



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

REGION NINE

Hawaii Division
Box 50206
Honolulu, Hawaii 96850

July 21, 1980

ARIZONA
CALIFORNIA
NEVADA
HAWAII
GUAM
AMERICAN SAMOA

IN REPLY REFER TO
HEC-HI

The Honorable Richard O'Connell
Director
Office of Environmental Quality
Control
Office of the Governor
550 Halekauwila Street
Tani Office Building, Third Floor
Honolulu, Hawaii 96813


Dear Mr. O'Connell:

Subject: Kauai Belt Road, Princeville to Kalihiwai,
Project No. DP-056-1(17)

Enclosed is the Final Environmental Impact Statement for
the subject project. This statement is accepted by the
Governor, State of Hawaii and the U. S. Department of
Transportation, Federal Highway Administration.

Sincerely Yours,

Ralph T. Segawa
Division Administrator

By: 
H. Kasumoto
Assistant Division Administrator

Enclosure

REPORT NUMBER: FHWA-HI-EIS-76-03-F

KAUAI BELT ROAD

KALIHIWAI TO HAENA

FAP Route 56, Kauai, Hawaii

FINAL

Environmental Impact Statement

**Environmental Quality Commission
Office Of The Governor
550 Halekuanila Street
Tanl Office Building, Third Floor
Honolulu, Hawaii 96813**

**U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
and
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION
Highways Division**

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FHWA-HI-EIS-76-03-F

Environmental Quality Commission
Office Of The Governor
550 Halekiauila Street
Tani Office Building, Third Floor
Honolulu, Hawaii 96813

KAUAI BELT ROAD
KALIHIWAI TO HAENA SECTION

FAP Route 56, Kauai, Hawaii

PROJECT NUMBERS:

DP-056-1 (17)
BRF-056-1 (20)
56D-01-70
56D-02-75
F-056-1 (11)

FINAL
ENVIRONMENTAL IMPACT STATEMENT

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
and
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION
Highways Division

*Submitted pursuant to 42 U.S.C. 4332 (2)(C),
and 23 U.S.C. 128(a).*

June 23 1980

Date

Neil Dillough

Director
Office of Environment and Design
Federal Highway Administration
Region Nine

June 13, 1980

Mr. Donald A. Bremner, Chairman
Environmental Quality Commission
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Mr. Bremner:


Subject: Recommendation for Acceptance - Environmental Impact Statement for Kauai Belt Road, Kalihawai to Haena, Kauai

Based upon the recommendation of the Office of Environmental Quality Control, I am pleased to accept the subject document as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes. This environmental impact statement will be a useful tool in the process of deciding whether or not the action described therein should or should not be allowed to proceed. My acceptance of the statement is an affirmation of the adequacy of that statement under the applicable laws, and does not constitute an endorsement of the proposed action.

When the decision is made regarding the proposed action itself, I expect the proposing agency to weigh carefully whether the societal benefits justify the environmental impacts which will likely occur. These impacts are adequately described in the statement, and, together with the comments made by reviewers, provide a useful analysis of alternatives to the proposed action.

With warm personal regards, I remain,

Yours very truly,


George R. Ariyoshi

cc: Mr. Richard L. O'Connell

		<u>No. of Copies</u>
Kauai Community Research Group	Attn: Jennie T. Yukimura RR #1 P.O. Box 28-B Lihue, Kauai 96766	1
Kauai Historical Society President	Attn: Robert J. Schleck P.O. Box 248 Lihue, Kauai 96766	1
The Kauai Outdoor Circle	P.O. Box 921 Lihue, Kauai 96766	1
Life of the Land and Sierra Club	Attn: Helen C. Hopkins P.O. Box 266 Hanalei, Kauai 96714	1
National Trust for Historic Preservation, Regional Director	Attn: John L. Frisbee, III 802 Montgomery St. San Francisco, CA 94133	1
Princeville Corporation	Hanalei, Kauai 96714	1
Shoreline Protection Alliance	Attn: Douglas Meller P.O. Box 4247 Honolulu 96813	1
<u>Private Individuals</u>		
William T. Le Gro	P.O. Box 291 Anahola, Kauai 96703	1
John Wehrheim	P.O. Box 111 Kilauea, Kauai 96754	1
Geraldine A. Wojno	P.O. Box 205 Hanalei, Kauai 96714	1

II. COMMENTS RECEIVED

<u>FEDERAL AGENCIES</u>	<u>Comment Date</u>
Advisory Council on Historic Preservation	4/26/77
Agricultural Stabilization and Conservation Service	4/4/77
Soil Conservation Service	5/9/77
Department of the Army	5/6/77
Department of Health, Education and Welfare	5/11/77
Department of Housing and Urban Development	4/1/77
Department of the Interior	6/9/77
Federal Aviation Administration	4/26/77
U.S. Senate, Hon. Spark Matsunaga	3/31/77
Environmental Protection Agency	4/29/77

<u>STATE OF HAWAII AGENCIES</u>	
Department of Accounting and General Services	4/4/77
Department of Agriculture	5/3/77
Department of Defense	3/29/77
Department of Health	5/3/77
Department of Land and Natural Resources	4/4/77
Division of Fish and Game	4/25/77
Historic Preservation Officer	5/6/77
Office of Environmental Quality Control	5/11/77
College of Tropical Agriculture	4/11/77
Environmental Center	5/10/77

<u>COUNTY OF KAUAI AGENCIES</u>	
Planning Department	4/21 & 4/22/77
Department of Public Works	4/6 & 4/20/77
Department of Water	4/26/77



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX
100 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA 94111

Project No. D-FHW-X40051-HI

F. E. Hawley
Regional Administrator
Federal Highway Administration
Two Embarcadero Center, Suite 530
San Francisco, California 94114

APR 29 1977

Dear Mr. Hawley:

The Environmental Protection Agency has received and reviewed the Draft Environmental Statement for the Kauai Belt Road, Kalihwai to Haena Section (FAP Route 56) Kauai, Hawaii.

EPA's comments on the Draft Environmental Statement have been classified as Category 10-1. Definitions of the categories are provided on the enclosure. The classification and the date of EPA's comments will be published in the Federal Register in accordance with our responsibility to inform the public of our views on proposed Federal actions under Section 309 of the Clean Air Act. Our procedure is to categorize our comments on both the environmental consequences of the proposed action and the adequacy of the environmental statement.

EPA appreciates the opportunity to comment on this Draft Environmental Statement and requests two copies of the Final Environmental Statement when available.

If you have any questions regarding our comments, please contact Patricia Sanderson Port, EIS Coordinator, at (415)556-6266.

Sincerely,

David L. Collins

Paul De Falco, Jr.
Regional Administrator

Enclosure

cc: Council on Environmental Quality

cc: Ralph S. Segawa, Div. Admin
Federal Highways Admin
677 Moana Blvd., Suite 613
Honolulu, Hawaii 96813

EIS CATEGORY CODES

Environmental Impact of the Action

10--Lack of Objections

EPA has no objection to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

1R--Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to reassess these aspects.

EU--Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed further (including the possibility of no action, at all).

Adequacy of the Impact Statement

Category 1--Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2--Insufficient Information

EPA believes that the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3--Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement.

If a draft impact statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make such a determination.

FHWA-HI-EIS-76-03-F

KAUAI BELT ROAD
KALIHIWAI TO HAENA SECTION

FAP Route 56, Kauai, Hawaii

PROJECT NUMBERS:

DP-056-1 (17)

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U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
and
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION
Highways Division

*Submitted pursuant to 42 U.S.C. 4332 (2)(C),
and 23 U.S.C. 128(a).*

Date

Director
Office of Environment and Design
Federal Highway Administration
Region Nine

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SUMMARY

SUMMARY

A. Federal Highway Administration

Administrative Action Environmental Statement

() Draft (X) Final
() Section 4(f) Statement attached

B. The names, addresses, and telephone numbers of individuals at the Federal Highway Administration and State Highways Division who can be contacted for additional information concerning this proposal and statement are:

Mr. Ralph Segawa
Division Administrator
Federal Highway Administration
U.S. Department of Transportation
300 Ala Moana Boulevard, Box 50206
Honolulu, Hawaii 96850

(Telephone Number: 546-5150)

Mr. Tetsuo Harano
Chief, Highways Division
Hawaii Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

(Telephone Number: 548-5711)

C. DESCRIPTION OF THE PROPOSED ACTION

The recommended action consists of widening and curve improvements from Kalihiwai to Princeville. This Final EIS presents "recommended" improvements for the Kalihiwai to Princeville section only, plus an interim maintenance repair program for several of the one-lane bridges. A long-range solution for correcting the deficiencies from Princeville to the end of the highway can not be recommended until a number of significant issues are resolved. (See Appendix F, Section V, "Unresolved Issues"). When these issues are settled, a Supplemental Final EIS will be prepared for the Princeville to Haena section of the highway.

The Proposed action consists of re-grading the highway, increasing the pavement width from 18 feet to 22 feet, and adding 4-foot paved shoulders with 4-foot graded extensions between Kalihiwai and Princeville. Except for improvements to the geometry of several curves, the project will follow the existing alignment. The project length is 1.9 miles and has an estimated cost of about \$3 million.

The Draft EIS (2/23/77) presented alternative proposals for improving the highway and one-lane bridges for the entire unimproved portion of the Kauai Belt Road from Kalihiwai to Haena. However, since the Draft EIS was circulated, the Hanalei, Waioli, and Waipa Bridges have been determined to be eligible to the National register of Historic Places. This initiated a Section 106 (National Historic Preservation Act) review of the State Department of Transportation's plans for the section of highway from the Hanalei Bridge to the end of the highway at Haena. Until all issues, including the Section 106 process, are resolved, a decision on the proposed bridge replacements from Princeville to Haena has been deferred. The Kalihiwai to Princeville section of the highway does not involve the Section 106 process, and the recommended action for this section will not affect the future selection of alternatives for the Princeville to Haena section. Therefore, the decision has been made to proceed with project development from Kalihiwai to Princeville. This Final EIS covers as much as possible for both sections. However, at such time a decision is made to proceed with any of the proposed bridge replacements, a supplement to this Final EIS will be prepared.

In the interim, because of the seriously deteriorated condition of the Hanalei Bridge and others, repair and maintenance will be performed to keep the structures in service until a final program is decided upon. The repairs will not alter the appearance of the bridges, and will not significantly increase their load capacities.

D. SUMMARY OF ENVIRONMENTAL IMPACTS

The primary impact of widening from Kalihiwai to Princeville will be an improvement in the structural and safety aspects of the highway. The appearance of the highway will be altered by re-grading the narrow box-cuts and eliminating the "entrance point" at the end of the previously improved section. However, much of this appearance will have already been altered by the planned addition of an approach to the

privately-developed Anini Vista Estates Subdivision. Physical impacts (soil loss, vegetation removal, etc.) will be minimal, since the improvements will follow the existing alignment. The improvements may encourage growth at Princeville, but this area is planned for development so growth is not necessarily a negative impact. The recommended highway widening will not influence decisions regarding the disposition of the historic bridges.

E. MAJOR ALTERNATIVES CONSIDERED

For reference, the full scope of proposed improvements from Kalihiwai to Haena are summarized here. At the present time, alternative W2 (widening from Kalihiwai to Princeville) and interim repairs to some of the bridges are the only improvements that have been raised to "recommended" status. The remaining proposals described in the 2/23/77 Draft EIS have been deferred. (See the following matrix, "Summary of Alternatives and Impacts" for a complete tabulation of the proposed improvements.)

1. Highway Improvement: Kalihiwai to the Hanalei Bridge

This section has been divided into two segments, Kalihiwai to Princeville (1.9 miles) and Princeville to the Hanalei Bridge (1.7 miles), each of which has two alternatives. Alternative 2 (Kalihiwai to Princeville) is a new highway alignment on the north side of the existing route, and Alternative W is widening the existing highway and realigning dangerous curves. (W1 provides 8-foot paved shoulders and W2 provides 4-foot paved shoulders.) For the Princeville to Hanalei bridge section, Alternative A involves realignment to the northerly side of the road, while Alternative W involves minimal widening and realignment closely along the existing highway. The alternatives differ in their curve radii and approach alignments.

2. Highway Improvement: Hanalei Bridge to Hanalei Town

Several types of elevated alignments were considered as solutions to the problem of road closure from flooding on the Hanalei River but these were rejected on the basis of high cost and environmental impacts. The only alternative being considered for this section is constructing paved shoulders and resurfacing the existing highway.

SUMMARY OF ALTERNATIVES AND IMPACTS

ALTERNATIVE ACTION	STATUS	ENVIRONMENTAL SECTOR										
		LANDFORM	GEOLOGY AND SOILS	WATER RESOURCES	BIOLOGICAL RESOURCES	AIR QUALITY	NOISE	SOCIOECONOMICS	CIRCULATION AND TRAFFIC	SCENIC RESOURCES	HISTORICAL AND ARCHAEOLOGICAL RESOURCES	COST (\$1,000's)
KALIHIWAI TO PRINCEVILLE												
ALTERNATIVE 2 (New Alignment)		A	M	M	O	O	O	M	B	A	O	3006
ALTERNATIVE W ₁ (8-Foot Shoulders)		O	M	M	O	O	O	M	B	M	O	3123
ALTERNATIVE W ₂ (4-Foot Shoulders)	Recommended	O	M	M	O	O	O	M	B	M	O	2981
PRINCEVILLE TO HANAIEI BRIDGE *												
ALTERNATIVE A (Horseshoe Curve)		A	M	M	O	O	O	M	B	A	O	4708
ALTERNATIVE W ₂ (4-Foot Shoulders)		A	M	M	O	O	A	M	B	A	O	3338
ALTERNATIVE W ₃ (Safety Improvements)		O	M	M	O	O	O	M	B	M	O	2346
HANAIEI BRIDGE TO HANAIEI TOWN *												
HANAIEI BRIDGE *												
DESIGN NO. 1A (1-Lane Steel Truss)		O	M	O	M	O	O	M	OA	O	A	558
DESIGN NO. 1B (2-Lane Steel Truss)		O	M	O	M	O	O	M	B	O	A	948
DESIGN NO. 2 (1-Lane Conc. with Mock Truss)		O	M	O	M	O	O	M	OA	O	A	843
DESIGN NO. 3A (2-Lane Conc. with Mock Truss)		O	M	O	M	O	O	M	B	O	A	1015
DESIGN NO. 3B (2-Lane Conc.)		O	M	O	M	O	O	M	B	M	A	702
DESIGN NO. 4 (2-Lane Conc. 550' Downstream)		A	M	O	A	O	O	M	B	A	O	5,112
WAIOLI BRIDGE *												
TWO-LANE		O	M	O	M	O	O	M	B	M	A	496
MAJOR REPAIR		O	O	O	O	O	O	M	OA	O	O	38
WAIIPA BRIDGE *												
TWO-LANE		O	M	O	O	O	O	O	B	M	A	583
MAJOR REPAIR		O	O	O	O	O	O	O	OA	O	O	128
WAIKOKO BRIDGE *												
TWO-LANE		O	M	O	O	O	O	O	B	M	O	394
MAJOR REPAIR		O	O	O	O	O	O	O	OA	O	O	64
WAINIHA BRIDGES 1, 2 AND 3 *												
TWO-LANE		O	M	O	M	O	O	O	B	M	O	1165
MAJOR REPAIR		O	O	O	O	O	O	O	B	M	O	88
HAENA BRIDGES 1 AND 2 *												
TWO-LANE CULVERT		O	M	O	O	O	O	O	B	O	O	389
MAJOR REPAIR		O	O	O	O	O	O	O	OA	O	O	207
MANOA STREAM FORD *												
REPAIR FORD		O	O	O	O	O	O	O	OA	O	O	46
WIDEN FORD		O	M	O	O	O	O	O	B	O	O	58
TWO-LANE CULVERT		O	M	O	O	O	O	O	B	M	O	176
LIMAHULI STREAM CROSSING *												
MAJOR REPAIR		O	O	O	O	O	O	O	OA	M	O	35
TWO-LANE CULVERT		O	M	O	O	O	O	O	B	M	O	163

O - NO IMPACT

B - BENEFICIAL

M - MITIGATABLE TO ACCEPTABLE LEVELS

A - ADVERSE (REFER TO TEXT FOR LEVEL OF SIGNIFICANCE AND WHETHER OR NOT IMPACT IS PARTIALLY MITIGATABLE)

OA - EXISTING ADVERSE CONDITION NOT CORRECTED

* - TO BE COVERED BY SUPPLEMENT TO THIS FINAL EIS

3. Bridge Replacements: Hanalei Bridge to Limahuli Stream

Six alternatives for replacing the Hanalei Bridge have been proposed; one or two-lane steel truss, one or two-lane concrete with mock truss, a modern two-lane bridge design at the present location, and a two-lane modern-style structure located 550 feet downstream from the existing crossing. Either two-lane replacements or major repairs to six existing bridge structures are proposed: the Waioli, Waipa, and Waikoko Bridges, and the three Wainiha Bridges. At Haena, two culverts would either be repaired or replaced with wider structures. At the Manoa Stream Ford, the alternatives consist of either a repaired ford, a repaired and widened ford, or a double-lane culvert. The alternatives proposed for the Limahuli Stream crossing are a double-lane culvert, or repairs to the existing structure.

4. No Project

The "Do-Nothing" alternative (maintaining the highway in its existing condition) could be applied separately to any of the proposed improvements. In each case the effect would be the continuation of substandard highway conditions consisting of poor horizontal alignments, inadequate roadway widths, and structurally unsound bridges. This is not a desirable alternative for the project on an overall basis.

F. CITIZEN PARTICIPATION

Following is a chronological summary of all formal and informal citizen participation in this project.

- | | |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5/30/74 | Information Meeting at Hanalei to discuss roadway improvements from Kalihiwai to Hanalei. |
| 7/9/75 | Draft EIS for Kalihiwai to Hanalei section circulated for public review. (Appendix A of this Final EIS contains a list of respondents and a summary of their comments with references to the Final EIS text.) |

- 8/13/75 Public Hearing at Hanalei to receive formal testimony on proposed improvements from Kalihiwai to Hanalei. (See Appendix A for a list of persons giving testimony.)
- 10/22/75 Information Meeting at Hanalei to discuss all proposed improvements from Kalihiwai to Haena.
- 3/3/76 EIS Preparation Notice for Kalihiwai to Haena section circulated for public review. (See Appendix A for a list of respondents, copies of their comments, and the State DOT's response where required.)
- 3/21/77 Draft EIS for Kalihiwai to Haena section circulated for public review. (Appendix F of this EIS contains a list of all respondents, copies their comments, and evaluations where appropriate. Comments were accepted for approximately 75 days beyond statutory 30-day review period.)
- 4/20-21/77 "Combined Corridor and Highway Design" Public Hearings at Hanalei and Lihue to receive formal testimony on proposed improvements from Kalihiwai to Haena. (See Appendix F for excerpts of testimony relating to the Kalihiwai to Princeville section.)
- 8/24/77 On-going correspondence and informal
to consultation with the North Shore Belt Road
Present Citizens Advisory Committee (established to coordinate citizen action regarding the proposed project).
- 3/22/79 Public Information Meeting at Hanalei held by the Advisory Council on Historic Preservation to discuss and receive testimony on the effect of the proposed improvements with respect to historic preservation concerns.

CHAPTER I

PROJECT DESCRIPTION

CHAPTER I DESCRIPTION OF THE PROPOSED ACTION

A. LOCATION

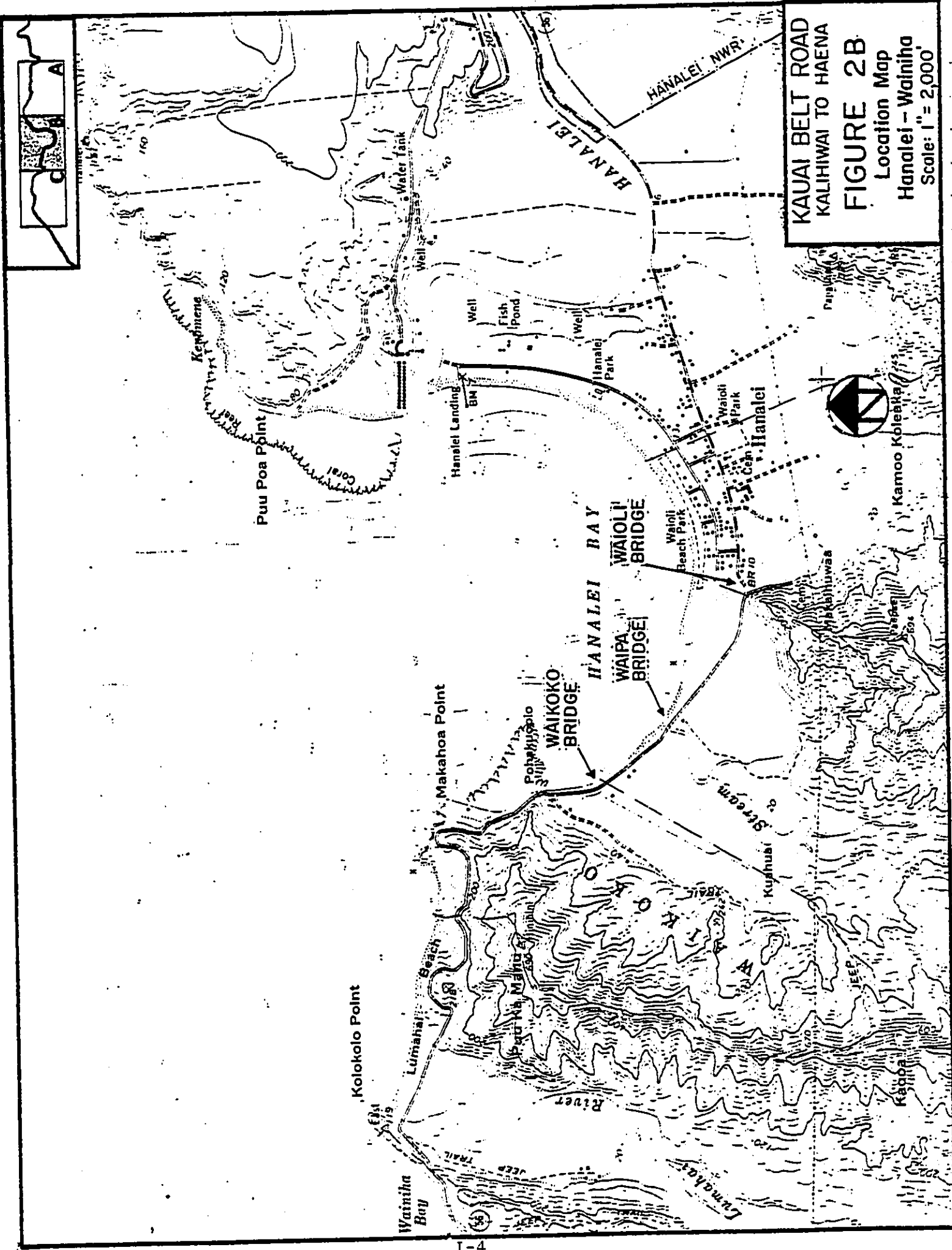
The Kauai Belt Road extends along the coast of the Island of Kauai from Barking Sands on the west coast to Haena on the north. (The Na Pali Coast is without road access). The Kuhio Highway (Federal Aid Primary 56) comprises the segment of the "belt" from Lihue to Haena, a distance of 38 miles. The proposed project involves improvements from near Kalihiwai to the terminus of the highway at Kee Beach near Haena, a total of 12.5 miles (Figures 1 and 2).

B. NEED FOR IMPROVEMENT

1. Structural and Design Deficiencies. In 1969, the County of Kauai transferred jurisdiction of the Kalihiwai to Haena section of the Kuhio Highway to the State Department of Transportation. The State concluded at that time that the two-lane highway, with eleven one-lane bridges, was sub-standard in design and that several of the bridges were in serious need of replacement. The Kuhio Highway has been gradually improved from Lihue to Kalihiwai; the segment presently proposed for improvement is the last to be upgraded.

The Kuhio Highway is the only ground linkage between the North Shore and the rest of Kauai. It must therefore carry all of the resident and visitor traffic and provide emergency access to an area that is subject to both flooding and tsunami inundation. By current highway design standards, the Kauai Belt Road from Kalihiwai to Haena is inadequate: some degree of improvement is necessary. The following paragraphs describe the major deficiencies of the highway from Kalihiwai to Princeville (a), from Princeville to the Hanalei Bridge (b), from the bridge into Hanalei Town (c), and from Hanalei Town to the end of Kuhio Highway at Kee Beach (d).

The recommended action consists of widening and curve improvements from Kalihiwai to Princeville. This Final EIS covers these improvements, plus an interim maintenance repair program for several of the one-lane bridges. A long-range solution for correcting the deficiencies from Princeville to the end of the highway cannot be recommended until a number of significant issues are resolved. (See Appendix F, Section V. "Unresolved Issues").



KAUAI BELT ROAD
 KALIHUWAI TO HAENA

FIGURE 2B
 Location Map
 Hanalei - Wainiha
 Scale: 1" = 2,000'



When these issues are settled, a Supplemental Final EIS will be prepared for the Princeville to Haena section of the highway to provide additional discussion on the impacts of the proposed improvements.

- a. Kalihiwai to Princeville. The highway section from Kalihiwai to Princeville is substandard in pavement width, too narrow (approximately 18 feet wide) and the grassed shoulders (approximately 2 feet wide) do not provide sufficient lateral clearance (Plate 1). These inadequate shoulders cause constrictions in an already narrow pavement, especially during times of rain when the shoulders become muddy and cannot be used, and water runs along the edge of the pavement. The curves have poor horizontal alignments, including unexpectedly sharp "S" curves and inadequate sight distances. The total thickness of the pavement and base is only about 5 inches, which is inadequate for the heavier modern vehicles and traffic volumes that the highway now carries. This structural deficiency shows up in numerous failures in the roadway base course, even with regular resurfacing. The rapid development of rough spots and pot-holes after repair or resurfacing indicates that the highway has passed its economic life span. In addition, a row of large eucalyptus trees immediately adjacent to the highway present a potential hazard from falling branches during high winds.
- b. Princeville to the Hanalei Bridge. This section of highway, which descends the Hanalei River bluff, has substandard pavement and shoulder widths, substandard roadway alignment, and structural deficiencies. A set of curves in a horse shoe configuration at the top of the bluff is substandard in alignment and offers poor visibility. There is inadequate roadway shoulder for emergency stopping off of the travel-way.
- c. Hanalei Bridge to Hanalei Town. The Hanalei Bridge (Plates 9 and 10) was prefabricated in New York by Hamilton and Chambers and erected in 1912 at its present location. It was upgraded in 1934, and in 1967, new Warren steel trusses were added to the original Pratt truss. In 1973, major repairs costing over \$40,500 were made by strengthening the members and connections with welded plates, and since 1970, an average of \$4,300 has been spent for annual maintenance on the bridge. In spite of these

efforts, the Hanalei Bridge is in an advanced state of deterioration, with some of the members having only 20% of their original cross sectional areas remaining. The posted load limit has been reduced to 10 tons in order to reduce strain on the bridge, but State Department of Transportation bridge engineers seriously consider it to be in danger of collapse. In addition to this hazard, the Hanalei Bridge has a clear width of only 17 feet (one lane) and right-angle approaches with poor visibility (Table 1). Because of its deteriorated condition and substandard design, the Hanalei Bridge is ranked Number One Priority in the State's Federal-aid Bridge Replacement Program.

The highway section from the Hanalei Bridge to the outskirts of Hanalei Town is characterized by periodic flooding, deteriorated pavement, and inadequate grass shoulders. Clearance between the pavement and obstructions is minimal, and approximately 1,000 feet from the bridge the road makes a slight curve at a narrow culvert, making the highway alignment deceptive.

- d. Hanalei Town to Kee Beach. The roadway from Hanalei to the end of the highway is only 18 feet wide, which is not adequate for the expected traffic. However, there are ten structures that provide only one lane (Table 1). Given the traffic volume carried by this highway, one-lane bridges are considered substandard. Furthermore, the bridges are in very poor condition. Although an average of over \$34,000 per year (1970-1978) has been spent to repair and maintain the deteriorated one-lane bridges from Hanalei Town to Wainiha, they all require major improvements. A summary of the major defects follows:

The Waioli Bridge (Plate 11) has damaged parapet walls, and the piers are scoured at the waterline.

The Waipa Bridge (Plates 12 and 13) has cracks on the parapet walls, spalling of the concrete, and badly corroded reinforcing steel. The concrete piers are eroded at the waterline. The bridge was constructed in two increments (1912 and 1934) with different widths, which creates a potentially hazardous condition.

TABLE 1 EXISTING STREAM CROSSING INVENTORY

Name	Type	Width (ft.) ^a	Length (ft.)	Load Restrictions		Date Const.	Latest Repairs	
				Limit ^b	Design ^c Posted			
Hanalei Bridge	Steel thru-truss	17	113	47	H15	12	1912	1973
Waioli Bridge	Flat Slab	16	90	29	H15	10	1912	none
Waipa Bridge	Flat Slab	18	138	27	H15	8	1912	1925
Waikoko Bridge	Flat Slab	17	45	29	H10	8	1913	1957
Lumahai Bridge	Prestressed Beam	30	538	NA	HS20	--	1973	none
Wainiha Bridge #1	Steel truss-deck	12	42	NA	H10	8	1957	1973
Wainiha Bridge #2	Steel truss-deck	12	78	NA	H15	8	1957	1973
Wainiha Bridge #3	Steel truss-deck	12	146	NA	H15	8	1957	1973
Iaena Bridge #1	Culvert	20	22	NA	NA	--	1912	none
Iaena Bridge #2	Culvert	20	24	NA	NA	10	1912	none
Manoa Stream Ford	Concrete on boulders	22	15	NA	NA	--	1912	none
Limahuli Stream Crossing	Flat Slab	17	15	NA	NA	--	1912	none

T 8

NOTES:

- a. Rail-to-Rail; effective pavement width is several feet less.
- b. Theoretical (ideal condition) maximum at the yield point stress.
- c. "H" is standard 2-axle truck, 14' between axles. "HS" is a 2-axle trailer and semi, 14'-30' between axles.

The 1946 tsunami caused the collapse of the east abutment of the Waikoko Bridge (Plate 14). The remaining west abutment is cracked and resting on boulders with large voids. There are large cracks in the parapet walls and spalling of a large area of the slab bottom. The reinforcing steel in the slab and the west abutment is corroded beyond use.

The tsunami of 1957 destroyed the original Wainiha Bridges. The three existing bridges (Plates 15 and 16) were constructed as an emergency project and were only intended as temporary crossings. In 1969, timber and steel members were added, and in 1973, the timber decking was replaced on all three bridges. Despite the intense maintenance effort, the steel structural members on the bridges require replacement.

From Wainiha to the end of the highway there are four minor stream crossings that are also in need of major repairs or replacement. The Haena Bridges #1 and #2 (Plates 17 and 18) show signs of concrete spalling and other decay and are structurally and geometrically substandard. The condition of Haena #2 is especially serious. The Manoa Ford (Plate 19) is dangerous at high water and subject to washouts. The Limahuli Stream Crossing (Plate 20) shows signs of decay and is substandard in design.

2. Accident Rates. The Kuhio Highway from Kalihiwai to Haena provides two lanes, but the eleven one-lane bridges create potentially hazardous conditions.

The accident rate on the Kalihiwai-Haena segment of the Kuhio Highway is disproportionately high. This segment carries only about 5% of the total traffic on Kauai, but has over 8% of the total accidents on the island. The 1972-1978 accident rates per million vehicle miles are given in Table 2 for the improved and unimproved sections of the Kuhio Highway and for Kauai as a whole. It can be seen that the accident rate in the project area is significantly higher than the rate for the adjacent section of Kuhio Highway which has already been improved. The locations and circumstances of the accidents of the study area in 1973 and 1974 are shown on Figure 3. Most of the accidents can be attributed to poor road geometry; cars running off of sharp curves at night and hitting fixed objects. The majority of the accidents

TABLE 2 ACCIDENT RATES ^a

	Accident Rate Per Million Vehicle-Miles ^b							Ave.
	1972	1973	1974	1975	1976	1977	1978	
<u>Improved Kuhio Hwy</u> Anahola to Kalihiwai	2.00	2.41	0.97	0.81	1.30	1.27	1.64	1.48
<u>Unimproved Kuhio Hwy</u> Kalihiwai to Haena	6.12	5.99	5.11	5.51	4.82	3.49	3.88	4.99
Island of Kauai Overall	3.00	3.32	2.28	2.44	2.83	2.50	2.77	2.73

Source: "Traffic Accidents and Accident Rates for State-County Highway Systems, State of Hawaii" State Department of Transportation, Traffic Engineering Section (Published annually).

Notes:

- a. This is a revision of Table 2 of the Draft EIS showing four more years, and aggregating the sub-sections to show the trend of accident rates from year to year on improved parts of Kuhio Highway. Table 2 of the Draft EIS displayed the accident rate for each sub-section, but because the sub-section designations were changed several times, direct comparison between sub-sections was difficult and confusing.
- b. Accident rate per million vehicle miles (R) is calculated by the following formula:

$$R = \frac{A}{L \times ADT \times 365 \times 10^{-6}}$$

- Where:
- A = Yearly total of accidents on segment
 - L = Length of segment
 - ADT = Average daily traffic (vehicles per day) on segment
 - 365 = Days per year, to convert traffic to one year total
 - 10⁻⁶ = Conversion to convenient decimal position

The overall accident rate (ΣR) for a series of segments (1, 2, 3....n) is obtained by:

$$\Sigma R = \frac{L_1 R_1 + L_2 R_2 + \dots L_n R_n}{\sum_n^1 L}$$

(80%) involved local drivers and a large number (22%) involved drinking drivers. (Statewide, approximately 13% of the total accidents involve drinking.) The majority of these accidents (53%) resulted in injuries. Although the total number of serious accidents may not be very great at present, the high accident rate indicates a potential for many more accidents as the traffic volume increases. In overall terms, the road section from Hanalei Town to Wainiha has been identified as the most dangerous, followed closely by the segment from Kalihiwai to the Hanalei Bridge.

3. Traffic Increase. Traffic projections indicate a significant increase in future traffic due primarily to the development of the planned community of Princeville. Also contributing to traffic increases are the development of other areas of the North Shore, the normal growth in population and vehicle usage, changes in travel patterns and an expected increase in visitor use. Figure 4 presents the existing highway capacity, existing traffic volumes and projected volumes for 1980 and 1998. The 1978 traffic volume up to Princeville was less than what was projected for that year, but the traffic beyond Hanalei was much greater than the 1980 projection.

These projections are based in part on the following planning documents:

"A General Plan for the Island of Kauai" - March, 1970;

"Economic Base Analysis with Resulting Population Projections for the Island-County of Kauai, State of Hawaii 1970-1999" - December, 1969;

"The North Shore Plan" - September, 1972;

"The Hanalei Development Plan, A Socio-Economic Prelude" - September, 1972; and

"Planning for Princeville at Hanalei".

(These documents are available for review from the Kauai County Planning Department.) A basic condition of the projections was that by 1990, 69% of the residential units, 31% of the hotel units, and 100% of the commercial space planned for Princeville will be developed.



Blacked out quadrant means the accident involved the respective item listed.

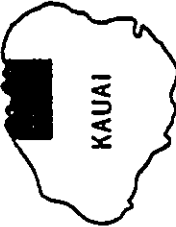
Double ring means the accident was multicausal related.

Example:

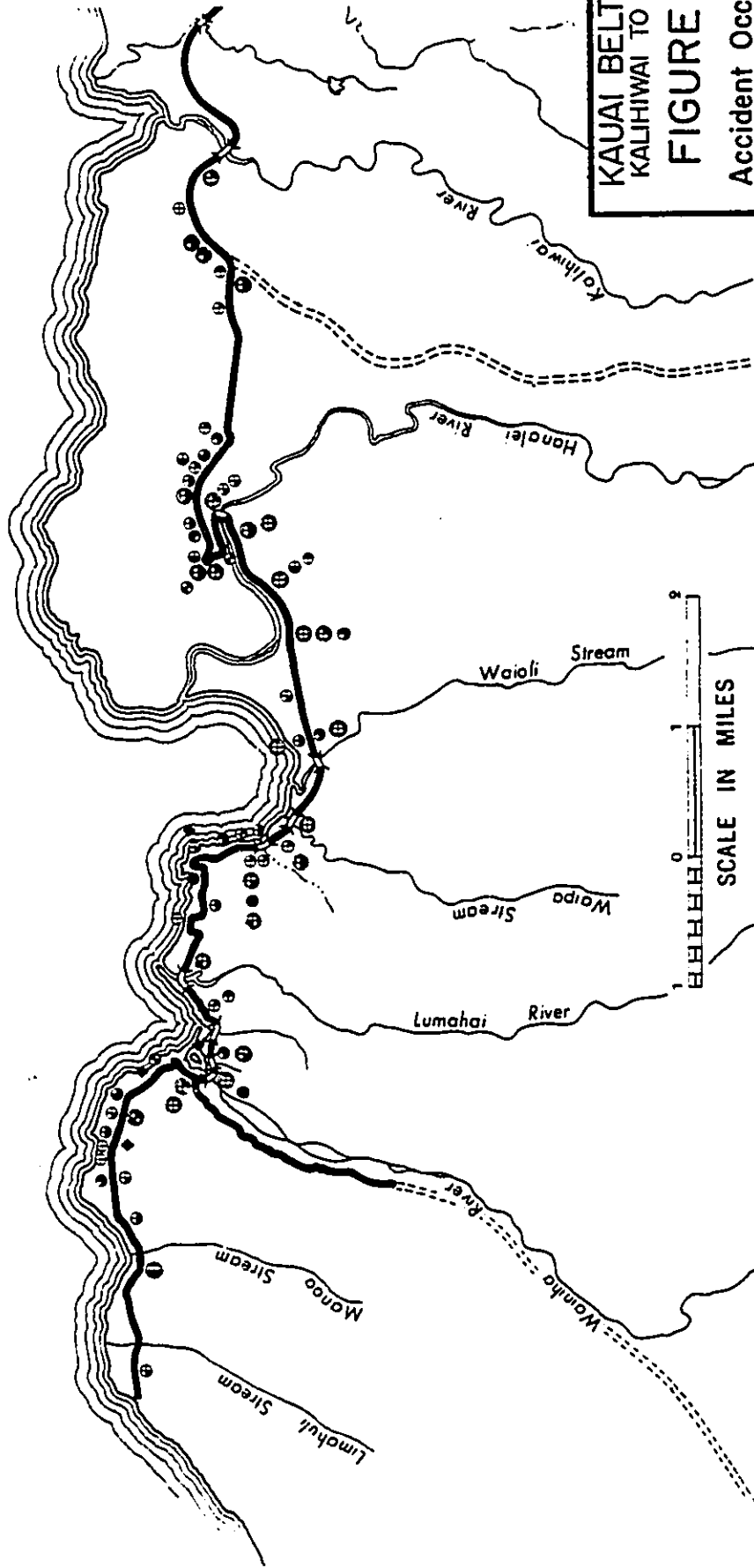
A tourist driver got in a multi-causal accident at night. No injuries were sustained and drinking was not a contributory factor.

◆ - Circumstances unknown.

Total No. of Accidents	77
No. of Accidents: Unknown Circumstances	4
Known Circumstances	73
Involving Tourist	15
Drinking While Driving	16
Injuries Sustained	39
Occurring at Night	45
Multicausal Related	26
	20%
	22%
	53%
	62%
	36%

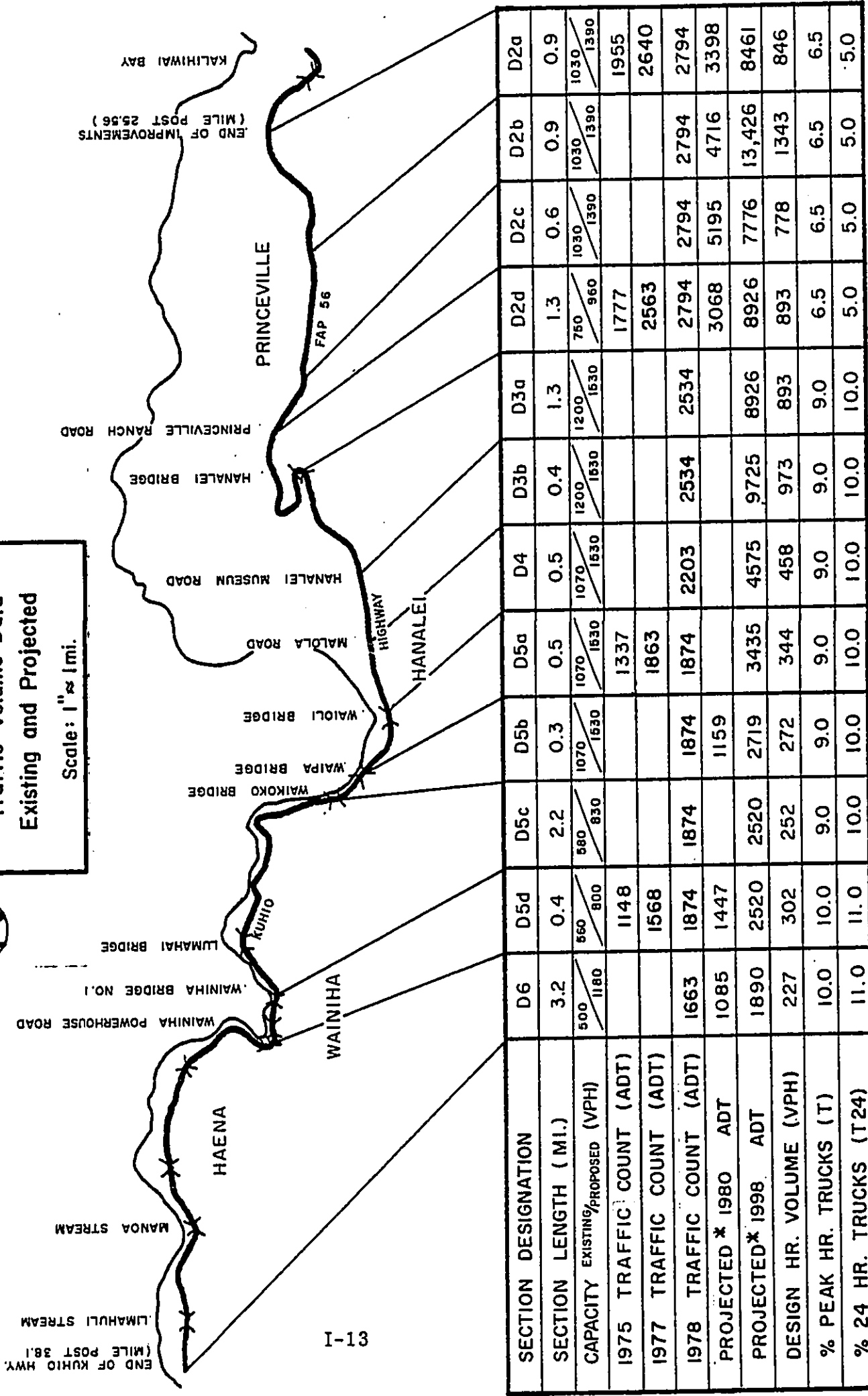


MAP LOCATION



**KAUAI BELT ROAD
KALIHIWAI TO HAENA**
FIGURE 3
Accident Occurrences
1973 and 1974

**KAUAI BELT ROAD
KALIHUWAI TO HAENA**
FIGURE 4
Traffic Volume Data
Existing and Projected
Scale: 1" ≈ 1mi.



* PROJECTIONS MADE IN 1975 BY THE STATE DOT.

In the process of traffic assignment, it was found that the existing highway does not presently limit the total volume of traffic to the North Shore, albeit its limitation of certain types of vehicles, since the capacity of the highway is not being exceeded. It therefore follows that an improved highway would not by itself generate a significant increase in the total volume of traffic. However, since the existing Hanalei Bridge and most of the other bridges to the west do presently restrict the passage of certain types of vehicles such as large buses, heavy trucks and cranes, with new two-lane bridges the number of these types of vehicles could be expected to increase. All other increases in traffic would be tied in to land-use policies for the area.

C. PROJECT CHARACTERISTICS

1. Introduction. The ultimate improvements to Kuhio Highway from Kalihiwai to Haena involve two categories of action; upgrading the roadway, and repairing or replacing one-lane bridges. For design purposes, the roadway improvements have been separated into three sections, each with a different set of alternatives. These sections are from Kalihiwai to Princeville (1.9 miles), from Princeville to the Hanalei Bridge (1.3 miles), and from the Bridge to Hanalei (1.2 miles). (No major roadway improvements are proposed beyond Hanalei.) There are ten one-lane bridges (and one ford) from the Hanalei Bridge to the end of the highway, each of which requiring different treatment. These bridges are the Hanalei Bridge, Waioli Bridge, Waipa Bridge, Waikoko Bridge, Wainiha Bridges (3 adjacent structures), Haena Bridges (2 nearby culverts), Manoa Stream ford, and Limahuli Bridge.

Public involvement throughout this project has made it very clear that any improvements that are made to the highway must not be allowed to degrade the scenic resources or the quality of life of the North Shore. The objectives of this project is to bring the Kuhio Highway up to adequate safety standards, while at the same time maintain a design that is compatible with the character of the area.

This Final EIS deals only with the recommended improvements for the section of highway from Kalihiwai to Princeville. Until issues raised by the Section 106 process established by the Advisory Council on Historic Preservation are resolved,

in addition to clearances pursuant to the Endangered Species Act, and Executive Orders on Floodplain Management and Wetlands Management, a recommended action can not be proposed for the Hanalei, Waioli or Waipa Bridges. (See Appendix E, "Project Approvals and Clearances Required" and Appendix F, "Comments and Responses to the Draft EIS", Section V "Unresolved Issues", Page F-101.) Likewise, until final plans for the Hanalei Bridge are agreed upon, it is premature to propose changes in the highway section from Princeville to Hanalei Town. When these issues are settled, a supplement to this Final EIS will be prepared for the recommended roadway improvements from Princeville to Hanalei, and for the recommended plans for the one-lane bridges. The following paragraphs describe the recommended action for the Kalihiwai to Princeville section and interim measures to maintain the bridges. The proposed alternatives for the remainder of the highway are described in the Draft EIS (dated 2/23/77).

It is important to note that "splitting" the project by constructing the Kalihiwai to Princeville improvements first will not influence the selection of alternatives for the remainder of the highway. There are three main reasons for this; First, the alignment on the Hanalei Bluff will not be changed, so the previous alternatives for the approach to Hanalei Bridge may continue to be evaluated on their own merits. Secondly, the recommended improvements from Kalihiwai to Princeville should not cause an increase in traffic beyond Princeville; traffic is increasing, but this is due to factors other than the condition of the highway (see Page II-30). Finally, the proposed maintenance repairs to the Hanalei Bridge will not eliminate the need for its eventual replacement.

2. Highway Improvement: Kalihiwai to Princeville. The existing highway has two 9-foot wide lanes, 2-foot wide grassed shoulders and no clear area for most of its length (Plates 1 and 5). The existing right-of-way is 50 feet wide. The speed is presently posted at 35 mph near the beginning of the segment. Two alternative improvements were proposed for the highway between Kalihiwai and Princeville (1.9 miles). The first alternative consisted of a new alignment (Alternative 2) and the second, developed as a result of public suggestions, involved widening the existing highway and adjusting/realigning dangerous curves at several locations. Alternative W had several variations of traffic lane and shoulder widths. The characteristics of these alternatives are summarized in Table 3.

TABLE 3 COMPARATIVE HIGHWAY CHARACTERISTICS

Parameter	Kalihiwai to Princeville			
	Exist.	Alt. 2	Alt. W1	Alt. W2
Design Data				
Design speed (MPH)	varies	40	40	40
Posted limit (MPH)	35 ^a	35	35	35
Pavement width (ft.)	18	22	22	22
Shoulder width (ft.) ^b	2	8	8	4
Min. ROW (ft.)	50	50	60	60
Max. Grade (%)	8.3	5.0	7.0	7.0
Min. Grade (%)	0	1.2	0.5	0.5
Length (Mi.)	1.91	2.05	1.90	1.90
Cost Estimate (\$1000's)				
Right-of-Way	--	137	74	74
Prelim. Engineering	--	230	244	232
Construction	--	2,639	2,806	2,675
Total	--	3,006	3,123	2,981
Benefit/Cost Ratio	--	1.20	1.08	1.13
Community Impact				
Land Acquisition (Acre)	--	22.8	7.3	7.3
Parcels Affected	--	4	3	3
Homes Displaced	--	0	0	0
People Displaced	--	0	0	0
Business Displaced	--	0	0	0

NOTES:

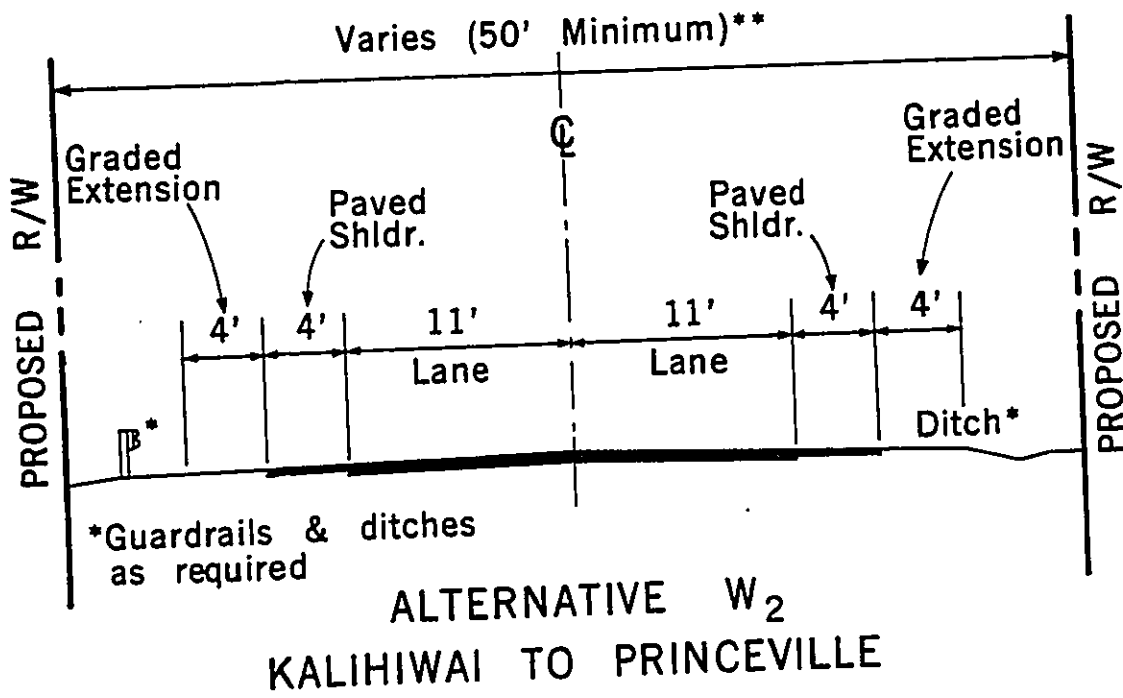
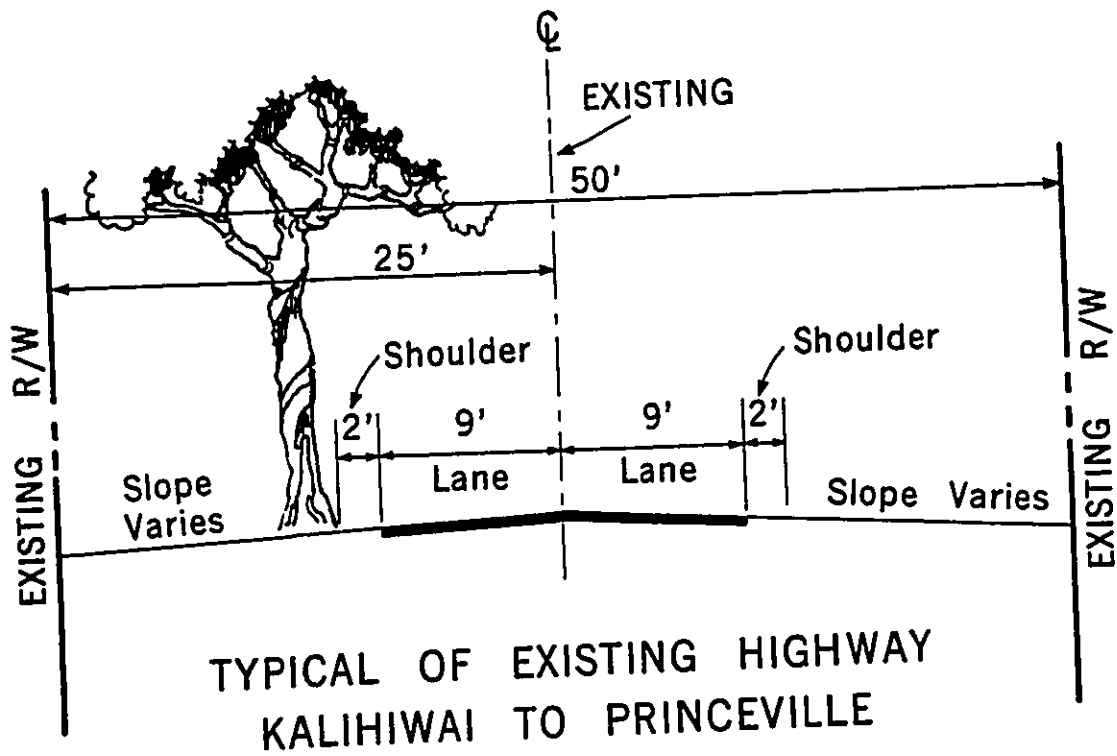
- a. Set by County Ordinance. (Advisory speed signs are posted designating slower speeds.)
- b. Guardrails will be provided where there is an insufficient roadside clear area or as required for safety.

The recommended action for the Kalihiwai to Princeville section is Alternative W2, which will provide two 11-foot lanes and 4-foot paved shoulders (Figure 5). The curves at three locations will be adjusted and realigned (Figure 6) to eliminate their substandard alignment geometrics while minimizing right-of-way impacts. In the vicinity of the eucalyptus trees (Figure 8A and Plates 1 and 3), the road will be widened to one side in order to avoid removing any trees. Where there are no trees the road may be widened symmetrically. The minimum right-of-way will be 60 feet where trees are present, and 50 feet where there are no trees. Appropriate safe transitions to the existing road will be required at Princeville beyond the project terminus. The posted speed limit will be kept at 35 mph.

Power and telephone lines will have to be moved, but sufficient rights-of-way will be provided and coordination with all affected utility companies will be maintained. Traffic control will be determined in the design phase and/or by the contractor according to contract specifications.

The cost of widening the highway from Kalihiwai to Princeville is estimated at approximately \$2.6 million. The computed Benefit/Cost ratio is 1.13, indicating that anticipated user benefits (primarily safety) outweigh the construction and maintenance cost of the improved highway. This ratio was calculated according to the methodology prescribed in the American Association of State Highway Officials publication, "Road User Benefit/Cost Analyses For Highway Improvements". Costs and benefits not priced monetarily such as aesthetics, environmental impacts, economic impacts and non-user benefits are not included in the ratio, but are evaluated throughout this EIS. The improvements are to be funded jointly by the Federal Highway Administration (approximately 77%) and the State Department of Transportation (approximately 23%).

If appropriations are granted as scheduled, the improvements will begin in late 1982, and should take approximately 12 months to complete. To minimize the area exposed to erosion, clearing and grading activities will be restricted to a maximum 700,000 square foot "open area" unless otherwise permitted by the engineer. If possible, grading will be started around April and be completed by October so as to avoid the season of most intense rainfall (November to March).

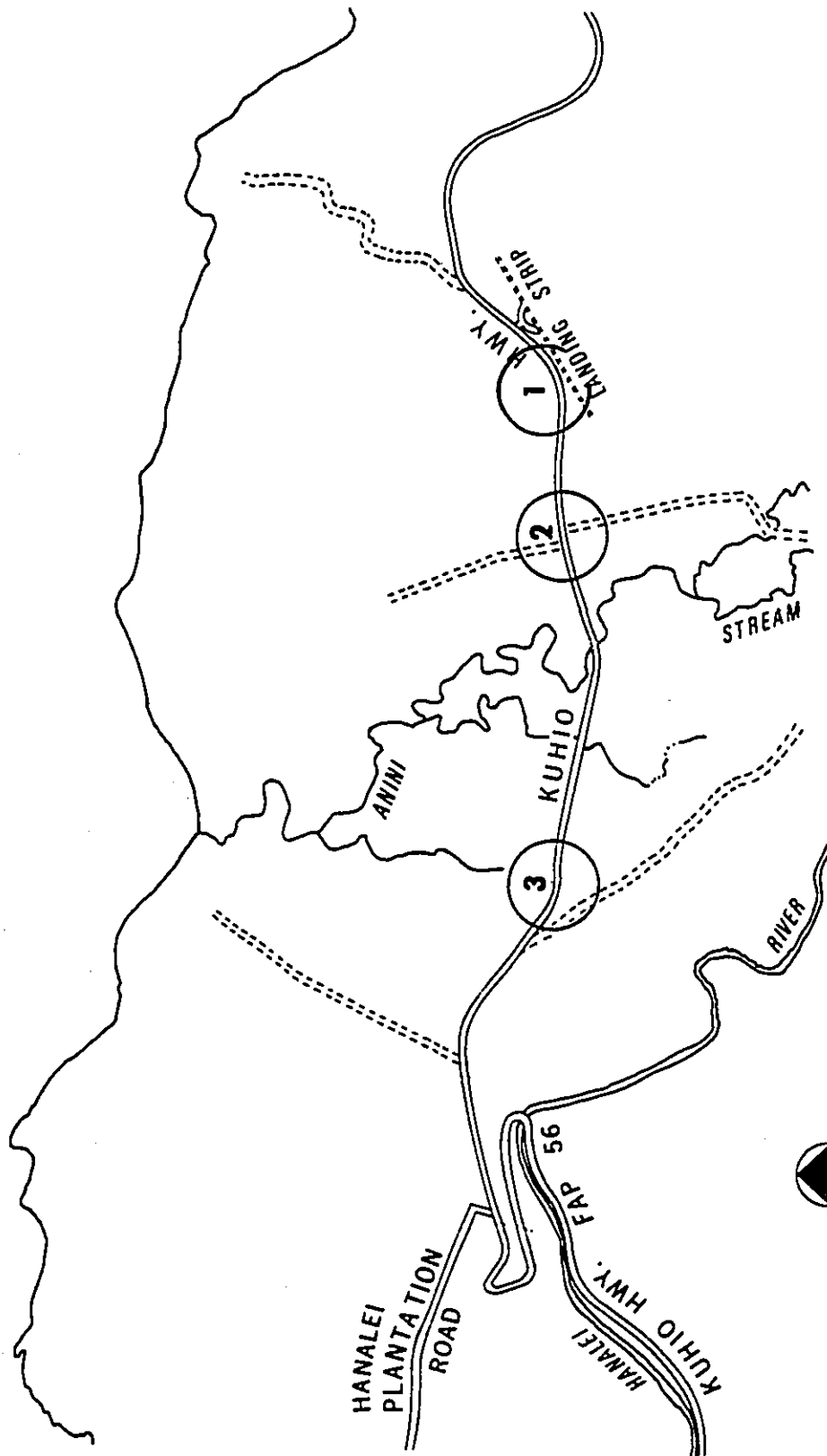


**May be increased to 60' minimum to preserve eucalytus trees.

KAUAI BELT ROAD
KALIHAIWAI TO HAENA

FIGURE 5

TYPICAL SECTIONS
EXISTING AND ALTERNATIVE W₂



KAUAI BELT ROAD
 KALIHUAI TO HAENA

FIGURE 6

CURVE IMPROVEMENTS
 KALIHUAI TO PRINCEVILLE



3. Maintenance Repairs. In order to keep the more deteriorated bridges in service until a permanent replacement or rehabilitation program can be implemented, major repairs will be required. Those requiring the most attention are the Hanalei, Waipa, and Wainiha Bridges. These interim repairs will not "strengthen" the structures to a significantly higher load capacity, but will "restore" them to a better condition until a permanent solution is determined. To significantly increase the load capacity of the Hanalei Bridge, in particular, would require major restructuring. Because the Hanalei, Waioli, and Waipa Bridges have been determined to be eligible for listing in the National Register of Historic Places, there is a limit to the changes that can be made under "maintenance". The anticipated repairs to the Hanalei and Wainiha Bridges include replacement of timber decking, stringers and girders, replacement of portions of structural steel members, cleaning, and painting. The concrete bridges will have reinforcing bars replaced, and will be repaired with epoxy injections and spot patching and sealing of spalled areas. Where necessary, the deck slab will be replaced. These repairs are not as extensive as those envisioned under the "major repair" alternative presented in the 2/23/77 Draft EIS.

The State Legislature has granted appropriations of \$70,000 for planning repairs to various bridges on the State Highway System. The work will be performed out of the Kauai District's \$757,000 regular maintenance budget. The repair work is anticipated to begin in August 1980. The economic justification for the interim bridge repairs is based on the need to maintain continuous access and operation of the highway; if one of the bridges should collapse and isolate a portion of the North Shore population, the safety, health and welfare of the community would be severely affected.

D. PROJECT HISTORY AND SYNOPSIS OF THE ENVIRONMENTAL REVIEW PROCESS

Beginning in 1963, State funds have been periodically designated for the purpose of upgrading the Kuhio Highway. These improvements, which have included widening and bridge replacements, have been completed to a point approximately 1/2 mile beyond the Kalihiwai Bridge (Mile Post 25.5). In 1969, the County of Kauai transferred the remainder of the Highway to the jurisdiction of the State Department of Transportation.

At the time, a study made on the condition of the highway indicated that the geometry of the curves and width of pavement and shoulders was inadequate for the loads the highway was carrying. These deficiencies were resulting in high maintenance costs. Furthermore, the accident rate was inordinately high. Plans for improving this last segment were supported by the County of Kauai, and included the County's General Plan.

In May of 1972, notices regarding the State DOT's plans for improving the Hanalei Bridge were published in the local newspapers, giving citizens the opportunity to request a public hearing. There were several requests for a hearing, but these were subsequently rescinded, so the State DOT proceeded to acquire the necessary rights-of-way for a new bridge to be located approximately 500 feet downstream from the present bridge (Design No. 4 as described in the 2/23/77 Draft EIS). The U.S. Fish and Wildlife Service was acquiring property for the Hanalei National Wildlife Refuge at the same time, so the new right-of-way was coordinated with the establishment of the Refuge boundary.

In May of 1974, the State Department of Transportation held an informal informational meeting in Hanalei to present plans for improving the highway from Kalihiwai to the Hanalei Bridge. Proper notice was given in the local newspapers, and letters were sent to community associations and individuals affected by the project, but the meeting was poorly attended. There were no major objections to the alternative alignments presented at this meeting.

A Draft Environmental Impact Statement on the Kalihiwai to Hanalei segment of the project was circulated for review in the summer of 1975 (Report No. FHWA-HI-EIS-75-01-D, May 29, 1975). This EIS evaluated the impacts of four alternative alignments; two from Kalihiwai to Princeville and two from Princeville to the Hanalei Bridge. These were essentially parallel to, but separated from, the existing highway.

Following circulation of the Draft EIS, a public hearing was held at the Hanalei Courthouse on August 13, 1975. The major concern of the residents was that a new highway would induce growth on the North Shore and that the present quality of life would thereby be lost. Another concern was that an improved

highway would allow more tourists and especially tour buses into Hanalei (Heavy trucks and buses are presently restricted by the weight limit of the Hanalei Bridge); some residents reacted against the idea of having tourist-oriented concessions in Hanalei. On the other hand, the County of Kauai Planning Department and the Public Works Department expressed support for the proposed improvements because of the deteriorated condition and poor safety record of the highway. (See Appendix A, particularly pages A-3 to A-7 and A-59 to A-60, for a summary of written and public testimony at this stage of the project.)

The scope of the May 29, 1975 Draft EIS was challenged on the grounds that it did not discuss the entire highway improvement plans for the North Shore. Plans for replacing the Hanalei Bridge were being developed, and a Negative Declaration on the project was approved on June 22, 1972. Therefore, a new Draft EIS was written to evaluate all of the proposed highway improvements from Kalihiwai to the end of the highway at Kee Beach beyond Haena.

The second phase of environmental review on this project was initiated on October 22, 1975 with a public information meeting in Hanalei, at which the revised highway improvement alternatives were discussed. This meeting was followed by an EIS Preparation Notice circulated on March 10, 1976 (under State environmental rules and regulations). The public responses to this Preparation Notice expressed the same basic concerns over uncontrolled growth on the North Shore. In addition, many people commented that they did not wish to see the appearance of the existing bridges changed, especially the Hanalei Bridge which they feel has become a landmark identified with the rural character of the North Shore. These comments resulted in further modification of the State Department of Transportation's proposals and guided the discussion of environmental concerns in the "Kalihiwai to Haena" Draft EIS dated February 23, 1977 (Report No. FHWA-HI-EIS-76-03-D).

Two "Combined Corridor and Highway Design" public hearings were held to discuss the project. The first was held in Hanalei on April 20, 1977 and the second was held in Lihue on April 21. Comments received on the Draft EIS and testimony given at the public hearing reiterated the community's desire to preserve a rural life style. However, not all were willing to accept a substandard transportation system,

so support was expressed for the concept of improving the highway and bridges. A number of respondents raised the issue of the historical significance of the bridges, and requested that they be nominated to the National Register of Historic Places. (See Appendix F, "Comments and Responses to the Draft EIS.")

Draft National Register nomination forms were prepared by the Kauai Historical Society and submitted to the State Historic Preservation Officer (SHPO) in November of 1976. At the request of the SHPO and the Department of Interior, additional documentation on the history of the North Shore transportation system was provided by the State Department of Transportation. A formal request by the FHWA for a determination of eligibility for nomination to the National Register was made to the Keeper of the National Register in June, 1978. In August, 1978, the Keeper of the Register determined that the Hanalei, Waioli, and Waipa Bridges were eligible for inclusion on the National Register of Historic Places. The remaining North Shore highway structures were determined not eligible. However, this judgement was qualified due to the Keeper's opinion that there was insufficient information to assess individual historical significance or eligibility within the context of an historic transportation system which influenced the development of the Hanalei Valley.

With the determinations of eligibility, the procedures of Section 106 of the National Historic Preservation Act were initiated to coordinate plans for the bridges with the advisory Council on Historic Preservation and other concerned parties. A Preliminary Case Report on the three eligible bridges was prepared in January, 1979 by the State DOT, reviewing the various alternative bridge improvement proposals and summarizing the historical context of the bridges. On March 22, 1979 the Advisory Council held a public information meeting at Hanalei to discuss and receive testimony on the effects of the proposed highway and bridge improvements with respect to historic preservation concerns, and on possible alternative courses of action. Public testimony brought out both the need for stronger, safer bridges and the desire to keep Hanalei as it is by preserving the bridges determined eligible for the National Register.

On November 21, 1979, the State DOT informed the Federal Highway Administration of its intention to undertake maintenance repair of several of the one-lane bridges, and to widen the

existing highway from Kalihiwai to Princeville. Thus, it became unnecessary to complete the Section 106 review of the State DOT's proposals for the bridges (see Page D-5). Furthermore, the Kalihiwai to Princeville section of the highway is outside of the historical issue which is centered in the Hanalei Valley. Therefore, the environmental review process has been separated back into two sections, from Kalihiwai to Princeville and from Princeville to the end of the highway. (The 1975 Draft EIS covered from Kalihiwai up to the Hanalei Bridge.) The improvements to the highway can proceed as far as Princeville without influencing the disposition of the bridges. When ultimate improvements are determined, a supplemental Final EIS will be prepared for the Princeville to Haena Section.

E. RELATIONSHIP OF THE PROJECT TO LAND USE PLANS

The proposed project is located within the Hanalei Planning Area of the Kauai General Plan (March, 1970). This plan establishes the development concepts and objectives for the six planning areas of the Island. The North Shore Development Plan (September 30, 1972) is the official land use plan for the project area (County of Kauai Comprehensive Zoning Ordinance, Bill No. 210, Ordinance No. 239 and amendments). The Development Plan assigns first priority to improvement of the Kuhio Highway to Hanalei including a new bridge over the Hanalei River. These improvements are placed in Phase I, to be implemented within 5 years (i.e., 1977).

The highway improvements designated in the North Shore Development Plan are based on proposals of the State Department of Transportation made at the time the Plan was being developed. Although the plan is presently being revised and may reflect different policies for Hanalei than were being followed in the late 1960's, the Princeville area remains in need of improved access.

As a result of public involvement in this project, the proposed improvement alternatives have been modified from what is indicated in the 1972 Plan. The following is a section-by-section comparison of the circulation system designated by the North Shore Plan with that currently recommended or proposed by the State Department of Transportation. It can be seen from this comparison that most of the proposed highway improvements would be less extensive in scope than what is envisioned in the 1972 North Shore Plan.

<u>Highway Segment</u>	<u>North Shore Development Plan</u>	<u>State DOT Proposal</u>
Kalihiwai to Princeville	New southerly alignment.	Minimal widening of existing highway and improving 3 curves.
Princeville to Hanalei Bridge	New alignment close to existing highway and realign hairpin curve.	New alignment close to existing highway (Alt.A) or widen existing highway (Alts. W2 & W3). Realign hairpin curve (Alts. A & W2), or retain existing alignment (Alt. W3).
Hanalei Bridge to Hanalei Town	Elevated causeway to eliminate flooding of highway	Constructing shoulders and resurfacing road. No flood-proofing.
Hanalei Town	New inland alignment.	No change to existing alignment.
Waioli Stream to Waikoko Stream	New inland alignment and new bridges	Replace bridges on adjacent alignment or major repairs to existing bridges.
Wainiha Valley	New inland alignment & new bridges	Replace bridges on adjacent alignment or major repairs to existing bridges.
Terminus	Loop through proposed State Park.	None proposed.
Bikeway	Adjacent to entire route.	Proposed, but only where there would be paved shoulders.
Tour Buses	Allowed on Kuhio Highway, Mahimahi Road and Weke Road to Black Pot (in Hanalei).	New or repaired bridges would allow tour buses and other heavy vehicles into Hanalei and beyond.

F. SUMMARY OF TECHNICAL STUDIES

1. "Drainage Report, Hanalei Bridge and Approaches" (prepared by Wilson, Okamoto and Associates, June 1976). This engineering and hydrology study was made to determine the feasibility of various measures to prevent closure of the road into Hanalei by flooding on the Hanalei River. The report describes the flooding characteristics of the Hanalei River and presents three solutions to protect the road: (1) a 2.1 mile long berm that would completely block floodwaters from the western portion of the valley; (2) an elevated roadway along the river with a cut-off berm at the eastern edge of Hanalei; and (3) a viaduct along the river and no cut-off berm. Any of these schemes would significantly alter the hydraulic characteristics of the Hanalei River and the appearance of the Hanalei Valley. They would cost from \$6.6 million to \$14.0 million dollars. The responsibility of the State Department of Transportation is to prevent its highways from aggravating any flooding. Controlling the existing flooding would be within the jurisdiction of the Corps of Engineers. The recommended improvements to the Kalihiwai-Princeville Section do not encroach on any flood plains, so the provisions of Executive Order 11988, Flood Plain Management, do not apply.
2. Archaeological Survey. An archaeological survey has been conducted for the recommended improvements to the Kalihiwai-Princeville Sections. The results of this investigation are reported in Appendix D and summarized in Chapter II.

G. OTHER RELATED PROJECTS

The preceding sections of Kuhio Highway have already been upgraded to modern design standards. The section terminating at Kalihiwai was constructed in 1963, and provides two 11-foot lanes with 4-foot gravel shoulders. The preceding section was constructed in 1973, and provides two 12-foot lanes with 10-foot paved shoulders (Plate 2). No highway projects other than those described in the February 1977 Draft EIS are being considered for the North Shore. However, the State Department of Transportation is implementing a minor drainage project along the highway within Hanalei Town. This project consists of the construction of a covered ditch to carry highway surface

runoff to an existing drain. The culvert will not completely alleviate local flooding in Hanalei, nor will the proposed highway improvements alleviate the flooding problem between the Hanalei Bridge and Hanalei Town.

Periodic maintenance and resurfacing would be required on the highway system in the future but this would not qualify as an additional "project".

H. DISCUSSION OF SECTION 4(f) CONSIDERATIONS

The term "Section 4(f)" is a reference to the Department of Transportation Act of 1966 (89 Stat. 931; PL 89-670). The subject section deals with the encroachment of a highway project onto publicly owned lands such as parks, recreation areas, wildlife and waterfowl refuges, or historical sites. Where a highway project must take such lands, a special "Section 4(f) Statement" must be prepared to demonstrate that there is no feasible and prudent alternative to the offending alignment, and to present proposed measures for minimizing harm to the public lands.

The recommended improvements to the Kālihiwai to Princeville section will not affect any Section 4(f) lands. Except for slightly realigning three curves, the widening will be accomplished within the existing highway corridor. Affected land outside of the existing corridor has been verified to be devoid of historical or archaeological resources (see Appendix D). A portion of the Hanalei National Wildlife Refuge property abuts the highway right-of-way at the top of the Hanalei River bluff, but the recommended improvements will not require the use of any of this land. This part of the Refuge is a steep wooded slope that is not utilized by the protected waterbirds, so highway construction will have no secondary effects.

The highway improvements and bridge replacements from Princeville to Haena will involve Section 4(f) concerns, since the Hanalei, Waioli, and Waipa Bridges have been determined to be eligible for inclusion in the National Register of Historic Places, and the Hanalei National Wildlife Refuge may be affected. Also, the effect of the proposed improvements on the Hanalei tōro field system, North Shore transportation system, and Haena archaeological sites, may have to be evaluated in a Section 4(f) statement. These subjects will be addressed in a supplement to this Final EIS when a recommended action for the Princeville-Haena section is selected.

CHAPTER II
ENVIRONMENTAL IMPACTS
AND MITIGATION MEASURES

CHAPTER II PROBABLE IMPACTS OF THE PROPOSED ACTION

A. THE GROWTH INDUCING IMPACT

When an area is underdeveloped relative to permitted land use, highway improvements can stimulate development if the area was previously inaccessible or when access was restricted or limited in some way. The latter situation typically occurs where a highway is so congested that to commute to job centers becomes unreasonable; reducing the commuting time by increasing the highway capacity then makes the area more attractive for residential use. Limited access can also be found in the form of a single constraining factor, such as a bridge or other condition that restricts certain types of vehicles, such as heavy or oversize trucks, etc.

The Kalihiwai to Princeville section of the Kauai Belt Road can not be placed in either of the above categories. There is presently highway access to the area, so the concept of opening up a new area does not apply. Furthermore, this section of the highway does not limit the flow of traffic, since the existing capacity is sufficient for the projected 1998 traffic volume. (The primary justification for the project is safety, not traffic projections.) When the subject segment is improved, the travel time to the Kapaa and Lihue job centers will not be appreciably reduced, since the project involves only 2 miles of "unimproved" highway versus the remaining 25 miles of excellent highway. Finally, there are no constraints to certain types of vehicles using the Kalihiwai to Princeville segment. For these reasons, it is highly improbable that widening the Kalihiwai to Princeville segment and realigning the dangerous curves would induce growth on the North Shore, particularly in the sensitive area beyond Princeville.

The Princeville to Haena segment of the highway does have constraining factors in the deteriorated one-lane bridges. It is therefore very probable that removing these constraints will have a growth inducing effect. However, the recommended interim repairs to the Hanalei Bridge may only increase its load capacity from the present 12 tons, back to 15 tons. Since the repairs will only restore the capacity to a previous condition, there will be no growth inducement. The growth inducing impact of a permanent restoration or replacement program will be addressed in the Final EIS for the Princeville to Haena section of the highway, which will be prepared when the historical review process (Section 106) is completed.

B. PRIMARY IMPACTS

The following section describes the existing conditions, probable impacts of the project, and proposed mitigation measures for each major element of the physical and cultural environment of the North Shore. This section thus combines in one chapter "The Description of the Existing Environment", "Environmental Impacts of the Proposed Project" and "Mitigation Measures" which are typically presented in separate chapters of an EIS. These paragraphs have been modified from the Draft EIS (2/23/77) to cover the impacts of the recommended improvements to the Kalihiwai to Princeville highway section. The impacts of the proposed improvements from Princeville to Haena are discussed in the Draft EIS and will be further evaluated as required when the Section 106 process is completed and when the nature of the improvements are decided.

1. Landform.

- a. Existing Conditions. The Kuhio Highway encounters four basic physiographic provinces in the project area: coastal upland, coastal strand, bottom land (flood plain), and rough mountainous land (Figure 2A, B and C). From the Kalihiwai River to the Hanalei River, the highway crosses a coastal upland where the road ranges from 200 feet to 350 feet in elevation. This bench has an undulating topography dissected by the Anini Stream and numerous minor drainages. At Honu Road, the highway begins its descent across a steep bluff into the Hanalei River Valley and drops approximately 225 feet to an elevation of 17 feet above sea level at the Hanalei Bridge. The highway varies in elevation from 6 to 14 feet as it follows the Hanalei River bottom land and curves around the Hanalei Bay coastal strand. At the western edge of Hanalei Bay, the road climbs a steep headland above Lumahai Beach, drops into the Lumahai Valley and follows along another coastal cliff to Wainiha Bay. At Wainiha Bay, the road turns slightly inland at an elevation of 6 feet then rounds a point at the western edge of the bay. The Haena section of the highway crosses a low, wide

coastal strand (elevation 8-15 feet). At the Haena County Park the road follows along the base of precipitous cliffs and rises to an elevation of 70 feet at the Limahuli Stream crossing. From the Limahuli Stream the road drops to an elevation of 18 feet at Kee Beach, the terminus of the Kuhio Highway and the beginning of the Kalalau Trail along the Na Pali Coast.

- b. Impacts. Landform modification from the recommended widening alternative from Kalihiwai to Princerville (W2) will be minor, since the improvements will mainly be limited to the present highway alignment. The existing box-like road cuts (Plate 1) will be smoothed to more gentle slopes (Plate 2). Several feet of additional fill will be placed on either side of the road across the Anini Stream valley, in order to provide adequate shoulders. These alterations will have no adverse impact on the project area (see Paragraph 9, Scenic Resources).
- c. Mitigation Measures. Due to the minor nature of the landform modifications, no mitigation measures (other than standard erosion control practices described below) need be considered.

2. Geology and Soil Erosion

- a. Existing Conditions. The North Shore landform is a result of deposition (volcanoes, corals and water) and erosion (wind, water and landslides). These processes have formed the four physiographic provinces described above, and have given each province a characteristic soil. The following descriptions of the soils encountered by the Kuhio Highway on the North Shore are from the literature of the Soil Conservation Service (1, 2). *

The soils of the coastal upland between the Kalihiwai River and the Hanalei River bluff are predominantly of the Makapili Series. The highway crosses approximately 2.6 miles of these soils (71% of the segment). These are well-drained silty clay and clay loam soils with a depth to bedrock greater than 5 feet. Makapili soils have a low fertility and a low shrink-swell potential. Erosion potential ranges from moderate to very severe, depending on the slope: 59% of the Makapili soils crossed by the highway are on 0-8% slopes and are subject to moderate erosion if unprotected (Class II e); 31% of the soils are on 15-25% slopes subject to very severe erosion (Class III e and IV e); and 10% of the Makapili soils occur on 25-40% slopes that are highly erosive (Class VI e). Other soils encountered by the highway on this coastal upland include Pooku Silty Clay, Rough Broken Land, and Rough Mountainous Land. The highway crosses approximately 0.4 miles of Pooku soils (12% of this section) on the elevated area east of Anini Stream. Pooku soil is deep, well drained, and similar to the Makapili soils except that it is only slightly erodable. The "Rough" lands are crossed at the Anini Stream and on the Hanalei River bluff (0.6 miles or 17% of the Kalihiwai-Hanalei Bridge section). These areas are too steep and rocky to have developed much of a soil cover, and are very severely limited by erosion.

* References are listed at the end of this Chapter.

The soil found on the bottom land and flood plain of the Hanalei River is Hanalei Silty Clay. This is a poorly-drained soil formed on alluvium and limited by a high water table. It has a moderate shrink-swell potential and is only slightly erodable. The approaches of the Hanalei Bridge, the highway into Hanalei and the Wainiha Bridges #1 and #2 are on this soil.

The town of Hanalei, the highway around Hanalei Bay, Wainiha Bridge number 1, and the Haena bridges are on Mokuleia soils. This is a fine sandy loam on areas where drainage is good (most of the highway and bridge approaches) and a clay loam where drainage is poor (west approach of the Waioli Bridge). These are coastal strand soils, formed on recently deposited alluvium over coral sand. Mokulea soils have a low shrink-swell potential and moderate fertility. They are not subject to erosion due to the gentle slopes on which they occur.

The soil at the Manoa and Limahuli crossings is Kolokolo Extremely Stony Clay Loam. This soil is characterized by large boulders with varying amounts of soil in between. It is not particularly erodable, but since it is associated with steep stream courses and outwashes it is subject to overflow.

- b. Impacts. Natural soil loss on undisturbed soils between Kalihiwai and Princeville is estimated (3) to range from 0.6 tons per acre per year to 7.6 tons per acre per year depending on the slope of the ground. A typical roadcut in these soils would expose up to 11 feet of soil to erosion (2:1 slope, 5-foot soil depth). The bedrock is not considered to be erodable. If left unprotected, such a road cut would erode at a rate of approximately 360 tons of soil per acre per year. A typical fill would produce approximately 230 tons per acre per year (4:1 slope, 10-foot depth). The recommended improvements will have approximately 2.1 acres of newly exposed cuts and fills. The total potential soil loss (without mitigation) will therefore be approximately 790 tons per year, which

is much less than a new alignment would cause. Natural soil loss in the Anini watershed is estimated to be on the order of 4,000 tons per year (based on an average of 2.0 tons per acre).

- c. Mitigation Measures. Appropriate erosion control measures, planned and contracted as a part of the total job and applied immediately following grading, will significantly reduce soil loss. The State Department of Transportation is obligated to implement erosion control measures as specified in Section 639 of the 1976 State of Hawaii "Standard Specifications for Road and Bridge Construction, Temporary Project Water Pollution Control (Soil Erosion)". Typical erosion control measures are described below (Specific practices may vary as appropriate):

During grading and other construction activities, the temporary measures that will be applied include: mulching with bagasse, hay, netting, etc.; installation of temporary berms and slope drains; sediment traps and siltation ponds; seeding with fast-growing grasses; and other measures appropriate to the situation. At the end of each working day, the Contractor will shape and berm exposed earthwork in such a manner as to control and direct runoff. Failure to conform to these and other requirements spelled out in the Specifications will be cause for suspension of all operations.

Permanent erosion control will primarily rely on slope plantings. Species that have been recommended by the Soil Conservation Service are dwarf pangola grass (Digitaria decumbens), bermuda grass (Cynodon dactylon), St. Augustine grass (Stenotaphrum secundatum), centipede grass (Eremochloa ophiuroides), metallic plant (Hemigraphis colorata), money wort (Lysimachia nummularia), and lypia (Lippia canescens). Most of the grasses are presently common in the project area. The high rainfall of the area (70" - 100") enables plants to become readily established, and many introduced species of trees, shrubs and vines will volunteer on the new cuts as they have on the older ones (Plates

1, 2, 6 and 7). However, it would be desirable to plant cuts and fills with declining native species such as ohia lehua (Metrosideros collina), if economical stock can be obtained. To provide additional erosion control, long cuts and fills will have slope serrations, drains and terraces where possible.

Special erosion control consideration will be given to the stream crossings, including the Anini Stream. Where appropriate, berms and sediment traps will be employed and highway areas exposed to flowing water will be protected with netting or rock, and will be planted with fast-growing stream-bank species (eg. California grass, Brachiaria mutica). Cuts and fills in the vicinity of Anini Stream and the Hanalei River will be given extra protection with mulching or netting and immediate planting. Maintenance, including fertilizing and replanting, will be carried out as needed to insure the efficacy of the erosion control treatments. Where feasible grading will be carried out during the period of least intense rainfall to further reduce potential erosion. This period occurs between April and November, when only 29% of the intense rainfall falls. Much of the erosion hazard would be avoided if all of the grading is completed and slopes are stabilized during this period.

Implementation of these erosion control measures will reduce soil loss from exposed cuts and fills by a factor of 100 (4). Immediate application of mulch will reduce total potential soil loss by a factor of 50, or from 230-360 tons per acre per year to 4.6-7.2 tons per acre per year. (1.3-2.1 tons per acre if slopes are stabilized before November 1.) Once grass is well established, soil loss from cuts and fills will be 2.3-3.6 tons per acre per year. The estimated average natural soil loss over the total Anini Stream watershed is at least 2 tons per acre (ranging from 0.6-7.6 tons per acre). Soil loss from cultivated fields in Hawaii (ie. sugar cane or pineapple) varies from 5 tons per acre to 10 tons per acre or more. Given the relatively small area to be exposed by cuts and fills (approximately 2 acres at the most), it can be concluded that with the proposed erosion control measures, overall soil loss from the project area will not be significantly above natural erosion.

3. Water Resources and Hazards

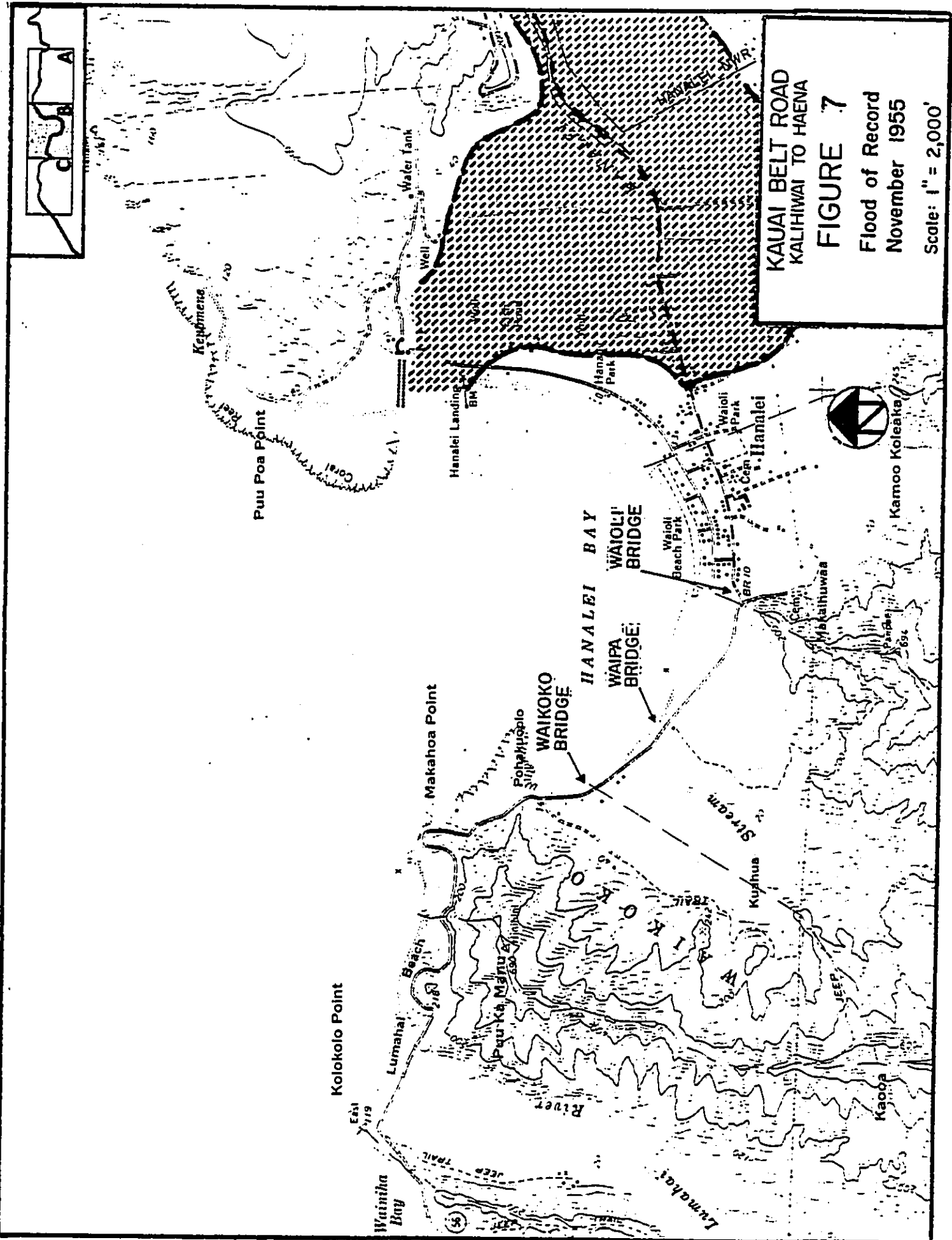
- a. Existing Conditions. The project area has three rivers (Hanalei, Lumahai and Wainiha), five streams (Anini, Waioli, Waipa, Manoa and Limahuli) and numerous minor drainages (eg. Waikoko and Haena #1 and #2). There are no lakes or reservoirs in the vicinity of the highway, although there are taro ponds in Hanalei Valley which are seasonally flooded and drained. Flow and water quality data are only available for the Hanalei and Wainiha Rivers. The gaging stations are located approximately 2.6 river-miles and 5.8 river-miles, respectively, upstream from the highway crossings so data are not directly applicable to project-site conditions.

The average annual flow of the Hanalei River at the gage (drainage area 19.1 square miles) is 231 cubic feet per second (cfs), since its diversion into the Hanalei Tunnel for irrigation in 1963. The minimum recorded flow is 33 cfs (September 1973) and the maximum recorded flow is 24,900 cfs (5). The discharge at the bridge (drainage area 20.8 square miles) would be slightly greater. A discharge of 6,000 cfs is considered to be of flood magnitude. This level is exceeded yearly, sometimes twice in one year; since 1962, the Hanalei River has flooded 13 times (6). The months of January, April, May and December are the most flood-prone; around 68% of the floods since 1868 have occurred in these months (based on newspaper reports up to 1962 and flow records thereafter). Seasonal flooding generally causes only inconvenience and closure of the highway for several hours between the Hanalei Bridge and the outskirts of Hanalei. However, a damaging flood occurs on the average of once every $3\frac{1}{2}$ years and results in crop damage, livestock loss, and the isolation of Hanalei. Because the town is slightly higher than the surrounding flood plain it is rarely affected. The most damaging flood occurred in November, 1955; it was slightly greater than a 100-year flood and covered the road to a depth of 8 feet over the lowest section (7). The ex-

tent of this flood is shown on Figure 7. The yearly floods cover the road with 2-2½ feet of water (8).

The Hanalei River has been given a Class 2 quality rating by the State Department of Health, indicating that it is not used as a domestic water supply. The quality is well within State standards, however, with only 56-67 mg/L of total dissolved solids (standard: 28,000 mg/L) and 0.01-0.02 mg/L dissolved nitrite plus nitrate (standard: 0.1 mg/L) (9). Coliform bacterial levels are not counted in the river, but samples taken by the Department of Health at the Hanalei Bay Landing near the river mouth range from 7 mpn to 35,000 mpn for total coliform and from less than 2 mpn to 1300 mpn for fecal coliform. This wide range is attributable to variations in river discharge. The 35,000 mpn count occurred following a heavy rain (October 20, 1975). The water quality of Hanalei Bay and the other North Shore coastal waters is very good, being rated Class AA (pristine conditions) by the Department of Health.

The average annual flow of the Wainiha River is 143 cfs. The drainage area at the gage (5.8 miles upstream from the highway) is 10.2 square miles, but the total watershed is 22.6 square miles; discharge at the Wainiha Bridges would therefore be much greater. The extremes range from a minimum flow of 34.8 cfs (February, 1954) to a maximum flood of approximately 40,000 cfs (February, 1956). It is of interest that these extremes occurred in the same month only two years apart. This is a result of variations in the intense "Kona Storms" that are responsible for most of the winter rainfall. The Wainiha River floods almost as frequently as the Hanalei River and often damages homes at Wainiha. Since the severe 1956 flood which damaged the Wainiha bridges, there have been at least seven damaging floods in the flood plain, with inundation exceeding 3 feet (10).



**KAUAI BELT ROAD
KALIHUWAI TO HAENA**

FIGURE 7

**Flood of Record
November 1955**

Scale: 1" = 2,000'



The water quality of the Wainiha River is rated Class 2. Its chemical characteristics are similar to those of the Hanalei River, with total dissolved solids of 45-55 mg/L and nitrate levels of 0.02-0.12 mg/L. Coliform bacteria levels are not sampled in the area.

In addition to flooding, the North Shore is also subject to tsunami (tidal wave) inundation. Damaging tsunamis occurred in April, 1946 and March, 1957. The 1957 tsunami resulted in \$1.5 million damage on Kauai (11) and destroyed or badly damaged many of the bridges presently proposed for replacement. The maximum predicted (100 year) tsunami run-up at Hanalei is 4000 feet inland; at Lumahai the maximum predicted run-up is 5000 feet, at Wainiha it is 4000 feet inland, and at Haena it is 2500 feet inland (12).

- b. Impacts. The proposed highway improvements will not adversely affect the flow characteristics of any of the streams or minor drainages of the North Shore. The possibility exists that a record-intensity storm or a flood could occur during construction, in which case no erosion control measure would be completely effective, and additional sediment would be discharged to the streams and coastal waters for a short period of time. However, these storms produce such a high level of "natural" sediment that the contribution from the proposed project would be very small. Under normal rainfall conditions, the proposed erosion control measures (see above) will keep sediment production from graded areas to levels near background. Pollution of the streams from the spill of chemicals or other materials during construction is a potential adverse impact that could affect fish and wildlife.

- c. Mitigation Measures. Culvert crossings will be provided for the Anini Stream and the minor drainages crossed by the recommended highway widening. Sedimentation will be mitigated by the proposed erosion control measures (see above). Pollution from accidentally spilled materials is a remote possibility that can be avoided by impressing construction

workers with the need for careful handling of paint, acid, etc. Sediment and oil traps will be installed at construction yards to insure that runoff from these areas does not cause stream pollution. The "State Standard Specifications for Road and Bridge Construction" (Section 107.17 A and B) requires the Contractor to prevent siltation and pollution of rivers and streams resulting from construction activities.

4. Biological Resources

- a. Existing Conditions. The vegetation encountered by the Kuhio Highway in the project area is almost entirely composed of species introduced relatively recently into Hawaii. Three vegetation types can be distinguished in the project area: pasture (dry and wet types), guava-java plum thicket, and marsh (natural and taro pond). These are delineated on Figure 8A, B and C.

The coastal upland from Kalihiwai to Princeville is dry pasture land composed of kikuyu grass (Penisetum clandestinum), pangola grass (Digitaria decumbens), and intortum (Desmodium intortum) (Plates 3 and 4). Under good management this pasture type can produce up to 8-10,000 pounds of forage per acre per year (13). On the south side of the highway is a dense windbreak of tall eucalyptus (Eucalyptus robusta), delineated on Figure 8A. The highway also crosses a wet pasture type in the Hanalei River Valley and other lowlands subject to periodic flooding. The same grasses are found in this type, with the addition of California grass (Brachiaria mutica) in the wettest areas.

The stream courses and low-elevation mountainous areas of the North Shore support species of introduced shrubs and trees that form dense thickets (Plate 3). Guava (Psidium guajava), java plum (Eugenia cumini), and mango (Mangifera indica) are the dominant members of this vegetation type. Scattered native ohia-lehua (Metrosideros

collina) and hala trees (Pandanus tectorius) can also be found (Anini Stream, Hanalei River bluff, Lumahai Beach), but are relatively uncommon.

Natural fresh-water marsh is very limited in extent in the project area. Fringing marsh plants (primarily bullrushes, Scirpus) occur in the estuaries formed at the mouths of the Hanalei River, the Waioli and Waipa Streams and the Lumahai and Wainiha Rivers. The largest marsh (9 acres) is found north of the mouth of the Hanalei River (Figure 8B). Of greater ecological importance in the project area are the numerous taro ponds which are essentially "cultivated marshes". Taro occupies much of the Hanalei River bottom land (approximately 113 acres), the area behind Hanalei (136 acres), and there are scattered patches along the Waioli Stream (10 acres), Waikoko Stream (11 acres) and the Wainiha River (15 acres) (Figures 8A, B and C). The stream and river banks support dense thickets of hau trees (Hibiscus tiliaceus).

The wildlife found in the project area is, like the vegetation, predominately non-native. Mammals include rats, feral cats and some feral pigs (forested areas). There are no feral goats or cattle in the project area and no deer. Introduced game birds include the ring-neck pheasant (Phasianus torquatus) and the Japanese quail (Coturnix c. japonica). The pheasant is relatively abundant in the dry pasture areas near Princeville. The guava-java plum thickets are occupied by the cardinal (Cardinalis cardinalis), Japanese white-eye (Zosterops japonica), shama thrush (Copsychus malabaricus), melodius laughing-thrush (Garrulax canorus), barred dove (Geopelia striata), common mynah (Acridotheres tristis), and other introduced birds. Cattle egrets (Bubulcus ibis) have recently come to the island and are increasing in numbers. Black-crowned night herons (Nycticorax n. hoactli) are common in ponds and marshes. There are no native forest birds in the project area - these species do not occur below 2-3000 feet in elevation as they are restricted to areas with native vegetation and no mosquitoes (which transmit avian malaria from introduced birds).

The project area contains important populations of four species of waterbirds that are listed as Endangered by the State and the U.S. Fish and Wildlife Service. These are the Hawaiian stilt (Himantopus h. knudseni), Hawaiian coot (Fulica americana alai), Hawaiian gallinule (Gallinula chloropus sandvicensis), and Hawaiian duck or koloa (Anas wyvilliana) (14). The taro ponds of the Hanalei Valley are the most important habitat for these species, especially for the stilt. The Hanalei National Wildlife Refuge protects a portion of this habitat (approximately 113 acres of taro). The habitat of these four species within the project area is delineated on Figures 8A, B and C. (The proposed improvements from Kalihawai to Princeville do not encounter any of the important habitat of these species.)

The Hawaiian stilt is a black and white long-legged wading bird that feeds on insects and crustaceans in the taro ponds. It nests on the dikes between ponds. A large number of stilts also nest around the shallow lakes on Niihau Island. There are only about 1,500 Hawaiian stilts, of which approximately 250 live on Kauai and Niihau. Without taro cultivation stilts would not occur on Kauai, as they require areas of shallow open water. Natural marshes (such as the one near the Hanalei River mouth) have a tendency to become too overgrown. The birds are very tolerant of non-destructive human activity (ie. automobile traffic) and may be easily observed from the highway near the refuge (Plate 9).

The Hawaiian coot, a sub-species of the abundant American coot, is a black duck-like bird with a white bill and forehead. It is relatively common in taro ponds and in the estuaries of the Waioli, Waipa, Lumahai and Wainiha Streams (The Hanalei River mouth has too much boating activity). It builds a floating nest in dense reeds. The world population of Hawaiian coots is estimated at 1,700 (1969) of which approximately 1,200 occur on Kauai and Niihau Islands. The American coot, which is often found in destructive numbers on the mainland, does not occur in Hawaii.

The Hawaiian gallinule is a black bird with a red beak and forehead, similar in general appearance to the coot, but with longer legs. It walks on floating vegetation in search of aquatic insects. The gallinule nests in dense vegetation near the shore of taro ponds or estuaries. Gallinules are more secretive than coots or stilts, but are tolerant of human activity. A gallinule was observed only 50 feet from the Waioli Bridge and was apparently not disturbed by the passing automobiles. Population numbers of the gallinule are in the mid-hundreds on Kauai, where it is most abundant. It is found in most suitable habitats on the North Shore.

The Hawaiian duck frequents all of the freshwater aquatic habitats, from taro ponds to mountain streams, and nests in dense vegetation near water. Hawaiian ducks seek out areas with little human activity, and flush readily when approached. The world population is approximately 3,000 birds, most of which are found on Kauai.

The native fauna of the streams in the project area includes several species of fresh water gobies (oopu), shrimp, snails, fresh water limpets and worms. *Tillapia*, an introduced species of fish is abundant in taro ponds. The oopu nakea (*Awaous stamineous*) is a very important food fish on Kauai, the only island where it is abundant (15). Each fall the oopu comes downstream with peak stream flows to the mouths of the Hanalei River, Waioli and Waipa Streams, the Lumahai and Wainiha Rivers, and the Limahuli Stream to spawn. Spawning occurs primarily from mid-August to late December during which time the oopu lays a single layer of eggs on a rock. On the Hanalei River, spawning extends from approximately 200 meters below the bridge to one mile upstream. Spawning adults are caught in large numbers by local fishermen. The eggs hatch within 24 hours of laying and the fry are washed out to sea. After about 6 months the oopu fingerlings return to the river and migrate upstream. The main return of young fish occurs from mid-Autumn to early summer.

- b. Impacts. The vegetation of the North Shore will not be adversely affected by the recommended highway improvements. The relatively small areas exposed by grading will be quickly revegetated by seeded and volunteer plants. The widening will not affect any of the eucalyptus trees, but will result in the removal of four large (4-foot trunk diameter) java plum trees on the north side of the highway near the Princeville Ranch road. No native vegetation will be removed.

The highway widening will affect a minor amount of pheasant habitat within the right-of-way, and the additional fill in the Anini Stream valley will very slightly reduce the potential Koloa habitat. However, these impacts do not have a large enough magnitude to be of consequence. No wetland habitat will be affected.

- c. Mitigation Measures. The proposed erosion control planting program will fully mitigate the loss of plant cover along the widened highway section. (This does not include restoration of grazing lands.) More trees will be planted than will be removed.

The proposed erosion control measures will not allow excessive amounts (above "background" levels) of sediment into the rivers or streams crossed by the highway. Adverse impacts to the oopu and other native stream fauna will therefore be avoided.

5. Air Quality

- a. Existing Conditions. There are no significant sources of air pollution in the project area. The highway is only a minor source due to the low traffic volumes. The Princeville area was once used for growing sugar cane (the cane is burned prior to harvesting), but is no longer. The pasture land is well-vegetated and does not contribute abnormal amounts of dust.
- b. Impacts. During construction of the Kalihiwai-Princeville section, dust and exhaust from equipment will be emitted. This will last approximately 8 months.

An analysis of automobile emissions was performed to determine the effect of the proposed highway improvements on ambient air quality. This analysis is presented in Appendix B. Based upon present design parameters and Federal motor vehicle emission standards (as amended March 1975), no significant impact on air quality is anticipated in the vicinity of the proposed improvements during the 20 year design period. For the no-build alternative, the microscale CO impacts are similar to those of the improved highway until 1980. By 1998 however, the CO levels associated with the improved highway should be generally less than those predicted for the existing highway.

Under the projected traffic volumes and Federal motor vehicle emission standards, the total CO emissions should decrease nearly 38% between 1975 and 1998. Hydrocarbon emissions will likely decrease by 37% while nitrogen oxide values should increase by 30%. For carbon monoxide, the maximum emission rates during the 1976 through 1998 period are currently being observed. Peak hydrocarbon emissions will be observed in 1978 while emissions of nitrogen oxides will gradually increase throughout the 1976 to 1998 period. The proposed highway improvements should have little bearing on these factors.

Violations of existing State or Federal ambient air quality standards are not likely, even under the "worst case" meteorological and traffic flow conditions. Table 7 of Appendix B indicates that the estimated maximum CO concentrations will remain at least a factor of two less than the most stringent applicable standard for both the build and no-build alternatives.

Because the State Air Quality Control Implementation Plan relies on the Federal Motor Vehicle Emission Controls, the State Department of Health has confirmed that the proposed project can be considered to be in conformance with that Plan.

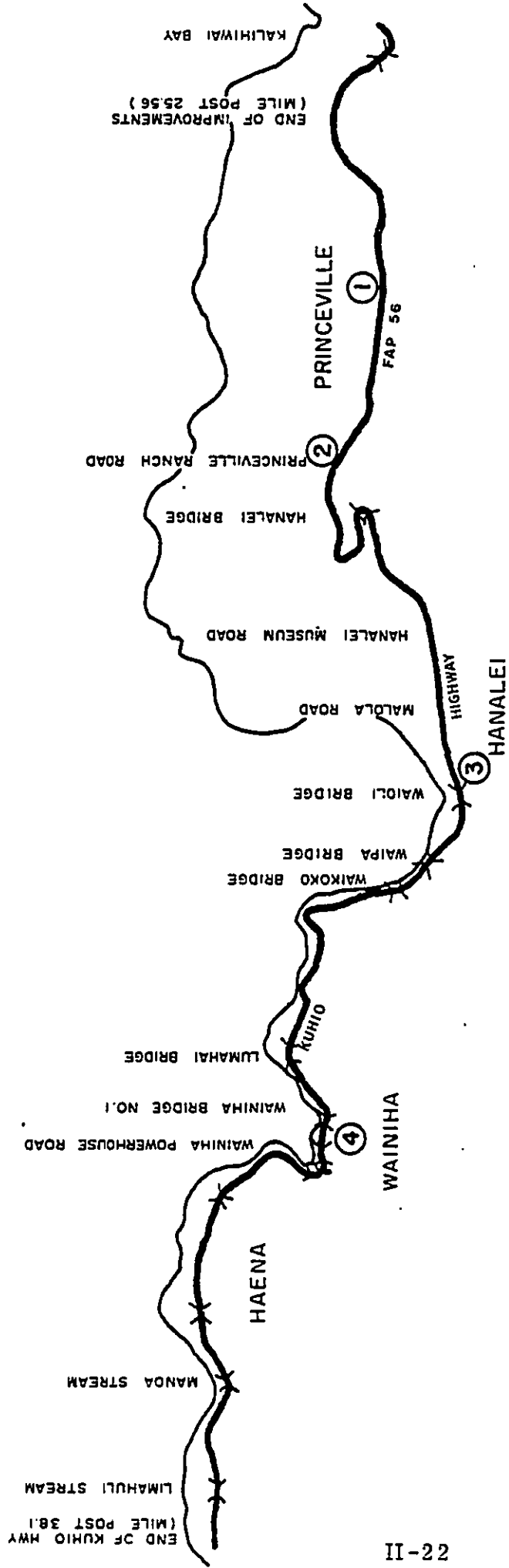
- c. Mitigation Measures. Dust will be controlled by watering. No other mitigations are required.

6. Noise

- a. Existing Conditions. Noise levels have been calculated for four representative points in the project area, using the standard Federal Highways Administration methodology (16) and 1975 traffic volume data. (The basic assumptions and calculation sheets are given in Appendix C.) The four locations and the existing noise levels are plotted on Figure 9. Noise levels on the North Shore are low, as is characteristic of a rural area.

In the highway corridor (75 feet from the centerline), traffic is the main noise source. The L_{10} dBA level ranges from 59 dBA to 62 dBA, depending on traffic volume. (L_{10} is the noise level that is exceeded 10% of the time at a given point.) Spot noise measurements made in 1973 indicated an L_{10} of only 56 dBA approximately 300 feet away from the highway at the residences on Honu Road.

- b. Impacts. Predicted L_{10} noise levels for 1998 traffic volumes with and without the proposed improvements are tabulated on Figure 9. As a result of increased traffic on the highway, L_{10} levels will increase by 4-6 decibels without any highway improvements. By providing a widened roadway and increased speed limits, the recommended improvements will increase the L_{10} within the highway corridor (75 feet from the centerline) to + 68 dBA from Kalihiwai to the Princeville Ranch Road. Since this level is within the Federal Design Standard of L_{10} 70 dBA for residential areas and other sensitive receptors, it can be concluded that the recommended highway widening will not have an adverse impact on existing or future receptors along this road section. There are no applicable State noise standards for Kauai; the DOH has det 70 dBA as the limit for equivalent land use on Oahu. At the intersection of the Kuhio Highway and Honu Road, there is a cluster of six residences that will experience an increase in noise levels to L_{10} 62-68 dBA, depending



LOCATION ^a	EXISTING ^b 1975 L ₁₀ dBA	1998 L ₁₀ dBA w/o IMPROVEMENTS	1998 L ₁₀ dBA with IMPROVEMENTS				FEDERAL STANDARD	STATE ^c STANDARD
			ALT. 2	ALT. W	ALT. A	2-LANE BRIDGE		
1	60	66	68	68	—	75	70 E	
2	62	66	68	68	68	70	55 I	
3	59	65	—	—	64	70	55 I	
4	59	63	—	—	62	70	55 I	

notes:

- a. Point 75 feet from centerline.
- b. Calculated from 1975 traffic volumes.
- c. As established for Island of Oahu by DOH.
Potentially applicable to Kauai.
E = Exterior, I = Interior

KAUAI BELT ROAD
KALIHIAI TO HAENA

FIGURE 9

Existing and Predicted
L₁₀ dBA Noise Levels

Scale: 1" = 1 mi.

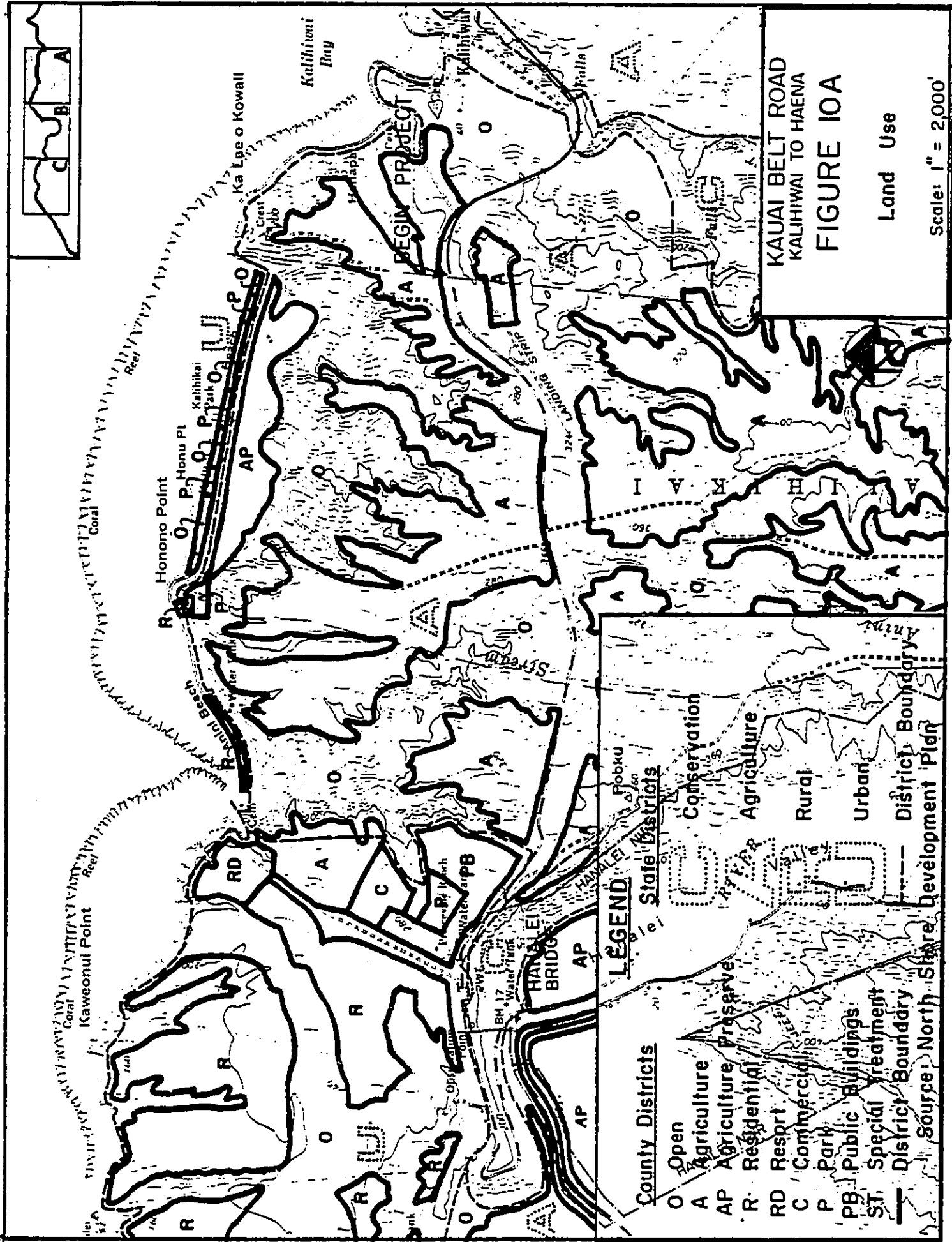
on the distances of each house from the road. The Oahu noise standard of 50 dBA on the interior of homes, etc. (potentially applicable for future development at Princeville) will not be exceeded.

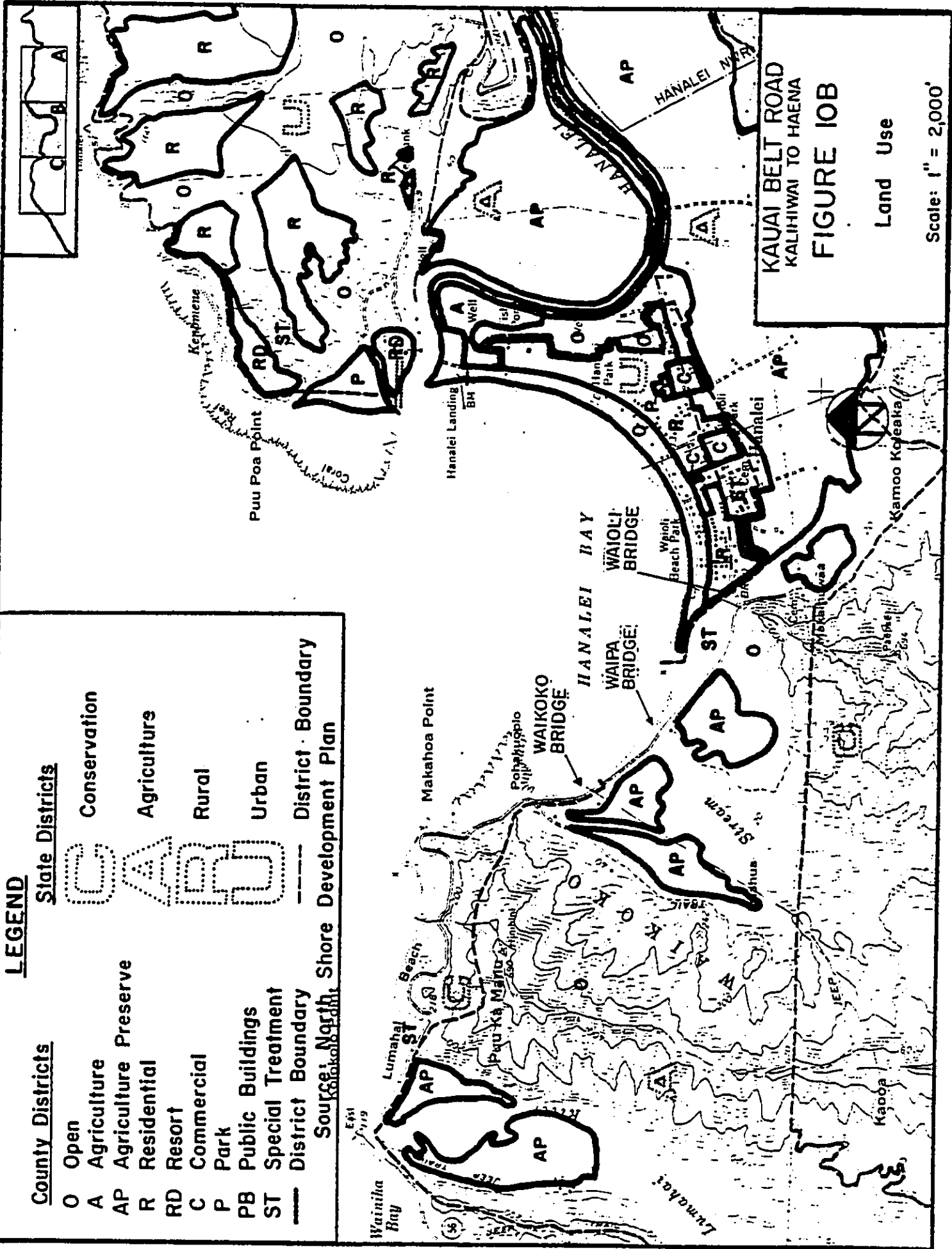
- c. Mitigation Measures. The recommended highway improvements will not have an adverse noise impact, so noise mitigation is not required. To prevent future impacts, no residences or public facilities should be constructed closer than 75 feet from the highway centerline without including noise attenuating measures into the design.

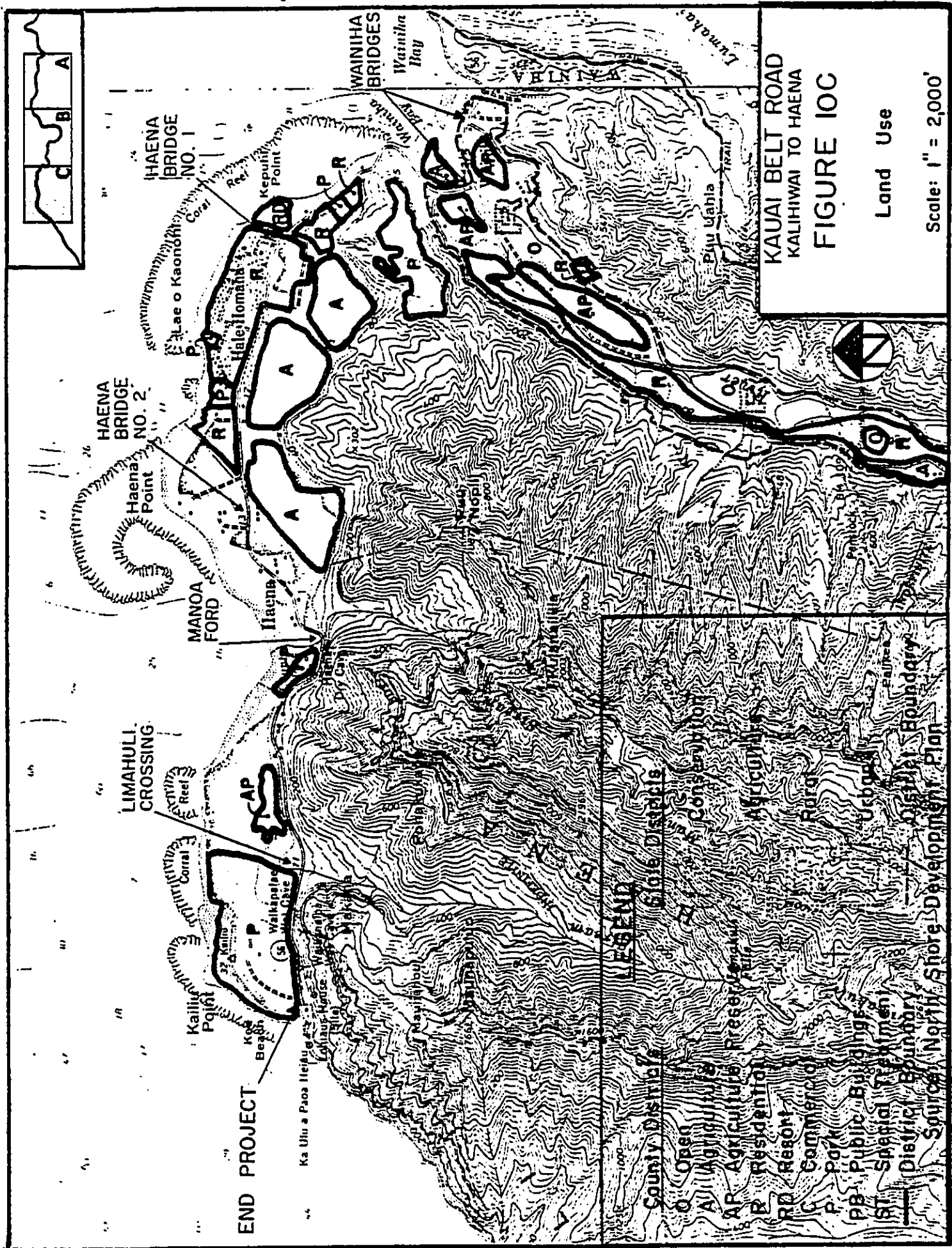
7. Socioeconomics

- a. Existing Conditions. Agriculture is the dominant land use along the highway corridor. The coastal upland between Kalihiwai and Princeville is used for cattle grazing, and the bottom land along the Hanalei and other river valleys is used for pasture and taro cultivation. Urban uses are encountered at Princeville, Hanalei, Wainiha and Haena. The State Land Use Districts crossed by the Highway include: Conservation (39% of the highway), Agriculture (33%), Urban (22%), and Rural (6% of the highway). The State Land Use Districts and the County Zoning Districts are delineated in Figure 10 A, B and C.

The character of the urban land use on the North Shore varies considerably. Princeville is a planned resort development with house lots, condominiums, rental units, commercial facilities and a 27-hole golf course. However, the majority of Princeville is yet to be developed. Hanalei is presently the major community of the North Shore. It has small commercial facilities, community services (fire station, post office, court house, elementary school), and approximately 120 dwelling units. Wainiha and Haena are small rural communities with limited commercial facilities (store, restaurant, resort) and less than 100 dwelling units total. A small airport has recently been completed near the highway just beyond Kalihiwai (Figure 2A).







The resident population of the Island of Kauai was 29,460 persons in 1974, with 1,150 persons residing on the North Shore (17). Although the total population of the Island dropped slightly from 1970 to 1974, the Hanalei Census Tract (the North Shore and the Kilauea area) experienced "phenomenal growth" over this period (43.8% increase)(18). The majority of this growth can be attributed to an influx of persons from the Mainland (19). The North Shore Development Plan projects an "ultimate" population ceiling of 9,788 persons on the North Shore. These would be distributed as follows; 5,800 permanent residents at Princeville (59%), 2,057 from Wainiha Valley to Haena (21%), 1,358 at Hanalei (14%), and 573 at Anini Beach and other small areas (6%). While it is highly unlikely that these ultimate population figures will be realized, the growth pattern is expected to follow that promulgated by the North Shore Development Plan (Figure 10 A, B and C).

The economy of Kauai is based on tourism and agriculture (dominated by sugar cane). In Hanalei, approximately 19% of the residents are employed full or part-time in the tourist industry, 16% are engaged in agriculture, 8% work for the government, and 31% work full or part-time in other areas (eg non-tourist commercial)(20). The county-wide unemployment rate in 1974 was 7.4%

Taro and cattle grazing are the most important agricultural activities on the North Shore; approximately 40% of the taro grown in Hawaii comes from the Hanalei Valley, with approximately 285 acres in cultivation. Because taro farming is a very difficult, labor-intensive occupation and is limited to small family operations, few young people plan to choose it as a career. With attrition of the present taro farmers, a declining market, and technological problems such as weed and disease control, taro production does not appear to be able to support the the future economy of the North Shore (21).

The majority of the visitors to the North Shore do not stay overnight, as there are not enough hotel units in the area. Since there are very few tourist-oriented commercial facilities, the North Shore presently does not receive much direct economic benefit from tourism. However, the beauty and rural charm of the North Shore is very attractive to tourists, and with the expected growth in tourism will come a demand for more tourist accommodations.

Although small-scale agriculture is not as economically viable as the tourist industry, the residents of the North Shore do not wish to see it decline. In the two socioeconomic surveys previously cited (Anderson, et. al, 1972 and 1975), and in the numerous resident responses to the present highway improvement proposals, the local people have given top priority to maintaining or increasing small-scale agriculture and have assigned lowest priority to expanding tourist facilities. The major reason behind this choice is the contention that an increase in tourist facilities would degrade the very features of the North Shore that are presently so attractive.

On the other hand, the North Shore Development Plan (Page 47) takes the position that, "In order to utilize and capitalize on the environmental resources, more people, bringing more money and more interest and more ideas, will be necessary. The great majority of these people will have to be visitors - tourists, if you like- hosted by a much smaller number of permanent residents." And, "...either the visitors come in sufficient number to maintain a socially and economically viable community or the North Shore will become another playground for the wealthy and occasional recluse and a haven for the social dropout."

- b. Impacts. The recommended widening of the Kalihiwai to Princeville segment will require less than ten acres of land for the new right-of-way. The majority of this land is presently used for cattle grazing, and roughly half (3-5 acres) is classified as Prime Agricultural Land. The widening will closely follow the existing highway, so no pasture land will be isolated without access. Since the existing right-of-way fencing will be relocated where required, there will be no hazard to livestock from the improved highway.

The proposed highway improvements will not adversely affect the transportation requirements of the elderly, handicapped, minorities, or other special groups. Rather, the North Shore will be benefited by a safer highway.

Regarding population growth and tourism, it can be reasonably assumed that growth would occur with or without an improved highway. However, as pointed out in Section A, above, building activity would be facilitated by improved bridges (one or two-lane). It is also possible that the area's environmental and legal growth constraints would not be recognized in the assessment of property taxes, and increased taxes along the highway would result. Unfortunately, the actual magnitude of this potentially adverse socioeconomic impact cannot be predicted.

The present agricultural activities on the North Shore are, in one sense, "competing" with tourism for position as the dominant economic base and guiding factor in land use decisions. Although tourism is the stronger force, it is State policy to encourage diversified agriculture. The proposed highway improvements would benefit both agriculture and tourism, since both require an adequate transportation system.

- c. Mitigation Measures. The relatively small amount of land required for right-of-way will be purchased, thus mitigating any economic impact to the owners.

Mitigation of the secondary impact of economic growth resulting from highway improvements - as this is considered to be an adverse impact by many North Shore residents - is not within the jurisdiction of the State Department of Transportation. However, strict control of development is available to the local

residents through existing environmental and regulatory land use constraints as managed by the County of Kauai Planning Department. With the application of these growth controls, rather than relying on the constraints of a substandard highway, the rural character of the North Shore can be preserved.

8. Circulation and Traffic

- a. Existing Conditions. The characteristics of the Kuhio Highway have been previously described in Chapter I. In Section B, Need for Improvement, the highway's deficiencies have been pointed out: high accident rate, unsafe bridge conditions, high maintenance requirements, and limited capacity for future traffic.
- b. Impacts. The recommended improvements are the minimum necessary to correct the inadequacies of the existing highway and provide sufficient capacity for future traffic around Princeville. None of the recommended improvements will cut off access to peripheral areas. New road crossings will be provided at grade where required. Access to the Hanalei Sanitary Landfill (located between the two branches of Anini Stream and north of the highway) will be provided at all times. The sections of highway where shoulders will be paved will be suitable for use by cyclists.

The recommended improvements do not involve the entire highway. The Kalihiwai-Princeville section carries a higher volume of traffic than the rest of the highway and hence warrants higher design standards. The majority of the highway will remain unchanged from the Hanalei Bridge to the end of the highway.

It is unlikely that an improved highway will directly cause an increase in passenger-vehicle traffic, since automobiles are not presently limited by the deficiencies of the highway. In other words, the current highway capacity is greater than the

projected volume on all but two of the highway sections, as shown on Figure 4 (compare "capacity" with "design hr. volume"). Traffic will increase if tourist facilities are provided, but such development would be subject to land use and zoning regulations (which are not within the jurisdiction of the State Department of Transportation).

- c. Mitigation Measures. The recommended improvements are designed to correct the deficiencies of certain segments of the Kuhio Highway, and are therefore mitigation measures in themselves.

9. Scenic Resources

- a. Existing Conditions. The North Shore is one of the most beautiful areas in Hawaii. The long curving beaches, rocky headlands, quiet bays, spectacular mountains with distant waterfalls, meandering rivers, open pastures and dense thickets all within a relatively small area produce an incredibly rich and diverse visual environment. Woven into this setting are pockets of settlement and small-scale farming that add to the scenic quality of the area. The North Shore is not a wilderness; human influence is readily apparent. However, it is the type of influence that has been tempered by time and has become an integral part of the landscape, rather than something added to it. It is this low-key quality of the human presence that gives the North Shore its "rural charm". This combination of natural scenic features and rural character occurs in only a few places in the world and is prized wherever it is found.

The Kuhio Highway is the means by which most people experience the North Shore, and is in itself an important element of the area's scenic resources. Driving from Lihue, the character of the roadway and surrounding countryside becomes increasingly rural. Approximately one mile past Kilauea, the new (1973) highway ends and the section constructed across Kalihiwai Valley in 1963 begins. The roadway on this section passes

through a wooded area, and there is an excellent view of Kalihiwai Valley from the elevated bridge. Shortly after crossing the bridge, the visitor passes a sign stating "End of Improved Highway" and enters a narrow box-cut flanked by dense vegetation. This gives a very strong feeling of "entering" a unique area. For the next 2.6 miles the view constantly shifts from open vistas of pasture land (Plate 3) or mountains to closed cuts (Plate 1) and dense thickets. Even at a conservative speed of 30 mph, it is difficult to take it all in. (This is where the narrow pavement and sharp curves pose a hazard.) Just before Honu Road is the famous Hanalei Bridge overlook (Plate 9), which provides an unobstructed view of the mountains and river valley. A second scenic overlook occurs at the hairpin curve, where Hanalei Bay and the coast beyond may be viewed.

The Hanalei Bridge is the entry point for the Hanalei Valley and Hanalei Town where the rural aspect of the North Shore is the dominant visual element. The old stores and houses set among the taro paddies is a characteristic feature. The Hanalei Bay can be seen from the Waipa Bridge, but the view is screened by trees. The first clear view of the bay is afforded in the vicinity of the Waikoko Bridge (Plate 14). From the Waikoko Bridge the road curves around a rocky coast with several views of the open ocean and Lumahai Beach. At the Lumahai Bridge, the lagoon and mountains are major visual elements.

Entering the Wainiha Valley the viewer is again presented with a rural environment. The one-lane wooden bridges emphasize this and form a strong contrast with the modern style of bridge over the Lumahai River.

Through Haena to the end of the highway the view alternates from dense "tree tunnels" to open pastures and house lots. The mountains rise very steeply through this section and give a closed-in feeling. The crude crossings at the Manoa and Limahuli Streams (Plates 19 and 20) strengthen the sense of isolation that is created by the dense vegetation. The end of the highway at Kee Beach is a destination point, and completes the idea of "entering" created by the beginning of the unim-

improved highway. The total distance between these two points is only 12.5 miles but there is such a diversity of visual stimuli that it seems a much greater distance.

The North Shore Development Plan designates the highway as a Scenic Corridor, and the Department of Transportation has classified it as a Rural Highway.

b. Impacts. The recommended widening from Kalihiwai to Princeville will eliminate the present "entrance" to the North Shore. However, this point will also be altered by the construction of an approach to the Anini Vista Estates Subdivision. The loss of this visual node will be an unavoidable adverse impact. The actual views from this section of highway will not be significantly changed, but the closeness of the box-cuts will be lost. The edge of the highway - the beginning of the "view" - will thus be farther away and will tend to separate the viewer from the view. On the other hand, vistas that are now blocked by the narrow road cuts may be opened up. The "enclosure" at the Anini Stream, where the road drops into dense thicket, will be retained. The Hanalei Bridge overlook will be unaffected.

c. Mitigation Measures. The "closeness" of the existing Kalihiwai-Princeville section is one of the features that make it unsafe. This visual element cannot be completely restored on the wider highway but the use of heavy plant cover (trees and shrubs rather than grasses alone) on cuts will tend to offset the feeling of distance created by the wider highway. Landscaping with tree clusters (30 feet from the pavement edge) would provide variety in the appearance of the right-of-way. The "gateway" effect of the beginning of the unimproved highway could be partially replaced by over-arching trees at the same location or closer to Princeville. Another alternative would be to develop a stronger sense of "entrance" at the beginning of the Kalihiwai segment (one mile past Kilauea).

10. Historical and Archaeological Resources

- a. Existing Conditions. The North Shore has been settled since the time of the early Polynesians and the Hanalei Valley and coastal strand to Haena was a major area of population concentration in the past. In 1847, the North Shore area had a total population of 1,661 people, of which 637 lived in Hanalei, the largest community (23). One of the first missions on Kauai was the Waioli Mission at Hanalei, established in 1834. This structure is still standing and is listed on the National Register of Historic Places(23). Other historical structures include some elegant old homes, many of the buildings in the community of Hanalei and the Hanalei Pier. Only the Waioli Mission is presently listed on the National Register of Historic Places, although the Hanalei, Waioli, and Waipa Bridges have been determined to be eligible for listing by the Keeper of the National Register. (A detailed evaluation of the status of the historic bridges will be provided in a supplement to this Final EIS covering that section of the project). Natural historic features along the North Shore include the Dry Cave at the Haena County Park and the Wet Caves near the end of the highway.

An archaeological reconnaissance has been conducted for the three areas where the recommended Kalihiwai-Princeville will extend outside of the present roadway. The results of this study are included in Appendix D. Each area has been extensively altered by previous agricultural activities, and contain no historic or archaeological features of any kind.

- b. Impacts. The recommended highway improvements will not affect historical buildings or natural historic features. No known archaeological sites are found in the area to be impacted.
- c. Mitigation Measures. Should an archaeological resource be found during construction, the "State Standard Specifications for Road and Bridge Construction" (Section 107, 17D) requires the contractor to suspend all work that would disturb the findings and contact the State Historic Preservation Officer to determine a course of action.

CHAPTER II. REFERENCES

1. U.S.D.A. Soil Conservation Service and University of Hawaii Agriculture Experiment Station. Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii. 1972.
2. U.S.D.A. Soil Conservation Service. Erosion and Sediment Control Guide for Urbanizing Areas in Hawaii. January, 1976.
3. Ibid.
4. Ibid.
5. U.S. Geological Survey. Water Resources Data for Hawaii and Other Pacific Areas. 1975
6. Wilson Okamoto & Associates. Drainage Report, Hanalei Bridge and Approaches. June, 1976
7. Department of the Army Corps of Engineers and Hawaii Department of Land and Natural Resources. Flood Hazard Information, Island of Kauai. June, 1973.
8. Wilson Okamoto & Associates. Op Cit. 1976
9. U.S. Geological Survey, Op Cit. 1975.
10. Department of the Army Corps of Engineers and Hawaii Department of Land and Natural Resources. Wainiha Flood Hazard Area, Map FP-25 . February, 1975.
11. Department of the Army. Op Cit. 1973.
12. Ibid.
13. U.S.D.A. Soil Conservation Service. Soil Survey Interpretations, Kauai. January, 1972.

14. U.S. Fish and Wildlife Service and Hawaii Division of Fish and Game. Hawaii's Endangered Waterbirds. No. date.
(Also personal communication with Fred Zeillemaker, Hanalei NWR Refuge Manager.)
15. Personal communication, Dr. John Maciolek - U.S. Fish and Wildlife Service and University of Hawaii Fisheries Biologist.
16. U.S. Department of Transportation. Fundamentals and Abatement of Highway Traffic Noise. (3 volumes) Report No. FHWA-HHI-HEV-73-7976-1. June, 1973 - April, 1974.
17. Anderson, Robert N., et al. Kauai Socioeconomic Profile. University of Hawaii Departmental Paper 35. May, 1975.
18. Ibid.
19. Anderson, R.N., et al. Hanalei Development Plan, A Socio-economic Prelude. University of Hawaii, Departmental Paper 2. September, 1972.
20. Ibid.
21. Anderson, R.N., et al. Op Cit. 1975.
22. Schmitt, R.C. The Population of Northern Kauai in 1847. Hawaii Historical Review, Vol. 2 No. 3 April, 1966.
23. Federal Register, Volume 40, No. 28. February 10, 1976. .

CHAPTER III
ALTERNATIVES

CHAPTER III. ALTERNATIVES TO THE PROPOSED ACTION

The project has been divided into two segments to be covered in separate Final EIS's. Of the 27 alternatives for 11 different actions discussed in the Draft EIS, those dealing with the Princeville-Haena section will remain as "proposed alternatives" until the historic review (Section 106) process is completed. For the Kalihiwai-Princeville section, Alternative W2 has been selected ("recommended"). The other alternatives are briefly described below and the reasons for recommending Alternative W2 are discussed.

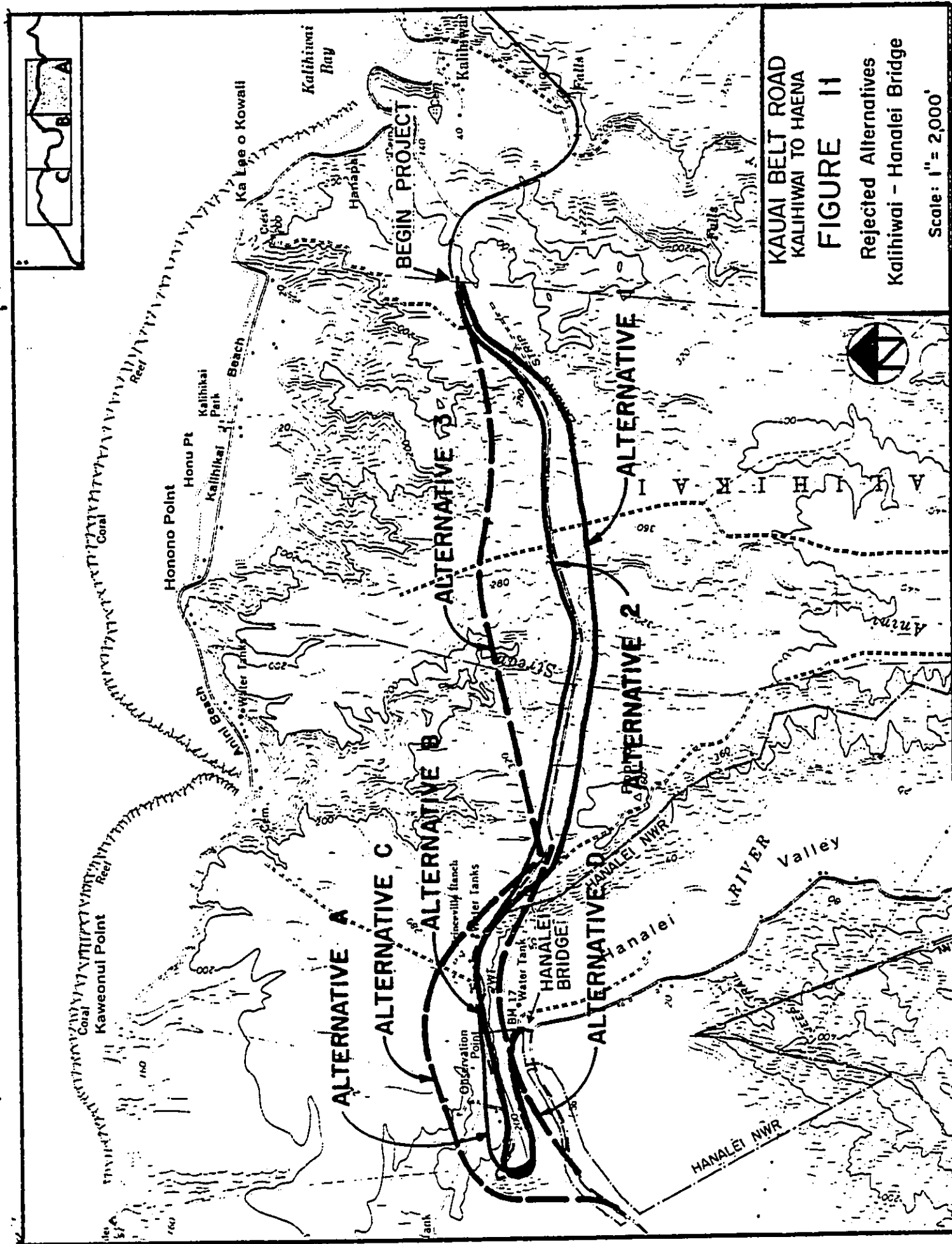
A. ALTERNATIVES CONSIDERED BUT REJECTED EARLY IN THE PLANNING PROCESS

Early in the project, numerous alternative improvements were considered for the Kalihiwai to Princeville section. After evaluation, four were rejected prior to circulation of the Draft EIS. These rejected alternatives are shown on Figure 11. Alternative 1 would provide a new alignment to the south of the existing highway. Its technical characteristics are similar to Alternative 2 (Figure 5), except that it is farther away from the existing alignment (approximately 400 feet at one point). Alternative 1 was rejected because it would interfere with the Princeville landing strip (opened September, 1976), and would isolate approximately 27 acres of pasture land.

A new, shorter alignment approximately 1,500 feet north of the existing highway (Alternative 3) was also studied but rejected because of problems with drainage, the need for excessive cuts and fills, high construction cost, and it would disrupt the development plans for Princeville Ranch.

A modification of Alternative W was considered that would involve only realigning the curves, with no road widening in-between. This would slightly improve the safety characteristics of the highway, but there would still be no shoulders for emergency pull-outs and the road base would remain inadequate.

Construction of 12-foot lanes and 10-foot shoulders was considered for the new alignments, but was rejected because of environmental impact, public opposition, and cost.



B. PROPOSED ALTERNATIVES REJECTED SUBSEQUENT TO THE DRAFT EIS.

1. Alternative 2 - Realignment North of the Existing Highway: Alternative 2 (Figure 11) would provide a new highway for the Kalihiwai-Princeville segment which would be immediately parallel to the existing highway on the north side (Plate 3). The total length of Alternative 2 is approximately 2.05 miles. The cost would be approximately \$2.614 million, with a benefit/cost ration of 1.2.

The new highway would have two 11-foot wide lanes and 8-foot wide paved shoulders (Table 3). Total right-of-way would be a minimum of 50 feet. The highway would be designed for 40 mph and posted for 35 mph. (The original proposal called for a 50 mph speed limit and 10-foot wide paved shoulders.) The width of the new alignment would allow most disabled vehicles to adequately clear the travelled way. Turnouts would be provided at scenic view points. The old alignment may become a bicycle path.

Alternative 2 would cross the main branch and west fork of the Anini Stream (Plate 3). These two branches presently cross beneath the existing road through tunnels. The crossings for Alternative 2 would be on a fill with pipe culverts of sufficient capacity for a 50-year flood. Small gullies, irrigation channels and other drainage features would also be provided with culverts. Access at grade would be provided for all roads intersecting the new alignments. Rights-of-way for utilities would be maintained along the existing highway. Coordination with the U.S. Department of Commerce, National Ocean Survey would be established to insure the proper relocation of geodetic survey control monuments. During construction of this alternative, traffic would be handled by the existing highway.

Alternative 2 was rejected because a new highway alignment would have a much greater impact on the environment than widening the existing highway. This is particularly apparent when considering such factors as landform alteration and soil loss. Public reaction to a new

alignment was very negative. As shown on Table 3, Alternative 2 would cost approximately \$22,000 more than the recommended Alternative W2, with a benefit/cost ratio only 0.07 points higher than Alternative W2 (an insignificant difference).

2. Alternative W1. The widening alternative had two variations; both provided 11-foot traffic lanes but W1 proposed 8-foot paved shoulders, and W2 proposed 4-foot paved shoulders. The curve improvements were identical in each case. The cost of Alternative W1 would be approximately \$2.716 million (the highest of the three proposals), with a benefit/cost ratio of 1.08. This is \$124,000 more than Alternative W2, and a difference of 0.05 points below the benefit/cost ratio of Alternative W2 (Table 3).

Alternative W2 was selected over Alternative W1 because W2 will disturb less land and will therefore have less environmental impact. In keeping with the frequently expressed desires of the community, Alternative W2 provides the minimum level of improvement within the standards of safety sought by the Department of Transportation.

C. ALTERNATIVE TRANSPORTATION SYSTEMS

Many North Shore residents have suggested the development of a mass transit system as an alternative means of handling the projected increases in traffic. If increasing capacity was the only objective of the proposed highway improvements, a mass transit system would be an alternative to consider. However, the main reasons for the proposed improvements are the existing substandard conditions (poor alignments and unsafe bridges) and structural inadequacies (pavement base and bridges). Increased capacity is important, but it is secondary to the objective of providing a safe highway. Any mass transit system designed to use the existing highway (eg. bus or shuttle as opposed to fixed-rail) would increase the need for the proposed improvements.

D. NO PROJECT ALTERNATIVE

The "Do-Nothing" alternative has been considered separately for each of the eleven different improvements that constitute the proposed project. However, it has been rejected for the Kalihiwai to Princeville section, since it is the Department of Transportation's responsibility to provide a safe highway. To take no action to correct the dangerous curves, narrow pavement, and inadequate base structure would not be properly discharging that responsibility. The Department of Transportation has been responsive to the wishes of the community by selecting the minimum level of improvement. When ultimate improvements for the Princeville to Haena section are determined, safety will also be given high importance in evaluating the "Do-Nothing" alternative.

CHAPTER IV
UNAVOIDABLE
ADVERSE IMPACTS

CHAPTER IV. UNAVOIDABLE ADVERSE IMPACTS

Since the scope of the recommended widening is relatively minor, the potential for unavoidable adverse impacts is small. In regrading the box-cuts to a more gentle slope, the appearance of the highway will be altered. This can be considered an adverse impact, since the present character of the highway is valued by many residents and visitors. Some soil loss will occur during construction, but this will be held to a minimum by requiring the Contractor to comply with the State Standard Specifications for erosion control.

CHAPTER V
SHORT TERM USES VS
LONG-TERM PRODUCTIVITY

CHAPTER V.

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

To the majority of residents and visitors, the "productivity" of the North Shore is found in its natural beauty combined with unique rural charm. Any activity should therefore be evaluated on whether or not it maintains and enhances the scenic quality of the area. The recommended widening will not detract from the scenic quality of the area other than altering the appearance of the highway. The view from the road may be improved by opening up vistas that are presently blocked by narrow box-cuts.

Other forms of productivity such as taro farming, cattle grazing and the preservation of endangered waterbird habitat will not be affected. The wider highway will not foreclose future activities or land uses.

**CHAPTER VI
COMMITMENTS
OF RESOURCES**

Highway construction and paving will commit small amounts of materials that will be imported to the project area from existing quarries on Kauai. The recommended improvements will not commit land outside of the identified corridor; all cuts and fills will be approximately balanced. Within the highway corridor, a small amount of grazing land will be removed.

The U.S. Department of Interior has called to attention a deposit of ferruginous bauxite that is found at shallow depths (0-50 feet) in a north-south belt through the project area. There are approximately 30 million tons of this mineral resource with an average content of 26% alumina, 40% iron, and 7% titanium. Maintaining the present highway alignment will continue to make unavailable an insignificant amount of this resource. In light of the objectives for the future of the North Shore, namely the enhancement of its scenic resources, and the restrictions of the North Shore Development Plan, it is inconceivable that an attempt would be made to recover this mineral resource.

The proposed improvements will commit the economic resources of the State and Federal Government, and a portion of the required funds has already been appropriated. Because of the unsafe conditions of the existing highway, its improvement has been given a top priority.

PLATES

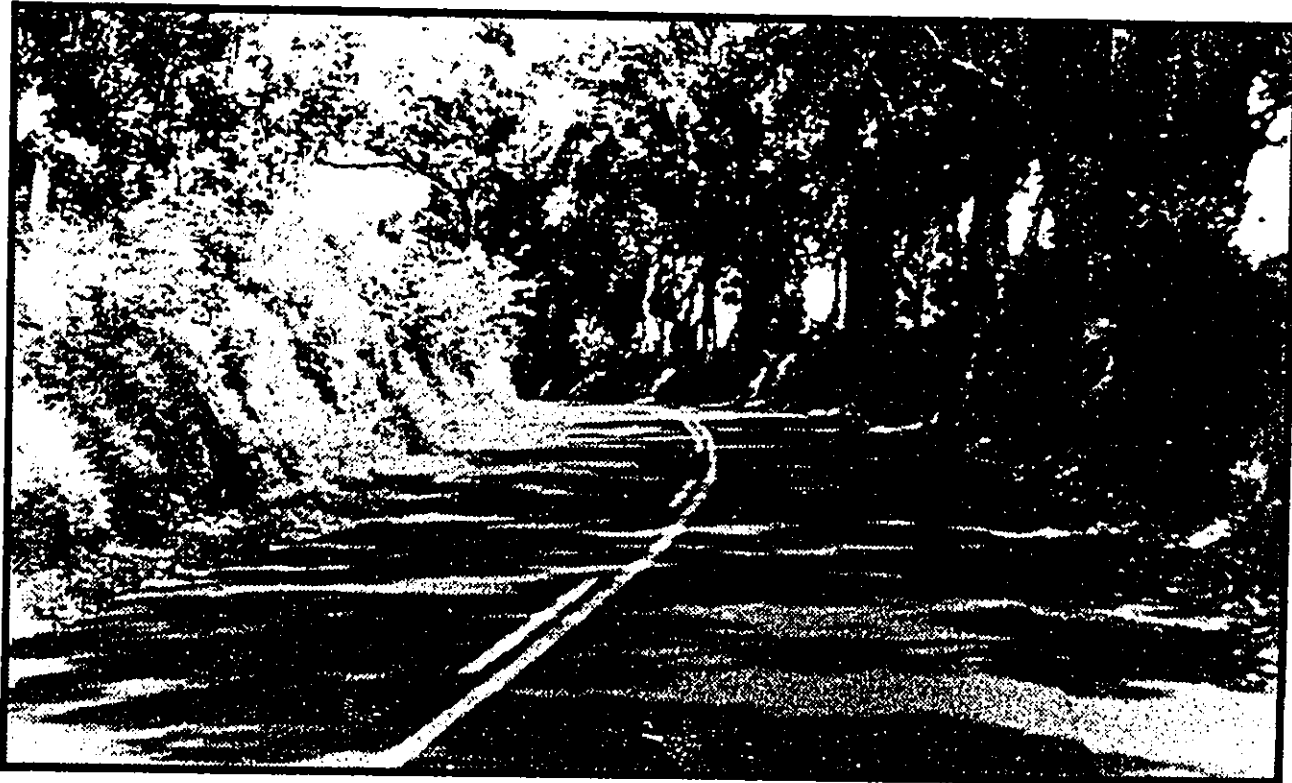


Plate 1 Typical view of the Kuhio Highway between Kalihiwai and Princeville. Note narrow shoulders and blind curve. Alternative W would make this spot similar to Plate 2.

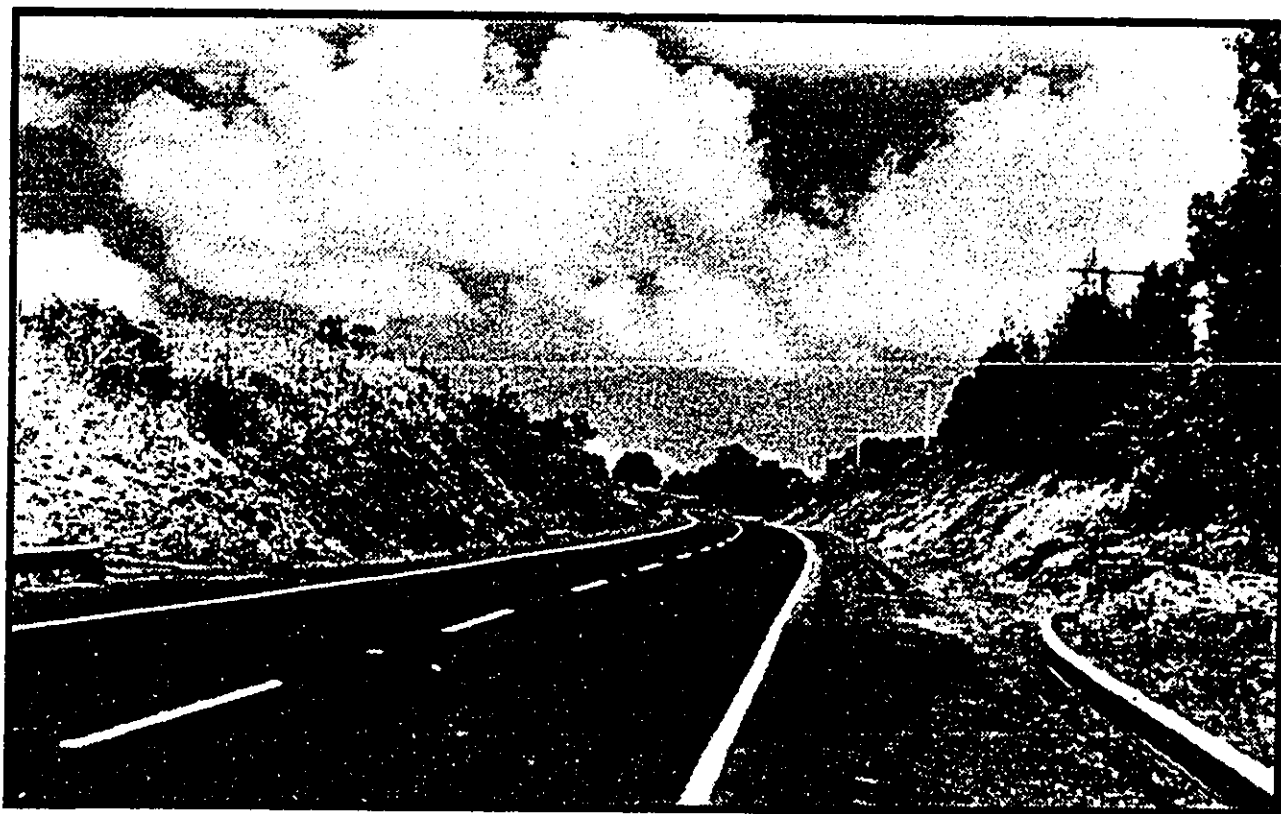


Plate 2 Typical view of the improved Kuhio Highway showing treatment of cuts and shoulders. Photo taken near Kilauea.



Plate 3 The coastal upland near Princeville, looking west toward Anini Stream with its dense growth of Java Plum and Guava. Alternatives 2 and W would follow the right-hand side of the road.

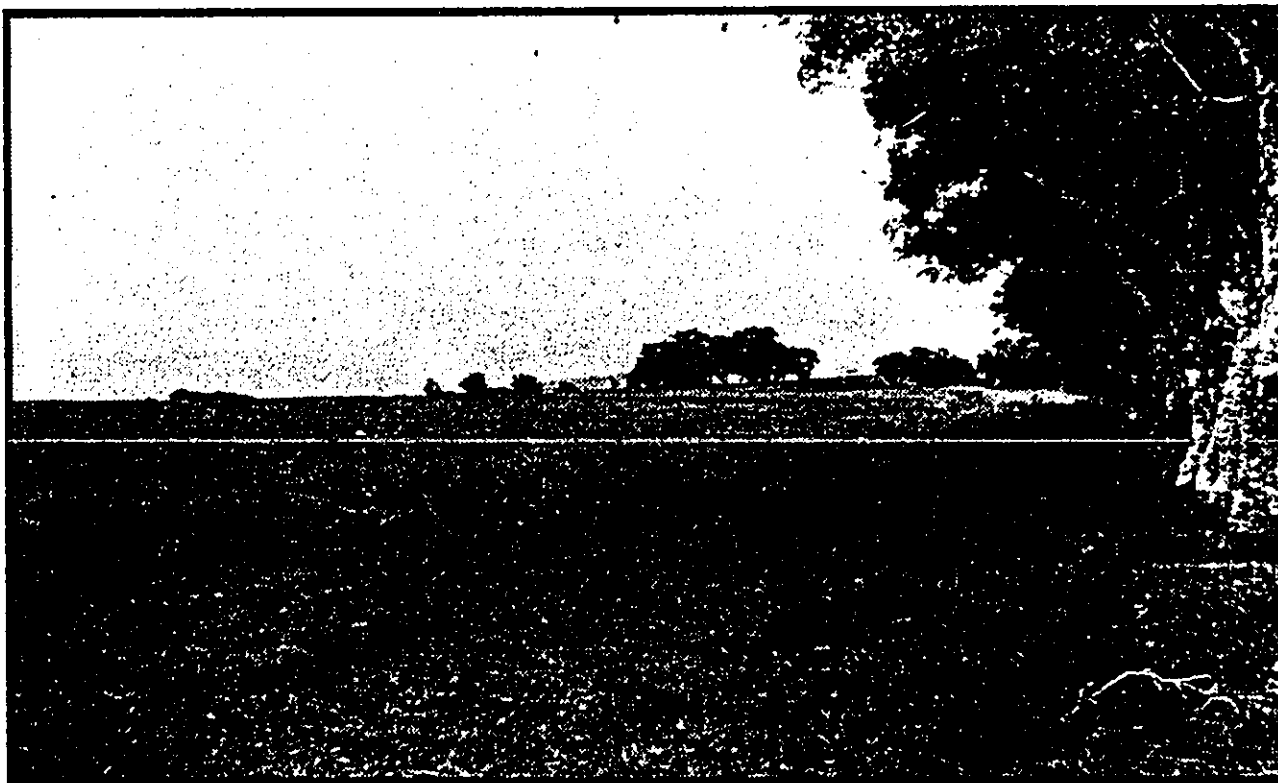


Plate 4 View of the Princeville Ranch looking east. The realignment of curve number 3 would pass through this area.



Plate 5 The existing road cut on the Hanalei River bluff.

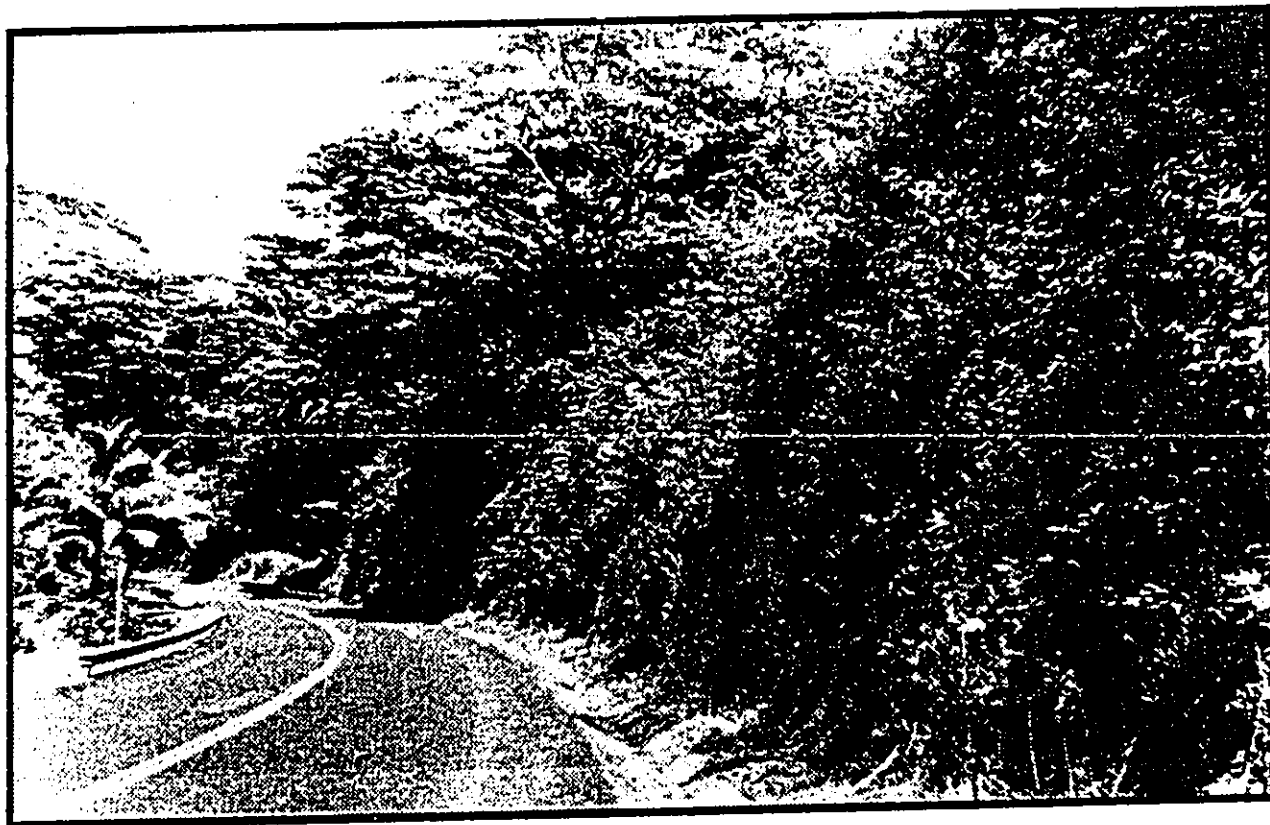


Plate 6 The road cut on the east bluff of Kalihiwai Valley, made in 1963. Road widening on the Hanalei bluff would be similar. Note the dense plant cover including large trees; these are entirely self-established.

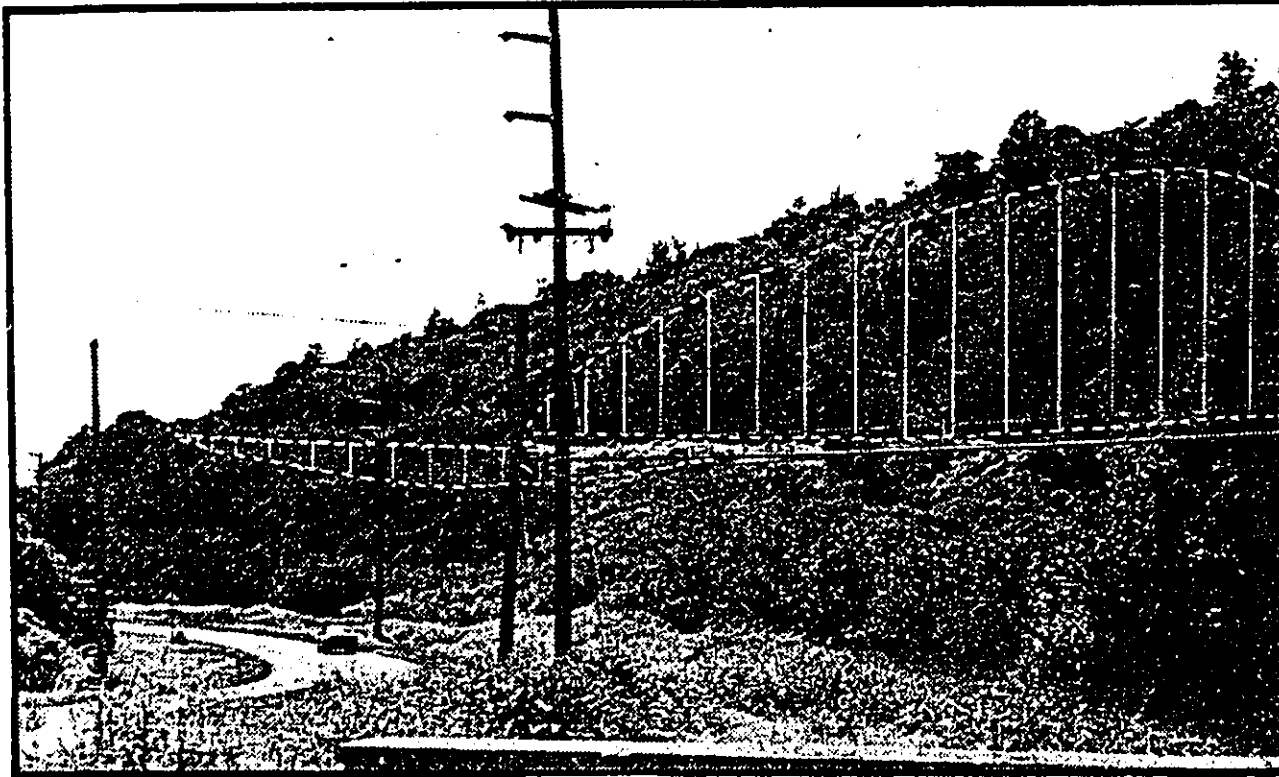


Plate 7 Approximate cut and fill on the Hanalei River Bluff from Alternatives A or W₂. (View from the bridge).

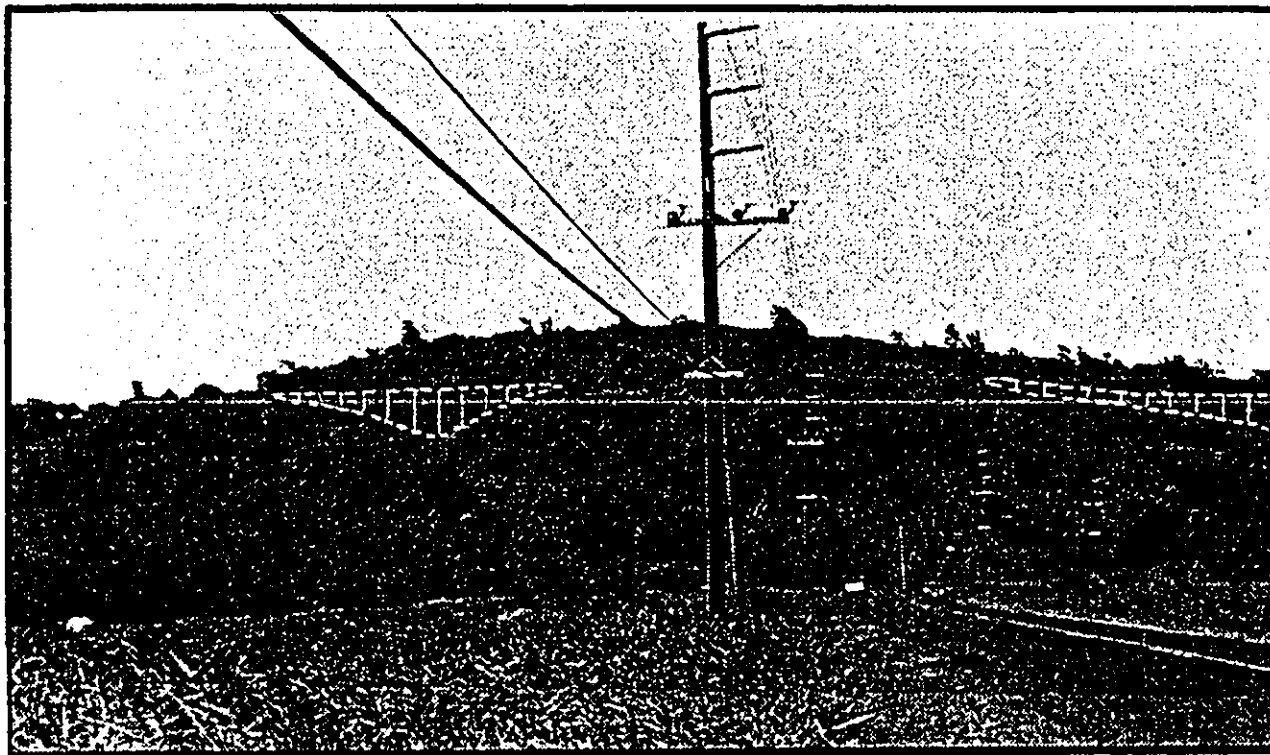


Plate 8 Approximate cut and fill on the Hanalei River Bluff from Alternatives A or W₂. (View from the valley).

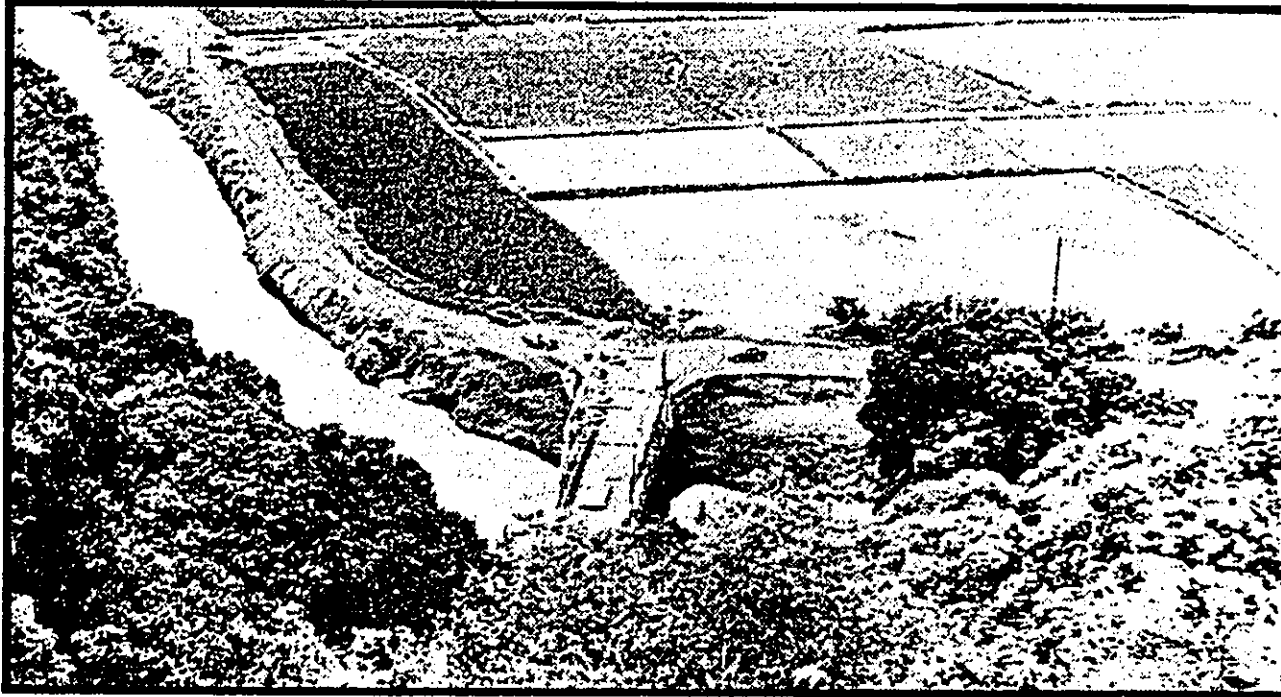


Plate 9 The Hanalei Bridge and taro patches of the Hanalei NWR. Note cars waiting to cross. At the time this photo was taken (6/14/76, A.M.), there were several Hawaiian Stilts and Coots feeding in the pond closest to the highway.

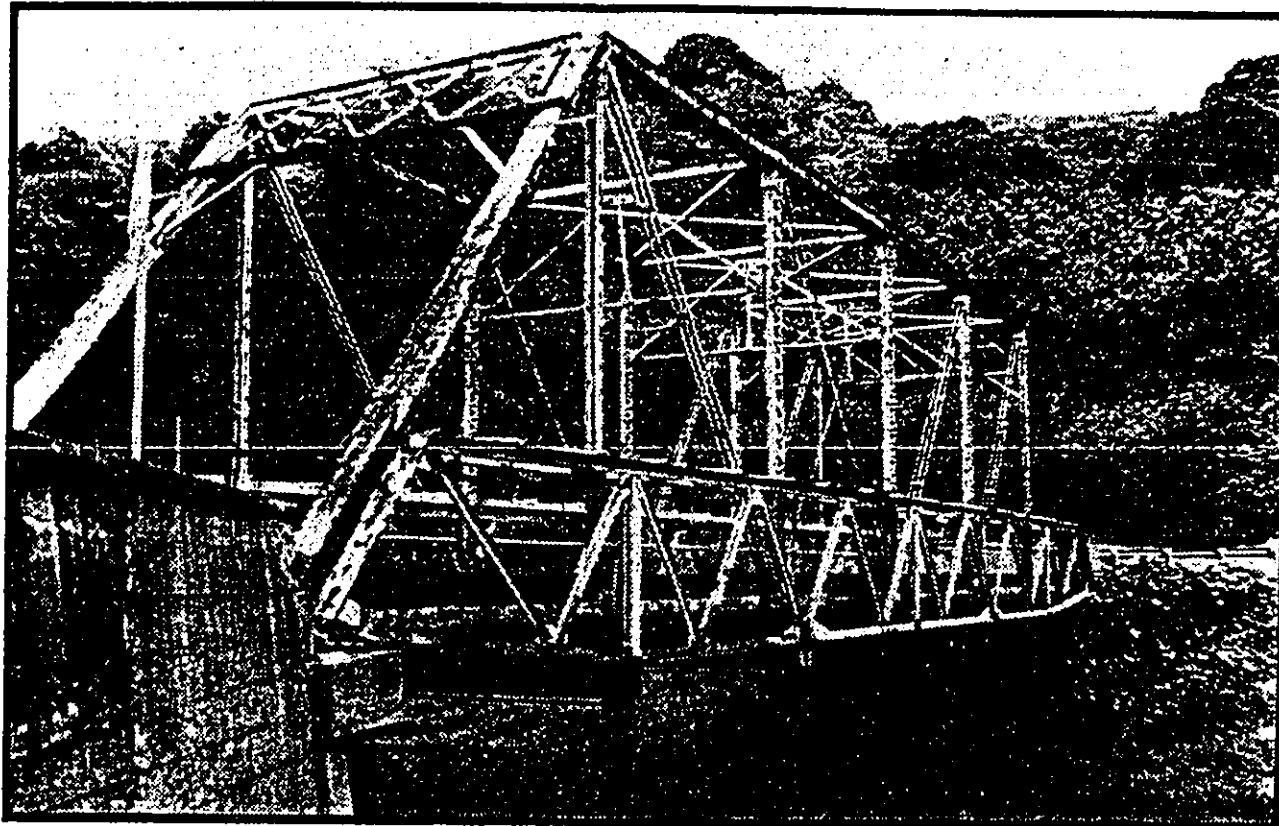


Plate 10 The thru-truss design of the Hanalei Bridge.

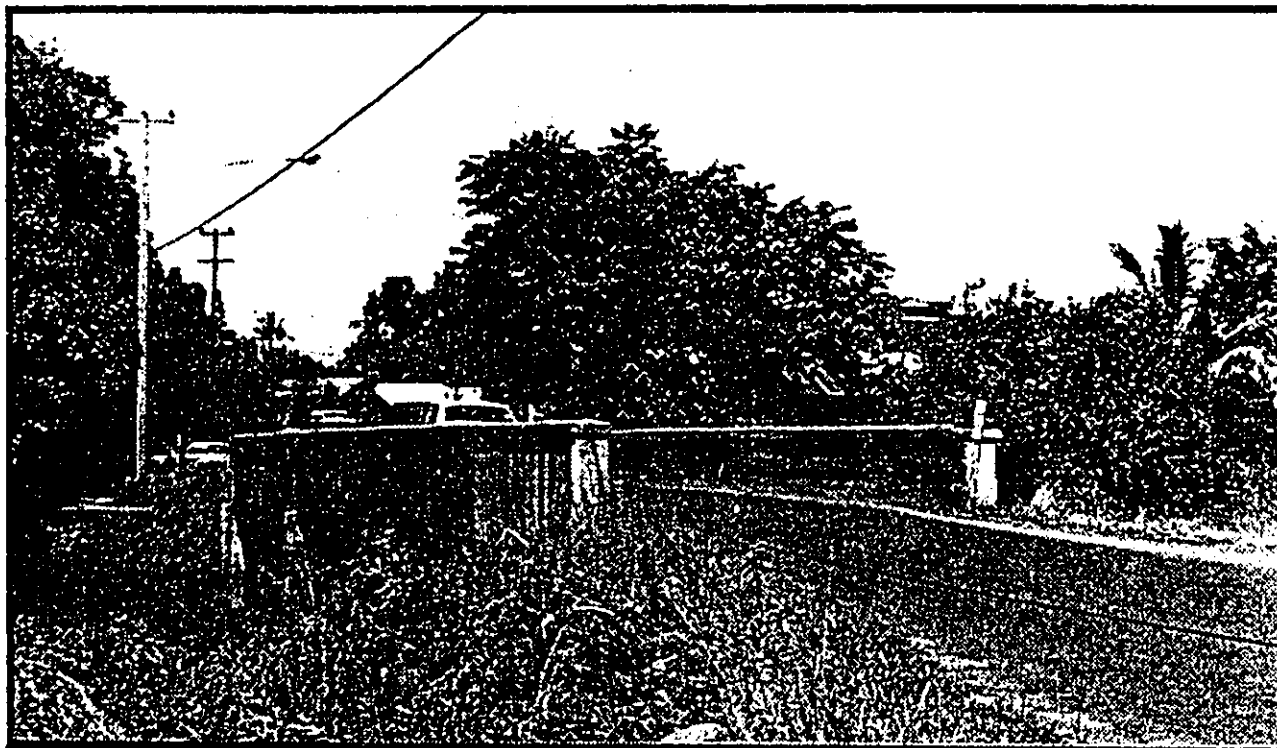


Plate 11 The Waioli Bridge looking east.

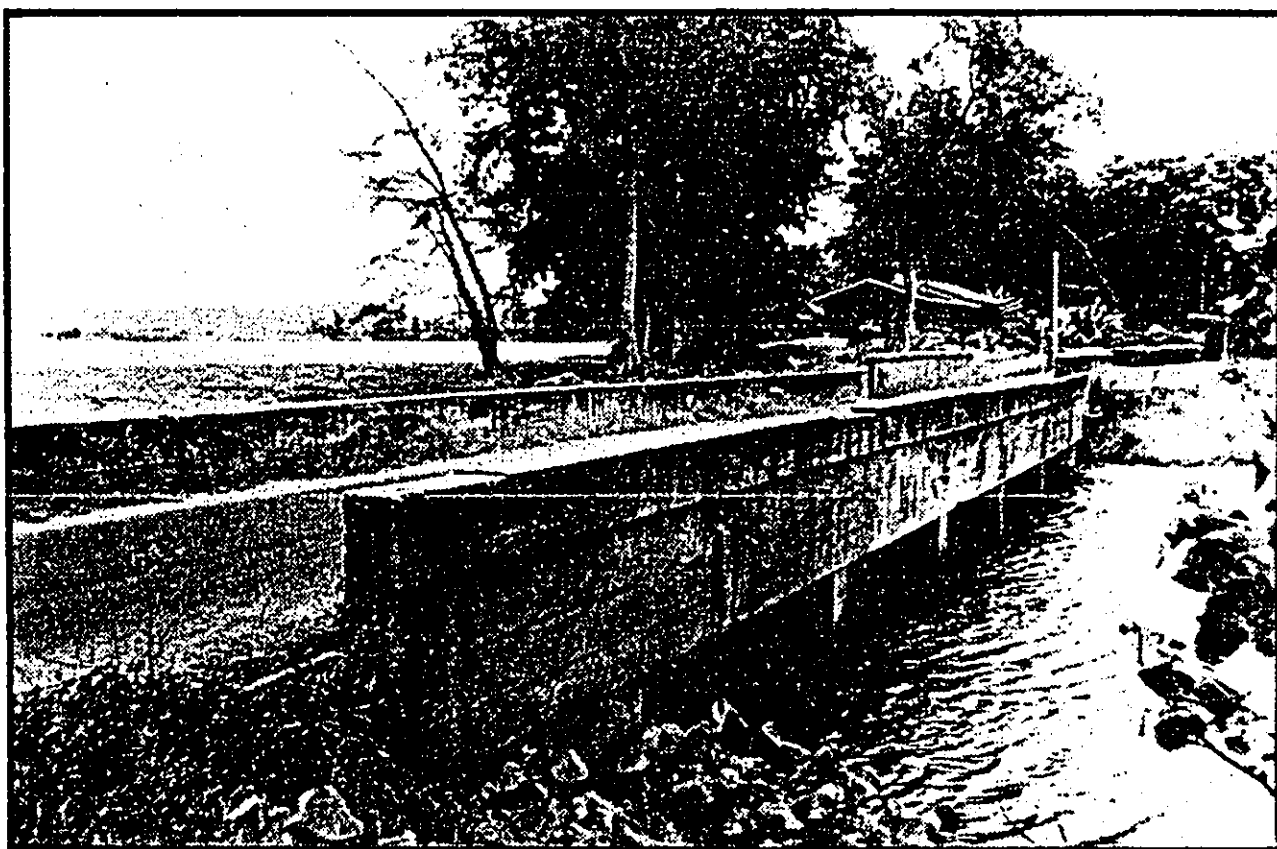


Plate 12 The Waipa Bridge looking east. Note the two different segments; the shorter one (background) is narrower than the 1934 extension.



Plate 13 Cars waiting to cross the Waipa Bridge.



Plate 14 The Waikoko Bridge looking west. Note the makeshift repairs made after the 1946 tsunami dropped the east abutment.

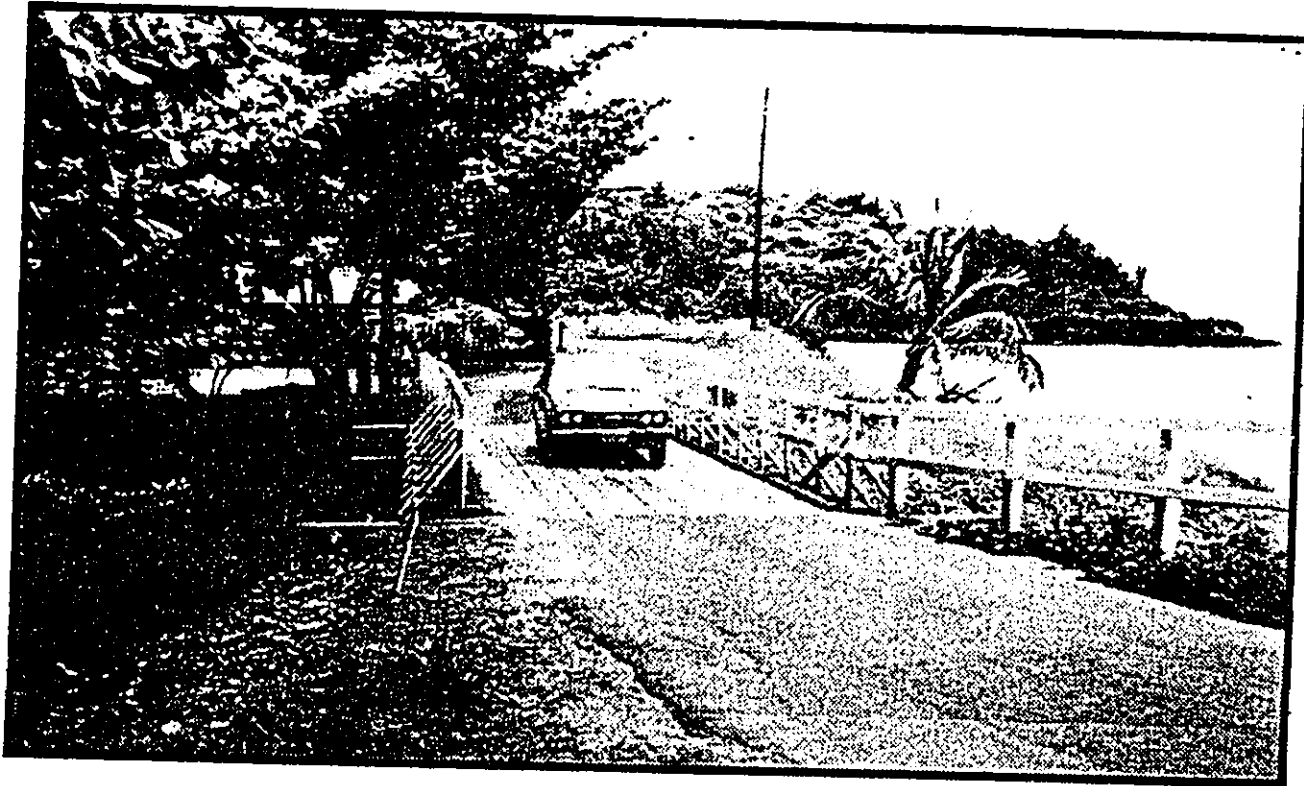


Plate 15 The Wainiha Bridge Number 1 looking west.

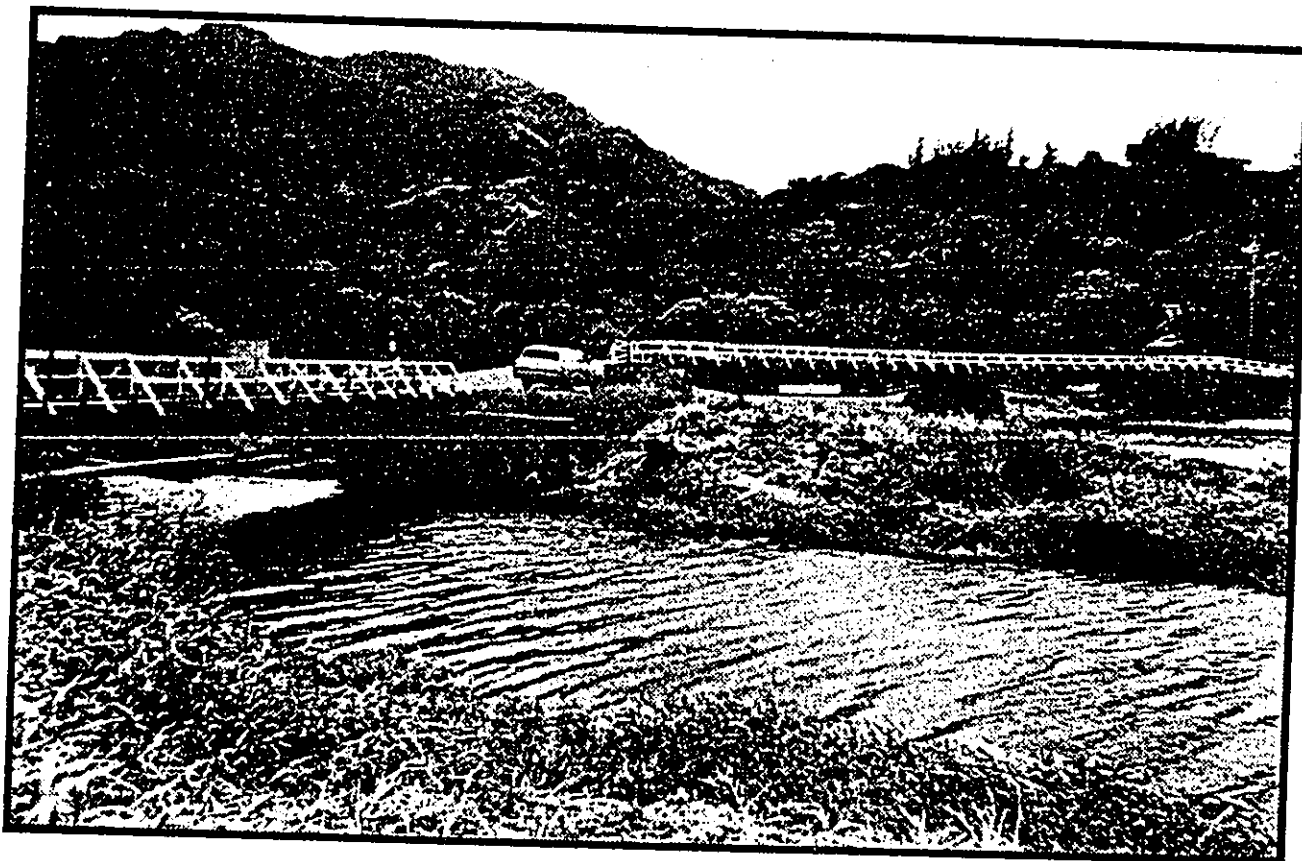


Plate 16 The Wainiha Bridges Numbers 2 and 3 looking west. These were erected as temporary structures in 10 days after the 1957 tsunami. Note the sag in bridge #3 (background).



Plate 17 The Haena "Bridge" number 1 looking west. Note the settlement of the west abutment.

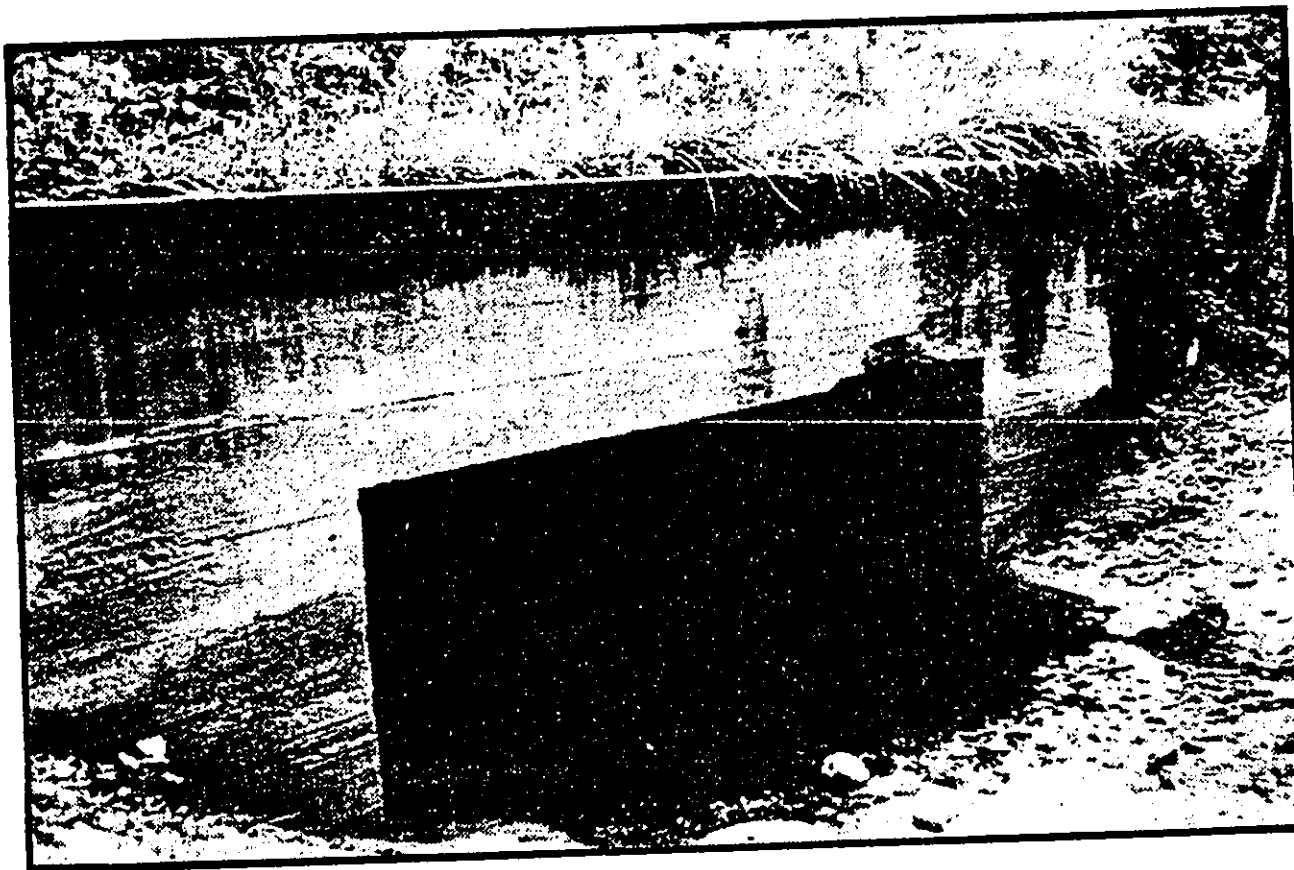


Plate 18 The Haena "Bridge" number 2. The grass growing on the top of the bridge camouflages the edge. Note evidence of decay in the concrete.



Plate 19 The Manoa Ford looking west.



Plate 20 The Limahuli Stream Crossing.

**APPENDIX A
ORGANIZATIONS AND
PERSONS CONSULTED**

APPENDIX A ORGANIZATIONS AND PERSONS CONSULTED IN
THE PREPARATION OF THE DRAFT EIS

I. RESPONDENTS TO THE MAY 29, 1975 DRAFT EIS AND SUMMARY
OF COMMENTS (Kalihawai to Hanalei Bridge Section Only)

<u>A.</u>	<u>List of Respondents</u>	<u>Letter</u> <u>Dated</u>
1.	<u>U. S. Governmental Agencies</u>	
a.	Advisory Council on Historic Preservation - Mr. Louis S. Wall	7/18/75
b.	Department of Agriculture Soil Conservation Service - Mr. Francis C.H. Lum	8/ 6/75
c.	Department of Commerce Office of Science & Technology - Mr. Sidney R. Galler	8/29/75
d.	Department of Defense Air Force - Mr. Ben D. Kosa Army Engineer District, Honolulu - Mr. Ki Suk Cheung Army Support Command - Col. Charles S. Varnum	8/ 8/75 8/27/75 7/17/75
e.	Department of Health, Education and Welfare Office of Environmental Affairs - Mr. James D. Knochenhaur	9/ 5/75
f.	Department of Housing and Urban Development Federal Housing Administration - Mr. Alvin K.H. Pang	8/12/75
g.	Department of the Interior Office of the Secretary, Pac. SW Reg. - Mr. Webster Otis	8/21/75
h.	Department of Transportation Federal Aviation Administration - Mr. Herman C. Bliss	7/16/75
i.	Environmental Protection Agency, Region IX - Mr. Paul De Falco, Jr.	9/ 2/75

2. U. S. Congressional Representatives
 - a. The Honorable Hiram L. Fong 7/ 8/75
 - b. The Honorable Patsy T. Mink 7/ 7/75

3. State of Hawaii Agencies
 - a. Department of Agriculture
- Mr. John Farias, Jr. 8/ 4/75
 - b. Department of Defense
- Mr. Valentine A. Siefermann 7/ 8/75
 - c. Department of Education
- Mr. Teichiro Hirata 7/ 8/75
 - d. Department of Health
- Dr. James S. Kumagai 8/ 1/75
 - e. Department of Land & Natural
Resources
Chairman of the Board
- Mr. Christopher Cobb 7/15/75
 - f. Department of Planning and
Economic Development
- Mr. Hideto Kono 8/26/75
 - g. Office of Environmental Quality
Control
- Mr. Richard E. Marland 7/23/75 &
9/16/75

4. University of Hawaii
 - a. Environmental Center
- Mr. Doak C. Cox 9/ 4/75

5. County of Kauai
 - a. Department of Public Works
- Mr. Akira Fujita 7/21/75

6. Public Utilities
 - a. Citizens Utilities Company
- Mr. Boyd T. Townsley 7/10/75

7. Other Organizations

- a. American Lung Association
- Mr. James W. Morrow 9/ 4/75
- b. Archaeological Research
Center, Inc.
- Mr. Francis Ching, Jr. 7/30/75
- c. Life of the Land
- Mr. Robert W. Gould 8/ 6/75
- d. Sierra Club & Life of the Land
- Mrs. Helen C. Hopkins 8/13/75

8. Private Individuals

- a. Mr. David Chang, Koloa, Kauai 7/15/75
- b. Mr. Joe Hadley, Kapaa, Kauai 8/ ? /75
- c. Mr. Mark Hemmings, Koloa, Kauai 7/24/75 &
8/22/75
- d. Mr. Peter Moras, Sonoma, Ca. 8/23/75
- e. Ms. Helen Morihisa, Kauai 8/14/75
- f. Mr. Jack Nishimoto, Hanalei, Kauai 8/27/75
- g. Ms. Marilyn Pollock and
Mr. Ewin R. Pollock 8/23/75
- h. Ms. Gail Rush, Kaneohe, Oahu 8/18/75
- i. Mr. Robert J. Schleck, Lihue, Kauai 8/13/75
- j. Mr. Wm. J. Sollner, Kapaa, Kauai 7/19/75
- k. Mrs. Alexander J. Veech, Hanalei,
Kauai 8/ ? /75
- l. Mrs. R. White, Koloa, Kauai 10/ 5/75

9. Persons Giving Testimony at the August 13, 1975 Public Hearing

In addition to those responding by letter, the following private citizens presented their views at the public hearing on the May 29, 1975 Draft EIS (Kalihawai to Hanalei Bridge section only), held at the Hanalei Courthouse. A total of 86 persons attended the hearing, which lasted four hours.

- a. Ms. Winona Aipia, Princeville
- b. Ms. Nancy Bennet, Kauai
- c. Mr. D.A. Carswell, for Princeville Corp.

- d. Mr. Jack Euwing, Haena
- e. Mr. Max Graham, Kauai
- f. Mr. Joseph Hadley, Hanalei
- g. Mr. Joseph J. Harris, Jr., Kalihi Kai
- h. Mrs. Helen C. Hopkins, for Sierra Club
and Life of the Land
- i. Mr. Robert Johnson, for Malama Hanalei
- j. Dr. J.H. Johnston, Hanalei
- k. Mr. David Kouchalakos, Hanalei
- l. Mr. Milton E. Lawrence, Anini Beach
- m. Mr. Jack Nishimoto, Wainiha
- n. Mr. Arnold B. Nurock, Hanalei
- o. Mr. George Peabody, Kauai
- p. Mr. Steven Peters, Kauai
- q. Mr. Ed Pollock, Hanalei
- r. Mr. Robert Scotland, Hanalei
- s. Mr. Wilber Tai Hook, Kauai
- t. Mr. Jim Thompson, Kauai
- u. Mr. John Wehrheim, for Kauai Historic Society
- v. Mr. Fred Xylomacher
- w. Ms. Jennie T. Yukimura
- x. Ms. Joann Yukimura

B. Summary of Comments

The following is a point-by-point summary of the major issues raised by the agencies and persons responding to the May 29, 1975 Draft EIS prepared for this project (Kalihiwai to Hanalei Section). These issues were weighed by the State Department of Transportation, and resulted in modifications to the proposed improvements. The major changes are: the preparation of this EIS (Kalihiwai to Haena), the addition of Alternative W, and several new proposals for the replacement of the Hanalei Bridge. Comments relating to the scope of the May 29, 1975 Draft EIS, rather than to the proposed project itself, are not summarized here but have been answered throughout the text of this EIS. Following each summary, the reader is directed to the appropriate pages of this EIS for further discussion. (The issues are arranged according to the outline of this EIS not according to their importance in the opinion of the respondents).

1. Need for the Project

Many citizens expressed their disapproval of the proposed improvements by questioning the need for an improved highway. Some claimed that the present highway is not unsafe, that it is in good condition, and that the bridges are satisfactory as they are. (See pages I-7 to I-9 and Tables 1 and 2). Other respondents criticized the traffic projections on the grounds that Princeville has not experienced the rapid growth that had been first anticipated. The traffic projections have been revised. (See Figure 4).

2. Project Economics

Requests were made for information on project cost, levels and sources of funding, and the Benefit/Cost Ratio of the proposed improvements. (See page I-15 and Table 3).

3. Growth Inducement

By far the greatest concern of North Shore residents is the possibility that an improved highway would bring more tourists and more construction, and would eventually lead to the destruction of their quality of life. (See the following pages for further discussion of this subject: I-20, II-1, II-29, and A-10.)

4. Modification of Landform

Concern was expressed that construction on the Hanalei River Bluff would leave an ugly scar. (See pages II-3, II-33 and Plates 6, 7, and 8).

5. Erosion and Siltation

Several agencies (eg. SCS, Dept. of Interior) and many private citizens considered this a major potential impact of the proposed improvements. It was requested that the effects of construction-induced erosion on Anini Stream and the Hanalei River be thoroughly discussed. (See pages II-5 to II-7).

6. Water Resources

Water pollution from erosion and the effect of the project on the Hanalei Valley flooding problem were frequently voiced concerns. Hydrologic data and the provisions for crossing Anini Stream were requested. (See pages I-24, I-25 and II-8 to II-12).

7. Wildlife

The effect of the proposed project on the endangered waterbirds at the Hanalei National Wildlife Refuge and on the stream fauna of the Hanalei River was a major concern of the U.S. Department of Interior and other agencies. (See pages II-17 to II-19).

8. Air Quality

The May 29, 1975 Draft EIS discussed the air quality impact of the proposed project, but did not employ the most up-to-date prediction methodology. (See pages II-19 to II-21 and Appendix B).

9. Noise

The May 29, 1975 Draft EIS predicted noise levels in excess of Federal Standards and proposed mitigating measures. However, these measures were not acceptable to some respondents. (See page II-21 to II-23).

10. Socioeconomics

It was felt by some respondents that a new highway alignment would have a severe effect on the grazing industry. (See page II-29.) Others were concerned about increased land valuation (see page II-29), and the displacement of families (see page II-29), or conflict with the Hanalei Sanitary landfill (see page II-30).

11. Scenic Resources

Landscaping, preserving the eucalyptus trees, and the overall effect of the project on the scenic quality of the North Shore were given a high priority by the respondents. (See pages II-31 to II-33).

12. Archaeological Resources

The State Department of Transportation's plans to conduct an archaeological survey for the selected route but not for the alternative routes was criticised by some but accepted by others. (See page II-4 and Appendix D).

13. Mass Transit

As an alternative to improving the existing highway, a number of respondents suggested some form of mass transit, such as a shuttle bus. (See page III-4.)

II.

RESPONDENTS TO THE MARCH 10, 1976 EIS PREPARATION
NOTICE (Kalihiwai to Haena Section)

<u>A. List of Respondents</u>	<u>Letter Dated</u>
1. <u>U. S. Governmental Agencies</u>	
a. Advisory Council on Historic Preservation - Mr. Louis S. Wall	4/ 7/76
b. Department of Agriculture Soil Conservation Service - Mr. Francis C. H. Lum	4/ 8/76
c. Department of Defense Air Force - Mr. Ben D. Kosa Army Engineer District, Honolulu - Mr. Kisuk Cheung	3/25/76 4/12/76
d. Department of Housing and Urban Development Federal Housing Administration - Mr. Alvin K. H. Pang	4/12/76
e. Department of the Interior Bureau of Outdoor Recreation - Mr. Frank E. Sylvester Fish and Wildlife Service - Mr. Maurice H. Taylor Geological Survey - Mr. F. T. Hidaka National Park Service - Mr. Robert L. Barrel	4/ 1/76 5/20/76 4/ 7/76 6/15/76
f. Department of Transportation Coast Guard - Capt. H. G. Holmgren Federal Aviation Administration - Mr. Joseph B. Nestor	5/11/76 4/ 2/76
2. <u>State of Hawaii Agencies</u>	
a. Department of Accounting and General Services - Mr. Hideo Murakami	3/31/76
b. Department of Agriculture - Mr. John Farias, Jr.	4/ 7/76

- c. Department of Defense
- Maj. Gen. Valentine A. Siefermann 3/19/76
 - d. Department of Education
- Mr. Charles G. Clark 3/15/76
 - e. Department of Health
- Dr. James S. Kumagai 3/24/76
 - f. Department of Land & Natural
Resources
Chairman of the Board
- Mr. Christopher Cobb 4/ 6/76
 - g. Department of Planning and
Economic Development
- Mr. Hideto Kono 4/26/76
 - h. Office of Environmental Quality
Control
- Mr. Richard E. Marland 3/29/76
3. County of Kauai
- a. Mayor
- The Honorable Eduardo E. Malapit 5/13/76
 - b. County Clerk
- Mr. Tad T. Miura 5/18/76
 - c. Planning Department
- Mr. Brian Nishimoto 3/18/76
4. Public Utilities
- a. Gasco, Inc.
- Mr. Francis Tanaka 3/18/76
 - b. Hawaiian Telephone Company
- Mr. S.K. Smiddy 3/26/76
5. Other Organizations
- a. American Lung Association
- Mr. James W. Morrow 3/18/76
 - b. Kauai Historical Society
- Mr. Robert J. Schleck 4/ 9/76
 - c. The Kauai Outdoor Circle
- Mrs. H. Roger Netzer 4/16/76
 - d. Shoreline Protection Alliance
- Mr. Douglas Meller 4/15/76
 - e. Sierra Club & Life of the Land
- Mrs. Helen C. Hopkins 3/30/76

6. Private Individuals

- | | | |
|----|-------------------------------------------------------|---------|
| a. | Mr. & Mrs. John C. Ferry,
Sherman Oaks, California | 3/? /76 |
| b. | Mr. William T. Le Gro,
Anahola | 3/16/76 |
| c. | Mr. John T. Wehrheim,
Kilauea | 4/29/76 |
| d. | Ms. Geraldine A. Wojono,
Hanalei | 3/23/76 |
| e. | Mr. E. L. Yates,
Corona Del Mar, California | 4/ 6/76 |

B. Summary of Comments

The concerns expressed by the respondents to the March 10, 1976 EIS Preparation Notice were essentially the same as those received on the May 29, 1975 Draft EIS (See Pages A-4 to 7). "Growth" and the subsequent loss of the rural North Shore lifestyle continues to be the major issue. It was expressed in several different ways, but the North Shore residents definitely want to retain the "slow and peaceful" atmosphere created by the narrow winding road and the one-lane bridges. The style of the existing bridges is considered to be essential to the rural character of the area. Most respondents stressed the importance of retaining the present style, even if the bridges must be replaced. Of the respondents that accepted the State Department of Transportation's contention that the Kalihiwai-Hanalei Bridge section is unsafe (not all did accept it), the majority favored widening the existing road (Alternative W) rather than building a new one (Alternatives 1, 2, A and B). Only the Kauai County Engineer preferred a new alignment. Most respondents disapproved of the concept of an elevated alignment in the Hanalei Valley as a solution to the flooding problem. All of these comments were weighed by the State Department of Transportation, and the concerns have been addressed in this EIS.

These letters and the State Department of Transportation's replies are reproduced below.

Advisory Council
On Historic Preservation
1522 K Street N.W.
Washington, D.C. 20005

DIRECTOR'S OFFICE

APR 12 12 45 PM '76

RECEIVED
DIRECTOR'S OFFICE
APR 12 1976

DEPARTMENT OF TRANSPORTATION
APR 17 1976

Mr. E. Alvey Wright
Director
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wright:

This is in response to your request of March 10, 1976 concerning the Environmental Impact Statement Preparation Notice for the Kaula Belt Road, Maena to Kuliulua, Island of Kaula, Hawaii.

It might be helpful to explain the role of the Advisory Council not only in fulfilling its responsibilities under Section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), but also its mandates from the Congress and the President. The Council was created by the National Historic Preservation Act of 1966 (80 Stat. 915, 16 U.S.C. 470) to advise the President and the Congress in the field of historic preservation. Section 106 of the Act directs the head of any Federal agency considering an undertaking which would affect cultural resources included in the National Register of Historic Places to afford the Council an opportunity to comment on the undertaking prior to its approval. The issuance on May 13, 1971 of Executive Order 11593, "Protection and Enhancement of the Cultural Environment," broadened the Council's area of responsibility. By that Order, Federal agencies were directed to work with the Council to insure that their plans and programs contribute to the enhancement and preservation of non-federally owned cultural resources. It further required the head of any Federal agency to afford the Council an opportunity to comment on all undertakings which would result in the sale, transfer, demolition or substantial alteration of a property under his agency's control or jurisdiction that had been determined eligible for inclusion in the National Register by the Secretary of the Interior. The "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800) set forth the steps an agency is to follow in obtaining Council comments. For your information, copies of the procedures, the Act, Executive Order 11593 and a flow chart illustrating the steps to be followed by a Federal agency in obtaining Council comment are attached.

A - 11

Page 2
April 7, 1976
Mr. E. Alvey Wright
Kaula Belt Road

The Council on Environmental Quality's "Guidelines for Preparation of Environmental Impact Statements" (40 C.F.R. Part 1500) directs Federal agencies to forward their environmental documents to the Advisory Council for review if the undertaking will affect properties included in or determined by the Secretary of the Interior to be eligible for inclusion in the National Register. The Council's review of these statements is limited to determining whether or not the responsible Federal agency has adequately demonstrated compliance with Section 106 and/or Executive Order 11593. Regardless of whether or not the particular Federal agency files an environmental assessment or impact statement under NEPA, it is responsible to demonstrate compliance with Section 106 and the Executive Order 11593 as applicable. The Advisory Council's comments on an environmental document should not be construed as comments pursuant to Section 106 or Executive Order 11593. The Council only provides those comments through the compliance process detailed in its procedures. Ideally, Council comments will be secured by an agency at the time it prepares the environmental assessment or statement and will be included in the agency's environmental documentation when it is sent out for review and comment by other agencies.

Therefore, if the Federal Highway Administration or another Federal agency is assisting with this project, as part of its planning process, it should arrange to have the areas that will be impacted by the undertaking surveyed to identify cultural properties eligible for inclusion in the National Register of Historic Places pursuant to Executive Order 11593, "Protection and Enhancement of the Cultural Environment" issued May 13, 1971 as implemented through the "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800). After the survey is complete, if the Federal agency determined, in consultation with the Hawaii State Historic Preservation Officer, that the undertaking will result in an effect on any property included in or eligible for inclusion in the National Register it is required to afford the Advisory Council an opportunity to comment on the undertaking in accordance with the Council's procedures.

I trust the above information will be of assistance to you in the preparation of the proposed environmental impact statement. Should you have questions or require additional assistance, please contact

The Council is an independent unit of the Executive Branch of the Federal Government charged by the Act of October 11, 1966 to advise the President and Congress in the field of Historic Preservation.

GEORGE R. AIYOSHI
Governor

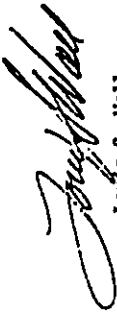
E. ALVEY WRIGHT
Director

Page 3
April 7, 1976
Mr. E. Alvey Wright
Kauai Belt Road

DEPUTY DIRECTORS
WALLACE ADRI
RYONCHI HIGASHIMURA
DOUGLAS S. SAKAMOTO
CHARLES O. SWANSON

Michael H. Dureman of the Advisory Council staff at P. O. Box 25085,
Denver, Colorado 80225, telephone number (303) 234-4946.

Sincerely yours,



Louis S. Wall
Assistant Director, Office
of Review and Compliance

Enclosures



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
809 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

May 14, 1976

IN REPLY REFER TO
HAW-PA
2-28876

Mr. Louis S. Wall, Assistant Director
Office of Review and Compliance
Advisory Council on Historic Preservation
1522 K Street NW
Washington, D.C. 20005

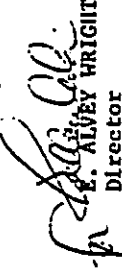
Dear Mr. Wall:

Subject: Kauai Belt Road, Maena to Kalihwai
Reference: Your letter dated April 7, 1976

Please be assured that this project will comply with the
procedures set forth in 36 C.F.R. Part 800 and that the concerns
of the Advisory Council will be properly addressed. The State
Historic Preservation Officer (SHPO) will be consulted on the
historic resources in the project vicinity.

We sincerely appreciate your comments and recommendations
and will look to your office for guidance on historical matters.

Sincerely,



E. ALVEY WRIGHT
Director

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
440 Alexander Young Building, Honolulu, HI 96813 RECEIVED

APR 13 8 1976 AM 216

Mr. E. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wright:

Subject: Kawai Belt Road, Kalihiwai to Maena
Environmental Impact Statement Preparation Notice

We have reviewed the subject preparation notice and offer the following comments for your consideration:

1. The notice states that "A major portion of the area is used for cattle production." Each alternative should take into consideration the effects it will have on the cattle-ranching operations. Effects may include: highway isolating small parcels of grassland, making these lands of little or no use for cattle operations; highway bisecting a pasture making it difficult to move cattle between pastures.
2. Attention should be given to planning for erosion control along the highway right-of-way on subsegment Hanalei to Princeville.
3. The statement "A parallel elevated alignment (bridge or high fill) from Hanalei Bridge to Hanalei Town has been proposed as a possible solution to the annual problem of flooding." may be true as far as flooding the roadway is concerned. If a high fill is used, will it act as a dam and cause flooding in the valley areas not now affected by flooding problems?

Thank you for letting us review this preparation notice.

Sincerely,

Francis C. H. Lum
Francis C. H. Lum
State Conservationist

DIRECTOR'S OFFICE
APR 9 12 33 PM '76
DEPT. OF
TRANSPORTATION

HWY-PA
2.28599

April 28, 1976

Mr. Francis C. H. Lum
State Conservationist
U. S. Department of Agriculture
Soil Conservation Service
440 Alexander Young Building
Honolulu, Hawaii 96813

Dear Mr. Lum:

Subject: EIS Preparation Notice for
Kawai Belt Road,
Kalihiwai to Maena
Reference: Your letter of
April 9, 1976

Thank you for commenting on our EIS Preparation Notice.

Our response to your comments follows:

1. The alternatives will have minimal effects on cattle operations since they are located adjacent to the existing highway alignment. The proposed improvements may require acquisition of small areas of remnant parcels.
2. Providing erosion control is a normal design function and will be given due attention.
3. We are cognizant of the flooding problems at the Hanalei Bridge approaches. We are conducting a hydrologic study to assure that the proposed plans do not aggravate the flooding or flood areas in the valley not now affected by flooding.

Sincerely,

R. Higaonoloma
R. E. ALVEY WRIGHT
Director



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 15th AIR BASE WING PACAFI
APO SAN FRANCISCO 96353

RECEIVED

MAR 20 10 18 AM '75

DEEE (Mr. Nakashima, 449-2158)

Environmental Impact Statement Preparation Notice
DEPT. OF TRANSPORTATION
III ENGINEERING DIVISION

State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

1. This headquarters has no comment to render relative to the environmental impact statement preparation notice for the Kaula Belt Road, Kailihwai to Ilaena Project, on the island of Kauai, Hawaii.
2. We greatly appreciate your cooperative efforts in keeping the Air Force apprised of your development projects throughout the State.

HUI D. KURA
Dup Dir of Civil Engineering



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
BLOC. 239, FT. SHAFTER RECEIVER
APO SAN FRANCISCO 96358

APR 14 8 41 AM '75

12 April 1976

DIRECTOR'S OFFICE
APR 13 12 45 PM '75
DEPT. OF TRANSPORTATION
III ENGINEERING DIVISION

Mr. E. Alvey Wright, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wright:

We received the environmental impact statement preparation notice for Kaula Belt Road, Kailihwai to Ilaena on 12 March 1976. Supplementing the suggestions in our letter of 27 August 1975 regarding the Ilaena to Kailihwai section of the Kaula Belt Road, we offer the following comments.

- a. The drainage area, flood frequency, and design discharge for each of the bridge crossings should be included in the EIS. It is requested that design of the bridge or high fill for flood control purposes, from Hamalei Bridge to Ilaena, be coordinated with us.
- b. Structures or fill in stream crossings subject to tides will require Department of the Army permits under Section 10 of the River and Harbor Act of 1899 and Section 404 of the Federal Water Pollution Control Act Amendments of 1972. In addition, fill in streams or wetlands above tidal influence will require Section 404 permits.
- c. We recommend that the U.S. Coast Guard, Department of Transportation, be added to Agencies to be Consulted on page 9. Permits are required from the U.S. Coast Guard for the construction of bridges and causeways in or over tidal waters.
- d. We suggest that the EIS consider beneficial aspects of old roads as historic and aesthetic resources and as buffers that filter change and growth.

Thank you for the opportunity to provide comments.

Sincerely yours,

J. K. CHEUNG
Chief, Engineering Division



GEORGE H. ALVEY WRIGHT
DIRECTOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
945 PUNCHBOWL STREET
HONOLULU HAWAII 96813

April 26, 1976

E. ALVEY WRIGHT
DIRECTOR

DEPUTY DIRECTORS
WALLACE AOKI
MORICHI HIGASHIYAMA
DOUGLAS S. SAKAMOTO
CHARLES O. SWANSON

IN REPLY REFER TO
HWY-PA
2-28549



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL HOUSING ADMINISTRATION
HONOLULU HOUSING OFFICE
P.O. BOX 1377
HONOLULU, HAWAII 96811

April 12, 1976

APR 14 9 41 AM '76
9:70 (Johnson/
546-5358)

REGION II
650 Golden Gate Avenue
P.O. Box 34883
San Francisco, California 94102

Mr. Klauk Cheung, Chief
Engineering Division
Department of the Army
U.S. Army Engineer District,
Honolulu
Building 230, Fort Shafter
APO San Francisco 96558

Dear Mr. Cheung:

Subject: Kauai Belt Road, Haena to Kalihawai
Reference: Your letter dated April 12, 1976

Thank you for informing us about the necessary Army and
Coast Guard permits. These will be obtained as our project
develops.

We may not be able to include the detailed data suggested
for each of the proposed bridge crossings in the Final EIS.
However, we will have the data developed during the final design
plans which will be coordinated with your Department.

Your suggestions on the use of the old roads will be
considered.

The Coast Guard will be sent a copy of our EIS Preparation
Notice.

Thank you for your continued cooperation.

Sincerely,

R. Higashiyama
for E. ALVEY WRIGHT
Director

DIRECTOR'S OFFICE
Apr 13 12 48 PM '76
TRANSPORTATION

Mr. E. Alvey Wright, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wright:

Subject: Kauai Belt Road
Haena to Kalihawai, Island of Kauai

As requested in your letter dated March 10, 1976, we have
reviewed the Environmental Impact Statement Preparation
Notice for the subject project and have no comment at this
time.

We look forward to receiving the Draft Environmental
Impact Statement and will make comments at that time.

Sincerely,

Alvin K. H. King
Alvin K. H. King
Director



IN REPLY REFER TO:
4230

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OUTDOOR RECREATION
PACIFIC SOUTHWEST REGIONAL OFFICE

DOX 3602
420 GOLDEN GATE AVENUE
SAN FRANCISCO, CALIFORNIA 94118

April 1, 1976

DIRECTOR'S OFFICE
APR 5 8 09 AM '76
DEPT OF THE INTERIOR
TRANSPORTATION

Mr. E. Alvey Wright
Director
Hawaii Department of Transportation
889 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wright:

This responds to your letter of March 10, 1976, requesting comments on the Environmental Impact Statement Preparation Notice for the Kaula Belt Road, Haena to Kulihiwal, Island of Kauai.

Our major concern is whether or not the proposed project will impact either the Hanalei Beach Park or the Haena State Park. Lands for both parks have been acquired with a grant from the Land and Water Conservation Fund (L&WCF). If either park is impacted, provisions of Section 6(f) of the L&WCF Act may be applicable in that taking of land from the parks would require the approval of the Secretary of the Interior and replacement land of equal value and utility. A Section 4(f) assessment also would be necessary.

If either park would be affected by the project, we recommend you notify us of this fact prior to preparation of the environmental impact statement so we can determine the extent of involvement with the L&WCF project and the applicability of Section 6(f). You should consult also with Mr. Hideo Kono, Director, Department of Planning and Economic Development, who is the State Liaison Officer in Hawaii for L&WCF matters.

We note that the proposed project contains a number of bridge replacement. We suggest that you consider the possibility of public water access development utilizing portions of old bridge approaches and



structures in those locations where potential public use would warrant such development.

With respect to the Hanalei Bridge and approaches, we recommend that you consult with the U. S. Fish and Wildlife Service on potential impacts for this portion of the project in that the proposed bridge replacement is within a National Wildlife Refuge.

Sincerely yours,

Frank E. Sylvester
Frank E. Sylvester
Regional Director

cc: Mr. Ralph Segawa
Federal Highway Administration, Hawaii

RECEIVED
APR 5 1976
FEDERAL HIGHWAY ADMINISTRATION
HONOLULU, HAWAII

GEORGE B. ARIYOSHI
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
808 PUNICUJUAL STREET
HONOLULU, HAWAII 96813

April 15, 1976

E. ALVEY WRIGHT
DIRECTOR

DEPUTY DIRECTORS
WALLACE ADRI
RYOICHI HIGASHIYAMA
DOUGLAS S. SARANOID
CHARLES O. SWANSON

IN REPLY REFER TO:
HWY-PA
2-28400



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Division of Ecological Services
821 Hilliani Street
Honolulu, Hawaii 96813

References: ES

May 20, 1976

Mr. Ralph T. Segawa, Division Administrator
U. S. Department of Transportation
Federal Highway Administration
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Sirs:

This provides comments on the environmental impact statement preparation notice for the proposed Kawai Belt Road, Kalihuiwai to Ilaena, island of Kauai, Hawaii.

Kalihuiwai to Hanalei Bridge, page 2. As long as the proposed action does not involve construction activity south of the present roadway from the intersection of the Power Line Road on the east to the Hanalei Valley Overlook on the west, little, if any, disturbance to the refuge and endangered wildlife would occur. It appears that the "third Alternative" would cause the least impact on the environment.

Subject: Kawai Belt Road, Ilaena to Kalihuiwai
EIS Preparation Notice
Reference: Your letter, 4230,
dated April 1, 1976

Thank you for your prompt response. Our plans will not affect either the Hanalei Beach Park or the Ilaena State Park. We have already sent Mr. Hideto Kono of the Department of Planning and Economic Development a copy of our EIS preparation notice and are awaiting his comments. The U. S. Fish and Wildlife Service has also been sent a copy of our EIS preparation notice.

The possibility of public water access development will be considered where warranted and feasible.

Sincerely,

E. ALVEY WRIGHT
Director



2.

Wildlife Refuges and other interested parties.

Manalei Tonal, page 3. Road construction activity along the course of the present roadway from Manalei Bridge on the east to the power sub-station on the west would have the least impact on taro paddies and endangered waterbird habitats. The present road is adequately shielded from endangered bird habitats by a hedgerow of dense vegetation. Elevating the roadway would elevate noise, visual activity, and littering above the protection of the hedgerow. Elevation of the road would have less impact if a hedgerow was provided adjacent to the pavement. A design of this type would require an earthen fill rather than a concrete causeway to permit the placement of the hedgerow. Roadside parking should not be permitted from the Manalei Bridge to the western edge of the taro lands by providing a very minimum shoulder and appropriate signs. A public view point on the south side of the road, approximately 2,000 feet west of the present bridge, would be acceptable. Numerous culverts beneath the roadway would be required to minimize flooding of taro lands on the refuge.

Identification and Summary of Major Impacts, page 6. The statement should discuss the potential environmental impacts to fish and wildlife resources, particularly within the Manalei River Valley. In addition, we suggest that the amount of wetlands affected under the various project alternatives be compared with respect to its impact on waterbirds. During construction of new bridges or stream crossings the statement should indicate whether or not bypass channels would be utilized. If construction would occur in flowing streams, the statement should describe how turbidity and siltation would be controlled, as well as identify the impact of this activity on the stream fauna. Under this section, or under Mitigation, the draft environmental impact statement should indicate that construction would be timed to avoid peak o'opu runs (late fall) and peak periods of endangered waterbird use of taro paddies and other waterbird habitat in the Manalei River Valley (July through January).

Proposed Mitigation Measures, page 8. This section should be expanded to explicitly describe pertinent provisions of the Endangered Species Act of 1973.

Sincerely yours,

Maurice H. Taylor
Maurice H. Taylor
Field Supervisor

cc: RD (PS), Portland
HILMER, Sekora
SE, Kridler

RECEIVED

677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

JUL 12 1 34 PM '76

DEPT. OF TRANSPORTATION
HAWAII

RECEIVED
JUL 13 8 43 AM '76
DESIGN BRANCH
HIGHWAYS DIVISION
DEPT. OF TRANSPORTATION

Mr. Maurice H. Taylor
Field Supervisor
Division of Ecological Services
Fish and Wildlife Service
821 Milliani Street
Honolulu, Hawaii 96813

Dear Mr. Taylor:

Subject: Kauai Belt Road, Kalihoua to Ikaena

We appreciate your assistance in implementing the requirements of Section 102(2)(D)(iv) of the National Environmental Policy Act of 1969, as amended. Your views as expressed in your letter of May 20, 1976, will be given appropriate consideration in the preparation of the Draft Environmental Impact Statement for this project.

When the Draft EIS is completed, it will be furnished for your further review and comment.

Sincerely yours,

Ralph T. Segava
Division Administrator

By H. KUSUMOTO
Assistant Division Administrator

cc: Hawaii Highways Division w/cc of FWS 5/20/76 ltr

RECEIVED

JUL 13 2 35 PM '76

ST. DEPT. OF TRANS.
HWYS DIV
PLANNING BR.



United States Department of the Interior

GEOLOGICAL SURVEY

Water Resources Division
5th Floor, 1833 Kalaheua Ave.
Honolulu, Hawaii 96813

April 7, 1976

State Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Gentlemen:

Subject: Request for comments, Kauai Belt Road
Haena to Kalihiwai, Island of Kauai, HI

We have no comment except to point out that the section between
Hanalei Bridge and Hanalei and parts of the section between
Hanalei and Haena are in low-lands which are subject to in-
undation during extreme floods. Adequate drains must be
provided, especially if the proposed parallel elevated align-
ment is built upon a fill.

Sincerely,

F. T. Hidaka
F. T. Hidaka
District Chief

cc: Regional Hydrologist, WRD, HR (Attn: L. E. Newcomb)
G. H. Chase (Attn: G. H. Davis)

A-19

GEORGE H. ANYOSIII
DIRECTOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
888 PUNCHBOWL STREET
HONOLULU HAWAII 96813

April 22, 1976

Mr. F. T. Hidaka
United States Department
of the Interior
Water Resources Division
1833 Kalaheua Avenue, 5th floor
Honolulu, Hawaii 96813

Dear Mr. Hidaka:

Subject: Kauai Belt Road,
Haena to Kalihiwai,
EIS Preparation Notice
Reference: Your letter
dated
April 7, 1976

Thank you for your comments. We are cognizant of the
low-lands which are subject to inundation during extreme
floods and will design our highway to prevent it from
aggravating these flooding problems.

Thank you for your continued cooperation.

Sincerely,
R. Higashina
for E. ALVEY WRIGHT
Director

E. ALVEY WRIGHT
DIRECTOR

DEPUTY DIRECTORS
WALLACE AUKI
RYOICHI HIGASHINANA
DOUGLAS S. SAKAMOTO
CHARLES D. SWANSON

IN REPLY REFER TO
HRY-PA
2.28509

DIRECTOR'S OFFICE

APR 8 1 04 PM '76

DEPT OF
TRANSPORTATION

RECEIVED

APR 9 11 55 AM 1976

DEPARTMENT OF TRANSPORTATION
HONOLULU HAWAII



United States Department of the Interior

NATIONAL PARK SERVICE

HAWAII GROUP
677 ALA MOANA BLVD., SUITE 512
HONOLULU, HAWAII 96813

IN REPLY REFER TO:
17619

June 15, 1976

Mr. Ralph T. Segava
Division Engineer
Federal Highway Administration
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Ralph:

Sorry that I seem to have lost your February 6 letter requesting information on lands managed by the National Park Service in Hawaii, Guam and American Samoa. In addition, our Regional Office received a request for information on the Kauai Belt Road, Kailihwai to Haena, Hawaii. This is in response to both requests. The following information is provided for your technical assistance only and does not represent formal review comments on an environmental statement from the Department of the Interior.

Regarding specifically the Kauai Belt Road Project, there are no existing or proposed units of the National Park System or any proposed or known potential sites or properties listed or to be listed as National Landmarks that will be affected by the proposed project. However, cultural resources may exist within the project boundary. We recommend that an archeological survey be made by a professional archeologist over the entire project area. All archeological and/or historical properties discovered should be evaluated for their National Register potential pursuant to Title 36, CFR 800.10.

The National Register of Historic Places and the National Registry of Natural Landmarks must be consulted to determine whether or not properties listed and/or eligible for listing on either register are within the project boundary. If any cultural property is included in or determined eligible for inclusion in the National Register of Historic Places, a determination of effect must be made through consultation with the State Historic Preservation Officer (Title 36, CFR 800.4).

The environmental statement should contain the results and recommendations of the archeological survey. The statement should indicate that the National Register of Historic Places, National Registry of Natural

Landmarks and the State Historic Preservation Officer have been consulted. A copy of the comments received from the State Historic Preservation Officer should be included in the statement. Inspects upon cultural resources and Natural Landmarks should be thoroughly evaluated and well defined mitigation measures should also be included in the statement. The proper protective and mitigative measures for cultural resources are included in Title 36, CFR 800. The latest full listing of eligible and registered Natural Landmarks is the May 5, 1976, Federal Register. Additional sites have been listed in the February 9, 1976, Federal Register. The most recent National Register of Historic Places listing is contained in the February 10, 1976, Federal Register.

There are no units of the National Park System in American Samoa, nor in Guam. There is, however, a proposed National Historical Park on Guam, and the Department of the Interior has title to some of the lands therein. The enclosed, more-or-less obsolete map shows the proposed boundaries as of some four years ago. The proposal is still alive and under consideration by the Congress. Even if it does not become a Federal park, there is some consideration of the Territory leasing Federal (Interior) lands for a territorial park.

Maps (designed for other purposes, but helpful to you, I hope) of Hawaii Volcanoes National Park, City of Refuge National Historical Park and Puukohola Heiau National Historic Site, all on Hawaii, and of Haleakala National Park on Maui are enclosed. One City of Refuge map shows present boundaries and the other shows the boundaries proposed by the Master Plan.

There are properties listed and eligible for listing on the National Registry of Natural Landmarks and on the National Register of Historic Places in Hawaii, American Samoa and Guam. All preliminary environmental impact evaluations for projects should include consultation with latest listings of these properties as well as an archeological survey over the project area. For further specific information please call me, or come on down and look at our maps.

We hope that this information will assist you toward the implementation of Section 102(2)(D)(iv) of the National Environmental Policy Act of 1969, as amended.

Sincerely yours,

Robert L. Harrel
State Director

Enclosures





DEPARTMENT OF TRANSPORTATION
UNITE STATES COAST GUARD

Address reply to:
COMMANDER (nep)
Fourteenth Coast Guard District
677 Ala Moana
Honolulu, Hawaii 96813

MAY 14 12 55 PM '76

MAY 10 11 31 AM '76

DEPT OF
TRANSPORTATION

Admiral E. Alvey Wright
Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

Staff review of the "EIS Preparation Notice for Kauai Belt Road Ikena to Kaliahwa, Island of Kauai" has been completed. The only Coast Guard interest in this project, as we see it now, may involve the bridges. More information is required to determine if Coast Guard Bridge Permits are required.

A Coast Guard Bridge Permit may be required for any one or all of the proposed bridges. Each of the bridges will have to be addressed on an individual basis. Please submit an application for each bridge in accordance with instructions contained in the enclosed booklet. Applications should be mailed to: Commander (nep), Fourteenth Coast Guard District, 677 Ala Moana, Honolulu, Hawaii 96813. Please contact LT Frederick F. HEDER in our Bridge Section, Aids to Navigation Branch, at 546-7130 if there are any questions on this matter.

Thank you for the opportunity to review and comment on the EIS Preparation Notice. We look forward to reviewing the draft EIS when it becomes available.

Sincerely,

H. G. Houlmgren
H. G. HOULMGREN
Captain, U. S. Coast Guard
Chief of Staff
Fourteenth Coast Guard District
Acting

Enclosure: Permits for the Construction of Bridges Across Navigable Waters of the United States (booklet - 2 copies)

Copy to:
CGC: Hawaii

GEORGE T. ARIYOSHI
1071 5804



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
889 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

June 8, 1976

Commander (nep)
Fourteenth Coast Guard District
677 Ala Moana Boulevard
Honolulu, Hawaii 96813

Dear Sir:

Subject: Kauai Belt Road, Ikena to Kaliahwa
Reference: Your letter dated May 11, 1976
(reference No. 5922)

Thank you for sending us the instruction booklet, "Permits for the Construction of Bridges Across Navigable Waters of the United States." Our permit applications will be submitted in accordance with your instructions during the design stage.

We will also send you a copy of our draft EIS when it is published. Thank you for your cooperation.

Sincerely,

R. Higashimura
for E. ALVEY WRIGHT
Director

E. ALVEY WRIGHT
Director

DEPUTY DIRECTORS
WALLACE ADRI
RYOICHI HIGASHIMURA
DONALD S. SARANOTO
CHARLES O. SWANSON

IN REPLY REFER TO:
HHY-PA
2.29230

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

PACIFIC ASIA REGION
P. O. BOX 480
HONOLULU, HAWAII 96813

APR 2 1976



APR 1 9 08 AM '76
DEPT. OF TRANSPORTATION
HONOLULU, HAWAII

DIRECTOR'S OFFICE
APR 5 8 08 AM '76
DEPT. OF TRANSPORTATION

Rear Admiral E. Alvey Wright, USN (Ret)
Director, Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

Thank you for the State of Hawaii letter HWY-PA 2.27559 dated March 10, 1976, regarding the Environmental Impact Statement Preparation Notice for the Kauai Belt Road, Haena to Kaihiiwai, Island of Kauai.

The proposed project does not appear to have an impact on aeronautical interest in the area and we, therefore, have no comments.

Sincerely,

Joseph H. Hestor
JOSEPH H. HESTOR
Acting Director, APC-1

A - 22



GEORGE R. ANTOSH
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 116, HONOLULU, HAWAII 96819

MAR 31 1976

Honorable E. Alvey Wright
Director
Department of Transportation
State of Hawaii
Honolulu, Hawaii

Dear Mr. Wright:

Subject: Request for Comments, Kauai Belt Road
Haena to Kaihiiwai, Island of Kauai

This is in response to your letter no. HWY-PA 2.27558 dated March 10, 1976.

From the point of view of any environmental effects of the proposed action of upgrading the subject road, we have no comments.

However, if the recommended alternative calls for widening of the subject road fronting Hanalei District Court and Hanalei Elementary School, we would like to review the proposal prior to its recommendation.

If you have any questions, please call us at 548-5460.

Very truly yours,

Hideo Murakami
HIDEO MURAKAMI
State Comptroller

DIRECTOR'S OFFICE
APR 5 1976
HONOLULU, HAWAII
STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 116, HONOLULU, HAWAII 96819
TELEPHONE NO. (P) 1352-6

GEORGE R. ALVEY, USN
DIRECTOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 FUNCHBOWL STREET
HONOLULU, HAWAII 96813

April 23, 1976

E. ALVEY WRIGHT
DIRECTOR
HAWAII DIRECTOR
WALLACE ADRI
FREDRICH HIGASHIONNA
DONALD S. SAKAWOTO
CHARLES D. SWANSON

IN REPLY REFER TO:
HWY-PA
2-28512

MEMORANDUM

TO: THE HONORABLE JOHN FARIAS, JR., CHAIRMAN
BOARD OF AGRICULTURE

FROM: E. ALVEY WRIGHT, DIRECTOR
DEPARTMENT OF TRANSPORTATION

SUBJECT: KAUAI BELT ROAD, HAENA TO KALIHUAI
EIS PREPARATION NOTICE COMMENTS
Reference: Your memorandum dated April 7, 1976

Your comments on the flooding of cultivated lands and impact on pasture lands will be considered and addressed in our Environmental Impact Statement. Thank you for your continued cooperation.

R. Higashionna
for E. ALVEY WRIGHT

A-24



DIRECTOR'S OFFICE

MAR 23 8 07 AM '76

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
FORT RUGER HONOLULU, HAWAII 96816

BTENCG

19 MAR 1976

Rear Admiral E. Alvey Wright, USN, (Ret.)
Department of Transportation
869 Funchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

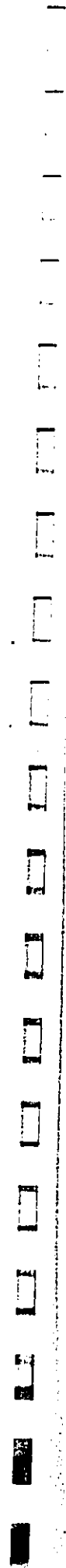
Kauai Belt Road Haena to
Kalihwai, Island of Kauai

Reference is made to your letter dated March 10, 1976, subject as above.

We have no comments to offer on the Environmental Impact Preparation Notice for the subject project. Please keep us advised of the progress of this project.

Very truly yours,

Valentine A. Sifferhans
VALENTINE A. SIFFERHANS
Major General, USMC
Adjutant General



GEORGE R. ANTOSCH
GOVERNOR



CHARLES G. CLARK
SUPERINTENDENT

DIRECTOR'S OFFICE

MAR 22 8 14 AM '76

DEPT. OF
TRANSPORTATION

MAR 25 9 15 AM '76
STATE OF HAWAII
DEPARTMENT OF EDUCATION

OFFICE OF THE SUPERINTENDENT

MEMO TO: Honorable E. Alvey Wright, Director
Department of Transportation

FROM: Charles G. Clark, Superintendent
Department of Education

SUBJECT: Environmental Impact Statement for
Kauai Belt Road - Haena to Kalihwai

Thank you for your letter of March 10, 1976, providing us with a copy of
the EIS Preparation Notice for the subject proposal.

We have no additional comment since our letter of July 8, 1975, when we
reviewed the portion of the project from Hanalei to Kalihwai.

A-25



DIRECTOR'S OFFICE

STATE OF HAWAII
DEPARTMENT OF HEALTH
HONOLULU, HAWAII 96813

March 24, 1976

Mr. E. Alvey Wright, Director
Department of Transportation
869 Punchbowl St.
Honolulu, Hawaii 96813

Dear Mr. Wright:

Subject: Request for Comments on Proposed Environmental Impact
Statement (EIS) for Kauai Belt Road, Haena to Kalihwai,
Island of Kauai

Thank you for allowing us to review and comment on the subject
proposed EIS. Please be informed that we have no comments or objections
to this project at this time.

We realize that the statements are general in nature due to
preliminary plans being the sole source of discussion. We, therefore,
reserve the right to impose future environmental restrictions on the
project at the time final plans are submitted to this office for review.

Sincerely,

James S. Kuragai
JAMES S. KURAGAI, Ph.D.
Deputy Director for
Environmental Health

Do not reply, please refer to
file EHS - 88

GEORGE H. ARIYOSHI
GOVERNOR OF HAWAII



DIRECTOR'S OFFICE
APR 9 9 41 AM '76

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 621
HONOLULU, HAWAII 96809

April 6, 1976

GEORGE H. ARIYOSHI
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
859 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

April 23, 1976

E. ALVEY WRIGHT
DIRECTOR
DEPUTY DIRECTORS
WALLACE ADRI
STENOGRAPHIC MITSUKAWA
DONALD S. SWANSON
CHARLES D. SWANSON

IN REPLY REFER TO
HWY-PA
2.28507

Honorable E. Alvey Wright
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

We have reviewed the Environmental Impact Statement notice for the Haena-Kalihiwai section of the Kauai Belt Road.

We want to emphasize that flooding in the vicinity of Hanalei River and Hanalei town should be considered in the design of this project.

If all work is done on fast land, there should be no effect on fishing in the area. Review of the final project design should be made to ensure that silt, debris and noxious chemicals do not enter Hanalei River which is an important nursery for mullet, oopu, crab and other species. Measures will also be necessary to prevent siltation of the river during construction. The EIS should also cover possible adverse effects to Waioli, Waipa, Lihalei, Wainiha, Manoa and other streams.

Very truly yours,

Christopher Cobb
CHRISTOPHER COBB
Chairman of the Board

cc: DONALD
Fish & Game
Historic Sites
State Parks

The Honorable Christopher Cobb
Chairman and Member
Board of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Cobb:

Subject: Kauai Belt Road, Haena to Kalihiwai
EIS Preparation Notice Comments
Reference: Your letter dated April 6, 1976

Please be assured that your comments on the flooding problem and the possible pollution to the Hanalei River and the various streams during construction will be fully addressed in our Environmental Impact Statement. Thank you for your continued cooperation.

Sincerely,
R. Higashimura
for E. ALVEY WRIGHT
Director



DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

GEORGE B. ALVEY
Director
HIDE TO KONO
FRANK SHERVASE
Project Director

Statewide Office at 215 South King St., Honolulu, Hawaii • Mailing Address: P.O. Box 2395, Honolulu, Hawaii 96808

April 26, 1976

DIRECTOR'S OFFICE
APR 28 12 50 PM '76
TRANSPORTATION

The Honorable E. Alvey Wright
Director
Department of Transportation
State of Hawaii
Honolulu, Hawaii

Dear Mr. Wright:

Subject: Kauai Belt Road, Haena to Kaihihwal
Island of Kauai

We have reviewed the preparation notice of the environmental impact statement for the subject project and found the proposed EIS will identify the major impacts of the proposed highway improvements.

We would appreciate receiving a copy of the EIS to review when it is completed.

Sincerely,
[Signature]
HIDE TO KONO

3974

HWY-PA
2.28856

May 12, 1976

The Honorable Hideto Kono
Director
Department of Planning and Economic Development
P.O. Box 2359
Honolulu, Hawaii 96804

Dear Mr. Kono:

Subject: Kauai Belt Road, Haena to Kaihihwal
Reference: DEED Letter No. 0939 Dated April 26, 1976

We will send you a copy of our EIS when it is completed. Thank you for your cooperation.

Sincerely,
[Signature]
E. ALVEY WRIGHT
Director

GEORGE H. ARYOSH
Chairman



RECEIVED

APR 7 1 21 PM '76

ST. DEPT. OF TRANSPORTATION
HAWAIIAN DEPT. OF ENVIRONMENTAL QUALITY CONTROL
PLANNING DIVISION
OFFICE OF THE GOVERNOR

500 N. HANALEI BLVD.
HONOLULU, HAWAII 96813

March 29, 1976

DIRECTOR'S OFFICE
RICHARD E. WRIGHT, PH.D.
DIRECTOR
MAR 31 8 08 AM '76
APPROVE NO.
DEPT. OF TRANSPORTATION

MEMORANDUM

TO: E. Alvey Wright, Director
Department of Transportation

FROM: Richard E. Hartland, Director
Office of Environmental Quality Control

SUBJECT: Environmental Impact Statement Preparation Notice
for Kauai Belt Road, Haena to Kalihiwai, Island of
Kauai

This Office appreciates the opportunity to participate in the consultation period. In our review of the EIS Preparation Notice on the above subject, we offer the following comments:

1. We suggest that further consultation be sought with the U.S. Fish and Wildlife Service, Kauai County's Department of Public Works, Corps of Engineers, Soil Conservation Service, and public organizations.
2. The amount and type of funding for the project should be described. Are these funds federal, state, and/or county? In what proportions?
3. The justification of the improvements should be given.
4. The preparation notice mentions flooding at the Hanalei Bridge. We recommend that a discussion be given of the flooding in terms of property damages, flooding history, flow capacity, and etc. It is also important to discuss the cause of the flooding.
5. In the summary of affected environment, social impact of Hanalei Valley to Haena should be carefully analyzed. A discussion should reveal that improvements of the highway will generate a different flow of traffic which may alter the present lifestyle of the area.

Page 2

6. Another alternative should be discussed is the possibility of transferring the jurisdiction of the highway to the County of Kauai. Since your proposed improvements make it necessary to conform to federal standards and specifications, one lane bridges will be replaced by two lane bridges. However, if the jurisdiction was given to the county, then perhaps the residents may be able to have their one lane bridges and retain their existing lifestyle.

We trust that these comments are helpful to you in preparing your EIS. We look forward to the draft EIS.

If we can be of further assistance to you in this matter, please do not hesitate to contact us.



GEORGE H. ARYOSHII
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
845 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

April 20, 1976

E. ALVEY WRIGHT
Director
DEPUTY DIRECTORS
WALLACE AOKI
RODOLPH HIGASHIMORII
DOUGLAS S. SAKAMOTO
CHARLES G. SWANSON

IN REPLY REFER TO:
HWY-PA
2.28429

MEMORANDUM

TO: THE HONORABLE RICHARD E. MARLAND, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: E. ALVEY WRIGHT, DIRECTOR
DEPARTMENT OF TRANSPORTATION

SUBJECT: KAUAI BELT ROAD, HAENA TO KALIHUWAI
Reference: Your memorandum dated March 29, 1976

We agree with comments 1, 2, 3, 4 and 5 of your letter and will incorporate them in our draft EIS.

However, we do not agree with your comment No. 6. The primary concern is one of safety and access for the public. We do not recommend one-lane bridges for safety reasons. We are informed that we may be liable for accidents that occur on newly-constructed substandard roadways. The County of Kauai could also be liable.

We are aware that this is an environmentally sensitive area which may be impacted by our proposed highway improvements. We are hopeful of finding a solution to best serve and satisfy the public interest.

Your comments and concern are appreciated.

E. ALVEY WRIGHT



OFFICE OF THE MAYOR
4375 KICE STREET
LIPUKE, KAUAI, HAWAII 96766

May 13, 1976

RECEIVED
MAY 21 7 39 AM 1976
DEPT. OF TRANSPORTATION
DESIGN BRANCH
HIGHWAYS DIVISION
DEPT. OF TRANSPORTATION
MAY 21 12 39 PM '76

Mr. E. Alvey Wright
Director
Department of Transportation
STATE OF HAWAII
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wright:

May I express my sincere apologies for the delay in replying to your request for comments relating to the Kauai Belt Road, Haena to Kalihwai, Island of Kauai.

Attached please find comments regarding subject matter from the Department of Public Works.

Thank you for your kind attention.

Very truly yours,

EDUARDO E. MALAPIT
MAYOR, COUNTY OF KAUAI

EEM:cs

Attachment

DEPARTMENT OF PUBLIC WORKS

COUNTY OF KAUAI

MEMORANDUM

TO: MAYOR MALAPIT DATE: MARCH 31, 1976
FROM: COUNTY ENGINEER
SUBJECT: REQUEST FOR COMMENTS, KAUALI BELT ROAD
HAENA TO KALIHUAI, ISLAND OF KAUAI

Mayor Malapit

March 31, 1976
Page 2

Our comments are limited to the engineering and roadway maintenance areas of the proposed action.

A. The section from Kalihuai to Hanalei Bridge should follow a new alignment with the present roadway obliterated. Our reasons include:

1. Geometric features - horizontal and vertical alignment cannot adequately convey the present traffic.
2. Highway cross-section - shoulders are non-existent and obstructions are present in many locations.
3. Drainage - on-site drainage systems are not available.
4. Pavement Structural Section - present pavement will require tremendous maintenance efforts in the future.
5. Emergency conditions - present alignment has required road closures due to fallen trees in the Princeville area.
6. Costs - a new alignment may be cheaper considering that no alternate routes are available during construction.

B. We concur that the Hanalei Bridge be replaced with a two-lane bridge. The new bridge should be of a capacity to carry modern sized trucks and highway loads. The high construction costs in Hanalei area is partly due to the limited capacity of the present bridge.

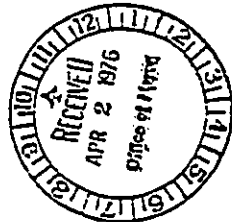
C. In addition to provisions for abating the annual flooding from Hanalei Bridge to Hanalei Town, a drainage system through the town taking flows to Hanalei River should be included.

The new post office has experienced flooding and it has been in existence for less than a year.

D. Road widening should be considered in the Hanalei Town to Haena section. Shoulders should be provided wherever possible. The scenic lookout at Waikoko Point has been the locality for many mishaps due to the narrow road and concentration of tourists.

The County's Hanalei maintenance crew has assisted the State in countless emergency occurrences which are attributed to the road's present condition. These include flooding, landslides, fallen trees, and vehicular mishaps.

Other County agencies may address other impacts of the proposed actions. Should further information be required, please call.



[Signature]
J. AKIHO FUJITA

HSH:cs

HWY-PA
2.29224

June 24, 1976

The Honorable Eduardo E. Malapit
Mayor, County of Kauai
4396 Rice Street
Lihue, Hawaii 96766

Dear Mayor Malapit:

Subject: Kauai Belt Road, Haena to Kalihikai
Reference: Your letter dated May 13, 1976

Our responses to the comments contained in the County Engineer's memorandum dated March 31, 1976 follow:

- A. Kalihikai to Hanalei Bridge: Based on the testimonies and comments received through previous transactions with the public, we are presently considering an alternative of widening the existing highway, utilizing a lower design speed to accommodate bicycles and vehicles. Posted speed limits would be 35 miles per hour from Kalihikai to Princeville and 25 miles per hour or less for the remainder. Under this concept, we would retain the existing alignment as much as possible except for improvements to four curves.

Another exception to retaining the existing alignment is in the area near the eucalyptus trees. We are thinking in terms of utilizing these trees as a control and shifting the roadway from them to provide safety requirements with a travelled way width of 22 feet and shoulder widths of 8 feet.

For all other areas, it is our intent to utilize the existing pavement areas as much as possible.

An amendment to the North Shore Development Plan may be required since the typical section being proposed represents a decrease in planned requirements.

- B. Hanalei Bridge: We are considering a new bridge meeting current load capacities at the location of the existing bridge. We have not made a final decision on laneage (i.e., one-lane or two-lanes) for the bridge. Safety and environmental impacts are prime factors being considered.
- C. Hanalei Bridge to Hanalei Town: A hydrological study is being conducted to assure that our improvements will not add to the flooding problems in this area. A separate highway drainage improvement project within Hanalei Town is under design. However, we will not be able to alleviate all of the annual flooding problems since flood control is not within our jurisdiction. We are willing to cooperate in a flood control project with the County and/or the U.S. Corps of Engineers.
- D. Hanalei Town to Haena: From a highway capacity viewpoint, traffic projections do not warrant anything more than our proposed bridge replacements. Widening of the existing road was considered in our earlier studies. Unfortunately, the low traffic projections and high estimated costs made this alternative economically unfeasible.

We appreciate the assistance that your Hanalei maintenance crew has provided us in times of need. Thank you for your past cooperation, and we solicit your continued support.

Sincerely,

E. ALVEY WRIGHT
Director

COUNCIL
MAY 21 12 33 PM '76
RECEIVED
MAY 21 12 33 PM '76
DEPT. OF TRANSPORTATION
HONOLULU, HAWAII 96813



OFFICE OF THE COUNTY CLERK
439A BELT STREET
LIHUE, KAUAI, HAWAII 96746
TELEPHONE 243-0785

May 18, 1976

Mr. E. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

The Council of the County of Kauai acknowledges, with thanks, the receipt of your letter of May 10, 1976, and the copy of the Environmental Impact Statement Preparation Notice for the Kauai Belt Road, Kalihivai to Haena.

Very sincerely,

Tad T. Miura
County Clerk, County of Kauai

A - 32

DIRECTOR'S OFFICE
MAY 20 12 31 PM '76
DEPT. OF TRANSPORTATION
HONOLULU, HAWAII 96813

RECEIVED
MAY 21 7 59 PM 1976

TAD T. MIURA
COUNTY CLERK
TAKESHI KATO
BANKY CLERK

MAY 19 1976
RECEIVED
DEPT. OF TRANSPORTATION
HONOLULU, HAWAII 96813



RECEIVED
MAY 23 9 15 AM '76

DEPT. OF TRANSPORTATION
COUNTY OF KAUAI
PLANNING DEPARTMENT
4280 BELT STREET
LIHUE, KAUAI, HAWAII 96746

March 18, 1976

Mr. E. Alvey Wright, Director
State Dept. of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Re: Comments, Kauai Belt Road
Haena to Kalihivai

1. Kalihivai to Hanalei Bridge

The third alternative alignment, proposing widening and improving of the existing roadway has merit from an aesthetic and feasibility standpoint. It would be the least costly to develop and it is lined with trees. These trees as much as possible should be preserved, and widening and realignment of the roadway should follow the alternative that would eliminate the least number. This alignment was most preferred by those in attendance at the public informational meeting (October, 1975) and offers the most advantages.

This portion of the visitors' drive from Lihue to the North Shore destination area is important in establishing the setting and character to one of the world's most beautiful coastlines.



Mr. E. Alvey Wright, Director
Page 2
March 18, 1976

2. Hanalei Bridge and Approaches
Bridge design should reflect rural character or be unobtrusive. It must fit into its sensitive surroundings, since Hanalei Valley is considered as one of Kauai's and the State of Hawaii's most valuable scenic resources. Excessive grading should be properly landscaped.
3. Hanalei Town
If roadway between Hanalei Bridge and Hanalei Town is to be elevated by a high fill as a possible solution to the flooding problem, design should assure that the fill does not act as a barrier to the natural drainage of the valley. Any viaduct must be carefully designed.
4. Hanalei to Lumahai
Replacement of the bridges within this strip would be a welcome improvement.
5. Lumaha'i to Wainiha
The North Shore Development Plan proposes that new bridges over Wainiha River be located further upstream. Should these new bridges be built on the existing alignment, it should be designed to withstand tsunami forces. Like Hanalei, these bridges should be designed harmonious to its setting.
6. Wainiha to Haena
Proposals relate to improvements to the existing roadway only, which are appropriate courses of action for the area.
No improvements proposed for turn-around at highway's end in Haena to alleviate existing congestion? When improvements to other highway sections are completed, buses will then be able to travel all the way to beginning of Na Pali Coast.

Mr. E. Alvey Wright, Director
Page 3
March 18, 1976

In general, the North Shore (Hanalei to Haena) is a valuable natural, scenic, and recreational resource area for the State and Nation. It is also constrained by flood, tsunami, and slopes. Therefore, it warrants strong growth control measures, and the highway is one of the major factors. The area is very rural, and if its scenic beauty is to be preserved, it should remain that way. Too many improvements to the highway may have negative impacts to the area. It would generate more traffic, thus stimulating more residential or other developments and further taxing our public facilities and parks. Improvements to the existing road as compared to widening and realignments between Hanalei and Haena, would be more preferable and would definitely control growth. It must be recognized that increased development of the area, a possible result of highway improvements, could be detrimental to the sensitive environment that exists on the North Shore.

- (g)5. Relating to EIS
Primary and secondary effects on scenic quality should be evaluated also.
- (h). As a mitigation measure, temporary and permanent landscaping should be considered.

Brian Nishimoto
for BRIAN NISHIMOTO
Planning Director

cc: Ed Nakano

GEORGE F. ARYOSHI
Sergeant



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

April 13, 1976

Mr. Brian Nishimoto
Planning Director
Planning Department
County of Kauai
4280 Rice Street
Lihue, Kauai, Hawaii 96766

Dear Mr. Nishimoto:

Subject: Kauai Belt Road, Haena to Kalihiwai
Reference: Your letter of March 18, 1976

Thank you for your comments and suggestions. They will be helpful in our efforts to implement our proposed highway improvements for the North Shore area.

To clarify our proposed improvements for the Wainiha to Haena section, we are considering the future replacement or improvement of four existing stream crossings consisting of two box culverts and two fords. No other work is being contemplated for this segment except for an impending minor drainage improvement project in the vicinity of the east ford.

We agree that the North Shore area is a valuable, natural, scenic, and recreational area and we recognize its sensitive environment.

We will continue to coordinate our planning with you. We appreciate your continued cooperation and assistance.

Sincerely,

E. ALVEY WRIGHT
Director

E. ALVEY WRIGHT
Director

SENIOR DIRECTORS
WALLACE AOKI
RYOICHI NISHIMOTO
DONALD S. SAKAMOTO
CHARLES D. SWANSON

IN REPLY REFER TO:
HWY-PA
2-28319



GASCO, INC.
A DIVISION OF PACIFIC RESOURCES, INC.

DIRECTOR'S OFFICE

P. O. BOX 3379 / HONOLULU, HAWAII 96813

DEPT. OF TRANSPORTATION

DEPT. OF TRANSPORTATION

March 18, 1976

Admiral E. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

Thank you for this opportunity to comment on the environmental assessment on the Kauai Belt Road Haena to Kalihiwai on the Island of Kauai.

The project does not appear to have any adverse effect on the Gas Company.

Very truly yours,

Francis Tanaka
Environmental Coordinator

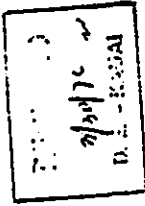
FT:jm



HAWAIIAN TELEPHONE COMPANY

P.O. BOX 591 • LIHUE, HAWAII 06766 • TELEPHONE 245-6795

March 26, 1976



Mr. Edwin Nakano
District Engineer
State Highways Division
P. O. Box 1711
Lihue, Hawaii 96766

Subject: Kauai Belt Road, Haena to Kaliahwal, Island of Kauai

Refer: IMX-PA 2-27558

Gentlemen:

With regards to your proposed highway improvements from Kaliahwal to Haena,

we have no comments on environmental effects. However, we suggest that an adequate right-of-way be acquired to accommodate the placement of both electric and telephone facilities.

Very truly yours,

S. K. Saldyy
S. K. Saldyy
Island Manager

JT:yc

A - 35

215 North Kukui Street, Honolulu, Hawaii 96817, Telephone (808) 577-5966

RECEIVED

AMERICAN LUNG ASSOCIATION of Hawaii
DEPT. OF TRANSPORTATION

RECEIVED

Mar 19 12 47 PM '76

March 18, 1976

Admiral E. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

Re: Environmental Impact Statement for the
Kauai Belt Road, Haena to Kaliahwal

This is in reply to your letter of March 10, 1976 (IMX-PA 2-27558) requesting comments on the environmental effects of the proposed highway project.

In assessing the air quality impact of the project we suggest that you include the following:

1. Identify the critical year for automotive pollutants by estimating annual emissions of carbon monoxide (CO), hydrocarbons (HC), and nitrogen oxides (NOx) over the design life of the proposed highway. The construction period should be carefully examined as reduced speeds result in higher emissions. Estimates should take into account changes in traffic volume, variations in average route speed, percentage of heavy duty traffic, etc.
2. When the critical year is identified, compute ambient CO concentrations under worst case and most probable meteorological conditions as well as peak and average daily traffic conditions at various distances from the highway. A review of meteorological data from the nearest weather recording stations will be necessary.
3. Evaluate the ambient estimates in light of the frequency of occurrence of weather conditions conducive to pollutant buildup and compare with State and Federal air quality standards.

Christmas Seals Fight TB, Asthma, Emphysema, Air Pollution

la
bs

GEORGE H. AHIYOSHI
DIRECTOR



E. ALVEY WRIGHT
DIRECTOR
DEPUTY DIRECTORS
WALLACE ADRI
RYOICHI HIGASHIOMIYA
DOUGLAS S. SAKAMOTO
CHARLES G. SWANSON

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
833 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

IN REPLY REFER TO:
IMY-PA
2.28401

April 15, 1976

Admiral F. Alvey Wright
March 18, 1976
Page 2

Thank you for the opportunity to offer these suggestions prior to preparation of the EIS. When the EIS is complete we would appreciate receiving a copy for review.

Sincerely,
James W. Morrow
James W. Morrow, Director
Environmental Health

JMM:ct

cc: Dr. Richard E. Harland, DEQC

Mr. James W. Morrow
Director
American Lung Association
of Hawaii
245 North Kukui Street
Honolulu, Hawaii 96817

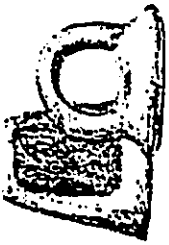
Dear Mr. Morrow:

Subject: Kauai Belt Road
Haena to Kalihwai
EIS Preparation Notice
Reference: Your letter dated
March 18, 1976

Thank you for your prompt response to our EIS Preparation Notice. We will consider your suggestions. Our air quality analysis will cover the State and Federal requirements which in part duplicate your suggestions.

A copy of the draft EIS will be furnished you when it is prepared.

Sincerely,
E. Alvey Wright
E. ALVEY WRIGHT
Director



KAUAI HISTORICAL SOCIETY

RECEIVED

Post Office Box 248
Lihue, Kauai, Hawaii 96765
April 9, 1976
DEPT. OF TRANSPORTATION
APR 12 23 AM '76

DIRECTOR'S OFFICE

Mr. E. Alvey Wright
Department of Transportation
Honolulu, Hawaii 96813

Dear Mr. Wright
Re: HMY-PA 2.27558

The route from Kalihawai to Haena should be preserved as a scenic and historic highway and should receive the most sensitive engineering and landscape treatment.

1. Kalihawai to Hanalei Bridge
We hope the existing roadway will be maintained and not improved to permit faster auto traffic. A speed limit of 35 miles per hour will enable the traveler to go slow enough to enjoy the superb scenery.

In the event a decision is made to realign this road, we urge that the road follow the contours of the land rather than run straight through open cuts that detract from the scenic landscape.

2. Hanalei Bridge and approaches.
We concur with the majority of Hanalei residents that the present bridge should be retained because of its unique structural style. However if another bridge has to be built, it should be located parallel to the existing bridge and in the same structural style.

3. Hanalei Town.
We question the need for a parallel elevated alignment (bridge or high fill) from Hanalei bridge to the town. A far less expensive solution to the annual problem of flooding would be to have the river mouth dredged frequently and the river itself cleared of debris and silt to allow for faster flow of water during heavy rains.

4. Hanalei town to Haena.
We agree that the bridges at Maloli, Waipa and Waikoko need to be repaired or replaced. New bridges should be built parallel to the present ones to avoid as much as possible the disturbance of adjacent landscape. Their simple structural style should be retained.

The Mainiha bridge has a special character of its own. Every effort should be made to retain it. We see no reason why travelers can't take their turn in crossing over it. This is what gives the Hanalei-Haena scenic drive a country-like quality that is fast disappearing from the rest of Kauai island.

-2-

Mr. E. Alvey Wright

April 9, 1976

In conclusion:

1. Any new alignments should include bike-paths.
2. The National Trust for Historic Preservation offers consulting service by engineers specially trained in the preservation of scenic highways. We request that you contact Mr. Russell Keune Vice-President for Preservation Services, National Trust for Historic Preservation, 740-748 Jackson Place, N. W., Washington, D. C., 20006 for assistance in scenic road planning.

Very truly yours,

KAUAI HISTORICAL SOCIETY

Robert J. Schlock
Robert J. Schlock
President



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
850 KUHIOHOMA STREET
HONOLULU, HAWAII 96813

E. ALVEY WRIGHT
DIRECTOR

DEPUTY DIRECTORS
WALLACE ADRI
RYOICHI HIGASHIONNA
DOUGLAS S. SARAKOTO
CHARLES O. SWANSON

Mr. Robert Schleck
Page 2

HWY-PA 2.28669

IN REPLY REFER TO:
HWY-PA
2.28669

May 3, 1976

Mr. Robert Schleck, President
Kauai Historical Society
P. O. Box 248
Lihue, Kauai, Hawaii 96766

Dear Mr. Schleck:

Subject: Kauai Belt Road,
Haena to Kalihwai
Reference: Your letter
dated
April 9, 1976

Thank you for your comments. Our responses to your
comments follow:

A - 3
08

1. Kalihwai to Hanalei Bridge

We plan to retain much of the existing highway
with minimal widening and curve improvements. The
reason for our proposal is to reduce the high acci-
dent rate in this section. The present speed limits
will be maintained.

2. Hanalei Bridge and Approaches

Your proposal regarding the style and location
of the Hanalei Bridge is one of the alternatives we
are developing. Please note that we will most likely
be liable for accidents that occur on newly constructed
one-lane bridges.

3. Hanalei Town

We are presently conducting a hydrological study

for this area and should be able to comment on the
flooding problem shortly. Dredging of the river
mouth comes under the jurisdiction of the County
or U. S. Corps of Engineers.

4. Hanalei Town to Haena

We agree on the concept that the structural
styles of the existing bridges be retained. However,
we are considering two-lane bridges since we will
probably be liable for accidents that occur on newly
constructed one-lane bridges.

5. Bikeway

We appreciate your proposal for bikepaths.
We hope you realize that additional rights-of-way
would be required for the bikepaths.

Thank you for the information regarding the National Trust
for Historic Preservation and their services. We will contact
them for information on scenic road planning.

Sincerely,

R. Higashionna
for E. ALVEY WRIGHT
Director



STATE OF HAWAII
LARGE HAWAII 65766

THE KAUAI OUTDOOR CIRCLE 2 K 111 11/6

April 6, 1976

DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

State of Hawaii, Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Attention of Mr. E. Alvey Wright, Director

Subject: Request for Comments, Kauai Belt Road, Haena to Kaula
Iliwa'i, Island of Kauai

Gentlemen:

The Outdoor Circle was founded for the purpose of preserving and enhancing the beauty of Hawaii. However, in the last few years people have begun to realize that the beauty and charm of the Islands, which mean so much to the residents and to the many visitors, is slowly being eroded and replaced, so that Hawaii is becoming a miniature replica of the mainland. We also have learned that what might seem like small changes on the mainland have far-reaching effects on Hawaii's fragile ecology.

Each of the Hawaiian Islands has its special places. For Kauai these places are the Kokee-Ma Pali Coast and the Hanalei-Haena areas. As the plan for the North Shore (by Ebo, Dean, Austin and Williams, Inc.) states: "The North Shore is a region of fantastic beauty." The accompanying Socio-economic Prelude by Anderson, Barron and Harders says: "Hanalei has in abundance beautiful coastline, mountains, and natural scenic beauty unexcelled anywhere else in Hawaii."

The North Shore Plan is thoughtful, well presented, and has many excellent features. However, most of the research was done in 1971 and early 1972--at least four years ago. A plan is just that--a plan--and even the planners recognize that plans should not only be reviewed at regular intervals but that they should take into account the desires of the local residents.

The people of Kauai have had the planning mistakes made on the other islands to guide them (Maui is often cited as a prime example). At the two public hearings on the proposed changes to the highway and the bridges on the North Shore, the sentiment was overwhelmingly against these changes. It seems that the residents not only want to retain the rural beauty of the area but to have some control over the growth of tourism.

Many of the predictions for the North Shore have not taken place, and the approval of large increments of tourist accommodations

State of Hawaii Department of Transportation - Page Two
April 6, 1976

In the Waipouli-Wailua area and the planned development at Poipu-Koloa make it even less likely that major growth in tourism will take place in the Hanalei-Haena area in the foreseeable future.

Regarding the specific proposals outlined in your Environmental Impact Statement Preparation Notice (with cover letter dated March 10, 1976), the Kauai Outdoor Circle, by action of the Board today, would like to make the following remarks and recommendations:

1. **Kalihiwai to Hanalei Bridge:** That the road not be widened and/or straightened and that the speed limit be 35 mph. We feel a straight road and a higher speed limit will not reduce the accident rate, as the curves and the width of the road may not be the primary factor in accidents; on the contrary, a wider, straight road with a higher speed limit may increase the number of accidents.

It would make no sense to lose the scenic qualities of the present road alignment only to find that the accident rate remained the same or increased.

2. **Hanalei Bridge and Approaches:** That a new bridge over the Hanalei River replace the present bridge at the same location and be of similar construction. The bridge itself is not undated during flood periods but only a short stretch of the road on the Hanalei side. This condition lasts for only a short time, and because the flow of water is unencumbered, no damage is sustained.

A bridge on a viaduct downstream of the present bridge would not only require cuts into the steep side of the hill (which is a wildlife sanctuary), but because of the necessary curve outward the valley would greatly detract from the famous and much photographed view of Hanalei Valley.

3. **Hanalei Town:** An elevated alignment (bridge or high fill) from Hanalei Bridge to Hanalei town seems to be most satisfactory. If the road were elevated on a bridge, debris being swept down could catch and clog under the bridge causing a backing up of the flood waters. A high fill could channel the waters down to Hanalei town. Either way, the result would be problems much more severe and dangerous than the present flooding pattern.

Flood plains have their own place in the ecological scheme, and attempts to change their course have often proved disastrous and have also encouraged development in unsafe areas.

In the past the location of the Post Office at the Young Store has caused some inconvenience to through traffic and danger to pedestrians. However, the off-street parking provided at the new Post Office has taken care of this problem.

and barrier reefs that are still alive and beautiful. All of these areas are close to the highway and are part of the beauty of Kauai. They are also important to the protection of the shorelines and are an important recreational asset for both residents and tourists. It is a known fact that pollution in the form of siltation is as detrimental, at least, as other forms of water pollution.

Thank you for soliciting our comments. We hope the foregoing will not just be considered as fulfilling a requirement of the law by the Department of Transportation, but that it will be seriously considered and used in guiding your decisions on the North Shore.

Sincerely yours,

THE KAUAI OUTDOOR CIRCLE

[Handwritten signature]
Mrs. H. Roger Netzer
President

4. Hanalei Town to Haena: Although the Waipa and Walkoko bridges are not particularly attractive structures, the Waoli Stream Bridge is characteristic of the rural atmosphere of Hanalei. Even more so are the bridges in the Wainiha area. If it is absolutely imperative that these bridges be replaced for safety reasons, we recommend that the new bridges be replicas of the old ones. There is great sentimental attachment in the North Shore area to these bridges, and the tourists are equally charmed by them--so much so that they must be considered part of the uniqueness of the North Shore. Rarely is there any problem crossing them. On the contrary, their quaintness and beautiful settings seem to encourage a politeness and deference that is seldom found elsewhere among drivers.

With widened and ugly steel and concrete bridges at Wainiha would soon come new plans and pressures to straighten and widen the road clear to Ke'e. An ill-advised attempt was made some time ago to put the road through a hillside near Imahai, and the ugly gash still remains and still causes siltation of the nearby ocean.

It appears that the only reason for widening these bridges would be to allow tour buses access to Haena. Haena is a popular area with the people of Kauai for surfing, swimming, snorkeling, diving, fishing, and picnicking, and many would like to see the whole area preserved as a nature conserve.

Proposed Mitigation Measures:

1. Regarding the bridges, since we do not know what "special features" are planned, we cannot comment on them. However, we would hope that the Department of Transportation does not feel that the concrete and steel bridge at Imahai is an aesthetic improvement over the existing bridges.
 2. and 3. Regarding erosion and siltation during the proposed construction, we realize that the State specifications and the grading and grubbing ordinance of the County of Kauai, in themselves, are good measures. However, we do not believe that these measures, even if meticulously enforced, could control soil erosion and siltation in the Hanalei-Haena area due to the high rainfall, the nature of the soils, the numerous stream beds that become canyons when it is raining, and highway and bridge building methods, i.e., cut-and-fill, surcharges, pile driving, etc.
- The area below the cliffs at Prichavilla, the northern section of Hanalei Bay, and all the shorelines along Haena have eroding

GEORGE H. AMYOSHII
Secretary



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
845 KUHIOHOLE STREET
HONOLULU, HAWAII 96813

E. ALVEY WRIGHT
Director
DEPUTY DIRECTOR
WALLACE ADRI
RYOICHI HIGASHIDHNA
DOUGLAS S. SAMANOTO
CHARLES O. SWANSON

IN REPLY REFER TO:
HWY-PA
2.28665

May 4, 1976

Mrs. H. Roger Netzer, President
The Kauai Outdoor Circle
P.O. Box 921
Lihue, Hawaii 96766

Dear Mrs. Netzer:

Subject: Kauai Belt Road, Haena to Kalihwai
Reference: Your letter dated April 6, 1976

Thank you for your comments. Your concerns on the limitations of the North Shore Plan are appreciated. Our responses to your specific comments follow:

1. Kalihwai to Hanalei Bridge

Our proposal is to provide a better alignment and a wider road for safety. We feel that highways should be designed to accommodate all drivers in relative safety, including reasonable provisions for human error due to drinking, drugs, personal problems, etc. We intend to retain the 35 mph posted speed limit.

2. Hanalei Bridge and Approaches

Your proposal regarding the style and location of the Hanalei Bridge is one of the alternatives we are developing.

Mrs. H. Roger Netzer
Page 2

HWY-PA 2.28665

3. Hanalei Town

A hydrologic study is being conducted to assure us that our highway improvements will not aggravate the present flooding problems. With the exception of a minor drainage project, we are not proposing any other highway improvements for this section.

4. Hanalei Town to Haena

We are considering two alternatives for this segment of Kauai Belt Road. Both alternatives will replace the existing structures with similar type of structures with either one or two through lanes. Please note that we are likely to be liable for accidents that occur on newly constructed one lane bridges.

5. Mitigation Measures

As mentioned previously, we intend to replace the existing bridges with similar type structures.

Mitigation measures to prevent erosion and siltation are an integral part of all our highway projects including the period during construction. The actual specifications or references thereto will be detailed in our Environmental Impact Statement.

Please be assured that all of your comments will be seriously considered. We appreciate your comments and concern.

Sincerely,

E. Alvey Wright
for E. ALVEY WRIGHT
Director

GEORGE R. ARIYOSHI
GOVERNOR



E. ALVEY WRIGHT
DIRECTOR
DEPUTY DIRECTORS
WALLACE AOKI
RYUKICHI HIGASHIHONMA
DOUGLAS S. SARAHOTO
CHARLES D. SWANSON

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
888 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

IN REPLY REFER TO:
HBY-PA
2.28510

APR 28 1976

SHORELINE
PROTECTION
ALLIANCE

813 ALAKEA STREET
MAIL ADDRESS: P.O. BOX 1217
HONOLULU, HAWAII 96813
TELEPHONE: 333-2400

April 5, 1976

State of Hawaii
Department of Transportation
Highways Division
Planning Branch
600 Kapiolani Boulevard
Honolulu, Hawaii 96813

Re: EIS Preparation Notice for
Kauni Belt Road, Kalihawai
to Haena

Gentlemen:

I would like to be a consulted party on the Kauai Belt Road Environmental Impact Statement. My understanding of the EIS process is that I should have at least 30 days to comment on the completed EIS - rather than on the Preparation Notice as was suggested in a letter I received from the Department of Transportation dated March 29, 1976.

You should be aware that you will need a Shoreline Management Area Permit for the Project.

You also should be aware that although Kauai residents support road improvements between Hanalei and Kalihawai, they are adamantly opposed to improvements which would allow tour buses to travel between Hanalei and Haena. You might be able to address their concerns by banning tour bus use of Kauai Belt Road beyond Lumahai Beach.

Respectfully,

Doug Meller
Douglas Meller
Secretary

Mr. Douglas Meller
Secretary
Shoreline Protection
Alliance
P.O. Box 4247
Honolulu, Hawaii 96813

Dear Mr. Meller:

Subject: Kauai Belt Road,
Haena to Kalihawai,
EIS Preparation Notice
Comments
Reference: Your letter
dated
April 5, 1976

We are aware that a Shoreline Management Area Permit is required for this project.

Your suggestion of banning tour bus use of Kauai Belt Road beyond Lumahai Beach should be directed to the Public Utilities Commission for consideration.

A copy of the draft EIS will be transmitted for your review when it is completed.

Very truly yours,

T. Harano
T. HARANO
Chief
Highways Division

A-74

HONOLULU OFFICE

RECEIVED

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DEPT. OF TRANSPORTATION
HONOLULU DIVISION

State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Atten: E. Alvey Wright, Director

Subject: Kauai Belt Road, Hanalei to Kaliahiwai, Project No. DP-056-1(17).

The Sierra Club, Hawaii Chapter and Life of the Land have asked me to reply to your request for comments on the above proposal.

The "need" for the proposed project is based on:

- "1. Traffic projections indicate a significant traffic increase by 1996.
- "2. The efficient pavement structure has resulted in high maintenance costs.
- "3. The road is substandard in pavement width and should be based on current design criteria."

The "basic input data" for developing traffic forecasts are based on documents which promote orderly and integrated planning for the County of Kauai." These documents are:

- "1. A General Plan for the Island of Kauai, March 1970;
- "2. Economic Base Analysis with Resulting Population Projections for the Island-County of Kauai, State of Hawaii, 1970-1990, December 1969;
- "3. Planning for Princeville at Hanalei;
- "4. The North Shore Plan;
- "5. The Hanalei Development Plan, A Socio-economic Prelude."

Traffic projections are based on projected urbanization and population growth, and it is recognized that improving highways leads to increased urbanization and population growth. The State Dept. of Transportation (DOT) says (March 11, 1976): "The current activity at Princeville does not seem to warrant major downward revisions in our traffic projections. These traffic projections reflect only a portion of the total Princeville being developed in the 20-year period. Furthermore, we have

recently also considered the revised development plans in Princeville. Therefore, we don't feel that our traffic forecasts are being overstated. We will however, monitor the actual growth of the area, as per our continuing surveillance activity, and evaluate our projections and make adjustments as required."

The DOT seems to be saying that the activity at Princeville and the 20-year plans for development at Princeville require the proposed plans for the road and bridges in the Hanalei-Haena area. At the same time it appears to be saying that if the actual growth they predicted does not take place, the project will be reconsidered. It would be very difficult to reconsider a plan that has already been completed.

Paragraph D of Section 4.06 "Special Planning Areas" of the General Plan for the County of Kauai, adopted in 1971, states: "The Planning Department shall review each development plan formulated under this Section no less than every five years after its adoption and shall revise and update all plan elements consistent with the conditions that prevail at the time of such review".

According to the draft E.I.S. on Project No. DP-056-1(17), the final E.I.S. and project report were to be finished by the end of 1975 and the design and construction stages would each take about one year to complete. It is now March of 1976 and the final E.I.S. has not been completed and at this point, final decisions on alternate plans have not been made. Before any construction begins, the Planning Dept. should review the special planning for the North Shore.

The "Economic Base Analysis with Resulting Population Projections for Kauai, 1970-1990, dated Dec. 1969", is obviously outdated. At a meeting for County officials on Nov. 8, 1975 (at Princeville), Mr. Rezendes, head of the Kauai Finance Dept., said he felt the County must (a) cut government spending, (b) increase the tax base and county revenues, or (c) go bankrupt. The Kauai Public Works Department's CIP budget for 1975 was \$17 million and it was expected the budget would be \$75-80 million over the next six years. Most of the money would be used to build sewers and roads and put in drainage essential to development. Since 1973 there has been a growing deficit in the County budget. Revenues through Grants-in Aid from the State have remained the same over that period.

The State Legislature has just passed and sent to the Governor a bill raising the real property tax exemption for homeowners in Hawaii, which will mean an even greater loss of revenues for the counties unless they raise property tax rates, which would still leave Kauai County in financial straits.

10 The DOT says the General Plan for Kaua'i is geared to a population of 90,000 by 1990. According to the Kaua'i County Planning Dept. figures quoted in the Environmental Impact Assessment Report, Lihue Airport Master Plan Study (Nov. 1975) by Peat, Marwick, Mitchell & Co., the population of Kaua'i, including the Island of Niihau, in 1970 was estimated to be 29,761. The Planning Dept. projected an increase of approximately 4,300 for each five year period to 1985 (which would make a total population of approximately 51,300). Are we to assume then that the population would increase by nearly 39,000 between 1985 and 1990? "Hawaii '75 Annual Economic Review" by the Bank of Hawaii, August 1975, statistics show that the population of Kaua'i in 1973 was 32,002 and in 1974 it was 31,485.

11 The County Planning Commission is convinced that the best way to increase the tax base is to allow more development for tourism, EVEN THOUGH DEVELOPMENTS ALREADY EXISTING ARE IN SERIOUS FINANCIAL TROUBLE. If more CIPs are needed for more tourist development, Kaua'i will continue to be in serious financial trouble also and the downward trend in population will continue.

12 Regarding the DOT data on plans for Princeville, on Pg. 42 of the Socio-economic Prelude of the North Shore Plan, is the following: "Resort-residential developments such as Princeville are a largely untried concept in Hawaii.-----The future magnitude and impact of this community is difficult to assess, but also highly intriguing since such an effort has yet to succeed in Hawaii".

13 The Socio-economic Study was initiated in Nov. 1971 and the field work was carried out in the first three months of 1972, so the predictions regarding tourism, which were admittedly vague and conditional, are now four years old. In the meantime, many changes have taken place nationally and locally. We have suffered a financial recession and an energy shortage. In Hawaii during 1972 and the first half of 1973, land and housing costs escalated at a dizzy speed and the market was inundated with speculators, many of whom were caught by the rapidly rising interest rates and increasing construction costs.

14 Figures from the North Shore Plan, which projected a full-time population with 2,300 dwelling units, 1,000 resort units and a 5-acre general commercial site at Princeville were included in the Draft EIS (5/29/75). The contradictory statement in the plan that Princeville is anticipated to continue as a second home and resort community was not considered by the DOT.

15 There are approximately 500 house lots at Princeville. Fifty-four houses have been built and slightly over half are owner occupied (none by employees of Princeville). Of the

16 rest, some are for sale, some are used as vacation or weekend houses by owners and others are rented to people who live on Kaua'i or on a short-term basis to visitors. Three new houses have been started in the last year. Of the eight condominiums started, seven have been completed. Construction stopped some time ago on one and three are in very serious financial trouble. None have had the 70 to 80% occupancy rate necessary for financial success.

17 Hanalei Colony Resort at Haena is situated ideally on a point on a beautiful beach. It was built in 1969 and long before the project was completed all the units were sold to residents of Hawaii or others who are familiar with and love the North Shore. Of the 52 units, 48 are available to tourists. In its more than six years of existence, the resort complex has not made a profit, but the majority of the apartments are still owned by the original buyers because of the beauty of its location and its quiet, low-keyed style. The people who stay at Hanalei Colony and other tourist accommodations in the Hanalei-Haena area, "repeat" visitors. The great majority of tourists who come to Kaua'i prefer to be in the Waialua-Haipouli or the Poipu-Koloa area. In speaking of the visitors to the North Shore, the Hanalei Development Plan, Socio-economic Prelude says

18 "Who are these visitors and why will they come? Unlike the standard tourist who comprises the traditional backbone of the Hawaiian market they will not be seeking the status of the fabled resorts or the sun and sand of the tanning lotion bakers. Rather, they will be those despaired of the 'aikiki congestion and similar instant Americanisms; those who seek the essence of the real Hawaii in the real world with real people engaged in real social pursuits. Nor will they be those who gush over contrived historical tableaux or hokey, simulated Hawaiian cultures. Rather, they will be those tired of artificial paradise who seek only the experience of relaxation, recreation, and personal renewal amongst an honest, contemporary Hawaiian society which has neither lots its traditional roots nor stubbornly refuses to express them in new ways. Nor will they be those who are satisfied to experience Hawaii from the roof of a parking structure or a golf cart. Rather, they will be those who increasingly need the exhilaration and the peace, the stimulation and the encouragement of magnificent nature-embracing people, their creations and their activities. The North Shore will not be for everyone-----and it shouldn't try to be."

19 This statement makes it clear that if the DOT insists on "progress" in Hanalei, the very thing that draws those who prefer the North Shore, will be destroyed. The statement was not written by impractical dreamers but is part of a plan prepared by civil engineers and professional planners.

19 It has been seven months since the original public hearing on the subject project was held. The financial situation at Princeville is still precarious. The Princeville Corp. (Consolidated Gas & Oil, Inc. of Denver, Colorado) lost \$2 million on the project last year. The permanent population remains the same. The project manager for Princeville, Mr. Don Gatswell, spoke against the widening and straightening of the road between Kalihwai and Princeville at the hearing and suggested a truss bridge in the style of the present bridge over the Hanalei River.

20 Princeville recently received permission from the Kava'i Planning Commission to reactivate and lengthen an airfield between Kalihwai and Princeville. The purpose of the airport is to promote package golf-tour groups. Though there is no traffic congestion between Kapa'a and Princeville, one of the reasons given for the airport request was to relieve traffic congestion on the highway.

21 The conclusions in the North Shore Plan includes the following: "Forecasts of employment and population levels for small areas are necessarily conditional statements. Simple time-series projections have little validity in a situation in which the major determining variables are in a high state of flux. The state of the art in economic forecasting is such that only firm reliability has been shown for forecasts of one or two years. To attempt to forecast in detail the economy of the North Shore area over the next decade thus borders on being 'social science fiction'." The report also says: "...as the following assumptions and forecasts prove wrong over the next decade, adjustments should be made to the overall forecasts."

22 At a series of hearings before the Kava'i Planning Commission during the spring of 1975, community opposition to a shopping center in Hanalei Town made it obvious that the people do not want a commercial development of such size (25 shops) or the increased population suggested in Table 21, Pg. 10 of the North Shore study. The consensus of opinion is: "Keep the development at Princeville", a position with which Princeville Corp. no doubt agrees. Yet, Princeville's request for 5 acres for general commercial, instead of the originally planned 2.9 acres, was denied by the Planning Commission because the rate of development of the Princeville project does not warrant the change. The Land Use Commission also denied a request for urban zoning of approximately an additional thousand acres.

23 The North Shore Plan is not an edict from heaven. It can and should be changed. The plan itself has emphasized that it should be reviewed in not less than 5 years and that adjustments be made in it according to the wishes of the residents. Though the plan was published in Sept. 1972, the research on the Socio-economic Profile, as stated previously, was completed in May 1972-----close to four years ago. The hearing held on the highway

plans in August and the public meeting in Oct. of 1975 made it quite clear that the residents of the North Shore are ready for adjustments to the plan. As reported by Mr. Jan Ian Bruggenante in the March 17, 1976 edition of the Honolulu Advertiser: "The Department's original plans for upgrading the section of Kuhio Highway from Kalihwai to the end of the road at Maena ran into a solid wall of opposition at an informational meeting in Hanalei last year." (See attached.) The records of the public hearing will show that not one person spoke in favor of the plans of the DOT.

24 The DOT says the road between Kalihwai and Hanalei does not have an adequate base---the pavement is too thin---and that because of this maintenance has been twice as expensive as that on other segments of highway on Kava'i. The road was paved in 1971. It would seem that once it was learned the pavement was not adequate, it would have made more sense to repave it properly rather than to spend so much on maintenance. However, the thickness of the pavement is not relevant to the plans of the DOT to widen and straighten the road.

25 In extolling the "fantastic beauty" of the "unfolding scenery and panoramic views" of the North Shore, the plan describes the trip from Lihue to Napili (sic) as an experience that is "anticipatory and heightening...from uninspired, man-made, urban to dramatic, almost overpowering natural culmination.-----An indelible experience. From the Egyptian Temple to the suggestion museum, this design principle has been consciously pursued wherever man has sought to emotionally and lastingly impress his fellow man. Through natural and cultural coincidence, the North Shore has achieved the same objective better and certainly more grandly than most human efforts.-----The speed of movement and sequence in which the experience unfolds is as important as the route and direction. Both currently contribute to the overall experience, although new road alignments could begin to give an undesirable uniformity to travel speeds (underlining added)." The plan goes on: "Climbing onto the Princeville shelf, the apparent openness and size is increased in contrast to Kalihwai Valley. The shelf is unpredictably revealed and obscured by tree masses and topography, but effectively so. Any new alignment must be careful to maintain the tantalizing circumstances." The plan also contains a picture of the bridges at Vainiha with the caption: "One lane bridges are a part of the rustic charm of the Hanalei area."

26 A letter signed by E. Alvey Wright, Director of the State DOT (March 11, 1976) says: "We feel that a functional and attractive highway facility is required and such can be designed to be compatible with the plans promulgated by the County for the North Shore area." Only the ultimate pragmatist could

believe that widening and straightening the road from Kalihwai to Princeville and replacing the bridges in the Hanalei-Haena area with concrete and steel structures would be "compatible" with what "through natural and cultural coincidence" has been achieved "more grandly than most human efforts".

In the letter of March 11, 1976, statistics on traffic accidents were given as follows: "The 16 accidents which occurred in 1973 between Hanalei and Kalihwai (3.4 miles in length) resulted in sixteen injuries and one fatality. This resulted in an accident rate of 7.20 accidents per million vehicle miles for the project segment. The weighted average accident rate for Kauai County was 3.54 accidents per million vehicle miles in 1973. For comparison, on Kuhio Highway between Kilauea Road and Molokaa Road, an improved stretch (4.7 miles in length), there were ten accidents in 1973. These ten accidents resulted in four injuries and no fatalities.....This represents an accident rate of 3.72 accidents per million vehicle miles.

These statistics have little meaning because considering the small population on Kauai statistics for other years could be very different. So far in 1976 there have been two fatalities in accidents on Kauai.....one between Lihue and Lawai and the other near Opaeka'a Falls. One single accident on any given stretch of highway on Kauai could change the whole ratio regardless of the condition of the road.

There are many sections of highway in Hawaii that are heavily traveled and have substandard pavement widths and should be improved. A prime example is the section of Kamehameha Highway between Kapehu and Ka'ava on Windward Oahu. Why, if the residents of the North Shore do not want the improvements the DOT suggests, has this segment of highway been chosen to be "improved" at this time? It is very obvious that any improvement to the highway will raise the value (and taxes) of the adjacent land and as a consequence there will be pressure to urbanize more land. Obviously, too, aside from the desires of the land owners who hope to profit from land urbanization, the only explanation is that this is a "pork-barrel" project....a shortsighted trade-off for those who expect to gain something either financially or politically.

The Draft EIS suggests that if the alignment chosen for the highway would pose a problem of air and noise pollution, the use of masonry construction, glazed windows and air conditioning for future public facilities along the right of way should be considered. In a place noted for its great beauty and its RURAL CHARACTER (not to speak of energy problems), it is hard to believe that such a recommendation could be made.

The statements regarding air pollution, as usual, are all based on the assumption that national air standards will be

more strict in the future and automobile manufacturers will be required to adopt devices to control air pollution. Just the opposite is happening. Congress is constantly under pressure by the highway lobby, backed by the White House, to weaken or compromise on auto emission standards under the guise of the necessity to conserve fuel.

In the Sections on Temporary Project Water Pollution Control, there are the usual built-in escape clauses. Even, if, by some miracle, these controls were strictly enforced, they would not stop soil erosion during heavy rains. Soils, in the Kalihwai to Haena area are predominantly unstable friable surface and silty clay sub-surface or of deep sticky Hanalei type. Before the construction of the Kilauea section of Kuhio Highway and the grubbing and grading of land on the cliffs at Princeville, the lagoon at (W)anini contained many live and beautiful coral heads. Now it is almost impossible to find any living coral inside the lagoon. Since there is practically no sewage going into the lagoon, it would seem the damage has been due to siltation.

The DOT letter of March 11, 1976 says, "The EIS points out that there are mitigation measures to reduce potential impacts. This is a proper function of the EIS; Guaranteeing compliance is not a function of the EIS. Unfortunately, it appears that the function of the EIS is to try to prove that the proposed project is needed, wanted and will not be detrimental in any way and that the requirements of the EIS under the law have been met. Its function seems never to show that a project is costly both monetarily and environmentally and that everyone would be better off without it.

No cost/benefit analysis was included in the draft EIS. Perhaps if there had been one the conclusion would have been the same as that on the proposed Lihue airport plan----that the costs would outweigh the benefits. There are certain things to be considered in the proposed expenditures of state funds for this unwanted highway, which will be brought up later in these comments.

An EIS Preparation Notice with covering letter dated March 10, 1976 says on pg. 3, Hanalei Town: "Future road improvements from Hanalei Bridge through Hanalei Town to Waiole Stream Bridge would conform to the concept of the North Shore Development Plan. A parallel elevated alignment (bridge or high fill) from Hanalei Bridge to Hanalei Town has been proposed as a possible solution to the annual problem of flooding.

The floods, usually one a year) have always taken place in Hanalei Valley. It is true that they do close off the road for periods of time that vary in hours but the people of the North Shore think of them as a temporary inconvenience. There

are a number of homes back in the valley in the middle of the taro fields. These homes are not endangered at flood time because they are built on ground above the flood level and the flooding does not damage the taro. Part of the land in the valley and on the Princeville side of the river is used for cattle grazing. The cattle move to high ground as the water rises. If a bridge or high fill were built from the bridge over the river to Hanalei Town, the whole pattern of the flood waters could be drastically altered. The water would be blocked from flowing down the swampy area along the river bank. With either a bridge or culverts under a fill there would be danger of clogging by debris and silt. Results could be inundation of the homes in the taro fields and the funneling of more water down to Hanalei Town.

Other problems would be cutting off the access road to the taro fields and houses and to the area where the cattle graze; cutting off access to the river on the Hanalei side (where local people go to fish and great stress on the Hanalei River bridge. If either a bridge or fill were to carry the highway to Hanalei Town and if shoulders were included, the highway would have to extend either into the taro fields and Wildlife Sanctuary or into the swamp area on the makai (ocean) side of the present highway. It was suggested at the information meeting on the proposed highway that if the hau trees that clog the river were cut back, there would be more room for flood waters to drain down the river and the County transportation representatives said they would consider this.

The area makai of the highway comes under the jurisdiction of the Coastal Zone Management Committee as well as the U. S. Army Engineers.

Regarding highway financing, a report prepared for the State Dept. of Budget and Finance (by Arthur Young & Co.), An Analysis of the Assignment of Responsibilities and Funding of Transportation in Hawaii, states that under present financing procedures and plans for transportation funds expenditures, by 1981 the annual deficits in the DOT finances will be between \$87 and \$107 million (of which \$40 million would be in highway programs) unless the State gas tax goes to 21.5 cents per gal.

The study says further that the DOT's plans into the early 1990s were based on expectations of the early 1960s, of ever-increasing growth in population and tourism. For various reasons these expectations did not and will not take place. Aside from costs of fuel, inflation, high interest rates, increase in construction and maintenance costs, the people of Hawaii and the State are beginning to feel that there must be limitations placed on growth in Hawaii.

The study says that by 1981 the capital investment required for master-plan requirements for existing highway, airport and harbors through 1981 will increase the total outstanding debt to \$795 million. This does not include \$71 million for a State Ferry system and the planned rapid transit system in Honolulu.

State DOT director, E. Alvey Wright, said on Jan. 14, 1976 (Honolulu Advertiser 1/15/76), "To avoid a deficit it will be necessary to cut back 75% of our operation and maintenance activities including the termination of approximately 250 out of the 360 currently filled positions. It may also be necessary to terminate 500 additional filled positions which are currently involved in capital construction programs." (Underlining added.) On the same date, also in the Honolulu Advertiser is an article that points out: "The number of State workers and the State payroll are growing at a much faster pace than the total State population, individual family budgets, the cost of living and private per capita income.

If the DOT programs are in trouble now, how will it handle the problems created by the necessary repayment of borrowed money. As the indebtedness grows, the amount left for essential services in the future will diminish. Eileen Anderson, State Budget Director said: "Bond rating analysts consider Hawaii's outstanding debt as very high and they have expressed their concern over our ability to continue our current borrowing practice while maintaining a favorable rate of interest". (Star-Bulletin & Advertiser, Feb. 1, 1976).

One solution to these financial problems would be to stop funding CIPs such as the proposed Kulo Highway and bridges improvement on the North Shore of Kauai and other CIPs that are unwanted by Hawaii's taxpayers. This is the recommendation made by me as a representative of the Sierra Club and Life of the land and for my family and myself.

Helen C. Hopkins

Date March 30, 1976

Helen C. Hopkins
P. O. Box 266
Hanalei, Hawaii 96714

6: OFFICE OF ARIYOSHI
CONTINUED



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
969 PUNCHBOWL STREET
HONOLULU, HAWAII 96813
JUN 14 1976

E. ALVEY WRIGHT
DIRECTOR

DEPUTY DIRECTORS
WALLACE AOKI
RYOICHI HIGASHIYAMA
DOUGLAS S. TAKAMOTO
CHARLES D. SWANSON

IN REPLY REFER TO:
HWY-PA
2-29174

Ms. Helen C. Hopkins
P.O. Box 266
Hanalei, Hawaii 96714

Dear Ms. Hopkins:

Subject: Kauai Belt Road, Haena to Kalihawai
EIS Preparation Notice
Reference: Your letter dated March 30, 1976

PA
1
4
CO

Thank you for the time and effort you have taken in responding to our EIS Preparation Notice. We commend you on the scope and depth of your comments. Our response to your comments is attached as an enclosure to this letter.

Your concern for the North Shore area is appreciated.

Sincerely,

E. Alvey Wright
E. ALVEY WRIGHT
Director

Enclosure

State of Hawaii
Department of Transportation
Highways Division
Planning Branch

RESPONSE TO MS. HELEN HOPKINS

Kauai Belt Road, Haena to Kalihawai
EIS Preparation Notice

Paragraphs 2, 3, 4

The project information furnished by our letter dated March 11, 1976 is correctly stated.

Paragraph 5

Should substantive events cause a significant decrease in traffic predicted over the 20-year design period, we will reconsider the portions of the project that have not yet been implemented. It should be noted however, that the improvements proposed are not solely for increased activity and growth of traffic in the North Shore. The improvements are also necessary for traffic safety. Some of the bridges are in danger of collapse which would endanger people. The existing one-lane bridges are also operationally unsafe based on our present design criteria.

Paragraph 6

This project is being coordinated with the County of Kauai's Planning Department. The revision and updating of the General Plan is their responsibility.

Paragraph 7

The draft EIS, prepared and circulated for Project No. DP-056-1(17), covered the section from Hanalei to Kaliahwi. We are now including all sections of the proposed highway improvements from Kaliahwi to Haena in a new draft EIS to be circulated later this year.

Paragraph 8, 9

Your comments deal with fiscal concerns beyond the scope of our project. However, we will include pertinent economic data in our draft EIS.

Paragraph 10

We recognize that the Kauai General Plan does contain population projections in the range of 90,000 for the year 1990 with the qualification, "Only if and as economic development takes place ..." However, the General Plan, until revised, is still the official planning document promulgated by the County of Kauai.

Paragraph 11, 12, 13

We thank you for the information you have furnished.

Paragraph 14

It is our understanding that you consider the North Shore Plan to be contradictory in anticipation that Princeville will continue to grow as a second home and resort community. You feel that this growth is not presently happening due to current economic conditions.

Our traffic projections are conservative in that they reflect only a portion of the total Princeville Complex being developed in the 20-year period and thus does account for the economic fluctuations such as you have indicated. We have found that this is generally the best approach where we feel projections by others are too high or where there is a great amount of uncertainty in the ultimate development.

Paragraphs 15, 16, 17

Thank you for the current information on the sales and occupancy conditions at Princeville and your opinion on the preferences of the tourists who come to the North Shore area.

Paragraph 18

Your statement implying that DOT insists on progress in Hanalei by the proposed improvements is inaccurate. The basic reasons for the proposed improvements are to replace

the various structures that are in danger of collapse and to replace the existing roadways where the pavement has outlived its useful life (high maintenance costs). These highway improvements will be based on present design and safety standards.

Paragraph 19

We are studying the alternative of a new truss bridge at the existing bridge location.

Paragraph 20

Our involvement in the airstrip at Princeville is to assure that there will be adequate airway-highway clearance between the runway and our highway. We are not aware of traffic congestion between Kapaa and Princeville at present.

Paragraph 21, 22, 23

We agree that no one testified in favor of the highway from Kalihwai to Hanalei at the public hearing held in August 1975. However, some support was received for the curve improvement and widening alternative at the October 1975 informational meeting.

Your comments on the changes to the North Shore Plan should be directed to the Kauai Planning Commission and the Kauai County's Planning Department.

We will consider the present North Shore Plan to be the official plan promulgated by the County until such time that it is revised.

Paragraph 24

The road section between Kalihwai and Hanalei was taken over from the County in 1969. Initial improvements were made in 1971, consisting of minimum overlays to the existing pavement. These improvements were meant to serve as stop-gap measures until more permanent measures could be studied.

Paragraphs 25, 26

The attractiveness of the North Shore area will make it a significant destination for many people. We are aware of the environmental sensitivity of the area as well as the need for safe and efficient transportation. The widening and curve improvements proposed for the Kalihwai to Hanalei segment can be accomplished with minimal impact to the surrounding area. We propose to replace the bridges between Hanalei to Haena with similar looking structures.

Paragraphs 27, 28

The latest traffic statistics for the section of highway from Moloaa Road to Kilauea Road shows lower accident rates for 1974 and 1975. For your information, we are tabulating the most recent available data.

DESCRIPTION	SECTION LENGTH (MILES)	ACCIDENT RATE (PER MILLION VEHICLE MILES)		
		1973	1974	1975
Anahola Rd. to Moloaa Rd.	4.93	1.10	0.84	0.74
Moloaa Rd. to Kilauea Rd.	4.89	3.72	1.10	0.89
Anini Rd. to Hanalei Bridge	4.02	7.20	3.66	2.59
Hanalei Bridge to Malolo Rd.	1.68	6.29	4.27	9.39
Malolo Rd. to Anae Rd.	0.40	-0-	4.82	-0-
Anae Rd. to Wainiha Rd.	3.48	11.24	7.40	7.37
Wainiha Rd. to Ilaena	3.22	3.60	9.39	5.93
Island of Kauai	115.00	3.319	2.282	not available

A - 51

The proposed project is being undertaken at the present time because it has a high priority when compared to other proposed projects for the island of Kauai. Studies for the section of Kamehameha Highway between Kaneohe and Kaawa are not being undertaken at the present time since other projects like Interstate Routes H-1, H-2 and H-3, Moanalua Road Improvements, etc. have higher priorities for our proposed Oahu projects.

Paragraph 30

We regret that you disagree with the mitigation measures cited in the draft EIS for future public facilities. The mitigation measures mentioned in the EIS will be dependent upon the type of public facility constructed if any. Please be assured that we will consider all alternatives to minimize the impact to the natural beauty of the area.

Paragraph 31

We plan to revise our air quality studies based on the latest available criteria.

Paragraph 32, 33

The mitigation measures described in the EIS have proven to be more effective than those used on our previously constructed projects.

Paragraph 29

We are looking into all of the sections with substandard facilities. We feel that our current proposal of curve improvements and the replacement of deteriorated stream crossings between Kalihikai and Ilaena are necessary for safety. The State Legislature has appropriated funds for these projects.

We also intend to monitor recently constructed projects in other areas to provide us with data on the effectiveness of these mitigation measures.

Paragraph 34

We will include a benefit-cost analysis in the draft EIS.

Paragraph 35, 36

A hydrologic study is underway as a part of the study for Hanalei Bridge. Please be assured that our improvements will not aggravate the present flooding conditions or create flooding of other areas not now subject to flooding.

Paragraph 37

The problems you mention are all being studied.

Paragraph 38

We will coordinate the development of the project with the Coastal Zone Management committee and the U.S. Corps of Engineers. Paragraphs 39, 40, 41, 42, 43, 44

We appreciate your concerns on our State Transportation program, its policies, funds, and relationship with the Kawai projects on the North Shore. We feel that we cannot drop the proposed improvements as you have suggested since the health, welfare and safety of the people would be endangered. We will, however, continue to evaluate your comments and suggestions before we finalize any decisions for the proposed highway improvements.

DEAR DOT -

PLEASE SAVE THE OLD BRIDGES
FROM KALIHIWI TO HAENA, KAWAI

HAWAII NEEDS TO PROTECT
ITS PAST, FOR OUR SAKE AND OUR
CHILDREN'S SAKE. WE HAVE ALREADY

TAKEN SO MUCH FROM THIS GREAT
LAND.

A FEW NEW BRIDGES MEANS
A FEW MORE BIG TRUCKS, BUSES, 10 STORY
BIDGS.

PLEASE KEEP OUR HAWAII
THE WAY IT HAS BEEN - WE HAVE
DONE ENOUGH DAMAGE.

THANKS

JOHN & MARTI FERRY
HANALEI

OFFICE OF THE DIRECTOR
STATE OF HAWAII



STATE OF HAWAII
OFFICE OF THE DIRECTOR
155 BERKELEY STREET
HONOLULU, HAWAII 96813
April 20, 1976

F. ALVEY WRIGHT
DIRECTOR
POWER DIVISION
WALLALLA ROAD
MOONLAKI (HUKUNOHONA)
KUNIALEA & SARAWARD
CHARLES O. SWANSON

BY MARY MAYER FOR
IRVY-PA
2-28318

DIRECTOR'S OFFICE
RECEIVED
May 18 12 41 PM '76
WILLIAM T. LE GRO
211 ANAHOA
KAUAI, HAWAII 96703
TRANSPORTATION DIVISION
MAY 16 1976

Department of Transportation
689 Punchbowl St.
Honolulu 96813

Dear DOT People:

I wish to make my personal opinions known concerning the Kalihwai-Haena road project and the proposed Hanalei River Bridge.

Basically, I am opposed to any change whatsoever in this road or the bridge. The way I see it, the area has survived with its irreplaceable isolation and quietude without any great loss for centuries. I do not feel things have changed enough to warrant any road or bridge improvements.

However, I do not think that any tourist or resident, no matter what the state of inebriation or unfamiliarity, should be killed or injured in any way because of the unsafe condition of the highway or bridge. I believe that all measures should be taken to ensure the safety of these facilities.

I am opposed to changes, however, for these reasons, and I believe you should seriously consider these reasons before any decisions are made. You must understand how much a bridge and highway can alter a community's lifestyle. Any bridges in Hanalei and Wainiha and Haena that allow four buses access to this area will certainly mark the real beginning of ruin. The highway would have to be widened and realigned over much of the route. And the advent of large numbers of buses and tourists can only mean one thing--a demand for tourist facilities and concessions. The traffic, even now very slow because of sharp curves, will increase considerably with four buses. All the tacky businesses that come and go so quickly because of their dependence on quirky tourism will destroy the mood of this region that is so much prized by both residents and tourists. This area is mostly unspoiled, and I believe the tourists want to see it remain this way, and I know the locals feel this way as well. Since the end of the island is designated for incorporation into a state park, it would be defeating the purpose of this park to allow such an increase in tour traffic as this new road and bridge system would provide.

Esthetically, the Hanalei bridge, the Waiali-Waikoko bridges, and the Wainiha bridges are very pleasant and attractive; each is another reminder and indicator of the rural-ness, the unspoiled quality of this most beautiful place on the Planet Earth. If they are unsafe, I believe they should be made safe, but without detracting from their considerable charm. The people of Kauai, especially the North Shore, are very attached to these bridges in a way that the Vermonters are attached to their covered bridges.

It is transportation and communication that changes a given area. I ask that you allow the Hanalei region to remain unchanged and unspoiled.

Mr. and Mrs. John G. Ferry
4122 Stone Canyon Avenue
Sherman Oaks, California 91403

Dear Mr. and Mrs. Ferry:

Subject: Kanai Belt Road, Haena to Kalihwai
Reference: Your letter received on March 31,
1976

Thank you for your note asking that the old bridges from Kalihwai to Haena be saved. Regrettably the existing structures are not structurally sound, nor are they salvageable.

While new structures will be required please be assured that they will be designed and built to blend with the scenic and rural setting as well as the lifestyle of the North Shore area.

Sincerely,

F. ALVEY WRIGHT
Director

LA
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for the enjoyment and spiritual renewal of our descendants. This protection of a truly unique area can be accomplished if you take utmost care in your planning. Specifically, the road should be widened and straightened and elevated where absolutely necessary; since the speed limit now is 35 mph, I don't think much work need be done here. The bridges and the road in low-lying areas should be raised. I don't think the architecture of the bridges should be changed--no one who has seen the Hanalei and Wainiha bridges and has any sensitivity could recommend replacement with a "sweeping" structure such as foisted upon the Lumshai Stream. I also think that the weight limits should not be increased so as to prevent the crossings of four buses, cause of large-scale construction, and ultimate despoliation of an incredibly beautiful area. Let the other islands open up their treasures for all to see from a bus or condominium. Allow Kauai to remain hidden in some respects, visible only to small and controllable numbers of people who will forever thank you for preserving this environment.

Mahalo nui loa for considering my opinion, which I believe is the opinion of many other Kauaians.

Maluhia a me Aloha,

William T. Le Gro

A-54

3601

HWY-PA
2.28210

April 6, 1976

Mr. William T. Le Gro
Box 291 Anahoula
Kauai, Hawaii 96703

Dear Mr. Le Gro:

Subject: Kauai Belt Road
Haena to Kalihiva

Thank you for your letter of March 16, 1976. Your comment to improve the roadway only where it is absolutely necessary will be considered. We recognize the sensitive environment that exists in the North Shore area. We are hopeful of finding a solution that will best serve the overall public interest.

We appreciate your interest and concern on our proposed project.

Sincerely,

Sincerely,
E. ALVEY WRIGHT
Director

RECORDED
SERIALIZED
APR 10 1976

John Wehrlein
Box 111 Kilauea
Kauai, Hawaii
96754

State of Hawaii
Dept. Of Transportation
Highways Division
Planning Branch

April 29, 1976

Dear Sirs:

Thank you for sending me the environmental impact preparation notice on the Kauai Belt Road Kaliahiwai to Haena project. I would appreciate your consideration of the following comments:

1. The pasture lands both mauka and makai of the existing highway support the bulk of the North Shore's cattle industry. To raise the speed limit of this road with new alignments would raise the insurance rates of the cattle operation in the area and in effect be raising the price of beef on Kauai. I recommend that you consider only your third alternative, "to retain and widen the existing roadway with improvements to four curves . . ."
2. The nature and the slow easy characteristic of that roadway is a pleasure for the people of the North Shore as well as an attraction for visitors to our community. To change the alignment of this road or to remove the trees that line and shade its path would be in effect taking away a source of pleasure and relaxation for local residents as well as our visitors. We consider the road in its present state a natural resource.
3. The people who live on the North Shore are not in much of a hurry; and the people who come to visit us are usually trying to slow down. At a public hearing held by your office in Hanalei last people of the North Shore unanimously testified against any change to the alignment of this road. To consider the first two alternatives proposing new alignments after this public testimony would seem to be an affront to the people of the North Shore and a waste of tax money on a highway project that taxpayers don't want.
4. The people of Kauai have expressed over and over again their desire for slow growth, carefully controlled growth, and quality growth on their island. Kauai is trying to protect its communities, its special way of life, its

agricultural lands and Kauai is trying to develop a selective and high quality visitors industry. To substantially alter the nature of our landscape and the pace of our lives with a new highway and new bridges is to act against the intent that the people of this island have so often and publically expressed, their intent to hold onto their way of living in a peaceful rural atmosphere.

5. Kauai is quaint and historic. Slow and peaceful. It is a good place to raise a family and it is a good place for a family to come on vacation. To take away our winding roads, our one lane wooden bridges would be taking away some of Kauai's history and character. To open up the North Shore to faster traffic and a faster way of life is to take away some of the privacy of our communities and to make the experience of visiting Kauai less personal.
6. The county has repeatedly stated its policy to develop a visitors industry for people who come to Kauai with families and spend a week or two exploring the beaches, driving the beautiful winding roads, visiting our historic sites, and experiencing the aloha of our people. Kauai gets a little return from the visitor on a quickie tour who arrives one morning and leaves that evening or the next day. And that visitor gets little from Kauai. This type of "freeway" tourism leaves the visitor and the local people used but not paid.
7. I ask that you consider only improving the existing roadway from Kaliahiwai to Hanalei bridge without excessive removal of trees lining the highway. And construct a parallel elevated alignment from the Hanalei bridge to the town to help the flooding problem. I suggest that you retain all existing bridges that are repairable and that you use available funds for the necessary repairs. I recommend that bridges beyond repair be replaced with structures that retain the original design and materials.
8. I ask that no other work be projected for this area by the Department of Transportation until requested by the citizens of the various North Shore communities in the project area.

Thank you for the opportunity to comment on your proposal.

Sincerely,

John Wehrlein



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
669 KUHIOHOLA STREET
HONOLULU, HAWAII 96813

May 18, 1976

E. ALVEY WRIGHT
DIRECTOR
DEPUTY DIRECTORS
WALLACE AOKI
TORICHI HIGASHIONNA
DOUGLAS E. SARAKOTO
CHARLES O. SWANSON

IN REPLY REFER TO:
HWY-PA
2.28892

Mr. John Wehrheim
Page 2

HWY-PA 2.28892

We have requested guidance from the County on their Development Plan. At the present time, the Kauai General Plan is the official plan which we must consider.

- 7. One of our alternatives reflects your recommendations and will be presented at the public hearing.

Our proposals for the North Shore were described in the EIS Preparation Notice. We will continue to monitor the transportation facilities in the North Shore to assure the public of safe and efficient transportation. Any significant proposals to improve the highway will be fully coordinated with all concerned agencies including the people of the various North Shore communities. The public will also be given ample opportunity to present their views.

We appreciate your concern for the North Shore.

Sincerely,

E. Alvey Wright
E. ALVEY WRIGHT
Director

Mr. John Wehrheim
Box 111
Kilauea, Hawaii 96754

Dear Mr. Wehrheim:

Subject: Kauai Belt Road, Maena to Kalihlwai
EIS Preparation Notice Comments
Reference: Your letter dated April 9, 1976

Thank you for commenting on our EIS Preparation Notice. Our response to your comments follows:

- 1. The alternatives will have minimal impact on cattle operations since they are located adjacent to the existing highway. The existing speed limits will be retained.
- 2. Every attempt will be made to retain the existing trees.
- 3. The people testifying at the public hearing at Hanalei in August of 1975 were opposed to realigning the road. We have since developed a proposal to widen the existing roadway and improve several curves.
- 4. 5. 6. We are cognizant of the sensitive environment that exists in the North Shore. While one lane wooden bridges reflect Kauai's history and character, there is a need for safe transportation. Some of the bridges are in danger of collapse and the existing one-lane bridges are also operationally unsafe.

PRINCEVILLE ART CENTER

AT

HANALEI, KAUAI, HAWAII 96714 P.O. Box 205

(808) 826-6561

March 23, 1976

State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Wright:

I am dropping a line in regards to the proposed improvements to the bridges and roads between Kalihwiwi and Maena, Kauai. Having lived here but a short time, but indeed with an eye for the artistic beauty of this place, I find the wooden truss bridge into Hanalei and the rustic one-lane bridges beyond marks of quiet beauty in the landscape. I am quite sure that modern-style constructions would mar that beauty. If anything, I would only endorse the continued maintenance and inspection of the present facilities.

I shall be present at the summer hearing which has been proposed to discuss the project. If at all possible, please keep me posted of the date of this event.

Very truly yours,

Geraldine A. Wojno

Geraldine A. Wojno

DIRECTOR'S OFFICE
MAR 25 12 31 PM '76
DEPT. OF
TRANSPORTATION

"Community Involvement in Art"
Ms. Geraldine A. Wojno
Proprietor

HMY-PA
2.28287

April 12, 1976

Ms. Geraldine A. Wojno
P. O. Box 205
Hanalei, Kauai, Hawaii 96714

Dear Ms. Wojno:

Subject: Kauai Belt Road,
Maena to Kalihwiwi
Reference: Your letter dated
March 23, 1976

We appreciate your concern for the beauty and charm of the Hanalei area. Your endorsement of continued maintenance and inspection of the various bridges is not possible. The present bridges are too deteriorated to be considered safe, or even salvageable. Our bridge engineers report that there are no economical solutions whereby the existing structures can be repaired to a sound condition for highway use.

Furthermore, safety considerations would preclude the replacement of existing structures with new one-lane facilities, as this would be a substandard design.

We will however try to design our improvements to be harmonious with the sensitive environment of the area.

Sincerely,

R. Alvey Wright
Mr. ALVEY WRIGHT
Director



Speed your reply Via ITT No. H11A421/APR 6/DE

LI/DEPT OF TRANSPORTATION

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DEPT OF TRANSPORTATION
869 PUNCHBOWL ST
HONOLULU, HAWAII 96813

RE KALIHUAI-HAENA ROAD PROJECT SIR'S PEOPLES DESIRES AND FACTS HAVE BEEN PRESENTED AND AS MY FAMILY OWNS OVER SEVEN ACRES IN HANAIEI AREA STRONGLY URGE DENIAL OF UNNECESSARY MAJOR ROAD-BRIDGE RECONSTRUCTION -- MOST SPECIFICALLY HANAIEI-WAIOLI-HAENA AREAS. IF SO DONE -- FACT NOT THREAT OF PROBABLE MAJOR LAWSUIT FROM THIS FAMILY AND OTHERS
E L YATES

COL 869 HONOLULU 96813

ITT World Comm

393492

World Comm

85-A-1

531-0561

C. Petitions

The State Department of Transportation has received six petitions prior to the circulation of this Draft EIS; two petitions in favor of the project (287 signatures), three petitions opposed to the project (18 signatures), and one petition requesting an improved drainage system in Hanalei Town as a part of the project (25 signatures). These petitions read as follows:

1st Petition

"we the tax payers and the citizens of Kauai want the State Transportation Department to build the highway from Kalihiwai to Hanalei."

- Dated August 21, 1975, 241 signatures, 12 addresses (Kapaa, Koloa, Kekaha, Kalaheo, Lihue).

2nd Petition

"The undersigned visitors to Kauai request that the State Department of Transportation withdraw its plans for widening and realignment of Kuhio Highway and that if it is imperative that the bridges over Hanalei and Wainiha Rivers be made stronger, they either be repaired or replaced in the same style. The Hanalei-Haena area is one of the last remaining 'Hawaiian places' and we would like to see it remain that way.

- No date (received 4/8/76), 5 signatures from Canada, Alaska and California.

3rd Petition

"As residents of Kauai, we request that the State Department of Transportation withdraw its plans for widening and realignment of Kuhio Highway and that if it is imperative to make the bridges over Hanalei and Wainiha Rivers stronger, they either be repaired or replaced in the same style."

- No date (received 4/8/76), 7 signatures; 6 from Hanalei and 1 from Haena.

4th Petition

"As owners of condominium apartments at Hanalei Colony Resort, we recognize that the Hanalei-Haena area is unique and that the leisurely pace and rustic charm of the old-fashioned bridges adds greatly to this uniqueness. We therefore request that the State Department of Transportation withdraw its plans for widening and realigning of Kuhio Highway and that if it is imperative to make the bridges over Hanalei and Wainiha Rivers stronger, they either be repaired or replaced in the same style."

- No date (received 4/8/76), 6 signatures from Hanalei Colony Resort at Haena.

5th Petition

"We the undersigned residents of Kauai, in recognition of the urgent need for improved highway safety and a uniform, island-wide vehicular transportation system, hereby urge the State Department of Transportation to expedite its proposed program of highway widening and bridge improvements in the area between Kalihiwai and Haena."

- No date (received 5/5/76), 46 signatures, no addresses.

6th Petition

"We, the undersign residents and voters from the town of Hanalei request that when the new highway is constructed in Hanalei that you will put in a drainage (covered) system at least 6 feet deep. This will alleviate the flooding of our yards and cesspools during our rain storms."

- Dated March 24, 1976 (received 5/11/76), 25 signatures, no addresses.

III. OTHER CONSULTATIONS

Appreciation is extended to the following agencies and persons who contributed information useful in the preparation of this EIS.

A. U.S. Governmental Agencies

1. Department of Agriculture

a. Soil Conservation Service

- Kauai Field Office Mr. Neal S. Fujiwara

- Oahu Field Office Mr. Saku Nakamura

b. Forest Service

- Inst. Pacific Islands Forestry Mr. Ed Pettys

2. Department of the Interior

a. Geological Survey

- Water Resources Division Mr. John Yee

b. Fish and Wildlife Service

- Hanalei National Wildlife Refuge Mr. Fred Zeillemaker (Manager)

- Fisheries Biologist Dr. John Maciolek

B. State of Hawaii Agencies

1. Department of Health

a. Kauai District Office Mr. Ted Inouye

Mr. R. Masuo

b. Pollution Technical Review Mr. Harold Tobin

- c. Noise Pollution Mr. Len Yoshioka
- 2. Department of Land and Natural Resources
 - a. Fish and Game Division
 - Kauai District Office Mr. Thomas Telfer
 - Oahu Mr. Joe Dalrymple
 - Mr. Richard Yoshida
 - b. Water and Land Development Division
- C. County of Kauai
 - 1. Department of Planning Mr. Tom Shigemoto
- D. Other Organizations
 - 1. American Lung Association Mr. Jim Morrow
 - 2. The Kauai Historical Society Mr. Robert J. Schleck
 - 3. The National Trust for
Historic Preservation Mr. John L. Frisbee III

APPENDIX B
AIR QUALITY REPORT

APPENDIX B AIR QUALITY STUDY

A. INTRODUCTION

In this section are presented the various elements of the air quality study for the proposed improvements to the Kanal Belt Road from near Kalitwa to Ilana.

To determine the air quality impact of the proposed improvements, all available background air quality and meteorological data were examined and air quality levels were estimated for the base year 1975 and projected for the years 1980 ("critical year") and 1988 (highway design year). The air quality effects were then related to the applicable Federal and State standards to determine whether the proposed highway improvements will meet these criteria.

Two alternative actions were considered:

1. Construction of the proposed improvements, consisting of widening and/or realigning the existing highway and replacement of the existing single-lane bridges with double-lane structures.
2. No build alternative, in which the existing road would remain in its present condition. A detailed discussion of the proposed improvements is included in Chapter 1. The microscale carbon monoxide effect associated with each alternative was determined, using the HIWAY Model developed by EPA¹ for motor vehicle pollutant emissions along highways. The specific methodology employed was that contained in the EPA publication "Guidelines for Air Quality Maintenance Planning and Analysis - Volume 9"² issued January, 1975. In addition to CO impacts, a regional pollutant burden analysis was performed for the motor vehicle - generated pollutants, hydrocarbons (HC) and nitrogen oxides (NO_x).

1. "HIWAY: A Highway Air Pollution Model," J.R. Zimmerman and R.S. Thompson, EPA Research Center, Meteorology Laboratory, December, 1973.

2. "Guidelines for Air Quality Maintenance Planning and Analysis, Volume 9: Evaluating Indirect Sources," EPA, Office of Air and Waste Management, January, 1975.

The various objectives of the air resources study are as follows:

1. Estimate background CO concentrations at the proposed site using the existing data base.
2. Convert motor vehicle traffic data to CO emissions and ambient air impact concentrations for the years 1975, 1980 and 1988 through highway diffusion modeling techniques.
3. Calculate HC and NO_x emission burdens, expressed in tons/year, on a regional basis.

These objectives were designed to meet the requirements of the National Environmental Policy Act of 1969. The air pollution effects for each alternative were assessed in terms of the National Ambient Air Quality Standards (NAAQS).

B. ANALYSIS TECHNIQUES AND ASSUMPTIONS

The HIWAY model, which was adapted for estimating traffic generated CO effects is a steady state Gaussian computation method. It is based on considering each lane of traffic for an at-grade highway as though it were a finite, uniformly emitting line source of pollution. Once at-grade (or cut-section) line sources have been specified, the air pollution concentration representing hourly averaging times at a downwind receptor location, can be determined by trapezoidal integration of the values of air pollution concentration produced by a number of point sources placed at equal intervals along the line source. This model is applicable for any highway directional orientation, any wind direction and any receptor location at ground level or at some specified elevation.

The HIWAY model was used to derive a series of curves¹ which made it possible to convert motor vehicle volumes to CO impact concentrations at various distances from the highway edge. This adaptation of the HIWAY model is based on the following conditions:

1. "Guidelines for Air Quality Maintenance Planning and Analysis, Volume 9: Evaluating Indirect Sources," EPA, Office of Air and Waste Management, January, 1975.

CO emission factors for the year 1975 were for a national average mix of gasoline motor vehicles by model year, comprising 88 percent automobiles and 12 percent light duty trucks. (The small number of buses that currently enter the area do not travel beyond Princeville due to the weight restriction on the Hanalei Bridge.)

For the 88/12 percent vehicle mix, adjustment factors were applied to the 1975 CO emission factors to reflect the application of emission control programs for the years 1980 and 1988. The 1975 emission factor for the national model year distribution was calculated to be 61.6 gm CO per vehicle-mile. The Hawaii mix is almost the same as the national average. Therefore, no local adjustment was required. The projection factors to be applied to the 1975 CO levels for the years 1980 and 1988 were .5 and .2 respectively.

The National average emission factors assume an average route speed of approximately 20 mph. Although the speeds on the existing and proposed road are generally higher, the emission factors used were not adjusted for these increased speeds. Since this factor was not applied, the estimates represent the "worst case" conditions of heavy traffic congestion. This is a very conservative assumption since CO emissions tend to decrease with increased vehicle speed.

The transport and dispersion of pollutants are influenced by both wind speed and atmospheric stability. The methodology applied in this study assumes a stability Class D which represents adverse dispersion conditions. The application of this stability category and the selection of maximum traffic flow volumes represent worst-case conditions which yield maximum estimated air quality impact concentrations.

A steady wind speed of 1 m/s (2.2 mi./hr.) is assumed in the dispersion model. Wind speed and direction data at

2. U.S. DHEW Public Health Service. National Air Pollution Control Administration; "Air Quality Criteria for Carbon Monoxide." NAFCA Publication Number AP-62 (Mar. 1970).

Kilauea Point typically average from 13 to 20 mph, with speeds of less than 3 mph observed less than 4% of the time (Tables 1-3). These values, although not directly applicable to the project area due to differences in topography, do indicate that the assumed wind speed of 2.2 mph used in the estimation of CO concentrations represents extreme "worst case" conditions. Under typical wind patterns, the resulting concentrations would be nearly a factor of 5 less than those computed.

1. Air Quality Variables

The four major factors affecting air quality in this study are highway location and configuration, vehicle emissions, background meteorology and ambient air quality.

The highway location influences the air pollution effects of these sites located in proximity to the road. Such sensitive receptors as school, public facilities or residences, where persons might be subjected to one-hour or eight-hour exposures to motor vehicle exhaust emissions, must be considered, and CO concentrations in ambient air computed at these locations. The proposed improvements consist of several possible realignments at various points along the highway, or involve changes in the existing road itself. Regardless of the specific alignment chosen, the changes in microscale carbon monoxide levels at roadside will be primarily due to changes in the width of the existing highway and elimination of one-lane bridges. Both of these elements will allow increased traffic volume and speed. Sensitive receptors were chosen at the property line of private residences 15 feet from the edge of the existing highway. The distance from the road to receptor was conservatively assumed to be the same for the improved road (Figure 7 of the EIS). Two receptor locations were chosen, one representing the effect of a new bridge (Waioli Bridge) and the other the effect of a widened highway (Kuhio Highway at the Hanalei Plantation Road).

The typical highway configurations are shown in Figures 5 and 7 of the EIS. The HWAY model employed to determine CO concentrations assumes at-grade elevations for both roads.

2. Background Meteorology and Air Quality

The project area is located on the north shore of the island of Kauai. The wind is from the east quadrant at least 80% of the time, reflecting the persistent trade wind circulation of tropical latitudes. Wind speeds on the north shore average from 13 to 20 mph as measured at the Kilauea Lighthouse (approximately 7 miles from the midpoint of the study area). As mentioned previously, the CO dispersion calculations were based on a very conservative wind speed of about 2 mph.

There has been no air quality monitoring on the north shore of Kauai. Some monitoring has been done in Lihue, but it is not representative of conditions in the rural areas of the north shore. A large portion of the area is used for cattle-grazing and there are no pollutant-generating industries in the area. As a result, a national background level of 1 ppm has been assumed.

To estimate the total CO levels caused by the 1975, 1980 and 1988 year traffic flows, it is necessary to estimate the background CO one-hour and eight-hour concentrations in ambient air for these three years. Although increasing (annual) vehicle miles traveled (VMT) values tend to increase the CO background levels, more stringent emission standards will cause them to be reduced.

Based on the influence of both the VMT and emission standard variations, a pollutant burden analysis for all three years has been prepared and is summarized in Table 6. These values indicate that the effect of increasingly stringent motor vehicle exhaust controls outweighs the projected VMT, thus yielding continuously decreasing emissions. Because the background CO concentration of 1 ppm is assumed to be the level naturally occurring in the free atmosphere, and the total vehicle emissions in 1980 and 1988 should not exceed 1975 levels, the background level of 1 ppm was also used for these years.

1. U.S. DEW Public Health Service, National Air Pollution Control Administration; "Air Quality Criteria for Carbon Monoxide" NAPA Publication Number AP-62 (Mar. 1970).

3. Dispersion Modeling

The step-wise methodology applied for the microwave air pollution assessment is as follows:

- a. Traffic flows were obtained for the year 1975 and projected for 1980 ("critical year") and 1988 (highway design year).
- b. EPA-based motor vehicle pollutant emission factors F_i were determined for the years 1975, 1980 and 1988.
- c. CO concentrations were estimated in ambient air at the project site, for both the build and no-build alternatives for 1975, 1980 and 1988. The year 1975, rather than 1976, was chosen as the baseline period due to the availability of traffic data.
- d. Based on traffic flow data and roadway configurations, one-hour and eight-hour CO concentrations were estimated for both alternatives at two critical receptors in accordance with EPA Air Quality Maintenance Guidelines.
- e. The CO concentrations determined in the previous tasks were added to the background concentrations to obtain total CO levels.
- f. The total CO impact values were compared with the ambient air quality standards for this pollutant (See Table 4).

4. Example Calculations

Carbon Monoxide Concentration Calculations. At the present time autos stack up on either side of the one-lane bridges, waiting to cross. For modeling purposes the bridge was considered to exert the same impact as a non-signalized intersection. In both cases, as the demand-capacity ratio increases, queue formation is likely to cause increasing impact on nearby ambient CO concentrations. The capacity of the one-lane bridges cannot be accurately quantified. However, for the purposes of these calculations, the capacity was assumed to be one-half of one lane on the adjoining road.

Example Bridge Receptor Calculation. For the no-build alternative in 1988 the capacity of each lane of the adjoining road is 535 VPH/lane (see Figure 4 segment D5a in the EIS). Bridge capacity is taken to be $535/2 = 268$ VPH. Design hour traffic demand is 344 VPH (172 VPH/lane), or 19% of ADT (determined from traffic counts). Demand capacity ratio $V/C = 172/268 = 0.64$. From Figure 1, the impact at 10 meters of the upstream lane using the queuing curve is 5.0 ppm. From Figure 2, assuming a cruise speed of 30 mph, the impact of the downstream lane at 10 meters is 1.0 ppm.

Lane dimension - four meters. To determine the maximum CO concentration at highway edge, the approximate distance of the receptor from the near edge of lanes 1 and 2 is 5 meters and 9 meters respectively. Correction values for conversion of "10 meters" CO values to the actual distances of 5 and 9 meters from the roadway edge are 1.2 and 1.0, respectively (See Figure 3).

Lane No.	V/C	Receptor Distance (meters)	CO level (ppm) at 10 meters	Distance Factor	CO level (ppm) at Receptor
1	.64	5	5.0	1.0	5.0
2	.64	9	1.0	1.2	1.2

TOTAL 1 HOUR IMPACT = 6.2 ppm

This value must be adjusted for 1988 emissions and converted to mg/m^3 . Using the projection factor of .2 to convert 1975 emissions to 1988 values, and applying the conversion factor of $1.14 \text{ mg}/\text{m}^3$ per 1 ppm for CO, then

$$\begin{aligned} \text{Adjusted CO concentration} &= 6.2 \times .2 \times 1.14 = 1.4 \text{ mg}/\text{m}^3 \\ \text{Background CO concentration} &= 1.1 \text{ mg}/\text{m}^3 \\ \text{Total peak one-hour CO concentration} &= 2.5 \text{ mg}/\text{m}^3 \end{aligned}$$

- "Compilation of Air Pollution Emission Factors," EPA Publication AP 42, Second Edition, Supplement 5, Feb. 1976.

Example Roadside Receptor Calculation. For the build alternative the maximum eight-hour traffic (65% of the ADT as determined from traffic counts) for 1980 is 125 VPH/lane.

Lane capacity = 400 VPH/lane (segment D2a, Figure 1 of the EIS).

Lane dimension - four meters (approximately). The receptor distance to near edge of lanes 1 and 2 is 5 meters and 9 meters, respectively.

Correction factor for converting "10 meters" CO values to the actual distances of 5 and 9 meters from the roadway edge are 1.2 and 1.0, respectively (see Figure 4).

V/C for each lane is $125/400 = .26$. From Figure 5, the 10 meters impact of each lane is less than 1 ppm. Correcting the 10 meters values to account for actual distances from roadway edge, concentrations of 1.2 and 1.0 for lanes 1 and 2, respectively, were obtained.

Lane No.	V/C	Receptor Distance (meters)	CO level (ppm) at 10 meters	Distance Factor	CO level (ppm) at Receptor
1	.26	5	< 1.0	1.2	< 1.2
2	.26	9	< 1.0	1.0	< 1.0

TOTAL 1 HOUR IMPACT = 2.2 ppm

To convert to 8-hour averages, a meteorological persistence factor of .6 is assumed as suggested in the EPA "Guidelines".

- From Figure 4 of the EIS, Segment D2a 1980 ADT volume is 3068; therefore, $3068 \text{ ADT} \times 65\%$ 8-hour = 8 lanes \times 2 lanes = 125 VPH/lane.

The one hour value must also be adjusted for 1980 emissions and converted to mg/m³. Using the .5 projection factor and applying the conversion factor of 1.14 mg/m³ per 1 ppm for CO, then

$$\begin{aligned} \text{Adjusted CO concentration} &= < 0.8 \text{ mg/m}^3 \\ (< 2.2 \times .5 \times 1.14 \times .6) \\ \text{Background CO concentration} &= \frac{1.1 \text{ mg/m}^3}{1.9 \text{ mg/m}^3} \\ (\text{1 ppm} = 1.1 \text{ mg/m}^3) \\ \text{Total impact is less than} & \end{aligned}$$

Pollutant Burden Analysis. An analysis of regional pollutant burdens of CO, hydrocarbons (HC) and nitrogen oxides (NOx) was performed for the years 1975, 1980 and 1988. The average daily vehicle-miles traveled for each year are summarized in Table 5

The calculation methods employed are as follows:

Pollutant emission factors

Year 1975	CO = 61.6 g/mi
	HC = 9.8 g/mi
	NOx = 4.8 g/mi
Year 1980	CO = 31.0 g/mi
	HC = 5.4 g/mi
	NOx = 3.6 g/mi
Year 1988	CO = 11.3 g/mi
	HC = 1.9 g/mi
	NOx = 2.0 g/mi

Sample Calculation

For 1980 the estimated daily VMT = 31,343

$$\text{CO} = 31,343 \times 31.0 \text{ g/mi} \times 1 \text{ lb.} \times 1 \text{ ton} = 1.1 \text{ tons}$$

$$\frac{454 \text{ g}}{2000 \text{ lb.}}$$

$$\text{HC} = 31,343 \times 5.4 \text{ g/mi} \times 1 \text{ lb.} \times 1 \text{ ton} = .2 \text{ tons}$$

$$\frac{454 \text{ g}}{2000 \text{ lb.}}$$

$$\text{NO}_x = 31,343 \times 3.6 \text{ g/mi} \times 1 \text{ lb.} \times 1 \text{ ton} = .1 \text{ ton}$$

$$\frac{454 \text{ g}}{2000 \text{ lb.}}$$

A summary of vehicle pollutant emission burdens is presented in Table 6. It should be noted that the 1980 and 1988 traffic projections (Figure 4 of the EIS) assume that the proposed highway improvements would not in themselves induce traffic since the existing highway is not a limiting factor to visitation (a lack of commercial facilities is the limiting factor). However, this is not true for buses and other heavy vehicles which cannot cross the existing Haunlet Bridge. The traffic projections assume that by 1980 the Haunlet Bridge will not limit bus traffic ("built alternative"). If the weight restriction of the Haunlet Bridge is not lifted ("no built alternative"), traffic beyond the bridge could be greater than predicted since tourists, which are the major contribution to traffic and which will increase with or without the proposed improvements, would travel in smaller vehicles. The traffic volume data used in this analysis is therefore an approximation in that it does not take into account these highly complex variables.

SUMMARY OF RESULTS

C.

Based upon present design parameters and Federal motor vehicle emission standards (as amended March, 1975), no significant impact on air quality is anticipated in the vicinity of the proposed improvements during the 20 year design period. For the no-build alternative, the micro-scale CO impacts are similar to those of the improved highway until 1980. By 1988 however, the CO levels associated with the improved highway should be generally less than those predicted for the existing highway.

Under the projected VMT and Federal motor vehicle emission standards, the total CO emissions should decrease nearly 38% between 1975 and 1988. Hydrocarbon emissions will likely decrease by 37% while nitrogen oxide values should increase during the 1976 through 1988 period are currently being observed. Peak hydrocarbon emissions will be observed in 1978 while emissions of nitrogen oxides will gradually increase throughout the 1976 to 1988 period. The proposed highway improvements should have little bearing on these factors.

Violations of existing State of Federal ambient air quality standards are not likely, even under the "worst case" meteorological and traffic flow conditions. Table 7 indicates that the estimated maximum CO concentrations will remain at least a factor of two less than the most stringent applicable standard for both the build and no-build alternatives.

TABLE 1
KILAHEA POINT, KAUAI
0800 HRT WINDROSGF

Direction	Wind Speed (kts)						Total
	0-3	4-7	8-12	13-18	19-24	>24	
N	.0000	.0009	.0037	.0064	.0000	.0018	.0128
NE	.0018	.0064	.0256	.0385	.0293	.0137	.1151
E	.0027	.0183	.0476	.1154	.0632	.0275	.2747
SE	.0147	.0650	.1346	.1438	.0751	.0302	.4631
S	.0092	.0165	.0092	.0018	.0000	.0000	.0366
SW	.0119	.0266	.0156	.0046	.0009	.0000	.0595
W	.0027	.0037	.0037	.0009	.0009	.0009	.0128
NW	.0027	.0000	.0046	.0009	.0009	.0000	.0101
Total	.0458	.1374	.2445	.3123	.1703	.0751	.9653

Calms = .0147

Years of Record - 1964, 1967, 1971

Number of Observations - 1,095

Compiled from RMS data by:

THE AMERICAN HUNG ASSOCIATION OF HAWAII

TABLE 2
KILAUEA POINT, KAUAI
1400 HST WINDROSE

Direction	Wind Speed (kts)						Total
	0-3	4-7	8-12	13-18	19-24	>24	
N	.0027	.0082	.0064	.0101	.0009	.0000	.0284
NE	.0027	.0128	.0274	.0686	.0293	.0146	.1555
E	.0000	.0082	.0393	.1482	.0613	.0357	.2928
SE	.0009	.0073	.0750	.2214	.1052	.0339	.4437
S	.0000	.0009	.0037	.0027	.0000	.0000	.0073
SW	.0009	.0055	.0073	.0018	.0027	.0018	.0201
W	.0000	.0027	.0064	.0064	.0018	.0018	.0192
NW	.0018	.0091	.0110	.0846	.0027	.0009	.0302
Total	.0091	.0549	.1766	.4639	.2040	.0887	.9973

Calms = .0027

Years of Record - 1964, 1967, 1971
Number of Observations - 1,093

Compiled from NWS data by:
THE AMERICAN LING ASSOCIATION OF HAWAII

TABLE 3
KILAUEA POINT, KAUAI
2000 HST WINDROSE

Direction	Wind Speed (kts)						Total
	0-3	4-7	8-12	13-18	19-24	>24	
N	.0009	.0073	.0091	.0046	.0009	.0000	.0228
NE	.0037	.0091	.0192	.0475	.0402	.0201	.1307
E	.0009	.0119	.0539	.1268	.0685	.0210	.2831
SE	.0055	.0274	.1233	.1735	.0922	.0265	.4181
S	.0027	.0064	.0064	.0037	.0000	.0000	.0192
SW	.0037	.0110	.0137	.0037	.0009	.0000	.0329
W	.0027	.0027	.0082	.0055	.0009	.0018	.0219
NW	.0037	.0082	.0064	.0037	.0018	.0027	.0265
Total	.0237	.0840	.2402	.3689	.2055	.0721	.9945

Calms = .0055

Years of Record - 1964, 1967, 1971
Number of Observations - 1,095

Compiled from NWS data by:
THE AMERICAN LING ASSOCIATION OF HAWAII

TABLE 4

SUMMARY OF
STATE OF HAWAII AND FEDERAL
AMBIENT AIR QUALITY STANDARDS

Pollutant	Sampling Period	Federal Standards		State Standards
		Primary ^a	Secondary ^b	
1. Suspended Particulate Matter (micrograms per cubic meter)	Annual Geometric Mean	75	60	---
	Annual Arithmetic Mean	--	--	55
	Maximum Average In Any 24 Hours	260	150	100
2. Sulfur Dioxide (micrograms per cubic meter)	Annual Arithmetic Mean	80	60	20
	Maximum Average In Any 24 Hours	365	260	80
	Maximum Average In Any 3 Hours	1300		400
3. Carbon Monoxide (milligrams per cubic meter)	Maximum Average In Any 8 Hours		10	5
	Maximum Average In Any 1 Hour		40	10
4. Hydrocarbons: Non-methane (micrograms per cubic meter)	Maximum Average In Any 3 Hours		160	100
5. Photochemical Oxidants (micrograms per cubic meter)	Maximum Average In Any 1 Hour		160	100
6. Nitrogen Dioxide (micrograms per cubic meter)	Annual Arithmetic Mean		100	70
	Maximum Average In Any 24 Hours			150

^a Designed to prevent against adverse effects on public health.

^b Designed to prevent against adverse effects on public welfare including effects on comfort, visibility, vegetation, animals, aesthetic values, and soiling and deterioration of materials.

TABLE 5

EXISTING AND PREDICTED
DAILY VEHICLE - MILES OF TRAVEL (VMT)

Road Segment ^a	Length	Vehicle-Miles/Day	
		1975	1990
D2a	0.9	1,760	3,950
D2b	0.9	---	4,244
D2c	0.6	---	3,117
D2d ^b	1.3	2,310	3,988
D3a	1.3	---	3,930
D3b	0.4	---	3,650
D4	0.5	---	992
D5a ^c	0.5	660	757
D5b	0.3	---	348
D5c	2.2	---	3,100
D5d	0.4	459	579
D6	3.2	---	3,472
Total	12.5	40,055 (est)	31,343

Notes:

- a. Refer to Figure 4, Traffic Volume Data, of the EIS.
- b. Representative receptor: Kulihi Highway and Haalei Paved/Gravel Road.
- c. Representative receptor: Waialeale Bridge.

TABLE 6

POLLUTANT EMISSIONS BURDENS - TONS/DAY

A. Burdens based on Projected Traffic (Figure 4 of the EIS) ^a

	<u>1975 T/D</u>	<u>1980 T/D</u>	<u>1988 T/D</u>
CO	1.3	1.1	0.8
HIC	0.2	0.2	0.1
NO _x	0.1	0.1	0.1

B. Burdens contributed by Additional Buses ^b

	<u>1980 T/D</u>	<u>1988 T/D</u>
CO	0.008	0.016
HIC	0.001	0.002
NO _x	0.003	0.012

Notes:

- a. Includes buses and trucks; approximately 300 per day in 1980 and 900 per day in 1988 (12%).
- b. Assume 100 more buses per day than projected for 1980 and 200 more buses per day than projected for 1988, to demonstrate small effect that buses have on pollutant emissions.

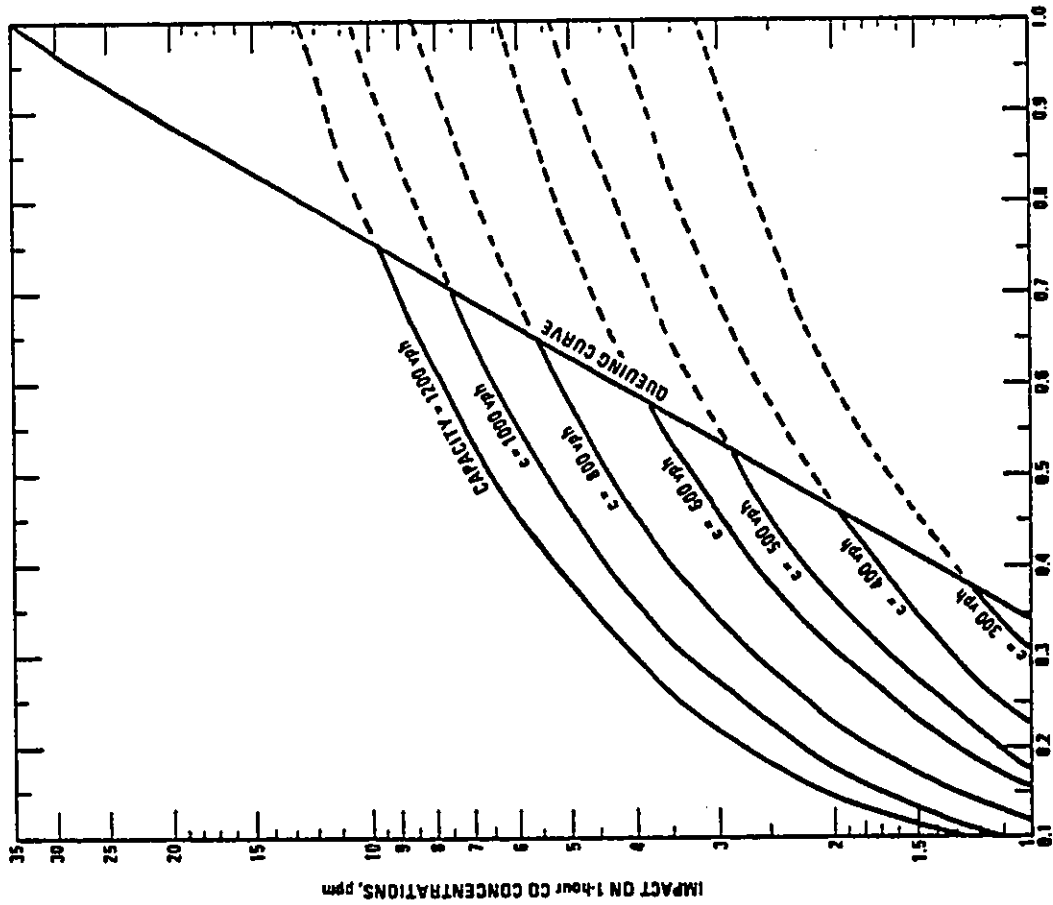
TABLE 7

ESTIMATED MAXIMUM CO CONCENTRATIONS AT TWO CRITICAL RECEPTORS
(Expressed as mg/m³)

Project Alternative	1975		1980		1990	
	1 Hr. Max.	8 Hr. Max.	1 Hr. Max.	8 Hr. Max.	1 Hr. Max.	8 Hr. Max.
<u>Build</u>						
roadside receptor	----	----	2.6	< 1.9	3.3	< 1.5
receptor at bridge	----	----	< 2.4	< 1.9	< 1.6	1.9
<u>No-Build</u>						
roadside receptor	< 3.6	< 2.6	< 2.4	< 1.9	2.2	2.4
receptor at bridge	< 3.6	< 2.6	2.4	< 1.9	2.5	1.5

Figure 1

IMPACT OF TRAFFIC UPSTREAM FROM A NON-SIGNALIZED INTERSECTION ON CO CONCENTRATIONS AT A RECEPTOR SITE LOCATED A PERPENDICULAR DISTANCE OF 10 METERS AWAY



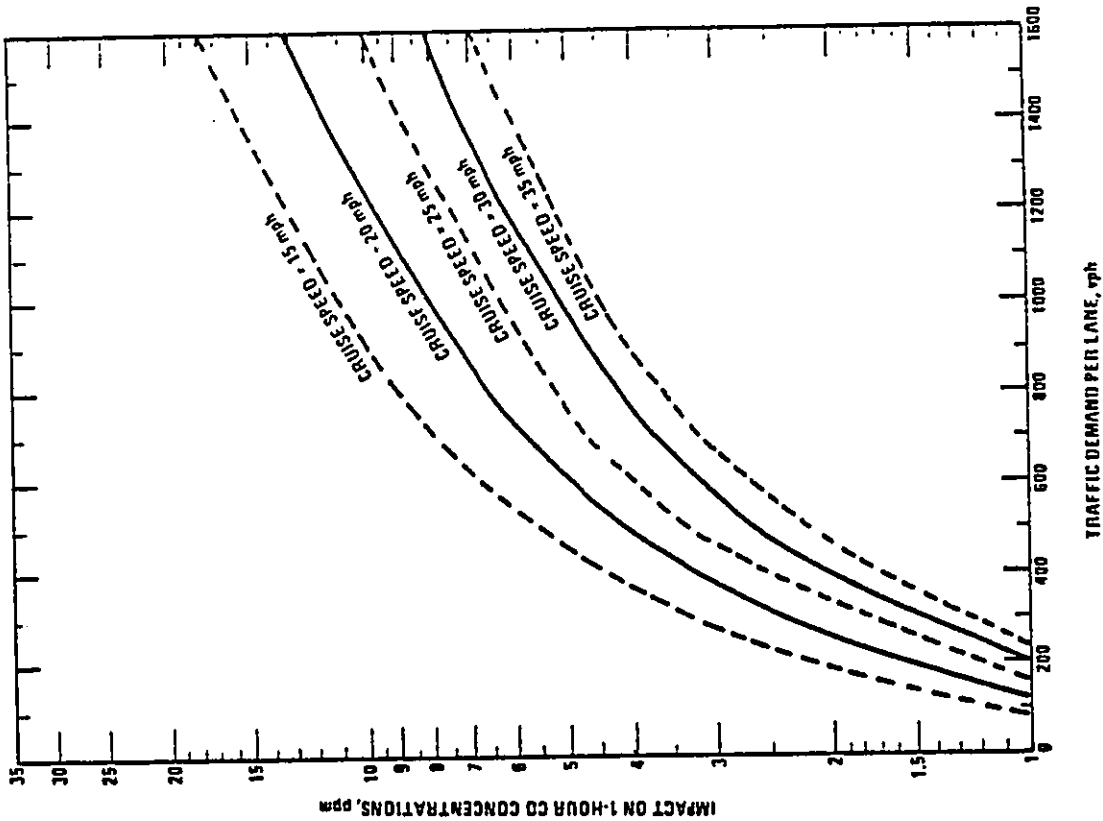
Source: EPA

D-10

Source: EPA

Figure 2

MAXIMUM IMPACT OF TRAFFIC IN A LANE DOWNSTREAM FROM AN INTERSECTION AT A RECEPTOR SITE LOCATED A PERPENDICULAR DISTANCE OF 10 METERS AWAY

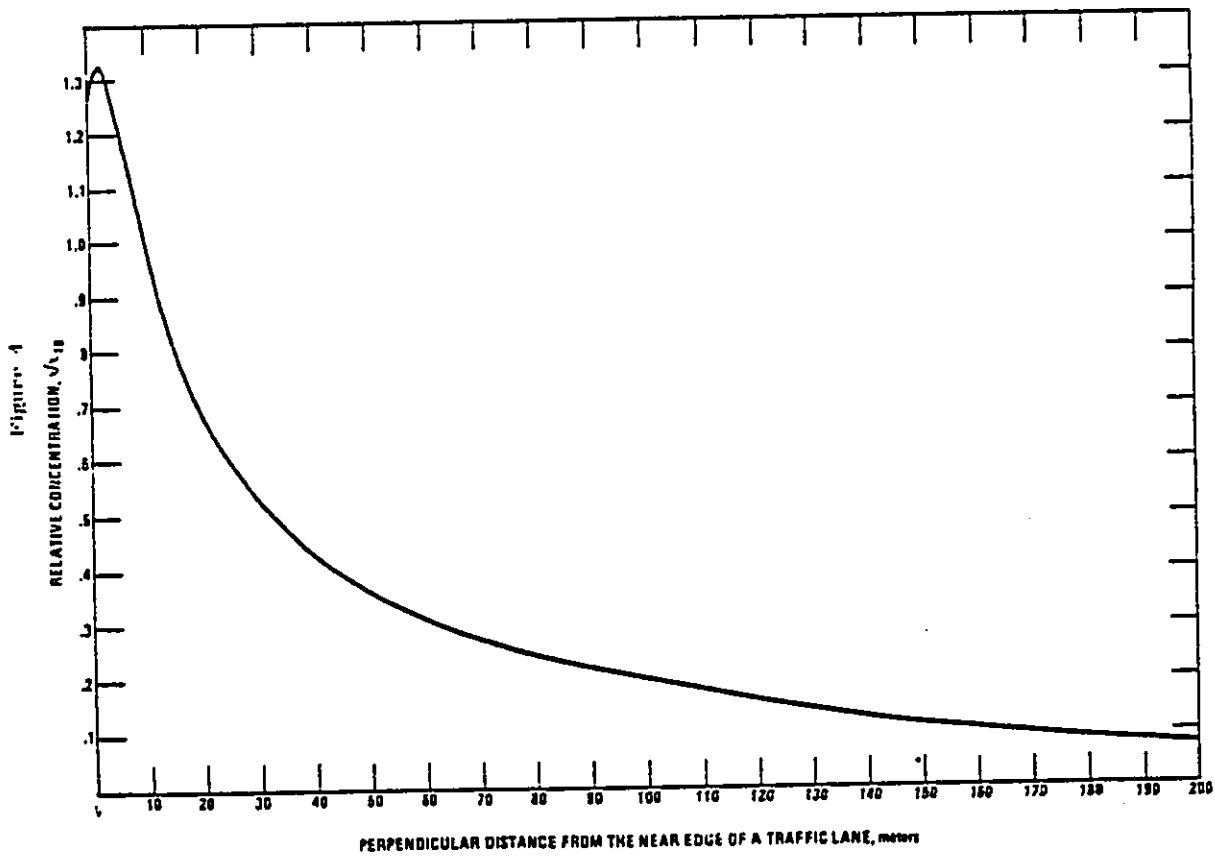


Source: EPA

D-20

Source: EPA

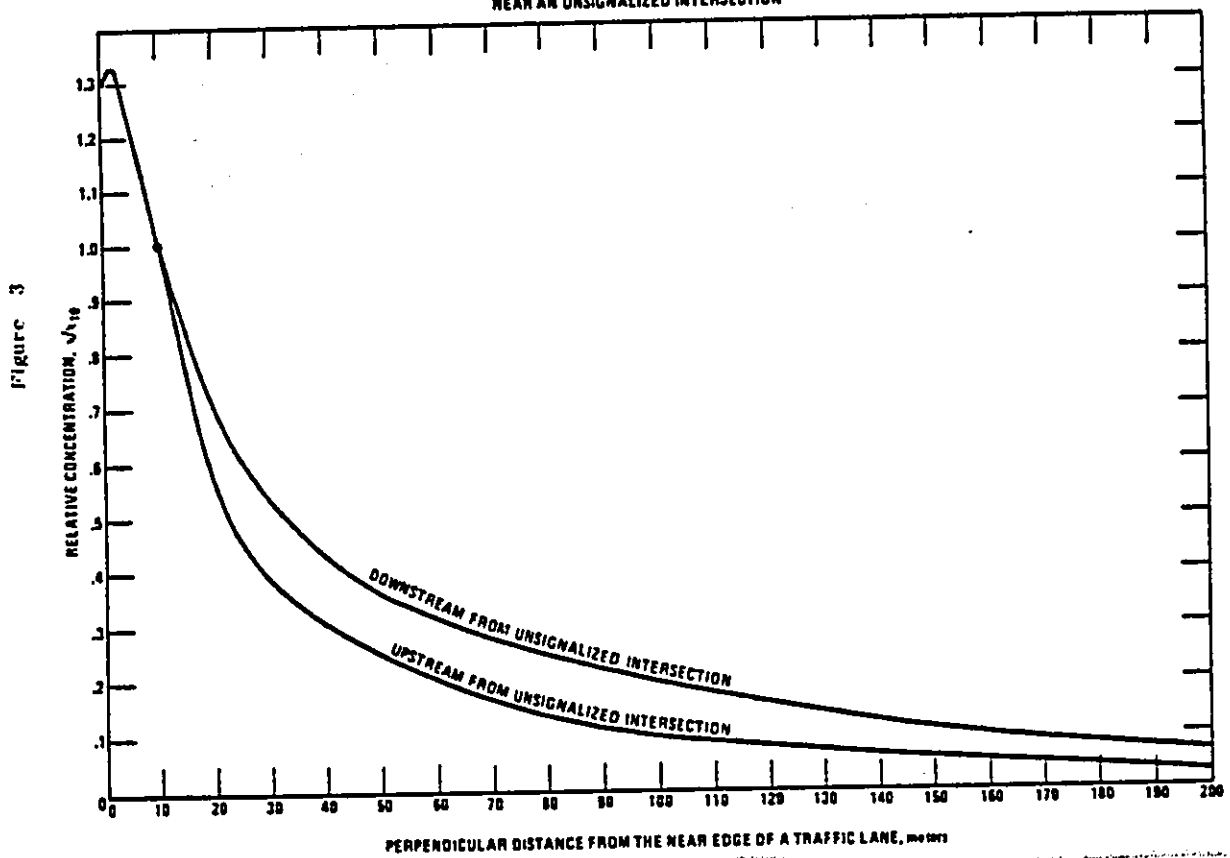
FIGURE 4 RELATIVE CONCENTRATION OF CO VS. PERPENDICULAR DISTANCE FROM A TRAFFIC LANE WITH FREELY FLOWING TRAFFIC



Source: EPA

B-22

FIGURE 3 RELATIVE CONCENTRATION OF CO VS. PERPENDICULAR DISTANCE FROM A TRAFFIC LANE NEAR AN UNSIGNALIZED INTERSECTION

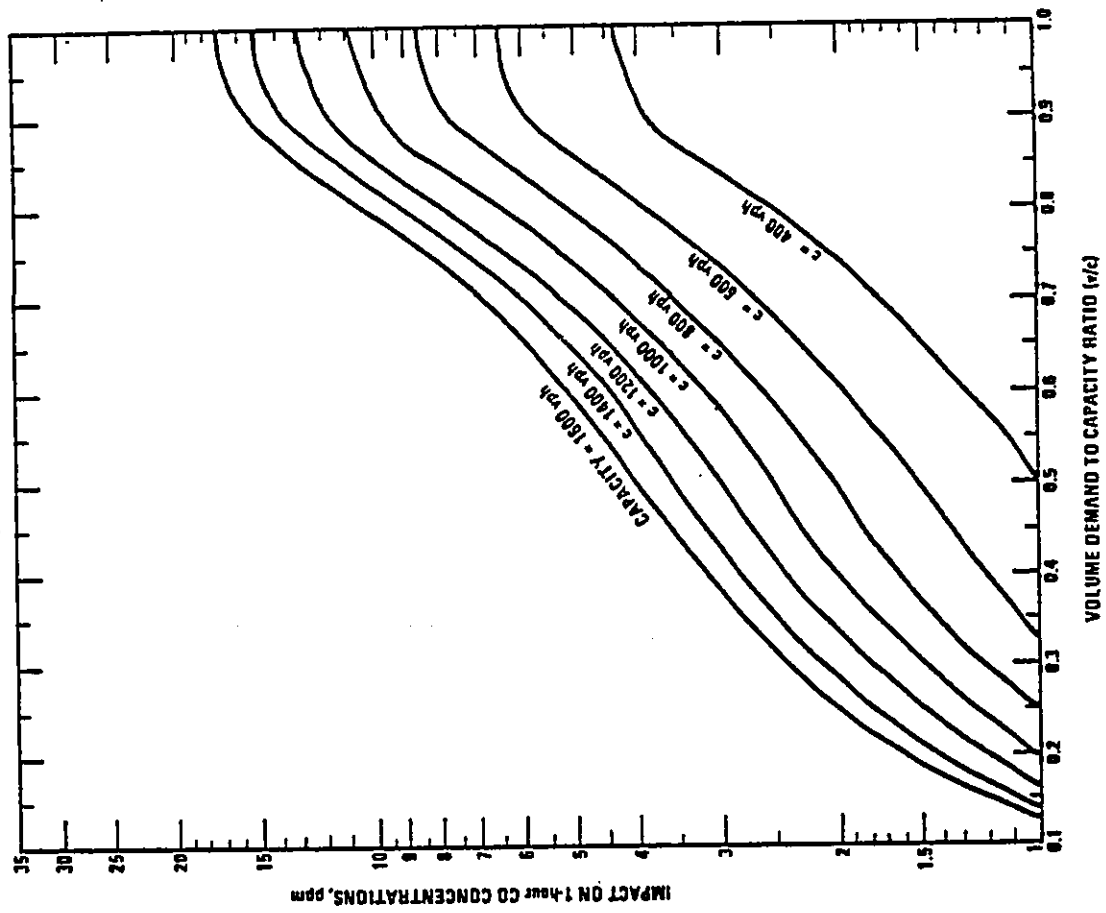


Source: EPA

B-21

Figure 5

VOLUME DEMAND - CAPACITY RATIO IN A LANE ON A MAJOR STREET VERSUS CO
CONCENTRATION IMPACT AT A PERPENDICULAR DISTANCE OF 10 METERS



Source: EPA

B-23

APPENDIX C

NOISE

APPENDIX C NOISE LEVEL CALCULATIONS

The following worksheets present the basic assumptions and calculation methodology used to predict existing and future traffic noise at four selected points in the project area. The source for this methodology is the Federal Highways Administration publication "Fundamentals and Abatement of Highway Traffic Noise" (3 volumes), June 1973.

TRAFFIC NOISE COMPUTATION TALLY
NOISE LEVEL, dBA

Project Kuhio Highway (Kalihiwai-Haena) Engineer FLP
 Segment Points 1, 2, 3 and 4 Date July 23, 1976
 Autos/hr. as noted Trucks/hr. as noted Miles/hr. 35
 Highway Width 22 feet. Observer 75'
 Comments "Existing" L₁₀ dBA from 1975 traffic counts

Item	(1)		(2)		(3)		(4)			
	A	T	A	T	A	T	A	T	A	T
1975 VPH →	183	13	305	21	122	12	104	11		
I ₅₀ reference at 100 feet	49	28	52.5	31	46	28	45	28		
Distance, width adjustment	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
L ₁₀ - L ₅₀ adjustment	9.6	13	7.8	13	11.2	13	11.7	13		
L ₁₀ reference at observer	60.1	42.5	61.8	45.5	58.7	42.5	58.2	42.5		
Segment adjustment										
Barrier adjustment										
Miscellaneous Adjustments	Gradient									
	Road surface									
	Foliage									
	Rows of houses									
	Acceleration at Bridge						7		7	
L ₁₀ at observer, by veh. type	60.1	42.5	61.8	45.5	58.7	49.5	58.2	49.5		
L ₁₀ at observer, summed	60.2		61.9		59.2		58.7			

TRAFFIC NOISE COMPUTATION TALLY
NOISE LEVEL, dBA

Project Kuhio Highway (Kalihawai-Haena) Engineer FLP
 Segment Points 1, 2, 3 and 4 Date July 23, 1976
 Autos/hr. as noted Trucks/hr. as noted Miles/hr. 35
 Highway Width 22 feet. Observer 75'
 Comments 1998 L10 dBA without highway improvements

Item	(1)		(2)		(3)		(4)		A	T
	791	55	727	50	417	41	272	30		
1998 VPH →	791	55	727	50	417	41	272	30		
I ₅₀ reference at 100 feet	58	40	58	39	55	37	52	35		
Distance, width adjustment	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
L ₁₀ - L ₅₀ adjustment	5.7	12.6	5.7	12.7	7.0	12.7	8.4	13.0		
L ₁₀ reference at observer	65.2	54.1	65.2	53.2	63.5	51.2	61.9	49.5		
Segment adjustment										
Barrier adjustment										
Miscellaneous Adjustments	Gradient									
	Road surface									
	Foliage									
	Rows of houses									
	Acceleration at Bridge						+7		+7	
L ₁₀ at observer, by veh. type	65.2	54.1	65.2	53.2	63.5	58.2	61.9	56.5		
L ₁₀ at observer, summed	65.5		65.5		64.6		63.0			

TRAFFIC NOISE COMPUTATION TALLY
NOISE LEVEL, dBA

Project Kuhio Highway (Kalihawai-Haena) Engineer FLP
 Segment Points 1 and 2 Date July 23, 1976
 Autos/hr. as noted Trucks/hr. as noted Miles/hr. 45
 Highway Width 38 feet. Observer 75'
 Comments 1998 L10 dBA with improvements as noted

Item	1998 VPH →		ALTS I,2,W (1)		ALTS A,B,W (2)					
	A	T	A	T	A	T	A	T	A	T
I ₅₀ reference at 100 feet	61	41	60	40						
Distance, width adjustment	1.5	1.5	1.5	1.5						
L ₁₀ - L ₅₀ adjustment	5.8	12.8	6.1	12.9						
L ₁₀ reference at observer	68.3	55.3	67.6	54.4						
Segment adjustment										
Barrier adjustment										
Miscellaneous Adjustments	Gradient									
	Road surface									
	Foliage									
	Rows of houses									
	Acceleration at Bridge									
L ₁₀ at observer, by veh. type	68.3	55.3	67.6	54.4						
L ₁₀ at observer, summed	68.5		67.8							

APPENDIX D

ANTIQUITIES

ARCHAEOLOGICAL RESEARCH CENTER HAWAII, INC.

P. O. Box 285; Lawai, Kauai, Hawaii 96765; Ph. 332-8521

11
January
1980

Mr. Fred Proby
Chief Environmental Scientist
VTN Pacific
1164 Bishop Street, Suite 906
Honolulu, Hawaii 96813

SUBJECT: LETTER REPORT: Archaeological
Reconnaissance of Portions of the Kauai
Belt Road from Kalihiwai to Princeville,
Halele'a, Kauai Island. ARCH 14-59.

Dear Mr. Proby:

In early January of 1980 personnel of Archaeological Research Center Hawaii, Inc., conducted an archaeological reconnaissance of three separate parcels adjacent to the Kauai Belt Road between Kalihiwai and Princeville (see enclosed map). These three parcels are to be used for the proposed widening of the road and run parallel to the present road. They are related to survey stations along the road and were described in the scope of work for this project as follows:

Station 82 - 94	Four acres from the north edge of existing highway to approximately 30 feet beyond the proposed right-of-way line.
Station 109 - 113	One acre in Anini Stream Gulch, approximately 50 feet beyond toe of existing fill, on both sides of highway.
Station 130 - 164	Four acres, 50 to 90 feet northerly from the edge of existing highway.

The purpose of the reconnaissance of these three areas was as follows:

1. To determine the presence, location and nature of archaeological sites or cultural layers in the study area.
2. If archaeological sites were located, to evaluate the significance of these sites to determine what further steps are

Mr. Fred Proby
Letter Report 14-59
January 11, 1980
Page 2

necessary to mitigate their impact by the proposed highway modification.

Each of these parcels was carefully examined on foot and documented with photographs. The present condition of each of the parcels is described as follows:

- Station 82 - 94 This four acre parcel is in pasture land with vegetation consisting of low grass with occasional Lantana bushes and Eucalyptus trees. Modern modification is evident including bulldozing for the construction of modern drainage ditches.
- Station 109 - 113 This one acre parcel is within Anini Stream Gulch with steep topography and heavy vegetation of Guava, Pandanas and Guava plum. There is evidence of previous bulldozing.
- Station 130 - 164 This is a four acre parcel presently in a pasture which has been heavily bulldozed and filled in modern times. This is evidenced by tracks and partially buried telephone pole sections in low mounds.

In summary, all three of the parcels examined have received extensive modern modification and contain no archaeological or historic features or cultural layers of any kind. On the basis of this, archaeological clearance with no further investigation is recommended.

If there are any questions concerning the above or if we can be of further assistance to you, please do not hesitate to contact me.

Nā Kau a Kau,

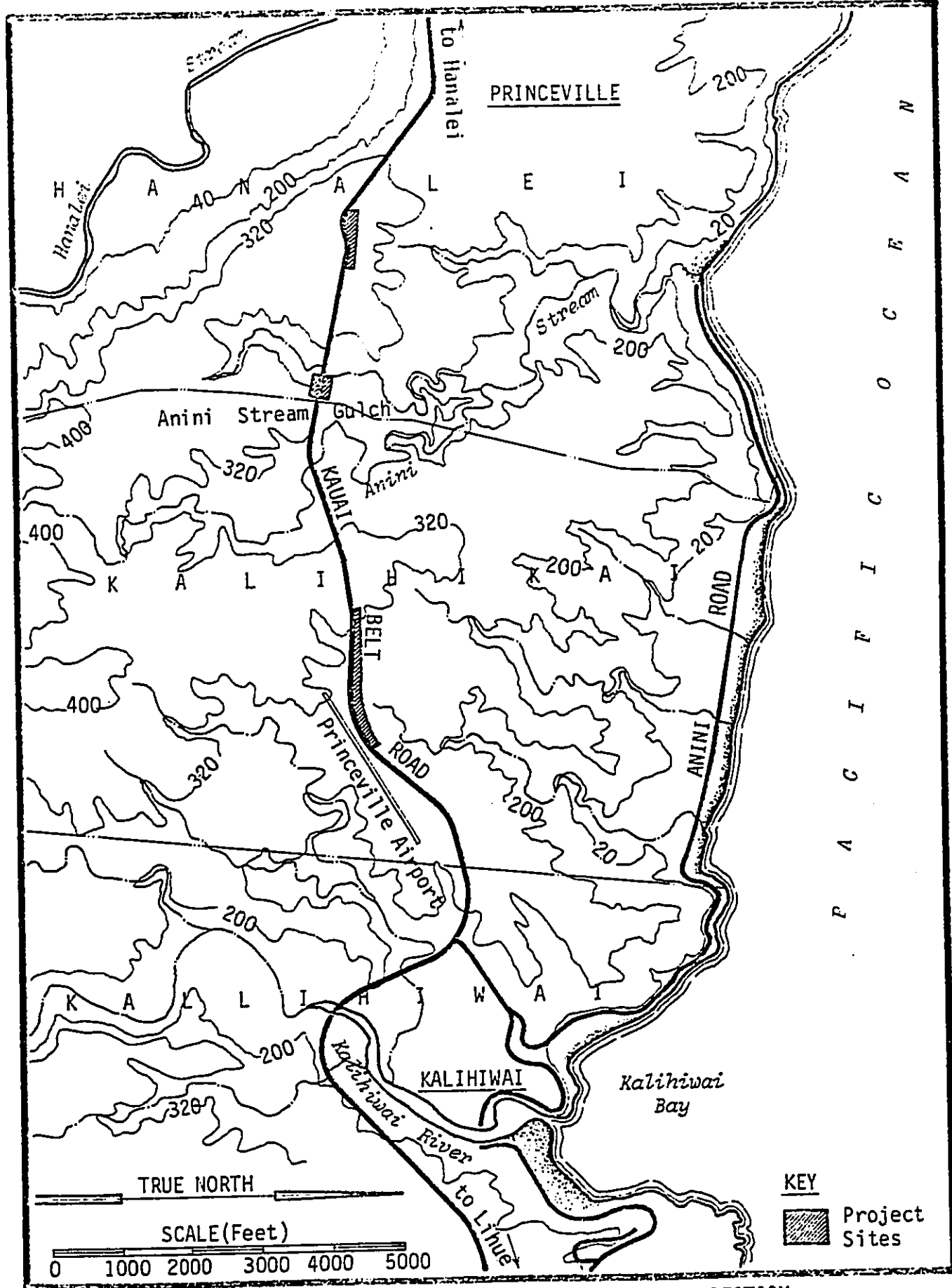
ARCHAEOLOGICAL RESEARCH CENTER HAWAII, INC.

Hallett H Hammatt

Hallett H. Hammatt, PhD.
Vice President

HHH:ds

Enclosure



KAUAI BELT ROAD, KALIHIWAI TO PRINCEVILLE SECTION
 A.R.C.H. PROJECT 14-59

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GEORGE R. ARIYOSHI
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 621
HONOLULU, HAWAII 96809

SUSUMU ONO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES

EDGAR A. HAMASU
DEPUTY TO THE CHAIRMAN

DIVISIONS:
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FISH AND GAME
FORESTRY
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

February 15, 1980

The Honorable Ryokichi Higashionna
Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813


Dear Mr. Higashionna:

Subject: Kauai Belt Road - Princeville to Kalihiwai

Based on the data from Archaeological Research Center Hawaii, Inc. reconnaissance of your proposed area of impact, it is our opinion that the proposed undertaking will have no effect upon any known historic or archaeological site on or likely to be eligible for inclusion on the Hawaii Register and/or National Register of Historic Places.

In the event that any unanticipated sites or remains such as shell, bone or charcoal deposits; human burials; rock or coral alignments, pavings, or walls are encountered during construction, please inform the applicant to stop work and contact this office immediately.

Sincerely yours,


Susumu Ono
State Historic Preservation
Officer

Council On
Historic
Preservation

1822 K Street NW.
Washington D.C.
20005

January 15, 1980

Mr. Neil Dillabough
Director, Office of Environment and Design
Federal Highway Administration
Two Embarcadero Center, Suite 530
San Francisco, California 94111

Dear Mr. Dillabough:

This is to acknowledge your letter of December 19, 1979, to Mr. Robert R. Garvey, Jr., Executive Director of the Council, concerning the decisions made regarding the Kauai Belt Road in Hawaii. We appreciate learning of the Hawaii Highways Division's decision to undertake the required maintenance repairs of the Hanalei and Waipa Bridges and to delete the proposed improvements to the Kauai Belt Road between Princeville and Haena. As these actions appear to eliminate the involvement of the Federal Highway Administration in any undertaking affecting properties included in or eligible for the National Register of Historic Places we are closing our case file on FHWA's request for Council comment on the Kauai Belt Road, Kalihiwai to Haena Section (FAP Route 56, Kauai, Hawaii).

The Council looks forward to the continued assistance and cooperation of FHWA should this undertaking be reconsidered in the future.

Sincerely,



Louis S. Wall
Chief, Western Division
of Project Review

APPENDIX E
CLEARANCES

APPENDIX E. PROJECT APPROVALS AND CLEARANCES REQUIRED

The proposed highway improvements require the following clearances and permits:

1. Clearance from the State Department of Land and Natural Resources. (Obtained)
2. Clearance from the State Historic Preservation Officer that the project would have no adverse impacts on features of historical or archaeological significance. (Pending review of archaeological survey.)
3. Clearance from the Federal Aviation Administration that the Princeville landing strip would not be affected. (Obtained)
4. Clearance from the U.S. Fish and Wildlife Service that the project would have no adverse effect on the Hanalei National Wildlife Refuge ("Section 4(f) land"). (Formal Section 7 clearance has been completed.)
5. Wetlands finding in accordance with Executive Order 11990. (Not required for the Kalihiwai to Princeville Section, since no wetlands are encountered. May be required for the Princeville to Haena Section, in which case a finding will be included in a Supplemental Final EIS.)
6. Permit from the U.S. Army Corps of Engineers for the Anini Stream crossing. (Pending completion of construction plans.)
7. Permits from the U.S. Army Corps of Engineers for the replacement of the Hanalei, Waioli, Waipa, Waikoko and Wainiha Bridges, since it would involve the placement of structures or fill in stream crossings subject to tides. (Pending determination of a recommended alternative.)

8. Bridge permits from the U.S. Coast Guard for the replacement of the Hanalei Bridge and (perhaps) the Wainiha Bridges, since they are over navigable tidewaters. (Pending determination of a recommended alternative.)
9. Special Management Area permit from the County of Kauai Planning Department for the Waikoko Bridge (the Waioli and Waipa Bridges are not within the SMA). (Pending selection of a recommended alternative.)
10. Certification of federal consistency with the State Coastal Zone Management Act, by the State Department of Planning and Economic Development. (Pending approval of a Special Management Area permit for the Privceville to Haena section.)
11. The Statewide Review Agency Clearance, and intergovernmental agency review clearinghouse to insure coordination of Federally funded projects. (Satisfied through circulation of the Draft EIS through the State Department of Planning and Economic Development.)

GEORGE R. ARIYOSHI
GOVERNOR OF HAWAII



CHRISTOPHER COBB, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES

EDGAR A. HAMASU
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P O BOX 621
HONOLULU, HAWAII 96809

DIVISIONS:
CONVEYANCES
FISH AND GAME
FORESTRY
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

July 15, 1975

Honorable E. Alvey Wright
Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Note: This letter is in reference
to the May 29, 1975 Draft EIS
(Kalihiwai to Hanalei Bridge).

Dear Sir:

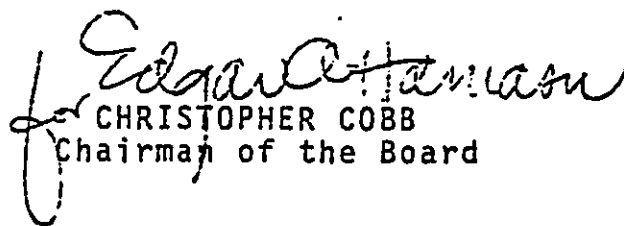
SUBJECT: Kauai Belt Road, Hanalei to Kalihiwai
Project No. DP-056-1(17)
Draft Environmental Impact Statement

Thank you for allowing us to comment on the subject draft impact statement.

We see no major adverse effects on wildlife values and no perennial streams will be affected by the two alternate routes being proposed. Erosion and prevention of pollution should be adequately controlled through Section 639 "(Temporary Project Water Pollution Control (Soil Erosion)" - page 57.

The statements regarding historic preservation concerns -- that FHWA will conduct an archaeological survey once a route is chosen, are satisfactory to us.

Very truly yours,


CHRISTOPHER COBB
Chairman of the Board

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

2100

APR 2 1976

PACIFIC-ASIA REGION
P. O. BOX 400
HONOLULU, HAWAII

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DEPT. OF TRANSPORTATION
HONOLULU DIVISION



Rear Admiral E. Alvey Wright, USN (Ret)
Director, Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

DIRECTOR'S OFFICE
APR 5 8 08 AM '76
DEPT. OF
TRANSPORTATION

Dear Admiral Wright:

Thank you for the State of Hawaii letter HWY-PA 2.27558 dated March 10, 1976, regarding the Environmental Impact Statement Preparation Notice for the Kauai Belt Road, Haena to Kalihiwai, island of Kauai.

The proposed project does not appear to have an impact on aeronautical interest in the area and we, therefore, have no comments.

Sincerely,

Joseph B. Nestor
JOSEPH B. NESTOR
Acting Director, APC-1

APR 10 1976
100-2
APR 11 1976

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

PACIFIC-ASIA REGION
P. O. BOX 4009
HONOLULU, HAWAII 96813

APR 26 1977



Mr. Ralph T. Segawa
Division Administrator
Federal Highway Administration
Region Nine
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Mr. Segawa:

This responds to your letter 915EC dated March 16, 1977, transmitting a copy of the draft Environmental Impact Statement for the proposed improvements to Kauai Belt Road, Kalihiwai to Haena Section, on the island of Kauai, Hawaii.

The proposed improvement project will have no impact on existing or planned FAA facilities in that area. However, we wish to point out that Princeville Airport, a private facility, is located within the project limits. So that there will be no further derogation of the existing airway/highway clearance, the planned widening along this section of the highway should be made on the side further away from the airport.

Thank you for the opportunity to comment on this document.

Sincerely,

K. Hayama
K. HAYAMA
Supervisory Airports Engineer, APC-620



United States Department of the Interior

FISH AND WILDLIFE SERVICE

LLOYD 500 BUILDING, SUITE 1692
500 N.E. MULTNOMAH STREET
PORTLAND, OREGON 97232

November 13, 1979

In reply refer to:
AFA-SE - 1-2-79-F-95

Mr. Ralph T. Segawa
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
300 Ala Moana Blvd., Room 4119
Honolulu, Hawaii 96813

Dear Mr. Segawa:

This is in reply to your letter of June 26, 1979 requesting the consultation pursuant to Section 7 of the Endangered Species Act of 1973, as amended in 1978 (PL 95-632). It concerns the proposed improvements to the Kauai Belt Road, Kalihiwai to Haena Section, Federal Aid Primary Route 51, Island of Kauai, Hawaii.

At issue is the possible effects this proposed highway project may have on the Hawaiian stilt (Himantopus h. knudseni), Hawaiian coot (Fulica americana alai), Hawaiian gallinule (Gallinula chloropus sandvicensis), and Hawaiian duck (Anas wyvilliana).

The project information provided with your request was used in this consultation and our opinion is based on the project details and design as presented. A field inspection of the project area was conducted on August 15, 1979 to gather additional data for the consultation. We also contacted Federal and State personnel familiar with management of waterbirds and their habitat, and freshwater fishery biologists familiar with the aquatic fauna of streams in the project area.

Portions of the highway improvement construction will occur within known habitat of these waterbirds. The areas of concern include those sites where wetlands or streams will be bridged. Of particular concern are the Hanalei and Wainiha bridges. These occur adjacent to or in proximity to areas that have been identified by the Hawaiian Waterbird Recovery Team as essential habitat.

Historically, most of the Hawaiian Islands supported large natural marshes and ponds. In addition, the Hawaiians had established an extensive system of coastal fish ponds and engaged in large scale wetland taro farming. All these areas provided habitat for these four species of waterbirds. However, with conversion to crops other

November 13, 1979

Page two

than taro, loss of wetland habitat to urbanization and introduction of exotic species, the populations of these waterbirds has steadily declined. In recognition of the threat placed upon the species, they were listed as endangered by the Department of Interior in 1967 (Hawaiian gallinule and duck) and in 1970 (Hawaiian stilt and coot).

Currently, Hawaiian stilts are distributed on the Islands of Niihau, Kauai, Oahu, Maui, Molokai and Hawaii. The 1977 statewide population was estimated at 1,500 birds. This species is associated with shallow freshwater, brackish water, or saltwater habitats.

The Hawaiian coot is presently distributed on the same islands as the stilt. The coot population was estimated to 2,500 individuals in 1977. The coot prefers thickly vegetated, fresh or brackish water marshes associated with open water.

Hawaiian gallinules, at present, are known to exist only on the islands of Kauai and Oahu, although one was seen on Molokai in 1971. The total population is estimated to be 750 birds; 500 on Kauai and 250 on Oahu. Like the coot, the gallinule prefers thickly vegetated freshwater marshes interspersed with ponds, taro patches, and lagoons, and reedy margins of water courses, reservoirs, and wet pastures.

The Hawaiian duck is presently a resident on Kauai and Hawaii and like the other waterbird is dependent upon wetland habitat. It inhabits coastal lagoons, marshes and mountain streams. Population estimates in 1967 place their numbers at 3,000.

Construction at the Hanalei and Wainiha bridge sites will involve habitat utilized by the gallinule and duck for foraging and loafing. Construction work on the stream banks and within the stream bed will result in siltation on site and downstream. Some streamside cover will be removed prior to construction or covered with siltation following construction. Chemical pollutants from construction materials and equipment may also have adverse affects on the aquatic ecosystem downstream. There will be increased disturbance attributable to construction activities and improved vehicular access into coots habitat (particularly in the Wainiha estuary) and stilts habitat at the taro fields in the Hanalei Unit of the Hawaiian Islands National Wildlife Refuge adjacent to the bridge site and highway. However, observations by a number of ornithologists indicate that these endangered waterbirds have considerable tolerance for limited human activities, such as those resulting from this highway project.

It is, therefore, the opinion of the Fish and Wildlife Service that construction of the proposed improvements to the Kauai Belt Road, Kalihiwai to Haena Section, as discussed above, is not likely to jeopardize the continued existence of the listed species. Although there will be some adverse impacts to these species and their habitat, they are believed to be transitory in nature and of such scope as not to constitute jeopardy to these species.

In order to help the Federal Highway Administration fulfill the mandates of Section 7(a) which require all Federal agencies to utilize their authorities for the conservation of endangered species, we recommend your agency incorporate the following recommendations into the project:

1. Construction of the Hanalei Bridges should be scheduled to avoid the peak periods of waterbird use of the refuge from July through January.
2. Removal of streamside vegetation should be kept to the minimum required for specific structures to preserve this foraging and loafing habitat.
3. All construction work should be accomplished in such manner as to minimize sedimentation and pollution of aquatic habitats to prevent adverse affect on aquatic fauna and the birds that utilize these areas.

This concludes our formal consultation on construction of the proposed improvements to the Kauai Belt Road, Kalihiwai to Haena Section, Island of Kauai, Hawaii. If project modification beyond those discussed above occurs, or if new information on listed species becomes available, reinitiation of consultation may be appropriate. We would appreciate notification of your intent in light of this opinion.

Sincerely yours,


Acting William H. Meyer
Regional Director

**APPENDIX F
COMMENTS
AND RESPONSES**

APPENDIX F COMMENTS AND RESPONSES TO THE DRAFT EIS

I. DRAFT EIS MAILING LIST (Circulated 3/16/77)

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Federal Aviation Administration Department of Transportation	1833 Kalakaua Avenue Honolulu, Hawaii 96815	1
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Mr. Ernest E. Sligh, Director Environmental Impact Division Office of Environmental Programs Federal Energy Administration	New Post Office Building 12th & Pennsylvania Ave, NW Washington, D.C. 20461	5
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The Honorable Spark M. Matsunaga	442 Cannon House Office Building Washington D.C. 20515	1
The Honorable Patsy T. Mink	2338 Rayburn House Office Building Washington, D.C. 20515	1
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The Honorable Richard A. Kawakami	P.O. Box 398 Waimea, Kauai 96796	1
The Honorable Tony T. Kunimura	RR No. 1 Koloa, Kauai 96756	1
The Honorable Dennis R. Yamada	P.O. Box 127 Lihue, Kauai 96766	1
<u>State Senators - 8th District</u>		
The Honorable George H. Toyofuku	P.O. Box 547 Lihue, Kauai 96766	1
<u>County of Kauai Agencies</u>		
The Honorable Eduardo Malapit Mayor, County of Kauai	Lihue, Kauai 96766	1
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Kauai Electric Co., Ltd.	P.O. Box 278 Eleele, Kauai 96705	1
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 <u>Transportation Commission</u>		
Noboru Yamane	RR #1 Kapaa, Kauai 96746	1
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Hanalei Community Association President	Attn: Robert Semitekoi Hanalei, Kauai 96714	1

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Kauai Historical Society President	Attn: Robert J. Schleck P.O. Box 248 Lihue, Kauai 96766	1
The Kauai Outdoor Circle	P.O. Box 921 Lihue, Kauai 96766	1
Life of the Land and Sierra Club	Attn: Helen C. Hopkins P.O. Box 266 Hanalei, Kauai 96714	1
National Trust for Historic Preservation, Regional Director	Attn: John L. Frisbee, III 802 Montgomery St. San Francisco, CA 94133	1
Princeville Corporation	Hanalei, Kauai 96714	1
Shoreline Protection Alliance	Attn: Douglas Meller P.O. Box 4247 Honolulu 96813	1
 <u>Private Individuals</u>		
William T. Le Gro	P.O. Box 291 Anahola, Kauai 96703	1
John Wehrheim	P.O. Box 111 Kilauea, Kauai 96754	1
Geraldine A. Wojno	P.O. Box 205 Hanalei, Kauai 96714	1

II. COMMENTS RECEIVED

<u>FEDERAL AGENCIES</u>	<u>Comment Date</u>
Advisory Council on Historic Preservation	4/26/77
Agricultural Stabilization and Conservation Service	4/4/77
Soil Conservation Service	5/9/77
Department of the Army	5/6/77
Department of Health, Education and Welfare	5/11/77
Department of Housing and Urban Development	4/1/77
Department of the Interior	6/9/77
Federal Aviation Administration	4/26/77
U.S. Senate, Hon. Spark Matsunaga	3/31/77

STATE OF HAWAII AGENCIES

Department of Accounting and General Services	4/4/77
Department of Agriculture	5/3/77
Department of Defense	3/29/77
Department of Health	5/3/77
Department of Land and Natural Resources	4/4/77
Division of Fish and Game	4/25/77
Historic Preservation Officer	5/6/77
Office of Environmental Quality Control	5/11/77
College of Tropical Agriculture	4/11/77
Environmental Center	5/10/77

COUNTY OF KAUAI AGENCIES

Planning Department	4/21 & 4/22/77
Department of Public Works	4/6 & 4/20/77
Department of Water	4/26/77

	Comment
	<u>Date</u>
<u>ORGANIZATIONS</u>	
American Lung Association	5/4/77
Hawaii Building & Construction Trades Council	4/29/77
Hawaiian Telephone Company	4/20/77
Kauai Historical Society	5/25/77
Kauai Outdoor Circle	5/10/77
Kauai Society of Professional Engineers, Architects & Land Surveyors	5/10/77
National Trust for Historic Preservation	5/9/77
North Shore Belt Road Citizens Advisory Committee	5/1 - 6/30/77
Princeville at Hanalei	5/4/77
Sierra Club, Life of the Land, and Helen Hopkins	5/26/77
 <u>PRIVATE INDIVIDUALS</u>	
Phil and Jo Barber	4/28/77
Charles Forward Jr.	4/14/77
Dr. & Mrs. H.P. Groesbeck	5/4/77
Roger and Genevieve Luther	4/24/77
William Manewal	5/8/77
Craig Nakamura, and Others	5/10/77
Bryson Nishimoto	4/21/77
Marilyn Pollock	4/15/77
G.L. and Jeannette Routon	5/3/77
M. Skedd	5/9/77
Harry and Kathleen Steward	4/18/77
Ernie Wenck	4/19/77
Jennie T. Yukimura	5/16/77

NOTE:

For this Final EIS, the evaluation of comments covers only the Kalihiwai to Princeville section. Only maintenance repairs of the one-lane bridges will be undertaken at present. When a decision is made regarding long-range plans for the Princeville to Haena section (following resolution of the historicity issues), a supplement to this Final EIS will be prepared, which will include evaluations of comments relevant to that highway section.

Advisory Council on
Historic Preservation
1522 K Street, N.W.
Washington, D.C. 20005

EVALUATION
ADVISORY COUNCIL ON HISTORIC PRESERVATION (4/26/77)

April 26, 1977

Mr. Ralph T. Sogawa
Division Administrator, Region 9
Federal Highway Administration
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

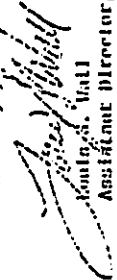
Dear Mr. Sogawa:

This is in response to your request of March 16, 1977, for comments on the draft environmental statement (DES) for the proposed improvements to Federal-Aid Primary Route 56, the Kuhio Highway (Kauai Belt Road), from near Kalihua to the terminus of the road near Haena (Kea Beach), in the Hanalei District of the Island of Kauai, Hawaii. The Advisory Council on Historic Preservation has reviewed the DES and notes that the undertaking will affect the Hanalei Bridge, as well as other bridges in the vicinity which may be eligible for inclusion in the National Register of Historic Places.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, (16 U.S.C. 470), as amended, 90 Stat. 1320), Federal agencies must, prior to the approval of the expenditure of any Federal funds on an undertaking or prior to the granting of any license, permit or other approval for an undertaking, afford the Council an opportunity to comment on the effect of the undertaking upon properties eligible for or included in the National Register of Historic Places.

Until the requirements of the "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800), which detail the steps for compliance with Section 106, are met, the Council considers the DES to be incomplete in its treatment of historical, archeological, architectural and cultural resources. To remedy this deficiency, the Council will provide substantial comments on the undertaking's effect on the previously mentioned properties through the "Procedures." Please contact Michael H. Buzeman of the Council staff to assist you in completing this process as expeditiously as possible.

Sincerely yours,



Douglas G. Hall
Assistant Director, Office
of Review and Compliance

The Council is authorized by the Executive Branch of the Federal Government charged by the Act of October 3, 1966, by the President and Congress in the field of Historic Preservation.



UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE
 1833 Kalaheua Avenue
 Honolulu, Hawaii 96815

April 4, 1977


U.S. Department of Transportation
 Federal Highway Administration
 677 Ala Heana Blvd., Suite 613
 Honolulu, Hawaii 96813

Gentlemen:

Kaui Belt Road, Kalihwai to Haena Section,
 FAP Route 56, Draft Environmental Impact Statement

This will acknowledge receipt of your letter of March 16, 1977 together with draft EIS on above subject project. We have no comments to offer on said project and do not desire a copy of the final environment impact statement.

Very truly yours,


 C. K. Chan
 State Executive Director
 Hawaii State ASCS Office

UNITED STATES DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

P. O. Box 50001, Honolulu, HI 96850

May 9, 1977

Mr. Ralph T. Sogawa
 Division Administrator
 Federal Highway Administration, Region IX
 U. S. Department of Transportation
 667 Ala Heana Blvd., Suite 613
 Honolulu, HI 96813

Dear Mr. Sogawa:

Subject: Kaui Belt Road, Kalihwai to Haena Section, FAP Route 56,
 U.S. Department of Transportation, Federal Highway Administration


We have reviewed the subject draft EIS and offer the following comments for your consideration during further evaluation of the potential impact of the project on the environment:

No mention is made of prime agricultural land lost to highway construction. For example, present highway and alternatives consider Hanalei soils in terms of potential erosion, not loss of prime agricultural land. Hanalei silty clay, 0 to 8 percent slopes, and Hanalei silty clay, 0 to 8 percent slopes, are considered prime agricultural lands. Also, the taro and rice fields in the Hanalei soils are considered to be unique lands.

The number of acres of these soils and the taro and rice fields that will be affected by the highway should be mentioned. Any mitigation measures to lessen the impact of taking these lands out of production should be stated.

Thank you for the opportunity to review this document.

Sincerely,


 Jack P. Knudsen
 State Conservationist



EVALUATION

SOIL CONSERVATION SERVICE (5/9/77)



DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, CORPS OF ENGINEERS
1415 P.W. T.C. DRAPER
APO SAN FRANCISCO 96346

WME:J-IV

6 May 1977

On page II-26 of the Draft EIS the amount of grazing land that would be affected by the different alternatives was identified. It was an oversight that this acreage was not identified as prime agricultural land. The recommended widening alternate from Kalihwai to Princeville will take an estimated 7.3 acres of grazing land for new right-of-way (see Page II-20 of this Final EIS), of which approximately half is classified as Prime. This widening will not affect any taro or rice fields.

Mr. Ralph T. Sripawa, Division Administrator
U. S. Department of Transportation
Federal Highway Administration, Region Nine
677 Ala Ikaa Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Mr. Sripawa:

We have reviewed the Draft Environmental Impact Statement for Kaula Belt Road, Kaititvat to Hana Section, as requested in your letter 915 EC, dated 16 March 1977. The Corps commented on the Environmental Impact Statement Preparation Notice for this proposed project in a letter to Mr. E. Alway Wright dated 12 April 1976. We feel that our comments were adequately addressed in this document and have no further comments to make at this time.

We appreciate the opportunity for additional input.

Sincerely yours,

[Signature]
KISOR CUSHNIC
Chief, Engineering Division





DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
REGIONAL OFFICE

50 United Nations Plaza
SAN FRANCISCO, CALIFORNIA 94102

Office of Environmental Affairs

OFFICE OF
THE REGIONAL DIRECTOR



DEPARTMENT OF HIGHWAYS AND URBAN DEVELOPMENT
AREA OFFICE
100 HUNTER STREET, P.O. BOX 3377
HONOLULU 9, HAWAII 96813

SECTION 14
410 G Street, S.W.
Washington, D.C. 20540

April 1, 1977

9.7F (Johnson/
546-5556)

May 11, 1977

Ralph T. Segawa
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Region II
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

Mr. Ralph T. Segawa, Division Administrator
U. S. Department of Transportation
Federal Highway Administration
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813

Dear Mr. Segawa:

Subject: Kaula Belt Road Kalia to Haena Section
FAP Route 56, Draft Environmental Impact Statement

The proposed realignment and improvements covered in the Draft
EIS for the 17.5 mile section on FAP Route 56 on Kauai was
reviewed by this office.

The proposed action and alternatives considered in the Draft
EIS do not impact on HUD projects or HUD areas of concern.
We look forward to receiving the Final Draft of the EIS.

Sincerely,

Ben S. Kuan
Alvin K. H. King
Director

Dear Sir:

The Draft Environmental Impact Statement for the Kaula Belt Road,
Kalia to Haena Section, FAP Route 56 has been reviewed in accord-
ance with the interim procedures of the Department of Health, Education
and Welfare as required by Section 102(2)(c) of the National Environ-
mental Policy Act, PL 91-190.

The major concerns of this Department are related to possible impacts
upon the health of the population, services to that population and
changes in the characteristics of the population which would require
a different level or extent of services. At this time we have no
comments to offer.

We appreciate the opportunity to review this Statement. We would
like a copy of the final EIS when it is developed..

Sincerely,

James D. Froehner
James D. Froehner
Regional Environmental Officer

cc: CIO
OIA



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

Mr. Ralph T. Segawa, Honolulu, Hawaii

In Reply Refer To:
FMS/EC
ER-77/302

JUN 9 1977

Dear Mr. Segawa:

We have reviewed the Draft Environmental Statement for Kaula Belt Road (FAP-56) Hanalei to Kaihiwai, Kauai County, Hawaii and have the following comments:

GENERAL COMMENTS

The Department of the Interior does not endorse construction of a new Hanalei Bridge by proposed Alternative Design #4. Although no Hanalei National Wildlife Refuge property would be needed for that alternative, and the historic Hanalei Bridge would not be affected, implementation of Alternative Design #4 would result in direct and indirect loss of about five acres of endangered waterbird habitat.

The increased noise and human activity resulting from the construction of Alternative Design #4 would probably reduce the value of this habitat for use by endangered waterbirds. Any of the various other bridge design alternatives discussed would not cause significantly adverse impacts to the 0.969 acre parcel of Refuge land that would be affected, assuming that erosion control precautions discussed in the draft statement would be utilized.

SECTION 4(f) COMMENTS

Hanalei National Wildlife Refuge

Although Alternative Design #4 does not require the direct taking of land from the Hanalei National Wildlife Refuge, it does result in the loss of about five acres of endangered waterbird habitat. For this reason, we believe that the selection of Design #4 would be an imprudent choice. The Department of the Interior would therefore concur that there are no feasible and prudent alternatives to the selection of Designs # 1A, 1B, 2, 3A, or 3B, as far as the taking of land from the Refuge is concerned.

Historic Sites

We note that the Kauai Historical Society has recommended that the Hanalei, Waipi, Waipa, Waikoko, and Mainia Bridges, and the Hanoo Ford and the Limahuli Stream Crossing be nominated to the National Register of Historic Places. Regardless of the final outcome of the nomination procedure, it would appear that all of these structures are of local historical significance and thus subject to Section 4(f) consideration. We therefore urge that a Section 4(f) statement be prepared for the project's involvement with these historic resources.

Based on information in the draft statement concerning the need for repair or replacement of the above bridges and stream crossings, plus the desirability of maintaining a scenic highway approximately along the existing right-of-way, the Department of the Interior would probably concur that there were no feasible and prudent alternatives to some use of these historic resources. We recommend, however, that innovative design techniques be utilized to maintain the historic and scenic character of the existing roadway, and that other mitigation measures be developed, as appropriate, in consultation with the Kauai Historical Society and the State Historic Preservation Officer.

Concerning the Hanalei Bridge, the Department of the Interior concurs that there are no feasible and prudent alternatives to Designs # 1A, 1B, 2, 3A, or 3B. We oppose the selection of Design #4 because of its impact on endangered waterbird habitat. Mitigation measures should include recordation to professionally acceptable standards, as well as any other appropriate measures that may be decided upon in consultation with State and local officials. Based on information presented in the draft statement it appears that Design # 1A or 1B would best preserve the existing ambience of the Hanalei crossing.

Archaeological Sites

Since an archaeological survey of the project area has not yet been undertaken the applicability of Section 4(f) to archaeological resources cannot be determined at this time. We would point out that, should significant

trj
1-1-4



Mr. Ralph T. Segawa, Honolulu, Hawaii

archeological sites be discovered later in the planning process, additional Section 4(f) statements may be required. We urge that adequate surveys be accomplished as soon as possible before the final statement is completed so that archeological information will be available for the selection of alternatives and for adequate compliance with the requirements of Section 4(f).

ENDANGERED SPECIES COMMENTS

The Department of the Interior is concerned with the possible adverse effects of the proposed action on endangered species. Section 7 of the Endangered Species Act of 1973 requires all Federal agencies to insure that activities authorized, funded or carried out by them do not jeopardize the continued existence of the species or their critical habitat.

As noted above, the Department of the Interior opposes the selection of Alternative Design #4 because of its impacts on about five acres of endangered waterbird habitat. Even if Design #4 is rejected the proposed project may have some adverse impact on endangered species in the area. Further evaluation of this possibility is needed in the final statement.

Unless the Federal High Administration (FHWA) is certain that the proposed project, including any proposed mitigation measures, will not jeopardize endangered species or their critical habitat, then we strongly recommend that FHWA enter into formal Section 7 consultation with the U.S. Fish and Wildlife Service. FHWA should initiate such consultation by submission of a written request to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 3737, Portland, Oregon, 97208. The proposed procedures for Section 7 compliance have recently been published: Proposed Provisions for Interagency Cooperation, 42 FR 4868-4873, January 26, 1977.

In any event, the responsibility for determining project impacts on endangered and threatened species, and complying with Section 7 of the Endangered Species Act remain with the sponsoring Federal Agency. Specific actions taken in regard to Section 7 should be discussed in the final environmental statement.

ENVIRONMENTAL STATEMENT COMMENTS

Page 11-19c, Mitigation Measures. The document proposes replacement for loss of endangered species habitat if Imanalei Bridge Design Alternative #4 is selected and constructed. However, such replacement should not be for an equivalent amount of land area as implied, but to provide habitat and wildlife use values equal to those destroyed. The text should recognize

Mr. Ralph T. Segawa, Honolulu, Hawaii

that this procedure does not in actuality replace habitat that is irrevocably lost with project development.

In figures 2A, 6, and 16A, a portion of the Imanalei National Wildlife Refuge has not been delineated but should be in the final statement. This area is located north of the highway to the center of Imanalei River below the existing bridge as shown in figure 11.

As noted on page 11-37, "Impacts to potential archeological resources are as yet undetermined." This situation appears to be due to the stated policy (11-36, 37) that an archeological survey will be conducted for the selected alternative only.

This means that cultural resources of an archeological nature will not be a part of the planning process that selects alternatives, and this is contrary to the intent of 36 CFR 800.4(a) that "As early as possible and in all cases prior to agency decision concerning an undertaking...". Instead, the plan is to select an alternative and then survey. If any found resource is "marginal," excavation would occur; but if it is of more importance, routes would be re-evaluated to select an alternative that would not affect the resource.

All cultural resources along each alternative route should be identified and individually weighed against the national register criteria before final decision as to the route is made.

The "Summary of Impacts" table on page 1v is inaccurate in that assessments of impacts on historical and archeological resources cannot be made without first determining the nature and extent of such resources within the project area. Also, it is unclear what "problematic impact," as used in the table, means when referring to archeological and historical resources.

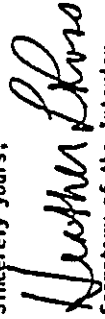
In sum, the lack of information regarding the presence or absence of cultural resources makes it impossible to evaluate the impacts of the proposed project and its alternatives upon cultural resources, and, as such, the statement is inadequate.

The area from Imanalei Bridge westward to the end of the project is described as having unsuitable soil and steep unstable slopes (p. 11-1, par. 2). In view of those adverse conditions and the fact that proposed bridge improvements would result in the use of heavy vehicles over roads that have not carried such traffic in the past, the physical impact of

Mr. Ralph T. Segawa, Honolulu, Hawaii

We appreciate the opportunity to review and comment on this draft environmental statement.

Sincerely yours,



Acting
Deputy Assistant Secretary of the Interior

Mr. Ralph T. Segawa
Division Administrator
Federal Highway Administration
Pacific International Gold Bond Building
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

cc: Rear Admiral E. Alvey Wright, USN, Ret.
Director, Department of Transportation
Division of Highways
869 Punchbowl Street
Honolulu, Hawaii 96813

Mr. Ralph T. Segawa, Honolulu, Hawaii

the heavier vehicles should be evaluated fully. The environmental statement should include an evaluation of adverse impacts of heavier vehicles on road surfaces, subgrade soils, and fill materials in relation to the unstable slopes and generally unsuitable soil conditions.

No discussion of a turn-around at the west end of the road was found. Since this is shown as an abrupt dead-end road on the maps, it might be advisable to consider the need for a turn-around for the tour buses that are anticipated on the improved road.

No mention of landslides was noted in the main body of the environmental statement, although unstable slopes were briefly referred to on page 11-1 (par. 2). We feel that the statement should contain a full evaluation of any potential geologic hazard of landslides in relation to the proposed earthwork. Sufficient information on the geology of the project area should be provided to relate landslide hazards or unstable slopes to underlying geologic conditions. Although the draft statement contains a section entitled "Geology and Soil Erosion" (p. 11-4 to 11-8), the discussion is largely confined to soils, information on underlying geologic materials being limited largely to brief references to volcanoes and corals (for example, p. 11-4, par. 2).

HJ 1-16

SUMMARY COMMENTS

As mentioned above, additional information must be presented before the Department of the Interior can complete its role under Section 4(f) of the Department of Transportation Act. Since we have a continuing interest in this project we would be happy to provide technical assistance in the preparation of additional Section 4(f) documentation. For matters relating to the Hanalei National Wildlife Refuge please contact the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 3737, Portland, Oregon, 97208 (503 - 234-4050). For matters relating to historical and archeological resources please contact the Regional Director, National Park Service, 450 Golden Gate Avenue, San Francisco, California, 94102 (415-556-4196).



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

PACIFIC ISLANDS REGION
1000 K STREET, N.W.
WASHINGTON, D.C. 20515



APR 26 1977

U.S. DEPARTMENT OF THE INTERIOR (6/9/77)

EVALUATION

- A, B, C, F, I. These comments, relating to the Princeville to Haena section of the highway, will be evaluated in a supplement to this Final EIS.
- D. The recommended highway widening will affect only a small area adjacent to the highway, in which archaeological sites are highly unlikely. Nevertheless, a reconnaissance survey has been conducted, the results of which are presented in Appendix D. Should any artifacts be uncovered during construction, work will be stopped in the area and the SHPO will be immediately notified.
- E. Section 7 consultation has been concluded. Since the primary concern is with the alignment at the Hanalei Bridge, a final determination will be made in the Princeville to Haena supplemental Final EIS.
- G. These maps have been corrected.
- H. See response to D, above.
- J. This will be provided for in the Haena State Park.
- K. Landslides are not a concern on the gentle topography of the Kaliaiwal to Princeville segment. Your suggestion on discussing the stability of road cuts from Princeville to Haena will be discussed in the supplemental Final EIS covering that section.

Mr. Ralph T. Pigeon
Division Administrator
Federal Highway Administration
Region III
677 Ala Hono Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Mr. Pigeon:

This responds to your letter 915EC dated March 16, 1977, transmitting a copy of the draft Environmental Impact Statement for the proposed improvements to Kaula Belt Road, Kaliaiwal to Haena Section, on the Island of Kauai, Hawaii.

The proposed improvement project will have no impact on existing or planned FAA facilities in that area. However, we wish to point out that Princeville Airport, a private facility, is located within the project limits. So that there will be no further derogation of the existing aircraft/diability clearance, the planned widening along this section of the highway should be made on the side further away from the airport.

Thank you for the opportunity to comment on this document.

Sincerely,

K. HAYASHI

K. HAYASHI
Supervisory Airport Engineer, APT-620

STARBUCK M. MATSUMAGA
HAWAII

EVALUATION

FEDERAL AVIATION ADMINISTRATION (4/26/77)

The recommended highway widening from Kallhiwai to Princeville will be made on the side of the road away from Princeville Airport, so there will be no interference.

United States Senate

WASHINGTON, D.C. 20510

March 31, 1977

Mr. Ralph T. Segawa
Division Administrator
Federal Highway Administration
677 Ala Moana Blvd.
Honolulu, Hawaii 96813

Dear Mr. Segawa:

Thank you for forwarding to my office a copy of the Environmental Impact Statement for the Kawai Kell Road, Kallhiwai to Maona Section.

Although I do not have any comments at this time I have noted the date for public hearings.

If I may be of any assistance in this matter please do not hesitate to contact me.

Atoba and best wishes.

Sincerely,

Frank Matsunaga
Frank Matsunaga
U. S. Senator

RECEIVED
MAY 11 11 31 AM '77
DEPARTMENT OF AGRICULTURE
PLANNING DIVISION
TRANSPORTATION



GEORGE H. ARYOSH
GOVERNOR

IRIEO NISHIOGA
COMPTROLLER
IRIEO NISHIOGA
DEPUTY COMPTROLLER

LETTER NO. (P) 1354.7



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 100, HONOLULU, HAWAII 96810

APR 4 1977

Mr. Ralph T. Segawa
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Region Nine
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Mr. Segawa:

Subject: Kanae Hill Road, Kalihiwai to Hana Section
Hana Section, FAP Route 56, Draft
Environmental Impact Statement

This is in response to your letter number 9155C requesting review and comments on the subject project.

As the project will not involve any right-of-way or easement taking of frontage along Hanalei Elementary School and Hanalei Court House, we have no comments to offer.

We would appreciate a copy of the final Environmental Impact Statement.

Very truly yours,
R. Nishio
IRIEO NISHIOGA
State Public Works Engineer

W:vy

RECEIVED
MAY 11 11 31 AM '77
DEPARTMENT OF AGRICULTURE
PLANNING DIVISION
TRANSPORTATION

May 1, 1977

Mr. H. Sumitani
Assistant Division Administrator
U. S. Department of Transportation
Federal Highway Administration
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813

Dear Mr. Sumitani:

Subject: Kanae Hill Road, Kalihiwai to Hana Section
FAP Route 56, Draft Environmental Impact Statement

The Department of Agriculture has reviewed the subject draft impact statement. This agency concurs with the alternatives proposed by the State Department of Transportation because the project upon land production areas would be beneficial.

We would appreciate a copy of the final environmental impact statement.

Thank you for the opportunity to comment.

Sincerely,
J. A. ...
J. A. ...
Director, Board of Agriculture

cc: State Department of Transportation

U. S. AIR FORCE
HONOLULU



DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
1000 BUCKLE, HONOLULU, HAWAII 96816

MEMO

Mr. W. Kuzumoto,
Assistant Division Administrator
U. S. Department of Transportation
Federal Highway Administration
677 Ala Hahaione Boulevard, Suite 613
Honolulu, Hawaii 96813

Dear Mr. Kuzumoto:

Kaunoi Belt Road

Thank you for sending us a copy of the "Kaunoi Belt Road" Environmental
Impact Statement. We have received the publication and have no comments
to offer.

Yours truly,

Wayne R. Tashiro
WAYNE R. TASHIRO
Captain, CE, USARMC
Center & Engr. Officer

Enclosure

GENERAL INVESTIGATION
DIVISION OF HAWAII

VALENTINE A. CHERNOZHUKOV
SUPERVISOR
ADMINISTRATIVE

29 APR 1977



STATE OF HAWAII
DEPARTMENT OF HEALTH

1000 BUCKLE
HONOLULU, HAWAII 96816

May 3, 1977

Mr. Ralph T. Siggs
Division Administrator
Federal Highway Administration
Department of Transportation
677 Ala Hahaione Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Mr. Siggs:

Subject: Kaunoi Belt Road, Kailua to Hahaione Section, FAP Route 56,
Draft Environmental Impact Statement

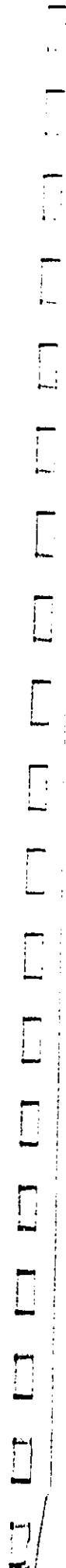
Thank you for allowing us to review and comment on the subject
project.

In general the draft statement appears to be quite comprehensive.
The air quality assessment is adequate. The secondary impacts due
to the improved transportation facility might be expanded upon in the
final statement.

Sincerely,

Shigeo Sameda

SHIGE O SAMEDA, Chief
Environmental Protection &
Health Services Division



CHRISTOPHER LOUIS CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES

ELUCAS A. HAMAHA
SECRETARY

DIVISIONS
CONSERVATION
FOREST AND LAND
LAND USE
LAND ACQUISITION
STATE PARKS
WATER AND SOIL DEVELOPMENT



RECEIVED

APR 13 1 25 PM '77

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 221
HONOLULU HAWAII 96813

April 4, 1977

GENERAL ANTHONY DIINO'S OFFICE

APR 7 12 39 PM '77

DEPT. OF TRANSPORTATION
STATE OF HAWAII

EVALUATION
DEPARTMENT OF HEALTH (5/3/77)

This Final EIS for the Kalihwai to Prineriville section does discuss secondary (ie. growth) impacts (see page 11-11). A future growth-inducing impact may result from widening the Hanalei Bridge. This impact will be discussed in the supplemental Final EIS for the Prineriville to Haena section.

Honorable L. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

SUBJECT: Kaui Belt Road, FAP Route 56,
Haena to Kalihwai

This project will have an impact on Haena State Park. We should coordinate park development with the highway project. There are two main concerns:

1. Bridge improvement or relocation at Limahuli Stream should be determined by park plans. The stream forms the park boundary and all roads beyond that point to Kee Beach will be park roads.
2. The existing roads and parking arrangements within the park are inadequate. If it became possible for buses to reach the park, the problem could become unmanageable. We would prefer to construct an adequate road before highway improvement make it possible for buses to reach the park. Park planning is scheduled to begin later this year, with construction to follow as soon as possible.

Very truly yours,

Christopher Cobb
CHRISTOPHER COBB
Chairman of the Board

OFFICE OF THE ATTORNEY GENERAL
GOVERNMENT OF HAWAII



DIVISIONS
CONSERVATION
FISH AND GAME
LAND AND NATURAL RESOURCES
PLANNING
WATER AND LAND DEVELOPMENT

EVALUATION
DEPARTMENT OF LAND AND NATURAL RESOURCES (4/4/77)

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FISH AND GAME
1111 KUAHOLOANUI STREET
HONOLULU, HAWAII 96813

Impacts to parks on the Princeville to Iliaena segment of the highway will be discussed in the supplemental Final FIS for that segment. We will continue to coordinate highway plans with your agency.

April 25, 1977

U.S. Department of Transportation
Federal Highway Administration
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813

Gentlemen:

SUBJECT: Kaula Hill Road, Kalahele to Haena Section,
FAR Route 56, Draft Environmental Impact
Statement

The Division of Fish and Game has reviewed the subject document and offers the following comments:

1. With respect to fisheries values in the eight streams and rivers affected by the proposed project, no adverse effects are expected. It is suggested that on Page 11-17, Lines 1 and 2 in referring to trout, the words "highly sought after food fish" be used rather than "game fish" to be absolutely correct.
2. As far as wildlife values are concerned, the Draft E.I.S. adequately covers the subject. Wildlife values would be best protected by proceeding with Alternative Design #10, keeping the same alignment in that portion of the road between the Hanalei bridge and Hanalei town as now exists. Other alternatives for the Kalahele to Princeville and Hanalei through Maunaloa are less critical to wildlife. All alternatives for which the Department of Conservation has expressed preference would be best protected from the standpoint of the protection of wildlife.

Thank you for the opportunity to review the subject document.

Yours truly,

[Signature]
DICKIE WEAVER, Director
Division of Fish & Game

ENCLOSURE

EVALUATION

DIVISION OF FISH AND GAME (4/25/77)

- 1. Your suggestion has been incorporated in the Final EIS, page II-18.
- 2. The comments regarding the Hanalei Bridge will be taken into consideration.

CLAUDINE M. ANTWERP
Secretary of Hawaii



DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 821
HONOLULU, HAWAII 96808

CHRISTOPHER LUMM, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HANALEI
SECRETARY TO THE CHAIRMAN
DIVISIONS:
FOREST AND LAND
FISH AND GAME
LAND USE
PLANNING
STATE PARKS
WATER AND LAND DEVELOPMENT

May 6, 1977

Mr. Ralph T. Segawa
Division Administrator, Region 9
Federal Highway Admin.
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

Dear Mr. Segawa:

I appreciate this opportunity to comment on the draft environmental statement for the proposed improvements to the Federal-Aid Primary Route 56, the Kuliho Highway (Kaula Belt Road), from near Kulihoiwi to the terminus of the road near Haana, Hanalei District, Kauai.

It will be appropriate for your agency to allow the Advisory Council on Historic Preservation an opportunity to comment upon the effect that this undertaking might have on properties on or likely to be eligible to the National Register of Historic Places. The Section 106 procedures for the protection of historic and cultural properties are indicated in 36 C. F. R. Part 800.

Sincerely yours,
Jane I. Silverman
Jane I. Silverman
Historic Preservation Officer
State of Hawaii

cc: Advisory Council, Washington and Denver

GENERAL AUTOMATA
CONSUMER



RECEIVED
MAY 19 9 56 AM '77
OFFICE OF TRANSPORTATION
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
OFFICE OF THE GOVERNOR
HONOLULU, HAWAII

EVALUATION

STATE HISTORIC PRESERVATION OFFICER (5/6/77)

The results of the Section 106 review process will be reported in the supplemental Final FIS for the Princeville to Heaena section.

RECEIVED
MAY 13 7 50 AM '77
OFFICE OF TRANSPORTATION
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
OFFICE OF THE GOVERNOR
HONOLULU, HAWAII

MEMORANDUM

TO: E. Alvey Wright, Director
Department of Transportation

FROM: Richard E. Harland, Director
Office of Environmental Quality Control

SUBJECT: Faunai Belt Road, Kalihival to Heaena Section

Before we make specific comments on the draft environmental impact statement, we have one general comment. We are aware of the sensitive and scenic environment of the North Shore, especially Hanalei Valley. Residents have vividly expressed their opinions of protecting their tranquil and rural lifestyle. Yet, we are also aware of the short structural lives of the present bridges. Thus, in planning and selecting the alternatives, we strongly recommend that this be done in accordance with the State's Environmental Policy Act, Chapter 344, Hawaii Revised Statutes. With this in mind, we offer the following comments:

HAWAIIAN BRIDGE DESIGN#2 (p. I-11) **A**

The FIS indicates that the Federal Highway Administration will not pay for design #A. Is it also applicable to design #2 or any other one-land bridge proposal?

PLATE 19, 6, 20

our copy does not have plates 19 and 20

WILSONVILLE HABITAT (p. II-10) **B**

In discussing that 5% of the habitat will be directly and indirectly affected by the proposed alternate highway design, the FIS states:

Although this is a relatively small amount, loss of this habitat would be a significant adverse impact, since it is "critical habitat" for four endangered species. These waterbirds are endangered for the very reason that their habitat has been eliminated or

iciously reduced throughout the Islands. No further loss of habitat can be considered insignificant, especially where that habitat is presently used by large numbers of these endangered species,

The realization of the potential impact on the endangered species in a very important comment, especially in light of the State Environmental Policy Act (Chapter 344). We appreciate your full consideration of the refuge.

DRENCHING

In constructing a new Hanalei Bridge or other bridges, will drenching be needed? If so, this should be discussed in the final EIS in terms of the effect on water quality and the effect on the receiving body of water.

TABLE 5

According to Table 5, the tentative schedule indicates that only 14% of the construction will be in the dry season. Thus, it is recommended that careful erosion measures should be practiced to reduce sedimentation and siltation of the receiving body of water.

FIGURE 3

The figure illustrates accidents of 1973 and 1974. Although the total accidents are seventy-seven for the entire strip of improvement, the number of accidents at the bridges is considerably less. Thus, data should depict the breakdown for bridge-related accidents to accurately detail the existing hazards at the bridges and not the road itself.

PAGE A-93

In the response to Mr. Helen Hopkins comment, it states, "We will include a benefit-cost analysis in the draft EIS." Our copy did not include such an analysis.

SAFETY

One of the main objectives of the proposed improvements is safety. However, if bridges can accommodate tour buses, there is a question of safety along the roads. The present road to Haona is narrow and has many curves. Buses need more room for the curves and that will present safety problems along the road itself. This is a potential hazard which may later be used to justify road widening itself. Has this been considered?

APPENDIX B: FIGURE A-129

Mr. EIS states,

A major concern of the Hanalei-Haona residents is that with an improved highway tour buses will

no longer be restricted. This attitude is in conflict with the North Shore Development Plan which specifically states that tour buses will be allowed in the area. This, and other disagreements that North Shore residents have with their official land use plan, is an issue that is not within the jurisdiction of the State Department of Transportation.

The development plan is a policy statement - not a fixed commitment that cannot be amended. Nor, it is a document that must be implemented. The cited passage seems to indicate that your agency has no jurisdiction on the matter therefore it is not an issue. Your participation on the highway is related to the development such that you are implementing some of its objectives. This should not be treated lightly. Undoubtedly the proposed action will influence the plan's objectives directly and/or indirectly. In other words, your proposal serves as the vehicle which is part of the infrastructure of the plan.

For fairness and brevity, our Office did not attempt to summarize other review comments. Instead, we strongly recommend that careful consideration be given to each comment.

Further, the EIS Regulations state that the accepting authority need not consider response after the fourteen day response period. However, because of the controversial nature of the proposed action, we will consider response beyond the fourteen day period.

We trust these comments will be helpful to you in preparing the final EIS. We thank you for the opportunity to review the final EIS. We look forward to the final EIS.

EVALUATION

OFFICE OF ENVIRONMENTAL QUALITY CONTROL (5/11/77)

- A. Federal funds under 23 USC may not be used for the construction of one-lane bridges on the North Shore.
- B. C. F. G. These comments relate to the proposed improvements to the Princeville to Haena section of the highway. They will be given careful consideration in selecting alternatives, and will be evaluated in the supplemental Final EIS for that section.
- D. The erosion control measures described in this Final EIS (pages 11-7 & 8) will be employed, where appropriate, throughout the construction period, and until the exposed slopes are stabilized.
- F. The benefit/cost ratios for the alternative improvements to the Kulihiwai to Princeville and Princeville to Hanalei Bridge segments were given on page 1-18 of the Draft EIS. The benefit/cost ratio of the recommended widening from Kulihiwai to Princeville is 1.13.
- H. The referenced comment regarding the North Shore Development Plan was not intended to imply that the Department of Transportation is not responsible for the impacts of its actions, nor that growth is not an issue. Rather the Draft EIS clearly identifies growth as the major issue surrounding this project. However, when the issues of "growth" and "safety" are in conflict, the Department of Transportation must give greater weight to providing a safe highway. In the present case, the highway is not, and should not be, the only control to growth. The Development Plan is recognized as a policy statement, and is not thought of as inflexible, as demonstrated by the fact that the Department of Transportation's proposals are less in scope than shown on the Development Plan (see pages 1-23 & 24 of this Final EIS). The recommended widening has been selected as a balance between the need for a safe highway and the community's desire for a minimum amount of change. It is expected that the revised Development Plan will reflect this approach.



DIRECTOR'S OFFICE

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RECEIVED
MR. 20 10 09 1977
UNIVERSITY OF HAWAII
DEPT. OF TRANSPORTATION
PLANNING DIV.

College of Tropical Agriculture
Hawaii Agricultural Experiment Station
Bilger Hall 208 - 255
Honolulu, Hawaii 96810

PLANNING DIV.

Office of the Associate Director

April 11, 1977

Mr. E. Atvey Wright
Director, Department of Transportation
State of Hawaii
869 Punchbowl St.
Honolulu, Hawaii 96813

Dear Mr. Wright:

RE: Kaula Belt Road, FAP Route 56, Haena to Kulihiwai
(LT-PA 2.36223)

I have asked Dr. J. Ooka, Superintendent of the Kaula Research Station of the College of Tropical Agriculture, to comment on the proposed Kaula Belt Road, FAP Route 56, Haena to Kulihiwai.

His response is that the proposed road or its construction do not appear to present a hazard to agriculture and probably will not affect agriculture directly. However, an indirect effect could result from increased traffic due to easier access. Increased recreational use and exploitation of watershed areas may result in the degradation of the water supply used by taro growers in the area.

Would you please accept this written assessment in lieu of attendance at a public hearing.

Yours sincerely,

H. P. Keftord
Acting Associate Director

cc: Dr. J. Ooka

AN EQUAL OPPORTUNITY EMPLOYER

EVALUATION

COLLEGE OF TROPICAL AGRICULTURE (4/11/77)

Your concern on the indirect effects to the water supply used by taro growers is acknowledged and will be noted in the supplemental Final EIS for the Princeville to Iienua section.



University of Hawaii at Manoa

Environmental Center
Crawford 317 • 2550 Campus Road
Honolulu, Hawaii 96822
Telephone (808) 948-7301

Office of the Director

May 10, 1977

RC:0221

MEMORANDUM

TO: U.S. Department of Transportation

FROM: Doak C. Cox *Doak C. Cox*

RE: Kaula Belt Road - Kalihiwai to Iienua Section, FAP Route 56
Draft Environmental Impact Statement (DEIS)

The Environmental Center review of the above cited DEIS has been prepared with the assistance of C. Lamoureux (Botany), C.S. Papatostas (Civil Engineering), and Clare Shinsato (Environmental Center).

Time and available personnel has not permitted us to prepare our usual broad review. Therefore our comments are confined to specific limited areas. It should not be assumed that areas not addressed in our comments are to be considered adequate or do not present any potential detrimental impacts. The following comments are submitted for your consideration.

In general, the draft EIS has discussed the range of potential environmental impacts which the proposed project may generate. We are pleased to note many of the questions we raised in the Kalihiwai-Iienua draft EIS have been addressed in this EIS.

A
The State Department of Transportation "will recommend one proposed action" following public and governmental reviews. We note that the environmental impacts may be more fully assessed when the specific alternatives have been chosen and fully discussed in the final EIS (e.g. an archaeological survey will be conducted "for the selected alternative only"). We would suggest that a preliminary archaeological survey be conducted on each of the alternative sites so that the results of the survey can be used in the selection of the final right-of-way.

B
The draft EIS states that the geometric characteristics of the existing facility are substandard. A number of comparisons between components of the existing highway and AASHTO standards indicate that this is often the case. The final EIS will be greatly enhanced by including the design standards used and by citing the major alignment, sight distance and cross-section discrepancies between the standards and the existing highway.

AN EQUAL OPPORTUNITY EMPLOYER

May 10, 1977

EVALUATION

ENVIRONMENTAL CENTER (5/10/77)

Table 2 of the draft EIS should be accompanied by a map which shows clearly the locations of the points defining all sections noted. Information about the improvements to section C1 and C2 which resulted in accident rate reductions should be included in the final EIS.

It is clear that the Kauhawai-laena segment of the Kuhio Highway has a disproportionately high accident rate which requires attention. Although the accident rate in the project area is 3 to 12 times higher than the rate for segments of the Kuhio Highway that have been improved (p. 1-3), it cannot be assumed that all of the proposed alternatives are capable of reducing the accident rate of the project section to the levels prevailing on the improved sections.

The final EIS should attempt to quantify the potential of each alternative to reduce the current accident rates. To accomplish this, better accident statistics than those reported on Figure 3 are necessary. For example, it is not clear whether reported accident were caused by substandard geometry or whether they were due to driver error (e.g. exceeding the design limit, etc.).

We appreciate the opportunity to review this EIS and request copies of the final Environmental Impact Statement.

cc: Reviewers
OEOC

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1 2 8

A. The alternatives which had the greatest potential for encountering previously undiscovered archaeological sites have been rejected in favor of minimal widening within (or slightly outside) the right-of-way from Kauhawai to Princeville. An archaeological reconnaissance has been conducted for the recommended alternative (Appendix D). If any artifacts are encountered during construction, work will be stopped and the SHPO immediately notified.

B. The pavement on the existing Kauhawai to Princeville segment is 18 feet wide compared to AASHTO standards allowing a 22 foot minimum. The existing shoulders are 2 feet wide compared to the standard 8 feet minimum. The curves that are to be realigned are examples of extremely poor geometrics ("broken back" curves and "S" curves without a tangent), and are not considered to be adequate highway design under AASHTO criteria.

C. The accident statistics in Table 2 have been revised to show more years and to eliminate the confusion caused by changes in designating segments. The improvements to the highway from Anahola to Kauhawai (C1 and C2) are shown on Plate 2 (compare with existing alignment on Plate 1). They consisted of the same type of widening and realigning proposed for the subject section. It is therefore not unreasonable to assume that the Kauhawai to Princeville section will experience a drop in the accident rate to a level close to that of the previously improved segment, or around 1.5 accidents per million vehicle miles.

EDUARDO E. MALAPIT
Mayor



SHIGEO K. NISHIMOTO
Planning Director

COUNTY OF KAUI
PLANNING DEPARTMENT
4250 KEE STREET
LILIGE, KAUI, HAWAII 96744

April 21, 1977

Mr. E. Alvey Wright
Director
State Dept. of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Gentlemen:

Re: Kaui Belt Road, FAP, Route 56,
Haena to Kalihiwai, Kaui

TO :

Based upon your findings and evaluation contained within the draft Environmental Impact Statement for the proposed highway and bridge improvement from Kalihiwai to Haena, the Kaui Planning Department is in concurrence and supports all of your "preferred alternatives" as specified in your public hearing notice.

We recognize that in selecting these "preferred alternatives", your objective is to bring the subject highway and bridges up to adequate safety standards for the safety, health and welfare of the residents and visitors that commute on

Mr. E. Alvey Wright
Page 2
April 21, 1977

this ground transportation system, while at the same time maintaining a design that is compatible with the unique character and the scenic beauty of this region that is hard to find elsewhere.

The blind curves and narrow pavement and shoulder widths, and the one-way and very poor structural condition and short remaining life span of the bridges described in your studies make segments of the highway and the bridges hazardous and dangerous. A collapse of any one of the bridges may not only endanger lives, but will isolate some communities from needed daily services that may be vital to some. Improvement plans (as you are now doing) should therefore proceed expeditiously in order to achieve timely improvement that has had the opportunity to consider various designs appropriate for this area. We believe that your "preferred alternatives" can achieve your objective. We commend the efforts and attitude of your Department in trying to develop an acceptable and appropriate design solution for the highway and bridges in this region.

Sincerely,

SHIGEO K. NISHIMOTO
Planning Director

cc: Mayor, Plann. Com.
Edwin Nakano



RECEIVED
 APR 29 2 16 PM '77
 DEPT. OF TRANSPORTATION
 HIGHWAYS DIVISION

BRIAN N. NISHIMOTO
 PLANNING DIRECTOR

DIRECTOR'S OFFICE

APR 25 1 28 PM '77

DEPT. OF
 TRANSPORTATION

COUNTY OF KAUAI
 PLANNING DEPARTMENT
 4300 KEE STREET
 LILUO, KAUAI, HAWAII 96764

April 22, 1977

Mr. Ralph T. Segawa
 Division Administrator
 U.S. Department of Transportation
 Federal Highway Administration
 677 Ala Moana Blvd., Suite 613
 Honolulu, Hawaii 96813

Subject: Kaula Belt Road, Kalihua to Haena
 Section, FAP Route 58, Draft Environmental
 Impact Statement

47
 - 33

Gentlemen:

The information provided in the Draft Environmental Impact Statement was very helpful in evaluating the various proposed alternatives on the subject matter.

We have just one comment to make. Under the socio-economic category, on Page II-27, a portion of the second paragraph reads as follows:

"The North Shore appears to be faced with two undesirable alternatives: retain the existing economic base with its uncertain future or develop a new economic base with the potential of degenerating the unique rural life-style."

That statement narrows the choices only between two alternatives. Another alternative is available and should

Mr. Ralph T. Segawa
 Page 2
 April 22, 1977

be stated in the impact statement. The existing economic base can be expanded and diversified further. Some of the soils in this region are suitable for specialized crops such as taro. If taro farming is expanded and other specialized crops are introduced, there would be a definite need to improve the highway and bridge system to transport the agricultural products. An expansion of the economic base in this direction will not degrade the unique rural life-style of this region even with some proposed improvements to the highway.

In our opinion, the "preferred alternatives" as presented by the State Department of Transportation at its public hearing on April 20th and 21st on Kaula, is the type of improvements that could achieve this objective.

Sincerely,

BRIAN NISHIMOTO
 Planning Director

cc: Mayor
 Plng. Com.
 /E. Alvey Wright, DOT
 Edwin Nakano,



April 6, 1977

facility is not in the interest of traffic safety. Not only is there liability for damages by the State but more importantly the personal property and lives of the motorists are jeopardized when a one lane bridge is provided.

3. We do not feel that the cost-benefit ratio or the cost to provide the safety improvement should govern and control the nature of the improvement. Cost and available funds should only dictate perhaps the incremental construction or the phasing of the entire project.

4. Between Waikoko Stream to Haena the roadway has a pavement width of 18 feet or less, roadway shoulders are nonexistent in many locations, and there are several sharp horizontal curves in the roadway alignment. These conditions should also be improved. We believe that vehicular accidents generally decrease with higher cross-sectional standards such as wide traffic lanes, shoulders, and structures. Further, flatter grades and curvatures reduces the variances in speeds of vehicles and increases sight distances which will also contribute to the safety of the highway.

We thank you for the opportunity to comment on the Draft Environmental Impact Statement.

Very truly yours,

Henry Morita
HENRY MORITA
County Engineer

KK:smm

THOMAS E. MAJANI
HAWAII

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DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION

OFFICE OF
COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS TRANSPORTATION

4376 RICE STREET

HAENA, KAUAI, HAWAII 96766

April 20, 1977

DIRECTOR'S OFFICE HENRY MORITA
COUNTY ENGINEER
PHONE 215-3318

CLAY KAGAWA
APR 22 9 47 AM '77
PHONE 245-3412

Mr. E. Alvey Wright, Director
DEPARTMENT OF TRANSPORTATION
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Sir:

SUBJECT: TESTIMONY OF THE DEPARTMENT OF PUBLIC WORKS,
COUNTY OF KAUAI RE: KAUAI DELT ROAD, KALIHUWAI
TO HAENA SECTION, FAP ROUTE 56

We have been keeping close tab on developments proposed by the State Department of Transportation for the North Shore highways since this is such a vital link affecting so many of our constituents.

Although we may have previously expressed a desire to see a new alignment in the Kalihwai to Hanalei Bridge Section, we believe that the downgraded version presented as the preferred alternative is acceptable and a fair compromise with expressed public sentiments for minimizing improvements. For safety considerations, we would recommend that correction of existing vertical curve deficiencies be considered. The preferred double lane bridge alternatives are also acceptable. We strongly recommend against considering replacement with single lane structures. The national impetus is towards correcting single lane bridges because of the hazards they present.

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Mr. E. Alvey Wright, Director

April 20, 1977
Page 2

EVALUATION
DEPARTMENT OF PUBLIC WORKS (4/20/77)

We would recommend that increased shoulder widths to four (4) feet with a minimum of eleven (11) feet for structures be considered, since this will allow for safer passage of bicycles if only on the structure itself.

Very truly yours,

Clay Kagan
for HENRY MORITA
County Engineer

/s/ cc: Mr. Ed Nakano

- 4/6/77 1. In response to the North Shore community's desire for a minimum amount of change, the winning alternative has been selected for the Kalthwal to Princeton segment.
- 2.3.4. Your comments relating to the Princeton to Haem segment of the highway will be considered in the supplemental Final FIS for that section.
- 4/20/77 Your support of the preferred alternatives is acknowledged.

DEPARTMENT OF WATER

COUNTY OF MAUI
P. O. BOX 1708
LIIHUE, HAWAII 96766

AMERICAN LUNG ASSOCIATION of Hawaii

May 4, 1977

April 26, 1977

Mr. Ralph T. Segawa
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813

Re: Kanae Belt Road, Kalihiwai to Maena Section,
EAP Route 56, Draft Environmental Impact
Statement

Thank you for allowing us to review and comment on the draft E.I.S. Although portions of the proposed road and bridge improvements between Hanalei and Maena will affect our waterlines, we will comment when the construction plans are submitted to this office for review. Therefore, we have no objections to this project.

Please keep us informed on the progress of this project.

Walter T. Brant

Walter T. Brant, Jr.
Manager and Chief Engineer

WBT:al

Mr. Ralph T. Segawa
Division Administrator
Federal Highway Administration
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813

Dear Mr. Segawa:

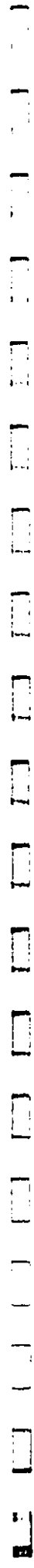
Subject: Kanae Belt Road, Kalihiwai to Maena Section
EAP Route 56, Draft Environmental Impact
Statement (February 2, 1977)

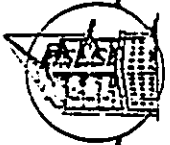
We have reviewed the subject EIS and are satisfied that an adequate air quality impact analysis was conducted. Furthermore, we believe the results represent a reasonable estimate of the magnitude of the project's impact on local air quality.

Sincerely yours,

James W. Morrow
James W. Morrow, Director
Environmental Health

JWM:ct





Hawaii Building & Construction Trades Council, AFL-CIO

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ST. DEPT. OF TRANS.
HIGHWAYS DIV
PLANNING BR.
DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION

April 29, 1977

Admiral E. Alvey Wright, Director
Department of Transportation
State of Hawaii
869 Punchbowl St.
Honolulu, Hawaii 96813

Dear Admiral E. Alvey Wright,

I am a Business Agent of Carpenters Union, Local 745, and also, the Chairman of the Kaula Building and Construction Trades Council, AFL-CIO, which represents approximately 600 construction workers. At present, 153 of our members are unemployed and Kaula is very much in need for construction jobs.

Our organization strongly support your proposed improvements from Kaula to Hawaii. There is no question that the state highways and bridges are too narrow in the subject area and we feel that if monies are available, we should widen the roads and shoulders and build concrete bridges. Many others, besides construction workers, feel that concrete bridges are more permanent and in the long run, would cost the taxpayers less to maintain.

We firmly believe that a final decision on this subject matter is your prerogative, and are confident that your decision will be based on the best interest for Kaula and its taxpayers. Most of the people who spoke against this project are new comers to this island, who have been protesting and will continue to protest on all developments. They are a minority and do not speak for the rest of the population of Kaula.

I respectfully request that you make a favorable decision on this subject matter, and give Kaula something that all of us could appreciate.

Very truly yours,

Hawaii Building & Construction
Trades Council, AFL-CIO

Kazuya Kobayama
Kazuya Kobayama
Chairman, Kaula Division

KK:eh
cc: Eddie Nakano

EVALUATION

HAWAII BUILDING & CONSTRUCTION TRADES COUNCIL, AFL-CIO
(4/29/77)

Your preference for concrete bridges will be considered in the selection of the recommended alternatives for the Princeville to Haena highway improvements.

h
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CO
ST

HAWAIIAN TELEPHONE COMPANY

P.O. BOX 591 • LIHUE, HAWAII 96766 • TELEPHONE 245-6795

April 20, 1977

EVALUATION

HAWAIIAN TELEPHONE COMPANY (1/20/77)

The Kalihwai to Princeville segment will be widened toward the north (maaka), necessitating the relocation of some telephone facilities. Construction plans will be coordinated to insure minimum inconvenience.

U. S. Department of Transportation
Federal Highway Administration
Region Nine
677 Ala Ikaa Blvd., Suite 613
Honolulu, Hawaii 96813

Attention: Mr. Ralph T. Sogawa, Division Administrator

Dear Mr. Sogawa:

Subject: Kaula Belt Road, Kalihwai to Haena Section,
FM Route 56, Draft Environmental Impact Statement

To assist you in your highway design, a set of plans of the existing roadway with our facilities plotted in has been forwarded to Mr. Kazumi Iwakawa, Engineer with the Department of Transportation, Land Transportation Facilities Division, Kaula District Office.

As stated, to Mr. Iwakawa, relocating our facilities in the heavily wooded area on the maaka side of the existing highway would be very undesirable for Hawaiian Telephone Company due to economic (excessive tree trimming maintenance) and aesthetic reasons. When designing the proposed highway, please consider the above factors.

Should you have any questions or require additional information, call Mr. James Yamachi at 245-2734.

Very truly yours,



James Tehuta
Supervising Engineer

JY:mas

cc: H. Durabael

6.1
21



Kauai Historical Society

5/15/77

My name is Robert ^{SCHECH} Schlect and I am
President of the Kauai Historical Society.

The Kauai Historical Society believes that
the entire Hanalei - Hana area has great
historic value. Also important is the scenic
quality of this area.

In 1972 the National Register of
Historic Sites prepared a report in which it is
emphasized that the road from Hanalei to Hana
should be preserved. More recently, the National
Register has encouraged the Society to complete
forms for nomination of the bridge from Hanalei
to Hana, to the National Register, which have
been completed and forwarded to the State
Preservation Office in Honolulu.

We have also received information on
several roadways and are working toward
designating the highway from Kalihoua to Hana
as a scenic highway for the people of Kauai.

We request that the Department of
Transportation allow us some time to
accomplish these goals.

EVALUATION

KAUAI HISTORICAL SOCIETY (5/25/77)

The historical aspects of the bridges will be addressed in the
supplemental Final EIS for the Princeville to Haena section.



DIRECTOR'S OFFICE P. O. BOX 921
HONOLULU, HAWAII 96809

DEPT. OF TRANSPORTATION
MAY 10, 1977

DEPT. OF TRANSPORTATION
LAND TRANSPORTATION
FACILITIES DIVISION
MAY 13 1 26 PM '77

Department of Transportation 2

May 10, 1977

Department of Transportation
State of Hawaii
895 Punchbowl Street
Honolulu, Hawaii 96813

Attention: Mr. E. Alvey Wright, Director

Subject: Kuaui Belt Road, Haema to Kailihua, Island of Kuaui

Gentlemen:

The Kuaui Outdoor Circle, founded with and perpetuated by the idea of preserving and enhancing the beauty of Hawaii, is naturally very concerned with the Department of Transportation's proposed changes for the Kuaui Belt Road.

The Circle has made a very thorough review of the recently completed Environmental Impact Statement, (hereafter referred to as the EIS). We have found the EIS a well written, sensitive and provocative document. It is quite evident to us that the DOT has responded in good faith and with concern for the views of Kuaui's Northshore residents expressed at last years public hearings.

It is because of the Department of Transportation's (DOT) responsiveness and request for public views on the North Shore Belt Road proposals that the Kuaui Outdoor Circle, by action of the Board of Directors, would like to make the following remarks and recommendations.

The premise is the base of reasoning throughout our suggestions on road improvement. It is that the Kuaui Outdoor Circle recognizes the need for safety improvements but feels that the historical and scenic Northshore is created in part by the rural highway servicing it. The ruralness of the present road, in fact, is an essential ingredient to the total "feeling" of the area; and should be treated (and possibly designated) as a Rural Scenic Road.

Below are our recommendations for the stretch of road from Kailihua to the Princesville entrance:

1. That there not be continuous 4 foot shoulders on each side of the road. That instead there be gutters on both sides of the road for car breakdowns, not scenic reasons. That these turnout or pull-off areas have a construction base of hollow tile or a similar base that allows water seepage. It is our understanding that this method is being used in various areas on the island.

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2. The present 9 foot lanes be increased to 10 foot lanes. It is imperative to us that this improvement not disturb the present row of Eucalyptus trees.

3. The cuts along the highway give it a rural character. We wish these cuts to remain. Of special concern is the retention of the "box cut" at the end of the improved highway. This cut acts as an "entrance" to the scenic and rural Northside.

4. Curve re-alignment:

- a. Curve #1, at Tumble T Ranch barn, does not need re-alignment.
- b. Curve #2, the "S" curve before Powerline road, does need straightening. The new alignment should be done west of the Eucalyptus trees not make as proposed. This would be more attractive, preserve the Eucalyptus trees, create a turnout, and less expensive.
- c. Curve #3, before the Princesville entrance, does not need re-alignment. This curve forces the maintenance of low speed to the Princesville entrance; we feel this is a positive factor.

5. We urge the utility lines be put underground for aesthetic and safety reasons.

6. The Eucalyptus trees now lining the road should be preserved at all costs. The trees should, however, be topped immediately and thereafter maintained on the falling branches create genuine driving hazards.

7. Existing tree stumps now left standing along the road should be removed.

8. It is recommended that a natural wood informational "Rural Scenic Road" sign be posted just after the Kailihua bridge announcing the beginning of the scenic drive.

We will reserve our comments on the bridges until the State Historical Committee determines whether the bridges are historical structures worthy of preservation, and until the findings from the Federal Highway Administration's Bridge Replacement Study are submitted.

Our opinions of the road running from the Princesville entrance to Kuaui bridge follow:

1. That proper signs and speed limit signs be placed on the ascent and descent side of the road serving the turn; curve near the Princesville bridge.
2. That the road be widened at the ascending grade to the "bump" between the Princesville bridge and Princesville bridge allowing a scenic view of the river.

KAHAI OUTFIXOR CIRCLE (5/10/77)
EVALUATION

3. That the cut in the road maina of the hauled bay look-out which is now marked by "Falling Rock" signs is indeed a landslide area with many falling rocks. The area should be improved in a planting manner. The East Kaula Soil and Water Conservation Committee should be contacted about this.

4. The present road is of ample width. Additional shoulders should be discouraged as they would encourage turn-offs of the "stop-look" variety creating dangerous traffic conditions.

Along with the need to upgrade the maintenance of the belt road is a need for additional refuse containers. An area especially neglected and receiving heavy usage by swimmers and surfers is the beach turnoff opposite Kaiyo Chandlers house and Smith Kowberry's house. Although this is just one very obvious area there are several other areas that need refuse containers. We will be more specific on this in our following letters.

In general we agree with the recommendations of the Honolulu Citizens Advisory Committee, and join them in requesting an extension of the May 11, 1977, testimony deadline.

Thank you for this opportunity to express our opinions on this matter.
Sincerely yours,

THE KAHAI OUTFIXOR CIRCLE

William J. Johnson
Mrs. William J. Johnson
President

Susan D. Wilson
Mrs. Thomas Wilson
Project Chairman

cc: Mr. Si Kakano, District Highway Engineer
Mr. Douglas Sakamoto, DOT Deputy Director

Kalihiwai to Princeville

1. The suggested treatment of the shoulders can not be implemented for several reasons. First, a continuous paved shoulder is needed to accommodate bicycles. Secondly, the random nature of vehicle breakdowns makes it necessary for there to be an adequate shoulder along the entire length of highway, not just at scattered points. Finally, without almost weekly mowing, a grassed shoulder stabilized with hollow tile would appear to be no shoulder at all, and would not serve the objective of providing security to the driver.
2. The recommended widening is to two 11-foot wide lanes in the direction away from the row of eucalyptus trees.
3. The present road cuts can not be maintained if the highway is to be widened and provided with shoulders. The present "entrance" might be replaced by special landscaping, but to leave this bottleneck between two improved sections would be very hazardous.
4. a. Both the horizontal and vertical curves at this location are substandard with regards to sight distance.
b. The inset diagram for curve #2 was not published correctly in the FIS. The inset diagram should have been turned 180 degrees.
c. A horizontal curve that can be negotiated safely at the design speed is necessary.
5. The high cost of installing and servicing underground utilities makes this an unfeasible measure.
6. The highway will be moved farther away from the eucalyptus trees, so the danger from falling branches will be reduced. The trees will be trimmed as needed.

KAUAI SOCIETY OF PROFESSIONAL
ENGINEERS, ARCHITECTS & DIRECTOR'S OFFICE
LAND SURVEYORS

P. O. BOX 1663
HONOLULU, HI 96766

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FACILITIES DIVISION
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7. Tree stumps will be removed.

8. This suggestion will be considered along with an alternative means of retaining the North Shore "entrance".

Princeville to Hanalei Bridge

These suggestions will be considered selecting alternatives for the Princeville-Iaena section, and will be evaluated in the supplemental Final FIS for that segment.

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Admiral E. Alvey Wright
Director, Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

The Kauai Society of Professional Engineers, Architects and Land Surveyors feel that the people of Hawaii are entitled to safe access into the beautiful North Shore area and, therefore, would like to go on record endorsing the need for improvements to the present highway between Kalia and Iaena. We herewith offer the following reasons and recommendations for your consideration.

1. HAZARDOUS, wherever possible, a safe highway system with the unique scenic qualities and character of the Hanalei-Iaena area.
2. CONSTRUCTION of wider roadway and shoulder for emergency purposes and for the safety of hikers and cyclists who are on the increase. The North Shore is a rural area where gas stations are few and far between. A wider shoulder is necessary to accommodate a safe off-roadway parking for vehicles requiring mechanical breakdown services.
3. ELIMINATION of the sharper curves and steeper grades as they constitute a hazard to safe driving. The "stop and

Admiral E. Alvey Wright
Department of Transportation
May 10, 1977
Page 2

ing" effect they create makes it unnecessarily hard on
trucks and cuts down on gas mileage.

4. REPLACEMENT of the narrow obsolete bridges with two-lane concrete structures because, the present bridges are not only dangerous and inadequate, but are expensive to maintain.

The Society of Professional Engineers, Architects and Land

Surveyors is made up of more than sixty Kuaui residents whose objectives are to encourage friendly relationships, good will among the members and to encourage a social environment and free exchange of information between members which will be beneficial to the community and professions.

We hope that the outcome of your decision on this matter will give the people of Kuaui a safer highway system.

Sincerely,

James M. Shinn
James M. Shinn, Chairman
Legislative Committee

Alvin K. Albert
for Kenneth F. Ibarra, President

cc: The Garden Island

HJ -41



National Trust for Historic Preservation

WEST COAST OFFICE DEPARTMENT OF HIGHWAYS SAN FRANCISCO, CALIFORNIA 94111 (415) 777-6411

May 9, 1977

U.S. Department of Transportation
Federal Highway Administration
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813

Gentlemen:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Kuaui Belt Road, Kallihini to Iiaina Section.

In general, we found the draft EIS a well thought out document taking into consideration many of the concerns we have regarding the highway's scenic and historic values. The accommodation of these values in the proposed improvements is to be commended although we would like to emphasize the following points as especially important for your final assessment:

1. The scenic quality of the highway. Traffic engineering standards need not always be the determining factor in road design and accommodation for views, vistas, vegetation, land forms and water courses should be made in the final design.
2. The bridges should be carefully considered because of the integral part they play in the scenic value of the highway. The original structure is important and a newly built replacement, even though a replica, should be considered only as a last resort.
3. The discussion of growth and growth control is unconvincing. To say that the "highway itself would not induce growth or development in the area" (page II-1) belies the very factors which growth depends upon. Iiaina has a limited area for growth and with increases in population, pressures to develop will become greater and greater. All the island will be affected and the inevitable link between development location and accessibility will become evident - development will go where there is access, it will not go where there is little or no access.
4. Since access and pressures for development are interdependent, the control of growth cannot be ascribed totally to the powers of local government. They may have certain tools within their legislative

U.S. Department of Transportation
Federal Highway Administration
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813 (415) 777-6411

U.S. Department of Transportation
Page 2
May 9, 1977

ponents to regulate the environment, but to put the full brunt of development pressures into their hands without recognizing the growth inducing impact of the highway reflects the approach necessary to implement an effective growth management program. Development controls are most effective when a series of constraints (or inducements for alternative locations) are provided together. It becomes more and more difficult if pieces of the constraint or inducement package are left out. The responsibilities of the highway as a growth constraint or inducer should be better recognized, accepted and solutions sought within the context of the North Shore's future plans.

5. The choice given between a dying economy and one that exists for the accommodation of tourists may not fully take in what might be best for the North Shore area. To say that tourists must be accommodated or "the North Shore will become another playground for the wealthy, and occasional rectuse and a haven for the social dropout" is to ignore the growth potentials inherent in the existing population. Given the local people as an asset and beginning point rather than discounting them in the first place could set the stage for considerations regarding the stabilization of agricultural resources, development of new indigenous industries, development aid to support such new economies and the accommodation of tourists on the residents' terms rather than on the tourist industry's terms.

In conclusion we would urge you to work closely with both the Advisory Council on Historic Preservation, Louis S. Hall, Assistant Director, Office of Review and Compliance, 1622 K Street N.W., Washington D.C. 20005 and the Hawaii State Historic Preservation Office, Jane Silverman, Department of Land and Natural Resources, P.O. Box 621, Honolulu, Hawaii 96809 on developing your final EIS.

Thank you again for letting us review the draft EIS.

Sincerely,



Mitsashi Bill Sugaya
Assistant Director

cc: Jane Silverman
Robert H. Fox - National Trust Advisor

EVALUATION

NATIONAL TRUST FOR HISTORIC PRESERVATION (5/9/77)

1. Traffic engineering standards establish the need for highway improvements. The design of the improvements will take aesthetics into account, as suggested.
2. Major consideration is being given to the bridges through the Section 106 review process, the results of which will be reported in the supplemental Final EIS for the Princeville to Linnæa section.
- 3 & 4. There presently is access to the North Shore, though not for all types of vehicles. The DOT recognizes that growth can occur with an improved highway, but holds that it need not occur if existing environmental and institutional constraints are applied. This Final EIS acknowledges the local community's lack of confidence in these constraints. However, any alternative engineering solution to improving the safety of the highway will also remove its growth-inhibiting characteristics. Given the premise that a safe highway is the primary objective, the control of growth must rest on the environmental and institutional constraints.
5. An improved highway will accommodate whichever economic future the people of the North Shore choose, whether expanded agriculture, tourism, "no change", or any other option. The selection and encouragement of this future is the responsibility of the community and its locally elected officials. Recognizing the beneficial role that an improved highway can have, the County Planning Department has endorsed the proposed project.

TESTIMONY

RE, North Shore Belt Road
Date: May 1, 1977
From: Citizens Advisory Committee, Pua Back
Location: Public Hearing, Hanalei School

We have formed a committee of concerned citizens of Hanalei as well as representatives of the following groups:

- Kaui Historical Society
- Halei Corporation
- Princeville Community Association
- Maloli Hui 'in Churea
- Outdoor Circle
- Kaui Historical Foundation
- North Shore Advisory Committee
- Kumalo Ranch
- National Trust for Historic Preservation

The purpose of forming this committee is in response to E. Alvey Wright's request for citizen input. We applaud the Department of Transportation's awareness and sensitivity to the fragile nature of our area, as reflected in the Midway Environmental Impact Statement.

Our committee intends to meet on a regular basis. We specifically request that a system be set up whereby citizens can participate in the planning process, as opposed to responding to plans already laid.

Our second specific request is for an extension of the May 11 date before decisions are made. The EIS has been in our community for only two weeks in complexity is great, and for this reason we request more time to deal with alternatives.

As stated in the EIS, we too feel that the beauty of this area is a major state asset. ~~MAXIMUM~~ To consider this a scenic rural is in the best interest of the economy of Kauai, our tourist industry, and our local residents. We feel strongly that our views are clearly stated in the EIS and I quote:

"The Kuhio Highway is the means by which most people experience the North Shore, and is ~~thereby~~ in itself an important element of the area's scenic resource. After crossing the new Kallihual bridge, the visitor approaching the North Shore passes a sign stating "End of Improved Highway" and enters a very strong feeling of "entering". For the next 2.6 miles the view constantly shifts from open vistas of pasture land or mountains, to closed cuts and dense thickets. Even at comparative speed of 30 mph, it is difficult to take it all in."

testimony (2)

The EIS goes on to say:

"The proposed widening or realignment from Kallihual to the Hanalei Bridge would eliminate the present "entrance" to the North Shore. The loss of this visual node would be an unavoidable adverse impact." II-32

We still take the position that the scenic road should definitely begin at the end of the present improved highway at Kallihual, not at Hanalei Bridge.

In order to achieve this, we have, in a limited amount of time, come up with a number of alternatives: dealing with only the stretch of road from Kallihual bridge to Princeville entrance, we note that the DOT proposes two 11 foot lanes with four foot paved shoulders. We suggest two 10-11 foot lanes with only one shoulder, preferably of grass.

The DOT proposes to straighten three curves on this stretch. We propose a need to straighten only one of these curves.

We suggest that the ~~scenic~~ trees be topped, the utilities be put underground, and that adequate signs be posted both for information and for safety.

Because each section of the highway from Kallihual to Hanalei where the road opens is so unique unto itself, our committee to date has made only the above specific recommendations. We are requesting more time and your consideration of our continuing input.

Thank you

DIRECTOR'S OFFICE

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Citizens Advisory Committee
P.O. Box 81
Honolulu, Hawaii, HI 96714

Admiral E. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Re: North Shore Belt Road

Dear Admiral Wright,

I am including several enclosures so that you can have a full understanding of how this Committee is proceeding and the direction it is taking. 1. I have noted on the proposed agenda of our first meeting of April 20, some of what happened at that meeting. 2. The outcome of that meeting was clearly defined in our testimony at the Public Hearing at Honolulu April 20, which I enclose in full. 3. The agenda of our last meeting of April 26, with the notation that we got halfway through it and will use it as our agenda for this Wednesday's meeting as well. 4. A copy of our letter to Roy Wigram, Chief of Police, who attended our last meeting.

At the hearing we made two specific requests. Our second request was that, considering the complexity and impact of the DOT proposal, and the limited amount of time the community has had to review it, we have asked for an extension of the May 11 date to deliver our testimony. You have been very clear that your department needs some idea of what sort of time we require, so I will answer that first.

Road Improvements: I expect that we can deliver our suggestions on road improvements by mid-June, and hopefully sooner. We have about finalized our discussion on the segment from Kalihiwai to Princeville, which I am including here. We will start discussing the segment from there to the Hanalei Bridge next week, and from the Bridge to Hanalei town the following one. It seems that after the initial discussion it helps to have a week to consider our recommendations and their consequences, and that revisions occur at the next meeting. I expect a final review of the enclosed recommendations at our next meeting.

During this whole course of events we are compiling a list of requested safety improvements to the section of the road from Hanalei town to Heaia that we would like to initiate.

A primary refrain throughout our meetings is a request to upgrade the maintenance of the North Shore Belt Road.

Bridges: We request a delay in any decision on any of the bridges, contingent on our being able to react to the following events;

The Hanalei Bridge is the only known example of a Hamilton Chambers Bridge. The small reinforced concrete bridges are some of the earliest known construction of that type in the nation. Since these bridges seem to be of some considerable interest historically, the Kuaialo Historical Society has recommended to the State Preservation Office that that office ask the State Review Board to consider these bridges as well as the Waianua Bridges for the State and National Register. The results of this will affect our Committees thinking. We don't know when the Review Board next plans to meet, or what is on their agenda. We understand that they will consider these bridges a priority item if notified that time is of the essence, which should apparently come from you and the State Preservation Office.

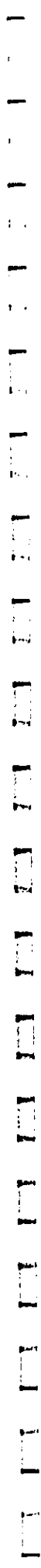
The State Preservation Office is awaiting receipt of the Bridge Replacement Study conducted by the Federal Highway Administration. They are recommending that this study be forwarded for review to the Historic American Engineering Review, within the Department of Interior. Once again, the report from this source will greatly affect the Committee's thinking.

Once these reports are made available to us, I would imagine that we will need about a month to develop our input. As you can see from our agenda, we will begin to tackle the many different factors involved in bridge discussion right away, but we can only develop general guidelines until we get the above information.

So, although that is not specific as to dates, it is the best we can do to define the type of extension we are requesting.

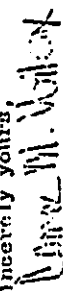
At our second meeting of April 27, we reviewed our recommendations for the segment of road from Kalihiwai to the Princeville Entrance. They are as follows:

- D 1. That there not be a continuous 1/2 foot shoulder on each side of the road. That instead there be occasional pullouts for breakdowns on each side of the road. You will note this differs from our original testimony.
- E 2. That these breakdown areas should be of grass rather than paved. We understand that there are several methods to create support foundations that allow grass cover.
- F 3. The cuts along the highway are what gives it its rural character. We wish these cuts to remain. In particular we wish to retain



the "entrance" out at the existing end of the improved highway.

- 4. There is unanimous agreement that two 11-foot lanes is excessive and unnecessary. We will re-discuss our recommended width at this Wednesday's meeting and get back to you.
 - 5. We recommend that the utilities be put underground for aesthetic and safety reasons.
 - 6. We recommend the following signs and markings:
 - a. Round reflector center lines, all the way to Haena.
 - b. White side lines, all the way to Haena.
 - c. An informational "Rural Scenic Road" sign at existing end of improved highway. Possibly a good Outdoor Circle Project.
 - 7. The Eucalyptus trees be topped.
 - 8. Curve re-alignment
 - a. Curve #1-at Poc Johnston's barn- does not need re-alignment.
 - b. Curve #2-"S" curve before powerline road- to be straightened makal of trees, not mauka as proposed. This will create a turn-out.
 - c. Curve #3- before Princevill Entrance- does not need re-alignment. In fact, this curve serves to maintain low traffic speed on the Princeville Entrance approach, which we feel is a positive.
 - 9. The EIS states that the pavement is structurally deficient. The surface could use improvement.
- Coming out of our discussion with Chief of Police Roy Hirao and officer Al Yoshita, who were very clear that the matter of structural safety standards did not fall within their department, and so were therefore speaking as laymen, we agreed to recommend the following:
- 10. That there be a storage lane to the Princeville Airport, to be defined by the existing fence.
 - 11. That Ho-Pass lanes be put at the road by the Airport immediately.
 - 12. That a traffic circulation plan for the new Shopping Center-Princeville Entrance be proposed, and a storage lane be planned to service this area.
- Looking forward to your response.

Sincerely yours,

 Carol H. Wilcox
 Citizens Advisory Committee

DIRECTOR'S OFFICE
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 HONOLULU DIVISION
 MAY 31, 1977
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Citizens Advisory Committee
 P.O. Box 81
 Hanalei, Kauai, HI. 96714

Admiral E. Alvey Wright, Director
 Department of Transportation
 869 Punchbowl Street
 Honolulu, Hawaii 96813

RE: North Shore Belt Road
 Dear Admiral Wright,

Thank you for your extension of June 15, and longer if necessary, so that the Citizens Advisory Committee can comment on the North Shore Belt Road.

We are submitting here our initial review of the Bridges. I am enclosing a copy of the newspaper article by Barnes Riznic on the historical interest of these bridges. Along with the enclosed article is also a letter from Bill Sugaya, of the National Trust for Historic Preservation.

Briefly, the philosophy of "it's old, ergo it must go" is no longer acceptable when dealing with old structures, especially when they have historic and/or cultural or aesthetic significance.

When the replacement of these structures, be they commercial buildings or homes or bridges, will create a secondary impact of a nature undesired by those affected, that becomes an equally important factor when considering replacement.

In the DOT proposal for the North Shore Belt Road, we have just this situation, fully documented, of historically interesting bridges, the replacement of which would have an adverse impact, as stated in the EIS, page 11-1. "The secondary effects of the improved highway on the quality of life on the North Shore has been a primary concern expressed by residents. The area is rural in character, but improvements to the highway could theoretically facilitate urbanization."

Since the EIS bases the need for replacement of the bridges on structural inadequacies, we searched the EIS, the Bridge Inventory Sheets, the Bridges Inspection Reports, and the Bridge Appraisal Reports for technical data to support that premise. We have pulled out all data on the bridges in the EIS and enclosed it, to illustrate how little of it is of technological nature.

(cont'd)

(cont'd page 2: comments on the North Shore Belt Road bridges)

This scarcity of technical data led the committee to conclude that the information available is not enough to justify replacement of the bridges.

Consequently, the committee asked a local registered structural engineer, Jim Adams of James Adams International Structural Engineers, Honolulu, to help us examine each bridge. We want to be clear that we are not commenting on one- vs two-lane bridges, or design of replacement, or existing design problems. We are simply concerning ourselves, as does the EIS, with the structural integrity and lifespan of each bridge.

WE ARE CONCERNED WITH DISCREPANCIES BETWEEN OUR FINDINGS AND THOSE IN THE EIS. WE PARTICULARLY DRAW YOUR ATTENTION TO THE POTENTIAL SUDDEN COLLAPSE ON SOME OF THE BRIDGES, AND STRUCTURAL SOUNDNESS OF OTHERS.

We are enclosing our report on each bridge, along with Committee comments. We hope that, after reading this, you will agree that it might now be a good time for your department and our committee to discuss these matters. We wish to invite you, Chuck Swanson, Mr. Harano, and possibly Clarence Yamamoto, to meet with us here in Hanalei as soon as possible, preferably before June 15th.

If you could call me regarding the above, at 826-6354, I will be able to make the necessary arrangements.

Sincerely yours,

Carol M. Wilcox

Carol Wilcox,
Chairperson, Citizens Advisory
Committee

cc: Edwin Nakano, County Engineer

P.S. In our letter of May 2 we made recommendations on road improvements from Kaliahwal to the Princeville entrance. We draw your attention to the enclosed comments on the same road, from the Princeville entrance through Hanalei town.

HANALEI BRIDGE

THE CRITICAL QUESTION WHEN DISCUSSING THE HANALEI BRIDGE IS: HOW MUCH OF THE LOAD IS CARRIED BY THE MORE RECENTLY ADDED (1934 or 1959?) WARREN TRUSS.

1. The 1912 Pratt Truss is badly corroded. The sway bracing and vertical member at panel 2-3 is damaged by collision.
2. The Warren Truss is in good condition.
3. The EIS does not refer to the condition or carrying capacity of the Warren Truss.
4. Ed Nakano, County Engineer of Kauai, is of the opinion that the Warren Truss carries the total of the live load. The Warren Truss does not carry the 1912 structure.
5. If Mr. Nakano's opinion is the case, then it is the conclusion of Jim Adams that the 1912 Pratt Truss has a minimal function at this time, if any.
6. If the Pratt Truss proves to be non-structural, the argument presented on page 1-9 of the EIS, i.e. that sand-blasting would weaken the supporting structure, is invalid.
7. If the Warren Truss is not carrying the entire load at present, it can be upgraded and reinforced to meet these requirements.
8. The Pratt truss can be preserved and maintained for aesthetic and historic purposes with cleaning, treating, and maintenance.
9. There is evidence of movement of the abutment on the North Princeville side.

COMMITTEE COMMENTS

SINCE THE EIS HAS 1. TREATED THE PRATT TRUSS AS THE SOLE SUPPORTING STRUCTURE
2. IGNORED THE STRUCTURAL CAPABILITIES OF THE WARREN TRUSS,
THE COMMITTEE CANNOT ACCEPT THE CONCLUSION AS PRESENTLY STATED THAT THE HANALEI BRIDGE NEEDS REPLACEMENT.
THE COMMITTEE RECOMMENDS AN ANALYSIS OF THE WARREN TRUSS.

cc: Ed Nakano, County Engineer

WAIOLI BRIDGE

OF ALL THE ELEVEN BRIDGES INSPECTED, THE WAIOLI BRIDGE APPEARS TO BE IN THE BEST CONDITION

1. Jim Adams' opinion is that this bridge is in good condition, that its lifespan is indeterminable if maintained properly.
2. There is surface scouring of the piers at the water line. This is non-structural in nature, and could be repaired with an epoxy paint.
3. The finishing cap and the parapet walls are damaged. This is not of structural significance, but should be sealed.
4. Water leakage observed at the old road level. The water drainage holes have been plugged. This is causing some corrosion.
5. There are cracks in the abutment.

COMMITTEE COMMENTS

OBSERVATION DOES NOT SUPPORT THE EIS CONTENTION THAT THIS BRIDGE HAS A THREE YEAR LIFE SPAN.

THIS COMMITTEE CANNOT ACCEPT THE CONCLUSION THAT THE WAIOLI BRIDGE NEEDS REPLACEMENT.

WE RECOMMEND FURTHER INVESTIGATION.

cc: Ed Nakano, County Engineer

THE WAIIPA BRIDGES

THE WAIIPA BRIDGES APPEAR TO BE IN CRITICAL CONDITION, REQUIRING IMMEDIATE ATTENTION. THESE BRIDGES COULD BE IN DANGER OF SUDDEN COLLAPSE, OR, ON THE OTHER HAND, THERE IS A POSSIBILITY THAT THE TENSION CAPABILITY OF THE CONCRETE ITSELF IS ADEQUATE TO CARRY THE ANTICIPATED LOADS.

Waipa Bridge-1974 increment

1. There are no weep holes on the bridge. Surface water is leaking through both parapets, causing extensive corrosion of the reinforcing.
2. The side of the bridge has exposed and corroded stirrups. The leaking water, as stated above, could be causing this damage.
3. There is a water pipe imbedded in the south side of the bridge.
4. The concrete piers are eroded at the waterline. The large gaps below the waterline are gaps between the piers which appear to be the way they were originally constructed.
5. The center beam is spalling and badly corroded.

Waipa Bridge-1912 increment

1. Some of the primary tension steel is badly corroded.

COMMITTEE COMMENTS

IT IS THE URGENT RECOMMENDATION OF THIS COMMITTEE THAT THESE BRIDGES BE IMMEDIATELY ANALYSED, TO VERIFY THE PRESENT LOAD CARRY CAPACITY AND FACTOR OF SAFETY.

WE CONCUR WITH THE EIS STATEMENT OF PAGE I-4 THAT REPAIR OF THIS BRIDGE IS POSSIBLE BY "PATCHING CRACKS, REINFORCING PIERS AND ABUTMENTS, AND ADDING SUPPORT WHERE NEEDED".

WE FURTHER RECOMMEND THAT THE IMBEDDED WATER PIPE BE INSTALLED ON THE OUTSIDE OF THE BRIDGE.

cc: Ed Nakano, County Engineer

THE WAINIHA BRIDGES

THE WAINIHA BRIDGES ARE IN SIMILAR CONDITION. WE WILL COMMENT ON THEM TOGETHER AFTER SEPARATING OUR INDIVIDUAL OBSERVATIONS.

WAIKOKO BRIDGE

THIS BRIDGE APPEARS TO BE IN CRITICAL CONDITION, REQUIRING IMMEDIATE ATTENTION.

THE WAIKOKO BRIDGE MAY BE IN DANGER OF SUDDEN COLLAPSE. OR, ON THE OTHER HAND, THERE IS A POSSIBILITY THAT THE TENSION CAPABILITY OF THE CONCRETE ITSELF IS ADEQUATE TO CARRY THE ANTICIPATED LOADS.

ENTRY UNDER THE BRIDGE IS EXTREMELY HAZARDOUS. CHUNKS OF CONCRETE FALL TO THE GROUND AT THE SLIGHTEST DISTURBANCE.

COMMITTEE COMMENTS

THE WAIKOKO BRIDGE IS HISTORICALLY VERY INTERESTING AS AN ILLUSTRATION OF THE FORCE OF THE TSUNAMI THAT THIS AREA IS EXPOSED TO. IT SHOULD BE PRESERVED AS AN EDUCATIONAL EXAMPLE FOR EVERYONE.

THIS COMMITTEE RECOMMENDS IMMEDIATE SHORING UP AND ANALYSES OR LOAD TESTING, TO VERIFY ITS FACTOR OF SAFETY.

ACCESS BELOW THIS BRIDGE SHOULD BE RESTRICTED IMMEDIATELY.

cc: Ed Nakano, County Engineer

WAINIHA BRIDGE #1

1. Some of the tension rods are seriously corroded.
2. The main steel beams show evidence of minor to moderate surface corrosion.
3. The abutments appear to be sound and have a base of approximately 12 feet more than the existing bridge deck.
4. The stream bed is partially blocked and the water lies stagnant.
5. Broken piers of the former bridge lie in the stream bed.

WAINIHA BRIDGE #2

1. Steel is moderately corroded
2. Chipping and painting maintenance is in progress.
1. Seriously corroded due to lack of maintenance and salt air.
2. Losing about 20% of one flange due to corrosion.
3. Abutments are approximately 12 feet wider than the bridge deck width.

WAINIHA BRIDGE #3

COMMITTEE COMMENTS

ALL THESE BRIDGES CAN BE REINFORCED FOR HIGHER TONNAGE AND A LONGER LIFE SPAN.

IF A CONTINUING MAINTENANCE PROGRAM IS INITIATED, AS RECOMMENDED IN THE BRIDGE INSPECTIONS SHEETS OF 1973, THE CORROSION CAN BE BROUGHT UNDER CONTROL.

THESE BRIDGES SHOULD BE ANALYSED TO DETERMINE THEIR EXISTING CAPACITY.

cc: Ed Nakao, County Engineer

FROM THE DRAFT EIS REGARDING SAFETY OF THE BRIDGES AND FORDS
HANAHEI RIVER TO LIHAHUI CREEK.

HANAHEI BRIDGE:

Pg. I-2: Constructed in 1912 and upgraded in 1936. In spite of major repairs in 1967 and 1973, serious corrosion of major structural elements has caused the bridge to deteriorate to a dangerous state. State DOT bridge engineers have estimated the remaining life of the bridge to be less than 3 years. In addition to the danger of collapse, the Hanahele Bridge has sharp right-angle approaches, a clear width of only 17 ft. and a posted capacity of 15 tons.

Pg. I-9: Design #1A is essentially equivalent to "repairing" the existing bridge, because the steel members of the bridge are so badly deteriorated. For example, some have only 20% of their original cross sectional area remaining, and when the bridge was repaired in 1973, it was not painted because sandblasting would have weakened it. For those reasons, it is probable that any new members can be welded on. The bridge is approaching failure at so many points that to "repair" it would require replacement of the entire truss.

Pg. II-1:it is very difficult for heavy construction equipment to get into the Hanahele-Haena area because of the weight restrictions on the bridges....Also, buses cannot cross the Hanahele Bridge....

Pg. II-2: New or repaired bridges, either one or two-lane would have higher load limits and would be able to handle tour buses, larger school buses, larger fire and farm trucks, refuse service trucks, construction equipment and other heavy vehicles.

Pg. III-5: If the Hanahele Bridge is not replaced or repaired, it will collapse. State DOT engineers have inspected (these) bridges and have estimated their remaining life to be less than 3 years. Replacement is inevitable, either now, with carefully coordinated architectural design and the presence of the existing bridge to carry traffic during construction or sometime in the near future as an emergency measure with no time to be concerned with appearance.

Table I:

Width, 17 ft. rail to rail	effective pavement width is several feet less.
Length, 117 ft.	
Load Restrictions, Limit 47	Theoretical (ideal condition) maximum at the yield point stress
" " " Design 015	is a standard 2-axle truck.
" " " Posted 15	14' between axles.

Table #3 of Design #4 (essentially equivalent to "repairing" the present bridge) is used. The speed dictated by "repairing"

Pg. 3

HAENA BRIDGE #1

1. The bridge has broken and been patched.
2. There are signs of settlement in the west abutment.
3. There is spelling under the bridge.

COMMITTEE COMMENTS

THE COMMITTEE NOTES THAT THE DOT HAS MADE NO PROPOSAL FOR HAENA BRIDGE #1. WE NOTE, ALSO THAT THE EIS ALTERNATIVES ARE REPAIR OR REPLACEMENT. JIM ADAMS STATES THAT THIS BRIDGE COULD BE REPAIRED, EVEN THOUGH DIFFICULT.

IT IS RECOMMENDED THAT THE LOAD CAPACITY AND FACTOR OF SAFETY BE VERIFIED.

HAENA BRIDGE #2

THIS BRIDGE APPEARS TO BE IN CRITICAL CONDITION, REQUIRING IMMEDIATE ATTENTION. THIS BRIDGE COULD BE IN DANGER OF SUDDEN COLLAPSE. ON THE OTHER HAND, THERE IS A POSSIBILITY THAT THE TENSION CAPABILITY OF THE CONCRETE ITSELF IS ADEQUATE TO CARRY THE ANTICIPATED LOADS.

1. Critical spalling underneath the bridge.
2. The steel is corroded beyond use.
3. The parapet walls appear to be sound.

COMMITTEE COMMENTS

JIM ADAMS CONSIDERS THIS BRIDGE TO BE PRESENTLY DANGEROUS AND UNSAFE. THE COMMITTEE IS CONCERNED WITH THE ABSENCE OF ANY STATEMENT BY BOTH THE EIS AND THE DOT ON THE APPARENT CRITICAL CONDITION OF THIS BRIDGE. WE WOULD BE INTERESTED TO KNOW IF THERE IS FURTHER ANALYSIS THAT WE ARE NOT AWARE OF.

IF THE BRIDGE, UPON ANALYSIS, PROVES TO BE UNSAFE, THE ALTERNATIVES APPEAR TO BE: 1. REPLACEMENT 2. RECONSTRUCTION 3. A FILLED CULVERT.

AS A TEMPORARY MEASURE WE RECOMMEND IMMEDIATE SHOWING UP AND POSTING OF A WEIGHT LIMIT.

cc: Ed Nakao, County Engineer

approaches would be 5 mph and stop and/or yield signs would be posted:

Pavement width would be 11 ft.
 Shoulder width " 3 "
 Minimum clear width 17 "

VALIOLI, VAIPA AND WAIKOKO BRIDGES, AND WAINIHA #1, #2, #3 BRIDGES

Pg. 1-2: Valioli Bridge has damaged parapet walls, and the piers are scourred at the water line.

Waipa bridge has cracks on the parapet walls, spalling of the concrete and badly corroded reinforcing steel. The concrete piers are eroded at the waterline. The bridge was constructed in two increments (1912 and 1934) with different widths, which creates a potentially hazardous condition.

Waikoko bridge: The 1946 tsunami caused the collapse of the east abutment of the bridge. The remaining west abutment is cracked and resting on boulders with large voids. There are large cracks in the parapet walls and spalling of a large area of the slab bottom. The reinforcing steel in the slab and the west abutment is corroded beyond use.

Pg. 1-3: Wainiha bridges. The tsunami of 1957 destroyed the bridges. The three existing bridges were constructed as an emergency project and were only intended as temporary crossings. In 1969, timber and steel members were added to strengthen the bridges. In 1973, the timber decking was replaced on all three bridges. Major latent repair raised the posted capacity from 10 to 15 tons. Many of the steel structural members on the bridges are now seriously corroded, and require replacement.

Pg. 1-4: Valioli, Waipa and Waikoko bridges are one-lane concrete slabs with one to eight spans. The alternative of major repair would differ for each bridge, but would generally consist of patching cracks, reinforcing piers and abutments, and adding support where needed. The repaired bridges would only have a life of an additional 15 years.

Pg. 1-5: Wainiha bridges #1, #2 and #3. Steel with timber decking. All three show evidence of serious corrosion and subsequent weakening of the steel structural members. The alternative of repairing the existing bridges is limited in practicality by the serious corrosion of the steel structural members. Major repairs would add only 7-10 years to their remaining life.

Pg. 11-6: If the Valioli, Waipa, Waikoko and Wainiha bridges are not replaced or repaired they will collapse. State engineers have inspected these bridges and have indicated their replacement to be less than 1 year. Replacement of these bridges is inevitable.

Table 1 Existing Stream Crossings Inventory

<u>Valioli Bridge with load restrictions</u>	Flat Slab, 16 ft. wide (a); 90 ft. long; Limit (b) 29; Design (c) #15; Posted 15; Date Const. 1912; Latest Repairs none.
<u>Waipa Bridge with load restrictions</u>	Flat Slab, 18 ft. wide (a); 138 ft. long; Limit (b) 27; Design (c) #15; Posted --; Date Const. 1912; Latest Repairs 1925.
<u>Waikoko Bridge with load restrictions</u>	Flat Slab, 17 ft. wide (a); 45 ft. long; Limit (b) 29; Design (c) #15; Posted 10; Date Const. 1912; Latest Repairs 1957.
<u>Wainiha Bridge #1 with load restrictions</u>	Steel truss-deck; 12 ft. wide (a); 42 ft. long; Limit (b) #1; Design (c) #10; Posted --; Date Const. 1957; Latest Repairs 1973.
<u>Wainiha Bridge #2 with load restrictions</u>	Steel Truss-deck; 12 ft. wide (a); 78 ft. long; Limit (b) #1; Design (c) #15; Posted 15; Date Const. 1957; Latest Repairs 1973.
<u>Wainiha Bridge #3 with load restrictions</u>	Steel Truss-deck; 12 ft. wide (a); 146 ft. long; Limit (b) #1; Design (c) #15; Posted 15; Date Const. 1957; Latest Repairs 1973.

HAENA BRIDGES #1 & #2

Pg. 1-7: show signs of concrete spalling and other decay and are structurally and geometrically substandard. The condition of Haena #2 is especially serious. They are just wide enough for two sub-standard traffic lanes (20 ft.) but in practice they function as one-lane bridges. Pg. 1-16.

Table 1 Existing Stream Crossings Inventory

<u>Haena Bridge #1 with load restrictions</u>	Culvert; 20 ft. wide (a); 22 ft. long; Limit (b) Design #1; Posted --; Date Const. 1912; Latest Repairs none.
<u>Haena Bridge #2 with load restrictions</u>	Culvert; 20 ft. wide (a); 24 ft. long; Limit (b) Design #1; Posted --; Date Const. 1912; Latest Repairs none.

MARCA FORD

Pg. 1-7: structures at high water and subject to washouts.

Pg. 11-6: If Haena and Marca crossings are not replaced they would continue to pose a hazard by constricting the highway from two lanes to one.

Best estimate of life remaining for Table 1 crossings.

LILAHUHI STREAM CROSSING

Pg. 1-3; The Lilahuli Stream Crossing shows signs of decay and is sub-standard in design.

Pg. 1-17; The major repair alternative would not alleviate the unsafe conditions created by a one-lane bridge without railings.

MAMOA FORD AND LILAHUHI STREAM CROSSINGS - Table I Existing Stream Inventory

MAMOA STREAM FORD: Concrete on boulders; 22 ft. wide(s); 15 ft. long; Limit NA; Design NA; posted --; Date Const. 1912; latest repairs none.

LILAHUHI STREAM CROSSING: Flat slab; 17 ft. wide (a); 15 ft. long; Limit NA; Design NA; posted --; Date Const. 1912; latest repairs none.

TABLE I Symbols

- a. Fail-to rail; effective pavement is several feet less.
- b. Theoretical (ideal conditions) maximum at the yield point stress
- c. "H" is standard 2-axle truck, 14' between axles. "HS" is a 2-axle trailer and semi, 14'-30' between axles.

Citizens Advisory Committee
P.O. Box 81
Halealea, Kauai, HI 96714

DIRECTOR'S OFFICE

JUN 3 10 40 AM '77

May 31, 1977

DEPT. OF
TRANSPORTATION

Admiral E. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

RE: North Shore Belt Road

Dear Admiral Wright,

This letter is a continuation of our committee's recommendations on road improvements, as initiated in our letter of May 2. We would like to re-emphasize that we are making recommendations premised upon this being a "Rural Scenic Road". This Rural Scenic Road Designation we feel is in the interest of, and does not conflict with, the safety, economic growth, and community desire.

A further premise, not clarified in our May 2 letter, is in response to the following statements in the EIS.

"The secondary effects of an improved highway on the quality of life on the North Shore has been a primary concern expressed by residents. The area is rural in character, but improvements to the highway could theoretically facilitate urbanization." (EIS II-1)

And, Further:

"...A basic condition of the projections was that by 1990, 69% of the residential units, 31% of the hotel units, and 100% of the commercial space planned for Princeville will be developed. In the process of traffic assignment, it was found that the existing highway does not presently limit the total volume of traffic to the North Shore, albeit its limitation of certain types of vehicles, since the capacity of the highway is not being exceeded." (EIS I-4) (Italics mine)

We think that development should be in response to need, and not in response to projected need.

Pg. 4

Projected need can translate very easily into creating need. A cart before the horse philosophy. Also, that a re-evaluation in light of the energy crisis and President Carter's proposals may be appropriate.

P

Our opinions on the road running from the Princeville entrance to Hanalei Bridge are as follows:

1. That signs representing a true hairpin curve be placed on the ascent and descent side of the road, marking the large curve at the Hanalei Bay Lookout.
2. That the mau on the west side of the road descending from the above lookout be trimmed and maintained, allowing a scenic view of the river and valley.
3. That the cut in the road mauka of the Hanalei Bay Lookout should be improved in a planting manner. The East Kauai Soil and Water Conservation Committee should be consulted on this.
4. The present road is of ample width. Additional shoulders should be discouraged as they would encourage turn-offs of the stop-and-go variety, creating a dangerous traffic situation.

Recommendations on the section of road from the Hanalei Bridge through Hanalei Town are as follows:

1. The first three culverts coming off the bridge should be widened. The need to widen the third culvert is of special importance.
2. Again, the present road is of adequate width. We recommend you do not put additional shoulders. There is ample room for distress pull-overs on the grass banks, which is how they are now used.
3. Although we don't know if this is in your jurisdiction, the present situation is that the crews are using herbicide right down to the edge of the Hanalei River. We recommend a set-back from the river to protect its waters from contamination.
4. The maintenance program in Hanalei needs to be upgraded. The grass needs to be cut more frequently and gravel fill needs to be placed in the numerous washed out areas along the shoulders.
5. In those areas where the ditch is close to the road, and poorly marked, vehicles frequently slip into the ditch. Although just keeping the grass trimmed is adequate in most areas, there are certain areas where additional protection is advised. We recommend that for additional protection telephone poles be laid horizontally between the road and the ditch in the following areas: across from the Post Office, across from the Tahiti Hui, and across from the Trader.

71 - 52

Citizens Advisory Committee
P.O. Box 81
Hanalei, HI 96714

June 12, 1977
-a-

Chuck Shannon, Deputy Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

RE: North Shore Belt Road

Dear Chuck,

I am writing pursuant to our conversations of June 8 and 9.

Our committee has submitted its testimony on the road from Kalia to Hanalei. We emphasize that we are discussing road improvements only, not the bridges. We are meeting with Ralph Daehler on the Hanalei to Kee section on the 15th. We will need a while to consolidate our recommendations, and so ask for an extension to July 1 to submit them.

We are proceeding on the assumption that we have been, or will be, granted this extension. We would, however, like to ask that this and future responses to our committee's proposals and requests be in written form. The present situation of verbal communication exclusively is putting me in the position of speaking for the DOT, which is inappropriate.

We would like to re-state that we have only begun to discuss the question of bridge replacement. That we have commissioned an independent analysis of the bridges which we delivered on June 3. That we now must have a response to our recommendations before we can tackle the questions of 1. replacement vs. restoration 2. one- vs. two-lanes 3. replacement-in-kind vs. new design. That we have been very clear that our requests for extensions are on road improvement recommendations, and that Bridge recommendations will follow only after serious dialogue with your department, as requested in our original testimony of May 1, 1977.

Sincerely,

Carol M. Wilcox

Carol M. Wilcox

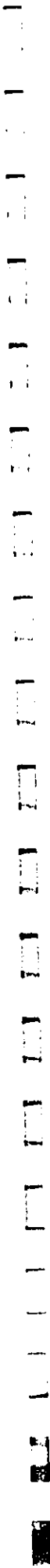
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Sincerely yours,

Carol M. Wilcox

Carol Wilcox
Chairperson, Citizens Advisory
Committee

Cc: Ed Nakano, County Engineer



Citizens Advisory Committee DIRECTOR'S OFFICE
P.O. Box 81
Honolulu, HI 96714

--2--

In order to protect this area from the above, and to set a precedent for other similar areas, this committee suggest exploring a "Rural Scenic Road" designation.

Our goals would be as follows:

1. To establish a new category of "Rural Scenic Roadways" for special areas, in which the Federal Government will be able to participate.
2. To have an ordinance passed on the State and/or County level to support a "Rural Scenic Road" for this historical, cultural, and scenic special treatment zone.
3. To support the local population's expressed and documented feeling that they wish to retain the life style of their home, that they live here by choice, that they wish control of their environment.

Within these broad goals, we at the moment recognize some more specific ones in regard to transportation and the North Shore Belt Road. We would be glad to discuss these with you.

We hope that the DOT will combine its efforts with ours to effect such a proposal. We feel that this is to the best interest of our economy, our tourist industry, our present population, and our future as a viable State.

We urgently ask for your response in this matter.

Sincerely,

Carol M. Wilcox

Carol M. Wilcox
Spokesman, Citizens Advisory
Committee

cc

7:5: 11:11:11

RECEIVED
JUN 17 9 44 AM '77
June 13, 1977

Admiral E. Alvey Wright, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright,

The Citizens Advisory Committee would like to work with the Department of Transportation on exploring the possibility of designating the North Shore Belt Road, from Kalihua to Ke'e, as a "Rural Scenic Road". The Historical, Cultural, and Scenic Importance of this area has already been recognized by the County in its designation as a Special Treatment Zone.

To the best of our knowledge, this idea of a "Rural Scenic Road" would be an innovative venture in the national sense. We feel that it has great merit, and feel that the State of Hawaii would be an appropriate one to initiate such an undertaking.

The Hawaiian had an ancient saying, which translates:

You must see Honolulu before you die
And then you may die in peace
For you have seen all the beauty there is.

The area we are dealing with is, beyond dispute, one of the most beautiful in the world. It has been often recognized as such by history's world travelers, and today by the Hawaii Visitors Bureau.

The area is further unique in that its beauty has been largely unblemished by high density development.

There are many factors that have allowed the character of this area to remain somewhat protected. Among these are citizen participation, continuous agricultural use, land ownership patterns, water table, Class AA waters, remoteness, exposure to tsunami and flood, and county planning. Not the least is restricted accessibility.

There have been inroads on all the above controls. And now the proposal is to make a major change in that one most effective control; that of transportation. The DOT proposal, if implemented, will create greater traffic, a far greater development capacity, and an irreversible negative impact on this very special area.

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CITIZENS ADVISORY COMMITTEE
P. O. Box 81
Honolulu, Hawaii 96760

SEEMING RETURN APRIL 20 - JULY 1, 1977

The Citizens Advisory Committee, concerned with the State's plans for extensive highway improvements to the North Shore Belt Road, met on a weekly basis since April to study, discuss and recommend what it feels are better ways to approach the North Shore's road problems.

We are exploring the possibility of designation of the highway from Kailua to Kaneohe as a "Rural Scenic Road." To do this, we have asked the State Department of Transportation to gather information on such a designation. We have written (and received a favorable reply) from Senator Daniel Inouye. A "Rural Scenic Road" designation, the Committee believes, is in the interest of safety, economic growth, and community desires.

The Committee recognizes the need for safety improvements, but it feels the historical and scenic North Shore is created in part by the rural highway servicing it. The D.O.T.'s recommended highway and bridge changes would change the total environment of Kuaia's North Shore.

Our reasoning, in part, is based on the following statements in the E.I.S. (Page 11-3), "...the area is rural in character, but improvements to the highway way could theoretically facilitate urbanization." (and) E.I.S. (Page 1-4), "... In the process of traffic assignment, it was found that the existing highway does not presently limit the total volume of traffic to the North Shore, albeit its limitation of certain types of vehicles, since the capacity of the highway is not being exceeded."

We think improvements should be in response to substantiated need, and not in response to unsubstantiated need. Projected need can be translated all too easily into creating a cart before the horse philosophy. The E.I.S. discussion of growth is unconvincing.

To help us study these problems, the Citizens Advisory Committee (which in itself consists of representatives from a variety of local organizations) met with the following special resource people: Adree Chief Roy Hirano, District Forester Ralph Dechler, and Jim Adams, a registered structural civil engineer from Oahu. Out of these meetings has come valuable information and suggestions which the Committee submitted to the D.O.T., including an in-depth report on the eleven Kuaia and Kaneohe bridges.

We have been assured that our reports and concerns would open a dialogue between us and the D.O.T. Of particular importance to us are the engineering discrepancies we have found in the E.I.S. on bridge conditions and our own findings. It is the opinion of our consulting engineer that most of the bridges are structurally sound and can be repaired (he also pointed out serious problems with two bridges). We concur with the opinion on the bridges of Harold Hill, Supt. Assistant Director, West Coast Office, National Trust for Historic Preservation that, "The original structure is important and a newly built replacement, even though a replica, should be considered only as a last resort." Besides to say, we are very concerned that the D.O.T. will not sit down with us as promised.

Carol M. Wilcox
Chairperson

CMW:ly

CITIZENS ADVISORY COMMITTEE
P. O. Box 81
Honolulu, Hawaii 96760

June 30, 1977

Admiral E. Alvey Wright
Director
Department of Transportation
809 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright,

The Citizens Advisory Committee is very disappointed that you chose not to sit down with us and discuss the problems of the Department of Transportation's Kuaia North Shore Belt Road project. We have been participating in this meeting, promised by your Deputy Director and even joined final recommendations on the bridges until we could discuss your engineering assessments.

This Committee would have been aware of the road and bridge problems if the Department had been able to discuss them with us. We would like to suggest that the D. O. T. develop new guidelines for discussion with groups and individuals truly concerned in giving input.

We urge you to reconsider the suggestion of discussion on road and bridge changes with members of this Committee. As we stated in our original testimony of April 20 and repeated for the past two months, an informative dialogue should be part of the process of public review of your plans. We were given assurance by your Deputy Director that we would have such an opportunity.

In an inclosing the Committee's completed recommendations, a summary sheet, as well as a copy of a letter we received last week from Senator Inouye.

Yours sincerely,

Carol M. Wilcox
Chairperson

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DEPARTMENT OF TRANSPORTATION
JUN 6 8 10 AM '77

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United States Senate
WASHINGTON, D.C. 20540

June 21, 1977

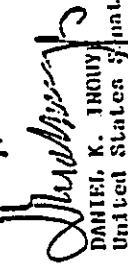
Ms. Carol M. Wilcox
Chairperson
Citizens Advisory Committee
P.O. Box 81
Hanalei, Hawaii 96714

Dear Ms. Wilcox:

I wish to acknowledge receipt of your communication of June 11, 1977, concerning the possibility of designating the Kaula North Shore Belt Road as a "rural scenic road." I personally believe that such a formal designation would indeed significantly help to preserve Kaula's beautiful scenic heritage. Accordingly, I have contacted Mr. Gary Everhardt, director of the National Park Service of the U.S. Department of the Interior, to obtain his view on this possibility.

As soon as I hear from Mr. Everhardt, I shall be sure to recontact you.

Regarding the possibility of my visiting with your association, I would suggest that you contact Mr. George Kawakami, my local Kaula agent, to arrange a mutually convenient time.

Aloha,

DANIEL K. INOUÉ
United States Senator

DKI:vqbf
cc: George Kawakami

CITIZENS ADVISORY COMMITTEE
P. O. Box 81
Hanalei, Kaula, Hawaii 96768

June 30, 1977
-b-

Admiral E. Alvey Wright
Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Admiral Wright:

HANAIEI BRIDGES

The Hanalei bridge has tremendous character that cannot be lost and should combine with good bridge design. It could be considerably more attractive with proper repair, and then a continued maintenance program.

This bridge is a fine example of a Warren Pratt Truss reinforced with a Warren Truss. It is historically interesting in that it may be one of the few remaining examples of a Hamilton and Clements bridge. Hamilton and Clements was a major bridge manufacturer based in New York at the turn of the century. The fact that this bridge was designed and manufactured in New York, and transported 5000 miles, in 1912, to Hanalei, where it was assembled and finished, gives it added historical interest.

We recommend the following action on the Hanalei bridge:

1. THE HANAIEI BRIDGE SHOULD BE REPAIRED AND MAINTAINED. We feel that, of all the bridges, it is most important to retain this bridge. We believe the State engineering analysis has been deficient.
2. We refer to our statement in paragraph 16, June 30, regarding a need for an ordinance to restrict certain kinds of traffic.

The Waialeale, Waipua, Waialeale Bridges, the Heaheua #1 and #2 Overhead-Bridges, and the Kaula and Hanalei bridges are historically interesting as some of the very earliest known examples of steel reinforced concrete bridges in the West. Preservation leaves us with some remarkable examples of turn-of-the-century technology that can be retained. We recommend retaining each of these bridges as a vital part of our historical, cultural and scenic heritage.

HANAIEI BRIDGE

1. THE HANAIEI BRIDGE SHOULD BE REPAIRED AND MAINTAINED. Of all the concrete bridges, this one seems to be in the best condition, and in fact there is no apparent structural problem.
2. To improve visibility, the approaches should be built up.
3. The sides of the Waialeale bridge need resurfacing repair, as there is spalling.
4. The wavy bales should be re-roped to allow the standing water to run off.

KAIPA BRIDGES 1012 and 1034

THE KAIPA BRIDGES SHOULD BE RETAINED AND REPAIRED. Our Structural Engineer and the E.I.S. assure us that this is feasible.

WAIKOKO BRIDGES

WE REPEAT OUR STATEMENTS OF JUNE 3 REGARDING THAT LOAD ANALYSIS OF THIS BRIDGE BE UNDERTAKEN IMMEDIATELY. WE AGAIN REQUEST THAT ACCESS UNDER THE BRIDGE BE RESTRICTED IMMEDIATELY, as it is highly hazardous, due to spalling of the surface.

THIS BRIDGE SHOULD BE RETAINED AND REPAIRED.

MAHUA BRIDGES #1, #2, #3

THESE BRIDGES SHOULD BE RETAINED AND REPAIRED. The primary need here is cleaning and treating, with a continued maintenance program thereafter. The existing corrosion is primarily a result of a lack of maintenance.

HAENA BRIDGES #1 and #2

WE AGAIN REQUEST IMMEDIATE LOAD ANALYSIS OF HAENA BRIDGE #2. If it is as critical as it appears, we recommend filling with a pipe culvert.

HAENA BRIDGE #1 SHOULD BE RETAINED AND REPAIRED.

HAENA BRIDGE #2 SHOULD BE RETAINED AND REPAIRED.

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CAM:PP

MANOA STREAM FORD

THE MANOA STREAM FORD SHOULD BE TACT AS IS.

KAUNOAIA STREAM CROSSING

WE REQUESTED MAINTAINING AND REPAIRING AS STATED IN THE E.I.S.. WE DO NOT REQUEST WIDENING.

We would like to emphasize that our concern with the Makoko Bridge and Kauna Bridge #2 is extreme. A lack of immediate analysis of these bridges may be considered negligence on the part of the D.O.T. We would like assurances that this will be done, as a matter concerning the safety of those who use them.

The further benefits of our recommendations is a financial savings, at a time when the State is severely in need of economizing. We are using the facts as listed in the E.I.S. We can't find any material to justify these estimates, and in fact they don't logically correspond to the apparent repair and replacement problems we have noticed. So, although we are using them, we do not necessarily agree with them.

At the very least, however, the State can anticipate the following savings of our proposal over the D.O.T. proposal for the bridges:

D. O. T. Proposal	\$1,680,000
Repair Proposal	957,000
SAVINGS	\$2,713,000

We understand that there would be greater federal participation with the D. O. T. proposal, so that the State would pay considerably less than the total; however, federal monies are still our tax dollars, and should be wisely spent.

We further note that a repair program will employ local Kama'i people, whereas the D. O. T. proposal for replacement will employ off-island and out-of-state personnel for the complex problems that replacement presents.

Sincerely yours,

Carol M. Wilcox
Carol M. Wilcox
Citizens Advisory Committee

CITIZENS ADVISORY COMMITTEE
P. O. Box 81
Honolulu, Hawaii 96708

June 30, 1977
"C"

Admiral E. Alvey Wright
Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

RE: Kaunoi North Shore Belt Road

Dear Admiral Wright,

The Citizens Advisory Committee toured the above mentioned road from Lanalei to Kei with Ralph Buchter, of the Forestry Department, and East Kauai Soil and Water Conservation member, on June 22.

Following are our recommendations on the segment of road from Lanalei to Kei. We note that the D. O. T. proposes to replace all 10 bridges, but has made no road improvement proposals. We recommend that the bridges be repaired, not replaced, and that road improvements be initiated as follows:

1. Resurfacing of the entire road from and including Lanalei to Kei to shortly before the Wet Cave. Resurfacing to follow the alignment and width of the existing road.
2. Better pull-offs at all the bridges.
3. Horizontal telegraph poles set into cement pillars, approximately 2-2 1/2 feet off the ground, for all new and replaced guard rails.
4. Guard rail on the Kaunoi-Kaunoi side of the Waikoko Bridge.
5. Signs indicating severe blind curve at Waikoko and again at Kaunoi.
6. Fill in pot holes along side of entire length of road. Waikoko and Kaunoi are particularly bad.
7. Create a look-out and small park at Lanalei point where the road cut is. See proposal by Ralph Buchter.
8. Be more discrete in herbiciding. There are numerous dead trees along the road, due to past herbiciding. These should be cut and removed. All stream adjacent areas should be restricted from herbiciding. Compensation should be given to "striping" all of these waterways.
9. Selective trimming of trees for viewing and aesthetics.
10. Planting to reduce erosion. Consult Ralph Buchter.

R. A. Wright
page two

June 30, 1977

11. Big Waikoko is one of the few remaining areas with lava as the primary vegetation. The encroachment of Iii, Java Plum and guava is becoming a threat to the Pandanus. We recommend extensive removal of these plants. Consult Ralph Buchter.
12. Check rock walls and build up where needed on the Kaunoi side of Waialeale Bay.
13. Kaunoi Park is a series of related problems presenting a hazardous and unsightly situation. The vendors and the parking at the Dry Cave create a terrible traffic situation, not to mention a visual blight, and both should be prohibited. The new pavement around the tree at the Dry Cave is an abomination, and should be removed. Guard rails should be placed so that vehicles cannot pull into the area; there is parking available across the street. There is a tremendous lack of sensitivity operating in this area at the moment. The beach parking lot is congested. It is adequate in size, but some planning is required. We recommend guard rails along the road, with two or three access openings, so that cars could park in two rows instead of the present one row and double parking situation. The parking lot surface should be upgraded with crushed rock, not paving. There are 20 or more garbage cans, many without lids and all right on the roadside. They are unsightly and unsanitary. We recommend a central storage area and more effective containers.
14. Kaunoi State Park - - which is under development. We recommend that the existing road be discontinued except for emergency use from a place before Waialeale; and that Waialeale, Kei, the beach, camping and picnicking areas be reached by foot, from a crushed rock surface parking lot.
15. We also urge that the old lava fields access from Waialeale be returned to lava cultivation and/or be preserved as a bird sanctuary. We note that the State Park system must feel that this area is worthy of very special treatment, since they are putting over two million dollars into the development of this park.
16. Waialeale Bridges. Thin out them to improve visibility and view. Some attention should be given to the blocked up stream and the potential flood hazard this might create.
17. We also recommend, either their removal or within a "Natural Science Road" designation, that the four bridges should be restricted from traveling this road. The critical question is one of safety, and the bridges are a danger on these roads. They cannot navigate the road without going over into the opposing lane. The bus itself is wider than the road in certain areas, and in other areas it can't navigate the turns without being a hazard to other vehicles. There is no area where there is room for a bus to stop and allow the

K. A. Wright
page three

June 30, 1977

visitor to enjoy the views - without again creating a hazard, plus taking up the total of the view-site parking area available. As an alternative, we feel that the quality is better preserved for visitor, and resident, by a mini-bus or limousine service.

We recognize that not all the above recommendations are within the D. O. T. jurisdiction. We ask that you send these on to the proper agencies.

Sincerely yours,



Carol M. Wilcox
Chairperson
Citizens Advisory Committee

CAM:WP

FJ - 58

EVALUATION

NORTH SHORE BELT ROAD CITIZENS ADVISORY COMMITTEE
(5/1/77, 5/2/77, 5/31/77a, 5/31/77b, 6/12/77a, 6/12/77b, 6/30/77a,
6/30/77b, 6/30/77c)

Note: The preceding letters were submitted within the time extension granted to the Committee. There has since been ongoing correspondence between the Committee and the State and Federal highway departments dealing primarily with the proposed improvements to the Princeville to Haena segment. This correspondence and related comments in the preceding letters, will be evaluated in the supplemental Final EIS for that section of the highway. The comments evaluated here relate to the Kailiwal to Princeville section.

- A. A single shoulder would not provide an adequate pullout for disabled vehicles.
- B. All three curves require varying degrees of improvement, some of which can be accomplished within the present right-of-way.
- C. The trees will be trimmed as required. The high cost of installing and servicing underground utilities makes this an unfeasible measure in this case. The signing needs of the highway is being reviewed.
- D. Occasional pullout areas, in lieu of continuous shoulders on each side of the road is not appropriate. This type of design is below generally acceptable minimum standards.
- E. Without almost weekly mowing, which would be too costly, a grassed shoulder stabilized with fallow tile or a similar method would appear to be no shoulder at all, and would not serve the objective of providing security to the driver.
- F. Box cuts will be considered, but the present road cuts can not be retained if the highway is to be widened and provided with shoulders. The present "entrance" might be replaced by special landscaping, but to leave this bottleneck between two improved sections would be very hazardous.

4

G. The pavement width should be consistent with generally accepted safety standards. Landscaping can be used to obtain an appropriate visual edge, and create an awareness of speed.

H. Underground utilities would improve the visual qualities of the area, but because of the high cost, this proposal will need to be further evaluated. The estimated cost for overhead utilities is \$120,000 compared to \$580,000 to relocate them underground.

I. a. This recommendation has been implemented.

b. Edge lines are not generally recommended for road widths less than 20 feet wide inasmuch as this can result in a hazard on narrower pavement widths.

c. This type of informational sign is presently considered non-conforming. (See Q, below)

J. Rather than topping the trees, it is recommended that the trees be trimmed on the roadside up to a limited height. The cost to top would be considerably more than the \$25,000/tree estimated cost if only trimming is done.

H
I
CO

K. a. Both the horizontal and vertical curves at this location are substandard with regards to sight distance.

b. The inset diagram for curve #2 was not published correctly in the FIS. The inset diagram should have been turned 180 degrees.

c. A horizontal curve that can be negotiated safely at the design speed is necessary and compatible with your request of Item 12.

L. The pavement is definitely in need of structural reconstruction. If only resurfacing is done, it would be a superficial treatment to the major problem which exists below the black top.

M. Traffic to the Princeville Airport does not warrant a left turn storage lane. The developer of the airport may, however, install a left turn storage lane at his own cost under a work permit which we would be glad to issue.

N. The suggested no-passing lines have been implemented.

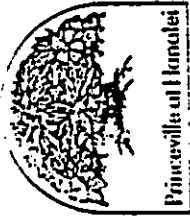
O. If this is necessary, the developers of this enterprise should be responsible for installing this improvement.

P. The traffic projections made by the State Department of Transportation are conservative, in that they reflect only a portion of the total Princeville complex being developed in the 20-year projection period. This is generally the best approach when it is felt that projections by others are too high or where there is a great amount of uncertainty in the ultimate development. The conservative nature of the traffic projections (made in 1975) is demonstrated in Figure 4 (page 1-13 of this Final FIS), which has been revised to show actual 1977 traffic (ie. two years after the projections were made). The 1977 ADT on the Kallitwat-Princeville section was near or above the 1978 projected value, and the actual 1977 traffic on the Hanalei-Haena section was higher than the 1980 projections. However, these facts notwithstanding, the primary justification for the proposed improvements is safety, not traffic increase. The fact that a safer highway will also have a greater capacity is unavoidable.

Q. The route in question has previously been designated on the State's Scenic Highway network. However, as it is also a Federal-Aid Primary Highway serving as a rural interior arterial it should conform or have the potential of conforming to safety standards consistent with anticipated average operating speeds, average daily traffic, and other related characteristics.

R. See Q, above.

S. That the recommended widening will change the appearance of the Kallitwat to Princeville highway segment is clear. However, this impact is mitigatable through careful design and landscaping. The recommended highway widening will not induce growth, and will therefore not change the total North Shore environment. Likewise, the interim repair of the Hanalei Bridge will not be growth inducing since the capacity will not be increased over what it has been in recent years. The growth inducing impact of ultimate restoration or replacement of the Hanalei Bridge will be discussed in the Princeville to Haena supplemental Final FIS. The primary need for the improvements is safety, which has been substantiated.



May 4, 1977

RECEIVED DIRECTOR'S OFFICE

JUN 6 1 59 PM '77
MAY 26 1 11 PM '77

U. S. Dept. of Transportation
Federal Highway Admin., Region Nine
677 Ala Moana Blvd., Suite 613
Honolulu, Hawaii 96813

DEPT. OF TRANSPORTATION
STATE OF HAWAII
DIVISION OF TRANSPORTATION

Atten: Mr. Ralph T. Segawa, Division Administrator
Subject: Kaula'i Belt Road, Kalihwai to Ikaena Section
(FAP Route 56, Kaula'i, Hawaii) - Draft Environmental Impact Statement.

Mr. Et Nakano
District Engineer
Department of Transportation
State of Hawaii
Honolulu, Hawaii 96766

Dear Mr. Nakano:

This letter is submitted in response to your request for input on improvements to the Kalihwai to Ikaena section of the Kaula'i Belt Road. Princetonville Corporation is generally in agreement with the alternatives recommended by the Department of Transportation in the recent draft EIS submitted for review from Kalihwai to Princetonville. We feel there is a need for the eleven foot travelling lane and four foot shoulders delineated in alternative W-2. It is hoped that the pavement can be structurally improved and that the shoulders when stabilized, can be grazed. Three bad curves exist in this stretch.

We feel that it is aesthetically and historically important to rebuild the bridges in a historical flavor, hence, would have no objection to design I-A of the Hanalei Bridge. We would prefer single lane bridges from Wainiha to Ikaena.

We also request that turnout lanes be provided at the entrances to Princetonville, Princetonville Center and Princetonville Airport. We would request further time to study the specific route design alignment and details when finalized.

Yours truly,

David A. Carswell

David A. Carswell
Executive Vice President

DNW

15. Ala. K. Lani, Honolulu 96711 Telephone: 808/825 6561

Gentlemen:

The following comments regarding the above subject were prepared for the Ikaena Club, Kaula'i Chapter, for life of the land and for myself as a resident and land owner on the North Shore of Kaula'i.

ACCIDENT STATISTICS: Pg. I-3, Draft EIS gives accident statistics for the unimproved section of Kaula'i Highway in the years 1973 and 1974, and says the accident rate in the project area is 3 to 12 times higher than the rate for segments of Kaula'i Highway that have already been improved. In Table 2 the accident rate for the areas with the highest accident rates (Hanalei Bridge to Aku Rd. and Waioli Bridge to Wainiha) are given for 1975, but not for 1973 and 1974. The area with the third highest accident rate, (Wainiha Rd. to Ikaena) has the accident rates for all three years, 1973, 1974 and 1975. Why weren't the statistics listed for Sections D2 and D4? According to Kaula'i Chief of Police Roy Hiram, the section of the road, Kalihwai to the Hanalei Bridge had a speed limit of 50 mph in 1973 and 1974, whereas after 1975 the speed limit was reduced to 35 and 25 mph. The speed limit was extreme for the area.

It is obvious that the areas with the highest accident rates in 1975 (Hanalei Bridge to Ikaena) are the areas where the greatest number of people are concentrated and where there is the most traffic congestion ALONG THE SIDES OF KAULA'I HIGHWAY. There are only three houses on the highway between Kilauea and Hanalei Town and the only side roads with the exception of cattle crossings, are at the entrance to Princetonville Airport, Ka Ikaena at Princetonville and Plantation Drive. None of these areas are places where cars are parked on the roadside.

Between Hanalei Bridge and Ikaena there are many houses, some tourist cottages, stores, shops, restaurants, churches, two gas stations, the post office and many other places where people congregate. Off-street parking is severely limited at the grocery stores, gas stations, the restaurant and some of the shops. Cars and trucks parked along the highway often protrude onto the highway and are parked in a haphazard manner. During the day there

are many residents and tourists walking along and crossing the highway. The accident occurrences (Fig. 3 of the EIS) do not tell us if the accidents involved cars, bicycles or pedestrians. Were there serious injuries to passengers, drivers and vehicles, or were some of them merely dented fenders? How many were due to cars sliding into the ditch on the mauka side of the highway across from the only "night club", Tahiti Nui?

According to news items in the Garden Island paper between 1/24/76 and 4/20/77 there were 14 accidents on Kua'i involving 13 fatalities and various injuries ranging from critical to minor. Of these 14 accidents, nine were one-car accidents of which six crashed into utility poles or guard rails, or slid into ditches. In those accidents there were four fatalities. Only 2 of these 14 accidents happened on the North Shore and in one of these the driver and three passengers were treated for minor injuries and released.

As stated in my comments in the EIS, A-81, the number of statistics involved in accidents on Kua'i is so small that they can be skewed by a single accident. In answer to written comments by the Outdoor Circle, Kua'i Chapter, a letter from the office of the State DOT Director says: "We feel highways should be designed to accommodate all drivers in relative safety, including reasonable provisions for human error due to drinking, drugs, personal problems, etc." (Emphasis added).

In a letter to the editor of the Garden Island, Cayetano Gerardo, Administrative Assistant to the Mayor of Kua'i, said: "I have received numerous complaints concerning the safety of our highways and roadways throughout the Island of Kua'i. The Government is charged with the responsibility of making our highways and roadways as safe as possible. However, this function is limited to a percentage of the total safety picture. The greater percentage of safety belongs with the people who use our highways and roadways and this is to say that safety is really the responsibility of people themselves. It is my contention that no matter how safe we in government make the highways and roadways, it is still the responsibility of the people to provide and practise full safety."

BENEFIT/COST RATIOS: On Pg. I-18 the EIS discusses these figures for the Kalihwai to Princeville Alternatives 2, W1 and W2 and from Princeville to the Hanalei Bridge for Alternatives A, W2 and W3. These figures are meaningless to the general public because no information is given on how the ratio was achieved. Is the unique rural beauty of the North Shore considered and if so, what is it worth? Benefit/costs were not given on proposed improvements from Hanalei River to Hanalei Town, nor on the proposed improvements to the bridges and ferds.

TRAFFIC PROJECTIONS AND PRINCEVILLE: The EIS says (Pg. I-24) B that traffic projections indicate a significant increase in future

traffic due primarily to the development of the planned community of Princeville. Also contributing to traffic increases are the development of other areas of the North Shore, the normal growth in population and vehicle usage, changes in travel patterns and an expected increase in visitor use".

However, in answer to the suggestion from the Kua'i County Engineer (Pg. A-50) that road widening and shoulders wherever possible should be considered in the Hanalei Town to Maena section, the State DOT reply to the Mayor of Kua'i is: "D. Hanalei Town to Maena: From a highway capacity viewpoint, traffic projections do not warrant anything more than our proposed bridge replacements. Widening of the existing road was considered in our earlier studies. Unfortunately, the low traffic projections and high estimated costs made this alternative economically unfeasible".

Further on (Pg. II-1 of the EIS) is: "The Princeville area is the only part of the North Shore that is suitable for development, and an improved highway would benefit this development - providing that the scenic qualities of the North Shore are not degraded by the highway". (Underlining added). At the August 13, 1975 public information meeting, Mr. Donn Carswell, Project Manager for Princeville stated that Princeville neither wants or needs the proposed improvements.

HIGHWAY IMPROVEMENTS AND THE NORTH SHORE PLAN: As further justification for the proposed highway and bridge improvements on Pg. I-21 of the EIS, it is stated: "The Development Plan (North Shore) assigns first priority to improvement of the Kuhio Highway to Hanalei including a new bridge over the Hanalei River". (paren. added).

This statement is to be questioned. Throughout the North Shore Development Plan and its accompanying Socio-Economic Prelude is reiterated over and over the need to retain the scenic beauty and the low-keyed life style of the residents of the North Shore. Regarding the highway, the plan contains the following:

"The Development Plans recognize the State's alignment for Kuhio Highway from Kalihwai Stream to Maena but recommends re-alignment in two places. From Waioli Stream to Waikoko it is recommended that the existing road alignment remain and be improved and the proposed alignment further inland be considered as a less desirable alternate route. (Pg. 101). (Underlining added).

According to the Public Hearing Fact Sheet for Kua'i Belt Road Kalihwai to Maena, April 20-21, 1977, planning studies were initiated for various highway sections between Kalihwai and Waioli in 1966. The North Shore plan is dated Sept. 30, 1972 and the Socio-Economic Prelude, May 1972. The study began in 1971 and the plan was enacted into law Dec. 1974. The authors of the plan were acknowledging but not necessarily recommending the plans of the DOT.

Other remarks in the North Shore Plan regarding the highway are:

Pg. 19. "The road alignment from Hanalei to Maena should remain essentially unchanged to retain the scenic views of the coastline. The only exceptions would be Waipa and Wainiha Valleys, where a more mauka alignment would allow the coast road to become an access road to the ocean".

Pg. 20. "All roads should be improved but not to the detriment of the landscape or result in the elimination of the rural character of the North Shore".

Pg. 23. "The movement pattern structures the environmental experience. The most important characteristics of that pattern in the North Shore area is its basic simplicity and directional control...simple in that alternate routes are not available and that the logic of both location and direction are readily apparent...controlled in that access and egress are along the same route (although the experience is different) and that there is termination rather than continuity. The acquired design logic is profound and effective".

"The speed of movement and sequence in which the experience unfolds is as important as the route and direction. Both currently contribute to the overall experience, although new road alignments could begin to give an undesirable uniformity to travel speeds". (Underlining added.)

HIGHWAYS AND GROWTH CONTROLLING FACTORS: The EIS says (Pg. II-1, A.): "Also, buses cannot cross the Hanalei Bridge so there is presently no demand in Hanalei for the type of tourist concessions that cater to large tour groups."

As a matter of fact, the big tour buses do cross the Hanalei Bridge in spite of the weight restrictions. Some of them even go as far as Lualaba. The EIS goes on: "The present inadequacies of the highway are therefore growth controlling factors. However, the highway is not the only (nor the best) growth-controlling factor operating on the North Shore. From the Hanalei River Bluff to the end of the road at Maena there is virtually no section of the North Shore that is not subject to flooding, tsunami inundation, unsuitable soil or steep unstable slopes...The County zoning codes and building ordinances (eg. the 'North Shore Development Plan Ordinance') recognize these limitations and restrict development accordingly..."

The zoning codes in the North Shore Development Plan are (and refer to) the same codes of the County of Kauai in the areas of restricting development in flood plains, tsunami-prone areas and slopes. However, the codes are not so strict as to stop development in these areas and numerous exceptions have already been given (including two sub-divisions). Obviously widening the highway and the bridges would accelerate this process.

Several times in the EIS reference is made to the North Shore Plan and the County zoning ordinance in the context of growth control, ignoring the fact that exemptions can be made to zoning codes. In a special "Limo duck" session (12/22/77), the County Council of Kauai voted 5-2 to approve the upzoning of 2.9 acres of land on Kuhio Highway in the heart of Hanalei Town, from Neighborhood Commercial to General Commercial. The upzoning was approved by the Mayor and no reasons were given for this action. To quote the Garden Island of Dec. 27, 1976: "The Planning Staff, the North Shore Advisory Council, the University of Hawaii, the Health Dept., among other bodies opposed the General Commercial. Not one person spoke for it--not ONE. Hundreds opposed, by letter, by petition and in person". (See attachments No. 1, 2, 3, 4 and 5.)

The zoning ordinance says: "General Commercial shall include uses and services which are less frequently used and which are normally supplemented by and dependent upon the aggregate activities of a central commercial center serving several residential neighborhoods and which are less compatible with the environmental qualities of residential districts".

This upzoning can lead to pressure for further upzoning. Zoning is not the province of the DOT but the following reply to residents of the North Shore in regard to their concerns about development (EIS, Pg. II-2) is an irresponsible rationalization: "...the highway itself would not induce growth or development in the area. Growth in tourism is a 'problematic' impact because many local residents view tourism as an intrusion of the privacy and resent being 'on display' to the large tour buses; on the other hand, tourism is an important element of Hawaii's economy and its increase is viewed by other Kauai residents as very desirable. (Telling North Shore residents that tourism is good for them is also outside the scope of the DOT's responsibility). There are many residents of Hawaii who do not want to see their main and perhaps ultimately, only industry, become tourism.

It is a recognized fact that highway construction and improvement does accelerate growth. As the EPA, San Francisco Agency has said: "Land use and transportation planning are mutually dependent with each serving to fulfill the prophecies of the other. Population trends are the foremost consideration in transportation planning. Transportation, particularly highways, is one of the major determinants of land use. The argument presented is that a highway is needed to serve future traffic as well, traffic that to a large extent is created by the very existence of a highway".

Highways and improved highways cause land values to rise. The Socioeconomic Prelude to the North Shore Development Plan says: "As land values rise, so do property taxes which are levied on an ad valorem (in proportion to value) basis. At some point, the combination of higher land value and increased taxes is likely

to lead the landowner to sell his property, or at least convert its use... Generally this is beneficial to society as more compact development reduces costs of constructing, maintaining and using roads, schools and other public services. A hotel or a service station placed in the midst of rural land will cause surrounding land speculation and expectations of future gains. The landowner is caught in the middle. His property taxes are being used to provide or improve public services he may already consider to be adequate... Seemingly the only way to emerge a winner is to give up, sell the property and reap the appreciation in land value. However, for the many farmers and residents with lease holds, even this solution is not available... the lease holders are paying for property they do not own and as the property values escalate the taxes go up". (Socioeconomic Prelude, Pg. 39).

On Pg. II-1 of the EIS is: "With an increase in commercial facilities at Princeville, growth in tourism can be expected". There are several references to Princeville in the EIS. If the highway plans are primarily to benefit Princeville perhaps that is why there are no benefit/cost figures in the EIS on the plans for that part of the highway from the north side of the Hanalei River to Limahuli Stream crossing.

In response to my comments of March 30, 1976 (incorporated into the Draft EIS) regarding development at Princeville, the DOT replied (A-86): "Should substantive events cause a significant decrease in traffic predicted over the 20-year design period (of Princeville) we will reconsider the portions of the project that have not yet been implemented". (Paren. added).

The land at Princeville was conveyed to Eagle County Development Corp., a Colorado corporation, by deed from the Lihue Plantation Company, Ltd., a Hawaii Corp., and recorded in the Bureau of Conveyances of the State of Hawaii in Liber 7444, Pg. 93, on March 1, 1971, and development began that year. A 20-year projection would be to 1991. According to Table 5, in the Draft EIS, Tentative Construction Schedule, the proposed highway and bridge improvements would be finished by the end of Dec. 1980. How do you reconsider portions of a project that have not been completed AFTER it has been completed?

Regarding the DOT's paragraph 14 (A-88) in the EIS, I do indeed consider the figures in the North Shore Plan regarding Princeville contradictory. The Plan says that Princeville is anticipated to continue as a second home and resort community, but it also predicts a population of 5,000 full time residents. The plans for Princeville include a number of single family residences including second homes, retirement homes and some full-time residents, also condominiums and hotels. On Pg. 44, the North Shore Plan says: "The future magnitude and impact of this community is difficult to assess, but also highly intriguing since such an effort has yet to succeed in Hawaii."

In reply to my comments of March 30, 1976, the DOT says (A-88): "Thank you for the current information on the sales and preferences of the tourists who come to the North Shore area". The "opinion" was not mine but that of the authors, of the North Shore Plan, who say on Pg. 47: "Who are these visitors and why will they come?" Unlike the standard tourist who comprises the traditional backbone of the Hawaiian market, they will not be seeking the status of jaded resorts or the sun and sand of the tanning lotion bake-outs. Rather, they will be those despaired of the Waikiki congestion and similar instant Americanism; those who seek the essence of the real Hawaii in the real world with real people engaged in real social pursuits. ... they will be those who increasingly need the exhilaration and the peace, the stimulation and the encouragement of magnificent nature-embracing people, their creations and their activities. The North Shore will not be for everyone - and it shouldn't try to be".

The current information on Princeville is no better than it was in March 1976. Princeville's losses have been: "\$791,000 in 1974; \$761,000 in 1975 and \$816,000 for the first nine months of 1975. Of the seven major multifamily developments, all have had "tough times", according to Mr. Henry A. Perry, president of the Princeville Corp. Four of these condominium projects have gone into bankruptcy (one of them twice) and one of the projects has not been completed. Land sales and resident starts have been lagging. This information was printed in section D-8 of the Jan. 7, 1977 Honolulu Advertiser.

Princeville is one of the three prime tourist areas denigrated in the County planning and has the largest area of land in resort/residential zoning---nearly 1,000 acres. A request by Princeville for a change of zoning from agriculture to urban on nearly an additional 1,000 acres was denied by the Planning Commission because the first increment was not developed as expected in the six years of its existence. Princeville has not yet been successful in attracting any buyers for the 2 areas zoned RR-20 (hotel).

The Dept. of Education has dropped plans to move the Hanalei and Kilauea schools to Princeville due to opposition by parents. A shopping center with 21,000 sq. ft. of space under roof is being built at Princeville (which it is hoped will stimulate growth of Princeville) and a shopping center is being built at Kilauea, (and the owner of the General Commercial zoned land at Hanalei says he intends to build a shopping center). The population of the North Shore is not big enough to support three shopping centers and it is unlikely that the people at Kilauea and Hanalei will patronize the center at Princeville.

The latent efforts to shore up Princeville involves a merger with Consolidated Oil and Gas, Inc. of Denver (Consolidated already owns 97% of Princeville Corp. and was operating it as a subsidiary). Princeville shareholders will receive one share of Consolidated common stock for each two Princeville shares they hold.

Hanalei Colony Resort on the beach at Wainiha, with 48 units available to tourists is the only other major resort destination on the North Shore. The data on the resort show that it has never been financially profitable and that the owners and tourists like its low-keyed style and the serenity of the area. Many of the guests return year after year because it is so quiet and off the beaten track.

MITIGATION MEASURES: Under Primary Impacts, C., PG. II-3 of the EIS, the DOT says in regard to SOIL EROSION AND SILTATION, that cuts and fills on the Hanalei River Bluff could be reduced with retention walls or cribbing, but this would preclude revegetation and would be more costly. The EIS also says (II-5) of the Anini Stream and the Hanalei River Bluff: "These areas are too steep and rocky to have developed much of a soil cover". Mitigation measures for the River Bluff suggested by the DOT are, rounding off or serrating the face of the cuts. PG. II-6, 7 and 8 discuss soil erosion control, such as mulching, installation of temporary berms and slope drains, sediment traps and siltation ponds, seeding with fast growing grasses, etc.

Both the County and State have siltation and soil erosion control measures. However, with the best of intentions, given the rainfall on the North Shore, the nature of highway construction and costs of delays to contractors, it would be extremely difficult, if not impossible to control soil erosion in "areas too steep and rocky to have developed much of a soil cover." As for the suggestion that the face of cuts on Hanalei River Bluffs could be serrated to "give a more natural appearance and to reduce erosion", it would have been better left unsaid. The steep cuts in the area of Lumahai Beach are a good example of what happens when steep slopes are cut into. Has the State tried to alleviate this problem in the areas from Lumahai to Wainiha?

FLOODS IN HANAIEI: On PG. II-9 and 10 of the EIS, data is given on floods in Hanalei Valley, which says that on an average of every 3 1/2 years they result in crop damage, livestock loss, and the isolation of Hanalei. Fig. 12 shows the flood of record, Nov. 1955. It should be noted that the County of Kauai has allowed construction of numerous houses in the flood plain shown on this map. In the winter of 1975 a flood covered approximately

the same area. There was no loss of crops, cattle, or people's lives. The crops (taro) are always raised in fresh running water and the cattle move to higher ground as the water rises. Floods in the Wainiha area are much more dangerous in terms of loss of life, primarily because young Maole (stranger) transients occupy fragile shacks in low lying areas in the path of potential floods. Either they are unaware of or indifferent to the danger.

As the EIS says: "Seasonal flooding generally causes only inconvenience and closure of the highway for several hours" in a letter to the Mayor of Kauai (A-52), the State DOT says: "We are willing to cooperate in a flood control project with the County and/or the U. S. Corps. of Engineers." It would be disastrous to attempt such a plan and would be the end of taro growing in Hanalei valley. The Mayor speaks of flooding of the new post office. This flooding is caused by improper drainage of the water from the taro fields and not from the Hanalei River.

AIR QUALITY AND IMPACTS: PG. II-19 of the EIS says: "Under the projected traffic volumes and the Federal Motor Vehicle emission standards, the total CO emissions should decrease nearly 38% between 1975 and 1998..." The Clean Air Act Amendments (S. 3219, H.R. 10498), were not enacted into law by the Senate in 1976 and the auto industry, in planning its 1978 models has acted as though air pollution controls will be weakened in the future. In early 1977 the administration (in Washington) asked for a delay in auto emissions standards (until 1981 for carbon monoxide and 1983 for oxides of nitrogen). The auto industry and pressure from labor unions have had great influence on Congress toward delaying the needed standards. Obviously, as more and more cars are manufactured under inadequate standards, the time when pollutants are decreased will be delayed.

The wind speed tents (quoted in the EIS) were made at Kiluaea Point, directly above the ocean where wind speeds of less than 3 mph were "observed less than 4% of the time..." a place where no one but a caretaker lives. The wind patterns and speeds are very different in Hanalei town where the majority of the population from (and including Princeville) to Maena, live.

Widening the bridges from Hanalei River to Maena-Hui would obviously make the area accessible to many more tour buses and "stretch-outs", which would use the narrow roads in the quiet residential area of Hanalei town to go to the "Black Pot" beach and other areas. On the Island of Kauai it is NOT IDEAL to leave the motors of tour buses running---and they are left running so the air conditioning will not be turned off. The air pollution thus created would adversely affect Hanalei town and the public park---particularly during the summer and fall Kona periods.

NOISE POLLUTION: This would definitely be a problem in Hanalei town, Wainiha and in Maena-Hui. Because it is necessary that people travel more slowly when approaching and leaving

the area from Kallhiwai to Mauna-ihui. As the Socioeconomic Prelude says (Pg. 9, #5), "...most construction workers for resort development and most private residences will not come from within the community, nor will they find it advantageous to move there." With the exception of the work force now engaged in building the shopping center at Princeville, the great majority of the construction workers involved in building both houses and condominiums have been and are "haoles", hired by contractors who are also haoles.

It is apparently the policy of management at Princeville (as it is at Hanalei Colony), to employ "local" people wherever possible. However, many of the jobs are seasonal and most of these jobs are filled by young haoles, but not the same ones all the time.

Though the North Shore plan has been a valuable source of information regarding the area, it is now nearly five years old and many changes have taken place in Hawaii in those years. The plan makes it very clear that the local people have (as the EIS says on Pg. 11-25) "given top priority to maintaining or increasing small-scale agriculture and have assigned lowest priority to expanding tourist facilities". This was true of the majority of all ethnic groups without regard to income levels or length of residence and it is still true.

Hawaii is very dependent on the mainland for food and prices are particularly high on the outer islands such as Kauai. In recent years more and more young people (and some not so young) are turning to small scale farming. This interest and the realization that our resources are becoming more scarce and more expensive has spread to people of all ethnic backgrounds and has led to a concern for the land. The people are beginning to realize that unrestrained development, which in most cases is controlled by mainland conglomerates, is not only taking over their open space and beaches but also their valuable agricultural land. Being pushed off the land by resort and second home development is resulting in resentment toward the political structure and increased tourism. Many people, particularly the young, believe there is more dignity and satisfaction in working on the land than in being waiters, busboys and chambermaids.

Kilauea, (where the improved section of the highway is) was formerly a sugar plantation. After the operation was closed down, the land was sold by C. Brewer and then large parcels were sold and resold, with the price of the land constantly escalating until due to an appeal to the Governor, a moratorium was placed on the zoning of the land. However, once again agriculture and the people have lost out to the developers' pressure. (See attachments 6, 7, 8 and 9).

The EIS speaks of a "climate of tension between community growth policies that has generated controversy over the proposed highway improvements", (Pg. 11-26). This remark about a climate of tension is taken from the North Shore Plan and is out of context. Pg. 13 and 14 of the Socioeconomic Prelude points out the resentment by the long-time residents, the retired or semi-retired haolen and the employed newcomers who intend to remain for a

the sites of the one-way bridges, noise is not now a problem, but buses with their noisy motors would destroy the serenity of those areas..

Under mitigation measures (Pg. 11-23) the EIS says the proposed highway improvements "...would not have an adverse noise impact, so noise mitigation is not required. To prevent future impact, no residences or public facilities should be constructed closer than 75 feet from the highway centerline without including noise attenuating measures into the design." This is a contradiction as the DOT is ignoring the noise impact on the many already existing residences and public facilities that are closer to than 75 feet from the centerline of the highway. If the DOT did not feel the obligation to supply noise attenuating measures, those affected by the noise would be left to endure the noise or to try to mitigate the noise themselves, at their own expense.

SOCIOECONOMICS: On Pg. 24, the EIS says that in 1974, 1,150 persons resided on the North Shore. According to the Office of Economic Development of Kauai, this is an estimate and includes transients who lived in any kind of structures, though not tourists.

The EIS says: "...the Hanalei Census Tract (the North Shore and the Kilauea area) experienced 'phenomenal growth' over this period", (1970-1974), a "43.8% increase". The majority of this increase (in population) can be attributed to an influx of persons from the Mainland". (Paren. Added). This information is taken from the "Hanalei Development Plan, A Socioeconomic Prelude". The "phenomenal growth" coincides with the discovery of the North Shore by the so-called "young haole transients", many of whom lived for varying lengths of time at "Taylor's Camp" in Maena-ihui. Others lived in tents, lean-tos, etc., along the Na Pali Coast and in Hanalei and Maena-ihui.

Before this population increase in the early 1970's, the population in the Hanalei Census tract, the residents of the North Shore, numbered 805. It is difficult to predict what the population trend will be. Some of the transients have moved into more permanent types of dwellings either because they have found jobs or because they are on welfare and are living on subsidized housing allowances, usually in communes. However, the majority are still in the category of "floating" population.

The EIS says (11-24): "In Hanalei, approximately 19% of the residents are employed full or part-time in the tourist industry ...". This figure comes from "Hanalei Development Plan, A Socioeconomic Prelude", Anderson, R. H., et. al. University of Hawaii, Departmental Paper 2, September, 1972. The Socio-economic Prelude dated May 1972 (Anderson, R. H., et. al.) gives the figure of 19% employed in tourism and the largest group employed in tourism, was haole (Caucasian). Young haolen still constitute the largest group working in tourism and "other" employment in

number of years, against the "transients". The long-time residents object to hordes who have brought up beach property and put up "no trespassing" signs. The Prelude says, "In addition to the fragmentation observed, further disagreement within the community is brought about by land speculation and the profit motive. Some land in Hanalei has been acquired for the sole purpose of selling at higher prices for resort development or other development possibilities. Not all these investors are from outside the community; some are long time County residents".

The Socioeconomic Prelude says (Pg. 27): "Surprisingly there were very few differences in the rankings given by various sub-groups of respondents. Age, education, and income did not cause any significant differences in ranking community needs. The community needs (Table 13) ranked as follows:

Community needs	All residents ranking
Keep agriculture as an important activity in Hanalei	1
Keep the scenic beauty	2 High priority
Better housing	3
Ease in getting to shopping and medical services	4
Opportunities for family outdoor recreation	5 Medium priority
Chance for residents to meet and discuss community needs	6
Opportunity for youth to stay in area after high school	7
Opportunities for youth recreation	8 Low Priority
Keep the population the same	9
Resort development even if some agricultural land is given up	10 Undesirable

There has been little or no controversy over the proposed highway improvements in the community. The controversy is between the community and those few investors inside the community and outside the community who want more development on the North Shore.

In speaking of the constantly changing views the EIS (Pg. II-31) says: "Given at a conservative speed of 30 mph, it is

difficult to take it all in. (This is where the narrow pavement and sharp curves pose a hazard). In all fairness, the DOT stresses in the EIS the scenic value of the North Shore and admits that many of the proposed improvements would affect that value. However, the DOT still concludes that the highway must be widened, realigned, etc. and that the one way bridges must be replaced for safety reasons.

No where in the EIS is there any mention of the dangerous conditions that would occur if the bridges are widened. As stated by the Planning Director of Kaua'i, with the improvements, buses would travel all the way to the end of the road at Ke'e. The road through Hanalei town, flanked by businesses, homes, churches, etc. on one side and the drainage ditches on the other would be made hazardous for residents and visitors in the area. The road from Hanalei town is inadequate to handle the huge tour buses. From the east side of Hanalei Bay to Maena-Hui the road consists of a series of sharp curves with a high bank on the land side and steep drop-offs on the ocean side. The tour buses could not negotiate most of these curves without driving in the center of the road or crossing the center line, therefore there would be the possibility of many people being injured in one accident.

Some tour bus drivers say the tourists come to Kaua'i to see the famous "South Pacific Bench" at Lumahai. However when it is suggested to them that tourists could be transferred to mini-buses at a staging area such as Princeville, the answer is that it would take too much time. Why should the people of the North Shore or of all Hawai'i sacrifice one of its most unique areas so that tourists can spend a few minutes taking pictures of Lumahai, while on a half or one day tour of the island, and then rush off to the next scenic destination?

Apparently the DOT hopes to widen the section of the road from Hanalei to Ke'e in the future if the funding becomes available. This would be an ecological disaster for the fringing and barrier reefs along the coast, not to mention a probable irreversible scarring of the thickly vegetated hills.

The EIS says on Pg. II-37 under mitigation measures that removal of the existing bridges is unavoidable. However, the EIS has presented the alternative of repairing the bridges which is what the people indicated they wanted at the public hearings and information meeting. On the inside back cover of the packet titled, "Why we have public hearings", the State of Hawai'i, DOT Highways Division says: "...a sincere and reasonable objection, asking questions with an open mind, or simply putting oneself on record in favor of, or opposed to a proposal, will be significant contributions. These contributions will aid us in making certain that the project's final design will have the benefit of analysis by the citizen of the area". Yet, the inside front cover says: "The responsibility of selection of the final solution rests with the Highways Division, and will be based on factual information, including findings uncovered-

ed through the public hearing". The DOT seems to be saying that in truth, "reasonable objections or simply putting oneself on record in favor of, or opposed to a proposal will" have little or no bearing on final decisions. Apparently aesthetics, concerns in regard to air, water, noise, etc. pollution, lifestyle or even the possibility of destroying what the tourists come to see, are not relevant.

The public is told that the Joint State-Federal highway program is unique in that the entire cost is borne by those who use the facilities; that Federal Trust Fund monies come from taxes on motor fuel, oil, grease, new buses, etc. Actually the money comes from the direct and indirect taxes paid by every tax payer, not just from the above listed revenues. There is an income-tax deduction for gasoline taxes, which makes road-user charges in a privileged position. You cannot deduct the cost of riding public transportation from your income tax. We are also told that grant-in-aid funds for use in State and County Highways are allotted to the states in accordance with formulas that give weight to population, area, and postal route mileage.

The population of the North Shore is small, the area is unique and there is no home postal delivery. Still the fact that the people of the area have amply demonstrated over a period of nearly two years that they do not want the proposed highway improvements, which will be detrimental to them environmentally, economically and socially is not to be taken into consideration? Opportunities should be improved and widened for public participation in transportation policy making at the local level with a stronger role for citizens and municipalities. The socioeconomic considerations have not been adequately covered in regard to the proposed highway improvements. The DOT does not have, or at least does not consider all the reasons for opposition to improving the highway, or the political pressures that are pro-highways.

In the case of concerns about agricultural lands: The DOT says K (in answer to the State Dept. of Agriculture, A-36), that it will address the impact on pasture lands in the FIS (Pg. A-37). The probable loss of pasture lands would not be due to the physical fact of the highway improvements, but because an improved highway would facilitate pressures to urbanize many acres of land, now leased for pasture, for so-called "gentlemen's estates". This has already happened to agricultural land in the Kilauea area.

At the Public Hearing of August 1975, the Public Meeting of October of 1975 and the Public Hearings in Hanalei on April 20, 1977 and in Lihue on April 21, 1977, the public testimony was overwhelmingly against the DOT's proposed plans. (See Attachments #10 and 11). The FIS says that petitions received strongly favor an improved highway but that the petitioners against an improved highway were identified as either North Shore residents or visitors, "while the origin of those favoring the project was not identified." Many of the signatures were illegible but those that could be read were checked and none were from the North Shore.

MINORITY INVOLVEMENT. Regarding the Federal Highway Administration requirement on minority involvement (EIS A-126), I believe that it should be pointed out that in Hawaii, i ethnic background cannot be determined by surnames because of the large number of inter-racial marriages.

L
The State Director of Transportation was quoted in the Honolulu Advertiser (1/15/76), as saying that if money for highway projects are not found, approximately 250 currently filled positions will have to be eliminated and perhaps 520 additional positions will also have to be terminated. (As of March 11, 1976 the State DOT employs 1,416 people according to Honolulu Star-Bulletin writer Jerry Tune). The same edition of the Advertiser (1/15/76) says: "The number of State workers and the State payroll are growing at a much faster pace than the total State population, family budgets, private per capita income and the cost of living".

Opponents of increased indebtedness for capital improvement projects (and particularly for speculative expensive housing that serves as tax right offs mostly for mainland investors), are accused of causing or increasing unemployment. Ever since the industrial revolution, new inventions, cost-cutting methods, automation, etc. have caused unemployment and even the total disappearance of some types of jobs. Construction jobs are of a "boom or bust" type of employment. Many construction workers are "floaters". They go where the jobs are and unfortunately some remain behind after the jobs are finished and join the unemployment and welfare rolls. It is becoming more and more obvious that because of restrictions and shortages of energy in the future many kinds of jobs will be eliminated and other kinds of jobs will take their place. At any rate, highway construction should not be used as an excuse for "make work" jobs.

The Garden Island news of April 27, 1977, quotes F. Alvey Wright, State DOT Director as saying he has no preference concerning the width of improve bridges and roads (in the North Shore area) and, "As far as I'm concerned, they can build one-lane bridges...". "However," the article continues, Wright explained that the project must include two-lane bridges or the DOT will lose Federal funding." According to the news item, the DOT Director said he would leave the North Shore area alone and use the construction funds for Maui if he could but "the only problem is that the bridges are going to fold". In the FIS the alternative of repairing the Waiohi, Waipa, Waikoko bridges would give them an expected life span of 15 years; and repairing Vainiha Bridges #1, 2 and 3, would increase the expected life span from 7 to 10 years. The question then comes down to which is more important, the Federal funds or the preservation of the North Shore's uniqueness. Comparing the costs of the alternatives on the bridges, it seems that the bridges could be repaired many times over for far less than the cost of constructing modern, two-lane bridges.

FUNDING: As stated in the FIS, funding of the proposed improvements to the road, bridges (Hanalei, Waiohi, Waipa, Waikoko and Vainiha),--if built to Federal standards would be 70% Federal and

should be realigned into a simple, gradual curve, slightly makai of the present alignment. Off-lanes should be provided on the mauka side to the Princeville Airport and also on the makai side of Princeville (to provide for future traffic to the shopping center).

Reflectors should be placed on the guard rail, from the beginning to the end of the rail at the hairpin turn on the Hanalei River Bluff. The possibility of planting of the bluff on the mauka side at the turn should be explored. Signs warning of and showing the nature of the curve should be posted from both directions. The view of the highway toward Kaliahwa from the junction of Kuhio Highway and Plantation Rd. should be improved by trimming back the planting at the corner.

At the approach to Hanalei Bridge, there should be a sign that says: "One Way Bridge" rather than "Narrow Bridge". (All the one way bridges should have such signs on all approaches.

From Hanalei Bridge to Waiohi Bridge there should be turn-outs in several places for distressed cars (also as inconspicuous as possible). Some culvert walls are too close to the highway and should be set back and the culverts over the third creek from the Hanalei Bridge should be realigned. Owners of shops, stores and the restaurant in Hanalei should be encouraged by the County to provide safer off-street parking for patrons. Signs should be posted in the town to remind motorists that they must watch for pedestrians. The ditches on the mauka side of the road by the taro patches should have some type of curbs, markers or shields to prevent cars from sliding into them.

The Waiohi and Waipa bridges should have flared, rustic design barriers at right angles to the ends of the bridges with reflectors and the narrow section of Waipa bridge (where the bridge is two different widths) should be replaced to match the wider portion. Medial reflectors should be installed on the road from Hanalei River to the end of the road at Ke'e. Haena Bridge #1 should be widened because it is so close to the entrance to Hanalei Colony. The fords at Manoa and Limahuli Streams should not be replaced---they are unique and fit into the area very well. They should be repaired if necessary and signs should be posted to alert motorists of their nature.

The Kona'i Visitors Bureau should be asked to cooperate by pointing out to tourists that the North Shore area is a very special place---a place to slow down and enjoy the rural atmosphere and the friendly people. Part of that friendliness is encountered at the one-way bridges where the situation brings out a kind of amused camaraderie in both residents and tourists.

President Carter proposes to introduce comprehensive legislation establishing a "National Heritage Trust" to protect historic areas. With a little cooperation from the State DOT and the County of Kauai perhaps the North Shore could qualify for this status.

30% State. Construction of shoulders, repaving, from Hanalei Bridge to Hanalei Town, Haena Bridge #1 and #2, Manoa and Limahuli Stream fords, would be funded by the State. If repair of the present bridges or replacement in kind (in the same way) were chosen by the DOT, they too would be funded by the State.

The Chief, Engineering Division of the U. S. Army Engineer District, Honolulu said (A-10): "We suggest that the FIS consider beneficial aspects of the old roads as historic and aesthetic resources and as buffers that filter change and growth". The Kona'i Planning Director said, (A-56) "...the North Shore... warrants strong growth control measures, and the highway is one of the major factors... Too many improvements to the highway may have negative impacts to the area. It would generate more traffic, thus stimulating more residential or other developments and further taxing our public facilities and parks. Improvements to the existing road as compared to widening and realignments between Hanalei and Haena, would be more preferable and would definitely control growth. It must be recognized that increased developments could be detrimental to the sensitive environment that exists on the North Shore". The Planning Director does not make a positive recommendation for widening or realigning of the road, Hanalei Bridge and approaches, Hanalei Town (road), widening of the bridges Hanalei to Lualaba, Lualaba to Wainiha, or Wainiha to Haena.

N
The Director of the State Office of Environmental Quality Control, Dr. Richard Farland, suggested to the DOT Director (A-46) that, "Another alternative should be discussed is the possibility of transferring the jurisdiction of the highway to the County of Kauai. Since your proposed improvements make it necessary to conform to federal standards and specifications, one lane bridges will be replaced by two lane bridges. However, if the jurisdiction was given to the county, then perhaps the residents may be able to have their one lane bridges and retain their existing lifestyle".

Obviously the people of the North Shore are not totally insensitive to the need for safety measures on highways. However, there are a number of things that can be done to improve the existing highway and bridges, which would make them safer for motor vehicles and which would not intrude on the drama of the whole North Shore experience for both residents and visitors.

O
On the highway, (unimproved section) Anini Rd. to Hanalei Bridge, reflectors are needed on the medial strip and on guard rails. White lines should be painted along the outer edges of the highway. Some utility poles are too close to the highway and should be moved back further. Tree stumps at highway level should be removed and the trees along the right-of-way trimmed. Occasional pull-off areas (where possible without cutting into the banks) should be provided in as inconspicuous a manner as possible for emergency use only.

"Scenic Highway" signs should be used---to start before entering the "box-cut" after the bridge at Kaliahwa. The "S" curve

Because Hawaii is committing itself to an increased and long-range future of tourism as one, perhaps its main, source of income, the State should be looking at things in new ways, trying to encourage "quality" tourism and to preserve the things that will bring that type of tourism to Hawaii. One of the most important ingredients for successful tourism is a resident population that does not feel resentment and animosity toward not only the tourists but toward those who are promoting tourism.

Hopefully, the State DOT will overcome its zeal to "improve" what cannot be improved on---to recognize that it does not have to carry its construction plans to every nook and cranny of these islands. Maana is the end and it will remain the end. There is no place to go from there.

Sincerely,

Helen C. Hopkins

FOR LIFE OF THE LAND
HAWAII CHAPTER, SIERRA CLUB

Helen C. Hopkins (Mrs.)
P. O. Box 266
Hanalei, Hawaii

cc. Mr. E. Alvon Wright, Director
State Dept. of Transportation

Life of the Land
Sierra Club

HJ - 60

'No need' seen for Hanalei up-zoning

Speakers against General Commercial zoning for Larry Ching's property at Hanalei all emphasized that there is no need for any more development in the town than the present Neighborhood Commercial will provide.

Speaking at the Tuesday night hearing of the Council's Planning Committee, they insisted the general commercial area a few miles down the road at Pineville is sufficient to supply the needs of their small community.

Nick Beck, chairman of the Northshore Improvement Committee, reported that group as "shocked" to hear the Planning Commission "totally ignored all recommendations and planning by all involved agencies" and "without justification" approved the change. Beck named the Kaula Planning Department, U of H study on the

North Shore, the North Shore Improvement committee and the North Shore plan itself, which was approved by the County Council, as all favoring neighborhood commercial and opposing general commercial.

To illustrate the difference, he listed the uses which are now permitted: restaurants, retail stores, service stations, theaters, supermarket type stores and "other adequate shopping facilities for the area."

With General Commercial, Beck said, some additional permitted uses would be light manufacturing, warehouses, terminals, auto sales, and hotels.

Though Ching says he wants to build a supermarket, Beck challenged that re zoning of 2 9 acres is not necessary for a supermarket.

Charles Forward of Hanalei in-

sisted there had been no "proof of need" from the applicant that the present Neighborhood Commercial zoning is not sufficient for the needs of Hanalei.

The sewer problem of falling prices and debts instead of profits led Mr. Forward to the conclusion that tourism will become our growth industry and the island must keep its unique charm to attract visitors.

He told the Council if they grant Commercial Zoning for one landowner, all the rest will say "...they Beat flow about me? You put one inside too, huh?"

Mr. Forward was one of the speakers to point out that Mr. Ching's "baby laundromat" overflew the respoons and to ask for a denial of the change until the sewage problem is solved.

He referred to a letter from James Kunagai, Deputy Director of Health for the State, who said the proposed development is located in low land with high water tables not conducive to adequate surface and underground sewage.

Kunagai wrote that establishments generating large amounts of sewage have histories of cesspool problems, and his department has no objection to a grocery store to replace Ching Young store. WITHOUT addition of any establishments which generate large amount of sewage, such as restaurants and bakeries

Planning Committee Chairman Bob Yotsuda asked if the sewage problem were taken care of, would Forward withdraw his objections? Forward would only admit that if the sewage problem were taken care of...

"It might be worth taking a second look at it... but I doubt it." Barnes Iiznik, Director of the Waiohi House Mission said he felt the "best Planning Department in the State has been overlooked and

challenged." He asked the Council to re-examine arguments against a change for which he felt no need had been shown and which would injure efforts to preserve what is "scenic, traditional and historic" about Hanalei.

Bob Wade, manager of the Hanalei Trader, presented a petition against the change signed by approximately 150 residents of the area. He said they were people who came into his store, who signed without any campaigning on his part.

"People don't want up zoning in Hanalei Valley," Wade stated. He was also concerned about sewage problems.

Hanalei resident Robert Hopkins reported that Pineville "broke ground yesterday" for a commercial development and any needs in Hanalei could be met by neighborhood commercial zoning.

Commercial zoning would open the area to construction that will be incompatible to Hanalei, he feared. Attorney Courtney Kaber reminded the Council that John Cunningham had been denied General Commercial two years ago and told to come in for zoning changes as he needed them. She did not see what had changed in the interval to make General Commercial desirable now, especially since it would "destroy the very being of Hanalei."

Larry Ching's lawyer, Walton Ilong, who asked to be the last speaker, pointed out that some people feel "...Don't let progress intrude on our lifestyle," but he said "you can't stop progress."

Hanalei needs additional commercial services, he said and if it were done by a variety of people it could become a "badge of pride."

"Only one person can develop Hanalei to meet the needs of the people," he said of his employer.

(Continued on Page 12)

ATTACHMENT #1

★ Ching ★

(Continued from Page 1)

"Before you can get a building permit, you must meet the requirements of the Board of Health, and Mr. Ching will meet all state and county requirements," he promised.

Illog also said Ching wanted General Commercial so he would not have to come back to the Planning Commission each time he wants to add something else.

As to the fear that the additional uses permitted under commercial would be built, Illog said "... You are not going to spend money to put up what there is no need for." His employer, he said, as an "astute businessman" knows the rules of "demand and supply." Those opposing were indignant that Larry Ching's representative had the "last say" and they were not allowed to rebut.

This is the second time in recent hearings when citizens were treated as what they said was a procedure which gave the advantage to the developer, since he could rebut their testimony but they could not challenge his facts.

Planning Chairman Robert Yotunda told The Garden Island after the meeting the "no rebut" rule was to avoid what is intended as a hearing - becoming a debate.

He did say he would honor a request from either side to be "last speaker" if made before the meeting starts, or would allow someone who had not spoken to present additional facts ... not a rebuttal ... after the developer has presented his case.

To the Forum:

In the same issue of The Garden Island, (12-22) that carried the report of the council's approval of Larry Ching's new shopping center in Hanalei, a feature article on page B-5 announced that work has already begun on a \$27 million shopping center at Princeville, 2 miles away. The Princeville project covers 21,000 square feet, and is called "the first phase".

There are presently 2 general stores in Hanalei, one in Wainiha, and 2 in Kilauea. There are at least 8 snack shops and restaurants in the same area, and only about 500 people living on the north shore. And it's no secret that the Chings already charge the resort prices their attorney says Larry wants to save us from.

So, first of all, a hearty cheer to Bob Yotunda and Ilse Shaw for their non-approval, and a big BOO to the other 5 on the council for their decision to approve.

At the same time, the recently-announced plans to evacuate up to 400,000 people from Oahu to Kauai and the Big Island in the event of a nuclear attack is a very good argument for a strong agricultural base in Kauai's economy.

This pot only shows that the tourist industry cannot be counted on indefinitely - it proves the need for us to develop our food-producing lands extremely. Given the world situation, these chilling possibilities only give more credence to Jo-An Yukimura's stand for a low-consumption, non-development-oriented Kauai society, a truly, non

H.V.B. style garden island.

It appears to me as a non-respect that a correlation can be made between the dangerous world situation and the situation here at home, and that is that greed cheapens the quality of all life.

As a neighbor of the Ching's, I wish I could single them out for praise instead of criticism. I haven't set foot in their store for over two years because I've proven to my own satisfaction that I can't afford to. Money does count, but it's sad at this late date that Larry and Co. haven't learned you don't gouge your customers and keep their respect. The other merchants of our north shore community have heart, and they are the ones who get my business and my aloha.

Laka Morton

Ching upzoning ok, Council splits 5-2

Councilman Louie Gonsalves asked the Ching zoning amendment be pulled from the Planning Committee and acted on for final reading.

Planning committee head Yotunda had instead asked the matter be deferred to the new council. He gave as his reasons:

- 1) Sewerage conditions as stated by the State Department of Health.
- 2) Negative recommendations of the North Shore Improvement Committee.
- 3) Incompatibility of goals and objectives of the North Shore Plan relative to commercial space for Hanalei.
- 4) Contemplated uses are permitted under a Neighborhood Commercial classification with a use permit.
- 5) Negative recommendations by Planning Department and split vote by Commission overturning the staff recommendation.
- 6) Questions regarding compliance to shoreline protection Rules and Regulations.

Only Ilse Shaw supported Bob Yotunda in his losing fight to defer until January.

Added to the agenda were letters from Helen Hopkins, Mabel Wilcox, Gaylord and Carol Wilcox, and Julia K.L. Rodriguez, all in opposition to granting the zoning.

Louie Gonsalves moved that the zoning change from neighborhood commercial to general commercial be granted.

Yotunda spoke in protest, giving the reasons given in his letter as needing study and adding: "The Council will lose credibility in future actions if no reasons are given for the change ... these should be some rationale." Gonsalves' reply was that when the Planning Commission approved the change ... "they must have made a lot of investigation."

Attorney Kahr then spoke about the elapsed time, at the same time (Continued on Page 10)

presenting to the Council a petition against the change signed by 75 residents of Hanalei and Kilauea.

It was then the meeting fell apart with recess after recess declared. As Councilmen left the floor, they were surrounded by members of the audience, most arguing against the zoning change.

In one of the short, confused sessions Jerome Illog suggested four amendments to the expected approval. Three of them said only that Ching must comply with the CZO, State Department of Health and Water Department rules. The fourth would have forbidden apartments, motels or hotels for the next five years.

In another session Ilse Shaw had a chance to speak against the change:

"I am not against development,"

she said, "but this same Council voted for Neighborhood Commercial for Hanalei. That was two years ago, and the people of Hanalei do not feel differently. Everyone of the people who have spoken have spoken against the change."

Mrs. Shaw said the Council has a "responsibility to research the facts" especially since the Planning Staff spoke against general commercial and the Planning Commission ... "a political body" ... overturned them by a split vote.

She called the change "premature and unneeded" and said since a shopping center can be constructed under the present zoning, she did not understand the need for a change, and when she asked had never received an answer as to why.

"It is a political decision," she charged, "not based on the input of the community, or planning or zoning facts."

ATTACHMENT #2

Don't let Hamalei up zoning slip by

To the Forum:

I am appalled at the action taken by the County Council on December 21 and 22, the last meetings held by the outgoing council.

The alleged issue: Larry Ching's request for rezoning of 2.9 acres in Hamalei from Neighborhood Commercial to General Commercial.

Mr. Ching, and although I haven't seen his developmental plans, I hear that they are quite nice. So nice, in fact, that he would have been allowed to build his "supermarket" under the present zoning!

So what's the real issue? Not just the zoning change, which under the terms of the C.Z.O. will allow other businessmen to argue convincingly for similar zoning changes in Hamalei and set a pattern for gradual destruction of Hamalei's unique character, but mostly, in my opinion, the manner in which this zoning request was approved.

Why? There simply was no good reason for approval, since Mr. Ching would have been unhampered without it, while there are several

good reasons against approval, all of which have been stated to the public and the press numerous times, inclusive of its being in direct conflict with the C.Z.O., the Northshore Development Plan, the Northshore Advisory Council opinion, the Planning Department's opinion, and tremendous public opinion in opposition.

Only two members of the Council opposed the change, and tried to hold the decision over for the new council: Rose Oso Shaw, an outgoing "jame duct" whose reason was not at all crippled, and Robert K. Yotsuda, who listed several good reasons in opposition. Immense huddles to you both.

To the other five members voting aye, the following:
LARRY CHING: Thank you for letting me speak on December 21, and present the council with a petition from 75 Hamalei-Kilauea residents opposing the zoning change.

Not that you or the other four voting for it took it or the public hearing into consideration. Why were you completely silent about your reasons for voting "aye?"

ROBERT KEE: Being a "jame duct" stripped you of any reasoning power. You stated that Larry Ching

Hew also tried to justify his vote with the weak excuse that he does not want the people of Hamalei to "pay resort prices at Pricedville."

Did the people of Hamalei ask him to save them from "resort prices"? Has he checked prices at Ching Young Store? And, does he think that General Commercial instead of Neighborhood Commercial zoning will lower prices?

WE CONGRATULATE Rose Oso Shaw (who will be missed on the next Council) and Robert Yotsuda for their efforts to stop this change being railroaded through against the people's wishes.

Mr. Shaw made it clear she is not against development per se, but against bills upzoning as being premature and flouting the wishes of the people.

Among the other points Robert Yotsuda made is that several zoning cases in the same area are before the Council, and delay is needed to study how they inter-related. Up-zoning granted to one can be used as a precedent for up-zoning others, especially when it is granted for no reason at all. Why then should anyone have to give reasons?

WE FOUND TWO THINGS especially interesting: When the Ching upzoning first came before the Council, a two year limitation on beginning construction set by the Planning Commission was removed... "temporarily" Louie Gonзалves said, until after the public hearing to find out how the people felt.

The restriction disappeared somewhere in the Council maneuvering, and was never heard from again. Secondly, when Mrs. Shaw made the amendment that hotels, motels and apartments be eliminated from the permitted buildings there, a recess was immediately called.

During the discussions that went on around the room, Ching's lawyer, Walton Chong, was heard to say of this, "We don't like it but we will accept it."

"Accept" the decision of the County Council? Wow! Show's who's in charge, doesn't it?

HAD THIS NOT BEEN almost two years from election day, we don't think even the infamous five would have dared give the voters the shaft. But, they figure the voters have short memories, and will forget by election 1978.

We will never tell you whom to vote for, but if any of these five stand up at campaign time and say they are asking for your vote to serve you... to "do the will of the people"... follow your impulse to laugh scornfully... or throw up!

ONE MORE TIME... the names of the guys who ignored the people of Kaula are... Louie Gonзалves, Roger Hie, Jerome Hew, Abel Medeiros and Burt Tsuchiya.

We might be wrong, but -

by Jean Holmes



The outgoing Council left in a blaze of glory... the life blood of the democratic process on Kaula.

AGAINST THE EXPRESSED wishes of the people of Hamalei, in opposition to opinions expressed by residents all over the island, they granted General Commercial zoning to Larry Ching for 2.9 acres at Hamalei.

Mr. Ching already has Neighborhood Commercial which would enable him to build anything he SAYS he wants to build. Special use permits could be issued when variances are needed. But, according to Mr. Ching, it is "too much trouble" to follow the Democratic rules other people do and apply for the permits.

The Planning Staff, the North Shore Advisory Council, the University of Hawaii, the Health Department... among other bodies... opposed the General Commercial.

NOT ONE PERSON spoke for it... not ONE. Hundreds opposed, by letter, petition and in person, appealing to the Council not to grant the zoning. It is an issue which has united all groups of people, ranging from mainlanders to missionary-time kamaiaina.

Yet five members of the Council ignored the voice of the people and listened only to Larry Ching. Burt Tsuchiya, Abel Medeiros and Louie Gonзалves did not even try to justify their vote. Their master had spoken.

Roger Hie rambled on about the land being owned by the Chings for 70-some years, and that they had always paid their taxes. AFTEN PLANNING STAFFEN Avery Youn had explained clearly... to most of us... the difference between a regional supermarket (which Mr. Ching's drawings indicate he plans and which is permitted under the present zoning) Jerome Hew said he did not understand and did not want zoning which "depended on interpretation of words."

has owned the land a long time and should be allowed to develop it. Why do you think the C.Z.O. and other zoning laws exist?

JEROME HEW: So, a developer shouldn't be at the mercy of interpretation of words? Avery Youn, and the Planning Department report and Director told you that Mr. Ching could implement his plans under the present zoning.

Do you doubt the accuracy of that "interpretation" or are you now both a planner and semanticist?

ABEL MEDEIROS: Another "jame duct". When I asked you why you supported the zoning change, you should never have said "Did you see how few votes I got in Hamalei?" I hope sincerely that wasn't your real reason, but you didn't advance any others!

LOUIE GONZALVES: You talked a lot about merit, and then didn't cite any reasons this zoning change was merited, limiting yourself to personal attacks on Councilpersons Shaw and Yotsuda. Is this how you'll be chairing the council next year?

TO THE PUBLIC: I wish you'd all been here. Please try and attend council meetings. What used to be just great entertainment is becoming dangerous.

Ask yourselves why, when the last meeting of the year is usually for fun and games, the "game" this year went into extended time so the two lame ducks who sided with LRU could map Hamalei's future.

As for the zoning change itself, there is always a recourse. First, lobby the Mayor to veto it. Second, a Motion to Reconsider by one of the LRU gang would allow the new council to decide the question. Lobby them.

Third, we now have referendum votes on Kaula. It's worth a try. Fourth, there's always impeachment, and the last resort, the courts.

Whatever you do don't let this one slide. The new council will need to know you give a damn, or look out!

Jan. 3, 1977

"Beautiful but dumb"

To the Forum,

In a paper presented August 1976 to the Governor's Conference on the Year 2000, written by Phillip K. Ige (State Department of Education) and Ralph S. Hirota (Chairman of Kauai County Council), is the following (with apologies to the ladies):

"... if Kauai were a woman, she might truly be called beautiful but dumb. It is more probable that old habits will prevail, at least for the short term. The mass of voters will continue to be politically naive and uninformed on important public issues, easily fooled by back-stapping politicians."

Old habits are beginning to change on Kauai. Next time around perhaps the voters will rid themselves of a few more "back-stapping politicians." Congratulations to Councilpersons Shaw and Yostrada are also to be commended for their insight and honesty in fulfilling their mandate to protect the public interest. I sincerely hope that Mayor Malapit will stand by them and veto the Council action.

Helen C. Hopkins
Hanalei

It's criminal to cheat people

Mr. Councilmen:

From what I am given to understand, your vote concerning the Ching Upzoning is directly opposed to what the majority of the people want.

It is criminal to cheat and conlude the people you are responsible to lead.

Please change your vote.

Sincerely,
Theodore Reed

Hopes that Mayor will

To the Forum:

Jean Holmes deserves the Courageous Giralie Award for so bravely sticking her neck out on the Hanalei General Commercial Appeal.

Too bad the affected community is not equally articulate, but the feeling is there and this WILL be remembered, even if the Mayor does veto it, as I truly hope he will.

Sincerely,
A. B. Nurock

-Velo Ching up-zoning

To the Forum:

Jean Holmes' veid comments regarding the County Council's dissonal opinion in renouncing Hanalei are emphatically endorsed by this resident of the North Shore.

Councilpersons Shaw and Yostrada are also to be commended for their insight and honesty in fulfilling their mandate to protect the public interest. I sincerely hope that Mayor Malapit will stand by them and veto the Council action.

Joseph Jeremy Harris, Jr.

A - PAGE 2 - THE GARDEN ISLAND - MONDAY, JANUARY 17, 1977

Readers express displeasure with Hanalei upzoning

Mayor Eduardo Malapit
County Building
Lihue, Kauai
Mayor:

I was shocked and dismayed at your decision to liftlet Hanalei with general commercial zoning.

I had put very little effort into the attempt to petition your veto of the upzoning, assuming that the questionable reasoning and errors behind the request would certainly compel you, as a lawyer and man of moral responsibility, to veto this action.

It is now well documented that higher taxes, crime and social tension along with increase in direct proportion to the degree and rate of urbanization throughout the State.

The local businessmen and politicians who advocated the upzoning in the name of "local" interests will be responsible in part for the violence and frustration that is predicted to follow rapid urbanization in Hanalei.

Mayor, why don't you go to Hanalei or Wainiha and ask some of the more active local guys there why they like to bust up the haoles and see if they say it's because the haoles don't like development?

The last election certainly proved that John Yutimura represents a majority opinion on this island and a complete cross section of age and race.

Her opposition to this upzoning is based on her constant and conclusive struggle to protect the right of the local population to determine the future of their communities.

The people of Hanalei have twice unanimously opposed the State's plan to build a new highway from Kaula and replace the bridge. Hanalei may be the fastest growing area in the State but this is obviously not the choice of the people who live there.

By granting this upzoning, you are creating a vacuum that, if filled, will need a great increase in transportation, utilities and population.

I listened to your press conference and found that it avoided or glossed over the basic issues. There is presently no need for general commercial considering the fact that Larry Ching CAN build his new store without a zoning change; and the "back room" politics surrounding the council's actions were an insult to justice and to the voters and should have been grounds enough for a veto regardless of the applicant's lack of merit.

Mayor, it is of little importance but I want you to know that I actively solicited votes for you during the last campaign, claiming that you were sincerely concerned with the social and environmental ecology of Kauai.

I now find it quite ironic, after having just published an article in this effect in our alumni magazine, illustrated with a photograph of Hanalei valley and bridge, that you would sign into law an ordinance seriously threatening this valley - an ordinance so weakly rationalized and thinly disguised that if there were a substantial motivation behind the upzoning, those involved did not want it known publicly.

John Wehrheim

To the Forum:

The question is - if the mayor had so much to gain by vetoing the upzoning - what did he get by signing it?

Sam Aeo

To the Forum:

Odd isn't it how people are already crying the blues about the folks TILLEY elected. Well folks... it's too late! When the type of mentality prevails on this island that says whoever spends the most must be the "best guy"... you get what you deserve.

Don't blame the politicians for their promises... when you're spending a bunch of money you want to make sure you get a good return on your investment... i.e. the job you're after... so promise them anything. As to Mr. W. Smith's final paragraph in last Monday's paper "I respect Mayor Malapit's decision to consider a veto"... HAH! You now know the end result of that particular hahn (there is another word for it... but this IS a family paper!)

Happy upzoning two years voters... on to bigger and better buildings... don't count on any votes or responsiveness to the wishes of the people because with a few exceptions you just didn't put that calibre of person in office... so eat your heart out!

Gloria McElgunna

ATTACHMENT #14

Jan. 3, 1977

A - PAGE 2 - THE GARDEN ISLAND - MONDAY, JANUARY 17, 1977

"Beautiful but dumb"

To the Forum,
In a paper presented August 1976 to the Governor's Conference on the Year 2000, written by Phillip K. Ige (State Department of Education) and Ralph S. Hirotsu (Chairman of Kaula's County Council), is the following (with apologies to the ladies):
"... If Kaula's were a woman, she might truly be called beautiful but dumb. It is more probable that old habits will prevail, at least for the short term. The mass of voters will continue to be politically naive and uninformed on important public issues, easily fooled by back-slapping politicians."
Old habits are beginning to change on Kaula's. Next time around perhaps the voters will rid themselves of a few more "back slapping politicians."
Congratulations to Councilpersons Rose Oso Shaw and Bob Yokuda for their stand on the up-zoning of Larry Ching's Hanalei property.
Helen C. Hopkins
Hanalei

It's criminal to cheat people

Mr. Councilmen:
From what I am given to understand, your vote concerning the Ching Upzoning is directly opposed to what the majority of the people want.
It is criminal to cheat and confuse the people you are responsible to lead.
Please change your vote.
Sincerely,
Theodore Reed

Hopes that Mayor will

To the Forum:
Jean Holmes deserves the Outstanding Civic Award for so bravely sticking her neck out on the Hanalei General Commercial Appeal.
Too bad the affected community is not equally articulate, but the feeling is there and this WILL be remembered, even if the Mayor does veto it, as I truly hope he will.
Sincerely,
A B. Norcock

-Veto Ching up-zoning

To the Forum:
Jean Holmes' lucid comments regarding the County Council's disregard for both public and professional opinion in rezoning Hanalei are emphatically endorsed by this resident of the North Shore.
Councilpersons Shaw and Yokuda are also to be commended for their insight and honesty in fulfilling their mandate to protect the public interest. I sincerely hope that Mayor Malapit will stand by them and veto the Council action.
Joseph Jeremy Harris, Jr.

Readers express displeasure with Hanalei upzoning

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County Building
Lihue, Kauai
Mayor:

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I had put very little effort into the attempt to petition your veto of the upzoning, assuming that the questionable reasoning and ethics behind the request would certainly compel you, as a lawyer and man of moral responsibility, to veto this action.
It is now well documented that higher taxes, crime and social tensions increase in direct proportion to the degree and rate of urbanization throughout the State.
The local businessmen and politicians who advocated the upzoning in the name of "local" interests will be responsible in part for the violence and frustration that is predicted to follow rapid urbanization in Hanalei.
Mayor, why don't you go to Hanalei or Wainiha and ask some of the more active local guys there why they like to bust up the haoles and see if they say it's because the haoles don't like development?
The last election certainly proved that JoAnn Yukimura represents a majority opinion on this island and a complete cross section of age and race.
Her opposition to this upzoning is based on her constant and continuing struggle to protect the rights of the local population to determine the future of their communities.
The people of Hanalei have twice unanimously opposed the State's plan to build a new highway from Kaihiwai and replace the bridge.
Hanalei may be the fastest growing area in the State but this is obviously not the choice of the people who live there.
By granting this upzoning you are creating a vacuum that, to be filled, will need a great increase in transportation, utilities and population.
I listened to your press conference and found that it avoided or glossed over the basic issues. There is presently no need for general commercial considering the fact that Larry Ching CAN build his new store without a zoning change; and the "back room" politics surrounding the council's actions were an insult to justice and to the voters and should have been grounds enough for a veto regardless of the applicant's lack of merit.
Mayor, it is of little importance but I want you to know that I actively solicited votes for you during the last campaign, claiming that you were sincerely concerned with the social and environmental ecology of Kauai.
I now find it quite ironic, after having just published an article to this effect in our alumni magazine, illustrated with a photograph of Hanalei valley and bridge, that you would sign into law an ordinance seriously threatening this valley - an ordinance so weakly rationalized and thinly disguised that if there were a substantial motivation behind the upzoning, those involved did not want it known publicly.
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The question is - if the mayor had so much to gain by vetoing the upzoning - what did he get by signing it?
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Odd isn't it how people are already crying the blues about the folks THEY elected. Well folks... it's too late! When the type of mentality prevails on this island that says whoever spends the most must be the "best guy"... you get what you deserve.
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Happy upzoning two years voters... on to bigger and better buildings... don't count on any vetoes or responsibility to the wishes of the people because with a few exceptions you just didn't put that calibre of person in office... so eat your heart out!
Gloria McElgunna

ATTACHMENT #4

JAN. 17, 1977

To the Forum:

Am I right in thinking . . . that the County's General Plan and CZO, made law by the vote of the people, states that changes can be made only "with good reason"?

Am I right in thinking . . . the upzoning in Hanalei town was granted by our Planning Commission, County Council, and Mayor, "without ANY real reason given" - good or bad?

Am I right in thinking . . . that when the voters' wishes are so blatantly disregarded and our laws taken so lightly, we now have a chance via our new referendum process, to ask the new Council to vote on the issue again and/or put the question on the ballot?

If so . . . please let me be one of the first to sign a referendum petition - as our only hope of correcting the great wrong that has been done to our island and the democratic process.

Nancy Kaauwai
Kapaa

To the Forum:

Certain elected and appointed officials have recently brushed aside serious planning questions and overruled our trained planning staff. Rationalization rather than reason, or worse, no reason at all was offered to justify the decision rendered. The community feels hopeless. It is left to conclude that political obligation and "cronyism" was involved.

Other important decisions face the Planning Commission, Council, and Mayor. Now is the time for re-dedication by these officials to the standard of impartiality, foresight, and the good of the entire island community.

Fragile Kauai deserves no less.

Concerned citizen
Edie Capocci

TO THE EDITOR:

REGARDING THE HANALEI UPZONING . . .



BARBARA SAY, HANALEI

HANALEI BAY 2001.....?

BAY LOOKING TOWARD PRINCEVILLE

Historic Hawaii photo reprinted by request

March 14, 1977

To the Forum:

This picture, originally published in the "Historic Hawaii News", is a real shocker and some may scoff at the idea, but we saw it happen on Oahu and Maui. Is Kauai to be next? Shall we allow the North Shore Plan to be nibbled away piece by piece? And what about the rest of Kauai?

If you really love Kauai please join the more than 1,000 people who have shown their aloha 'aina by signing the Referendum Petition. The Petition asks the County Council to repeal Ordinance #27, which needlessly upzoned 2.2 acres of land in the heart of Hanalei Town from Neighborhood Commercial to General Commercial. Call us at 825-6735 for petitions and information.

Hanalei Referendum Hui
David K. Ainoa, President

F-73

ATTACHMENT #5

GARDEN ISLAND
FEB. 9, 1977

Brewer sees land cost increase if moratorium ok'd

by Alan Matsooka

Imposing a moratorium on Kilauea agricultural subdivisions is unnecessary and would damage farmers by escalating land costs, C. Brewer officials said Monday.

In addition, they said the firm would be forced to temporarily suspend its operations at Kilauea if the County Council approved an ordinance calling for the moratorium.

But other speakers voiced fears that subdivided parcels could eventually be "county estates" with a price tag unaffordable by the bulk of Kilauea residents, and asked for a halt to further subdivisions until an area-wide development plan can be completed.

THEY WILL BE CONSULTED with enough Kilauea residents before beginning work at Kilauea, they said, and has left some questions unanswered, primarily the availability of sufficient water for a large-scale agricultural venture.

The comments were made Monday night during a County Council public hearing conducted at Kilauea School to hear testimony on a proposed ordinance which would stop any action on agricultural subdivisions at the North Shore community until a development plan is prepared and adopted.

STAFF REPORTER attended the five hour meeting, 20 speaking in favor of the ordinance and nine opposed.

During the meeting, Planning Committee chairman John Yukimura surrendered her gavel after attorney Wallon Ilong accused her of bias and said she should disqualify herself as chairman of the hearing.

Ilong, representing several Kilauea landowners, noted that the councilwoman had been involved in lawsuits which sought a halt to the subdivision of some Kilauea lands.

THEY WILL BE CONSULTED with enough Kilauea residents before beginning work at Kilauea, they said, and has left some questions unanswered, primarily the availability of sufficient water for a large-scale agricultural venture.

Much of the testimony during the hearing centered on C. Brewer's "Project 150," a plan to put nearly 3,000 acres of former Kilauea Sugar Co. land back into agriculture.

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Because of that, C. Brewer land manager Harold Luscomb said passage of the proposed moratorium could put some uncertainty in the firm's future plans.

"Imposition of a moratorium of agricultural subdivisions could well put us in the position of having to seriously consider a self-imposed suspension of our own activities at Kilauea," he said.

THEY WILL BE CONSULTED with enough Kilauea residents before beginning work at Kilauea, they said, and has left some questions unanswered, primarily the availability of sufficient water for a large-scale agricultural venture.

C. Brewer

slate sessions

Directors of C. Brewer & Co. Ltd. and parent U.I. International Corp. of Honolulu will hold consecutive meetings here tomorrow and Thursday.

Brewer's board meeting will mark the 45th anniversary of the company's move into its present headquarters at Fort and Queen streets. The two-story, steel-rod building's interior has just been completely renovated.

U.I., which celebrated its 50th anniversary last year, has been a major investor in C. Brewer for 20 years. It now holds a 54 per cent interest.

HONOLULU
ADVERTISER
11/4/75

ATTACHMENT #6

A moratorium is not needed because Brewer and the State have already done extensive planning, he said. Luscomb added that the proposed three-month moratorium could work against Kilauea farmers.

"A moratorium would cause delays in those parts of the program not directly involved in the agricultural subdivision," he said. "Delays in the subdivision would undoubtedly cause further increases in costs which would increase the ultimate selling price of the land."

But Kenneth Martin, representing the Kaula Farm Bureau Federation which supports the moratorium, said he suspected the land might not be good for farmers anyway.

MARTIN SAID MOST of the prime agricultural lands owned by Brewer and others at Kilauea have no available water, causing him to believe the land has "little or no" agricultural value at this time.

"Speculation is a game of whistling and dealing," he said. "There's no room for down-to-earth farmers."

One way the entire situation could be resolved, he said, is for the Federal government to guarantee a multi-million dollar loan to the State so it could purchase the Brewer land at Kilauea.

Martin said he was concerned that none of the landowners approached the Federation to get its input, and said he supported a moratorium for a year or more so Brewer officials, farmers and private landowners could discuss the future of Kilauea.

THEY WILL BE CONSULTED with enough Kilauea residents before beginning work at Kilauea, they said, and has left some questions unanswered, primarily the availability of sufficient water for a large-scale agricultural venture.

"You try to degrade us or belittle us, I don't know," an estate consultant said after one Brewer official testified. "If you expect us to stand firm, I think the smartest thing you can do is forget the Governor for a little while and come and see the Council, the people that represent the people."

Luscomb, at the end of the meeting, responded to several concerns voiced during the five hours. He said C. Brewer has contracted a consultant to study the existing irrigation system, and estimated that it would cost \$200,000 to repair. Enough water will be available for agriculture, he said.

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Restrictions will be placed prohibiting re-zoning of subdivided parcels or re-subdivision of the land, which will remain in agricultural use, Brewer vice-president Rullie Herberg said, though, that the firm was "philosophically" opposed to an anti-speculation clause in the deed.

The Brewer officials said beach accesses would be made available and hunting licenses granted, as long as workers and property were not endangered.

They did not tell the price of the land, but said it would fall below the \$200 per acre figures which some said they would be willing to pay. A firm price will be disclosed before final subdivision approval, they said.



John Matsooka
Herbie Herberg

Continued from
Attachment #6

Vice president Bierberg said he would support a 30-day moratorium so Kilauea residents and others could meet with the Brewer officials and possibly modify the Project 150 plan.

WILLIAM WILSON (in support): in what can be accomplished in one month? he asked.

He said he would not be opposed to a longer moratorium if the Brewer limits were extended.

Among those testifying were: NATHAN TAMURA (in opposition): a business agent for the ILWU. Tamura said jobs were needed so Kilauea residents wouldn't have to drive far to get to work. A moratorium, he said, would just cause more problems. He said some of those testifying in support were "brainwashed."

WILLIAM WILSON (in opposition): owner of Kilauea Management Co. "A moratorium will only cause more delay before people get on the land," he said. Landowners planned their subdivisions based on the General Plan because "we felt it was being pushed by the Mayor and County so that's the route we took."

WILLIAM WILSON (in support): concerned that agricultural lands are disappearing throughout the State, such as at Waialeale-Waikane. "People who love the land and want to farm have to evacuate the area. They become overtaxed by the flood of development."

WILLIAM WILSON (in support): said plans for reactivation of Kilauea agricultural lands look promising after the "bleak outlook" which loomed over the closing of the Kilauea Sugar Co. However, said residents had a "moral obligation" to request a comprehensive development plan.

JOHN KANA (in support): Kilauea Agriculture Association member. "The farmers aren't against Brewer. We're for comprehensive planning," he said. Pointing to a recently approved 61-acre agricultural subdivision, he said, "The price is too high and there's too much water." If there's not enough water for agriculture, then the lands will go urban, and the islands will be first.

T. JACK WILSON (in opposition): Kilauea landowner and owner of an agricultural subdivision. Said Brewer has given easements for irrigation so enough water will be available for farming, and has a waiting list of Kawai residents who want to buy land. "We could probably sell every parcel... in the period of a week." Accused Chairman Yukimura of being "self-serving" and prejudiced.

WILLIAM WILSON (in support): said a complete plan is necessary so children can continue to live in a rural area, and to know what Kilauea will be like in the future. With food shortages, said the community should become self-sufficient. "This town of Kilauea will not die. It will grow and become a planned community."

EMILY MACLAY (in support): concerned that diminishing agricultural lands will make Kawai dependent on other islands for farm products. "We can't live on meat alone. We can't live on fish alone. We need our vegetables." Asked for community solidarity. "If we are divided, then we will be shattered like glasses."

WILLIAM WILSON (in support): a certified teacher who farms at Moloaa, said young people with college educations sometimes return to Kawai because of the lifestyle, even if they have to sacrifice jobs. Said the problems of land tenure, marketing, processing and transportation of agricultural goods should be resolved.

WILLIAM WILSON (in opposition): concerned about the lack of input in planning process, but opposed to moratorium because of Kilauea job situation. "I think we should not at this point bring up another delay in what has to be done in providing a living for the people of Kilauea."

WILLIAM WILSON (in opposition): also concerned with the job situation, said should go ahead with Brewer proposal "without any hosing around." "I think the people of Kilauea, the oldtimers, have been misled, very badly misled."

Since this depends on the crop and type of operation, we suggest that all subdivision applications be evaluated by a review board made up of representatives of the UH Extension Service, Farm Bureau, Soil Conservation Service, Dept. of Agriculture, and others familiar with agriculture.

1. The deed restrictions must be longer than twenty years. Twenty years is no time at all in terms of a farming investment. We foresee a flurry of speculative sales and investment purchases ten to fifteen years from now when the 20-year period draws to a close.

2. A certain portion of the land should be set aside for young farmers to lease land, with possibly an option to buy.

3. There should be a moratorium on the subdivision of agricultural land until the above items are accomplished.

4. A community development plan should be done to show how the agricultural and urban areas will relate to each other, and how community goals for the respective areas will be accomplished.

Kilauea can produce good crops - fruits, vegetables, grains, cattle, produce, poultry, hogs, etc. at a profit. A thriving agricultural community in Kilauea would contribute to the economy, providing - directly and indirectly - many jobs. This is happening in Kamae on the Big Island where there is a prosperous community that is based in large part on successful ag subdivisions established by the state.

The reason Kamae is succeeding is because it was DESIGNED TO SUCCEED. It was planned and regulated by people who understood the needs of agriculture and the problems of competing land use. Without careful land management and regulation, we will create a place like the Waialeale instead where good agricultural lands are giving way to residences.

Lastly, we strongly urge that the comments and opinions of those who will be most affected - the community and the farmers - be considered before any deals are struck between the State, the land owners, or any parties. Without consulting the people, the government runs the danger of failing to serve the citizenry's best interest.

Sincerely,
Anthony Silva, President

VINCENT LILIAN (in support): said C70 section allowing one house on three acres of agricultural land could result in "country estates, as well as gentlemen farmers who have no real intention to produce food." Would result in higher land prices and eventually urban zoning. Has no basic objections to Brewer plan, but said should have restrictions insuring agricultural use of the land.

A.P. IKA (in support): owner of 912 acres of Kilauea forest reserve land under negotiation with State for incorporation into an agricultural park. Said his only concern was that a three-month moratorium was not long enough to develop a plan. Kilauea, he said, is more being planned by "outsiders and by people whose interests are in the profit side of the ledger," and who would abandon the project if it is not profitable.

WILLIAM WILSON (in opposition): said Kilauea residents had "more than enough time" to decide what to do with the land. Said the "farsi mora" system should have been placed on "hippie camps" and the second moratorium on the destruction of the Kilauea School, but no moratorium on agricultural subdivisions.

OTHELIA SPEAR (in favor of the moratorium) were John Wichtheim, Seidi Atagi, Fred Quinn, Tokumitsu Gushiken, Spencer Gushiken, Joseph Enrique, Nellie Bautista, David Spear, Kevin Nunn, Linda Spear and Brad Ahlers.

MAR 21 1977
Farm Bureau
Supports Kilauea

To the Forum:
Due to our interest in the survival and growth of agriculture in Hawaii, we of the Kawai Farm Bureau have been paying close attention to events in Kilauea. We find it commendable that the ILWU has secured a written commitment from C. Brewer regarding Kilauea.

We hope, however, that the State and County will continue efforts to assure the long-term success of agriculture in Kilauea. To us, some work still remains to be done.

FIRST, while we agree that a thriving guava industry would be wonderful for Kawai, there are many questions in our minds about the existence of actual or potential markets for Brewer's guavas. It would be helpful if Brewer would show good faith and make available its marketing plan or data. It is standard practice for agricultural proposals to be accompanied by a marketing plan. Whenever farmers request loans from the Kawai Task Force, marketing plans are required. We think such a plan will put to rest any questions about the feasibility of the project and the sincerity of the corporation. (We are not questioning here Don Cataluna's sincerity)

SECOND, while we endorse the lowering of standards for agricultural subdivisions because they are unnecessary for bonafide agricultural operations, this makes it even more important that the lots be for bona fide farming. To be suitable for bona fide farmers:

a. the price of water and land must be what agricultural products will bear. First preference to local people in the sale of lots is nice, but the preference will be of little value if the price is so high that most local farmers will not be able to take advantage of it. C. Brewer's proposal to fix the irrigation system is hopeful, but the water rights must also be guaranteed to each parcel in perpetuity if farming is to succeed. Price of water, too, is key. Since water is such an important resource, control of the water system should be by a neutral party on a nonprofit basis.

b. The number of dwelling units per lot must be more limited. Under present law, a buyer of a ten-acre lot could erect four houses. Very few agricultural operations would be economically feasible on the small acreage that would result. If Brewer is sincere about agriculture, it should willingly restrict its inland lots to one dwelling unit. Or, the County should impose the requirement.

Kilauea plan affects all agriculture

To the Forum:

When I attended the public hearing in Kilauea last Monday, I observed a depressing trend. Essentially, I saw the slow death of a dream, a death caused by the disease of greed. The symptoms are quite clear. They appear as a rash of subdivisions, a fever of speculation, and a loss of vision.

Since the original proposal for the creation of an Agricultural Park covering over 900 acres of Kilauea land, drastic changes have happened. At first, the idea seemed to gain great popular support. From Gov. Ariyoshi to Mayor Malapit, the politicians indicated commitment to the concept. Was it all just shibui?

To give the State credit, it attempted to condemn the land in question, unfortunately, when sued in court, the State lost its case and was forced to abandon that strategy. Now the fate of the land depends on whether or not it rapidly becomes subdivided.

According to Mayor Malapit's Position Paper on the Ag Park, strict enforcement of the current CZO will not prevent speculation. His paper also indicates that it might be wise to prevent the subdivision of any parcels larger than 50 acres.

According to a letter by Gov. Ariyoshi, the situation in Kilauea

source of jobs and revenue. It is only a matter of time until our island will become a mini-Waikiki.

If the Ag Park is not saved, we are in serious trouble. Perhaps the land out there could be used to grow an alternative cash crop such as soybeans. I am no agricultural expert, but it seems to me that the idea is worth serious study and consideration.

But, as I have said, after all the shibui and frustration, I fear that the Ag Park is doomed. We may all live to witness the death of our dreams. The disease of greed is cancer. After it has killed Kilauea it will spread. There is no known cure for it. Left untreated, it is lethal. But if detected in time, cancer may respond to treatment. Its growth may be controlled.

Will the Council act as a physician to start immediate treatment? I so, will it provide enough treatment in time? The future is in the hands of those seven people. Your fate and mine depend on their decision.

Ketin Nunn
Kapa

Kilauea Moratorium Killed 6-1

The Kilauea moratorium was "deferred indefinitely" Tuesday, following the go-ahead to C. Brewer plans for a guava and prawn farm, for an agricultural subdivision.

Bob Yotsuda a surprise voter on the "aye" side, John Yukimura continued her opposition. Councilman Yotsuda said all his questions had been answered when he went to Honolulu and talked with a member of the Governor's staff and with a representative of C. Brewer.

The moratorium would have put a three-month halt on all subdivisions at Kilauea, and stalled plans of C. Brewer for the guava orchard and processing plant, the prawn farm, and for an agricultural subdivision of 10 acres or more.

There was some discussion over exactly what "deferred indefinitely" means. Council Administrator Turk Tokita told The Garden Island that while Cushing's Rules of Order declare the matter "dead", Council regulations permit such a matter to be revived after a year.

Speaking for C. Brewer, Harold P. Luscumb, vice president for Property Planning, said "We are delighted that the Council had confidence enough in C. Brewer to defer the moratorium indefinitely. He said he was not perturbed over the possibility of the moratorium being brought up again in a year, because...

"By then, we will have made enough progress that there will be visible proof there is no reason for a further moratorium."
Next immediate roadblock to C. Brewer plans is the leasehold condemnation, proposed by Governor Ariyoshi when it seemed the former Kilauea Sugar Company lands were going to be divided into three acre parcels and lost to agriculture.

"We are involved in a series of discussions with the State," Luscumb said, "and we are hopeful that the problem will be resolved very soon." He added that he did not feel that the moratorium was particularly directed at Brewer... that nobody was "playing games to get Brewer" but that those proposing it were sincere in their motivation.

"The problem was, Brewer is the biggest landowner at Kilauea and thus affected the most."
Move to bring the moratorium question out of the Planning Committee, where it was stalled by votes of Yotsuda and Miss Yukimura, was made by third member flut Tsuchiya.

Tsuchiya said he felt a question of such major importance... whether it was approved, killed or deferred again... should be made by all seven Councilmen, not just three.

Deferment, he added, is continued when more information was needed, but all facts had been gathered and C. Brewer had put his commitments in writing. He did not feel the deferment of the vote should be continued "as a threat or means to obtain further concessions."
"This is the first concrete program for Kilauea since 1970 when sugar production ceased", he said.

Speaking in opposition to killing the moratorium bill, JoAnn Yukimura said the time was needed to develop an agricultural plan "before the area is permanently fragmented."
Miss Yukimura quoted Farm Bureau head Tony Silva as saying the 500 acres of proposed agricultural subdivisions pending before the Planning Department

are not designed for hona fide farmers.
She insisted there is a workable solution... "if we have the will".

Goals to preserve agricultural lands are even more important with the drought and freeze the mainland suffered this winter, she continued. Miss Yukimura

claimed the moratorium would not harm C. Brewer's plans. Since they said the guava and prawn farms would continue no matter what happened to their planned subdivision. Instead, she said, "it is the small farmer and public who will be harmed".

The Councilwoman pointed to a letter from C. Brewer, Vice President R. L. Horberg, in which he wrote that if guavas turn out to be a "colossal mistake" Brewer is not binding himself to stay in that business.

She scolded the construction industry for its opposition to the moratorium because it may set a precedent in other areas of Kauai. "The narrow-mindedness and selfishness of this reasoning saddens me", she said.

"I have been accused of being idealistic, she concluded, "but I believe my ideas are grounded in the very real overall realities of the food, energy, weather and corporate enterprise picture."

Attachment #8

Kilauea population would double under proposal, LUC told

by Bob Pictard

The State Land Use Commission held a day long hearing Wednesday on Rex Financial Corp's petition to change almost 38 acres of Kilauea land from the agricultural district to suburban district, for a proposed 165-unit residential subdivision located behind Kilauea School.

Staff Planner Curtis Ato said the County Planning Department recommended disapproval of the request, labelling it "preliminary."

He said that if all the residential subdivisions that have already received final or tentative approval in Kilauea were actually built and sold out, the present population of the area could leap from its present figure of 630 people to 1,467.

If Rex's petition was granted and all the houses eventually sold, Ato said, that could add another 837 people to the area, swelling the potential population of Kilauea to 2,169 people within the next five years.

Rex Financial's petition characterized Kilauea as fast-becoming "the bedroom community of the North Shore," meaning that people who live in Kilauea work elsewhere on the North Shore or the island.

The lots will sell for between \$120,000, it says, and "will fill the growing need for moderately priced residential homesites for Kaula's residents."

"Our track record indicates we have a ready market for 50 lots a year in low-cost packages," said T. Jack Dennington, Rex Financial's Kaula agent. "If we can keep within the \$14-18,000 average price range, we can sell them as fast as we can put them on the market."

Dennington said Rex Financial presently owns 184 residential lots

★ Kilauea ★

(Continued from Page 1)
from the Governor," said James Kirchhofer, a planner with the State Department of Agriculture, "is to deal with all the Kilauea land-owners on agricultural subdivisions to guarantee an agricultural future for Kilauea."

Rex Financial attorney Walton Long said the company would be open to lawsuits if attempts were made to put new restrictions on the ag parcels that already have been bought. Dennington said he objected to the "inequity" of the proposed conditions, and said it would be "difficult" for Rex to agree to them.

"What's the State's attitude on blackmail?" LUC Chairman Eddie Tangen asked Kirchhofer.

Tangen also criticized the Planning Department for not attending the pre-hearing conference on Oahu.

Belles said he requested that the meeting be held on Kaula since most of the principals were here, and that County has had to cut back on Oahu trips due to budget considerations.

By JAN TEBBURGENCE

Advertiser Kaula Bureau

WRIGHT said yesterday his office is rethinking the North Shore road improvements problem and will go back to the people soon for their comments.

The department this summer ran into a solid block of opposition when it proposed realignment and widening of the roadway from Kalihawai to Hanalei.

THE IMPROVEMENTS, spearheaded at a public hearing said, would change the lifestyle of the quiet, verdant North Shore area, would increase vehicle speeds, would attract more tourist development and would detract from the beauty of the area.

The department took the comments back for study and Wright said. The Advertiser yesterday the final decision will be left open depending on the feelings of the majority of the people of Kaula.

He suggested that even if a totally new alignment is not made, certain improvements will be necessary.

TIENE: MAY BE A need — from a safety standpoint — of spot improvements in some areas and shoulder stabilization in others.

The next public meeting will deal with the Hanalei bridge, too, which was not included in the summer hearing, he said.

"We feel that the bridge is important," he said. Among the alternatives would be to rebuild the present one-lane bridge with its eight-ton carrying capacity or to install a new two-lane bridge with a greater capacity.

THERE IS A DEFINITE need, he said, to elevate a portion of the road where it approaches the bridge from the Hanalei Town side. This area floods so severely during heavy rainfall that the North Shore is cut off entirely from surface transportation.

And beyond Hanalei there are other problems. A number of bridges across such streams as Waiohi, Waipa, Waipaho and Waialua are ancient one-lane structures. To replace them with new one-way structures would cause difficulties, Wright said.

"If we did not replace some bridges north of Hanalei with two-way structures, we would be open to litigation" for failure to meet safety standards, he said.

HOWEVER, HE FURTHER improvements are attempted, the State will require an environmental assessment for the entire area from Kalihawai to Hanalei.

"We have no intention of going piecemeal unless we know the final character of the area," Wright said.

Since much of the testimony at the public hearing dealt with the fact that better roads inevitably bring about higher speeds, Wright was asked for his feelings.

Wright says Hanalei road under review

by Bob Pictard

Hanalei residents shouted their opposition to a scaled-down Department of Transportation plan to improve Hanalei's roads and bridges, at a public hearing Wednesday night at Hanalei School.

The DOT had come up with several alternatives to an improvement plan they unveiled in 1973, which met vehement opposition from residents who felt the plan would drastically alter the secluded rural lifestyle of Hanalei.

The DOT ran up against that same wall of anger at Wednesday night's hearing, and Councilman Billy Fremont had to call for order after Hanalei resident David W. O'Brien-schlager and visiting painter Edward Kuhlback disrupted DOT Kaula District Engineer Edward Nakano's presentation with angry shouts from the floor.

"Leave us alone," shouted O'Brien-schlager, as slides of Hanalei's aging bridges flashed before the audience of about 100 people.

"What's wrong with that bridge? You guys don't even live here!"

"I feel very sorry as a councilman," said Fernandez, pointing to Nakano, "that my people aren't giving him a fair chance. He was born and raised in Hanalei."

The DOT's proposal concerns a 12.5 mile stretch of the Kaula Highway from the end of the improved road at Kalihawai to the end of the road at Hanalei, and it advocates widening shoulders and replacing several one-lane bridges with two-lane spans.

ATTACHMENT #10

ATTACHMENT #9

Hanalei-Haena

Road protests calmer at Lihue

4/27/77

ATTACHMENT #11

Most speakers at Thursday night's public hearing in Lihue on Hanalei highway improvements once again objected to the Department of Transportation's proposals, but they did so in much softer tones than at Wednesday night's hearing in Hanalei.

At that meeting, angry Northshore residents had shouted down DOT Kauai District Engineer Edward Nakano as he presented several alternate plans to widen Hanalei's roads and bridges, and Councilman Billy Fernandez received the same treatment when he tried to restore the meeting to order.

During public testimony Thursday, Charles Forward described the previous night's audience at Hanalei School as "99% against what the State seems determined to

shove down our throats."

Forward suggested that the DOT had gotten biased opinions from State engineers to support the project, which would widen roads into Hanalei and Haena, and create double lane bridges out of the present one lane spans in the North Shore.

Jennie Yukimura said that construction jobs would be more readily available for Kauai workers if the improvement project remained small and confined to refurbishing present roads and bridges, because the bigger project proposals would more likely go to off-island workers.

Jeremy Harris disagreed that one lane bridges were "inconvenient", saying that local people and tourists don't feel that way. He also advocated that Kauai, "preserve and capitalize on our chief resource of natural beauty."

Harris said the County should charge a toll for cars going past Princeville, but the charge should be only for tourists, not residents.

He said the County should establish a tram system into the North Shore area so tourists could "leisurely see the North Shore."

"This could generate \$1.5 million a year in revenues if run properly," Harris said.

Karen Graham agreed that wider bridges would be more convenient, but she said she didn't want to see tourist buses in Hanalei because "people just spill out of them." She said the bridges should be widened, but the buses should be restricted to certain areas.

Planning Director Brian Nishimoto told the DOT that the Planning Department supported all

their alternatives, and he asked those opposed to the improvement plans to consider safety first.

"Think about this situation," Nishimoto said. "If a child or parent is killed in an accident, and the primary cause is a narrow bridge, and he or she happens to be yours, then how would you feel about a narrow, one lane bridge?"

E. Courtney Kahr told the audience of about forty people that the present one-lane bridge system in Hanalei is probably safer than the proposed double lane bridges.

"In my experience as a lawyer, I've seen that traffic accidents relate mostly to speeding and drunk driving," she said, "so we should slow the cars down. It's more likely that cars would go slower on a one lane bridge."

Mike Miller said he is circulating a petition stating that Hanalei's bridges and roads are scenic treasures, and are "fully capable of handling all of our needs." He said he had collected 200 signatures by the time of the hearing.

Eddie Pualie, a Wainiha resident, criticized the DOT, saying, "when you ask them to do something, they don't have the money, but now they can build bridges."

He said North Shore residents will suffer if the improvement plans go through because of increased taxes.

"You want to see the place the same as you see it now?" he asked the packed meeting room, "or do you want to see it all junked up?"

Helen Hopkins, speaking for Lihue of the Land and the Hawaii chapter of the Sierra Club, disputed the DOT study's accident statistics, calling them "vague" and quoting a letter published in The Garden Island from the Mayor's Administrative Assistant Cayetano Gerardo, which said that safety is the responsibility of the people themselves, no matter what the condition of the roadways.

She said it was "irresponsible and cynical" of the DOT to boost tourism by widening the roads and bridges.

Nakano described Hanalei's roads as "substandard in pavement structure, width and geometrics," and he said the traffic accident rate from Kailihei to Haena is "disproportionately high."

After presenting several alternative plans for improvement, Nakano said the DOT favors widening the highway from Kailihei to Princeville to 11 ft. lanes with 4 ft. shoulders, and leaving the road from Princeville to the Hanalei Bridge the same width, adding only 4 ft. shoulders "where possible."

Dissenting residents said the widened highway would bring scores of tourist buses into Hanalei, and they disputed the DOT's contention that the highway "would make it easier for people to see the North Shore, but the highway itself would not induce growth or development in the area."

The DOT's bridge improvement projects sparked the most vocal protests from members of the audience. Nakano said the DOT wants to replace "in kind" the one-lane Hanalei Bridge with a two-lane, 28 ft. wide steel truss bridge, which they described as "more in line with public desire to retain the existing bridge concept" than the previously presented alternate designs.

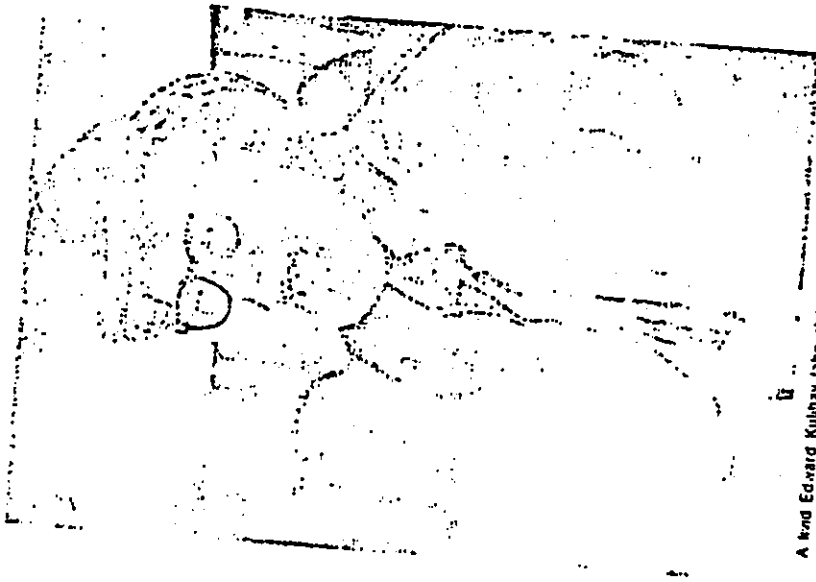
Nakano said if Hanalei bridges, culverts and fords built around 1912 are in "various stages of deterioration" with "structural defects not readily evident."

He said the DOT prefers to replace the single lane Waioli, Waipa, Waiuku and three Wainiha bridges with double lane, 28 ft. wide spans. The replacement cost of these six bridges alone would exceed \$2 million, according to DOT figures.

During public testimony, Barnes Ritnik said the DOT's environmental impact statement "overlooked the historical value of the bridges." He said they were among the first built using a reinforced concrete design in the country, and are "eligible for the National Register of Historical Places."

"Our technological history," he said, "is as important as our Hawaiian heritage."

Robert Schick, president of the Kauai Historical Society, said the roads and bridges should remain unchanged since the 1972 National Register of Historical Sites recommended that the road from Lihue to Haena be preserved as a scenic highway.



A wind Edward Kuhny (above) lives to shout down Kauai district engineer Edward Nakano and Councilman Billy Fernandez (above left) during a Department of Transportation hearing in Hanalei. Left: John Murphy sings his protest to the DOT's plans, while the recorder at the meeting takes down the words to his song. Photos: Matsushita.

EVALUATION

SIERRA CLUB, LIFE OF THE LAND AND HELEN HOPKINS (5/26/77)

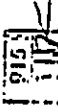
- A. Table 2 has been revised to show 1972-1978 traffic accident rates. The highway segment designations were changed in 1975, resulting in confusion when the accident rates are reported by small segments. This confusion has been eliminated by combining the data for all unimproved segments and comparing it with the adjacent improved segment. The accident rate in Hanalei Town is higher than on the Kalihwai-Princeville section, but both have higher rates than on the improved highway. The rate of accidents is used for comparison, rather than the simple number of accidents, precisely because it is not easily skewed.
- B. Traffic projections are taken into consideration in the planning of all highway projects. However, the primary justification for the recommended widening from Kalihwai to Princeville is the poor condition of the highway, rather than a need for more capacity.
- C. The North Shore Development Plan is presently the guiding document for planning, and the alternative proposals are in conformance with that plan. In response to the community's desire for minimal improvement, the widening alternative has been selected.
- D. The recommended widening from Kalihwai to Princeville will not induce growth, since the present highway does not limit traffic flow or types of vehicles. The interim repairs to the Hanalei Bridge will not induce growth, since the capacity will only be raised to what it has been in recent years. The growth inducing impacts of the proposed improvements from Princeville to Haena will be discussed in the Final EIS for that section.
- E. The Kalihwai to Princeville widening project will not require major cuts or fills, so the erosion control measures described in this EIS will have a high probability of success. The need for a large and fill on the Hanalei River bluff will be reevaluated.

- F. The point of this comment is unclear.
- G. The wind record from Kilauea was the most accurate data available. Buses were taken into account in the air quality assessment.
- H. The noise assessment shows that by 1988 the improvements would cause only 2 decibels increase over the peak noise level that would exist without the improvements. This is not a significant difference, hence the conclusion of no adverse impact from the project. This is not to say that the normal increase in traffic noise (which would occur with no project) will not be an annoyance.
- I. This clarification of population trends on the North Shore is helpful information.
- J. Comments dealing with the Princeville to Haena segment will be evaluated in the supplemental Final EIS for that segment.
- K. See evaluation J, above. The example of Kilauea is more the result of losing an agricultural economic base and having it replaced by urbanization. The role of the improved highway is insignificant. If anything, routing the highway around the town preserved its rural character.
- L. The justification for the project is not to provide jobs, but to provide a safe highway.
- M. See J, above.
- N. The County is in support of the proposed improvements.
- O. Medial reflectors have been installed. Edge striping on a narrow roadway is not recommended, since it tends to further constrict the lane width. Utility poles and other obstructions will be moved a safe distance from the highway. Occasional pull-off areas are not adequate for disabled vehicles. The signing needs of the highway will be carefully reviewed. The "S" curve will be realigned. The traffic volume into the airport does not justify the provision of turn lanes. Recommendations for the Princeville-Haena segment will be evaluated.

11-22-11

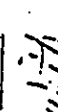
Dept of Transportation
Field Highway Administration, Region 9
San Diego, CA
San Diego

JULY 22 1971



with our property owners in the
vicinity area, island of Palms.

Tom King 5-8-9-29 and we are



extremely concerned over the proposed
of the transportation Dept dealing with
building the bridge and providing and
maintaining roads from Encinitas to
the end of the North road.

Continuing and of the existing bridge
and road would serve area the
vicinity of the bridge and vicinity of the area
which are to provide circulation.

Due to the road and spur traffic

would create conditions that, those of us
that own property in the area, would soon
find difficult to tolerate. Construction,
with all its expenses, would put and and
it one of the few remaining areas in
the Islands that is worth money for its
unimproved beauty.

Sincerely,

Phil and Jo Barber

Phil & Jo Barber
3535 Stonewood Dr.
Sherman Oaks, CA 91403

11-22-11

CHARLES FORWARD, JR.
POST OFFICE BOX 459
HAHAIONE, HAWAII 96711

11-0000-1(17)
D.C. 1-22-1(20)
April 14, 1977

U.S. Dept. of Transportation
Federal Highway Adm. Region 9
677 Ala Moana Blvd
Suite 613

Honolulu, HI 96813

Attn: Ralph T. Segawa, Dir. Adm.

Subject: D.O.T. Belt Road, Island of

Kauai from Kalihimoi to Hanalei Section
Projects

I want to be placed on record as
of the above date April 14, 1977, as being
opposed to any and all improvements
of the proposed project.

At the present time and since 1964
the maintenance of the present highway
and bridges has been very poor.
Often large potholes remain in the high-
way for many months. Drainage ditches
remain filled with heavy growth for
years. Example: Drainage ditch from
State Highway Hanalei, Hanalei, Kauai to Hanalei
blugged and closed since state took

CHARLES FORWARD, JR.
POST OFFICE BOX 459
HAHAIONE, HAWAII 96711

the highway from County of.
During the days of county control
of belt road the vegetation was
cut not poisoned by herbicide.
Back from roadway allowing scenic
views to be enjoyed by all. This
is no longer the case. Example:
lookout to Hanalei Bridge is like
looking thru a tunnel with out a roof.
A disgrace to say the least.

The most neglected and important
area of the highway is the Hanalei
Bridge itself. It is of great historical
value as are all the other bridges
in the proposed project area.
Other than ~~assess~~ replacing broken
remnants of the bridge goes for
hundreds of thousands with no
painting of bridge and general rep-
air. If the bridge received annual rep-
air and reinforcing ~~work~~ it would
stand many years more to say the less

CHARLES FURVARD, JR.
POST OFFICE BOX 31
HANALEI, KAUAI, HAWAII 96714

I have spoken out on this project
before and will again in the future if
needed. In the mean time leave our
vital Hanalei-Haena area alone
if try to make a Honolulu style high-
way here and do further damage to
life-styles and peace of way
living.

Place your superhighways on Oahu
of West Maui and Kona (Big Island)
where the areas are already badly
agrested. Just don't make a mess
of this beautiful area of Kauai.

Sincerely
Charles H. Forward Jr.

Box 459
Hanalei, Kauai, HI 96714

SAN DIEGO TUTOR INSTITUTE
MEDICAL GROUP INC

105 UNIVERSITY AVENUE
SAN DIEGO, CALIFORNIA 92103
PHONE: 791-6270

May 4, 1977

U. S. Department of Transportation
Federal Highway Administration, Region Nine
677 Ala Moana Boulevard, Suite 613
Honolulu, Hawaii 96813

Re: Kaimi Belt
Road Kalihwai to
Haena Section Project

Attention: Ralph T. Segawa, Division Administrator

Dear Mr. Segawa:

I am writing to give our strong preferences and recommendations concerning the 1977 project identified above. We are property owners, soon to be full-time residents of the Haena area (Waiula Hui 1 and Lot # 28, Halea, Kauai). We are fully aware of the Environmental Impact Statement.

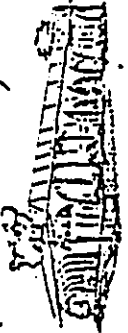
In choosing this area for our permanent residence, out of all the locations in the world, we did so for several overwhelming reasons: (a) the incomparable beauty; (b) the lush, tropical, unspoiled, rural setting; and, (c) the strict conservation, R-2 zoning features (which, it is fervently hoped, will save this area from the widespread despoiling of the natural beauty we have seen occur in Maui, Oahu, and elsewhere from hotels, condominiums and other sequelae of burgeoning tourism). If there is to be a remaining spot in the Islands of Paradise, let it be this area, protected from "Progress" by safe, but restrictive, preservation of the rural character of single lane roads leading chiefly to the beaches and to the homes of those who love it.

I. DISAPPROVE: ALTERNATE 2, HIGHWAY KALIHWAI TO PINEVEHUALE, INCLUDING ALTERNATE A. AND ALTERNATE W.

II. APPROVE:

- A. ALTERNATE 3, SEGMENT PINEVEHUALE TO HANALEI BEACH;
- B. HANALEI BEACH TO HANALEI TOWN; 4 FOOT SHOULDERS, CURBS, REPAIRS;
- C. HANALEI TOWN; DESIGN #1A ONLY;

OK - [unclear] (20)



H. P. BRIDGESHECK, MD.
JOHN T. P. CUMMINS, MD.
FRANK B. CALLIPATH, MD.
R. Y. THOMAS SONG, MD.

1111 S. MURPHY
ANN ARBOR, MI 48106

April 24, 1977

100-100000-1000

U. S. Department of Transportation
Attention: Mr. Ralph T. Segawa
Regarding: Kaula Belt Road Rehabilitation
to Haena Section Project

Page Two

- D. WAIOHI, WAIPIA, WAIKOKO BRIDGES: SECOND ALTERNATIVE ONLY;
- E. WAINIA BRIDGES #1, #2, #3: THIRD ALTERNATE ONLY;
- F. MAENA BRIDGES #1 and #2: ALTERNATE #1 ONLY;
- G. MANOA STREAM FORD: ALTERNATE #1 ONLY;
- H. LIMAHUJ STREAM CROSSING: ALTERNATE #1 ONLY.

As is well known to the Department of Transportation, it has been repeatedly demonstrated that the residents and individual property owners cannot depend upon the strict control of development... through existing environmental and regulatory land use constraints as managed by the county of Kauai's Planning Department.

In closing, let us plead that the preferences of the residents of the North Shore, whose investments and continuing taxes highly qualify them, should be given overwhelming preference over the self-serving potential profiteers who sign developmentally-inspired petitions. They are usually neither residents, nor property owner-taxpayers of the area!

Sincerely,

M. F. Grossbeck, M. D.

Marie L. Grossbeck
Marie L. Grossbeck

lml

HJ - 83

Director, United States
Department of Transportation
For the State of Hawaii,
Honolulu, HA.

Dear Sir:

We have just completed five de
days of vacationing on the island of
Kauai, northern part.

We learned from persons living in
Hanalei that outside interests are
attempting to further exploit this unique
area, the first step being to widen
and/or redesign the bridges in order to
speed up traffic.

Kauai should preserve its prime
area and other distinctive features. De
velopment is needed in tourist areas. It
is no big a mistake to say that we
pristine beach and valley as it would
be to blanket Diamond Head with
new apartments.

The tempo of life should properly

slow down in this beautiful pastoral setting. The narrow bridges act as a deterrent to fast driving. This constitutes a safety factor. Of course there should be a few wide spots along the road to enable cars to stop for picture taking, to protect bicycl riders, etc.

Many tourists treasure the unspoiled and undeveloped parts of the Islands. Just knowing they exist is a source of satisfaction. In respect of the importance of balance from the standpoint of overall tourist appeal, it appears to us very short sighted for the State of Hawaii to place itself at the mercy of a single industry, namely tourism. Fuel for air travel upon which tourism depends may be in short supply within ten years. The availability of agricultural land would then become essential both for industry and food.

We hope you will see your influence to cause further development at Honolulu.

Yours very truly,
Rogers W. Luther Governor C. Litter

MEMORANDUM
4383 ARMAFELF. RD.
KAHUA, H.I. 96740

8/17

DEAR MR. WRIGHT DIRECTOR'S OFFICE

YOU ARE PROBABLY A CIVIL ENGINEER AND HAVE BEEN HIGHLY TRAINED TO THINK THAT MOVING TRAFFIC BRIDGES IS VERY DESIRABLE, USUALLY IT IS,

BUT SOMETIMES EFFICIENCY SHOULD TAKE A BACKSEAT TO OTHER VALUES. THE SINGLE-LANE BRIDGES IN THE MAHUKI AREA SERVE AS EFFECTIVE VALVES, REGULATING THE FLOW OF TRAFFIC (DEVELOPMENT) INTO THE FRAGILE AREA.

SOMEONE HAS SAID THAT NO WATER HERE ABOUT A MILE IS APPROX. THE NUMBER OF CARS ALONGS GIVES TO US THE ROAD BEING THE ROAD FOR THE ROAD AROUND THE ROAD AND THE ROAD FOR THE ROAD.



DIRECTOR'S OFFICE

May 10, 1977 11:57 PM '77

TO: DIRECTOR, DEPT. OF TRANSPORTATION
869 Punchbowl Street
Honolulu, Hawaii 96813

DEPT. OF
TRANSPORTATION

FROM: CRAIG NAKANURA
732 Honou Street
Honolulu, Hawaii 96816

RE: Comments on Kaula Belt Road - Hoena to Kalia/Ala

Please send me a copy of the final EIS, when available

2

PLEASE DO NOT OPEN THE FLOOD
GATES TO GREEDY SPECULATORS WHO
NEED EASY ACCESS TO A BEAUTIFUL
REGION.

CAME LAST THOUGHT: OUR WORLD IS
SPREADING, SPREADING UP. CAN "ALoha"
MAINTAIN A LIFESTYLE THAT STANDS
UP TO WHIPPING BY EACH OTHER IN
NICHTL BOXES? IT'S REFRESHING
TO SEE A HIGHWAY DESIGN FEATURE
THAT MAKES COURTEOUS MENTION
A NECESSITY: "AFTER YOU, PLEASE."

BEST HIGHWAYS WILL US TO REACH
MOMENTS. SO GOOD THATS A YEAR THE
HAWAII GREEDS ARE ATTRACTIVE
USABLE, AND CULTURALLY CORRECT.
PLEASE LET THEM, (AND US) BE.

THANK YOU TO ALL
COURTESY
COURTESY
COURTESY
COURTESY
COURTESY

May 10, 1977

The following statement is in response to the Draft EIS for the Kaula Belt Road Project - Ikaena to Kalihivai. A basic cost-benefit analysis applied to the findings of the EIS will reveal one undeniable conclusion.

The main reasons presented justifying the proposed changes are: 1) The need for easier access to the area 2) The unsafe nature of the highway in this area, as determined by the high accident rate when compared to the remainder of Kauai, and 3) The deterioration of the bridge and highway construction.

To alleviate this problem, overly drastic improvements are proposed, i.e., a two lane concrete girder bridge crossing the Hanalei River, downstream of the existing structure. Also proposed is the removal of several historic bridges between Hanalei and Wainiha, to be replaced with two lane bridges.

Upon reviewing these proposed "improvements", I believe we must ask ourselves several questions:

First, is there really a need for these major improvements? On page I-4 of the Draft EIS, it is stated, "In the process of traffic assignment, it was found that the existing highway does not presently limit the total volume of traffic to the North Shore..." This statement, along with those of several residents who have said that the projected traffic increase has not materialized (see Appendix to EIS), leads to the conclusion that indeed, the existing structures are large enough to handle the area's traffic volume.

That same paragraph further states that the current road does "...restrict the passage of certain types of vehicles such as large buses, heavy trucks and cranes..." But, is there really a need for these vehicles in this area? The adverse impacts of large tour buses travelling through this small rural community are plain - noise, smoke, and dust pollution as well as increased traffic and population. The easy access to large trucks and cranes will with certainty mean increased construction, and I am sure such plans are already in progress.

Accident occurrences for the Kalihivai to Ikaena Road for 1973 and 1974 are shown in Figure 3 of the Draft EIS.

While it is true that the number of accidents are high in proportion to the other areas of Kauai, I would like to suggest that these accidents should not be attributed mainly to the narrowness and condition of the road. The facts state that 62% of the accidents occurred at night, and while most of the other major roads of Kauai are well lit, this area is notorious for its lack of street lights. Well placed street lights that blend into the surroundings is surely a relatively inexpensive solution that will go far in reducing the number of accidents.

The deterioration of the present road structure is perhaps the only justification for the proposed changes that has merit. If State Highway assessments are to be believed, some of the structures have only a remaining three year lifetime. However, as stated earlier, because there is really no need for drastic changes in these structures, I would suggest only "minor modification, what are classified "safety improvements" in the Draft EIS, i.e., resurfacing and minimal road widening. Where bridges need improvement, I would suggest replacement in kind - and of no larger size, as it is the quaint nature of these one lane bridges that provides much of the esthetically pleasing rural atmosphere of the Hanalei area. Indeed, residents have said that the one lane bridges have always worked fine for them, and tourists still have access with rental cars. This alternative also provides the attractive benefit of the lowest cost.

The next question we must address, is whether the proposed changes are wanted. In Chapter II, the EIS states that local residents view tourism growth as an intrusion on their privacy and that they give top priority to maintaining small scale agriculture and lowest priority to expanding tourist facilities. Should not the overwhelming view of the residents in the area be complied with? Or shall we, from afar, force them to live in an environment we have provided for them?

In Chapter II, the EIS also speaks of growth being controlled presently by the inadequate highway. This section concluded that improving the highway would not result in increase in development because of natural restraints i.e., flooding,

increased pollution, unwanted development, and great expense to the taxpayers. A reasonable and relatively inexpensive alternative would seem to be the addition of street lights in dangerous areas and replacement in kind or repair of the existing structures. We must take into consideration the wants and needs of the residents, and not haphazardly create the space for development that once started, will be impossible to stop.

In conclusion, as Mark Twain was quoted in the Sierra Club book, Kaunoi:

"No alien land in all the world has any deep strong charm for me but that one, no other land could so longingly and so beseechingly haunt me, sleeping and waking, through half a lifetime, as that one has done. Other things leave me, but it abides; other things change, but it remains the same. For me its balmy airs are always blowing, its summer seas flashing in the sun; the pulsing of its surfbeat is in my ear; I can see its garlanded crags, its leaping cascades, its plummy palms drowsing by the shore, its remote summits floating like islands above the cloud rack; I can feel the spirit of its woodland solitudes, I can hear the splash of its brooks; in my nostrils still lives the breath of flowers that perished twenty years ago."

Will this beauty be lost?

Craig G. Nakamura

David Nakashima
717-B 17th Avenue
Honolulu, Hawaii 96816

Scott Ezer
5367 Poala Street
Honolulu, Hawaii 96821

tsunami inundation, unsuitable soil and steep unstable slopes and the County Zoning Codes which limit construction around these natural constraints. This is clearly a shortsighted and unjustifiable conclusion. Today's architects and engineers can easily overcome these natural restraints, and zoning codes can always be changed. Thus if the proposed changes are made, an increase in development is inevitable, contrary to the wants and needs of the Hanalei population.

The final question to address is--what are the unavoidable adverse impacts of the proposed improvements? For assistance in answering this question, I shall consult Chapter IV of the Draft EIS, and add to its somewhat biased presentation.

Of major concern is the replacement of the historic Hanalei Bridge, which for years has symbolized the gateway to tranquil Hanalei, and indeed, of which many have said, "Everything slows down upon passing over the Hanalei Bridge". The loss of this historic landmark would destroy the rural atmosphere of the area, not to mention the permanent damage to the adjacent Hanalei National Wildlife Refuge. This refuge is the home of four species of endangered waterfowl, and construction here would greatly set back any progress they have made.

Another major impact is the previously discussed growth of development, which is not only self-destructive, but unwanted by most of the resident population.

Construction of replacement bridges is on the immediate shoreline as well as close to that shore in all instances. Because of this, I do not believe it is possible to make an unqualified statement that "The project would not produce any unavoidable adverse impacts to the coastal zone." The construction alone would do much to harm the existing ecosystem, as well as permanent damage that would be done due to the changes.

We must now look at a cost-benefit analysis of the proposed changes. The only truly justifiable benefit of the changes would be the improvement of the deteriorating road conditions. The costs due to such a change include damage to the rural and esthetic beauty of the area.

EVALUATION

CRAIG NAKAMURA, AND OTHERS (5/10/77)

April 21, 1977

Eloin Nakano
State Highways Engineer
Department of Transportation
Honolulu, Hawaii

Sir:

I am writing in favor of the proposed two-lane bridges and widening of the roads from Kailua to Iiwa.

Reasons favoring the proposal are safety and convenience.

Safety: Wider roads allow for more maneuvering and clearance between oncoming vehicles. If a truck and a large car pass each other, the car is usually forced onto the grassy shoulder. And if it has been raining, that can be critical. There is this reasoning just on the roads get bigger, our foot gets heavier. That being the case, let's blame our foot and ourselves.

Convenience:

I wish to cross the roadways without having to stop and wait at the bridge for a string of cars. Funny thing, some say that one-lane bridges slow the traffic down. I say the reverse is true--the tempo is actually quickened. Countless number of times I have observed two vehicles approaching from opposite sides of Hahaione and Hahaione bridges and upon meeting the other, actually speed up to be the first one there and thus continue on without having to brake, stop, and wait for the other to pass.

The eventual "over the bridge first winner" is usually:

- 1) the one with more guts
 - 2) a large truck or pickup
 - 3) a large car
 - 4) or a rented out junk whose insurance is covered by the State anyway
- and rarely a, "go ahead after you" driver.

In closing, I feel that the North Shore being one of the fastest growing areas in the State should have an improved roadway system.

In yours at-humble

[Signature]
Honolulu, Hawaii

- A. At no point has increased access been presented as a justification for the proposed improvements.
- B. Less extensive improvements have also been proposed. The recommended widening from Kailua to Princeville is the minimum improvement that will meet safety objectives.
- C. The need for the project is safety and improved structures, not traffic increase.
- D. Comments relating to the Princeville to Iiwa section will be evaluated in the supplemental Final EIS for that section.
- E. Lighting is one contributory factor, but poor roadway geometry is more important, and can not be corrected except by widening the roadway and improving the dangerous curves.

F & G. See D, above.

1977 MAY 10 10 10 AM '77

April 15, 1977

REC'D

DIRECTOR'S OFFICE

Director, Department of Transportation
869 Punchbowl Street
Honolulu, HI - 96813

APR 21 3 38 PM '77
DEPT. OF TRANSPORTATION
PLANNING BR.

EVALUATION
MARILYN POLLOCK (4/15/77)

RE: Kaula Belt Road

Dear Sir,

I am pleased that the Department of Transportation has listened to the community of Hanalei and Maena, and that you have changed your specifications on the road also that you have submitted alternatives on the bridges; I believe all bridges replaced should be of the same style and one-lane, in the same location.

Hanalei and Maena are places of great beauty, a beauty one should take time to enjoy. I believe that road approaches from Kalia-wai to the top of the hill at Princeville should be maintained as is and lower speed limits be enforced. Emergency turn-outs could be constructed where they would not interfere with the natural beauty.

4
1
00

B
In terms of buses, mini-bus type would be advisable to use in the valley, transferring from the large vehicle to the mini-bus. This smaller vehicle could provide more jobs. The change station could be at Princeville, or at the Scenic turnout. A smaller bus would give the visitor the advantage of seeing the scenery in a more intimate way and the North shore would be remembered as a unique experience.

C
The Governor has publicly advocated a limit to growth and the need to preserve our wonderful natural beauty. Widening the road and doing away with the rural and picturesque feeling of the North shore in order to accommodate short time visitors demonstrates great insensitivity to the feelings and desires of the residents and their future investment, the children of Kaula.

Sincerely,

Marilyn Pollock (Mrs. B.R.)
1739 C. Ala. Street
Honolulu, HI 96815

ph. 915-2767

- A. Lower speeds will be used where feasible. Space for emergency turnouts will be provided on the shoulders from Kalia-wai to Princeville.
- B. The type of buses allowed to operate in the area is a function of the Public Utilities Commission, which has indicated a reluctance to restrict access to certain types of vehicles.
- C. Development and growth are controlled by the land use policies of the County. The highway plans merely reflect these policies. The State is cognizant of the need to provide transportation facilities that preserve the resources of the North Shore.

May 3, 1977

U.S. Dept. of Transportation
Federal Highway Admin. - Region Nine
677 Ala Monua Blvd., Suite 613
Honolulu, Hawaii 96813
Attn: Mr. Ralph T. Savage

Subject: Kaula Holt Road Realignment to Heauna Section Project

Dear Mr. Savage,

My wife and I are vehemently opposed to the proposals to widen the bridges and highway as covered by some of the outlines proposed part of the subject project.

Our objections are registered as frequent visitors to the nine taxpayers, and owners of real property in the subject area. While resort property might temporarily benefit from the expansion of the tourist hotels, in the long run we, along with the residents, would lose the very thing that makes the area dear to our hearts.

Beleaguering diurnal buses are not needed on the north shore. Only Kaula's north shore and Heauna are left for those of us who want to escape to live or to relax. The quaint beauty of "South Pacific" would be destroyed forever if the road and bridges were widened. The very beauty the tour bus operators would like to sell would be destroyed by their presence.

As taxpayers, we oppose the unnecessary and unwanted spending of tax dollars and the consumption of precious energy sources and materials for such needless purposes. As an example, one proposal for the Kaula bridge calls for an expenditure of \$286,000 versus \$47,000 to provide needed maintenance only. If the \$286,000 is amortized over 40 years, the annual cost excluding interest, present value calculations, etc., is \$7,150. The maintenance would provide 7-10 years of life. Even at seven years this is only \$6,700 versus \$5,820,000 for projected cost comparisons over eight and a half million dollars of potential waste -- any, worse than waste, of wanton destruction in the name of "progress".

The consultants are, in fact, opposed to any massive widening project. The environmental study confirms damage will occur. Funds needed elsewhere would be worse than wasted. Who, in question, really wants the wider bridges and highway and for what reason?

It is rare indeed when we fully agree with the staunch environmentalists. This time, however, they are right.

Please register our vigorous objections to and protests against any widening of the bridges and highway covered in the subject project area.

Wendell H. Houston
Wendell H. Houston
614. Houston

7746 S. Jurado Ave.
Bartonsville, CA 91765

Shedd
474 West Hillside Blvd.
San Mateo, Ca. 94403

May 9, 1977

Director of Transportation
State of Hawaii
1065 Punchbowl St.
Honolulu, Hawaii

Dear Sir:

I am in Hawaii on a business trip and have been to the islands of Maui, Hawaii and Kauai. I have been to Oahu with my family several times in the past for combination business/vacation trips. Oahu has changed greatly since my last trip here and for the worse. I would not care to spend a vacation here. If ever there was a city that desperately needed a good public transit system, it is Honolulu.

Maui is a small replica of Waikiki and I do not enjoy having to stay in a hotel there. Business associates in Honolulu suggested that I visit the island of Kauai. I have just spent four days there in the Hanalei district, a place so beautiful and unspoiled that I intend to come back as soon as possible with my family to spend more time there.

I was fortunate enough to meet some of the so-called "local" people in Hanalei Town who made my stay there even more pleasant because of their knowledge of the area and the past history. From them I learned that your department has plans for widening and straightening the road and widening the unique one-way bridge. As a resident of the State of California, I know from experience what easy access (by way of improved roads) can do to rural areas. Much of my beautiful state has been irreparably spoiled by urban sprawl and highway traffic.

Hopefully some of the rural areas of the United States can be preserved so that our children and grandchildren can enjoy them as we did when we were children. I would like to suggest that you leave the Hanalei area as is. As the saying goes, "spread kills" and people should be encouraged to slow down and enjoy the magnificent scenery.

Sincerely,

Wendell H. Houston
Wendell H. Houston
474 West Hillside Blvd.
San Mateo, Ca. 94403

Steward, Harry

P.O. Box 397

Hanalei, Kauai, Hawaii 96714

Memo from:

ERNIE WENCK

April 19th, 1977

U.S. Dept. of Transportation
Aiea Mauna Blvd.
Honolulu, Hawaii

U.S. Dept. of Transportation
Aiea Mauna Blvd.
Honolulu, Hawaii

April 18, 1977

Dear Mr. Ralph Segawa,

Dear Mr. Ralph Segawa:

REGARDING THE PROPOSED HIGHWAY AND BRIDGE CONSTRUCTION OF KAIHIMAI

TO MAEHA-HUI.

As property owners of Wainiha, Kauai, tax key # 4-5-8-12-7, we are vitally interested in opposing the upgrading of existing bridges and roads in load capacity and lane widths on the grounds that it would change the overall atmosphere and life style of the residents as well as destroy the attraction it holds for tourists.

It is also clear to us that the existing low speeds directly reflect the low incidence of fatalities and serious injuries in the Hanalei to Maena area. We also feel maintaining the status quo could best meet the interests of the taxpayers.

Please include us on any mailing list of activities or information concerning these subjects. Thank you.

Sincerely,
Harry Steward
Kathleen Steward
Harry and Kathleen Steward

Regarding the proposed highway and bridge construction of Kaihimai to Maena-Hui.

As a property owner of Wainiha, Kauai, Hanalei Colony Resort, I am vitally interested in opposing the upgrading of existing bridges and roads in load capacity and lane widths on the grounds that it would change the overall atmosphere and life style of the residents as well as destroy the attraction it holds for tourists.

It is also clear to us that the existing low speeds directly reflect the low incidence of fatalities and serious injuries in the Hanalei to Maena area. I also feel maintaining the status quo could best meet the interests of the taxpayers.

Sincerely Yours,
Ernie F. Wenck, Jr.
Ernie F. Wenck, Jr.
2713 So. Gaffey St. 5
San Pedro, Ca. 90731

SILVER POINT YACHTING SERVICES, INC.
SAN PEDRO, CALIF. 90731

III. PETITIONS

Following circulation of the Draft EIS, the State Department of Transportation received four petitions and "form letters", three in favor of the proposed highway improvements (565 signatures) and one opposed (658 signatures). The petition statements are given below (the petitions themselves may be reviewed at the State DOT office).

1st. Petition

"We, the undersigned, hereby support the concept of the complete realignment of roadways and the construction of concrete bridge leading into Hanalei for the following reasons:

1. Provide the people of the County a first-class federal highway through the North Shore for safe and efficient services;
2. Eliminate the hazardous curves and narrow road shoulders considered to be unsafe and dangerous;
3. Minimize the cost of maintenance and repairs of a concrete versus steel constructed bridge.
4. Provide for better ambulance service."

No Date, 493 signatures, all from Kauai communities outside of the North Shore.

2nd. Petition (Form Letter)

"This is a written testimony in favor of a new Hanalei Bridge. Recently there were two accidents within a span of a week. Fortunately no one was killed. The old bridge is a menace and very dangerous to the citizens and school children of Hanalei. I believe that some day the State of Hawaii will have a large lawsuit on it's hands if this situation is not rectified.

Another situation that should be taken care of is the drainage system in the Hanalei Town area. If the drain ditches are dug deeper we would not have cesspool problems and drainage problems."

Dated April 19, 1977, 62 signatures under "Citizens for the Safety of Hanalei", no addresses.

3rd Petition (Form Letter)

"This is to go on record that I am in favor of the Department of Transportation's improving the Hanalei to Haena Roadway and two-way bridges for the safety of the travelling public.

Presently the roadways are too narrow with inadequate shoulders for emergency stops and to provide adequate guardrails along sheer side slopes. The recent mishap of a vehicle plunging 150 feet to the beach would not have happened if adequate safety facilities were provided. The Hanalei, Waikoko and Wainiha Bridges are inadequate and hazardous with low load limits and poor guard rail provisions. Merchandise and materials being trucked to Hanalei cost considerably more because of the low load limit allowed on the bridges which affects all the residents of Hanalei to Haena.

The people objecting to the safety improvements are being obviously selfish and are not concerned of the safety of others who live and visit Hanalei. Life of people are too precious to forego the much needed and belated improvements. Your concern of the safety and well being of everyone is appreciated."

Dated 5/11/77, 10 signatures, no addresses.

4th Petition

"We the people of Kauai consider the roads and bridges to the end of the road in Haena, scenic, beautiful, and fully capable of handling all our needs. We the under-signed protest the widening and drastic expansion of the roads and bridges, resulting in the inevitable damage to the delicate environment of the North Shore."

Received 6/14/77, 658 signatures with addresses, all but a few from Hanalei and other North Shore communities.

IV. EXCERPTS OF PUBLIC HEARING TESTIMONY RELATING
SPECIFICALLY TO THE KALIHIWAI TO PRINCEVILLE SECTION

Hanalei, April 20, 1977

Mr. Robert Schleck, Kauai Historical Society

"....We have also received information on scenic roadways and are working toward designating the highway from Kalihiwai to Haena as the scenic highway for the people of Kauai...."

Ms. Pam Beck, North Shore Belt Road Citizens Advisory Committee

"....We of the Committee take the position that the scenic road should definitely begin at the end of the present improved highway at Kalihiwai. In order to achieve this, we have, in a limited amount of time, come up with a number of alternatives.

Dealing with only the stretch of road from Kalihiwai Bridge to the Princeville entrance, we note that the DOT proposes two 11-foot lanes with 4-foot paved shoulders. We suggest 10 or 11-foot lanes with only one shoulder, preferably of grass.

The DOT proposes to straighten three curves on this stretch. Its up on the map here. We propose the need to straighten only one of these curves. We've driven along and the only one that we could find was a problem of the three, one may-be needs to be straightened out.

We suggest that the Eucalyptus trees be topped, for safety; that the utilities be put underground; and that adequate signs be posted both for information and for safety...."

Mr. Howard Yamaguchi, Yamaguchi Bus Service

"....On the first increment, the Kalihiwai-Hanalei area, there is one point a little past the Hanalei-Princeville airstrip that we feel is dangerous. Now, the reason is that it's not -- not that it's not wide, but that's the area where the drivers start picking up speed, okay, because of that curve, and they can't see it.

On your way -- let's see -- on our way to Kapaa, that's when the drivers usually come to our lane, okay...."

Mr. Jeremy Harris

"....It's my contention that, first of all, Dr. Marland's suggestion that possibly the roads could be transferred to the County. I feel that should be further explored both by Pam Beck's Committee and by the Department. And I think that only after a very in-depth analysis of that possibility should any further decisions be made.

If that proves impossible for some unforeseen reason, I would recommend that no change is needed on the Kalihiwai to Hanalei bridge section.

In reviewing your statistics, the accident rate per million vehicle miles in this stretch of road is only .15 higher than that for the entire island, which I don't believe is statistically significant...."

Lihue, April 21, 1977

Mr. Jack Rodrigues

".... First of all, how many of you realize when this Federal-aid program came to Hawaii, to Kauai, especially. It started way, way back, 1938. 1938, 39 years after, where are we? From Lihue to Kalihiwai, 28.5 miles. Thirty-nine years to construct this number of miles. Now we got 13 miles to go to Haena. At this rate we should see another 18 years.

Well, I'm glad I represented my great grand-children because I might be a great great grandfather. Now, I'm not trying to point a finger at anyone but I think Kauai has been a stepchild when it came to having Federal funds on highways. That's secondary, but I don't understand the State's plan. First we build a primary highway from Lihue to Kalihiwai with modern roads, modern designs, then all of a sudden the State reverts itself and says now let's build a secondary road from Kalihiwai all the way to Hanalei Bridge and past Hanalei Bridge is something that's pretty deep and I can't get involved too far right now, but I want to speak to Hanalei Bridge.

Why a secondary road? Fifty-foot right-of-ways. Does the State realize that the County subdivision ordinances require 50-foot right-of-ways? Just for subdivisions. Road pavement's 20 feet, someplace 22 feet, that's wider than what you planning for the primary road all the way to Hanalei...."

Mr. Charles Forward Jr.

"....Another thing, I'm amazed with the energy crisis that we're obviously facing in the United States now and Hawaii being an insular state or being an island state, will be particularly hit by this energy problem, that the State is even contemplating wider highways. It just don't make sense, that's all...."

Mr. Arnold Nurock

".... The prime consideration in all this supposedly is safety and a lot of accident statistics have been put up, but they're rather vague. And the answers presume to be to widen the road, straighten the road and improve and widen the bridges because I think that's the way engineers think about things. But a careful analysis of the actual causes of accidents in those areas and where precisely they did occur would be rather interesting and might lead to the conclusion that precisely the things they're talking about doing would increase the accident rate. And I don't think that any shread of evidence has been given thus far to indicate one way or the other whether that's true.

Mr. Paul George

".... I feel sure we do need a lot of repairs in the road because of minor accidents due to the faults in the road, but I feel knocking it down and putting a whole new road would really not help the safety at all, as the other people have said...."

Mr. William J. Sollner

".... So I'm taking the position that whatever you do on the North Shore or anywhere else in the state from this point on, provisions for bikeways should be included in plans for highway construction improvement, resiting of existing routes, whatever...."

Ms. Jenny Hutchings

"....I have seen in Ohio, where my family lives, roads that have been straightened from lovely curving roads to one lovely straight highway where my car can go 80 miles an hour if they don't catch me. I mean it's really neat and all the curves are gone and all the pleasure is taken from it in the name of progress. Technology today is an octopus that is growing into everybody and slowly squeezing out their life. It's taking away your green grass. It's taking away your trees. Look at your parking lot with your big supermarkets. How many trees do you see there any more. I get very unhappy about it.

If you want to beautify your hills in Hanalei and on the way up the road to Hanalei, why don't you take the red dirt that has been left from the new roads that have been built to straighten the old roads and plant some bougainvillea, some Filipino orchids, put the natural plants back. They're all gone. There's nothing left but the red dirt.

Someone else mentioned the mountains slowly eroding and falling down because you build your new roads and you leave the red dirt lying there to be eroded...."

The full transcripts of these hearings are available for review at the office of the State Department of Transportation.

V. UNRESOLVED ISSUES

For the Kalihiwai to Princeville segment of the project, the primary unresolved issue is the treatment of the "entrance" at the beginning of the project. The loss of this visual node is an unavoidable adverse impact. The desire to the Outdoor Circle and the Citizens Advisory Committee is to keep it as it now is, giving the highway a definite rural atmosphere. However, to retain the narrow box cut will not be possible with the improved highway cross section, and the access road to the Anini Vista Estates Subdivision. The State Department of Transportation will continue to work with these two groups to arrive at an acceptable landscaping approach that will preserve the character of the area.

The question of archaeological resources can not be fully resolved until ground is broken, since there could theoretically be subsurface remains. A reconnaissance has been conducted, and no sites were found. If any artifacts are uncovered during construction, work will be stopped and the SHPO notified.

For the Princeville to Haena segment of the project, a supplement to the Final EIS (includes Section 106 requirements) would have to be prepared and approved before implementing any major action.