

BENJAMIN J. CAYETANO
GOVERNOR



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

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAII
GLENN M. OKIMOTO

RECEIVED

IN REPLY REFER TO:
HWY-DS 2.7175

00 FEB 25 12:07

OFF. OF ENVIRONMENTAL
QUALITY CONTROL

TO: GENEVIEVE SALMONSON, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: KAZU HAYASHIDA *KH*
DIRECTOR OF TRANSPORTATION

SUBJECT: FINAL ENVIRONMENTAL ASSESSMENT FOR THE KEAAHALA ROAD
WIDENING PROJECT, KAHEKILI HIGHWAY TO POOKELA STREET
KANEHOHE, OAHU, HAWAII (TMK:4-5-23)

The State of Hawaii, Department of Transportation, Highways Division (HDOT) has reviewed and responded to comments received during the 30-day comment period (July 23, 1999, through August 23, 1999) for the Keaahala Road Widening, Kahekili Highway to Pookela Street Draft Environmental Assessment (EA). HDOT has determined that the proposed project will not have significant environmental effects and hereby issues a, "Finding of No Significant Impact (FONSI)," determination. Please publish the FONSI notice for the proposed project in the March 8, 2000, edition of *The Environmental Notice*. ✓

Should you have any questions, please contact Craig Watanabe, Technical Design Services Office, Design Branch, Highways Division at 692-7551. Thank you for your time and attention.

Enclosures

c: Akinaka and Associates (L. Watanabe)

29

MAR - 8 2000
FILE COPY

2000-03-08-OA-~~FEA~~-

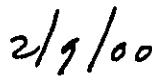
FINAL ENVIRONMENTAL ASSESSMENT

For the
(KEAAHALA ROAD WIDENING)
PO'OKELA STREET TO KAHEKILI HIGHWAY
Kaneohe, Oahu, Hawaii
TMKs: 4-5-23

RESPONSIBLE OFFICIAL:



KAZU HAYASHIDA
DIRECTOR



Date

PROPOSING AGENCY:

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

PREPARED BY:

Akinaka & Associates, Ltd.
250 North Beretania Street, Suite 300
Honolulu, Hawaii 96813

FEBRUARY 2000

This Environmental Document Was Prepared Pursuant to Chapter 343, Hawaii Revised Statutes

TABLE OF CONTENTS

SECTION	TITLE	PAGE
1	INTRODUCTION	1-1
1.1	Purpose and Need	1-1
1.2	Project Summary	1-4
2	DESCRIPTION OF THE PROPOSED PROJECT	2-1
2.1	Project Location	2-1
2.2	Existing Conditions	2-1
2.3	Proposed Improvements	2-4
	2.3.1 Road Widening	2-4
	2.3.2 Intersections	2-4
	2.3.3 Drainage System	2-7
	2.3.4 Retaining Walls	2-7
	2.3.5 Utility Relocation	2-9
	2.3.6 Bikeway Facilities	2-9
2.4	Development Schedule and Cost	2-9
2.5	List of Potential Permits and Approvals	2-9
	2.5.1 Federal Government	2-9
	2.5.2 State Government	2-10
	2.5.3 City and County of Honolulu	2-10
3	ALTERNATIVES CONSIDERED	3-1
3.1	No Action Alternative	3-1
3.2	New Connector Road Alternative	3-1
4	ENVIRONMENTAL SETTING	4-1
4.1	Topography	4-1
4.2	Geology	4-1
4.3	Soils	4-1
4.4	Climate	4-1
4.5	Hydrology / Water Resource	4-3
4.6	Surface Water	4-3
4.7	Wetlands	4-3
4.8	Flood Hazard	4-5
4.9	Earthquake Hazard	4-5

TABLE OF CONTENTS

SECTION	TITLE	PAGE
4.10	Air Quality	4-5
4.11	Noise Emission	4-5
4.12	Aesthetic Quality	4-5
4.13	Flora/Fauna	4-7
4.14	Historic, Archaeological and Cultural Characteristics	4-8
4.15	Land Use, Plans & Policies	4-8
4.16	Existing Traffic	4-9
4.17	Existing Storm Drainage	4-10
4.18	Existing Utilities	4-10
5	SOCIO-ECONOMIC SETTING	5-1
6	PROBABLE IMPACTS AND MITIGATIVE MEASURES	6-1
6.1	Short Term Impacts	6-1
6.1.1	Surface Water	6-1
6.1.2	Wetlands	6-1
6.1.3	Flood Hazard	6-2
6.1.4	Air Quality	6-2
6.1.5	Noise Emission	6-3
6.1.6	Aesthetics	6-3
6.1.7	Flora / Fauna	6-4
6.1.8	Historic, Archaeological and Cultural Characteristics	6-4
6.1.9	Traffic	6-4
6.1.10	Utilities	6-5
6.1.11	Socio-Economic	6-5
6.2	Long Term Impacts	6-5
6.2.1	Surface Water	6-6
6.2.2	Wetlands	6-6
6.2.3	Air Quality	6-6
6.2.4	Aesthetics	6-6
6.2.5	Land Use, Plans & Policies	6-7
6.2.6	Traffic	6-8
6.2.7	Storm Drainage	6-8
6.2.8	Socio-Economic	6-9
7	DETERMINATION	7-1

TABLE OF CONTENTS

SECTION	TITLE	PAGE
8	REASONS SUPPORTING THE DETERMINATION	8-1
9	AGENCIES CONSULTED DURING THE PREPARATION OF THE EA	9-1
9.1	Federal Government	9-1
9.2	State Government	9-1
9.3	City and County of Honolulu	9-1
9.4	Other Parties	9-1

REFERENCES

- APPENDIX A - 10/18/99 LETTER RECEIVED FROM THE U.S. FISH AND WILDLIFE SERVICE
- APPENDIX B - CORRESPONDENCE RECEIVED DURING THE DRAFT EA 30-DAY COMMENT PERIOD

TABLE OF EXHIBITS

EXHIBIT	TITLE	PAGE
1-1	VICINITY MAP	1-2
1-2	LOCATION MAP	1-3
2-1	EXISTING CONDITIONS - KEAAHALA ROAD PROJECT SITE KAHEKILI HIGHWAY TO POOKELA STREET	2-2
2-2	EXISTING CONDITIONS - WORN PAVEMENT / INADEQUATE DRAINAGE	2-3
2-3	GENERAL PLAN	2-5
2-4	TYPICAL ROADWAY SECTIONS	2-6
2-5	STRIPING PLAN	2-8
4-1	SOIL SURVEY MAP	4-2
4-2	EXISTING WETLAND DRAINAGE AREA	4-4
4-3	FLOOD HAZARD DISTRICT	4-6

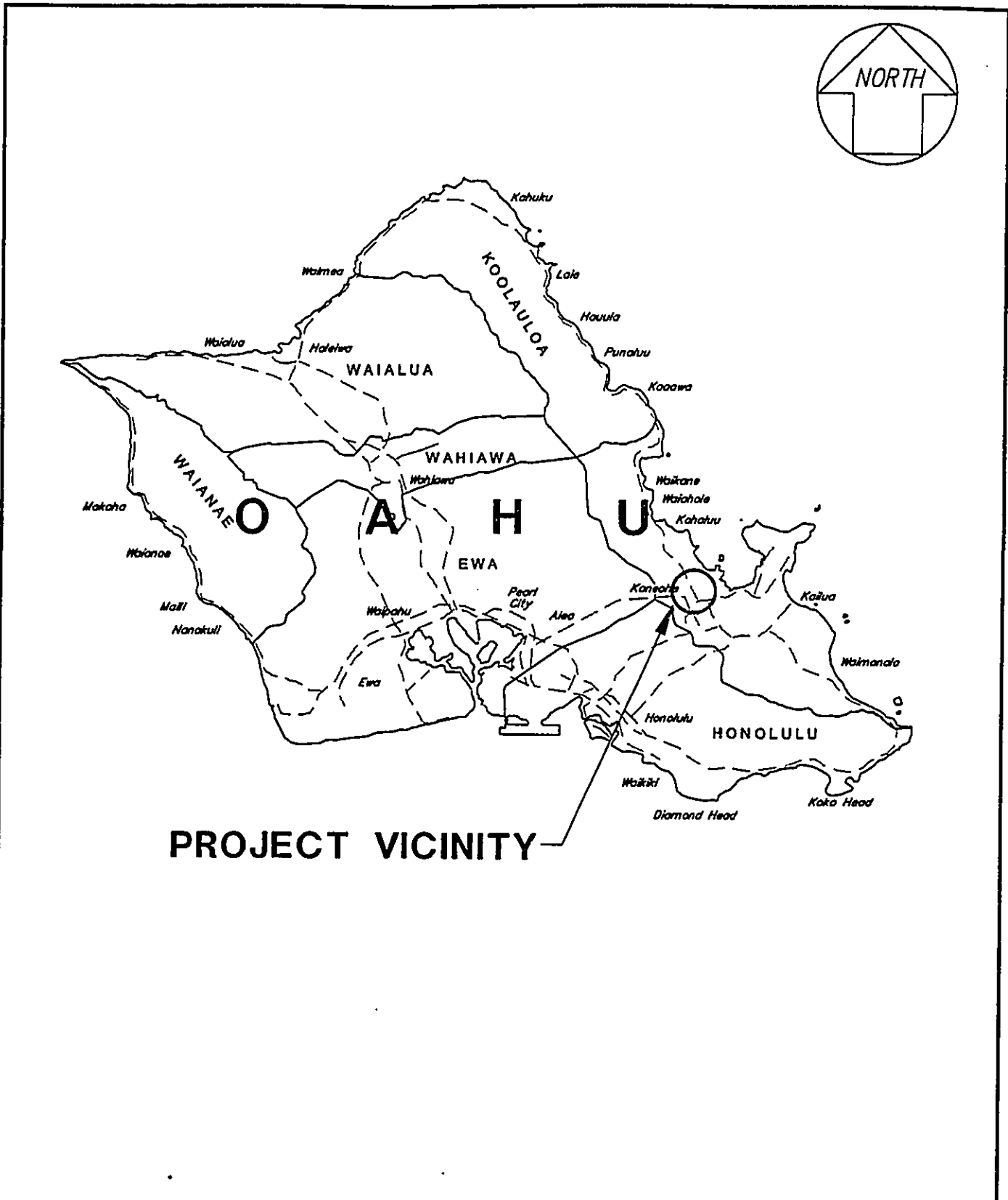
1. INTRODUCTION

1.1 PURPOSE AND NEED

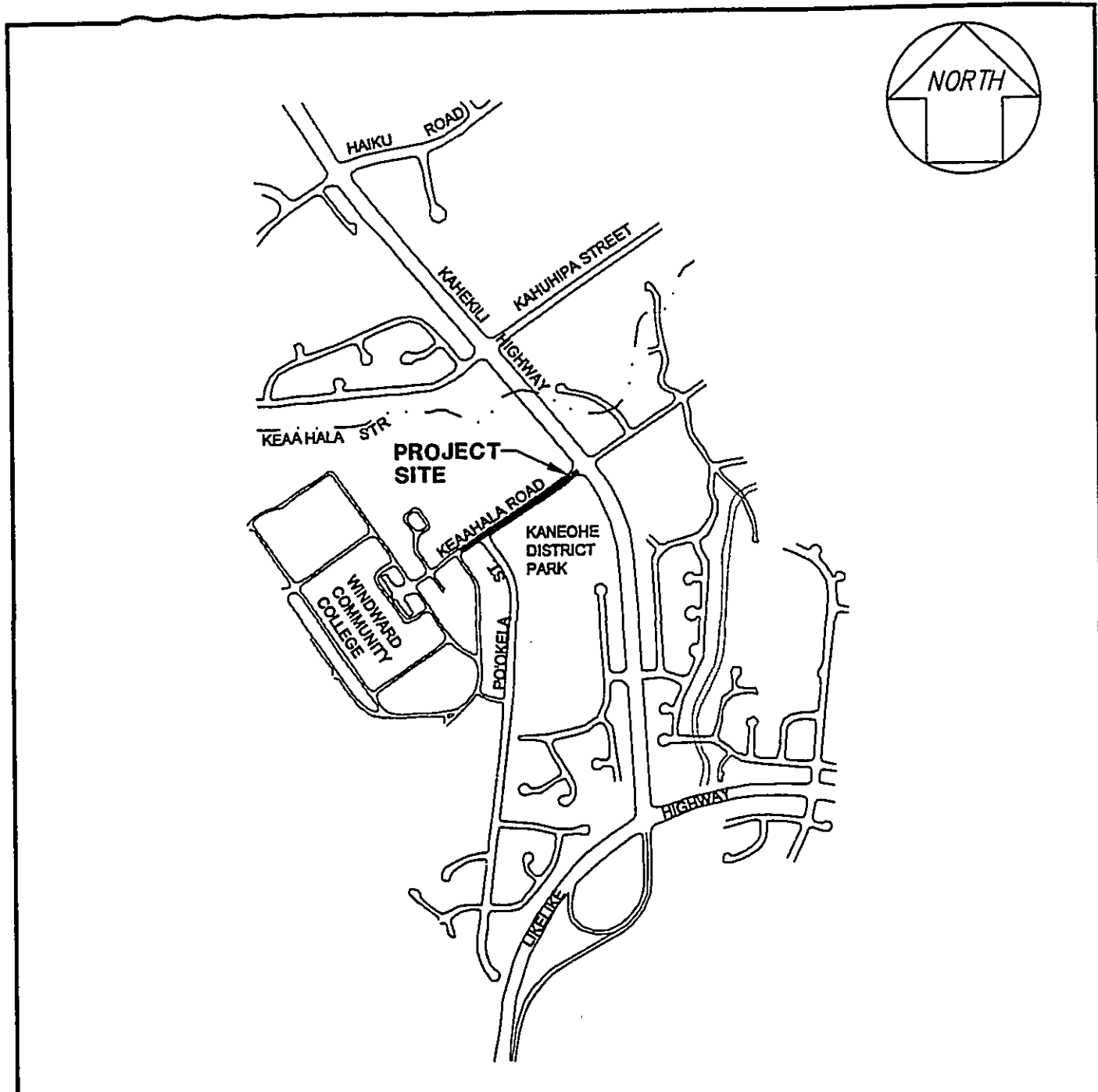
The purpose of the proposed project is to widen approximately 0.21 miles of the existing Keaahala Road from Kahekili Highway to Pookela Street to accommodate the existing and future traffic demands of the surrounding area in Kaneohe, Oahu, Hawaii as shown in Exhibits 1-1 and 1-2. The project is needed since the present two-lane facility is inadequate to serve the existing and future needs of the areas surrounding the project site. The proposed improvements include the widening of the existing roadway from two lanes to three lanes for most of the improved roadway and from three lanes to four lanes at the intersection of Keaahala Road and Kahekili Highway. Other physical improvements include new concrete curb, gutter and sidewalk; a new drainage system; new street lighting; new concrete retaining walls; and the relocation of overhead utilities.

The State of Hawaii Department of Transportation (HDOT) had previously agreed to widen and improve Keaahala Road for the City and County of Honolulu (City) in order to mitigate impacts from the State's Interstate H-3 project. Construction of the State's H-3 project involved eliminating the previous access to the Castle Hills subdivision which was directly connected to Likelike Highway. Consequently, HDOT extended Pookela Street to Keaahala Road, thereby making Keaahala Road the main access facility for the subdivision. HDOT intended to dedicate the State owned portion of Pookela Street to Keaahala Road to the City. The City agreed to this under the condition that HDOT widen and improve Keaahala Road from Pookela Street to Kahekili Highway. Thus, upon completion of the proposed improvements, HDOT will dedicate Keaahala Road, from Pookela Street to Kahekili Highway, to the City and County of Honolulu.

The improvements to Keaahala Road are also warranted due to the substandard features of the existing two lane roadway. The current pavement structure, highway lighting, and drainage system are currently inadequate. The present lane width lacks a separate center median for left turns onto the driveways along Keaahala Road and is inadequate for the safe maneuvering of trucks. In addition, the intersection at Keaahala Road and Kahekili Highway lacks exclusive left or right turn lanes onto Kahekili Highway for the makai bound traffic. Thus, this existing intersection is not well suited to accommodate future traffic increases and growth in the area. Traffic volumes along Keaahala Road are expected to increase from the recently completed Hope Chapel Kaneohe church and day care facility, the future site of the Kooiaupoko District Courthouse building, the planned expansion of the Windward Community College and future increases in the Hawaii State Hospital patient and staff loads.



VICINITY MAP		EXHIBIT
Project:	Keaahala Road Widening Kahekili Highway to Po'okela Street Honolulu, Oahu, Hawaii State Project No. HWY-O-03-97	1-1



LOCATION MAP

NOT TO SCALE

LOCATION MAP		EXHIBIT
Project:	Keaahala Road Widening Kaheki Highway to Po'okela Street Honolulu, Oahu, Hawaii State Project No. HWY-O-03-97	1-2

1.2 PROJECT SUMMARY

Proposing Agency: Department of Transportation-Highways Division
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Approving Agency: Department of Transportation-Highways Division
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Preparer of EA: Akinaka and Associates, Ltd.
250 North Beretania Street, Suite 300
Honolulu, Hawaii 96817-4716

Project Name: Keaahala Road Widening - Pookela Street to Kahekili Highway

Proposed Action: Widen Keaahala Road from Pookela Street to Kahekili Highway.

Project Location: Kaneohe, Oahu, Hawaii

Tax Map Key: 4-5-23

Existing Land Uses: County Road

State Land Use District: Urban

City and County of Honolulu
Zoning Designation: P-2 and AG

Land Ownership: City and County of Honolulu

2. DESCRIPTION OF THE PROPOSED PROJECT

2.1 PROJECT LOCATION

The proposed project is located in the town of Kaneohe, on the Windward side of Oahu as previously shown in Exhibit 1-1. The project limits span approximately 0.21 miles along Keaahala Road from Pookela Street to Kahekili Highway as previously shown in Exhibit 1-2. Reference Tax Map Key is 4-1-23.

2.2 EXISTING CONDITIONS

The existing Keaahala Road is a heavily used two lane roadway that is oriented in the mauka-makai (west-east) directions as shown in the photograph of Exhibit 2-1. Keaahala Road extends to Kamehameha Highway in the makai direction and terminates at the Windward Community College at its mauka end. Keaahala Road is signalized at its four-legged intersection with Kahekili Highway, and unsignalized at its intersection with Pookela Street. The project route currently lacks a curb and gutter, and a concrete paved sidewalk. The existing road pavement is deteriorated, with frequent occurrences of potholes and ponding problems along the roadway as shown in the photographs of Exhibit 2-2.

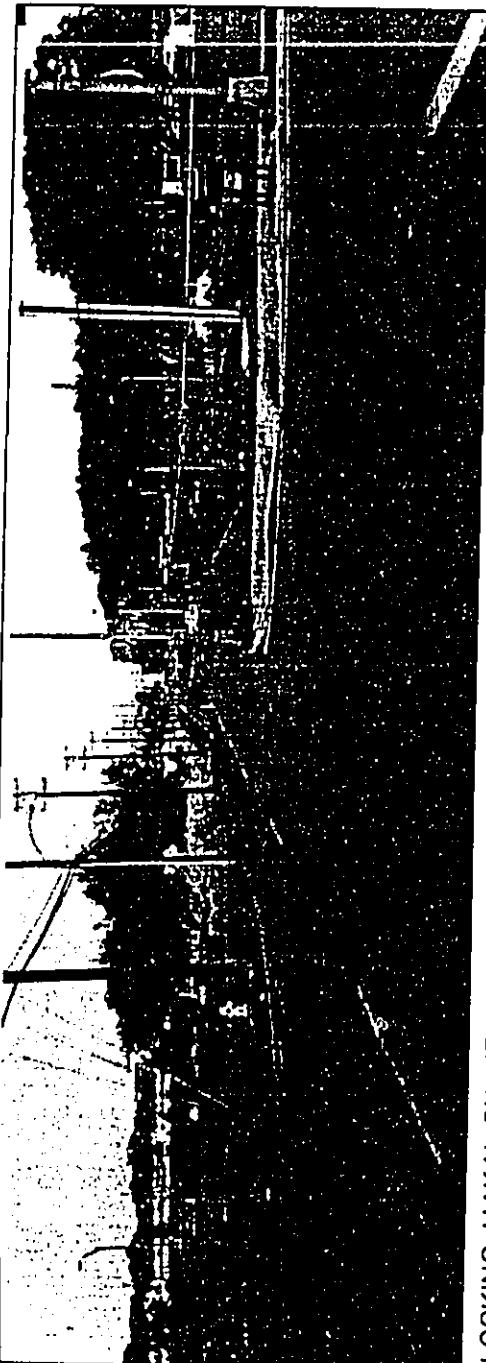
Keaahala Road currently has no provisions for a bicycle route. Although bike lanes were constructed along Kahekili Highway (as a part of the Kahekili Road Widening project), no bike routes were designated along Keaahala Road according to a State master plan for bikeways (Bike Plan Hawaii, 1994).

Keaahala Road provides the only access to the Kaneohe District Park, Windward Community College, the Hawaii State Hospital, and the Windward Comprehensive Health Center. Exclusive access to the Castle Hills residential subdivision, a State Department of Transportation base yard, Hina Mauka (a new private substance abuse center), and the recently constructed Hope Chapel Kaneohe church and day care facility are also provided by Keaahala Road via Pookela Street. Keaahala Road will also provide sole access to the future site of the new Koolaupoko District Courthouse building to be constructed in the area.

Pookela Street is a two lane roadway between Keaahala Road and Likelike Highway and intersects Keaahala Road across the driveway of the Windward Health Center. Access to Pookela Street was originally provided via Likelike Highway. However, as part of the H-3 Interstate project, HDOT closed this access and extended Pookela Street to Keaahala Road.



LOOKING MAUKA ON KEAAHALA ROAD FROM KAHEKILI HIGHWAY



LOOKING MAKAI ON KEAAHALA ROAD FROM POOKELA STREET

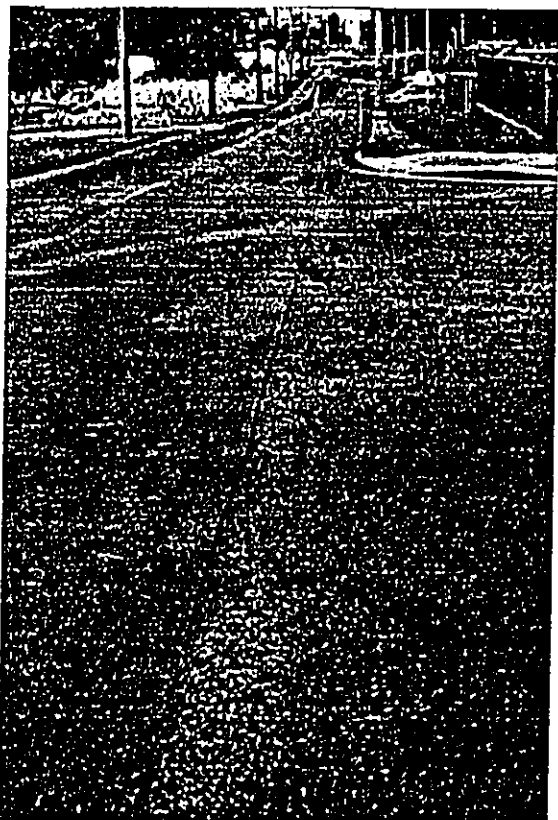
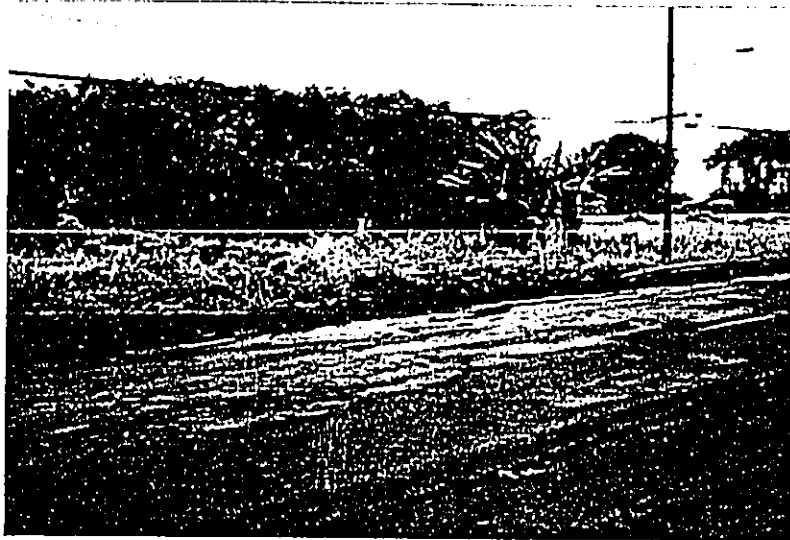
**EXISTING CONDITIONS - KEAAHALA ROAD PROJECT SITE
KAHEKILI HIGHWAY TO POOKELA STREET**

Project:

Kealahala Road Widening
 Kahekili Highway to Pookela Street
 Honolulu, Oahu, Hawaii
 State Project No. HWY-0-03-97

EXHIBIT

2-1



EXISTING CONDITIONS - WORN PAVEMENT AND INADEQUATE DRAINAGE		EXHIBIT
Project:	Keaahala Road Widening Kahekili Highway to Po'okela Street Honolulu, Oahu, Hawaii State Project No. HWY-0-03-97	2-2

Kahekili Highway is a well traveled arterial highway that extends from Likelike Highway to Kamehameha Highway in Kahaluu. Recent improvements to Kahekili Highway have widened the original three lane roadway (one through lane in each direction, with a median left turn lane at key intersections) to a six lane divided highway with provisions for exclusive left turn lanes.

2.3 PROPOSED IMPROVEMENTS

The proposed improvements involve the widening of Keaahala Road from Kahekili Highway until an area just past Pookela Street to a three lane undivided highway as shown in Exhibits 2-3 and 2-4. Proposed improvements also include provisions for new concrete curb, gutter and sidewalk; a new drainage system; new street lighting; new retaining walls; and the relocation of overhead utilities. Details of the proposed improvements to Keaahala Road are further discussed in the subsequent sections.

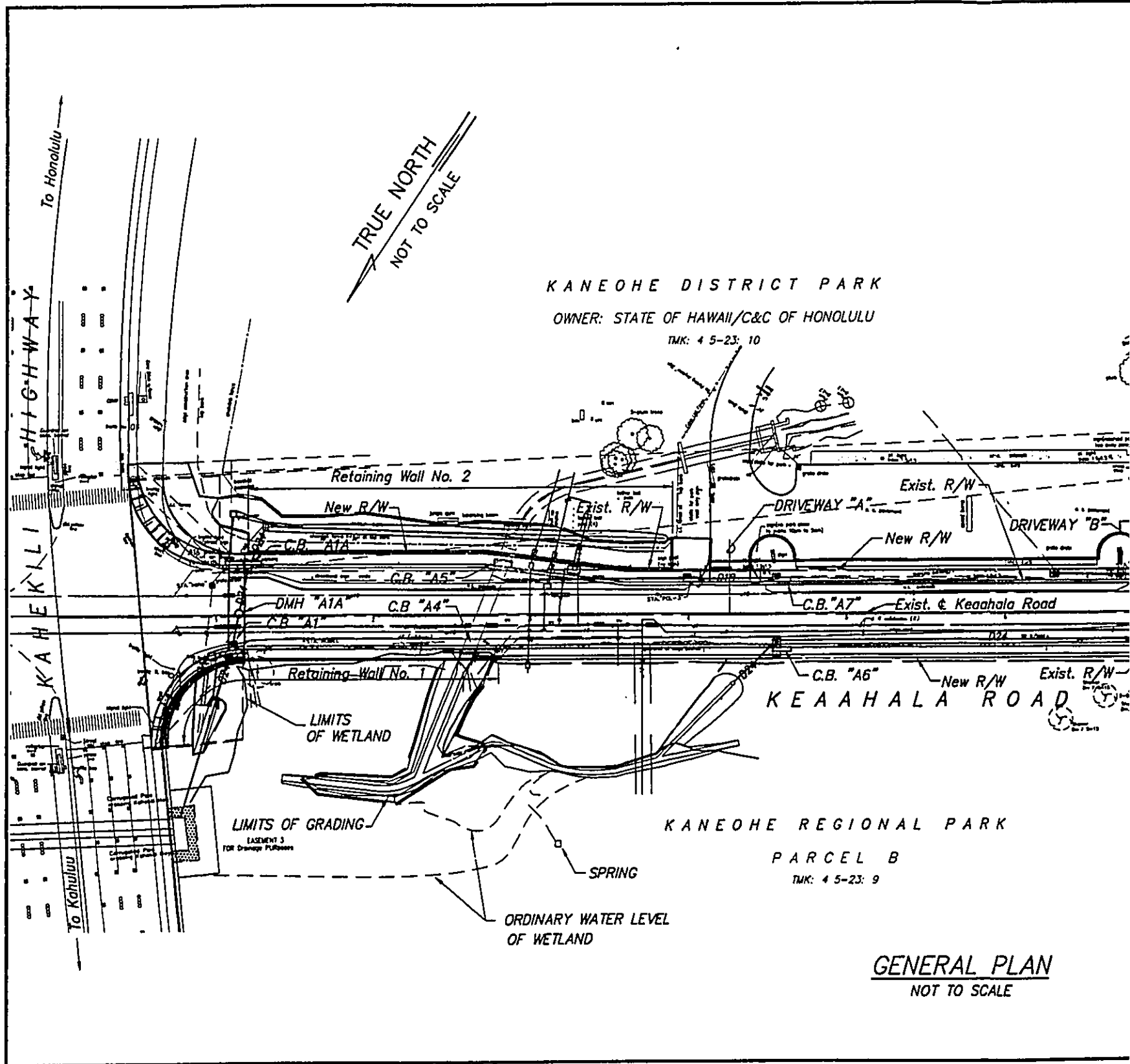
2.3.1 Road Widening

The City and County of Honolulu's Department of Planning and Permitting (DPP) had originally requested a 60-foot right-of-way for the Keaahala project route. However, a 60-foot right-of-way would not only result in greater impacts to the adjacent wetland area located on the north side of the roadway, but would also require the existing basketball courts (located on the south side of the roadway) to be demolished and relocated. Since relocating the existing basketball courts is unacceptable to the Department of Parks and Recreation (DPR), the existing 40 to 48 feet wide right-of-way along Keaahala Road will be widened to 56 feet for most of the project route and 68 feet at the Kahekili Highway intersection. Additional land will need to be acquired for the new right-of-way on both the north and south sides of the Keaahala Road project route. The widened right-of-way will allow for a three lane undivided roadway that will include one through lane in each direction of traffic, and a median left turn lane at intersections and driveways. The relocation of certain driveways along the project route were coordinated with and approved by the City's Department of Transportation Services. A typical roadway section at this intersection is also shown in Exhibit 2-4.

Concrete curb and gutter, 2 feet in width, as well as 7-foot wide concrete sidewalks will also be constructed along the length of the project route on both sides of the roadway. Curb ramps in compliance with the requirements of the Americans with Disability Act (ADA) will also be provided.

2.3.2 Intersections

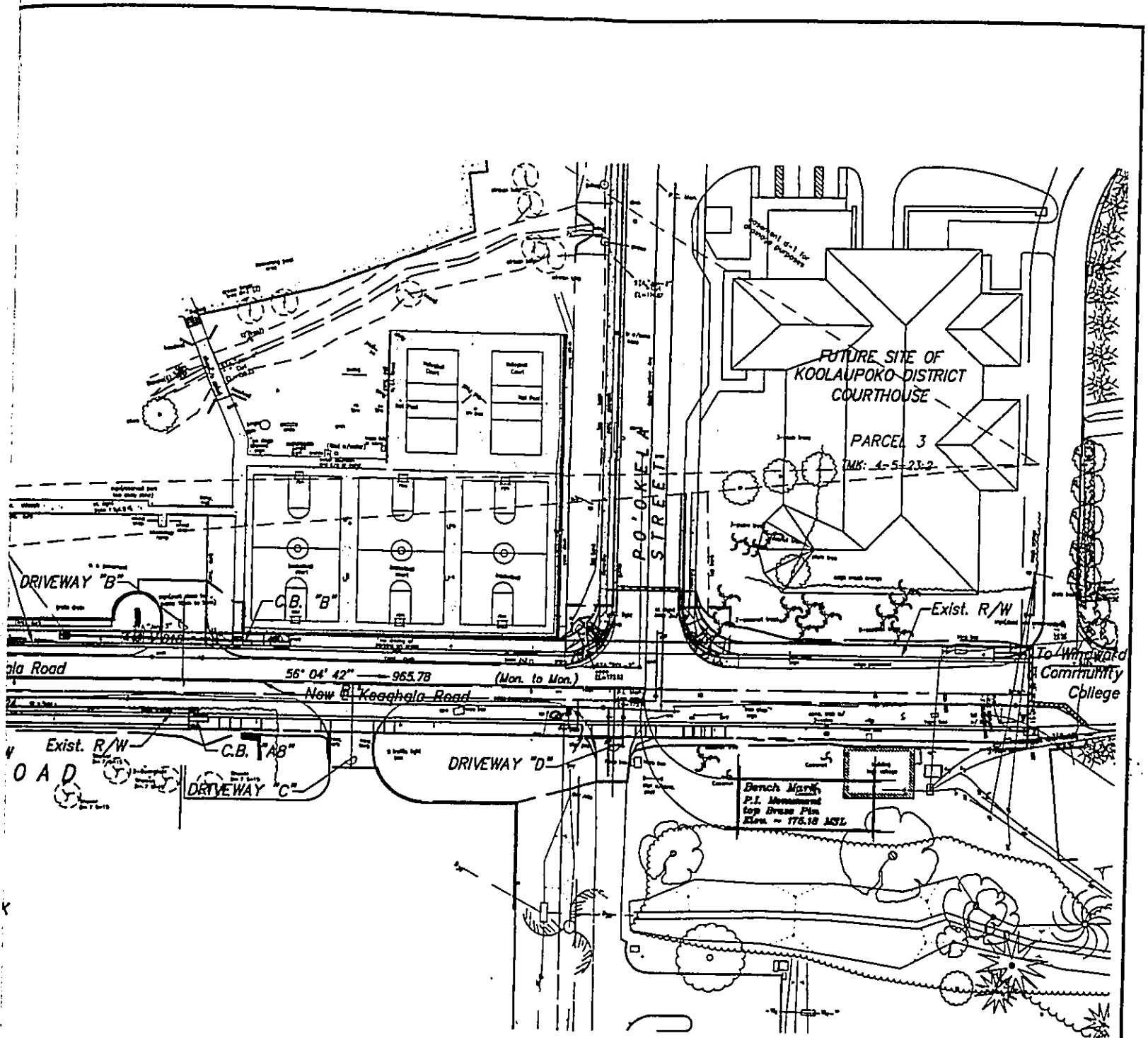
The intersection of Keaahala Road and Kahekili Highway is currently signalized with a shared through, left turn lane and a shared through, right turn lane on the makai-bound



GENERAL PLAN
NOT TO SCALE

GENERAL PLAN

Project: Keaahala Road Widening
Kahekili Highway to Po'ol
Honolulu, Oahu, Hawaii
State Project No. HWY-O-



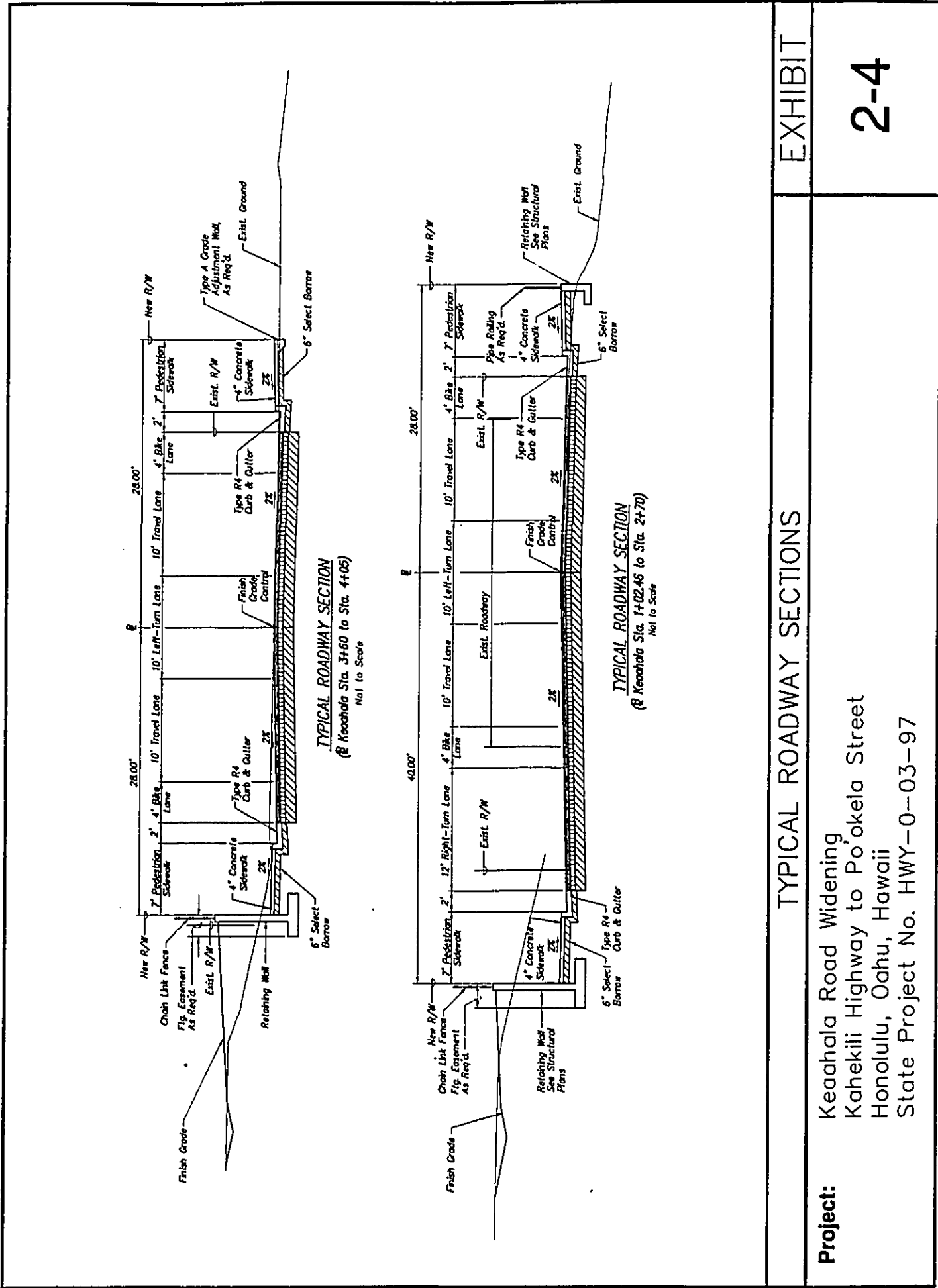
PLAN
E

GENERAL PLAN

Road Widening
 Highway to Po'okela Street
 Wahiawa, Hawaii
 Project No. HWY-O-03-97

EXHIBIT

2-3



EXHIBIT

Project: Keachala Road Widening
Kahekili Highway to Po'okela Street
Honolulu, Oahu, Hawaii
State Project No. HWY-0-03-97

2-4

approach. Improvements to this intersection for the makai-bound traffic on Keaahala Road will include provisions for an exclusive left turn lane, a through-only lane and an exclusive right turn lane.

Exclusive left turn lanes for mauka-bound traffic along Keaahala Road will be provided at the driveway entrance to the Kaneohe District Park and at the Pookela Street intersection via a center lane median. Makai-bound traffic will also be provided with exclusive left turn lanes within the median at the intersections of Pookela Street for access to the Windward Health Center and at the driveway for the Kaneohe District Park's tennis courts. A striping plan of the proposed roadway improvements has been included in Exhibit 2-5.

2.3.3 Drainage System

The existing conditions of the project area do not conform to HDOT drainage design criteria. Ineffective drainage structures contribute to frequent ponding problems along the existing project route of Keaahala Road. Ponding of runoff on the road pavement is greatest near the Kahekili Highway intersection.

The proposed drainage improvements consist of 100 lineal feet of 18-inch drain pipe, 660 lineal feet of 24-inch drain pipe, as well as the installation of catch basins and drain outlet structures. Existing drain inlets will also be modified and the existing box culvert that crosses Keaahala Road will be extended. The proposed improvements will also require the clearing and grading of an existing drainage ditch located in the adjacent wetland drainage area. Although this area is a natural drainage way, previous construction activities as well as overgrown vegetation have filled the area thereby reducing its capacity to convey flows. Clearing and grading within a portion of the wetland area will create a more effective drainage way.

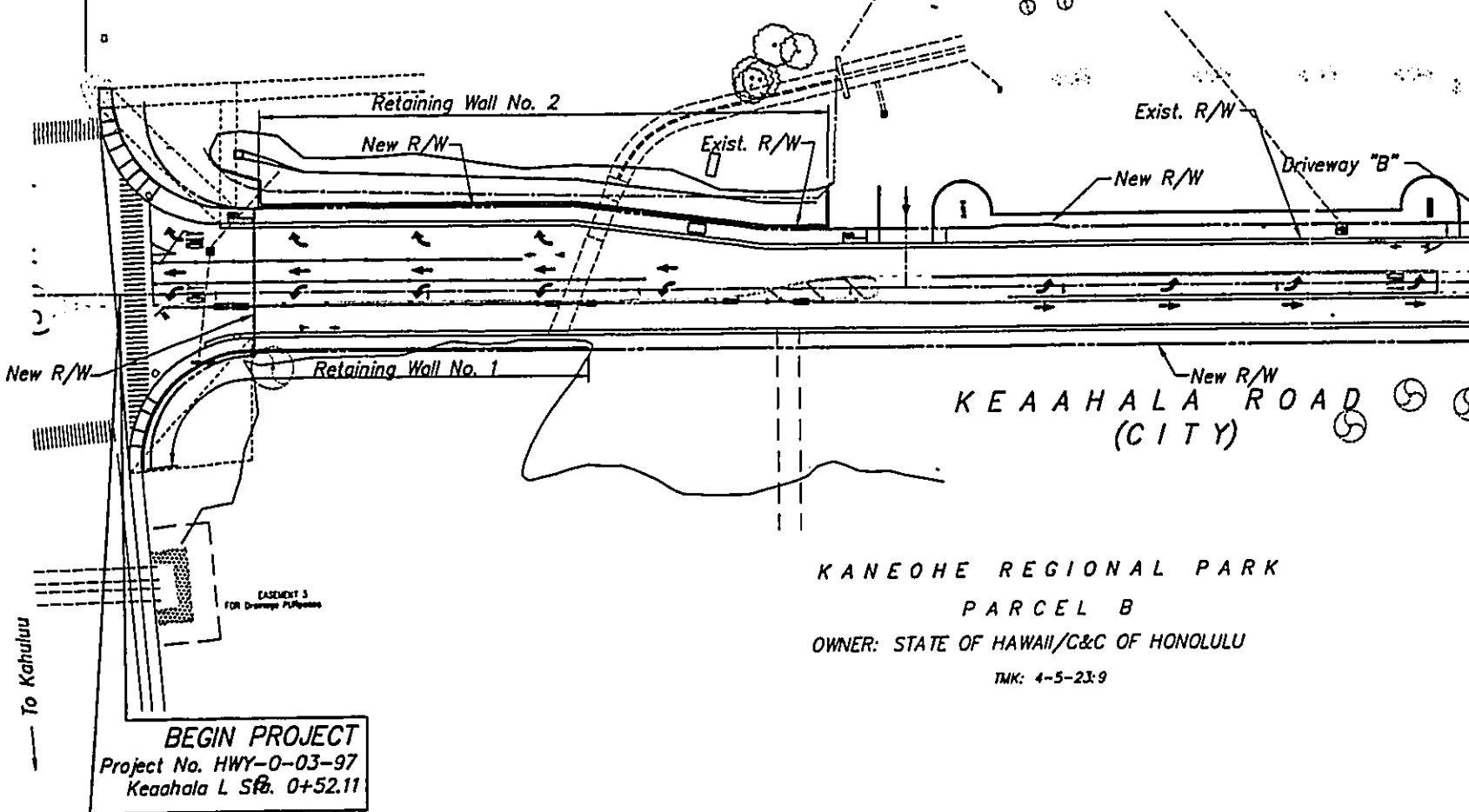
2.3.4 Retaining Walls

Two retaining walls are proposed along the Keaahala Road project route. One of the walls, "Retaining Wall No. 1," will be approximately 245 feet in length and constructed on the north side of the roadway between Kahekili Highway and the concrete box culvert that crosses beneath Keaahala Road. The other retaining wall, "Retaining Wall No. 2," will be approximately 270 feet in length and located on the opposite (south) side of the roadway, between Kahekili Highway and the existing makai-side driveway of the Kaneohe District Park. Retaining Wall No. 1 will be connected to the existing retaining wall at Kahekili Highway and follow the existing grades along Keaahala Road. Retaining Wall No. 2 will not be connected to the existing wall at Kahekili Highway.

To Honolulu

TRUE NORTH
SCALE: 1" = 40'

KANEOHE DISTRICT PARK
OWNER: STATE OF HAWAII/C&C OF HONOLULU
TMK: 4-5-23:10

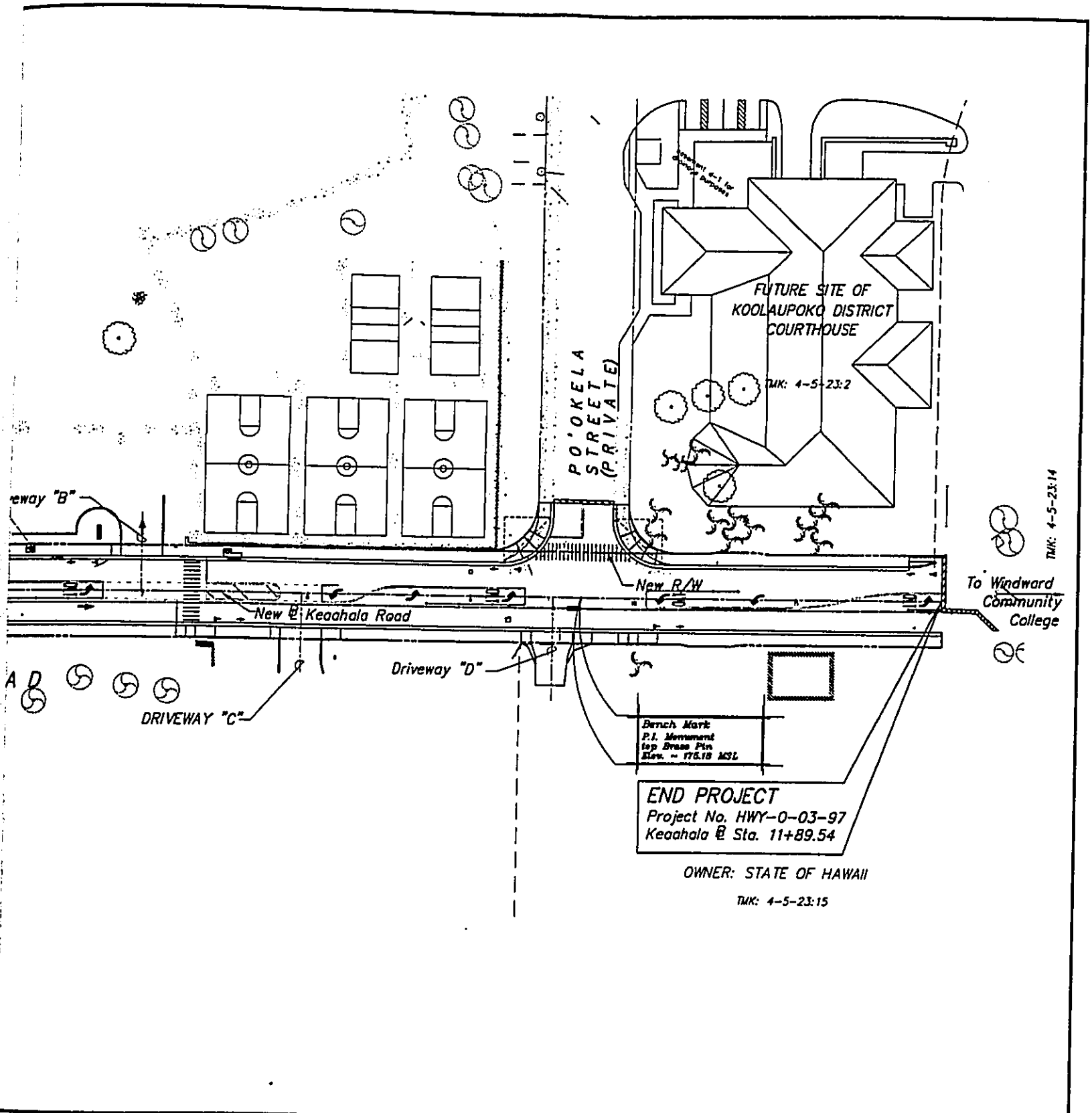


KEAAHALA ROAD
(CITY)

KANEOHE REGIONAL PARK
PARCEL B
OWNER: STATE OF HAWAII/C&C OF HONOLULU
TMK: 4-5-23:9

STRIPING PLAN

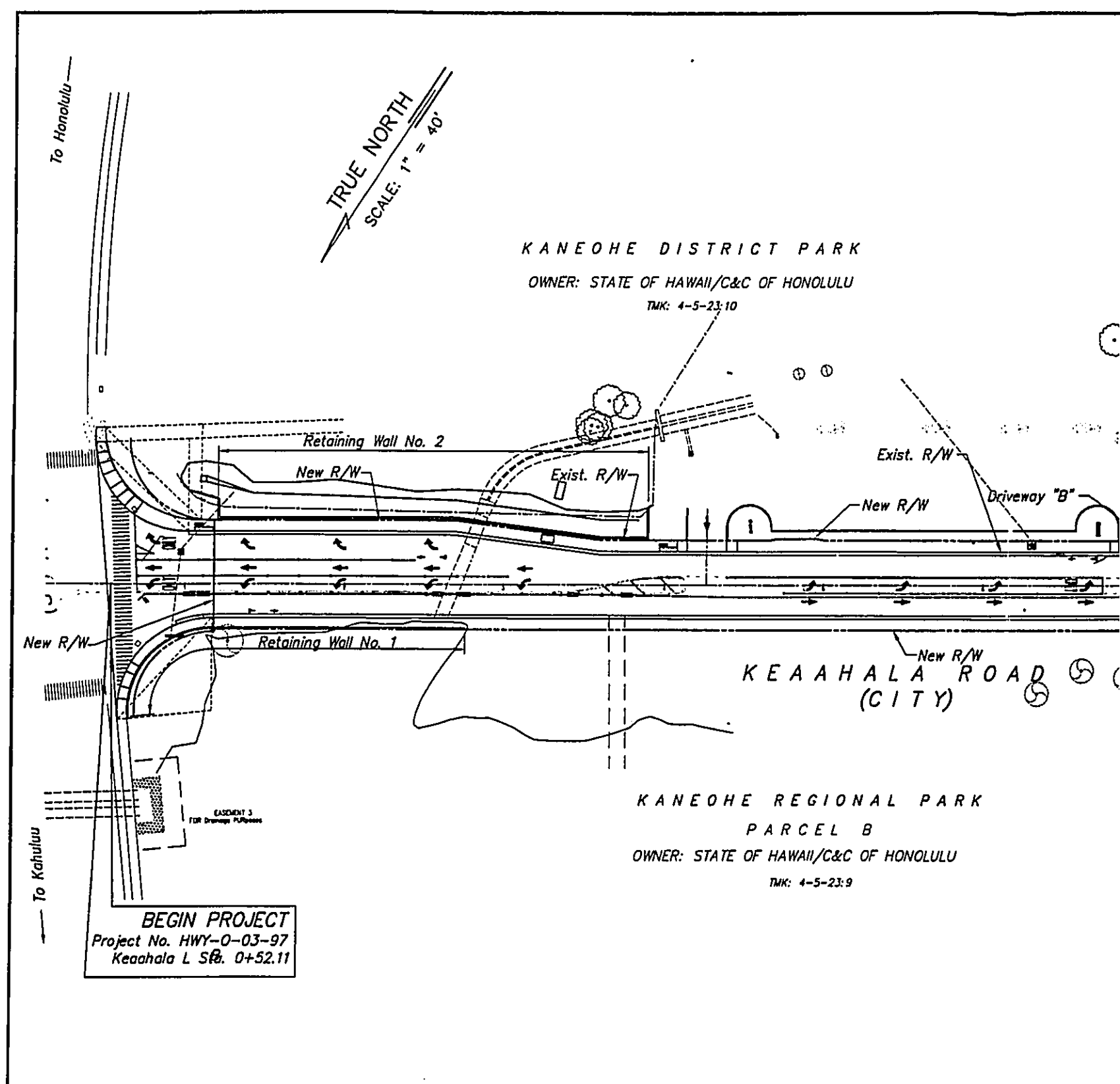
Project: Keahala Road Widening
Kahekili Highway to
Honolulu, Oahu, Hawaii
State Project No. 0-03-97



ENGINEERING PLAN	EXHIBIT
Road Widening Highway to Po'okela Street Oahu, Hawaii Project No. HWY-0-03-97	2-5

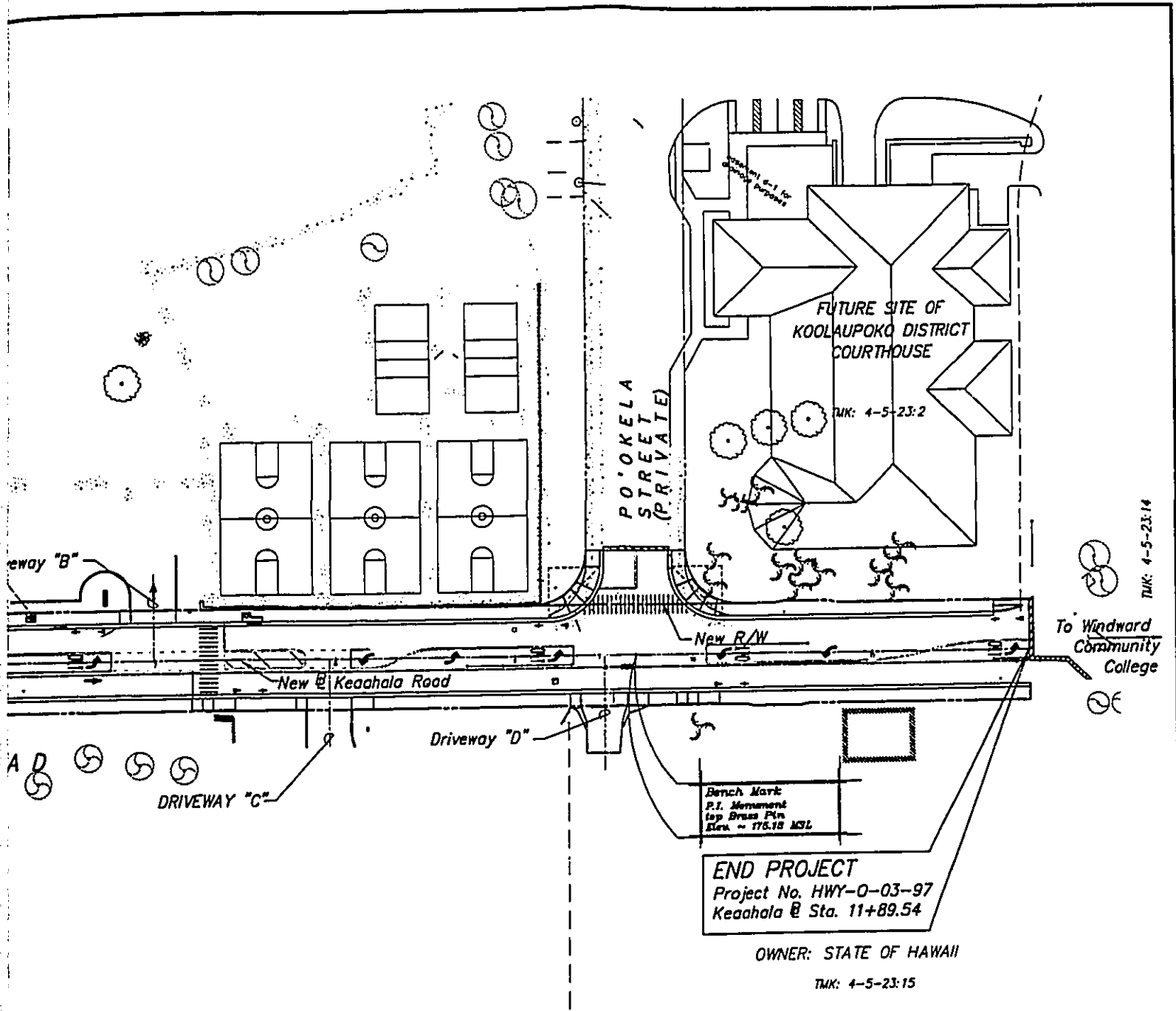
CORRECTION

THE PRECEDING DOCUMENT(S) HAS
BEEN REPHOTOGRAPHED TO ASSURE
LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING



STRIPING PLAN

Project: Keaahala Road W/ Kahekili Highway to Honolulu, Oahu, HI State Project No.



PLANNING PLAN	EXHIBIT
Road Widening Highway to Po'okela Street Honolulu, Oahu, Hawaii Project No. HWY-0-03-97	2-5

2.3.5 Utility Relocation

In order to accommodate the proposed road widening, the existing overhead wood utility poles and lines will be relocated within the new right-of-way by the Hawaiian Electric Company.

2.3.6 Bikeway Facilities

Although no bike routes have been designated along Keaahala Road in the 1994 State of Hawaii Master Plan - Bike Plan Hawaii, a 4-foot wide bike lane will be provided on both the mauka-bound and makai-bound sides of the project route due to recommendations from the City's Department of Transportation Services. The bike lanes would mainly serve students commuting to and from Windward Community College. Since the additional land required for the bike lanes would encroach onto the adjacent wetland drainage area, the design of the roadway section was coordinated with the Army Corps of Engineers (ACOE). The incorporation of the bike lanes into the road section has also been accepted by the City and County of Honolulu's Department of Planning and Permitting.

2.4 DEVELOPMENT SCHEDULE AND COST

The proposed widening of Keaahala Road is planned to be constructed with funds from the State of Hawaii. Construction costs for the project are estimated at \$3.0 million for improvements depicted in Exhibits 2-3 and 2-4.

A preliminary project schedule is provided as follows:

- Complete Design - February 2000
- Advertise for Bids - April 2000
- Start Construction - September 2000
- Project Completion - 1.5 years after start of project

2.5 LIST OF POTENTIAL PERMITS AND APPROVALS

2.5.1 Federal Government

U.S. Army Corps of Engineers

- Department of the Army Permit - Nationwide Permits No. 14 (Road Crossings) and No. 33 (Temporary Construction Access and Dewatering).

2.5.2 State Government

Department of Business, Economic Development and Tourism

- Coastal Zone Management Program Federal Consistency Determination

Department of Health

- Community Noise Permit for Construction Activities
- NPDES Construction Dewatering Permit
- NPDES Hydrotesting Permit
- Section 401 Water Quality Certification

Department of Land and Natural Resources

- Stream Channel Alteration Permit
- Right-of-Entry Permit

2.5.3 City and County of Honolulu

Department of Environmental Services

- Construction Dewatering Permit (Temporary)
- Permit to Discharge Effluent (Hydrotesting - Temporary)

Department of Transportation Services

- Street Usage Permit

3. ALTERNATIVES CONSIDERED

3.1 NO ACTION ALTERNATIVE

The No Action Alternative would allow worn roadway conditions, ponding and flooding problems along Keaahala Road to persist. Traffic flows are also expected to increase from the newly constructed Hope Chapel Kaneohe church and day care facility and from the future site of the State's new Koolaupoko District Courthouse. Since the Keaahala Road / Kahekili Highway intersection currently operates at capacity conditions, with an overall "desirable minimum" level of service, an increase in traffic would result in time lost to motorists, thereby constituting a negative impact. Furthermore, the substandard conditions of the existing roadway would adversely impact the safety of the motorists, pedestrians, and children in the area who frequent the park.

The No Action alternative is also not feasible since the HDOT had previously planned to widen Keaahala Road after closing the only access to the Castle Hills subdivision on Likelike Highway.

3.2 NEW CONNECTOR ROAD ALTERNATIVE

An alternative to create a new mauka-makai connector road serving the same function of Keaahala Road would not be feasible. Such an alternative would cause tremendous economic and social impacts on the facilities and residents in the project area. Adverse impacts could include displacement of homes, relocation of facilities, dividing communities and costly right-of-way acquisition.

4. ENVIRONMENTAL SETTING

4.1 TOPOGRAPHY

The project area slopes up from Kahekili Highway toward Windward Community College. The slopes range from approximately 2% to 6%. The existing baseball fields on the south side of Kealahala Road is between 1 to 4 feet higher than the proposed sidewalk grades. The wetland area on the north side of the roadway is a drainage way that slopes down and away from the Kealahala Road. Three basketball courts exist on the south side of the roadway, near the Pookela Street intersection, and are between 0 to 8 feet lower than the proposed sidewalk grades.

4.2 GEOLOGY

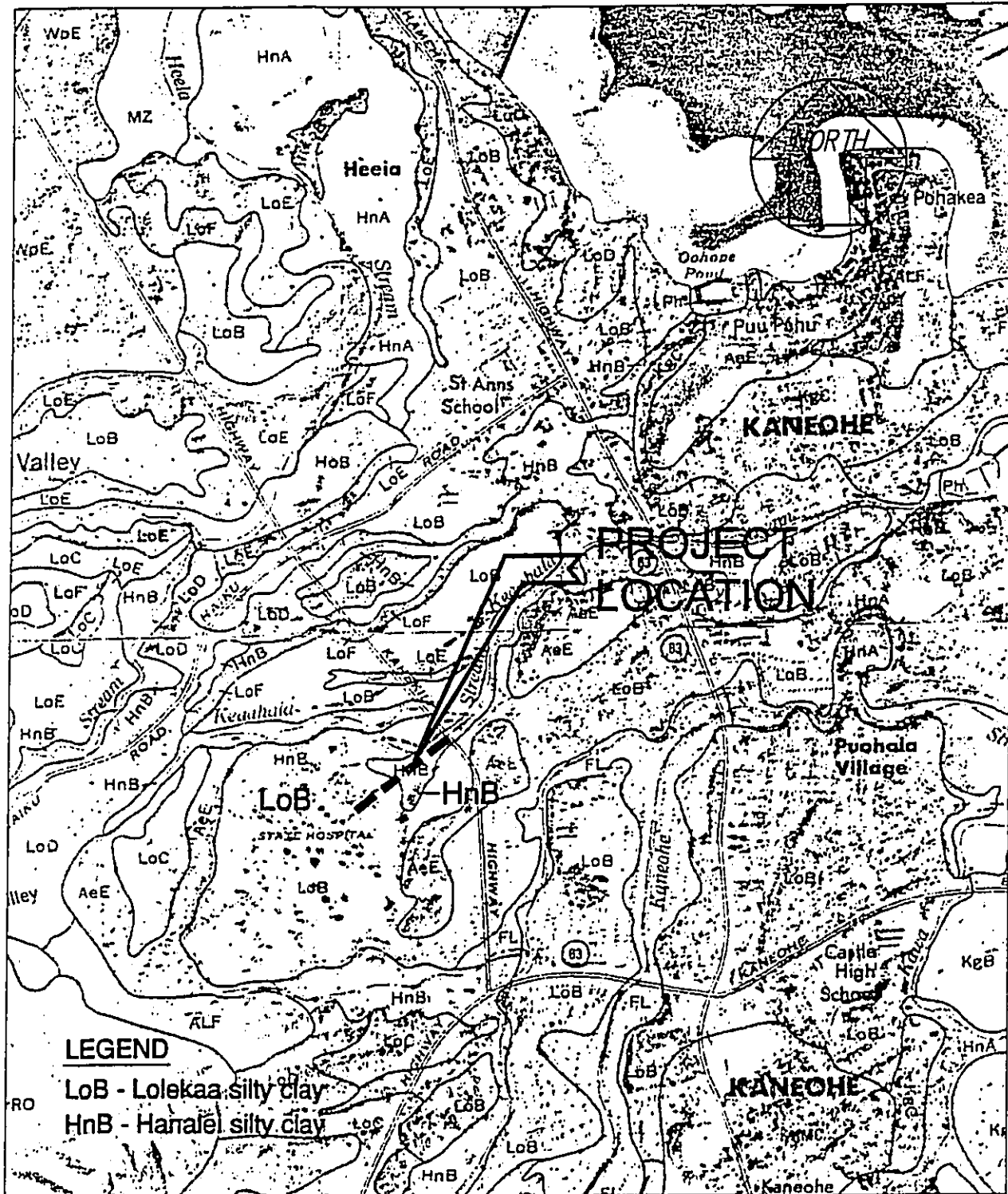
The project area lies on a plain which was formed by the eruptions of the Koolau shield volcano in the Tertiary geologic period and subsequent flooding erosion in the Pleistocene period. Much of this plain is gentle rolling. The project area can be geologically described as alluviated valley bottoms and weathered ridges with dike intruded basalt.

4.3 SOILS

The two soil types identified within the project area consist of Lolekaa silty clay (LoB) and Hanalei silty clay (HnB) which are a part of the Lolekaa-Waikane Association. These soils are well-drained and developed from old alluvium and colluvium of basic igneous rock. It occupies gently sloping to moderate steep alluvial fans and terraces and steep colluvial slopes (U.S.D.A. Soil Conservation Service, 1972). The soil types within the project area are shown in Exhibit 4-1.

4.4 CLIMATE

Kaneohe is located on the Windward side of Oahu and is consequently subject to frequent rain showers. The climate of the project region is considered to be windy, warm and moderately wet. Northeasterly trade winds prevail for most of the year with average annual wind speeds at 15 miles per hour (mph). Records show an average annual precipitation as approximately 75 inches, with the winter months generally being the most wet. Temperatures in the area are considered to be moderate with average temperatures for the coolest and warmest months at approximately 71 °F and 77.5 °F, respectively.



Source: US Department of Agriculture, Soil Conservation Service, 1972

Not to Scale

SOIL SURVEY MAP		EXHIBIT
Project:	Keachala Road Widening Kahekili Highway to Po'okela Street Honolulu, Oahu, Hawaii State Project No. HWY-0-03-97	4-1

4.5 HYDROLOGY

The Koolaupoko Aquifer System is located within the Kaneohe/Kahaluu/Waiahole region on the Windward side of the island. According to the Commission on Water Resource Management, this aquifer system has an estimated sustainable yield of 43 million gallons per day (mgd) and a daily yield of approximately 13.72 mgd. Borings taken for the proposed project route show the water table beneath Keaahala Road to be fairly high. The depth to the water table from the ground surface ranged from 0.9 feet to 6.2 feet.

4.6 SURFACE WATER

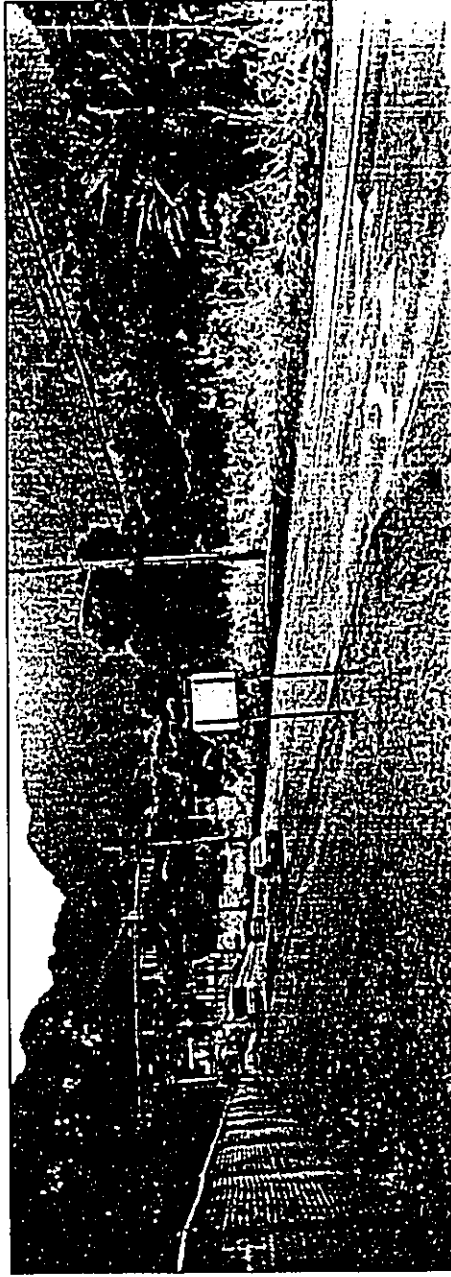
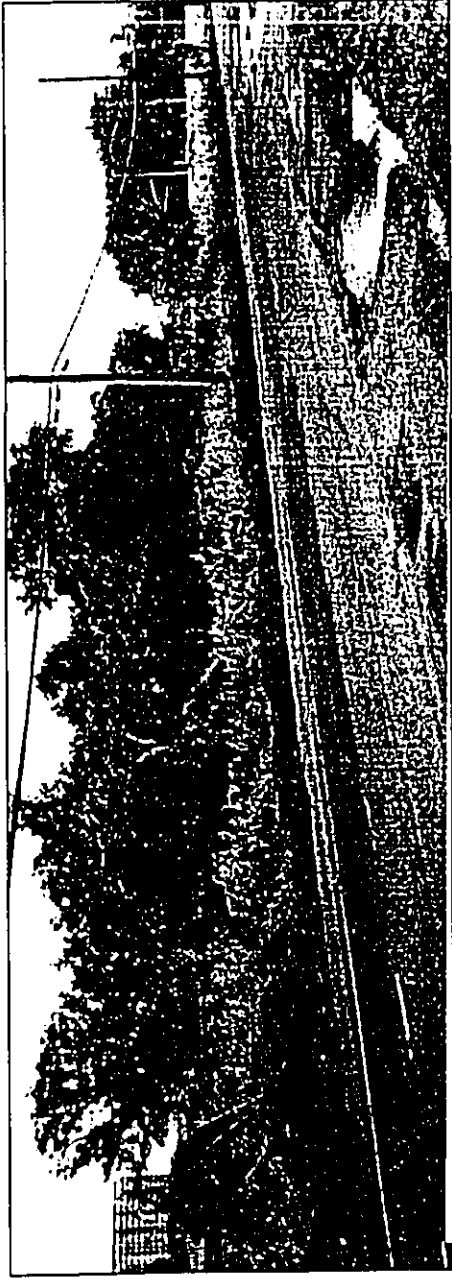
Keaahala Stream is a perennial stream that is located roughly 600 feet from the north side of the project route as previously shown in Exhibit 1-2. The stream arises from springs located in lower Haiku Valley and eventually empties into Kaneohe Bay. Most of the stream's volume is contributed by its southern tributary which originates behind a hill that overlooks the Kapunahala area, flows through the Kaneohe District Park, crosses under Keaahala Road via a concrete box culvert, flows through the wetland area via a natural swale which then directs the flows toward pipe culverts which cross under Kahekili Highway near the Keaahala Road intersection (Aecos, Inc., 1988).

Most of the Keaahala Stream channel has been modified and lined with concrete. The stream drains the area roughly between Haiku Road and Keaahala Road which includes Haiku Village, the Hokulele Subdivision, the State Hospital, Windward Community College, and the Kaneohe District Park (Aecos, Inc. 1988). The total area of the drainage basin is approximately 600 acres, while the portion above Kahekili Highway is roughly 219 acres. The new roadway drainage system along Keaahala Road would also discharge runoff flows into Keaahala Stream.

4.7 WETLANDS

The Keaahala Road project route is located adjacent to a wetland area to the north side of the roadway as previously shown in Exhibit 2-3. A photograph of the wetland area is shown in Exhibit 4-2. This wetland serves as a natural drainage area for the nearby properties and is currently overgrown with vegetation from previous construction activities in the area.

The proposed roadway widening will require a portion of the new concrete sidewalk, retaining wall and footing to be constructed within the adjacent wetland area. In addition, grading activities within the wetland area will be required to clear the existing drainage ditch and redefine the flow path for more effective drainage.



EXHIBIT

WETLAND DRAINAGE AREA

Project:

Keaahala Road Widening
Kahekili Highway to Po'okela Street
Honolulu, Oahu, Hawaii
State Project No. HWY-0-03-97

4-2

4.8 FLOOD HAZARD

According to the Federal Emergency Management Agency (FEMA) 1990 Flood Insurance Rate Maps (FIRM), Panel 90 of 135, the proposed project location is classified as "Zone D" which indicates that the potential for flood hazards have not yet been determined. The FIRM map for the project site is shown in Exhibit 4-3.

4.9 EARTHQUAKE HAZARD

According to the 1994 Uniform Building Code, the island of Oahu is classified as a Seismic Zone "2A." Zone "0" designates areas with the least seismic activity, while Zone 4 designates areas with the greatest seismic activity.

4.10 AIR QUALITY

According to the Air Quality Study conducted for the State's Kahekili Highway Widening and Interchange project, there are no monitoring stations in the area, however, the national air quality standard for carbon monoxide is not violated along Kahekili Highway.

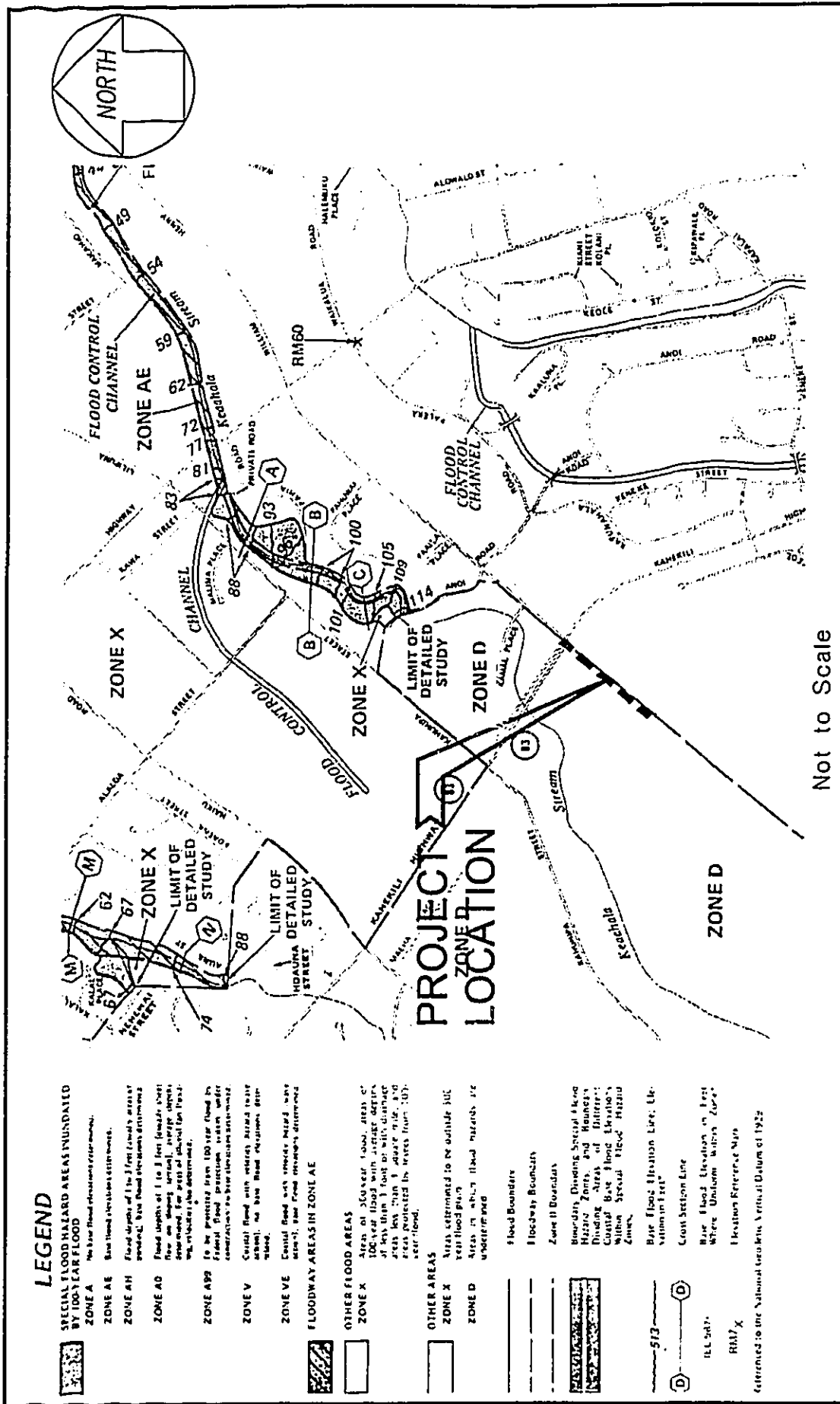
4.11 NOISE EMISSION

The primary source of noise in the project area is the vehicular traffic on Keaahala Road and Kahekili Highway. Other sources include noise from the Kaneohe District Park area, where various public recreational activities occur.

4.12 AESTHETIC QUALITY

The area of the proposed project can be characterized distinctly as suburban and is visually dominated by the open area of the Kaneohe District Park. The Koolau mountain range can also be seen in the background past Windward Community College.

The existing project route along Keaahala Road lacks sidewalks and is characterized by worn pavement and frequent occurrences of potholes. During heavy rain events, run-off also tends to pond along the roadway, thereby contributing to the poor aesthetic quality of the project route.



FLOOD HAZARD DISTRICT	
Project:	Keaahala Road Widening Kahekili Highway to Po'okela Street Honolulu, Oahu, Hawaii State Project No. HWY-O-03-97
EXHIBIT	
4-3	

4.13 FLORA / FAUNA

According to a 1990 Environmental Impact Study done for the recent widening of Kahekili Highway, there were no known rare, threatened, or endangered plant or animals species identified by the U.S. Fish and Wildlife services along Kahekili Highway, part of which is located on the makai end of the Keaahala Road project route.

Since most of the project area has already been extensively developed, no listed candidate, or proposed species are known to occur at the affected site (see letter from U.S. Fish and Wildlife Service dated 10/18/99 in APPENDIX A). The terrestrial animals found in the vicinity of Keaahala Road are predominantly introduced species, many of which are considered pestiferous (DHM, Inc., 1990).

According to the Department of Land and Natural Resources' Hawaii Stream Assessment, the following native aquatic species were observed in Keaahala Stream from a 1991 survey:

	NAME	COMMON NAME
NATIVE SPECIES		
Crustaceans:	<i>Atyoida(Atya) bisuicata</i>	<i>'opaekala 'ole</i>
	<i>Macrobrachium grandimanus</i>	<i>'opae 'oeha 'a</i>
Fishes:	<i>Awaous (Chonophorus) stamineus</i>	<i>'o 'opu nakea</i>
	<i>Eleotris sandwicensis</i>	<i>'o 'opu okuhe, akupa</i>
	<i>Stenogobius (Awaous, Chonophorus)</i>	<i>'o 'opu naniha</i>
Molluscs:	<i>Melanoides (Melania)sp.</i>	
NON-NATIVE SPECIES:		
Crustaceans:	<i>Macrobrachium far</i>	Tahitian prawn
	<i>Procambarus clarkil</i>	crayfish
Fishes:	<i>Clarias fuscus</i>	catfish
	<i>Gambusia affinis</i>	mosquito fish
	<i>Poecilia sp.</i>	guppy
	<i>Xiphophorus sp.</i>	swordtail

4.14 HISTORIC, ARCHAEOLOGICAL AND CULTURAL CHARACTERISTICS

The State Historic Preservation Division (SHPD) has no known record of any historic or cultural records within the project corridor since no archaeological work has been conducted in the specific project area (see letter dated 7/28/99 in APPENDIX B). According to SHPD, archeological survey and monitoring that was conducted for the Castle Hills Access Road Corridor which abuts the project corridor, did not locate any significant historic sites. In addition, aerial photographs from the late 1970's show that the project area was cleared and graded during development of the Kaneohe Regional District Parks.

The nearest known archaeological site to the project area is the Luluku Discontiguous Archaeological District located in the H-3 Kaneohe Interchange area above Kahekili Highway. This district contains eighteen different archaeological sites which represent traditional Hawaiian/prehistoric evidence of foreign influences. Such archaeological sites include simple stone structures, multi-feature complexes, possible habitation features, burials, boundary walls, and historic period artifact concentrations (DHM, Inc., 1990).

Kaneohe was a major area of early Hawaiian settlement on the island of Oahu, and is referenced in several Hawaiian myths and oral traditions. In 1779, the Kaneohe Bay region was estimated to have had a population between 15,000 and 17,000 people when the first Westerners arrived in the area. Kaneohe became a major population center of Oahu not only because of the availability of fresh water from its many streams and springs but also due to its location along the bay where there was an abundance of fishing resources (DHM, Inc., 1990).

Between the years of 1910 and 1925, pineapple cultivation became a major industry in Kaneohe. Many archaeological sites were disturbed and destroyed a long time ago from agricultural activities such as pineapple cultivation or other early construction activities. Only a few archaeological sites remain from the pre-contact era in good condition.

4.15 LAND USE, PLANS & POLICIES

The land use within the project area is designated as "Urban" and "Public Facility" by the State Land Use Designation Map and Koolaupoko Development Plan Land Use Map, respectively (the Koolaupoko Development Plan is currently being revised and will be soon known as the Koolaupoko Sustainable Communities Plan). According to the City and County Zoning maps, the Kealahala Road project route falls under the "P-2," and "AG" zoning designations.

The abutting land within the project limits is owned by the State of Hawaii. However, the Kaneohe District Park area, identified by TMK parcels 4-5-23: 09 and 10 is operated and maintained by the City & County of Honolulu under the Governor Executive Order No. 2528. The State-owned Windward Comprehensive Health Center is also located on the north side of the Pookela Street / Keaahala Road intersection, while the future site of the Hawaii State Judiciary Building is located on the south side of the intersection, mauka of the Kaneohe District Park's basketball courts.

The Kaneohe Bay Master Plan (KBMP) was developed in the early 1990s by Kaneohe Bay Master Planning Task Force. One of the chief purposes of the plan is to preserve and protect the unique natural resources of Kaneohe Bay for the continued enjoyment of the general public. The KBMP identifies Keaahala Stream as a part of the Kaneohe watershed which eventually discharges into Kaneohe Bay. Keaahala Stream has the potential for contributing non point source pollutants from urban runoff to the bay area since most of it is channelized as it passes through the heavily urbanized areas of Kaneohe town.

Windward Community College (WCC), located on the western limit of Keaahala Road, is currently planning and implementing improvements near to the project area pursuant to the WCC Master Plan. HDOT has coordinated the proposed Keaahala Road improvements with WCC to ensure that the proposed design is in accordance with the school's future needs.

4.16 EXISTING TRAFFIC

Existing traffic conditions along the Keaahala Road project route were analyzed in a traffic report by the Traffic Management Consultant, dated September 14, 1999. Field investigations were conducted in April 1997 at the intersection of Keaahala Road and Pookela Street during morning and evening peak hour traffic periods. The 1994 peak hour traffic data from the HDOT was used for the Keaahala Road / Kahekili Highway intersection due to the construction on Kahekili Highway at the time of the field investigation. According to this 1994 HDOT traffic data, the average daily traffic volumes on Keaahala Road, mauka of Kahekili Highway were approximately 6,830 vehicles during the weekday.

Features along the Keaahala Road project route are currently substandard and include an inadequate pavement structure, highway lighting, and drainage system. The present lane width lacks a separate center median for left turns onto the driveways along Keaahala Road and is inadequate for the safe maneuvering of trucks. In addition, the intersection at Keaahala Road and Kahekili Highway lacks exclusive left or right turn lanes onto Kahekili Highway for the makai bound traffic. The existing shared through, left turn lane and a shared through, right turn lane on the makai-bound approach at this

intersection is also insufficient in storage length for the amount of vehicles that use the roadway during morning and afternoon peak traffic hours.

The Keaahala Road project route also lacks provisions for bike lanes and concrete paved sidewalks on both sides of the roadway. A "mid-block" crosswalk is needed for the area near the existing basketball courts so pedestrians can safely cross between the south and north sides of the park. According the Kaneohe District Park personnel, children commonly have activities on both sides of the park and senior citizens who park on the south side of the park also need to safely cross this area of the roadway to attend the Open Market.

4.17 EXISTING STORM DRAINAGE

The existing storm drainage system in the project area consists of drain inlets along Keaahala Road which connect to 24-inch and 36-inch corrugated metal pipes. These drainage pipes transport the flows to the adjacent wetland area on the north side of the roadway. Drainage flows from the adjacent park area located on the south side of the roadway are directed toward a drainage ditch that runs through the park's parking lot, and connects to a 8-foot wide by 3.75-foot high concrete box culvert that crosses beneath Keaahala Road. The box culvert conveys the flows to the adjacent wetland drainage area.

Runoff flows from Keaahala Road are intended to be intercepted by a single grated drain inlet located on the south side of the roadway, which is connected to a 18-inch pipe that conveys the flows to the drainage ditch in the park. According to the drainage study done for the proposed project, this drain inlet was found to be very inefficient due to the elevation of the grate.

4.18 EXISTING UTILITIES

Overhead electrical, telephone, and cable television lines owned by the Hawaiian Electric Company, Hawaiian Telephone Company, and Oceanic Cable, respectively are located on the north side of the Keaahala Road right-of-way. Street light bracket arms are also attached to these utility poles. An underground electrical and telephone connection crosses beneath Keaahala Road to the Kaneohe District Park area near the park's makai driveway entrance. Between the Keaahala Road / Pookela Street intersection and the mauka end of the project site, the electrical line is located underground.

In addition to the drainage facilities described in the previous section, a 10-inch sewer line and a water line also exists beneath Keaahala Road. The existing water utility consists of a 16-inch line that is located approximately between Kahekili Highway and

the makai-side driveway entrance of the Kaneohe District Park. Beyond this driveway entrance, the water line is reduced to an 8-inch line that extends towards the Windward Community College area.

5. **SOCIO-ECONOMIC SETTING**

According to the State of Hawaii's 1990 census data, the resident population of the Kaneohe community was 35,338 persons. The Kaneohe Marine Base Hawaii located on the Mokapu peninsula employs approximately 5,261 of this total population, making it the largest employer in all of Windward Oahu. However, the majority of the Kaneohe population is employed on the leeward side of the Koolau mountains.

6. PROBABLE IMPACTS AND MITIGATIVE MEASURES

6.1 SHORT TERM IMPACTS

Short term impacts are those impacts that are of a temporary nature and are typical of site preparation and other construction activities. These impacts are temporary conditions that can be mitigated through compliance with applicable regulations/rules or the appropriate permit conditions, and through the application of current construction techniques and an approved best management practices plan.

6.1.1 Surface Water

Since construction of the drainage facilities will require excavation depths ranging from approximately 7 to 10 feet, the ground water table will most likely be intersected in most locations. Should dewatered groundwater need to be discharged into Keaahala Stream, the appropriate National Pollutant Discharge Elimination System (NPDES) permit will be secured from the State Department of Health. Compliance with the provisions of the NPDES permit minimizes any adverse impacts to the receiving water body. Confirmation of any permit requirements will be made after preliminary plans are completed.

The proposed project will not involve construction activities within Keaahala Stream. However, drainage flows from Keaahala Road are directed to the adjacent wetland drainage area which connects to Keaahala Stream and eventually discharges into Kaneohe Bay. Thus, the project specifications will require the Contractor to take appropriate measures during construction to prevent fuel, oil and cement products from discharging or leaching into the drainage system or Keaahala Stream. The Contractor will be required to implement an approved Best Management Practice (BMP) plan to minimize impacts to Keaahala Stream and ultimately, Kaneohe Bay.

6.1.2 Wetlands

The proposed widening of Keaahala Road will require the acquisition of some land from the adjacent wetland drainage area on the north side of the roadway to accommodate a portion of the new concrete sidewalk and retaining wall. Although this land acquisition involves the loss of a small parcel of the adjacent drainage area, the proposed project is the most feasible alternative. The adjacent wetlands serve as a drainage area for storm water run-off from the surrounding lands and is not a habitat to any known rare, threatened or endangered species of plant or animal.

In addition to the construction of a portion of the new concrete sidewalk and retaining wall, activities within the wetland area will include the extension of an existing concrete box culvert that crosses beneath Keaahala Road to an existing drainage ditch. Grading

and clearing of this existing drainage ditch will also be required within a portion of the wetland area as a part of the project's drainage improvements. The capacity of this drainage ditch is currently limited from the accumulation of sediment and an overgrowth of vegetation. Clearing and grading activities will allow the ditch to convey storm water run-off flows more effectively to the downstream culvert that crosses beneath Kahekili Highway. Temporary erosion control measures will be applied over the exposed ditch surface as needed until the natural vegetation is restored.

Construction activities within the wetland area will require the placement of temporary gravel access ways around the work areas to allow for the transportation of materials and equipment. This gravel access way will help to prevent excessive tracking of mud by construction equipment. Following completion of construction activities within the wetland area, the temporary gravel access will be removed as required and the cleared area will be graded to match the adjacent terrain. Temporary erosion control measures shall be applied as needed to prevent degradation of the downstream water quality.

The proposed project is being coordinated with the ACOE to minimize impacts to the wetland area. According to the ACOE, the HDOT will be required to obtain the following Department of the Army (DA) permits: Nationwide Permit No. 14 (Road Crossing) and Nationwide Permit No. 33 (Temporary Construction Access and Dewatering). In conjunction with these ACOE permits, a Department of Health 401 Water Quality Certification, and a Office of State Planning Coastal Zone Management Consistency Determination will also be required. Compliance with the provisions of these permits and the provisions of other applicable NPDES discharge permits will minimize construction impacts the wetland area. The Contractor will be required to employ an approved best management practices plan and take appropriate measures during construction to prevent the discharge of pollutants from entering drainage ditches which connect to Keahala Stream. The benefits to widening Keahala Road will far outweigh the loss of the small portion of the wetland drainage area since the proposed improvements will enhance traffic flow and safety for pedestrians as well as motorists in the area, and address ponding and flooding problems along the roadway.

6.1.3 Flood Hazard

Since the proposed project area is not located within a flood hazard district, no flood impacts are anticipated.

6.1.4 Air Quality

During construction, the air quality around the project area is expected to be affected by exhaust fumes from construction equipment and automobiles congested in the area. The discharge of dust into the atmosphere may cause concerns while grading, trenching and

backfilling activities are performed. Earth material deposited on the roads from trenches, trucks or equipment may also cause dust problems when agitated by traffic.

Adequate and proper maintenance of construction equipment and vehicles will help to reduce emissions. The Contractor will be required to have all heavy machinery equipped with proper air pollution abatement devices. Frequent watering of exposed dirt areas and equipment travel ways will help to control fugitive dust concerns. Immediate paving of completed areas of construction will also help to control fugitive dust. As required by ordinance, open body trucks must be covered at all times while transporting materials. Other types of dust controls shall be implemented by the Contractor as required to minimize air borne particles that may cause health problems and/or property damage.

Standard erosion control measures will be applied during construction to meet the requirements of applicable NPDES permit(s). All the mitigation measures to be used shall comply with the State Department of Health Administrative Rules, Title 11, Chapters 59 and 60, as well as all applicable County ordinances relating to excavation and stockpiling procedures.

6.1.5 Noise Emission

Noise from construction equipment and activities may be a nuisance to users of the adjacent Kaneohe District Park, the Windward Comprehensive Health Center, and residents of the apartment complex housing area on the makai side of the Kahekili Highway. The increase in noise levels is unavoidable during construction. However, unnecessary noise should be reduced through the use of mufflers on construction equipment/trucks, and through the adequate and proper maintenance of construction equipment and vehicles. The community will be given ample notice of construction activities and the elevated noise levels that are anticipated.

All activities will be coordinated with the Department of Health to minimize noise generation and shall comply with the provisions of Title 11, Chapter 42 "Vehicular Noise Control," and Chapter 46, "Community Noise Control." of the Hawaii Administrative Rules (H.A.R.). The Contractor will be required to obtain a noise permit for in accordance with H.A.R. Title 11, Chapter 46 for construction activities proposed during regular daylight working hours. Should any night work be required to minimize disruptions to the daytime traffic along Keaahala Road, the Contractor will be required to obtain a noise variance from the Department of Health pursuant to H.A.R. Title 11, Chapter 46.

6.1.6 Aesthetics

The short term presence of construction equipment and materials near the project site

may contribute to adverse visual impacts along Keaahala Road. However these visual impacts will be temporary and no unnecessary clearing and grubbing of vegetation will be allowed.

6.1.7 Flora / Fauna

According to the U.S. Fish and Wildlife Service, no listed candidate, or proposed species are known to occur at the affected site and no significant adverse impacts to federally listed species are expected to result from the proposed road expansion (see letter dated 10/18/99 in APPENDIX A). In addition, the proposed widening of Keaahala Road will not require the removal or relocation of any trees. Although no work will occur directly within Keaahala Stream, construction activities will occur within a portion of the adjacent wetland area that drains into the stream. The Contractor will be required to employ an approved best management practices plan and take appropriate measures during construction to prevent the discharge of pollutants from entering stream, and thereby minimize impacts to the aquatic life.

6.1.8 Historic, Archaeological and Cultural Characteristics

The proposed project is not anticipated to impact historic sites during construction since the area has already been extensively developed and ground disturbance during construction should not extend below fill soils. However, should evidence of historic sites be encountered during construction, all activities in the area of the find shall cease, and the State Historic Preservation Division shall be notified immediately. The Division shall be provided sufficient time to assess the find and recommend appropriate mitigation measures. Any archaeological data recovery work that may be recommended by the Division shall be completed by a qualified archaeologist prior to the commencement of work in the area of the find. Completion of the mitigation work shall be confirmed by the Division, and a report of the findings shall be prepared and submitted to the Division for review and acceptance. If human skeletal remains are inadvertently encountered during construction, procedures outlined in the Hawaii Revised Statutes 6E-43.6 shall be followed.

6.1.9 Traffic

Temporary traffic congestion should be anticipated along Keaahala Road since traffic flow will be impeded during the construction period. An approved traffic control plan will be implemented to ensure the most efficient movement of traffic through the project area. The Contractor will be required to maintain at least two travel lanes, one lane of traffic in each direction, at all times. When required by construction activities, the Contractor may provide one lane of traffic, controlled by flaggers or police officers. The travel corridor will be delineated and signed to promote safety in the construction work

zone according to regulation standards as stipulated in Part VI of the Manual on Uniform Traffic Control Devices.

Access to the Kaneohe District Park, Windward Comprehensive Health Center, Windward Community College, State Hospital, HDOT base yard, Hina Mauka, and the Castle Hills subdivision will be temporarily affected during construction. Since Keaahala Road is the only access way to these areas, evening work hours (during hours when most of the facilities are closed) may mitigate the traffic congestion anticipated from construction activities along the project route.

6.1.10 Utilities

The existing overhead utilities along the north side of the project route will need to be relocated due to the widening of Keaahala Road. Electrical and cable utilities will be relocated overhead within the road right-of-way. The proposed project is currently being coordinated with these utility companies to minimize any disruptions in service during the relocation.

6.1.11 Socio-Economic

Due to the anticipated traffic congestion in the project area during construction, the residents of the Castle Hills subdivision, park users of the Kaneohe District Park, and the other facilities that are accessed solely through Keaahala Road may be temporarily inconvenienced. Students and faculty of the Windward Community College, as well as clients and employees of the Windward Comprehensive Health Center, the State Hospital, and Hina Mauka may need to allow for additional commuting time to and from these facilities, especially during the morning and afternoon peak hours of traffic. Mitigation measures include provisions for an approved traffic control plan and possibly scheduling construction activities during off-peak hours when these facilities are closed.

The proposed project will provide temporary employment opportunity during the construction period. Local material suppliers and dining establishments may temporarily benefit from the project due to their proximity and increased amount of construction workers in the area.

6.2 LONG TERM IMPACTS

No significant long term adverse impact is anticipated as result of the construction of the proposed project. The long term impacts of the proposed project is expected to be beneficial since access and traffic flow will be improved to the different facilities on the mauka end of Keaahala Road, as well as the Castle Hills subdivision.

6.2.1 Surface Water

Storm water run-off along the Keaahala Road project route is currently directed into an existing grated inlet located on the south side of the roadway and conveyed to a drainage ditch in the wetland drainage area on the north side of the roadway which connects to Keaahala Stream. The proposed improvements will eliminate ponding and flooding problems along Keaahala Road and will direct storm water run-off along the project route into the existing drainage system more efficiently. The additional run-off anticipated from the proposed increase in paved surfaces is considered to be negligible. Thus, no substantial increase in flows to Keaahala Stream, and ultimately Kaneohe Bay is anticipated.

6.2.2 Wetlands

No long term adverse impacts are expected on the adjacent wetland drainage area following construction of the widened roadway. Since no rare, threatened or endangered species are known to dwell in the area, no permanent habitat displacement is anticipated. The primary function of the wetlands to serve as a drainage area for the surrounding parcels will remain the same. Storm water run-off flows would be conveyed through this drainage way more efficiently since the ditches within the wetland area would be cleared and graded.

6.2.3 Air Quality

Long term air quality impacts would be directly related to the vehicular traffic using Keaahala Road between Kahekili Highway and Pookela Street. Since the proposed project is expected to enhance the traffic flow along Keaahala Road, the total vehicular emissions in the area should be improved.

6.2.4 Aesthetics

The proposed project is expected to largely improve the overall aesthetics of Keaahala Road from Kahekili Highway to Pookeia Street since the existing roadway conditions consist of worn pavement, potholes, a lack of sidewalks, and an inadequate drainage system that results in frequent ponding along the roadway. The proposed project will provide for new pavement structure, sidewalks, and an improved drainage system to eliminate the ponding and flooding problems.

Minimal visual impacts are expected from the proposed retaining walls to be constructed along a portion of the Keaahala Road project route. "Retaining Wall No. 1," will be approximately 245 feet in length and constructed on the north side of the roadway

between Kahekili Highway and the concrete box culvert that crosses beneath Keaahala Road. Retaining Wall No. 1 will be connected to the existing retaining wall at Kahekili Highway and follow the existing grades along Keaahala Road. Pipe railing, 3.5 feet high, will be placed on the top of the wall for safety purposes. Thus, the pipe railing and only a small portion of Retaining Wall No. 1 will be visible from the Keaahala Road project route.

The other retaining wall, "Retaining Wall No. 2," will be approximately 270 feet in length and located on the opposite (south) side of the roadway, between Kahekili Highway and the existing makai-side driveway of the Kaneohe District Park. Retaining Wall No. 2 will not be connected to the existing wall at Kahekili Highway. This wall is needed to retain the existing park lands and minimize impacts to the existing ball field. Although this wall will be visible from the roadway, it will be constructed with moss rock. This natural rock texture will match the existing rock wall that fronts the basketball courts located further west along the south side of the roadway.

6.2.5 Land Use, Plan & Policies

The proposed widening of Keaahala Road will require the acquisition of land on both the north and south sides of the project route to accommodate the new right-of-way. The parcels to be affected and the respective land area needed for the proposed project are shown as follows:

<u>TMK</u>	<u>Area To Be Acquired (square feet)</u>
4-5-23:09	7716.12 s.f.
4-5-23:10	5888.98 s.f.
4-5-23:15	2429.19 s.f.
4-5-23:02	1887.34 s.f.

All of the affected parcels are owned by the State of Hawaii. However, parcels 09 and 10 are managed by the City and County of Honolulu under the Governor Executive Order No. 2528 for the purposes of operating and maintaining the Kaneohe District Park. The functions and purposes of the park as well as the usable recreational space will remain unchanged. In addition, no businesses or homes will be displaced as a result of the land acquisition. The existing land use patterns will remain the same after the project is completed and no long term effects on property values or the local tax base are expected.

The proposed roadway and drain improvements are in compliance with the Kaneohe Bay Master Plan and is not in conflict with any of the plan's recommendations for maintaining and improving stream water quality. The additional run-off generated from the proposed project is considered to be an insignificant increase to Keaahala Stream. The proposed project is also consistent with State and City land use designations, and is

in compliance with the Coastal Zone Management objectives and policies identified in Chapter 205A, Hawaii Revised Statutes.

6.2.6 Traffic

The proposed widening of Keaahala Road is expected to improve traffic flow in the area over the long term. Traffic flow will also be enhanced by the new pavement structure and the improved drainage system. The provisions of an exclusive left turn lane, a through-only lane and an exclusive right turn lane for the makai-bound traffic on Keaahala Road at the Kahekili Highway intersection will improve vehicle storage and the existing and future traffic flows. Exclusive left turn lanes will also be provided along a center lane median for both mauka-bound and makai-bound traffic along Keaahala Road for improved driveway access.

New 7-foot wide accessible concrete sidewalks in compliance with ADA requirements, as well as new 4-foot wide bike lanes will be provided on both the mauka-bound and makai-bound sides of the roadway. A mid-block crosswalk will also be provided near the basketball area for pedestrians to safely cross between the north and south sides of the park.

The improvements to Keaahala Road will accommodate the additional traffic flows from the following planned facilities such as the Windward Community College expansion; the newly constructed Hope Chapel Kaneohe church and day care facility; the future site of the Koolaupoko District Courthouse; the future expansion of the Windward Community College; and growth in patient and staff loads at the Hawaii State Hospital. If no improvements are made to Keaahala Road, the additional traffic loads from these facilities would adversely impact traffic flow along the roadway.

6.2.7 Storm Drainage

The proposed drainage improvements along the Keaahala Road project route will not only bring the existing inadequate system into conformance with HDOT design criteria, but will also alleviate the existing ponding and flooding problems from runoff which frequently occur during rain events. A new roadway drainage system will be installed beneath Keaahala Road to take care of surface runoff along the roadway. In addition, a portion of the adjacent wetland drainage area will be cleared to allow flows to be conveyed more effectively to the culvert that crosses beneath at Kahekili Highway.

The reduction of ponding and flooding problems in the project area will consequently enhance the safety of pedestrians and motorists traveling along the roadway. No negative impact to the existing downstream drainage system is anticipated.

6.2.8 Socio-Economic

The proposed improvements to Kealahala Road will contribute to the social and environmental well-being of the Kaneohe community. No residences or businesses will be displaced by the project. Since the proposed drainage improvements are expected to alleviate ponding problems along the roadway, the public safety for both motorists and pedestrians is also expected to be improved. In addition, the widened roadway along with the provisions for bike lanes should help to alleviate congested traffic conditions during the peak traffic hours.

7. DETERMINATION

In accordance with the Hawaii Revised Statutes, Chapter 343, the State of Hawaii, Department of Transportation anticipates that the proposed Kealahala Road Widening from Kahekili Highway to Pookela Street will not have significant impacts to the environment. This document constitutes an anticipated "Finding of No Significant Impact," (FONSI) and as a result, an Environmental Impact Statement will not be required for the proposed project.

8. REASONS SUPPORTING THE DETERMINATION

The anticipated determination of the proposed project was based on the following significance criteria in accordance with the Hawaii Administrative Rules 11-200-12:

- *The proposed action does not involve an irrevocable commitment or loss of or destruction of unique natural or cultural resources:*

The proposed widening of the Keaahala Road project will require the acquisition of some land from the adjacent wetland drainage area on the north side of the roadway. Although this land acquisition involves the loss of a small parcel of the adjacent drainage area, the proposed project is the most feasible alternative. The adjacent wetlands serve as a drainage area for storm water run-off from the surrounding lands and is not a habitat to any known rare, threatened or endangered species of plant or animal. The benefits to widening Keaahala Road will far outweigh the loss of the small portion of the wetland drainage area since the proposed improvements will eliminate ponding and flooding problems along the roadway, and enhance traffic flow and safety for pedestrians as well as motorists.

The proposed project should have no effects on historic sites since the most of the project area has already been extensively developed and ground disturbance during construction should not extend below fill soils. However, should evidence of historic sites be encountered during construction, all activities in the area of the find shall cease, and the State Historic Preservation Division shall be notified immediately.

- *The proposed action does not curtail the range of beneficial uses of the environment:*

The proposed project is consistent with the State and City and County land use designations of the surrounding area. However, traffic disruptions during construction of the roadway improvements is expected to temporarily curtail the use of the recreational areas of the Kaneohe District Park. Traffic congestion along the Keaahala Road project route may discourage some of the public from using the park facilities due to the anticipated delays in commuting to and from the park. Since Keaahala Road provides exclusive access to a number of facilities at the mauka end of the roadway, in addition to the Castle Hills subdivision, the long term benefit of a widened roadway far outweighs the temporary traffic impacts and possible curtailment of the adjacent recreational areas.

- *The proposed action is in concert with the State's long term environmental policies, goals and guidelines as expressed in Chapter 343, HRS, and any revisions and amendments thereto, court decisions and executive orders:*

The proposed project is consistent with the State's Land Use Plan which is in concert with all applicable policies, goals, and guidelines. The proposed project does not conflict with the State's long term environmental policies or goals and guidelines as expressed in Chapter 343 of the Hawaii Revised Statutes.

The State's environmental policy is to conserve the natural resources and enhance the quality of life. Traffic flows along Keaahala road are expected to increase from the newly constructed Hope Chapel Kaneohe church and day care facility and also from the future site of the State's new Koolauokō District Courthouse. The proposed project will improve traffic flow thereby benefitting the residents of the Castle Hills subdivision as well as all the employees, patients, clients and students of the other facilities that use Keaahala Road as an access roadway.

- *The proposed action does not substantially affect the economic or social welfare of the community or State:*

During construction, heavy traffic congestion may temporarily cause inconveniences to residents of the Castle Hills subdivision, park users, patients of the Windward Comprehensive Health Center and Hina Mauka, students commuting to classes at the Windward Community College, and employees of all these facilities. Since there are no commercial businesses located along the project route, no substantial impacts to the economic welfare of the community or State are anticipated. A positive economic impact is the short term production of construction related jobs.

- *The proposed action does not involve substantial secondary impacts, such as population changes or effects on public facilities:*

The proposed project will not directly result in an increase of population in the area. The project is needed to improve traffic flow along Keaahala Road which provides the only access to the Castle Hills subdivision as well as other various facilities.

During construction, some members of the community may be temporarily discouraged from using the recreational facilities at the Kaneohe District Park due to heavy congestion and traffic back-ups along Keaahala Road. In the long term, the widened roadway will have a positive effect on the park facilities since the improvements will enhance traffic flow to the area.

- *The proposed action does not substantially affect public health:*

Construction activities will generate short term impacts with the potential for affecting public health. Such short term impacts include noise and dust which will be minimized through the implementation of the mitigative measures previously identified in Section 6. These impacts are addressed and regulated through the permit processes established by the appropriate regulatory agencies. In addition, the Contractor will be directed to communicate with the community to mitigate public concerns during construction.

- *The proposed action does not involve a substantial degradation of environmental quality:*

The proposed roadway improvements does not involve a substantial degradation of environmental quality since the existing physical aspects of the surrounding area will be preserved. Keaahala Road currently operates at capacity conditions during the morning and afternoon peak hours of traffic, with an overall desirable minimum level of service. Future traffic flows are expected to increase along the project route, thereby increasing the total emissions in the area and impacting the air quality. Since the proposed project would enhance traffic flow along Keaahala Road, the total vehicular emissions in the area should not worsen.

- *The proposed action is individually limited and cumulatively, does not have a considerable adverse effect upon the environment or involve a commitment for larger actions:*

The proposed roadway improvements, either individually or cumulatively, will not have a considerable adverse effect on the environment. The proposed project addresses a direct need to improve the existing two-lane facility of Keaahala Road between Kahekili Highway and Pookela Street which is inadequate to serve the current or future needs of the surrounding area.

HDOT had previously agreed to widen Keaahala Road between Kahekili Highway and Pookela Street due to the elimination of an access way that directly connected Pookela Street from Likelike Highway. Thus, no commitment of any larger action is involved.

- *The proposed action does not substantially affect rare, threatened or endangered species or habitats:*

Most of the proposed roadway improvements will be constructed within the existing right-of-way which are areas that have been previously disturbed. Thus, no direct adverse impact to wildlife resources are anticipated from the proposed improvements

since the proposed project area lacks rare, threatened, or endangered species. Although the acquisition of some land from the adjacent wetland drainage area will be required for the widened roadway, this wetland site serves as a drainage area for storm water run-off from the surrounding lands and is not a habitat to any known rare, threatened or endangered species of plant or animal.

- *The proposed action does not detrimentally affect air or water quality or ambient noise levels:*

Short term impacts on air and ambient noise levels are expected to occur during the construction period, but will be mitigated through typical construction practices and regulation specified in the project plans and specifications. Upon completion of the roadway improvements, the air quality and noise levels should return to the existing condition.

Construction activities will occur within a portion of the wetland drainage area since the existing drainage ditches will require clearing and grading as part of the proposed project's drainage improvements. The Contractor will be required to comply with the provisions of all applicable permit conditions to minimize construction impacts to the wetland area. The Contractor will also be required to implement an approved best management practices plan and take appropriate measures during construction to prevent pollutants from discharging or leaching into the drainage ditches which connect to Keaahala Stream, and ultimately, Kaneohe Bay.

- *The proposed action does not affect an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary or coastal waters:*

The proposed project limits are not located within an environmentally sensitive area such as a flood plain or a tsunami zone. Thus, the proposed roadway improvements are not expected to adversely impact any flood plain, tsunami zone erosion-prone area, geologically hazardous land, estuary or coastal waters.

- *The proposed action does not substantially affect scenic vistas and view planes identified in county or state plans or studies:*

No scenic vistas or view planes should be affected from the proposed project since the new widened roadway will be close to the grade of the existing roadway. The proposed project is expected to largely improve the overall aesthetics of Keaahala Road between Kahekili Highway and Pookela Street by providing for new pavement structure, sidewalks, and an improved drainage system to eliminate the ponding and flooding problems.

Minimal visual impacts are expected from the proposed retaining walls to be constructed along a portion of the Keaahala Road project route. Retaining Wall No. 1 will be connected to the existing retaining wall at Kahekili Highway and follow the existing grades along Keaahala Road. Pipe railing, 3.5 feet high, will be placed on the top of the wall for safety purposes. Thus, the pipe railing and only a small portion of Retaining Wall No. 1 will be visible from the Keaahala Road project route.

Retaining Wall No. 2 will not be connected to the existing wall at Kahekili Highway. This wall is needed to retain the existing park lands and minimize impacts to the existing ball field. Although this wall will be visible from the roadway, it will be constructed with moss rock. This natural rock texture will match the existing rock wall that fronts the basketball courts located further west along the south side of the roadway.

- *The proposed action does not require substantial energy consumption:*

No substantial amount of energy will be required for the proposed construction of the roadway improvements. Following construction, the improved Keaahala Road between Kahekili Highway and Pookela Street will have no effect upon energy consumption.

9. AGENCIES CONSULTED DURING THE PREPARATION OF THE EA

The following agencies were consulted during the preparation of the Draft EA. A copy of the responses received during the Draft EA 30-day comment period are included in **APPENDIX B.**

9.1 FEDERAL GOVERNMENT

U.S. Army Corps of Engineers

9.2 STATE GOVERNMENT

Department of Business, Economic Development and Tourism, Office of Planning
Department of Health
Department of Health, Windward Comprehensive Health Center
Department of Land and Natural Resources
Department of Land and Natural Resources, State Historic Preservation Division
Hawaii State Hospital
Office of Hawaiian Affairs
University of Hawaii, Environmental Center
Windward Community College

9.3 CITY AND COUNTY OF HONOLULU

Board of Water Supply
Department of Planning and Permitting

9.4 OTHER PARTIES

Councilmember Steve Holmes, District III
GASCO
GTE Hawaiian Telephone
Kaneohe Neighborhood Board No. 30
Hawaiian Electric Company
Hina Mauka

REFERENCES

City and County of Honolulu, Department of Land Utilization. Land Use Ordinance Zoning Map No. 6, Ord. No.: 86-109. October 22, 1986.

Department of Transportation, Highways Division. Bike Plan Hawaii, A State of Hawaii Master Plan. April 1994.

Department of Transportation, Highways Division. Kahekili Highway Widening and Interchange, State Project No. 83F - 01 - 75 and 63A - 05 - 68, Federal Aid Project No. F-083-1(26), Final Environmental Impact Statement. June 1990.

Federal Emergency Management Agency. Flood Insurance Rate Map. City & County of Honolulu. Community Panel Numbers 150001 and 0115C, Revised September 28, 1990.

Fukunaga and Associates, Inc. Final Environmental Impact Statement for the Site Selection Study for the New Koolaupoko District Courthouse. March 1996.

Hawaii Revised Statutes, Chapter 205A. Coastal Zone Management. 1985 and 1992 Supplement.

Hawaii Revised Statutes, Chapter 343. Environmental Impact Statements.

Hawaii Revised Statutes, Chapter 344. State Environmental Policy.

Kaneohe Bay Master Plan Task Force. Kaneohe Bay Master Plan. May 1992

PBR Hawaii. Final Environmental Assessment - Hope Chapel Kaneohe Access Driveway. February 1995.

State of Hawaii, Department of Business, Economic Development and Tourism. The State of Hawaii Data Book 1993-94.

State of Hawaii, Office of Environmental Quality Control. A Guidebook for the Hawaii State Environmental Review Process. July 1991.

The Traffic Management Consultant. Draft Traffic Report for the Proposed Kealahala Road Widening Project - Kahekili Highway to Fookela Street. September 14, 1999.

U.S. Department of Agriculture Soil Conservation Service. Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai. August 1972.

APPENDIX A

**10/18/99 LETTER FROM
THE U.S. FISH AND WILDLIFE SERVICE**



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Ecoregion
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96850

OCT 18 1999

In Reply Refer To: AAP

Mr. Sheldon Yamasato
Akinaka and Associates, Ltd.
250 North Beretania Street, Suite 300
Honolulu, Hawaii 96817

RECEIVED
OCT 19 1999

AKINAKA & ASSOCIATES, LTD.

Re: Endangered or Threatened Species list request for Keaahala Road Widening Project from Kahekili Highway to Pookela Street, Oahu, Hawaii

Dear Mr. Yamasato:

The U.S. Fish and Wildlife Service (Service) has received your September 23, 1999, request for a list of any federally listed, proposed, or candidate species that may occur in the vicinity of the Keaahala Road Widening project from Kahekili Highway to Pookela Street, Oahu, Hawaii. Approximately 0.21 miles of Keaahala Road will be widened to accommodate existing and future traffic demands of the surrounding area. Other physical improvements include new concrete curbs, gutters and sidewalks, new drainage system, new street lighting, new concrete retaining walls, and the relocation of overhead utilities. The project sponsor is the State of Hawaii Department of Transportation Highways Division.

Based on our review of pertinent information in our files, no listed, candidate, or proposed species are known to occur at the affected site. Although the proposed action will encroach upon portions of an existing wetland, which functions as a drainage way for nearby properties, the project sponsor will apply for two Department of the Army Nationwide Permits. These permits will cover construction of a portion of the new concrete sidewalk, wall footing and retaining wall; extension of existing drainage culvert; the connection of a new 24-inch drain line to an existing outlet structure; grading of the existing drainage ditches; construction of temporary gravel access ways; and construction dewatering during excavations.

The wetland is currently overgrown with alien vegetation and does not provide optimal habitat for endangered waterbird species. Therefore, no significant adverse impacts to federally listed species are expected to result from the proposed road expansion.

We appreciate your interest in protecting endangered and threatened species and minimizing project-related impacts to fish and wildlife resources. If you have questions or comments, please contact Fish and Wildlife Biologist Arlene Pangelinan by telephone at (808) 541-3441 or by facsimile transmission at (808) 541-3470.

Sincerely,



Robert P. Smith
Pacific Islands Manager

cc: CZMP, Honolulu
DAR, Honolulu
CWB, Honolulu

APPENDIX B

**CORRESPONDENCE RECEIVED DURING THE
DRAFT EA 30-DAY COMMENT PERIOD**

The following table summarizes the agencies/parties that were consulted during the Draft EA 30-day review period, which of those agencies/parties commented, and the date that the response letter was sent.

AGENCIES AND ORGANIZATIONS CONSULTED	Date of Comment Letter	Date Response Sent
Federal Government		
U.S. Army Corps of Engineers	no comment rec'd	--
U.S. Department of the Interior, Fish and Wildlife Service	10/18/99	--
State Government		
Department of Accounting and General Services	8/24/99	2/18/00
Department of Health, Environmental Management Division	8/13/99	2/10/00
Department of Land and Natural Resources	no comment rec'd	--
Department of Land and Natural Resources - Land Division	no comment rec'd	--
Department of Land and Natural Resources - State Historic Preservation Division	7/28/99	2/18/00
Department of Land and Natural Resources - Division of Aquatic Resources	no comment rec'd	--
Department of Business, Economic Development & Tourism - Office of Planning	no comment rec'd	--
Office of Hawaiian Affairs	8/9/99	2/18/00
Office of Environmental Quality Control	8/9/99	2/18/00
Hawaii State Hospital	7/27/99	2/11/00
University of Hawaii, Environmental Center	no comment rec'd	--
Windward Community College	no comment rec'd	--
Windward Health Center	no comment rec'd	--
City and County of Honolulu		
Board of Water Supply	8/9/99	2/10/00
Department of Design and Construction	no comment rec'd	--
Department of Parks and Recreation	8/23/99	2/8/00
Department of Planning and Permitting	8/23/99	2/11/00

AGENCIES AND ORGANIZATIONS CONSULTED	Date of Comment Letter	Date Response Sent
Department of Transportation Services	8/19/99	2/10/00
Other Parties		
Councilmember Steve Holmes, District II	no comment rec'd	--
Representative Iris Ikeda Catalani, State Legislature, 47 th District	no comment rec'd	--
Representative Ken Ito, State Legislature, 48 th District	no comment rec'd	--
Senator Bob Nakata, State Legislature, 23 rd District	no comment rec'd	--
Senator Marshall Ige, State Legislature, 24 th District	no comment rec'd	--
GTE Hawaiian Tel	8/17/99	2/18/00
Hawaiian Electric Company	no comment rec'd	--
Hina Mauka	no comment rec'd	--
Hope Chapel Kaneohe	no comment rec'd	--
Kaneohe Neighborhood Board No. 30	no comment rec'd	--
Kaneohe Outdoor Circle	no comment rec'd	--
Private Citizens:		
Ms. Sharron McMorrow	8/20/99	2/11/00
Ms. Lola Mench	8/17/99	2/11/00



COPY

PLEASE REFER TO
FILE NO

ADDRESS ONLY
ADMINISTRATOR
HAWAII STATE HOSPITAL

INFORMATION REGARDING PATIENTS
IS CONFIDENTIAL AND FURNISHED
FOR PROFESSIONAL PURPOSES ONLY

STATE OF HAWAII
DEPARTMENT OF HEALTH
HAWAII STATE HOSPITAL
45-710 KEAAHALA ROAD
KANEHOE, HAWAII 96744-3597

July 27, 1999

Mr. Craig Watanabe
Department of Transportation – Highways Division
State of Hawaii
869 Punchbowl Street, Room 304
Honolulu, Hawaii 96813

Re: Draft Environmental Assessment for the Keaahala Road
Widening Project – Kahekili Highway to Po'okela Street
Kaneohe, Oahu, Hawaii (TMKs: 4-5-23)

Dear Mr. Watanabe:

Thank you for the opportunity to provide comments on the Keaahala Road Widening Project. We have reviewed the Draft Environmental Assessment and find the document to be comprehensive and enlightening. However, we have the following concerns relative to the impact on Hawaii State Hospital:

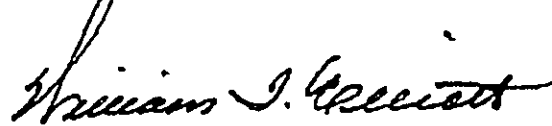
- a. Impact of the road widening on an existing emergency generator building and the proximity of the new traffic pattern to the structure and the above ground storage tank holding 1500 gallons of diesel fuel.
- b. Relocation of overhead wood utility poles in the right way that do not belong to HECO.
- c. Impact on the bus stop makai of the generator building, and provisions for a temporary location during the course of construction.
- d. Impact on the residents of the cottages adjacent to Keaahala Road in Parcel 3 if still occupied in the Fall 2000.

Mr. Craig Watanabe
July 27, 1999
Page 2

As a key member of the community, we look forward to the improvements this project will bring to the infrastructure and stand by to assist as appropriate. These concerns are provided for your consideration in the final design plans.

My point of contact is Mark Van Doome in Plant Operations at 236-8296.

Sincerely,



WILLIAM T. ELLIOTT
Associate Administrator
Administrative and Support Services

c: Mr. Sheldon Yamasato
Akinaka and Associates, Ltd.
250 North Beretania Street, Suite 300
Honolulu, HI 96817

Wayne P. Law, MSW, Administrator, Hawaii State Hospital
Mark Van Doome, Facility Plant Engineer, Hawaii State Hospital

BENJAMIN J. CAYETANO
GOVERNOR



KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAII
GLENN M. OKIMOTO

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

IN REPLY REFER TO:
HWY-DS 2.7289

February 11, 2000

TO: WILLIAM T. ELLIOTT, ASSOCIATE ADMINISTRATOR
ADMINISTRATIVE AND SUPPORT SERVICES, HAWAII STATE HOSPITAL
DEPARTMENT OF HEALTH

FROM: PERICLES MANTHOS, ADMINISTRATOR *P. Manthos*
HIGHWAYS DIVISION

SUBJECT: RESPONSE TO COMMENTS ON THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE KEAAHALA ROAD WIDENING PROJECT,
KAHEKILI HIGHWAY TO POOKELA STREET, KANEOHE, OAHU, HAWAII

Thank you for your comment letter dated July 27, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

1. COMMENT: "Impact of the road widening on an existing emergency generator building and the proximity of the new traffic pattern to the structure and the above ground storage tank holding 1500 gallons of diesel fuel."

RESPONSE: The proposed improvements along the Keaahala Road project route are not expected to directly impact the existing emergency generator building or the above ground diesel storage tank as these structures are outside of the project limits.

2. COMMENT: "Relocation of overhead wood utility poles in the right way that do not belong to HECO."

RESPONSE: The existing overhead wood utility poles are owned by the State of Hawaii and will be relocated within the widened roadway as a part of the proposed project.

3. COMMENT: "Impact on the bus stop makai of the generator building, and provisions for a temporary location during the course of construction."

RESPONSE: The existing bus stops along the Keaahala Road project route will be temporarily relocated during construction. The contractor shall coordinate the location of the temporary bus stops with the City Department of Transportation Services.

Mr. William T. Elliott
Page 2
February 11, 2000

HWY-DS 2.7289

4. COMMENT: "Impact on the residents of the cottages adjacent to Keaahala Road in Parcel 3 if still occupied in the Fall 2000."

RESPONSE: The Windward Community College campus is located well outside of the Keaahala Road construction limits (approximately 500 feet from the western limit of the project route). Construction noise will be minimized through the implementation of the appropriate mitigative measures. In addition, the contractor shall comply with the provisions of Hawaii Administrative Rules (HAR), Title 11, Chapter 42, "Vehicular Noise Control," and HAR Title 11, Chapter 46, "Community Noise Control."

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

BENJAMIN J. CAYZANO
GOVERNOR OF HAWAII



TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JANET E. KAWILO

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhikawa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

July 28, 1999

Mr. Craig Watanabe
Department of Transportation - Highways Division
State of Hawaii
601 Kamokila Blvd, 6th Floor
Kapolei, Hawaii 96707

REC'D AUG 09 1999

LOG NO: 23861 ✓
DOC NO: 9907EJ28

Dear Mr. Watanabe:

**SUBJECT: Chapter 6E-8 Historic Preservation Review Draft Environmental Assessment for the Keaahala Road Widening Project - Kahekili Highway to Pookela Street Kane'ohe, Ko'olaupoko, O'ahu
TMK: 4-5-23**

Thank you for the opportunity to review the draft EA for the Keaahala Road Widening project. The project proposes to widen approximately 0.21 miles of the existing Keaahala Road to accommodate existing and future traffic demands. Improvements will include the widening from 2 to 3-4 lanes of the road, and other appurtenances including concrete curbs, gutter, sidewalk, drainage systems, street lighting retaining walls, and relocation of overhead utilities.

A review of our records shows that there are no known historic sites at the project location. No archeological survey has been conducted of the proposed widening corridor, however archaeological survey and monitoring for the Castle Hills Access Road Corridor which abuts this project area, did not locate any significant historic sites. Also, aerial photographs from the late 1970s show that the project area was cleared and graded during development of the Kaneohe Regional and District Parks. Because it is unlikely that any historic sites would be found, we believe that this project will have "no effect" on historic sites.

If you have any questions please call Sara Collins at 692-8026 or Elaine Jourdane at 692-8027.

Aloha,

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

Don Hubbard, Administrator
State Historic Preservation Division

EJ:jk

c: Sheldon T. Yamasato, P. E., Akinaka & Associates, Ltd., 250 N. Beretania Street, Suite 300, Honolulu, Hawaii 96817-4716

BENJAMIN J. CAYETANO
GOVERNOR




KAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

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

IN REPLY REFER TO:
HWY-DS 2.7359

February 18, 2000

TO: DON HIBBARD, ADMINISTRATOR
STATE HISTORIC PRESERVATION DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES

FROM: PERICLES MANTHOS, ADMINISTRATOR 
HIGHWAYS DIVISION

SUBJECT: RESPONSE TO COMMENTS ON THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE KEAAHALA ROAD WIDENING PROJECT,
KAHEKILI HIGHWAY TO POOKELA STREET, KANEOHE, OAHU, HAWAII

Thank you for your comment letter dated July 28, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We acknowledge your determination that the presence of historic sites within the project area is unlikely and that the proposed roadway improvements will have "no effect" on historic sites.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

COPY

RECEIVED
AUG 17 1999

August 9, 1999

AKINAKA & ASSOCIATES, LTD.

Mr. Craig Watanabe
Department of Transportation-Highways Division
State of Hawai'i
869 Punchbowl Street, Room 304
Honolulu, Hawai'i 96813

EIS #327

Re: Draft Environmental Assessment for the
Kea`ahala Road Widening Project-Kahekili Highway to Po`okela Street
Kāneohe, O`ahu, Hawai'i (TMKs: 4-5-23)

Dear Mr. Watanabe,

Thank you for the opportunity to comment on the Draft Environmental
Assessment (EA) for the Kea`ahala Road Widening Project from Kahekili
Highway to Po`okela Street.

According to the Draft EA, there are no rare, threatened, or endangered flora or
fauna species found in the vicinity of the proposed project site. In addition, the
State Historic Preservation Division (SHPD) has no know record of any historic or
cultural records within the project corridor since no archaeological work has been
conducted in the specific project area. However, we caution that the SHPD
should be contacted if any human burials, artifacts, or other cultural remains or
deposits are encountered within the project area.

At this time the Office of Hawaiian Affairs (OHA) has no objection to the project.
If you have any questions, please contact Mark A. Mararagan, Policy Analyst at
594-1945.

Sincerely,


C. Sebastian Aloit, Director
Hawaiian Rights Division


Colin Kippen
Deputy Administrator

cc: Board of Trustees
Mr. Sheldon Yamasato, Akinaka & Associates

BENJAMIN J. CAYETANO
GOVERNOR



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


KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

IN REPLY REFER TO:
HWY-DS 2.7358

February 18, 2000

TO: COLIN KIPPEN, DEPUTY ADMINISTRATOR
OFFICE OF HAWAIIAN AFFAIRS

FROM: PERICLES MANTHOS, ADMINISTRATOR
HIGHWAYS DIVISION 

SUBJECT: RESPONSE TO COMMENTS ON THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE KEAAHALA ROAD WIDENING PROJECT,
KAHEKILI HIGHWAY TO POOKELA STREET, KANEOHE, OAHU,
HAWAII

Thank you for your comment letter dated August 9, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

COMMENT: "According to the Draft EA, there are no rare, threatened, or endangered flora or fauna species found in the vicinity of the proposed project site. In addition, the State Historic Preservation Division (SHPD) has no know record of any historic or cultural records within the project corridor since no archaeological work has been conducted in the specific project area. However, we caution that SHPD should be contacted if any human burials, artifacts, or other cultural remains or deposits are encountered within the project area."

RESPONSE: The State Historic Preservation Division (SHPD) has no known record of any historic or cultural records within the project corridor since no archaeological work has been conducted in the specific project area. In addition, the U.S. Fish and Wildlife Service has no known record of any listed candidate or proposed species occurring at the project site since most of the project area has already been extensively developed.

Mr. Colin Kippen
Page 2
January 18, 2000

HWY-DS 2.7358

The proposed project is not anticipated to impact historic sites during construction since the area has already been extensively developed and ground disturbance during construction should not extend below fill soils. However, should evidence of historic sites be encountered during construction, all activities in the area of the find will cease and the State Historic Preservation Division will be notified immediately. If human skeletal remains are inadvertently encountered during construction, procedures outlined in the Hawaii Revised Statutes 6E-43.6 will be followed.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

BENJAMIN J. CAYETANO
GOVERNOR



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

RECEIVED
AUG 14 1999

August 9, 1999

AKINAKA & ASSOCIATES, LTD.

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

Dear Mr. Hayashida:

Subject: Draft Environmental Assessment for the Kealahala Road
Widening, Po'okela Street to Kahekili Highway, Kaneohe,
Oahu


Thank you for the opportunity to review the above project. We
have the following questions and comments.

1. Two retaining walls which are contiguous to the unattractive walls of Kahekili Highway are proposed along Kealahala Street. Please illustrate the visual impacts of the proposed structures. Photos of existing conditions taken from public view points are helpful in evaluating visual impacts. Renderings of future structures superimposed on photos of existing views should be provided.
2. We recommend that steps be taken to minimize any visual impact. These visual mitigation measures should be coordinated with the plans to rehabilitate Kahekili Highway. Please also describe the plans to improve the aesthetics of Kahekili Highway. When will the Kahekili Highway work begin?
3. Please provide a separate conceptual drawing of the drainage plans for this project which includes the wetland area. On the plans clearly describe the work that will be performed such as clearing, grading and channelization. How much of the natural drainageway will be channelized with unnatural "smooth" surfaces? How will this reduction of natural surfaces (if any) increase the amount of polluted runoff entering Kaneohe Bay. Please describe any mitigation measures that will be taken to minimize polluted run off from entering the bay.

Mr. Hayashida
Page 2

Should you have any questions, please call Jeyan Thirugnanam at
586-4185. Mahalo.

Sincerely,


Genevieve Salmonson
Director

c: Akinaka & Assoc.

BENJAMIN J. CAYETANO
GOVERNOR




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

KAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTORS
BRIAN K. MINAII
GLENN M. OKIMOTO

IN REPLY REFER TO:
HWY-DS 2.7292

February 18, 2000

TO: GENEVIEVE SALMONSON, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: PERICLES MANTHOS, ADMINISTRATOR
HIGHWAYS DIVISION 

SUBJECT: RESPONSE TO COMMENTS ON THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE KEAAHALA ROAD WIDENING PROJECT,
KAHEKILI HIGHWAY TO POOKELA STREET, KANEOHE, OAHU, HAWAII

Thank you for your comment letter dated August 9, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

1. COMMENT: "Two retaining walls which are contiguous to the unattractive walls of Kahekili Highway are proposed along Keaahala Street. Please illustrate the visual impacts of the proposed structures. Photos of existing conditions taken from public view points are helpful in evaluating visual impacts. Renderings of future structures superimposed on photos of existing views should be provided."

RESPONSE: Renderings of future structures superimposed on photos of existing views are not a part of the present project scope.

Minimal visual impacts are expected from the proposed retaining walls to be constructed along a portion of the Keaahala Road project route. "Retaining Wall No. 1," will be constructed on the north side of the roadway between Kahekili Highway and the existing concrete box culvert that crosses beneath Keaahala Road. This wall is needed to support the widened roadway and will be connected to the existing retaining wall at Kahekili Highway, following the existing grades along Keaahala Road. Pipe railing, 3.5 feet high will be placed on the top of the wall for safety purposes. Thus, the pipe railing and only a small portion of Retaining Wall No. 1 will be visible from the Keaahala Road project route.

"Retaining Wall No. 2" will be constructed on the opposite (south) side of the roadway, between Kahekili Highway and the existing makai-side driveway of the Kaneohe District Park. This retaining wall will not be connected to the existing wall at Kahekili Highway. The purpose of this wall is to retain the existing park lands and minimize impacts to the existing ball field.

Although this wall will be visible from the roadway, the exterior face will have a moss rock treatment. This natural rock texture will match the existing rock wall that fronts the basketball courts located further west along the south side of the roadway.

2. COMMENT: "We recommend that steps be taken to minimize any visual impact. These visual mitigation measures should be coordinated with the plans to rehabilitate Kahekili Highway. Please also describe the plans to improve the aesthetics of Kahekili Highway. When will the Kahekili Highway work begin?"

RESPONSE: Visual impacts from the proposed retaining walls will be minimized as previously discussed in Response No. 1. A landscaping project for Kahekili Highway has been proposed by the State Department of Transportation. The the Kahekili Highway landscaping project is within the early stages of design development. The Keaahala Road Widening project is being coordinated with this project to the greatest extent possible. Since the concept for the Kahekili Highway landscaping project has not been fully developed, plans and scheduling for this project are not available at this time.

3. COMMENT: "Please provide a separate conceptual drawing of the drainage plans for this project which includes the wetland area. On the plans clearly describe the work that will be performed such as clearing, grading and channelization. How much of the natural drainage way will be channelized with unnatural "smooth" surfaces? How will this reduction of natural surfaces (if any) increase the amount of polluted runoff entering Kaneohe Bay. Please describe any mitigation measrues that will be taken to minimize polluted run off from entering the bay."

RESPONSE: A copy of the, "Notification Requirements for the Department of Health 401 Water Quality Certification Blanket Coverage," is attached for your reference regarding the proposed work within the wetland area. A portion of this wetland drainage area, which is currently overgrown with vegetation, will be cleared as a part of the drainage improvements. The project involves no reduction of natural surfaces within this wetland area. Mitigation measures to minimize downstream water quality impacts are included in the attachment.

Ms. Genevieve Salmonson

HWY-DS 2.7292

Page 3

February 18, 2000

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

Attachment

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



August 9, 1999

JEREMY HARRIS, Mayor

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

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

Attention: Craig Watanabe, Highways Division

Dear Mr. Hayashida:

Subject: Draft Environmental Assessment for the Keaahala
Road Widening Project, Kaneohe, Oahu

Thank you for the opportunity to review and comment on the Draft Environmental Assessment (EA) for the Keaahala Road Widening Project.

Our previous comments of September 9, 1998 regarding pre-assessment consultation are still applicable and included in Section 9 of the Draft EA.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,


CLIFFORD S. JAMILE
Manager and Chief Engineer

cc: Akinaka & Associates, Ltd.

BENJAMIN J. CAYETANO
GOVERNOR



KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

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

IN REPLY REFER TO:
HWY-DS 2.7179

February 10, 2000

Mr. Clifford S. Jamile
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96843

Subject: Response to Comments on the Draft Environmental Assessment for the
Keaahala Road Widening Project, Kahekili Highway to Pookela Street,
Kaneohe, Oahu, Hawaii (TMK:4-5-23)

Dear Mr. Jamile:

Thank you for your letter dated August 9, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We acknowledge that your previous comments of September 9, 1998, during the pre-assessment consultation phase are still applicable.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Pericles Manthos".

PERICLES MANTHOS
Administrator
Highways Division

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

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

In reply, please refer to:
File:

August 13, 1999

99-158/epo

Mr. Craig Watanabe
Highways Division
Department of Transportation
869 Punchbowl Street, Room 304
Honolulu, Hawaii 96813

Dear Mr. Watanabe:

Subject: Draft Environmental Assessment
Kealahala Road Widening Project
Kahekili Highway to Pookela Street
Kaneohe, Oahu, Hawaii
TMK: 4-5-23

Thank you for allowing us to review and comment on the subject project. We do not have any comments to offer at this time.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Gill".

GARY GILL
Deputy Director for
Environmental Health

c: Akinaka & Assoc., Ltd.

BENJAMIN J. CAYETANO
GOVERNOR



KAZU HAYASHIDA
DIRECTOR

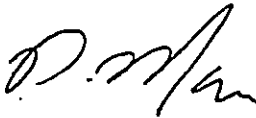
DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

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

IN REPLY REFER TO:
HWY-DS 2.7213

February 10, 2000

TO: GARY GILL, DEPUTY DIRECTOR FOR ENVIRONMENTAL HEALTH
DEPARTMENT OF HEALTH

FROM: PERICLES MANTHOS, ADMINISTRATOR 
HIGHWAYS DIVISION

SUBJECT: RESPONSE TO COMMENTS ON THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE KEAAHALA ROAD WIDENING PROJECT,
KAHEKILI HIGHWAY TO POOKELA STREET, KANEOHE, OAHU, HAWAII

Thank you for your letter dated August 13, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We acknowledge that you have no comments to the proposed project at this time.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

c: Mr. Sheldon Yamasato, Akinaka and Associates, Ltd.

bc: HWY-DS(CW)

CW:ky

Lola N. Mench
47-378 Kam. Hwy.
Kane'ohe, Hawai'i
August 17, 1999

96744

COPY

RECEIVED

AUG 19 1999

AKINAKA & ASSOCIATES, LTD.

Department of Transportation
Attention: Greg Watanabe
869 Punchbowl Street, Room 304
Honolulu, Hawai'i 96813

Re: Kea'ahala Street widening

Kea'ahala certainly does need attention, but the biggest problem is with drainage rather than a need for widening. However, the bike lanes are a practical addition. It seems short sighted to neglect the remainder of Kea'ahala from Kahekili to Kam. Hwy. That is a miserable and harrow stretch of highway with as much traffic as the upper portion. Many of us who constantly use these roadways are not in agreement that retaining walls are necessary or even desirable. Much better to spend the money to improve the stretch of Kea'ahala to Kam. Hwy.

As you probably know, Kane'ohe and Kahalu'u people have strenuously objected to the retaining walls along Kahekili. They are unnecessarily ugly and obtrusive. The excuse for these was to protect the homes along the route. There are no homes along the proposed route, so why more walls?? Wasted money!

Mahalo for the opportunity to comment.

copy sent to:Akinaka and Associates, Ltd..

Lola N. Mench

BENJAMIN J. CAYETANO
GOVERNOR



KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAII
GLENN M. OKIMOTO

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097
February 11, 2000

IN REPLY REFER TO:
HWY-DS 2.7291

Ms. Lola N. Mench
47-378 Kamehameha Highway
Kaneohe, Hawaii 96744

Dear Ms. Mench:

Subject: Response to Comments on the Draft Environmental Assessment for the Keaahala Road Widening Project - Kahekili Highway to Pookela Street, Kaneohe, Oahu, Hawaii

Thank you for your comment letter dated August 17, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

COMMENT: "Kea'ahala certainly does need attention, but the biggest problem is with drainage rather than a need for widening. However, the bike lanes are a practical addition. It seems short sighted to neglect the remainder of Kea'ahala from Kahekili to Kam. Hwy. That is a miserable and harrow (sic) stretch of highway with as much traffic as the upper portion. Many of us who constantly use these roadways are not in agreement that retaining walls are necessary or even desirable. Much better to spend the money to improve the stretch of Kea'ahala to Kam. Hwy.

As you probably know, Kane'ohe and Kahalu'u people have strenuously objected to the retaining walls along Kahekili. They are unnecessarily ugly and obtrusive. The excuse for these was to protect the homes along the route. There are no homes along the proposed route, so why more walls?? Wasted money!"

RESPONSE: The State of Hawaii Department of Transportation (HDOT) had previously agreed to widen and improve the mauka segment (between the Windward Community College and Kahekili Highway) of Keaahala Road in order to mitigate impacts from the State's Interstate H-3 project. Construction of the State's H-3 project involved eliminating the previous access to the Castle Hills subdivision which was directly connected to Likelike Highway.

Consequently, HDOT extended Pookela Street to Keaahala Road, thereby making Keaahala Road the main access facility for the subdivision. HDOT intended to dedicate the State owned portion of Pookela Street Road to the City. The City agreed to this under the condition that HDOT widen and improve Keaahala Road from Pookela Street to Kahekili Highway. Upon completion of the proposed improvements, HDOT will dedicate Keaahala Road, from Pookela Street to Kahekili Highway, to the City and County of Honolulu.

The proposed widening of Keaahala Road from Kahekili Highway to Pookela Street will accommodate the existing and future traffic demands of the surrounding area. Improvements to Keaahala Road are warranted due to the substandard features of the existing two lane roadway. The current pavement structure, highway lighting, and drainage system are currently inadequate. The present lane width lacks a separate center median for left turns onto the driveways along Keaahala Road and is inadequate for the safe maneuvering of trucks.

Improvements to the remainder of Keaahala Road from Kahekili Highway to Kamehameha Highway are not within the current project scope and are under jurisdiction of the City and County of Honolulu.

As a part of the proposed project, a new roadway drainage system will be installed beneath Keaahala Road to take care of surface runoff along the roadway. In addition, cleaning out the existing culvert that crosses beneath Keaahala Road, and improvements to a portion of the adjacent wetland area will help to address the current drainage problems.

The concrete walls along Kahekili Highway were constructed primarily for the purposes of retaining the abutting properties or highway embankment and reducing traffic noise levels to homes along the highway. The Keaahala Road Widening project will require retaining walls for the purposes of supporting the widened roadway and abutting park land.

Ms. Lola Mench
Page 3
February 11, 2000

HWY-DS 2.7291

"Retaining Wall No. 1," will be constructed on the north side of the roadway between Kahekili Highway and the existing concrete box culvert that crosses beneath Keaahala Road. This wall is needed to support the widened roadway and will be connected to the existing retaining wall at Kahekili Highway, following the existing grades along Keaahala Road. Pipe railing, 3.5 feet high will be placed on the top of the wall for safety purposes. Thus, the pipe railing and only a small portion of Retaining Wall No. 1 will be visible from the Keaahala Road project route.

"Retaining Wall No. 2" will be constructed on the opposite (south) side of the roadway, between Kahekili Highway and the existing makai-side driveway of the Kaneohe District Park. This retaining wall will not be connected to the existing wall at Kahekili Highway. The purpose of this wall is to retain the existing park lands and minimize impacts to the existing ball field. Without this retaining wall, substantial grading would be required onto the park lands and a portion of the existing ball field would be adversely affected to accommodate the widened roadway.

Although this wall will be visible from the roadway, it will be constructed using a moss rock exterior finish. This natural rock texture will match the existing rock wall that fronts the basketball courts located further west along the south side of the roadway.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

Very truly yours,



PERICLES MANTHOS
Administrator
Highways Division

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

Beyond the call

August 17, 1999

Mr. Craig Watanabe
Department of Transportation – Highways Division
State of Hawaii
869 Punchbowl Street, Room 304
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment for the
Keaahala Road Widening Project – Kahekili Highway to Pookela Street

Dear Sir:

Thank you for the opportunity to review the above subject project. As noted in the Draft EA, GTE Hawaiian Tel has existing aerial facilities located along Keaahala Road. We will work with you and Hawaiian Electric to relocate the existing poles and cables when the project commences.

Should you have any questions, please call Garret Hayashi at 840-1438.

Sincerely,

Garret T. Hayashi
for Wayne L. Cabral ✓
Section Manager
Access Design & Construction

cc: Mr. Sheldon Yamasato
Akinaka and Associates, Ltd.
250 North Beretania Street, Suite 300
Honolulu, Hawaii 96817

L. Caetano
File (Kaneohe)

BENJAMIN J. CAYETANO
GOVERNOR



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

January 18, 2000

KAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

IN REPLY REFER TO:
HWY-DS 2.7182

Mr. Wayne L. Cabral, Section Manager
Access Design and Construction
GTE Hawaiian Tel
P.O. Box 2200
Honolulu, Hawaii 96841

Subject: Response to Comments on the Draft Environmental Assessment for the
Keaahala Road Widening Project - Kahekili Highway to Pookela Street
Kaneohe, Oahu, Hawaii (TMK:4-5-23)

Dear Mr. Cabral:

Thank you for your letter dated August 17, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We acknowledge the presence of GTE Hawaiian Tel's existing aerial facilities located along Keaahala Road and will continue to coordinate the relocation of the utility poles and cables with GTE and the Hawaiian Electric Company.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

Very truly yours,

A handwritten signature in black ink, appearing to read "Pericles Manthos".

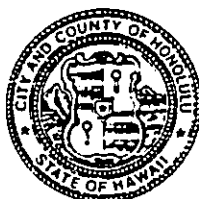
PERICLES MANTHOS
Administrator
Highways Division

c: Mr. Sheldon Yamasato
Akinaka and Associates, Ltd.

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

PACIFIC PARK PLAZA • 711 KAPIOLANI BOULEVARD, SUITE 1200 • HONOLULU, HAWAII 96813
PHONE: (808) 523-4529 • FAX: (808) 523-4730

EREMY HARRIS
MAYOR



RECEIVED
AUG 26 1999

CHERYL D. SOON
DIRECTOR

JOSEPH M. MAGALDI, JR.
DEPUTY DIRECTOR

AKINAKA & ASSOCIATES, LTD.

August 19, 1999

TPD7/99-03508R
(TPD99-00466, 00472)

Mr. Craig Watanabe
Highways Division
Department of Transportation
State of Hawaii
869 Punchbowl Street, Room 304
Honolulu, Hawaii 96813

Dear Mr. Watanabe:

Subject: Keaahala Road Widening Project
Kahekili Highway to Pookela Street

In response to the July 14, 1999 letter from Akinaka & Associates, Ltd., the draft environmental assessment (EA) for the subject project was reviewed. The following comments are the result of this review:

1. Section 1.1 on Page 1-1 of the draft EA states that the length of the project is 0.21 miles. This is inconsistent with Section 2.1 on Page 2-1 that describes the project limits as spanning approximately 0.17 miles.
2. Section 2.3 on Page 2-4 describes the proposed improvement of Keaahala Road to a three lane "divided" highway. However, Section 2.3.1 on the same page describes the road widening as allowing a three lane "undivided" highway. Further, the typical roadway sections shown in Exhibit 2-4 on Page 2-6 show the roadway to be "undivided".
3. Section 2.3.1 on Page 2-4 states that eight-foot wide concrete sidewalks will be constructed on both sides of the roadway along the project route. However, the typical roadway sections shown in Exhibit 2-4 on Page 2-6 show the pedestrian sidewalk widths to be seven feet.
4. There are two existing bus stops on Keaahala Road. When the road is widened, sufficient space should be provided at these bus stop areas to meet Americans with

Mr. Craig Watanabe
August 19, 1999
Page 2

Disabilities Act (ADA) criteria and to properly install bus shelters. The ADA requirements for bus stops require "a minimum clear length of 96 inches". To properly site a City designed bus shelter, an area eight feet deep by 26 feet long is required.

5. The inclusion of a proposed roadway signing/stripping plan as part of Section 2.3.2 on Page 2-4 would clarify the discussion regarding proposed intersection improvements.
6. The bike lanes described in Section 2.3.6 on Page 2-7 are not what this department recommended. The recommendation of this department was to install four-foot wide bike lanes with two-foot wide gutter sections as shown in Exhibit 2-4 on Page 2-6 of the draft EA.
7. The first sentence in the second paragraph of Section 4.16 on Page 4-9 should be corrected to reflect that the morning peak hour occurred between 5:45 a.m. and 6:45 a.m.
8. Several sections of the draft EA (Section 1.1 on Page 1-1 and Section 6.2.6 on Page 6-7) include statements regarding existing congestion on Keaahala Road. However, in Section 4.16 on Page 4-9, it is stated that the Keaahala Road/Kahekili Highway intersection operated at a desirable minimum level of service. These sections of the draft EA should be clarified and/or made consistent. Further, it is suggested that the draft EA be updated using post-construction traffic counts from the Kahekili Highway project as the basis for the traffic analyses.
9. The last sentence of the first paragraph in Section 6.1.9 on Page 6-4 should be amended by adding, "stipulated in Part VI of the Manual on Uniform Traffic Control Devices" to the end of the sentence.

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

Sincerely,



CHERYL D. SOON
Director

cc: Mr. Sheldon Yamasato
Akinaka & Associates, Inc.

BENJAMIN J. CAYETANO
GOVERNOR



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

KAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

IN REPLY REFER TO:
HWY-DS 2.7211

February 10, 2000

Ms. Cheryl D. Soon, Director
Department of Transportation Services
City and County of Honolulu
711 Kapiolani Boulevard, Suite 1200
Honolulu, Hawaii 96813

Subject: Response to Comments on the Draft Environmental Assessment for the
Keaahala Road Widening Project, Kahekili Highway to Pookela Street,
Kaneohe, Oahu, Hawaii

Dear Ms. Soon:

Thank you for your comment letter dated August 19, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

1. COMMENT: "Section 1.1 on Page 1-1 of the draft EA states that the length of the project is 0.21 miles. This is inconsistent with Section 2.1 on Page 2-1 that describes the project limits as spanning approximately 0.17 miles."

RESPONSE: The text in Section 2.1 has been edited to reflect the correct length of project as 0.21 miles.

2. COMMENT: "Section 2.3 on Page 2-4 describes the proposed improvement of Keaahala Road to a three lane 'divided' highway. However, Section 2.3.1 on the same page describes the road widening as allowing a three lane 'undivided' highway. Further, the typical roadway sections shown in Exhibit 2-4 on Page 2-6 show the roadway to be 'undivided.'"

RESPONSE: The text in Section 2.3 has been edited to reflect the correct description of Keaahala Road as an "undivided" highway.

3. COMMENT: "Section 2.3.1 on Page 2-4 states that eight-foot wide concrete sidewalks will be constructed on both sides of the roadway along the project route. However, the typical roadway sections shown in Exhibit 2-4 on Page 2-6 show the pedestrian sidewalk widths to be seven feet."

RESPONSE: The text in Section 2.3.1 has been edited to reflect the correct sidewalk widths as seven feet.

4. COMMENT: "There are two existing bus stops on Kealahala Road. When the road is widened, sufficient space should be provided at these bus stop areas to meet Americans with Disabilities Act (ADA) criteria and to properly install bus shelters. The ADA requirements for bus stops require a 'minimum clear length of 96 inches.' To properly site a City designed bus shelter, an area eight feet deep by 26 feet long is required."

RESPONSE: The proposed improvements will be designed to comply with requirements of the American With Disabilities Act (ADA). A final set of the project's construction plans will be submitted to the Department of Health, Commission on Persons with Disabilities to ensure ADA requirements are met. There are currently no bus shelters provided at the existing bus stops. The proposed project involves relocating the existing bus stops in accordance with ADA requirements, however, no bus shelters will be provided.

5. COMMENT: "The inclusion of a proposed roadway signing/stripping plan as part of Section 2.3.2 on Page 2-4 would clarify the discussion regarding proposed intersection improvements."

RESPONSE: A stripping plan exhibit will be included in the Final EA.

6. COMMENT: "The bike lanes described in Section 2.3.6 on Page 2-7 are not what this department recommended. The recommendation of this department was to install four-foot wide bike lanes with two-foot wide gutter sections as shown in Exhibit 2-4 on Page 2-6 of the draft EA."

RESPONSE: The text in Section 2.3.6 has been edited to correctly reflect the DTS recommended bike lanes as four-foot wide with two-foot wide gutter sections.

7. COMMENT: "The first sentence in the second paragraph of Section 4.16 on Page 4-9 should be corrected to reflect that the morning peak hour occurred between 5:45 a.m. and 6:45 a.m."

RESPONSE: The text in Section 4.16 has been edited to correctly reflect the morning peak hour as 5:45 a.m. and 6:45 a.m.

Ms. Cheryl Soon
February 10, 2000
Page 3

HWY-DS 2.7211

8. COMMENT: "Several sections of the draft EA (Section 1.1 on Page 1-1 and Section 6.2.6 on Page 6-7) include statements regarding existing congestion on Keaahala Road. However, in Section 4.16 on Page 4-9, it is stated that Keaahala Road/Kahekili Highway intersection operated at a desirable minimum level of service. These sections of the draft EA should be clarified and/or made consistent. Further, it is suggested that the draft EA be updated using post-construction traffic counts from the Kahekili Highway project as the basis for the traffic analyses."

RESPONSE: The text in Sections 1.1, and 6.2.6 has been edited to consistently describe the existing traffic conditions along Keaahala Road.

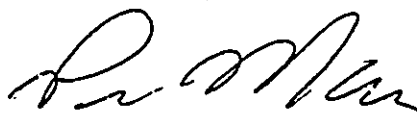
Post-construction traffic counts from the Kahekili Highway project was not used as the basis for the traffic analyses since this data was not available at the time the traffic study was being completed.

9. COMMENT: "The last sentence of the first paragraph in Section 6.1.9 on Page 6-4 should be amended by adding, 'stipulated in Part VI of the Manual on Uniform Traffic Control Devices' to the end of the sentence."

RESPONSE: The text in Section 6.1.9 has been edited to incorporate the comment.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

Very truly yours,



PERICLES MANTHOS
Administrator
Highways Division

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

Dear Sirs,

August 20, 1999

We would like to enter our feelings and recommendations on the Keaahala Rd. widening project.

First of all we are against the widening of Keaahala Rd. from Kahekili to the Windward community College.

The primary reason is because your proposed project would put up another concrete wall which we strongly object to. As it will again distract from the natural beauty of the Windward side. We who love the Windward side are still smarting from the assault the Transportation Dept. made on Kahekili. Turning it into a concrete "freeway" in the middle of rural Oahu.

We don't feel the street needs widening. We travel every day to and from the district park and find no problem with traffic flow.

We do find a problem with the condition of the current asphalt. As you know there is water flowing under the road and that problem needs to be corrected. It is a constant problem and should be permanently dealt with.

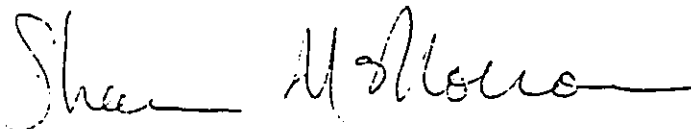
As far as the makai bound traffic is concerned we have a left and straight, a straight, and a partial right turn lane. We feel this sufficient and functionary and does not currently distract from our country feeling.

We strongly object to a concrete wall. They are ugly and have no place on our Windward side. We would advise you to do what has to be done to correct the drainage problem but leave the grass and greenery alone.

While you're working on the drainage problem and have the street torn up why not put the electrical wires under ground. They too are a real eyesore.

Sincerely,

Sharron McMorro and family



BENJAMIN J. CAYETANO
GOVERNOR



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

KAZU HAYASHIDA
DIRECTOR
DEPUTY DIRECTORS
BRIAN K. MINAII
GLENN M. OKIMOTO

IN REPLY REFER TO:
HWY-DS 2.7290

February 11, 2000

Ms. Sharon C. McMorrow
45-115 Moakaka Place
Kaneohe, Hawaii 96744-5328

Subject: Response to Comments on the Draft Environmental Assessment for the Keaahala Road Widening Project - Kahekili Highway to Pookela Street, Kaneohe, Oahu, Hawaii

Dear Ms. McMorrow:

Thank you for your comment letter, dated August 20, 1999, during the 30-day comment period for the Keaahala Road Widening Project - Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

1. COMMENT: "First of all we are against the widening of Keaahala Rd. from Kahekili to the Windward Community College. The primary reason is because your proposed project would put up another concrete wall which we strongly object to. As it will again distract from the natural beauty of the Windward side. We who love the Windward side are still smarting from the assault the Transportation Dept. made on Kahekili. Turning it into a concrete 'freeway' in the middle of rural Oahu.

We don't feel the street needs widening. We travel every day to and from the district park and find no problem with traffic flow.

We do find a problem with the condition of the current asphalt. As you know there is water flowing under the road and that problem needs to be corrected. It is a constant problem and should be permanently dealt with.

As far as the makai bound traffic is concerned we have a left and straight, a straight, and a partial right turn lane. We feel this sufficiently and functionary and does not currently distract from our country feeling."

We strongly object to a concrete wall. They are ugly and have no place on our Windward side. We would advise you to do what has to be done to correct the drainage problem but leave the grass and greenery alone."

RESPONSE: The State of Hawaii Department of Transportation (HDOT) had previously agreed to widen and improve the mauka segment (between the Windward Community College and Kahekili Highway) of Keaahala Road in order to mitigate impacts from the State's Interstate H-3 project. Construction of the State's H-3 project involved eliminating the previous access to the Castle Hills subdivision which was directly connected to Likelike Highway. Consequently, HDOT extended Pookela Street to Keaahala Road, thereby making Keaahala Road the main access facility for the subdivision. HDOT intended to dedicate the State-owned portion of Pookela Street Road to the City. The City agreed to this under the condition that HDOT widen and improve Keaahala Road from Pookela Street to Kahekili Highway. Upon completion of the proposed improvements, HDOT will dedicate Keaahala Road, from Pookela Street to Kahekili Highway, to the City and County of Honolulu.

The proposed widening of Keaahala Road from Kahekili Highway to Pookela Street is needed to accommodate the existing and future traffic demands of the surrounding area. Keaahala Road provides the only access to the Kaneohe District Park, Windward Community College, the Hawaii State Hospital, and the Windward Comprehensive Health Center. Exclusive access to the Castle Hills residential subdivision, a State Department of Transportation base yard, Hina Mauka (a new private substance abuse center), and the recently constructed Hope Chapel Kaneohe church and day care facility are also provided by Keaahala Road via Pookela Street. Improvements to Keaahala Road are warranted due to the substandard features of the existing two lane roadway. The current pavement structure, highway lighting, and drainage system are currently inadequate. The present lane width lacks a separate center median for left turns onto the driveways along Keaahala Road and is inadequate for the safe maneuvering of trucks. In addition, traffic volumes along Keaahala Road are expected to increase from the recently completed Hope Chapel Kaneohe church and day care facility, and from the future site of the Koolaupoko District Courthouse building to be constructed in the area.

As a part of the proposed project, a new roadway drainage system will be installed beneath Keaahala Road to take care of surface runoff along the roadway. In addition, cleaning out the existing culvert that crosses beneath Keaahala Road, and improvements to a portion of the adjacent wetland area will help to address the current drainage problems.

Ms. Sharron McMorrow
Page 3
February 11, 2000

HWY-DS 2.7290

"Retaining Wall No. 1," will be constructed on the north side of the roadway between Kahekili Highway and the existing concrete box culvert that crosses beneath Keaahala Road. This wall is needed to support the widened roadway and will be connected to the existing retaining wall at Kahekili Highway, following the existing grades along Keaahala Road. Pipe railing, 3.5 feet high will be placed on the top of the wall for safety purposes. Thus, the pipe railing and only a small portion of Retaining Wall No. 1 will be visible from the Keaahala Road project route.

"Retaining Wall No. 2" will be constructed on the opposite (south) side of the roadway, between Kahekili Highway and the existing makai-side driveway of the Kaneohe District Park. This retaining wall will not be connected to the existing wall at Kahekili Highway. The purpose of this wall is to retain the existing park lands and minimize impacts to the existing ball field. Without this retaining wall, substantial grading would be required onto the park lands and a portion of the existing ball field would be adversely affected to accommodate the widened roadway. Although this wall will be visible from the roadway, it will be constructed with moss rock. This natural rock texture will match the existing rock wall that fronts the basketball courts located further west along the south side of the roadway.

2. COMMENT: "While you're working on the drainage problem and have the street torn up why not put the electrical wires under ground. They too are a real eyesore."

RESPONSE: Although it would be preferable to relocate the existing overhead utilities under the roadway, this option is very costly and not feasible due to funding constraints.

Should you have any questions or need additional information, please contact Mr. Craig Watanabe of the Highways Division, Technical Design Section at 692-7551.

Very truly yours,



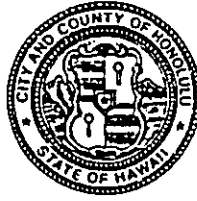
PERICLES MANTHOS
Administrator
Highways Division

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6743

COPY



RECEIVED
AUG 24 1999

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

AKINAKA & ASSOCIATES, LTD.

LORETTA K.C. CHEE
DEPUTY DIRECTOR

1999/CLOG-4677 (ST)

August 23, 1999

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

Attn: Craig Watanabe

Dear Mr. Hayashida:

Draft Environmental Assessment (EA):
Keaahala Road Widening - Kahekili Highway to Pookela Street
Kaneohe, Oahu
Tax Map Key: 4-5-23

We have reviewed the Draft EA for the above-referenced project received on July 19, 1999, and our comments are as follows:

Section 1.1 Purpose and Need

The draft does not sufficiently discuss the purpose and need for the proposed project. This section of the Final EA should be expanded to describe the context under which this project is planned and elaborate on how this project fulfills the "prior agreement" with the City and County of Honolulu mentioned in this section. The Final EA should also describe how this project relates to the Windward Community College Master Plan and the Planned Review Use Permit (92/PRU-3) approved by the Honolulu City Council on May 5, 1994 (Resolution 94-87, CD1). Furthermore, we note that there is some question as to whether the new District Courthouse will actually be located in this area. We request that the Final EA address this possibility.

We also request that this section be expanded to discuss the rationale used to support the recommendation to construct a 56-foot roadway, in lieu of the City's prior request for a 60-foot roadway.

Mr. Kazu Hayashida, Director

Page 2
August 23, 1999

Section 2.2 Existing Conditions

The Final EA should be expanded to discuss environmental characteristics adjacent to the project area (as opposed to traffic characteristics), including a description of the nearby wetland as delineated by the U.S. Corps of Engineers.

Section 2.3 Proposed Improvements

The roadway cross-section and bike lane dimensions shown in Exhibit 2-4 are not consistent with that described in the narrative. These inconsistencies should be corrected in the Final EA.

This section should also address previous discussions with both our Department and the Department of Transportation Services, relative to the relocation and deletion of certain driveways along Keaahala Road.

Section 2.3.2 Intersection

A signal warrant check should be conducted at the intersection of Keaahala Road and Pookela Street based on projected volumes with the build-out of the Windward Community College and the surrounding parcels. If it appears that traffic signals may be warranted, underground conduits and pullboxes should be installed as part of the road reconstruction project.

Section 2.5.3 Permits and Approvals - City and County of Honolulu

- Relative to the City's General Plan and Koolaupoko Development Plan, the proposed improvements do not appear to create any long-term negative impacts to the area nor will there be displacement of businesses or homes as a result of the improvements. The project appears to be compatible with the City's General Plan and current Koolaupoko Development Plan. However, the Final EA should also note that the Koolaupoko Development Plan is currently being revised and will be known as the Koolaupoko Sustainable Communities Plan.
- Traffic control plans during construction should be submitted. These plans should include incremental measures for specific segments of roadway during the various phases of construction. Construction work which may occur beyond the normal working hours, should be coordinated with the City prior to submittal of the traffic control plans.

Mr. Kazu Hayashida, Director

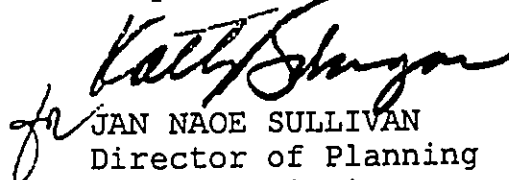
Page 3

August 23, 1999

- A request to modify the 56-foot roadway section should be submitted at the time of the subdivision application.
- We note that construction plans, required for all work within City rights-of-way, have already been submitted to our Civil Engineering Branch for initial review and comment.

Should you have any questions, please contact Steve Tagawa of our Coastal Lands Branch at 523-4817.

Very truly yours,


JAN NAOE SULLIVAN
Director of Planning
and Permitting

JNS:am

cc: Sheldon Yamasato, Akinaka & Assoc., Inc. ✓
Office of Environmental Quality Control

bcc: TRB, CEB, PD

POSSE: 6477

BENJAMIN J. CAYETANO
GOVERNOR



KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

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

IN REPLY REFER TO:
HWY-DS 2.7212

February 11, 2000

Mr. Randall Fujiki, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Subject: Response to Comments on the Draft Environmental Assessment for the
Keaahala Road Widening Project, Kahekili Highway to Pookela Street,
Kaneohe, Oahu, Hawaii

Dear Mr. Fujiki:

Thank you for your comment letter, dated August 23, 1999, during the 30-day comment period for the Keaahala Road Widening Project - Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

1. **COMMENT: Section 1.1 Purpose and Need**

"The draft does not sufficiently discuss the purpose and need for the proposed project. This section of the Final EA should be expanded to describe the context under which this project is planned and elaborate on how this project fulfills the "prior agreement" with the City and County of Honolulu mentioned in this section. The Final EA should also describe how this project relates to the Windward Community College Master Plan and the Planned Review use Permit (92/PRU-3) approved by the Honolulu City Council on May 5, 1994 (Resolution 94-87, CD1). Furthermore, we note that there is some question as to whether the new District Courthouse will actually be located in this area. We request that the Final EA address this possibility.

We also request that this section be expanded to discuss the rationale used to support the recommendation to construct a 56-foot roadway, in lieu of the City's prior request for a 60-foot roadway."

RESPONSE: Section 1.1 of the Final EA will be expanded to further discuss the purpose and need for the proposed project. The Windward Community College Master Plan is a separate project from the Keaahala Road improvements. The Department of Transportation has coordinated the Keaahala Road improvements with the Windward Community College to ensure that the proposed design was in accordance with the school's future needs. The proposed location of the new District Courthouse will be shown in the Final EA.

The DPP recommended 60-foot right-of-way was reduced to a 56-foot right-of-way in order to minimize impacts to the adjacent wetland area and the basketball courts on the south side of the roadway. A 60-foot right-of-way would require the acquisition of land from the wetland area and require the basketball courts to be demolished and relocated. A summary of this rationale will be included in Section 2.3.1 "Road Widening" of the Final EA.

2. COMMENT: **Section 2.2 Existing Conditions**

"The Final EA should be expanded to discuss environmental characteristics adjacent to the project area (as opposed to traffic characteristics), including a description of the nearby wetland as delineated by the U.S. Corps of Engineers."

RESPONSE: Environmental characteristics of the project area and its surroundings are addressed in Section 4, "Environmental Setting." The description of the wetlands in Section 4.7 will be further expanded in the Final EA.

3. COMMENT: **Section 2.3 Proposed Improvements**

"The roadway cross-section and bike lane dimensions shown in Exhibit 2-4 are not consistent with that described in the narrative. These inconsistencies should be corrected in the Final EA.

This section should also address previous discussions with both our Department and the Department of Transportation Services, relative to the relocation and deletion of certain driveways along Keaahala Road."

RESPONSE: The text has been edited to correct the inconsistent dimensions of the roadway cross-section and bike lane. The relocation and deletion of certain driveways along the project route was coordinated with and approved by the Department of Transportation Services. Coordination with DTS and DPP will be mentioned in the Final EA.

4. COMMENT: **Section 2.3.2 Intersection**

"A signal warrant check should be conducted at the intersection of Keaahala Road and Pookela Street based on projected volumes with the build-out of the Windward Community College and the surrounding parcels. If it appears that traffic signals may be warranted, underground conduits and pullboxes should be installed as part of the road reconstruction project."

RESPONSE: A signal warrant check is not warranted at the intersection of Kealahala Road and Pookela Street at this time. However, provisions for underground conduits and pullboxes will be included as a part of the proposed project to preclude disturbing the roadway again in the future for the installation of these utilities.

5. COMMENT: **Section 2.5.3 Permits and Approvals - City and County of Honolulu**
"Relative to the City's General Plan and Koolaupoko Development Plan, the proposed improvements do not appear to create any long-term negative impacts to the area nor will there be displacement of businesses or homes as a result of the improvements. The project appears to be compatible with the City's General Plan and current Koolaupoko Development Plan. However, the final EA should also note that the Koolaupoko Development Plan is currently being revised and will be known as the Koolaupoko Sustainable Communities Plan.

Traffic control plans during construction should be submitted. These plans should include incremental measures for specific segments of roadway during the various phases of construction. Construction work which may occur beyond the normal working hours, should be coordinated with the City prior to submittal of the traffic control plans.

A request to modify the 56-foot roadway section should be submitted at the time of the subdivision application.

We note that construction plans, required for all work within City rights-of-ways, have already been submitted to our Civil Engineering Branch for initial review and comment."

- RESPONSE: The Final EA will be revised to update the status of the Koolaupoko Development Plan as the Koolaupoko Sustainable Communities Plan.

Upon completion, traffic control plans will be submitted to the Department of Planning and Permitting for approval. Should construction activities be anticipated beyond normal working hours, work will be coordinated with the City prior to construction plan submittal.

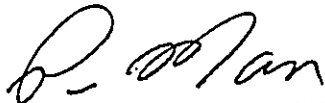
A request for the modification of the proposed 56-foot roadway section will be submitted to the Department of Planning and Permitting at the time of subdivision application.

Mr. Randall K. Fujiki
February 11, 2000
Page 4

We acknowledge that our construction plans for all work proposed within the City's right-of-way is currently under review by the City's Civil Engineering Branch.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

Very truly yours,



PERICLES MANTHOS
Administrator
Highways Division

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

Mr. Sheldon Yamasato
DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

850 SOUTH KING STREET 10TH FLOOR • HONOLULU, HAWAII 96813
PHONE: 808/523-4182 • FAX: 808/523-4084

JEREMY HARRIS
MAYOR



RECEIVED
AUG 27 1999

WILLIAM BALFOUR JR.
DIRECTOR

MICHAEL T. SMITH
DEPUTY DIRECTOR

AKINAKA & ASSOCIATES, LTD.

August 23, 1999

Mr. Craig Watanabe
Department of Transportation
Highways Division
State of Hawaii
869 Punchbowl Street
Room 304
Honolulu, Hawaii 96813

Dear Mr. Watanabe:

Thank you for your letter of August 4, 1999, to Ms. Linda Liu regarding the Draft Environmental Assessment (EA) for the widening project on Keaahala Road. We have the following concerns:

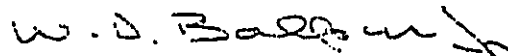
1. Should any of the construction vehicles need to enter Kaneohe District Park during the construction of the project, the contractor needs to obtain a Right-of-Entry Permit from the Customer Service Department, Permit Section before the project begins.
2. Surface water was addressed in the Draft EA. There is a creek next to the lower parking lot in Kaneohe District Park on the south side of Keaahala Road that overflows during heavy rain. It floods the lower parking lot and flows into Keaahala Road. Adequate drainage needs to be addressed to alleviate this problem. Proper drainage of the creek into the drain under Keaahala Road by Driveway "A" is needed to prevent the creek from overflowing its banks. See attached map for location of creek and flooding.
3. During heavy rains, at least once a year, Keaahala Road turns into a river. Along with the creek overflowing, ponding occurs at Keaahala Road and Kanekili Highway.

4. Section 2.4 Development Schedule and Cost: Your preliminary project schedule shows construction to start in August, 2000. For our park users, August 1, 2000, is the start of the season for AYSO Soccer and Pop Warner Football. The first week of August has the most use in the afternoons causing a traffic/parking nightmare for park users. We recommend moving the start of construction away from the month of August.
5. On Exhibit 2-3, it shows there will be two driveways entering the south portion of the park. Please retain this as buses for park programs use the parking lot as a loading/unloading zone for children. The buses cannot go around the upper parking lot to load/unload as there is not sufficient turnaround area. Buses have gotten stuck in the upper parking lot when cars are parked in the marked stalls. We recommend keeping driveways "A" and "B" as drawn on Exhibit 2-3.
6. Section 6.1.9 Traffic: This section states that there may be evening construction for this project. Please be advised that Monday-Friday activities at Kaneohe District Park cease at 9:30 p.m. on both the south and north sides of the park.
7. Question on pedestrian crosswalks and the City bus stops: We did not see them located on the map. Attached is a copy of the EA Preconsultation on Keaahala Road Widening. Our concern is the location of a safe pedestrian crossing on Keaahala at Flag "C" (see attachment). There are children that have activities on both sides of the park. Parents and staff have expressed concern over their safe crossing. Senior citizens attending the Open Market also need to cross the road safely.
8. Section 2.3 Proposed Improvements: Please be sure that street lights and signs do not interfere with ADA accessibility, e.g., wheelchairs. Kahekili Highway was recently constructed and sidewalks are not accessible because the poles and street lights are located in the middle of the sidewalk, obstructing the passage of wheelchairs.

Mr. Craig Watanabe
August 23, 1999
Page 3

Thank you for the opportunity to comment on the project. If you need further information, please contact Mr. Wilfred Ho, Windward District Manager, at 233-7300, or Ms. Liu, Kaneohe Complex Supervisor, at 233-7306.

Sincerely,

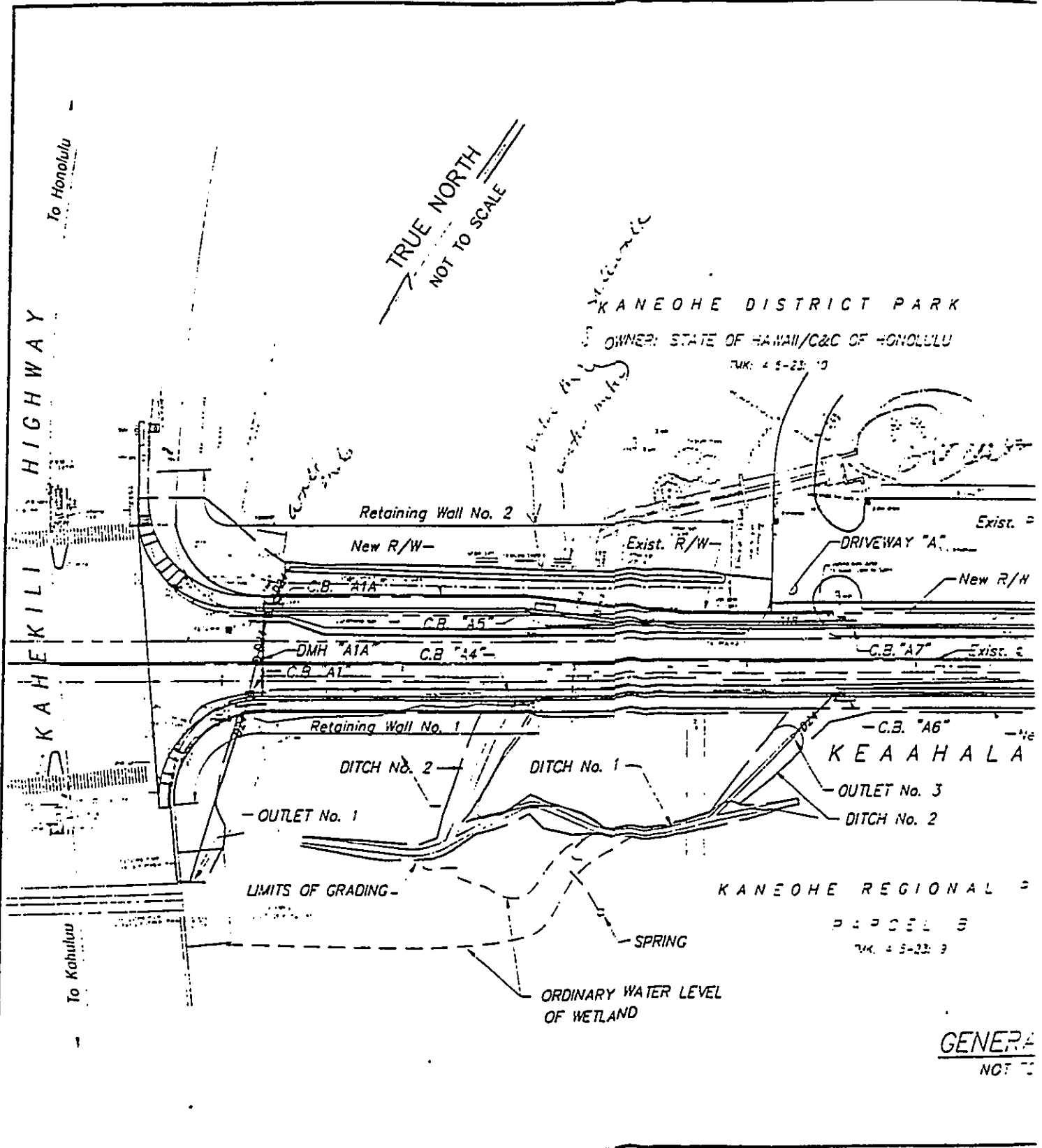


WILLIAM D. BALFOUR, JR.
Director

WDB:ml

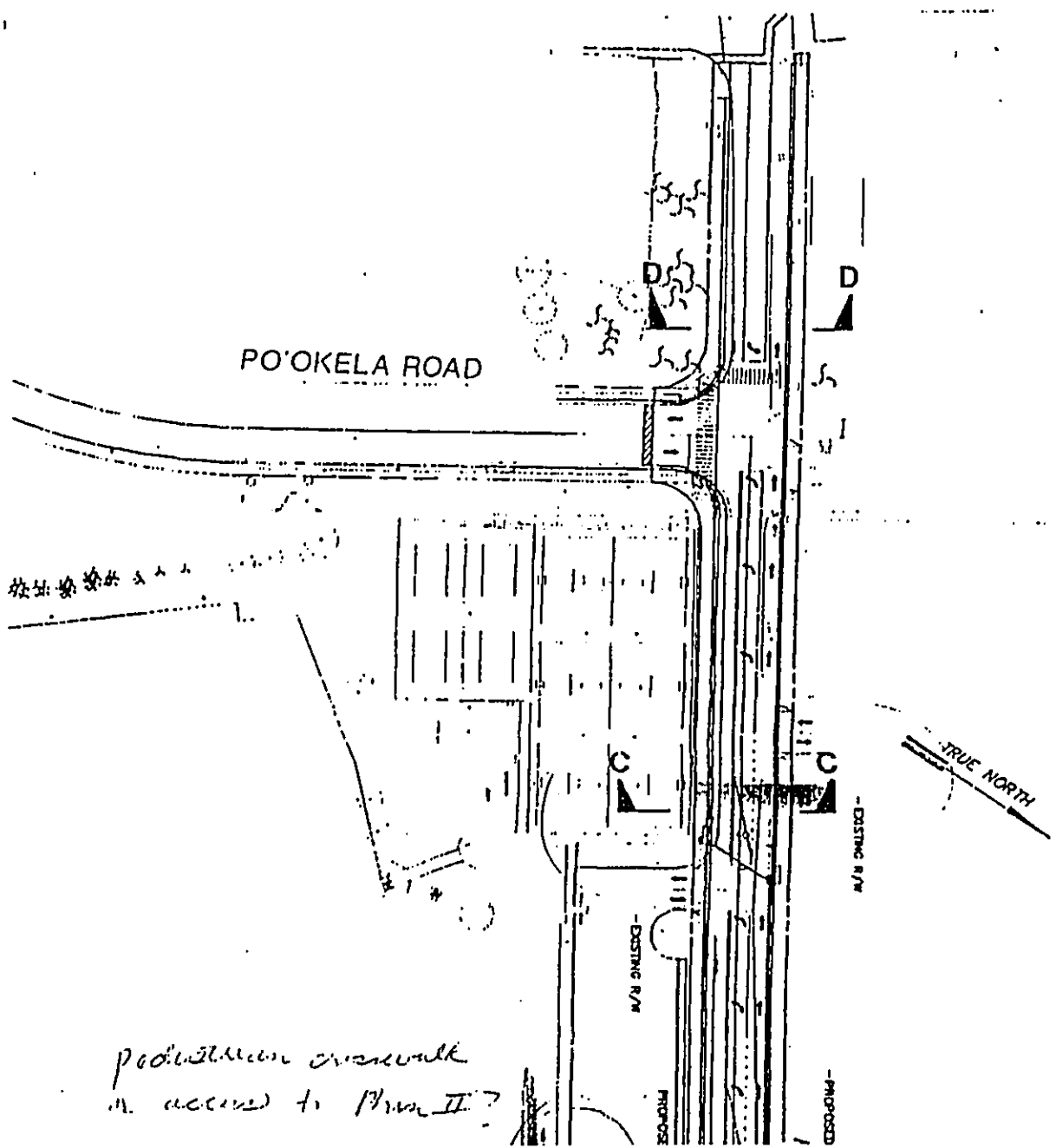
Attachments

cc: Mr. Sheldon Yamasato



GENERAL
NOT TO SCALE

	GEN
Project:	Kea- Kahe- Hono State



*pedestrian crosswalk
in access to Phase II?*

BENJAMIN J. CAYETANO
GOVERNOR



KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

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

IN REPLY REFER TO:
HWY-DS 2.7180

February 8, 2000

Mr. William Balfour, Jr., Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Subject: Response to Comments on the Draft Environmental Assessment for the
Keaahala Road Widening Project, Kahekili Highway to Pookela Street
Kaneohe, Oahu, Hawaii (TMKs: 4-5-23)

Dear Mr. Balfour:

Thank you for your comment letter dated August 23, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

1. COMMENT: "Should any of the construction vehicles need to enter Kaneohe District Park during the construction of the project, the contractor needs to obtain a Right-of-Entry Permit from the Customer Service Department, Permit Section before the project begins."

RESPONSE: The Contractor will be required to secure a "Right-of-Entry" permit from the Customer Service Department, Permit Section prior to the start of construction should access/entry to the Kaneohe District Park be required.

2. COMMENT: "Surface water was addressed in the Draft EA. There is a creek next to the lower parking lot in Kaneohe District Park on the south side of Keaahala Road that overflows during heavy rain. It floods the lower parking lot and flows into Keaahala Road. Adequate drainage needs to be addressed to alleviate this problem. Proper drainage of the creek into the drain under Keaahala Road by Driveway "A" is needed to prevent the creek from overflowing its banks. See attached map for location of creek and flooding."

RESPONSE: The proposed project involves drainage improvements along Keaahala Road. A drainage study has been completed as a part of the proposed project to address the drainage needs along the project route. A new roadway drainage system will be installed beneath Keaahala Road to take care of surface runoff along the roadway. In addition, a portion of the adjacent wetland drainage area will be cleared to allow for more effective conveyance of flows to the culvert at Kahekili Highway.

Current flooding problems from the "creek" next to the lower parking lot of the Kaneohe District Park is mainly attributed to clogging of the downstream culvert which crosses beneath Keaahala Road. This culvert will be cleared during construction, but will require periodic maintenance (clearing of accumulated sediment) to ensure effective drainage and prevent flooding of the lower parking lot .

3. COMMENT: "During heavy rains, at least once a year, Keaahala Road turns into a river. Along with the creek overflowing, ponding occurs at Keaahala Road and Kahekili Highway."

RESPONSE: Clogging of the culvert crossing beneath Keaahala Road (from the lower parking lot to the wetland area) together with the lack of a roadway drainage system along Keaahala Road contributes to the ponding and flooding problems currently being experienced. As previously stated in Response No.2, the proposed project will include a new roadway drainage system to be installed beneath Keaahala Road. In addition, clearing of the culvert that crosses Keaahala Road, and improvements to a portion of the adjacent wetland area will address the current drainage problems.

4. COMMENT: "Section 2.4 Development Schedule and Cost: Your preliminary project schedule shows construction to start in August, 2000. For our park users, August 1, 2000, is the start of the season for AYSO Soccer and Pop Warner Football. The first week of August has the most use in the afternoons causing a traffic/parking nightmare for park users. We recommend moving the start of construction away from the month of August."

RESPONSE: The contract specifications will include provisions for the construction scheduling to begin no earlier than Labor Day.

5. COMMENT: "On Exhibit 2-3, it shows there will be two driveways entering the south portion of the park. Please retain this as buses for park programs use the parking lot as a loading/unloading zone for children. The buses cannot go around the upper parking lot to load/unload as there is not sufficient turnaround area. Buses have gotten stuck in the upper parking lot when cars are parked in the marked stalls. We recommend keeping driveways "A" and "B" as drawn on Exhibit 2-3."

RESPONSE: Both driveways entering the southern portion of the Kaneohe District Park will be retained and shown on the site plan (Exhibit 2-3) of the Final EA.

6. COMMENT: "Section 6.1.9 Traffic: This section states that there may be evening construction for this project. Please be advised that Monday-Friday activities at Kaneohe District Park cease at 9:30 p.m. on both the south and north sides of the park."

RESPONSE: The contractor shall maintain at least one lane open in each direction of traffic during construction.

7. COMMENT: "Question on pedestrian crosswalks and the City bus stops: We did not see them located on the map. Attached is a copy of the EA Preconsultation on Keaahala Road Widening. Our concern is the location of a safe pedestrian crossing on Keaahala at Flag "C" (see attachment). There are children that have activities on both sides of the park. Parents and staff have expressed concern over their safe crossing. Senior citizens attending the Open Market also need to cross the road safely."

RESPONSE: A pedestrian crosswalk will be provided in the area of Flag "C." This crosswalk is shown on the striping plan of the construction plans and will be provided as an exhibit in the Final EA.

8. COMMENT: "Section 2.3 Proposed Improvements: Please be sure that street lights and signs do not interfere with ADA accessibility, e.g., wheelchairs. Kahekili Highway was recently constructed and sidewalks are not accessible because the poles and street lights are located in the middle of the sidewalk, obstructing the passage of wheelchairs."

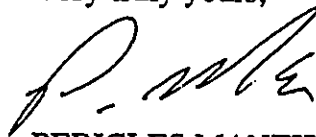
RESPONSE: Accessible sidewalks will be designed to comply with requirements of the American With Disabilities Act. A final set of the project's construction plans will be submitted to the Department of Health's Commission on Person's With Disabilities to ensure ADA requirements are met.

Mr. William Balfour
February 8, 2000
Page 4

HWY-DS 2.7180

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Services Office, Design Branch, Highways Division.

Very truly yours,



PERICLES MANTHOS
Administrator
Highways Division

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.

COPY

RECEIVED (P) 1599.9
AUG 26 1999

AUG 24 1999

AKINAKA & ASSOCIATES, LTD.

TO: Mr. Craig Watanabe
Highways Division
Department of Transportation

SUBJECT: Draft Environmental Assessment (EA) for the
Keaahala Road Widening Project - Kahekili Highway
to Pookela Street
Kaneohe, Oahu, Hawaii (TMK 4-5-23)


Thank you for the opportunity to review the subject EA which we received with your July 14, 1999, memorandum.

Our comments follow:

1. We are currently in the design phase for the construction of the Koolaupoko District Courthouse. July 2000 to November 2001 is the construction schedule for the project. Accordingly, the courthouse should be included in all subsequent plans, reports, etc. pertaining to the construction phase of the road widening project.
2. Since Keaahala Road is the only access for ingress and egress for the Kaneohe District Park, the Koolaupoko District Courthouse, the Windward Comprehensive Health Center, the Castle Hills subdivision, the Windward Community College, the State Hospital and the State Department of Transportation baseyard, we support the road widening project, as it should better accommodate traffic flow in the area.
3. We are currently managing various projects for the Windward Community College which are currently in the planning or design phases. The construction of these projects is scheduled to begin in August 2000, the same time the road widening project is scheduled to begin.
4. Consequently, we anticipate many construction related impacts. The approved traffic control plan should consider these additional construction projects to ensure the most efficient movement of traffic in the project area. The most efficient movement of traffic as stated in Section 6.1.9, may not be viewed as efficient by many users of the roadway during its widening.

5. Also, noise emissions from construction activity could adversely affect the use of the libraries, classrooms and offices on the Windward Community College campus and may warrant additional mitigation measures to those stated in the report. Thus, we recommend that the Department of Transportation's construction activities be coordinated with the Windward Community College, so that disruption on the college campus is kept to a minimum.
6. We concur that all construction activity should be coordinated with the Department of Health for compliance with regulatory requirements.

If you should have any questions, please contact Mr. Ronald Ching of the Planning Branch at 586-0490.


GORDON MATSUOKA
Public Works Administrator

RC/ET:jk

c: Office of Environmental Quality Control
/ Mr. Sheldon Yamasato, Akinaka and Associates, Ltd.
Mr. Daniel Jandoc, Project Management Branch

BENJAMIN J. CAYETANO
GOVERNOR



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


February 18, 2000

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAII
GLENN M. OKIMOTO

IN REPLY REFER TO:
HWY-DS 2.7357

TO: GORDON MATSUOKA, PUBLIC WORKS ADMINISTRATOR
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

FROM: PERICLES MANTHOS, ADMINISTRATOR
HIGHWAYS DIVISION 

SUBJECT: RESPONSE TO COMMENTS ON THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE KEAAHALA ROAD WIDENING PROJECT,
KAHEKILI HIGHWAY TO POOKELA STREET, KANEOHE, OAHU,
HAWAII

Thank you for your comment letter dated August 24, 1999, during the 30-day comment period for the Keaahala Road Widening Project, Kahekili Highway to Pookela Street Draft Environmental Assessment. We offer the following responses to your comments:

1. COMMENT: "We are currently in the design phase for the construction of the Koolaupoko District Courthouse. July 2000 to November 2001 is the construction schedule for the project. Accordingly, the courthouse should be included in all subsequent plans, reports, etc. pertaining to the construction phase of the road widening project."

RESPONSE: The proposed Koolaupoko District Courthouse will be shown on the site plan of the construction plans and in Exhibit 2-3 of the Final Environmental Assessment. We have had discussions with the DAGS project managers and planners for the courthouse project and will coordinate construction projects in the vicinity to the greatest extent possible.

2. COMMENT: "Since Keaahala Road is the only access for ingress and egress for the Kaneohe District Park, the Koolaupoko District Courthouse, the Windward Comprehensive Health Center, the Castle Hills subdivision, the Windward Community College, the State Hospital and the State Department of Transportation baseyard, we support the road widening project, as it should better accommodate traffic flow in the area."

RESPONSE: We acknowledge your support of the Kealahala Road Widening project. The proposed road improvements will help to accommodate the existing and future traffic demands of the surrounding area.

3. COMMENT: "We are currently managing various projects for the Windward Community College which are currently in the planning or design phases. The construction of these projects is scheduled to begin in August 2000, the same time the road widening project is scheduled to begin."

RESPONSE: The proposed Kealahala Road Widening project will continue to be coordinated with other DAGS projects that are planned in vicinity of the roadway improvements.

4. COMMENT: "Consequently, we anticipate many construction related impacts. The approved traffic control plan should consider these additional construction projects to ensure the most efficient movement of traffic in the project area. The most efficient movement of traffic as stated in Section 6.1.9 may not be viewed as efficient by many users of the roadway during its widening."

RESPONSE: An approved traffic control plan shall be implemented to ensure the most efficient movement of traffic through the project area despite construction activities. Adjustments to the traffic control plan will be made, where feasible, to incorporate other nearby construction projects. The EA addresses the short term traffic impacts to be expected during construction such as temporary traffic congestion and affected access to facilities along the project route.

5. COMMENT: "Also, noise emissions from construction activity could adversely affect the use of the libraries, classrooms and offices on the Windward Community College campus and may warrant additional mitigation measures to those stated in the report. Thus, we recommend that the Department of Transportation's construction activities be coordinated with the Windward Community College, so that disruption on the college campus is kept to a minimum."

RESPONSE: The Windward Community College campus is located well outside of the Kealahala Road construction limits (approximately 500 feet from the western limit of the project route). Construction noise will be minimized through the implementation of the appropriate mitigative measures. In addition, the contractor will be required to comply with the provisions of Hawaii Administrative Rules (HAR), Title 11, Chapter 42, "Vehicular Noise Control," and HAR, Title 11, Chapter 46, "Community Noise Control."

Mr. Gordon Matsuoka
Page 3
January 18, 2000

HWY-DS 2.7357

6. COMMENT: "We concur that all construction activity should be coordinated with the Department of Health for compliance with regulatory requirements."

RESPONSE: Construction activities will be coordinated with the Department of Health for compliance with regulatory requirements. The appropriate permits will be secured prior to the start of construction.

Should you have any questions or need additional information, please contact Craig Watanabe at 692-7551, Technical Design Section, Design Branch, Highways Division.

c: Mr. Sheldon Yamasato,
Akinaka and Associates, Ltd.