Bernard P. Carvalho, Jr. Mayor

Wallace G. Rezentes, Jr. Managing Director

HART DE 2017



FILE COPY Michael A. Dahilig Director of Planning OCT 2 3 2017

Ka'āina S. Hull Deputy Director of Planning

# PLANNING DEPARTMENT County of Kaua'i, State of Hawai'i

4444 Rice Street, Suite A-473, Līhu'e, Hawai'i 96766 TEL (808) 241-4050 FAX (808) 241-6699

Mr. Scott Glenn, Director Office of Environmental Quality Control Department of Health State of Hawai'i 235 South Beretania Street, Room 702 Honolulu, Hawai'i 96813

FC. O	<b>71</b> ?	R
C. OF ENV	80	ĒO
Y CI	10	T
CONTROL	P12:32	VED

0

Subject: Final Environmental Assessment and Finding of No Significant Impact For Kauai Museum Kauai Tax Map Key No. (4) 3-6-005:005 Līhu'e, Kaua'i, Hawai'i

Dear Mr. Glenn:

The County of Kaua'i Department of Planning hereby transmits the Final Environmental Assessment and Finding of No Significant Impact (FEA-FONSI) for the subject property at Kauai Tax Map Key No. (4) 3-6-005:005 on the Island of Kaua'i. Please publish the FEA-FONSI in the next available edition of the Environmental Notice.

Public comments and corresponding responses that were received during the 30-day public comment period for the draft environmental assessment are included in the FEA-FONSI. Based on the significance criteria outlined in Title 11, Chapter 200, Hawaii Administrative Rules, we have determined that preparation of an Environmental Impact Statement is not required.

Enclosed is a completed OEQC Publication Form, a copy of the FEA-FONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in MS Word.

If there are any questions, please contact Mr. Ron Agor of Agor Jehn Architects at (808) 947-2467.

Me Ke Aloha Pumehana,

Michael A. Dahilig Director of Planning

An Equal Opportunity Employer

# APPLICANT PUBLICATION FORM

Project Name:	Kauai Museum
Project Short Name:	
HRS §343-5 Trigger(s):	State Grant Funding
Island(s):	Kauai
Judicial District(s):	Lihue
TMK(s):	(4) 3-6-005:005
Permit(s)/Approval(s):	Class IV Zoning, ST-P Use Permit and Building Permit yet to be Submitted
Approving Agency:	Kauai County Planning Department
Contact Name, Email, Telephone, Address	Director Michael Dahilig <u>mdahilig@kauai.gov</u> 808-241-4057 4444 Rice Street, Lihue, Hi 96766
Applicant:	Kauai Museum
Contact Name, Email,	Maryanne Kusaka MKusaka@hawaii.rr.com
Telephone, Address	(808) 6526500 4428 Rice Street, Lihue, Hi 96766
Consultant:	Agor Jehn Architects, LLC
Contact Name, Email,	Ron Agor-Architect ron@agorjehnarch.com
Telephone, Address	(808) 947-2467 460 Ena Road, Suite 303, Honolulu, Hi 96815
Status (select one) DEA-AFNSI	Submittal Requirements Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEA, and 4) a searchable PDF of the DEA; a 30-day comment period follows from the date of publication in the Notice.
<u>X</u> FEA-FONSI	Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; no comment period follows from publication in the Notice.
FEA-EISPN	Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; a 30-day comment period follows from the date of publication in the Notice.
Act 172-12 EISPN ("Direct to EIS")	Submit 1) the approving agency notice of determination letter on agency letterhead and 2) this completed OEQC publication form as a Word file; no EA is required and a 30-day comment period follows from the date of publication in the Notice.
DEIS	Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a searchable PDF of the distribution list; a 45-day comment period follows from the date of publication in the Notice.
FEIS	Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a searchable PDF of the distribution list; no comment period follows from publication in the Notice.
FEIS Acceptance Determination	The approving agency simultaneously transmits to both the OEQC and the applicant a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS; no comment period ensues upon publication in the Notice.
EIS Statutory Acceptance	The approving agency simultaneously transmits to both the OEQC and the applicant a notice that it did not make a timely determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and therefore the applicant's FEIS is deemed accepted as a matter of law.
Supplemental EIS Determination	The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is or is not required; no EA is required and no comment period ensues upon publication in the Notice.

\_\_\_\_\_ Withdrawal

\_\_\_\_ Other

Contact the OEQC if your action is not one of the above items.

Identify the specific document(s) to withdraw and explain in the project summary section.

#### **Project Summary**

Provide a description of the proposed action and purpose and need in 200 words or less.

The project entails a one thousand square feet second story addition with an elevator to the Rice Museum Building. The space will be used for office/storage of displays. The space under the elevated addition will continue to be used for outdoor events. The design substantially matches the existing Rice Museum Building.

In the Kauai Museum Building, the project includes a chair lift from the first floor to the upper museum floor.

The pupose of this project is for additional office/storage space and to have the upper floors of both the Rice Museum and the Kauai Museum buildings ADA accessible.

# FINAL

# **Environmental Assessment**

For

Kauai Museum 4428 Rice Street Lihue, Hi 96766

TMK: (4) 3-6-005-:005

October, 2017

**Prepared by:** 

Agor Jehn Architects, LLC

460 Ena Road, Suite 303

Honolulu, Hawaii 96815

# TABLE OF CONTENTS:\_

Title Page		Page 1
Table of Conte	nts	Page 2
Section 1.0	Introduction and Summary Project Information	Page 3
Section 2.0	General Description of Action's Technical, Economical, Social, and Environmental Characteristics, Time Frame and Funding	Page 4-5
Section 3.0	Description of the Environment	Page 5-7
	<ul> <li>3.1 Land Classification and Zoning</li> <li>3.2 Physical Features</li> <li>3.3 Infrastructure</li> <li>3.4 Flood Hazard</li> <li>3.5 Ground Water</li> <li>3.6 Drainage</li> <li>3.7 Flora and Fauna</li> <li>3.8 Endangered Species</li> <li>3.9 Scenic Resources</li> <li>3.10 History of the Land</li> <li>3.11 Coastal Zone</li> </ul>	
Section 4.0	Probable Impacts and Mitigative Measures,	Page 8-9
Section 5.0	Cultural Assessment	Page 9
Section 6.0	Project Alternatives Considered	Page 9
Section 7.0	Findings and Determination	Page 10-13
Section 8.0	Organizations and Persons Contacted	Page 14-15
Section 9.0	References	Page 15
Section 10.0	Index of Exhibits	Page 16
Statutory Chec	klist (24 CFR Part 58)	Page 17
Environmental	Checklist (24 CFR Part 58)	Page 18-20
Certification		Page 21

## 1.0 INTRODUCTION AND SUMMARY

# **1.1 Scope and Authority:**

This Environmental Assessment (EA) is prepared pursuant to Chapter 343, Hawai`i Revised Statutes (HRS) and associated Title 11, Chapter 200, Hawai`i Revised Statutes (HRS).

This project involves the use of state funding, therefore triggers an environmental assessment.

## **1.2 Project Information:**

Project Name:	Kauai Museum Lihu`e, Kaua`i, Hawai`i
Applicant:	Kauai Museum
Agent:	Ron Agor, Architect 460 Ena Road Suite 303 Honolulu, Hawai`i 96815
Accepting Authority:	Planning Department, County of Kaua`i c/o Office of Environmental Quality Control (OEQC) 236 South Beretania Street, Suite 702 Honolulu, Hawai`i 96813
Project Location:	Island of Kaua`i, Lihue District TMK: (4) 3-6-005:005
Total Affected Area:	Approximately .5074 Acres
Existing Land Use:	Existing Museum
County Zoning:	R-1/ST-P General Plan Designation-Urban
State Land Use:	Urban
Approval Required:	County Class IV Zoning and Use Permit-ST-P

## 2.0 <u>GENERAL DESCRIPTION OF ACTION'S TECHNICAL, ECONOMICAL,</u> <u>SOCIAL AND ENVIRONMENTAL CHARACTERISTICS, TIME FRAME</u> <u>AND FUNDING</u>

#### 2.1 Location:

The project site is approximately .5074 acres located at the Northwest corner of Rice Street and Eiwa Street in Lihue. Kaua'i. (See Exhibit "1") See Exhibit "10" for an aerial view of the site and surrounding areas. To the North and West and adjacent to the Kauai Museum site is the County Administrative Building and Parking Lot.

#### 2.2 **Proposed Action:**

The applicant is proposing to construct a second floor addition to the Rice Museum Building as shown in Exhibits "7.1", "7.2" and "8". A chair lift is also proposed for the Wilcox Museum Building.

The existing Rice Building is two stories, approximately 2,428 sf on the first floor and Approximately 1900 sf on the second floor.

The existing Wilcox Building is two stories and a basement. The first floor is approximately 5,398 sf, the second floor is approximately 2,988 sf and the basement is approximately 900 sf.

The proposed addition to the Rice Building includes a second story 1,096 sf office and Storage space with a 114 sf corridor leading to the second floor of the existing structure. The ground floor will have the elevator and approximately 1,000 sf of open lanai space for community activities.

The design of the second story addition resembles, strongly, the original architecture of Rice Building. It consists of Cementous and rock finishes that integrates with the existing architecture. (See Exhibits "7.1", "7.2" and "8")

SHPD Required an Intensive Level Survey that was submitted and approved. (See Exhibit "12') This survey studied the history of the architecture for the Rice Building.

The work in the Wilcox Building entails a chair lift that will be used to access the upper floor exhibit areas. (See Exhibit "7.1" and "7.2")

The topography of the site is relatively level and well landscaped.

### 2.3 Economic and Social:

Economically, the proposed project will make the second floor museum spaces ADA accessible and this asset may increase visitor counts for the Museum.

The construction of the project will provide minimal positive impact on the construction industry.

Socially, the proposed project will make the museum more accessible to the elderly and the physically impaired with the proposed elevator and chair lift.

## 2.5 Time Frame and Funding:

The projected time frame for this project if to be completed by the end of April, 2017. The Environmental Assessment process may take a minimum of 3 months, the Class IV Zoning and Use Permit and simultaneous Building Permit approvals is anticipated to take approximately 3 months. Construction time is anticipated to take 3 months to complete.

The Kauai Museum from the State of Hawai'i a Grant in Aid for the planning and construction of the project. The funds are available as needed.

## 3.0 DESCRIPTION OF THE ENVIRONMENT

#### **3.1 Land Classification and Zoning:**

The State Land Use Commission designates the Project site as Urban. The County of Kaua`i zones the Project site as Special Treatment-Public District (ST-P) and Residential R-1. The General Plan for Kaua`i designates the site Urban. Applicant will be applying for a Class IV Zoning Permit, and a Special Treatment District (ST-P) Permit.

#### **3.2 Physical Features:**

- A. Topography: The project site relatively level with gently slopes down from the front of the buildings to Rice Street. Except for the excavation of the foundations, no major earthwork is anticipated.
- B. Geology: According to "Maps the Soils Survey of the Island of Kaua'i, Oahu, Maui, Moloka'i and Hawai'i, by the U.S. Department of Agriculture, Soil Conservation Service, soil at the Project site consists primarily of Lihue-Silty Sandy Clay. Permeability is moderately rapid, run-off is slow and the erosion hazard is slight.

C. Climate: The mean annual rainfall throughout the project area is about 22 inches per year. Average temperatures in the region range from the 60's to the low 90's. Fahrenheit. Temperature differences between day and night are about 15 degrees.

The consistent direction of the trade winds is from the northeast at between 10 and 15 miles per hour.

#### **3.3 Infrastructure:**

The Kauai Museum is located on the northwest corner of Rice Street and Eiwa Street. Sewer, Water, Electrical, and Cable is available for the existing museum structures and the proposed addition. There will be no increase in water consumption for this project.

The Museum and the County appears to be sharing the adjacent parking lot to the north of the museum site. There is no anticipation of significant increase in traffic in the area due to the proposed addition.

Police protection for Lihue town is provided by the Kaua'i County Police Department, whose main headquarters are located in Lihue, approximately two and one half miles from the project site. The Kaua'i Fire Department provides fire protection for the Lihue area from a fire station located approximately one mile from the project site. A paramedic station is located approximately a half a mile from the project, with Kaua'i's main hospital, Wilcox Memorial Hospital, located approximately two miles from the project.

#### **3.4 Flood Hazard:**

The property is within Zone X, as indicated by the Flood Insurance Map for the County of Kaua'i. (See Exhibit "5")

#### 3.5 Ground Water:

The proposed development is not anticipated to have significant adverse impacts on ground water because no active water systems are on the Project site.

#### **3.6 Drainage and Erosion:**

The site is fully developed with the Wilcox and the Rice Museum Buildings. The existing drainage system works well and no erosion is anticipated to take place.

The area where the second story addition is planned over a paved courtyard is used for outdoor public activities. This paved lanai area has a drainage system that is in working order. The addition will not at any more rain run off than already potentially exists. No Drainage and Erosion problems are anticipated.

### 3.7 Flora and Fauna:

The project site has been fully developed for nearly 50 years. The site is well landscaped. There are no known rare, endangered, or threatened species of flora located within or near the project site.

A three day, morning and late afternoon observation was conducted on site. No observation of terrestrial fauna occurred except for two cats. Some of the avifauna introduced to the area includes the Spotted Dove, Barred Dove, Japanese white-eye, Cardinal, Red-Crested Cardinal, and Mynah.

## **3.8 Endangered Species:**

There are no apparent endangered species in the project area.

According to the Hawai'i Natural Diversity Database, there have been no recording of rare species or eco-system on the project site.

#### 3.9 Scenic Resources:

The Project site is relatively flat and is not adjacent to the ocean nor is the ocean visible from the Project site. The Project will not significantly block scenic mountain views from the highway.

#### **3.10** History of the Land:

See attached Exhibit "10", Archaeological and Cultural Assessment.

#### 3.11 Coastal Zone:

The subject property is inland and not within the coastal zone.

## 4.0 PROBABLE IMPACTS AND MITIGATIVE MEASURES

#### 4.1 Short Term Impacts:

A. Construction: Site preparation and building improvements will result in an increase in dust, and noise at the Project. The prevailing trade wind pattern is from the north-east directions. Potential airborne matters will generally be carried in the south-west direction towards a large parking lot.

Construction noise is also expected.

B. Traffic: Construction workers will generate short term traffic on Rice Street. The project is small in nature so parking will have minimal impact to the surrounding area.

C. Employment: Construction of the Project will minimally impact Kaua'i's Eeonomy for four months.

#### 4.2 Long Term Impacts:

A. Traffic: The project is for a second story storage and office area to address existing needs of the Museum. The use of the proposed space will have very minimal impact to the traffic in the surrounding area.

Bus stops are located within walking distance from the project.

B. Visual: The Project consists of second story addition adjacent and in the back of the Rice Building. The addition is within the existing width and height of the existing Rice Building. The south side of the proposed new structure will be visible from Rice Street. The rest of the building will be visible only from the parking lot side of the project.

The proposed addition with have exterior finish of plaster and rock to match the existing architecture of the Rice Building. (See Exhibit "7.1", "7.2" and "8")

#### 4.3 Mitigative Measures:

Applicant will take mitigative measures during the various stages of construction to minimize short-term impacts as they occur, such as increased dust, noise and traffic.

Applicant will ensure that all construction activities comply with the provisions of the Hawai'i Administrative Rules, S-11-60.11.33 on Fugitive Dust. Dust preventive measures will include:

a. Requiring the contractor to implement a dust control plan to comply with fugitive dust regulations.

- b. Planning of construction phases to minimize the amount of dust-generating materials and activities, centralizing on-site vehicular traffic routes and locating of potential dust-generating equipment in areas of the least impact.
- c. Provide adequate water source at the site prior to start of construction.
- d. Landscape and provide rapid covering of bare areas developed during construction.
- e. Minimize dust from shoulders and access roads.
- f. Provide dust control measures during weekends, after hours, and prior to daily construction.
- g. Control dust from debris being hauled away from the site.
- h. Establish buffer zones, wherever possible, in order to alleviate potential nuisance problems.

Applicant will not be required to obtain a National Pollutant Discharge Elimination System (NPDES) because the site is less than an acre.

Applicant will prescribe specific hours and days during which construction may occur to minimize potential noise.

## 5.0 <u>CULTURAL ASSESSMENT</u>

The attached Exhibit "12", Archaeological and Cultural Assessments, concludes that the Project would have "no effect on significant historic properties as historic properties are absent on the parcel." Should any archaeologically significant artifacts, bones, or other indicators of previous historic on-site activity are uncovered during construction, the Applicant will strictly comply with the requirements of SHPD.

## 6.0 PROJECT ALTERNATIVES CONSIDERED

NO ACTION: "No Action" alternatives would leave no options for the use of Special Treatment-Public District zoned properties for public and private gatherings. It would be contrary to the Kaua`i General Plan Land Use Map designated the site as urban, as well as to the Lihue Town Plan.

CONSIDERATION OF ALTERNATE SITES: The consideration for alternate sites is not a viable option. The project is intended to add to the viability of the existing Kauai Museum. The site is compatible with the designation within the Kaua`i General Plan and the County Zone map. Use of the Project site for public and quasi-public use are part of a long-range vision set forth in the Lihue Town Plan.

PROCEED WITH THE PROJECT: The project will provide accessibility to the second floor level of the Museum's exhibit spaces and fulfill its need of office and storage space.

## 7.0 FINDING AND DETERMINATION

Significant Criteria: As stated in Section 11-200-12, EIS Rules, in determining whether an action shall be considered. The expected consequences of an action, both primary and secondary, and the cumulative as well as the short-term and long-term effects must be assessed in determining if an action shall have significant criteria is listed below and is followed by the means of compliance or conflict:

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources.

The Project will not cause any irrevocable loss of natural or cultural resources. As discussed previously, the Project site is already developed and the proposed addition is over an existing paved lanai used for community outdoor events.

No known archaeological or cultural historic sites on the Project site (See Exhibit "12", Archaeological and Cultural Survey).

Should any archaeologically significant artifacts, bones, or other indicators of previous historic on-site activity be uncovered during construction, they will be treated in strict compliance with the requirements of the State of Hawai`i Department of Land and Natural Resources, Historic Preservation Division ("SHPD") and all construction will cease until cleared by SHPD.

2. Curtail the range of beneficial uses of the environment;

The proposed Project will be built over an existing paved lanai used for outdoor public activities. The site is already developed. Furthermore, the Kaua`i County General Plan and the Lihue Town Plan designates this site for urban development in the area.

3. Conflicts with the State's long-term environmental policies and guidelines as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decisions or executions orders;

The Project development is consistent with Chapter 344, HRS in that;

- (a) The Project focuses on serving Kaua'i's existing population and does not expect to be a factor in any increase in the island's population.
- (b) The Project includes plans for the conservation and utilization of natural resources and efficient use of energy resources.
  - (1) Applicant will utilize best management practices for waste prevention and recycling.

- (2) There is no natural wildlife, forest, marine, or unique ecological preserves on or near the Project site.
- (3) The Project is consistent with the Kaua`i County General Plan, the Lihue Town Plan and complies with the rules and regulations set forth in HRS Chapter 205 for lands designated Urban by the State Land Use Commission and the Comprehensive Zoning Ordinance of the County of Kaua`i.
- (c) No endangered flora or fauna have been discovered on or adjacent to the Project site. Existing landscaping consist of native trees, shrubs, and flowering plants as encouraged by the County of Kaua`i Department of Water as part of their recommendations for water conservation.
- (d) The Project will add to a cultural space provided by the Kauai Museum for the public.
- (e) The Project's location near a bus stop will serve to encourage members of the community to ride the bus to the Museum, thereby conserving energy and reducing air and noise pollution.
- (f) Applicant is committed to the efficient use of energy resources for the Project. It is the intent to use a recently installed a Photo-Voltaic system, the use of energy efficient light fixtures and bulbs. No plumbing fixtures is planned for this project.
- (g) Environment stewardship will be promoted by the Kauai Museum to encourage those who utilize the facility to respect the surrounding environment, reduce waste and excessive consumption, and fulfill the responsibility as trustees of the environment for the present and the future generations.
- (h) This project is consistent with the National Environment Policy Act.
- 4. Substantially affects the economy or social welfare of the community and/or state;

The Project will have minimal positive impact on the construction industry for Kauai. There is no anticipated increase in employees because of this Project.

The intent of the Project is to provide accessibility to the entire museum, including the second floor. This is will encourage seniors and physically challenged people to visit the Museum. 5. Substantially affects public health:

During the construction period, the Project will temporarily impact air quality and noise levels. Applicant will utilize Best Management Practices to minimize these impacts. Upon completion of the Project, projected air quality and noise impacts will be negligible if at all. The positive aspects of the Project will greatly benefit the community and serve to more than offset any negative impacts that would give rise to a "No Action "alternative.

6. Involves substantial secondary impacts, such as population changes or effects on public facilities;

The Project will cause no population changes as it will serve the existing population. It will not affect public facilities in the area.

7. Involves a substantial degradation of environmental quality;

This Project will not cause any degradation of the environment. The Project site is the home of the Kauai Museum. No impact on drainage, erosion, flora, fauna, etc. is anticipated.

- 8. Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger action;
  - (a) The Project's cumulative impact on the environment will not involve a commitment for larger action. Adequate parking is available for this project. There will be no requirements for additional traffic infrastructure or utility infrastructure.
  - (b) Air: As discussed herein, air quality will be impacted during construction phase for a short-term. As completed, the Project will not have any facilities or activities that produce air pollution.

Water: The Project site does not contain any natural water resources and therefore, will have no impact on natural water resources. The addition will not entail additional plumbing fixtures.

Noise: As discussed herein, construction will have a short-term impact on noise in the vicinity. When completed, however, the Project does not expect to generate any substantial noise.

Endangered Species: Applicant will employ any mitigative measures suggested by the USFWS to minimize any impact the Project may have on endangered or threatened species that may be found in the Project area. 9. Substantially affects a rare, threatened or endangered species or its habitat;

There are no rare, threatened or endangered species or habitats on the site or nearby.

10. Detrimentally affects air or water quality or ambient noise level;

The Project will not detrimentally affect air or water quality or ambient noise level in the long term. Air quality will be affected during construction as discussed herein and mitigation measures will be implemented to reduce any detrimental effects.

Since the Project site does not contain any natural water resources, none will be detrimentally affected. Noise levels will increase intermittently during the short-term due to construction as discussed herein. The project will not generate any long-term effect on the ambient noise level in the area.

11. Affects or is likely to suffer damage by being located in an environmentally s sensitive area, such as a flood plain, tsunami zone, beach, erosion-prone areas, geologically hazardous land, estuary, freshwater, or coastal area;

The Project is not located in an environmentally sensitive area, such as a flood plain, tsunami zone, beach, erosion-prone areas, geologically hazardous land, estuary, freshwater, or coastal areas and, therefore, will not affect or suffer damage thereto.

12. Substantially affects scenic vistas and view planes identified in county or state plans or studies;

The Project will not affect any scenic vistas or view plane identified by either the County of Kaua`i or the State of Hawai`i. The Project site is not visible from the ocean, nor can the ocean be seen from the Project site. Mountains views from the highway will not be adversely affected.

13. Requires substantial energy consumption;

The Project will receive power from Kaua`i Island Utility Cooperative. Energy consumption will be minimized using energy lighting and equipment and a Photo Voltaic system.

#### Finding of No Significant Impact

Based on the above stated criteria, the Planning Department of the County of Kaua`i has determined that the proposal project will not have any significant adverse environmental impacts and that an Environmental Impact Statement will not be required for the proposed action. The draft Environmental Assessment will be published by OEQC and will be available for public review as prescribed by Chapter 343 Hawaii Revised Statutes. Response to comments received within the 30-day review period, will be prepared and incorporated in the Final Environmental Assessment.

#### 8.0 ORGANIZATIONS AND PERSONS CONTACTED

The following agencies were consulted and sent a copy of the EA for comments. A 21-day period was stipulated for comments.

- A. Office of Environmental Quality Control (OEQC) State of Hawai`i
   232 S. Beretania Street, Suite 702 Honolulu, Hawai`i 96813
- B. Department of Land and Natural Resources State Historic Preservation Division 601 Kamokila Blvd., Suite 555 Honolulu, Hawai`i 96707
- C. Department of Land and Natural Resources Engineering Branch 1151 Punchbowl Street Honolulu, Hawai`i 96813
- D. Clear Air Branch Hawai`i State Department of Health Suite 250 P.O. Box 3378 Honolulu, Hawai`i 96813
- E. Clear Water Branch Hawai`i State Department of Health P.O. Box 301
  9919 Ala Moana Blvd. Honolulu, Hawai`i 96813
- F. Department of Transportation Highway Division1720 Haleukana Lihue, Hawai`i 96766
- G. U.S. Fish and Wildlife Service 300 Ala Moana Blvd, # 63071 Honolulu, Hawai`i 96813
- H. Department of Housing and Urban Development 500 Ala Moana Blvd, Suite 3A Honolulu, Hawai`i 96813

- I. U.S. Army Corps of Engineers Honolulu District Fort Shafter, Hawai`i 96858
- J. Ground Water Office
  Water Division, WRT-9
  U.S. EPA, Region 9
  75 Hawtrone Street
  San Francisco, California 94105
- K. Wetlands, Oceans and Estuary Branch W-7
  U.S. Environment Protection Agency Region 9
  75 Hawtrone Street San Francisco, California 94105
- L. Department of Planning County of Kaua`i 4444 Rice Street Lihue, Hawai`i 96766
- M. Department of Public Works County of Kaua`i 4444 Rice Street Lihue, Hawai`i 96766
- N. Department of Water 4398 Pua Loki Street Lihue, Hawai`i 96766
- O. Kaua`i County Housing Agency 4444 Rice Street Lihue, Hawai`i 96766

#### 9.0 <u>REFERENCES</u>

County of Kaua`i General Plan

County of Kaua'i Comprehensive Zoning Ordinance

Lihue Town Plan Federal Emergency Management Agency "Flood Insurance Rate Map" United States Fish & Wildlife Services (Online <u>www.nwi.fws.gov</u>) National Wild & Scenic Rivers by State (Online <u>www.nps/gov/rivers/wild)</u>U. S. Department of Agricultures, Soil Conservation Service, Archaeology of Kaua`i 1973

## 10.0 INDEX OF EXHIBITS

#### Exhibit "A" Letter of Authorization

- Exhibit "1" Vicinity Map
- Exhibit "2" Tax Map Key Map
- Exhibit "3" Zoning Map
- Exhibit "4" General Land Use Map
- Exhibit "5" Flood Map
- Exhibit "6" Site Plan
- Exhibit "7.1" Floor Plans
- Exhibit "7.2" Floor Plans
- Exhibit "8" Elevations
- Exhibit "9" Renderings
- Exhibit "10" Aerial of Surrounding Structures
- Exhibit "11" Intensive Level Survey Approval
- Exhibit "12" Archaeological and Cultural Assessment

# STATUTORY CHECKLIST

## (24 CFR 58.8)

Record the determination made regarding each listed statue, executive order of regulation. Provide appropriate source documentation. [Note reviews or consultations completed as well as any applicable permits or approvals obtained or required. Note dates of contact or page reference]. Provide compliance or consistency documentation. Attach additional material as appropriate. Note conditions, attenuation, or mitigation measures required.

#### FACTORS DOCUMENTATION

Historic Preservation [24 CFR 800]

Flood Plan Management [24 CFR 55, Executive Order 11988]

Wetlands Protection [Executive Order 11990]

Coastal Zone Management [Section 307 (c) & (d)

Sole Source Aquifers [40 CFR 149]

Endangered Species Act [50 CFR 402]

Wild & Scenic River Act [Section 7 (b) & (c)]

Air Quality [Clean Air Act; Section 176 (c) & (d)]

Farmland Protection Policy Act [7 CFR 658]

## **DETERMINATION AND COMPLIANCE**

Archaeological Assessment forwarded to SHPD for review on November 12, 2013

Printed No Effect-Section 3.4 Exhibit 5

Printed No Effect-Section 3.4 Exhibit 5

Printed No Effect-Section 3.11 Outside CZM Area-Planning Dept.

Printed No Effect-Per EPA website no designated Sole Source Aquifers for Kaua`i

Contact No Effect-Per Fish & Wildlife Service Site Observation – 3 mornings, 3 noons, 3 evening site visits.

Printed No Effect-According to National Park Service Website, there are no Wild & Scenic Rivers

Printed No Effect-Website for Region 9: Air Programs Project is I "attainment area".

Printed No Effect-Kaua`i General Plan designated project area as Urban Center.

## ENVIROMENTAL ASSESSMENT CHECKLIST

(Environmental Review Guide HUD CPD 782, 24 CFR 58.40; Ref 40 1508.8 &1508.27) Evaluate the significance of the effects of proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation to support the finding. Then enter the appropriate impact code from the following list to make a determination of impact. **Impact Code:** (1) – No impact anticipated; (2) - Potentially beneficial; (3)-Potentially adverse ;( 4)-Requires mitigation; (5)-Requires project modification. Notes names, dates of contact, telephone numbers and page reference. Attached additional material as appropriate. Note conditions or mitigation measures required.

LAND DEVELOPMENT	CODE	SOURCE OR DOCUMENTATION
Conformance with comprehensive Plans and Zoning	2	Proposed project complies with the Kauai General plan policies. The CZO requires Council approval for zoning change.
Compatibility and Urban Impact	2	Same as above
Slope	1	Section 3.2
Erosion	1	Section 3.2B and 3.6. Exhibit 6
Soil Stability	1	Section 3.2
Hazards and Nuisance including Site Safety	4	Title 11, HAR, Chapters 1-26, Vector Control.11-60.1, Air Pollution Control, and 11-58.1, Solid Waste Management Control
Energy Consumption	1	A Photo-Voltaic System will be utilized to to offset the high electric rates and reduce fossil fuel dependency.
Noise-Contribution to Community	4	Title 11, HAR Chapter 11-46, Community Noise Control.
Air Quality-Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	4	Title 11, HAR, Chapter 11-60.1, Air Pollution.
Environmental-Design Visual Quality-Coherence, Diversity	1	The proposed project will be designed for minimal impact on the physical environment by being compatible with surrounding area and the land.

SOCIO-ECONOMIC	<u>CODE</u>	SOURCE OR DOCUMENTATION
Demographic Character Changes	1	The proposed project is in parallel to the Kauai General Plan in designating the subject property for public use projects.
Displacement	1	The subject project will not cause Displacements.
Employment and Income Patterns	2	No data available.
<u>COMMUNITY FACILTIES AND</u> <u>SERVICES</u>	<u>) CODE</u>	SOURCE OR DOCUMENTATION
Education Facilities	1	Cheifess Kamakahelei Middle School and Lihue Elementary Schools are nearby.
Commercial Facilities	1	The proposed project is within the Lihue town core where commercial facilities exist.
Health Care	1	The project is within 2.0 miles from site.
Social Services	1	Services are available in Lihue, approximately within a half mile away.
Solid Waste	1	Section 3.3
Waste Water	1	Section 3.3
Storm Water	1	Sections 3.5 & 3.6
Water Supply	1	Section 3.3
Public Safety-Police	1	Section 3.3 Kauai Police Department headquarters is located approximately 2-1/2 miles away.
Public Safety-Fire		1 Section 3.3 a Lihue Fire Station is approximately 1 mile from site.
Emergency Medical	1	Emergency Care is available at Wilcox Memorial Hospital, approximately 2 miles away.

Open Space and Recreation	1	Open space and recreation will not be adversely affected.
Cultural Resources	1	See Exhibit "12", Archaeological & Cultural Assessment.
Transportation	1	A Kaua'i Bus stop is within walking distance from the project.
NATURAL FEATURES	<u>CODE</u>	SOURCE OR DOCUMENTATION
Water Resources	1	Section 3.5.
Surface Water	1	Sections 3.5 and 3.6
Unique Natural Feature and Agricultural Lands	1	Farmland Protection Policy Act (7 CR 658) not applicable to land committed to Urban development.
Vegetation and Wildlife	1	Section 3.7 & 3.8.
<b>OTHER FACTORS</b>	CODE	SOURCE OR DOCUMENTATION
Flood Disaster Protection Act [Flood Insurance 58.6 (a)]	1	FEMA Flood Insurance Rate map Subject property within Zone X. Section 3.4.
Coastal Barrier Recourses Act [58.6(c)]	1	Section 3.11. Subject property not within costal management areas.
Airport Runway Clear Zone or Clean Zone Disclosures [58.6 (d)]	1	No airport within 3 miles from subject property.

## **CERTIFICATION:**

Project Name and Identification: Kauai Museum

- 1. Is Project in compliance with the applicable laws and regulations as cited in the Statutory Checklist (24 CFR Part 58.1)?. **YES**
- 2. Is an Environmental Impact Statement required pursuant to 24 CFR Part 53.37? NO
- 3. Can a determination be made that the proposed activity will not significantly impact upon the quality of the human environment? **YES**

FINDING:

- X Findings of No Significant Impact: (This Project will not result in a significant impact on the quality of the human Environment)
- Findings of Significant Impact:(This Project may significantly affect the quality of the human environment)

Preparer's Signature:

Responsible Entity: Approving Official

10-06-2017 Date

See following Page 22 herein.

Michael A. Dahilig Planning Director County of Kauai

 Date

Bernard P. Carvalho, Jr. Mayor

Wallace G. Rezentes, Jr. Managing Director

+0CT 0 6 2017



Michael A. Dahilig Director of Planning

Ka'āina S. Hull Deputy Director of Planning

PLANNING DEPARTMENT

County of Kaua'i, State of Hawai'i 4444 Rice Street, Suite A-473, Līhu'e, Hawai'i 96766 TEL (808) 241-4050 FAX (808) 241-6699

Mr. Scott Glenn, Director Office of Environmental Quality Control Department of Health State of Hawai'i 235 South Beretania Street, Room 702 Honolulu, Hawai'i 96813

Subject:

Final Environmental Assessment and Finding of No Significant Impact For Kauai Museum Kauai Tax Map Key No. (4) 3-6-005:005 Līhu'e, Kaua'i, Hawai'i

Dear Mr. Glenn:

The County of Kaua'i Department of Planning hereby transmits the Final Environmental Assessment and Finding of No Significant Impact (FEA-FONSI) for the subject property at Kauai Tax Map Key No. (4) 3-6-005:005 on the Island of Kaua'i. Please publish the FEA-FONSI in the next available edition of the Environmental Notice.

Public comments and corresponding responses that were received during the 30-day public comment period for the draft environmental assessment are included in the FEA-FONSI. Based on the significance criteria outlined in Title 11, Chapter 200, Hawaii Administrative Rules, we have determined that preparation of an Environmental Impact Statement is not required.

Enclosed is a completed OEQC Publication Form, a copy of the FEA-FONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in MS Word.

If there are any questions, please contact Mr. Ron Agor of Agor Jehn Architects at (808) 947-2467.

Me Ke Aloha Pumehana,

Michael A. Dahilig Director of Planning

An Equal Opportunity Employer

#### **INDEX OF EXHIBITS**

- Exhibit "A" Letter of Authorization
- Exhibit "1" Vicinity Map
- Exhibit "2" Tax Map Key Map
- Exhibit "3" Zoning Map
- Exhibit "4" General Land Use Map
- Exhibit "5" Flood Map
- Exhibit "6" Site Plan
- Exhibit "7.1" Floor Plans
- Exhibit "7.2" Floor Plans
- Exhibit "8" Elevations
- Exhibit "9" Renderings
- Exhibit "10" Aerial of Surrounding Structures
- Exhibit "11" Intensive Level Survey Approval
- Exhibit "12" Archaeological and Cultural Assessment

# EXHIBIT "A"

Kauai Museum 4428 Rice Street Lihue, Hi 96766

February 14, 2017

RE: Authorization for EA Submittal

TO WHOM IT MAY CONCERN:

Please consider this document as an Authorization for Ron Agor, Architect to represent the Kauai Museum in the preparation and submittal of an Environmental Assessment for our proposed Project.

Sincerely, Chucky Boy Chock





TAK MAD NOT TO SCALE



<u>م</u>



GENERAL LAND USE MAP NOT TO SCALE

		TARDY ST	S VAL	R	1	7	/													m×± ₩ ₩ ₩
	AS UNOIN		A STATE AND A STATE AND A STATE OF A STATE O		1 1 1 1 1 1 1 1 1	SONE X		IS WAS	A Martin Ma	A TROPANIA		LAI - R. MALINI		Flond Hazard Accecement Renort	5	Kauai Museum	erty l	COUNTY: KAUAI TMK NO: (4) 3-6-005:005 MATTESHED: MAMINIMUL	ESS:	FLOOD MAP Not to scale
FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND (Note: legend does not correspond with NFHL)	SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100- year), also know as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:	Zone A: No BFE determined.	Zone AE: BFE determined.	Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.	Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.	Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.	Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.	<b>Zone AEF</b> : Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.	NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.	<b>Zone XS (X shaded):</b> Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.	Zone X: Areas determined to be outside the 0.2% annual chance floodplain.	OTHER FLOOD AREAS	Zone D: Unstudied areas where flood hazards are undeter- mined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating commu- nities.	Flood Hazard Information	FIRM INDEX DATE: NOVEMBER 26, 2010 LETTER OF MAP CHANGE(S): NONE			THIS PROPERTY IS WITHIN A TSUNAMI EVACUTION ZONE: NO FOR MORE INFO, VISIT: http://www.scd.hawaii.gov/	THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO FOR MORE INFO, VISIT: http://dlnreng.hawaii.gov/dam/	



617E PLAN 6cale: 1/32" = 1:-0"

PROJECT NOTES:

LOT SIZE	21945 GF	
MILCOX BLDG	5246 SF	
	2460 5루	
RICE PAVED COURTYARD	1030 55	
EXISTING LOT COVERAGE	8796 SF	
ADDITION	1161 SF (OVER EXISTING PAVED COURTYARD)	3 PAVED COURTYARD)



LOWER FLOOR PLAN SCALE I/16" = 1-0"



UPPER FLOOR PLAN scale ing' : 1-0'








# AERIAL OF SURROUNDING STRUCTURES

#### EXHIBIT "11"

DAVID Y. IGE GOVERNOR OF HAWAI'I





#### STATE OF HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAIʻI 96707

November 21, 2016

Jane Kamahaokalani Gray, Director Kaua'i Museum Association, Ltd. 4428 Rice Street Lihue, Hawai'i 96766

Dear Director Gray:

#### SUBJECT: ILS Review – William Hyde Rice Building 4428 Rice Street, Lihue Owner Name: Kaua'i Msueum Association, Ltd. Kalapakī Ahupua'a, Puna District, Island of Kaua'i TMK: (4) 3-6-005:005

Thank you for the opportunity to comment on this request from Kaua'i Museum Association, Ltd. for Hawai'i Revised Statutes (HRS) Chapter 6E-10 review. The State Historic Preservation Division (SHPD) received this submittal on October 27, 2016.

The Kaua'i Museum includes the William Hyde Rice Building and the Albert Spencer Wilcox Memorial Building. The Albert Spencer Wilcox Memorial Building is listed on the Hawai'i and National Registers of Historic Places (SIHP #30-11-9344). The William Hyde Rice Building, located on the western portion of the parcel, is a two story building that was designed in the international style with regional elements. The project scope of work includes constructing a new, second story office and elevator on the rear (north façade) of the building.

The William Hyde Rice Building, which is adjacent to the Wilcox Building, was constructed in 1960 and is located within the nomination boundary. The Intensive Level Survey (ILS) determined the building eligible for listing on the Hawai'i and National Registers of Historic Places as a contributing resource of the Kaua'i Museum complex.

Based on this submittal, SHPD's accepts the ILS documentation.

Per SHPD's letter dated June 16, 2016, SHPD looks forward to receiving the limited archaeologicial inventory survey, draft environmental assessment, and updated plans (Log No. 2016.00676, Doc No. 1605AB02).

Please attach to permit: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 692-8015.

Please contact Anna Broverman, Architectural Historian, at (808) 692-8028 or at anna.e.broverman@Hawai'i.gov regarding architectural resources or this letter.

CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT KEKOA KALUHIWA FIRST DEPUTY

SUZANNE D. CASE

JEFFREY T. PEARSON DEPUTY DIRECTOR - WATER

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

IN REPLY REFER TO: LOG NO: 2016.02539 DOC NO: 1611AB04 Architecture

(Continued on Reverse)



Draft

## **Archaeological Assessment**

# And

# **Cultural Assessment**

# for Kaua'i Museum Renovations

# Kalapakī Ahupua'a, Puna District, Island of Kaua'i, Hawai'i TMK: (4) 3-6-005:005

Prepared for

**Ron Agor-Architect** 

And

Kaua'i Museum Association Ltd.

Prepared by

Nancy A. McMahon, M.A., M.Ed., M.S.

Exploration Associates, Ltd. Līhu'e, Kaua'i, Hawai'i

And with assistance by

Chris Landreau, M.S. Aina Pacific Consulting



January 2017



# **INTRODUCTION**

#### **Project Background**

Kaua'i Museum Associate Ltd. is proposing to do renovations which includes construction of a new, second story office and elevator on the rear north façade of the William Hyde Rice Building, adjacent to the Wilcox Building on west side. The project area is located 0.5074 acres located at TMK: (4) 3-6-005:005. The Albert Spencer Wilcox Memorial Building of the Kaua'i Museum is listed on the Hawaii and National Registers of Historic Places [SIHP#30-11-9344]. The William Hyde Rice Building, which is adjacent to the Wilcox Building, was constructed in 1960, is located in the nomination boundary and not listed as a contributing resource. The Wilcox Building was built in 1924 and designed by Hart Wood. It was donated by the Emma Wilcox in memory of her husband Albert for the public library. Emma donated additional funds for another building in 1930 for an addition to the library for museum purposes which was the start of the plans for the Rice building (Evenson 2016). The Rice (Museum) Building was designed by Kenneth Roehrig and M. Morishige was the general contractor (ibid).

Limited archaeological testing in the proposed elevator shaft and areas of ground disturbance was recommended by the Kaua'i Archaeologist in a letter to the Kaua'i Museum Associate Ltd. from Alan Downer, PHD of State Historic Preservation Division (SHPD) on June 16, 2016 [Appendix A]. The archaeological inventory survey work concentrated in the location of new elevator shaft and any locations of ground disturbance. This subsurface testing locations are located in the court yard of the Kaua'i Museum which is not listed as a contributing resource in the nomination. The Rice Building was constructed in 1960 which appear to be the same time the court yard came about. The testing strategy approved by then Kaua'i Archaeologist Mary Jane Naone covered the 1006 square feet elevated office/foundations, walkway footings and elevator location. Testing was to the depth of the excavation of the elevator shaft 4-6 feet and foundation footings of the buildings' second floor office (7 @ 2 feet and grade beans 6 @ 16").

In addition to the limited archaeological testing, the SHPD Architectural Branch required that an ILS (Intensive Level Survey) be conducted on the Rice Building, to determine its eligibility for the State and National Register of Historic Places. At the time of this writing, this study (Evenson 2016) is in draft format, under review by SHPD.

#### Scope of Work

The purpose of this archaeological investigation is to address any archaeological and/or historical concerns. The proposed work includes a surface survey, limited subsurface testing, and a preliminary findings report. A more detailed archaeological report (detailing methods background research, previous archaeology in the area) will be needed to meet the requirements of an inventory-level survey (AIS) per the rules and regulations of (State Historic Preservation Division/Department of Land and Natural Resources) SHPD/DLNR. The level of work for the AIS will then be sufficient to address site types, locations, and allow for future mitigation recommendations if appropriate. Any property over 50 years



of age must be evaluated for historic significance according to the Hawaii Revised Statues 6E and Hawaii Administrative Rules 13-13-276 and 284 which is based on the National Register of Historic Places.



Figure 1. Tax Map Key for the Project Area in yellow.





Figure 2. Site Plan for Kaua'i Museum Renovation Project







Figure 3. USGS Map Location





*Figure 4. Rendering from the Architect showing existing area and new addition.* 

#### Consultation

Prior to the archaeological survey, consultation with the former Kaua'i Museum Director and current staff at the Kaua'i Museum. Both were concerned about finding utilities or cesspool that might be found during the subsurface testing. A drainage plan was found for the court yard. The current brick paving



was installed fairly recently exact date is not known but around 2010. In 2012, the performance platform was removed and the whole court yard paved in brick paving.

# **ENVIRONMENTAL SETTING**

#### Natural Environment

The project is situated in the center of the town of Līhu'e. Līhu'e is situated in the geological feature known as the Līhu'e depression. Koloa volcanics (3.65 to 0.52 million years ago) extend across the eastern half of the island and partly infilled this depression (Blay and Siemers, 1997). Soils in the general project area are well drained soils (Foote *et. al.* 1972:82). The dominant soil is Līhu'e silty clay, 0-8% slope (LhB; Foote et al. 1972:82). This sediment is red in color and overlay soft weathered rock.

Vegetation in the courtyard is minimal. Annual rainfall in the Līhu'e area is c. 40-60 inches, somewhat average between the wetter mountainous terrain to the west and the drier terrain to the south/southeast (Armstrong 1983:56).

The project area is located at c. 200 feet above mean sea level in a built environment. The Kaua'i Museum court yard is situated behind the Rice Building and east of the former Wilcox Library. Beyond the court yard is an asphalt paved parking lot for Museum staff, handicap stalls. Further beyond this parking is Museum visitor parking and County of Kaua'i parking.

#### Kalapakī Ahupua'a

The town of Līhu'e is located in the ahupua'a of Kalapakī, in the traditional district of Puna and the modern district of Līhu'e, in the southern portion of Kaua'i Island (Figure 3). Today Līhu'e encompasses around 4 square miles and is the business and government center of the island. A brief history of the area will be in the background research section of this report.

# **CULTURAL ASSESSMENT & BACKGROUND RESEARCH**

In Hawaiian Antiquities and Folklore (Fomander, 1918-1919), a pioneering collection of Hawaiian lore, references are made to Kalapakī Ahupua`a, and to Līhu'e. One of the named Kaual winds, "He waikai ko Kalapakī" refers to the salty fresh water of Kalapakī (vol. 2: 96-97). The place name Lihu`e appears in the "Legend of Uweuwelekehau." Uweuwelekehau and his wife Luukia are being punished: they are stripped of their clothing and sent to Mana [at the west end of the island]. When they reach the plains of Līhu'e, Luukia complains of her nakedness. Uweuwelekehau tells her that they will find on a nearby hill a pa'u and all manner of kapa, which they do (vol. 2:196-197).



#### **Place Names**

Translations presented without attribution in this subsection are from Pukui et al. (1974), unless indicated otherwise. Pukui et al. (1974) list but do not translate Kalapakī, defined simply as a "beach" in Līhu'e district. Pukui and Elbert (1986) define the word Kalapakī (with a small "k") as "double-yoked egg, *Kaua'i*." Aside from its beach and landing, Kalapakī is probably best known in a traditional sense for its *heiau* of Ahukini and Ninini (and possibly another at Kuki'i). Ahukini has been translated as "altar [for] many [blessings]" (brackets inserted by Pukui et al. 1974), and this was also the name of a *heiau* in Kane'ohe, O'ahu. Ninini has been translated as "pour," as in *ninini wai* (to pour water), Kalapakī was also the name of a village located along the coast. According to Hammatt and Creed (1993:22), Land Commission documents demonstrate that the "village of Kalapakī" was synonymous with the "*'ili* of Kuuhai."

Līhu'e (literally translated as "cold chill") became the modern political name for the traditional *moku* (district) of Puna. It is clear that Līhu'e is a traditional place name, but less certain that the subject project area was specifically called this name prior to the historic era. Historical documents suggest the name Līhu'e was first applied to this area by Kaikio'ewa (Governor of Kaua'i) in the 1830s, perhaps after Kaikio'ewa's upcountry residence on the island. On the other hand, Nathaniel Emerson's translation of the famous *oli* (chant) cycle of Hi'iaka and Pele (see below) mentions Līhu'e with the other main places names of this area. It is also well known that Līhu'e was a traditional settlement area near the current Schofield Barracks on O'ahu.

Several relevant place names are mentioned in *mo'olelo* about the naming of *makani* (winds). For example, Hi'iaka, a sister of the Hawaiian volcano goddess Pele, chanted a list of winds from Nāwiliwili, Kalapakī, Ahukini, Līhu'e, Kapaia, and Hanamā'ulu (Emerson 1993, originally 1915):

He Heone ka makani o Nāwiliwili, He Waimua ka makani o Kalapakī, He Ehukai ka makani o Ahukini, He Pahola ke kiu ho o kii makani lele kula o Līhu'e , He Kuliahiu ka makani o Kapaia, He Hooluakainehe ka makani o Hanamā'ulu.

According to a collection of Kaua'i place names by Kelsey (n.d.), Kalapakī has also been known in traditional times as "Ahukini," as in the following '*ōlelo no'eau*:

*Ahukini, oia ka inoa nui o ka' aina a hiki Hanama'ulu.* Ahukini is the overall name of the land next to Hanama'ulu.

#### Subsistence and Settlement

The *ahupua'a* of Kalapakī was permanently inhabited and intensively used in pre-Contact and early historic times, based on a large amount of archaeological, historical, and oral-history documentation. The coastal areas were the concentration of permanent house sites and temporary



shelters, *heiau*, including *ko'a* and *kū'ula* (both types of relatively small shrines dedicated to fishing gods), and numerous trails. There were fishponds at Kalapakī. Further from the current project area, there were numerous house sites and intensive cultivation areas within the valley bottoms of Nāwiliwili and Hulē'ia Streams.

Before the historic era, there was a village at Kalapakī (probably between Kalapakī Beach and Ahukini), and another, likely larger, at Nāwiliwili to the southwest. Another village was located near the mouth of the Hanamā'ulu Stream.

The dryland areas (*kula*) of these *ahupua'a* contained native forests and were cultivated with crops of *wauke* (paper mulberry, *Broussonetia papyrifera*), *'uala* (sweet potatoes, *Ipomoea batatas*), and *ipu* (bottle gourd). Legends and historic documentation (especially Land Commission records) elaborate on many of these important natural resources.

#### **History Era**

Land Commission documents indicate a land use pattern that may be unique to this part of the island, or to Kaua'i, in general, in which *lo'i* (irrigated terraced gardens) and *kula* lands are described in the same 'āpana (portion of land), with houselots in a separate portion. In most places, *kula* lands are defined as drier landscapes and they do not typically occur next to, and among, wetter *lo'i* lands. Also, according to Hammatt and Creed (1993:23), "there are several [LCA] references to other *lo'i* next to the beach which indicate wetland cultivation extending right to the shoreline." This is another type of land use that seems to be fairly unique to Kaua'i.

In the 1830s, the Governor (Kaikio'ewa) founded a village at Nāwiliwili that eventually developed into Līhu'e. According to Hammatt and Creed (1993), the name Līhu'e was not consistently used until the establishment of commercial sugar cane agriculture in the middle 19<sup>th</sup> century; and from the 1830s to the Māhele, the names Nāwiliwili and Līhu'e were used interchangeably to some extent to refer to a settlement along Nāwiliwili Bay. Some sources attribute the decision to call this area Līhu'e (literally translated as "cold chill") to Kaikio'ewa, who apparently named it after his nearby upcountry home. Waimea and Kōloa were preferred anchorages compared with Nāwiliwili, which opens directly east to the trade winds. Gales were known to blow ships onto the rocks.

By 1830, the sandalwood trade had waned and the whaling industry was just beginning. At the same time, commercial agriculture was being established on Kaua'i. When the first crop of sugar cane was harvested at Kōloa, the king himself commanded that portions of his private land be planted in cane. The Governor of Kaua'i Kaikio'ewa in 1839 began farming the slopes of Nāwiliwili Bay where there was more rain than at Kōloa (Dorrance and Morgan 2000). He also built a house and church in Nāwiliwili Ahupua'a.

Donohugh (2001:94) describes Governor Kaikio'ewa's attempt to establish the first commercial sugar mill and plantation in Līhu'e in 1839:

During the early decades of Koloa Plantation, other sugar plantations had started up on the island. One was to result in the ascendancy of Lihu'e to the principal town and seat



of government on Kaua'i, replacing Wailua. When Kaikio'ewa was appointed governor, he located his home in what is now the Līhu'e District. He planned to grow sugar cane but died in 1839 before his plans could be realized. Kaikio'ewa was responsible for the name [Līhu'e], which means "cold chill," the name of his previous home at a higher and chillier altitude on O'ahu.

Donohugh (2001:94) describes observations by James Jarves, who passed through Līhu'e in 1838:

... [He] found only a church built by Kaikio'ewa and a few grass houses. He commented the governor had selected Hanamā'ulu Bay as the harbor, "entirely overlooking the fact that it opened directly to the windward."

Kaikio'ewa died in 1839 soon after the start of the sugar plantation, which lasted only one year and closed down in 1840 (Dorrance and Morgan 2000).

Around this time, perhaps as late as 1842, the first missionaries settled in the Līhu'e area led by Dr. and Mrs. Thomas Lafon, and assisted by Rev. and Mrs. Peter Gulick from Kōloa. Schools were opened, and some missionaries attempted to grow cotton as the first intensive cash crop, but were unsuccessful (Damon 1931).

An account of the United States Exploring Expedition, which passed through Līhu`e in 1840, talks about the area, but also mentions the forced removal of *kama'āina* from the coastal areas:

At noon they reached Lihui, a settlement lately undertaken by the Rev. Mr. Lafon, for the purpose of inducing the natives to remove from the sea-coast, thus abandoning their poor lands to cultivate the rich plains above. Mr. Lafon has the charge of the mission district lying between those of Kōloa and Waioli. This district [Līhu'e] was a short time ago formed out of the other two.

The principal village is Nāwiliwili, ten miles east of Kōloa. This district contains about forty square miles, being twenty miles long by two broad. The soil is rich: it produces sugar-cane, taro, sweet-potatoes, beans, etc. The only market is that of Kōloa. The cane suffers somewhat from the high winds on the plains.

The temperature of Lihui has much the same range as that of Koloa, and the climate is pleasant: the trade-winds sweep over it uninterruptedly, and sufficient rain falls to keep the vegetation green throughout the year. No cattle are to be seen, although the pasturage is good. (Wilkes 1845:67-68)

With the death of Kaikio'ewa, governorship of Kaua'i was transferred for a brief period to his widow Keaweamahi. Then followed the brief tenure of Chiefess Kekauonohi and her husband Kealiiahonui (son of King Ka'umuali'i) after which the governorship passed to Paulo Kanoa in 1848. Kanoa had two houses overlooking Nāwiliwili Bay: one on the bluff south of Nāwiliwili Stream (the present site of Kaua'i High School) and another at Papalinahoa, north of the bay (Damon 1931).

# Exploration Associates

#### EXPLORATION ASSOCIATES LTD

One of the last vestiges of the pre-cash crop landscape is depicted in the diary entry for the Rice family's arrival on Kaua'i in 1854. During the second half of the nineteenth century, western settlers and entrepreneurs set their sights on southeast Kaua'i. Damon describes the Līhu'e landscape at the time of the family's arrival at Nāwiliwili Bay:

From the deck of their river craft in 1854 Mrs. Rice and the children could plainly see above the rocky shore and ruins of Kuhiau, the old heiau, or temple, and nearby on the bluff the flaming blossoms of a great *wili-wili* tree among *koa* trees which ten grew almost down to the water's edge. (Damon 1931:17-18).

The middle 19<sup>th</sup> century brought great changes to Līhu'e, including private and public land ownership laws known as the Māhele (literally, 'to divide' or 'to section'), ranching, and commercial sugar cane agriculture, which firmly established Līhu'e's place in state and global economic markets. Coulter's (1931) population density estimates for 1853 (Figure 6) show a relatively large settlement around Nāwiliwili Bay. Each of Coulter's symbols represents 50 people; the map shows approximately 35 symbols, or 1,050 people, in the greater Nāwiliwili Bay area.





# Figure 5. Population estimates for Kaua'i generated by Coulter (1931), each symbol represents 50 people; with a modest population (150 people) are the coastal boundary between Hanamā'ulu and Kalapakī.

One of the major changes that negatively impacted the *maka'āinana* was the introduction of cattle and horses that destroyed vegetation and encouraged soil erosion. In the middle 19<sup>th</sup> century, during the time of Kamehameha III, a series of legal and legislative changes were brought about in the name of 'land reform' (see Jon Chinen 1958, 1971 for details). Previous to the, all land belonged to the *akua* (gods), held in trust for them by the paramount chief, and managed by subordinate chiefs. Following the enactment of a series of new laws from the middle 1840s to middle 1850s, all land in the Hawaiian Kingdom was divided into three main types: government (or Crown) land; *ali'i* (chiefly) lands; and commoner lands, which *maka'āinana* could in principle obtain in fee simple, following passage of the Kuleana Act in 1850. This act allowed *maka'āinana* (in principle) to own land parcels at which they were currently and actively cultivating and / or residing. In theory, this 'set aside' of hundreds of thousands of acres as potential *kuleana* parcels ultimately led to about 10,000 claimants obtaining approximately 30,000 acres, while 252 chiefs, for example, divided up about a million acres. Many or most Hawaiians were simply disenfranchised by these acts.

The locations of *kuleana* or commoner land claims of the Māhele (1848-1853) in Kalapakī Ahupua'a are from the shore back into and along the floodplains of the valley land. There were 13 claims in Kalapakī, of which 12 were awarded. The cultivation of "taro" (kalo), the major staple, was along the river flood plains. All the house lots in Kalapakī were at the shore. There were small kula listed for the ahupua'a where presumably sweet potatoes and other produce were grown. The only crop other than "*kalo*" mentioned specifically is *wauke* in Kalapakī. Additionally, more than one claim in Kalapakī mentions the fishponds of Koena'awa (Kamai and Hammatt 2016).

In Kalapakī Ahupua'a, *kalo* (taro) *lo'i* claims were on the north side of Nāwiliwili River (the *wauke* land in Claim 3907 on the south side of the river being the sole exception) and along the smaller drainages of Kalapakī and Koena'awa, where there were also reportedly springs. Two streams, Koena'awa-nui and Koena'awa-iki, were also identified in the claims, but neither is named on current maps.

Most Kalapakī claimants lived at the shore in the *kulana kauhale*, or, village of Kalapakī, located on Nāwiliwili Bay. Several claimants describe their village house lots in relation to the fishponds of Koena'awai-nui & Koena'awa-iki). There is also a description of the *muliwai*, or estuary, of Koena'awa-nui. Several other *loko* are mentioned at Kalapakī.

Claim 3640 mentions a footpath for the *'ili* of Limawela near the shore at the boundary between Hanamā'ulu and Kalapakī. These documents therefore indicate a north/south path along the shoreline, and other paths going inland from the shore, which is a traditional transit pattern for Kaua'i *ahupua'a*.

Paulo Kanoa, Governor of Kaua'i at the time of the Māhele, claimed both the *ahupua'a* of Hanamā'ulu and Kalapakī but was awarded neither. Instead, Victoria Kamāmalu was awarded both *ahupua'a* under LCA 7713:2. A portion of this award (7713:2 part 7) includes land within the present project area. Following the death of Victoria Kamāmalu in 1866, Princess Ruth Ke'elikōlani inherited her lands. In 1870, Ke'elikōlani sold large portions of her Kalapakī and Līhu'e lands to William Hyde Rice of Līhu'e Plantation. In addition, in 1870, Paul Isenberg purchased the *ahupua'a* of Hanamā'ulu from J.O.



Dominis, which includes the land of the present airport area. William Hyde Rice made subsequent land purchases from Princess Ruth in 1879:

William Hyde Rice, who already had his own home on the hill east of the mill, bought a large makai section of the ahupua'a of Kalapakī from Princess Ruth in 1879 and there conducted the Līhu'e Ranch. In later years he sold most of this land to the plantation. (Damon 1931:747)

The large tracts of inland areas (*kula*), not in the river valleys or at the shore, are not described in the claims but were probably in use. This *kula* land at the time of the Māhele belonged to Victoria Kamāmalu. Land use is not elaborated in her claims for Hanamā'ulu or Kalapakī. Traditional *kula* resources for all claimants would have been medicines, herbs, construction materials such as *pili* grass and trees for building houses, canoes, and perhaps lithic materials for tools. Sweet potatoes and other dryland crops, such as *wauke*, probably were cultivated in patches throughout the area at one time or another.

Additional details for Kalapakī LCAs can be gleaned from Native Testimony (erroneously entered as "Foreign Testimony," a common error) and Native Register documents compiled by Hammatt and Creed (1993).

Cattle, introduced by Vancouver, had at first been under a royal *kapu* and were allowed to roam freely and reproduce. Within a few decades cattle had begun to wreak havoc on village gardens and taro lands and homes. Residents either abandoned the land destroyed by roaming cattle or else started building walls to keep the cattle out of their homes and gardens. Hulē'ia, an *ahupua'a* to the south of the project area, was claimed by Victoria Kamāmalu during the Māhele, as a preserve for cattle (Māhele information). Apparently, as the report by Wilkes suggests, the people of Līhu'e had so far been safe from such depredation (ca. 1840s).

In William Hyde Rice's Hawaiian Legends (discussed above), Rice's granddaughter Edith Rice Pleus notes that Kalapakī in the 1920s comprised fertile lands. She probably referred to the extensive plains or *kula* lands existing prior to use for commercial sugar cane. The cultivation of sweet potatoes, gourds and *wauke*, and other dryland crops would have dominated land use in these *kula* lands.

A document listed only as Land Matters, Document 11 with no date in the State Archives refers to *konohiki* rights (either prior to or contemporary with Land Commission claims since the *konohiki* received their claims after the ali'i and before the *kuleana* awards). The *konohiki* had proprietary rights to fish caught in the bay fishing. Document No. 11 lists *ana'e* as the protected fish of Hanamā'ulu, and *uhu* for Kalapakī. These protected fish are part of the konohiki resources, which he or she would use to meet his/her obligations to superior chiefs, governors/governesses and the King or Queen. Wikolia is listed as the *konohiki* for Wailua, Hanamā'ulu, Kalapakī, Nāwiliwili, Niumalu, Haiku, Kīpū, and a few other places.

One of the last vestiges of the pre-cash crop landscape is depicted in the diary entry for the Rice family's arrival on Kaua'i in 1854. During the second half of the 19th century, western settlers and entrepreneurs set their sights on southeast Kaua'i. Ethel Damon, in Koamalu, her history of the Rice family of Kaua'i, describes the Līhu'e landscape at the time of the family's arrival at Nāwiliwili Bay:



From the deck of their river craft in 1854 Mrs. Rice and the children could plainly see above the rocky shore and ruins of *Kuhiau*, the old *heiau*, or temple, and nearby on the bluff the flaming blossoms of a great will-will tree among *koa* trees which ten grew almost down to the water's edge (Damon 1931:17-18).

These early written documents describe a good land with a nice climate and plentiful provisions for the traveler. Residents of the land live near the ocean and fishing villages are scattered along the shore; and at that time at Kalapakī many trees grew right down to the water's edge (e.g. *koa* and *wiliwili*).

As a direct result of the availability of large tracts of land for sale during the Māhele, in 1849, Līhu'e Plantation "was established on the site Kaikio'ewa had chosen, and the cluster of homes and stores around it was the start of the town of Līhu'e." (Donohugh 2001:94). The plantation was started by Henry A. Pierce, Judge Wm. Little Lee, chairman of the Land Commission, and Charles Reed Bishop, doing business as Henry A Pierce and Company (Damon 1931). The first 3,000 acres were purchased in Nāwiliwili and an additional 300 acres were purchased in Ahukini in 1866. The Līhu'e Plantation became the most modern plantation at that time in all Hawai'i. It featured a steam-powered mill built in 1853, the first use of steam power on a Hawaiian sugar plantation, and the ten-mile-long Hanamā'ulu Ditch built in 1856 by plantation manager William H. Rice, the first large-scale irrigation project for any of the sugar plantations (Moffatt and Fitzpatrick 1995:103). Dorrance and Morgan (2000:28) provide a slightly different list of achievements for Līhu'e Plantation: "The first irrigation ditch in Hawai'i was dug in 1857 [at Līhu'e], and in 1859 the first steam engine in a Hawai'i mill was installed at Līhu'e Plantation."

The residential and administrative heart of Līhu'e Plantation was located in the western portion of the subject project area, now downtown Līhu'e, Kaua'i's political center and most developed area. There are many documentary resources about the history of commercial sugar cane in Līhu'e (see, e.g., the Kaua'i Museum's website, <u>http://www.Kauaimuseum.org</u> and Kaua'i Historical Society's website, <u>http://www.khs.org</u>). Dorrance and Morgan (2000) have summarize highlights of the history of both the Līhu'e and Hanamā'ulu Plantations (see pp. 28-29), and there are other, more detailed histories of these operations (e.g., Condé and Best 1973; Wilcox 1996; Donohugh 2001).

The success of the Līhu'e Plantation allowed it to continue to expand. When the owner of Hanamā'ulu Ahupua'a, Victoria Kamāmalu, died in 1870, all 9,177 acres in the *ahupua'a* were purchased by Paul Isenberg, the manager of Līhu'e Plantation from 1862-1878 (Damon 1931:742-747). By 1870, the plantation owned 17,000 acres in Hanamā'ulu. A total of 30,000 leased acres in Wailua were later added in 1878. Līhu'e Plantation built a second mill in 1877, north and west of the present airport, recorded in an 1885 map of Hanamā'ulu Bay by Lt. George G. Jackson. This mill operated until 1920, when it was converted into housing for laborers.

Sugar cane cultivation transformed the traditional landscape of Kalapakī into plantation landscape. By 1931, Līhu'e Plantation had 6,712 acres in cane. Līhu'e Plantation "developed a water collection system second only to East Maui Irrigation Company ... Altogether there are 51 miles of ditch and eighteen intakes" (C. Wilcox 1996:68). Railroads extended across the plantation to and from the shipping facilities and beyond the plantation itself to other plantations (Figure 6).

According to Dorrance and Morgan (2000:24-25), there were at least four different major sugar cane operations (i.e., mills and / or plantations) in the near vicinity of the subject project area during the later 19<sup>th</sup> century, including the Līhu'e and Hanamā'ulu Plantations (founded 1870, closed 1898) as well



as the Hanamā'ulu Mill Company (founded 1870, closed 1880) and Charles L. L'Orange (founded 1882, closed 1888).

In 1870, the Līhu'e Plantation Company bought up approximately 17,000 acres of undeveloped land in Hanamā'ulu, which were then used to grow sugar cane and to capture and deliver water to both plantations. Later, in 1870, George N. Wilcox started the first sugar cane plantation in Hanamā'ulu, the Hanamā'ulu Plantation (Dorrance and Morgan 2000). In 1898, Hanamā'ulu Plantation was merged into Līhu'e Plantation. Commercial sugar cane agriculture continued in Līhu'e until 2000, when it and the Kekaha Sugar Co. finally shut down and terminated approximately 400 workers. The nearby Kīpū Plantation, founded in 1907, operated until 1942 (Dorrance and Morgan 2000). Līhu'e Plantation remained a vibrant and successful commercial operation throughout most of the 20<sup>th</sup> century (Dorrance and Morgan 2000).



*Figure 6. Līhu'e Plantation Co. in 1941 around the subject project area (source: Condé and Best 1973:168).* 

Rice production was an off-shoot industry of the sugar plantation in the 1870s, since many of the new Chinese plantation workers began to grow rice for themselves and then for trade with California. Japanese immigrants, by the end of the 19<sup>th</sup> century did the same and took over many of the Chinese rice paddies. Growing and milling rice also became a means for immigrants to leave the plantations after their indenture period. Field note drawings (1885) by Lt. Geo. G.E. Jackson, a cartographer for Territory of Hawaii in the early 1880s show rice fields at the mouth of Nāwiliwili River in the estuary and he shows a few houses left in Kalapakī Village. In general, rice planters used abandoned taro fields, but made the patches larger than the traditional taro patch. This is probably true of the Kalapakī floodplain.



Jackson's drawings also show that the Kalapakī land north of Kukii Point, where the airport now lies, as a "level grassy land with volcanic boulders," showing no cane cultivation in 1885. Gay and Kittridge's map of 1898 still shows the same "stony land" and notes its use as a goat and sheep pasture.

Līhu'e Plantation owners and managers were concerned about reforesting their landscape, to make it more fruitful, productive, and pleasant. Forests, which would have existed possibly down to the sea, had been cleared during the sandalwood era, and perhaps earlier. Former forest lands were barren by the time the plantation management controlled the land. A major reforestation plan was carried out.

Ethel Damon records that early settler, Richard Isenberg,

often looked out on to the bare slopes of Mount Kalepa, said later by Chief Forester C.S. Judd to have been covered formerly with a growth of sandalwood. On his departure Richard Isenberg left funds for the planting of ten acres on Kalepa hill to young ironwood. Today a roadway up this hill has been constructed for Kaua'i's first wireless telephone station, Ka Lepa, The Signal Hill, thus resuming what is said to have been its ancient importance as a peak for signaling messages. (Damon 1931:913)

A major reforestation effort was also carried out on Kilohana Crater:

Paul Isenberg engaged a German forester who remained on Līhu'e Plantation for five or six years and then returned to the Prussian Forest Service after passing much of his knowledge on to others here. His first and principal task was to plant and tend a young forest on a tract of valley and a ridge of about 300 acres on the eastward slope leading up to Kilohana crater. This is often called the German Forest and was, as far as is known, the first extensive attempt at reforestation anywhere on the islands. ... The Pride of India was finally chosen, as a tropical tree long a denizen of the islands, and some Australian ironwoods where also propagated for the purpose, as far as seed could be obtained. The albizzia, known as the white-flowering monkey pod, was also largely planted in the valleys, and has proven a useful tree, having one characteristic of the Hawaiian *hau*, its branches sprouting easily when cut off and inserted in the ground as fence posts. (Damon 1931: 772)

In the course of a few years it was evident that the Pride of India was not well adapted for these wind-swept slopes, and Manager Carl Isenberg set out thousands of koa seedlings, a hard wood native to those ridges and a lusty child of Hawaiian forests. ... So dense did the shade become at one time that hundreds of the koa trees were cut out for firewood. (Damon 1931: 773)

While the plant species of the plantation landscape changed so did the architectural landscape. The sugar plantation infrastructure included ditch systems, railroads and engine houses, bridges, interisland shipping storage facilities and housing.

The first Līhu'e Mill was built in 1849 and it was the start of the town of Līhu'e. In 1890s besides the Mill, there was a plantation store with a post office, a hotel, a hospital and mule stables. By 1910, the town included a bank, a bakery, a coffee shop, a separate post office building, a tailor shop and a county building. The County building was built on 5 acres purchased from Līhu'e Planation in 1913. A large



armory with stables was constructed in 1920s just behind the Wilcox Library (Kaua'i Museum) and a County Annex building just northeast of the County Building was constructed in 1934. Next to the Library was also a Bandstand built around the 1930s. Next to that, off 'Eīwa Street was the Sheriff Building, which was a wooden frame structure, facing Rice Street. The Sheriff's building before it was a sheriff's building was the Hyde Rice butcher shop. This building later was converted to the Red Cross Shop around 1930 and then demolished around 1950s. Figure 7 shows a 1924 photo of the project area, showing the Wilcox Library, a road next to the library, the open pasture/athletic field.

In 1969, the State built a new library building on Hardy Street and the contents of the Wilcox Library were moved to that location. The A.S. Wilcox Building after that became jointly the Kauai Museum.



Figure 7. 1924 Photo of Līhu'e, showing Līhu'e Armory (present State Building location) and County Building with cane and pasture land in the foreground, view to the southwest (courtesy of Hawai'i State Archives: digital collections) from Kamai and Hammatt 2016:36. Red arrow indicated project area which appears to include a street between the then Wilcox Library and the Līhu'e Store and the open pasture/athletic field.



# **ARCHAEOLOGICAL BACKGROUND**

The current project area has not previously been subject to archaeological research. However, there have been multiple projects over the past few decades in Kalapakī Ahupua'a, with several projects having been conducted in Līhu'e proper. The archaeological record of early Hawaiian occupation in this area indicates a date range of c. A.D. 1100 to 1650 for pre-Contact Hawaiian habitations (Walker et al. 1991). A radiocarbon date of A.D. 1170-1400 was obtained from excavated sediments near the mouth of Hanamā'ulu Stream which is somewhat far from this project area. The following archaeological projects studied lands located in and near the current project Table 1. The nearest excavations were that done by State Parks Archaeologist Martha Yent for Archaeology Week looking for the old Sheriff's Building (Yent 2000). Most of these investigations yielded no significant historic or cultural sites, or relatively minimal finds:

Author	Location	Survey Level	Findings
Soong 1978	Kalapakī	Archaeological	No Sites
	Ahupua'a	Reconnaissance Survey	
McMahon 1990	Nāwiliwili,	Archaeological Field	Documented three
	Kalapakī, and	Check	previously identified
	Hanamā'ulu		historic residential sites
	Ahupua'a		
Walker, Kalima, and	Līhu'e	Archaeological	Ten historic properties were
Goodfellow 1991	District	Inventory	identified, three pre-Contact
		Survey	and
			seven historic: a habitation
			complex with cultural
			deposits
			(SIHP #s 50-30-08-1838a and
			-
			1838b); a complex with wall
			and
			terrace (#s 50-30-08-1839a
			and -
			1839b); a retaining wall (#50-
			30-
			08-1840); a road (#50-30-08-
			1841); a wall (#50-30-11-
			1842); a
			complex with a concrete
			foundation, a road, and a
			concrete
			wall

\_



	1		
Hammatt and	Kaumuali'i	Archaeological	Four historic properties were
Chiogioji	Highway	Assessment	identified: the Grove Farm
1998	Corridor,		office building in Puhi, the
	Nāwiliwili,		Līhu'e Mill Bridge, the
	Ha'ikū,		Hoʻomana Overpass Bridge.
Yent 2000	Kalapakī	Archaeological	No sites.
	Ahupua'a	Inventory Survey	
O'Hare,	Nāwiliwili	Archaeological	Five historic properties were
Groza, and	and	Inventory	identified:
Monahan	Kalapakī	Survey	Plantation-era flume, terrace,
2012	Ahupua'a	,	and culvert; a rock and
			mortar drainage ditch dating
			to the 1930s; a Plantation-
			era rock wall; a remnant
			Plantation-era train bridge;
			and Plantation-era section of
			train tracks and a sugarcane road.
Dowell and Dago	Kalanakī	Archagological	
Powell and Dega	Kalapakī	Archaeological	
2013	Ahupua'a	Inventory Survey	
Kamai and Hammatt	Kalapakī	Archaeological	No findings
2016	Ahupua'a	Monitoring	
Powell and Dega	Kalapakī	Archaeological	One historic property
2016	Ahupua'a	Monitoring	identified: rock wall





*Figure 8. Archaeological Studies near the project area.* Modified from Kamai and Hammatt 2016.



Most of the historic properties near the project area are buildings, cemeteries, or infrastructure related to the Plantation Era. Figure 8 shows the location of these sites relative to the project area.



Figure 9. Historic Properties near the project area (Modified from Kamai and Hammatt 2016).

# **METHODS**

#### Field Methods

On September 6, 2016, archaeologist Nancy McMahon, principle archaeologist for Exploration Associates, Ltd. performed a pedestrian survey of the court yard of Kaua'i Museum and research of some of the infrastructure of the court yard. On September 28 and 29, 2016, a subsurface survey consisting of the excavation of 1 trench in the proposed elevator shaft and three other locations in the proposed office footings walkway and elevator shaft. Subsurface testing was conducted using a hand excavations and then we decided to use a mechanical auger for the three other locations due to the soil compaction. Field observations were recorded and photographs were taken of the project area and the trenches. Trenches and test pits were measured and trench profiles were photographed. Soil identification, color and chroma was obtained using a Munsell color chart. Field crew consisted of archaeologists, Nancy McMahon, Linz Armstrong, Chris Landreau and Scott Sagum.



#### **Testing Plan**

Figure 10, shows the testing plan agreed upon with Kaua'i Archaeologist, Mary Jane Naone. Initially two test trenches were proposed: one in the elevation shaft and the second, where the footings would be for the new office building but where the old performance platform was located which was removed in 2012. After the bricks and cement were removed, the court yard was saturated with water in order for the cement saw to work. Water penetrated the below the cement and sand/gravel into the subsurface layers making hand excavation very difficult and extending the field work for an additional day.



Figure 10. Proposed Testing Plan.



#### **Revised Testing Plan**

Once we started excavating the elevator shaft, we found the soils to be hard clay, due to the water use to cut the bricks but also after research the area appeared to be part of a street and clearly pasture use. These activity compacted the soils which made it difficult to hand excavate. After a brief discussion with the Kauai Archaeologist, Mary Jane Naone, we decided to use a mechanical gas powered auger to trench to the elevator shaft depth. We also decided to auger the other 3 footing locations with the auger (Figure 11).



Figure 11. Locations of the Trench and Auger locations.



# **RESULTS OF FIELDWORK**

The initial fieldwork component was conducted on September 6, 2016 by principal investigator and archaeologist Nancy McMahon of EAL. A 100% surface survey recorded no surface sites or artifacts were found in the court yard, although the court yard is part of the Kaua'i Museum complex [SIHP#30-11-9344], but not a contributing element to the nomination.

The subsurface fieldwork component was conducted on September 28 and 29th, 2016 by archaeologists, Nancy McMahon, Chris Landreau, Linz Armstrong, Scott Sagum and briefly Milton Ching for his auger. Every attempt was made to place the trench in proposed elevator shaft location and footings of the new office. Ron Agor, the architect for the project marked the locations on the ground in the court yard. The cement and bricks were cut and removed from these locations by a contractor who had to use a wet saw to cut the brick and cement. This was problematic as the water saturated the subsurface soils and as the water dried up the soils became clay like and hard to dig through. Figure 8 shows the 4 test locations for this survey as they were modified in the field. The four locations are a representative sampling of the subsurface context. A large 2 meter by 4 meter test unit was placed in the elevator shaft location. All the testing evinced the same soil composition, very homogenous natural silty clay strata, and a description of the soils represented by all four test locations.

No pit features, cultural deposits nor any artifacts were identified in any of the test locations. The soils encountered conform to the Līhu'e series.

Subsurface testing predominantly revealed homogenous natural silty clay strata. We found an <u>O horizon</u> with the brick which was recently placed in the courtyard, under that in the area where the elevator is to be located – we have a cement slab, wire, thin mm clean sand for leveling, then <u>strata I</u> [5 YR 3/4] fill with historic nails, and wire, and <u>strata II</u> [5YR 4/4] which is the dark red brown silty clay soil (hard packed clay). We excavated to 5.5 feet in this location, since the elevator will go down to 4' 6". On the opposite side of the elevator shaft where the footing for the new building will be, we did further testing, strata I disappeared, the fill later disappear, below the O horizon which no cement slab was found, we are directly on strata II. We excavated in four footing locations to almost 3' since grade beams will be at 16" and foots at 24". Results in this four footing locations were the same. These lands were utilized for a lengthy duration for sugar cane (Līhu'e Plantation Co.) and then later pasture and a road also reflects the lack of cultural materials.

#### Soils Description

0-14 cm Red Brick plus basalt, concrete and sand

Strata I 14-40 cm 5YR3/4



Strata II 5YR3/4 dark reddish brown (hard packed clay) 40-077 cm Structure consistent and plasticity, dry, moist, wet plasticity, roots abundance, diameter class m, Boundary clear Appearance smooth.

Auger A Brick to 10 cm, Concrete 10-22 cm, Sand 22-28 cm, Stratum I 28-49 cm, Stratum II 49-77 cm

Auger B Brick to 11 cm, Concrete 11-22 cm, Sand 22-24 cm, Stratum 24- 49 cm, Stratum II 49-88 cm

Auger C Brick to 12 cm, Concrete 12-20, Sand 20-25 cm, Stratum 25- 49, Stratum II 49-100 cm





Figure 12. Trench 1 Profile.





Figure 13. Photograph of Trench Profile.





Figure 5. Auger A, Representative Sample Profile.



# SUMMARY

#### Conclusion

The *ahupua'a* of Kalapakī has been densely populated and modified by human means through the pre-Contact through the 21<sup>st</sup> century. Though extensive Native Hawaiian agricultural sites and historic rice and cane agriculture has obliterated many of these sites in the valley proper, it was postulated that historic period sites related to ranching might be present in the project area. However, recent utilization of the uplands and the modern use of the subject parcel suggest that any remnant sites that may have been present are gone. This land area has seen several changes in use from Native Hawaiian agricultural use to post contact changes of cane cultivation to pasture for ranching, then use as a part of an athletic field, and its current use as the Kaua'i Museum court yard. We did not expect to find much Native Hawaiian evidence and thought we might get more historic archaeology finds but we did not find anything including any infrastructure associated with the construction of the former Wilcox Library.

#### Recommendations

As no subsurface historic properties were present in the court yard of the Kaua'i Museum. EAL recommends that the new addition, walkway and elevator shaft will have "no effect" on archaeological concerns. Since no historic properties were found during this Archaeological Inventory Survey this is now considered an Archaeological Assessment. Consequently, EAL's recommendation for the proposed project is "no historic properties affected". No further archaeological work is recommended. Should historic properties or burial sites be identified during ground disturbance, all work should immediately cease, and the appropriate agencies notified pursuant to applicable law.



## **References Cited**

#### Bell, Matthew, Constance R. O`Hare, Matt McDermott, and Shawn Barnes

2006 Archaeological Inventory Survey of the Proposed Līhu'e Airport Improvements, Hanamā'ulu and Kalapakī Ahupua'a, Līhu'eDistrict (Puna Moku), Island of Kaua'i, TMK [4] 3-5-001: Por.005, 008, 102, 160, and 3-7-002: Por. 001. Cultural Surveys Hawai'i, Inc. Kailua, Hawai'i.

#### Bennett, Wendell C.

1931 *The Archaeology of Kaua'i.* Bernice P. Bishop Museum, Bishop Museum Bulletin 80, Honolulu, Hawai'i.

#### Chinen, Jon J.

1958 *The Great Māhele, Hawaii's Land Division of 1848*. University of Hawai'i Press, Honoulu, Hawai'i. 1971 *Original Land Titles in Hawai'i*, University of Hawai'i Press, Honoulu, Hawai'i.

#### Ching, F.K.W., P.B. Griffin, W.P. Kikuchi, W.H. Albrecht, J.C. Belshe, and C. Stauder

1973 *The Archaeology of Puna, Kaua'i, Niumalu Ahupua'a, Loko Kuapa o Alekoko.* Archaeological Research Center Hawai'i, Lawai, Hawai'i.

#### Chiogioji, Rodney, Kēhaulani E. Souza, and Hallett H. Hammatt

2004 Historical and Cultural Assessment for the Proposed Improvements Project at Nāwiliwili Harbor, Nāwiliwili Ahupua'a, Island of Kaua'i. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

#### Condé, Jesse C., and Gerald M. Best

1973 Sugar Trains, Narrow Gauge Rails of Hawai'i. Glenwood Publishers, Felton, California.

#### Coulter, John W.

1931 *Population and Utilization of Land and Sea in Hawaii, 1853*. B.P. Bishop Museum Press, Honolulu, Hawai'i.

#### Creed, Victoria S., Loren Zulick, Gerald K. Ida, D.W. Shideler, and H.H. Hammatt

1999 Archaeological Assessment of the Proposed Līhu'eAirport Expansion Area, Hanamā'ulu and Kalapakī Ahupua'a, Līhu'eDistrict, Island of Kaua'i (TMK 3-501: 5, 6, 8, 9, 109, 111, and 158 and 3-7-02: Por. 1). Cultural Surveys Hawai'i, Kailua, Hawai'i.

#### Damon, Ethel M.

1931 Koamalu. Privately printed at the Honolulu Star-Bulletin Press, Honolulu, (2 Volumes).

#### Dorrance, William H. and Francis S. Morgan

2000 The 165-Year Story of Sugar in Hawai'i. Mutual Publishing, Honolulu, Hawai'i.

#### Emerson, Nathaniel B.

1993 *Pele and Hi'iaka, A Myth from Hawaii.* Reprinted from 1915, University of Hawai'i Press, Honolulu, Hawai'i.



#### Evensen, Trina

2016 Draft ILS Kauai Museum, William Hyde Rice Building, Mason Architects, Honolulu, Hawai'i.

#### Fornander, Abraham

1918 Fornander's Collection of Hawaiian Antiquities and Folklore. Vol V, Part 1. Bishop Museum Press, Honolulu, Hawai'i.

#### Hammatt, Hallett, H.

1988 Archaeological Reconnaissance Survey of 150 acres of Coastal Land, Kalapakī, Kaua'i Island [Kaua'i Lagoon's Resort]. Cultural Surveys Hawai'i, Kailua, Hawai'i.

1990 Archaeological Assessment of Phase III, IV, V Kaua'i Lagoons Resort, Kalapakī, Kaua'i, TMK 4-3-5-001:102. Cultural Surveys Hawai'i, Kailua, Hawai'i.

#### Hammatt, Hallett H., and Victoria S. Creed

1993 Archaeological Inventory Survey of 61.6 Acres in Nāwiliwili, Kaua'i. Cultural Surveys Hawai'i, Inc., Kailua, Hawai'i.

#### Handy, E.S. Craighill

1940 *The Hawaiian Planter, Volume 1.* Bishop Museum Bulletin No. 161, Bernice P. Bishop Museum, Honolulu.

#### Joesting, Edward

1984 Kaua'i: The Separate Kingdom. University of Hawai'i Press, Honolulu.

#### Kalima, Lehua, and Helen Wong Smith

1991 Appendix B: Historical Documentary Research, IN, *Archaeological Inventory Survey, Hanamā'ulu Affordable Housing Project Area, Land of Hanamā'ulu, Līhu'e District, Island of Kaua'i (TMK: 3-7-03:Por. 20),* by Alan T. Walker, and Paul H. Rosendahl. Paul H. Rosendahl, Ph.D., Inc, Hilo, Hawai'i.

#### Kamakau, Samuel M.

1961 Ruling Chiefs of Hawaii. Kamehameha Schools Press, Honolulu.

#### Kaua'i Historical Society

1991 The Kaua'i Papers. Kaua'i Historical Society, Līhu'e, Kaua'i.

#### Kelsey, Theodore

n.d. "Kaua'i' Place Names." Unpublished manuscript, Kelsey Collection, Hawai'i State Archives.

#### Kikuchi, William K.

1973 Hawaiian Aquacultural System, Ph.D. Dissertation. The University of Arizona, Tucscon, Arizona.

1987 "The Fishponds of Kaua'i," *Archaeology on Kaua'i, Vol. 14, No. 1, March, Anthropology Club*. Kaua'i Community College, Puhi, Kaua'i.



#### McMahon, Nancy

1990 Archaeological Fieldcheck of Three Parcels in Līhu'e Judiciary District: Possible Locations for a New Kaua'i Judiciary Building, Nāwiliwili, Kalapakī, and Hanamā'ulu, Kaua'i. State Historic Preservation Division, State of Hawai'i.

2013 Cultural Impact Assessment for Rice Camp Affordable Senior Housing Project Kalapakī Ahupua'a Līhu'e District (Puna Moku), Island of Kaua'i TMK: [4] 3-6-04: 009 and 3-6-09: 001, McMahon Consulting, Līhu'e, Hawai'i.

#### Monahan, C. and H. Hammatt

2008 Archaeological Literature Review and Field Inspection Report for the Nāwiliwili- Ahukini Bike Path Project Nāwiliwili, Kalapakī and Hanamā'ulu Ahupua'a Līhu'e District, Kaua'i Island TMK: (4) 3-2-004; 3-5-001, 002 & 3-6-002, 019, 020, and various rights-of-way between various plats. On File at State Historic Preservation Division, Kapolei.

#### Neller, Earl, and Stephen Palama

1973 *The Archaeology of Puna, Kaua'i: From the Ahupua'a of Niumalu to the Ahupua'a of Kīpū.* Archaeological Research Center Hawai'i, Lawai, Hawai'i (on file at CSH).

#### O`Hare, C., R. Groza, and C. Monahan

2012 Archaeological Inventory Survey for the Ho`omana Road Realignment of the Phase I Kaumuali`i Highway Project, Nāwiliwili and Kalapaki Ahupua`a, Līhu'e District, Island of Kaua`i TMK:3-8-004, 3-8-005 & 3-8-016, various parcels and portions of various parcels. On File, State Historic Preservation Division, Kapolei.

#### Powell, Jim and Mike Dega

2014 Archaeological Inventory Survey of Two Parcels for Senior Affordable Housing in Kalapakī Ahupua'a, Līhu'e District, Island of Kaua'i Hawai'i, [TMK: (4) 3-6-004:009 & 3-6-009:001], SCS, Honolulu, Hawai'i.

2016 Draft Archaeological Monitoring Report for the old Court House Renovations, in Kalapakī Ahupua'a, Līhu'e District, Island of Kaua'i Hawai'i,SCS, Honolulu, Hawai'i.

#### Pukui, Mary K.

1983 *'Olelo No'eau: Hawaiian Proverbs and Poetical Sayings*. Bishop Museum Special Publication No.71, Bernice P. Bishop Museum Press, Honolulu, Hawai'i.

#### Pukui, Mary K., Samuel H. Elbert, and Esther Mookini

1974 Place Names of Hawai'i. University of Hawai'i Press, Honolulu, Hawai'i.

#### Pukui, Mary K., and Samuel H. Elbert

1986 Hawaiian Dictionary. Revised and Updated. University of Hawai'i Press, Honolulu, Hawai'i.

#### Rice, Mary A.

1914 "History of Līhu'e ." Typescript of a talk presented on December 17, 1914 to the Kaua'i Historical Society. Reprinted in *The Kaua'i Papers*, pp. 46-67. Kaua'i Historical Society, Līhu'e, Kaua'i.



#### Rice, William H.

1974 Hawaiian Legends. Originally published in 1923. Bernice P. Bishop Museum, Honolulu, Hawai'i.

#### Walker, Alan T., and Paul M. Rosendahl

1991 Archaeological Inventory Survey, Kalapakī Point Development Project Area. Land of Nāwiliwili, Līhu'e District, Island of Kaua'i. Paul PHRI, Inc, Hilo, Hawai'i.

#### Walker, Alan T., L. Kalima, and Susan T. Goodfellow

1991 Archaeological Inventory Survey Līhu'e /Puhi/ Hanamā'ulu Master Plan, Lands of Hanamā'ulu, Kalapakī, Nāwiliwili, and Wailua, Līhu'e District, Island of Kaua'i (TMK 4-3-2-; 4-3-3-; 4-3-9-). PHRI, Inc, Hilo, Hawai'i.

#### Wichman, Frederick B.

1998 *Kaua'i: Ancient Place-Names and Their Stories.* University of Hawai'i Press, Honolulu, Hawai'i. 2003 *Nā Pua Ali'i O Kaua'i. Ruling Chiefs of Kaua'i.* University of Hawai'i Press, Honolulu, Hawai'i.

#### Wilcox, Carol

1996 Sugar Water, Hawaii's Plantation Ditches. University of Hawai'i Press, Honolulu, Hawai'i.

#### Wilkes, Charles

1845 *Narrative of the United States Exploring Expedition, Volume 4*. Lea and Blanchard, Philadelphia, Pennsylvania.

#### Yent, Martha

2000 Preliminary Archaeological Investigations: Former Sheriff's Building County Building Complex, Līhu'e, Kaua'i, DLNR State Parks, Honolulu, Hawai'i.



# Appendix A



DAVID Y. IGE GOVERNOR OF HAWAII





#### STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

June 16, 2016

Kauai Museum Association Ltd. 4428 Rice Street Lihue, HI 96766

SUBJECT: Chapter 6E-10 Historic Preservation Review Other: Request for Determination Address – 4428 Rice Street Kalapaki Ahupuaa, Puna District, Island of Kauai TMK: (4) 3-6-005:005 Owner: Kauai Museum Association Ltd. SUZANNE D. CASE CHAIRPERSON DARD OF LAND AND NATURAL RESOURCES ISSION ON WATER RESOURCE MANAGEME

> KEKOA KALUHIWA FIRST DEPUTY

JEFFREY T. PEARSON DEPUTY DIRECTOR - WATER

BOATING AND CEAN RESCRATION BUREAU OF CONVPANNES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVITION AND CASTAL LANDS CONSERVITION AND CASTAL LANDS ROMEREAND FORESTRY AND WILLIE BUNDREEME KAHOOLAWE SUISAND RESERVE COMMISSION LAHOOLAWE SUISAND RESERVE COMMISSION STATE PARKS

LOG NO: 2016.00676 DOC NO: 1605AB02

On March 21, 2016, the State Historic Preservation Division (SHPD) received the submittal for Section 6E-10 Historic Preservation Review. The submittal included the scope of work, plans, and renderings. The scope of work includes construction of a new, second story office and elevator on the rear (North facade) of the William Hyde Rice Building and installation of an accessible chairlift in the Albert Spencer Wilcox Memorial Building.

The Albert Spencer Wilcox Memorial Building of the Kauai Museum is listed on the Hawaii and National Registers of Historic Places [SIHP #30-11-9344]. The William Hyde Rice Building, which is adjacent to the Wilcox Building, was constructed in 1960, is located within the nomination boundary, and is not listed as a contributing resource.

In order for SHPD to make a determination for this 6E-10 review, please provide the following:

- 1. A completed Intensive Level Survey (ILS) for the William Hyde Rice Building to identify character defining features and determine its eligibility for inclusion in the Hawaii and National Registers of Historic Places
- 2. A Permit Set of the proposed scope of work with the seal and signature of the architect of record
- 3. A limited archaeological inventory survey to include solely subsurface testing in two areas: the proposed elevator shaft and area of new ground disturbance. Placement of the excavations will be dependent on the areas of ground disturbance outlined in permit plans and with SHPD consultation.

Currently, the proposed scope of work will affect the historic integrity of the Wilcox and Rice Buildings because of its scale, irreversible nature and incompatible design. SHPD offers the following recommendations to minimize the adverse effect to the Wilcox Building:

- 1. Screen the addition with short, mid, and high level landscaping (north and west facades)
- 2. Incorporate horizontal reveals between the existing building and proposed new addition
- 3. Consider the use of glass as a main building material; the proportions and division of lites should relate to the front façade fenestration of the Rice Building
- 4. Consider changing the column shape to reflect Roehrig's and Dickey's work

(Continued on Reverse)



Ę

Please contact Mary Jane Naone at maryjane.naone@hawaii.gov or 808.271.4940 for questions regarding archaeology and Anna Broverman at anna.e.broverman@hawaii.gov or 808.692.8028 for questions regarding architecture or this letter.

Mahalo,

Alan S.Downer, PhD Administrator, Deputy State Historic Preservation Officer

cc: Ron Agor, Architect Agor Architects, LLC ron@agorarchitects.com Aloha,

flan S. Downer

Alan S. Downer, PhD Administrator, State Historic Preservation Division Deputy State Historic Preservation Officer

cc: Ron Agor Agor Architects, LLC ron@agorarchitects.com Polly Tice, Research Section Director Mason Architects Inc. pt@masonarch.com