

Waimea Visitor &
Techno Center

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OFFICE OF ECONOMIC DEVELOPMENT

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OFFICE OF ENVIRONMENTAL QUALITY CONTROL
GROUP 70

December 12, 1997

Mr. Gary Gill, Director
Office of Environmental Quality Control
State Office Tower
235 S. Beretania Street, Suite 702
Honolulu, HI 96813

Dear Mr. Gill:

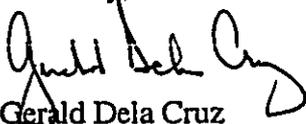
Subject: Finding of No Significant Impact (FONSI) for the Waimea Visitor and Techno Center (TMK: 1-6-08: por. 06) Waimea, Kauai, Hawaii

The County of Kauai Office of Economic Development (OED), as accepting authority, has reviewed the comments received during the 30-day public comment period which began on November 8, 1997. The OED has determined that this project will not have a significant environmental effect and has issued as FONSI. Please publish notice of availability for this project in the January 8, 1998 OEQC Bulletin.

Enclosed please find four (4) copies of the Waimea Visitor and Techno Center Environmental Assessment and a completed OEQC Document Publication form.

If you have any questions, please call John Isobe at (808) 245-6692 or fax (808) 246-1089.

Sincerely,


Gerald Dela Cruz
Director

cc: Mr. John Isobe, Kauai Economic Development Board
Ms. Mary O'Leary (Group 70 International, Inc.)
Myrah P. Cummings, EDA Project Manager

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and Techno Center

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Waimea Visitor and Techno Center

Waimea District, Island of Kauai

Final Environmental Assessment

Applicant:



December 1997



Group 70 International • Architecture • Planning • Interior Design • Environmental Services • Building Diagnostics
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813 • Phone (808) 523-5866 FAX (808) 523-5874

Waimea Visitor and Techno Center

Waimea District, Island of Kauai

Final Environmental Assessment

This environmental document is prepared pursuant to Chapter 200 of Title 11, Administrative Rules, Department of Health, "Environmental Impact Statement Rules."

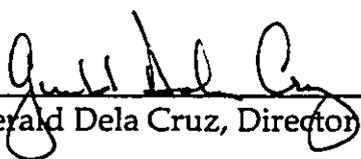
Proposing Agency:

Kauai Economic Development Board
4334 Rice Street, Suite 204-B
Lihue, Kauai, Hawaii 96766

Accepting Authority:

County of Kauai, Office of Economic Development

Responsible
Official:


Gerald Dela Cruz, Director

Dec. 15, 1997

Date

Prepared By:

Group 70 International, Inc.
Architecture • Planning • Interior Design • Environmental Services
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813

December 1997

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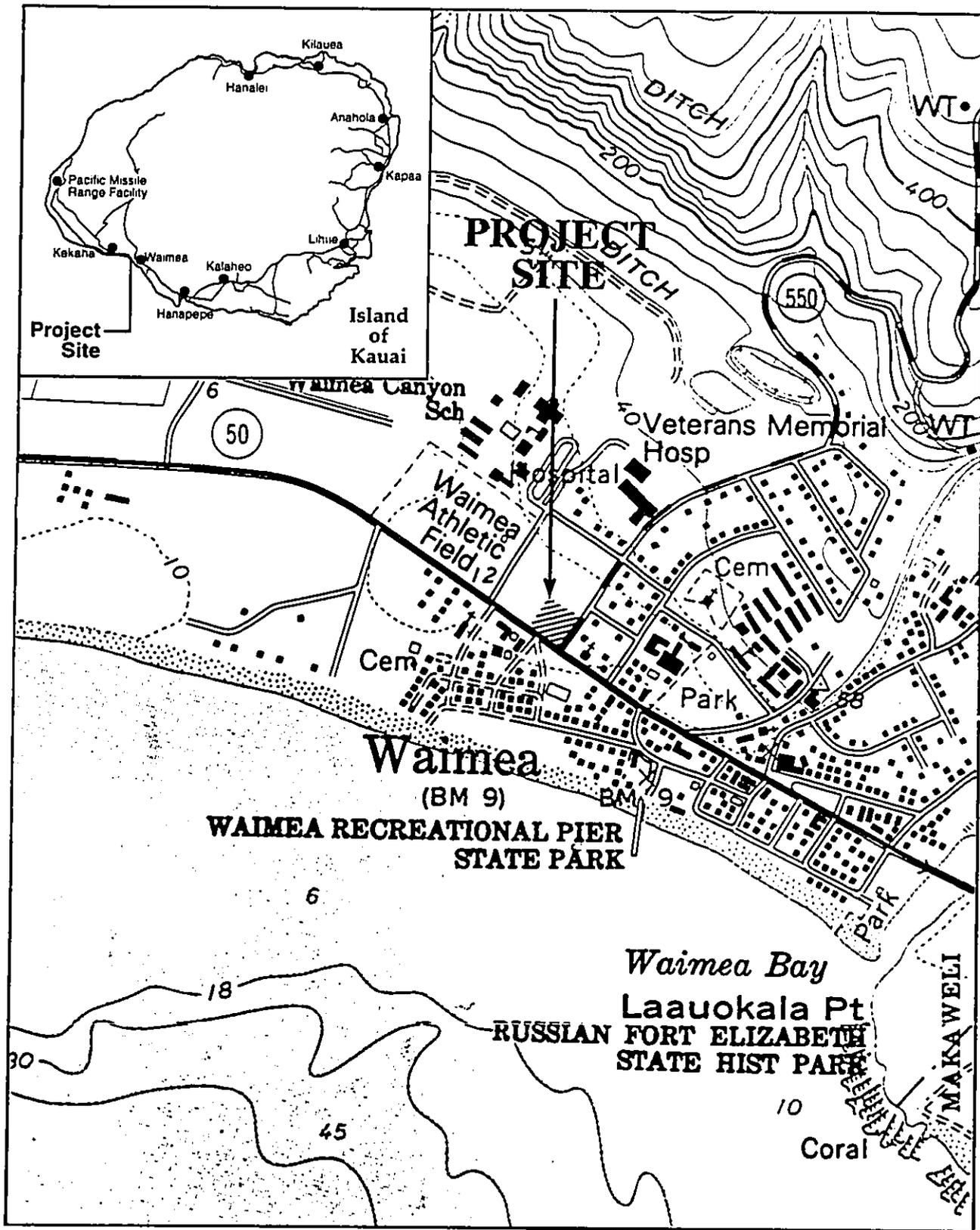
Section 1.0
Introduction

1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared in accordance with the requirements of Chapter 343, HRS and Hawaii Administrative Rules, Title 11, Department of Health, as the proposed action involves the use of County administered funds.

1.1 PROJECT INFORMATION SUMMARY

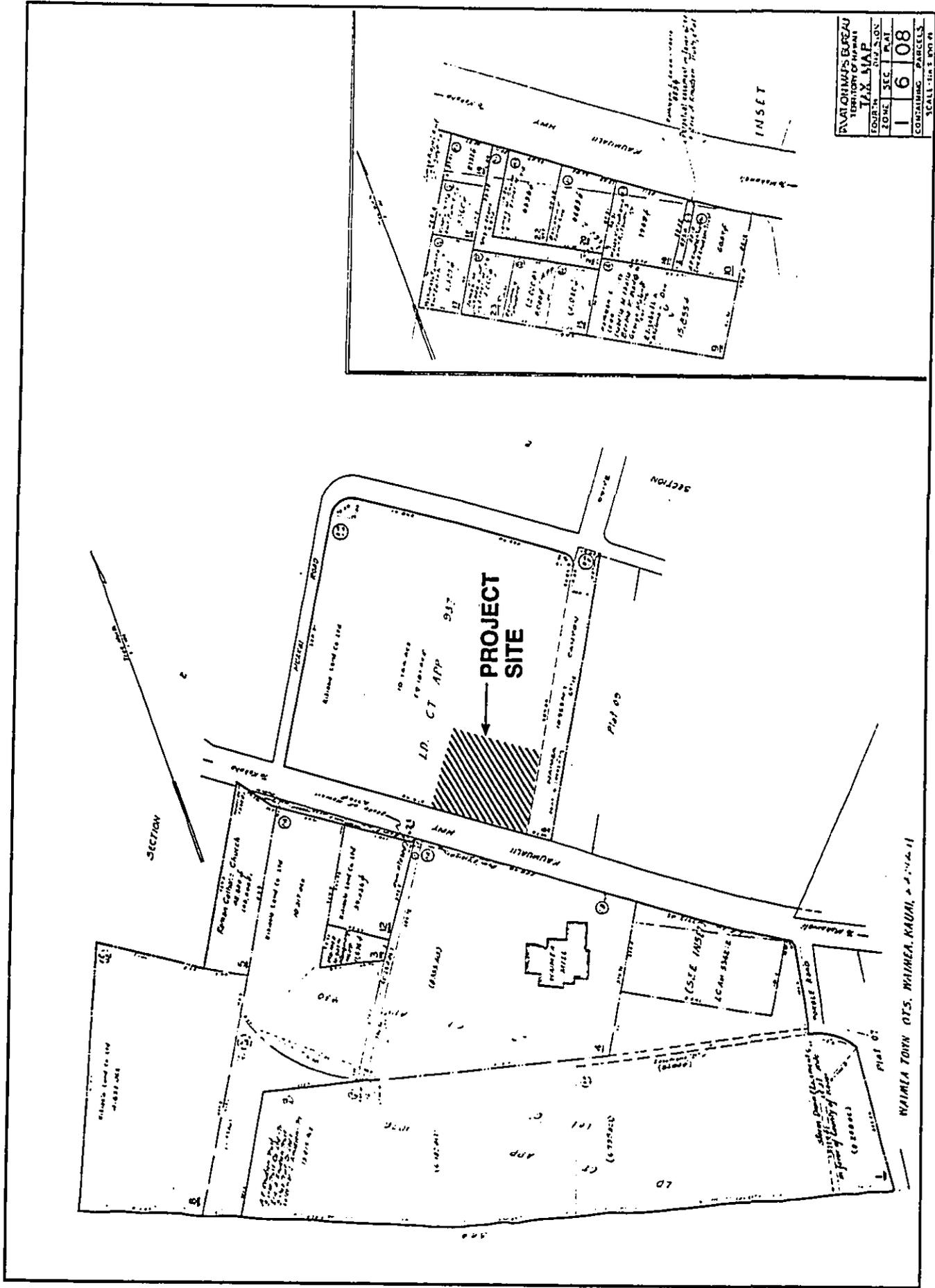
<u>Applicant:</u>	Kauai Economic Development Board 4334 Rice Street, Suite 204-B Lihue, Hawaii 96766 Contact: John Isobe, President Telephone: 808-245-6692 Fax: 808-246-1089
<u>Agent:</u>	Group 70 International, Inc. 925 Bethel Street, Fifth Floor Honolulu, Hawaii 96813 Contact: Mary O'Leary, AICP Telephone: 808-523-5866 Fax: 808-523-5874
<u>Accepting Authority:</u>	County of Kauai, Office of Economic Development
<u>Project Location:</u>	Waimea, Island of Kauai, Hawaii
<u>Tax Map Key:</u>	1-6-08: por. 06 (Figures 1-1 and 1-2)
<u>Landowner:</u>	Kikioala Land Company, Ltd.
<u>Land Area:</u>	44,655 square feet
<u>Request:</u>	The applicant proposes to develop a Waimea Visitor and Techno Center which would consist of a single-story building totaling approximately 7,500 square feet.
<u>Existing Use:</u>	Agriculture
<u>State Land Use District:</u>	Urban
<u>Kauai County General Plan:</u>	Urban Residential
<u>Zoning:</u>	Project District-overlay; General Commercial underlying zone.



Location Map

Waimea Visitor and Techno Center EA

Figure 1-1



Tax Map Key 1-6-08: por. 06
 Waimea Visitor and Techno Center EA
 Not to Scale
 Figure 1-2

1.2 OVERVIEW OF THE PROPOSED PROJECT

The Kauai Economic Development Board (KEDB) proposes to develop a Waimea Visitor and Techno Center in an effort to stimulate the economy of West Kauai and Waimea. The 7,500 square foot multi-purpose facility would serve as a regional orientation center for tourists and as a high technology office center. A detailed description of the proposed project is presented in Section 2.0. The design and construction of the project is funded by a U.S. Economic Development Administration (EDA) grant which is being administered by the Count of Kauai Office of Economic Development and sub-granted to the KEDB, a private non-profit organization.

The project site is an approximately one acre portion of a 10 acre block located on the west edge of Waimea at the corner of Kaumualii Highway and Waimea Canyon Drive. The lot is known as "Field 14" of the former Waimea Sugar Mill Company and is owned by the Kikiaola Land Company which has agreed to lease the project site to the County of Kauai for fifty-five (55) years. The lease rent for the first thirty (30) years has been established at one dollar per year. The site has been actively cultivated for over 80 years in sugarcane, and more recently for seed corn and sunflower experimentation crops, and is adjacent to the existing development of Waimea town.

The Waimea Visitor and Techno Center will serve as a catalyst for economic development and promotion of the West Kauai region's unique natural and technological resources. The strategic location of the project site in Waimea at the crossroads to the Pacific Missile Range Facility and the Kokee State Park and Waimea Canyon area will assure the facility's visibility and presence as a potentially significant contributor to the region's economic future.

1.3 AGENCIES CONTACTED IN PRE-CONSULTATION

Listed below are the agencies and organizations that were consulted in the preparation of the Draft Environmental Assessment. The Kauai County Office of Economic Development is the lead agency and accepting authority for this proposed action.

STATE AGENCIES

Department of Land and Natural Resources, Historic Preservation Division

Department of Health

Department of Transportation, Kauai Division

Office of Environmental Quality Control (OEQC)

COUNTY OF KAUAI AGENCIES

Office of Economic Development

Planning Department

Public Works Department

Water Department

ORGANIZATIONS

Kauai Economic Development Board

Kikiaola Land Company, Ltd.

1.4 CONTENTS OF THE FINAL ENVIRONMENTAL ASSESSMENT

This Environmental Assessment evaluates the potential impacts of the proposed Waimea Visitor and Techno Center on the natural and human environment. This document is presented in seven sections. Section 1.0 contains the introduction and project overview. Section 2.0 describes the proposed project and Section 3.0 addresses the environmental, social and economic setting of the proposed project. Alternatives to the proposed project are presented in Section 4.0. A review of the appropriate existing State and County policies and plans is contained in Section 5.0. Section 6.0 contains a statement of anticipated determination, findings and reasons supporting the anticipated determination. Section 7.0 contains comments letters received during the review period of the Draft Environmental Assessment and response letters. References used in the preparation of this document are attached in Appendix A.

Section 2.0

Project Description

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

2.1 DESCRIPTION OF THE AFFECTED AREA

The region of West Kauai is characterized by dramatic mountain lands ranging in elevation from 200 to over 4,000 feet. The lower elevations are dominated by agricultural and pasture lands and then the coastal plains. This area contains the small towns of Waimea and Kekaha and the sugar plantation villages of Pakala, Kaawanui, and Mana. Along the end of the coastal area is the Pacific Missile Range Facility (PMRF) and Barking Sands.

The landing of Captain Cook in 1778 at the mouth of the Waimea River marked a turning point in the area's history and the beginning of western civilization's influence on this region. Waimea town has played varied roles throughout its history, serving as a Russian military outpost with the construction of Fort Elizabeth in 1817, as a major whaling port, and as a significant sugar plantation town since the late 1800's. The sugar industry had been the dominant employer on Kauai for over a century, however, production has declined in recent decades and many of the Island's sugar mills have closed. Although sugarcane is still a major product, Kauai's agriculture has diversified to promote and market a variety of other products such as coffee, papaya, guava, taro, seed corn, shrimp farming, and tropical flowers.

The region has diversified from a solely agricultural-based economy to include high technology industries serving national and global interests. Within the last 40 years, facilities have been established at Barking Sands by the Hawaii Air National Guard, the Pacific Missile Range Facility and the National Aeronautics and Space Administration. A fiber optic cable stretches from Lihue to Mana .

The visitor and film industries have also played an increasingly important role in the diversification of Kauai's economy. A number of successful major motion pictures have been filmed on Kauai over the past two decades, promoting the natural and scenic beauty of the Garden Isle.

According to the Hawaii Visitors and Convention Bureau, visitor arrivals to Kauai grew throughout the 1980s and reached a high of 1,268,000 in 1991. Although the number of visitors declined after Hurricane Iniki struck the Island in 1992, damaging many of the major hotels and basic services, the daily visitor census is projected to increase approximately threefold - from about 15,800 in 1995 to 41,600 in 2020 - according to the State Department of Business, Economic Development and Tourism. Today, Waimea is the economic, social and institutional center for a diversity of activities in western Kauai and is a significant tourist destination for visitors on their way to the Waimea Canyon and Kokee State Park.

The western Kauai region contains a unique mix of some of Hawaii's most beautiful and natural resources, as well as a concentration of high technology-oriented industries such as the Pacific Missile Range Facility and various agricultural research and experimentation farming

facilities for international seed corn corporations. This mix reflects the equally unique demand for a Visitor and Techno Center which will serve thousands of annual tourists visiting West Kauai. The Center will also meet the growing need for high technology office space for businesses and services related to the Pacific Missile Range Facility and the development of civilian applications of defense technology.

2.2 EXISTING CONDITIONS AT THE PROJECT SITE

The project site is located at the corner of Kaumualii Highway and Waimea Canyon Drive on the west edge of Waimea town. The site is an approximately one acre parcel within a 10 acre block known as "Field 14" of the former Waimea Sugar Mill Company's lands (Figure 2-1). Field 14 had been actively cultivated in sugarcane as early as 1913 until the Mill was closed in 1945. In 1993, the block was leased to Pioneer Hybrid and, until April 1997, had been planted in seed corn and sunflowers for crop experimentation and research. Existing conditions are shown in Figure 2-2.

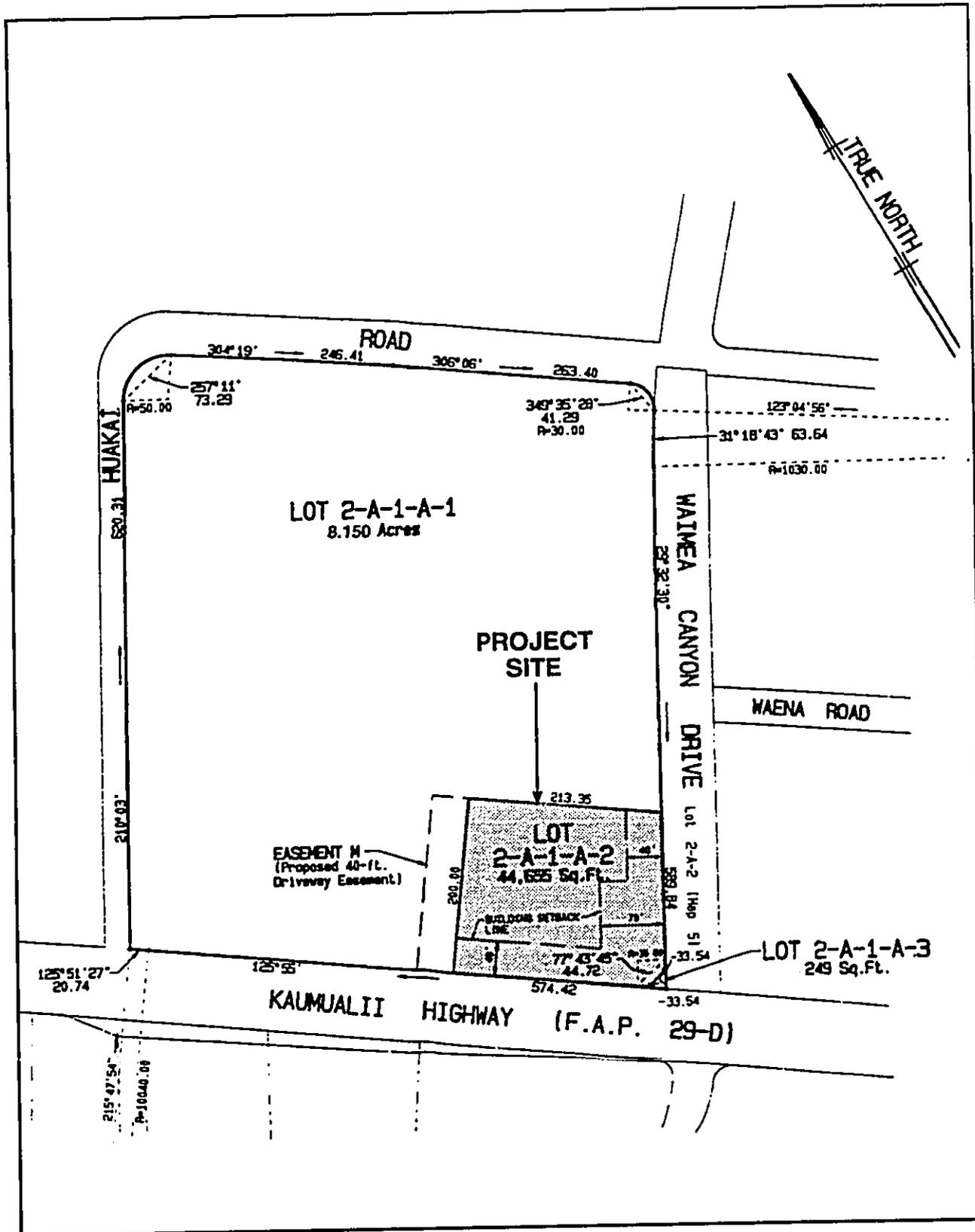
There are no immediately adjacent uses to the project site as the block is bordered by paved roadways on two sides and vacant land on the remaining two sides. Across Kaumualii Highway from the site is the old Waimea Sugar Mill, the Kikiaola Land Company offices and a Catholic Church. To the east are a Baptist Church, nursing home and single family residences across Waimea Canyon Drive. North of Field 14, across Huakai Road, are single family residences and the Kauai Veterans Memorial Hospital Medical Center. To the west is the Waimea County Park and the Waimea Elementary and Intermediate School.

The project site is owned by the Kikiaola Land Company which has signed a fifty-five year lease with the County of Kauai. Kikiaola Land Company owns over 600 acres in the Waimea area and has prepared a draft master plan for the redevelopment of their lands. The master plan's proposed uses for the remainder of Field 14 include a small retail commercial component and a possible assisted living elder care center. According to the Kikiola Land Company, the type of and timing for redevelopment of the remainder of Field 14 will depend on economic and market conditions.

2.3 DESCRIPTION OF THE PROPOSED PROJECT

As discussed in Section 1.0, the design and construction of the Waimea Visitor and Techno Center is made possible through a grant from the U.S. Economic Development Administration to the County of Kauai and sub-granted to the Kauai Economic Development Board. Included in Phase I of the grant are technical activities, engineering/design studies and services, business planning, and a feasibility study. The feasibility study was completed in January 1997. Phase 2 will involve construction of the Center. Groundbreaking is estimated to occur in the first quarter of 1998 with the Center opening in the fourth quarter of 1998.

The Waimea Visitor and Techno Center complex will be comprised of a single-story structure totaling approximately 7,500 square feet with walkways leading to easily accessible entries and well landscaped open garden courtyards. As part of the fabric of Waimea town, the building will be designed to reflect the rural town architectural character of the area, which consists of mainly single story structures.



Property Description Subdivision Map
 Waimea Visitor and Techno Center EA

Figure 2-1



View Mauka

Waimea Canyon Road



View West

Kaunualii Highway

Site Photos
Waimea Visitor and Techno Center EA

Figure 2-2

WAIMEA VISITOR AND TECHNO CENTER

• Final Environmental Assessment •

The Visitor Center component will occupy approximately 1,900 square feet and will serve as a regional orientation facility to the thousands of annual visitors that come to enjoy Kokee State Park and Waimea Canyon, some of the most scenic areas in Hawaii. Exhibits will highlight the area's history, rich natural resources, landmark locations and diverse cultural opportunities. The State Parks Division has expressed an interest in participating with the development and placement of visitor information and exhibits at the Center.

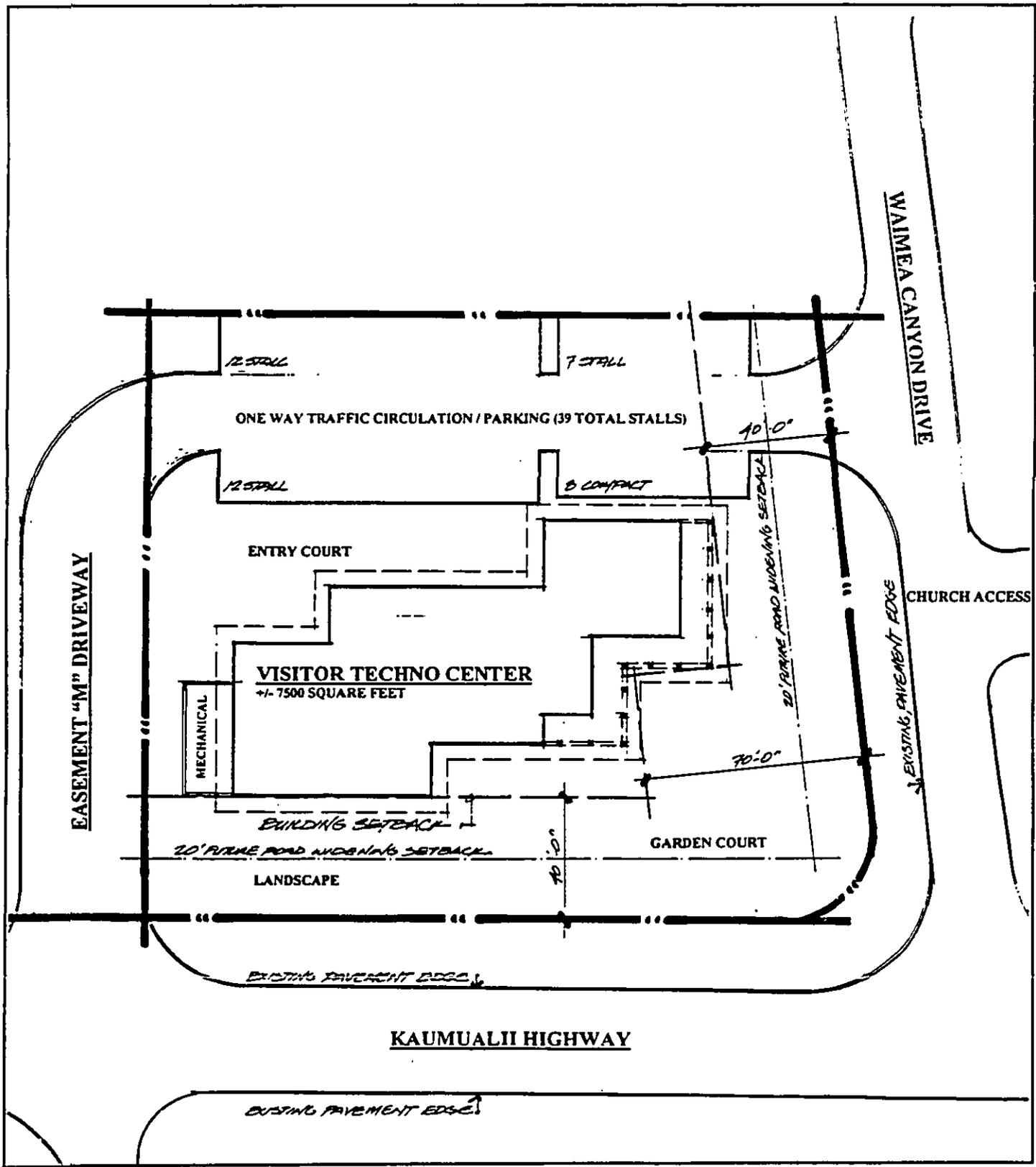
The Visitor Center will not be an active retail outlet. It is intended to serve as a referral to local retail activity and merchants. Displays will provide visitors with information regarding sightseeing activities and local events, encouraging them to visit the Kokee Natural History Museum, take a helicopter ride or attend a hula performance. The Visitors Center will provide public restrooms, drinking fountains, and landscaped seating areas where visitors can relax and enjoy the surroundings.

The Techno Center, approximately 4,700 square feet in size, will provide office space for businesses that support high technology initiatives at the Pacific Missile Range Facility and other civilian applications for defense technology. The building will have a small shared lobby and restrooms with approximately three to six separate private offices. The building will be designed to provide connectivity capability to the Pacific Missile Range Facility (PMRF) and the Maui Supercomputer via DS-3 and T-1 lines. It will also have an Uninterruptible Power Supply (UPS), back-up generator and centralized air conditioning systems. Businesses that support high technology initiatives at PMRF and other civilian technology application companies have indicated an interest in leasing office space in the building.

A shared video-teleconferencing room, approximately 900 square feet in size, will be located between the Visitor Center and offices for use by either component to show educational or training videos and to conduct business meetings and teleconferences. This room will also be available to area community groups who require more sophisticated meeting space and could potentially provide "virtual reality" exhibitions to both visitors and residents.

Development of the project site will include the provision of infrastructure and site improvements, including utilities to provide water, electricity, sewer and communication services; drainage improvements; driveways and paved parking areas; and landscaping. A preliminary site plan, floor plan and elevations are shown in Figures 2-3, 2-4, and 2-5. The building will be designed to incorporate conservation measures such as low flush toilet fixtures, bronze glass panes, and energy efficient lighting fixtures and air conditioning. In addition to taking into account site orientation, the structure's overall design and use of materials will include such elements as large roof overhangs, deep set doors and windows, and a light colored CMU block exterior.

The project site is larger than one acre in size which triggers the preparation of a Class IV Zoning Permit. It is anticipated that all necessary County permits approvals will be secured by the end of 1997. Groundbreaking for construction is estimated to commence within the first quarter of 1998. The project should be completed within the fourth quarter of 1998. The relationship of this action to existing plans and policies is discussed in Section 5.0. Technical, economic, social and environmental characteristics are described in detail in Section 3.0.

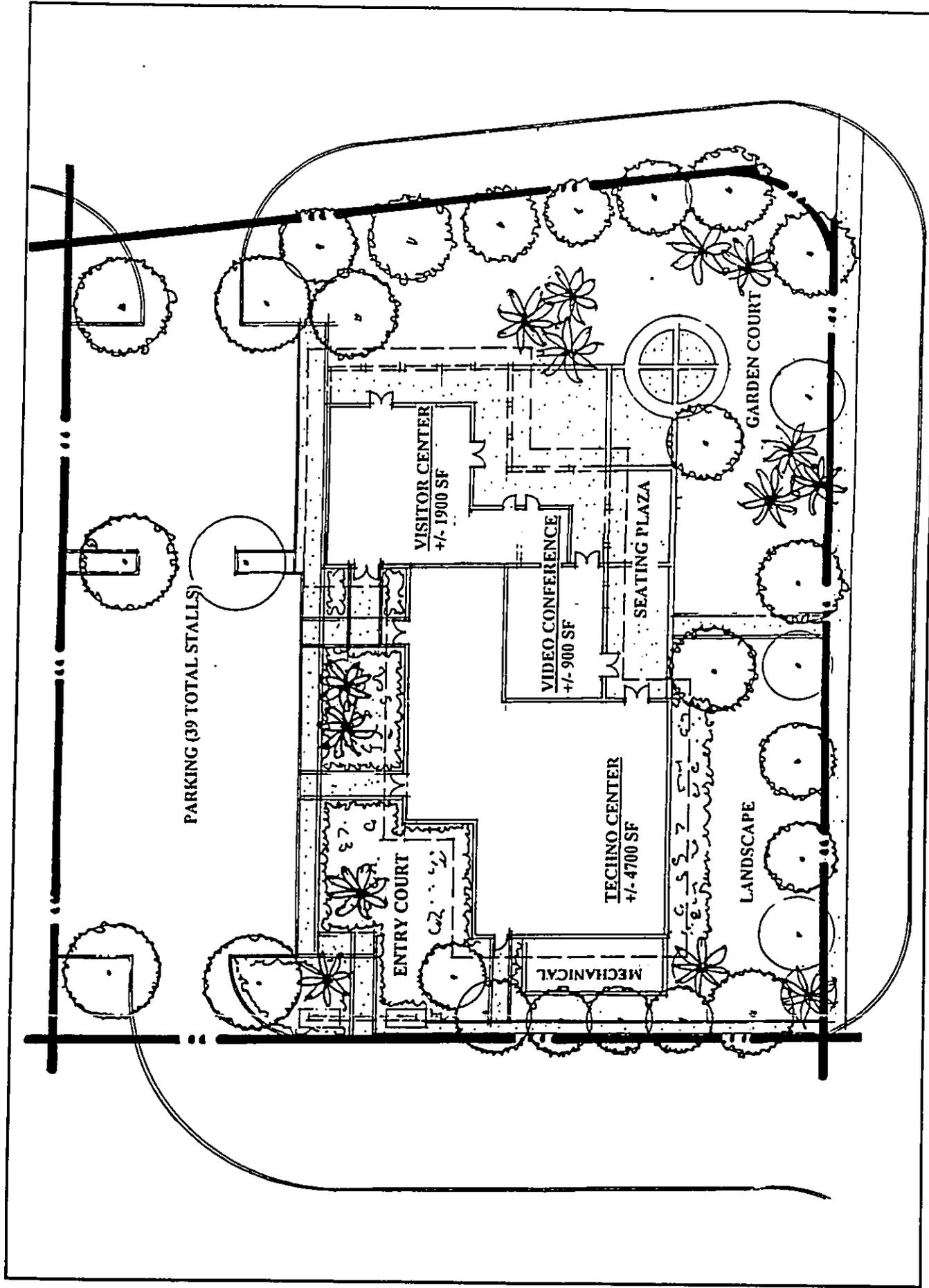


Preliminary Site Plan

Not to Scale

Waimea Visitor and Techno Center EA

Figure 2-3

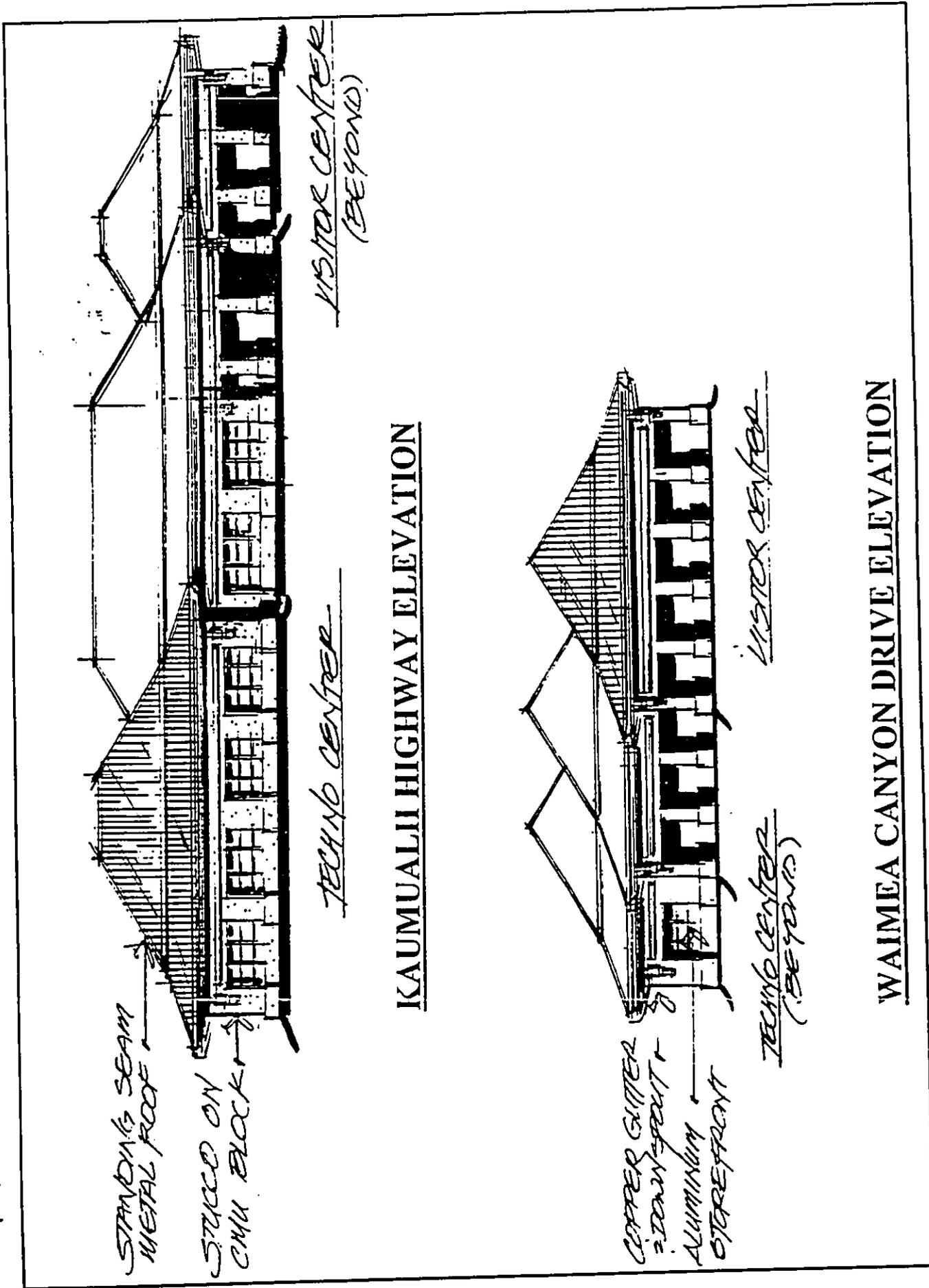


Preliminary Floor Plan

Waimea Visitor and Techno Center EA

Not to Scale

Figure 2-4



Not to Scale
Figure 2-5

Preliminary Elevations
Waimea Visitor and Techno Center EA

The implementation of the proposed project involves the expenditure of County funds (awarded by the U.S. Department of Commerce) as a sub-grant to the Kauai Economic Development Board, which triggers the preparation of an Environmental Assessment. Construction costs for the project are estimated at \$2.2 million dollars. In addition to the construction of the Waimea Visitor and Techno Center, costs include infrastructure and site improvements. No off-site improvements are required.

2.4 PURPOSE AND NEED FOR THE PROPOSED PROJECT

On September 11, 1992 Hurricane Iniki struck the Island of Kauai causing significant destruction to the natural and physical environment and creating economic hardship for the local economy and visitor industries. In an effort to assist and identify ways to revitalize Kauai's economy, the United State Department of Commerce's Economic Development Administration (EDA) funded two studies which made recommendations for the Island's economic recovery.

These studies called for the development of a high technology-oriented center in close proximity to the Pacific Missile Range Facility in order to assist small businesses which support high-tech initiatives at the PMRF and high-tech agricultural experimentation conducted by international seed companies in locating and getting established in West Kauai. As a result of these studies, in 1995 the U.S. EDA gave a \$2,423,250 Financial Assistance Grant Award to the County of Kauai.

The County of Kauai's Office of Economic Development evaluated alternative potential projects for use of the grant money, and in 1994 awarded the funds as a sub-grant to the Kauai Economic Development Board (KEDB) for the development of the Waimea Visitor and Techno Center. The KEDB is a non-profit organization founded in 1984 by a group of business and community leaders whose purpose is to investigate potential areas of economic diversification and to work to create or strengthen industries that can flourish on Kauai.

The project will be executed in two sequential phases, the first of which is the feasibility and engineering/design study (of which this Environmental Assessment is a portion), and the second is the construction of the facility as determined by Phase I. The Waimea Visitor and Techno Center is envisioned to promote the unique resources of West Kauai and provide an impetus for future economic growth and employment opportunities.

The project site is an ideal location for the Center because it is in close proximity to both the major visitor destinations of Waimea Canyon and Kokee State Park, and to the PMRF and nearby agricultural experimentation farms. The project site is well suited to serve as a visitor orientation and information center, and to provide office space for small businesses that support the high technology uses in the area.

Section 3.0

Description of the Environmental Setting,
Potential Impacts, and Mitigative Measures

3.0 DESCRIPTION OF THE ENVIRONMENTAL SETTING, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

Addressed below are the environmental setting, potential impacts and mitigative measures for the proposed Waimea Visitor and Techno Center project.

3.1 CLIMATE

Existing Conditions

The climate of Kauai is mild and semitropical with prevailing northeast trade winds. Average daily minimum and maximum temperatures range from the low 60's (degrees Fahrenheit) to the low 90's, depending upon the time of day and the season. The average temperature at Lihue Airport is 71.3 degrees Fahrenheit with cooler temperatures in the mountain areas such as Kokee above Waimea.

Precipitation is seasonal with the most rainfall typically occurring from October through April. Annual rainfall on Kauai varies greatly with elevation and geography from an average rainfall of 444 inches at the top of Mount Waialeale (the wettest place in the world) to approximately 20 inches on the leeward (Waimea) side of the island.

Anticipated Impacts and Mitigative Measures

The proposed action will have no effect on climatic conditions, therefore no mitigative measures are required.

3.2 TOPOGRAPHY

Existing Conditions

The topography of the Waimea town area can be characterized as relatively flat. The project site has been cultivated in agriculture for almost a century and is level with zero (0) to two (2) percent slopes. A low berm fronts a portion of the property along Kaumualii Highway. The topography rises dramatically and quickly behind Waimea Town to heights over 4,000 feet in elevation at the Kokee State Park.

Anticipated Impacts and Mitigative Measures

The proposed Waimea Visitor Techno Center will not alter the topography of the project site which is generally flat and level. It is not anticipated that significant grading will be required. No substantial fill or excavation is being proposed for the project. Mitigative measures related to soils and grading are described in the next section.

3.3 SOILS AND GRADING

Existing Conditions

According to the U.S. Department of Agriculture Soil Conservation Service (SCS, 1984), soils for the project site are classified as predominately Kekaha Silty Clay. According to SCS, these soils

are well drained, located on alluvial fans and flood plains, and are used for irrigated sugarcane, pasture and wildlife habitat. Soil characteristics include moderate permeability, slow runoff and no erosion hazard.

Anticipated Impacts and Mitigative Measures

The impact of the proposed action on soils is limited to the small potential for erosion during construction. All grading operations will be conducted in compliance with dust and erosion control requirements of the County of Kauai Grading Ordinance. A Grading Permit must be obtained from the County of Kauai in order to begin construction. During Grading Permit review and approval the grading plans for the site are reviewed by the Department of Public Works and specific conditions may be attached.

The impact of construction activities on soils will be mitigated by practicing strict erosion control and dust control measures, particularly those specified in the following:

- County of Kauai Grading Ordinance
- State of Hawaii, Department of Health, Water Quality Standards, Chapter 37-A, Public Health Requirements (1968);
- USDA Soil Conservation Service, Erosion and Sediment Control Guide for Hawaii (1968).

Primary fugitive dust control methods that will be implemented include regular watering of exposed soil areas, good housekeeping on the job site, and prompt landscaping, covering or paving of bare soils in areas where construction is completed.

3.4 SURFACE WATER AND DRAINAGE

Existing Conditions

The existing flood zones were reviewed using the National Flood Insurance Program, Flood Insurance Rate Map (FIRM). As illustrated in Figure 3-1, the FIRM indicates that most of the project site is within Other Areas Zone X: "Areas determined to be outside 500-year flood plain." A small makai portion of the project site is located within Other Flood Areas Zone X: "Areas of 500-year flood; areas of 100-year flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from 100-year flood." There are no existing drainage infrastructure improvements in Waimea. Stormwater runoff and drainage are by gravity, generally in a mauka-to-makai direction.

Anticipated Impacts and Mitigative Measures

As noted, only a small portion of the project site is subject to relatively minimal flood hazard. The mauka portion of the project site is outside of the 500-year flood plain. The design and siting of proposed structures will take into consideration the potential for flood hazard.

Long term impacts of the project on drainage conditions are expected to be insignificant. Improvements to the project site will be designed to minimize any increase in peak storm runoff flows. While the land generally slopes downward in the makai direction, there may be the possibility of ponding due to prior contouring related to the sugarcane irrigation system. Mitigation may require additional fill to ensure that the character or pattern of surface runoff will not impact adjacent properties.

3.5 FLORA AND FAUNA

Existing Conditions

The vegetation in the region varies with the elevation. The mountain areas contain ohia lehua, java plum, fern, pukiawe, koa, yellow foxtail, black berry, silver oak, lantana and uki. In the lower mountain areas other vegetation types found include kiawe, koa haole, lantana, indigo, and klu. The coastal plain, including Waimea, is hot and dry most of the year and contains plant life such as kiawe, koa haole, klu and a variety of grass types. The small towns in the region have an assortment of palms and shade and flowering trees. (Belt Collins, 1977)

The project site and the area to the west have been in sugarcane cultivation dating back to the early 1900's. Therefore, no existing vegetation exists on the site except for a line of gold trees along the Waimea Canyon Drive edge of the property, which will remain.

The area surrounding Waimea is a natural habitat for a variety of endemic wildlife. However, much of it is not seen in the developed area or coastal plain. The project site is located on the edge of town, has been actively cultivated and does not contain a sustaining wildlife habitat. Within this urban environment, bird species presumed to frequent the project area may include common species such as doves, house sparrows, common mynahs, and cardinals. Other animals presumably found within the project area include domestic pets and strays, rats and mice. No rare, endangered, or threatened plant or animal species are presently known to exist on the project site.

Anticipated Impacts and Mitigative Measures

Development of the project site will provide new landscaped areas, trees and plantings which may serve as habitat for area wildlife. The existing gold trees which line Waimea Canyon Drive on the project site's east side will remain. It is expected that during construction, birds that frequent the landscaped edge of the site will move to nearby undisturbed areas and will return when disturbances cease. Stray domestic animals and other pest mammals will pass through the site during and after construction. No adverse impacts are anticipated, and no mitigative measures are proposed.

3.6 ARCHAEOLOGICAL - CULTURAL RESOURCES

Existing Conditions

The Waimea *ahupua'a* is the largest on Kauai, comprising over 92,646 acres or more than one quarter of the island's total land area. It includes all of the Waimea Canyon area, the uplands of Kokee, the swampy plateau of Alakai'a and the northwestern coastal valleys of Nu'alolo and Miloli'i. Due to the range in climate and terrain of this vast area, the *ahupua'a* was settled and developed by Hawaiians prior to western contact to take advantage of the unique resources available. The area along the Waimea River was used for wetland agriculture, typical of Kauai-type valley settlements. Along the shoreline, fishing camps and temporary habitation areas existed on the beach. (Hammatt, 1996)

Toward the end of the 1800s, the lower stretches of the *ahupua'a* were developed as active sugarcane fields, and plantation irrigation ditch systems were constructed. The cultivation of sugarcane over many decades has likely disturbed any prior existing surface archaeological

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sites. The project site and fields to the west have been in active agricultural use for over 80 years. There are no known archaeological sites, cultural features or ongoing cultural practices at the project site.

There are several historical structures in Waimea that are on the State and/or National Register of Historic Places. None of the historic sites listed below are located adjacent to the project site.

TABLE 3-1			
State and National Register of Historic Places - Waimea, Kauai Region			
	Historic Site Name	Tax Map Key	
			Hawaii Register
			National Register
•	Russian Fort Elizabeth	1-7-05: 03	1981
•	Cook Landing Site	1-6-06: 01	1988
•	Bishop National Bank of Hawaii	1-6-06: 33	1977
•	Gulick-Rowell House	1-2-06: 34	1977
•	Waimea Educational Center	1-6-07: 42	1977
•	Yamase Building	1-6-07: 32	1977
•	Masuda Building	1-6-07: 30	1977
•	Waimea Elementary & Jr. High Classroom Building (moved)	1-6-10: 04 to 1-2-06: 42	1991
•	Ho'one'enu'u Heiau	1-2-02: 23	1981
•	Hauola Heiau	1-2-02: 23	1978

Anticipated Impacts and Mitigative Measures

There are no archaeological or cultural resources on the project site. Appendix B contains a letter from the State Historic Preservation Division Office which concurs that an archaeological subsurface reconnaissance of the project site is not required at this time because the site has been actively cultivated for many years. Since the registered historic sites in the Waimea area are not located near the project site, no impacts to archaeological, cultural or historical resources are anticipated.

In the event that any previously unidentified sites or remains are encountered during site work and construction phases, work in the immediate area will cease. An archaeologist from the State Historic Preservation Division will be notified and work in the area will be suspended until further recommendations are made for appropriate treatment of cultural materials.

3.7 LAND USE - DEVELOPMENT PATTERNS

Existing Conditions

Waimea Town began as a plantation village with traditional plantation housing and small commercial structures constructed around the sugar mill. As the town grew in size, other residential developments took place, rising toward the mauka valleys, and the commercial core filled in and was established along Kaunualii Highway. The Waimea River marks the eastern boundary and the Pacific Ocean the southern boundary of Waimea Town, forcing development to expand along the west side towards Kekaha. Agricultural fields surround the town and line the east banks of the Waimea River.

Development patterns in Waimea are set by the County General Plan, the Waimea-Kekaha Regional Development Plan and zoning regulations. The principal function of these regulations are to specify where land uses such as agricultural, commercial, residential, industrial, open and public areas are permitted.

The General Plan designation of the project site is Urban Residential (UR) (Figure 3-2). These lands can be developed for medium to higher density residential development and may also contain commercial and appropriate light industrial and public service facilities. The proposed project is consistent with the General Plan designation.

The Waimea-Kekaha Regional Development Plan serves as a guideline for the region's future growth within the framework of the General Plan. The Regional Development Plan's land use designation of the project site is Project District. This designation is further explained below as it relates to the project site's zoning designation.

The project site and area to the south have an overlay zoning designation of Project District (PD) which is intended to provide greater flexibility in the location of specific land uses to larger landowners who will develop their properties in accordance with an approved overall master plan. However, the project site is not a part of an existing approved master plan, therefore the site can be developed according to the existing underlying zoning designation of General Commercial (CG). The Waimea Visitor and Techno Center use is allowed within the CG zone. Figure 3-3 illustrates the project site's zoning. The necessary permits and approvals for the proposed development are discussed further in Section 5.0.

Anticipated Impacts and Mitigative Measures

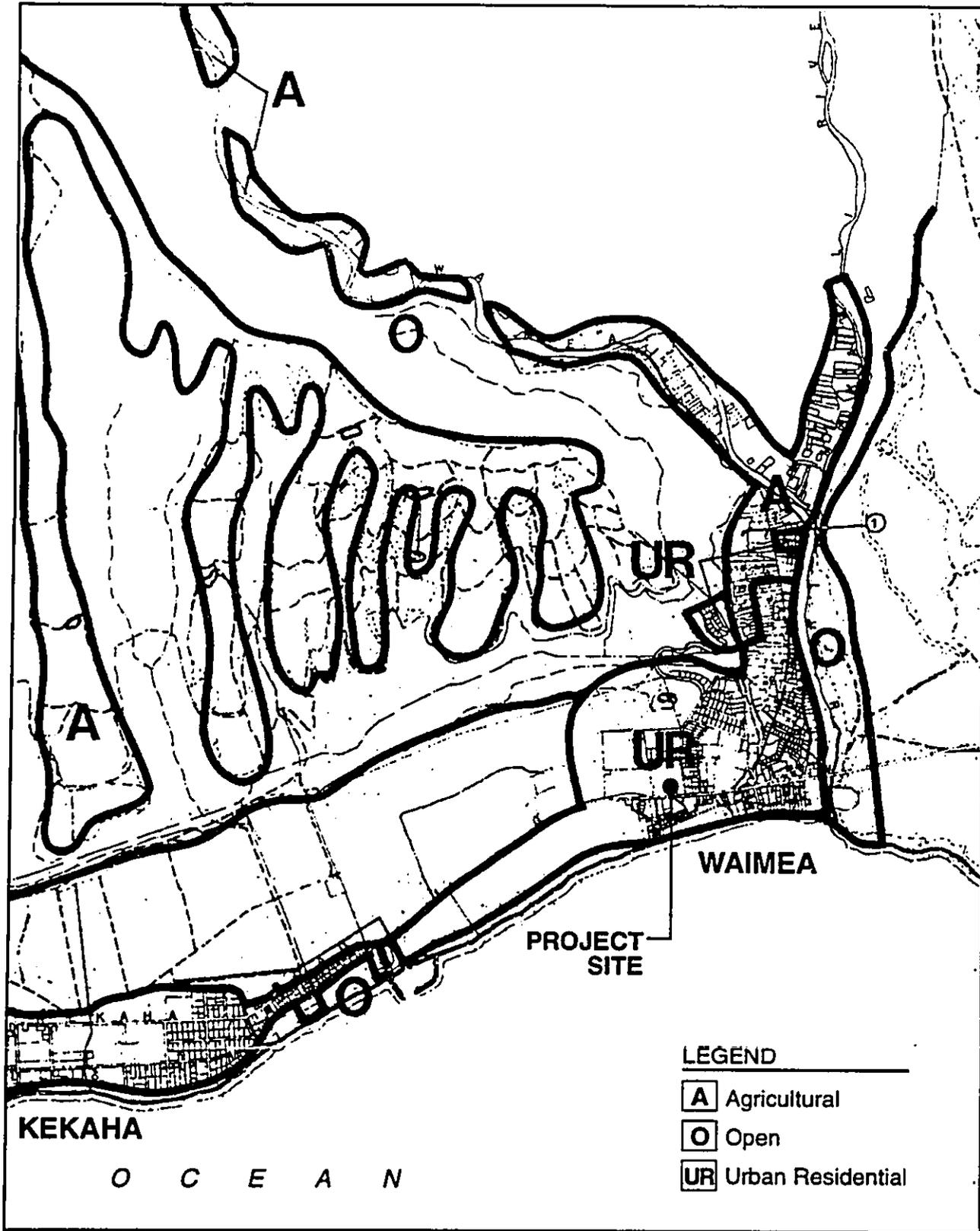
As described in Section 2.0, the proposed project involves the construction of a 7,500 square foot structure at the corner of Waimea Canyon Drive and Kaumualii Highway on the edge of town. There will be no change in the existing land use classification or in the amount of land designated for development. Land use patterns in the area will not change as a result of the proposed action. No mitigative measures are required.

3.8 ROADWAYS, ACCESS AND TRAFFIC CONDITIONS

Existing traffic conditions and anticipated future traffic conditions with and without the project are detailed in the Traffic Impact Analysis Report - Waimea Visitor and Techno Center (Julian Ng, Inc., October 1997) which is included as Appendix C. The findings are summarized below.

Existing Conditions

The project site is located at the intersection of Kaumualii Highway, a State highway serving West Kauai, and Waimea Canyon Drive, also under State jurisdiction. To the east of the intersection, Kaumualii Highway is a curbed street through Waimea Town, totaling 40 feet wide between curbs with 12-foot lanes and marked parallel parking spaces on both sides. Farther east of Waimea, the highway becomes a two-lane rural highway with 12-foot lanes and 6-foot shoulders. Kaumualii Highway west of Waimea Canyon Drive and fronting the project site is a two-lane rural highway with 12-foot lanes and paved shoulders varying in width from three to eight feet. The posted speed limit on Kaumualii Highway near the intersection is 25 miles per hour (mph).



General Plan Designations

Waimea Visitor and Techno Center EA

Figure 3-2

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Waimea Canyon Drive has 10-foot wide lanes in each direction with minimal shoulders and a posted speed limit of 25 mph. Southbound traffic on Waimea Canyon Drive is controlled by a stop sign at the intersection with Kaumualii Highway. A single southbound lane is shared for both left and right turns at the stop sign. A driveway is located opposite of Waimea Canyon Drive on the south side of the Highway.

The 24-hour traffic counts taken at the Kaumualii Highway and Waimea Canyon Drive intersection between 1981 and 1995 show that daily traffic at the intersection has been increasing by approximately 330 vehicles each year (State Department of Transportation, Highways Division).

The State Department of Transportation's (DOT) Kauai Long-Range Land Transportation Plan recommends widening Kaumualii Highway to a four-lane undivided roadway east of Waimea Canyon Drive between Waimea and Eleele. This will not impact the Highway frontage along the project site. The Highway's existing right of way is 80 feet. Waimea Canyon Drive's existing right of way is 60 feet. The Long-Range Plan does not contain any recommended improvements to Waimea Canyon Drive.

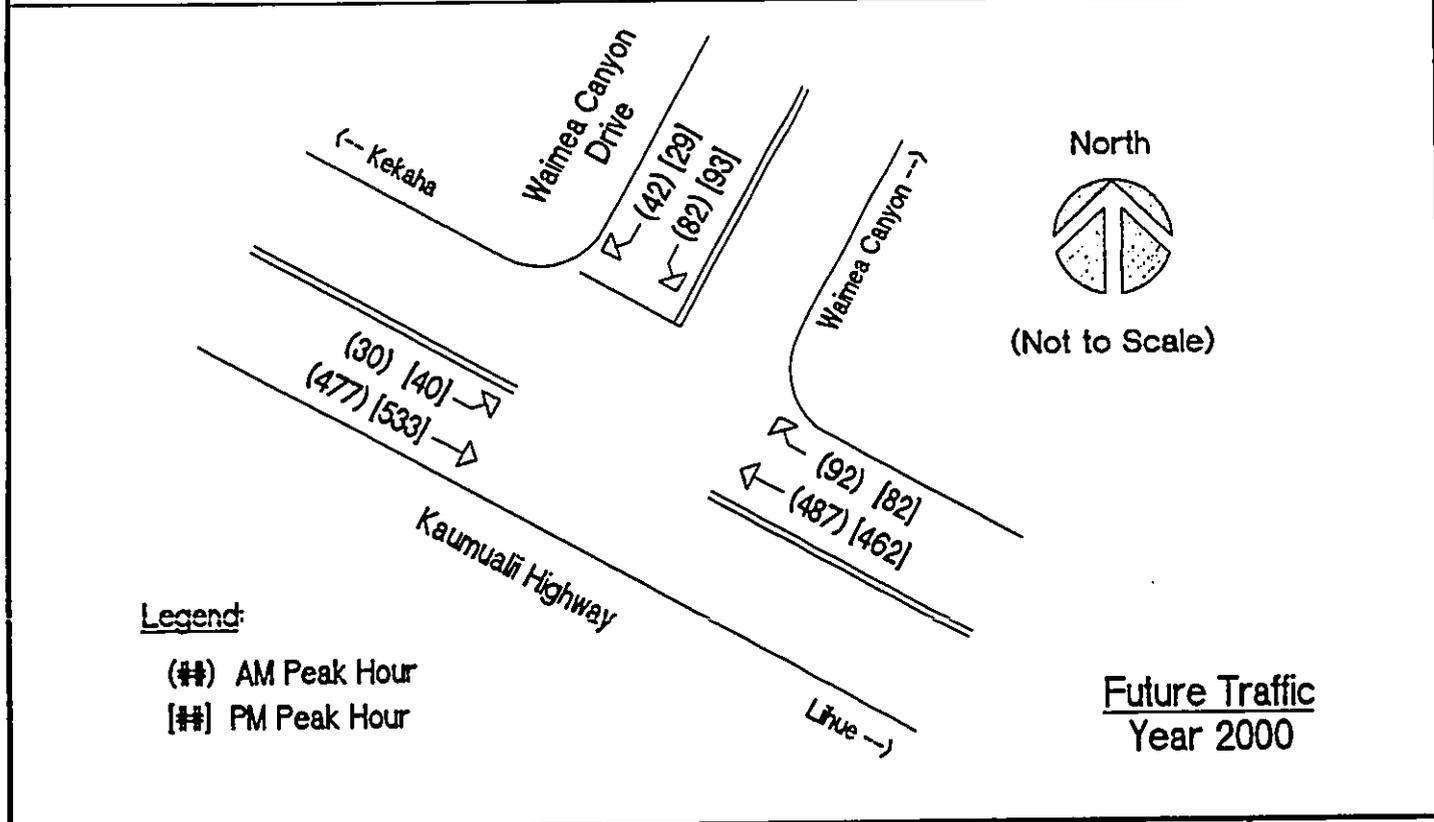
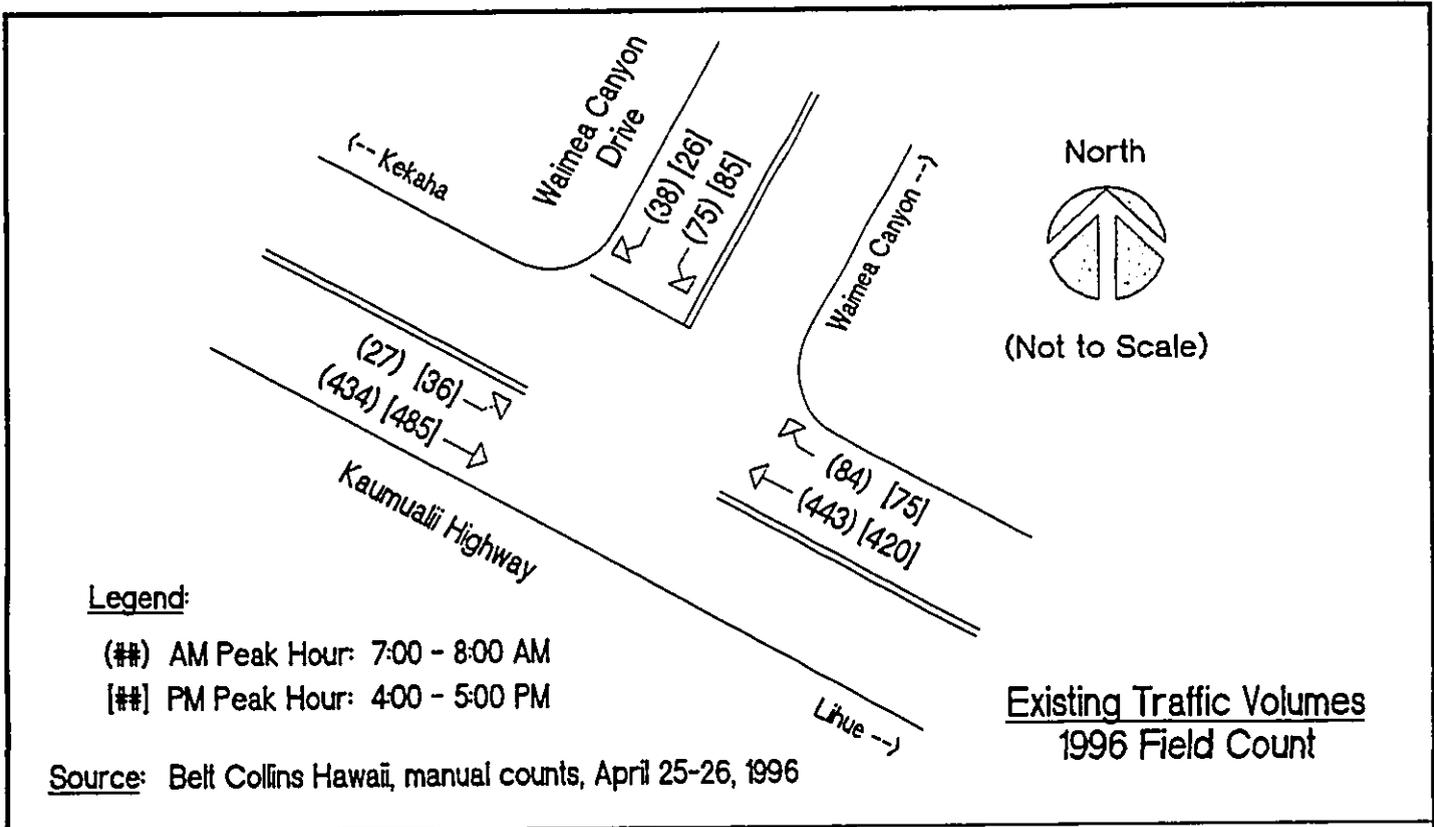
Anticipated Impacts and Mitigative Measures

Construction Period. Construction activities will be appropriately scheduled to avoid unnecessary impacts on traffic. Contractors will be responsible for providing necessary traffic controls and precautions to maintain traffic safety on roadways bordering the construction site.

Future Traffic Flow. Although redevelopment of the Waimea area is proposed by major land owners such as Kikiaola Land Company, long-term future conditions related to potential private master plan projects are not addressed in the Traffic Impact Analysis Report because those plans have not yet been finalized and formally approved by the County.

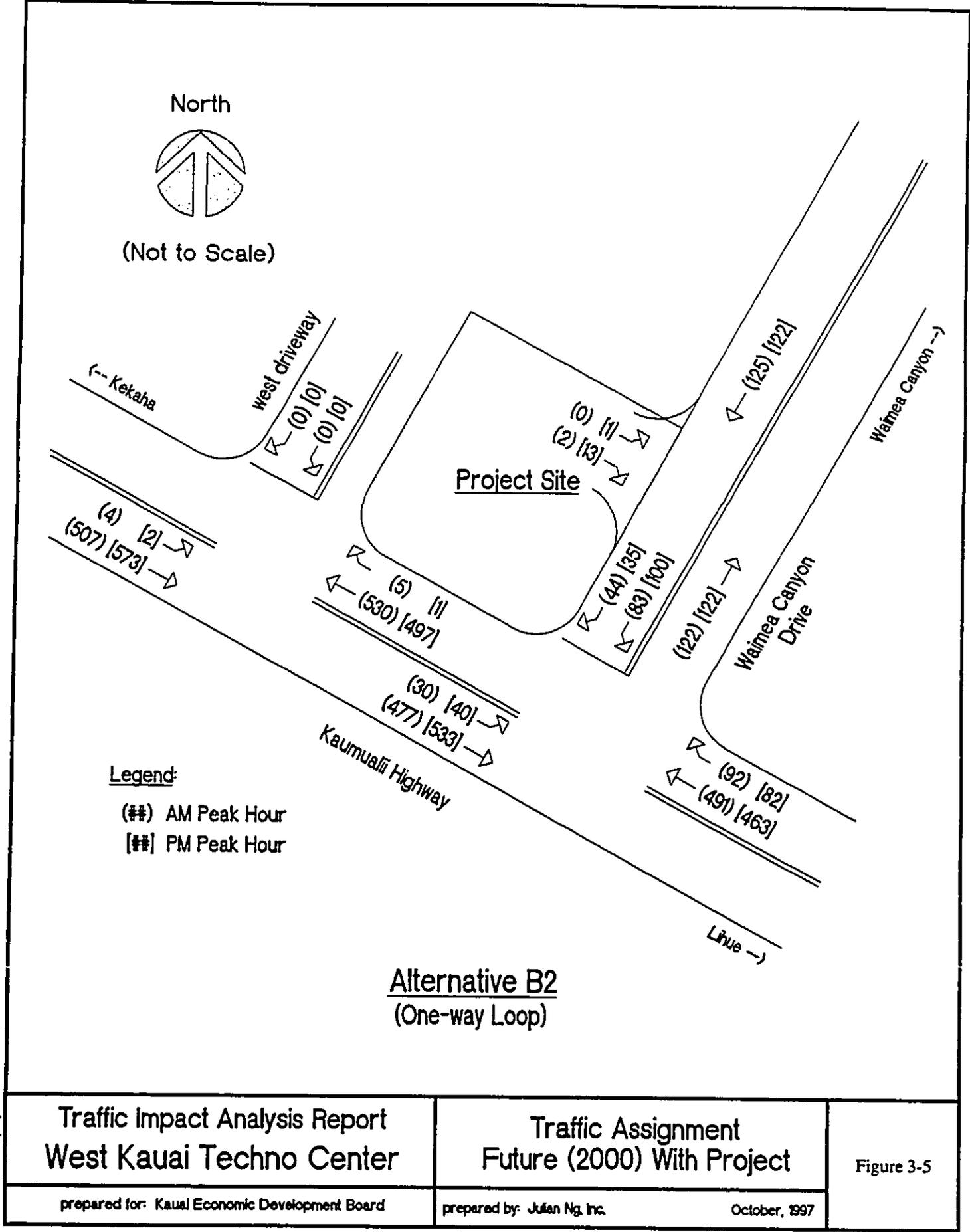
The findings of the Traffic Impact Analysis Report for the proposed Waimea Visitor and Techno Center are summarized below. Figure 3-4 depicts the peak hour existing traffic volumes and projected future traffic volumes for the year 2000 without the proposed project. Anticipated peak hour traffic volumes with the proposed project are presented in Figures 3-5. This graphic represents the traffic counts associated with a clockwise one-way loop within the project site, entering from a driveway (to be constructed west of the project site off of Kaumualii Highway) and exiting from the parking lot onto Waimea Canyon Drive. With this on-site traffic flow configuration, left turns into the project site from Waimea Canyon Drive would not be permitted. The project site driveway along this east frontage should be located as far north as possible to minimize any interference with traffic through the Kaumualii Highway intersection.

A Level of Service (LOS) analysis for the proposed project was completed based on projections which assumed 100 visitors per day to the Center, five employees and hours of operation of 8:00 am to 5:00 pm six days per week. Table 3-2 summarizes the LOS analysis with and without the proposed project.



<p>Traffic Impact Analysis Report West Kauai Techno Center</p>	<p>Traffic Assignments Without Project</p>	<p>Figure 3-4</p>
<p>prepared for: Kauai Economic Development Board</p>	<p>prepared by: Julian Ng, Inc.</p>	<p>October, 1997</p>

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TABLE 3-2 Waimea Visitor and Techno Center Unsignalized Intersection Level of Service (LOS) Analysis						
Kaumualii Highway and Waimea Canyon Drive	Existing Traffic (1996)		Future (2000) Without Project		Future (2000) With Project	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
- Shared Lane (stop) from Waime Canyon Drive	C	C	C	D	C	D
- Eastbound Left Turn (yield) from Highway	A	A	A	A	A	A

The existing conditions at the Kaumualii Highway and Waimea Canyon Drive intersection experience some delays during peak hours. However, present levels of service for all movements at the intersection are at acceptable LOS C or better. Delays will become greater in the future as traffic volumes increase without the project, but the unsignalized intersection is projected to continue to provide adequate service which may drop to LOS D which is still acceptable.

The increase in traffic generated by the proposed project will be less than one percent of the existing traffic, compared to an overall increase in traffic of approximately ten percent by the year 2000 if recent trends in traffic increase continue. The project will not significantly impact the Kaumualii Highway/Waimea Canyon Drive intersection. Although the additional traffic associated with the proposed project may result in slight increases in delays, it will not change the future projected acceptable level of service of LOS D.

The capacity analyses of the Kaumualii Highway/Waimea Canyon Drive intersection and driveway connections for the project site circulation alternatives indicate minor differences between a one-way interior loop from Kaumualii Highway to Waimea Canyon Drive or two-way ingress and egress. The preliminary site plan and interior circulation plan provide for a clockwise one-way interior loop. However, should the circulation plan be revised to accommodate a two-way loop through the site, according to the capacity analysis either circulation pattern produces acceptable traffic conditions.

Given the limited impacts and projected continuation of acceptable traffic conditions in the future, no mitigative measures are proposed.

3.9 NOISE

Existing Conditions

The primary noise sources in the area of the project site are related to traffic, agricultural production and equipment, and recreational activities. Generally, the relatively rural character of the area does not generate extended periods of unacceptable levels of noise.

Anticipated Impacts and Mitigative Measures

Development of the project site will involve construction activities, such as grading and paving which may generate significant noise levels. Earth moving equipment, such as bulldozers and

diesel trucks will probably be the loudest equipment used during construction, generating noise levels as high as 95 dB. However, such exposures are only a short-term condition, occurring during normal working hours.

Construction-period noise will be mitigated in accordance with Title 11, Administrative Rules, Chapter 46, Community Noise Control of the State Department of Health. All construction equipment and on-site vehicles will be equipped with mufflers as required.

Operations at the new facility will not generate significant or potentially disturbing level of noise, and no mitigative measures will be required.

3.10 AIR QUALITY

Existing Conditions

The State Department of Health, Clean Air Branch regularly samples ambient air quality at monitoring stations throughout the State and publishes the information in *Hawaii Air Quality Data*. The monitoring station sampling particulate matter closest to the project site is located in Lihue, over 25 miles away. There are no monitoring stations for carbon monoxide on Kauai.

The State of Hawaii Ambient Air Quality Standards (AAQS) for carbon monoxide are considerably more stringent than the comparable Federal AAQS. According to Hawaii Air Quality Data, between January 1988 and December 1990, of the 1,013 samples taken, there was only one incident where the State standard for carbon monoxide was exceeded and there were no Federal standard exceedances.

Anticipated Impacts and Mitigative Measures

Construction activities are expected to generate short-term impacts to air quality primarily, from fugitive dust emissions. Site preparation will create particulate emissions, as will on-site building construction. The impact of construction activities on air quality will be mitigated by conforming to strict dust control measures, particularly those specified in the State Department of Health's (DOH) Water Quality Standards, Chapter 37-A, Public Health Regulations, 1968; and the U.S. Soil Conservation Service's Erosion and Sediment Control Guide for Hawaii, 1968.

Primary fugitive dust control measures include wetting down loose soil areas, good housekeeping on the job site and the prompt paving or landscaping of bare soil areas. In addition, State of Hawaii Air Pollution Control Regulations require that fugitive dust emissions be controlled to such an extent that no visible emissions of fugitive dust from construction activity should occur beyond the property line.

There is the potential for air pollution from construction equipment and vehicles, and from vehicular emissions due to traffic disruptions from construction equipment. On-site mobile and stationary construction equipment will also emit some air pollutants in the form of engine exhausts. The larger types of equipment are usually diesel-powered. Nitrogen oxide emissions from diesel engines can be relatively high compared to gasoline-powered equipment, but the standard for nitrogen dioxide is set on an annual basis and is not likely to be violated by short-term construction equipment emissions. Carbon monoxide emissions from diesel engines, on

the other hand, are very low and should be relatively insignificant compared to normal vehicular emissions.

Short term increases in vehicular emissions due to disruption of traffic by construction equipment mobilization will be alleviated by moving equipment and personnel to the site during off-peak traffic hours. Increased traffic volumes in the long term may increase vehicular emissions, however, the region is generally rural and undeveloped. Air quality conditions in the region are not anticipated to decline and no mitigative measures are required.

3.11 SOCIO-ECONOMIC CHARACTERISTICS

Existing Conditions

The total population of the Waimea District has grown approximately 17 percent over the past two decades from 7,569 in 1970 to 8,888 in 1990. The largest portion of that growth (13 percent) was experienced between 1970 and 1980. According to the 1990 census, the population of Waimea Town is 1,840.

Agriculture has historically been a major island-wide employer. The Waimea area benefits from its close proximity to the Pacific Missile Range Facility and the related defense and technology research businesses. Over the past ten to fifteen years West Kauai has also seen growth in the visitor industry and related services sector. The closure of area sugar mills has emphasized the need for continued economic diversification and new employment opportunities.

Anticipated Impacts and Mitigative Measures

The project will create short-term benefits as a result of design and construction employment. The project will create jobs for local construction personnel. Local material suppliers and retail businesses can also be expected to benefit through a multiplier effect from the increased construction activities. State General Excise Tax revenues will be generated by the project construction and related expenditures.

The principal socio-economic impact of the proposed project will be the creation of employment opportunities both at the Visitor Center's and at the small businesses that will locate their offices within the Techno Center. The Center will also provide a new source of business for local merchants. In addition, its visitor orientation and information programs will foster an appreciation and respect for the region's natural resources and historic character.

Socio-economic impacts will be overwhelmingly positive - indeed, generating such impacts is the reason why the Center is being developed. Beyond the proposed structuring of the Center's activities to fit with and enhance the existing socio-economic character of Waimea Town and West Kauai, no mitigative measures are necessary.

3.12 VISUAL RESOURCES

Existing Conditions

The project site was recently actively cultivated agricultural land and does not contain any structures. As described in Section 2.0, the project site is bordered by the development of

Waimea Town. Single family residences, an area hospital and the old sugar mill are located across the highway and local roads adjacent to the site. A County park is located to the west of the site.

Views in Waimea Town and the valley are characterized by the mountain ranges and canyons rising mauka of town, agricultural fields surrounding the town, and the coastal plain and ocean to the south. The project site and adjacent area is generally flat, and views from the site are of the natural geography and development of Waimea Town (see Figure 2-2 page 2-4).

Anticipated Impacts and Mitigative Measures

The Waimea Visitor and Techno Center will be designed as a single-story structure totaling approximately 7,500 square feet, joined together by covered walkways and surrounded by landscaping. As part of the fabric of Waimea town, the buildings will be designed to reflect the rural town architectural character of the area which consists of mainly single story structures.

The project's scale and design will not significantly impact area views. The building will be designed to blend with existing development and will be setback forty feet from the Highway and Waimea Canyon Drive, and setback seventy feet from the corner to provide views along these traffic corridors and across the intersection.

3.13 UTILITIES

3.13.1 Water. The County water system supplies potable water to Waimea from wells located mauka of Waimea Town. A water line runs along the mauka side of Kaunualii Highway and will be extended to service the project site. According to the County Water Department, the existing water supply is more than sufficient to service the proposed project.

3.13.2 Wastewater. The County's secondary treatment wastewater plant is located west of Waimea. An eighteen-inch sewer pipe runs along the mauka side of Kaunualii Highway with a stub-out located in the vicinity of the proposed west access driveway easement. The sewer line will be extended from the stub-out to service the project site. According to the County Department of Public Works Wastewater Division, there is more than sufficient capacity at the existing wastewater treatment plant to service the proposed project.

3.13.3 Electrical Power. The electrical needs of the project site will be serviced by the Kauai Electric Company from existing power lines along Kaunualii Highway. Sufficient power to serve the new Center is available.

Anticipated Impacts and Mitigative Measures

The construction and development of the Waimea Visitor and Techno Center will not create significant demands for water, wastewater, or electrical services. All utility improvements within the site will be placed underground.

Section 4.0

Alternatives to the Proposed Action

4.0 ALTERNATIVES TO THE PREFERRED PROJECT

This Environmental Assessment evaluates three alternatives to the proposed project described in Section 2.0. The alternatives include:

- No Action Alternative
- Use of the Site for Agriculture
- Development of the Site for Other Commercial Uses

4.1 ALTERNATIVE 1: NO ACTION

The No Action alternative would maintain the site in its present condition as currently uncultivated agricultural land. Because the site is vacant and there is no current lease to actively farm the property, the No Action Alternative would have no environmental impacts. Although a No Action Alternative may be evaluated for the project site for this report's purposes, it should be acknowledged that the development of the remainder of Field 14 will impact this one acre portion of the larger block. It is unlikely that either the project site or the remainder of Field 14 would be developed or remain fallow independently of the other.

In this alternative, no action at the project site and the lack of a Waimea Visitor and Techno Center would translate into no new employment opportunities, nor would there be the promotion of local businesses and regional attractions. Although this alternative would have no adverse environmental impacts, no-action at the project site would lack the numerous positive socio-economic benefits which this project will provide to Waimea and the region.

4.2 ALTERNATIVE 2: USE OF THE SITE FOR AGRICULTURE

Under this alternative, the project site would be actively cultivated for agricultural use. The environmental impacts of this alternative would be minimal and would primarily consist of farming-related traffic and disturbance of the site's soil. The project site and remainder of Field 14 have been actively cultivated in sugarcane since the early 1900's and more recently for experimentation crops in seed corn and sunflowers. The most recent lease to farm the site expired in April of this year and was not renewed. According to Kikiaola Land Company, there are no immediate plans to lease the site for agricultural use. The potential environmental impacts of this alternative would be less than the proposed project and would have few impacts on adjacent uses, properties and roadways.

4.3 ALTERNATIVE 3: DEVELOPMENT OF THE SITE FOR OTHER COMMERCIAL USES

A third alternative to the proposed project would be the development of Field 14 as a community commercial center without the proposed project. The master plan for Kikiaola Land Company has proposed the development of the entire Field 14 block as a retail center consisting of a series of small buildings and related parking. Potential retail tenants could

include a supermarket, restaurants, as well as service and specialty stores. The landowner does not plan to develop the Waimea Visitor and Techno Center project site of approximately one acre as a stand alone use, separate from the remainder of Field 14. Therefore under this alternative, without the creation of a Waimea Visitor and Techno Center, the project site would be developed for commercial use within the larger context of Kikiaola Land Company's master plan for the entire Field 14 block.

This alternative, which assumes development of the entire Field 14 block, would produce greater environmental impacts compared to the other alternatives. A community retail center of this scale would produce greater traffic impacts and the entire block would be more intensively developed with landscaping, surface parking and multiple buildings. Although this alternative may create a greater number of employment opportunities, the environmental impacts of this alternative would be more significant than the other alternatives.

4.4 COMPARISON OF ALTERNATIVES WITH THE PROPOSED PROJECT

The issues for the evaluation of alternatives for this project are the impacts associated with the farming or commercial development of the entire 10 acre Field 14 block. As stated previously, it is unlikely that the Waimea Visitor and Techno Center project site would be developed independently from the remainder of Field 14 because the entire block is owned by one landowner. Therefore Alternative 3, which evaluates the development of the entire block, will naturally have the greatest environmental impacts when compared to the other alternatives.

Alternative 1 proposes that the site will remain as uncultivated agricultural land. This alternative would have no environmental impacts, however, it is unlikely that the project site and Field 14 would remain fallow given the landowners interest in developing the block. Alternative 2 would have minimal environmental impacts relating mainly to farming the land and disturbing the site's soils, as well as some farm equipment-related traffic. Alternative 3 would have the greatest environmental impacts compared to the other alternatives because it is a more intensive use of the project site and assumes that the Field 14 block would be developed in its entirety.

Both Alternative 3 (commercial development of the entire Field 14) and the commercial development of Field 14 with the proposed Waimea Visitor and Techno Center project would have similar impacts on the physical environment (visual, traffic, noise and air quality, drainage, etc.) because the physical appearance and the level of activity generated on the block are likely to be very similar. However, the socio-economic impacts would be different.

Both Alternative 3 and the development of Field 14 with the proposed Waimea Visitor and Techno Center are likely to generate a similar number of jobs. But the types of jobs and sector of Kauai's economy which is being served will be very different. Alternative 3 will provide retail and personal services, primarily to local residents. If the commercial development called for under Alternative 3 was not accommodated on the project site, it would likely be built elsewhere.

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The proposed Waimea Visitor and Techno Center, on the other hand will directly promote the visitor and high technology industries in West Kauai. It will add to the region's economy and provide employment opportunities in ways that would not exist if the Center was not built. This is a significant added benefit not provided by Alternative 3.

Section 5.0

Required Permits and Approvals

5.0 REQUIRED PERMITS AND APPROVALS

This section discusses the necessary approvals and permits required for the proposed project from governmental agencies, boards or commissions or other similar groups having jurisdiction, and the status of each identified approval.

5.1 STATE LAND USE DISTRICT BOUNDARIES

The State of Hawaii Land Use Law regulates the classification and uses of lands in the State to accommodate growth and development, and to retain the natural resources of the area. All State lands are classified by the State Land Use Commission, with consideration given to the General Plan of the County, as either Urban, Rural, Agricultural, or Conservation. The project site is within the Urban District. The proposed project does not require a change in State Land Use designation; it is a permitted use.

5.2 KAUAI COUNTY GENERAL PLAN

The Kauai County General Plan is the primary policy governing long-range and comprehensive development, use and allocation of land within the County. The General Plan identifies areas which are intended to be used or developed for general purposes such as agriculture, open space, communities and resorts. The location of specific uses and development is organized by the Development Plans and regulated by the Comprehensive Zoning Ordinance.

As discussed in Section 3.0, the General Plan designation for the project site is Urban Residential (UR) which is intended to be used for residential, commercial and light industrial development. The proposed project is consistent with the General Plan designation.

5.3 WAIMEA-KEKAHA REGIONAL DEVELOPMENT PLAN

The Waimea-Kekaha Regional Development Plan provides detailed plans for administrative purposes and assists the Planning Department and Planning Commission to implement the County's General Plan. Adopted in 1977, it serves as a guideline for specific improvements and provides orderly direction for this region's future growth within the framework of the General Plan. The Waimea-Kekaha Regional Development Plan Land Use Designation is Project District. This designation, as it relates to the project site, is explained in the following section.

5.4 COUNTY OF KAUAI ZONING DISTRICTS

The purpose of the Comprehensive Zoning Ordinance for the County of Kauai is to implement the General Plan and Regional Development Plans' policies for growth and development. Zoning designations in Waimea Town include Residential (R), General Commercial (CG), Open (O), Special Treatment-Public (ST-P), Special Treatment-Cultural/Historic (ST-C), and Project District (PD).

The Project District (PD) designation is an overlay zone intended to provide greater flexibility in the location of specific land uses to large landowners who will develop their properties in accordance with an approved overall master plan. Although the project site is zoned Project District, the County of Kauai Planning Commission has not approved a Master Plan or issued a Project Development Permit for this portion of Kikiaola Land Company's property. Therefore, according to Section 10-4.3 (a) (1) of the Revised Code of Ordinances, as amended, the project site shall be used for purposes according to the underlying zoning designation which is General Commercial (CG). The Waimea Visitor and Techno Center use is allowed within the CG zone. Figure 3-3 in Section 3.0 illustrates the project site's zoning.

The applicable Section of the Code is quoted below:

(1) Kikiaola-Knudsen Land Between Waimea and Kekaha Project District. This district shall be used for agriculture, recreation, residential and other purposes in accordance with the existing Use District until a Use Permit for a Project Development and a Class IV Zoning Permit is issued providing for planned development expansion of Waimea and Kekaha and the Project District. (Emphasis added.)

5.5 APPROVALS AND PERMITS REQUIRED

The following is a list of the approvals and permits required for the development and construction of the Waimea Visitor and Techno Center. The County's Special Management Area (SMA) boundary is located along the makai side of Kaunualii Highway. The project site is not within the SMA.

- Completion of the Chapter 343, HRS environmental review process.
- County of Kauai approval of a Class IV Zoning Permit is required because the project site is greater than one acre in size. The proposed Waimea Visitor and Techno Center is a permitted use under the site's General Commercial (CG) zoning designation.
- County of Kauai approval of construction plans and issuance of building permits.

Section 6.0

Findings and Reasons Supporting
Anticipated Determination

6.0 FINDINGS AND REASONS SUPPORTING ANTICIPATED DETERMINATION

6.1 ANTICIPATED DETERMINATION

The potential impacts of the development and future use after construction of the Waimea Visitor and Techno Center have been fully examined and discussed in this Environmental Assessment. After reviewing the significance criteria outlined in Section 11-200-12, EIS Rules, Contents of Environmental Assessment, it is anticipated that the proposed action will not result in significant adverse effects on the natural or human environment. This determination is based on the assessment that the proposed action will not:

- Involve an irrevocable loss or destruction of any natural or cultural resource;
- Curtail the range of beneficial uses of the environment;
- Conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS;
- Substantially or adversely affect the economic or social welfare of the community or State;
- Substantially affect public health;
- Involve substantial or adverse secondary impacts, such as population changes or effects on public facilities;
- Involve a substantial degradation of environmental quality;
- Cumulatively have a considerable effect upon the environment or involve a commitment to larger actions;
- Affect a rare, threatened or endangered species, or its habitat;
- Detrimentially affect air or water quality or ambient noise levels;
- Affect scenic vistas and viewplanes identified in County or State plans or studies;
- Require substantial energy consumption.

Based on the above findings, further consideration of the project's impacts through the preparation of a Environmental Impact Statement is not warranted.

6.2 REASONS SUPPORTING THE ANTICIPATED DETERMINATION

As stated above, there are no significant environmental impacts expected to result from the proposed action. The development of the Waimea Visitor and Techno Center will be beneficial to the Waimea and West Kauai region for the following reasons:

- Create new job opportunities and provide a place for small high-tech oriented businesses to locate in close proximity to potential users of their products and services.
- Promote local businesses and the region's visitor industry.
- Promote the natural and scenic assets of the area to tourists and residents.

Section 7.0

Draft EA Comments & Responses

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7.0 DRAFT EA COMMENTS AND RESPONSES

The following agencies and organizations were contacted during the preparation of the Draft Environmental Assessment and/or received a copy for review and comment for the proposed Waimea Visitor Techno Center.

Agency/Organization	Comments Received Draft EA
State of Hawaii	
Department of Agriculture	-
Department of Business, Economic Development and Tourism	X
Department of Hawaiian Home Lands	X
Department of Health	X
Department of Land and Natural Resources, Historic Preservation Division	X
Department of Transportation, Kauai Division	X
Office of Environmental Quality Control	X
Office of Hawaiian Affairs	X
County of Kauai	
Department of Planning	X
Department of Public Works	X
Department of Water	X
Office of Economic Development	-
Other Parties	
Garden Island Newspaper	--
Honolulu Advertiser - Kauai News Bureau	--
Honolulu Star Bulletin - Kauai News Bureau	--
KUAI Radio Station	--
Kikiaola Land Company, Ltd.	--
Pacific Missile Range Facility	--
Waimea Public Library	--
Waimea Businessmen's Association	--
West Kauai Main Street	--

BERNARD J. CAYREANO
GOVERNOR



RECEIVED
NOV 10 1997

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
KAAHUA DISTRICT
3080 ENNA STREET, ROOM 205
LIHUE, HAWAII 96766

2:00 PM '97

November 6, 1997

Ms. Mary J. O'Leary, AICP
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Subject: Proposed Waimea Visitor and Techno Center
Draft Environmental Assessment
TMK: 1-6-08:6

Review of the Draft Environmental Assessment has been completed and we do not have any comments to offer on the report, however, prior to commencing construction within the State R/W, the owner/developer shall meet the following requirements:

1. Construction plans for portions of the new driveways that are located within the State R/W shall be submitted to this office for review/approval. Construction plans shall include, but is not limited to, the following:
 - a. Driveway details;
 - b. Pavement striping and markings;
 - c. Traffic signs;
 - d. Shoulder swales;
 - e. Tree removals/relocations;
 - f. Miscellaneous construction details;
 - g. Grading plans;
2. Driveway pavement design shall be based on a Bus Design Vehicle. All driveway turning radii shall accommodate the Bus Design Vehicle.

Thank you for giving us the opportunity to review the Draft Environmental Assessment for this project.

HAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTOR
GLENN M. OKAMOTO
Brian K. Mizai

IN REPLY REFER TO:

HMV-KE 4.970984

Ms. Mary J. O'Leary, AICP
Page 2
November 6, 1997
HMV-KE 4.970984

If you have any questions, please call Steve Morikawa at 274-3118.

Sincerely,

STEVEN KONO, P.E.
District Engineer

SH:es

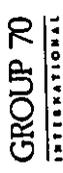
cc: County of Kauai
Kauai Office of Economic Development
4280-B Rice Street
Lihue, Kauai
Attn: Ms. Myrah Cummings



STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P.O. BOX 1177
HONOLULU, HAWAII 96813

November 12, 1997

RECEIVED
NOV 14 1997



December 8, 1997

Mr. Steven Kyono, P.E.
District Engineer
State of Hawaii, Department of Transportation
Highways Division, Kauai District
3060 Ewa Street, Room 205
Lihue, Hawaii 96766

- James G. Allen, AIA, ACP
- Samuel Y. Hong, AIA
- Shawn H. Norman, AIA, AED
- Hiroshi Hada, AIA
- Ken H. Nohy, AIA, CSI
- James H. Nelson, AIA
- Kajali E. Prasad, ACP
- Stephen H. Yuen, AIA
- Leah L. Chang, AIA
- Paul F. Cheney, AIA
- Dawn H. Marmorek, AIA
- Nancy J. Nohy, AIA
- Stephen F. Calks, CPA
- George F. Lee, ACP
- Kathy H. Ostrom, ACP
- Kathryn A. Nam
- Ken A. Iwawak
- Mary J. O'Leary

Dear Mr. Kyono:
Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 6, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center. We acknowledge your comments regarding requirements for construction within the State right-of-way. A set of plans will be forwarded to your office for review and approval at the appropriate time during the design of the proposed project. We will forward a copy of the Final EA for your information upon its completion.

Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board

Ms. Mary O'Leary
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, HI. 96813-4307

Dear Ms. O'Leary:
Subject: Proposed Waimea Visitor and Techno Center. Draft
Environmental Assessment (EA).

The Department of Hawaiian Home Lands (DHHL) has reviewed the draft EA for the proposed Waimea Visitor and Techno Center.

The proposed development will have no direct impact on DHHL's programs and projects on Kauai. Therefore, we have no objection to the development at this time.

Should you have any questions, please call Daniel Ornellas of our Planning Office at 586-3836.

Aloha,

KALI WATSON, Chairman
Hawaiian Homes Commission

cc: Myrah Cummings,
County of Kauai, Office of Economic Development



BENJAMIN J. CAVETANO
GOVERNOR

GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
228 SOUTH BERTANAMA STREET
SUITE 202
HONOLULU, HAWAII 96812
TELEPHONE (808) 551-4100
FACSIMILE (808) 551-4100

RECEIVED
NOV 14 1997

GROUP 70

December 8, 1997

 GROUP 70
INTERNATIONAL

FRANK S. ODA, AIA, AEP
NORMAN G. Y. HONG, AIA
SHERYL B. SCAMM, AIA, AEP
HEATHER HARRIS, AIA
LOW H. NILES, AIA, CN
JAMES T. NYLANDER, AIA
KATHY L. PATTINSON, AEP
STEPHAN H. YUAN, AIA
LINDA L. CHANG, AIA

PAUL P. CHURNEY, AIA
DAN H. KATSUMURA, AIA
NEMO J. SYTA, AIA
STEPHEN E. CALK, CPA
GEORGE T. MILL, ACP
JEFFREY H. OVENMAN, ACP
KATHY A. NAM
BOY A. ISHAYE
MARY J. O'LEARY

Mr. Kari Watson, Chairman
Hawaiian Homes Commission
State of Hawaii
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, HI 96805

Dear Mr. Watson:

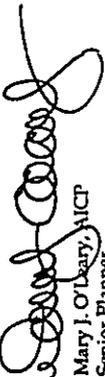
Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 12, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center. We acknowledge your comment that the proposed project will have no direct impact on the Department of Hawaiian Home Land's programs and projects on Kauai. We will forward a copy of the Final EA for your information upon its completion.

Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,


Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services • Building Design • Asset Management
925 Hethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • Phone: (808) 521-5876 • FAX: (808) 521-5874 • <http://www.group70.com>

November 12, 1997

Gerald Dela Cruz
Kauai Office of Economic Development
4280 Rice Street
Lihue, HI 96766

Dear Mr. Dela Cruz:

RE: Waimea Visitor and Techno Center Draft Environmental Assessment (EA)

Please include the following in the final EA:

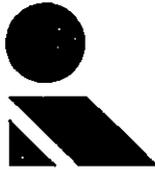
1. Timeframe: What are the anticipated start and end dates of this project?
2. Resource conservation measures: Please describe any element or material being used in this project to promote an environmentally sensitive and energy efficient design, such as low-flush toilets, solar panels or energy-efficient fixtures.

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

Sincerely,


Gary Gill
Director

c: John Isobe, Kauai Economic Development Board
Mary O'Leary, Group 70



GROUP 70
INTERNATIONAL

LEONARD (M.D.), AIA, ACP
Norman C.Y. Hoeg, AIA
Mary J. H. Naman, AIA, AIAU
Hiroshi Hatake, AIA
Roy H. Sobes, AIA, CA
James J. Sahlmann, AIA
Ralph E. Primm, ACP
Stephen H. Yuen, AIA
Linda L. Chang, AIA

Paul P. Charnoy, AIA
Dean H. McAmis, AIA
Nancy J. Sait, AIA
Stephen F. Calla, CPA
George J. Aia, AIA
Kliff H. Overton, AIA
Kathryn A. Nairn
Roy A. Inouye
Mary J. O'Leary

December 8, 1997

Mr. Gary Gill, Director
State of Hawaii
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, HI 96813

Dear Mr. Gill:

Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 12, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center (WVTC). Please find attached a response letter from the President of the Kauai Economic Development Board whose organization is in charge of designing the proposed project.

Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board



KEDB
Kauai Economic Development Board

4334 Rice Street, Suite 204B, Lihue, Kauai, Hawaii 96766 Phone: (808) 245-6692 Fax: (808) 246-1089 email: ked@keda.net

November 26, 1997

Mr. Gary Gill
Office of Environmental Quality Control
State of Hawaii
236 South Beretania St., Suite 702
Honolulu, HI 96813

Dear Mr. Gill:

Re: Comments on Draft Environmental Assessment

Thank you for your comments regarding the Draft Environmental Assessment for the Waimea Visitor and Techno Center as outlined in your letter dated November 12, 1997. The following is in response to your concerns:

1. Timeline: What are the anticipated start and end dates of this project?

It is anticipated that all necessary County permit approvals will be secured by December 31, 1997. Groundbreaking for construction should occur sometime within the first quarter of 1998, with completion of the project scheduled sometime in the fourth quarter of 1998.

2. Resource conservation measures: Please describe any element or material being used in this project to promote an environmentally sensitive and energy efficient design, such as low-flush toilets, solar panels or energy-efficient fixtures.

The building will incorporate the following energy efficient features:

a) Large roof overhangs (5'-0") with a relatively short overall building height providing shade at building exterior and thus reducing building cooling requirements.

Mr. Gary Gill
November 26, 1997
Page Two

- b) Site orientation which takes into account minimizing the building's harsh west sun exposure and thus reducing building cooling requirements.
- c) Plaster coated CMU block exterior with light colored paint finish to increase reflectance and help to reduce cooling loads.
- d) Deep set doors and window fenestration offering more shade and therefore reducing building cooling requirements.
- e) Bronze glass panes to cut down heat transmission into the building and thus reduce building cooling requirements.
- f) Insulated roof structure at roof's "outer skin" to keep hot air out of attic space and thus reduce building cooling requirements.
- g) "Low flow" water conservation toilet fixtures.
- h) Energy efficient air conditioning design which utilizes operable windows and ceiling fans at visitor center giving the users the option of conserving AC by using natural ventilation instead.
- i) Energy efficient lighting fixtures and design.
- j) We plan on encouraging tenants to install occupancy sensors in lighted areas for general lighting, which will conserve energy low use areas.

I hope your concerns have been adequately addressed. Please don't hesitate to call me at (808) 245-5692 if you have any questions. Thank you.

Sincerely,



John Isobe
President

KAUAI ECONOMIC DEVELOPMENT BOARD

cc: Gerald Dela Cruz, Kauai Office of Economic Development
Mary O'Leary, Group 70 Int'l



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS

711 KAPOLAHANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813-5249

PHONE (808) 594-1848

FAX (808) 594-1845

November 13, 1997

Ms. Mary J. O'Leary
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, HI 96813

Subject: Draft Environmental Assessment (DEA) for Waimea
Visitor and Techno Center, Island of Kauai

Dear Ms. O'Leary:

Thank you for the opportunity to review the Draft Environmental Assessment (DEA) for Waimea Visitor and Techno Center, Island of Kauai. The Kauai Economic Development Board is proposing to develop a visitor and technology center aimed to foster economic development of West Kauai and Waimea. The land, one acre portion of a 10 acre block, is owned by the Kikiaola Land Company. The company has agreed to lease the parcel to the County of Kauai for 55 years.

The Office of Hawaiian Affairs (OHA) has no concerns at this time to the proposed development. Based on information contained in the DEA, the project site neither contains endemic flora or fauna resources nor archaeological remains. Furthermore, the design and construction of the single-story facility comply with local zoning regulations and guidelines. Moreover, the DEA outlines a set of mitigation measures in anticipation to temporary adverse effects from construction activities.

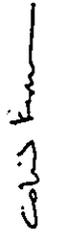
Letter to Ms. O'Leary
November 13, 1997
Page 2

Please contact Colin Kippen (594-1938), Officer of the
Land and Natural Resources Division, or Luis A. Manrique
(594-1758), should you have any questions on this matter.

Sincerely yours,



Randall Ogata
Administrator



Colin Kippen
Officer, Land and
Natural Resources
Division



GROUP 70
INTERNATIONAL

Frank A. Dall, AIA, ACP
Norman G. Y. Hoang, AIA
Sheryl H. Seaman, AIA, AND
Hiroshi Iishi, AIA
Rae H. Nibel, AIA, CM
James I. Noharawatu, AIA
Ralph E. Iverson, ACP
Stephen H. Yuen, AIA
Linda L. Chung, AIA
Paul P. Cheney, AIA
Dean H. Karamza, AIA
Verita J. Sarti, AIA
Stephen E. Calks, CPA
George J. Aho, ACP
Jeffrey H. Overton, ACP
Kathryn A. Nam
Roy A. Leary
Mary J. O'Leary

December 8, 1997

Mr. Colin Kippen Officer, Land and Natural Resources Division
Mr. Randall Ogata, Administrator
State of Hawaii
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, HI 96813

Dear Mr. Kippen and Mr. Ogata:

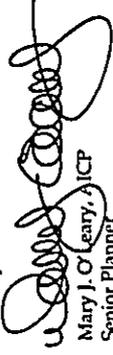
Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 13, 1997 letter regarding the Draft Environmental
Assessment (EA) for the proposed Waimea Visitor and Techno Center. We
acknowledge that your office does not have any concerns at this time to the
proposed development. We will forward a copy of the Final EA for your
information upon its completion.

Your letter and this response letter will be included in the Final Environmental
Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,



Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

BENJAMIN J. CAYETANO
GOVERNOR
SELIU F. NAYA
DIRECTOR
BRADLEY J. WASSERMAN
DEPUTY DIRECTOR
RICK EGGED
DIRECTOR, OFFICE OF PLANNING

Tel.: (808) 587-2846
Fax: (808) 587-2824

OFFICE OF PLANNING
235 South Beretania Street, 6th Fl., Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Ref. No. P-7070

November 17, 1997

Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Attn: Mary O'Leary

Gentlemen:

Subject: Draft Environmental Assessment for the Waimea Visitor and Techno Center

We have reviewed the draft environmental assessment and do not have any specific concerns or comments to offer at this time. We support this project aimed at stimulating the regional economy while fostering a better appreciation and respect for its natural resources and historic character.

Should you have any questions, please contact Susan Feeney of our Coastal Zone Management Program at 587-2820.

Sincerely,

Rick Egged
Director
Office of Planning

cc: County of Kauai Office of Economic Development



**GROUP 70
INTERNATIONAL**

FRANK S. OLI, AIA, AICP
NORMAN G. Y. HUNG, AIA
STEPH H. SCAMAR, AIA, AEP
HELENA HALL, AIA
ROY H. NILES, AIA, CSI
JAMES J. INDIANATO, AIA
RAJESH E. IVIRANEC, AICP
STEPHEN H. YUEN, AIA
LINDA L. CHUNG, AIA

PAUL P. CHURNEY, AIA
DEAN H. KAMAHARA, AIA
SUZUKI J. SUI, AIA
STEPHEN E. CALO, CPA
GARRETT I. ALI, AICP
JEFFREY H. OVERTON, AICP
KATHLEEN A. NIM
BOB A. IRVING
MARY J. O'LEARY

Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 17, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center. We acknowledge that you do not have any specific comments or concerns at this time and that you support this project. We will forward a copy of the Final EA for your information upon its completion.

Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isohe, President, Kauai Economic Development Board



WILLIAM I. CASTLELAND
GOVERNOR OF HAWAII

LAWRENCE JAMES
COMMISSIONER OF HEALTH

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

In reply, please refer to:

December 2, 1997
DEC 10 9 1997
97-247/epo
GROUP 70

Ms. Mary O'Leary
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

Subject: DRAFT ENVIRONMENTAL ASSESSMENT
Project: Waimea Visitor and Techno Center
Location: Waimea, Kauai, Hawaii
TMK: (4) 1-6-08: Por. 6

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:

Wastewater

The subject project is located within the county sewer service system. As the area is sewer, we have no objections to the proposed project, provided that it is connected to the public sewer.

The developer should work closely with the County to assure the availability of additional treatment capacity and adequacy for the project. Unavailability of treatment capacity will not be an acceptable justification for use of any private treatment works or individual wastewater system.

If you should have any questions on this matter, please contact Ms. Lori Kajiwara of the Wastewater Branch at 586-4290.

Sincerely,

BRUCE S. ANDERSON, Ph.D.
Deputy Director for Environmental Health

c: Kauai County Office of Economic Development
WWB



GROUP 70
INTERNATIONAL

FRANCOIS WA WWP
Aiea, HI 96815
SOUTH SHORE WA AND
Honolulu, HI 96815
RICHARD WA WWP
Honolulu, HI 96815
LARRY WA WWP
Honolulu, HI 96815
SOUTH SHORE WA WWP
Honolulu, HI 96815
FRANCOIS WA WWP
Honolulu, HI 96815
SOUTH SHORE WA WWP
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Honolulu, HI 96815
SOUTH SHORE WA WWP
Honolulu, HI 96815
FRANCOIS WA WWP
Honolulu, HI 96815
SOUTH SHORE WA WWP
Honolulu, HI 96815

December 9, 1997

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

Dear Mr. Anderson:

Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your December 2, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center. We acknowledge your comments that you have no objections to the proposed project, provided that it is connected to the public sewer.

The County of Kauai's Department of Public Works, Division of Wastewater, was consulted during the preparation of the Draft Environmental Assessment. According to the Division, there is more than sufficient capacity at the existing Waimea Wastewater Treatment Plant to service the proposed Waimea Visitor and Techno Center. A sewer lateral will be designed to connect the project site with the existing 18-inch sewer line which runs along the mauka side of Kaunualii Highway.

Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, MSCP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board



DEPUTY

11/17/97 10:51 AM

DELBERT COLONIA AGUIAR

AGRICULTURE DEVELOPMENT PROGRAMS
AQUATIC RESOURCES
CONSERVATION AND RESOURCES ENHANCEMENT
COWYATIMACS FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER AND LAND DEVELOPMENT

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

December 5, 1997

Ms. Mary J. O'Leary, AICP
Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Dear Ms. O'Leary:

SUBJECT: Proposed Waimea Visitor and Techno Center
Draft Environmental Assessment
TMK: 1-6-08: por. of 06, Waimea, Kauai

LOG NO: 20633 ✓
DOC NO: 97121m01
Architecture

Thank you for transmitting the Draft Environmental Assessment (DEA) for the above project. The description and mitigative measures for archaeological, cultural and historic resources are accurately reflected in the DEA. Since the land has been in active cultivation for many years, we concur that the construction will have "no effect" on any known archaeological resources and appreciate your inclusion of a stop work clause should any sites, including human burials, be found during construction.

We also concur that the proposed one-story design of the center will have "no effect" on the historic character of the nearby historic structures, especially since there are no historic structures immediately adjacent to the proposed center.

Thank you for the opportunity to comment. Should you have further questions, please call Tonia Moy at 587-0005 (O'ahu) or Nancy McMahon 742-7033 (Kauai).

Aloha!

DON HIBBARD, Administrator
State Historic Preservation Division

TM:jk

c: County of Kauai Office of Economic Development
Nancy McMahon



GROUP 70
INTERNATIONAL

1000 S. OAK, SUITE 400
AUSTIN, TEXAS 78745
SHELL STATION, SUITE 400
HOUSTON, TEXAS 77058

600 N. ALICE, SUITE 100
DALLAS, TEXAS 75208
1000 E. BURNING WOOD
SALT LAKE CITY, UT 84143
1000 E. 10TH, SUITE 100
DENVER, COLORADO 80202

1000 E. 10TH, SUITE 100
DENVER, COLORADO 80202
1000 E. 10TH, SUITE 100
DENVER, COLORADO 80202
1000 E. 10TH, SUITE 100
DENVER, COLORADO 80202
1000 E. 10TH, SUITE 100
DENVER, COLORADO 80202

December 9, 1997

Mr. Don Hibbard, Administrator
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
33 South King Street, 6th Floor
Honolulu, HI 96813

Dear Mr. Hibbard:

Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your December 5, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center. We acknowledge your comments regarding the accuracy of the archaeological, cultural and historic resources information contained in the Draft EA. We also acknowledge your comments that the construction and the design of the center will have "no effect" on any known archaeological resources or the historic character of the nearby area.

Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board

DEPARTMENT OF WATER

County of Kauai

"Water has no Substitute - Conserve It!"

RECEIVED
NOV 10 1997

November 6, 1997

Ms. Mary L. O'Leary, AICP
Group 70 International, Inc.
925 Bethel Street, Fifth Floor
Honolulu, HI 96813-4307

Dear Ms. O'Leary:

SUBJECT: Draft Environmental Assessment - Proposed Waimea Visitor & Techno Center, TMK1-6-08:por. 6, Kaunualii Hwy., Waimea, Kauai

We have no objections to the proposed Visitor and Techno Center. However, the existing source facilities for the Waimea water system are operating at capacity.

At the present time, or until such time that additional source facilities are developed for the Waimea water system, water service to this project/lot will be limited to the water meter provided for this lot, under the subdivision requirements of Subdivision S-97-5.

If you have any questions, please call Edward Doi of my staff at (808) 245-5417.

Sincerely,

Ernest Y. W. Lau
Ernest Y. W. Lau
Manager and Chief Engineer

ED:ls
C:\A\o'leary.doc



GROUP 70
INTERNATIONAL

FRANK S. OMI, AIA, AICP
NANCY G.Y. HONG, AIA
NANCY H. SCHEIDT, AIA, AND
HARSHI HADA, AIA
ROY H. KUBIK, AIA, GS
LINDA L. NISHIMOTO, AIA
RALPH E. PERINCE, AICP
STEPHEN H. YACHT, AIA
TAMU L. CHUNG, AIA

PAUL P. CHERRY, AIA
JAMES H. KAMURA, AIA
VICTORIA J. SAKAI, AIA
STEPHEN E. CULLEN, CIA
GEORGE I. AUB, AICP
KILINY H. OHTENION, AICP
KATHERINE A. NAMI
ROY A. BRANDE
MARY J. O'LEARY

December 8, 1997

Mr. Ernest Y. W. Lau
Manager and Chief Engineer
Department of Water
County of Kauai
4398 Pua Loke Street
Lihue, Hawaii 96766

Dear Mr. Lau:

Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 6, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center. We acknowledge your comment that water service to this project/lot is limited to the water meter provided for this lot under the recently approved (November 25, 1997) Subdivision Application S-97-5.

In compliance with the Water Department's conditions in the S-97-5 Subdivision Application, the Kauai Economic Development Board has made payments to your office for a Facilities Reserve Charge and a Service Connection Fee.

We will forward a copy of the Final EA for your information upon its completion. Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,

Mary J. O'Leary
Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board

Group 70 International, Inc. • Environmental Planning • Engineering • Environmental Science • Building Processes • Asset Management

Group 70 International, Inc. • P.O. Box 100 • Lihue, Hawaii 96766 • 63706 • Fax: 63706

MARYANNE W. KUSAKA
MAYOR



CESAR C. PORTUGAL
COUNTY ENGINEER
TELEPHONE 241-0600

RUSSELL SUGANO
ACTING DEPUTY COUNTY ENGINEER
TELEPHONE 241-0631

AN EQUAL OPPORTUNITY EMPLOYER
COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
MO'OLENA BUILDING, SUITE 275
LIHUE, KAUAI, HAWAII 96766

PW11.001

November 7, 1997

RECEIVED
NOV 10 1997

GROUP 70

Group 70 International, Inc.
925 Bethel St., 5th Floor
Honolulu, Hawaii 96813

Attention: Ms. Mary O'Leary

Gentlemen:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
PROPOSED WAIMEA VISITOR AND TECHNO CENTER
TMK: 1-6-8-POR 6

We reviewed the subject draft environmental assessment and offer the following comments:

- A. Flood
 - 1. Based on panel no. 156D of the Federal Insurance Rate Maps (FIRM) dated September 30, 1995 the flood zone for the subject property is zone x-shaded and x-unshaded. We have no flood requirements for the above flood zones.
- B. Access
 - 1. Access to the project site will be provided by a driveway to Kaunualii Highway and Waimea Canyon Drive. Both roadways are under the jurisdiction of the State Department of Transportation. The driveway at Waimea Canyon Drive should be located opposite an existing local street, Waimea Road to minimize traffic conflicts.

Group 70 International, Inc.
November 7, 1997
Page 2

C. Sewer
No comments.

Thank you for this opportunity to provide our comments. Should you have any questions, please feel free to contact Mr. Wallace Kudo of my staff at (808) 241-6620.

Very truly yours,

Cesar C. Portugal

CESAR C. PORTUGAL
County Engineer

WK/cu

The DOT has further required that a Master Plan and TIAR (addressing ingress and egress from Easement M and an intersection fronting Waimea Canyon Drive at Waena Road and internally connecting to the WVTC parking lot) must be provided prior to any development on Lot 2-A-1-A-1.

3. Sewer
We acknowledge that your office has no comments regarding sewer service for the project site.

We will forward a copy of the Final EA for your information upon its completion. Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

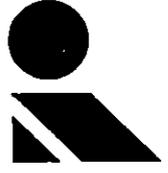
GROUP 70 INTERNATIONAL, INC.

Sincerely,



Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board



GROUP 70
INTERNATIONAL

Thomas S. Oaki, AIA, AICP
Norman G.Y. Hong, AIA
Sheryl B. Seaman, AIA, AUP
Jacobs Hada, AIA
Ron H. Nohy, AIA, CN
James E. Anderson, AIA
Kajih E. Puthimaw, AICP
Stephen H. Yuen, AIA
Tina E. Chung, AIA

Paul P. Conway, AIA
Dean H. Kamaea, AIA
Steven J. Surr, AIA
Stephen E. Ciba, CPA
Cecilia I. Ma, AICP
Kelsey H. Ostrom, AICP
Kathryn A. Nam
Roy A. Inouye
Mary J. O'Leary

December 8, 1997

Mr. Ceasar C. Portugal
County Engineer
Department of Public Works
County of Kauai
4444 Rice Street, Suite 275
Lihue, Hawaii 96766

Dear Mr. Portugal:

Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 7, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center (WVTC). We have prepared the following responses to the comments raised in your letter.

1. Flood
We acknowledge your comment that your office does not have any flood requirements for the x-shaded and x-unshaded flood zones which comprise the subject property.

2. Access
We acknowledge your comment that the project's exit driveway onto Waimea Canyon Road should ideally be located opposite of the existing local street, Waena Road (typo "Waimea Road" in your letter) to minimize traffic conflicts. However, the WVTC lot's mauka boundary is located over eighty (80) feet makai of Waena Road, making an alignment impossible at this time. According to the recently approved Subdivision Application S-97-5 for the project site, the issue of a roadway opposite Waena Road has been addressed in the following manner (see attached figure):

5. a. Based on the TIAR (Traffic Impact Assessment Report) submittal for the development of the Waimea Visitor and Techno Center (WVTC), the DOT has verbally indicated that it will permit a "temporary one-way" traffic circulation pattern for the WVTC (entering at Easement M (access from Kaunani Highway) and exiting from the WVTC parking lot) until such a time that permanent ingress and egress points for Lot 2-A-1-A-1 (the remainder of the larger development lot known as Field 14) are constructed.



MARYANNE W. KUSAKA
MAYOR

DEE M. CROWELL
PLANNING DIRECTOR
IAN K. COSTA
DEPUTY PLANNING DIRECTOR
TELEPHONE (808) 211-4477
FAX (808) 211-4474

PLANNING DEPARTMENT

RECEIVED
NOV 17 1997

November 13, 1997

Group 70 International, Inc.
925 Bethel Street, 5th Floor
Honolulu, Hawaii 96813-4307

Attn: Mary O'Leary

Subject: Proposed Waimea Visitor and Techno Center
Draft Environmental Assessment
Waimea, Kauai

Thank you for the opportunity to review the subject document, however, we do not have any comments to offer on the draft environmental assessment.

For your information, the Planning Department of the County of Kauai is in receipt of a Class IV Zoning Permit Application for the proposed Waimea Visitor and Techno Center. This application will be submitted to the Kauai Planning Commission for its review and consideration.

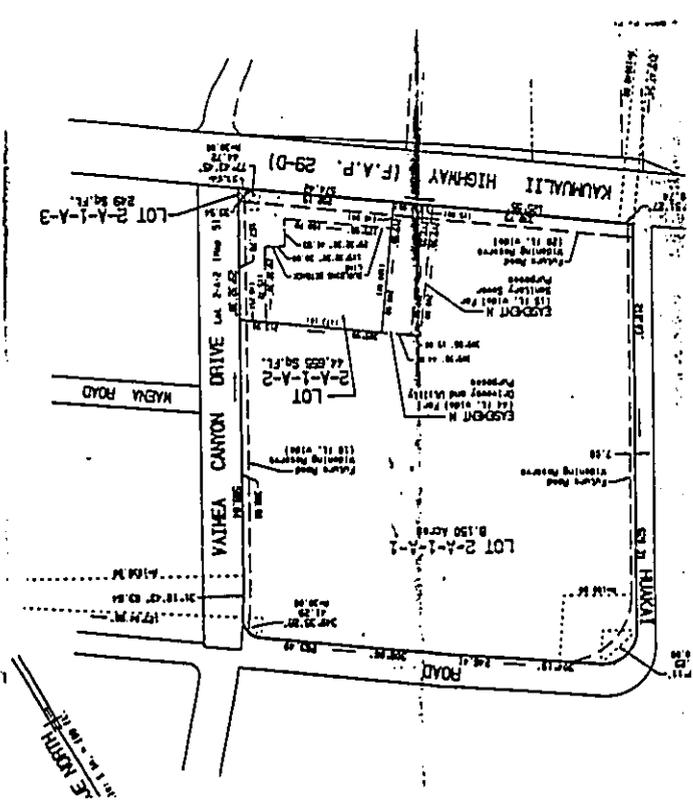
Should you have any questions please contact Myles Hironaka of my staff at 241-6677.

Dee M. Crowell
DEE M. CROWELL
Planning Director

cc: Office of Economic Dev.

Kapule Building • 4444 Rice Street, Suite 473 • Lihue, Kauai, Hawaii 96766
AN EQUAL OPPORTUNITY EMPLOYER

LAND COURT
STATE OF HAWAII
LAND COURT APPLICATION 937
SUBDIVISION OF LOT 2-A-1-A AS SHOWN ON MAP 11
INTO LOTS 2-A-1-A-1, 2-A-1-A-2 AND 2-A-1-A-3.
DESIGNATION OF EASEMENTS M AND N AFFECTING LOT 2-A-1-A-1
DESIGNATION OF FUTURE ROAD WIDENING RESERVES
AFFECTING LOTS 2-A-1-A-1 AND 2-A-1-A-2
AND DESTINATION OF BUILDING SETBACK LINE
AFFECTING LOT 2-A-2-A-2
KIKIOLA, WAIMEA, KAUAI, HAWAII
BELT COLLINS &
PLANNING DEPARTMENT
STATE OF HAWAII
NOVEMBER 11, 1997
OWNER: KIKIOLA LAND COMPANY, LIMITED
TRANSFER CERTIFICATE OF TITLE: 54,022





GROUP 70
INTERNATIONAL

- Frank S. Oaki, AIA, ACP
- Namun G.Y. Hoeg, AIA
- Steph H. Seaman, AIA, AUP
- Hiroshi Hada, AIA
- Ray H. Nohel, AIA, CA
- James J. Nishimoto, AIA
- Rajesh E. Prabhakar, AICP
- Stephen H. Yuen, AIA
- Linzi L. Chung, AIA
- Paul P. Clancy, AIA
- Dean H. Kamaura, AIA
- Armeda J. Scott, AIA
- Stephen F. Callo, CPA
- George I. Aul, ACP
- Kelley H. Ovenson, AICP
- Kathryn A. Nam
- Ray A. Inouye
- Mary J. O'Leary

December 8, 1997

Mr. Dee M. Crowell, Planning Director
County of Kauai
Planning Department
4444 Rice Street, Suite 473
Lihue, Hawaii 96766

Dear Mr. Crowell:

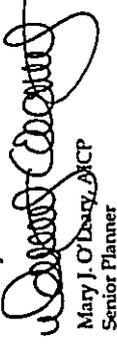
Subject: Waimea Visitor and Techno Center
Draft Environmental Assessment

Thank you for your November 13, 1997 letter regarding the Draft Environmental Assessment (EA) for the proposed Waimea Visitor and Techno Center. We acknowledge that your office does not have any comments to offer on the Draft EA at this time. We also acknowledge that your office is in receipt of a Class IV Zoning Permit Application for the proposed project. We will forward a copy of the Final EA for your information upon its completion.

Your letter and this response letter will be included in the Final Environmental Assessment. We appreciate your input for this project.

GROUP 70 INTERNATIONAL, INC.

Sincerely,


Mary J. O'Leary, AICP
Senior Planner

cc: Mr. John Isobe, President, Kauai Economic Development Board

[Faint, illegible text at the bottom of the page]

Appendix A

References

APPENDIX A - REFERENCES

- Austin, Tsutsumi & Associates, Inc. May 1997. Kauai Long-Range Land Transportation Plan. Prepared for the State of Hawaii Department of Transportation in cooperation with the County of Kauai Department of Public Works and Planning Department.
- Belt, Collins & Associates, Ltd. September 9, 1977. Waimea - Kekaha Regional Development Plan. Prepared for the County of Kauai, State of Hawaii.
- County of Kauai, Planning Department. Zoning Map.
- County of Kauai, Planning Department. The General Plan for the County of Kauai. General Plan Map.
- Federal Emergency Management Agency. September 30, 1995. Flood Insurance Rate Maps: Kauai County.
- Group 70 International, Inc. January 1997. Waimea visitor and Techno Center Feasibility Study. Prepared for the Kauai Economic Development Board.
- Hammatt, Hallett H. Ph. D. and Rodney Chiogioji, B.A. Cultural Surveys Hawaii. November 1996. Archaeological and Historical Assessment and Field Inspection of Kikiaola Lands in the Ahupuaa of Waimea, Kona District, Island of Kauai. Prepared for Belt Collins Hawaii.
- Hawaii State Department of Business, Economic Development and Tourism. June 1994. The State of Hawaii Data Book 1993-94.
- Kikiaola Land Company. 1996. Kikiaola Land Company Development Opportunities.
- Ng, Julian, Incorporated. October 1997. Traffic Impact Analysis Report - Techno Center - Waimea, Kauai. Prepared for the Kauai Economic Development Board.
- United States Department of Agriculture, Soil Conservation Service. December 1973. Soil Survey of the Island of Kauai.
- University of Hawaii, Department of Geography. 1983. Atlas of Hawaii, Second Edition.

Appendix B

Letter from the State Historic
Preservation Division

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



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

DEPUTIES

GILBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT
PROGRAM

AQUATIC RESOURCES
CONSERVATION AND

RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION

LAND DIVISION
STATE PARKS
WATER AND LAND DEVELOPMENT

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

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

October 17, 1997

Ms. Mary O'Leary, AICP
Group 70 International
925 Bethel Street, Fifth Floor
Honolulu, Hawaii 96813

LOG NO: 20315
DOC NO: 9710tm12
Architecture

Dear Ms. O'Leary:

SUBJECT: Proposed Waimea Visitor and Techno Center
TMK: I-6-008:portion of 006, Waimea, Kauai

Thank you for submitting the maps of the proposed area for the Waimea Visitor and Techno Center. The various historic maps indicate that the proposed site for the Center has been in active cultivation for many years and has therefore been previously disturbed. Therefore, we concur that an archaeological subsurface reconnaissance of the project site is not required at this time.

We look forward to reviewing the environmental assessment. Thank you for keeping us informed. Should you have further questions, please call Tonia Moy at 587-0005.

Aloha,

A handwritten signature in black ink, appearing to read "Don Hibbard".

DON HIBBARD, Administrator
State Historic Preservation Division

TM:jk

Letter to State Historic Preservation Office
Waimea Visitor and Techno Center EA
October 28, 1997
page 2

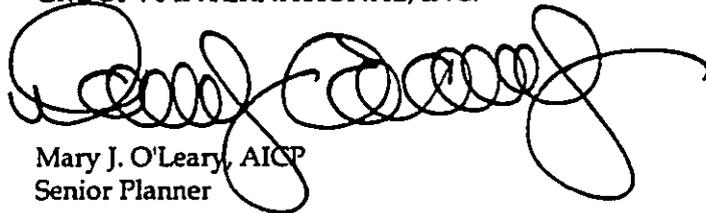
Historical Maps

Enclosed are photocopies of portions of three maps from the Waimea Sugar Mill Company dated "1913", "June 1928", and "August 16, 1937". The maps depict the site and adjacent land as having been actively cultivated in sugarcane as early as 1913. "Field 14" remained in sugarcane until the site was leased to Pioneer Seed Company in 1993 which has since continually planted the lot in seed corn and sunflower crops. Figure 2 contains photographs of "Field 14" taken earlier this year.

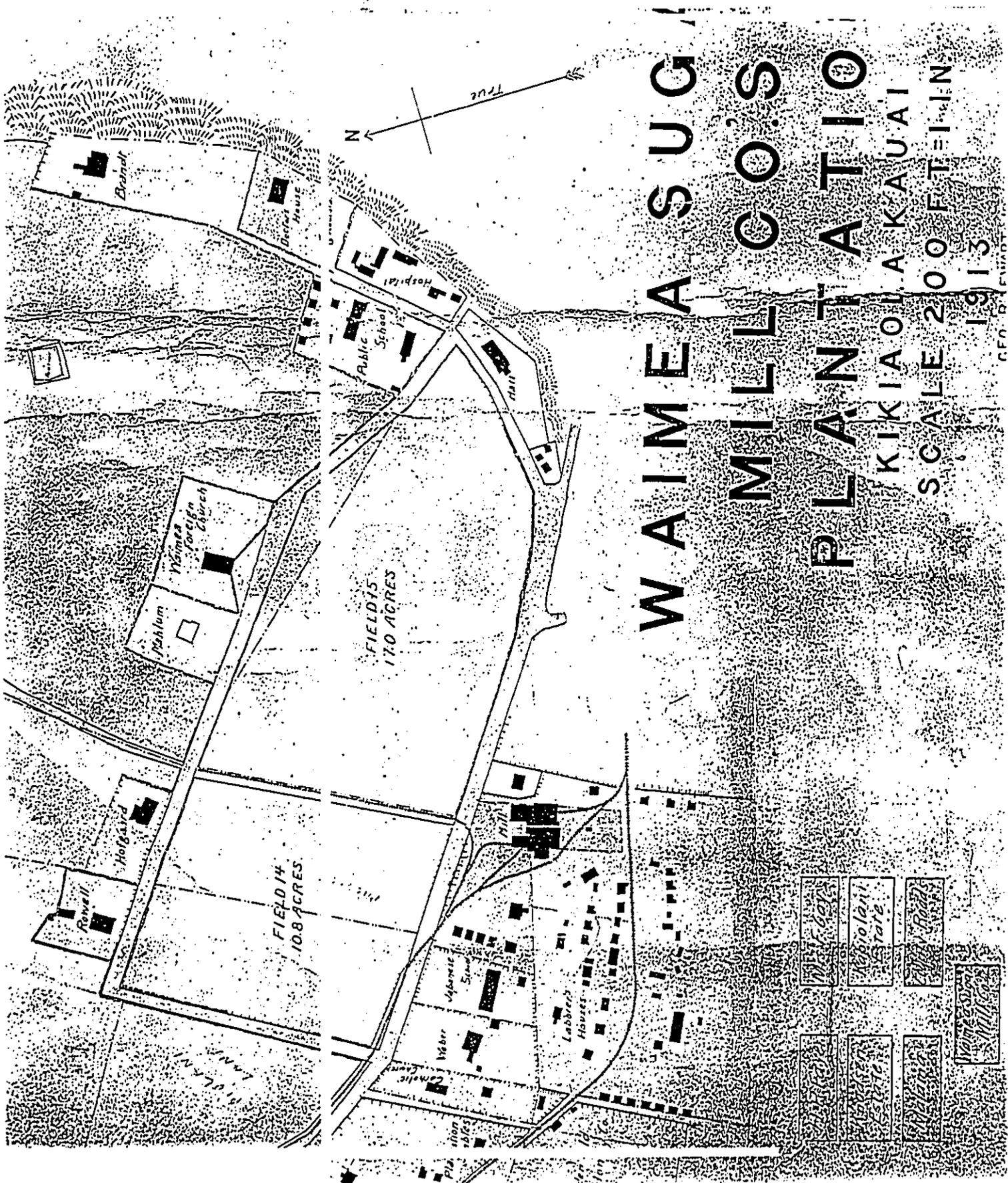
We appreciate your review of the enclosed materials and look forward to receiving your response regarding our request. Should you have any questions, please feel free to contact me at 523-5866.

Sincerely,

GROUP 70 INTERNATIONAL, INC.

A handwritten signature in black ink, appearing to read "Mary J. O'Leary". The signature is stylized and cursive, with a large initial "M" and "J".

Mary J. O'Leary, AICP
Senior Planner

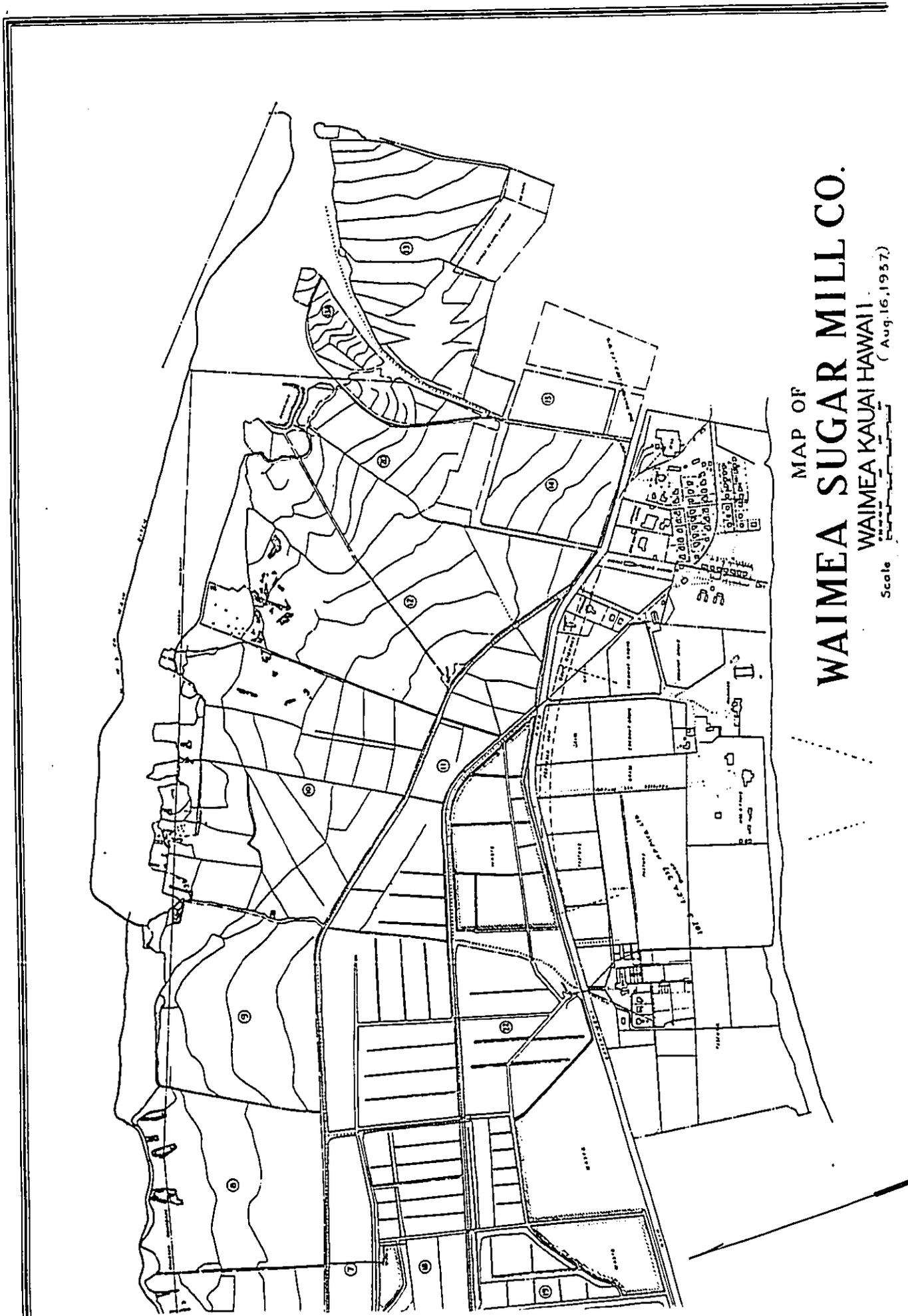


WAIMĒA SUGAR
 PLANTATION

KIKIAO, KAUAI
 SCALE 200 FEET = 1 IN
 1913

C.F. & F.

DOCUMENT CAPTURED AS RECEIVED



Appendix C

Traffic Impact Analysis Report

▶ TRAFFIC IMPACT ANALYSIS REPORT
TECHNO CENTER
WAIMEA, KAUAI

▶ October, 1997

▶ prepared for:
Kauai Economic Development Board

▶ prepared by:
Julian Ng, Incorporated
P. O. Box 816
Kaneohe, Hawaii 96744

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**TRAFFIC IMPACT ANALYSIS REPORT
WEST KAUAI TECHNO CENTER**

Waimea, Kauai

October 1997

The Kauai Economic Development Board has proposed to develop a technology and visitor center ("Techno Center") in Waimea, Kauai, on a site on the northwest corner of the intersection of Kaumualii Highway and Waimea Canyon Drive. The Techno Center will include displays of technological activities occurring in west Kauai. This report has been prepared to address existing and near-term future conditions at the intersection of Kaumualii Highway and Waimea Canyon Drive and to evaluate alternative access patterns for the site. While other development of the area has been discussed by the major land owner in the area, the Kikiaola Land Company, conditions for a longer-term future are not addressed herein because plans for other projects have not yet been formalized.

This report includes analyses of intersection conditions. Operating conditions are described by a level of service (LOS) which is determined using analyses methods described in the *Highway Capacity Manual*¹. At unsignalized intersections, the volumes of the uncontrolled movements affect the capacity available for the other movements which must yield or stop. The *Highway Capacity Manual* procedures identify average delays and levels of service for each controlled movement. These Levels of Service (LOS) are defined using the letters A through F:

<u>LOS</u>	<u>Average delay (seconds)</u>	<u>General Description</u>
A	≤5 seconds	Little or no delay
B	>5 and ≤10 seconds	Short traffic delays
C	>10 and ≤20 seconds	Average traffic delays
D	>20 and ≤30 seconds	Long traffic delays
E	>30 and ≤45 seconds	Very long traffic delays
F	>45 seconds	Very long traffic delays

EXISTING CONDITIONS

The project site is currently unused agricultural lands located west of Waimea, on the western part of the island of Kauai (see Exhibit 1). Existing uses in the vicinity include a hotel (Waimea Plantation Cottages) to the west, the Kauai Veterans' Hospital, Waimea Park, Waimea School, and the existing Kikiaola residential subdivision.

¹ Transportation Research Board, National Research Council, *Highway Capacity Manual* - Third Edition, Washington, D.C., 1994.

The project is located at the intersection of Kaumualii Highway, a State highway serving the western part of Kauai, and Waimea Canyon Drive. Waimea Canyon Drive has a 10-foot wide lane in each direction with minimal shoulders and its posted speed limit is 25 miles per hour (mph). Southbound traffic on Waimea Canyon Drive is controlled by a stop sign at the intersection with Kaumualii Highway, where a single lane is shared by traffic turning right or left onto the highway. A driveway is located south of the intersection opposite Waimea Canyon Drive.

To the east of the intersection, Kaumualii Highway is a curbed local street through the town of Waimea, 40 feet wide between curbs with a 12-foot lane and marked parallel parking spaces in each direction. Farther east, the highway becomes a two-lane rural highway with 12-foot lanes and 6-foot shoulders after it leaves Waimea. West of Waimea Canyon Drive, the highway is a two-lane rural highway with 12-foot lanes and paved shoulders varying in width from 3 to 8 feet. Posted speed limit on the highway near the intersection is 25 mph.

Existing traffic conditions described herein are for year 1996. Past traffic count data² at the intersection of Kaumualii Highway and Waimea Canyon Drive were used in the analysis. Table 1 shows the 24-hour counts taken at the intersection since 1981. A linear regression of the average traffic counted at the intersection indicates that daily traffic at the intersection has been increasing by approximately 330 vehicles each year. Exhibit 2 illustrates the trend in traffic volumes at the intersection.

Table 1
DAILY TRAFFIC AT INTERSECTION

	<u>Reported volumes</u>	
	<u>entering</u>	<u>exiting</u>
February 1981	8,828	8,828
April 1983	8,685	8,685
May 28-29, 1985	9,752	9,707
May 5-6, 1987	11,042	10,759
September 18-19, 1989	11,248	10,654
September 30-October 1, 1991	11,664	11,387
October 11-12, 1993	11,684	11,974
June 19-20, 1995	12,707	13,142

² State of Hawaii, Department of Transportation, Highways Division, *Traffic Survey Data (Individual Stations) - Island of Oahu, 1994.*

Because these counts included only approaches and departures from the intersection and the latest counts were taken during the summer, a manual count of turning movements was taken at the intersection of Kaumualii Highway and Waimea Canyon Drive during a weekday morning peak period and a weekday afternoon peak period. The data from the manual count are shown in an appendix to this report and the peak hour volumes are shown in Exhibit 3. The unsignalized intersection analysis of these volumes indicate that traffic stopped on Waimea Canyon Drive experience average delays during the peak hours. The results of the analysis, shown in Table 2, reflect observations made in the field during the manual count.

Table 2
UNSIGNALIZED INTERSECTION ANALYSIS - EXISTING TRAFFIC
Kaumualii Highway and Waimea Canyon Drive

	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>delay</u>	<u>LOS</u>	<u>delay</u>	<u>LOS</u>
Shared lane (stop) from Waimea Canyon Drive	14.9	C	17.7	C
Eastbound left Turn (yield) from highway	3.9	A	3.7	A

delay = average total delay, in seconds, per vehicle
LOS = unsignalized intersection level of service

FUTURE CONDITIONS WITHOUT PROPOSED PROJECT

Future conditions were evaluated for year 2000. Without the proposed project, daily traffic at the intersection could be expected to increase at the same rate as the recent past. The annual increase of 330 vehicles per day indicated by the past counts would mean an increase of approximately 9.9% in traffic between 1996 and 2000. The traffic volumes counted in April 1996 at the intersection were increased by this amount and the intersection was reevaluated. Table 3 shows the results of the unsignalized intersection analysis for the future without project traffic assignments shown in Exhibit 3

Table 3
UNSIGNALIZED INTERSECTION ANALYSIS
FUTURE (2000) WITHOUT PROJECTS
Kaumualii Highway and Waimea Canyon Drive

	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>delay</u>	<u>LOS</u>	<u>delay</u>	<u>LOS</u>
Shared lane (stop) from Waimea Canyon Drive	19.4	C	24.1	D
Eastbound left Turn (yield) from highway	4.1	A	4.0	A

delay = average total delay, in seconds, per vehicle
LOS = unsignalized intersection level of service

PROPOSED PROJECT

The traffic estimates for the projects were based on projections³ used for the utility analyses for the project. Visitation to the Techno Center is projected at 100 visitors per day. The Techno Center would have 5 employees and would be open six days per week, between 8:00 AM and 5:00 PM.

The traffic generated by the project was distributed onto Kaumualii Highway and Waimea Canyon Drive in proportion to the existing volumes approaching and departing the intersection of these roadways. Table 4 shows the project traffic estimates.

Table 4
PROJECT TRAFFIC

	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>enter</u>	<u>exit</u>	<u>enter</u>	<u>exit</u>
North on Waimea Canyon Drive	1	0	0	1
East on Kaumualii Highway	4	1	1	7
West on Kaumualii Highway	4	1	2	6

Kikiaola Land Company, owners of the properties adjacent to the Techno Center site, have indicated⁴ that access to the project site would be provided by a driveway to Kaumualii Highway located adjacent to and west of the site; a second access could be provided by a driveway to Waimea Canyon Drive north of the site. These driveways would also provide access to future development located north of the Techno Center.

Exhibit 4 shows the traffic assignments for Alternative A, in which the project traffic to and from the highway have been assumed to use the west driveway, which would connect to the highway west of the site, while traffic to and from Waimea Canyon Drive would use a driveway that is located north of the site. Exhibit 5 shows the traffic assignments for Alternative B1, in which a clockwise one-way pattern is established for project traffic. In Alternative B, the west driveway would be used by all entering traffic, while all exiting traffic will use the north driveway. Exhibit 6 shows the traffic assignments Alternative B2, in which the clockwise one-way pattern remains within the site and exits directly onto Waimea Canyon Drive at a driveway along the project site frontage.

The intersection of Kaumualii Highway and Waimea Canyon Drive was reevaluated with the additional traffic for each alternative. The two driveways were also evaluated as unsignalized intersections. Tables 5 and 6 summarize the findings of the capacity analysis.

³ Source: Belt Collins Hawaii

⁴ oral communication from Ms. Linda Collins, Kikiaola Land Company (October 3, 1997)

Table 5
 UNSIGNALIZED INTERSECTION ANALYSIS
 FUTURE (2000) WITH PROJECT
 Alternative A

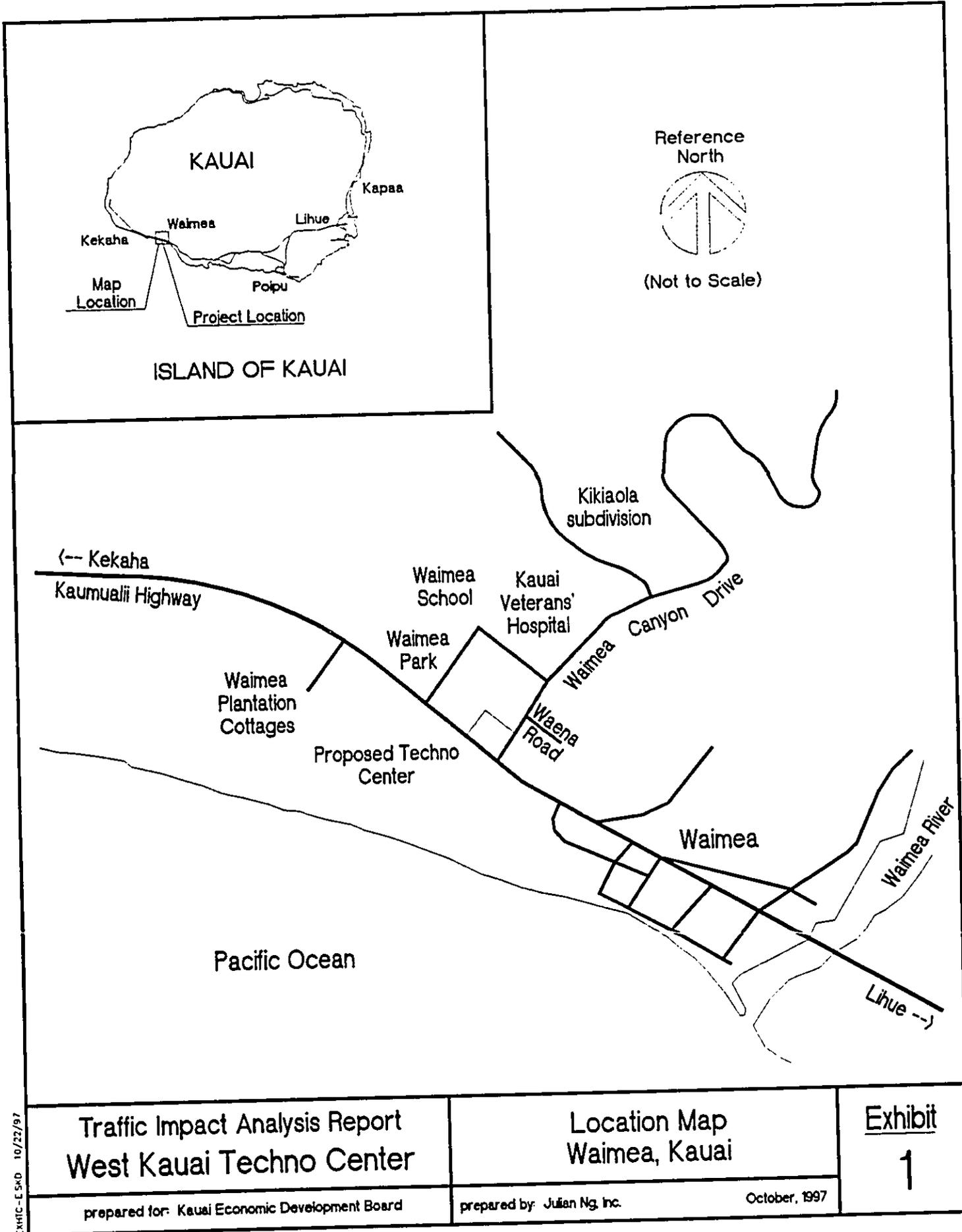
	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>delay</u>	<u>LOS</u>	<u>delay</u>	<u>LOS</u>
Kaumualii Highway and west driveway				
Shared lane (stop) from driveway	9.4	B	10.0	B
Eastbound left Turn (yield) from highway	3.8	A	3.6	A
Kaumualii Highway and Waimea Canyon Drive				
Shared lane (stop) from Waimea Canyon Drive	19.4	C	24.1	D
Eastbound left Turn (yield) from highway	4.2	A	4.0	A
Waimea Canyon Drive and north driveway				
Shared lane (stop) from driveway	-	-	4.7	A
Northbound left Turn (yield) from street	-	-	-	-

delay = average total delay, in seconds, per vehicle
 LOS = unsignalized intersection level of service

Table 6
 UNSIGNALIZED INTERSECTION ANALYSIS
 FUTURE (2000) WITH PROJECT
 Alternatives B1 and B2

	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>delay</u>	<u>LOS</u>	<u>delay</u>	<u>LOS</u>
Kaumualii Highway and west driveway				
Shared lane (stop) from driveway	-	-	-	-
Eastbound left Turn (yield) from highway	3.8	A	3.6	A
Kaumualii Highway and Waimea Canyon Drive				
Shared lane (stop) from Waimea Canyon Drive	19.5	C	25.7	D
Eastbound left Turn (yield) from highway	4.2	A	4.0	A
Waimea Canyon Drive and north driveway				
Shared lane (stop) from driveway	3.0	A	3.2	A
Northbound left Turn (yield) from street	-	-	-	-

delay = average total delay, in seconds, per vehicle
 LOS = unsignalized intersection level of service



CONCLUSIONS AND RECOMMENDATIONS

The proposed project is located near the existing intersection of Kaumualii Highway and Waimea Canyon Drive. The existing stop control on traffic approaching on Waimea Canyon Drive causes some delays during peak hours; however, levels of service for all movements at the intersection are at acceptable Level of Service C or better.

Traffic volumes at the intersection have been increasing and are expected to continue to increase. For future conditions without the proposed project, delays at the intersection will be greater but the unsignalized intersection will continue to provide adequate service. The level of service for stopped traffic using a shared lane on Waimea Canyon Drive may worsen to Level of Service D, which would still be acceptable.

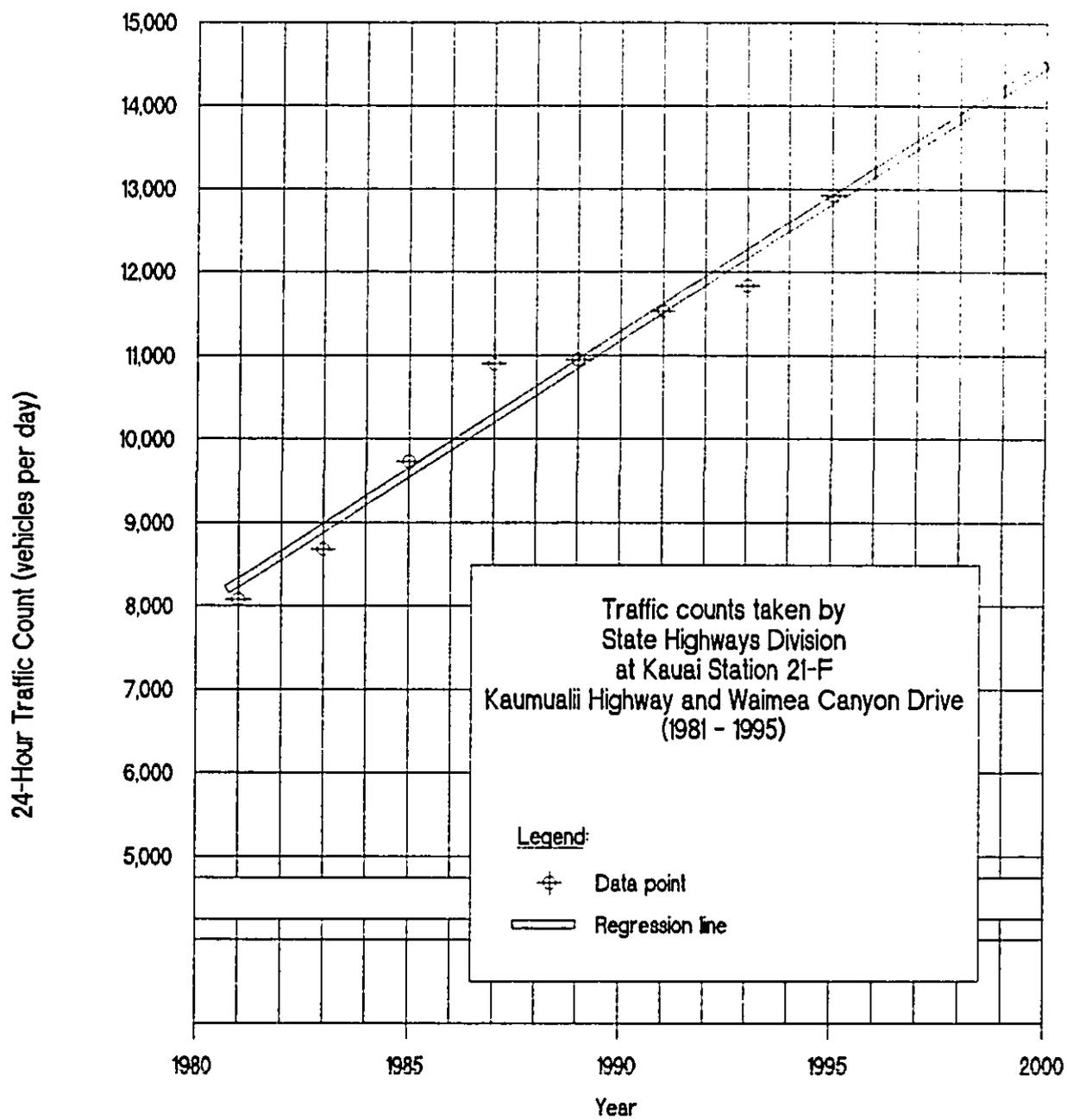
The increase in traffic generated by the proposed project will be less than one percent of the existing traffic, compared to a growth of about ten percent by year 2000 if recent traffic increases continue. The impact of the project on the intersection of Kaumualii Highway and Waimea Canyon Drive will be minor, with slight increases in delays but future levels of service would not change. The existing shared lane on Waimea Canyon Drive will continue to be adequate.

Driveways to Kaumualii Highway and to Waimea Canyon Drive have been proposed. Alternatives for circulation within the site are being considered. In one alternative, in and out movements would be permitted at each driveway; in other alternatives, a one-way pattern would be established for site traffic, in which site traffic would enter from Kaumualii Highway and exit onto Waimea Canyon Drive. The capacity analyses of the intersection and driveway connections indicate minor differences among the alternatives. Acceptable conditions in all alternative were found.

The west driveway is located near the midpoint of two existing intersections with the highway. A greater spacing between Waimea Canyon Drive and the highway access would result with this driveway than if a direct access from the site to the highway were provided. Similarly, a north driveway located off-site will be farther north along Waimea Canyon Drive than a driveway along the project site frontage; if this driveway is used, it should be located opposite an existing local street, Waena Road.

If a one-way pattern on the site is used, the exit driveway could be located on the site frontage, since left turns in from Waimea Canyon Drive would not be permitted. This driveway should be located as far north as possible, to minimize any interference from the intersection with Kaumualii Highway.

* * *



EMHC-E SMD 10/22/97

Traffic Impact Analysis Report
 West Kauai Techno Center

Recent Traffic Trend

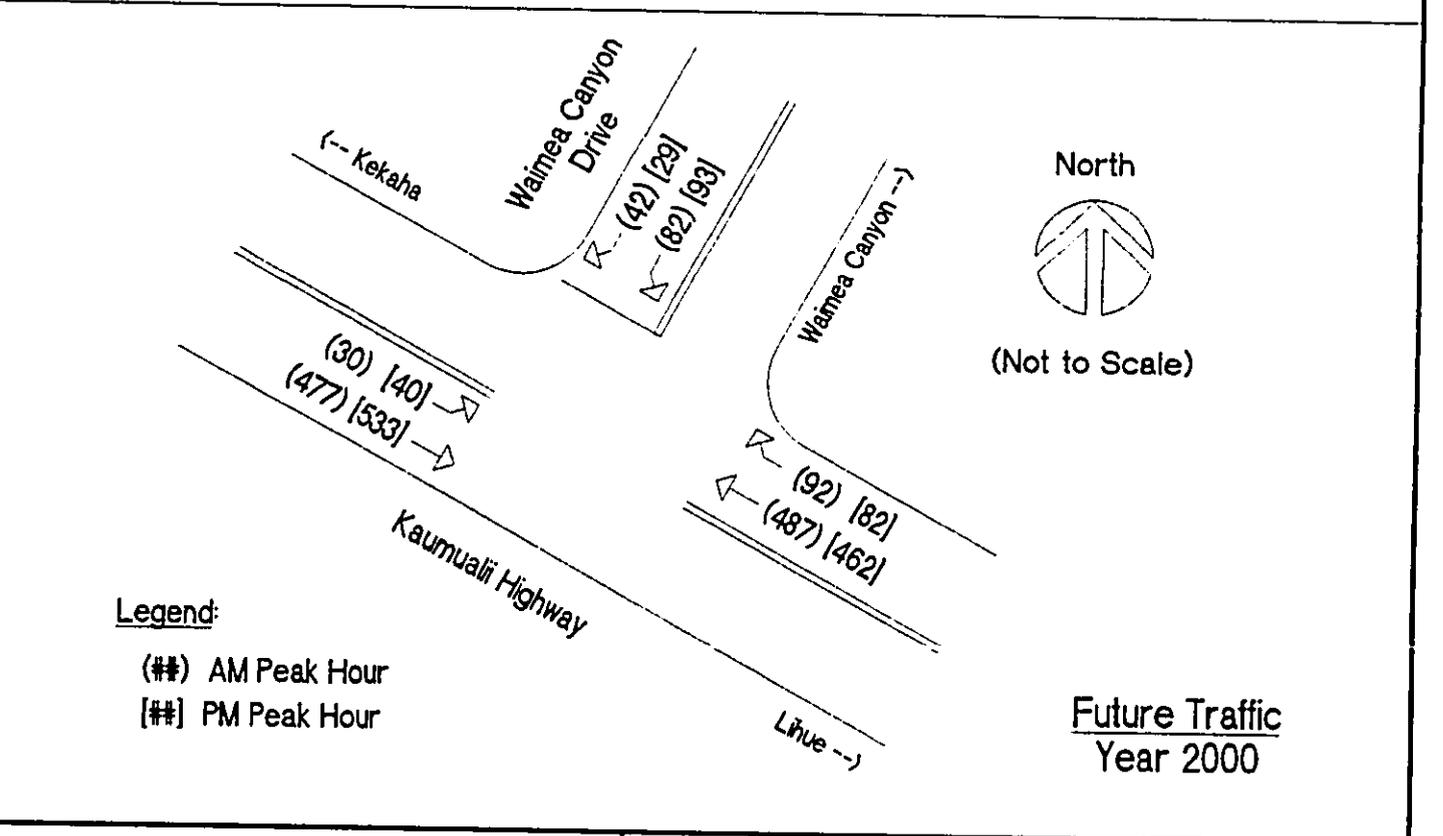
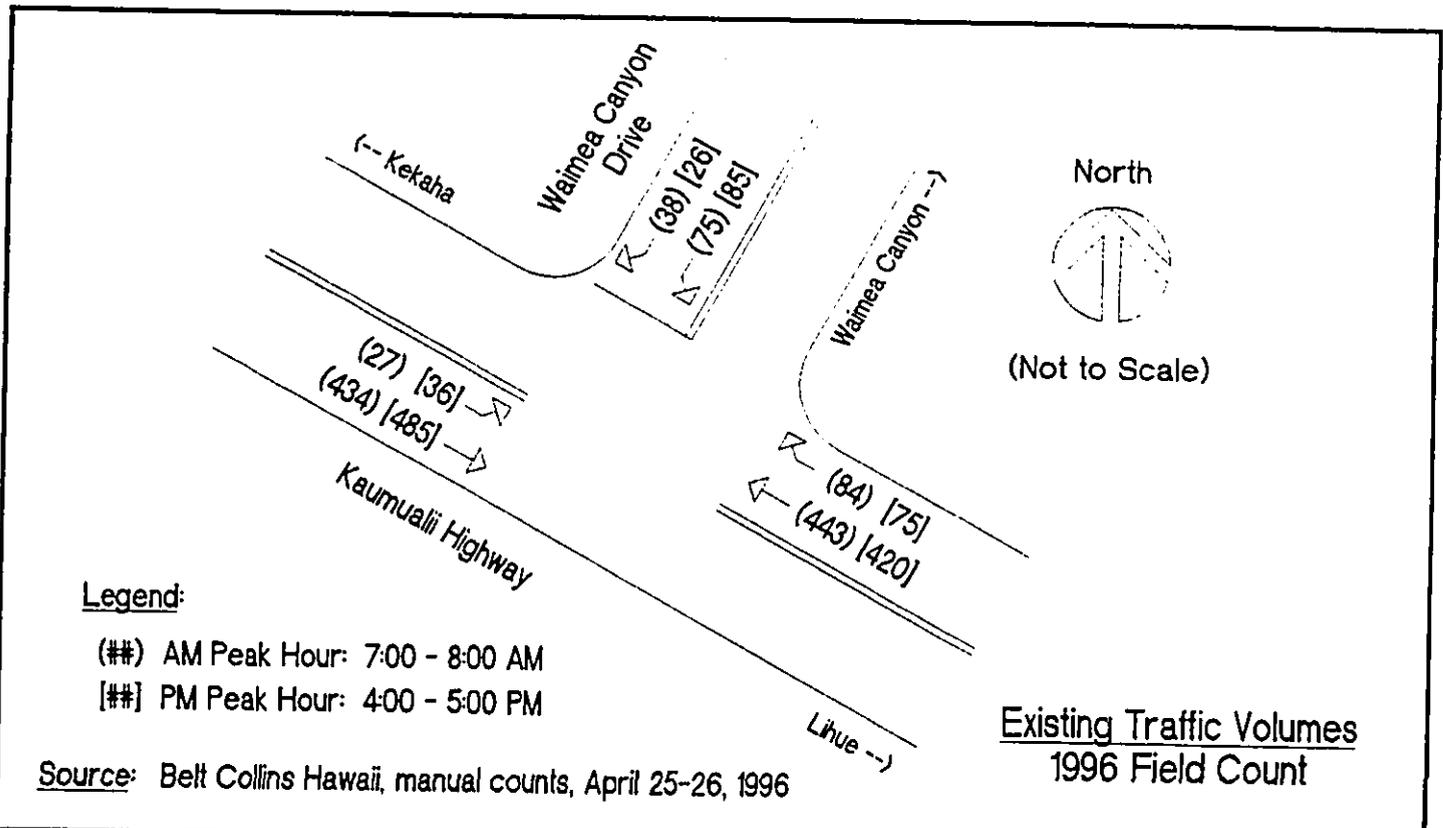
Exhibit

2

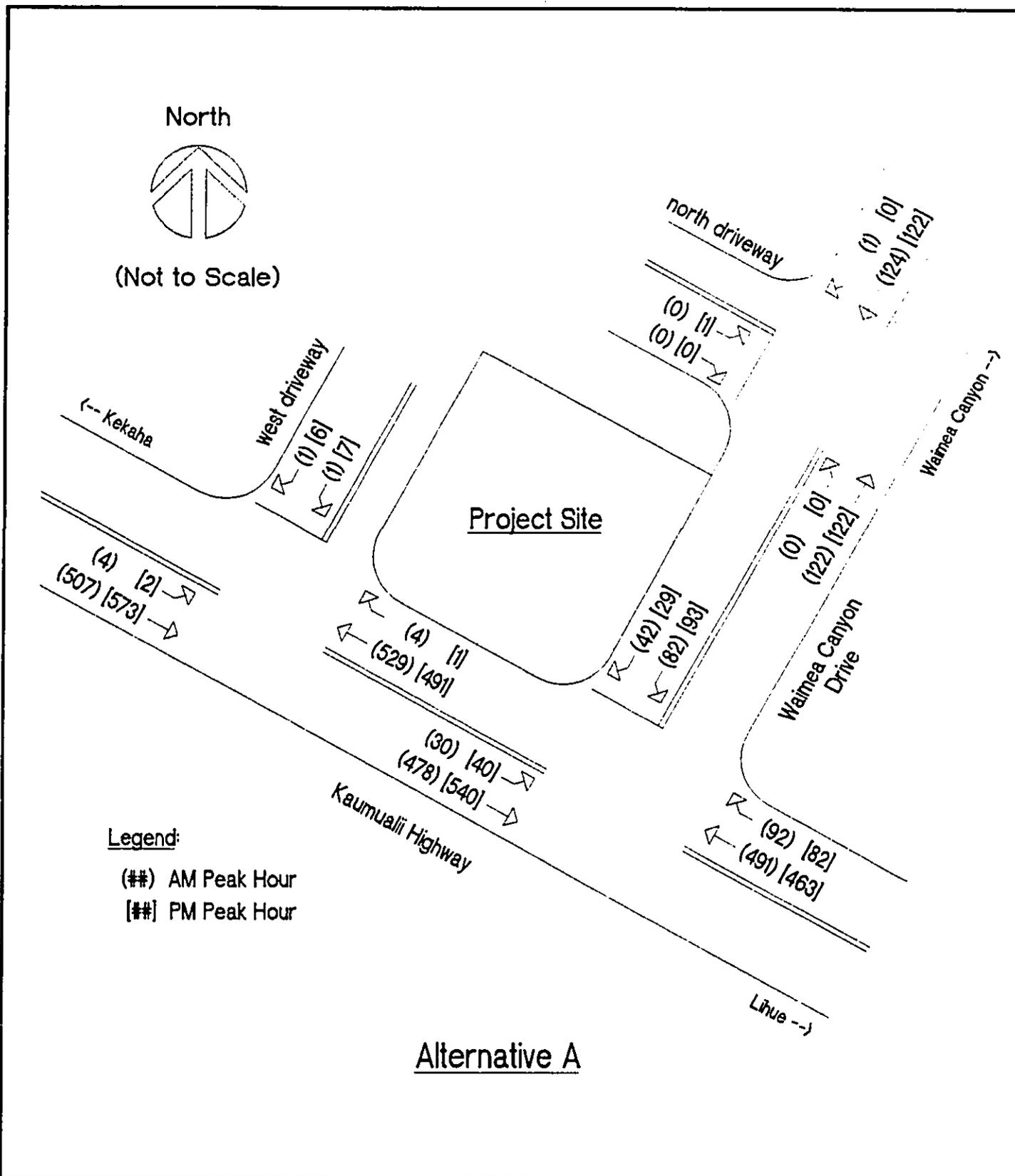
prepared for: Kauai Economic Development Board

prepared by: Julian Ng, Inc.

October, 1997



EMIC-E SKD 10/22/97	Traffic Impact Analysis Report West Kauai Techno Center	Traffic Assignments Without Project	Exhibit 3
	prepared for: Kauai Economic Development Board	prepared by: Julian Ng, Inc.	October, 1997



EMHC-ES&D 10/22/97

<p>Traffic Impact Analysis Report West Kauai Techno Center</p>	<p>Traffic Assignment Future (2000) With Project</p>	<p>Exhibit 4</p>
<p>prepared for: Kauai Economic Development Board</p>	<p>prepared by: Julian Ng, Inc. October, 1997</p>	

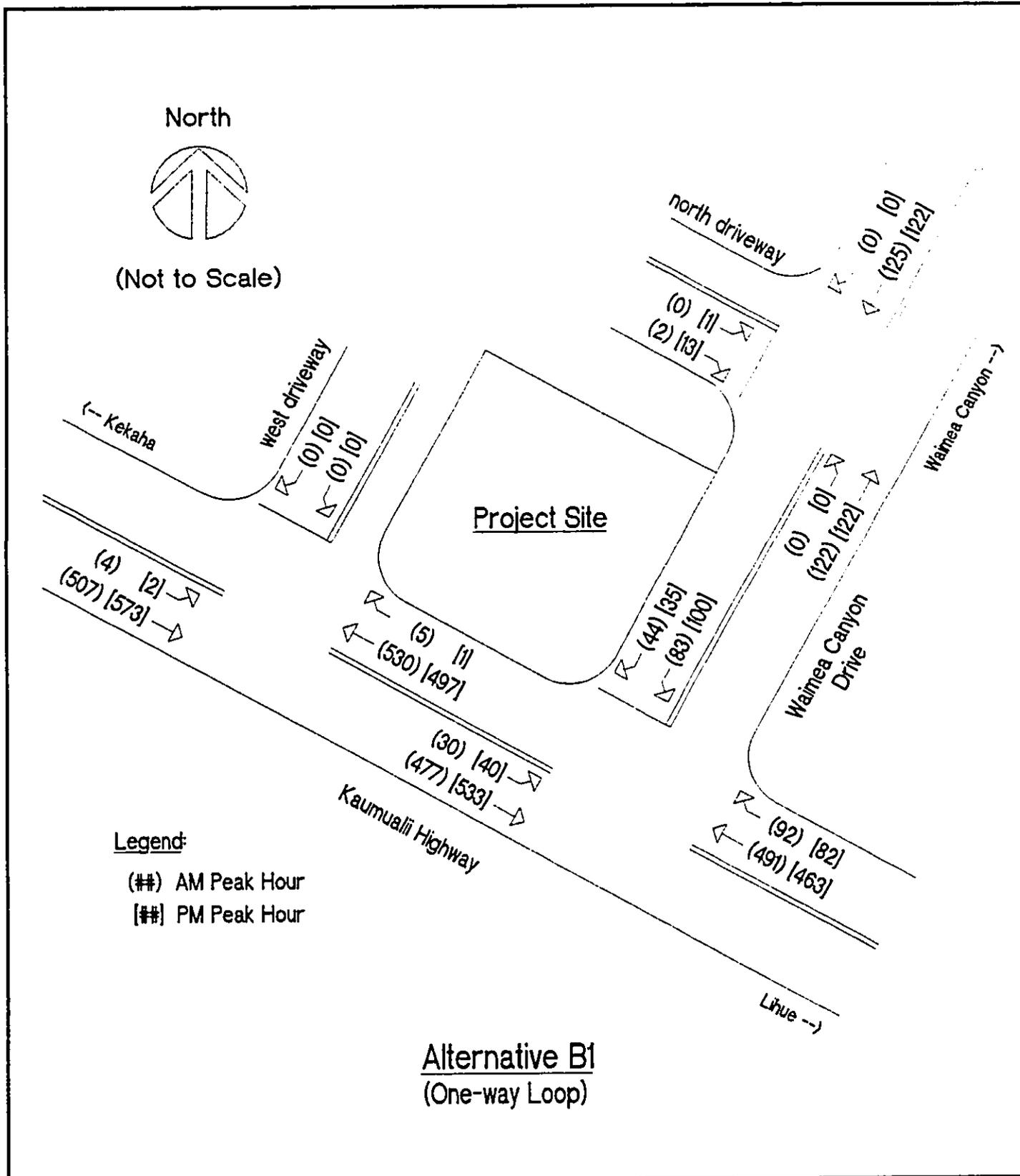
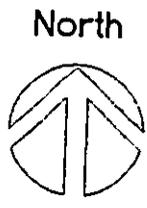
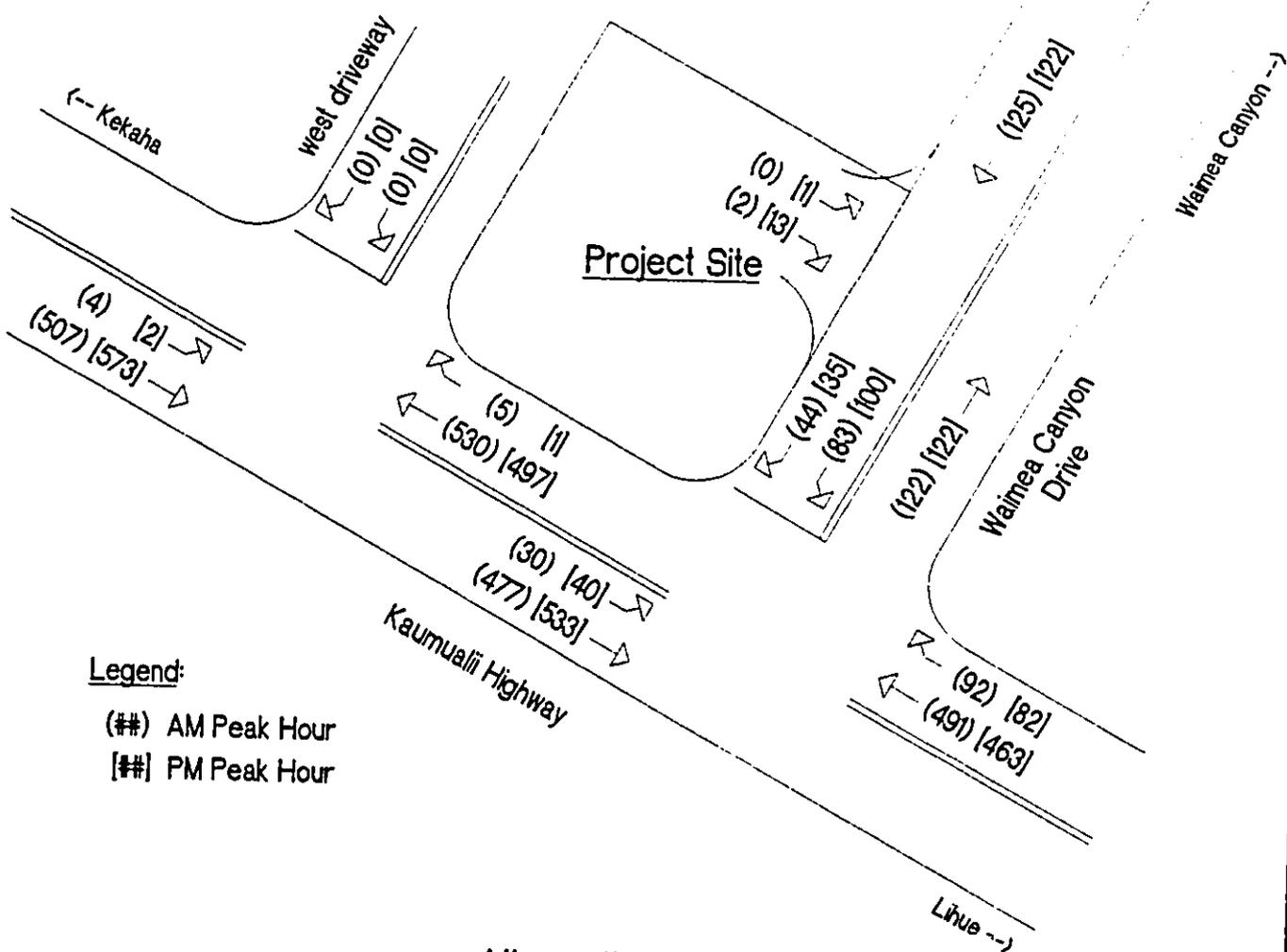


EXHIBIT-ESKD 10/22/97

<p>Traffic Impact Analysis Report West Kauai Techno Center</p>	<p>Traffic Assignment Future (2000) With Project</p>	<p>Exhibit 5</p>
<p>prepared for: Kauai Economic Development Board</p>	<p>prepared by: Julian Ng, Inc. October, 1997</p>	



North
(Not to Scale)



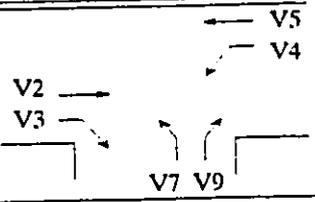
Legend:
 (##) AM Peak Hour
 [##] PM Peak Hour

Alternative B2
 (One-way Loop)

EXHIBIT - ESKD 10/22/97

<p>Traffic Impact Analysis Report West Kauai Techno Center</p>	<p>Traffic Assignment Future (2000) With Project</p>	<p>Exhibit</p>
<p>prepared for: Kauai Economic Development Board</p>	<p>prepared by: Julian Ng, Inc. October, 1997</p>	<p>6</p>

Appendix – Field Count Data

		Kaumualii Highway and Waimea Canyon Drive						
		Count by: Belt Collins Hawaii						
		Movement						
		V2	V3	V4	V5	V7	V9	Total
Thursday, April 25, 1996								
02:00 PM – 02:15 PM	101	15	4	130	36	10	296	
02:15 PM – 02:30 PM	54	13	8	116	20	5	216	
02:30 PM – 02:45 PM	88	15	9	110	26	5	253	
02:45 PM – 03:00 PM	89	25	12	85	33	12	256	
03:00 PM – 03:15 PM	101	10	11	109	19	7	257	
03:15 PM – 03:30 PM	83	7	7	124	18	6	245	
03:30 PM – 03:45 PM	76	15	9	120	19	7	246	
03:45 PM – 04:00 PM	99	22	3	115	28	10	277	
04:00 PM – 04:15 PM	96	21	8	108	20	8	261	
04:15 PM – 04:30 PM	114	14	10	158	15	6	317	
04:30 PM – 04:45 PM	100	17	12	111	23	3	266	
04:45 PM – 05:00 PM	110	23	6	108	27	9	283	
05:00 PM – 05:15 PM	91	22	7	100	16	3	239	
05:15 PM – 05:30 PM	103	16	7	101	10	9	246	
05:30 PM – 05:45 PM	89	11	9	89	22	7	227	
Total Counted	1,394	246	122	1,684	332	107	3,885	
Friday, April 26, 1996								
06:30 AM – 06:45 AM	75	16	3	65	11	4	174	
06:45 AM – 07:00 AM	64	25	9	58	14	12	182	
07:00 AM – 07:15 AM	129	22	5	82	15	16	269	
07:15 AM – 07:30 AM	124	27	8	117	15	8	299	
07:30 AM – 07:45 AM	127	23	9	122	26	11	318	
07:45 AM – 08:00 AM	63	12	5	113	19	3	215	
08:00 AM – 08:15 AM	57	11	4	84	15	2	173	
08:15 AM – 08:30 AM	51	9	3	82	12	1	158	
08:30 AM – 08:45 AM	54	10	3	50	13	3	133	
Total Counted	744	155	49	773	140	60	1,921	