

OCT - 4 1990

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

RECEIVED
OFFICE OF THE DIRECTOR
DEPT. OF HEALTH

FRANK F. FASI
MAYOR

RECEIVED

'90 OCT 10 AIO:27

OFC. OF ENVIRONMENTAL
QUALITY CENTER



October 1, 1990

'90 OCT -3 P2:51

SAM CALLEJO
DIRECTOR AND CHIEF ENGINEER

IN REPLY REFER TO:

R 90-1103

Bruce Anderson, Ph.D.
Deputy Director for Environmental Health
Department of Health
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Anderson:

Subject: Negative Declaration for the Proposed
Wahiawa Refuse Convenience Center, Wahiawa, Oahu, Hawaii
Tax Map Key: 7-01-01:22 (POR.)

This letter constitutes a notice of determination by this department after the potential impact of the proposed project has been assessed according to Title II, Chapter 200, Environmental Impact Statement Rules, and Chapter 343 of the Hawaii Revised Statutes relating to environmental impact statements. The determination has been made that an environmental impact statement is not required, based on the environmental assessment (EA) that was prepared by our department through our contract with Engineering Design Group, Inc.

The pertinent information for the notice of determination is summarized as follows:

1. Proposing Agency:
Department of Public Works
Division of Refuse Collection and Disposal
City and County of Honolulu
2. Land Owner:
City and County of Honolulu
3. Tax Map Key:
7-01-01:22 (POR.)

221

Dr. Bruce Anderson
October 1, 1990
Page 2

4. Description of the Proposed Action:

The proposed action planned for the Wahiawa Refuse Convenience Center consists of a drive-through system where a resident may drive up to a disposal container, deposit refuse, and depart. Access to the site will be provided by a 24-foot roadway from Wilikina Drive. Vehicles will continue to the paved area around disposal bins or to the recycling area, as determined by the guard at the site.

This convenience center does not replace regular residential waste collection. Rather, it is intended to be a convenient place where a resident may dispose of refuse items which the resident might ordinarily have to transport to a sanitary landfill. Hazardous materials will not be accepted at the site. Deposited material will be compacted directly into the haul container which when full will be hauled to H-POWER. Non-combustible items will be transported directly to the Waimanalo Gulch Sanitary Landfill for disposal.

5. Consultation:

Twelve (12) Federal, State and City agencies, one (1) councilmember one (1) neighborhood board, and three (3) private organizations were requested to review and comment on the EA. The comments received within the review period are contained in Section IX of the EA. The comments did not require major changes and involved coordination already incorporated in the construction process.

Subsequent to the deadline for the review period and after the EA has finalized, the comments from the Department of Health were received. Those comments and our response are attached. As presented in the response letter, precautions will be taken in the design to mitigate potential impacts presented in the letter.

6. Determination: After completing the environmental assessment and consulting with other agencies and companies we have determined that the proposed action will not have a significant impact on the environment, and an environmental impact statement is not required.

Dr. Bruce Anderson
October 1, 1990
Page 3

7. Reasons Supporting the Determination: The potential impact of the proposed project will not affect or involve significant impacts on the following criteria:
- a. the loss or destruction of any natural or cultural resources;
 - b. the curtailment of the range of beneficial uses of the environment;
 - c. affect a rare, threatened or endangered species, or its habitat;
 - d. substantially affect the economic or social welfare of the community or State;
 - e. involve a substantial degradation of environmental quality;
 - f. substantially affect public health;
 - g. substantially involve secondary impacts, such as pollution changes or effects on public facilities;
 - h. detrimentally affect an environmentally sensitive area, such as a flood plain, marsh, estuary, fresh water, or coast water;
 - i. detrimentally affect air, or water quality, or ambient noise levels; and
 - j. affect natural or state historic sites.

In addition, none of the agencies which provided comments requested that an environmental impact statement be prepared.

Sincerely,

C. Michael Street
for SAM CALLEJO
Director and Chief Engineer

Attach.

1990-10-23-0A-FEA

FILE COPY

★ **Wahiawa Refuse Convenience Center** ★

Environmental Assessment

WAHIAWA REFUSE CONVENIENCE CENTER
[TMK 7-01-01: 22 (por.)]

ENVIRONMENTAL ASSESSMENT

Prepared for
DIVISION OF REFUSE COLLECTION AND DISPOSAL
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

Prepared by
Engineering Design Group, Inc.
Consulting Engineers
Honolulu, Hawaii

August 1990

TABLE OF CONTENTS

		<u>Page</u>
SECTION I	DESCRIPTION OF THE PROPOSED PROJECT	
	A. Background and Rationale	I-1
	B. Proposed Project	I-2
	C. Operations of the Refuse Convenience Center	I-4
	D. Project Phasing and Costs	I-6
SECTION II	DESCRIPTION OF THE EXISTING ENVIRONMENT	
	A. Description of the Existing Project Site	II-1
	B. Geology and Soils	II-1
	C. Drainage	II-3
	D. Climate	II-3
	E. Water Quality	II-4
	F. Biological Characteristics	II-4
	G. Archaeological or Historical Sites	II-5
	H. Traffic	II-5
	I. Infrastructure	II-6
	1. Police	II-6
	2. Fire	II-6
	3. Water	II-6
	4. Electricity	II-6
	5. Sewage	II-7
SECTION III	LAND USE PLANS AND POLICIES	
	A. Land Ownership	III-1
	B. Land Use Designations	III-1
SECTION IV	ANTICIPATED IMPACTS AND MITIGATIVE MEASURES	
	A. Air Quality	IV-1
	B. Water Quality	IV-2
	C. Noise	IV-3
	D. Flora and Fauna	IV-3
	E. Archaeological and Historical	IV-4
	F. Traffic	IV-5
	G. Sanitation	IV-6
	H. Infrastructure	IV-6
	I. Socioeconomic	IV-6
SECTION V	ALTERNATIVES TO THE PROPOSED PROJECT	
	A. No Action	V-1
	B. Alternate Sites	V-1
	C. Alternate Designs	V-1

TABLE OF CONTENTS
(Continued)

	<u>Page</u>	
SECTION VI	RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE ENHANCEMENT OF LONG-TERM PRODUCTIVITY.	VI-1
SECTION VII	IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES.	VII-1
SECTION VIII	SUMMARY OF UNRESOLVED ISSUES.	VIII-1
SECTION IX	LIST OF AGENCIES, ORGANIZATIONS AND PERSONS CONSULTED	IX-1
APPENDIX	BIOLOGICAL RECONNAISSANCE OF THE PROJECT SITE.	A-1
	LIST OF REFERENCES	

LIST OF FIGURES AND TABLES

FIGURES	DESCRIPTION	<u>After Page</u>
1	Island Map of the Project Location	I-1a
2	Vicinity Map of the Project Site	I-1b
3	Photos of Existing Site	II-1a
4	Photos of Existing Site	II-1b
TABLE 1	Correlation Survey of Mini-Dump Problem Areas	I-2a

SECTION I

DESCRIPTION OF THE PROPOSED PROJECT

A. Background and Rationale [1]

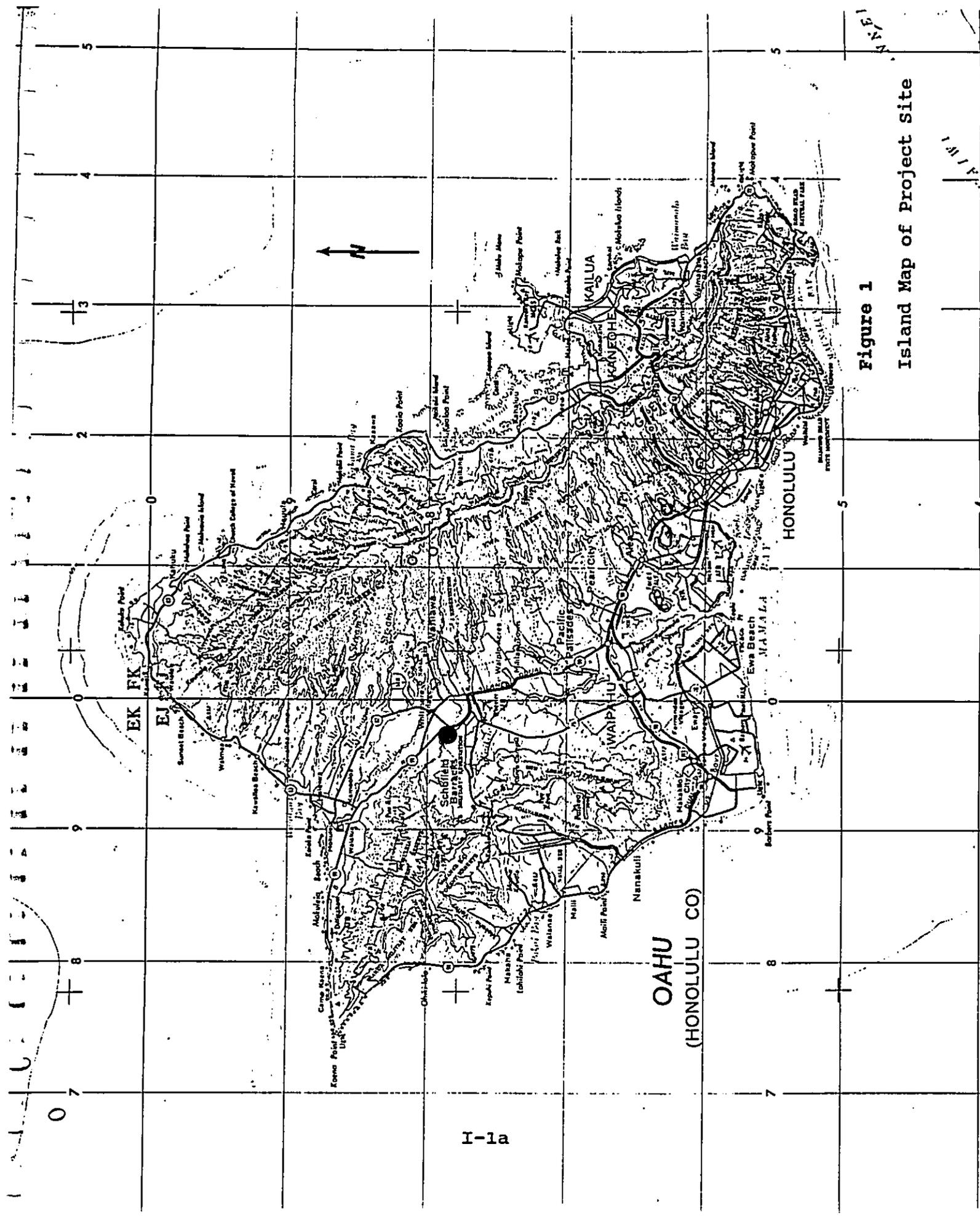
The City and County of Honolulu's Department of Public Works (DPW) proposes development of the Wahiawa Refuse Convenience Center (RCC) as part of the 1983 Oahu Solid Waste Management Plan (SWMP). Refer to Figures 1 and 2 for the location of the proposed project.

As defined in the SWMP, a convenience center is "a solid waste container facility, with or without compaction equipment, for use principally by neighborhood residents to discourage use of 'mini-dumps'." A mini-dump is defined as, "a pile of litter of such size as to constitute a special problem of refuse collection. It is more than a minor litter site."

Providing this RCC complements the City's overall plan for litter control, which includes the following:

- Public education and awareness
- More streamlined enforcement
- Continuing voluntary cleanup campaigns
- Establishing requirements for more litter receptacles

The Oahu SWMP identified a number of areas on Oahu where littering and mini-dumps create both aesthetic and public health concerns. These mini-dumps occur primarily in rural areas and generally in any open area with low visibility and little regular traffic.



I-1a

Figure 1
Island Map of Project Site

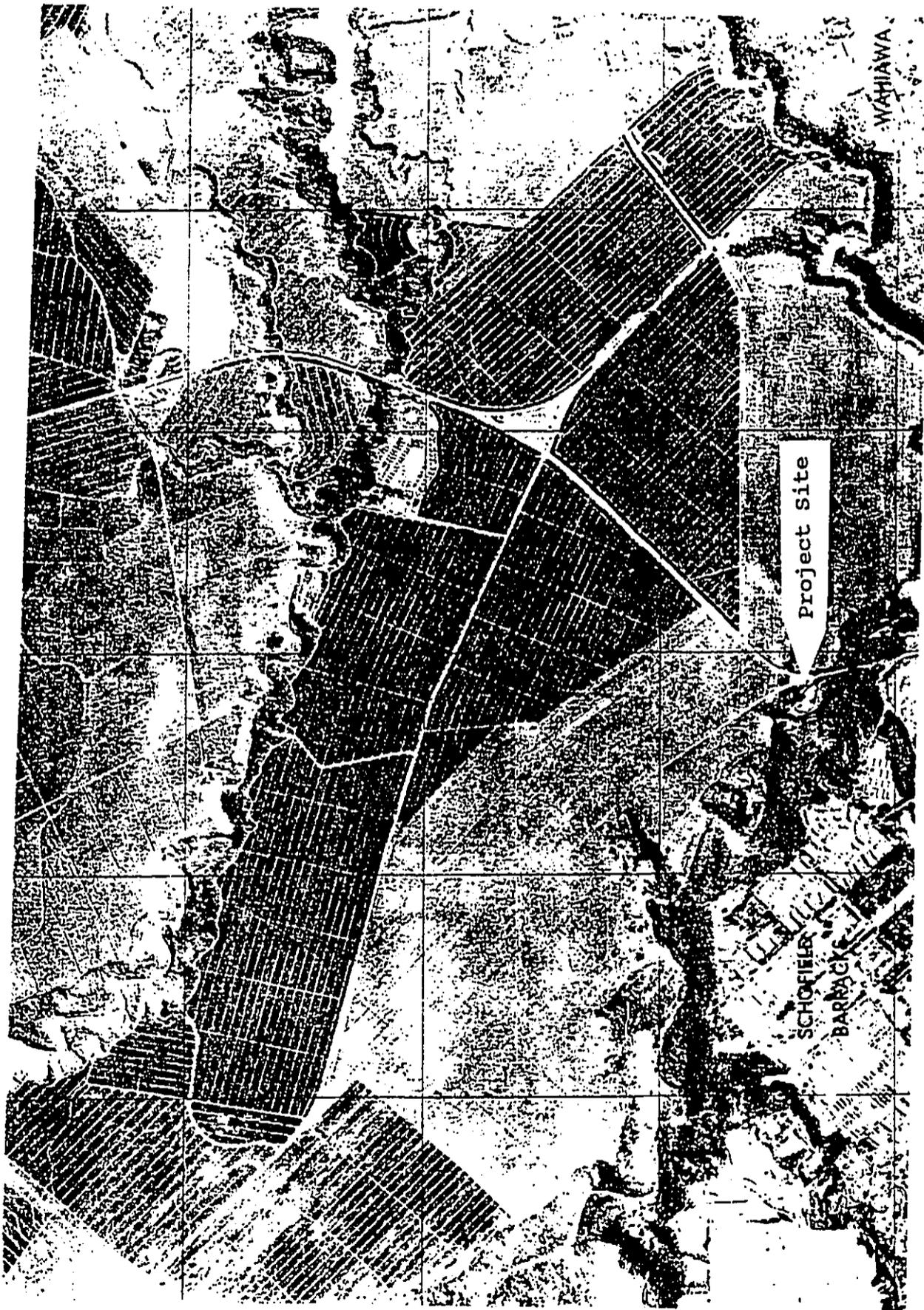


Figure 2
Vicinity Location of Project Site

Instead of food and household wastes, mini-dumps usually consist of tree trimmings, landscape wastes, and bulky items such as appliances, furniture and automobile parts. Generally, little putrescible material is found at these sites.

Both Hawaii and Kauai counties have experienced a reduction in illegal dumping since providing refuse "transfer stations" where residents deliver the refuse which might have ordinarily been dumped along roadsides. Hawaii county provided convenience centers incrementally throughout the island during the mid 1970's through the early 1980's. Unlike Oahu, Hawaii county did not provide refuse collection so the problem of mini-dumps was greater. After opening a number of these convenience centers, county officials reported that open illegal dumping ceased in most of the areas. Kauai provided refuse collection but mini-dumps still were prevalent in rural areas. After opening a transfer station, about 50 tons of refuse per week was deposited at the station, refuse which might otherwise have been dumped along roadsides.

B. Proposed Project

A number of locations on Oahu were identified through the SWMP study where more serious illicit dumping was occurring. Refer to Table 1 for an inventory of those sites. Since then a number of RCCs have been developed by the DPW:

TABLE 1
CORRELATION SURVEY OF MINI-DUMP PROBLEM AREAS

Problem Areas	Rural	Urban	Geographical Characteristics*						
			1	2	3	4	5	6	
Waimanalo	x		x						
Kailua		x	x	x					
Kaneohe		x	x						
Kahaluu	x		x						
Hauula	x		x						
Kahuku	x		x						
Sunset Beach	x		x						
Haleiwa	x		x	x	x				
Mokuleia	x		x						
Makaha	x		x		x				
Waianae	x		x	x	x				x
Nanakuli	x		x		x				
Makakilo	x		x						
Ewa Beach	x		x				x		
Waipahu		x	x	x	x				
Halawa		x	x						
Sand Island		x	x		x				
Hawaii Kai		x			x	x			
Mililani Town		x	x					x	
Wahiawa		x	x					x	x

*Geographical Characteristics notes:

- 1 Along the side of low-use roads and dead end streets
- 2 Along access roads to solid waste disposal facilities
- 3 Vacant land
- 4 Parks
- 5 Sugar cane or pineapple fields
- 6 Water courses including streams, canals and reservoirs

Source: Oahu Solid Waste Management Plan. May 1983.

<u>Refuse Convenience Center</u>	<u>Date Opened</u>
Waimanalo RCC	April 1985
Ewa RCC	March 1987
Waipahu RCC	May 1987
Laie RCC	December 1987
Waianae RCC	September 1989

The proposed Wahiawa site would be easily accessible to Wahiawa (about 2.5 miles from the business area of the town) and Mililiani and also would be convenient to residents of other problem areas identified in the inventory, such as Mokuleia.

The Wahiawa RCC, as with other RCCs, is not intended to replace regular residential refuse collection, which will remain as the primary method of refuse disposal. It would provide an accessible location for residents to take refuse, which ordinarily might be illegally dumped. Providing accessible disposal sites reduces the tendency for illicit dumping along roadsides.

The proposed RCC will involve a drive-through system where a resident may drive up to a disposal container, deposit the refuse, and depart. Access to the RCC will be provided by a 24-foot roadway from Wilikina Drive to the paved area around the disposal bins. The on-site guard will determine whether the refuse should be deposited in bins or should be routed to containers designated for large bulky items or recyclable items. Processing of the refuse is discussed under the next section, entitled "Operations of the Refuse Convenience Center."

The facility will be provided with electricity and telephone service from the nearest utility lines. An existing water meter will be activated to service the proposed project. A portable toilet will be provided.

Chain-link fencing to prevent access during off hours will be provided along Wilikina Drive. Some landscaping may be provided within the site, but the perimeter of the site already is surrounded by large trees and vegetation which will be retained to screen the site from the roadway.

C. Operations of the Refuse Convenience Center

The Wahiawa RCC will be slightly different than some of the other RCCs, in that a portion of the site will be set aside for large bulky items, such as appliances and furniture, and for recyclable items. Users will be restricted to householders. Refuse from commercial and business establishments will not be accepted. Access to the disposal bins is designed to accommodate only passenger cars and pickup trucks. Other than the contractor servicing the facility, larger vehicles will be prohibited at the facility.

The facility is planned to be open from 7:00 a.m. to 6:00 p.m., seven days a week. A guard will be on duty during these hours to inspect the incoming refuse and to route the load to the appropriate disposal bin. Although some bulky items will be accepted at the facility, derelict vehicles will not be. Dead animals also would not be accepted at the facility. Hazardous materials will not be accepted at the site.

To promote smooth operations of the facility and its procedures, information will be provided to the residents regarding the purpose of the facility, what will and will not be accepted at the facility, and instructions regarding who to contact to coordinate appropriate disposal.

Data on the amount of refuse deposited at the Ewa and Waipahu RCCs are available. From January through August of 1989, approximately 154 tons per month were deposited at the Ewa RCC and approximately 318 tons per month at the Waipahu RCC.[2] The volume for the Wahiawa RCC is expected to range somewhere between that of the Ewa RCC and the Waipahu RCC.

Because of the distance from the proposed Wahiawa RCC to HPOWER or to the Waimanalo Gulch Sanitary Landfill and the large volume of refuse anticipated, the number of hauls to these large waste processing sites must be minimized. To do this, a compactor will be provided at the Wahiawa RCC. This will greatly increase the amount of refuse which can be hauled with any one trip.

Refuse will be deposited into the compactor hopper. The deposited material periodically will be compacted directly into the haul container. When full, the container, which is enclosed, will be hauled to HPOWER. Non-combustible items will be transported directly to the Waimanalo Gulch Sanitary Landfill for disposal.

D. Project Phasing and Cost

After approvals for the proposed project are obtained, the contract process will require approximately 3 months and construction about 8 months. This places the estimated opening date for the Wahiawa RCC in late 1991.

The estimated cost for the proposed project is \$500,000, which includes site preparation and construction of the facility.

SECTION II

DESCRIPTION OF THE EXISTING ENVIRONMENT

A. Description of the Existing Project Site

The proposed project site [TMK 7-01-01: 22 (por.)] is the site of an abandoned concrete batching plant that was operated by Ameron HC&D. Figure 3 shows the existing access to the site from Wilikina Drive and evidence of illicit dumping along this access roadway. There are some remaining structures, as shown in the photos of Figure 4 and most are corroded or vandalized. These structures will all be removed by the present tenants, as part of the agreement transferring the title of the parcel.

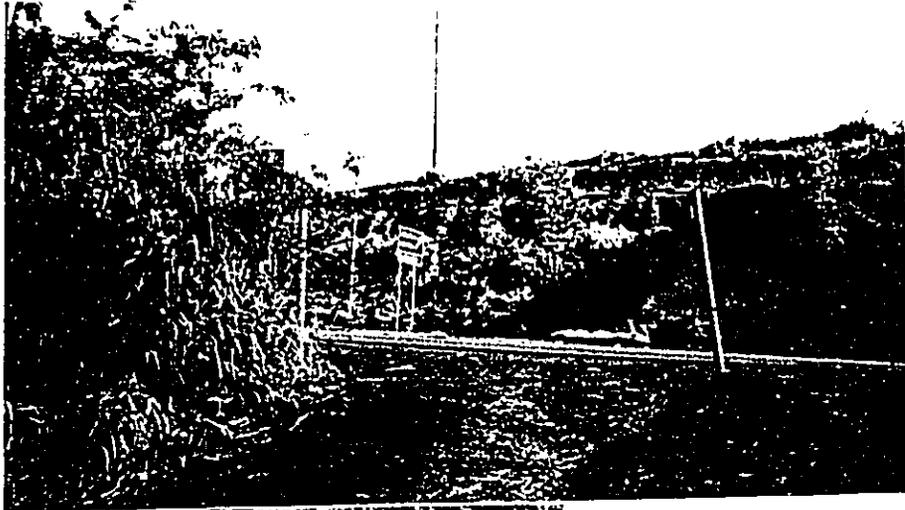
The vegetation on the site is sparse because of prior activity. There is one large tree on the site, with some other plants that were probably planted as ornamentals when the concrete plant was in operation. None of the plants on the site represent any rare or endangered species. The plants are quite common throughout the island. Vegetation along the periphery of the site is represented by common weeds and a few large eucalyptus trees. Most of these trees will be retained since they provide natural landscaping and a visual barrier of the site to those traveling along Wilikina Drive.

B. Geology and Soils

The project site is located on the Schofield Plateau which was created when the lava flows from the Koolau Volcano banked against the eroded slope of the Waianae Volcano. The

FIGURE 3

At the Entrance to the Project Site Along Wilikina Drive



II-1a

FIGURE 4

The Existing Project Site



II-1b

irregularity of erosion is visible in the rocks along Kaukonahua Gulch. There the Waianae lava slopes 10-15 degrees northeastward, while the overlapping Koolau lavas run 5 degrees northwestward. [3]

The project site is characterized by Helemano silty clay, 30 to 90 percent slopes (HLMG): This soil type is found on sides of (or in the case of the project site, adjacent to) V-shaped gulches. A representative profile has a surface layer of dark reddish-brown silty clay, about 10 inches thick. The subsoil is about 50 inches thick, dark reddish-brown and dark-red silty clay that has a subangular blocky structure. Substratum is soft, highly weathered basic igneous rock. The soil is neutral in the surface layer and neutral to slightly acid in the subsoil. Permeability is moderately rapid (2.0-6.3 inches/hour). Runoff is medium to very rapid, and the erosion hazard is severe to very severe. The corrosivity of this type of soil to uncoated steel and concrete is considered low. [4]

This soil is used for pasture, woodland, and wildlife habitat. Agricultural class VII soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat. Capability of subclass VIIe is that "soils are very severely limited by risk of erosion. The soils are well drained to excessively drained and have slopes that range from 0 to 100 percent." [4]

C. Drainage

The project site is essentially flat. During storms some drainage will sheet flow off the pavement into surrounding areas and into existing storm culverts. Much of it will dissipate and percolate into the surrounding soil and some will flow toward the stream. The amount of drainage created by the proposed project is expected to be minimal compared to existing conditions.

D. Climate [5]

The closest station for rainfall data is Wahiawa Dam which recorded a median annual rainfall of 42 inches from 1905 through 1982. Over this same period the monthly median rainfall ranged from 1.6 inches in July or August to 5.1 inches in January.

The temperature station at Wheeler Air Force Base is the closest station to the site. Over 41 years of data the annual average minimum was 63.3° F and the annual average maximum was 79.1° F. During this same period the lowest monthly average was 59.7° F in February and the highest monthly average was 82.6° F in September.

The average wind speed at Wheeler Air Force Base was 6.1 knots for the recording years of 1939-1949 and 1963-1966, but gusts up to 60 knots have been periodically recorded. The summary wind directions and percentage of activity were as follows:

<u>Direction</u>	<u>% of Time</u>
N	6.6
NNE, NE, ENE	33.8
E	12.1
ESE, SE, SSE	11.3
S	3.1
SSW, SW, WSW	2.9
W	2.6
WNW, NW, NNW	15.4
Calm	12.1

E. Water Quality [6]

The project site is near Kaukonahua Stream but at an elevation higher than the stream. The only water quality data available for Kaukonahua Stream are discharge data for the north and south forks of the stream. For the north fork, which is 4.5 miles northeast of Wahiawa, the average discharge over 65 years has been 16.4 cubic feet per second (cfs). During 1988 the average discharge was 21.5 cfs, ranging from 2.5 to 743 cfs. The south fork of the stream is located 2.3 miles east of Wahiawa Post Office and 7.1 miles north of Waipahu. Over 26 years, the average discharge was 21.5 cfs, and during 1988 the average was 28.6 cfs, ranging from 2.8 to 685 cfs.

F. Biological Characteristics

The project site has already been disturbed with prior activities of the concrete batching facility. Most of the vegetation, therefore, is along the periphery of the site.

During the field reconnaissance of the site and surrounding areas, the vegetation was comprised of common flora species and weeds. All of the birds observed during the reconnaissance were species common throughout the island. Some rodents were observed, and paths probably created by pigs were seen. The listing of flora and fauna observed during the reconnaissance is presented in the Appendix.

The project site and surrounding area do not represent a sensitive wildlife habitat, nor were specimens of rare and endangered species seen.

G. Archaeological or Historical Sites

There are no known archaeological or historical sites within the project site or immediate area likely to be impacted by the proposed project. The site already has been disturbed by previous activities of the now abandoned concrete batching plant.

H. Traffic [7]

Traffic counts for the intersection of Wilikina Drive at Kamananui Road, which is at the project site, was conducted by the State Department of Transportation for the 24-hour period of February 9-10, 1989. For the Pearl Harbor leg of Wilikina Drive, the count was 7,509 inbound into the intersection and 7,232 outbound from the intersection. On Kamananui Road the counts were 3,916 inbound into the intersection and 3,365 outbound from the intersection. For the north leg of Wilikina Drive the inbound count was 3,913 and the outbound count 3,550.

I. Infrastructure

During 1988 approval was requested for the site to be appropriately designated on the Central Oahu Development Plan Public Facilities Map, and a number of agencies were consulted about the proposed project.[8] The following summarizes comments received about the proposed project and amendment of the map.

1. **Police**

The nearest police station to the site is located at Wahiawa within 5 minutes transit time of the site. They have indicated that this proposed project will not have a significant impact to their services.

2. **Fire**

The nearest Fire station also is in Wahiawa and they have indicated that the existing fire protection services and facilities are considered adequate for the proposed project.

3. **Water**

There is an existing water meter at the site which serviced the previous tenant. This meter will be activated and plans coordinated with the City and County of Honolulu's Board of Water Supply. The water would be needed primarily for maintenance of the site and would not involve a large volume of consumption.

4. **Electricity**

Electricity will be provided to the site from the utility lines running along Wilikina Drive. This will be

required for the guard house, lighting at the site, and for the compactor.

5. Sewage

There are no municipal sewage disposal facilities at the project site. A portable toilet will be provided at the site.

SECTION III
LAND USE PLANS AND POLICIES

A. Land Ownership

The ownership of the project site is in its final stages of being transferred from the George Galbraith Trust Estate to the City and County of Honolulu.

B. Land Use Designations

The proposed project site is State Land Use designated Agriculture, is zoned by the City and County of Honolulu as Agriculture-1, Development Plan designated as Agriculture, and Development Plan Public Facilities designated as a solid waste facility, site determined, within 6 years. In addition, the Wahiawa Neighborhood Board No. 26 met on March 21, 1988 and after considering other proposed sites (refer to Section V for a discussion of these sites), the Board voted unanimously for the proposed use at the proposed site.[9]

The intended use of the proposed project is consistent with these land use designations.

SECTION IV
ANTICIPATED IMPACTS AND MITIGATIVE MEASURES

A. Air Quality

Short-term: As with any construction, there will be some short-term construction related impacts. Site preparation will involve construction equipment with associated equipment exhaust and dust. The exhaust is expected to cause minimal impacts to ambient air quality and will be only for the duration of construction. Fugitive dust from site preparation will be controlled by periodic water sprinkling.

Long-term: Vehicular traffic to the site will increase over the existing situation since the site is an abandoned facility with no traffic. At the Waipahu RCC vehicular counts range from 100 to 200 vehicles per day, which would be about 9 to 18 vehicles per hour. This is a similar volume which is expected at the proposed Wahiawa RCC. The amount of emissions from this traffic volume is expected to have a negligible impact on existing air quality. Contracted haulers will periodically haul containers from the site. With the anticipated frequency of hauling expected to be no greater than once in the morning and once in the afternoon, the impact to air quality should not be detectable.

Since the Wahiawa RCC will not accept dead animals and is not designed to replace regular household refuse collection, very little putrescible material will be involved. There may be some

open top containers for recyclable and large bulky items, but compactable combustible refuse will be placed into enclosed containers which will further contain potential odors. Consequently, odor is not expected to be a significant problem. The contractor will haul containers away regularly, probably 1-2 times per day, thus minimizing odor production.

B. Water Quality

Short-term: Although Kaukonahua Stream is adjacent to the project site, it is at an elevation considerably lower than the project site. Construction grading plans will be designed to prevent fill from entering the stream and the site graded to disperse sheet flow of water across the site and into adjacent areas before entering the stream. This should minimize the amount of flow into the stream.

Long-term: Once the facility is operational, the drainage from the site will be by sheet flow across vacant unused land and toward the stream. Some of the flow will be diverted toward existing culverts which will be able to carry the expected capacity of this drainage.

No hazardous materials will be accepted at the site. The containers for holding the compacted refuse will be largely enclosed. This will minimize the possibility of refuse blowing out of containers and into surrounding areas. In addition, personnel at the site will be responsible for maintaining the quality of the site, as well as keeping any litter from entering the stream and surrounding areas.

The operational impacts of the proposed project, therefore, are expected to result in a negligible effect on the water quality of the stream.

C. Noise

Short-term: There will be an increase of ambient noise levels during construction because of the equipment that will be used. Noise will be mitigated by limiting construction activities to the hours of 7:30 a.m. to 5:00 p.m. Residential areas are far enough away (about 2,000 feet) that construction activities will probably proceed unnoticed.

Long-term: Since the project will involve a compactor, there will be periodic noise associated with the compaction process because of the motor and the hydraulic ram. This is expected to be similar to the noise generated by refuse collection trucks when refuse is compacted. Since there are no residential areas in the immediate vicinity of the project and since the hill opposite of the site toward Schofield Barracks functions as a berm, noise associated with these activities is expected to be minimal, if not imperceptible by the nearest residents.

D. Flora and Fauna

Short-term: Since the site was cleared by prior cement batching operations, the amount of vegetation on the site is minimal and what is present at the site and surrounding area are common species which do not represent a sensitive habitat. Refer to the Appendix for species observed during a reconnaissance of

the site. These species will not be impacted by construction activities. The larger trees along the periphery of the site will be retained since they naturally provide a visual screen of activities from the roadway. Construction activities will displace animal species into surrounding areas but the numbers would be small, the surrounding areas should be able to easily accommodate these numbers, and the animals can return to the peripheral site vegetation upon completion of construction.

Long-term: Significant long-term impacts to existing flora and fauna at the site and surrounding areas are not expected. There is very little vegetation on the site and vegetation surrounding the site will not be significantly affected, nor will the fauna in this area. In previous communication with the U.S. Fish and Wildlife Service, they indicated that the project would not have a deleterious impact on fish and wildlife resources.

E. Archaeological and Historical [10]

No archaeological survey has been conducted of the site. The project site already has been leveled and disturbed due to prior use as a concrete batching plant. Consequently, there would be no archaeological features of significance. If, however, any subsurface walls or human bones are uncovered during site preparation, all activities will cease and the Historic Preservation Program of the Hawaii State Department of Land and Natural Resources will be contacted for further guidance and direction.

F. Traffic

Short-term: Construction related traffic is expected to be minimal. There will be initial transport of the large equipment to the site. Thereafter, transport of material to and from the site will be done during non-peak traffic hours to minimize interruption of traffic flow at the entrance to the project site.

Long-term: Traffic of the contractor bringing or removing containers from the site will be minimal, i.e., one or two trucks per day. This is not expected to result in significant left-turn queues, if any, into the site. For those vehicles traveling from the Haleiwa-to-Schofield direction, users will be able to make right turns directly into the site. Vehicles traveling along Wilikina Drive from Wahiawa and Mililani, will turn left into the site; however, this is not anticipated to be a problem since the number of vehicles during an hour's period is not expected to result in a queues of vehicles trying to gain access to the site.

In addition, the contractor is expected to transport one container to the site and one away from the site daily. Refuse being transported from the site will be taken along Wilikina Drive toward Honolulu, down Kunia Road or the H-2 Freeway to HPOWER or to Waimanalo Gulch Sanitary Landfill. Combustibles will be taken directly to HPOWER. Non-combustibles will be transported to the sanitary landfill for disposal.

G. Sanitation

The purpose of the Wahiawa RCC is to provide a convenient refuse disposal facility for an area identified as having mini-dump problems. By providing a conveniently located refuse disposal facility, the aesthetic and potential health problems associated with illicit dumping are expected to improve.

H. Infrastructure

In previous communication with the police and fire departments about this proposed project, it was indicated that the proposed project will not have a significant impact on their existing services.[8] Electricity and telephone services will be provided to the site from the nearest utility lines along Wilikinia Drive. There is an existing water meter at the project site which will be activated to service the proposed convenience center. The amount of water required for the project's operations will be primarily for maintenance of the site; the amount is expected to be quite minimal and would not involve a significant consumption. A portable toilet will be provided at the site.

I. Socioeconomic Impacts

Short-term: There will be some transient economic impact by the monies associated with construction of the proposed facility.

Long-term: The economic impact from construction would not be significant and would not be long-term. A refuse convenience center would not stimulate growth in an area, rather it is provided to meet the needs of an existing community. Providing

this refuse convenience center, however, would be cost effective considering the aesthetic and sanitary problems which would eventually have to be addressed through potentially costly clean-up campaigns.

SECTION V

ALTERNATIVES TO THE PROPOSED PROJECT

A. No Action

The problem of illicit dumping already has been identified for this area. No action will not solve this and illicit mini-dumps will continue to provide aesthetic and potential health problems.

B. Alternate Sites

Besides the proposed site three other sites were considered. These were: (1) off of Kamehameha Highway between the bridge and the entrance to Whitmore Village; (2) off of Kamehameha Highway near the Wahiawa community gardens and across the entrance to Wheeler Air Force Base; and (3) at Helemano Plantation. These sites were considered by Wahiawa Neighborhood Board No. 26 and the proposed site was the one unanimously selected on March 21, 1988.[9]

C. Alternate Designs

The proposed design is considered optimal for the needs of the surrounding communities and for cost effectiveness of operations. Individual bins without refuse compaction would increase the number of hauls that the contractor would have to make to HPOWER and the Waimanalo Gulch Sanitary Landfill. This would greatly increase the cost of hauling. Portable compactors, smaller than the one proposed, are available but probably would require more maintenance. The proposed compactor system would be

fixed in place but is sturdier, is expected to require less maintenance over time, and has the flexibility to handle an increase in volume over time to accommodate growth of the surrounding communities.

SECTION VI

RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposed project would use the site to provide a convenient refuse disposal facility to meet the existing and anticipated future needs of the surrounding residential communities. Other refuse convenience centers have demonstrated that it is an efficient solution to the aesthetic and potential health problems created by illicit dump sites. This would reduce the need for less efficient and costly clean-up campaigns which would have to be regularly conducted to address this problem.

SECTION VII

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The proposed project will commit the site for the Wahiawa RCC for the duration of its operations. The project is compatible with land use plans and will place a public facility at a site historically with a use consistent with the proposed action. The proposed project will not displace existing agricultural lands. Some water for minimal site maintenance will be committed but this is expected to be a negligible amount. Public funds will be used for the operations of the facility.

The proposed project is planned to provide an efficient means for residents of surrounding communities to dispose of their refuse. This would localize the disposal to a facility which will be maintained by the Department of Public Works, thus reducing the environmental degradation currently occurring due to illicit dumping in a number of places in the vicinity.

SECTION VIII

SUMMARY OF UNRESOLVED ISSUES

The only unresolved issue as of this date is the transfer of title of the parcel from the George Galbraith Trust to the City and County of Honolulu. This transfer is in its final stages and resolution is expected imminently. The amendment of the public facility designation already has been changed from "site undetermined, beyond 6 years" to "site determined, within 6 years."

SECTION IX

LIST OF AGENCIES, ORGANIZATIONS AND PERSONS CONSULTED

The following is a list of agencies, organizations and persons consulted on this project and draft environmental assessment. Those with an asterisk provided comments to the project, which are included in this section on the pages indicated.

	<u>Page</u>
<u>Federal Agencies</u>	
*U.S. Fish and Wildlife Services	IX- 2
*U.S. Army Corps of Engineers, Honolulu District	IX- 3
<u>State Agencies</u>	
Department of Health	
*Department of Land and Natural Resources	IX- 4
Office of Environmental Quality Control	
<u>City and County of Honolulu</u>	
*Board of Water Supply	IX- 5
*Department of General Planning	IX- 6
*Department of Housing and Community Development	IX- 7
*Department of Parks and Recreation	IX- 8
*Fire Department	IX- 9
*Police Department	IX-10
Wahiawa Neighborhood Board No. 26	
Wahiawa Satellite City Hall	
The Honorable Arnold Morgado, City Council	
<u>Other Organizations and Persons</u>	
Waiialua Sugar Company	
Wahiawa Community and Business Association	
George Galbraith Trust	

DOCUMENT CAPTURED AS RECEIVED

JUL- 9-90 MON 14:07

PW REFUSE DIVISION

FAX NO. 8085275864

P.02



United States Department of the Interior

**FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS OFFICE**

P.O. BOX 60187
HONOLULU, HAWAII 96850

Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Re: Wahiawa Refuse Convenience Center
Tax Map Key: 7-1-01:22 and 1 (POR)

Dear Mr. Callejo:

Due to current staff limitations, the Pacific Islands Office, Fish and Wildlife Enhancement cannot devote the time to adequately evaluate potential impacts to important fish and wildlife resources from the proposed project. Please understand that this notification does not represent the Fish and Wildlife Service's approval of the proposed activity. We may review future actions related to this project should workload constraints be alleviated, or if significant adverse impacts to trustee fish and wildlife resources are identified.

Sincerely yours,

William B. Kosaka
Ernest Kosaka
Field Supervisor
Fish and Wildlife Enhancement

JUL- 9-90 NON 14:08

PW REFUSE DIVISION

FAX NO. 8085275864

P.03



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 250
FT. SHAFTER, HAWAII 96858-8440

REPLY TO
ATTENTION OF:

June 29, 1990

Planning Division

Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

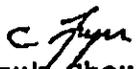
Dear Mr. Callejo:

Thank you for the opportunity to review the Draft Environmental Assessment for Wahiawa Refuse Convenience Center. The following comments are offered:

a. A Department of the Army permit is not required.

b. According to the current (September 22, 1989) flood insurance rate map, the project site is located in Zone D (areas in which flood hazards are undetermined).

Sincerely,


Risuk Cheung
Director of Engineering

JUL-31-90 TUE 9:33

PW REFUSE DIVISION

FAX NO. 8085275864

P. 02

440

JOHN WAIHEE
GOVERNOR OF HAWAII



STATE OF HAWAII
OF LAND AND NATURAL RESOURCES

P. O. BOX 821
HONOLULU, HAWAII 96809

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

DEPUTIES

KEITH W. AHUE
MANABU TAGOMORI
RUSSELL N. FUKUMOTO

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

REF:OCEA:JN

FILE NO.: 90-822
DOC. NO.: 8720E

JUL 27 1990

The Honorable Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Callejo

Subject: Environmental Assessment for the Wahiawa Refuse
Convenience Center at Wahiawa, Oahu;
TMK 7-1-01: por. 1 & 22

Thank you for giving our Department the opportunity to comment on this matter. We have reviewed the materials you submitted and have the following comments.

The EA has adequately covered historic preservation concerns (II-5 and IV-4). It is unlikely that significant historic sites are present because of disturbance caused by the concrete batching that previously operated in the proposed project area. Thus, this project will have "no effect" on significant historic sites.

Thank you again for your cooperation in this matter. Please call me, or Jay Lembeck of our Office of Conservation and Environmental Affairs, (at 548-7837), if you have any questions.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Bill Paty".
WILLIAM W. PATY

cc: DAR, DOFAW, DLM, DSP, HPP, DOWALD

IX-4

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET



June 25, 1990

FRANK F. FASI, Mayor
DONNA B. GOTH, Chairman
JOHN K. TSUI, Vice Chairman
SISTER M. DAVILYN AH CHICK, O.S.F.
SAM CALLEJO
EDWARD Y. HIRATA
WALTER O. WATSON, JR.
MAURICE H. YAMASATO
KAZU HAYASHIDA
Manager and Chief Engineer

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER *K.H.*
BOARD OF WATER SUPPLY

SUBJECT: YOUR JUNE 8, 1990 LETTER REQUESTING COMMENTS ON THE
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE WAHIAWA REFUSE
CONVENIENCE CENTER, TAX MAP KEY: 7-1-01: 2 AND POR. OF 1

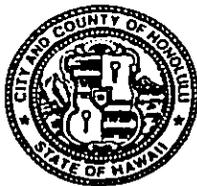
Thank you for allowing us to review the draft environmental assessment. Our comments are as follows:

1. Water can be available at the meter site for the former Ameron HC&D facility. However, we need to know the projected water demand for the convenience center to determine if our system is presently adequate to handle the projected demand.
2. The fire protection requirement should be coordinated with the Fire Department.
3. The need for water service and meter enlargement charges will be determined at the time the building permit application is routed for our approval.
4. A Board of Water Supply approved reduced pressure principle backflow prevention assembly is required for installation following the water meter.
5. The construction plans should be submitted for our review and approval to assure no effect on the existing water system.

If you have any questions, please contact Lawrence Whang at 527-6138.

IX-5

DEPARTMENT OF GENERAL PLANNING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAII 96813



June 25, 1990

MEMORANDUM

Sam
TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: BENJAMIN B. LEE, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED
WAHIAWA REFUSE CONVENIENCE CENTER, WAHIAWA, OAHU

We have reviewed the Draft Environmental Assessment (EA) for the proposed Wahiawa Refuse Convenience Center and offer the following comments:

1. The project is consistent with the General Plan.
2. The project is identified on the Development Plan Public Facilities (DPPF) Map and, therefore, is consistent with the requirements of the Development Plan (DP). Once completed, the project may be administratively removed from the DPPF Map and appropriately designated on the DP Land Use Map.
3. We note that the project will not significantly disturb existing vegetation or require extensive earthwork.
4. The Department of General Planning would like to provide input into the overall design and site plan for the project. It is requested that we be included in the review of the project plans as they become available.

Based on the foregoing, we have no objections to a Negative Declaration for the proposed project. Should you have any questions, please contact Bill Medeiros at 527-6089.

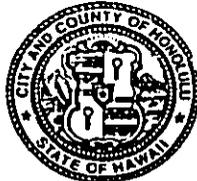
Ben
BENJAMIN B. LEE
Chief Planning Officer

BBL:js

IX-6

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 5TH FLOOR
HONOLULU, HAWAII 96813
PHONE: 523-4427 • FAX 527-5498



FRANK F. FASI
MAYOR

MICHAEL N. SCARFONE
DIRECTOR

RONALD B. MUN
DEPUTY DIRECTOR

June 26, 1990

MEMORANDUM

TO: Sam Callejo, Director and Chief Engineer
Department of Public Works

FROM: Michael N. Scarfone

SUBJECT: Draft Environmental Assessment
Wahiawa Refuse Convenience Center
Tax Map Key: 7-1-01: 2 and 1 (por.)

The Department has no comments regarding the subject environmental assessment.

Thank you for the opportunity to comment.

A handwritten signature in cursive script, reading "Michael N. Scarfone".

MICHAEL N. SCARFONE
Director

JUL- 9-90 MON 14:08

PH REFUSE DIVISION

FAX NO. 8085275884

P. 04

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
630 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK FASI
MAYOR



WALTER H. OZAWA
DIRECTOR
MIRIAMI MORITA
DEPUTY DIRECTOR

June 26, 1990

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: WALTER H. OZAWA, DIRECTOR

SUBJECT: WAHIAWA REFUSE CONVENIENCE CENTER
TAX MAP KEY: 7-2-01; 2 AND 1 (POR)

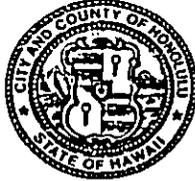
Thank you for the opportunity to review and comment on the draft Environmental Assessment for the Wahiawa Refuse Convenience Center. We have no comment at this time.

Walter H. Ozawa
WALTER H. OZAWA, Director
#

WMO:js

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

1455 SOUTH BERETANIA STREET, ROOM 305
HONOLULU, HAWAII 96814



LIONEL E. CAMARA
FIRE CHIEF

DONALD S.M. CHANG
DEPUTY FIRE CHIEF

June 27, 1990

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: LIONEL E. CAMARA, FIRE CHIEF

SUBJECT: WAHIAWA REFUSE CONVENIENCE CENTER
TAX MAP KEY: 7-1-01: 2 AND 1 (FOR.)

We have reviewed the subject material provided and have no additional comments.

Should you have any questions, please contact Battalion Chief Michael Zablan of our Administrative Services Bureau at local 3838.


LIONEL E. CAMARA
Fire Chief

MZ:ny

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
1455 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96814 - AREA CODE (808) 943-3111



FRANK F. FASJ.
MAYOR

HAROLD KAWASAKI
CHIEF

OUR REFERENCE SG-LK

June 25, 1990

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: HAROLD KAWASAKI, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
WAHIAWA REFUSE CONVENIENCE CENTER
TAX MAP KEY: 7-1-01: 2 AND 1 (POR)

We have reviewed the above-referenced assessment and have no objections to the proposal.

However, we recommend that additional caution signs be installed along Wilikina Drive prior to the project's entrance and Kamananui Road to ensure traffic safety.

Thank you for the opportunity to provide comments.

HAROLD KAWASAKI
Chief of Police

By

Joseph Aveiro
JOSEPH AVEIRO
Assistant Chief of Police
Support Services Bureau

APPENDIX

BIOLOGICAL RECONNAISSANCE OF PROJECT SITE

LIST OF FLORA

<u>FAMILY / Scientific Name</u>	<u>Common Name</u>
ANACARDIACEAE <u>Schinus terbinthifolius</u>	Christmas berry
APOCYNACEAE <u>Plumeria acuminata</u>	plumeria
ARACEAE <u>Monstera</u> sp.	monstera
ARALIACEAE <u>Brassia actinophylla</u>	umbrella tree; octopus tree
BIGNONIACEAE <u>Spathodea campanulata</u>	African tulip tree
CASUARINACEAE <u>Casuarina</u> sp.	ironwood; paina
COMPOSITAE <u>Ageratum conyzoides</u> <u>Bidens pilosa</u> <u>Emilia sonchifolia</u> <u>Erechtites hieracifolia</u> <u>Hypochoeris radicata</u> <u>Sonchus oleraceus</u> <u>Taraxacum officinale</u> <u>Wedelia trilobata</u>	ageratum Spanish needle; pilipili Floras paintbrush; red pualele fireweed hairy cats-ear pualele; pow thistle dandelion wedelia
CONVOLVULACEAE <u>Ipomoea alba</u> <u>Ipomoea indica</u> <u>Ipomoea tuberosa</u>	moonflower; white- flowered morning glory morning glory; koali-awahia wood rose

LIST OF FLORA (Continued)

<u>FAMILY / Scientific Name</u>	<u>Common Name</u>
EUPHORBIACEAE	
<u>Euphorbia glomerifera</u>	graceful spurge
<u>Euphorbia hirta</u>	garden spurge
<u>Aleurites moluccana</u>	kukui; candlenut tree
GRAMINEAE	
<u>Cenchrus echinatus</u>	sandbur
<u>Chloris radiata</u>	radiate fingergrass
<u>Cynodon dactylon</u>	Bermuda grass; manienie
<u>Digitaria adscendens</u>	Henry's crabgrass
<u>Eleusine indica</u>	wiregrass; goosegrass
<u>Panicum maximum</u>	Guinea grass
<u>Paspalum dilatalum</u>	Dallis grass; paspalum
<u>Paspalum orbiculare</u>	rice grass
<u>Pennisetum setosum</u>	feathery pennisetum
<u>Rhynchelytrum repens</u>	natal redtop
<u>Setaria glauca</u>	yellow foxtail; yellow bristlegrass
LEGUMINOSAE	
<u>Caesalpinia sepiaria</u>	cats claw
<u>Cassia leschenaultiana</u>	Japanese tea
<u>Desmodium uncinatum</u>	Spanish clover
<u>Leucaena leucocephala</u>	haole koa; ekoa
LILIACEAE	
<u>Cordyline terminalis</u>	ti; ki
<u>Sansevieria trifasciata</u>	bowstring hemp
MALVACEAE	
<u>Hibiscus sp.</u>	red hibiscus
MIMOSOIDEAE	
<u>Enterolobium cyclocarpum</u>	earpod; elephant's ear
MORACEAE	
<u>Ficus microcarpa</u>	Chinese banyan
MYRTACEAE	
<u>Eucalyptus robusta</u>	swamp mahogany
<u>Eucalyptus sp.</u>	eucalyptus
<u>Psidium guajava</u>	guava; kuawa

LIST OF FLORA (Continued)

<u>FAMILY / Scientific Name</u>	<u>Common Name</u>
PALMAE <u>Cocos nucifera</u>	coconut palm
POLYPODIACEAE <u>Dyopteris dentata</u>	oak fern
VERBENACEAE <u>Stachytarpheta urticaefolia</u>	cayene vervain; oi

LIST OF FAUNA: Animals observed during field reconnaissance or believed to be present

<u>CLASS / Scientific Name</u>	<u>Common Name</u>
CLASS AVES	
<u>Acridotheres tristis</u>	common mynah
<u>Cardinalis cardinalis</u>	northern cardinal
<u>Carpodacus mexicanus</u>	house finch
<u>Copsychus malabaricus</u>	white-rumped shama
<u>Geopelia striata</u>	barred dove
<u>Passer domesticus</u>	house sparrow
<u>Pycnonotus cafer</u>	red-vented bulbul
<u>Zosteropsis japonicus</u>	Japanese white-eye
CLASS MAMMALIA	
<u>Felis catus</u>	feral cat; popoki
<u>Herpestus auropunctatus</u>	mongoose
<u>Mus musculus</u>	house mouse; 'iole li'ili'i
<u>Rattus rattus</u>	roof rat; 'iole-nui
<u>Sus scrofa</u>	pig; pua'a

LIST OF REFERENCES

- [1] Oahu Solid Waste Management Plan. May 1983. Prepared by GMP Associates, Inc.
- [2] Division of Refuse Collection and Disposal, Department of Public Works, City and County of Honolulu. March 1990.
- [3] Macdonald, Gordon A., et al. Volcanoes in the Sea: The Geology of Hawaii. 2nd Edition. University of Hawaii Press, Honolulu. copyright 1983.
- [4] Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. August 1972. United States Department of Agriculture Soil Conservation Service.
- [5] Division of Water and Land Development, Hawaii State Department of Land and Natural Resources. March 1990.
- [6] Water Resources Data. Hawaii and other Pacific Areas. Water Year 1988. Volume 1. Hawaii. by R.H. Nakahara, et al. U.S. Geological Survey Water-Data Report HI-88-1 prepared in cooperation with the Hawaii State Department of Land and Natural Resources, Division of Water and Land Development.
- [7] Personal communication. April 1990. State of Hawaii Department of Transportation.
- [8] Memorandum, dated July 18, 1988 to Robert Rawson, Jr., Chairman Planning Commission from Donald A. Clegg, Chief Planning Officer, Department of General Planning. Re. Wahiawa Refuse Convenience Center.
- [9] Letter, dated April 25, 1988, to Henry Lee, Chairman of Wahiawa Neighborhood Board No. 26 from Alfred J. Thiede, Director and Chief Engineer, Department of Public Works, City and County of Honolulu.
- [10] Personal communication. April 1990. State Historic Preservation Program, Hawaii State Department of Land and Natural Resources.