

JOHN WAIHEE
GOVERNOR OF HAWAII



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

DEPUTIES

KEITH W. AHUE
MAHABU TAGOMORI
Dan T. Kochi

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

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SEP 3 1991

CH. 3. 10.
QUALITY

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

*Contact
204 547 6460
Land Management*

Ref.:LM-GM

KA-90:1307

Mr. Brian Choy, Director
State Office of Environmental
Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

Subject: Notice of Determination/Negative Declaration for
The Sunkiss Shrimp Company, Kekaha, Waimea, Kauai,
Tax Map Key: 1-2-02:22

We are submitting the enclosed environmental assessment
with negative declaration for the above. The following
information is provided in support of this determination:

1. Name of accepting agency:
State of Hawaii
Department of Land and Natural Resources
Division of Land Management
1151 Punchbowl Street, Room 220
Honolulu, Hawaii 96813

Preparing Applicant:
Sunkiss Shrimp Company
P.O. Box 583
Kekaha, Hawaii 96752
2. Brief description of proposed action:
The Sunkiss Shrimp Company proposes to construct and
operate approximately one (1) acre of aquaculture ponds
for saltwater shrimp production on 5.2 acres of
agricultural land at Kekaha, Waimea, Kauai, identified
as Tax Map Key: 1-2-02:22. The fiberglass ponds will
be placed essentially at grade, although some leveling
of the existing topography will be required.

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Mr. Brian Choy

Page 2

SEP 3 1991

Water for the project will come from an on-site well. Approximately 80 gallons per minute will be required on a continuous basis.

The effluent from the ponds will be directed into a settling basin to be located on the site's southern end. The basin will provide infiltration of the effluent into the blackish ground water near the ocean shore. Potable water sources will not be adversely impacted by this infiltration. There will be no overflows or excursions going directly into the ocean.

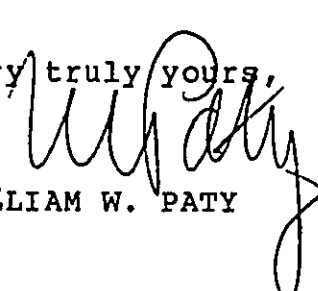
3. Determination:

We have determined that a Negative Declaration is appropriate and an Environmental Impact Statement is not required.

4. Reasons for supporting determination:

The proposed project poses no known, significant, short or long-term adverse impacts which cannot be mitigated. No endangered or threatened species will be affected and there is no known historical resources in the vicinity of the proposed action. The project is supported by the community. The significance of anticipated environmental impacts has been adequately evaluated and disclosed within the environmental assessment.

Very truly yours,


WILLIAM W. PATY

Enclosure

cc: Kauai Land Board Member
Kauai District Land Office
Sunkiss Shrimp Company

1991-09-23- KA-FBA

FILE COPY

**AN ENVIRONMENTAL ASSESSMENT
FOR
*SUNKISS SHRIMP COMPANY
KAUAI, HAWAII ***

MAY 1991

AN ENVIRONMENTAL ASSESSMENT

FOR

SUNKISS SHRIMP COMPANY

KAUAI, HAWAII

Prepared by

Mr. Landis Ignacio
P. O. Box 583, Kekaha
Kauai, Hawaii 96752

Prepared for
Sunkiss Shrimp Company
Kekaha, Kauai, Hawaii

May 1991

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SECTION A

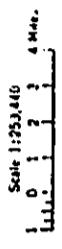
INTRODUCTION

The proposed project involves the construction of saltwater aquaculture ponds and appurtenant structures and water distribution systems on approximately 5.19 acres of agricultural lands at Kekaha, Kauai (TMK: 1-2-02:22). The land is owned by the State of Hawaii and is unutilized. It is bordered on the south side by ocean beach, and on the north side by the main highway leading from Kekaha to Mana. The surrounding lands are presently under sugar and corn seed production by Kekaha Sugar Company and Pioneer Seed Company.

The following assessment is submitted in compliance with requirements to demonstrate that the project will not have a significant "Environmental Impact".

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
UNIVERSITY OF HAWAII AGRICULTURAL EXPERIMENT STATION

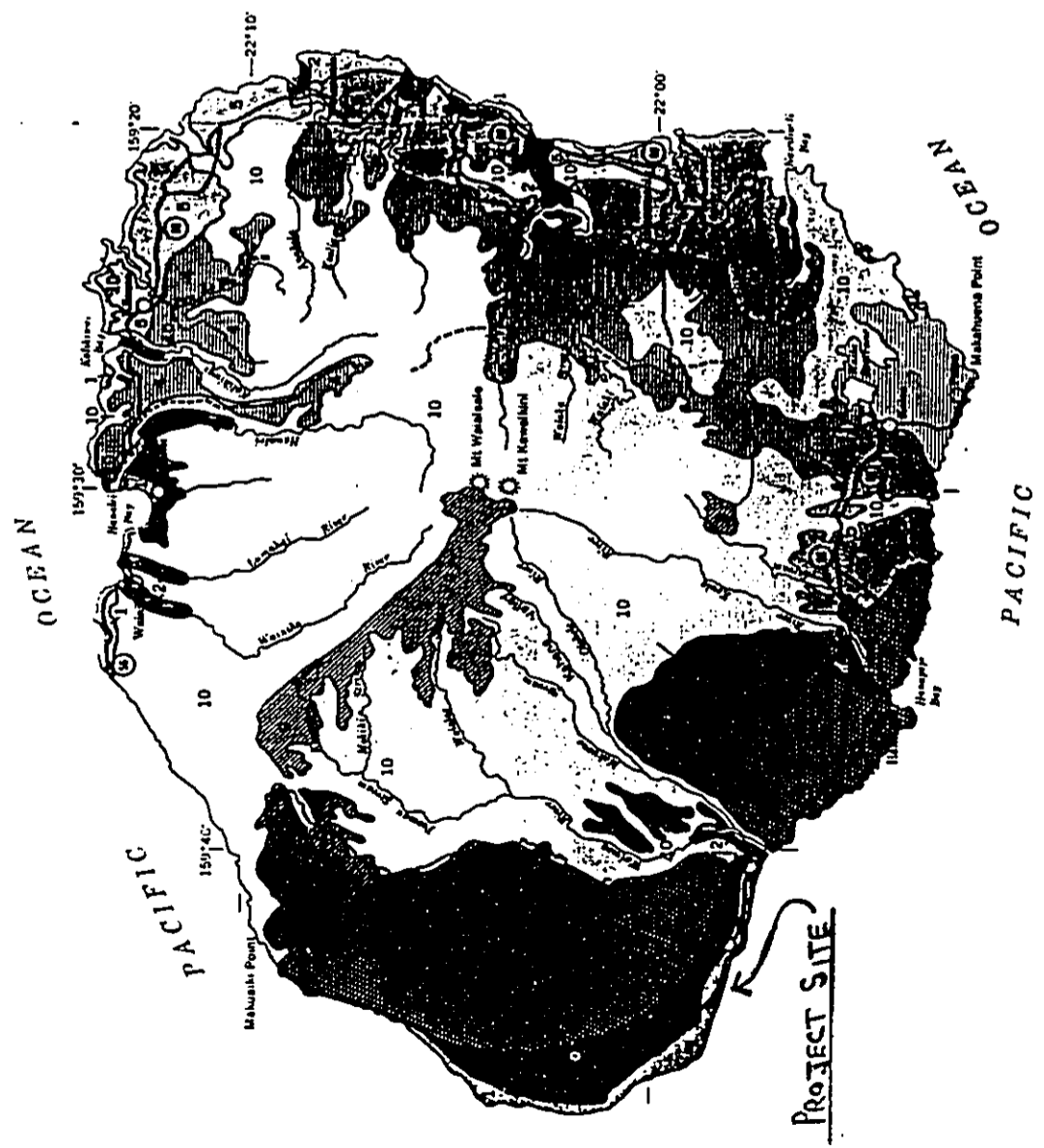
**GENERAL SOIL MAP
KAUAI ISLAND, HAWAII**



SOIL ASSOCIATIONS

- Jaaca-Mohalea association:** Deep, nearly level to moderately sloping, excessively drained and well-drained soils that have coarse-textured underlying material; on coastal plains.
- Hanalei-Kalalea-Pokala association:** Deep, nearly level, poorly drained to well-drained soils that have dominantly, moderately fine textured or medium-textured subsoil or underlying material; on bottom land.
- Kekaha-tahiti association:** Deep, nearly level, well-drained and poorly drained soils that have a fine-textured subsoil; on coastal plains.
- Kapa-Poahu-Halii-Makapili association:** Deep, nearly level to steep, well drained and moderately well drained soils that have a fine textured or moderately fine textured subsoil; on uplands.
- Lihue-Puhi association:** Deep, nearly level to steep, well drained soils that have a fine textured or moderately fine textured subsoil; on uplands.
- Mokuauia-Nihoa-Niu association:** Deep, gently sloping to steep, well-drained soils that have a dominantly moderately fine textured or fine textured subsoil and shallow, steep and very steep, well-drained soils over basalt bedrock; on uplands.
- Waikomo-Kalihi-Kaloo association:** Moderately deep, gently sloping, well-drained upland soils that have a moderately fine textured or fine textured subsoil; deep, nearly level, poorly drained, bottom-land soils that have a fine-textured subsoil.
- Rough broken land-Mahalo-Kakee association:** Shallow to deep, very steep, rough broken land and deep, moderately sloping to very steep, well-drained soils that have a medium-textured to fine-textured subsoil; on uplands.
- Waialeale-Aiala association:** Moderately deep, very steep, somewhat poorly drained soils that have a moderately fine textured subsoil and level to moderately steep, very poorly drained organic soils over fine-textured material; on uplands.
- Rough mountainous land-Rough broken land-Rock outcrop association:** Well-drained to excessively drained, very steep to precipitous lands of mountains and gulches.

January 1971



SECTION B

PROJECT DESCRIPTION

B-1 AQUACULTURE FACILITY AND PONDS

Sunkiss Shrimp Company proposes to construct and operate approximate 1 acre of aquaculture ponds for saltwater shrimp production on 5.19 acres of land located at Kekaha, Kauai. The ponds will be constructed in a circular fashion, and lined with a rubber membrane. The ponds will be placed essentially at grade, although some leveling of the existing topography will be required. The complete project will consist of four high intensity, grow-out ponds (.25 acres each) and two 30 foot diameter nursery tanks.

Proposed structures for the site will include the use of the existing concrete building as a hatchery and storage facility, as well as two 30' diameter fiberglass tanks as previously mentioned, and a security fence completely surrounding the parcel.

B-2 SOURCE WATER

Water for the project will be obtained from an on-site well to be located on the north side of the grow-out ponds. Approximately 80 gpm will be required on a continuous basis, but the capacity of the system will be 480 gpm to meet emergency requirements. The salinity of the water in the system will be maintained at between 20 and 30 ppt. Water at the required salinity will be obtained directly from this on-site well tapping the aquifer in the limestone foundation.

B-3 EFFLUENT

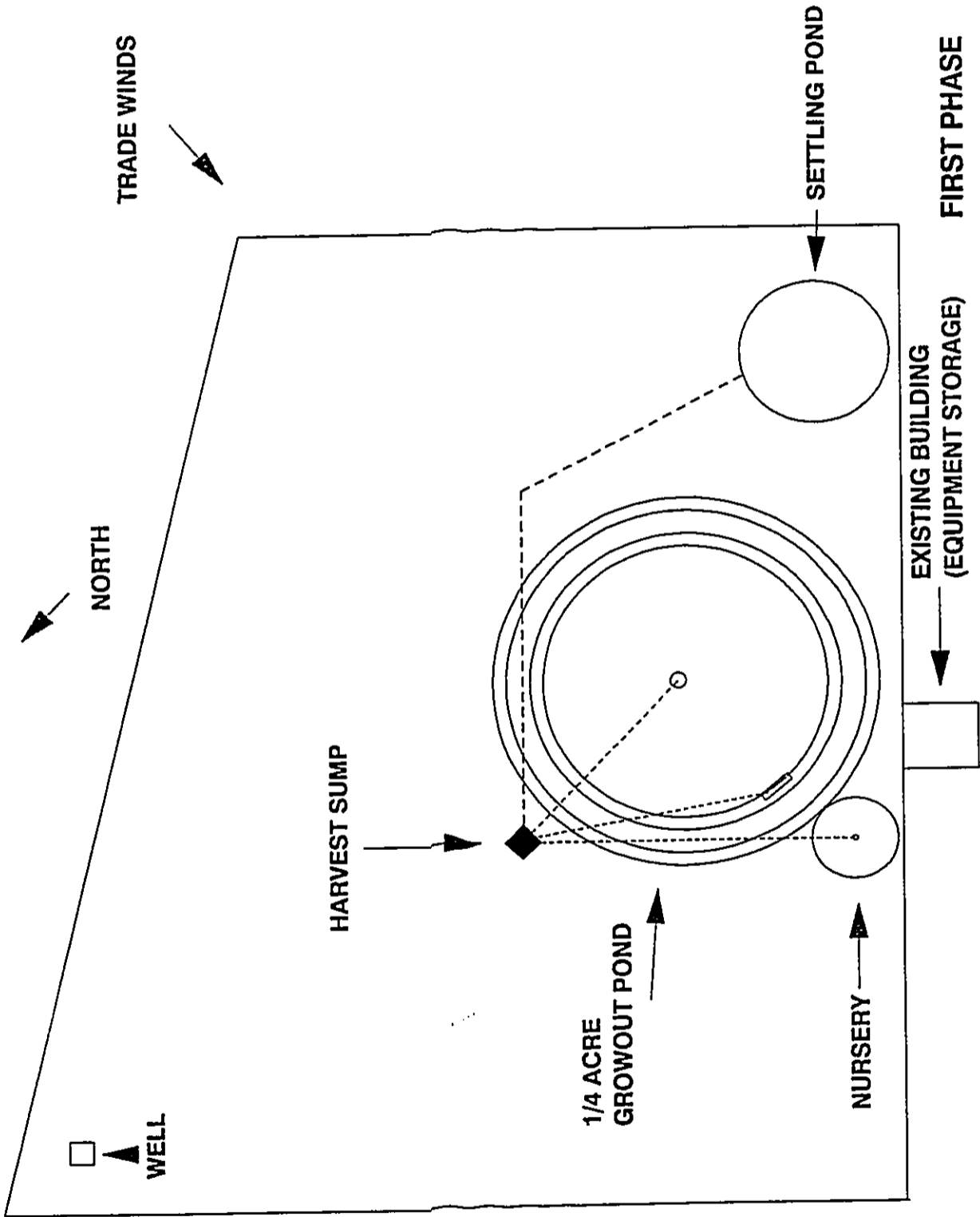
The effluent from the ponds will be directed into a settling basin to be located on the southern end of the parcel. This basin will provide infiltration of the effluent into the brackish ground water body near the ocean shore. Potable water sources will not be adversely impacted by this infiltration. There will be no overflows or excursions going directly into the ocean.

B-4 ANIMAL EVASION AND CONTROL

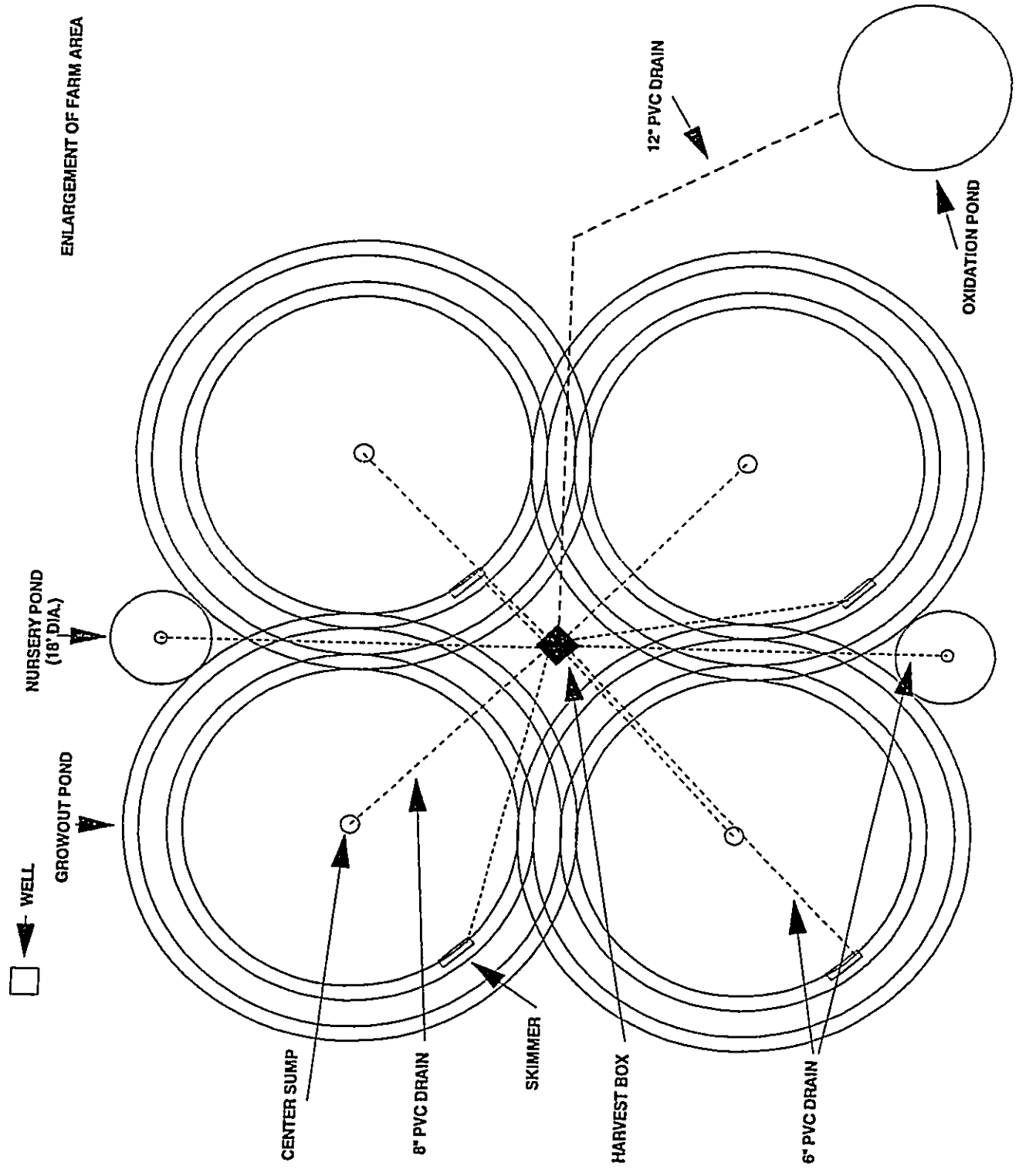
Because of the State's limited endemic biota, efforts have been undertaken since the turn of the century to increase the diversity of aquatic species available for recreational fishing pursuits. These introductions planned and in some cases accidental, have resulted in the establishment of at least 36 non-indigenous aquatic animals in the State. Many of these exotics serve useful purposes and are important and generally welcomed additions to the Hawaiian fauna. Others are of less importance and would probably not be missed if they could be eliminated. Considering the haphazard and indiscriminate nature of many of the earlier introductions, none appear to be seriously detrimental. Despite these facts, the Board of Agriculture continues to restrict importation of potentially injurious species for various reasons. The Sunkiss Shrimp Company

plans on producing the marine shrimp P. Vannamei. This species does not appear on the State's Injurious Species List.

However, Sunkiss plans on minimizing the potential of an escape or evasion through the use of a series of 1/4 inch screen filters on all outlet structures. These screens will be used in combination with the on-site settling basin, therefor virtually eliminating the escape potential.



ENLARGEMENT OF FARM AREA



NURSERY POND
(18" DIA.)

GROWOUT POND

WELL

CENTER SUMP

8" PVC DRAIN

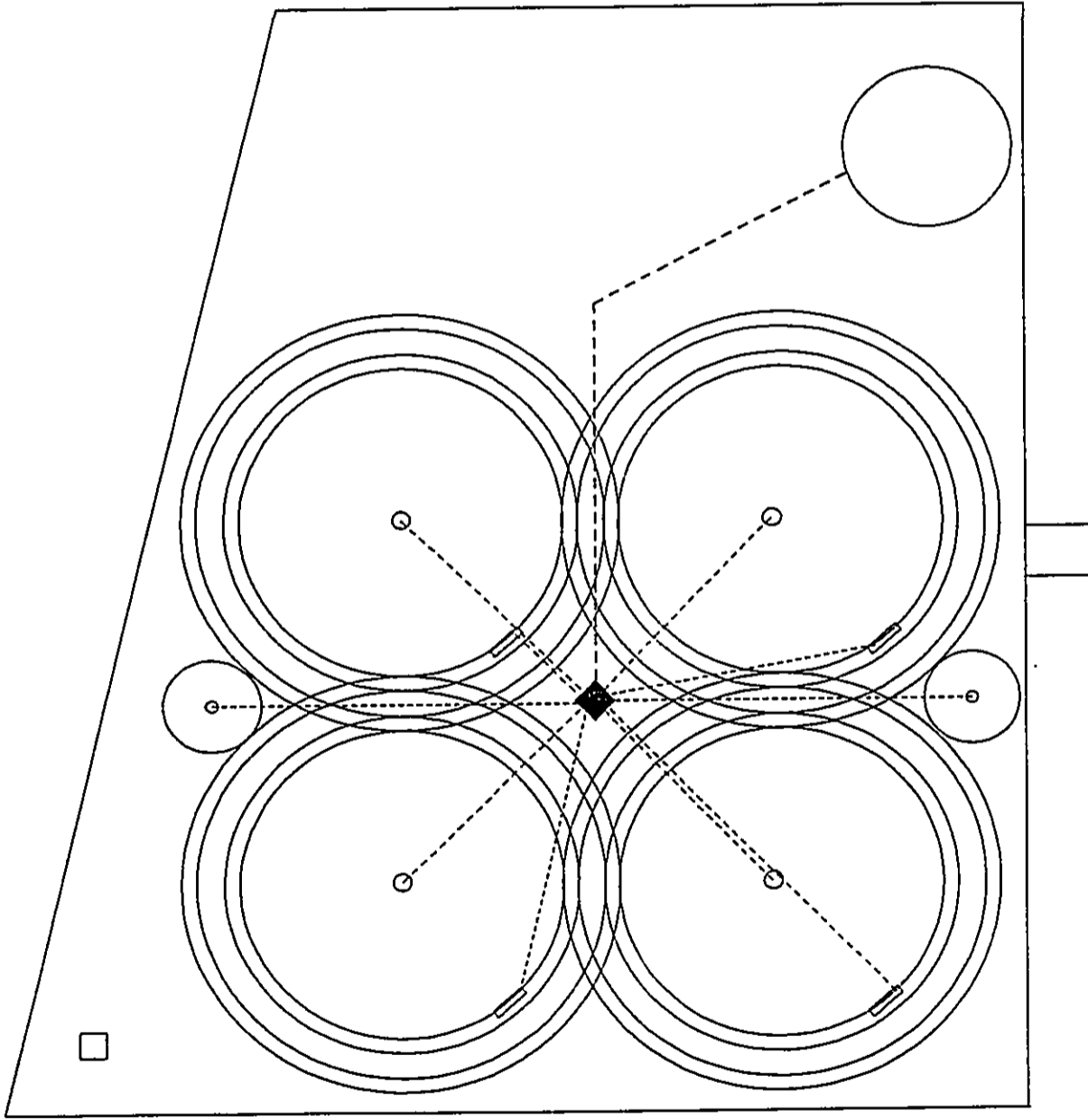
SKIMMER

HARVEST BOX

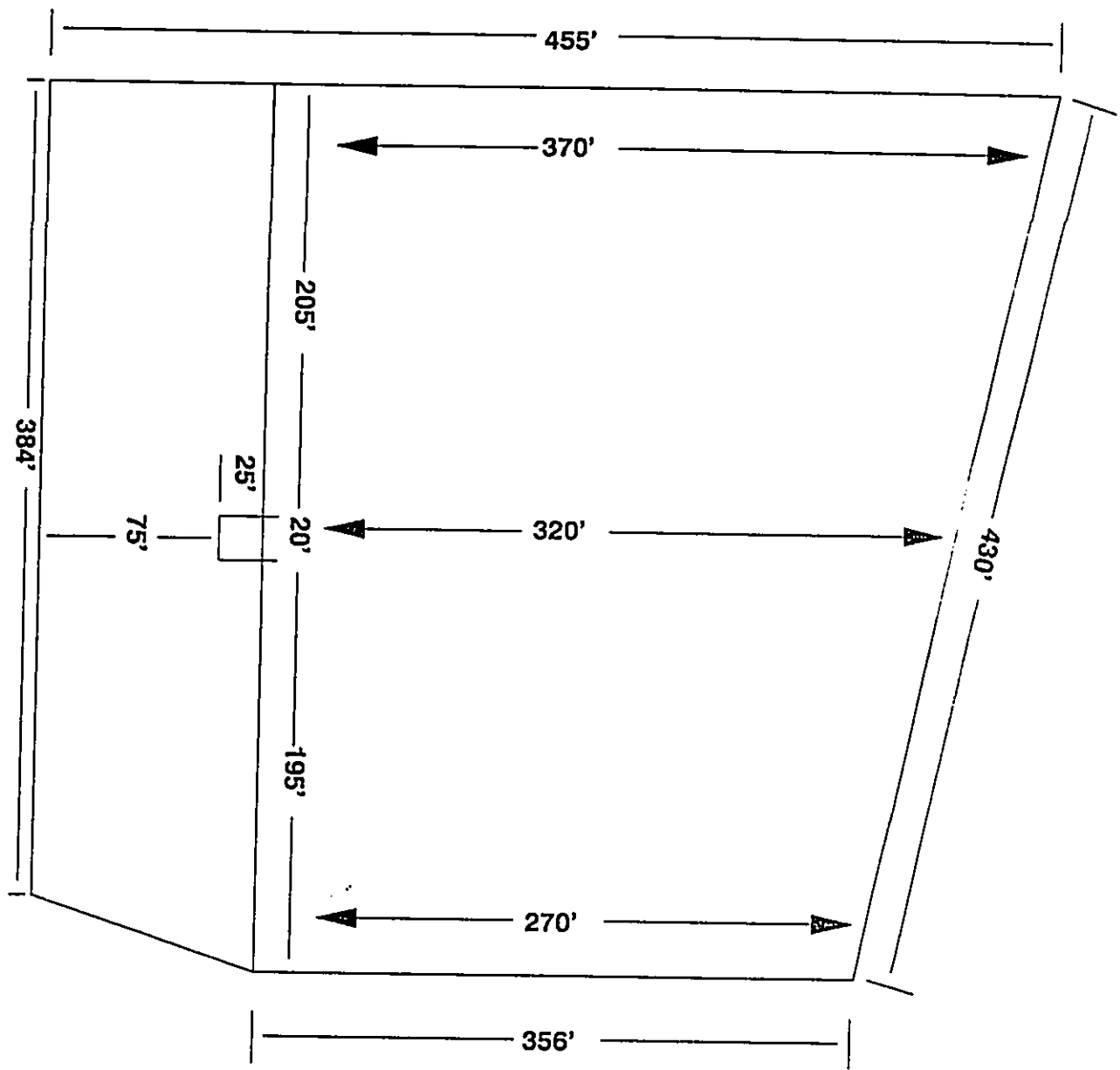
6" PVC DRAIN

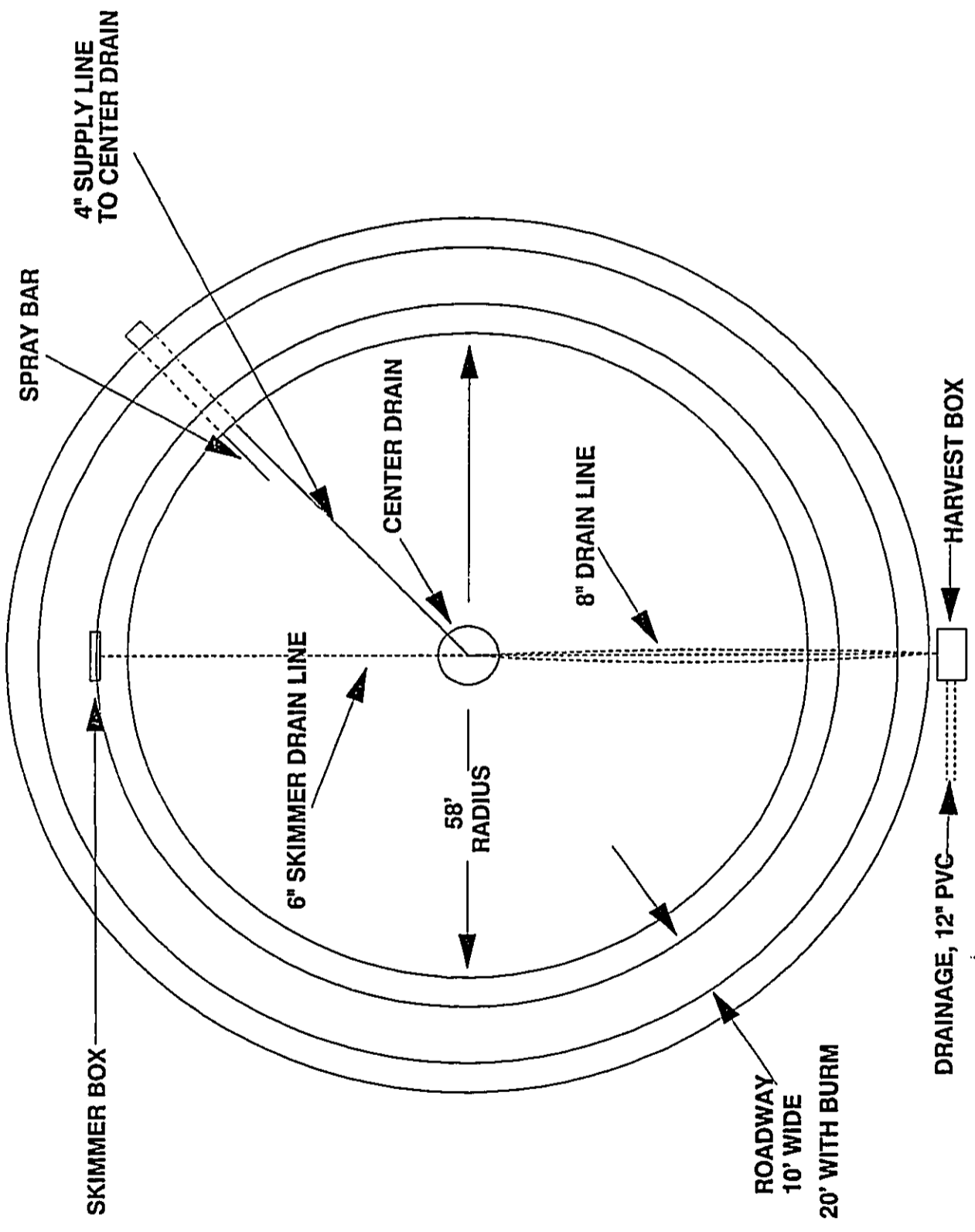
12" PVC DRAIN

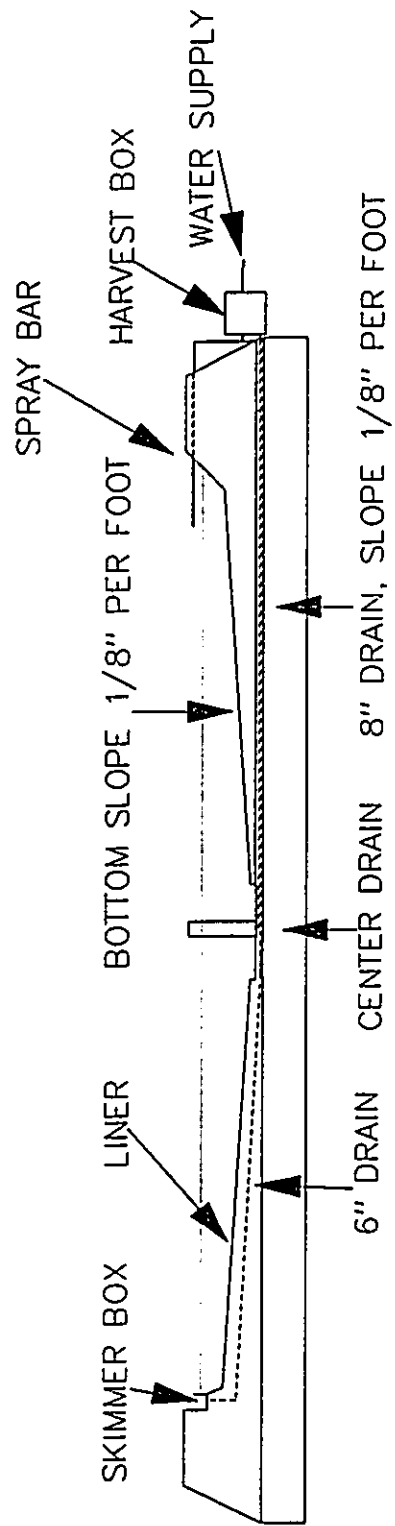
OXIDATION POND



DRAWING TO SCALE







SECTION C

ENVIRONMENTAL SETTING

C-1 PROJECT SITE DESCRIPTION

The proposed site for Sunkiss Shrimp Company is a state-owned, unutilized parcel on the west coast of Kauai near the town of Kekaha. The property is 5.19 acres in size, in a rectangular shape. The land is flat and has previously been used and known as the "Radio Noise Field Station", which belonged to the Federal Department of Commerce.

There is a drainage canal to one side. The parcel was recently turned back to the State of Hawaii as part of the Government Excess Land Act. Use of this land for aquaculture purposes is consistent with zoning and land use designations, as well as the general trend in development of other agricultural parcels in this area, many of which presently support agricultural facilities.

C-2 CLIMATE

The Mana Plain of Kauai is considered one of the warmer and sunnier areas of the State with an average temperature of 76°F. Average daily insolation measures 500 (the highest reading in Hawaii is 550). Average rainfall measures less than 15 inches annually. The State Aquaculture Master Plan identified this area, the Mana Plains, as the best site for aquaculture development in Hawaii.

C-3 SOILS

According to Soil Conservation Service maps, the soil throughout the entire parcel is classified as Jaucus Sand (JaC). This soil is single grain, pale, to very pale, sandy and more than 72 inches deep. This soil type merges with (and, in the classification system used by the SCS, includes) beach and dune sand.

C-4 SITE VEGETATION

A survey of the kinds of plants on the project site was undertaken for the purpose of vegetation identification.

The vegetation survey revealed that the strand assemblage in and around the project site is similar to, although somewhat less developed than, that found along the entire west coast of Kauai. The principal species present includes beach grass or 'aki 'aki (Sporobolus Virginicus), Beach Morning-Glory (Ipomoea Brasiliensis), Beach Naupaka (Scaevola Taccada), Napier Grass (Pennisetum Purpureum), Koa-Haole (Leucaea Leucocephala), Kiawe (Prosopis pallida), Kikania, Cocklebur (Xanthium Saccharatum), and Bermuda Grass (Cynodon Dactylon).

SECTION D

ENVIRONMENTAL IMPACTS

D-1 IMPACT ON COASTAL STRAND VEGETATION

The placement and extent of pond development is characterized in areas inhabited mainly by exotic weed plant species and grasses. Some native strand plants do occur in the area and these will be replanted along the fence perimeter. These plants are not rare and endangered species and do not form a coherent community. Many of these exotic and native species will re-establish on berms in and around the facility after construction.

D-2 IMPACT ON SURFACE AND GROUND WATER RESOURCES

The impact of the project on ground water in the area is of minimum or no concern due to the proximity of the parcel to the ocean. All discharge will be directed to a settling sump with excellent seepage, thus returning all withdrawn waters to its original source, filtered naturally.

D-3 IMPACT ON ARCHAEOLOGICAL OR HISTORIC SITES

There are no indication of the presence of historic sites or endangered plants or animal species on or near the property. The site has been impacted by activities in the past.

D-4 PHYSICAL IMPACTS

The site improvements planned by Sunkiss Shrimp Company will not alter significantly the existing physical features or topography of the area. The surrounding area is typically scenic with beaches, mountains, corn and canefields.

D-5 BIOLOGICAL IMPACTS

The rigorous soil, water and climate conditions of the area limits both animal and vegetative diversity. The dominant vegetative species of this area is a dense thicket of Kiawe trees. (A more complete description of the site vegetation can be obtained by referring to Section C-4.) The area does not support any migratory bird populations. The dense Kiawe growth however, does support introduced species of both spotted and barred doves. The common house mouse (Mus Musculus) and the Polynesian Rat (Rattus Exulans Hawaiiensis) also co-exist in limited numbers. Adjacent to the property is a drainage canal. In the canal, there are Tilapia (Mossambica) and Swordtails (Xiphophorus Helleri). These are all introduced aliens. There are no natives that inhabit the canal, thus, eliminating any impacts.

D-6 ECONOMIC AND SOCIAL IMPACTS

Two beneficial socio-economic impacts would result from the proposed action. During construction, local equipment suppliers, contractors and hardware dealers would benefit from sales and services. During the operational phase of the project, a farm worker will be directly employed, with additional benefits being felt by feed and fish retailers.

The principle socio-economic benefit will come when Sunkiss Shrimp Company reaches its goal of supplying a consistent source of quality "Pure Hawaiian Sunkissed Shrimp" to the local markets which would include numerous luxury hotels and restaurants which demand a consistent supply of high quality product. Sunkiss will also actively seek Kauai residents and local school groups, to come and train on the farm and learn about pond management, water quality, and shrimp farming systems. They will learn about mariculture thru on-the-job training, so that they may one day set up their own farm. Sunkiss hopes to work closely with Alu Like and other community groups as well.

The success of the proposed project would have a significant positive Socio-Economic Impact throughout the town of Kekaha, the Island of Kauai and the State of Hawaii.

SECTION E

MITIGATION MEASURES PROPOSED TO
MINIMIZE IMPACTS

The proposed layout of ponds, infiltration basin, well, storage and security structures are designed to avoid any adverse impacts occurring in and on this and adjacent property.

JOHN WAIHEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
AQUACULTURE DEVELOPMENT PROGRAM
335 MERCHANT STREET, ROOM 348
HONOLULU, HAWAII 96813
(808) 548-5495

June 12, 1991

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

DEPUTIES

KEITH W. AHUE
MANABU TAGOMORI
RUSSELL B. FUKUMOTO
DAN T. KOCHI
AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER RESOURCE MANAGEMENT

Mr. Landis Ignacio
The Sunkiss Shrimp Company
P.O. Box 583
Kekaha, HI 96752

Dear Landis:

I am writing in support of your plans to develop a shrimp farm at Kekaha, Kauai, and in support of granting your required Environmental Assessment for this project.

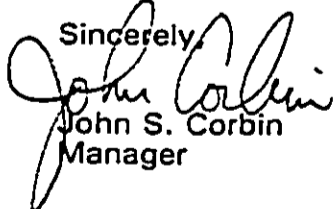
I understand that you are in the process of negotiating for a State lease on a 5-acre parcel. This site was visited by Mr. Richard Fassler, Aquaculture Development Program Economic Development Specialist; Mr. Paul Olin, State Aquaculture Extension Specialist; and Mr. Greg Jakob, State Aquaculture Engineering Extension Specialist. They reported that the site was outstanding in regard to 1) warm temperatures; 2) availability of salt or brackish water; 3) ease of development; and 4) accessibility to markets.

Furthermore, Messrs. Fassler, Olin and Jakob noted that the parcel is in the Agriculture zone, and there are no major permit problems.

I would also like to point out that the market for fresh marine shrimp is excellent and you should encounter no problems with your plans to market up to 100,000 pounds of product a year.

The Aquaculture Development Program will continue to assist you in the start-up and production phases of your project. Please call on us often.

We wish you the very best of success.

Sincerely,

John S. Corbin
Manager

JOANN A. YUKIMURA
MAYOR



GLENN H. SATO
Acting Director

COUNTY OF KAUAI
OFFICE OF ECONOMIC DEVELOPMENT
4444 RICE ST - RM 204
LIHUE, KAUAI, HAWAII 96766
TELEPHONE (808) 245-7305

June 21, 1991

Mr. Landis Ignacio
P.O. Box 583
Kekaha, HI 96752

Dear Mr. Ignacio:

Thank you for sending me your report "A Proposal for a Shrimp Farm on Kauai." I am a strong proponent for aquaculture, having worked on the Prawns of Hawaii operation at Kilauea, Kauai from 1978 to 1988.

Your proposal is well prepared and I commend you for seeking professional input as well as adding to your practical work experience before embarking on your business venture.

My experience in aquaculture taught me that three essential physical ingredients are critical in a successful operation. These are climate, level land and water availability. Your site offers all three and I am optimistic that you have a good chance to have a thriving business.

I offer the Office of Economic Development's support of your efforts at establishing an aquaculture operation at Kekaha. Please call me if I can offer any assistance gleaned from my ten years experience in aquaculture.

Sincerely,

Glenn H. Sato
Glenn H. Sato
Acting Director

KEKAHA SUGAR

P.O. Box 549
Kekaha Hawaii 96752
(808) 337-1472
Fax (808) 337-9209



June 24, 1991

Mr. Landis Ignacio
Sunkiss Shrimp Company
P. O. Box 583
Kekaha, Hawaii 96752

TO WHOM IT MAY CONCERN:

SUBJECT: Statement of Support for Sunkiss Shrimp
Company's Plan for a Marine Shrimp Farm
at Kekaha, Kauai, Hawaii

Kekaha Sugar Company, Limited supports the planned marine shrimp venture at Kekaha. Both Pioneer Seed and Kekaha Sugar declined to lease the proposed area due to its location and size. A marine shrimp operation would make good use of the area and be compatible with the other agricultural operations in the area. Further, it would clean up an unsightly area trashed by beach goers.

If aqua culture is to succeed, ventures such as this need to be encouraged in its formative years by the State, County, and the Community. We will do our part in supporting this project.

Very truly yours,

A handwritten signature in cursive script, appearing to read "L. A. Faye Jr.".

L. A. FAYE JR.,
Vice President and Manager

LAF/lis



PIONEER HI-BRED INTERNATIONAL, INC.
PLANT BREEDING DIVISION

RESEARCH LOCATION
P.O. BOX 586 • KEKAHA, KAUAI, HAWAII 96752
PHONE (808) 237-1413

June 10, 1991

Sunkist Shrimp Co.
Mr. Landis F. Ignacio
P.O. Box 583
Kekaha, Hi, 96752

Subject; Supportting Statement to Sunkist Shrimp Co.

Dear Landis;

Pioneer HiBred International Inc. supports your shrimp operations which will be located southeast end of our research station fronting the beach in Kekaha (first ditch). Your operation will not have any effect to our Research operations of seed corn, soybeans and sunflower. It will be a compliment to have more establishment of diversified commodities in the Kekaha district.

Much success to your up comming operations!

yours Truly

Jerome Klepper
Location Manager

Roy Oyama
Parent Seed Manager