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GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
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AQUACULTURE DEVELOPMENT
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CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMENT

ref: LD/dh
file no. MO-2806

MAY 7 1996

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

MEMORANDUM

TO: Mr. Gary Gill, Director
Office of Environmental Quality Control

FROM: Dean Uchida, Administrator
Land Division *[Signature]*

SUBJECT: Negative Declaration for Kaunakakai Wetlands Project,
TMK 5-3-5: 06 (por), Kaunakakai, Molokai

The Department of Land and Natural Resources has reviewed the comments received during the 30-day public review period which began on March 8, 1996. The agency has determined that this project will not have significant environmental effect and has issued a negative declaration. Please publish this notice in the forthcoming "OEQC" Bulletin.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the final EA. Please contact Don Horiuchi at 587-0381 if there are any questions.

Enc.

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1996-05-23-MO-PEA-Kaunakakai Wetlands Project

MAY 23 1996

FILE COPY

Kaunakakai Wetlands

Mitigation Plan and Final Environmental Assessment

Prepared for



MOLOKAI RANCH

April 1996



Kaunakakai Wetlands

Mitigation Plan and Final Environmental Assessment

Prepared for



April 1996



CONTENTS

Preface	i
I. INTRODUCTION	1
A. SECTION 404 VIOLATION	1
B. FUTURE DEVELOPMENT OF THE EXISTING WETLAND FOR BUSINESS/COMMERCIAL USE	1
II. DESCRIPTION OF THE ENVIRONMENTAL SETTINGS AFFECTING THE EXISTING WETLAND AND ENHANCEMENT SITE	5
A. LOCATION AND OWNERSHIP	5
1. Existing Wetland	5
2. Enhancement Site	5
B. LAND USE	5
1. Existing Wetland	5
2. Enhancement Site	7
C. TOPOGRAPHY AND HYDROLOGY	7
1. Existing Wetland	7
2. Enhancement Site	10
D. SOILS	12
1. Existing Wetland and Enhancement Site	12
E. FLOOD AND TSUNAMI HAZARD	12

1.	Existing Wetland and Enhancement Site	12
F.	FLORA	15
1.	Existing Wetland	15
2.	Enhancement Site	15
G.	FAUNA	16
1.	Existing Wetland	16
2.	Enhancement Site	16
H.	AIR AND NOISE QUALITY	16
1.	Existing Wetland	16
2.	Enhancement Site	17
I.	CULTURAL RESOURCES	17
1.	Existing Wetland	17
2.	Enhancement Site	18
III.	PRELIMINARY MITIGATION PLAN	19
A.	MITIGATION GOALS AND OBJECTIVES	19
B.	PROPOSED ENHANCEMENT PLAN	21
C.	IMPLEMENTATION PROGRAM	24
1.	Regulatory Requirements for Enhancement Site	24
a.	Conservation District Use Permit	25
b.	Shoreline Setback Variance	29
c.	Environmental Assessment	30
d.	Special Management Area Use Permit	31

IV.	PROJECT-RELATED IMPACTS AND MITIGATION MEASURES	40
A.	LAND USE	40
B.	LAND FORM AND VISUAL CHARACTER	40
C.	DRAINAGE AND EROSION CONTROL	41
D.	WETLAND ENVIRONMENT	41
E.	NOISE AND AIR QUALITY	42
F.	CULTURAL RESOURCES	42
V.	SUMMARY OF UNAVOIDABLE, ADVERSE ENVIRONMENTAL EFFECTS; ALTERNATIVES TO THE PROPOSED ACTION; AND THE IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES	44
A.	UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS	44
B.	ALTERNATIVES TO THE PROPOSED ACTION	44
C.	IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES	45
VI.	FINDINGS AND CONCLUSIONS	46
VII.	AGENCIES CONTACTED IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT	47
VIII.	CORRESPONDENCE RECEIVED IN CONNECTION WITH THE DRAFT ENVIRONMENTAL ASSESSMENT REVIEW AND SPECIAL MANAGEMENT AREA USE PERMIT AND SHORELINE SETBACK APPLICATIONS	48
REFERENCES		
APPENDICES		
A	Department of the Army Letter Regarding Section 404 Violation	
B	Site Photographs of Existing Wetland and Enhancement Site	
C	Letters from State Historic Preservation Division	
D	Monitoring of Subsurface Water Elevation at Proposed Kaunakakai Enhancement Site	

LIST OF FIGURES

1	Island Reference Map	2
2	Regional Location Map	3
3	Location of Existing Wetland and Proposed Enhancement Site	6
4	Site Map of Existing Wetland	8
5	Site Map of Proposed Enhancement Site	9
6	Drainage Areas in the Vicinity of the Existing Wetland and Proposed Wetland Enhancement Site	11
7	Soils Classification Map	13
8	Flood Insurance Rate Map	14
9	Conceptual Enhancement Plan	22
10	Schematic Typical Section Through Proposed Enhanced Wetland (A-A)	23
11	State Land Use Classification	26
12	Conservation District Subzone Designations	27

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Preface

Molokai Ranch, Limited (MRL) proposes to enhance an existing degraded wetland area in Kaunakakai, Moloka'i (TMK 5-3-5:06) as mitigation for the anticipated loss of a wetland area within Kaunakakai Town (TMK 5-3-1:por. 30, 51, and 57). In this regard, this report has been prepared as a wetland mitigation plan to address mitigation requirements of the U.S. Department of the Army (DA) and U.S. Fish and Wildlife Service. This wetland mitigation plan shall, by reference, be incorporated in applications submitted in connection with the DA permit (required for filling of the Kaunakakai Town wetland), Section 401 Water Quality Certification, and Coastal Zone Management Consistency approval.

Additionally, the proposed wetland enhancement site falls within the State Conservation District and shoreline setback area. Accordingly, the submittal of a Conservation District Use Application to the Board of Land and Natural Resources and a Shoreline Setback Variance Application to the Maui Planning Department will be required. Given these triggers, this document has also been formatted to address environmental assessment (EA) requirements, as provided by Chapter 343, HRS and Title 11, Department of Health, Chapter 200 entitled Environmental Impact Statement Rules. As the EA document for the proposed work in the Conservation District and shoreline setback, this report is anticipated to be filed as a Negative Declaration with the Office of Environmental Quality Control.

Finally, since the proposed enhancement site falls within the County of Maui's Special Management Area (SMA), an application for an SMA use permit will be required from the Molokai Planning Commission. This report shall also serve as a project assessment documentation which is to be incorporated in the SMA application document.

Chapter I

Introduction

I. INTRODUCTION

Molokai Ranch, Limited (MRL) proposes to enhance an existing degraded wetland area in Kaunakakai, Moloka'i, (TMK 5-3-5:06) (hereafter referred to as the "Enhancement Site") as mitigation for the anticipated loss of a wetland area within Kaunakakai Town (TMK 5-3-1:por. 30, 51 and 57) (hereafter referred to as the "Existing Wetland"). See Figure 1 and Figure 2. Issues which led to the preparation of this mitigation plan are described below.

A. SECTION 404 VIOLATION

On November 22, 1994, MRL completed the clearing of the existing wetland site and surrounding lands (totalling approximately 7.7 acres) as part of its ongoing property maintenance program. At the time of the clearing operation, MRL was unaware of the wetland condition at the property. The completed action included the mechanical clearing and removal of brush and kiawe trees which were found on the subject property and surrounding lands. Upon review of the clearing activity by the U.S. Department of the Army (DA), it was determined that about 1.3 acres of the total 7.7 acres cleared were wetlands. The DA therefore concluded that the vegetation clearing and attendant ground disturbance at the property was a violation of Section 404 of the Clean Water Act. See Appendix A. Accordingly, MRL is required to prepare and file an after-the-fact DA permit application for the clearing activity.

B. FUTURE DEVELOPMENT OF THE EXISTING WETLAND FOR BUSINESS/COMMERCIAL USE

The existing wetland and surrounding lands bordered by Kamehameha V Highway, Mohala Street, and Beach Place are designated by the Moloka'i Community Plan for Business/Commercial use. MRL has recently conveyed ownership of the lands encompassing the existing wetland and a portion of the surrounding lands (encompassing approximately 3.14 acres) to a local business interest who intends to develop the property for business/commercial purposes. The planned development of the site will include the filling of the property to establish designed finished floor and grade elevations for the proposed business use. The planned filling of the existing wetland to accommodate the proposed development, therefore, will result in the loss of

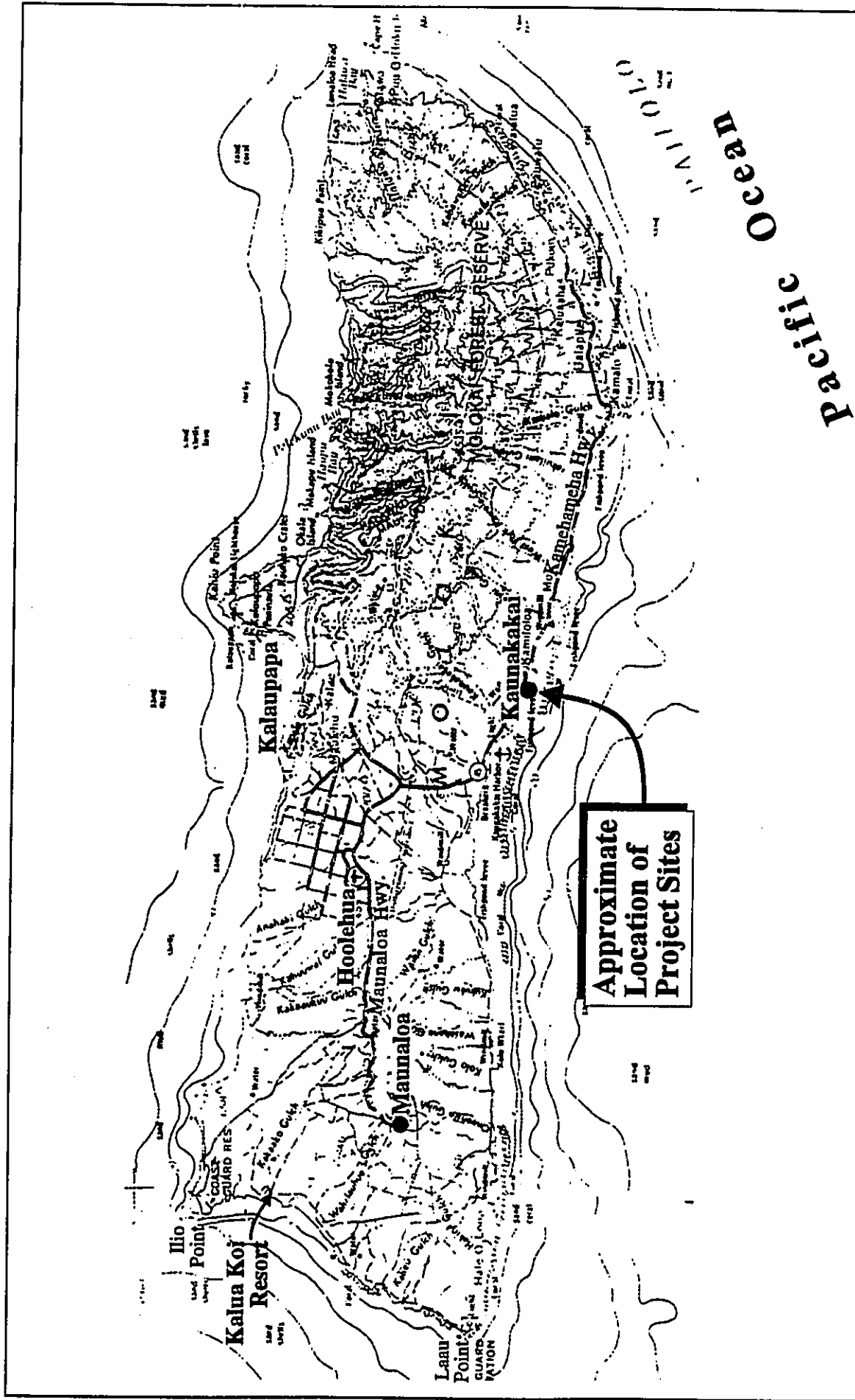


Figure 1

Kaunakakai Wetlands Island Reference Map



Prepared for: Molokai Ranch, Limited

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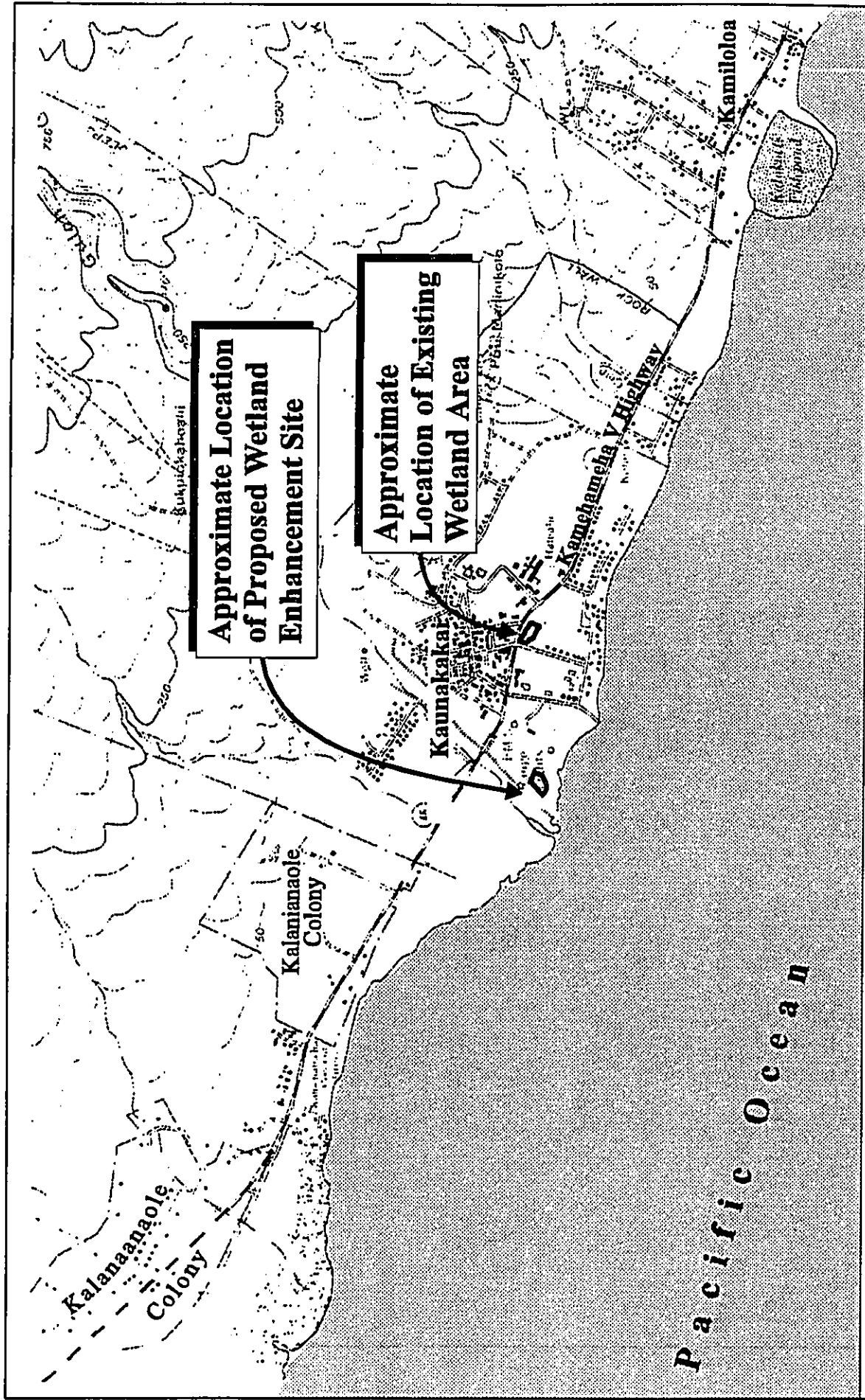


Figure 2 Kaunakakai Wetland Mitigation Plan
Regional Location Map



Prepared for: Molokai Ranch, Limited

the existing wetland area. The proposed mitigation plan described herein is intended to address this loss of approximately 1.3 acres of wetland in Kaunakakai Town.

The identification of issues and enhancement parameters presented in this report has been completed in coordination with the DA and the U.S. Fish and Wildlife Service (USFWS).

Chapter II

***Description of the Environmental
Settings Affecting the Existing
Wetland and Enhancement Site***

II. DESCRIPTION OF THE ENVIRONMENTAL SETTINGS AFFECTING THE EXISTING WETLAND AND ENHANCEMENT SITE

A. LOCATION AND OWNERSHIP

1. Existing Wetland

The existing wetland area is located along Kamehameha V Highway near its intersection with Mohala Street. See Figure 3. The properties encompassed by the existing wetland are identified as TMK 5-3-1:por. 30, 51 and 57. Kamehameha V Highway is the major east-west highway which traverses the south shore of Moloka'i. Mohala Street is a local collector serving residences located along Beach Place, to the south. MRL recently conveyed the existing wetland site and a portion of the surrounding lands (3.14 acres) to a local business interest. The new owner proposes to develop the subject area for business/commercial purposes.

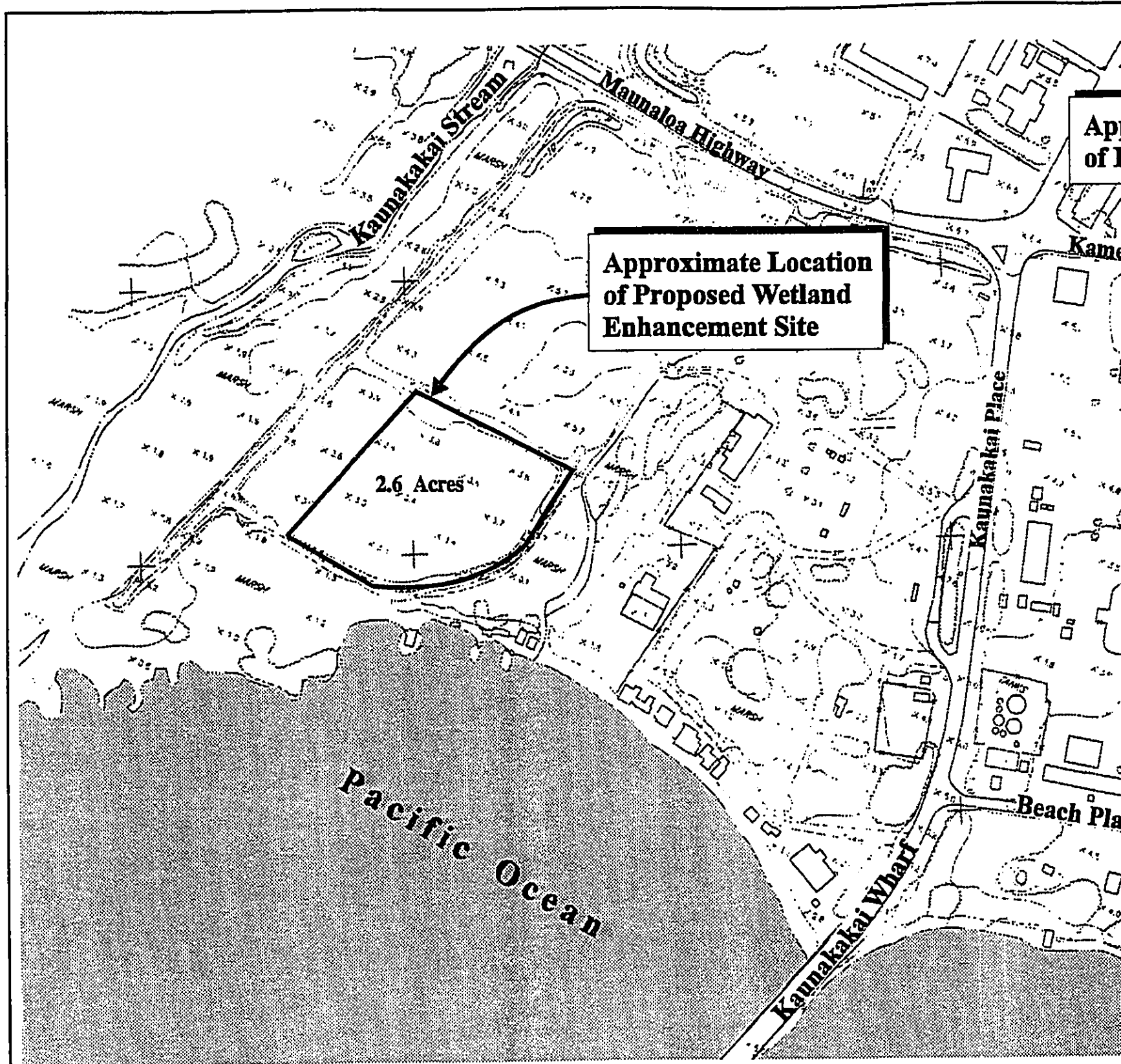
2. Enhancement Site

The proposed enhancement site is located approximately 0.3 mile southwest of the existing wetland area and encompasses an area of approximately 2.6 acres. Refer to Figure 3. The site represents a portion of the 23.8-acre parcel identified as TMK 5-3-5:06, which is owned by MRL. The enhancement site is located makai of Maunaloa Highway, and to the immediate east of the Kaunakakai Stream. Kaunakakai Stream, in the vicinity of the enhancement site, includes a flood control levee along its eastern bank. The levee improvements to Kaunakakai Stream were completed as part of the DA's flood control project for the stream which was implemented in 1950.

B. LAND USE

1. Existing Wetland

The existing wetland and surrounding contiguous properties bounded by Kamehameha V Highway, Mohala Street and Beach Place are presently vacant and undeveloped. With the exception of sparsely growing shrubbery, the site



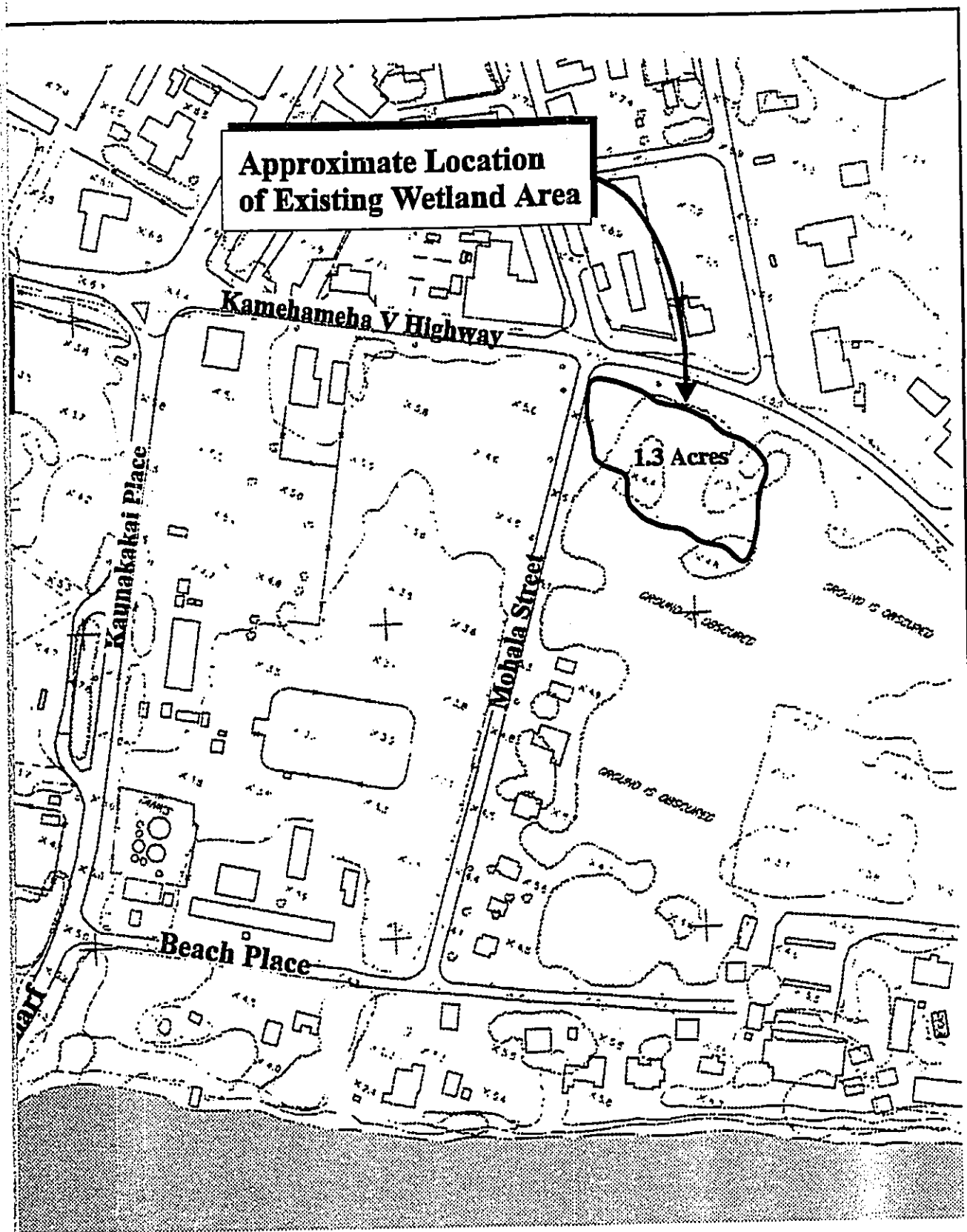
Base Map Source: Warren S. Unemori Engineering, Inc.

Figure 3

Kaunakakai Wetland Mitigation Project
Location of Existing Wetland and Proposed Enhancement Site



Prepared for: Molokai Ranch, Limited



Mitigation Plan
Proposed Enhancement Site



NOT TO SCALE

is open and clear of mature vegetative cover. Site photographs of the existing wetland area are documented in Appendix B.

Single family residential properties are located to the south of the existing wetland (across Beach Place). See Figure 4. The Pau Hana Inn is located further to the southeast, along the shoreline. Across the street, to the north and northwest, lies Kaunakakai School, Kaunakakai Baptist Church and numerous business/commercial establishments. To the immediate west (across Mohala Street) is the recently completed Kaunakakai Professional Center.

2. Enhancement Site

The enhancement site can be characterized as a barren mudflat within the perimeter of an earthen berm. See Figure 5. The Kaunakakai Stream is adjacent to and west of the site, while an existing marsh area which serves as habitat to endangered Hawaiian stilt, is located to the east. Lands to the immediate north of the enhancement site are fill lands used for the stockpiling of material from maintenance dredging from the Kaunakakai Harbor. The site itself is virtually devoid of vegetation, although patches of pickleweed (*batis maritima*) are found along the perimeter of the site. This barren condition is attributed to the regular use of the site by off-road vehicles, as evidenced by tire tracks within the enhancement site. Site photographs of the enhancement site are documented in Appendix B. The enhancement site is considered relatively remote from human activities which supports its selection for mitigation purposes.

C. TOPOGRAPHY AND HYDROLOGY

1. Existing Wetland

The existing wetland is flat and level, with an approximate ground elevation of four (4) to five (5) feet. There is no permanent source of surface water at the site. However, given the site's lower elevation relative to the surrounding

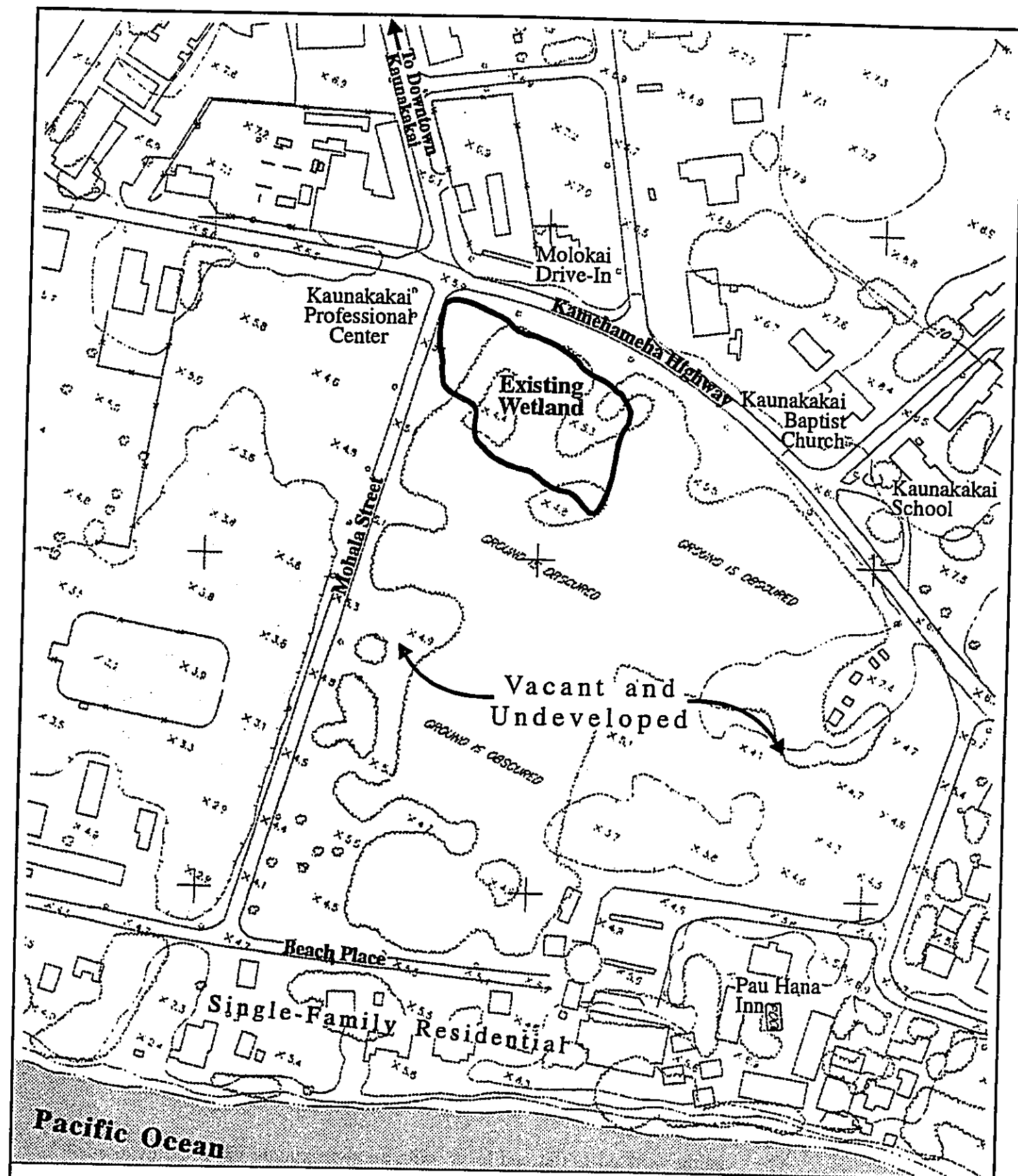


Figure 4 Kaunakakai Wetland Mitigation Plan
Site Map of Existing Wetland

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0 100 200 400
 Feet

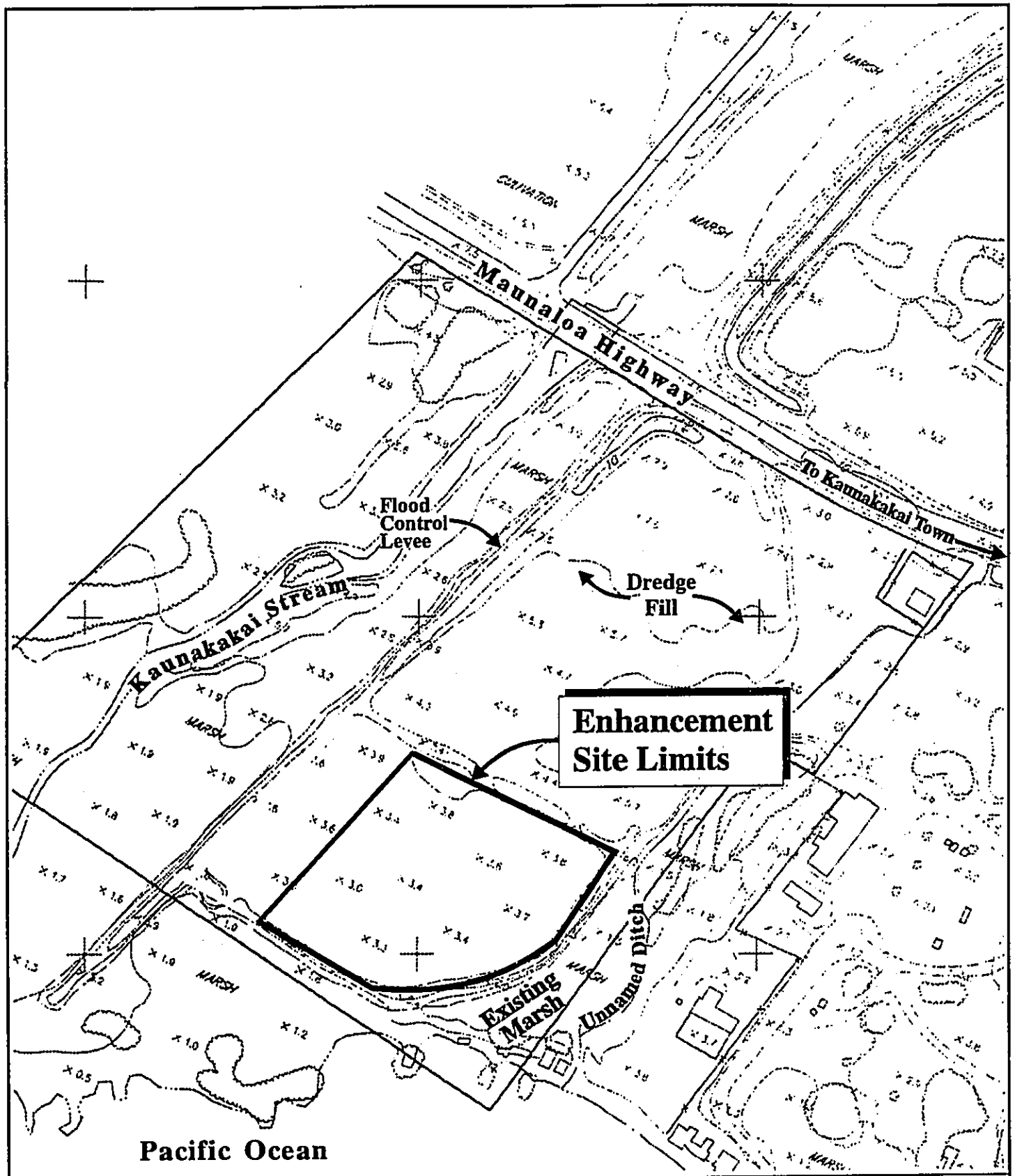


Figure 5 Kaunakakai Wetland Mitigation Plan
Site Map of Proposed Enhancement Site



Prepared for: Molokai Ranch, Limited



roadways and lands, it does become a ponding area during periods of rainfall. (The Kaunakakai area experiences about 18 inches of rainfall annually.) The contributing drainage area for the existing wetland consists of approximately 10.0 acres (Wilson Okamoto & Associates, 1992). See Figure 6. The estimated runoff for this drainage area is 10.6 cubic feet per second (cfs) for the 10-year storm and 17.0 cfs for the 50-year event. There are no existing drainage improvements (e.g., culverts or ditches) in the vicinity of the existing wetland.

The Kaunakakai Town area falls within the Kamiloloa Aquifer System (Mink, 1992). High-level dike water probably occurs in the inland portion of the aquifer. The water table for this aquifer is characterized as very deep. Most of the system is underlain with a basal lens in flank lavas. Potable water is developable inland with brackish water found along the coast.

2. **Enhancement Site**

From a topographic standpoint the enhancement site can be described as flat and level with approximate elevations between three (3) to four (4) feet. The enhancement site is part of an approximately 9.3-acre drainage area. Refer to Figure 6. Existing surface runoff generated by the 10-year storm is estimated at 8.9 cfs, while the 50-year storm generates runoff at a rate of 10.4 cfs. It is noted that the Kaunakakai Stream flood control levee prevents flood waters from the stream from entering into the enhancement site. With the flood control levee, the enhancement site is seasonally dry, without any permanent surface water features.

An unnamed drainage ditch is located adjacent to and east of the enhancement site (refer to Figure 5). This ditch receives runoff from culverts along Maunaloa Highway and Kaunakakai Place. At its makai or southern extent, the ditch emerges as marshlands with standing water. Pickleweed is abundant along the edges and within the marsh area.

Like the existing wetland in Kaunakakai, the enhancement site is located within the Kamiloloa Aquifer System, as described above.

D. SOILS

1. Existing Wetland and Enhancement Site

The Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii characterizes the specific classification of soils underlying the existing wetland and the enhancement site as Kealia Silt Loam (KMW). See Figure 7. This soil type is poorly drained due to high water table levels, has a high content of salt, and is moderately alkaline. Ponding occurs in low areas after heavy rains. When the soil dries, salt crystals accumulate on the surface. Permeability is moderately rapid, runoff is slow and hazards of water erosion are no more than slight. However, the hazard of wind erosion is severe when the soil is dry and the surface layer becomes loose and fluffy.

In a representative profile, the surface layer is dark reddish-brown silt loam about three (3) inches thick. This soil layer is mostly friable but slightly sticky in texture. Below the surface layer are stratified layers of black sand silt loam, loam and fine sandy loam. This layer can be characterized as having a clay structure which is slightly sticky and plastic in texture. A brackish water table occurs at a depth of about 36 to 48 inches. The subsurface layers are dark reddish-brown to dark reddish-gray in the upper part and dark grayish-brown to black near the zone of the water table. This layer also has a clay structure with a sticky and plastic texture.

E. FLOOD AND TSUNAMI HAZARD

1. Existing Wetland and Enhancement Site

The Flood Insurance Rate Map (FIRM) for this portion of the Island of Moloka'i indicates that the existing wetland falls within Zone C, an area of minimal flooding. See Figure 8. This designation notwithstanding, it is noted that the existing wetland area is an apparent ponding area following storm

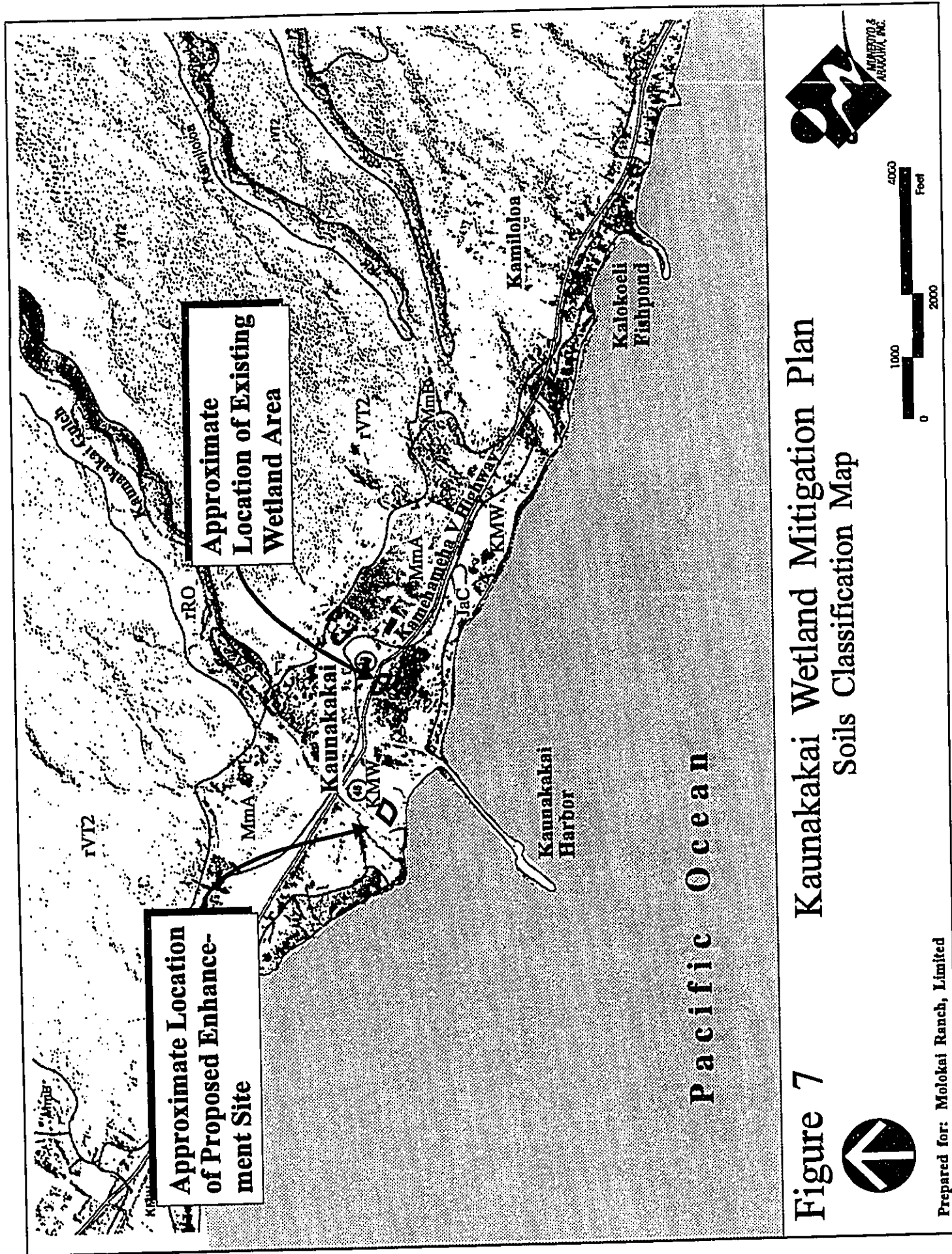
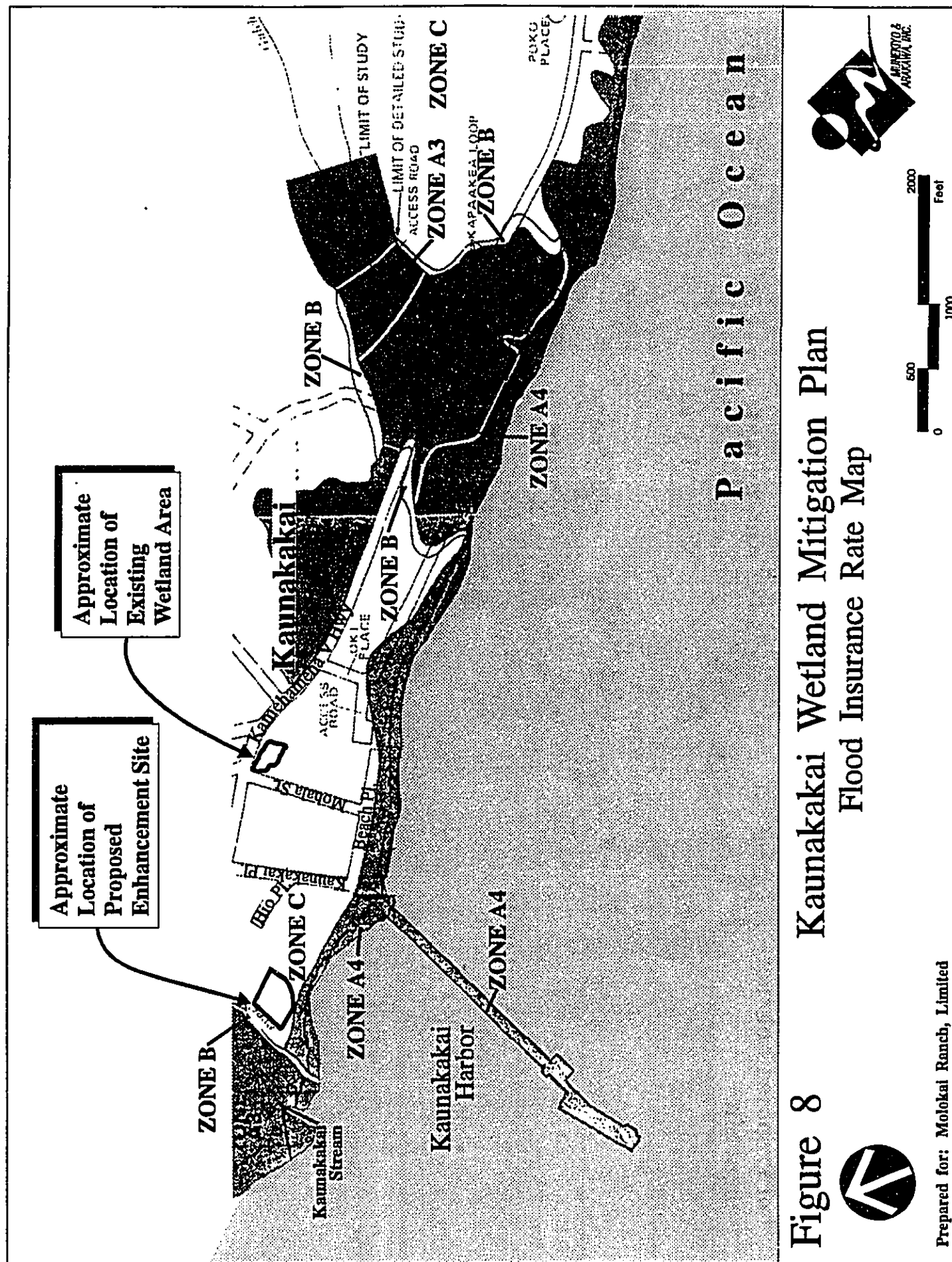


Figure 7 Kaunakakai Wetland Mitigation Plan
Soils Classification Map



Prepared for: Molokai Ranch, Limited



events.

At the enhancement site, a Zone C designation is established by the FIRM.

F. FLORA

1. Existing Wetland

The existing wetland site was mechanically cleared on November 22, 1994. Since then, vegetative growth has been re-established at the site. While the existing wetland area for the most part is clear, patches of pickleweed can be found within the site. Along the perimeter of the existing wetland, adjacent to Kamehameha V Highway and Mohala Street, upland grasses and weeds are observed.

2. Enhancement Site

The enhancement site itself is substantially devoid of vegetation. This characteristic is attributed to the apparent use of the enhancement site by off-road motorized vehicles. Patches of pickleweed are found along the edges of the enhancement site, with fairly dense stands occupying the slopes of the berm forming the perimeter of the site. A dense growth of pickleweed also occupies the adjacent marsh lands (along the unnamed ditch) which borders the enhancement site to the east. Along the makai or south side of the enhancement site (outside of the enhancement site limits) are mangrove (*Rhizophora mangle*) stands which are common along the south shore of Moloka'i.

Pickleweed and mangrove form the primary vegetative cover along Kaunakakai Stream, west of the enhancement site, while the area to the north of the site (makai of Maunaloa Highway), is occupied primarily by introduced upland weeds and grasses.

G. FAUNA

1. Existing Wetland

The existing wetland is in the midst of Kaunakakai Town. Wetland fauna and avifauna are not associated with this site due to the relatively high level of human activity (e.g., vehicular and pedestrian traffic, construction) which occurs in the immediate surrounding environs. This "urban" character is reflected in the animal life which is commonly found in such environments, including dogs, cats, mongoose, rodents and a number of non-water dependent bird species (e.g., common myna, house sparrow, etc.). Dogs, cats and mongoose in the surrounding area further detract from the suitability of this site to hold significant habitat value. These factors, combined with the normally dry conditions found at the site, reduces the suitability of the existing wetland to serve as a beneficial habitat area.

2. Enhancement Site

Unlike the existing wetland, the enhancement site is relatively isolated from human activity. Thus, the surrounding marsh areas are considered a functional waterbird habitat. The Hawaiian Stilt has been observed in the marsh lands located to the east of the enhancement site. Other species known to frequent this region of the island include the Pacific Golden Plover, Wandering Tattler, Ruddy Turnstone and Sanderling (Brown and Caldwell, 1995). While the enhancement site is relatively isolated from human activity, its proximity to uplands and Kaunakakai Town would indicate the presence of dogs, cats, rodents, and land birds in this vicinity as well. This occurrence however, is not considered significant given the remote and open conditions found at the site.

H. AIR AND NOISE QUALITY

1. Existing Wetland

There are no adverse air quality conditions in Kaunakakai Town, as there are no significant points sources of pollution in the vicinity. In addition, the Island's

constant exposure to winds typically results in the rapid dispersion of pollutants (e.g., automobile pollutants).

With respect to noise characteristics, the existing wetland is adjacent to Kamehameha V Highway and Mohala Street. Kamehameha V Highway is the primary east-west roadway serving the island of Moloka'i, while Mohala Street is a local collector primarily serving residents along Beach Place. In this regard, the existing wetland is exposed to traffic-related noise. There are no other noise sources in the vicinity of the existing wetland. Moloka'i Airport is located in Hoolehua, approximately eight (8) miles northwest of Kaunakakai Town.

2. Enhancement Site

Air quality at the enhancement site is also considered good, as there are no point sources of airborne particulates in the surrounding vicinity. However, given the loose and fluffy characteristics of the underlying Kealia Silt Loam soils during dry conditions, dust may be generated during windy days or when the site is used by off-road vehicles.

The ambient noise conditions at the enhancement site can be described as quiet as there are no man-made noise generators found nearby. Traffic noise from Maunaloa Highway is not noticeable.

I. CULTURAL RESOURCES

1. Existing Wetland

Land clearing for maintenance purposes at the existing wetland was completed in 1994. (In light of the proximity of the property to residential and business/commercial uses in Kaunakakai, maintenance clearing of vegetative growth at the site was undertaken for vector control and fire prevention purposes.) There are no surface indications of archaeological sites at the existing wetland. However, prior to the filling of the existing wetland for the

proposed business/commercial use (as part of the land use regulatory entitlement process) cultural resources review with the State Historic Preservation Division was undertaken. In a letter dated April 23, 1996, the State Historic Preservation Division indicates that there are no historic sites on the subject property. See Appendix C.

2. **Enhancement Site**

There are no surface archaeological features located at the enhancement site. This area has been previously disturbed as part of the Kaunakakai Stream flood control project. The adjacent lands to the north of the enhancement site has similarly been disturbed as it served as the dredge disposal site for the maintenance dredging of the Kaunakakai Harbor. Correspondence from the State Historic Preservation Division, dated October 26, 1995, indicates that there are no historic sites on the subject property. Refer to Appendix C.

Chapter III

Preliminary Mitigation Plan

III. PRELIMINARY MITIGATION PLAN

A. MITIGATION GOALS AND OBJECTIVES

In implementing the enhancement site, MRL will mitigate the loss of the existing 1.3-acre wetland in Kaunakakai and provide a 2.6-acre wetland environment at the new site which is intended to serve as a functional waterbird habitat. Moreover, the enhancement site will create a viable wetland ecosystem in an area which is presently degraded and marginal in terms of wetland value. In this context, the goal of this plan shall be to enhance a wetland area which is functionally marginal due to the present lack of open water areas. This enhancement shall serve to mitigate the loss of an existing wetland area in Kaunakakai Town. It is noted that the long-term management of the enhanced wetland will be the responsibility of MRL.

Specific objectives to be pursued in conformance with the mitigation goal are as follows:

1. Provide an enhancement concept which includes a permanent ponded water area surrounded by a seasonal wetland area which will provide a functional wetland system for the Island of Moloka'i.
2. Provide a management framework which will ensure the long-term viability of the enhanced wetland, including, but not limited to the following management components:
 - a. Wetland maintenance to ensure that enhanced wetland areas are free and clear of intrusive vegetation;
 - b. Wetland monitoring relative to wildlife utilization and water quality; and
 - c. Wetland security to ensure that appropriate measures are implemented to minimize the threat of predators and threat of disturbance by human activities.
3. Provide opportunities for Moloka'i residents and visitors to observe and learn about a functional wetland ecosystem.

The monitoring program noted above will address the following general requirements.

-
1. Monitor the establishment of the wetland vegetation to ensure that the desired plant growth and weed control within the enhancement pond are maintained.
 2. Monitor waterbird utilization activity to measure the success of the enhancement pond as a viable habitat area.
 3. Monitor fauna activity (e.g., dogs, cats, mongoose) within the enhancement site and the surrounding areas to ensure protection of migratory waterbird habitats within the enhancement pond.

The foregoing objectives of the monitoring program shall be achieved through the following implementing actions:

1. Enhancement site monitoring shall be conducted at least once every three (3) months for a period of two (2) years following completion of the enhancement improvements. Following the initial two-year monitoring period, monitoring shall occur at least once every six (6) months.
2. Site monitoring activities shall include the following:
 - a. Observation and recordation of vegetative growth, including invasive species such as mangrove. The percentage of vegetative cover at the site should be estimated, with vegetative coverage not to exceed approximately 50% of the total 2.6-acre enhancement site area.

Evidence of invasive or introduced species (i.e., plant species not acceptable for wetland environments by the USFWS) shall be removed. However, upland weeds and grasses which may occur on the berm embankments may be allowed to grow (for bank stabilization purposes) as long as it does not become the dominant species, replacing the planted landscape buffer species.
 - b. Observation and recordation of waterbird species, including numbers and locations.
 - c. Photographic documentation during each site visit. Site photographs shall be taken from the same reference points during each visit to facilitate temporal comparison of wetland conditions.
 - d. Observation of predator activity. Evidence of predator activity (e.g., footprints, droppings) shall be recorded.

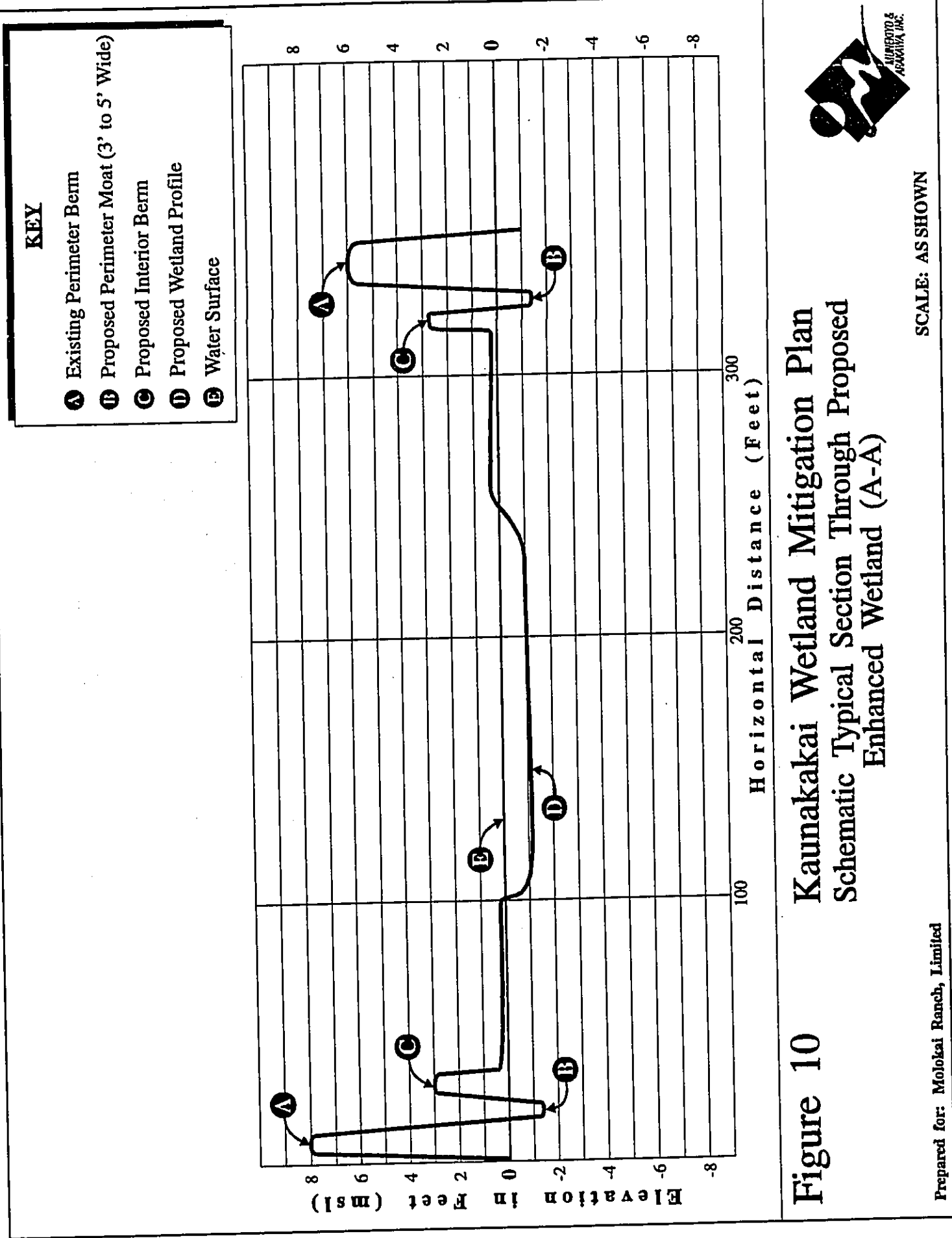
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3. Following each site visit, a brief written summary report documenting the results and follow-up actions (if any) of the visit shall be submitted to the DA and USFWS.

B. PROPOSED ENHANCEMENT PLAN

The proposed enhancement plan involves the creation of a permanent open water area surrounded by a seasonal wetland area. The open water area would encompass an area of approximately one-half acre. See Figure 9. Since the existing ground elevation at the enhancement site is between three (3) to four (4) feet, excavation will be required to expose the underlying brackish water. The water table level at the site will provide the necessary water levels to sustain soil saturation, waterbird habitat and plant establishment. Excavation of approximately four (4) feet will be required to create the open water area. A typical wetland section reflecting this concept is presented in Figure 10. Surrounding the open water area, the proposed seasonal wetland area would encompass approximately two (2) acres. This seasonal wetland area will be designed to provide local depressions which will promote ponding during the rainy season. (In providing supplemental ponding areas during the winter months, seasonal wetlands provide a supplemental habitat/food source for waterbirds utilizing the enhancement site.)

Additionally, the proposed wetland section provides for a 3- to 5-foot wide moat which is intended to serve as a deterrent to predators such as dogs, cats and mongoose. The moat would surround the proposed wetland in its entirety.

As previously mentioned, the proposed wetland enhancement area will be confined within the perimeter of an earthen berm. It will not, however, encompass the entire bermed area (approximately 3.5 acres). Accordingly, a new berm, similar in construction as the existing berm wall, will be constructed to enclose the enhancement site at its westerly boundary. Refer to Figure 9. Approximately 500 cubic yards of soil is required to establish the new berm.



Furthermore, planting along the wetland's perimeter berm is recommended for visual buffer enhancement purposes. Suitable wetland species to be planted will be in coordination with the Nature Conservancy of Hawaii-Molokai Preserve, and the University of Hawaii-College of Tropical Agricultural and Human Resources.

Vehicular access control to the site will be provided to ensure that unauthorized vehicles are prevented from entering areas in close proximity to the enhanced wetland. Access control will be in the form of gates or other physical barriers.

Total estimated excavation to create the one-half acre open water area and the two (2) acre seasonal wetland is approximately 11,000 cubic yards. To estimate the amount of excavation necessary to properly develop the proposed permanent and seasonal wetland areas, confirmation and monitoring of the underlying water surface elevation was required. Towards this end, a water table monitoring program was implemented, as summarized in Appendix D. This effort confirmed that the brackish water table is found approximately four (4) feet below existing grade at the site. Furthermore, there is no apparent tidal influence upon the underlying water table. Total construction cost is estimated to be on the order of approximately \$125,000.00.

C. IMPLEMENTATION PROGRAM

The implementation program consists of preparation of regulatory permit applications and construction plans. Construction plans shall include grading and landscaping plans which shall be in substantial conformance to the approved preliminary plan. Upon receipt of required regulatory and construction plans approvals, enhancement site improvements will be initiated.

1. Regulatory Requirements for Enhancement Site

Regulatory requirements which must be satisfied for the enhancement site (before construction can be initiated) are discussed below.

a. Conservation District Use Permit

Chapter 205, Hawaii Revised Statutes, relating to the State Land Use Commission, establishes the four (4) major land use districts in which all lands in the State are classified. These districts are designated "Urban", "Rural", "Agricultural", and "Conservation". The existing wetland is located in the Urban District while the enhancement site is located within the Conservation District. See Figure 11.

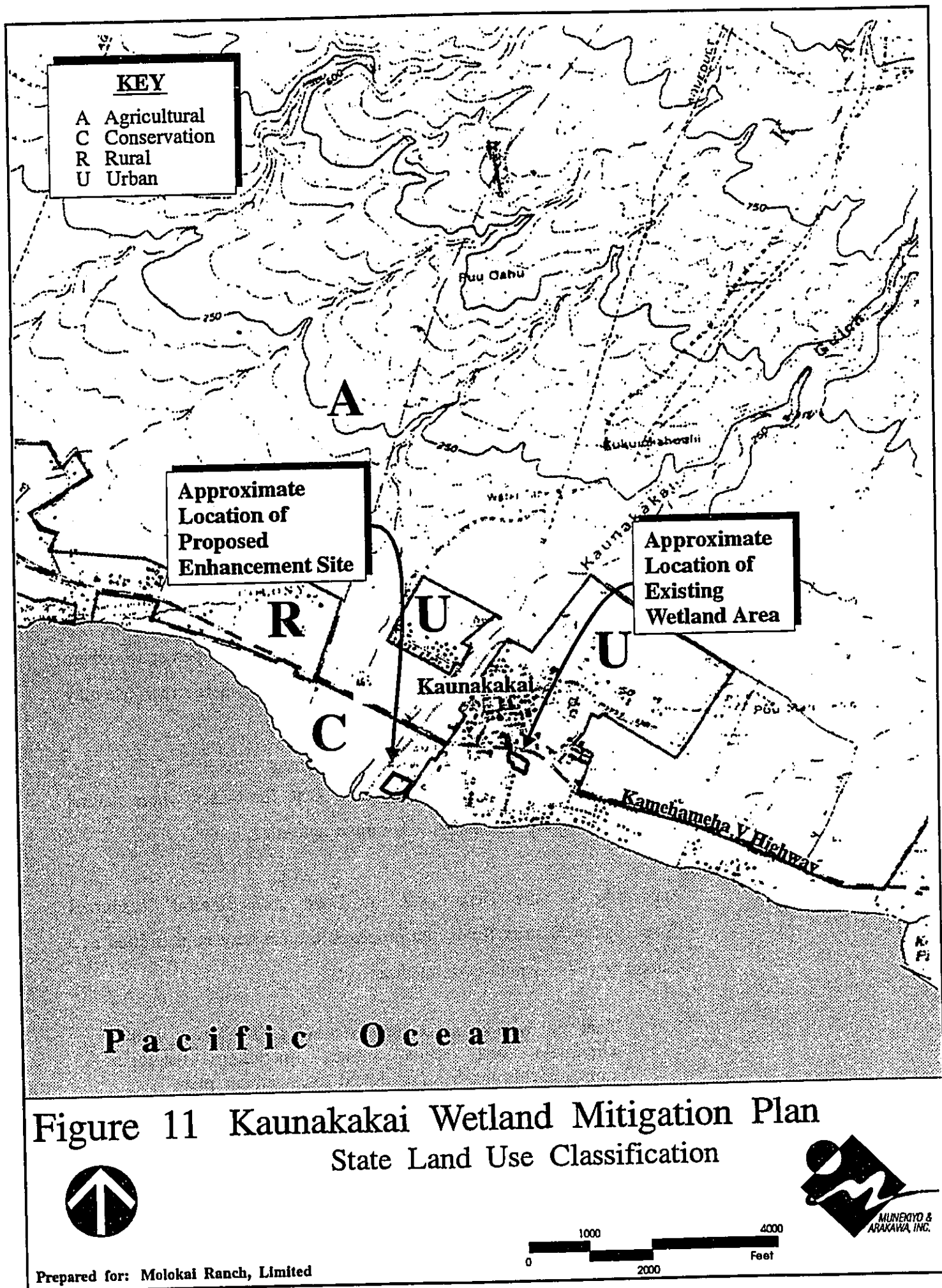
Chapter 2, of Title 13, Hawaii Administrative Rules, establishes subzones within the Conservation District. These subzones are designated "Protective" (P), "Limited" (L), "Resource" (R), "General" (G), and "Special" (S). The enhancement site is largely within the "General" subzone. However, its southern portion is located within the "Limited" subzone. See Figure 12.

The objective of the "General" subzone is to designate open space where specific conservation uses may not be defined, but where urban use may be premature.

The objective of the "Limited" subzone is to limit uses where natural conditions suggest constraints on human activities.

According to the Department of Land and Natural Resources Conservation District Rules, the proposed project may be permitted as a sanctuary (P-7), which is defined as:

Plant and wildlife sanctuaries, natural area reserves, and wilderness and scenic areas, including habitat improvements under an approved management plan.



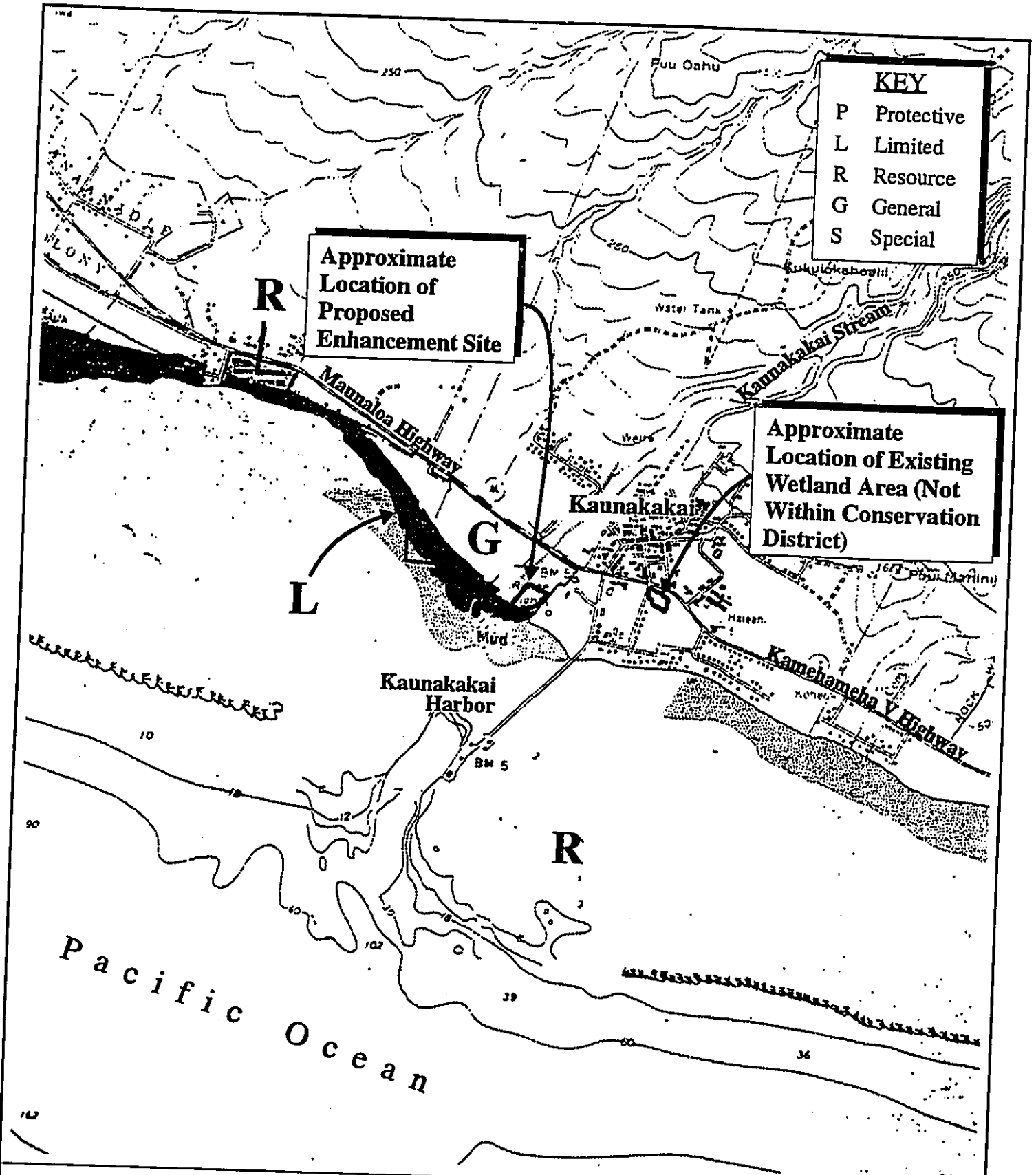
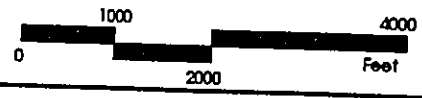


Figure 12 Kaunakakai Wetland Mitigation Plan
 Conservation District Subzone Designations



Prepared for: Molokai Ranch, Limited



Accordingly, a Conservation District Use Permit will be prepared and processed with the Board of Land and Natural Resources in accordance with Title 13. Thus, with regard to the proposed action's consistency with the purpose of the conservation district, the following criteria are discussed:

1. *The proposed land use is consistent with the purpose of the Conservation District:*

Pursuant to Title 13 of the Department of Land and Natural Resources, Conservation District Rules, the proposed project is identified as a permitted use (sanctuaries (P-7)). Thus, the proposed wetland enhancement pond project is not contrary to the objectives of the Conservation District.

2. *The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur:*

As previously mentioned, Conservation District Rules identify the proposed project as a permitted use, and is not contrary to the objectives of the General and Limited subzones.

3. *The proposed land use complies with provisions and guidelines contained in Chapter 205A, Hawaii Revised Statutes (HRS), entitled "Coastal Zone Management", where applicable:*

The proposed wetland enhancement pond project meets the objectives and policies of the Coastal Zone Management Program (see Section C.1.d of this Chapter).

4. *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region:*

The proposed project is not anticipated to adversely impact existing natural resources within the immediate area since it will create a viable wetland ecosystem suitable for migratory waterbird habitats.

5. *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels:*

The proposed enhanced wetland will be designed to blend in with the surrounding areas. Landscaping within and around the pond is also proposed. In this regard, there will be no adverse changes to the environment as a result of the project.

6. *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable:*

Existing land use characteristics at the project site and surrounding areas will not be adversely impacted. The proposed action will enhance the natural beauty and open space characteristics of the region.

7. *Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation district:*

The proposed action does not involve the subdivision of land to increase land use intensity.

8. *The proposed land use will not be materially detrimental to the public health, safety and welfare:*

The proposed project is not considered detrimental to the public's health, safety and welfare.

b. **Shoreline Setback Variance**

In accordance with the rules of the Moloka'i Planning Commission, actions within the shoreline setback are prohibited unless a variance is granted by the Commission. The subject property currently has a shoreline setback line of 150 feet from the shoreline. Because the makai portions of the proposed enhancement site falls within the shoreline setback area, a Shoreline Setback Variance (SSV) application will need to be filed with the Moloka'i Planning Commission.

According to Chapter 4 of the Rules of the Moloka'i Planning Commission Relating to the Shoreline Area of the Island of Moloka'i, a shoreline setback variance may be granted for a proposed project if applicable conditions are appropriately addressed. This section

evaluates the proposed wetland enhancement action relating to the required conditions to be met, as set forth in Chapter 4, Rules of the Moloka'i Planning Commission. The conditions, and subsequent discussions, are as follows:

- (1) *Maintain safe lateral access to and along the shoreline or adequately compensate for its loss.*

The proposed project will be entirely contained within an existing earthen berm which physically separates the project site from the nearby shoreline. Beach trails or public shoreline access areas used as access to the area's public beaches are not located within close proximity to the proposed enhancement site and, consequently, will not be impacted by the proposed action.

- (2) *Minimize risk of adverse impacts on beach process.*

As previously mentioned, the enhancement site will be contained entirely within an existing earthen berm. As such, the proposed action will not affect beach processes (e.g., erosion and disturbance of shoreline, etc.) in the general area.

- (3) *Minimize risk of structures failing and becoming loose rocks or rubble on public property.*

The excavated material will be used to create a new berm section along the westerly extent of the enhancement site. Excess dredged material will be hauled and stockpiled off-site, away from shoreline areas. Accordingly, the proposed action will not result in the deposition of rock and rubble material on public property.

- (4) *Minimize adverse impacts on public views to, from, and along the shoreline.*

The proposed enhanced wetland will be designed to blend in with the surrounding marsh areas. Landscaping within and around the pond is also proposed. In this regard, the proposed action will not restrict public views to, from, and along the shoreline.

c. **Environmental Assessment**

Use of Conservation District lands, as well as work performed within the shoreline setback are triggers requiring the preparation of an

environmental assessment (EA) pursuant to Chapter 343, Hawaii Revised Statutes and Title 11, Chapter 200, Hawaii Administrative Rules entitled Environmental Impact Statement Rules. Accordingly, this EA was prepared in connection with the wetland mitigation plan and was incorporated into the Conservation District Use Application and the Shoreline Setback Variance Application.

d. **Special Management Area Use Permit**

The proposed enhancement site is located within the County of Maui's Special Management Area (SMA). In this regard, an application for a SMA Use Permit will be filed with the Maui Planning Department for consideration and action by the Moloka'i Planning Commission.

Pursuant to Chapter 205A, Hawaii Revised Statutes, and the Special Management Area Rules and Regulations for the Molokai Planning Commission, actions occurring within the SMA are evaluated with respect to SMA objectives, policies and guidelines. This section addresses the proposed wetland enhancement action as related to applicable coastal zone management considerations, as set forth in Chapter 205A and the Rules and Regulations of the Molokai Planning Commission. The coastal zone management considerations are addressed as follows:

(1) **Recreational Resources**

Objective: Provide coastal recreational resources accessible to the public.

Policies:

1. Improve coordination and funding of coastal recreation planning and management; and
2. Provide adequate, accessible and diverse recreational opportunities in the coastal zone management area by:

-
- a. Protecting coastal resources uniquely suited for recreation activities that cannot be provided in other areas;
 - b. Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds and sandy beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
 - c. Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
 - d. Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
 - e. Ensuring public recreational use of County, State and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
 - f. Adopting water quality standards and regulating point and non-point sources of pollution to protect and where feasible, restore the recreational value of coastal waters; and
 - g. Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the Land Use Commission, Board of Land and Natural Resources, County Planning Commissions and crediting such dedication against the requirements of Section 46-6 of the Hawaii Revised Statutes.

Response: The proposed enhancement project is not anticipated to adversely impact existing coastal or inland recreational opportunities. While the enhancement site is presently used by

off-road vehicles, activities associated with this use are not considered compatible with wetland habitat functions.

(2) **Historical/Cultural Resources**

Objective: Protect, preserve and where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

1. Identify and analyze significant archaeological resources;
2. Maximize information retention through preservation of remains and artifacts or salvage operations; and
3. Support State goals for protection, restoration, interpretation and display of historic resources.

Response: Department of Land and Natural Resources, State Historic Preservation Division (SHPD) records indicate that there are no historic sites on the subject property. Should archaeological remains be encountered during construction, however, SHPD will be notified and applicable procedures to ensure compliance with Chapter 6E, Hawaii Revised Statutes will be followed.

(3) **Scenic and Open Space Resources**

Objectives: Protect, preserve and where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

1. Identify valued scenic resources in the coastal zone management area;

2. Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural land forms and existing public views to and along the shoreline;
3. Preserve, maintain and, where desirable, improve and restore shoreline open space and scenic resources; and
4. Encourage those developments which are not coastal dependent to locate in inland areas.

Response: The establishment of a maintained open pond area and seasonal wetland area (with appropriate wetland vegetation) is expected to improve the overall visual character of the enhancement site in keeping with the scenic and open space resources objective and policies.

(4) Coastal Ecosystem

Objective: Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

1. Improve the technical basis for natural resource management;
2. Preserve valuable coastal ecosystems of significant biological or economic importance;
3. Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
4. Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate State water quality standards.

Response: The proposed wetland enhancement project will provide a new ecosystem which will complement the overall character of the marshy coastline found in this area of Molokai. The proposed enhancement design is such that coastal water quality impacts will be avoided.

(5) **Economic Use**

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

1. Concentrate coastal dependent development in appropriate areas;
2. Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy-generating facilities are located, designed and constructed to minimize adverse social, visual and environmental impacts in the coastal zone management area; and
3. Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
 - a. Utilization of presently designated locations is not feasible;
 - b. Adverse environmental effects are minimized; and
 - c. The development is important to the State's economy.

Response: The development of an enhanced wetland at the subject property is considered appropriate in the context of surrounding land and economic uses.

(6) **Coastal Hazards**

Objective: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

1. Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, point and nonpoint source pollution hazards;
2. Control development in areas subject to storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;
3. Ensure that developments comply with requirements of the Federal Flood Insurance Program;
4. Prevent coastal flooding from inland projects; and
5. Develop a coastal point and nonpoint source and pollution control program.

Response: The proposed improvements will not impact existing drainage patterns and will not affect drainage and/or flooding conditions at neighboring or downstream properties.

(7) **Managing Development**

Objective: Improve the development review process, communication, and public participation in the management of coastal resources and hazard.

Policies:

1. Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
2. Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and
3. Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the general public to facilitate public participation in the planning and review process.

Response: All aspects of project implementation will be conducted in accordance with applicable Federal, State, and County requirements. Opportunity for review of the proposed action is also offered through the various regulatory permitting processes.

(8) Public Participation

Objective: Stimulate public awareness, education, and participation in coastal management.

Policies:

1. Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;
2. Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal-related issues, developments, and government activities; and
3. Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Response: As previously noted, opportunities for agency and public review of the proposed action is being provided through the various regulatory permitting processes.

(9) **Beach Protection**

Objective: Protect beaches for public use and recreation.

Policies:

1. Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;
2. Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and
3. Minimize the construction of public erosion-protection structures seaward of the shoreline.

Response: The proposed action is not anticipated to interfere with existing beach processes.

e. **Regulatory Approvals Required for the Existing Wetland**

Separately, approvals will be required at the existing wetland in Kaunakakai Town for the completed wetland clearing action and the proposed filling of the wetland for the anticipated business/commercial use of the property. These approvals are identified as follows:

- (1) After-the-fact DA Permit for the clearing activity;
- (2) After-the-fact Section 401 Water Quality Certification;
- (3) After-the-fact Coastal Zone Management Consistency Approval;
- (4) DA Permit for proposed wetland filling;
- (5) Section 401 Water Quality Certification for proposed filling;
- (6) Coastal Zone Management Consistency Approval for proposed filling; and
- (7) Special Management Area Use Permit for proposed filling.

2. Implementation Timetable

Construction implementation for the enhancement site will be started upon the receipt of all governmental approvals. In the context of regulatory processing timeframes, it is estimated that construction can begin in the second quarter of 1997, with a construction duration of approximately one (1) month. It is noted that this time estimate is subject to variation and is dependent on agency processing times.

Chapter IV

***Project-Related Impacts
and Mitigation Measures***

IV. PROJECT-RELATED IMPACTS AND MITIGATION MEASURES

A. LAND USE

The proposed action involves the anticipated filling of an existing degraded wetland in Kaunakakai Town and improvements to the proposed enhancement site as mitigation for the planned filling activity. The filling of the wetland area in Kaunakakai Town will be implemented in connection with the proposed development of the site and immediate surrounding environs for business/commercial use.

The proposed enhancement site is anticipated to provide a functional waterbird habitat which is not presently provided at the existing wetland site. The enhancement site is located in a relatively remote section of Kaunakakai, with minimal human activity occurring nearby. The enhancement site is bordered by the Kaunakakai Stream and an unnamed drainage ditch and marsh area which provides a compatible environment for waterbird habitat use.

In this connection, the proposed implementation of the enhancement improvements are anticipated to establish improved wetland conditions in keeping with the marsh and wetland character of this coastal section of Molokai.

B. LAND FORM AND VISUAL CHARACTER

The filling of the existing wetland will be conducted in connection with the development of a commercial project at the site. Site design considerations for the existing wetland will be separately addressed by the new owner of the parcel. With regard to wetland impacts, the filling of the site will eliminate wetland characteristics now found at the site. However, this loss is being mitigated through the proposed enhancement site improvements.

The proposed enhancement work will involve excavation to create a permanent ponding area and adjoining seasonal wetland area. In creating a functional wetland area, the improvements are also anticipated to improve the visual character of the site by

providing a new open water area and seasonal wetland area which is free of invasive plant species.

C. DRAINAGE AND EROSION CONTROL

The proposed filling of the existing wetland for commercial development will be completed in connection with required project-related drainage improvements. It is anticipated that such improvements will address County requirements for the provision of adequate drainage and erosion control systems.

The enhancement site now functions as a local collection area for storm runoff. There is no opening in the perimeter berms which allows off-site flows to enter into or to be discharged from the site (to the ocean). Inasmuch as the perimeter berms will be maintained for the enhancement wetland, the drainage functions of the enhancement site will not be altered as a result of the proposed action. During periods of high rainfall, the seasonal wetland area (which surrounds the open pond) is anticipated to pond, creating additional water areas for waterbird use.

As previously noted, the site is now used by off-road vehicles. Off-road vehicle use creates dust and promotes wind-blown erosion at the site. With the proposed enhancement improvements, fugitive dust is anticipated to be greatly reduced.

Since the enhancement site will be fully contained within surrounding berms, there are no downstream erosion-related impacts (e.g., coastal water quality degradation) anticipated from the proposed improvements.

D. WETLAND ENVIRONMENT

The filling of the existing wetland area will result in the loss of 1.3 acres of wetlands. To mitigate the loss, a larger degraded wetland area approximately 0.3 mile to the southwest of the existing site is proposed.

The new enhancement site will provide a permanent open water area and surrounding seasonal wetland area which will serve as habitat for waterbirds which frequent this part of Molokai (including the endangered Hawaiian Stilt). Wetland management procedures will be implemented to ensure that optimum habitat conditions are provided. This mitigation approach is expected to result in a net positive impact on wetland habitat functions and conditions since the existing wetland in Kaunakakai Town (to be filled) is not considered conducive to waterbird use.

E. NOISE AND AIR QUALITY

As previously noted, the proposed filling of the existing wetland will be conducted in connection with the proposed development of a commercial facility. In the context of the surrounding urban environs, the short-term and long-term impacts to noise and air quality associated with the filling are not anticipated to be adverse.

Construction activities for the creation of the enhanced wetland will primarily involve excavation and grading. This type of construction activity creates temporary nuisances related to noise and dust. Appropriate dust control measures (e.g., water application to freshly graded areas) will be implemented by the contractor to ensure that fugitive dust generated in connection with construction is minimized.

Additionally, construction-related noise at the enhancement site is not anticipated to be problematic since it is located away from urban activities. However, construction coordination will be required to ensure that disturbance to breeding and nesting in adjacent wetland areas are not impacted by construction activity. Pre-construction coordination with the USFWS and the DA will be conducted in this regard.

F. CULTURAL RESOURCES

There are no surface indications of historic sites at the existing wetland site. The State Historic Preservation Division has indicated that construction activities on the subject property will have no effect upon significant historic sites. Refer to Appendix C. This

area has been historically cleared for maintenance purposes by MRL. The new owner will be coordinating the proposed commercial project with the State Historic Preservation Division (in coordination with the County Planning Department) in connection with land use approvals needed to implement the project (i.e., Change in Zoning and Special Management Area Use Permit).

There are no surface indications of cultural features at the enhancement site, as well. The State Historic Preservation Division (SHPD) has also indicated that the enhancement project will have no effect upon significant historic sites. Refer to Appendix C. However, should any cultural remains be identified during construction, work will be stopped and SHPD consulted to establish an appropriate mitigation strategy.

Chapter V

***Summary of Unavoidable, Adverse
Environmental Effects; Alternatives
to the Proposed Action; and the
Irreversible and Irretrievable
Commitment of Resources***

***V. SUMMARY OF UNAVOIDABLE, ADVERSE ENVIRONMENTAL
EFFECTS; ALTERNATIVES TO THE PROPOSED ACTION; AND
THE IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES***

A. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

The creation of the enhanced wetland will result in some construction-related impacts as described in Chapter IV, Project-Related Impacts and Mitigation Measures.

Excavation and grading activities will create temporary nuisances related to noise and dust. Appropriate dust control measures will be implemented by the contractor to ensure that fugitive dust generated in connection with construction is minimized. Furthermore, construction-related noise at the enhancement site is not anticipated to be problematic since the site is located away from urban activities.

The creation of the enhanced wetland is not anticipated to create any significant, long-term adverse environmental effects.

B. ALTERNATIVES TO THE PROPOSED ACTION

Alternative enhancement site locations were examined by MRL in coordination with the DA. Alternate locations included sites along Kaunakakai Stream's western bank (makai of Maunaloa Highway). However, topographic and area limitations associated with western bank locale was not considered as suitable for enhancement purposes from the standpoint of development costs and mitigation objectives. For example, areas along the western bank include substantial fill material which would need to be hauled off-site. In addition, the possible site development configurations presented limitations relative to total area as well as construction and maintenance access needs.

Alternative mitigation options were also discussed, including the provision of an onsite replacement wetland at the Kaunakakai Town wetland site. However, given the property's existing urban context, it was determined that the proposed enhancement site option was preferred in terms of potential habitat establishment success.

C. **IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

The creation of the enhanced wetland will involve the commitment of lands in the Conservation District which will preclude other land options for the site. Conservation District Rules, however, identify the proposed project as a permitted use and is not contrary to the objectives of the Conservation District.

Chapter VI

Findings and Conclusions

VI. FINDINGS AND CONCLUSIONS

The proposed project involves the creation of a 2.6-acre enhanced wetland to mitigate the loss of an existing 1.3-acre wetland in Kaunakakai. The enhanced wetland is intended to serve as a functional waterbird habitat, as well as create a viable wetland ecosystem in the area which is presently degraded and marginal in terms of wetland value.

The project will involve short-term impacts typically associated with construction activities. Appropriate mitigation measures will be implemented to minimize the nuisances of construction.

From a long-term perspective, the project will provide a new wildlife habitat area for endangered waterbird species. Construction coordination with the U.S. Fish and Wildlife Service and the Department of Army will be undertaken to ensure that disturbance to waterbird breeding and nesting patterns in adjacent wetland areas are avoided during construction activities.

The State Historic Preservation Division (SHPD) has indicated that the creation of the enhanced wetland will have no effect upon significant historic sites. However, should any cultural remains be identified during construction, work will be stopped and SHPD consulted to establish an appropriate mitigation strategy.

No adverse effects upon public infrastructure and services are anticipated.

In light of the foregoing findings, it is concluded that the creation of the enhanced wetland will not result in any significant environmental impacts.

Chapter VII

***Agencies Contacted in
the Preparation of the
Environmental Assessment***

**VII. AGENCIES CONTACTED IN THE PREPARATION
OF THE ENVIRONMENTAL ASSESSMENT**

The following agencies were contacted during the preparation of the Environmental Assessment:

1. U.S. Department of the Army
Operations Division
Fort Shafter
Honolulu, Hawaii 96858
2. U.S. Fish and Wildlife Service
Pacific Islands Office
500 Ala Moana Blvd., Suite 3-580
Honolulu, Hawaii 96813
3. County of Maui
Planning Department
250 South High Street
Wailuku, Hawaii 96793
4. Department of Land and
Natural Resources
State Historic Preservation Division
33 S. King Street, 6th Floor
Honolulu, Hawaii 96813
5. Malama Park Project
c/o Walter Ritte
P. O. Box 1949
Kaunakakai, Hawaii 96748
6. University of Hawaii
College of Tropical Agriculture
and Human Resources
P. O. Box 317
Hoolehua, Hawaii 96729
7. Nature Conservancy of Hawaii-Molokai Preserve
P. O. Box 220
Kualapuu, Hawaii 96757

Chapter VIII

***Correspondence Received in
Connection with the Draft
Environmental Assessment Review and
Special Management Area Use Permit
and Shoreline Setback Applications***

***VIII. CORRESPONDENCE RECEIVED IN CONNECTION
WITH THE DRAFT ENVIRONMENTAL ASSESSMENT
REVIEW AND SPECIAL MANAGEMENT AREA USE
PERMIT AND SHORELINE SETBACK APPLICATIONS***

This Environmental Assessment was prepared in connection with the SMA/SSV application, which was filed with the Maui County Planning Department on December 26, 1995. During the agency review period, substantive comments on the subject application were provided by several agencies. Responses to the comment letters have been provided by the applicant, which are incorporated herein.

1021



**BOARD OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1108
WAILUKU, MAUI, HAWAII 96793-7108**

'96 FEB 22 P1:57
DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

February 20, 1996

Mr. David Blane, Director
County of Maui
Planning Department
250 South High Street
Wailuku, Maui Hawaii 96793

Re: Kaunakakai Wetlands Project; 96/SM1-01; 96/SSV-01;
TMK 5-3-5: por. 6

Dear Mr. Blane,

Thank you for the opportunity to comment on the proposed project.

We defer to the Aquatics Division of DLNR and the U.S. Fish & Wildlife Service regarding destruction and replacement/enhancement of wetland habitat.

We ask that the applicants take precautionary measures during construction to prevent petroleum products, construction materials and debris, and eroded soils from entering coastal waters.

We enclose a list of "Some of Maui's Native and Polynesian Plants". However, given the special nature of the area, we encourage the applicants to contact Ms. Kali Montero of UH Cooperative Extension Service at 567-6833 and FAX 567-6818, for more information on appropriate sources and propagation methods for Molokai native plants in this natural wetland area. We understand that the applicants are already cooperating with U.S. Fish & Wildlife. It has been suggested to us that the following U.S. Fish & Wildlife staff might be familiar with appropriate plantings & design for Molokai wetlands: Mike Silbernagle at 637-6330 (manages Molokai Wetland Refuge), or Karen Evans at 541-3441 (in charge of non-refuge wetlands).

We suggest that West Maui Watershed Coordinator Dr. Wendy Wiltse be consulted regarding protection of near-shore waters and ecosystems during construction. She can be reached at 661-7856.

Sincerely,

David Craddick
for David Craddick

Director

attachment: "Some of Maui's Native and Polynesian Plants" - Molokai

"By Water All Things Find Life"

Printed on recycled paper





MOLOKAI RANCH

April 26, 1996

Mr. David Craddick
Board of Water Supply
County of Maui
P.O. Box 1109
Wailuku, Hawaii 96793-7109

Re: Special Management Area Use Permit and Shoreline Setback Variance
(96/SM1-01; 96/SSV-01) for the Kaunakakai Wetlands (TMK 5-3-5:06)

Dear Mr. Craddick:

We have received a copy of your letter addressed to David Blane, Director of the Maui Planning Department, dated February 20, 1996. We would like to take this opportunity to respond to your comments.

All construction activities will be conducted within the perimeter of an existing earthen berm which encompasses the entire project site. There are no openings in the perimeter berm, and runoff generated onsite is fully contained within the berm's perimeter. During the construction period, every effort will be made to ensure that the integrity of the berm is maintained. Accordingly, no adverse impacts to nearshore waters are anticipated.

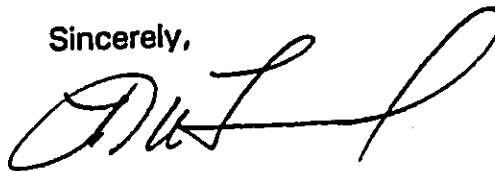
The contractor shall also ensure that all work is conducted in a neat and efficient manner. All onsite vehicles will be properly maintained to ensure that no leakage of petroleum products occur.

It is also noted that we are coordinating with the Nature Conservancy - Molokai Preserve, The University of Hawaii, College of Tropical Agriculture and Human Resources and the U.S. Fish and Wildlife Service (USFWS) to establish appropriate plantings that provide suitable nesting and diverse food resources for the pond's migratory waterbird community.

Mr. David Craddick
April 26, 1996
Page 2

We hope that the above responses address your concerns. Thank you again for your comments.

Sincerely,



Keith Fernandez
Molokai Ranch, Limited

cc: David Blane, Planning Department
Gary Gill, Office of Environmental Quality Control
Michael Munekiyo, Munekiyo & Arakawa, Inc.

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lkaiwed.003.1e48

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



LAWRENCE MIIKE
DIRECTOR OF HEALTH

96 FEB 26 12:24

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to:

February 16, 1996

96-017A/epo

Mr. David W. Blane
Planning Director
County of Maui
Planning Department
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Blane:

Subject: Applications for Special Management Area Permit and
Shoreline Setback Variance (96/SM 1-01, 96/SSV-01)
Kaunakakai Wetlands Project
Molokai
TMK: 5-3-5: por. of 6

Thank you for allowing us to review and comment on the subject permit application.

Our major concern is the potential nuisance and vector control problems caused by droughts and the subsequent lowering of water levels in the seasonal and permanent ponds. The bottom of the seasonal pond should be designed to sloped downward toward the permanent pond. This will allow the survival of "mosquito fish" and other aquatic fauna during periods of drought.

Sincerely,

Lawrence Miike
Director of Health

c: MDHO



MOLOKAI RANCH

April 26, 1996

Mr. Lawrence Miike
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801

Re: Special Management Area Use Permit and Shoreline Setback Variance
(96/SM1-01; 96/SSV-01) for the Kaunakakai Wetlands (TMK 5-3-5:06)

Dear Mr. Miike:

We have received a copy of your letter addressed to David Blane, Director of the Maui Planning Department, dated February 16, 1996. We would like to take this opportunity to respond to your comments.

The proposed enhancement plan involves the creation of a permanent open water area surrounded by a seasonal wetland area. The open water area would encompass an area of approximately one-half acre. Excavation of approximately four (4) feet will be required to expose the underlying brackish water, thus providing the necessary water levels to create the permanent open water area.

It is noted that subsurface water level monitoring was conducted at the project site confirming the water surface elevation of the underlying water table. Results of monitoring indicate that there is no significant tidal influence at the project site. Therefore, during drought conditions, the underlying water table is anticipated to maintain water levels of the open water area at desired levels.

With regard to the seasonal wetland areas, local depressions within the seasonal wetland would be provided to create temporary wetland areas during the higher rainfall months. Detailed topographic design of the seasonal wetland will be undertaken in coordination with the U.S. Fish and Wildlife Service.

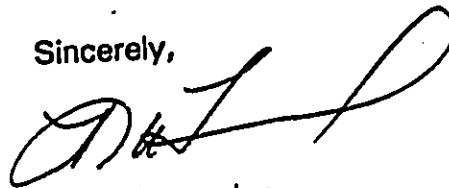
Also, the enhancement site, when developed, is intended to serve as a functional waterbird habitat. The primary objective of the proposed enhancement action is to provide a viable waterbird habitat. Final designs of the enhancement pond and management principles developed in connection with the enhancement site will

Mr. Lawrence Miike
April 26, 1996
Page 2

address requirements to meet the habitat enhancement objective. At this time, we do not plan to raise "mosquito fish" and other aquatic fauna in the enhanced area.

We hope that the above responses address your concerns. Thank you again for your comments.

Sincerely,



Keith Fernandez
Molokai Ranch, Limited

cc: David Blane, Planning Department
Gary Gill, Office of Environmental Quality Control
Michael Munekiyo, Munekiyo & Arakawa, Inc.

KF:to
kaiwed.002.1e48

007
BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
JERRY M. MATSUDA
GLENN M. OKIMOTO

'96 FEB 12 P12:50

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

IN REPLY REFER TO:

STP 8.7218

February 7, 1996

Mr. David W. Blane
Director
Planning Department
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Blane:

Subject: Kaunakakai Wetlands Project
Special Management Area Use Permit
and Shoreline Setback Variance
I.D. No.: 96/SM1-01, 96/SSV-01
TMK: 3-8-001: 19

Thank you for your transmittal of January 17, 1996.

The subject project is not anticipated to have an adverse impact on our State transportation facilities.

However, our Harbors Division currently uses a portion of the subject project area as a dredged spoils disposal site. We would like the land owner to consider offering an alternate site where we could dispose of the dredged materials.

We appreciate the opportunity to provide comments.

Very truly yours,

KAZU HAYASHIDA
Director of Transportation



MOLOKAI RANCH

April 26, 1996

Mr. Kazu Hayashida
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Re: Special Management Area Use Permit and Shoreline Setback Variance
(96/SM1-01; 96/SSV-01) for the Kaunakakai Wetlands (TMK 5-3-5:06)

Dear Mr. Hayashida:

We have received a copy of your letter addressed to David Blane, Director of the Maui Planning Department, dated February 7, 1996. In response to your comment, we will work with the State of Hawaii in identifying potential upland dredge disposal sites for the next dredging of Kaunakakai Harbor.

Thank you for your interest in this project.

Sincerely,

Keith Fernandez
Molokai Ranch, Limited

cc: David Blane, Planning Department
Gary Gill, Office of Environmental Quality Control
Michael Munekiyo, Munekiyo & Arakawa, Inc.

KF:to
kkawet.004.1e48

8-9



OFFICE OF STATE PLANNING

Office of the Governor

MAILING ADDRESS: P.O. BOX 3540, HONOLULU, HAWAII 96811-3540
STREET ADDRESS: 250 SOUTH HOTEL STREET, 4TH FLOOR
TELEPHONE: (808) 587-2846, 587-2800

BENJAMIN J. CAYETANO, Governor

FAX: Director's Office 587-2848
Planning Division 587-2824

Ref. No. Z-0033

February 12, 1996

The Honorable David W. Blane
Planning Director
Planning Department
County of Maui
200 South High Street
Wailuku, Hawaii 96793

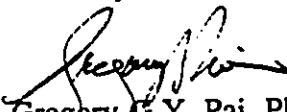
Attention: Mr. Clayton Yoshida

Dear Mr. Blane:

We have the following comment on the Environmental Assessment for Kaunakakai Wetland project at Kaunakakai, Molokai.

We note that the assessment does not discuss the long-term management and maintenance of the replacement wetland. Since this is an important element to assure the integrity of the wetland values, a meaningful program should be employed and also discussed in the assessment. Alternatively, such a provision might be a condition of the SMA permit and shoreline setback variance.

Sincerely,


Gregory G.Y. Pai, Ph.D.
Director

96 FEB 14 PM 2:42
DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED



MOLOKAI RANCH

April 26, 1996

Mr. Gregory Pai, Ph.D
Office of State Planning
Office of the Governor
P.O. Box 3540
Honolulu, Hawaii 96811-3540

Re: Special Management Area Use Permit and Shoreline Setback Variance
(96/SM1-01; 96/SSV-01) for the Kaunakakai Wetlands (TMK 5-3-5:06)

Dear Mr. Pai:

We have received a copy of your letter addressed to David Blane, Director of the Maui Planning Department, dated February 12, 1996. We would like to take this opportunity to respond to your comments.

As described in the proposed project's Environmental Assessment (EA), the long-term management of the enhanced wetland will be the responsibility of Molokai Ranch, Ltd. Also included in the EA is a proposed management framework which will ensure the long-term viability of the enhanced wetland. The management framework includes the following components:

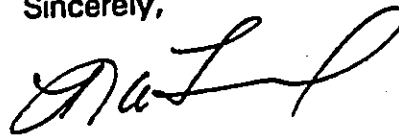
- a. Wetland maintenance to ensure that enhanced wetland areas are free and clear of intrusive vegetation;
- b. Wetland monitoring relative to wildlife utilization and water quality characteristics;
- c. Wetland security to ensure that appropriate measures are implemented to minimize the threat of predators and threat of disturbance by human activities.

Details of the management program (e.g., monitoring and maintenance program requirements) will be developed in coordination with the U.S. Fish and Wildlife Service.

Mr. Gregory Pai, Ph.D
April 26, 1996
Page 2

We hope that the above responses address your concerns. Thank you again for your comments.

Sincerely,



Keith Fernandez
Molokai Ranch, Limited

cc: David Blane, Planning Department
Gary Gill, Office of Environmental Quality Control
Michael Munekiyo, Munekiyo & Arakawa, Inc.

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kklawetl.001Je48

MAR 7 1996

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

March 5, 1996

Mr. Michael D. Wilson, Director
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Don Horiuchi

Dear Mr. Wilson:

Subject: Draft Environmental Assessment (EA) for Kaunakakai Wetlands, Molokai;
TMK: 5-3-5: por. 6

Please include the following in the final EA:

1. An island map showing the project location.
2. A list of any community groups contacted and copies of any correspondence.
3. The archeological report included does not cover portion 30 of the existing wetlands site. Please contact State Historic Preservation Division regarding coverage of this area.
4. A discussion of findings and reasons, according to the significance criteria listed in HRS Title 11-200-12, that support the anticipated negative declaration determination.
5. What are the anticipated start and end dates of the project?

If you have any questions, please call Nancy Heinrich at 586-4185.

Sincerely,

A handwritten signature in dark ink, appearing to read "Gary Gill".
GARY GILL
Director

c: Keith Fernandez, Molokai Ranch
Daniel Soares, Munekiyo & Arakawa



MOLOKAI RANCH

April 26, 1996

Gary Gill, Director
Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Re: Draft Environmental Assessment for Kaunakakai Wetlands, Molokai;
TMK 5-3-5; por. 06

Dear Mr. Gill:

We have received a copy of your letter addressed to Michael Wilson, Director of the Department of Land and Natural Resources, dated March 5, 1996. We would like to take this opportunity to respond to your comments.

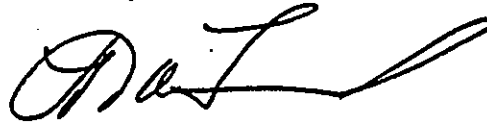
- ✓ 1. An Island Reference Map has been included into the Final Environmental Assessment.
2. Groups contacted during the preparation of the Final Environmental Assessment include the following:
 - a. Malama Park Project
c/o Walter Ritte
P.O. Box 1949
Kaunakakai, Hawaii 96748
 - b. Nature Conservancy of Hawaii - Molokai Preserve
P.O. Box 220
Kualapuu, Hawaii 96757
- ✓ 3. The properties encompassed by the existing wetland area are identified as TMK 5-3-01: por. 30, 51 and 57. Correspondence with the Department of Land and Natural Resources, State Historic Preservation Division (SHPD) indicate that it has no records of historic sites on the subject properties. These properties were also part of a field inspection conducted by SHPD staff. These findings as well as the correspondence letter from SHPD have been incorporated into the Final Environmental Assessment.

Mr. Gary Gill
April 26, 1996
Page 2

4. A discussion of findings and reasons, according to the significance criteria listed in HRS Title 11-200-12, that support the anticipated negative declaration determination has been added into the Final Environmental Assessment.
5. The construction implementation for the enhancement site will start upon the receipt of all governmental approvals. In the context of regulatory processing, it is estimated that construction can begin in the second quarter of 1997, with a construction duration of approximately one (1) month. It is noted that this time estimate is subject to variation and is dependent on agency processing times.

We hope that the above responses address your concerns. Thank you again for your comments.

Sincerely,



Keith Fernandez
Molokai Ranch, Limited

cc: David Blane - Planning Department
Gary Gill - Office of Environmental Quality Control
Michael Munekiyo - Munekiyo & Arakawa, Inc.

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Maui Land Use

ID:308-243 72

MAR 12 '96

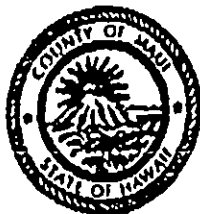
7:49 No.003 P.01

LINDA CROCKETT LINGLE
Mayor

CHARLES JENCKS
Director

DAVID C. GOODE
Deputy Director

AARON SHINMOTO, P.E.
Chief Staff Engineer



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
LAND USE AND CODES ADMINISTRATION
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

RALPH NAGAMINE, L.S., P.E.
Land Use and Codes Administration

EASSIE MILLER, P.E.
Wastewater Reclamation Division

LLOYD R.C.W. LEE, P.E.
Engineering Division

DAVID WISSMAR, P.E.
Solid Waste Division

BRIAN HASHIRO, P.E.
Highways Division

FILE COPY

DATE: MARCH 11, 1996

MEMO TO: DAVID W. BLANE
DIRECTOR OF PLANNING

FROM:  CHARLES JENCKS
DIRECTOR OF PUBLIC WORKS AND WASTE MANAGEMENT

SUBJECT: SPECIAL MANAGEMENT AREA PERMIT #95/SM1-01
SHORELINE SETBACK VARIANCE #95/SSV-01
KAUNAKAKAI WETLAND MITIGATION PLAN BY MOLOKAI RANCH
TMK (2)5-3-005: 006

These are our comments regarding the subject application for a Special Management Area ("SMA") permit and Shoreline Setback Variance ("SSV").

1. Comments from the Wastewater Reclamation Division:

The Wastewater Reclamation Division is currently considering construction of a redundant effluent disposal system for the Kaunakakai Wastewater Reclamation Facility. In conjunction with this proposed project, there is a possibility that a wetland near the existing wastewater treatment facility could be created. The Wastewater Reclamation Division and Molokai Ranch will continue further discussions whether a joint wetland project is desirable or feasible.

The Wastewater Reclamation Division has no objections to Molokai Ranch proceeding with their subject applications at this time.

The property owner is requested to call the Wastewater Reclamation Division at (808)243-7417 for additional information.

DATE: MARCH 11, 1996
MEMO TO: DAVID W. BLANE, DIRECTOR OF PLANNING
SUBJECT: KAUNAKAKAI WETLAND MITIGATION PLAN BY MOLOKAI RANCH
Page Two of Two Pages

2. Comments from the Solid Waste Division:

On page 30 of the Kaunakakai Wetlands SMA and SSV applications report, the project proposed that:

"Excess dredged material will be hauled and stockpiled off-site, away from shoreline areas. Accordingly, the proposed action will not result in the deposition of rock and rubble material on public property."

Clearing and grubbing material from this project should be diverted from the County sanitary landfill facility, however, some material may be suitable as landfill cover. The project contractor should call Mr. Steve Arce at (808)553-3221 regarding acceptability of the cleared and grubbed material as landfill cover.

The property owner is requested to call the Solid Waste Division at (808)243-7875 for additional information.

3. Comments from the Land Use and Codes Administration:

On page 42 of the Kaunakakai Wetlands SMA and SSV applications report, the project proposed that:

"The enhancement site now functions as local collection area for storm runoff. There is no opening in the perimeter berms which allows off-site flows to enter into or to be discharged from the site (to the ocean)."

It may be more beneficial to allow openings in the existing berms along the mauka side of the enhancement site to allow off-site flows to enter into the enhanced wetlands site. This may help reduce the volume of runoff-carried silt from entering into the ocean. The project designer should evaluate this concern.

The property owner is requested to call the Land Use and Codes Administration at (808)243-7373 for additional information.

RMN

f:\planning\molokai\cominental\smg\wetland

xc: Engineering Division ✓
Wastewater Reclamation Division ✓
Solid Waste Division



MOLOKAI RANCH

April 26, 1996

Mr. Charles Jencks
Department of Public Works and Waste Management
Land Use and Codes Administration
250 South High Street
Wailuku, Hawaii 96793

Re: Special Management Area Use Permit and Shoreline Setback Variance
(96/SM1-01; 96/SSV-01) for the Kaunakakai Wetlands (TMK 5-3-5:06)

Dear Mr. Jencks:

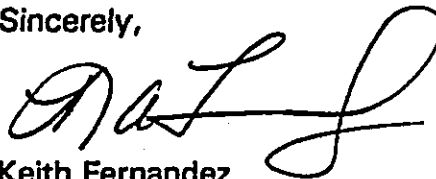
We have received a copy of your letter addressed to David Blane, Director of the Maui Planning Department, dated March 11, 1996. We would like to take this opportunity to respond to your comments.

1. We look forward to continuing discussion with the Wastewater Reclamation Division regarding the viability of a joint wetland project.
2. We intend to coordinate with the DPWWM, Solid Waste Division to determine whether excess materials from grading activities at the project site can be utilized as landfill cover.
3. With regard to the final design of the proposed enhancement pond, we will evaluate the feasibility of constructing openings to the mauka section of the berm wall to allow off-site flows to enter into the enhanced wetland area. It is noted, however, that the primary design objective of the proposed enhancement action is to provide a viable waterbird habitat.

Mr. Charles Jencks
April 26, 1996
Page 2

We hope that the above responses address your concerns. Thank you again for your comments.

Sincerely,



Keith Fernandez
Molokai Ranch, Limited

cc: David Blane, Planning Department
Gary Gill, Office of Environmental Quality Control
Michael Munekiyo, Munekiyo & Arakawa, Inc.

KF:to
kkaewet.005.1e48

References

References

Brown and Caldwell (in association with Ducks Unlimited, Inc.), Enhancement Site Assessment Report for Ohiapilo Pond (Draft), prepared for the County of Maui, January 1995.

Mink, John F., L. Stephen Lau, Aquifer Identification and Classification for Molokai: Groundwater Protection Strategy for Hawaii, Water Resources Research Center, University of Hawaii, October 1992.

University of Hawaii, Dept. of Geography, Atlas of Hawaii, Second Edition, 1983.

U.S. Army Corps. of Engineers, A Guide to Pacific Wetland Plants-by Lani Stemmermann, 1981.

U.S. Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, U.S. Government Printing Office, 1972.

Wilson Okamoto & Associates, Inc., Drainage Master Plan for Kaunakakai, Molokai, Hawaii, prepared for County of Maui, Department of Public Works, August 1992.

Appendices

Appendix A

***Department of the Army Letter
Regarding Section 404 Violation***

RECEIVED DEC 28 1994



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96822-5440



December 22, 1994

Regulatory Branch

SUBJECT: Section 404 Clean Water Act Violation, Molokai, Hawaii
(TMK: 5-3-01:47,48,53-58), File No. V95-003

Molokai Ranch, Ltd.
Four Waterfront Plaza
Box 96
500 Ala Moana Boulevard, Suite 400
Honolulu, Hawaii 96813

Gentlemen:

On November 22, 1994, the U.S. Army Corps of Engineers conducted an investigation to determine whether a violation of the Clean Water Act occurred on your property located in Kaunakakai, Molokai, Hawaii (TMK: 5-3-01:47,48,53-58). We determined that vegetation removal and grading were performed in wetlands on this property without a Department of the Army (DA) permit. We are currently assessing the nature and extent of the wetland area that was impacted.

Section 404 of the Clean Water Act prohibits the discharge of fill material into the waters of the United States, including wetlands, without a DA permit. Violations are subject to penalties, including fines of up to \$25,000 per day of violation and/or removal of the unauthorized work and restoration of the area to the pre-project conditions.

Wetlands are a valuable and productive natural resource. They serve as important food chain production areas, foster threatened and endangered species, control flooding and function as natural recharge areas. Therefore, the unnecessary alteration or destruction of wetlands is discouraged and considered contrary to the public interest.


I direct you to take the following actions:

- a) Immediately cease any further work on the property.

b) Submit to the Regulatory Branch information about the construction plans, other permits obtained, any photographs prior to grading, and names of the companies performing the work. In your submission please include your proposed plan to restore and/or mitigate the wetland impacts.

I am using this correspondence to solicit your assistance in preventing unwarranted environmental damage and in protecting the public's interest. You have (30) thirty calendar days after the receipt of this letter to contact the Regulatory Branch, in writing or by phone, to resolve the matter. Please contact Ms. Terrell Kelley at 438-9258, extension 13 or FAX 438-4060. Your cooperation is sincerely appreciated.

Sincerely,

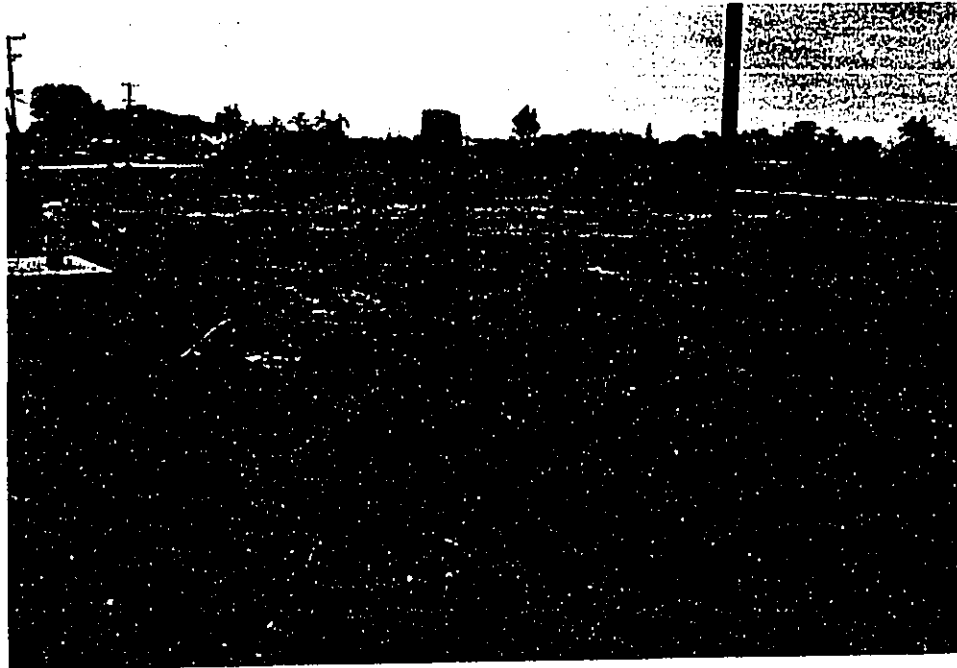

James L. Bereson, P.E.
Chief, Operations Division

Copies Furnished:

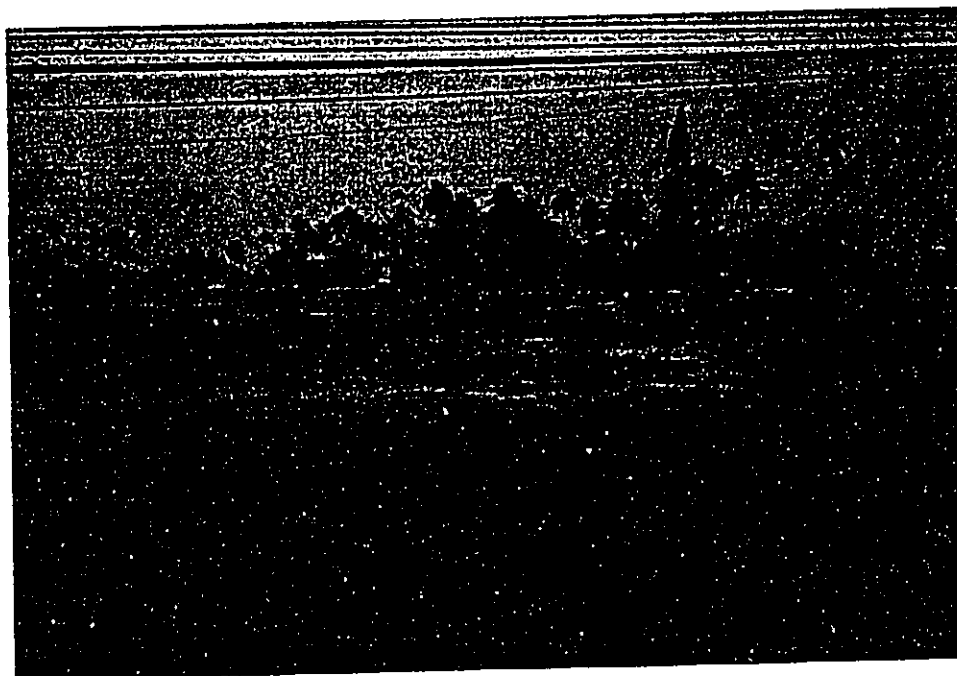
U.S. Fish and Wildlife Service, Honolulu, HI
U.S. Environmental Protection Agency, San Francisco, CA
State Department of Health, Clean Water Branch, Honolulu, HI
Office of State Planning, Honolulu, HI
Maui County Department of Public Works, HI
Maui County Department of Planning, HI

Appendix B

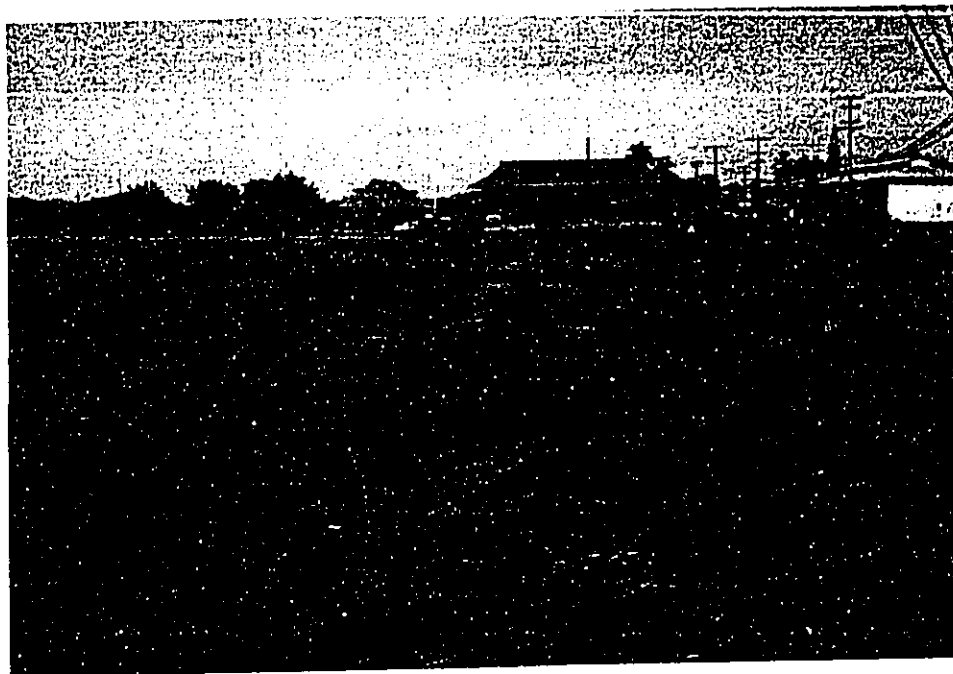
***Site Photographs of Existing
Wetland and Enhancement Site***



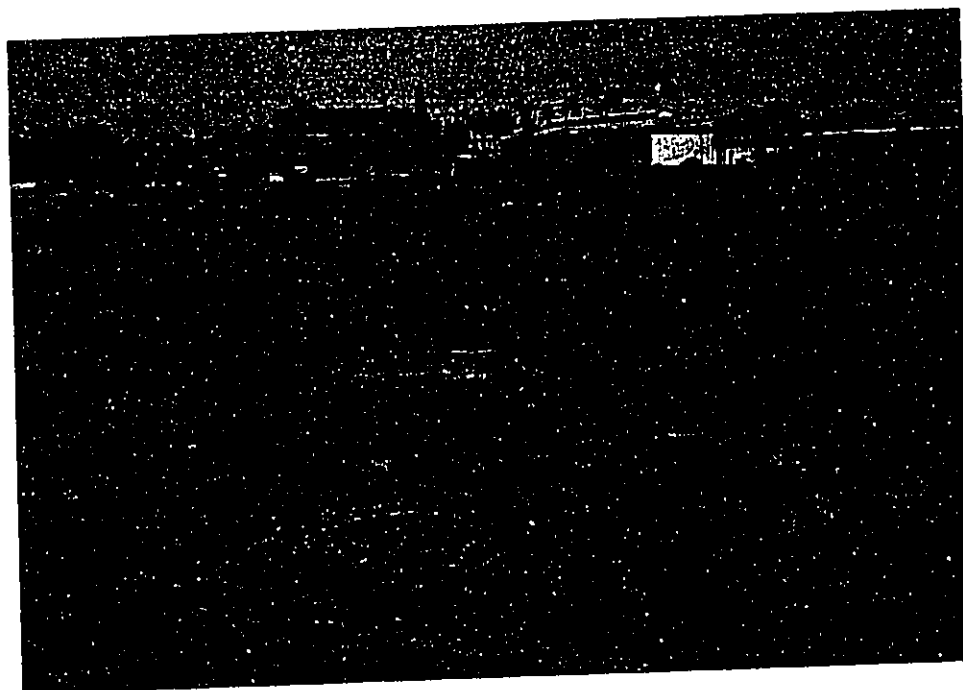
Photograph No. 1
Overall view of existing wetland area
(facing southeast)



Photograph No. 2
Overall view of existing wetland area
(facing south)



Photograph No. 3
Overall view of existing wetland area
(facing west)



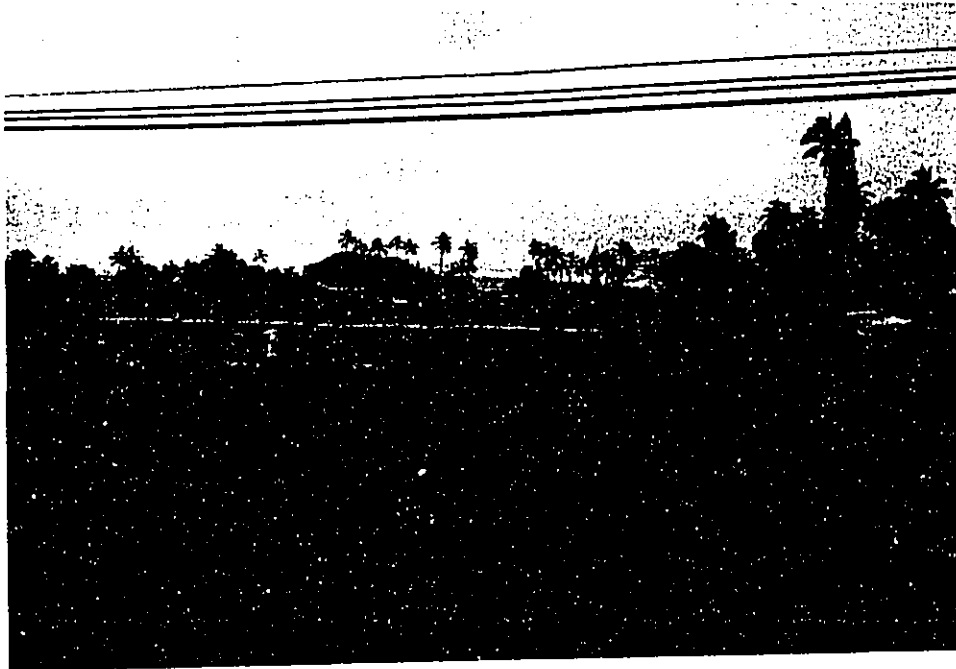
Photograph No. 4
Overall view of existing wetland area
(facing west)



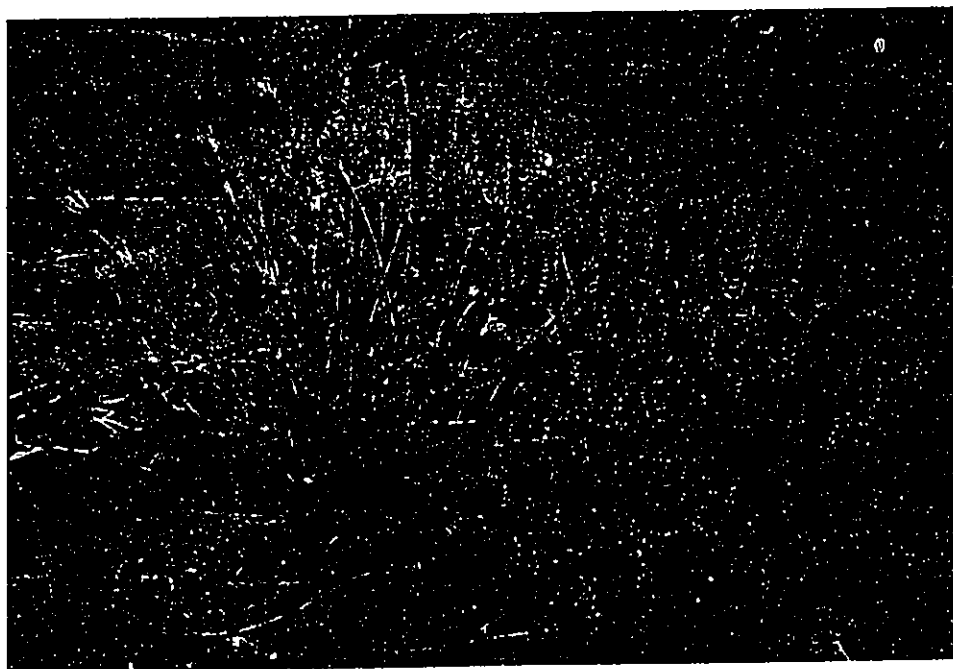
Photograph No. 5
Overall view of existing wetland area
(facing north)



Photograph No. 6
Overall view of existing wetland area
(facing northeast)



Photograph No. 7
Overall view of existing wetland area
(facing southeast)



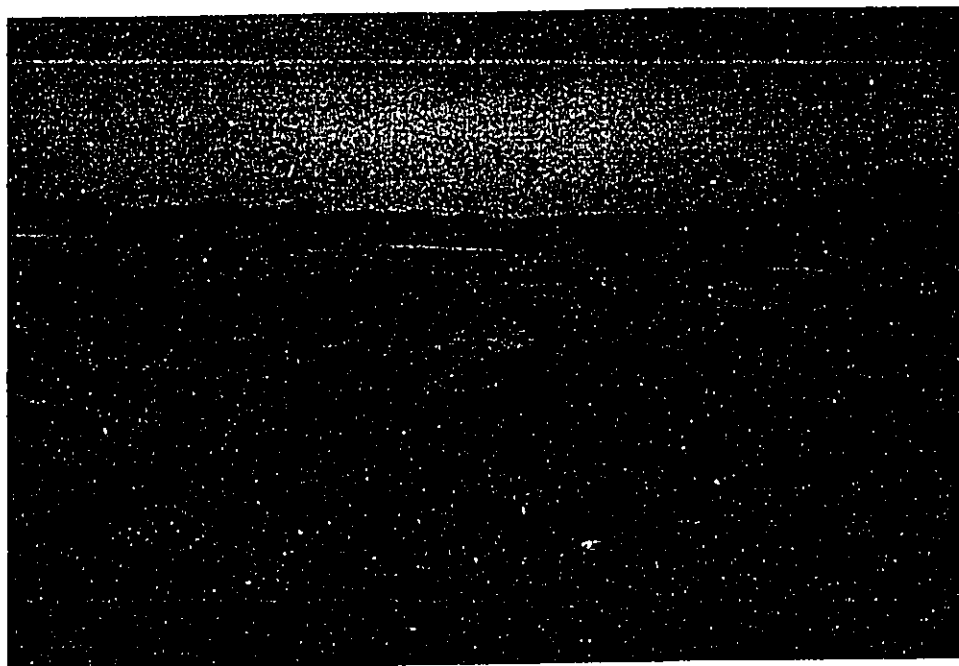
Photograph No. 8
Typical vegetation
within existing wetland area



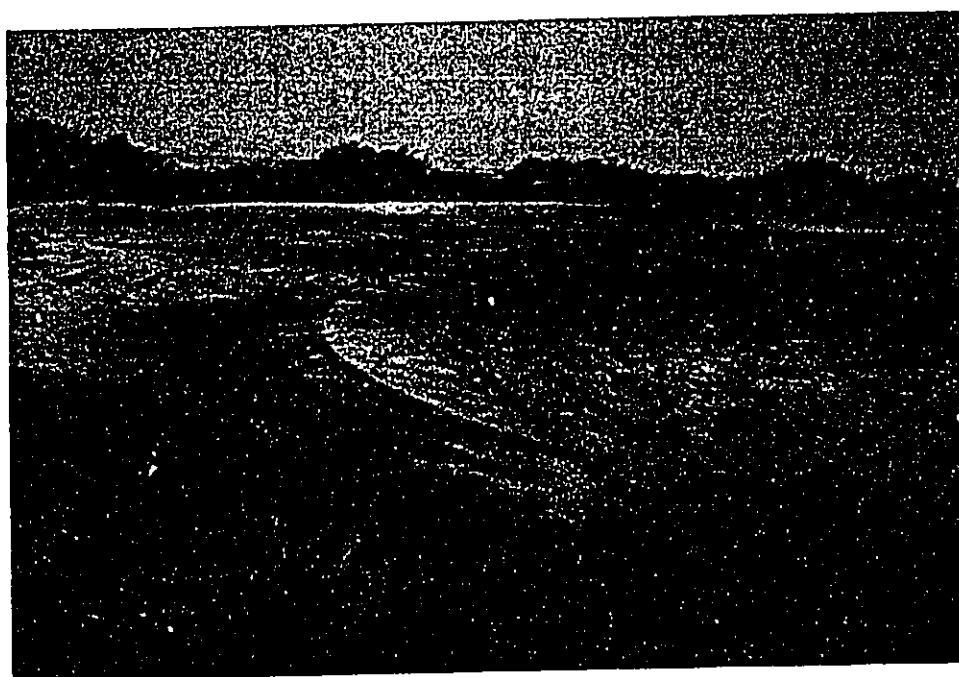
Photograph No. 9
Mohala Street
(facing south)



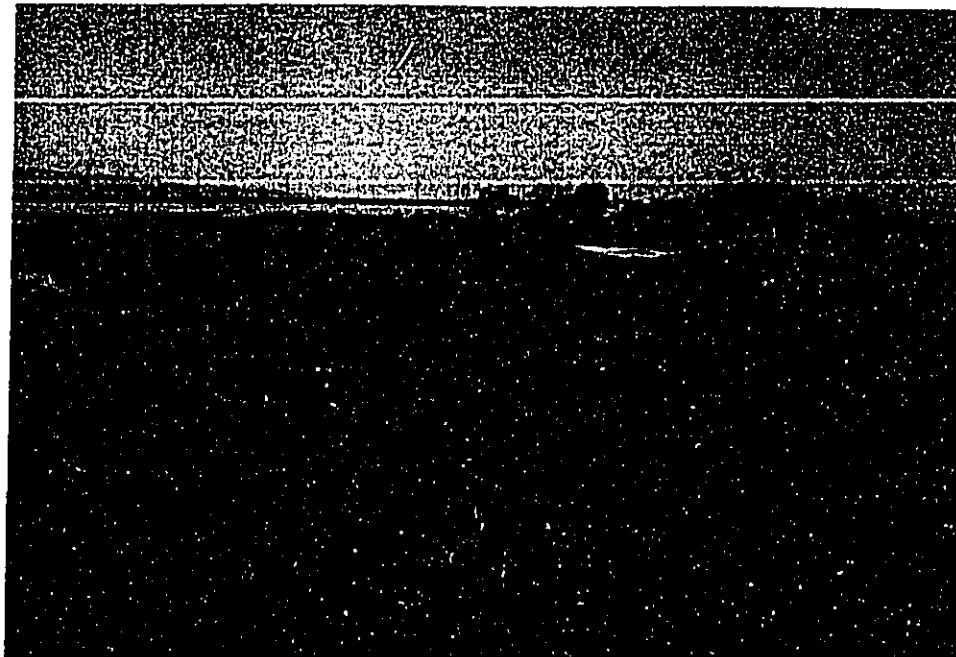
Photograph No. 10
Kamehameha V Highway
(facing east)



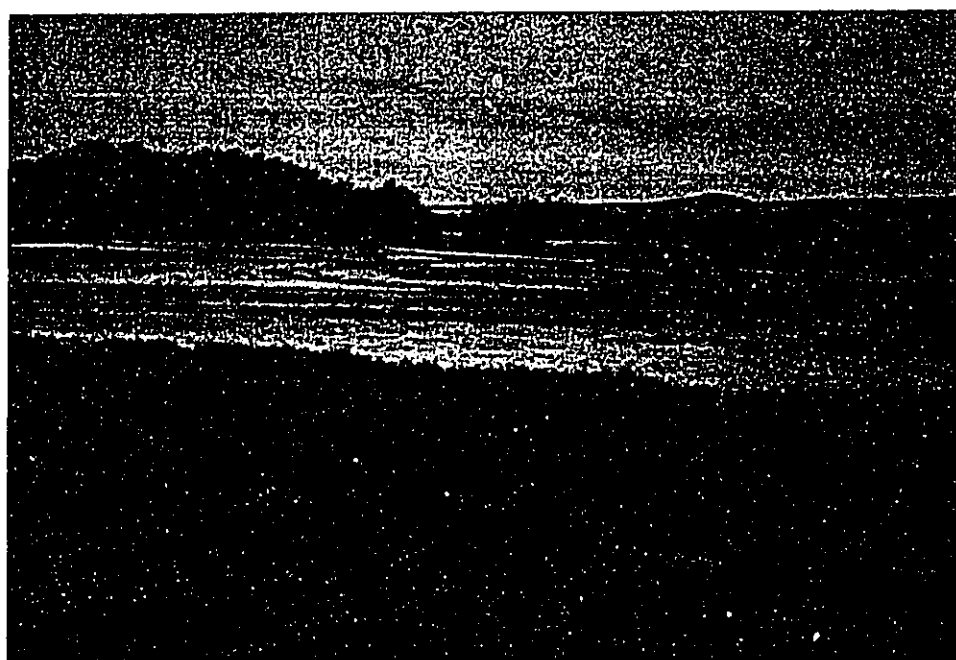
Photograph No. 11
Overall view of proposed wetland
enhancement site
(facing southwest)



Photograph No. 12
Overall view of proposed wetland
enhancement site
(facing southwest)



Photograph No. 13
View of unnamed ditch (drainageway) and wetland
vegetation (pickle weed and mangrove) located between the
existing berm's southern wall and the ocean
(facing southeasterly with Kaunakakai Wharf in the background)



Photograph No. 14
Overall view of proposed enhancement site
(facing northwest)



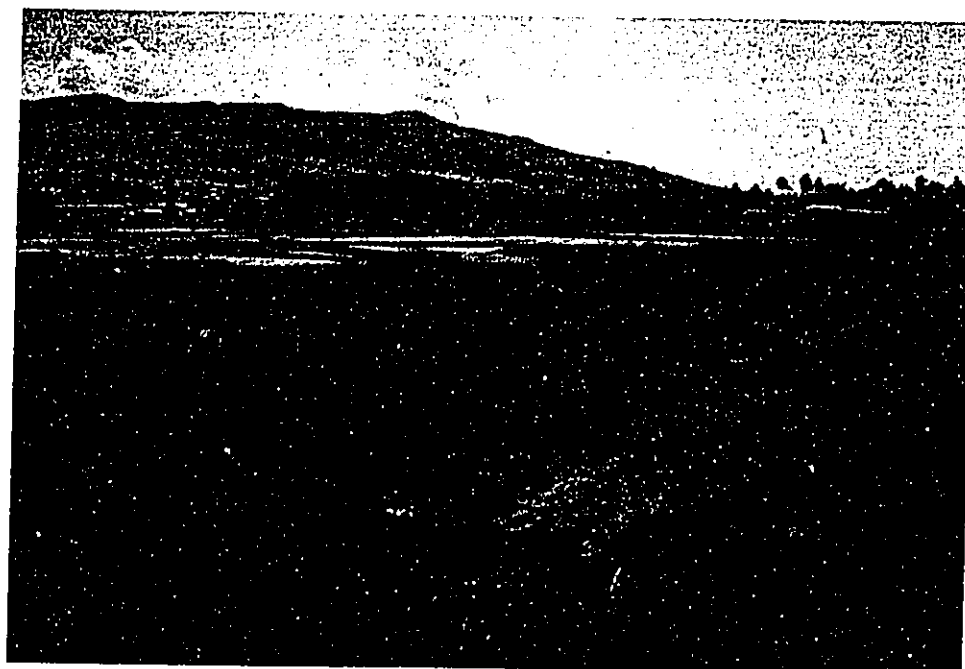
Photograph No. 15
Vegetation between the existing berm's southern wall
and the ocean
(facing northeast)



Photograph No. 16
Overall view of proposed enhancement site
(facing north)



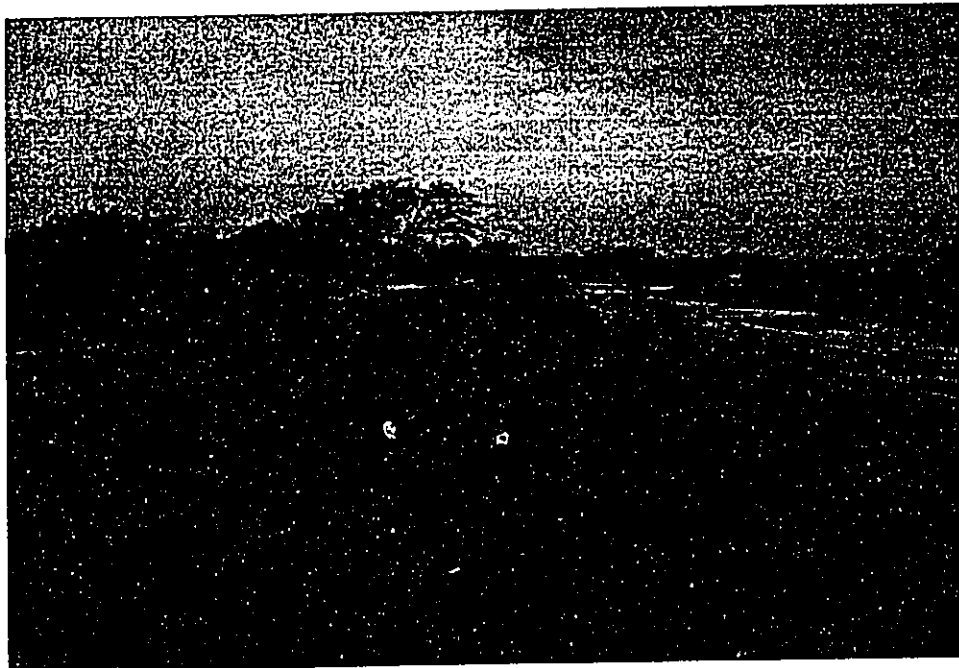
Photograph No. 17
View of existing berm's southwestern wall
(facing west)



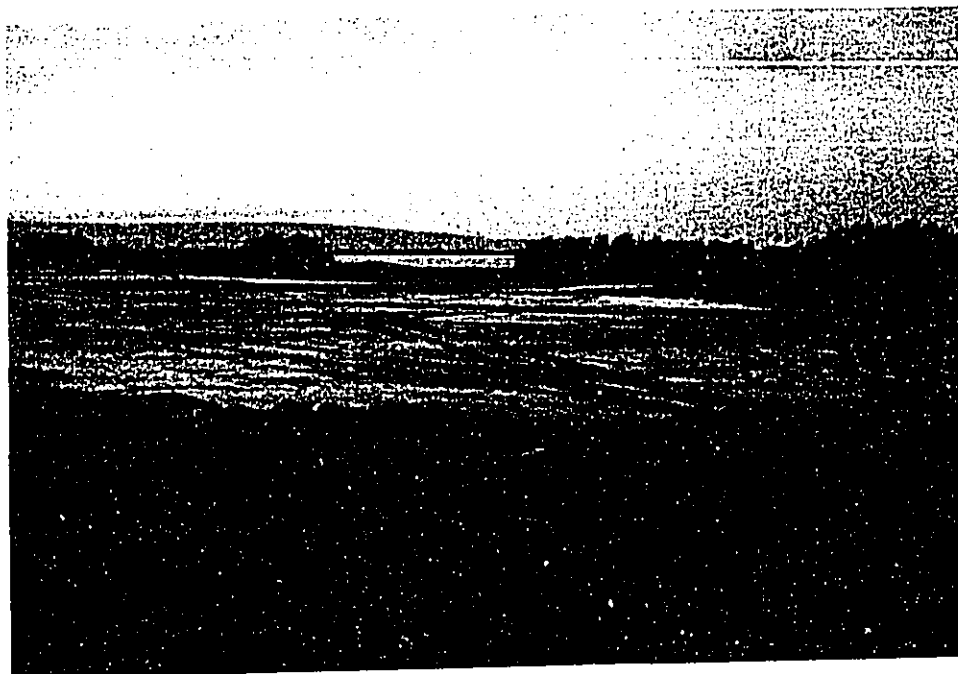
Photograph No. 18
Overall view of proposed enhancement site
(facing northeast)



Photograph No. 19
Overall view of proposed enhancement site
(facing northeast)



Photograph No. 20
View of southern extent of Kaunakakai Stream flood control levee
(facing southwest)



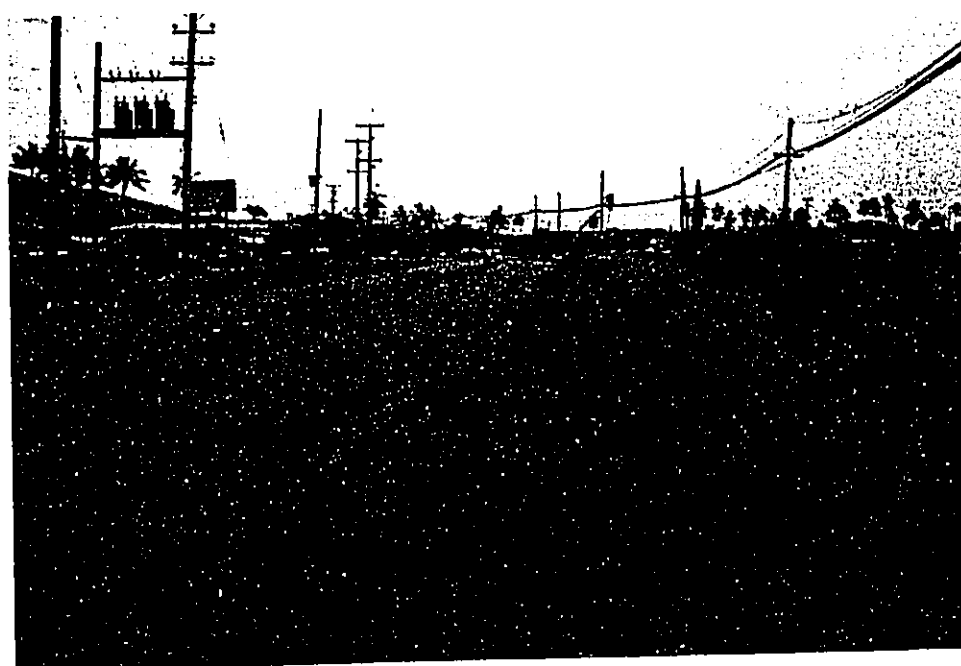
Photograph No. 21
Overall view of proposed enhancement site
(facing south)



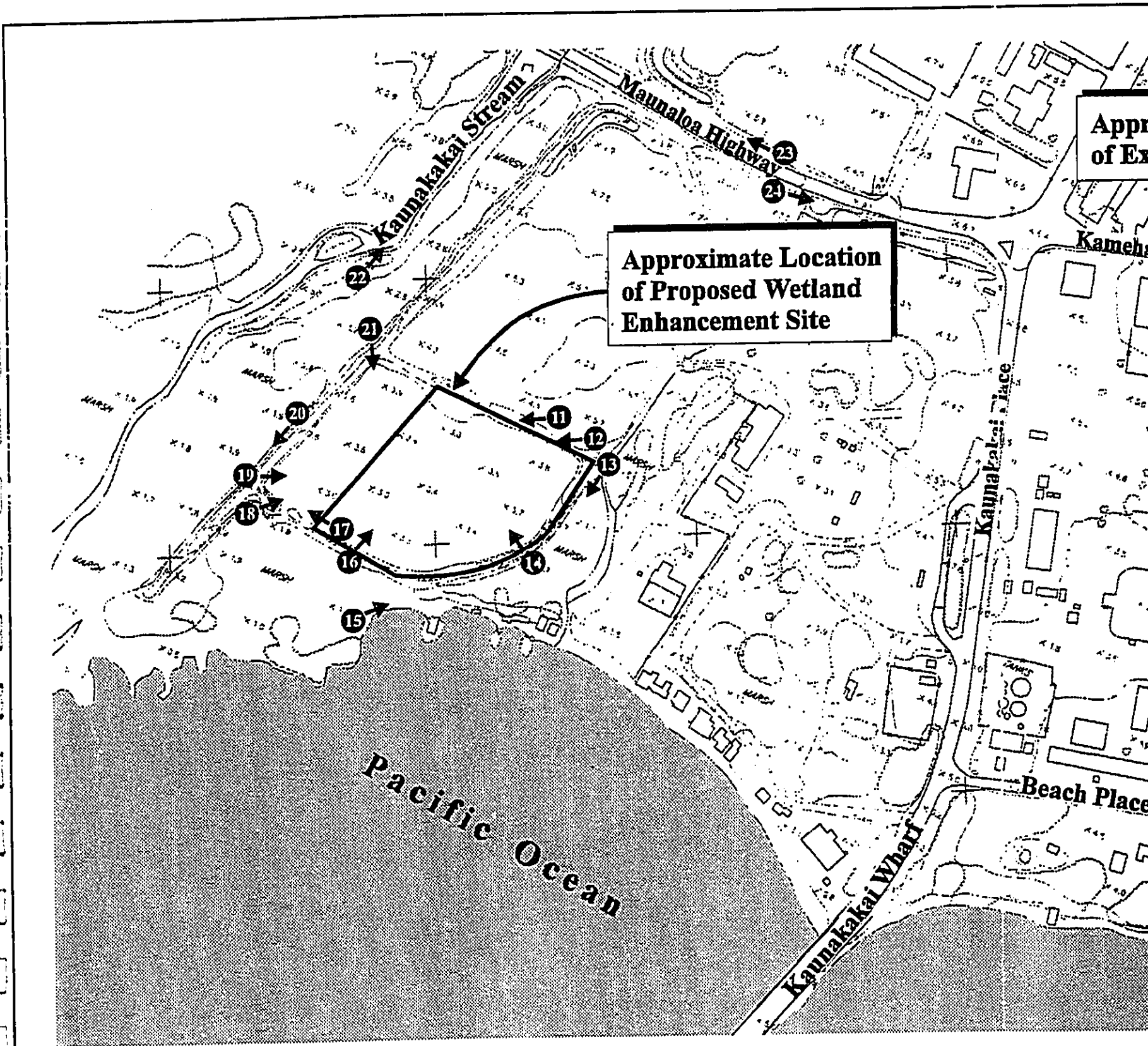
Photograph No. 22
View of Kaunakakai Stream located
west of enhancement site
(facing northeast)



Photograph No. 23
View of Kamehameha V Highway
(facing west)



Photograph No. 24
View of Kamehameha V Highway
(facing easterly)
Kaunakakai located in the background

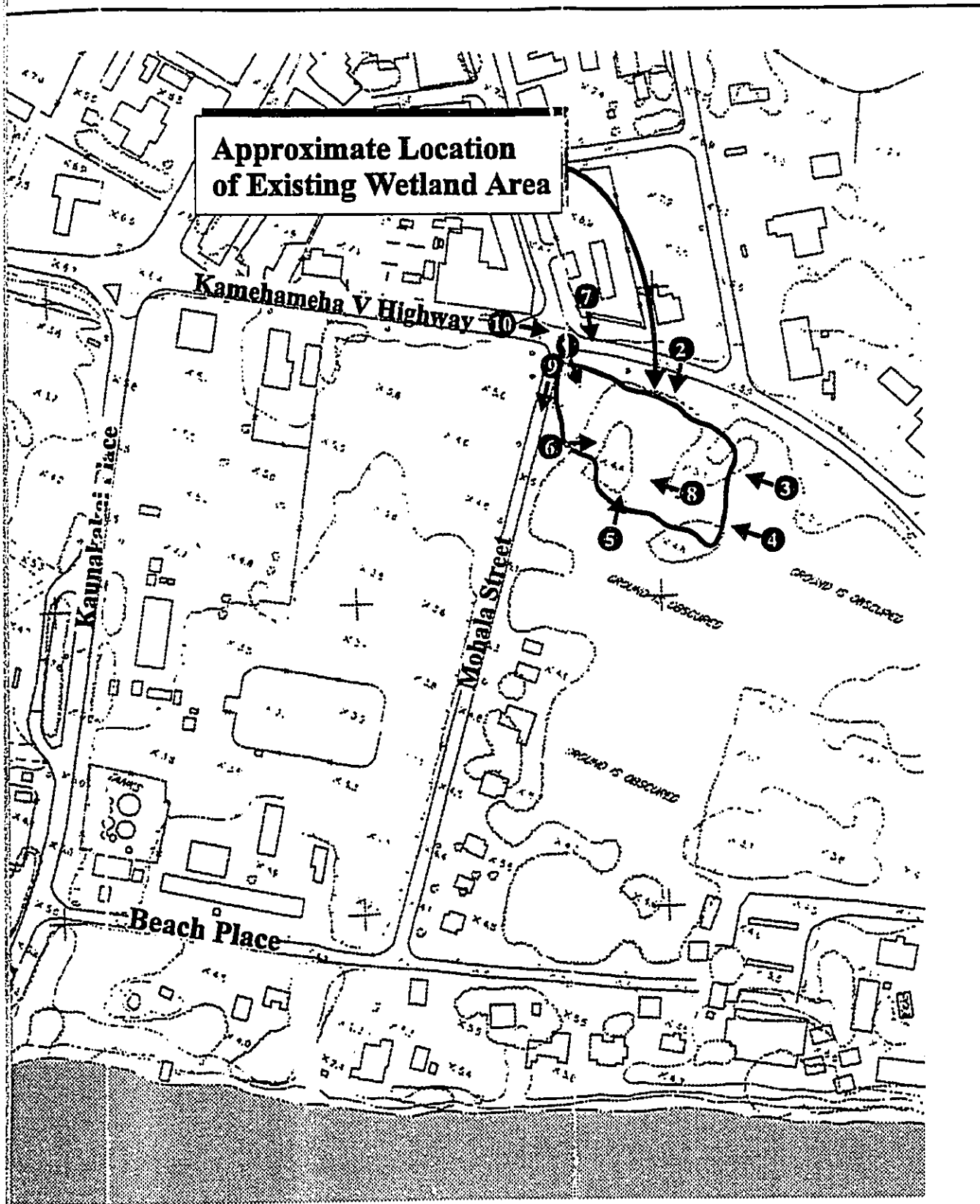


Source: Warren S. Unemori Engineering, Inc.

Kaunakakai Wetland Mitigation Plan Photographic Reference Map



Prepared for: Molokai Ranch, Limited



Mitigation Plan
Reference Map



NOT TO SCALE

Appendix C

***Letters from State Historic
Preservation Division***

BENJAMIN J. GAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 8TH FLOOR
HONOLULU, HAWAII 96813

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
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HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

April 23, 1996

Mr. David W. Blane, Director
Planning Department, County of Maui
250 S. High Street
Wailuku, Maui, Hawaii 96793

LOG NO: 17043
DOC NO: 9604SC14

Dear Mr. Blane:

SUBJECT: (I.D. 95/CLX-12) Amended Historic Preservation Review for the Change-In-Zoning
Application Made for the Friendly Market Center Kaunakakai, Moloka'i
TMKs: 5-3-01: 50, 51, 53, 54, 57 & Portion of 30

It has come to our attention that one of the subject parcels affected by the change-in-zoning application made for the Friendly Market Center of Kaunakakai, Moloka'i was inadvertently omitted from our comment letter of March 8, 1996 (Hibbard to Blane, DOC NO: 9603SC05). The affected parcels, as listed on the application materials, should include parcel 51, as noted above. For your information, Sara Collins of our staff included parcel 51 in her brief field inspection of the area in September 1995.

We have no record of historic sites on any of these parcels. Available evidence from our records and field inspections indicates that it is unlikely any historic sites are present on these parcels because of extensive modifications made for residential and commercial purposes. Consequently, we believe that the proposed change-in-zoning, if approved, will have "no effect" on significant historic sites.

Should you have any questions, please feel free to call Sara Collins at 587-0013.

Aloha,

for *Ross Cordy*
DON HIBBARD, Administrator
State Historic Preservation Division

SC:jen

cc: Mr. Jeffrey Egusa, Friendly Properties, P.O. Box 278, Kaunakakai, HI 96748
Mr. John Min, Chris Hart & Partners, 1955 Main Street, Suite 200, Wailuku, HI 96793
Mr. Daniel Soares, Munekiyo & Arakawa, 1823 Wells Street, Unit 3, Wailuku, HI 96793

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

OCT 30 1995

MICHAEL D. WILSON, CHAIRPERSON
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October 26, 1995

Mr. Daniel Soares
Munekiyo & Arakawa, Inc.
1823 Wells Street
Wailuku, Hawaii 96793

LOG NO: 15797 ✓
DOC NO: 9510SC27

Dear Mr. Soares:

SUBJECT: Historic Preservation Review of Proposed Enhancement of
Mudflats Near Kaunakakai Stream into a Wetland Pond
Kaunakakai, Moloka'i TMK: 5-3-5: 06

Thank you for your letter of inquiry, transmitted by facsimile on October 16, 1995. According to the supporting documents, the area proposed for enhancement as a wetland pond area is a 2.6-acre area that is currently a barren mudflat within an existing earthen berm. Property immediately north (mauka) of the project site is fill land, currently the location of stockpiled material used in maintenance dredging of Kaunakakai Harbor. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division. In addition, Sara Collins of our staff made a brief field inspection on October 20, 1995.

We have no record of historic sites on this parcel. No surface evidence of historic sites was apparent during the field inspection. The existing soil surface, which resembles fill, was visible during the field inspection due to a lack of vegetation over the subject area.

Archaeological inventory surveys, including subsurface testing, have been conducted on the adjacent parcels to the east and west, however. On the east side, inventory surveys located three significant historic sites: a subsurface cultural deposit (SIHP No. 50-60-03-630); an old pier (SIHP No. 50-60-03-890), and the Malama platform (SIHP No. 50-60-03-1030) (Archaeological and Historical Investigations at a Property Near Kaunakakai Wharf, Island of Molokai, Hawaii. 1983. Athens; Results of an Archaeological Reconnaissance Survey, Kaunakakai, Molokai. 1983. Komori; Malama Platform Archaeology. 1993. Tuggle).

Mr. Daniel Soares
Page 2

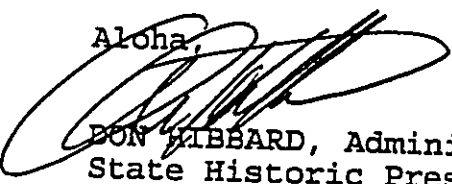
In the parcel on the west side, an inventory survey located two historic sites, a subsurface cultural layer (SIHP No. 50-60-03-631) in the northwestern corner of the project site, next to Maunaloa Highway, and a portion of the historic salt pans (SIHP No. 50-60-03-129), southeast of the project area (Archaeological Investigations Molokai Sewage Treatment Facilities, Kaunakakai, Molokai. 1981. Shun). Geological evidence indicated that much of the shoreline in the makai portion of the project area (adjacent to the currently proposed wetlands enhancement) had recently formed by accelerated siltation of coastal waters during the 19th and 20th centuries A.D. By some estimates, the yearly accretion rate was 2.5 to 5 meters seaward, or more, since the 1880s (Shun 1981).

In view of the lack of surface evidence for the presence of historic sites, and in view of the geological evidence for extensive shoreline siltation, it seems unlikely that significant historic sites are still present in the proposed project area. Therefore, we believe that the proposed undertakings will have "no effect" on significant historic sites.

We would add the following precautionary recommendation, however: Should historic sites such as walls, platforms, pavements, or mounds, or remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact the State Historic Preservation Division (587-0013), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.

Should you have any questions, please feel free to call Sara Collins at 587-0013.

Aloha,


DON HIBBARD, Administrator
State Historic Preservation Division

SC:jen

Appendix D

***Monitoring of Subsurface
Water Elevation at Proposed
Kaunakakai Enhancement Site***

**MONITORING OF SUBSURFACE WATER ELEVATION
AT PROPOSED KAUNAKAKAI ENHANCEMENT SITE**

A. INTRODUCTION AND PURPOSE

Molokai Ranch, Limited (MRL) proposes to construct a 2.6-acre enhancement wetland at TMK 5-3-3:06. The enhancement wetland shall serve as mitigation for the proposed filling of a 1.3-acre wetland within Kaunakakai Town (TMK 5-3-1:por. 30, 51, and 57). The enhancement concept involves excavation to create an approximately 0.5-acre permanent pond, along with an approximately 2-acre seasonal wetland.

To confirm the presence of a shallow water table and to better define construction excavation requirements, MRL conducted a subsurface water level monitoring program. Specifically, the objectives of this program are as follows:

1. Determine the water surface elevation relative to existing grade; and
2. Determine the extent of water surface fluctuations as a function of tidal changes.

B. MONITORING METHODOLOGY

1. Test Hole Locations

To achieve the objectives of the monitoring program, five (5) test holes were excavated with hand tools at the enhancement site. The test holes were placed at locations to ensure that measurements reasonably reflected subsurface water level characteristics throughout the enhancement site. The test hole locations are shown in Attachment "A".

Each test hole was excavated until at least eight (8) inches of standing water filled the hole. The average depth of each test hole, from existing grade to water surface was approximately four (4) feet. Test hole excavation was completed on October 23, 1995.

2. Measurement Protocol

Within each test hole, a calibrated measuring pipe was securely installed to measure water surface fluctuations. Once secured, an initial water surface elevation reading was taken off of a measuring pipe. This reading established the reference elevation from which subsequent measurements would be gauged.

Water surface readings at each test hole were recorded twice a day by MRL personnel. The times of day at which readings were taken were established on the basis of minimum and maximum tides, as charted in the "1995 Hawaii Coastal Tide Chart".

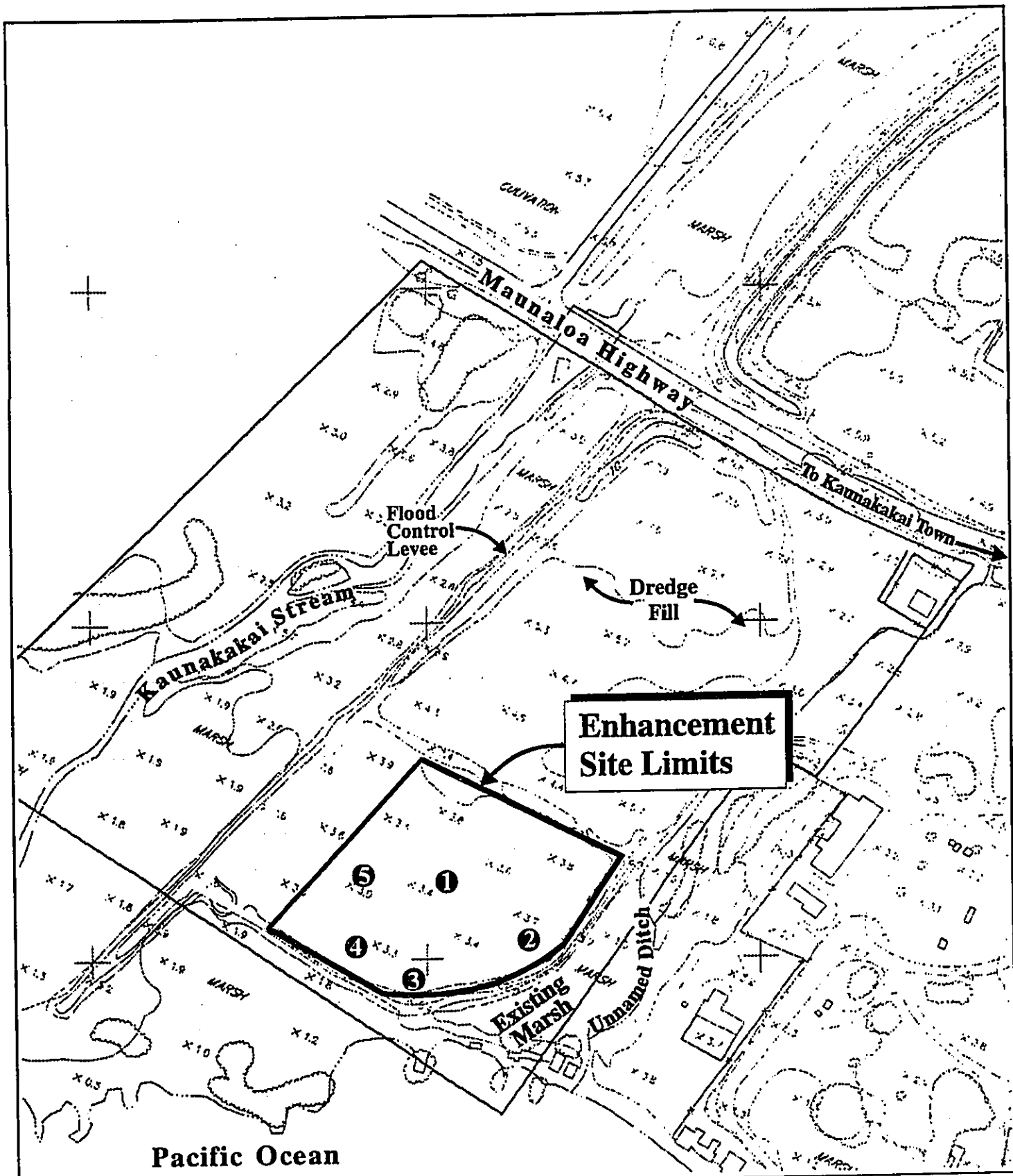
Daily measurements were taken on October 23, 24, 25, 26, 27, and 30, 1995.

3. Results

The results of data collected from each test hole are presented in Attachment "B". Each table reflects the water surface elevation relative to the initial reference mark. Measurements from all test holes show that the second reading on October 23, 1995 to be higher than the initial reference elevation. Following this second reading, however, all subsequent readings for the next five (5) days showed minimum variation. This pattern indicates that the reference elevation for each test hole was probably recorded prematurely, before the hole was fully saturated.

The following conclusions have been drawn on the basis of the monitoring program:

1. There is no significant tidal influence at the enhancement site location. (There was no observable difference in water surface elevations between the low tide reading and the high tide reading.)
2. A minimum excavation of approximately four (4) feet will be needed to establish the permanent open water pond for the enhanced wetland.



Attachment A

Kaunakakai Wetland Mitigation Plan Site Map of Test Holes



Prepared for: Molokai Ranch, Limited



ATTACHMENT "B"

Table No. 1

WATER TABLE MONITORING RESULTS FOR TEST HOLE NO. 1*		
Date	Low Tide Reading	High Tide Reading
10/23/95	Establish Reference Mark	+6
10/24/95	+5	+5
10/25/95	+8	+7
10/26/95	+8	+8
10/27/95	+9	+9
10/30/95	+8.5	+8

Table No. 2

WATER TABLE MONITORING RESULTS FOR TEST HOLE NO. 2*		
Date	Low Tide Reading	High Tide Reading
10/23/95	Establish Reference Mark	+4
10/24/95	-1	+4
10/25/95	+2	+2
10/26/95	+1	+1
10/27/95	+1	+1
10/30/95	+1	+1

Table No. 3

WATER TABLE MONITORING RESULTS FOR TEST HOLE NO. 3*		
Date	Low Tide Reading	High Tide Reading
10/23/95	Establish Reference Mark	+8
10/24/95	+12	+14
10/25/95	+19	+20
10/26/95	+20	+20
10/27/95	+19	+19
10/30/95	+20	+20

* Readings are measured in inches.

ATTACHMENT "B"

Table No. 4

WATER TABLE MONITORING RESULTS FOR TEST HOLE NO. 4*		
Date	Low Tide Reading	High Tide Reading
10/23/95	Establish Reference Mark	+12
10/24/95	+13	+12
10/25/95	+17	+17
10/26/95	+16	+16
10/27/95	+15	+15
10/30/95	+16	+16

Table No. 5

WATER TABLE MONITORING RESULTS FOR TEST HOLE NO. 5*		
Date	Low Tide Reading	High Tide Reading
10/23/95	Establish Reference Mark	+5
10/24/95	+5	+6
10/25/95	+7	+7
10/26/95	+8	+8
10/27/95	+8	+8
10/30/95	+8	+8

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* Readings are measured in inches.