trash in plastic bags and discarded vegetation from lawn maintenance lie along the north and west boundaries; abandoned junk cars and equipment are present along the east boundary, and park-related debris is scattered along the south boundary. The drainage channel along the eastern side of the dune formation has been used as a small-scale landfill dump. The interior of the project area is littered with remains of semi-permanent camp sites, and miscellaneous rubbish. The area is frequented by the neighborhood children, who have constructed various play areas under the kiawe and koa-kaole canopy.

PREVIOUS ARCHAEOLOGICAL WORK

Project Area

In 1981, Mr. Charles Keau conducted a surface survey of the 1.93 acre project area, at the request of Mr. Nolle R. Smith, director of the State of Hawaii - Department of Parks and Recreation (Keau 1981). Two features were identified by Keau and described as being "possible archaeological features...." Both features were located at the northeast corner of the property and were designated as Features A and B of Site 1.

Feature A, interpreted as a possible ko'a, or fishing shrine, was located on a "mound of mixed dirt and sand," and
is described as follows:

The south wall is a single stone alignment. Approximate measurement is 3.7 m length by 40 cm in height. Stones are porous lava, and the sizes range from 'baseball' to 20 x 30 cm. With the exception of two stones, the southeast corner stone measures 70 x 60 x 50 cm and 25 cm thick. On the right top corner are markings or scratches that are caused by heavy equipment. The other stone I know is a Kil. A possible Ku'ula Pohnaku. Its measurements are 60 x 20 x 25 cm. Along the base of this stone are two corals, and on the corner of this structure is a broken piece of branch coral (Keau 1981:1).

Feature B was located approximately 10 m southwest of Feature A, and consisted of a stone alignment 1.7 m long and 0.4 m wide. Keau notes that, "Like Feature A, historic artifacts are found on the surface - papers, plastic pipe, bottles and some othe. No midden or prehistoric artifacts found" (Keau 1981:2).

Based on his findings, Keau recommended that the project area be more closely examined by professional archaeologists. He also recommended that the features be tested in order to determine significance. These features and their depositional context are discussed in the findings section.

Kamaole

Prior to the enactment of cultural resource management laws, very few site inventory surveys were conducted in east Maui. Principal among the early site inventories for the island of Maui was Walker's (1931) survey, which identified 266 heiau and petroglyph sites. Walker identified only two sites (198, 199) along the entire coastline from Maalea to Makena. These were associated with a fishpond located near Keawakapu, south of Kihei (1931 map). Three heiau sites were, however, recorded in the uplands of Kamaole, between 2,000 and 3,000 ft AMSL (Walker 1931). These included Wailuku Heiau (Site 205), Kolea Heiau (Site 206) and Site 207, name unknown (Walker 1931).

Wailuku Heiau had been previously described by Thrum (see Appendix for quotation), and according to Walker, had been later used as a house site. It was reported to Walker that Wailuku was a sacrificial heiau and that drums were heard at the site on the nights of Kane. Kolea Heiau, also previously reported by Thrum, was described by Walker as a large, L-shaped enclosure with terraced sides and an interior platform and an open, unpaved court. The Site 207 heiau was described as being near Wailuku Heiau and consisting of a small platform (Walker 1931).

Walker's survey, other less extensive surveys, and excavations conducted in Maui County prior to 1970 were summarized by Emory and Hommon (1972) in a broad cultural resource management plan prepared for the County of Maui. At the time of their study, Emory and Hommon reported that there were eight development projects comprising over 50 acres in progress along the coast in Kamaole (Emory and Hommon 1972:33). Archaeological research, consisting of excavation at one C-shaped structure, was recommended for only one of these development projects.

Two previous reconnaissance surveys have included relatively small portions of land in lower Kamaole. The earliest of these was a reconnaissance survey of the proposed Piilani Highway corridor, which is located approximately 0.8 km inland of the eastern boundary of the project area. This corridor was examined by Cox (1976), who located two C-shapes in Keokea, and a small cave near the northern end of Kamaole (Site 224). Cox recovered volcanic glass dated at AD 1724-1784 from a small cave in Kamaole (Cox 1976).

The following year, Cordy conducted a survey of nine drainage gullies and an inland corridor through the barren scrub zone between Keaola Pond and Wailea (1977). His survey corridor through Kamaole incorporated a strip 300-350 ft wide, along the makai side of the Piilani Highway corridor, and both sides of a major drainage channel at the southern end of Kamaole. Cordy located 12 sites within Kamaole, including four historic cist or horse trails or paths (Sites 1716, 1718, 1719, and 1721), four additional historic period features such as ranch walls, water ditches, etc. (Sites 1713, 1714, 1717, and 1720), three prehistoric period temporary habitation sites (1715, 1723 and 1724), and one prehistoric site of unknown function (Site 1722).

Site 1715 was located near the northern border of Kamaole, approximately 152.0 m makai of Cox's Site 224. Cordy described Site 1715 as consisting of three C-shaped structures.

Kiheil/Wailea/Makena Area

Two reconnaissance surveys were recently conducted for housing development projects along the makai side of Piilani Highway, in Keokea and Waiolului, immediately north of Kamaole (Donham 1989, 1990a). In Keokea, 13
new sites and three of Cordy’s 1977 survey sites were identified within a 74-acre project area. Among the 30 features recorded during that survey nine were terraces, seven were enclosures, four were C-shapes, four were rock piles, two were midden scatters, one was an alignment, and one was a modified outcrop (Donham 1990a). Additional data recovery was recommended for six of the Keokea sites.

In Waiohuli, a 114-acre project area between Pillani Highway and the existing subdivision was surveyed. Five new sites and two previously identified sites were located; they consisted of six alignments, two rock piles, two calms, a bifaced wall segment, and historic structural remains (Donham 1989). Additional testing was recommended and was later conducted at a calum site (Site 2475) thought to be a possible burial monument. The site was found to be a component feature of a hillside terrace system used for dryland agriculture (Donham 1990b).

Since 1970 numerous archaeological studies have been conducted along the coastal portion of Walliku and Makawao Districts. These studies, in conjunction with resort development, are concentrated in the Wailea/Makena area, located approximately three miles south of the project area. One of the earliest contract projects in the Wailea/Makana area was Kirch’s survey and subsequent excavations at Paiauea (Kirch 1969, 1970, 1971). Kirch’s analysis of two coastal site complexes (SHP Sites 1028 and 1029) offered hypotheses regarding pre-contact period settlement patterns, subsistence, and social organization for leeward east Maui (Kirch 1971).

Kirch proposed that coastal settlement along the arid coastline of Paiauea was non-permanent, or transient, and was primarily for purposes of gathering sea resources. Permanent habitation sites were hypothesized to have been in upland resource zones, where intensive agriculture was conducted (Kirch 1971:83-85). Kirch also hypothesized that the residential complex examined (Site 1028) was probably occupied by a single descent group, whereas the heiau site (1029) was probably used or upkept by all occupants of the ahupua’a (Kirch 1971:83-85). A single radiocarbon date range (AD 1545-1745) was assayed from a charred post excavated at Site 1028 (Kirch 1971:76).

Subsequent to Kirch’s study, a number of reconnaissance and testing projects have been conducted in the Wailea/Makena area (Burrea 1974; Burrea 1975; Bordner 1986; Bordner and Cox 1982; Clark 1974; Cleghorn 1974, 1975; Cordy 1978; Dicks and Haun 1987; Dobyna 1988; Donham 1990c; d; Haun 1978, 1988; Hommon 1975; Jourdane and Sinoto 1979; Shill and Dobyna 1980; Shapiro and Haun 1988; Sinoto 1978; Walker, Rosendahl, and Haun 1985). These studies have been summarized and discussed in a report recently completed by Donham (1990c).

**SUMMARY OF HISTORIC DOCUMENTARY RESEARCH**

Historic background studies conducted in the Wailea/Makena area include an overview of Wailea and the Kula District by Burrea (1975), a regional political history with specific reference to the Makena area, by Cordy and Athens (1988), and two background studies of Palaea and Makawao District (Yoidovich 1988, Kalima and Wong-Smith 1990). In the Kiliea area, historic background information, primarily focused on Land Commission Awards, was compiled by Cox (1976) and Cordy (1977). Similar studies for Keokea and Waiohuli were compiled by EISC (1982) and Wong Smith (1990). Background information regarding Kamaloe has been compiled by Kalima and is presented in the Appendix.

Kalima’s report discusses the following topics: legendary references to Makawao and Kamaloe, the building of the Kamaloe heiau sites, general cultivation practices for the region, land tenure in Kamaloe, and background information on Kalaheo Park.

Kamaloe Ahupua’a was designated as Government Land during the Mahaleo of 1848, and was apparently used primarily for the keeping of government cattle. Numerous small parcels were sold or leased within the ahupua’a; some of these grants may date to the pre-Mahaleo government land sales, which were conducted for a brief period in Makawao. Cordy (1977) located, in the Mahaleo testimonies, at least seven coastal houeleo among the Land Commission kuleana awarded in Kamaloe. The individuals who were granted houses throughout the coast were also awarded inland agricultural lands, consisting of Irish potato patches, taro patches, and sweet potato patches. These inland awards were described as being in kula lands or in the barren zone (Cordy 1977:70-71).

Kalima could not locate specific references to the project area regarding land grants or Land Commission Awards.
FIELD METHODS AND PROCEDURES

A 100% surface pedestrian survey was conducted at the project area November 14, 1990, by the report author. The survey commenced at the northeastern corner of the property and consisted of parallel sweeps, oriented north to south and south to north. Each sweep was marked with pink flagging tape in order to insure complete coverage of the area. The northern and southernmost areas of most sweeps were covered with piled vegetation and debris, making surface observation impossible. The surface was generally visible for approximately 60% of the project area.

The subsurface survey was conducted November 20 and 26, 1990, by one or two persons. It consisted of excavating 14 hand-powered auger cores, spaced at 15.0 to 20.0 m intervals on a grid system. The cores were numbered consecutively, beginning at the northeastern corner of the grid pattern (Figure 3). The north-south lines were oriented 330-150 degrees Az., and the east-west lines were oriented 60-240 degrees Az. In some areas, the locations of cores had to be adjusted due to large klawe deadfall piles.

The coring tool used produced holes 0.08 m in diameter, and collected soil column sections approximately 0.20 m long. Coring holes were excavated to depths ranging from 0.37 to 2.13 m. Average coring depth was 1.34 m.

During auger core excavation, all soil removed was screened through 1/8" mesh hardware cloth. Each soil layer encountered during excavation was identified and described on standard PHRI Soil Stratigraphy forms. The depth range, thickness, moist and dry color, texture, structure, consistence and inclusions present in each layer were recorded. In addition to any notes on cultural layers, portable remains, deposition and the specific setting of the core location. Soil descriptions followed U.S. Soil Conservation Service soil description guidelines, and the Munsell Color Notation was used for color identification. The "water level" as used here refers to the level of the standing water that immediately seeped into and partially filled the open coring holes.

All auger holes were excavated until they had to be terminated due to excessive slumping and water infilling, or due to impenetrable cemented sand or rock (s). Two of the corings were terminated due to rocks; three were terminated at impenetrable cemented sand or possible buried (and submerged) reef formations; all others were excavated as deep as allowable into the groundwater zone. All holes were backfilled upon completion of the stratigraphy forms and measuring of the water level.

The soil screened during auger core excavation was examined for portable artifacts, faunal remains, and charcoal. Recent bottle glass was noted and discarded, as were faunal remains determined to be natural inclusion in the sand. No materials were observed that warranted collection.

After completion of the systematic pedestrian survey, the previously located features (Keal 1981) were cleared and examined. An additional portion of one feature—a portion that had not been previously described—was also cleared and examined. The previously located features were described on standard PHRI Feature Record Forms.
SURFACE FINDINGS

A single feature worth note was located during the surface survey. It consists of what appears to be a secondary deposit of structural remains, located along the northern edge of the project area (Figure 3). The deposit is a generally low, linear mound of mixed sand and dirt that contains subangular and vesicular basalt boulders and cobbles, waterworn coral cobbles and pebbles, beach conglomerate cobbles, and branch coral; also, waterworn basalt boulders, cobbles, and pebbles, and much modern rubbish.

The mound is 77.5 m long and 3.8 m wide. Maximum width is at the eastern end, which is located 11.0 m west of the northeastern corner of the project area. The western end is 26.0 m from the northwestern corner of the property. Maximum height of the mound from the surface of Waimalihai Street is 1.38 m, as measured with an eye level. At the eastern end of the mound, a deposit of road surfacing gravel and broken pieces of structural concrete appears to be eroding from the base. From the eastern end, boulders, cobbles and miscellaneous concrete pieces are scattered in a linear pattern to the south, and appear to be the trailings of a bulldozer cut that went through the mound, possibly to make an access road along the eastern edge of the property.

Most portions of the feature were covered with rubbish, lawn trimmings, and deadfall, and considerable effort was made to follow the entire extent of the mound in search of possible structural remains. Three areas of relatively concentrated stone and traces of disturbed alignment-like patterns were observed. These areas were situated around trees, and the clustering appeared to be caused, at least in part, by the tree roots. One of these areas included the previously identified features described by Keau (see Previous Archaeological Work).

The feature (A) described by Keau as a possible shrine was located at the eastern end of the linear mound, where the mound is broadest and highest. The area around the feature was cleared of vegetation, and it was discovered that the stone pattern mapped by Keau was actually a small portion of a much larger scattering of boulders and cobbles. The stone described as a Kii was no longer in the position as mapped by Keau, and was lying loosely on the surface. Boulders and cobbles were scattered on the surface and were partially buried in the area between Feature A and Feature B, previously described as a possible burial alignment. The scattering of rocks and mound feature continued west from Feature B for an additional 60.0 m. Weathered coral and branch coral, as well as waterworn cobbles, were located along the entire length of the mound; there was no concentration of coral in the Feature A locale.

The mound was examined for any traces of midden remains; none were located. Several trowel probes were made, revealing buried modern bottle glass, leather boots, rubber tires, etc. Boulders and cobbles are also buried in the deposit, which appears to have been produced by machinery.

The western end of the mound occurs at the eastern edge of the dune formation. The dune appears to have been cut at this point, either during road construction or small-scale sand borrowing. Waterworn cobbles and other structural stones are scattered at the base of the cut, and a few stones are still lodged in tree roots along the exposed dune face, suggesting that the feature may have crossed the dune. The exposed dune face here is 2.0 m above the surface of Waimalihai Street. It was closely examined for portable remains; only modern bottle glass was located. The soil adhering to the roots of toppled trees was also examined and found to contain no portable remains.

The feature could represent the disturbed remains of a wall. Based on the size range of structural stone present, it most likely would have been a relatively wide, core-filled wall. Several long, rectangular boulders similar to the kii located by Keau are present along the length of the mound, some of which are up to 0.9 m long. There are also relatively small cobbles (core filling) and numerous subangular pahohoe pieces, similar to those used in faced walls. It is possible that the wall was located where the mound is currently located; however, it could have also been pushed from a nearby location, most likely from the north side.

Based on the findings of the surface survey, it appears that the two features previously identified by Keau are only portions of a larger feature that consists of a secondary deposit of possibly prehistoric structural remains mixed with historic debris. The most likely interpretation of the stone structural remains, given the long, linear pattern of the feature, is that it was once a wall. It is not certain at this time whether there might be intact portions of the wall at the base of the mound. It does not, however, seem likely that there are intact portions, given the massive size of some of the boulders that are now lying loosely on the mound surface. These stones would have been at or near the wall base, if such a structure existed; they are clearly in a secondary context now.
SUBSURFACE FINDINGS

Fourteen auger cores were excavated in a systematic pattern across the project area (Table 1). The soil stratigraphy for all cores appeared to be relatively undisturbed, although it is likely that surface sand had been removed from the dune area in the vicinity of Cores 10 and 11, located immediately north of the tennis court parking area.

Two general profile types were observed; these were present in two distinct topographic zones—the dune formation and the low-lying area. Dune profiles were identified in Cores 10, 11, and 14. These profiles consist of five to seven sand layers, and include a surface layer of sand. Core 10, located along the eastern slope of the dune, contained a thin alluvial band of silty clay between 0.96 and 1.02 m below surface. Cores 11 and 14, along the upper slopes of the dune, contained no alluvial layers. The ground water level was encountered at 1.22 to 1.84 m below surface in these cores. No cultural deposits, portable remains, or carbonized materials were located in these cores.

The remaining 11 cores exhibit relatively similar profiles—a surface layer, of silty loam or silty clay loam over silty clay, which extends to an average depth of 0.67 m. Beneath the alluvial silty clay are three to five layers of sand, which grade from fine loamy sand to coarse, white sand in water. Average depth of the water level in the cores is 1.14 m, and ranges from 0.93 to 1.45 m. In general, the water level was higher in cores placed in the southwestern portion of the project area.

No cultural layers or carbonized materials were identified in the soil removed from the cores, and all portable remains located were recent. Small Echinoid pieces and small fragments of Crustacea shell were noted in sand layers; these were determined to be natural inclusions.

The soil profiles in the low-lying portion of the project area indicate that although the land was formed from aeolian and beach sand deposits, it has recently been built up by alluvium, with limited introduction of aeolian sand.
### Table 1.

#### SUMMARY OF AUGER CORES

<table>
<thead>
<tr>
<th>Core</th>
<th>Layer</th>
<th>Depth</th>
<th>Texture</th>
<th>Color</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>0-35</td>
<td>sil</td>
<td>5YR3/3</td>
<td>Surface duff, some humus</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>35-45</td>
<td>sie</td>
<td>5YR3/3</td>
<td>Large ped, plastic</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>45-59</td>
<td>sil</td>
<td>7.5YR3/4</td>
<td>Sand, 5% W</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>59-82</td>
<td>is</td>
<td>10YR5/5</td>
<td>Few pieces of Echinoid in upper 10 cm</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>82-114</td>
<td>s</td>
<td>10YR5/6</td>
<td>Pieces of Quartzite, wet</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>114-130</td>
<td>s</td>
<td>10YR5/6</td>
<td>5/1 miling, cemented ped common</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>130-157+</td>
<td>s</td>
<td>10YR7/0</td>
<td>Submerged, some cementation</td>
</tr>
<tr>
<td>2</td>
<td>I</td>
<td>0-18</td>
<td>sile</td>
<td>5YR3/3</td>
<td>Surface duff</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>18-67</td>
<td>sile</td>
<td>5YR3/3</td>
<td>Extremely plastic</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>67-89</td>
<td>is</td>
<td>7.5YR4/4</td>
<td>Cemented ped present</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>89-101</td>
<td>is</td>
<td>10YR5/6</td>
<td>Loamy, fine sand</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>101-108</td>
<td>sile</td>
<td>5YR3/4</td>
<td>Sandy clay transition zone</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>108-115</td>
<td>sile</td>
<td>5YR3/2</td>
<td>Same as Layer II</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>115-118</td>
<td>sile</td>
<td>10YR5/4</td>
<td>Numerous cemented ped</td>
</tr>
<tr>
<td></td>
<td>VIII</td>
<td>118-144+</td>
<td>s</td>
<td>10YR7/0</td>
<td>Very fine white sand, water level at -120</td>
</tr>
<tr>
<td>3</td>
<td>I</td>
<td>0-10</td>
<td>sil</td>
<td>5YR3/3</td>
<td>Clayey duff, humus</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>10-35</td>
<td>sile</td>
<td>5YR3/4</td>
<td>Small amount of sand</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>35-52</td>
<td>sile</td>
<td>5YR4/4</td>
<td>Minimal silt content</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>52-89</td>
<td>sile</td>
<td>7.5YR3/2</td>
<td>Clayey ped, sand lens at base of layer, 1 cm thick</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>89-94</td>
<td>sile</td>
<td>5YR3/2</td>
<td>Black silt, not present in other cores</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>94-137+</td>
<td>s</td>
<td>10YR7/3</td>
<td>Fine sand with scattered coarse pieces of coral and shell; water level at -123</td>
</tr>
<tr>
<td>4</td>
<td>I</td>
<td>0-15</td>
<td>sil</td>
<td>5YR3/3</td>
<td>Surface duff, humus</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>15-60</td>
<td>sile</td>
<td>5YR3/4</td>
<td>Medium ped, plastic</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>60-77</td>
<td>sil</td>
<td>5YR3/2</td>
<td>Increase in loam</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>77-88</td>
<td>sile</td>
<td>5YR3/1</td>
<td>Distinct ped, no rocks</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>88-100</td>
<td>is</td>
<td>10YR3/3</td>
<td>Organic, motiled sand</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>100-115</td>
<td>s</td>
<td>10YR6/3</td>
<td>Fine, white sand, very wet; water level at -110</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>115-133+</td>
<td>^ s</td>
<td>10YR7/3</td>
<td>Submerged white sand with tiny basalt, coral pebbles</td>
</tr>
<tr>
<td>5</td>
<td>I</td>
<td>0-16</td>
<td>sil</td>
<td>5YR3/3</td>
<td>Surface duff, humus</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>16-79</td>
<td>sile</td>
<td>5YR3/4</td>
<td>Medium ped, plastic</td>
</tr>
<tr>
<td></td>
<td>Rock</td>
<td>-79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I</td>
<td>0-17</td>
<td>sil</td>
<td>7.5YR3/2</td>
<td>Granular glass shard</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>17-39</td>
<td>sile</td>
<td>5YR3/3</td>
<td>Very moist, sticky</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>39-64</td>
<td>sile</td>
<td>10YR3/2</td>
<td>Few cemented ped, sand increases with depth</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>64-76</td>
<td>is</td>
<td>10YR5/4</td>
<td>Abrupt horizon</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>76-95</td>
<td>s</td>
<td>10YR6/4</td>
<td>Cemented layer 80-84; water level at -95</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>95-117</td>
<td>s</td>
<td>10YR6/4</td>
<td>Very fine sand, submerged, tiny cemented pods</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>117-133+</td>
<td>s</td>
<td>10YR6/2</td>
<td>Coarse coral sand with weathered shell fragments</td>
</tr>
<tr>
<td>7</td>
<td>I</td>
<td>0-15</td>
<td>sil</td>
<td>7.5YR3/2</td>
<td>Thin duff on surface</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>15-75</td>
<td>sile</td>
<td>5YR3/4</td>
<td>Layers of weathered gravel at -52 and -75; lower zone motiled with darker clay</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>75-84</td>
<td>s</td>
<td>10YR5/4</td>
<td>Some cemented ped</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>84-93</td>
<td>s</td>
<td>10YR7/4</td>
<td>Fine sand, very wet</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>93-115</td>
<td>s</td>
<td>10YR7/3</td>
<td>Numerous pebble-size cemented ped, shell ped; water level at -115</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>115-136</td>
<td>s</td>
<td>10YR6/1</td>
<td>Mostly cemented, submerged, numerous coarse coral and shell pieces</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>136+</td>
<td>s</td>
<td></td>
<td>Impenetrable cemented sand/possible reef</td>
</tr>
</tbody>
</table>
Table 1. (cont.)

<table>
<thead>
<tr>
<th>Core</th>
<th>Layer</th>
<th>Depth</th>
<th>Texture</th>
<th>Color</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>I</td>
<td>0-18</td>
<td>sil</td>
<td>5YR3/3</td>
<td>No duff present</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>18-63</td>
<td>sic</td>
<td>5YR3/3</td>
<td>Layer of gravel 56-63</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>63-77</td>
<td>sil</td>
<td>10YR3/3</td>
<td>Loose, dark loam</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>77-80</td>
<td>ls</td>
<td>10YR4/3</td>
<td>Abrupt boundary</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>80-99</td>
<td>ls</td>
<td>10YR4/3</td>
<td>Extremely wet, some cementation</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>90-115</td>
<td>s</td>
<td>10YR7/4</td>
<td>Fine sand, water level at base of layer -115</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>115-145</td>
<td>s</td>
<td>10YR7/1</td>
<td>Becomes coarse, some shell, submerged</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>-145+</td>
<td></td>
<td></td>
<td>Impenetrable cemented sand/possible reef</td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>0-25</td>
<td>sicl</td>
<td>7.5YR3/2</td>
<td>More clay than normal</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>25-37</td>
<td>ls</td>
<td>10YR4/3</td>
<td>Small angular gravel</td>
</tr>
<tr>
<td></td>
<td>Rock</td>
<td>-37</td>
<td></td>
<td></td>
<td>Appears to be basalt bedrock (7)</td>
</tr>
<tr>
<td>10</td>
<td>I</td>
<td>0-31</td>
<td>ls</td>
<td>10YR3/6</td>
<td>On dune formation, no duff</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>31-96</td>
<td>s</td>
<td>10YR6/6</td>
<td>Medium-grain size</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>96-10</td>
<td>sic</td>
<td>5YR4/4</td>
<td>Buried alluvial lens</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>102-111</td>
<td>sis</td>
<td>5YR4/4</td>
<td>Silt leached from III</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>111-119</td>
<td>s</td>
<td>10YR5/6</td>
<td>Cemented layer at -115</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>119-146</td>
<td>s</td>
<td>10YR7/4</td>
<td>Coarse, heavily cemented, very wet below -122; water level at -140</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>-146+</td>
<td></td>
<td></td>
<td>Impenetrable cemented sand/possible reef</td>
</tr>
<tr>
<td>11</td>
<td>I</td>
<td>0-28</td>
<td>ls</td>
<td>10YR5/4</td>
<td>On dune formation, no duff</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>28-56</td>
<td>s</td>
<td>10YR6/6</td>
<td>Fine, sterile sand</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>56-115</td>
<td>s</td>
<td>10YR6/6</td>
<td>Coarse with coral and shell pebbles, angular rock flocks</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>115-139</td>
<td>s</td>
<td>10YR6/1</td>
<td>Coarse, water level at -122</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>139-157+</td>
<td>s</td>
<td>10YR8/1</td>
<td>Coarse, weathered grains, submerged</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>-157+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I</td>
<td>0-10</td>
<td>sicl</td>
<td>5YR3/3</td>
<td>Thin surface duff</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>10-59</td>
<td>sic</td>
<td>5YR3/3</td>
<td>Gravel at -43 and at base of layer, dark mottling</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>59-66</td>
<td>sc</td>
<td>7.5YR3/4</td>
<td>Unusual sand/clay mix</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>66-70</td>
<td>sis</td>
<td>10YR4/4</td>
<td>Alluvial lens</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>70-75</td>
<td>s</td>
<td>10YR5/4</td>
<td>Very wet, mostly cemented</td>
</tr>
<tr>
<td></td>
<td>VI</td>
<td>75-87</td>
<td>s</td>
<td>10YR7/3</td>
<td>Fine, homogeneous sand; water level at -93</td>
</tr>
<tr>
<td></td>
<td>VII</td>
<td>87-125</td>
<td>s</td>
<td>10YR8/1</td>
<td>Coarse coral sand, grey (6/2) mottling, submerged</td>
</tr>
<tr>
<td>13</td>
<td>I</td>
<td>0-13</td>
<td>sicl</td>
<td>7.5YR3/2</td>
<td>Modern rubble</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>13-71</td>
<td>sic</td>
<td>5YR4/3</td>
<td>Black mottling below -65</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>71-83</td>
<td>ls</td>
<td>10YR4/4</td>
<td>Cemented throughout</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>83-127</td>
<td>s</td>
<td>10YR6/4</td>
<td>Water level at -106</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>127-140+</td>
<td>s</td>
<td>10YR7/3</td>
<td>Submerged, some shell fragments and cemented pods</td>
</tr>
<tr>
<td>14</td>
<td>I</td>
<td>0-11</td>
<td>s</td>
<td>10YR5/4</td>
<td>Humic sand-black mottling</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>11-135</td>
<td>s</td>
<td>10YR5/6</td>
<td>Dune formation</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>135-139</td>
<td>sis</td>
<td>7.5YR4/4</td>
<td>Thin alluvial lens</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>139-175</td>
<td>s</td>
<td>10YR6/4</td>
<td>Coarse, grain size enlarges with depth</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>175-213+</td>
<td>s</td>
<td>10YR7/3</td>
<td>Water level at -114; medium grain, some tiny basalt places</td>
</tr>
</tbody>
</table>
DISCUSSION

During the surface survey of the potential Kihei Public Library Site D two previously identified features described by Keau in 1981 were relocated. Based on the present work, these features have been determined to be portions of a more extensive secondary deposit of structural stone and twentieth century rubbish. A possible interpretation for the source of the structural stone in the deposit is that it represents the remains of a bifaced, core-filled wall that was pushed over by machinery. There is no indication that the wall formed an enclosure or otherwise turned south within the project area; the wall may have functioned as a boundary. The modern ahupu'a boundary is only c. 70.0 m to the north of this feature.

It is not likely that intact portions of the original structure are present. If they are, they would not be in good condition, and would be difficult to locate unless a relatively large area of the deposit is removed. During the present project an attempt was made to excavate into the deposit by hand; however, large boulders and other materials would have required the removal of a considerable area in order to reach the base of the deposit. Such excavation would be most effectively conducted by machinery.

The subsurface auger coring did not identify any potentially significant cultural remains. The survey did, however, confirm the presence of dune formation that appears to be relatively undisturbed. The western and eastern portions of the dune have been cut into; however, the c. 20.0 m wide formation is intact across most of the project area. As indicated in the background section, in the traditional Hawaii coastal sand dunes were often selected for habitation or for human burials.

RECOMMENDATIONS

Based on the findings of the surface and subsurface survey, it is recommended that archaeological monitoring be conducted if the dune formation at the western end of the property is to be excavated or in any way modified during development. No buried features or deposits were located in the dune; however, isolated features could be present between the coring locales.

It is also recommended that if the secondary deposit of structural debris is moved, limited monitoring take place at the onset, in order to determine if there are any intact wall sections or other intact structural remains at the base of the deposit.

It should be noted that the evaluations and recommendations presented in this final report have been based on a 100% surface and limited subsurface inventory survey of the project area, and are thus subject to the limitations of such surveys. There is always the possibility, however remote, that potentially significant, unidentified subsurface cultural features will be encountered in the course of future archaeological investigations or subsequent development. In such situations, archaeological consultation should be sought immediately.
Barrera, W.

Barrere, D.

Bordner, R.M.

Bordner, R.M., and D. Cox

Clark, S.

Cleghorn, P.

Cordy, R.

Cordy R., and J.S. Athens

Cox, D.
REFERENCES CITED

Dicks, A.M., and A.E. Haun


Dobyns, S.


Donham, T.K.


EISC (Environmental Impact Study Corp.)


Emory, K.P., and R. Hommon


Foote, D.E., E.L. Hill, S. Nakamura, and F. Stephens


Haun, A.E.


REFERENCES CITED

Honmon, R.J.

Jourdane, E., and A. Sinoto

Kalima, L., and H. Wong Smith
1990 Appendix A: Historical Documentary Research. IN Donham 1990c.

Keau, C.

Kirch, P.V.

Shapiro, W.A., and A.E. Haun

Schilt, R., and S. Dobyns

Sinoto, A.

Walker, A., P.H. Rosendahl, and A.E. Haun
Walker, W.


Yoklavich, A.

The proposed site (D) for the Kihue Public Library is within the ahupua'a of Kama'ole, in the Wailuku District of Maui. Ahupua'a boundaries are said to have been fixed about “twenty generations back in Hawaiian tradition” and remain largely unchanged (Yoklavich 1989:2). The larger land divisions, the districts, were fixed at the same time and were made up of a number of ahupua'. With the establishment of new governmental forms in the mid-nineteenth century, the names and boundaries of the districts have been less stable than those of the ahupua'a. Until 1859, the district name for the western side of East Maui was Honua'ula (Red Earth) (ibid.). From 1859 until 1909 this section of land was included in the Wailuku District "for taxation, educational and judicial purposes" (ibid.). In 1909 more changes were made in the district boundaries by the legislature "for the election, taxation, educational, judicial, city, county, and all other purposes" (ibid.). A wide strip of land running from the west coast to the East Maui shore was named the Makawao district. Minor adjustments have been made to this district since its development, and Kama'ole ahupua'a has again been put into the Wailuku District.

The project area is adjacent to the present Kalama Beach Park, near the coast, along the border of Kookua and Kama'ole. Few references to the ahupua'a of Kama'ole could be found, so to present a more general account of the area, the Makawao district (sometimes referred to as Kula) will also be discussed in this report.

Kama'ole literally means "childless," and Makawao means "watchful eyes of We-0 = timeless or eternity" (Puku'i et al. 1974). Most Kama'ole references mention the general area of Makawao district and Kula (kula-o-ka-ma'o-ma'o or Land of Mirages, where lost souls wandered until they could find their way to rest [Ashdown n.d]). In her notes on Maui, Sterling (n.d.) says that "Makawao includes the ancient districts of Hamakuaola and Hamakuaopoko and Honoulu. The last was transferred to Wailuku district where it never geologically belonged."

SAYINGS AND LEGENDS

Several old oral traditions concerning the Makawao area have survived to the present, including the following:

O 'Alelele ke kawa kaulana o Makawao.

'Alelele, the famous diving pool of Makawao.

Refers to Makawao, Maui (Puku'i 1983:2355).

Ehu'e mai oe i ke koai'e o Makawao!

Try uprooting the koai'e tree of Makawao!

I defy you to tackle a lad of Makawao! A boast from a native of Makawao, Maui (ibid:298).

Ka ua 'Uiki o Makawao.

The 'Uiki rain of Makawao.

Refers to Makawao, Maui (ibid:1602).

The rain of Makawao was described by Mrs. Miverva Kalama to E. Sterling in this way: "Ukumía - a soft drizzle (the ua kama'aina [familiar rain] of Makawao) when the klu rain cloud from Makawao meets the naulu rain cloud from Kula then the rain comes, the typical Makawao rain" (Sterling n.d.).

A passage in Edward G. Beckwith's Journal of a Tour on Maui, also speaks of the unusual rain in Makawao:

We noticed a peculiar meteorological phenomena through the whole ride. The trade wind which blows from the ocean across the Northwestern slope of Haleakala, is highly charged with vapor, which is condensed by the cool mountain air, and falls in abundant rains over the region of Makawao. Along the west side of the mountains about half way to the summit, lay a long line of cumulo stratus clouds, and between this and the nimbus there was but little space. The former lay along side of the mountain, apparently immovable, while the latter would advance and recede, now coming very near and coquetishly scattering its shining rain-drops beneath the very head of immovable cumulus, and now retreating as though afraid of its more dignified companion. While mentioning this latter peculiarity to a gentleman this evening, he remarked that it was this feature of the clouds
which gave the place its name - Makawao, Mako = to be afraid, wao = a cloud (in Sterling n.d.).

Sterling notes that this is incorrect. Afraid is maka'a and cloud is ka.' Mrs. Pukui says Makawao is the "kushiiwi - a mountain region. wao = a general term for inland region, usually not precipitous and often uninhabited."

One old saying was found that related specifically to Kama'ole:

"Aluka ka 'ina i kai o Kama'ole.

Thick with sea urchins in the sea of Kama'ole. Applied to a person laden with somebody else's work. A chief was once traveling along the beach at Kama'ole, Kula, Maui. A woman, not recognizing him as a chief, asked him to carry her bundle of sea urchins, which he did. Other women came along and did likewise until the chief was loaded with them (Pukui 1983:114).

Other legends refer to Kama'ole as a battle place. Samuel Kamakau, a 19th century native historian, gives this account:

Kauhi was a son of Keakaulike and a good soldier. He had led the attack in the war carried on by Keakaulike, and was the commander-in-chief in the battles of his father's time. These were the battles of Ki'imaumuku and Kipuka 'ohelo at Kama'ole, and of Kaeulu and Kaholemamelekos at Kaupo, by which he established peace for his father as ruling chief of Maui... (Kamakau 1961:73).

Another tale, concerning the greed of a chief in this area, is related by Kamakau and Abraham Fornander:

While Kahekili was carrying on the war on Oahu and suppressing the revolt of the Oahu chiefs, [Kamakau dates this 1765] a serious disturbance on Maui had occurred which gave him much uneasiness. It appears that he had given the charge of his herds of hogs that were running in the Kula district and on the slopes of Haleakala to a petty chief named Kukeawe. This gentleman, not satisfied with whatever he could embezzle from his master's herds, made raids upon the farmers and country people of Kula, Honoulu, Kahiikinui, and even as far as Kaupo, robbing them of their hogs, under pretext that they belonged to Kahekili. Indignant at this tyranny and oppression, the country people rose in arms and a civil war commenced. Kukeawe called the military forces left by Kahekili at Wailuku to his assistance; a series of battles were fought, and finally Kukeawe was killed at Kamaole-i-kai, near Paiauea, and the revolted farmers remained masters of the situation (Fornander 1969:228).

This uprising of the country people was called the "Battle of the pig-eating Ku-keawe" ("Aipua'a-a-Ku-keawe") (Kamakau 1961:142).

HEIAU

T.G. Thurm lists four heiau said to have existed within Kama'ole Ahupua'a. Of the four mentioned, however, he himself had only seen the remains of one, Wailuku Heiau:

The heiau known as Wailuku, in Kamaole, Kula (formerly reported) was visited and found to be of the platform type, some 40 x 60 feet in size, in ruins. Its upper entwined a low terraced wall, while the lower wall must have been ten feet high in its day. This heiau is held to be of the severe or pookana class, and is much revered from the alleged frequency of drum and other sounds emanating therefrom on the nights of Kane (Thurm 1921:146).

Of the other three he briefly writes:

Wailuku heiau, in ilil of Kawaiulipoa, Kamaole, mauka. not seen.

Kolea heiau, in ilil of Kawaiulipoa, for sacrifice, not seen.

Heiau, name unknown, in same ilil, on sea plain, 200 feet mauka or west of lower road and same distance south of Mormon church. Destroyed probably a kahua (Thurm 1918:128).
TRADITIONAL AGRICULTURE

Handy describes traditional agriculture in the Kula area of Maui:

Kula was always an arid region throughout its long low seashore, vast stony kula lands, and broad uplands. On the coast, where fishing was good, and on the lower westward slopes of Haleakala, a considerable population existed, fishing and raising occasional crops of potatoes along the coast, and cultivating large crops of potatoes inland, especially in the central and northeastern section...where rainfall drawn round the northwest slopes of Haleakala increases toward Makawao. Few Hawaiians, except cowboys, live in Kula now, and, so far as I observed, no sweet potatoes are planted (Handy 1940:161)

In their discussion of Hawaiian sweet potato planting techniques, Handy and Handy (1972:131) mention the kula area as a place:

Where potatoes are planted in crumbling lava combined with humus, as on eastern Maui and in Kona, Hawaii, the soil is softened and heaped carelessly in little pockets and patches utilizing favorable spots on slopes.

In an “Account of planting on Hawaii” from the Hawaiian Newspaper Ka Nupepa Ku’oko’a, March 24, 1922, Handy and Handy wrote:

Rocky lands in the olden days were walled up all around with the big and small stones of the patch until there was a wall (kuawi) about 2' high.

Kuykendall (1968:313) described the transition from traditional subsistence agriculture to the production of cash crops:

...Before that time the whalers had created a limited market for fresh vegetables, fresh meat, and fruit; the great increase in the number of whaleships after 1840 caused a corresponding increase in the demand for such products of the soil. In bulk and value, potatoes (sweet and Irish) ranked first in this traffic. In the early days only sweet potatoes had been obtainable at the islands, but after 1830, if not sooner, cultivation of the Irish potato was taken up and during the 1840s and 1850s became of great importance. It was shortly before 1840 that Irish potatoes were first raised in the Kula district, which proved to be so well adapted to them that it soon came to be called the “potato district.” Jarvis describes the region as it appeared to him in July 1846:

It ranges along the mountain (Haleakala) between 2000 and 5000 feet elevation, for the distance of 12 miles. The forest is but partially cleared, and the seed put into the rich virgin soil. The crop now in the ground is immense. The fields being all in blossom have a fine appearance, spreading as they do, over the broad surface of the mountain.

From this upland region the potatoes were carried down to the shore and taken to Lahaina or were sold directly to ships which called at Kalepolepo. In the spring of 1847 it was estimated that the crop would amount to 20,000 barrels...In 1854, G.D. Gilman estimated that the local Hawaiian market, including whale ships, could be depended on to consume about 20,000 barrels of Irish potatoes.

LAND TENURE

Although there were many small parcels granted during the Mahele, The indices to Land Commission Awards states that Kama’ole was Government Land from the beginning. The numerous parcels may be a result of an experiment conducted by the administration of Kamahameha III prior to the Mahele of 1848. Kuykendall (1968:282) recounts this experiment with fee ownership and the reasons for it:

It will be remembered that the year 1845, during which the new land law was being written and in part enacted, was disturbed by an anti-foreign agitation, accompanied by a rather pointed suggestion that lands be given or sold to the common people, and that the legislative committee, in its reply to the petitions of the people, approved the idea of selling land to Hawaiian subjects. This was directly in line with the suggestions contained
in Dr. Judd's report as minister of the interior, and there were frequent allusions to the subject in the proceedings of the legislature. The agitation among the people probably hastened the decision of the government to make an experimental beginning without waiting for the new law to go into operation. The places selected for the experiment were the Makawao district of Maui and Manoa valley on Oahu.

During the King's tour of Maui in December, 1845, and January 1846, the party visited Makawao and it was announced that the entire district, with the exception of McLane's plantation, was to be offered for sale to the people in fee simple. Rev. J.S. Green, pastor of the Hawaiian church at Makawao, undertook to manage the business of selling the land. In afterwards relating his experience in connection with the project, Green said he called the people together, showed them his instructions from the government, and explained the plan to them.

A few of these purchased at once, others had less confidence that lands would be secure, but soon abandoned their scruples, while others still could not for a long time, be persuaded that there was not some catch about it - some design to enrich the chiefs at their expense. But nearly all of them were finally talked out of their suspicions and took up each small piece of land (letter in Polynesian, July 14, 1849).

Another missionary, Rev. Richard Armstrong, assisted the enterprise by making surveys. The land was sold at one dollar per acre, and nearly a hundred parcels were taken up, most of them ranging from 5 to 10 acres. Altogether about nine hundred acres were purchased by the people of the district.

Various notes for Kama'ole Ahupua'a are contained in the Land File Index at the State Archives:

KAMAOLE AND KEOKEA

Commissioner of Public Lands to Governor

Submitting Land Patent No.1 6706 to Frank Sommerfield and Patrick Cockett, in the above place, Kula Maui, given in exchange for certain lands to be used for roadway & right of way, for the Kula pipe line, for approval.

Privy Council, Ahp. of Kamaole

Res. confirming the sale of the above Ahupuas to several persons as per list. vol. 7, p. 231

Res. refusing the appl. of Henry Dimond and Edwin O. Hall for the above land.

Res. Instructing the Min. of Int. to engage Wm. P. Alexander to survey the above land and such other govt. lands in Kula.

Res. refusing James Humphries appl. for the above land.

Res. refusing to grant any portion of the above land to Naauau, Naulana and Makauluau as the land has been reserved for the use of the Govt. cattle.

Res. Manu's Appl. for the purchase of 30 acres of Gov't. land of the above. Res. that the applicant be and is hereby directed to bargain with Wm. P. Alexander Govt. Agent for the sale of said land.

Int. Dept. 1870, Mar. 31

In report from the Gov. of Maui (Nahaolelua) for the quarter ending this date, showing that $77.50 had been rec'd from the Govt. lands rented to John Ross at the above place &c.

Ex. (C.P.L.) 1920, June 4
Commissioner of Public Lands to Governor

Submitting for approval transfer from Angus McPhee to C.C. Comruit of Kiawe Bean License effecting Gov't land at the above tract, Kula, Maui &c.
Int. Dept. Doc. no. 311

In list of royal patents and land claims, showing that Royal Patent no. 420 issued to Kanakaole and Royal Patent No. 472 issued to Kama for lands in the above Place, are still in the archives of the Probate Court of Maui.

Int. Dept. Doc. no 355

List showing amounts paid by the following persons for lands in the above tract, Maui, &c.

- Ahulau...$11.50
- Ilae...$20.75
- Opunui...$28
- Hakolo...$15.50
- Hila...$1.10
- James Humphries...$69.1
- Kaui...$6
- Joane Marie (Kau)...$26
- Kaunoe...$166.50
- Kahoolii...$15.50
- Kalua...$15
- Kalualoha...$46
- Kalama...$15.50

A total of 69 more individuals were listed, among whom were Kulihi who paid $442; David Malo who paid $143.75; and the biggest spender, John Richardson who paid $1,084.00. John Sniffin bought two lots, one for $267.50 and $192.00. The Swinton family bought five lots, which went to various family members, Jane, Martha, Harriet, Helen and Henry.

Later cards (from 1861 on) show that J. Richardson and P. Nahelelua (Governor of Maui) had received payment for parcels of land.

In all the Kamaole Land File Index contains over 100 cards, evidence of the many changes that took place in ownership.

In September, 1977 Ross Cordy conducted a flood control study of seven ahupua'a in the Kīhei area, including Kamaole. Figure A-1 is taken from Cordy's report, and various archaeological sites are indicated. Site 1715 is nearest the proposed project area. This site consisted of five C-shaped structures known as the project area. None of the 12 sites identified by Cordy in Kamaole Ahupua'a were in the coastal zone. He classified eight of these sites as historic and four as prehistoric. Of the eight historic sites, three of them (1718, 1719, 1721) functioned as cart/vehicle paths; one (1716) as a foot/horse path; one (1720) as an aqueduct; one (1717) ranch related; and two (1713 and 1714) as unknown. Of the four pre-historic sites he listed, three of them functioned as temporary housing sites (1715, 1723, 1724) and one (1722) was classified as unknown.

Cordy also compiled a data sample of Mahele testimony in order to provide information on the type of settlement within the inland and coastal zones of the seven ahupua'a he studied. The notes for Kamaole Ahupua'a are listed in Table 1.

**KALAMA BEACH PARK**

The proposed project site is north of and adjacent to Kalama Beach Park. The following is a brief history of the park contained in Beaches of Maui County, by John Clark:

Kalama Beach Park was named in honor of Samuel E. Kalama, the Maui County Chairman and executive officer for the twenty-year period from 1913 to 1933. Born Sept. 1, 1869, Kalama began his public career in 1888 when he was named clerk and tax assessor of the Makawao District. In 1893 he was appointed captain of the Makawao Police and also clerk of the road board. In 1899 he began a three-year term as deputy sheriff of the Makawao district. Kalama was elected as a Maui representative to the territorial legislature in 1902, and then again as senator, serving from 1904 to 1912. In 1912 he was successful in his bid for the chairmanship of the Maui Board of Supervisors, the equivalent of being mayor of Maui County. Kalama took over the position in 1913 and held it until the day of his death, on February 27, 1933. The park was officially dedicated with a public ceremony in May 1933.

Kalama Beach Park covers over thirty-six acres and contains a multitude of facilities, including twelve pavilions, three restrooms and showers, picnic tables, barbecue grills, playground equipment, one soccer field, one baseball field, tennis courts, a volleyball/basketball court, a caretaker's
Table 1.

<table>
<thead>
<tr>
<th>LCA &amp; Awardee</th>
<th>Inland</th>
<th>Coastal</th>
</tr>
</thead>
<tbody>
<tr>
<td>8881..Kalawao</td>
<td>Moku mau'u Irish potato patches</td>
<td>Houselot (at Kalualiiakoko, 'ili Kaukeakua</td>
</tr>
<tr>
<td></td>
<td>kula land in 'ili Kaukeakua</td>
<td></td>
</tr>
<tr>
<td>10890..Nalhe</td>
<td>Kula land, pasture taro, Irish potato plots</td>
<td>Houselot (ili Kalualiiakoko &quot;which I occupy permanently&quot;)</td>
</tr>
<tr>
<td>10891..Holani</td>
<td>Pasture 'ili Poliaha taro, some Irish potato</td>
<td>Houselot (Kaukeakua 'ili, wife belonged to Kaukeakua &amp; he worked lands there)</td>
</tr>
<tr>
<td></td>
<td>Houselot (ili Poliaha)</td>
<td></td>
</tr>
<tr>
<td>6445..Kamoam</td>
<td>Moku mau'u Irish potatoes in the barren</td>
<td>2 small houses</td>
</tr>
<tr>
<td></td>
<td>zone, pasture</td>
<td></td>
</tr>
<tr>
<td>6471..Kali</td>
<td>Moku mau'ua, Irish potato patches</td>
<td>Houselot</td>
</tr>
<tr>
<td>8038..Ahola</td>
<td>claim - 'ili Pai (extends from sea to</td>
<td>Houselot in unknown location</td>
</tr>
<tr>
<td></td>
<td>mountains); sweet potato patches, pasture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'ili</td>
<td></td>
</tr>
</tbody>
</table>

(Cordy 1977:70-71).
Figure 1-A. Map of Kihei Area with Site Locations
Taken from Ross H. Cordy 1977
residence, and a paved parking lot.

The building of the revetment fronting Kalama Beach Park created a great deal of controversy. Opponents of the project claimed the wall would permanently obliterate the beach, obstruct access to the water from the park, and create a "child trap" because the huge boulders have openings between them to allow drainage through the wall. Proponents, however, cited the fact that although the beach experiences seasonal erosion and accretion, the net effect has been erosion. Surveys made in 1912 and in 1961 showed that the shoreline had receded three hundred feet during this forty-nine year period. The erosion impaired the recreational use of the park and threatened the highway embankment at the south end of the beach. In the early 1970's an erosion control project was completed which included construction of a revetment along the threatened highway, construction of a twenty-five foot berm along the makai length of the park, and construction of a three thousand foot long revetment seaward of the berm. The sloped revetment was designed to protect the berm from erosion and to encourage accretion of sand on the seaward side.

The south end of Kalama Beach Park is the site of the former Kihei Boat Ramp. It was officially closed on July 1, 1983, and replaced by the present ramp. A popular surfing site is located directly offshore the old ramp.

To the north of Kalama Beach Park is a fairly long white sand and coral rubble beach that fronts several residential communities. Two sections of this beach are known as Waimahahai and Kawaiiipua (Clark 1989:46).

The project area is next to a recreational facility, and near Kihei School. No significant archaeological sites were found near the project area, and historical evidence does not indicate that any significant sites are likely to be present.
REFERENCES CITED

Ashdown, L.

Clark, J.R.K.

Cordy, R.H.

Fornander, A.

Handy, E.S.C.

Handy, E.S.C. and E.G. Handy

Kamakau, S.

Kuykendall, R.S.

Pukui, M.K.

Pukui, M.K., S.H. Elbert, and E.T. Mookini

Sterling, E.P.
Thrump, E.G.

1918   Thrum's Hawaiian Annual and Almanac. Honolulu.

1921   Thrum's Hawaiian Annual and Almanac. Honolulu

Yoklavich, A.

APPENDIX D

REFERENCES


