

AGRICULTURAL RESOURCE CENTER OF HOEA

MASTER PLAN SUMMARY REPORT

for

an Agricultural Processing Facility in North Kohala, Hawaii Island

Prepared for:

County of Hawaii Department of Research and Development
and
the Hawaii State Office of Planning

Prepared by

Hawaii FFA Foundation
and
Kahua Pa'a Mua, Inc.

July 2011



This Report was Prepared under an Award from the
U.S. Department of Commerce
Economic Development Administration

Award No. 07 79 05930

This publication was prepared by Hawaii Future Farmers of America Foundation, and Kahua Pa`a Mua, Inc. for the Hawaii State Office of Planning and the County of Hawaii Department of Research and Development. The statements, conclusions, and recommendations are those of the authors and do not necessarily reflect the views of the Economic Development Administration

ABSTRACT

The Master Plan for the Agricultural Resource Center of Hoesa, an Agricultural Processing Facility in North Kohala, was completed on July 30, 2010 and transmitted to EDA in August 2011. North Kohala is a rural region in the County of Hawaii which comprises Hawaii Island, the largest island of the eight main islands in the State of Hawaii. North Kohala has been struggling to find economic alternatives to replace the sugar plantation which closed in the mid-1970s.

This plan supports a community-based project to strengthen the local economy by developing a sustainable agricultural industry. The project supports small farmers and ranchers in order to ensure the future of agriculture in the region and increase food self-sufficiency for the State of Hawaii.

A master plan was completed including an environmental site assessment, identification of land use and zoning regulatory requirements, site plan maps, building floor plans and elevations, the Agricultural Resource Center of Hoesa governance structure, proposed construction and operating budgets and sources of funding.

The Economic Development Administration investment of \$20,000 was matched with in-kind-services from the Hawaii State Office of Planning, the Department of Research and Development of the County of Hawaii, the Hawaii Future Farmers of America Foundation and Kahua Pa`a Mua, Inc.

EXECUTIVE SUMMARY

In 1778, the year Captain James Cook sailed his ship into Kealahou Bay on the Island of Hawaii, the indigenous population of North Kohala is estimated to have been 30,000. This community sustained its people through cultivation of the land and the sea.

Over the last century the proportion of food grown or caught to feed the population of the State has decreased. It is estimated that currently over 80% of food consumed is imported. This is a concern to the people of Hawaii, since the cost of transporting food is vulnerable to dramatic increases in the cost of fuel for shipping.

The need for an agricultural processing facility in North Kohala was determined through numerous community forums and meetings. Kahua Pa'a Mua, Inc. was formed to acquire the land, plan, fund, construct and operate an agricultural resource center. The community-based organization entered into partnerships with the Hawaii FFA Foundation and the County of Hawaii Department of Research and Development to create a master plan.

In 1993 an environmental site evaluation was conducted for a 500 acre agricultural park by Chalon International of Hawaii, Inc., a major land owner in North Kohala. Years passed and the North Kohala community's plan for an agricultural resource center to support the agricultural park tenants had moved no closer to reality until, in 2006, the Hawaii State Office of Planning received a grant from the Economic Development Administration to provide technical assistance to project proposals in the 2003 Hawaii Statewide CEDS.

Community advocates for the Agricultural Resource Center of Hoesa (ARCH), a CEDS project, made a proposal to the Hawaii State Office of Planning to create a master plan for the ARCH on five acres within the Kohala Agricultural Park that could form the basis for moving forward with land acquisition, design and construction.

The Master Plan for the Agricultural Resource Center of Hoesa includes a draft Environmental Assessment for the Kohala Agricultural Park, a 500 acre site which includes the selected five acre site for the project. The Master Plan also includes a summary of the land use requirements for construction, site maps and plans for the proposed facilities, the governance structure, preliminary cost estimates, the proposed operating budget and proposed funding sources.

The Hawaii State Office of Planning acknowledges with gratitude the dedicated work of David Fuertes of Kahua Pa'a Mua, Inc., Leanne Okamoto of Hawaii FFA Foundation, Jane Horike of the Department of Research and Development, County of Hawaii, and Gail Fujita, the EDA Representative for Hawaii and the Outer Pacific.

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for

an Agricultural Processing Facility in North Kohala, Hawaii Island

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Agriculture Resource Center of Ho'ea

Values:

1. Self-development/Family unity
2. Food Resiliency (50%)
3. Reduce Health Disparity

Purpose:

1. Build healthier families and community.
2. Produce healthy food to sustain Kohala and beyond.
3. Assist Kohala community in becoming 50% food sustainable.

Origin:

1. 1778 - Kohala fed 30,000+ people.
2. Kohala has always been a diversified agricultural community.
3. Today the State of Hawaii only produces 18% of consumption.

Destiny:

A Healthier
Kohala Community.

PROJECT DESCRIPTION

ARCH – Agriculture Resource Center of Ho‘ea

ORIGIN:

In the year 1778, North Kohala fed a population of approximately 30,000 people. Kohala sustained its people on agriculture, by cultivation of the land and sea. Today, the year 2010, our entire State only produces 18% of its population consumption. A need for facilities such as ARCH was determined through numerous community forums and meetings, North Kohala's master community plan (CDP), reiterated the concept of becoming food sustainable by 50% (food this community consumes.)

VALUES:

To promote self-development and family unity
To achieve the CDP goal of being food resilient by 50%
To reduce health disparity

PURPOSE:

To build healthy families with strong family unity
Sustain a healthy community = healthy food production = healthier people
Meeting the CDP goal of 50% food sustainability
Produce and meet the needs of the Kohala community and beyond

DESTINY:

A healthier Kohala community through education, production, and processing of beneficial food products.

Site Description:

The proposed site is a 5.00 acre parcel is located in the Hualua ahupua'a on the east side of Upolu Road in the District of North Kohala, Island and County of Hawaii. The site was primarily selected since it is located in the Ho'ea Agricultural Park, a 500 acre agricultural development that will use renewable energy and water for multiple applications to produce wholesome food for local and export markets. The Ho'ea Agricultural Park is an ideal location due to the Park's commitment to sustainable agriculture and to the utilities and other resources that may be available to the project. The site's natural setting has slightly rolling topography, covered in grasses with a few scattered trees.

Irrigation water will be available from the Kohala ditch and potable water will be available from the Department of Water Supply. Wastewater shall be treated by one or more Individual Wastewater Systems (IWS) that meet all the State's and County's requirements. Any increase in storm runoff from the project will be contained onsite as required by Hawaii County Standards. A system of drywells and other mitigative measures will be utilized to contain the increased runoff as required by the County.

An Environmental Assessment (EA) For The Kohala Agricultural Park was completed in 1993 and the following information was addressed in the EA:

1. Geology/Hydrology
2. Soils Survey
3. Climate
4. Air/Noise/Visual Qualities

A Flora study was not done for the property, however a Botanical Survey by Char & Associates May 1992 was conducted on the property (Ho'ea Agricultural Park) just to the east of the project site that represents the botanical species in the agricultural park.

A Fauna study was not done for the property, however, as mentioned in the Flora section, a study was conducted east of the property (Ho'ea Agricultural Park) that reflects a fairly accurate description of fauna likely found.

The property (Ho'ea Agricultural Park) contains no archaeological sites on the property that are documented with the Department of Land and Natural Resources Historic Preservation Division Office. No reconnaissance survey has been conducted on the site to verify the presence or absence of archaeological features. It is very unlikely that any sites remain because the entire area was cultivated in sugar cane from the late 1800's.

CHALON INTERNATIONAL of Hawaii, Inc.

P.O. BOX 249 HAWAII, HAWAII 96719 • TELEPHONE: (808) 889-6257 • FAX: (808) 889-5252

April 23, 1993

Mr. Yukio Kitagawa
State Department of Agriculture
P.O. Box 22159
Honolulu, Hawaii 96823
Attention: Mr. Paul Schwind

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT OF THE KOHALA AGRICULTURE
PARK FOR INTERNAL REVIEW PURPOSES

Dear Mr. Kitagawa:

Chalon has prepared a draft environmental assessment of the proposed agriculture park located in North Kohala. We submit this draft document for your internal review and comments.

We will integrate your comments with those from the Department of Land and Natural Resources in a revised version that will be formally submitted for agency review.

We look forward to your constructive comments and appreciate the assistance your department has put forth on this project to date.

Sincerely,

Matthew Grady
Matthew Grady
Planner

CHALON INTERNATIONAL OF HAWAII, INC.

Attachment

cc: Duane Kanuha
Michael Gomes

CHALON INTERNATIONAL of Hawaii, Inc.

P.O. BOX 249 HAWAII, HAWAII 96719 • TELEPHONE: (808) 889-6257 • FAX: (808) 889-5252

April 23, 1993

Mr. Glenn Taguchi
Department of Land and Natural Resources
Land Management Division
P.O. Box 936
Hilo, Hawaii 96721

**SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT OF THE KOHALA AGRICULTURE
PARK FOR INTERNAL REVIEW PURPOSES**

Dear Mr. Taguchi:

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We will integrate your comments with those from the Department of Agriculture in a revised version that will be formally submitted for agency review.

We look forward to your constructive comments and appreciate the assistance your department has put forth on this project to date.

Sincerely,

Matthew Grady
Matthew Grady
Planner

CHALON INTERNATIONAL OF HAWAII, INC.

Attachment

cc: Duane Kanuha
Michael Gomes

DRAFT

April 1, 1993

DRAFT ENVIRONMENTAL ASSESSMENT
FOR THE
KOHALA AGRICULTURE PARK
KAHEI, NORTH KOHALA DISTRICT, HAWAII

ORIGINAL
① STAMP DRAFT
ON THIS.
② THEN MAKE
COPIES

TMK'S: 5-5-03:01, 04 & 05
5-5-06:02 & 10
5-5-07:02, 05, 07, 08, 10, 11, 12 & 13

APPLICANTS:

Chalon International of Hawaii, Inc.
P.O. Box 249
Hawi, Hawaii 96719

Contact Person: Matthew Grady, Planner, 889-6257
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P.O. Box 22159
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Contact Person: Paul J. Schwind, Planning
Administrator, 973-9469

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Office of the Governor
State Capitol
Honolulu, HI 96813

AGENCIES CONSULTED
IN MAKING ASSESSMENT:

State Department of Agriculture
State Department of Health
Environmental Management Division
State Department of Land and Natural Resources
Division of Historic Preservation
Environmental Division
State Department of Transportation
U. S. Department of Agriculture
Soil Conservation Service
County of Hawaii
Planning Department
Department of Public Works
Department of Water Supply
Na Maka'ala 'O Kohala
Hawi Agriculture and Energy
Boteilho Enterprises, Inc.
Bishop Estate

DRAFT

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1. INTRODUCTION

1.1 Purpose and Content of the Environmental Assessment

This Draft Environmental Assessment (DEA) has been prepared to describe the potential environmental impacts of a proposed agriculture park, located just to the south east of Upolu Airport in the North Kohala District on the Island of Hawaii. Chalon International of Hawaii, Inc., and the State Department of Agriculture are proposing to jointly develop an agriculture park too meet the needs of farmers seeking reasonably priced land and water to produce agriculture products for the Hawaii and mainland markets. This DEA has been prepared in compliance with provisions of Hawaii Revised Statutes (HRS) Chapter 343 Environmental Impact Statements, Title 11, Chapter 200 of the Hawaii Administrative Rules, Department of Health.

This DEA describes the proposed agriculture park project; the existing environmental conditions of the project site and the surrounding area; the probable environmental impacts that might result from the proposed project; the mitigation measures that would be employed to minimize potential adverse environmental impacts; the alternatives to the proposed project that have been investigated. This DEA supports a declaration of no significant impacts (Negative Declaration).

The reasons this proposed project is subject to Chapter 343 is because: 1) State owned lands are being utilized; 2) State money may be utilized to develop and operate the agriculture park and; 3) State Department of Agriculture Administrative Rules, Chapter 4-153 Section 8 Planning, subsection (b) (4), requires preparation of an EIS in accordance with Chapter 11-200 for the Board of Agriculture to take action upon.

2. GENERAL DESCRIPTION OF THE ACTION'S TECHNICAL, ECONOMIC, SOCIAL AND ENVIRONMENTAL CHARACTERISTICS

2.1 General Description

The proposed action involves the establishment of an agriculture park located on tax map keys: 5-5-06:02 and 10; 5-5-07:02, 05, 07, 08, 10, 11, 12, and 13 encompassing approximately 796 acres of land in the North Kohala District on the island of Hawaii. Approximately 253.6 acres of land is owned by the State of Hawaii and the balance, 542.4 acres are owned by Chalon International of Hawaii, Inc.. Another seven acres of land located on tax map keys 5-5-03:01 and 04/05, owned by Bishop Estate and the State of Hawaii respectively, will be utilized for the purposes of refurbishing an existing reservoir (refer Figures 1 and 2 and to Table 1). Should

PROJECT SITE

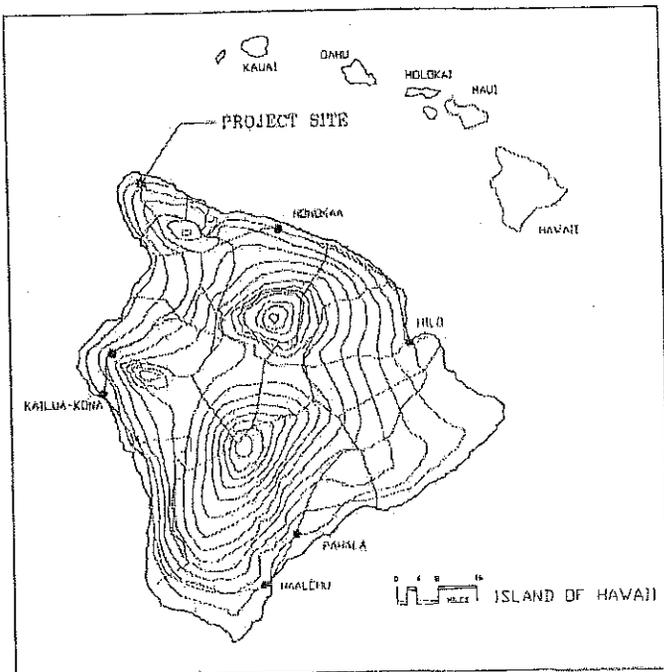
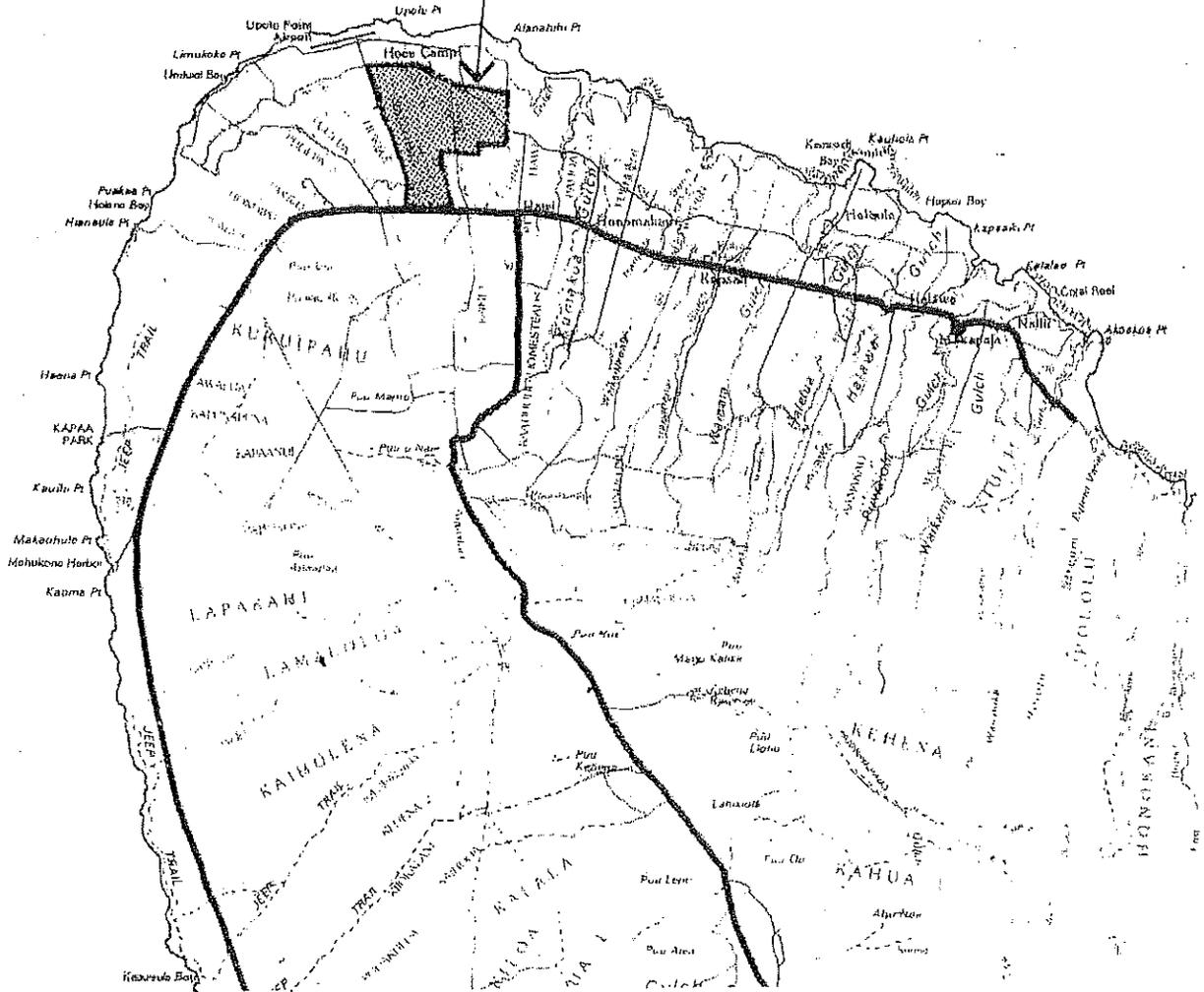
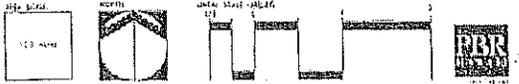
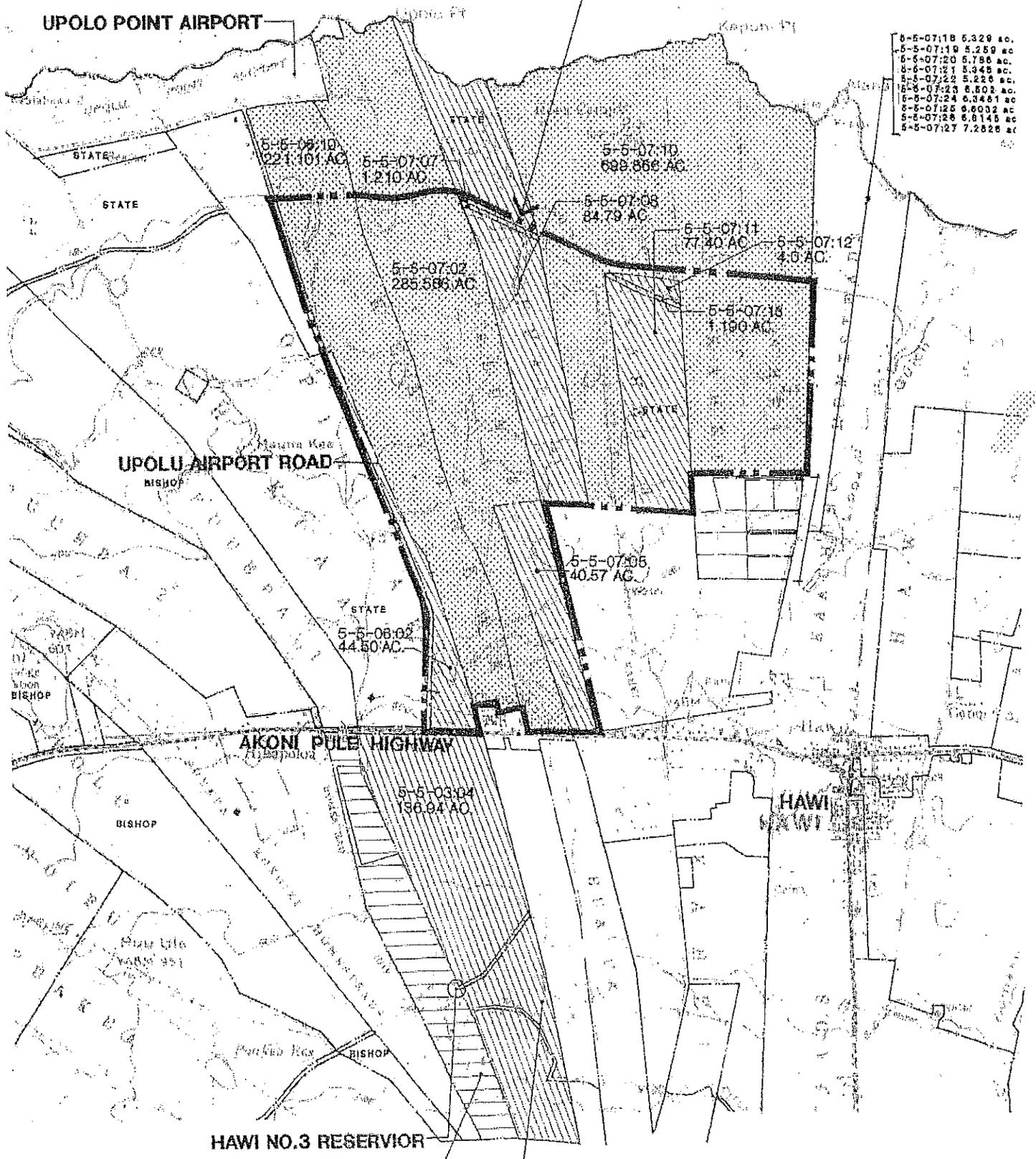


FIGURE 1
 LOCATION MAP
 ENVIRONMENTAL ASSESSMENT
KOHALA AGRICULTURAL PARK
OTHER INVESTMENTS OF UHWAZ NORTH HAWAII REGION OF HAWAII



PROJECT SITE

UPOLO POINT AIRPORT

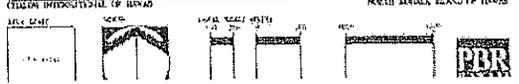


5-5-07:18	5.329 ac.
5-5-07:19	5.259 ac.
5-5-07:20	5.756 ac.
5-5-07:21	5.348 ac.
5-5-07:22	5.226 ac.
5-5-07:23	5.802 ac.
5-5-07:24	6.3461 ac.
5-5-07:25	6.002 ac.
5-5-07:26	6.0145 ac.
5-5-07:27	7.2826 ac.

LEGEND

-  CHALON INTERNATIONAL
-  STATE OF HAWAII
-  BISHOP ESTATE

FIGURE 2
TAX MAP KEYS (PARCEL MAP)
ENVIRONMENTAL ASSESSMENT
KOHALA AGRICULTURAL PARK



the use of the reservoir not be needed, there is a possibility that portions of same tax map keys would be used for new waterlines.

TABLE 1
Land Ownership

<u>TAX MAP KEY</u>	<u>ACRES</u>	<u>OWNER</u>
5-5-03:01	84.90	Bishop Estate (*)
5-5-03:04	136.94	State of Hawaii (*)
5-5-03:05	31.78	State of Hawaii (*)
5-5-06:02	44.50	State of Hawaii
5-5-06:10	±150.6	Chalon International
5-5-07:02	±197.9	Chalon International
5-5-07:05	40.57	State of Hawaii
5-5-07:07	1.12	State of Hawaii
5-5-07:08	84.79	State of Hawaii
5-5-07:10	±193.9	Chalon International
5-5-07:11	77.40	State of Hawaii
5-5-07:12	4.0	State of Hawaii
5-5-07:13	1.16	State of Hawaii
Total:	802.94	

Note: (*) indicates that of these three tax map keys approximately seven (7.0) acres will be utilized for the project and not the entire tax map key acreage as shown in the table.

The property is situated about one mile west of Hawi town in the geographical area known as Kahei and is accessed primarily by the Upolu Airport road and Akoni Pule Highway (Figure 2).

The State Department of Agriculture and Chalon International of Hawaii, Inc. intend to enter into a joint venture partnership agreement, pursuant to Section 166-5 Hawaii Revised Statutes, for the planning, development, and management of an integrated agriculture park on both State and Chalon owned lands. The joint venture agreement will exercise the option to seek exemptions from various County of Hawaii planning, zoning and subdivision requirements, pursuant to Section 166-4 of the Hawaii Revised Statutes.

The State Department of Agriculture, pursuant to Sections 171-11 and 171-117, Hawaii Revised Statutes, has requested that a Governor's executive order and set aside be granted to the Department of Agriculture for the purposes of establishing an Kohala Agriculture Park.

2.2 Technical Aspects of the Proposed Project

The project plans to provide farm lots sized 5, 10 and 20 acres. It is anticipated that about 45 to 65 lots would be created

overall, including about (24) 20-acre lots on Chalon's property; (11) 10-acre lots and (22) 5-acre lots on the State's property. Final subdivision plans will determine the precise number of lots to actually be created (refer to Figure 3). The lots will be leased on terms as long as practical for all parties involved. The agriculture park will permit a wide range of activities including but not limited to nurseries, orchards, vegetables, aquaculture and animal husbandry. The project will not permit residential units.

Access to the project area will be from a section of the Akoni Pule Highway (route 250), located between the town of Hawi and the intersection of Akoni Pule Highway and the Upolu Airport Road. Secondary access points will be from portions of the Upolu Airport Road and the Hoesa Road fronting the project, both maintained by the County of Hawaii. Internal access roads will be constructed to connect each one of the proposed lots.

The project intends to utilize the Kohala Ditch for irrigation water. Irrigation water demand estimates made by the State Department of Agriculture indicate a need of about 3.75 million gallons per day (Hawaii County Water Use and Development Plan - Plan Revision Draft 12/91, Department of Water Supply, County of Hawaii, by Megumi Kon, Inc. Appendix C, pg.3).

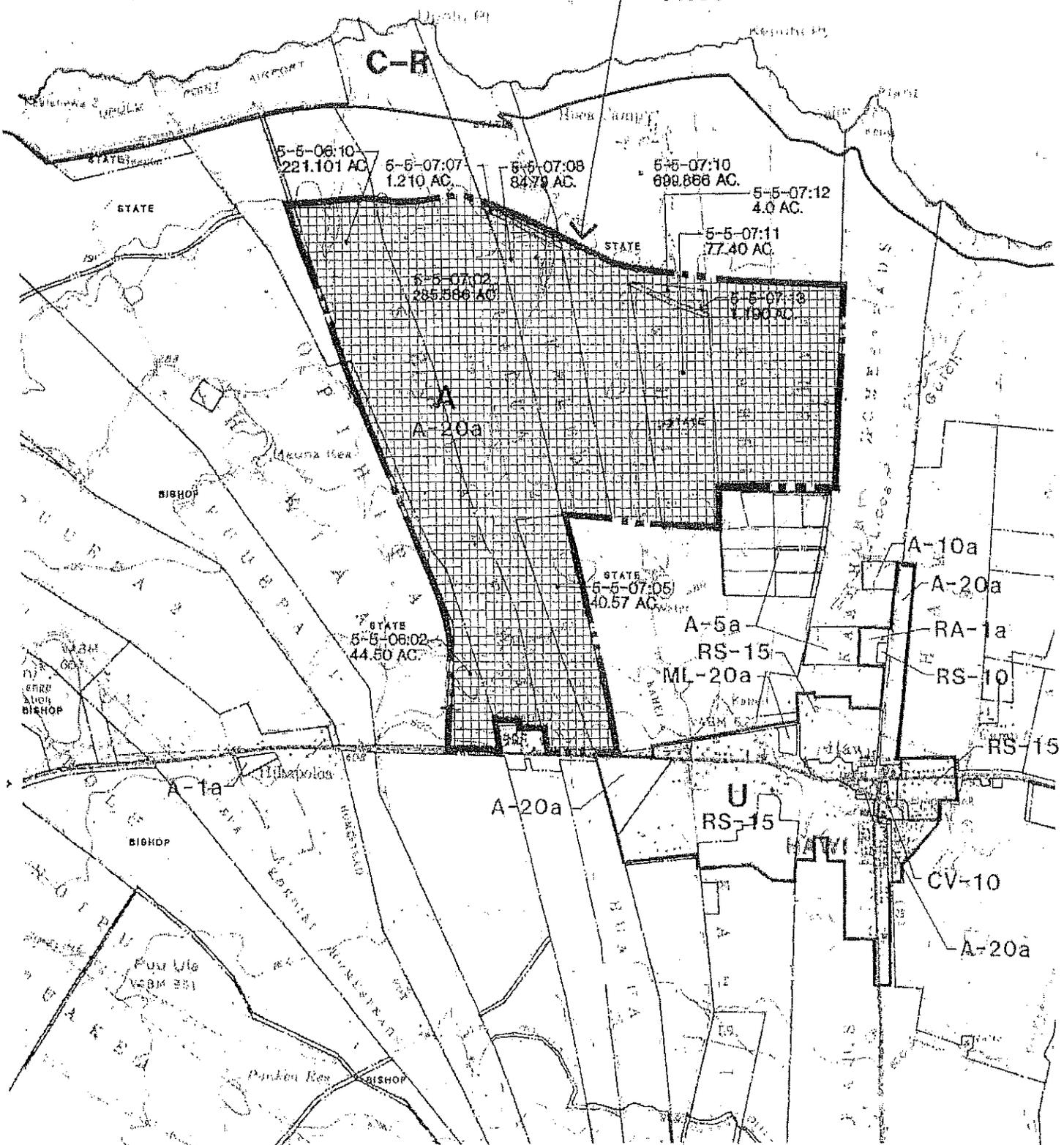
The proposed agriculture park conforms to all State and County plans as indicated in Table 2 and shown on Figure 4. Land use designations for the property are as follows:

TABLE 2
Land Use Designations

<u>Information Source</u>	<u>Designation</u>
State Land Use -	Agriculture
Hawaii County General Plan -	Intensive Agriculture
North Kohala Community Development Plan -	Agriculture (A-20a and A-5a)
Hawaii County Zoning -	Agriculture (A-20a)
ALISH -	80% Prime and 20% Other Important
Land Study Bureau -	B, C and E
SMA -	+ 2 ac. Inside/± 794 ac. Outside of SMA Boundary Line
FIRM -	Undetermined (area of 500 year flood zone)
Existing Land Use -	Pasture for Cattle
Previous Land Use -	Sugar Cane from 1880 to 1975
Underground Injection Control (SDOH) -	Site is above the UIC line

Site selection for the proposed agriculture park has been under consideration for at least three years, starting in 1989. This project concept is part of Chalon's overall development plan to provide an area where intensive agriculture can take place in North

PROJECT SITE



LEGEND

STATE LAND USE

-  AGRICULTURE
-  URBAN
-  CONSERVATION RESOURCE SUBZONE

HAWAII COUNTY ZONING

-  AGRICULTURE (20 AC. MIN. LOT SIZE)
-  AGRICULTURE (5 AC. MIN. LOT SIZE)
-  AGRICULTURE (1 AC. MIN. LOT SIZE)
-  RESIDENTIAL (15,000 SF. LOT)
-  RESIDENTIAL (10,000 SF. LOT SIZE)

FIGURE 4
STATE & COUNTY LAND USE DESIGNATIONS
ENVIRONMENTAL ASSESSMENT
KOHALA AGRICULTURAL PARK



Kohala. The site was selected with the assistance of the Citizens Participation Committee (a private group of citizens selected by Chalon to provide advice and feedback in the formulation of Chalon's plans). In particular, the Agriculture Subcommittee provided the primary input into selecting this site.

Several steps are needed to implement the proposed park. Chalon will prepare a preliminary subdivision plan for Chalon owned properties that are zoned Agriculture A-20a (minimum lot size 20 acres). At the same time Chalon and the State Department of Agriculture will formulate the contents of the joint development agreement. Concurrent to Chalon's actions, the State Department of Agriculture will ask the Department of Land and Natural Resources to set aside the state land for an agriculture park under the Department of Agriculture's control. Upon Department of Agriculture's (DOA) receipt of an executive order, the DOA will begin the sequence of events needed to complete the installation of infrastructure. It is estimated that by mid-to late 1995 tenants can begin leasing the farm lots. Full occupancy is expected by the year 2000.

The timing for these major steps are as follows:

<u>Tasks</u>	<u>Estimated Completion</u>
1. Chalon Subdivision (Tentative Plan)	Aug. 1993
2. Joint Development Agreement (Draft)	Oct. 1993
3. Executive Order Set Aside	March 1994
4. Infrastructure Improvements	March 1995
5. Full Occupancy	Year 2000

It should be noted that the joint development agreement will become effective and the actual use of State owned lands and funds can be integrated into the overall park, only when the executive order has been approved and executed.

The project has the following goals:

- a) Utilize underutilized properties (State and Chalon).
- b) Intensify agricultural use of the land.
- c) Shared costs of infrastructure and operation.
- d) Provide opportunity for more than two lessees to benefit the utilization of the property.
- e) Conform to State and County plans.
- f) Cause minimal negative environmental, social and economic impacts.

2.3 Socioeconomic Aspects of the Proposed Project

This proposed agriculture park responds to a demonstrated need for farm lots, as expressed in meetings held in North Kohala and an informal sign-up list that was posted in Chalon's office to solicit interested farmers. The list, as of 1990 represented 30 people in Kohala who expressed the need for lots ranging in size from 5, 10

and 20 acres. The farmers voiced the need to grow vegetables, nursery products and fruits and nuts. The project is benefitting those farmers or would be farmers who reside primarily in North and South Kohala. The project also responds to the need to keep land in productive agriculture and to provide jobs and local produce.

The Governor's Agriculture Coordinating Committee has submitted two reports to the Governor's office in 1991 and 1992 supporting the creation of the Kohala Agriculture Park and demonstrating its important role in the community and West Hawaii to perpetuate agriculture.

It is estimated that on-site costs for agriculture standard roadways, street intersection improvements, irrigation water lines, mass excavation and rough grading and electricity will cost between \$3.28 million and \$4.53 million. An additional off-site cost of about \$200,000 will be required to refurbish the Hawi No. 3 reservoir and pipeline leading from the Kohala Ditch to the park. Should this reservoir not be utilized, a cost of about \$500,000 would be anticipated for an onsite reservoir. The cost of the infrastructural improvements will be paid by the State of Hawaii and Chalon International of Hawaii.

3. SUMMARY DESCRIPTION OF THE AFFECTED ENVIRONMENT

3.1 Physical Environment

Geology/Hydrology

The underlying geology of the site is comprised primarily of one volcanic eruptive phase, the Pololu phase, that formed the Kohala mountain beginning 450,000 years ago. The underlying hydrology of the site harbors a basal lens which lies about 2 to 5 feet above mean sea level. There are no impacts expected to the geology underlying the site. The potential for infiltration of fertilizers and chemicals used in farming practices into the underlying groundwater is extremely remote. Contaminants would be subject to a transport infiltration depth of about 200 feet from the lowest point in the project area to the basal lens.

Soils/ Agriculture Potential/Topography

The Soil Survey, Island of Hawaii, State of Hawaii, dated December 1973 indicates the soils in the mauka section of the project area are of the Kohala series consisting of well-drained silty clays that formed in material from basic igneous rock influenced by volcanic ash. The dominant soil type is Kohala Silty Clay (KhC) 3 to 12 percent slopes. Runoff is slow to medium and erosion hazard is slight to moderate. Haiku Silty Clay (HaC) 7 to 15 percent slopes encompasses much of the makai side of the project site. This soil has

similar characteristics as the Kohala Silty Clay. (refer to Figure 5)

The Agriculture Lands of Importance to the State of Hawaii, (ALISH) classifies the land as "Prime" and "Other Unique". The Detailed Land Classification, designates that land as "B". Such soils are described as "good suitability" and can support crops. Land Evaluation Site Analysis scoring, based on the need for a 1990 statewide acreage of 650,005 acres of land for productive agriculture, indicates the land to be "Important Agriculture Land".

The topography of the property is characterized as gently sloping with rolling terrain. The slopes represent 5 to 12 percent grades.

The proposed project is not expected to adversely affect the soils, the agricultural productivity or the topography in any manner. The project is intended to take advantage of appropriate conditions for farming.

Climate

Kohala Corporation records indicate average annual rainfall at old Hoesa Camp (located just makai of the project area) to be 38.92 inches, with a monthly average of 3.24 inches. The Upolu 13 area (located at an abandoned reservoir in the middle of the project site) indicates a slightly higher rainfall of 42.49 inches annually, with 3.54 inches per month.

Temperatures at the Upolu Airport (the closest recording station) indicate the coldest month as February (mean maximum of 77.6 degrees F. and minimum of 64.2 degrees F), and the hottest month as September (mean maximum of 83.2 degrees F. and minimum of 68.2 degrees F.).

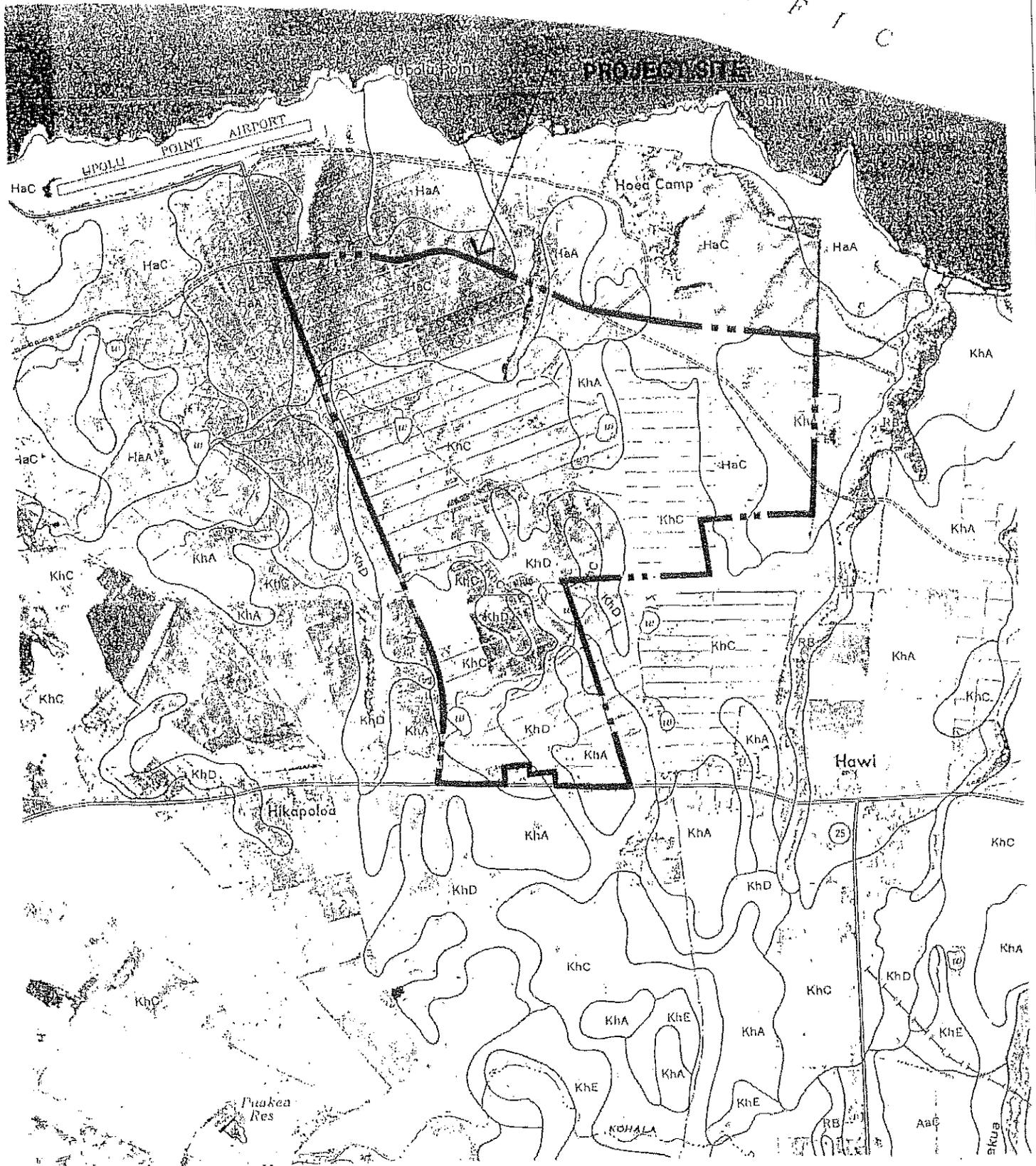
The Upolu Airport wind records, in terms of percentage of time and direction indicate dominant winds from the East (36%), followed by no wind (29%), northeast (14.5%), east southeast (5.3%), east northeast (3.5%) and all other directions (11.7%).

The proposed project is not expected to alter the climate in any manner.

Air/Noise/Visual Qualities

The existing project is classified as an "indirect source" of air pollution as defined in the federal Clean Air Act of 1977 because its primary association with air pollution is due to its inherent generation of mobile source, i.e., motor vehicle activity. The proposed project will also have short-term

I R T C



LEGEND

- HaA HAWI SILTY CLAY, 0 TO 3 PERCENT SLOPE
- HaC HAWI SILTY CLAY, 3 TO 12 PERCENT SLOPE
- KHA KOHALA SILTY CLAY, 0 TO 3 PERCENT SLOPE
- KhC KOHALA SILTY CLAY, 3 TO 12 PERCENT SLOPE
- KhD KOHALA SILTY CLAY, 12 TO 20 PERCENT SLOPE

FIGURE 5
SOILS MAP
ENVIRONMENTAL ASSESSMENT
KOHALA AGRICULTURAL PARK
COOPERATIVE UNIVERSITY OF HAWAII



SOURCE: "SOIL SURVEY OF ISLAND OF HAWAII, STATE OF HAWAII," DECEMBER, 1958

impacts due to the roadway construction and intermittent impacts due to tilling of soils for farming. There is a remote potential that under the operation phases of the project that chemicals (fertilizers, fungicides, insecticides) applied through spraying will drift downwind beyond the boundary line of the project. Negative impacts can potentially occur to those individuals who are incorrectly applying such chemicals. The proposed land use practices will not have an adverse effect on either the state or federal air quality standards and that all state and federal air quality standards will continue to be met at the project site.

The existing noise quality of the project site is dominated by natural factors, primarily the wind moving through the vegetation. Potential impacts on the noise quality of the site are chiefly limited to those generated by increased numbers of vehicles and, in the short-term, construction activities. The proposed project is not expected to adversely affect the area noise quality, however, it is likely that noise levels in localized areas would increase due to increased human activity. It is expected that the project would comply with all applicable State Community Noise Control regulations.

The existing visual character of the proposed project site is one of vast open space, pasture land and distant views of the ocean and the mountains. To the north, ocean views and the island of Maui are visible. To the south, the Kohala Mountain dominates the scene. Existing views will be retained in all directions should the proposed project proceed.

3.2 Natural Environment

Flora

The vegetation consists primarily of grasses and small scattered shrubs. This growth is less than 10 years old and represents introduced plant species. No study has been conducted on the actual site, however, Chalon has had studies (Botanical Survey, Hawi Makai Project, by Char & Associates, May 1992) conducted on property just to the east of the project site (about 1,800 feet, roughly one third of a mile) that represents the botanical species in the proposed agriculture park area. The Hawi Makai Study indicates that the project area was under sugar cane cultivation from the late 1800's to about 1975. Pasture land vegetation is the dominant vegetation type covering the entire site. Typical vegetation found on the site includes Guinea grass (Panicum maximum) and California grass (Brachiaria mutica). Small shrubs found on the project area include Christmasberry (Schinus terebinthifolius), guava (Psidium quajava), pluchea (Pluchea odorata), koa-hale or ekoa (Leucaena leucocephala),

and lantana (Lantana camara). These shrubs comprise about 5 to 10 percent of the entire project acreage. This site is dominated by introduced or alien plant species. None of these plant species are endemic (native to only Hawaii) and none are officially listed as threatened or endangered (U.S. Fish and Wildlife Service 1989). It is expected that the farming activities will pose no measurable impact to these existing plant species, other than the new introduction of diversified agricultural crops.

Fauna

No survey was conducted on-site, however, as mentioned in the Flora section, a study was conducted about one third of a mile east of the proposed agriculture park that reflects a fairly accurate description of fauna likely found. The Survey of Auyifauna and Feral Mammals at Hawi, North Kohala, Hawaii, by Phillip L. Bruner, October 1991 summarizes his findings. Two endemic birds (native) were spotted flying over the property: 1) Short-eared Owls and; 2) Hawaiian Hawk. Both species are commonly found in open grasslands and agricultural lands in Kohala. The report goes on to say that the Pacific Golden Plover could frequent the site from August through May, as these birds are migratory indigenous birds. Exotic birds (those introduced) recorded in the survey include the Japanese White-eye, the Zebra Dove, the Nutmeg Mannikin and the House Finch. Feral Mammals recorded were primarily the Small Indian Mongoose and feral cats. The proposed project is not expected to harm or influence the existing fauna. The introduction of new plant species is likely to attract a wider spectrum of animal or bird species than currently exists today. Additionally, some agricultural crops may act as a food source resulting in an increase in some of the existing population levels of animal or bird species.

3.3 Historical and Archaeological Resources

The project site contains no archaeological sites on the property that are documented with the Department of Land and Natural Resources Historic Preservation Office. No reconnaissance survey has been conducted on the site to verify the presence or absence of archaeological features. It is very unlikely that any sites remain on the surface because the entire area was cultivated in sugar cane from the late 1800's and early 1900's until the closure of the Kohala Corporation in 1975. Figure 6 identifies the Kohala Sugar Company's plantation field systems. Since that time the project area has been used for cattle grazing and the cultivation of corn and sorghum.

Research of existing literature reveals pertinent information about the area in general. North Kohala: Perception of a Changing

Community, by M.J. Tomonari-Tuggle, 1988, Section II.3 indicates the Hoesa Mill (site number 7105) to be located makai of the proposed project by about half a mile. The site is described as:

"an abandoned and deteriorating warehouse, sheds, and concrete platforms mark the site of Hoesa mill; coconut trees spot the locations of plantation houses." (Tomonari-Tuggle:1988:53)

The report continues to explain that small "camps" were associated with each of the mills. Hoesa Camp was immediately adjacent to Hoesa Mill (site 7105). Today no remnants of the camp exist. On the mauka side, between Akoni Pule Highway and the proposed project lies the former site of Camp 17, now used for residential use and under private ownership (refer to Figure 7).

An additional reference created by Archaeological Consultants of Hawaii, Inc. entitled Archaeological Inventory Survey With Subsurface Testing Report for A Property...In the Ahupua'a of Hawi, Paho, and Honomokau, North Kohala District, On the Island of Hawaii Revised September 1992 was conducted for Chalon's parcel of land about one third of a mile east of the subject property. The surface survey for the former sugar cane fields in this project area concluded an absence of historical sites due to the mechanical disturbances caused by the sugar cane cultivation. This same conclusion could be applied for the subject property of the proposed agriculture park.

Examination of old field maps starting in 1932 indicate a clear pattern of sugar cultivation over the entire project area. Subsequent field maps and aerial photographs demonstrate that sugar cane cultivation continued until the closure of the Kohala Corporation in 1975. Sugar cane cultivation tilled the soils to depths of 18 inches, thus disturbing and desecrating historical sites that may have once existed on the surface.

Discussions with members of the local historical group called "Na maka'ala 'O Kohala" indicate that Camp 17, located off the project site to the south, was the site of about 20 houses serviced by the Higa Store. The camp was dominated by plantation workers who originated in Okinawa. Na maka'ala 'O Kohala (NMOK) members discussed the influences that the Mookini Heiau had across the region including the proposed agriculture park site. They said there were few permanent structures, and there was no water for irrigation or drinking. There was scattered sweet potato cultivation and these crops were irrigated by small catchment systems. NMOK also stated that there was a plantation camp located alongside the current Upolu Airport runway. This camp was the home to many Portuguese immigrants. When the airport was constructed the camp was removed. Hoesa Mill was the dominant sugar mill located makai of the proposed agriculture park.

Based upon the historic knowledge to date and the lack of historic sites located on the surface the proposed project will have no

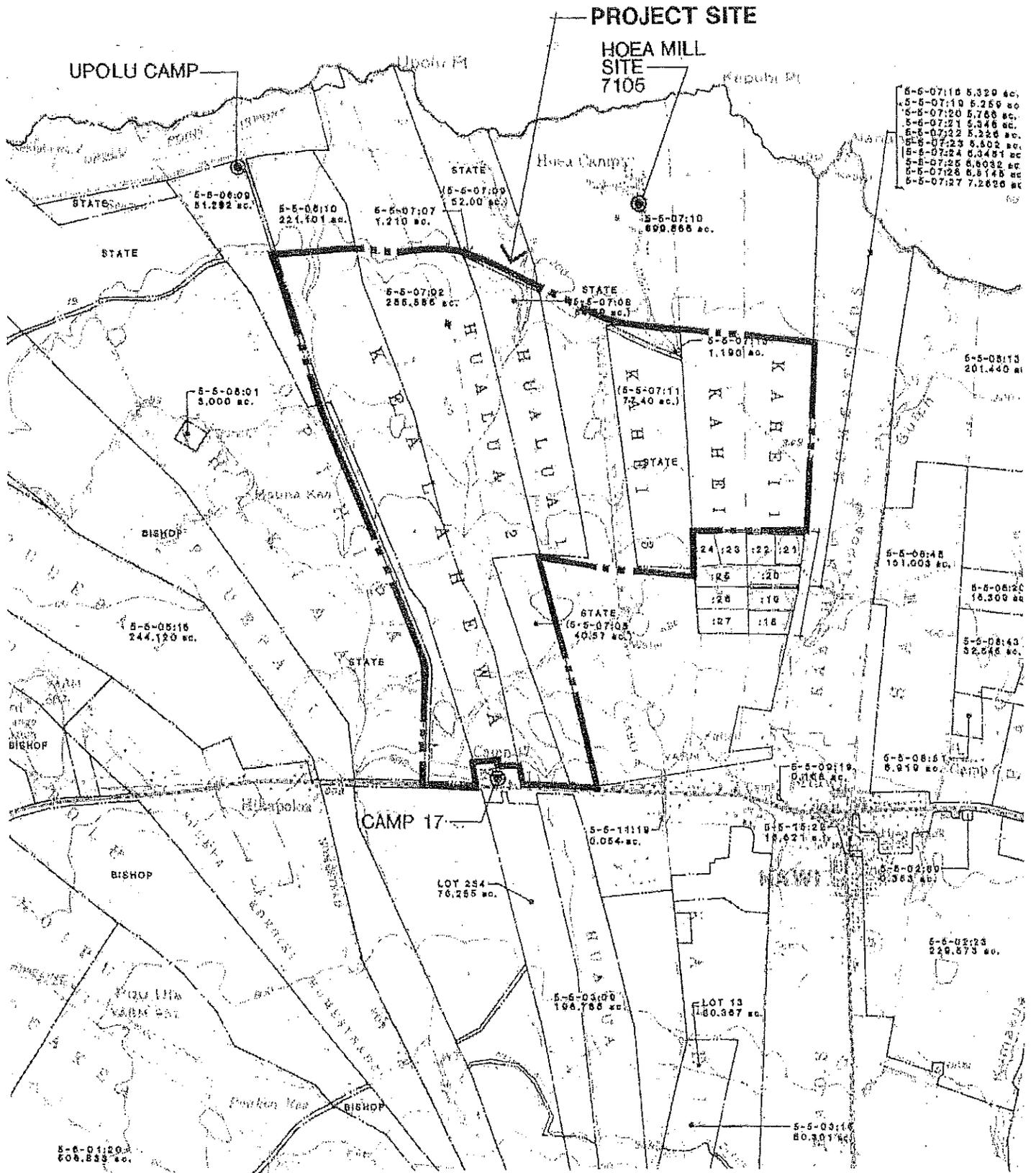
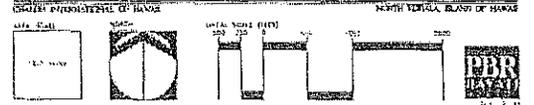


FIGURE 7
 HISTORIC SITES & AHUPUAA'S
 ENVIRONMENTAL ASSESSMENT
 KOHALA AGRICULTURAL PARK



SOURCE: DLNR HISTORIC SITES DIVISION, NA MAKA'ALA'O KOHALA.



adverse impact. Should any site be located during construction or operational phases, all work in the immediate vicinity will cease and the Department of Land and Natural Resources Historic Sites Division will be notified in addition to a consulting archaeologist and the County of Hawaii Planning Department.

3.4 Socioeconomic Environment

The 1990 Census information indicates a residential population in North Kohala of 4,291. Of this total population, 1,083 (25%) reside in Kapaau, 924 (21.5%) in Hawi and 496 (11.5%) in Halaula, the remaining 1,802 (42%) are scattered throughout the district. There are no major commercial activities in North Kohala. Small businesses dominate the district. The largest single employer is that of the Kohala Nursery, employing at times up to 60 people. The majority of the workforce travels out of the district to work in either Waimea or the resorts in South Kohala. The proposed project will not impact the existing population or its distribution. The project will prove beneficial by providing job opportunities to those individuals in close proximity to their residences. The project does not include residences and therefore supports a day-time population.

Both Chalon and the State of Hawaii lease the existing land to others for ranching and dairy purposes. Surrounding the project site is additional land leased for agriculture uses. Table 3 lists those tenants and known lease terms by tax map key and acreage.

TABLE 3
Tenants and Lease Terms on the Property

<u>Tax Map Key</u>	<u>Acres</u>	<u>Owner</u>	<u>Tenant</u>	<u>Lease Term</u>
5-5-06:02	44.5	State	Boteilho	Gen. Lease #4950 Expiration 2020
5-5-07:07	1.21	State	Chalon	Rev. Permit #6641 Annually
5-5-07:13	1.16	State	Chalon	Rev. Permit #6641 Annually
5-5-07:05, 08 11 and 12	206.76	State	None	None
5-5-06:10	150.6	Chalon	Boteilho	License, Expiration Dec. 1998
5-5-07:10	193.9	Chalon	Freitas	License, Expiration June 1996
5-5-07:02	197.9	Chalon	Boteilho	License, Expiration Dec. 1998

Figure 8 identifies those lessees on the project site and those surrounding the site.

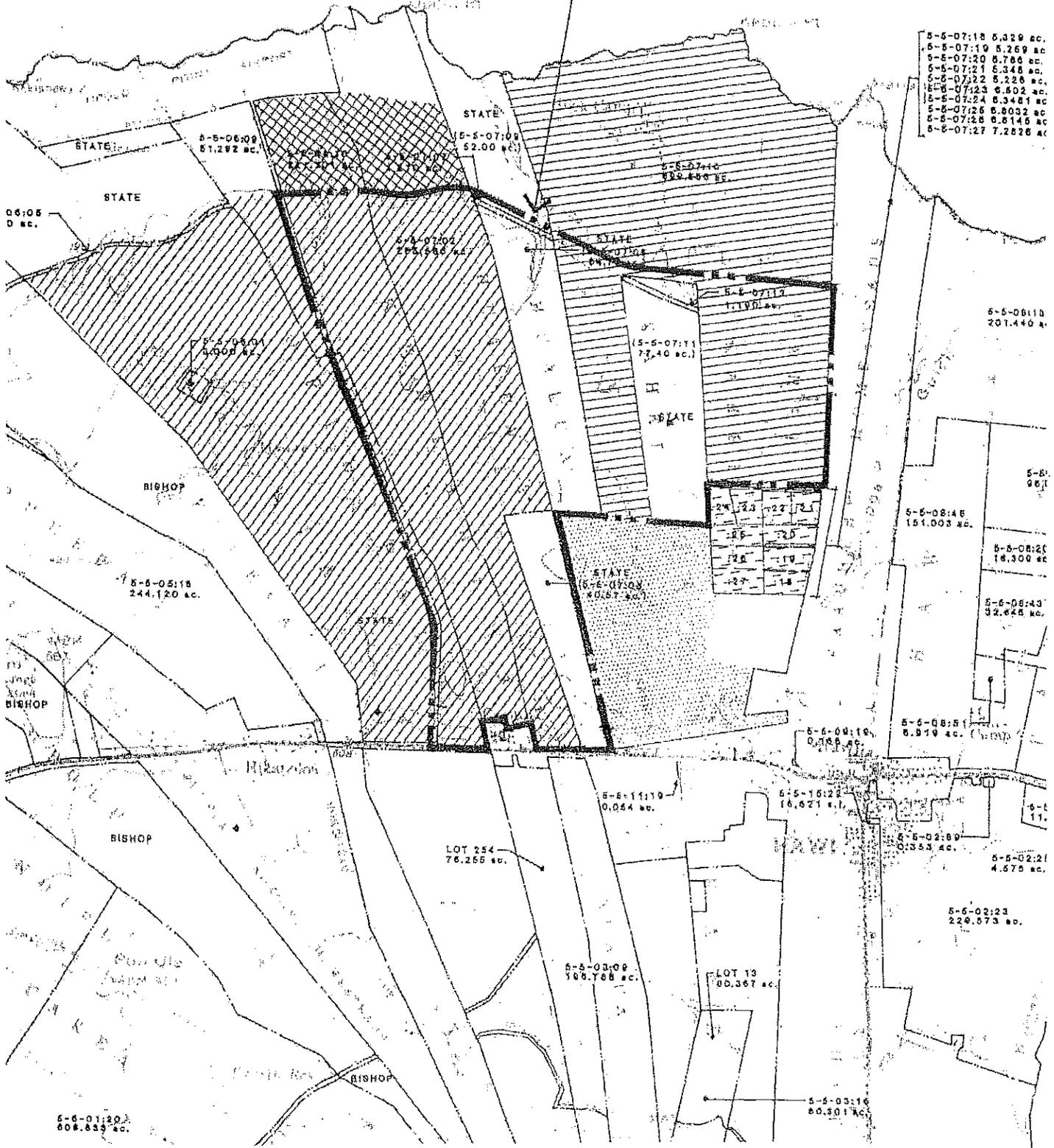
The lease, license and revocable permit agreements incorporate provisions to terminate the lease given proper written notice of one year in advance prior to the termination. The proposed project will impact Boteilho and Freitas. The State's land leased to Boteilho (tax map key 5-5-06:02 comprised of 44.5 acres) is a long sliver of land critical to the dairy operation. The proposed agriculture park plans to incorporate this lessee into the park using the same parcel. Lands owned by Chalon that are leased to Boteilho and Freitas will be used for the agriculture park and consequently, these two lessees will have to seek land elsewhere if they wish to operate with the same acreage. The lease terminations of these two tenants will enable 60 or more farmers to get on the site and produce crops beneficial for the district, island and the state.

Chalon and the State lease lands surrounding the proposed agriculture park to agricultural users. Chalon's leases include cattle ranching (Freitas, Ching and Pineko Partners and King), nursery and orchard crops (Kahei Agriculture Lots, various lessees), hydroelectric energy production and turfgrass cultivation (Hawi Ag. & Energy). The State leases are primarily for dairy farming (Boteilho Enterprises). To the northwest of the proposed project lies the Upolu Airport, controlled by the State Department of Transportation, Airports Division. Given this array of land uses, the proposed agriculture park will have a symbiotic relationship to the surrounding uses. In particular the Hawi Ag. & Energy corporation's mission is to act as an incubator and testing ground for agriculture producers by providing land, water and power. Should the products succeed in terms of growth expectations and in the market, Hawi Ag. & Energy seeks to find larger tracks of land for the farmer, preferably nearby, i.e. in the proposed agriculture park.

Refurbishment of the existing reservoir, Hawi no. 3, located on lands owned by Bishop Estate and the State of Hawaii will have a positive benefit to the existing and future users. The existing users include David Barclay (aquaculture), Malama Solomon (ranching/ farming), Boteilho Enterprises (dairy farming) and Masa Kawamoto (cattle ranching). Presently, the reservoir and pipeline is at least 25 years old and is rarely maintained. The proposed agriculture park incorporates the renovation of this system as a means to provide reliable water storage to maintain a consistent water supply to the park when the Kohala Ditch is inoperable.

The structure of the Joint Development between Chalon and the State Department of Agriculture will permit the State to meet its goals of establishing an agriculture park in North Kohala and Chalon to meet its goal of providing agriculture opportunities for those

PROJECT SITE



LEGEND

-  BOTIELMO ENTERPRISES (DAIRY FARMING)
-  CLIFFORD FREITUS (CATTLE RANCHING)
-  HAWI AG. & ENERGY (HYDRO-ELECTRIC & TURFGRASS)
-  KAHAEI AG. LOTS (DIVERSIFIED AG.)
-  ALICIA KING (CATTLE RANCHING)

FIGURE 8
LESSEES ON & OFF-SITE
ENVIRONMENTAL ASSESSMENT
KOHALA AGRICULTURAL PARK
STATE DEPARTMENT OF WATER HAWAIIAN TERRITORY



people in Kohala. The Joint Development component potentially saves the State of Hawaii money in terms of acquiring Chalon's land (up to \$14.0 million based on 542 acres at a land value of \$26,000 per acre). Additionally, overall implementation time for the project is decreased by Chalon working with the State, thus getting a completed project to the farmers more quickly than under the existing agriculture park program.

3.5 Infrastructure

Roads

The primary access roads into and out of the project will be the Akoni Pule Highway and the Upolu Airport road. To a lesser extent the Hoesa Road will be used. The Akoni Pule Highway is owned and maintained by the State Department of Transportation, Highways Division. The stretch of highway from the Upolu Airport road heading east to the intersection of the Hawi Road, a distance of 1.24 miles, has 4,235 vehicles traveling in both directions in a 24-hour time period as of 1990. This translates to an existing Level of Service (LOS) of A or B. Level of Service C would be approximately 7,600 traveling in both directions in a 24-hour period. The segment of highway from Upolu Airport Road heading west and south to Kawaihae, a distance of 16.5 miles, has 4,238 vehicles per 24-hours, traveling in both directions as of 1990. This translates to an existing LOS of A or B. Level of Service C translates to 9,700 vehicles per day. Given the limited number of farm lots proposed in the agriculture park (about 60), no residential component, and staggered work hours of farmers, the project will have a very limited impact on the existing level of service on the Akoni Pule Highway. Expected trip generation for each farm lot is four trips per day. Assuming there are 60 lots with two vehicles per lot, full occupancy would generate 240 vehicle trips per day.

The Upolu Airport road and the Hoesa road are owned by the County of Hawaii and are maintained by the Department of Public Works, Roadways Division.

Chalon and the State Department of Agriculture will create improvements to the roads as recommended by the State Department of Transportation and the County of Hawaii Department of Public Works. Presently the location and types of improvements are unknown until more refined concept plans are created.

Irrigation Water

The project is estimated to require about 3.75 million gallons per day of irrigation water from the Kohala Ditch. The

Kohala Ditch average daily flow is about 13.9 million gallons per day, of this amount about 1.5 million gallons per day are consumed by existing users. This means that about 12.4 million gallons per day are available for other uses. The proposed project would consume roughly 30 percent of this water. The impact of this water consumption is positive. The Kohala Ditch was constructed to promote agriculture. Presently, Chalon, the operators of the ditch, is seeking new users to: 1) utilize the unused water and; 2) to obtain revenues to maintain the existing system. It can be assumed that user fees charged for water use will be commensurate with other State run agriculture parks.

Solid Waste Disposal

Solid waste disposal is accommodated by individuals transporting their wastes to the Kaauhuhu Transfer Station approximately 2.5 miles away. The waste is then transported by the County of Hawaii Public Works Department, Solid Waste Division to the nearest landfill operation in Kona. The proposed project is not expected to significantly impact the existing and proposed landfill sites. It is expected that the bulk of the wastes will be "green matter" that can be composted on-site on an individual basis. It is anticipated that about half the wastes generated by residential development uses would accumulate in this project. This equals approximately 360 pounds per day for the total of 60 farm lots (assume 120 tenants x 6 lbs./day divided by 2). Chalon and the State are advocates of recycling and will encourage the agriculture park users to engage in recycling efforts. Composting and recycling will assist in reducing the volume of solid wastes need to be transported and disposed of in the County landfill site.

Wastewater Disposal

The proposed project does not include residences, yet there will be tenants utilizing the property during the daylight hours. Should tenants require a restroom facility, they will install the facility in compliance with all pertinent State and County rules and regulations. The State Department of Health (DOH) indicates the project site to be entirely above the underground injection control (UIC) line, meaning that no liquid wastes can be injected into the ground unless a permit has been approved by the DOH prior to such action.

Should a farm operation include confined animals in large concentrations (refer to National Pollution Discharge Elimination Systems Permit (NPDES), "criteria for determining a concentrated feeding operation", located in Appendix A) the lessees will be required to obtain an NPDES permit approval from the DOH prior to such activity taking place in order to

properly store and process the wastes generated from such practice.

Electrical Power and Communication

Electrical power and communication systems are available to the project site, should the agriculture park require these services. Power and telephone lines run along both the Akoni Pule Highway and the Upolu Airport road. Service lines will be installed along the primary internal access roads based upon expressed need from the perspective lessees. The demands for such services are expected to be minimal. Hawaii Electric Light Company, Inc (HELCO) will be the primary power provider.

3.6 Public Services

The existing hospital, police and fire stations are located in Kapaau, approximately three miles east of the project site. The proposed project is not expected to unduly burden these existing services. The agriculture park is utilized by day-time users, who for the most part live in North or South Kohala. This means that no new people are requiring services. The project may require assignment into one of the existing police beats, because currently that land area is largely unaccessible.

3.7 Relationship of Action to Existing Land Use Plans

The State Plan and more specifically the Agricultural Functional Plan call for the establishment of new agricultural parks in North Kohala. The State Land Use designation for the entire site is Agriculture. The West Hawaii Regional Plan designates the area as a "diversified crop area". The County of Hawaii General Plan designates the site as Intensive Agriculture; the North Kohala Community Development Plan designates the site as Agriculture (A-20a and A-5a); County Zoning designates the site as Agriculture A-20a. Additionally, the County of Hawaii Agriculture Development Plan indicates the development of agriculture parks as a "priority 1" plan of action.

These plans are in complete concurrence with the proposed project. The only potential deviation of the proposed project to the existing zoning would be an increase in density to a smaller lot size i.e. from 20 acre minimum lots size to 10 or 5 acre lot sizes.

Approximately 2 acres of the proposed agriculture park falls within the Special Management Area. Examination of the Special Management Area law under section 205A-22 HRS, Definitions, indicates the actions of proposed agriculture park are considered non-development. Specifically items (2) and (8):

"(2) Repair or maintenance of roads and highways within existing rights-of-way."

"(8) Use of any land for the purpose of cultivating, planting, growing, and harvesting plants, crops, trees, and other agricultural, horticultural, or forestry products or animal husbandry, or aquaculture or mariculture or plants or animals, or other agricultural purposes."

4. IDENTIFICATION AND SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES CONSIDERED

4.1 Major Impacts

The primary positive impacts are: utilization of prime agriculture lands for the express purpose of diversified agriculture; preservation of existing views; the potential increase in population numbers of and variations of animals and birds; the increase in land utilization from two existing lessees up to 60 lessees; the positive/symbiotic relationship of the proposed project to existing adjacent and surrounding uses; the increased reliability of irrigation water systems for existing users; the savings of State money for land acquisition; the potential for improved sections of county or state roadways and; the conformance of the project to all state and county plans.

The principal negative impacts are: reduced air quality due to construction, increased vehicle traffic, intermittent tilling of soils, and the spraying of chemicals; slight increases in noise emanating from localized areas within the project; introduction of new plant species displacing the existing non-native exotic pasture lands and scrub; lease termination of two tenants from Chalon owned lands; slight increases in traffic in the area of the project site due to increased access points and land users; and possibly the need for increased police security patrol within and around the project site.

Short-term impacts will be realized primarily on the project site through the construction of the roadways, drainage swales and irrigation systems. Related to this construction phase is the provision of jobs, emission of noise and dust and generation of traffic that accompanies construction.

Long-term impacts are chiefly those associated in the operational phase of the project. The potential exists that air quality will be diminished due to spraying of chemicals and increased mobile sources. About 60 tenants will be able to work the property and sell their Kohala grown products in Hawaii and potentially the mainland.

4.2 Alternatives Considered

Alternatives considered include: a) no action (meaning the land would continue to be utilized as it is today under license and general lease agreements to a few tenants); b) residential development for portions of Chalon's property fronting the Upolu Airport road or; c) the preferred alternative of an agriculture park.

These alternatives have been evaluated in terms of meeting the stated goals of the project mentioned in section 2.2.

Goal	Alternatives		
	A	B	C
1. Utilization of underutilized lands.		x	x
2. Intensify Agriculture Use.			x
3. Shared Infrastructure Costs.			x
4. Provide Many Farming Opportunities instead of a few.			x
5. Conforms to State and County plans.	x		x
6. Provides minimal negative environmental, social and economic impacts.	x		x

Note: the (x) indicates the goal is met under the appropriate alternative scenario.

Alternative A "no action" does conform to existing state and county land use policies and it also produces minimal negative environmental impacts, however, none of the other goals are met.

Alternative B, a residential proposal essentially meets only one goal, that of utilizing underutilized lands.

Alternative C, the preferred agriculture park meets all of the goals set forth. It utilizes underutilized lands owned by Chalon International and those lands under the jurisdiction of the State of Hawaii. Currently the state leases only one of the parcels that constitutes any useable size, the remaining 206.76 acres are left unused. The alternative provides an opportunity to intensify the land use while still maintaining the agriculture zoning. The alternative provides the opportunity to share infrastructure costs and management through the "joint development" approach under the agriculture park program. Department of Agriculture's records have shown that agriculture parks do not pay for themselves, particularly the capital improvements. The joint development permits a sharing of this expense. This alternative will provide as many as 60 farm lots, translating into many potential beneficiaries compared to the two lessees that benefit today. This

alternative conforms to state and county plans, with the exception of some small lot sizes that will be needed to accommodate different needs. Lastly, this alternative does not produce environmentally negative aspects particularly when compared to an agriculture park that includes residential and or large scale raising of livestock in confined pens.

5. PROPOSED MITIGATION MEASURES

Overall, this proposed project requires very few mitigation measures. Mitigation measures are in the following categories: air quality and relocation of existing tenants. Air quality will potentially be diminished due to the construction phases and to the operational phases. Mitigation measures include:

1. Minimizing the time of construction.
2. Retain existing ground cover until the latest date before construction.
3. Use of temporary area sprinklers in nonactive construction areas when ground cover is removed.
4. Station water truck on-site during construction period for immediate sprinkling.
5. Replanting the graded areas as soon as possible.
6. Planting of windbreaks within the project area to capture and dissipate airborne particles.
7. Establishment and enforcement of Covenants Codes and Restrictions to be made part of the lease agreement to reduce the potential of chemical drift by aerial applicators.

6. DETERMINATION

The implementation of an agriculture park on lands owned by Chalon International of Hawaii and the State of Hawaii is not expected to cause significant impacts to the environment. Impacts that are realized from the project are largely positive or have no impact, therefore it has been determined that a negative declaration be filed with the approving agency.

7. FINDINGS AND REASONS SUPPORTING DETERMINATION

In considering the significance of potential environmental effects, the applicant has considered the sum effects on the quality of the environment and evaluated the overall cumulative effects of the proposed action; The applicant has considered every phase of the proposed action, the expected consequences, both primary and secondary, and the cumulative, as well as the short and long-term, effects of the proposed action. As a result of these considerations, the applicant has determined that:

1. The proposed action does not involve an irrevocable commitment to loss or destruction of any significant natural or cultural resource;

2. The proposed action increases the range of beneficial uses of the environment;
3. The proposed action is in concert with the State and County of Hawaii long-term environmental policies, goals and guidelines as expressed in Chapter 344 of the Hawaii Revised Statutes and any revisions and amendments thereto, court decisions and executive orders and the county zoning code;
4. The proposed action does not substantially adversely affect the economic or social welfare of the community or state;
5. The proposed action does not substantially affect public health;
6. The proposed action does not involve substantial secondary impacts, such as population changes or effects on public facilities that are not already contemplated;
7. The proposed project does not involve substantial degradation of environmental quality;
8. The proposed action has been explored in entirety and thus cumulatively, including Chalon's lands that are not subject to the rules and regulations of Chapter 343 for agriculture use and subdivision, and therefore does not involve the commitment for larger actions;
9. The action does not substantially affect rare, threatened or endangered species, or its habitats;
10. The proposed action does not detrimentally affect air or water quality or ambient noise quality;
11. The proposed project does not affect environmentally sensitive areas such as flood plain, tsunami zones, erosion-prone areas, geologically hazardous land, estuaries, fresh water or coastal waters.

Further it appears that the proposed action is compatible with the locality and surrounding land uses and is appropriate to the physical conditions and capabilities of the area to be served; The existing physical and environmental aspects of the subject are will be preserved; the proposed action will not result in any significant adverse effects to the environment; and the proposed action is in keeping with the objectives and purposes of the project site and area. The applicants will be responsible for, and comply with, all applicable statutes, ordinances and rules of the Federal, State and Hawaii County governments.

AGPKBA.1

APPENDIX A

CRITERIA FOR DETERMINING CONCENTRATED ANIMAL
FEEDING OPERATIONS

CWA, whether or not applicable effluent limitations guidelines have been promulgated. See §§ 122.44 and 122.46.

Industry Category

- Adhesives and sealants
- Aluminum forming
- Auto and other laundries
- Battery manufacturing
- Coal mining
- Coil coating
- Copper forming
- Electrical and electronic components
- Electroplating
- Explosives manufacturing
- Foundries
- Gum and wood chemicals
- Inorganic chemicals manufacturing
- Iron and steel manufacturing
- Leather tanning and finishing
- Mechanical products manufacturing
- Nonferrous metals manufacturing
- Ore mining
- Organic chemicals manufacturing
- Paint and ink formulation
- Pesticides
- Petroleum refining
- Pharmaceutical preparations
- Photographic equipment and supplies
- Plastics processing
- Plastic and synthetic materials manufacturing
- Porcelain enameling
- Printing and publishing
- Pulp and paper mills
- Rubber processing
- Soap and detergent manufacturing
- Steam electric power plants
- Textile Mills
- Timber Products Processing

Appendix B—Criteria for Determining a Concentrated Animal Feeding Operation (§ 122.23)

An animal feeding operation is a concentrated animal feeding operation for purposes of § 122.23 if either of the following criteria are met.

(a) More than the numbers of animals specified in any of the following categories are confined:

- (1) 1,000 slaughter and feeder cattle,
 - (2) 700 mature dairy cattle (whether milked or dry cows),
 - (3) 2,500 swine each weighing over 25 kilograms (approximately 55 pounds),
 - (4) 500 horses,
 - (5) 10,000 sheep or lambs,
 - (6) 55,000 turkeys,
 - (7) 100,000 laying hens or broilers (if the facility has continuous overflow watering),
 - (8) 30,000 laying hens or broilers (if the facility has a liquid manure system),
 - (9) 5,000 ducks, or
 - (10) 1,000 animal units; or
- (b) More than the following number and types of animals are confined:

- (1) 300 slaughter or feeder cattle,
- (2) 200 mature dairy cattle (whether milked or dry cows),
- (3) 750 swine each weighing over 25 kilograms (approximately 55 pounds),
- (4) 150 horses,
- (5) 3,000 sheep or lambs;
- (6) 15,500 turkeys,
- (7) 30,000 laying hens or broilers (if the facility has continuous overflow watering),
- (8) 9,000 laying hens or broilers (if the facility has a liquid manure handling system),
- (9) 1,500 ducks, or
- (10) 300 animal units;

and either one of the following conditions are met: pollutants are discharged into navigable waters through a manmade ditch, flushing system or other similar man-made device; or pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

Provided, however, that no animal feeding operation is a concentrated animal feeding operation as defined above if such animal feeding operation discharges only in the event of a 25 year, 24-hour storm event.

The term "animal unit" means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0.

The term "manmade" means constructed by man and used for the purpose of transporting wastes.

Appendix C—Criteria for Determining a Concentrated Aquatic Animal Production Facility (§ 122.24).

A hatchery, fish farm, or other facility is a concentrated aquatic animal production facility for purposes of § 122.24 if it contains, grows, or holds aquatic animals in either of the following categories:

- (a) Cold water fish species or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year but does not include:
 - (1) Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year and
 - (2) Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of

food during the calendar month of maximum feeding.

(b) Warm water fish species or other warm water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include:

- (1) Closed ponds which discharge only during periods of excess runoff; or
- (2) Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

"Cold water aquatic animals" include, but are not limited to, the *Salmonidae* family of fish; e.g., trout and salmon.

"Warm water aquatic animals" include, but are not limited to, the *Ameiuride*, *Centrarchidae* and *Cyprinidae* families of fish; e.g., respectively, catfish, sunfish and minnows.

Appendix D—NPDES Permit Application Testing Requirements (§ 122.21).

TABLE 1.—TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS BY INDUSTRIAL CATEGORY FOR EXISTING DISCHARGERS

Industrial category	GC/MS Fraction 1			
	Volatile	Acid	Base/neutral	Pesticide
Adhesives and Sealants
Aluminum Forming
Auto and Other Laundries
Battery Manufacturing
Coal Mining
Coil Coating
Copper Forming
Electric and Electronic Components
Electroplating
Explosives Manufacturing
Foundries
Gum and Wood Chemicals
Inorganic Chemicals Manufacturing
Iron and Steel Manufacturing
Leather Tanning and Finishing
Mechanical Products Manufacturing
Nonferrous Metals Manufacturing
Ore Mining
Organic Chemicals Manufacturing
Paint and Ink Formulation
Pesticides
Petroleum Refining
Pharmaceutical Preparations
Photographic Equipment and Supplies

[Appendix D]

Land Regulatory Requirements For Construction:

A. Conformity with State & County Plans & Policies:

Hawaii State Plan

The Hawaii State Plan as set forth in HRS Chapter 226, consists of a series of long range, comprehensive plans, goals and policies which serve as a guide for the growth and future long-range development of the state. The goals of the Hawaii State Plan and their relationship to the project are as follows:

1. A strong, viable economy characterized by stability, diversity, and growth that enables the fulfillment of the needs and expectations of Hawaii's present and future generations.
2. A desired physical environment characterized by beauty, cleanliness, quiet, stable and natural systems, and uniqueness that enhances the mental and physical well being of the people.
3. Physical, social and economic well being for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring and of participation in the community.

The Project will contribute to the attainment of the three goals by contributing to the economic viability of agricultural activities, enhancing the physical environment by providing for sustainable agricultural methods and by fostering social and economic well being by making agricultural opportunities available to the local community.

B. State Land Use Designation

The Property is situated within the State Land Use Commission "Agricultural" District. The proposed Project is consistent with the "Agricultural" designation regulations.

C. Hawaii County General Plan (LUPAG)

The Hawaii County General Plan contains goals, policies and courses of actions as well as a Land Use Pattern Allocation Guide (LUPAG) Map. On the current LUPAG map that depicts the long-term land uses for the island, the project area is designated as "Important Agricultural land." This designation is defined as, "those with better potential for sustained high agricultural yields because of soil type, climate, topography, or other factors." The Project is consistent with the Hawaii County General Plan's LUPAG Map.

D. Hawaii County General Plan

The proposed Project is also consistent with the Plan's goals, policies and recommended courses of action.

E. North Kohala Community Development Plan (NKCDP)

The overall goal of the North Kohala Community Development Plan is, "To manage the future growth of the district in a manner that is consistent with the Kohala lifestyle and ideals of being a rural community with a strong cultural heritage, an agricultural base, and a small town feel."

The proposed Project is consistent with the NKCDP's overall goal in that it will contribute to developing North Kohala as a viable agricultural base.

F. Hawaii County Zoning

The current zoning designation for the property is Agricultural 20-acres (A-20a). The proposed Project is consistent with the zoning designation. A Special Permit will be required for the meeting facility planned for the Project.

Permitting Required/Timeline/Cost:

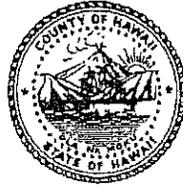
For construction of the buildings and the site work, the following permits are required:

- NPDES Permit (Federal)
- IWS Permit (State)
- Special Permit (County)
- Building Permit (County)
- Electrical Permit (County)
- Plumbing Permit (County)

Total costs for permitting are estimated at \$15,000.
The permitting process is estimated to take 6 months.

If an environmental assessment is required estimated costs are \$15,000.

William P. Kenoi
Mayor



BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

County of Hawai'i

PLANNING DEPARTMENT

Aupuni Center • 101 Paʻahi Street, Suite 3 • Hilo, Hawai'i 96720
Phone (808) 961-8288 • Fax (808) 961-8742

August 5, 2010

Mr. David Fuertes
HAFFA
P. O. Box 896
Kapaau, Hawai'i 96755

Dear Mr. Fuertes:

SUBJECT: APPLICATION FOR PLAN APPROVAL
Applicant: HAFFA
TMK: (3) 5-5-007:010, Por. of Kahei to Kealahewa, No. Kohala, Hawai'i

We are in receipt of the above-described application; however, we are deferring action on the application until the following items required for the Application for Plan Approval have been submitted to our office:

1. The location, size, height, and use of all existing and proposed structures;
2. Location, height, and material of all fences and walls;
3. All proposed landscaping and planting;
4. A site drainage plan approved by the Director of Public Works in accordance with Section 25-2-72(3) of the Zoning Code.
5. The standard of improvement and location, number, and size of spaces, arrangements and on-site circulation of all off-street parking and loading facilities, including points of access thereto from adjoining streets.
6. A certification of clearance (from the Director of Finance that the real property taxes and all other fees relating to the subject parcel(s) have been paid and that there are no outstanding delinquencies) shall accompany this Application.

Mr. David Fuertes
HAFFA
Page 2
August 5, 2010

All Site Plan or Drawings must be drawn to scale and fully dimensioned, indicating all requested information clearly.

Should you have any questions, please feel welcome to contact Larry Nakayama of this Department.

Sincerely,



JBJ LEITHEAD TODD
Planning Director

LHN:kwr
o:\plan approvals\5\TMK5-5-007-010HAFFA\Deferletter.doc

Site Planning Process:

The site planning process involved creating an organizational tool to locate the buildings in an organized manner and to provide for an efficiency in the site utility placement. A centralized landscaped area provides the sense of place for the project and is the point from which all the various roads go to the different buildings. This organizational framework divides the site into separate and distinct areas where the different buildings and open spaces are located. The overall result is an organized and efficient use of land that creates a proper setting for all the buildings.

PROJECT LOCATION



PROJECT INFORMATION
 TAX MAP KEY TMK (3) 5-5-7-39
 SITE AREA 5.00 ACRES

PROJECT SITE

Richard Orvinsky
 PLANNERS
 ARCHITECTS

SC: 1" = 1000' 0"

0 500' 1000'

N

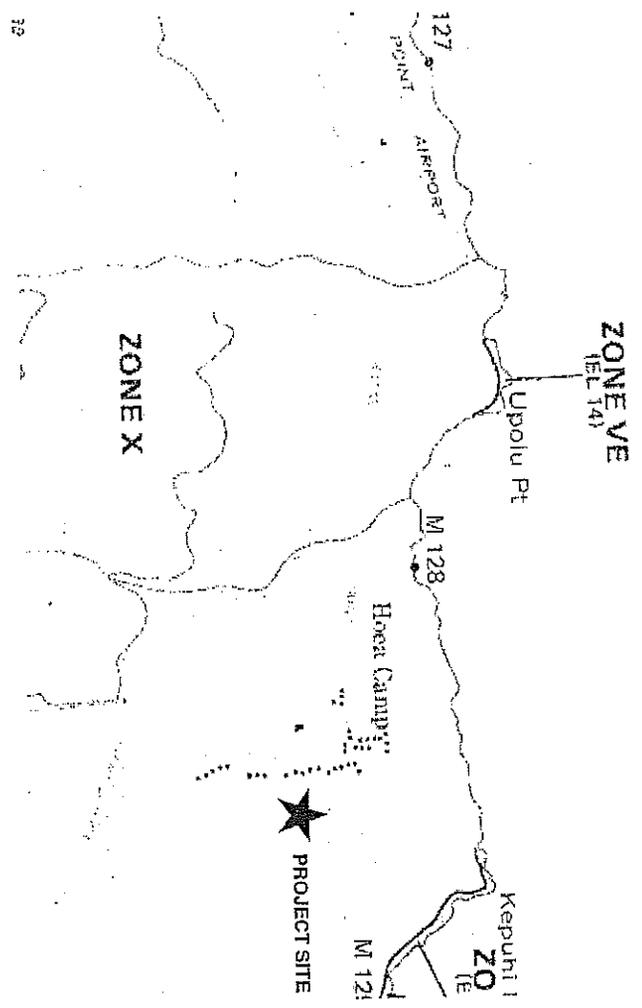
Date: 8.5.10
 Sheet No:

A - 1.1

ARCH Agricultural Resource Center of Ho'ea

FLOOD ZONE

PROJECT INFORMATION
TAX MAP KEY
SITE AREA 5.00 ACRES
TRK (3) 5.57:36



Richard Overstby
PLANNERS
ARCHITECTS

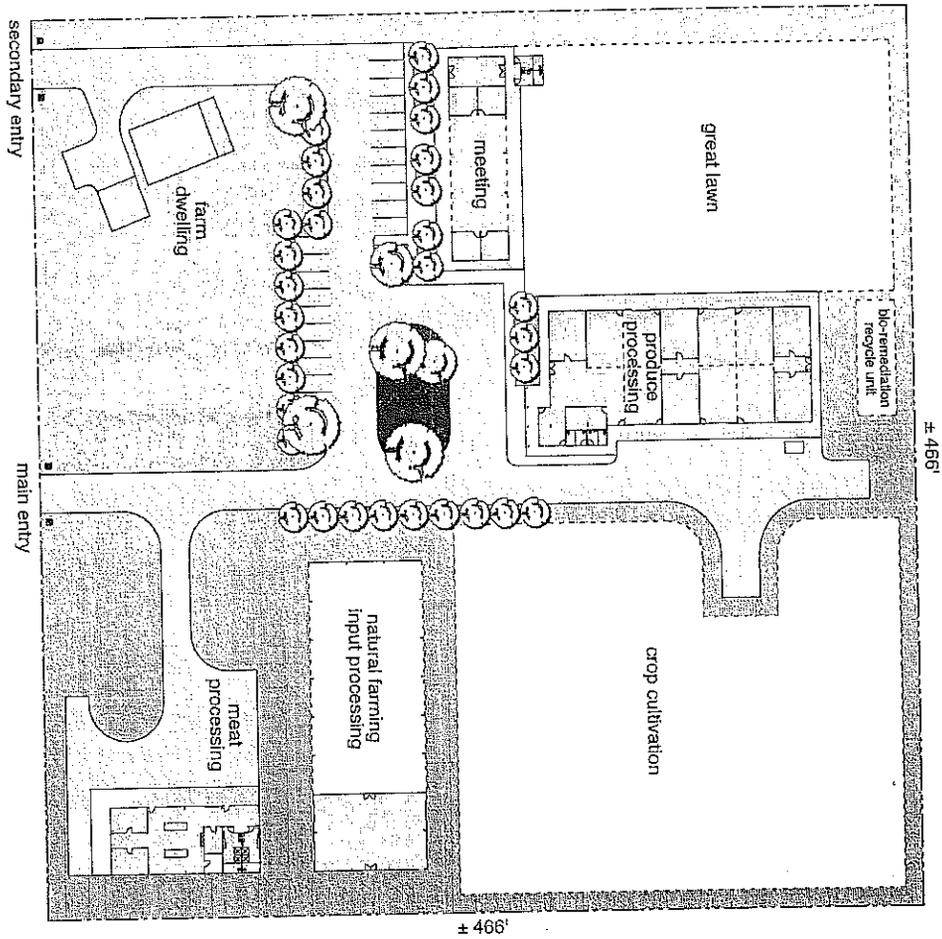


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Sheet No:

A - 1.3

ARCH Agricultural Resource Center of Ho'ea

SITE PLAN



PROJECT INFORMATION
 TAX MAP KEY T1AK (3) 5.5-7.39
 SITE AREA 5.00 ACRES

ARCH Agricultural Resource Center of Ho'ea

PLANNERS ARCHITECTS
Planner Overnsby

DATE: 8.5.10
 SIZE: 1/8"

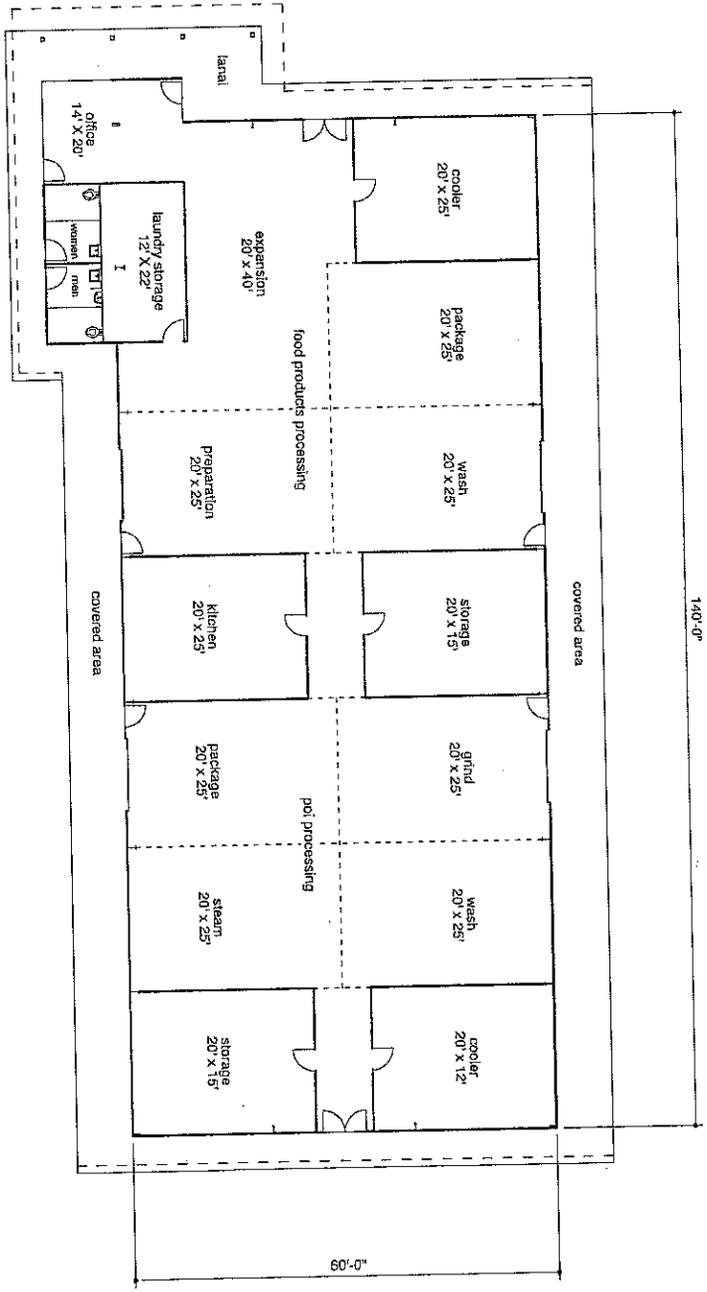
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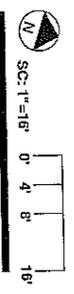
A - 1.5

FLOOR PLAN: PRODUCE PROCESSING FACILITY

PROJECT INFORMATION
 INTERIOR AREA 8,223 SF SF



Riehm Owensby
 PLANNERS
 ARCHITECTS



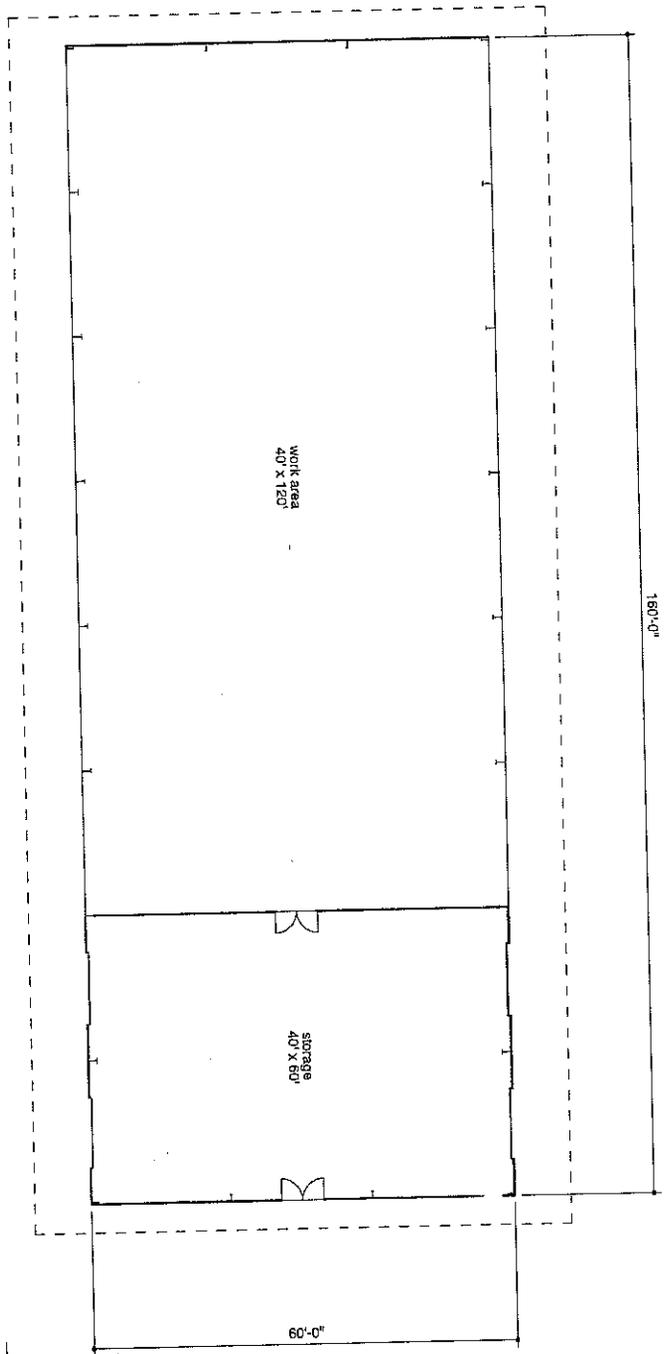
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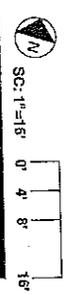
ARCH Agricultural Resource Center of Ho'ia

FLOOR PLAN: NATURAL FARMING INPUT PROCESSING FACILITY

PROJECT INFORMATION
INTERIOR AREA 9,800 SF SF



Richard Overstaby
PLANNERS
ARCHITECTS

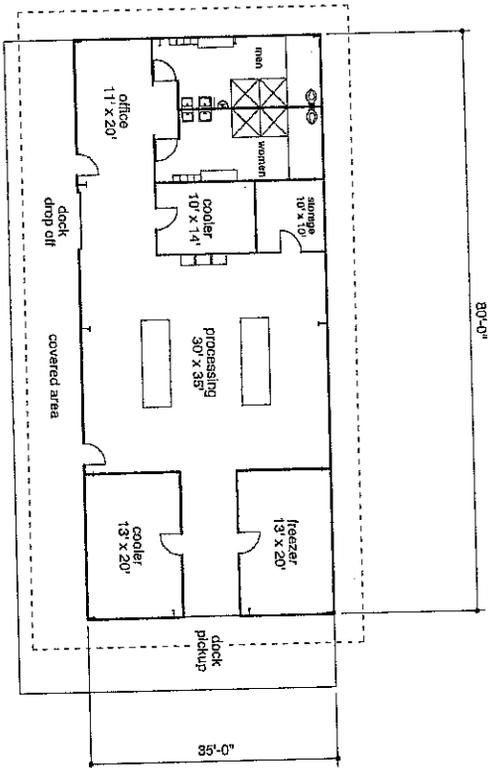


ARCH Agricultural Resource Center of Ho'ea

Date: 8.5.10
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FLOOR PLAN: MEAT PROCESSING FACILITY

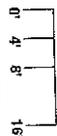
PROJECT INFORMATION
INTERIOR AREA 2,800 SF



Ricki Overnsby
PLANNERS
ARCHITECTS



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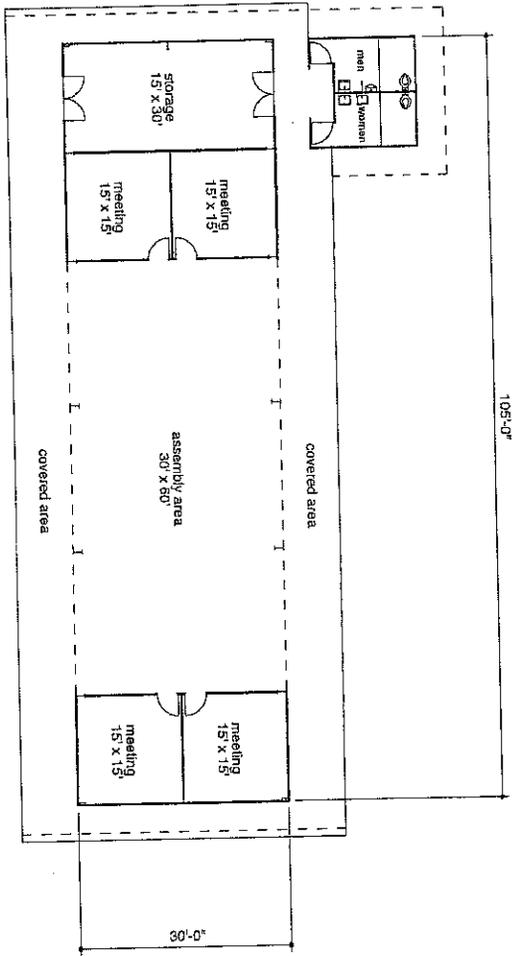


ARCH Agricultural Resource Center of Ho'ea

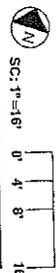
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Sheet No: A - 2.3

FLOOR PLAN: MEETING FACILITY

PROJECT INFORMATION
INTERIOR AREA 3,375 SF



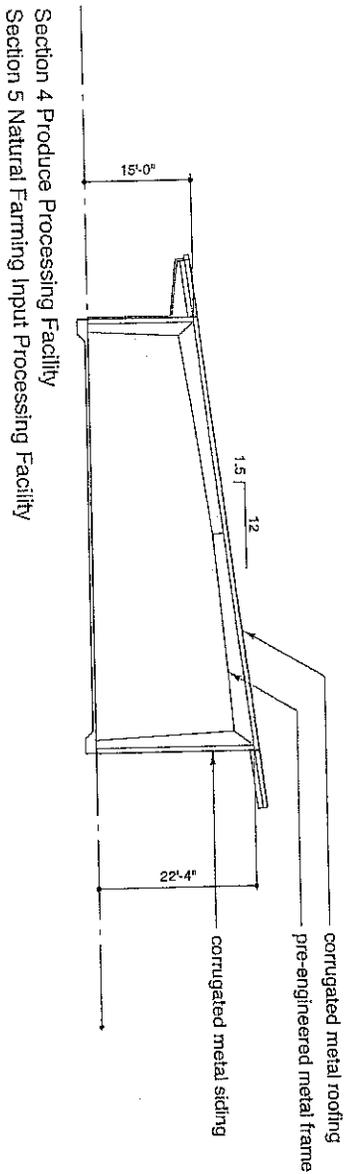
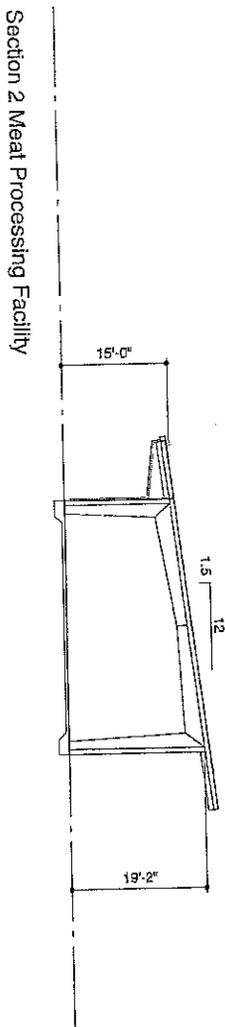
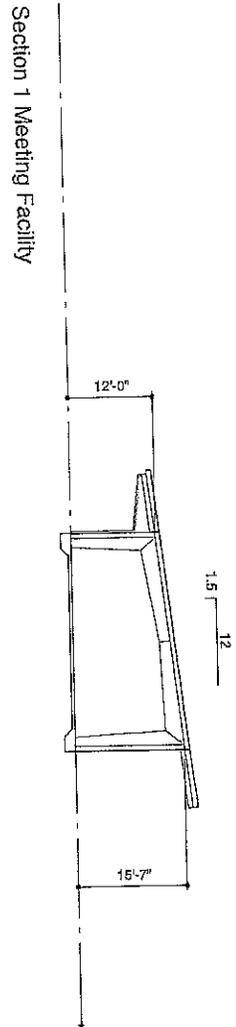
Riehm Overnsby
PLANNERS
ARCHITECTS



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ARCH Agricultural Resource Center of Ho'ea

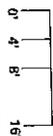
BUILDING SECTIONS:



ARCH Agricultural Resource Center of Ho'ea

Richard Orvinsky
PLANNERS
ARCHITECTS

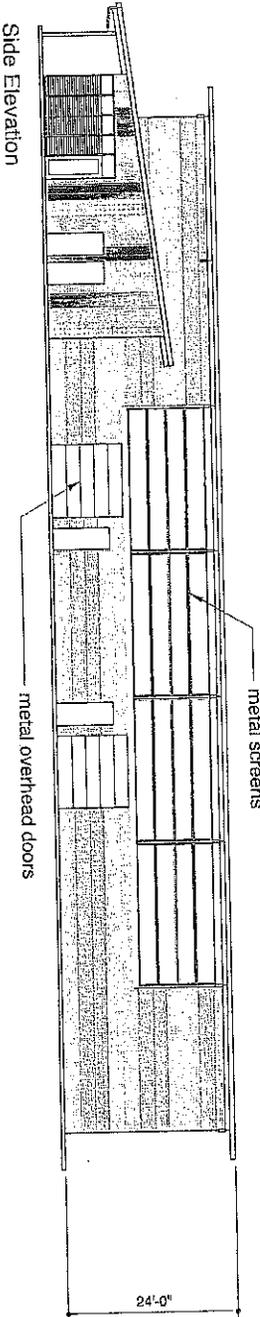
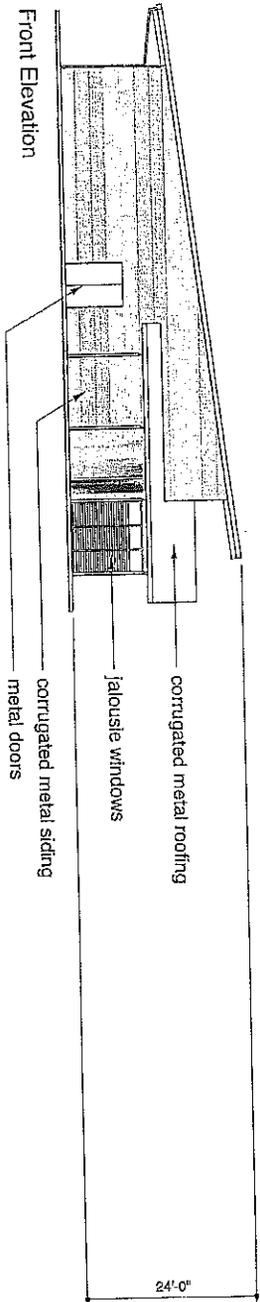
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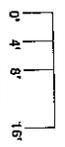
EXTERIOR ELEVATIONS: PRODUCE PROCESSING FACILITY



Riehm Overseas

PLANNERS
ARCHITECTS

SC: 1"=16'

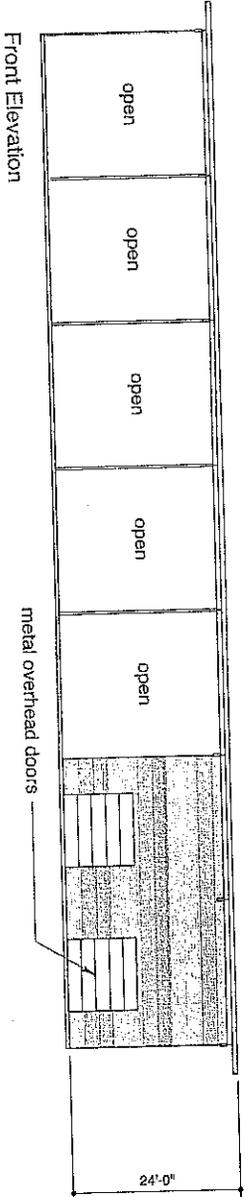
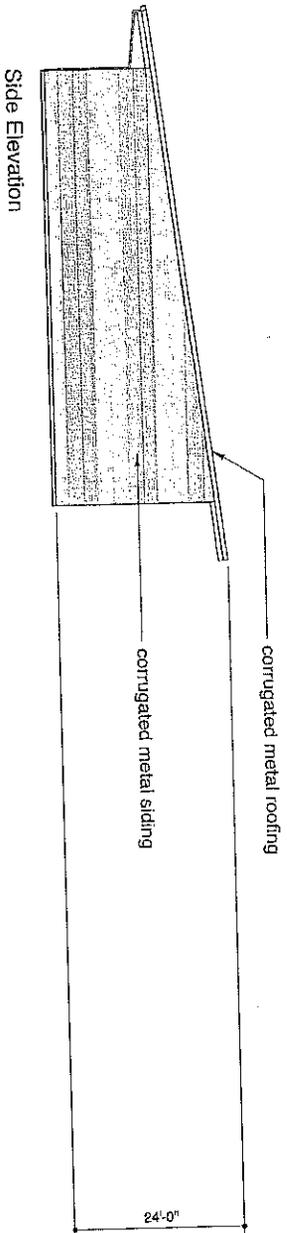


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ARCH Agricultural Resource Center of Ho'ea

EXTERIOR ELEVATIONS: NATURAL FARMING INPUT PROCESSING FACILITY



Richard Orvinsky
PLANNERS
ARCHITECTS

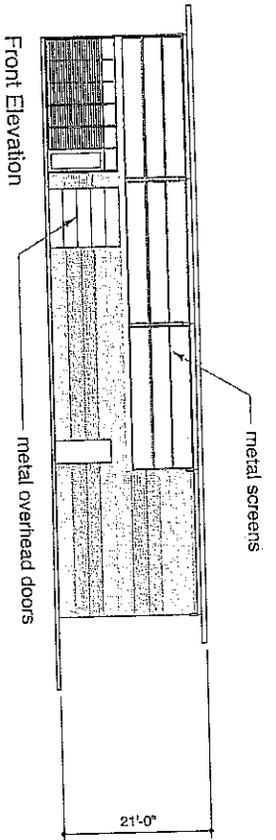
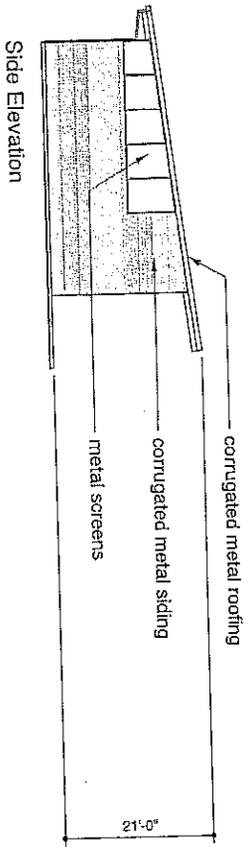
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ARCH Agricultural Resource Center of Ho'ea

Date: 8.5.10
Sheet No.: A - 4.2

EXTERIOR ELEVATIONS: MEAT PROCESSING FACILITY



Pielmu Overstby

PLANNERS
ARCHITECTS

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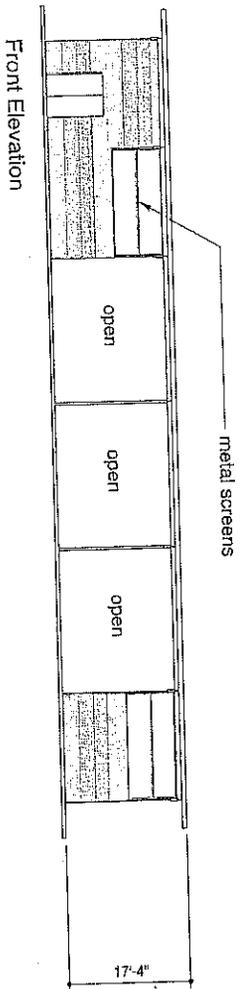
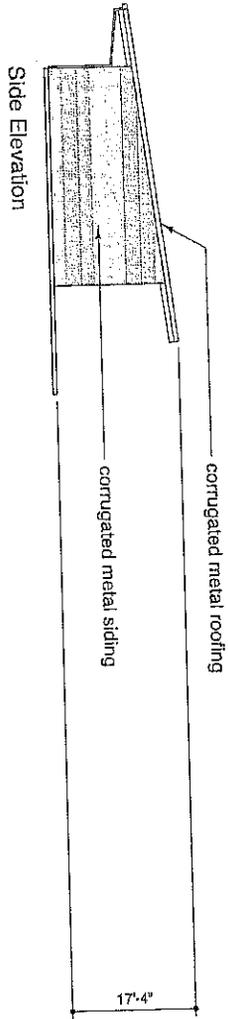


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ARCH Agricultural Resource Center of Ho'ea

EXTERIOR ELEVATIONS: MEETING FACILITY



Rielma Overstby

PLANNERS
ARCHITECTS



Date: 8.5.10
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ARCH Agricultural Resource Center of Ho Lea

GOVERNANCE STRUCTURE

ARCH – Agriculture Resource Center of Ho‘ea will first seek funding for implementation- building and construction of the project through Hawaii FFA foundation.

Upon completion of construction, Ho‘ea Agriculture Park will enter into a new contract with the Kahua Pa‘a Mua, a separate non-profit to govern the facilities. Kahua Pa‘a Mua is an entity that has a Hawaii State register and is presently undergoing the application for a federal 501(c)3.

Kahua Pa‘a Mua’s mission is to enhance communities through economic conservation/preservation, social and educational programs for youth and adults.

Please see appendix for the Articles of Incorporation and By-Laws for Kahua Pa‘a Mua.

Kahua Pa‘a Mua will manage the entire ARCH center. A manager with sound businesses background, excellent communication skills and ability to work with people is required for this position.

Responsibilities:

- Supervise all employees and daily operation. Assure all projects meet Safety requirements in OSHA and HACCP – Hazard Analysis Critical Control point.
- Assist in Marketing and Sales for the facility. Seek dynamic funding sources first through partnering, investors, and grants and aid whereby leveraging these funds to move towards self-reliance.
- Act as a premier leader in serving as a liaison to the community and government agencies. Creating a strong relationship with Ho‘ea Agriculture Park and all their partners to include renewable energy projects, water security, distribution development, and Independent Farmers.

One (1) Administrative Assistant with excellent people skills and office management skills is required for this position.

Responsibilities:

- The position requires maintaining the general calendar and fielding all calls and inquiries as well as handling outgoing and incoming correspondences including ordering and receiving supplies. This position also will be responsible for processing payroll for all employees and contractual services.

Two (2) half time facility Engineers with excellent people skills and experience in operating machinery in Poi and Meat processing facilities are required.

Responsibilities:

- The position requires safe operation of machineries, daily maintenance repair of equipment and building facility.
- Ability to coordinate workforce management with safe, clean and efficient product production.
- Ability to work with families in producing the best quality product ready for markets.
- Farmers with their families will be working with the Equipment's Engineer (only operator) to produce their family's products ex: Poi, Kulolo, various meat cuts, hamburger, etc.

One (1) Natural Farming Technician developing and producing Natural Farming inputs nutrients for plants and animals. The technician must understand science and it's applications.

Responsibilities:

- Coordinate and supervise Volunteers and laborers to producing inputs nutrients.
- Ability to work with people to maximize quality product that is a consistent product nutrients for the farmers to purchase.
- Ability to market Natural Farming inputs to all farmers and ranchers throughout the state of Hawaii.
- Understand proper labeling and consistency.

Independent Janitorial Services- contractual. Ability to provide the proper services in meeting quality control of County, State and Federal Regulations to assure food safety and best product safe for the consumer.

Responsibilities:

- Coordinate with the Facility Engineers assuring the best sanitation practices for Food safety.
- Clean all the processing facilities to include: Produce, Meat facilities, and all restrooms.

HOEA AGRICULTURE PARK

Water Security Distribution Development

Independent Farmer

ARCH

Renewable Energy System

- 1) Hydro
- 2) Wind
- 3) Sun

Agriculture Resource Center of Hoega

Other Hoega Farmers/Kohala Cooperatives

ARCH Advisory Council

(5) Volunteers

Managing organization
KAHUA PA'A MUA
Non-profit organization
(5) Board Members (volunteer)

Manager
(1)

Produce Processing Facility
Engineer (1/2)

Administrative Assistant
(1)

Meat Processing Facility
Engineer (1/2)

Natural Farming Input Technician
(1)

Meeting Room

Independent Janitorial
Services Contract

Roles and Responsibilities of ARCH – Agricultural Resource Center of Hoeh

EDUCATION

NATURAL FARMING

PRODUCE PROCESSING

MEAT PROCESSING

(input processing)

Kahua Pa'a Mua – Non-profit – (5) Board Members; *see attached By-Laws

- 1) Policy making, organization
- 2) Funding sources
- 3) Quality assurance

ARCH Advisory Council – (5) Members

- 1) Establish relationship/communication with the Kahua Pa'a Mua and Hoeh Ag Park, community
 - A. Policies
 - B. Funding
- 2) Assist in fundraising
- 3) Assist in marketing

Manager – (1) person

- 1) Supervise employee(s)
- 2) Marketing/Sale
- 3) Community Liason
- 4) Finding sources
- 5) Assurance of regulatory compliance safety/OSHA/Food

Admin Assistance – (1) person

- 1) Maintaining general calendar
- 2) Office reception to include phone, email, web, etc.
- 3) General accounting- payable/received

4) incoming/outgoing correspondence

5) Ordering/receiving supplies

6) Payroll

Facility Engineer for: Produce processing and Meat processing

1) Machinery Operator

2) Maintenance of equipment and repairs

3) Building maintenance

4) Coordinate workforce per commodity

Natural Farming Technician – (1) Person

1) Produce natural farming input nutrients

2) Coordinator/Supervise Volunteers and Laborer

3) Market NFIN-product

Independent Janitorial services- Contractual Fed. State County

1) Contractual Fed. State County Assure meet Laws

STATE OF HAWAII
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
Business Registration Division
Honolulu

04/14/2010 02:00:18

In the Matter of the Incorporation)
)
 of)
)
 KAHUA PA'A MUA, INC.)
)
)
)

ARTICLES OF INCORPORATION
(Section 414D-32, Hawaii Revised Statutes)

FILED 04/13/2010 08:51 AM
Business Registration Division
DEPT. OF COMMERCE AND
CONSUMER AFFAIRS
State of Hawaii



PETER K. KUBOTA
ATTORNEY AT LAW
505 KILAUEA AVENUE
HILO, HAWAII 96720

04/14/2010 02:00:18

04/15/201020001

STATE OF HAWAII
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
Business Registration Division
Honolulu

In the Matter of the Incorporation)
)
 of)
)
 KAHUA PA'A MUA, INC.)
)
)

ARTICLES OF INCORPORATION

The undersigned, desiring to form a non profit corporation under the laws of the State of Hawaii, do hereby execute and adopt the following Articles of Incorporation:

ARTICLE I
CORPORATE NAME

The name of the corporation shall be:

KAHUA PA'A MUA, INC.

ARTICLE II
CORPORATE INFORMATION

The mailing address of the corporation's initial principal office, and the name of the corporation's registered agent and street address of the corporation's initial registered office are:

DAVID FUERTES
P.O. Box 896
Kapaau, Hawaii 96755-0896

ARTICLE III
DURATION

The period of the corporation's duration is perpetual.

04/15/201020001

04-14-201020018

ARTICLE IV
CORPORATE PURPOSES

Section 1. The corporation is organized exclusively for the following purposes:

- (a) To enhance communities through economic, conservation/preservation, social and educational programs for youth and adults.
- (b) The transaction of any or all lawful activities for which nonprofit corporations may be incorporated under Chapter 414D, Hawaii Revised Statutes.

Section 2. The corporation shall be operated exclusively for charitable, religious, scientific, literary and educational purposes within the meaning of section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code") and the regulations thereunder, as amended. Such activities shall be conducted in accordance with section 501(c)(3) and the regulations thereunder as they now exist or as they may hereafter be amended.

ARTICLE V
CORPORATE POWERS

Section 1. The corporation shall have all powers, rights, privileges and immunities, and shall be subject to all of the liabilities conferred or imposed by law upon corporations of this nature, and shall be subject to and have all the benefits of all general laws with respect to corporations.

Section 2. The corporation shall have, in addition to the general powers conferred upon it under the statutes of the State of Hawaii, the following powers subject to the limitations described in Article VI:

- 1. To indemnify any person who was or is a party or is threatened to be made a party to any proceeding (other than an action by or in the right of the corporation) if that person is or was a director, officer, employee or other agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another foreign or domestic corporation, partnership, joint venture, trust or other enterprise, or was a director, officer, employee or agent of a foreign or domestic corporation which was a predecessor corporation of the corporation or of another enterprise at the request of the predecessor corporation, against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with the proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal proceeding, had no reasonable cause to believe the conduct of the person was unlawful. The termination of any proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person

04/14/201020018

did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, or that the person had reasonable cause to believe that the person's conduct was unlawful;

2. To indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action by or in the right of the corporation to procure a judgment in its favor because that person is or was a director, officer, employee or other agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another foreign or domestic corporation, partnership, joint venture, trust, or other enterprise, or was a director, officer, employee or agent of a foreign or domestic corporation which was a predecessor corporation of the corporation or of another enterprise at the request of the predecessor corporation, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of the action if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation; except that no indemnification shall be made in respect of any claim, issue, or matter as to which the person shall have been adjudged to be liable for negligence or misconduct in the performance of the person's duty to the corporation unless and only to the extent that the court in which the action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

ARTICLE VI LIMITATIONS

Section 1. No part of the net earnings of the corporation shall inure to the benefit of, or be distributable to its directors, officers, or other private persons, except that the corporation shall be authorized and empowered to pay reasonable compensation for services actually rendered to the corporation. No substantial part of the activities of the corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, except that members of the Corporation's Board of Directors and personnel of the corporation may testify or make other appropriate communication where formally requested to do so by a legislative body or a committee or a member thereof, in matters concerning legislation relating to the public purposes of the corporation or public appropriations to programs and activities of the corporation, and the corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these articles, the corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from federal income tax under section 501(c)(3) of the Code, or (b) by a corporation, contributions to which are deductible under section 170(c)(2) of the Code.

Section 2. If the corporation is for any one or more taxable years determined to be a private foundation as defined in section 509(a) of the Code, then: (a) the corporation will distribute its income each tax year at such time and in such manner as not to become subject to the tax on

undistributed income imposed by section 4942 of the Code; (b) the corporation will not engage in any act of self-dealing as defined in section 4941(d) of the Code; (c) the corporation will not retain any excess business holdings as defined in section 4943(c) of the Code; (d) the corporation will not make any investments in such manner as to subject it to tax under section 4944 of the Code; and (e) the corporation will not make any taxable expenditures as defined in section 4945(d) of the Code.

ARTICLE VII
MEMBERS

The corporation shall have no members.

ARTICLE VIII
DIRECTORS

The management of the business and affairs of the corporation and the control and distribution of its property shall be vested in a Board of Directors, which shall consist of such number of directors as shall be fixed by the Bylaws of the corporation, but in no event less than three (3) individuals. Further, at least one director is currently a resident of the State of Hawaii. The directors shall be qualified, nominated, elected and appointed as is provided for in the Bylaws. The Board of Directors shall have full power to control and direct the business affairs of the corporation, subject, however, to any limitations contained herein or in the Bylaws of the corporation or by statute. Each initial director of the corporation shall serve until his successor is duly chosen. The initial directors of the corporation and their residence addresses, are as follows:

<u>Name</u>	<u>Mailing Address</u>
DAVID FUERTES	P.O. Box 896 Kapaa, Hawaii 96755-0896
JOHN HIROTA	67210 Kauai Street Waialua, Hawaii 96791
DAVID R. SHIIGI	165 Makalika Street Hilo, Hawaii 96720
ROBERT K. LINDSEY, JR.	64-644 Puuluna Street Kamuela, Hawaii 96743
ALEXA TIM	91-151 Malakole Road Kapolei, Hawaii 96701

04/14/201020018

ARTICLE IX
OFFICERS

The officers of the corporation shall consist of a president, vice-president, secretary, treasurer and such other assistant officers as the Board of Directors deems necessary, with such qualifications, duties and powers as are provided for in the Bylaws. The officers have been elected or appointed at such time and in such manner and for such terms as prescribed in the Bylaws of the corporation. Any two or more offices may be held by the same person, provided that the corporation shall have at least two persons as officers. The initial officers and their residence addresses are as follows:

<u>Office</u>	<u>Name</u>	<u>Mailing Address</u>
President	DAVID FUERTES	P.O. Box 896 Kapaa, Hawaii 96755-0896
Vice President	JOHN HIROTA	67210 Kauai Street Waialua, Hawaii 96791
Secretary/ Treasurer	CAROLYN FUERTES	P.O. Box 896 Kapaa, Hawaii 96755-0896

ARTICLE X
INCORPORATOR

The Incorporator and his mailing address is as follows:

DAVID FUERTES	P.O. Box 896 Kapaa, Hawaii 96755-0896
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ARTICLE XI
ADOPTION AND AMENDMENT OF BYLAWS

After the effective date of the Articles of Incorporation, the initial Board of Directors shall hold an organizational meeting for the purpose of adopting the initial Bylaws of the corporation and transacting any other business. The power to alter, amend, or repeal the Bylaws of the corporation or adopt new Bylaws shall be vested in the Board of Directors.

04/14/201020018

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ARTICLE XII
DISSOLUTION

Upon the dissolution of this corporation, assets shall be distributed for one or more exempt purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code (or corresponding section of any future tax code) or shall be distributed to the federal government, or to a state or local government, for a public purpose. Any such assets not so disposed of shall be disposed by the Circuit Court of the county in which the principal office of the corporation is then located, exclusively for such purposes or to such organization or organizations, as said Court shall determine, which are organized and operated exclusively for such purpose.

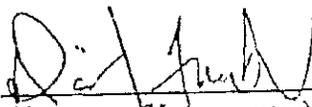
ARTICLE XIII
AMENDMENT

The Articles of Incorporation set forth herein shall be subject to amendment from time to time as provided by law, except that no amendment shall be made which would change the objects and purposes of this corporation to include objects and purposes which would not be exclusively charitable, religious, educational, scientific or literary, or which would permit net earnings of the corporation to inure to the benefit of any member, donor or private individual, or which would permit any transaction or activity not permitted to be conducted or carried on by an organization exempt under section 501(c)(3) of the Code.

We certify under the penalties of Section 414D-12, Hawaii Revised Statutes, that we have read the foregoing statements and that the same are true and correct.

Witness my hands this 9th day of April, 2010.

DAVID FUERTES
(Name of Incorporator)


(Signature of Incorporator)

04/14/201020018

BYLAWS
OF
KAHUA PA'A MUA, INC.

ARTICLE I
BOARD OF DIRECTORS

1. Number, Tenure and Qualification. The number of directors shall initially be set at FIVE (5), but shall never be less than three. Each director shall hold office until the next annual meeting and until his or her successor shall have been elected and qualified by a majority of the Board of Directors present at a meeting duly held for that purpose.

2. Resignation/Removal. Any director may resign at any time by giving written notice of such resignation to the Board of Directors. Any director may be removed from office at any time with or without cause and another elected in his place to serve for the remainder of his term by the affirmative vote of the majority of votes entitled to vote at any special meeting of the remaining Board of Directors then serving called for such purposes.

3. Vacancy. Any vacancy in the Board of Directors occurring during the year, including a vacancy created by an increase in the number of directors, may be filled for the unexpired portion of the term by the affirmative vote of the majority of the remaining Board of Directors then serving.

ARTICLE IV
MEETINGS OF DIRECTORS

1. Regular Meetings. A regular annual meeting of the Board of Directors shall be held without other notice than these Bylaws, on the first Wednesday in the month of ____ in each year at the hour of __ o'clock ____ m. for the purpose of appointing directors and for the transaction of such other business as may come before the majority. The Board of Directors may provide by resolution the time and place, either within or without the State of Hawaii, for the holding of additional regular meetings of the Board without other notice than such resolution.

2. Special Meetings. Special meetings of the Board of Directors may be called by or at the request of the president or any two directors. The person or person authorized to call special meetings of the Board may fix any place, either within or without the State of Hawaii, as the place for holding any special meeting of the Board called by them.

3. Notice. Notice of any special meeting of the Board of Directors shall be given at least two days previously thereto by written notice delivered personally or sent by mail or telegram to each director at his address as shown by the records of the corporation. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail in a sealed envelope so addressed, with postage thereon prepaid. If notice be given by telegram, such notice shall be deemed

to be delivered when the telegram is delivered to the telegraph company. Any director may waive notice of any meeting. The attendance of a director at any meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board need be specified in the notice or waiver of notice of such meeting, unless specifically required by law or by these Bylaws.

4. Quorum. At all meetings of the Board of Directors a majority of the directors shall be necessary and sufficient to constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute or by these Bylaws. If at any meeting there is less than a quorum present, a majority of those present may adjourn the meeting from time to time without further notice to any absent director.

5. Action by Directors Without a Meeting. Any action required or permitted under Section 414D-144, Hawaii Revised Statutes, as amended, to be taken at a meeting of the Board of Directors, may be taken without a meeting if a consent in writing, setting forth the action so taken, is signed by all of the directors.

ARTICLE V OFFICERS

1. Officers. The officers of the corporation shall be a president, one or more vice-presidents (the number thereof to be determined by the Board of Directors), a secretary, a treasurer and such other officers as may be elected in accordance with the provisions of this Article. The Board of Directors may elect or appoint such other officers, including one or more assistant secretaries and one or more assistant treasurers, as it shall deem desirable, such officers to have the authority and perform the duties prescribed, from time to time, by the Board of Directors.

2. Election and Term of Office. The officers of the corporation shall be elected annually by the Board of Directors at the regular annual meeting of the Board of Directors. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as conveniently may be. New offices may be created and filled at any meeting of the Board of Directors. Each officer shall hold office until his successor shall have been duly elected and shall have qualified.

3. Removal. Any officer elected or appointed by the Board of Directors may be removed by the Board of Directors whenever in its judgment the best interests of the corporation would be served thereby, but such removal shall be without prejudice to the contracts rights, if any, of the officer so removed.

4. Vacancies. In case of any office of the corporation becomes vacant by death, resignation, retirement, disqualification, or any other cause, the majority of the Directors then in office, although less than a quorum, may elect an officer to fill such vacancy, and the officer so elected shall hold office and serve until the first meeting of the Board of Directors next succeeding and until the election and qualification of his successor.

5. President. The president shall be the principal executive officer of the corporation and shall in general supervise and control all the business and affairs of the corporation. He shall preside at all meetings. He may sign, with the secretary or any other proper officer of the corporation authorized by the Board of Directors, any deeds, mortgages, bonds, contracts, or other instruments which the Board of Directors has authorized to be executed, except in cases where the signing and execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws or by statute to some other officer or agent of the corporation; and in general he shall perform all duties incident to the office of president and such other duties as may be prescribed by the Board of Directors from time to time.

6. Vice-President. In the absence of the president or in event of his inability or refusal to act, the vice-president or in event of his inability or refusal to act, the vice-president (or in the event there be more than one vice-president, the vice-presidents in the order of their election) shall perform the duties of the president, and when so acting, shall have all the powers of and be subject to all the restrictions upon the president. Any vice-president shall perform such other duties as from time to time may be assigned to him by the president or by the Board of Directors.

7. Treasurer. The treasurer shall have the custody of all funds, property, and securities of the corporation, subject to such regulation as may be imposed by the Board of Directors. He may be required to give bond for the faithful performance of his duties, in such sum and with such surety as the Board of Directors may require. He shall enter regularly on the books of the corporation to be kept by him for the purpose, full and accurate account of all moneys and obligations received and paid or incurred by him for or on account of the corporation, and shall exhibit such books at all reasonable time to any directors on application at the offices of the corporation. He shall, in general, perform all the duties incident to the office of treasurer, subject to the control of the Board of Directors.

8. Secretary. The secretary shall have charge of such books, documents and papers as the Board of Directors may determine and shall have the custody of the corporate seal, if any. He shall attend and keep the minutes of all the meetings of the Board of Directors of the corporation. He may sign with the president or vice-president in the name and on behalf of the corporation any contracts or agreements authorized by the Board of Directors, and when so authorized or ordered by the Board of Directors, he may affix the seal of the corporation, if any, to any contracts or agreements. He shall, in general, perform all the duties incident to the office of secretary, subject to the control of the Board of Directors, and shall do and perform such other duties as may be assigned to him by the Board of Directors.

9. Assistant Treasurers and Assistant Secretaries. If required by the Board of Directors, the assistant treasurers shall give bonds for the faithful discharge of their duties in such sums and with such sureties as the Board of Directors shall determine. The assistant treasurers and assistant secretaries, in general, shall perform such duties as shall be assigned to them by the treasurer or the secretary or by the president or the Board of Directors.

ARTICLE VI COMMITTEES

1. Committees of Directors. The Board of Directors, by resolution adopted by a majority of the directors in office, may designate and appoint one or more committees, each of which shall consist of two or more directors, which committees, to the extent provided in said resolution, shall have and exercise the authority of the Board of Directors in the management of the corporation; provided, however, that no such committee shall have the authority of the Board of Directors in reference to amending, altering or repealing the Bylaws, electing, appointing or removing any member of any such committee or any director or officer of the corporation; amending the Articles of Incorporation; restating the Articles of Incorporation; adopting a plan of merger; adopting a plan of consolidation with another corporation; or authorizing the sale, lease, exchange or mortgage of all or substantially all of the property and assets of the corporation; authorizing the voluntary dissolution of the corporation or revoking proceedings therefor; adopting a plan for the distribution of the assets of the corporation; or amending, altering or repealing any resolution of the Board of Directors which by its terms provides that it shall not be amended, altered or repealed by such committee. The designation and appointment of any such committee and the delegation thereto of authority shall not operate to relieve the Board of Directors, or any individual director, of any responsibility imposed upon it or him by law.

2. Other Committees. Other committees not having and exercising the authority of the Board of Directors in the management of the corporation may be designated by a resolution adopted by a majority of the directors present at a meeting at which a quorum is present. Any member thereof may be removed by the person or persons authorized to appoint such member whenever in their judgment the best interests of the corporation shall be served by such removal.

3. Term of Office. Each member of a committee shall continue as such until the next annual meeting of the Board of Directors of the corporation and until his successor is appointed, unless the committee shall be sooner terminated, or unless such member be removed from such committee, or unless such members cease to qualify as a member thereof.

4. Chairman. One member of each committee shall be appointed chairman by the person or person authorized to appoint the members thereof.

5. Vacancies. Vacancies in the membership of any committee may be filled by appointments made in the same manner as provided in the case of the original appointments.

6. Quorum. Unless otherwise provided in the resolution of the Board of Directors designating a committee, a majority of the whole committee shall constitute a quorum and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the committee.

7. Rules. Each committee may adopt rules for its own government not inconsistent with these Bylaws or with rules adopted by the Board of Directors.

ARTICLE VII INDEMNIFICATION OF OFFICERS AND DIRECTORS

1. Non-derivative Actions. The corporation shall indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) if that person is or was a director or officer of the corporation, against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with the proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal proceeding, had no reasonable cause to believe the conduct of the person was unlawful. The termination of any proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of this corporation and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

2. Derivative Actions. The corporation shall indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or complete action or suit by or in the right of the corporation to procure a judgment in its favor because that person is or was a director or officer of the corporation, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of the action if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of this corporation; except that no indemnification shall be made in respect of any claims, issue, or matter as to which the person shall have been adjudged to be liable for negligence or misconduct in the performance of the person's duty to this corporation unless and only to the extent that the court in which that action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

3. Authorization. Any indemnification under Sections 1 and 2 of this Article (unless ordered by a court) shall be made by the corporation only if authorized in the specific case upon a determination that indemnification of the director or officer is proper in the circumstances

because the director or officer has met the applicable standard of conduct set forth in Sections 1 or 2. The determination shall be made (a) by the Board of Directors by a majority vote of a quorum consisting of Directors who were not parties to the proceeding, or (b) if a quorum is not obtainable, or, even if obtainable if a quorum of disinterested directors so directs, by independent legal counsel in a written opinion to the corporation, or (c) by a majority vote of the members (if any); or (d) by the court in which the proceeding is or was pending upon application made by the corporation or the director or officer or the attorney or other person rendering services in connection with the defense, whether or not the application by the director, officer, attorney, or other person is apposed by this corporation.

4. Advance Payments. Expenses incurred in defending any proceeding may be paid by the corporation in advance of the final disposition of the proceeding as authorized by the Board of Directors in a particular case upon receipt of an undertaking by or on behalf of the director or officer to repay such amount unless it shall ultimately be determined that the director or officer is entitled to be indemnified by the corporation as authorized in this Article.

5. Other Rights. The indemnification provided by this Article shall not be deemed exclusive of any other rights to which those indemnified may be entitled and shall continue as to a person who has ceased to be a director or officer and shall insure to the benefit of the heirs and personal representatives of such a person.

6. Insurance. The corporation shall have the power to purchase and maintain insurance on behalf of any director or officer of the corporation, against any liability asserted against or incurred by the director's or officer's status as such, whether or not the corporation would have the power to indemnify the director or officer against liability under this Article.

ARTICLE VIII CONTRACTS, CHECKS, DEPOSITS AND FUNDS

1. Contracts. The Board of Directors may authorize any officer or officers, agent or agents of the corporation, in addition to the officers so authorized by these Bylaws, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the corporation, and such authority may be general or confined to specific instances.

2. Checks, Drafts, etc. All checks, drafts or orders for the payment of money, notes or other evidences of indebtedness issued in the name of the corporation, shall be signed by such officer or officers, agent or agents of the corporation and in such manner as shall from time to time be determined by resolution of the Board of Directors. In the absence of such determination by the Board of Directors, such instruments shall be signed by the treasurer or an assistant treasurer and countersigned by the president or a vice-president of the corporation.

3. Deposits. All funds of the corporation shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositaries as the Board of Directors may select.

4. Gifts. The Board of Directors may accept on behalf of the corporation any contribution, gift, bequest or devise for the general purposes or for any special purpose of the corporation.

ARTICLE X BOOKS AND RECORDS

The corporation shall keep correct and complete books and records of account and shall also keep minutes of the proceedings of its Board of Directors and committees having any of the authority of the Board of Directors.

ARTICLE XI FISCAL YEAR

The fiscal year of the corporation shall begin on the first day of January and end on the last day of December in each year.

ARTICLE XIII SEAL

The corporation may have a seal of such form as the Board of Directors may from time to time determine, which seal shall be in the custody of the secretary. The Board of Directors may change the form of the seal or the inscription thereon at pleasure.

ARTICLE XIV WAIVER OF NOTICE

Whenever any notice is required to be given under the provisions of the Hawaii Nonprofit Corporation Act or under the provisions of the Articles of Incorporation or the Bylaws of the corporation, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

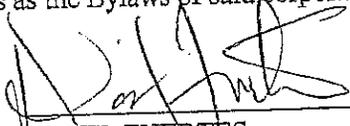
ARTICLE XV AMENDMENT TO BYLAWS

These Bylaws may be altered, amended or repealed and new Bylaws may be adopted by a majority of the directors present at any regular meeting or at any special meeting, if at least two

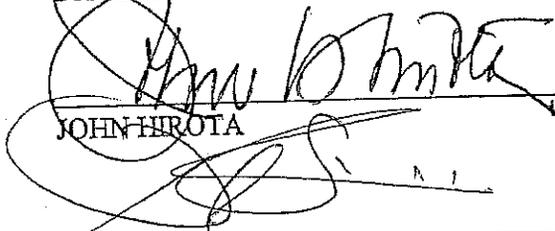
days' written notice is given of intention to alter, amend or repeal or to adopt new Bylaws at such meeting.

ADOPTION OF BYLAWS

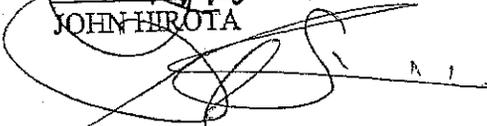
We, the undersigned directors of the corporation, on this ____ day of _____, 2008 do hereby adopt the foregoing provisions as the Bylaws of said corporation.



DAVID FUERTES



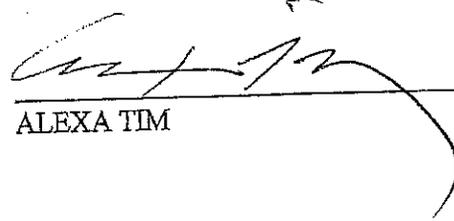
JOHN HIROTA



DAVID R. SHIIGI



ROBERT K. LINDSEY, JR.



ALEXA TIM

Agricultural Resource Center Preliminary Cost Estimate Phase 1

Riehm Owensby Planners Architects 9/8/10

Scope of Work	Quantity	Unit	Unit Cost	Subtotal	Total Cost
Sitework					
site preparation, demo, mass ex., grading	5	ac	\$25,000		\$125,000
utilities, water, sewer, electric			allowance		\$300,000
drive parking lot base course 6" thick	3,940	sy	\$18		\$70,920
drive parking asphalt paving 2" thick	3,940	sy	\$25		\$98,500
drywells	4	ea	\$12,500		\$50,000
concrete sidewalks	2,614	sf	\$3		\$7,842
parking lot lighting	4	ea	\$3,500		\$14,000
off site infrastructure, utility hookups			allowance		\$30,000
landscaping			allowance		\$25,000
				\$721,262	
Building					
produce processing facility	8,823	sf	\$120		\$1,058,760
produce processing furnishings fixtures			allowance		\$50,000
produce processing facility coolers	2	ea	\$10,000		\$20,000
produce processing kitchen equipment			allowance		\$107,095
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
				\$1,235,855	
Subtotal Sitework & Building				\$1,957,117	
Miscellaneous					
architectural & engineering fees	10%				\$123,586
contingency (10% sitework + building)	10%				\$195,712
				\$319,297	
Total					\$2,276,414

Agricultural Resource Center Preliminary Cost Estimate Phase 2

Riehm Owensby Planners Architects 9/8/10

Scope of Work	Quantity	Unit	Unit Cost	Subtotal	Total Cost
Sitework					
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
				\$0	
Building					
natural farming input processing facility	9,600	sf	\$60		\$576,000
meeting facility	3,375	sf	\$120		\$405,000
meeting facility furnishings fixtures			allowance		\$15,000
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
				\$996,000	
				\$996,000	
Subtotal Sitework & Building					
Miscellaneous					
architectural & engineering fees	10%				\$99,600
contingency (10% sitework + building)	10%				\$99,600
				\$199,200	
Total					\$1,195,200

Agricultural Resource Center Preliminary Cost Estimate Phase 3

Riehm Owensby Planners Architects 9/8/10

Scope of Work	Quantity	Unit	Unit Cost	Subtotal	Total Cost
Sitework					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
				\$0	
Building					
meat processing facility	2,800	sf	\$120		\$336,000
meat processing facility furnishing fixtures			allowance		\$50,000
meat processing facility coolers freezers	3	ea	\$10,000		\$30,000
caretaker's residence	1,200	sf	\$175		\$210,000
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
					\$0
				\$626,000	
Subtotal Sitework & Building				\$626,000	
Miscellaneous					
architectural & engineering fees	10%				\$62,600
contingency (10% sitework + building)	10%				\$62,600
				\$125,200	
Total					\$751,200

Agricultural Resource Center Preliminary Cost Estimate Phase 1, 2, 3 Riehm Owensby Planners Architects 9/8/10

Scope of Work	Quantity	Unit	Unit Cost	Subtotal	Total Cost
Sitework					
site preparation, demo, mass ex., grading	5	ac	\$25,000		\$125,000
utilities, water, sewer, electric			allowance		\$300,000
drive parking lot base course 6" thick	3,940	sy	\$18		\$70,920
drive parking asphalt paving 2" thick	3,940	sy	\$25		\$98,500
drywells	4	ea	\$12,500		\$50,000
concrete sidewalks	2,614	sf	\$3		\$7,842
parking lot lighting	4	ea	\$3,500		\$14,000
off site infrastructure, utility hookups			allowance		\$30,000
landscaping			allowance		\$25,000
				\$721,262	
Building					
produce processing facility	8,823	sf	\$120		\$1,058,760
produce processing furnishings fixtures			allowance		\$50,000
produce processing facility coolers	2	ea	\$10,000		\$20,000
produce processing kitchen equipment			allowance		\$107,095
natural farming input processing facility	9,600	sf	\$60		\$576,000
meat processing facility	2,800	sf	\$120		\$336,000
meat processing facility furnishing fixtures			allowance		\$50,000
meat processing facility coolers freezers	3	ea	\$10,000		\$30,000
meeting facility	3,375	sf	\$120		\$405,000
meeting facility furnishings fixtures			allowance		\$15,000
caretaker's residence	1,200	sf	\$175		\$210,000
				\$2,857,855	
Subtotal Sitework & Building				\$3,579,117	
Miscellaneous					
architectural & engineering fees	10%				\$285,786
contingency (10% sitework + building)	10%				\$357,912
				\$643,697	
Total					\$4,222,814

PROPOSED OPERATING BUDGET PHASE I - YR 1	REVENUES	EXPENSES
PERSONNEL COST		
Salaries and Wages		
Facilities Manager		50,000.00
Admin. Assistant/Book keeper -		35,000.00
Engineer - Taro Processing		38,000.00
Total Salaries and Wages		123,000.00
Payroll Taxes & Assesments		
FICA - 6.20%		7,626.00
Medicare - 1.45%		1,783.50
State Unemployment Insurance - 1.81%		2,226.30
Temporary Disability Insurance - 1.00%		1,230.00
Worker's Compensation - 0.95%		1,168.50
		36,900.00
FRINGE BENEFITS		
including health insurance, life/AD&D, LTD, flex spending plans, staff training/professional development etc., computed @ 30% of wages.		
TOTAL PERSONNEL COST		173,934.30
OTHER EXPENSES		
Insurance		2,500.00
Janitorial		24,000.00
Lease		1,500.00
Publication & Printing		2,000.00
Rental of Equipment (if unable to purchase kitchen equipment)		35,000.00
Repair & Maintenance		12,000.00
Staff Training		
Supplies - Office		1,000.00
Supplies - Training		
Utilities		47,000.00
TOTAL OTHER EXPENSES		125,000.00
PROJECTED REVENUES		
Taro Processing (\$1.25/lb x 2500 lbs/wk x 52 wks/yr)	195,000.00	
Value-Added/By-product Processing (\$35/hr X 10hr/day X 6 days/wk X 5	109,200.00	
TOTAL BUDGET	304,200.00	298,934.30
PROFIT		5,265.70

PROPOSED OPERATING BUDGET PHASE II	REVENUES	EXPENSES
PERSONNEL COST		
Salaries and Wages		50,000.00
Facilities Manager		35,000.00
Admin. Assistant/Book keeper -		38,000.00
Natural Farming Inputs Technician		38,000.00
Engineer - Taro Processing		161,000.00
Total Salaries and Wages		
Payroll Taxes & Assesments		9,982.00
FICA - 6.20%		2,334.50
Medicare - 1.45%		2,914.10
State Unemployment Insurance - 1.81%		1,610.00
Temporary Disability Insurance - 1.00%		1,529.50
Worker's Compensation - 0.95%		
		48,300.00
FRINGE BENEFITS		
including health insurance, life/AD&D, LTD, flex spending plans, staff training/professional development etc., computed @ 30% of wages.		
		227,670.1
TOTAL PERSONNEL COST		
OTHER EXPENSES		
Insurance		2,500.00
Janitorial		26,000.00
Lease		1,500.00
Publication & Printing		2,000.00
Rental of Equipment (if unable to purchase kitchen equipment)		35,000.00
Repair & Maintenance		12,000.00
Staff Training		
Supplies - Office		1,000.00
Supplies - Training		
Supplies - Natural Farming Input Materials		10,000.00
Utilities		48,000.00
		138,000.00
TOTAL OTHER EXPENSES		
PROJECTED REVENUES		
Taro Processing (\$1.25/lb x 2500 lbs/wk x 52 wks/yr)	195,000.00	
Value-Added/By-product Processing (\$35/hr X 10hr/day X 6 days/wk X 52 wks)	109,200.00	
Natural Farming Inputs (half year site prep-half year production)	80,000.00	
TOTAL BUDGET	384,200.00	365,670.1
PROFIT		18,529.90

PROPOSED OPERATING BUDGET - FINAL	REVENUES	EXPENSES
PERSONNEL COST		
Salaries and Wages		
Facilities Manager		50,000.00
Admin. Assistant/Book keeper -		35,000.00
Engineer - Meat Processing/Taro Processing		38,000.00
Natural Farming Inputs Technician		38,000.00
Total Salaries and Wages		161,000.00
Payroll Taxes & Assesments		
FICA - 6.20%		9,982.00
Medicare - 1.45%		2,334.50
State Unemployment Insurance - 1.81%		2,914.10
Temporary Disability Insurance - 1.00%		1,610.00
Worker's Compensation - 0.95%		1,529.50
		48,300.00
FRINGE BENEFITS		
including health insurance, life/AD&D, LTD, flex spending plans, staff training/professional development etc., computed @ 30% of wages.		
TOTAL PERSONNEL COST		227,670.10
OTHER EXPENSES		
Insurance		2,500.00
Janitorial		35,000.00
Lease		1,500.00
Publication & Printing		2,000.00
Rental of Equipment (if unable to purchase kitchen equipment)		35,000.00
Repair & Maintenance		12,000.00
Staff Training		
Supplies - Office		1,000.00
Supplies - Training		
Supplies - Natural Farming Input Materials		10,000.00
Utilities		50,000.00
TOTAL OTHER EXPENSES		149,000.00
PROJECTED REVENUES		
Meat Processing (\$125/head x 10 head/wk x 52 wks/yr)	65,000.00	
Taro Processing (\$1.25/lb x 2500 lbs/wk x 52 wks/yr)	195,000.00	
Value-Added/By-product Processing (\$35/hr X 10hr/day X 6 days/wk X 52 wks/yr)	109,200.00	
Natural Farming Inputs	150,000.00	
TOTAL BUDGET	519,200.00	376,670.10
PROFIT	142,529.90	

Agriculture Resource Center of Ho‘ea (ARCH) Proposed Funding Sources

The project will be carried out in three phases as follows:

Phase 1:

5 acres of site work and Infrastructure

Roads, utilities, sewer, electrical, sidewalks, drywells and paring lot lighting.

Cost: \$721,262

Funding sources: County of Hawaii Community Development Block Grant (CDBG)

8,823 sf – Produce Processing Facility

Cost: \$1,058,760

Funding Sources: County of Hawaii Community Development Block Grant (CDBG)
Federal Economic Development Agency (EDA)

Architectural and Engineering Fees 10% + Tax

Cost: \$185,420

Funding Sources: Kamehameha Schools Bishop Estate
USDA Rural Development

Permitting, EA and Civil Engineering fees:

Cost: \$120,000

Funding Sources: Kamehameha Schools Bishop Estate (KSBE)
USDA Rural Development

Processing Facility furnishings and Kitchen Equipment

Cost: \$177,095

Funding Sources: EDA

Start-up funds for Operating Costs

Cost: \$100,000

Funding Sources: OHA, KSBE, Capital Campaign

Phase 2:

9,600 sf Natural Farming Input Processing Facility

Cost: \$576,000

Funding Source: USDA Rural Development with Capital Campaign match

3,375 sf Meeting Facility

Cost: \$405,000

Funding Sources: CDBG, Capital Campaign, Grant in Aide.

Phase 3:

3,375 sf Meat Processing Facility

Cost: \$336,000

Funding Sources: Office of Hawaiian Affairs, KSBE, Capital Campaign, Grant in Aide

Meat Processing furnishings, coolers and freezers

Cost: \$416,000

Funding Sources: Office of Hawaiian Affairs (OHA), KSBE, Capital Campaign, Grant in Aide

1200 sf Caretaker residence

Cost: \$210,000

Funding Sources: HUD, Capital Campaign

Job Training for various occupations and skills

Cost: \$100,000

Funding Sources: Dept. of Labor Industrial Relations, OHA, Alulike, KSBE