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EXECUTIVE CHAMBERS

HONOLULU

March 5, 1987

JOHN WAIHEE
GOVERNOR

Honorable John Lewin
Director
Department of Health
1250 Punchbowl Street
Honolulu, Hawaii 96813

Dear Dr. Lewin:

Based upon the recommendation of your office, I am pleased to accept the Final Environment Impact Statement for Moanalua Road, from Pali Momi Street to Aiea Interchange, as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes. This environmental impact statement will be a useful tool in the process of deciding whether the action described therein should be allowed to proceed. My acceptance of the statement is an affirmation of the adequacy of that statement under applicable laws, and does not constitute an endorsement of the proposed action.

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

With kindest regards,

Sincerely,

JOHN WAIHEE

cc: U.S. DOT-Federal Highway Administration
State DOT-Highways Division
City & County of Honolulu, Department of Public Works



RECEIVED

FHWA-HI-EIS-84-02-F

**FINAL
ENVIRONMENTAL
IMPACT
STATEMENT**

**MOANALUA ROAD
FROM PALI MOMI STREET
TO AIEA INTERCHANGE
CITY AND COUNTY
OF HONOLULU
STATE OF HAWAII**

**U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration**

**DEPARTMENT OF TRANSPORTATION
State of Hawaii
Highways Division**

**DEPARTMENT OF PUBLIC WORKS
City and County of Honolulu
Division of Engineering**



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≡ PURPOSE AND NEED

III. PURPOSE AND NEED FOR ACTION

A. Purpose and Need

Moanalua Road is an existing arterial roadway, running generally in an east-west direction and serving the Aiea and Pearl City communities (Figure 1). Approximately 3.3 miles in length, Moanalua Road begins at Waimano Home Road in Pearl City, crosses under the H-1 Freeway at the Waiiau Interchange, and continues to the Aiea Interchange. Within the Pearl City area, Moanalua Road is typically a four-lane, limited access roadway with separate left turns at intersections. From Kaahumanu Street to Pali Momi Street, the four-lane roadway is continued and a center lane is provided for left turns. Between Pali Momi Street and Aiea Heights Drive, Moanalua Road is narrower, with only two lanes, one in each direction. Between Aiea Heights Drive and Aiea Interchange, four lanes, two in each direction, are provided.

Within the project boundaries, Moanalua Road crosses the Kalauao and Aiea streams. The Moanalua Road crossing at Kalauao Stream consists of a simply supported single span bridge approximately 39 feet long. The height of the opening is approximately 15 feet and the width of the bridge is 35 feet. The Moanalua Road crossing at Aiea Stream consists of an arch bridge with a span of 25 feet and a width of 52 feet.

Due to past efforts, the entire length of Moanalua Road, except for the section running through Aiea, has been improved. The proposed project will improve this gap in the roadway, thereby alleviating problems related to vehicular capacity and traffic volumes, and increasing the safety of all users of Moanalua Road.

B. System Linkage

Major east-west regional traffic through the area is served by the parallel Interstate Route H-1 and by Kamehameha Highway (State Route 99). Moanalua Road serves as a collector and distributor to these major highways. Although city buses run on portions of Moanalua Road, the primary modal use on the facility is the automobile.

Bus routes currently serving the affected portion of the project include: route 11, Aiea Height-Honolulu; route 53, Pacific Palisades-Honolulu; route 54, Pearl City-Honolulu and route 74, Aiea-Halawa Heights.

Within the project limits of Pali Momi Street and Aiea Interchange, the existing roadway has limited width, with little or no shoulders and a lack of adequate sidewalks. This segment also has poor alignment which is characterized by such features as sharp curves and limited sight distance. The proposed project would upgrade this segment of Moanalua Road to provide better consistency with the rest of the facility.

C. Capacity

1. Traffic Volumes. Current (1983) daily traffic volumes on Moanalua Road within the project limits range between 15,500 (east of Kaamilo Street) and 22,800 (east of Pali Momi Street) vehicles per weekday. Daily commuting traffic from the residential areas of Pearl City and Aiea is combined with traffic generated by the businesses, schools, churches, and other activities along Moanalua Road to form distinctive peak periods each weekday morning and afternoon.

Current morning peak hour (AM) traffic volumes range from

700 to 1100 vehicles per hour in the peak direction toward downtown Honolulu (eastbound). Opposing AM traffic volumes range from 300 to 500 vehicles per hour.

Afternoon peak hour (PM) traffic currently are between 900 and 1400 vehicles per hour, westbound. Opposing PM traffic is 500-700 vehicles per hour.

Moanalua Road experiences heavy traffic during special occasions. The Christmas shopping season and other sales promotions at either the Aiea Town commercial areas or the nearby Pearlridge Shopping Center cause extended periods of high traffic volumes during evening hours and weekends. Activities at Aloha Stadium also result in peak conditions on Moanalua Road, although this condition usually is short-termed and is probably attributable to vehicles which were parked in the Aiea business area by stadium users.

2. Traffic Conditions. The current traffic volumes and existing roadway configuration result in poor traffic conditions. Intersections along the two-lane portion of Moanalua Road operate at or near capacity conditions. Bumper-to-bumper traffic in the peak direction is typical. Drivers approaching on cross streets experience long delays; vehicular and pedestrian crossing at unsignalized intersections are hazardous and time-consuming. Pedestrians including school children walking along Moanalua Road also experience hazardous conditions.

Levels of service which describe traffic conditions, were calculated for existing counted traffic volumes using the Critical Movement Analysis procedure¹. Field observations, however, indicate that capacity conditions at the Moanalua Road and Kaamilo Street intersection in the PM peak hour result in a long queue which affects operations at the Moanalua Road and Aiea Heights intersection. Similarly, AM

peak hour operations at the Moanalua Road and Honomanu Street and the Moanalua Road and Pali Momi Street intersections are affected by capacity conditions at Kaamilo Street. Table 1 summarizes the existing levels of service. Field observations also indicate that the actual operating conditions are influenced by the poor geometrics of the roadway, and actual service levels may be lower than those shown in Table 1.

A study of the peak period traffic patterns on Moanalua Road also indicates that some drivers elect not to use certain portions of the roadway because of the lack of intersection capacities. In the AM peak period, 30 percent of the eastbound traffic on Moanalua Road approaching Honomanu Street turn right onto Honomanu Street to get to Kamehameha Highway.

In the PM peak hour, many of the westbound commuters using Moanalua Road were observed to also use Ulune Street. Of the total westbound traffic on Moanalua Road at Honomanu Street, one-third turned right from Kaamilo Street (southbound), and over one-fourth turned right from Aiea Heights Drive, indicating that a large number of the westbound commuters desiring to use Moanalua Road through Aiea town had to divert to Ulune Street because of the limited capacity on Moanalua Road. Figure 2 presents these traffic patterns that were observed.

3. Future Conditions. Future traffic demands for year 2005 have been projected based on current traffic volumes and potential growth in the area. This growth includes increases in residential dwelling units and in commercial space in the vicinity of the project. Additional residential population has been assumed to increase at an annual rate of about 0.52%; this is equal to the average annual rate of population growth expected in the Primary Urban Center between 1980 and 2000.

TABLE 1
EXISTING LEVELS OF SERVICE*

	AM Peak Hour	PM Peak Hour
<u>Signalized Intersections</u>		
Moanalua Road at Aiea Heights Drive	C	F
Moanalua Road at Kaamilo Street	E	E
<u>Unsignalized Intersection</u>		
Moanalua Road at Honomanu Street		
Left turns to Honomanu Street	C	A
Honomanu Street (stop-controlled)	E	E

Notes: * Levels of Service as defined by Highway Capacity Manual

Level A - free flow; no delays and easy turn movements

Level B - stable conditions; slight restrictions, no delays exceed one cycle

Level C - stable operation; some restriction, but not objectionable

Level D - approaching instability; possible substantial delays during short peaks, periodic clearance of queues

Level E - capacity conditions; long queues and delays of several cycles

Level F - intersection affected by queueing from downstream (ahead)

Levels of service for design (urban): desirable = C, minimum = D

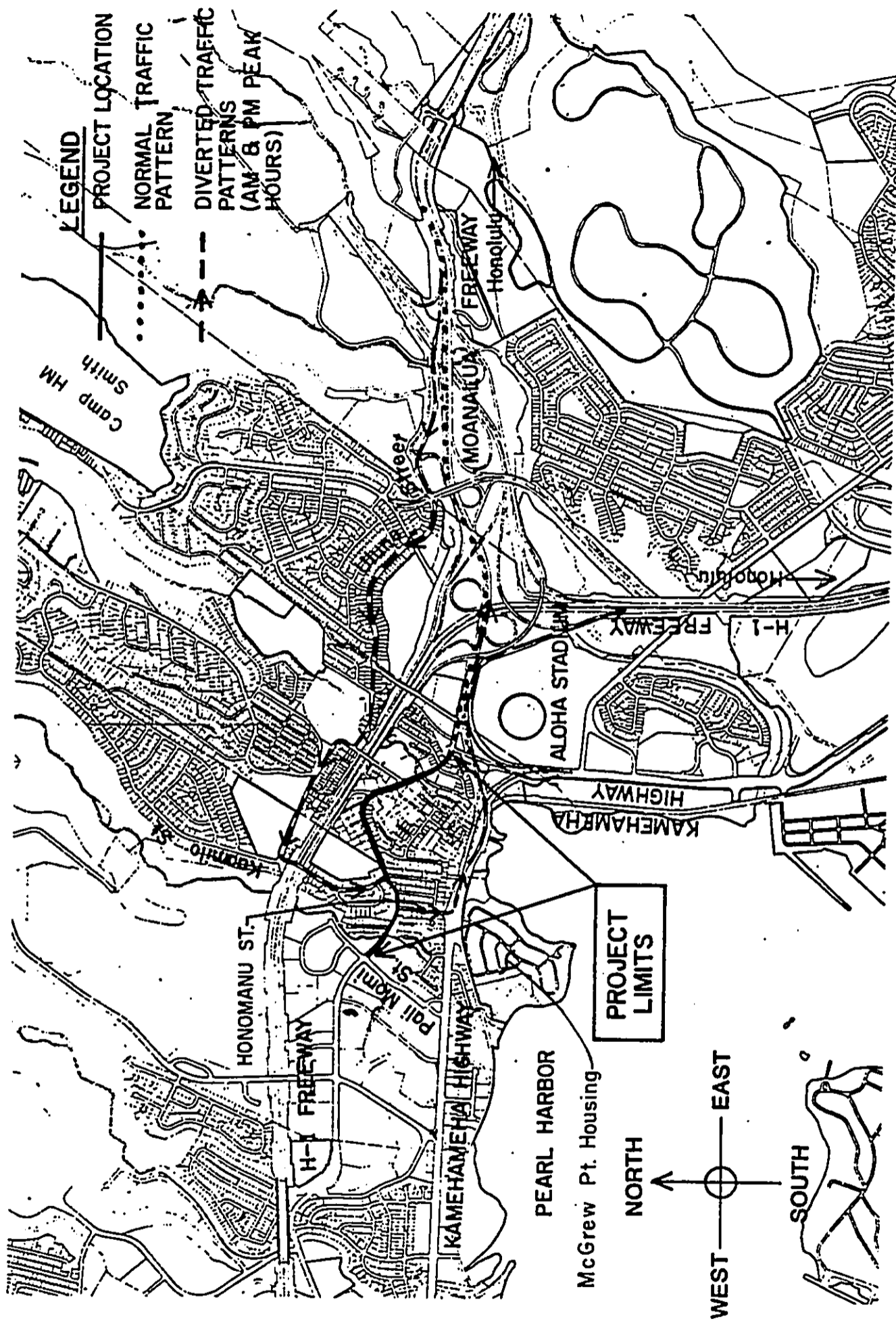


FIGURE 2
EXISTING TRAFFIC PATTERNS

NOT TO SCALE

The future traffic demand is expected to increase a total of 11 percent from current demands. A future traffic assignment has been prepared to reflect demand volumes, including traffic which is currently diverted in the AM to Kamehameha Highway via Honomanu Street or in the PM to Ulune Street.

Future peak hour, peak direction traffic demand volumes are between 900 and 1600 vehicles per hour. Moanalua Road, which currently carries 700-1400 vehicles per hour in the peak direction at capacity conditions, will not be able to serve this projected future traffic demand.

D. Compliance With Transportation Plan and Other Legislation

The improvement of Moanalua Road is needed to serve both the existing and future traffic demands. This need has been identified in regional transportation and urban plans.

The current Long Range Transportation Plan for 1985 guides transportation planning on Oahu and directs that Moanalua Road be improved. The Long Range Plan is presently being updated to the year 2000, and the planning for this update assumes that Moanalua Road between Pali Momi Street and Aiea Interchange will be improved.

Moanalua Road is within the Primary Urban Center Development Plan area. The Public Facilities Map for the Development Plan includes improvement to Moanalua Road between Kalauao Stream and Aiea Interchange. The Public Facilities Map also shows that additional right-of-way may be necessary for roadway improvements between Kalauao Stream and Alvah Scott Elementary School and between Laulima Street and Aiea Interchange.

The City and County of Honolulu Department of Public Works is proposing to improve the conditions on Moanalua Road. The

proposed project would upgrade Moanalua Road from Pali Momi Street to Aiea Interchange.

E. Social Demands or Economic Development

No significant economic developments or land use changes are projected for the general area which would facilitate need for the proposed project, though it is anticipated that additional residential population would increase at a rate consistent with the rate of growth expected in the Primary Urban Center between 1980 and 2000. However, as previously mentioned, the existing roadway has limited width, with little or no shoulders and a lack of adequate sidewalks.

F. Modal Interrelationships

The proposed project does not interface with or serve to complement airports, rail and port facilities, and/or mass transit services.

G. Existing Safety Hazards

Traffic accident records show that, during the past three years, there has been an average of 34 major accidents per year on Moanalua Road, in the section from Pali Momi to Kaimakani Streets. However, the number of accidents has decreased in recent years. Traffic signals installed at the intersection of Kaamilo Street and Moanalua Road during this time may have contributed to the decrease. Still, the accident rate is nearly twice the State-wide or the County-wide rates. The accident rate, then, on Moanalua Road within the project boundaries, can be considered excessive. Accident and vehicle inspection records were used to derive accident rates of

2.8 and 2.9 accidents per million vehicle-miles traveled within the State and the City and County of Honolulu, respectively. Accident records and traffic volume estimates for Moanalua Road, within the project limits, produced an accident rate of 5.2 accidents per million vehicle-miles traveled.

MOANALUA ROAD
PALI MOMI STREET TO AIEA INTERCHANGE
CITY & COUNTY OF HONOLULU
STATE OF HAWAII

FINAL
ENVIRONMENTAL IMPACT STATEMENT

Submitted Pursuant to 42 USC 4332(2)(c)
and Chapter 343, Hawaii Revised Statutes

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII
Highways Division

DEPARTMENT OF PUBLIC WORKS
CITY & COUNTY OF HONOLULU
Division of Engineering

Date

Federal Highway Administration
Region IX

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information concerning this document:

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Acting Director &
Chief Engineer
Department of Public Works
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813
(Telephone No: 808 523-4341)

The proposed action will improve Moanalua Road between Pali Momi Street and Aiea Interchange. The project would upgrade this 0.8-mile segment of Moanalua Road to provide better consistency with the rest of the facility.

SUMMARY

I. SUMMARY

A. Description of the Proposed Action

The proposed City and County of Honolulu project will improve Moanalua Road between Pali Momi Street and the Aiea Interchange within the City & County of Honolulu, State of Hawaii (Figure 1).

Along both sides of the road right-of-way, grade adjustment walls will be constructed as required. Driveway ramps will be reconstructed to provide access to existing driveways and garages. Existing street intersections will be modified, as necessary, to provide for safer vehicular traffic movement and smoother riding conditions.

The improvements will include clearing, grubbing, grading, landscaping, roadway pavements, curbs, drainage facilities, sidewalks, signing, street lighting, traffic signal systems, and utility relocations. Bridge structure improvements for the Aiea stream crossing and reconstruction at the Kalauao Stream crossing will also be included.

The preferred alternative consists of two through traffic lanes in each direction with a middle, two-way left turn lane for most of the project length. The "nominal" road right-of-way width is 80 feet from Pali Momi Street to Laulima Street, and 70 feet from Laulima Street to Aiea Interchange. The right-of-way widths vary to accommodate turning lanes or to improve the horizontal alignment of the existing roadway.

This alternative is a hybrid of Alternatives II and IV with turning movement modifications.

B. Description of Any Significant Actions Proposed in the Vicinity of the Project

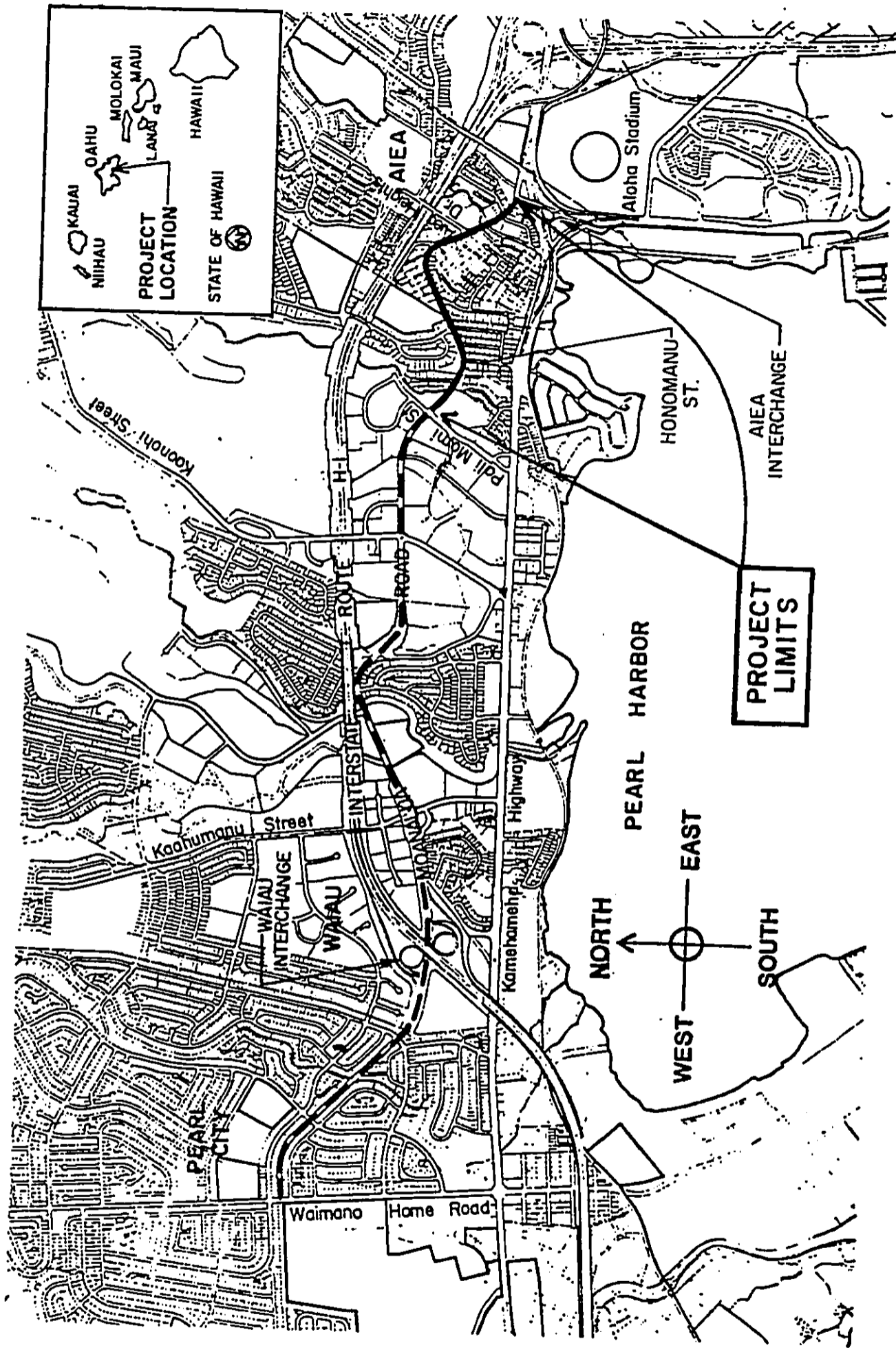


FIGURE 1
PROJECT LOCATION MAP

NOT TO SCALE

No other government agencies are proposing any other significant action in the vicinity of the proposed project.

C. Major Alternatives Considered

1. No-Action Alternative

Minor maintenance work to allow continued use of the facility can be expected; this work includes repairing, restriping, and traffic signal timing adjustments.

2. Alternative I

This alternative primarily consists of Transportation Systems Management (TSM) type actions, which would maximize the utilization of the present facility. A portion of the roadway will be realigned slightly to the north and additional rights-of-way would have to be acquired from the presently vacant lots north of the roadway. Provision of separate left turn lanes would improve intersection operations.

3. Alternative II

This alternative would upgrade the roadway to a standard city 80-foot right-of-way with a 64 foot roadway width between curb faces. Five 12-foot lanes would be provided, allowing for two lanes in each direction and a middle left turn lane.

4. Alternative III

This alternative which would utilize a 70-foot right-of-way, considers a reduced roadway width for most of the project length. A roadway of 52 feet between curb faces would be constructed, providing four 12-foot lanes.

5. Alternative IV

This alternative would construct a roadway 54 feet wide, from curbface to curbface. Five 10-foot lanes would be provided, with right-of-way width of 70 feet.

D. Significant Environmental Impacts

1. The preferred alternative for the proposed project will improve vehicular, pedestrian, and bicyclist safety.
2. Roadway realignment and additional right-of-way required for the preferred alternative would necessitate the taking of one residence and one business. Some additional land will be acquired and some existing residential and appurtenant structures may have to be raised.
3. There will be short-term effects on air, noise, and traffic resulting from construction activities for the preferred alternative.

E. Areas of Controversy

At the present time, there are no known major areas of controversy.

F. Significant Unresolved Issues

There are no unresolved issues from the standpoint of potential environmental impacts.

G. Federal Actions Required

A Department of the Army permit is required for the Kalauao Stream culvert crossing for discharge of dredged or fill material.

There are no other federal permit approvals or environmental requirements to be addressed at this time.

=
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IV

ALTERNATIVES

IV. ALTERNATIVES INCLUDING PROPOSED ACTION

A. Development of Alternatives

Several alternatives were developed from four basic criteria. The alternatives should:

1. Be consistent with the Long Range Transportation Plan and complement the other transportation facilities in the surrounding area.
2. Avoid major relocation of existing businesses and residences.
3. Maintain access to properties along Moanalua Road.
4. Provide reasonable operational characteristics.

Certain types of actions were not considered as alternatives because they are inappropriate to the intent of this project, due to the limited size and localized character of the roadway. These actions have included fringe parking, ride sharing, diversion of automobile users to transit, flexible work schedules, and road pricing. Satisfying criterion (1) above in any of these actions would have required improvements beyond the limits of this project. These actions are more appropriately addressed in a regional or islandwide perspective rather than as alternatives to improving a one-mile segment of roadway. These actions are also possible Transportation Systems Management (TSM) options which are not applicable to this project. Their ultimate use, however, could be expected if roadway capacities are inadequate.

The use of high-occupancy vehicle (HOV) lanes, a TSM action, was also given consideration. Since the existing facility provided access to abutting properties and, in many parts, consisted of only one lane in each direction, HOV lanes on existing roadways are not feasible.

Other specific TSM type intersection improvements were considered but rejected because of inadequate safety, other operational deficiencies, or the need for major construction to implement or support the improvements. Examples included a westbound-left turn lane at Aiea Heights Drive and a second westbound-through lane across Aiea Heights Drive.

Actions that were considered inappropriate included a straight-line connection between the ends of the project, which would have been inconsistent with criteria (2) and (3). A viaduct over Aiea Library or other significant realignment of the roadway would also not have met criteria (2) and (3).

Preferred Alternative. The alternative recommended for final design is a composite of two separate alternatives. From Pali Momi Street to Aiea Heights Drive, Alternative II would be utilized. From Aiea Heights Drive to Aiea Interchange Alternative IV would be used with some modifications to the turn lane striping (Figure 3).

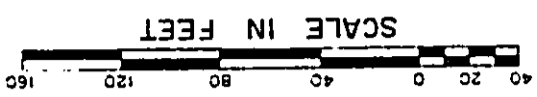
The preferred alternative consists of two through traffic lanes in each direction with a middle, two-way left turn lane for most of the project length. The "nominal" right-of-way width is 80 feet from Pali Momi Street to Laulima Street, and 70 feet from Laulima Street to Aiea Interchange. The actual right-of-way widths vary, at locations shown on the plans, to accommodate turning lanes or to improve the horizontal alignment of the existing roadway.

From Pali Momi Street to Aiea Heights Drive all lanes will be 12 feet wide, and from Aiea Heights Drive to Aiea Interchange all lanes will be 10 feet wide. Throughout the project length, curb lanes will have an additional 2 foot offset to the face of curb.

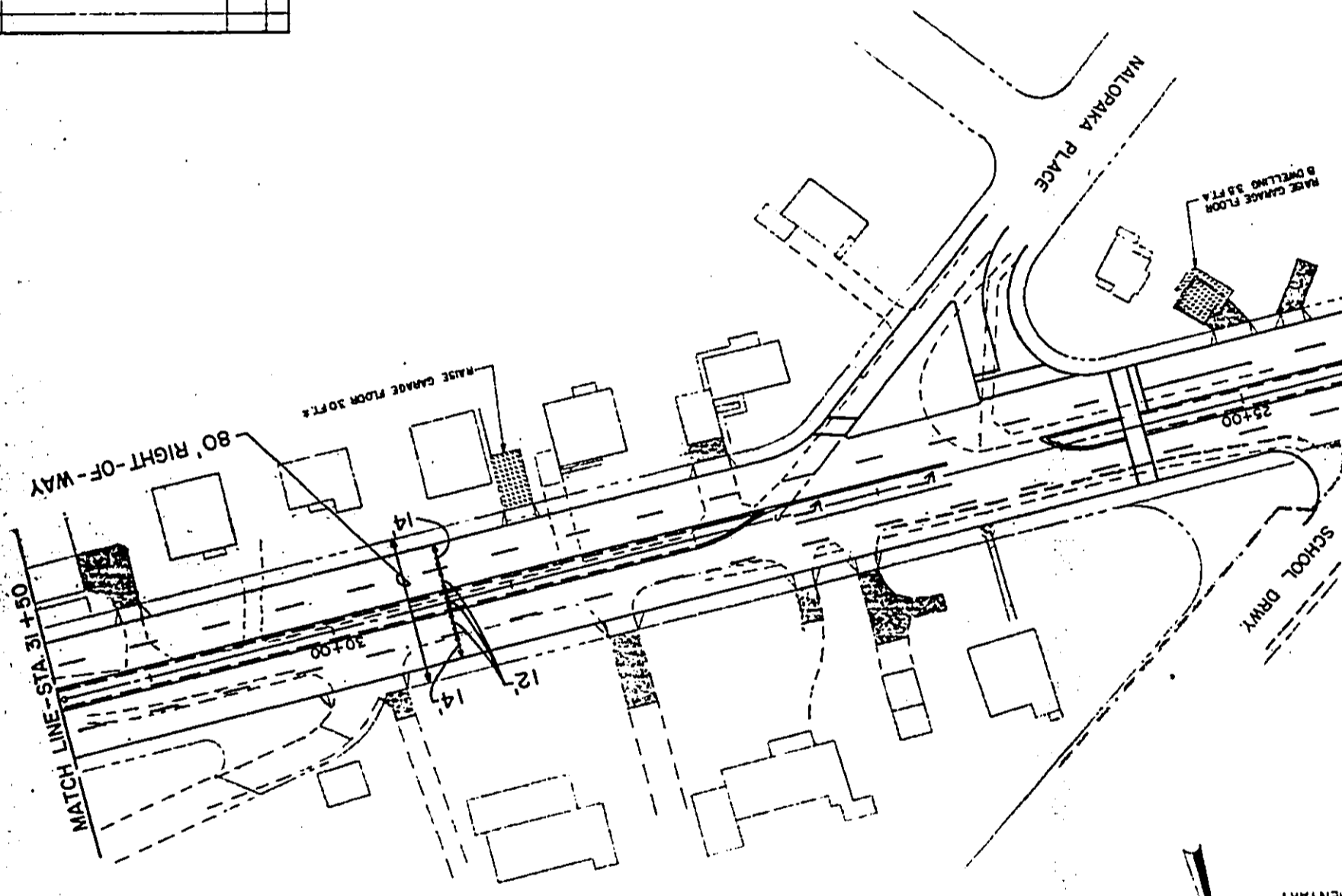
Sidewalk areas will be 8 feet wide and, in residential areas, will consist of a 4-foot wide concrete walkway and a 4-foot wide (including curb width) grassed utility strip that will be landscaped.

JOB NO.

DATE		DRAWN BY	
CHECKED BY		APPROVED BY	
<p style="text-align: center;">ALTERNATIVE PREFERRED</p> <p style="text-align: center;">DIVISION OF ENGINEERING CITY AND COUNTY OF MADISON DEPARTMENT OF PUBLIC WORKS</p>			
REVISIONS			
NO.	DATE	DESCRIPTION	BY



8008B



MENTARY

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8000 N

M 0026

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KEANAE ST

KAMALO ST

NALOPAKA P.

SEVENTH DAY
ADVENTIST
CHURCH

RAISE GARAGE FLOOR
8 DWELLING 38 FT x

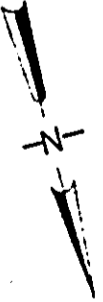
25+00

29+00

SCHOOL DRIVE

KAMALO ST

ALVAH SCOTT ELEMENTARY
SCHOOL



M 0026

M 0026

6400 N
N 3-3-30M

5600 N

KEANAE ST

HONOHANU ST

DRIVEWAY ADJUSTMENT (TYP)

BETHANY ASSEMBLY OF GOD CHURCH

HECO KANOHU
SUBSTATION

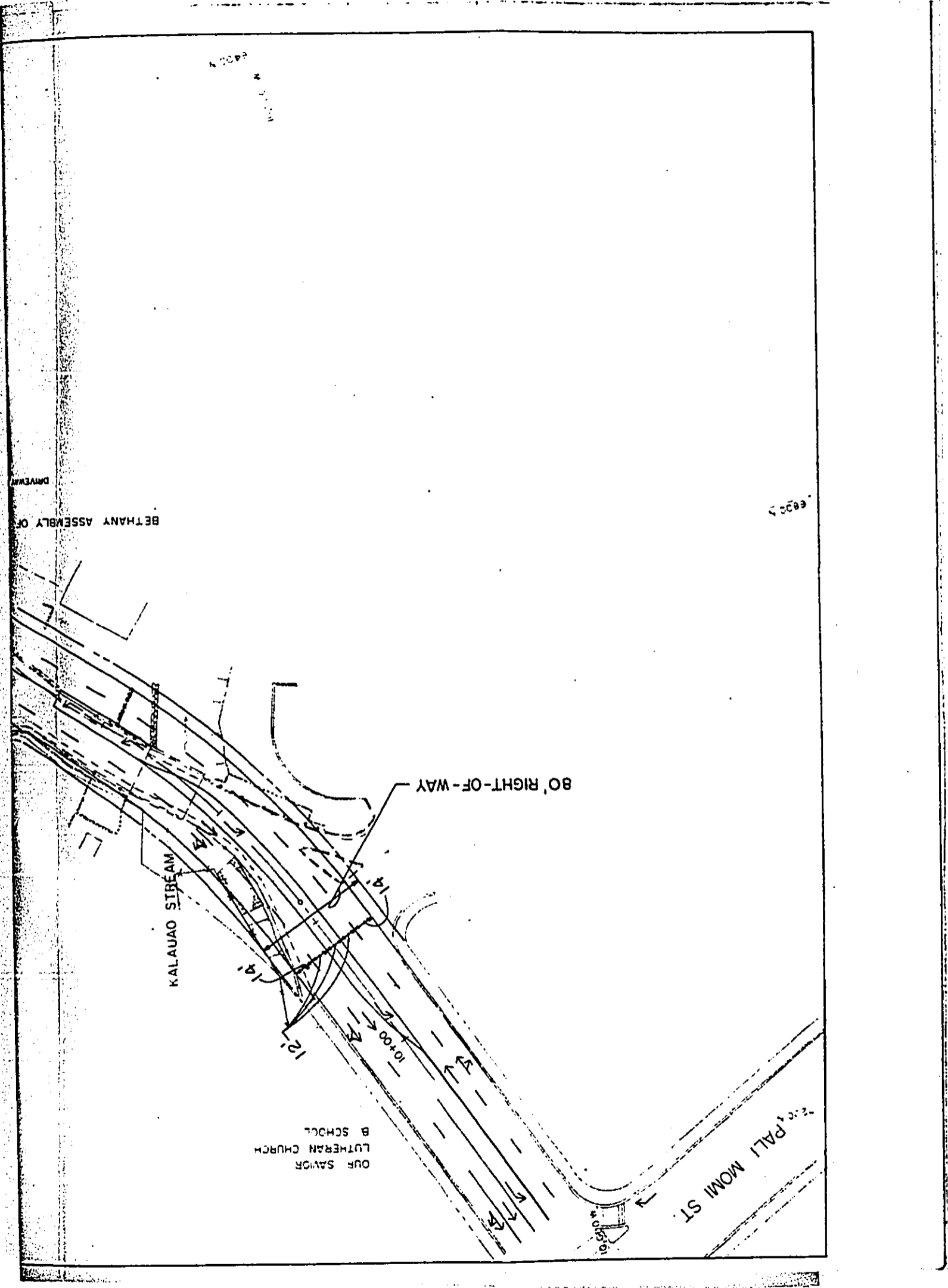
HALE MOMI PLACE

KALAUAO STREAM

OUR SAVIOR
LUTHERAN CHURCH
& SCHOOL

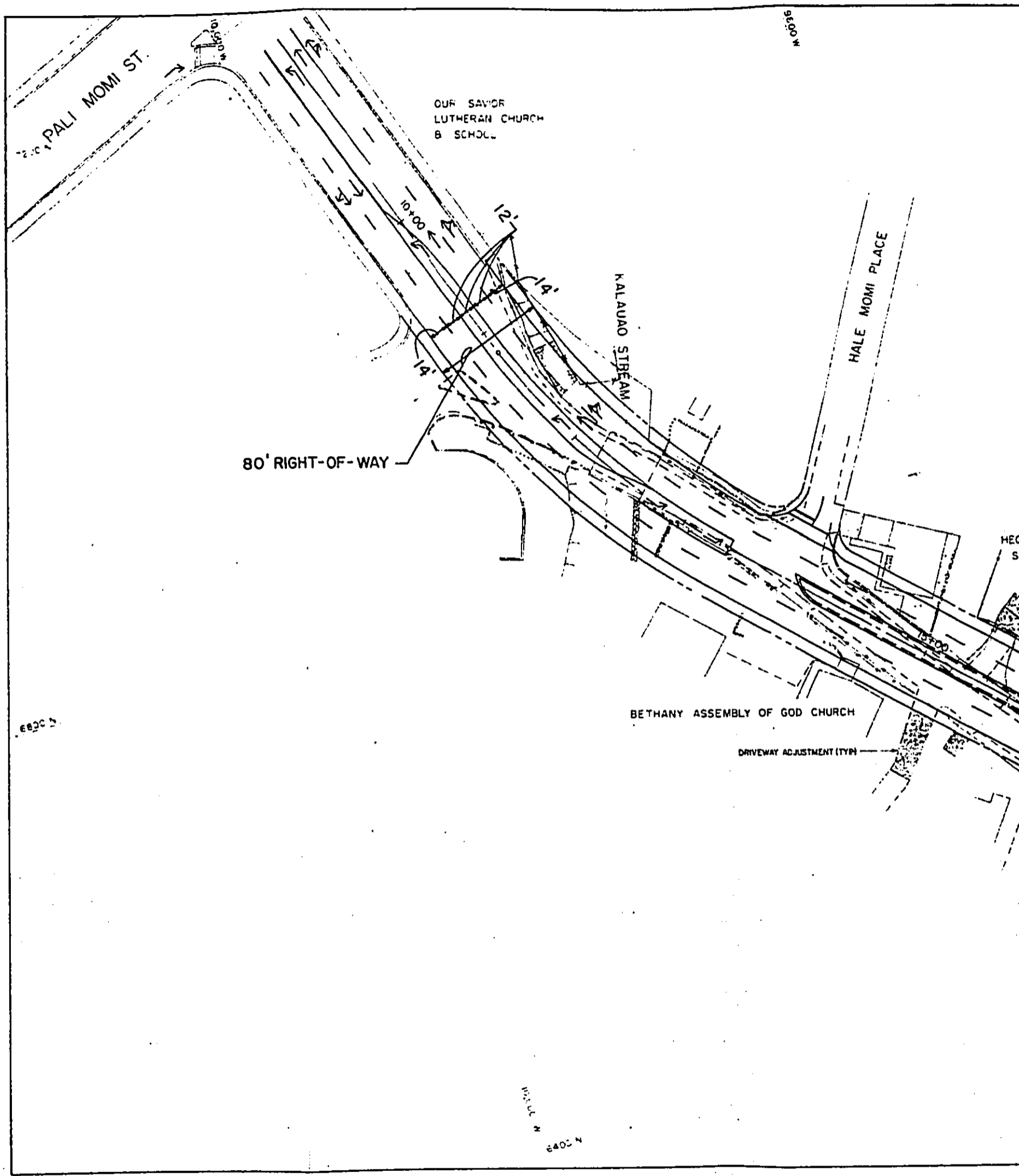
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CORRECTION

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



W 0036

W 0036

HALE MOMI PLACE

KAMILO ST.

HECO KAONOHI
SUBSTATION

OD CHURCH

JUSTMENT (TYR)

20+00

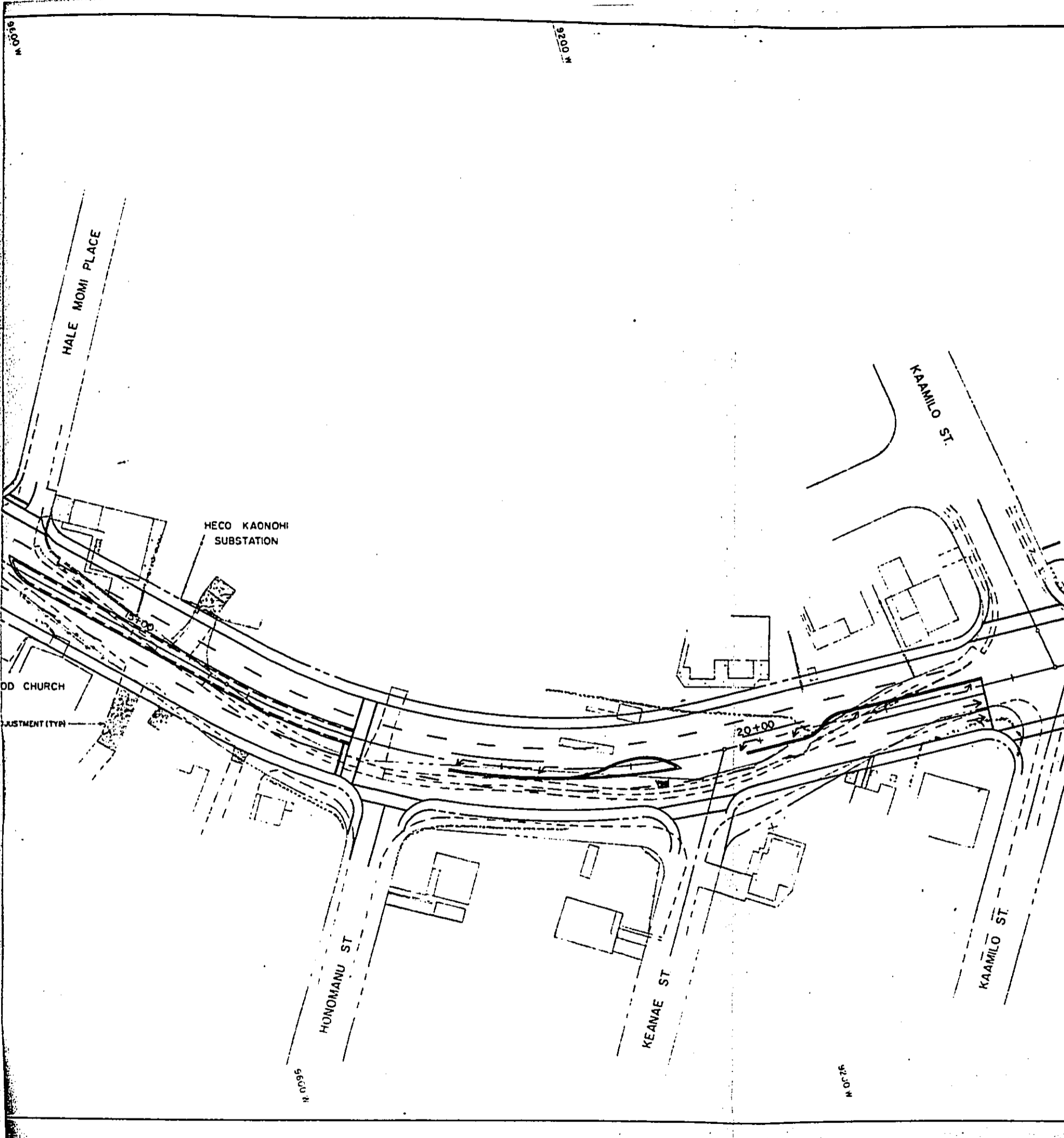
HONOMANU ST

KEANAE ST

KAAMILO ST

W 0035

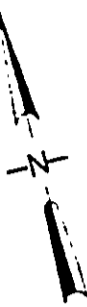
W 0035



6800 N

6800 N

ALVAH SCOTT ELEMENTARY SCHOOL



KAAMILO ST.

SCHOOL DRWY.

12'

25+00

SEVENTH DAY ADVENTIST CHURCH

RAISE GARAGE FLOOR 8 DWELLING 3.5 FTA

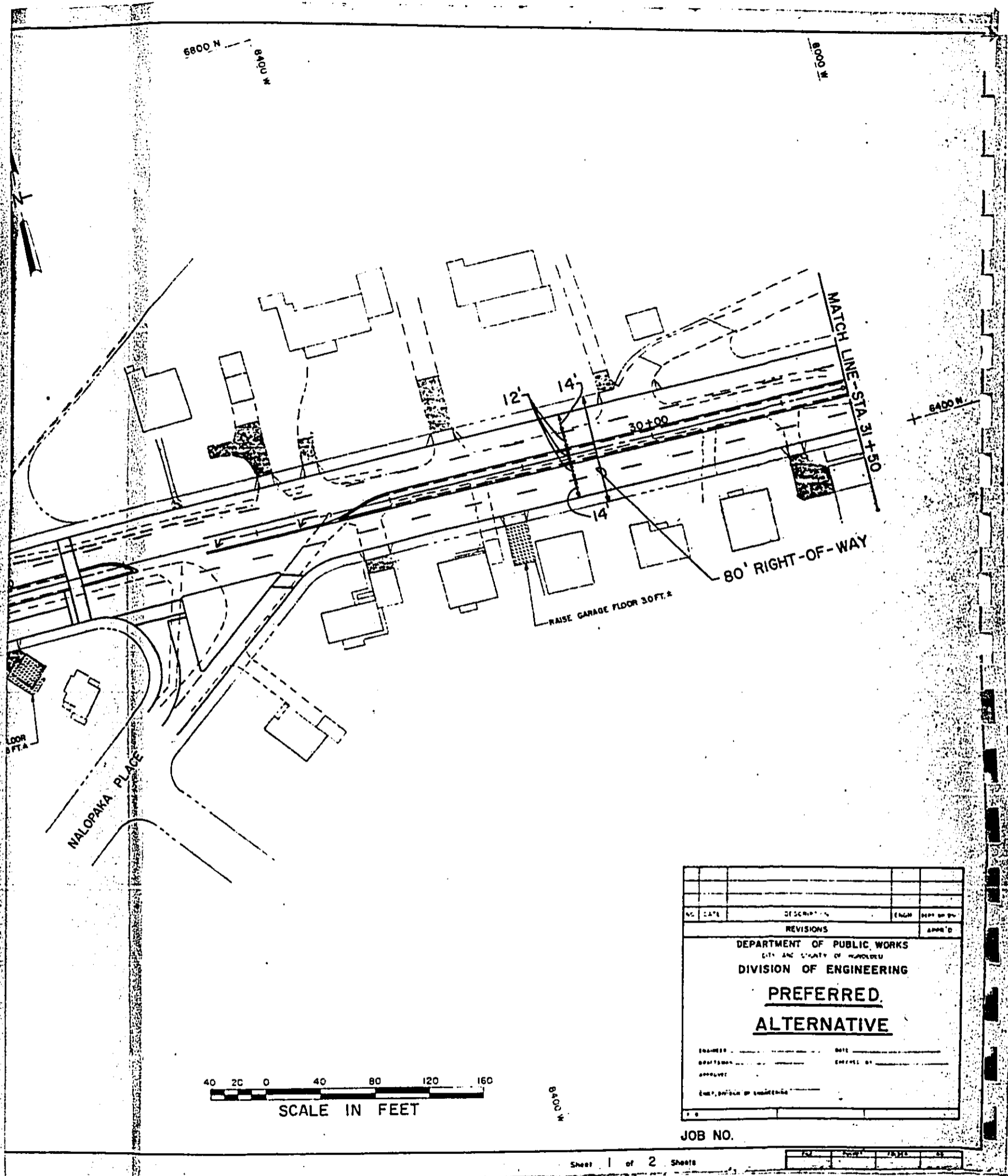
NALOPAKA PLACE

KAAMILO ST.



SCALE IN FEET

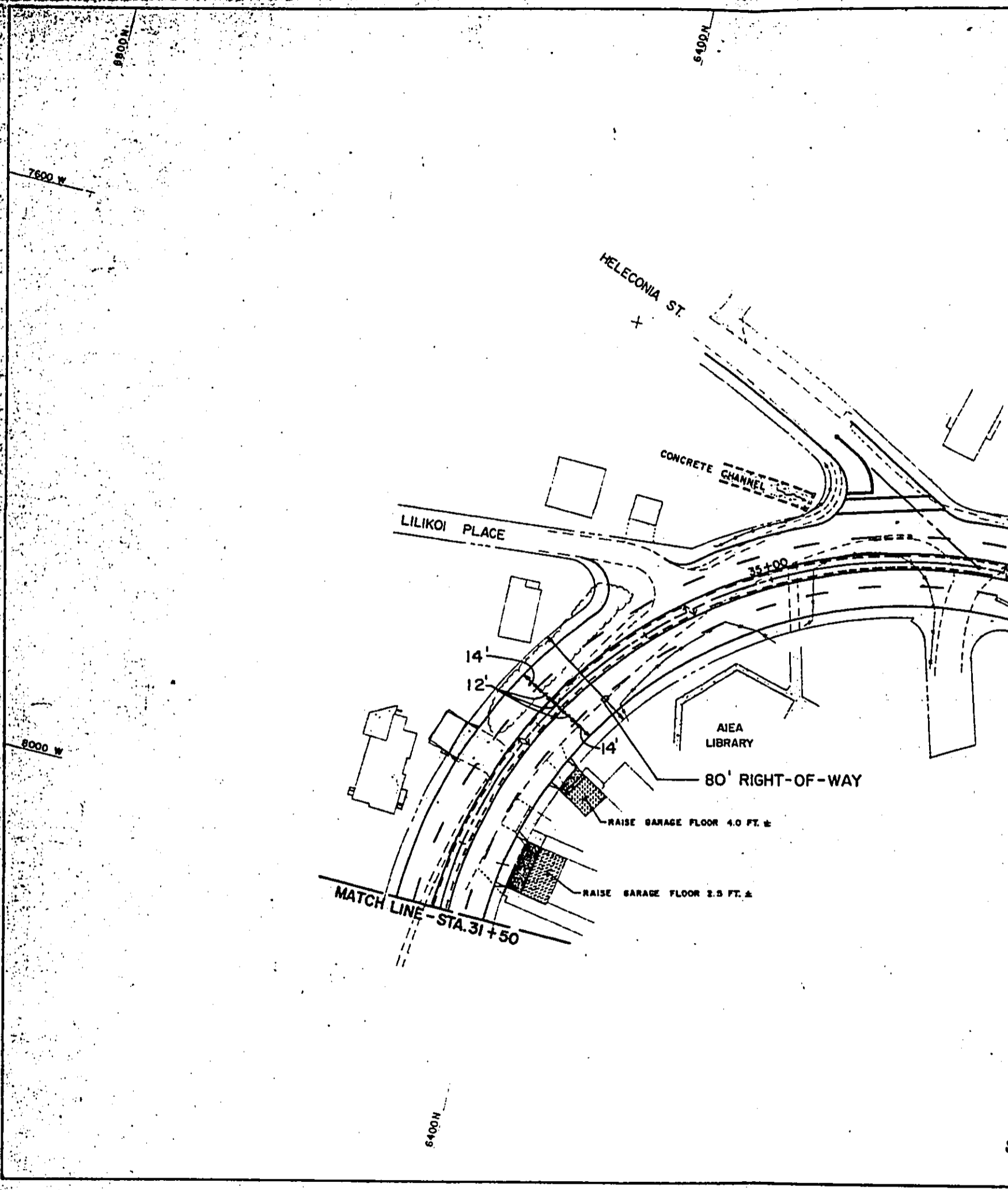
6800 N



NO.	DATE	DESCRIPTION	ENGR.	APP'D BY
REVISIONS				
DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF HONOLULU DIVISION OF ENGINEERING PREFERRED ALTERNATIVE				
DESIGNED	DATE		ENGR.	
DRAWN	DATE		ENGR.	
APPROVED				
ENGR., DIVISION OF ENGINEERING				

JOB NO.

h-N1
2-N1



7600 W

6400 N

6400 N

HELECONIA ST.

CONCRETE CHANNEL

LILIKOI PLACE

35+00

8000 W

AIEA LIBRARY

80' RIGHT-OF-WAY

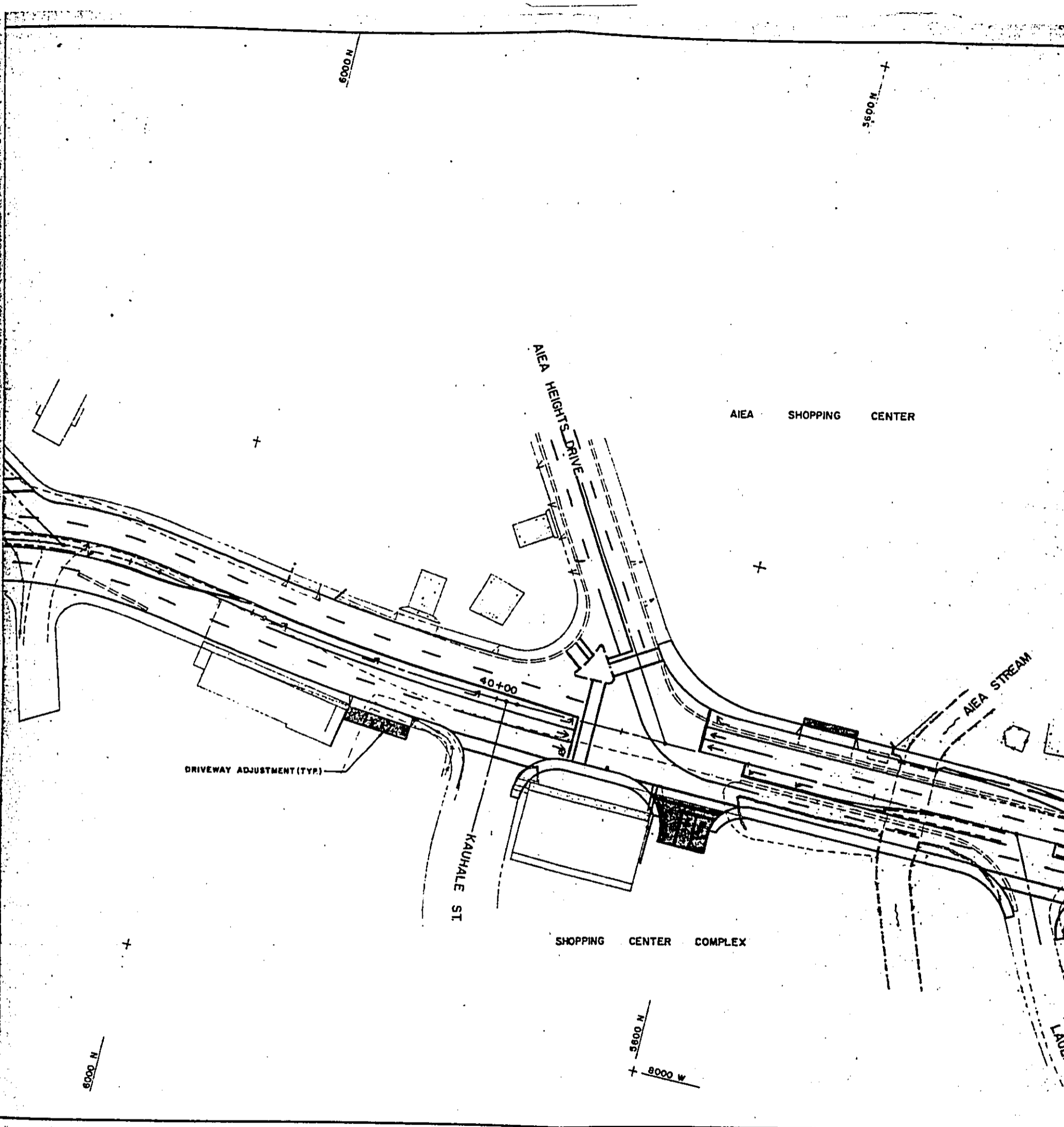
RAISE GARAGE FLOOR 4.0 FT. ±

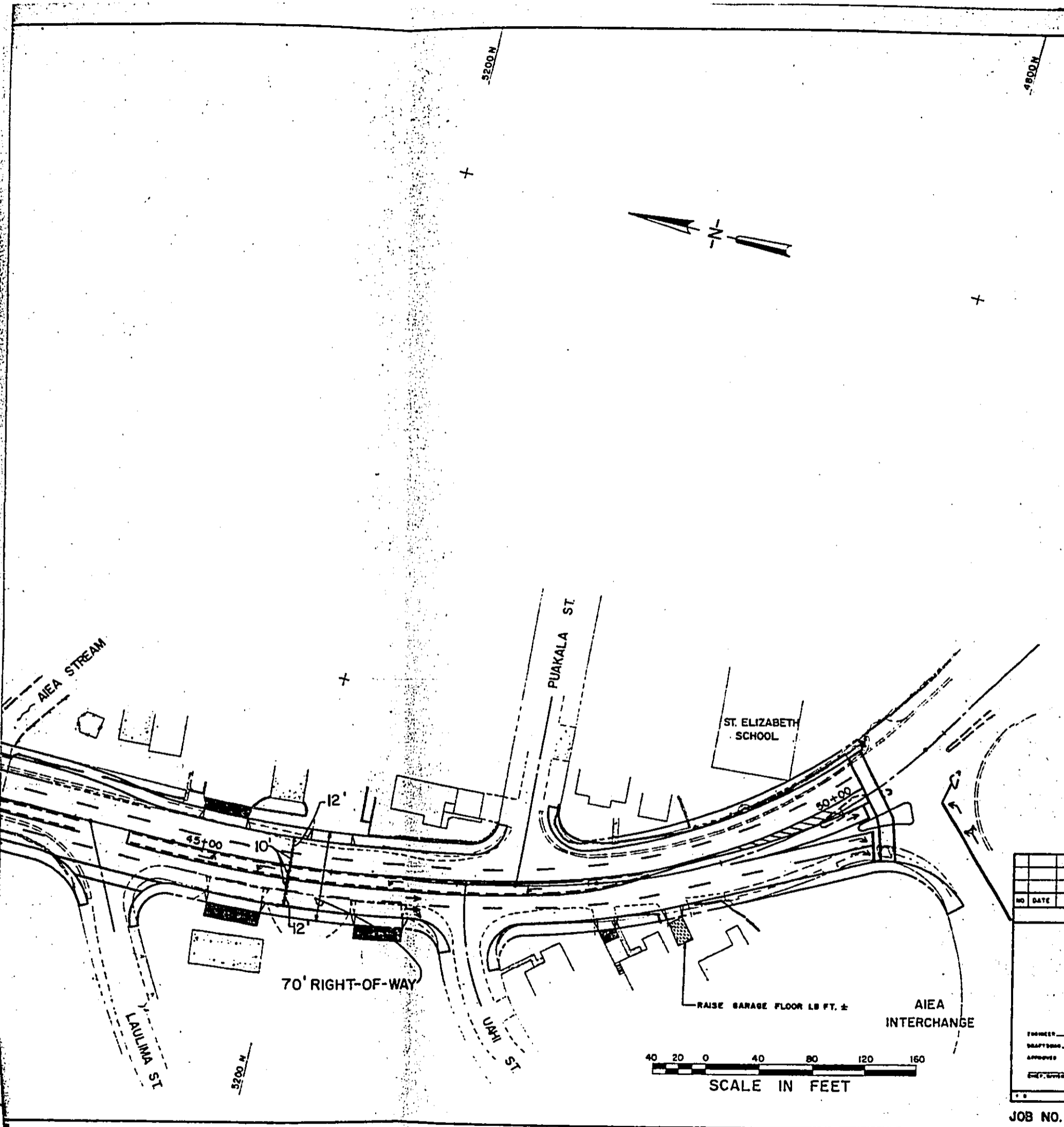
RAISE GARAGE FLOOR 2.5 FT. ±

MATCH LINE - STA. 31 + 50

6400 N

6000

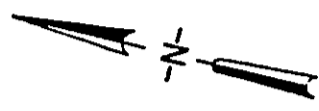




5800 N

5200 N

5200 N



AIEA STREAM

PUAKALA ST.

ST. ELIZABETH SCHOOL

LAULIMA ST.

UAI ST.

70' RIGHT-OF-WAY

RAISE GARAGE FLOOR LB FT. ±

AIEA INTERCHANGE

45+00

50+00

12'

12'

10'



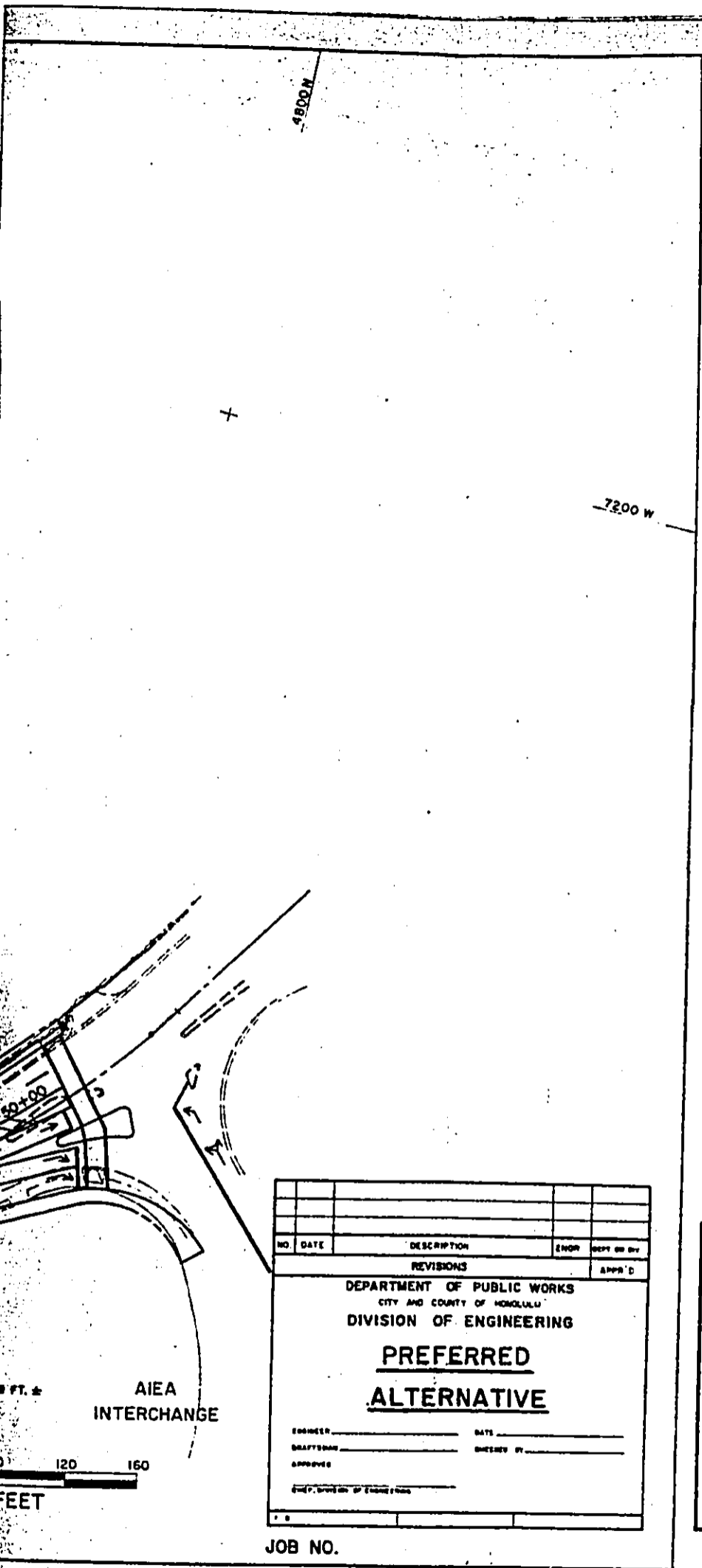
SCALE IN FEET

NO.	DATE

FOUNDER	
DRAFTER	
APPROVED	

JOB NO.

FIGURE 3
PREFERRED ALTERNATIVE



LEGEND

-----	EXISTING R.O.W.
-----	PROPOSED R.O.W.
--- / ---	EXISTING CONDITIONS
--- / ---	PROPOSED IMPROVEMENTS

In commercial areas the sidewalk will consist of an 8-foot wide concrete walkway (including curb width). Drop curbs will be provided at all existing driveways, and wheelchair ramps will be included at all intersections and crosswalks.

The existing bridge structure at Kalauao Stream crossing will have to be demolished. The type of stream structure to replace the existing one will be determined during the final design. The existing Aiea Stream crossing will be widened to accommodate the increased roadway width of the preferred alternative.

A possible replacement for the existing Kalauao Stream bridge is a 28-foot span, 13-foot high, concrete box culvert and increasing its width to 85 feet, with its invert elevation about 1 foot lower than the invert of the existing bridge opening. The transitions upstream and downstream of the bridge will be modified to suit the proposed box culvert.

An alternative to a box culvert would be the replacement of the existing bridge with a new bridge that spans the stream channel. This type of crossing would reduce impacts on the stream channel and minimize potential erosion and sedimentation problems during construction. Alternative stream crossing types will be investigated during the design phase, in conjunction with Corps of Engineers Section 404 Permit Application requirements and preliminary design practice. The investigation will focus on environmental impacts, costs, constructability, and traffic maintenance operations.

Modifications over Aiea Stream will include expansion of the existing Moanalua Road bridge width to about 81 feet with appropriate structural modifications.

The horizontal and vertical alignment of the preferred alternative, as well as the right-of-way requirements, location of bridges, and

access locations (driveways, street intersections, etc.) are illustrated in the attached plans.

Design of the preferred alternative shall be in accordance with the Hawaii Statewide Uniform Design Manual for Streets and Highways, October 1980, and shall be as follows:

1. Classification: Urban Arterial
2. Design Speed: 35 mph desirable, 30 mph minimum.
3. Posted Speed: 25 mph
4. Lane Widths:
 - a. Pali Momi Street to Aiea Heights Drive: 12 feet.
 - b. Aiea Heights Drive to Aiea Interchange: 10 feet.
5. Sidewalk Width: 8 feet.

B. Alternatives

1. No-Action Alternative. With a "no-action" alternative, minor maintenance work to allow continued use of the facility could be expected; this work includes repaving, restriping, and traffic signal timing adjustments. These actions would not improve traffic service levels, since roadway capacities would not be changed.
2. Alternative I. This alternative which primarily consists of TSM type actions, would maximize the utilization of the present facility.
3. Alternative II. Alternative II would upgrade Moanalua Road between Pali Momi Street and Aiea Interchange to a standard City street with a 80-foot right-of-way and a 64-foot width between curb faces.
4. Alternative III. Alternative III considers a reduced roadway width between Kalauao Stream and Aiea Library.

5. Alternative IV. Alternative IV would construct a roadway 54-feet wide, from curb face to curb face.

C. Summary of Alternatives for Proposed Project

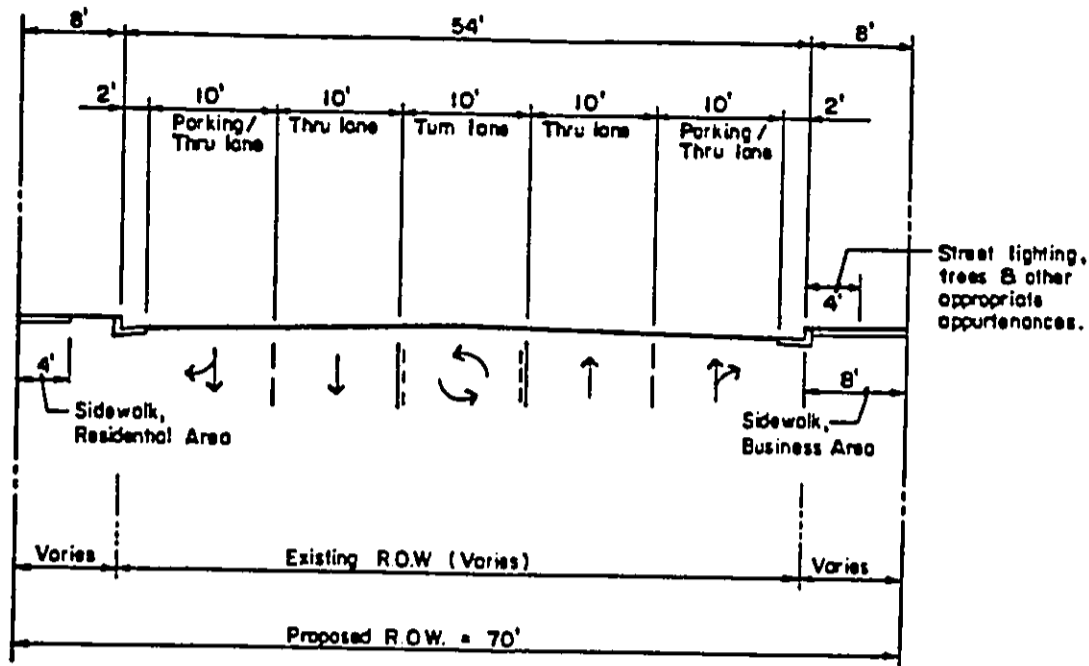
Future conditions without the proposed project are expected to be worse than existing, since current peak period traffic demands already exceed roadway capacities. The alternatives developed range from a "no-action" case to the construction of additional lanes, as listed below:

1. Preferred Alternative - 70-foot and 80-foot roadway (5 lanes). (Figure 4)
2. No-Action Alternative - No build.
3. Alternative I - Transportation System Management actions (through laneage remains the same).
4. Alternative II - 80-foot roadway (64-foot curb-to-curb, 5 lanes). (Figure 5)
5. Alternative III - 70-foot roadway (54-foot curb-to-curb, 4 lanes). (Figure 6)
6. Alternative IV - 70-foot (54-foot curb-to-curb, 5 lanes). (Figure 7)

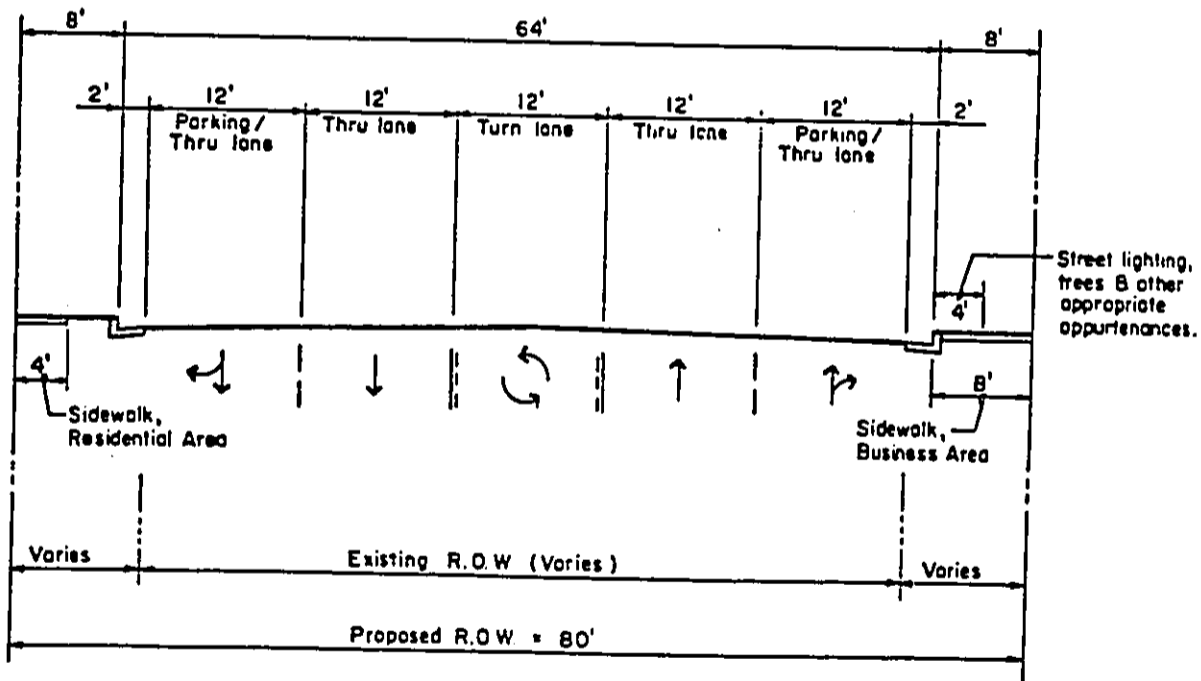
D. Traffic Evaluation of Alternatives for Proposed Project

Roadway capacities and traffic levels of service for urban streets are determined from conditions at major intersections. Within the project limits, these intersections include the Moanalua Road intersections with Honomanu Street, Kaamilo Street, and Aiea Heights Drive. Projections of future (year 2005) traffic demands were used with the Critical Movement Analysis procedure to determine levels of service and capacities.

At the Honomanu Street intersection, the analysis showed that the capacity of an unsignalized intersection would be exceeded in all alternatives and the "no-action" case. In the comparative analysis that follows, signalization of this intersection was assumed in the "no-action" case and in all alternatives.



AIEA HEIGHTS DR. TO AIEA INTERCHANGE



PALI MOMI ST. TO AIEA HEIGHTS DR.

FIGURE 4
TYPICAL SECTION
 PREFERRED ALTERNATIVE

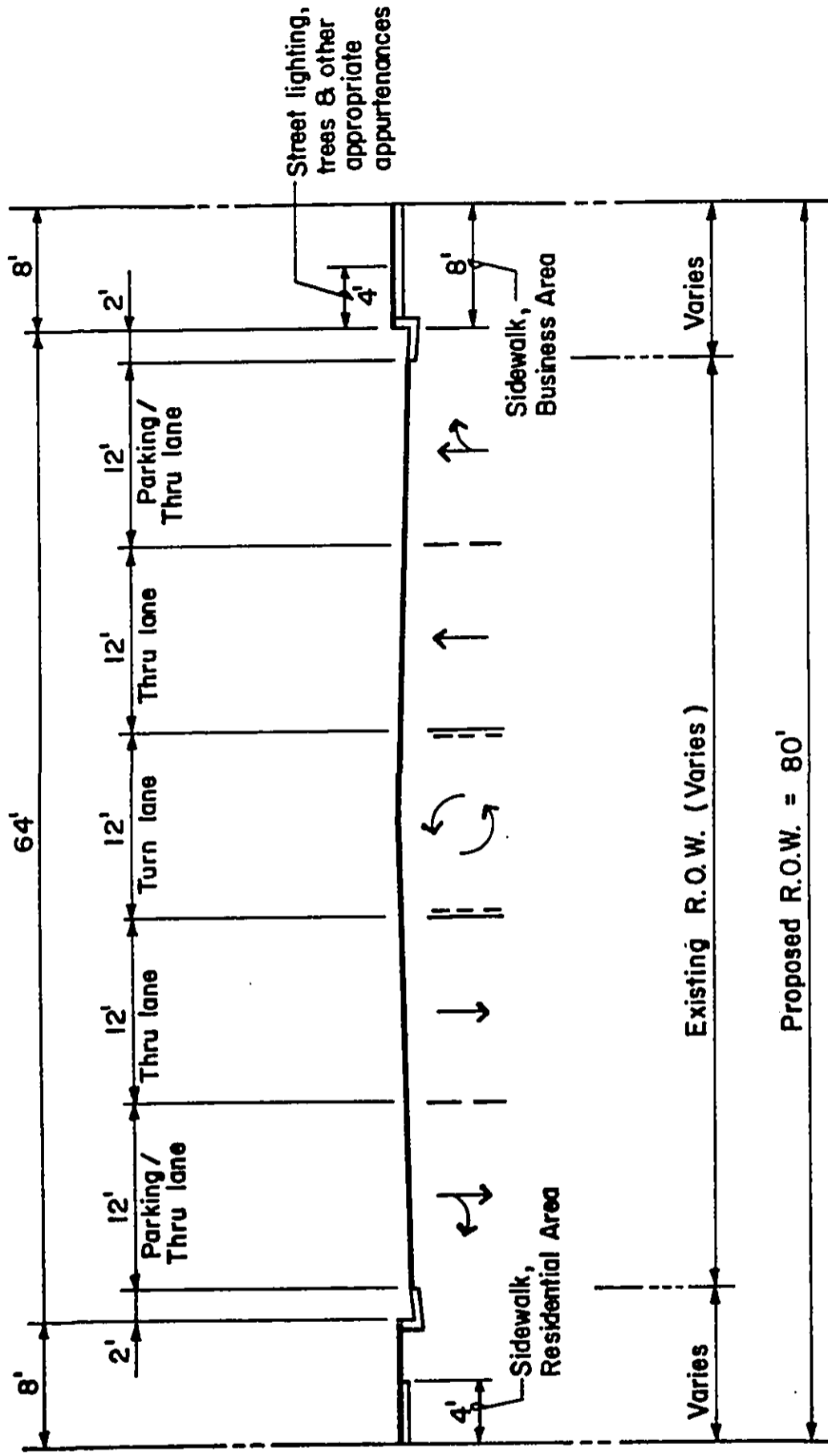


FIGURE 5
TYPICAL SECTION 1
 ALTERNATIVE II

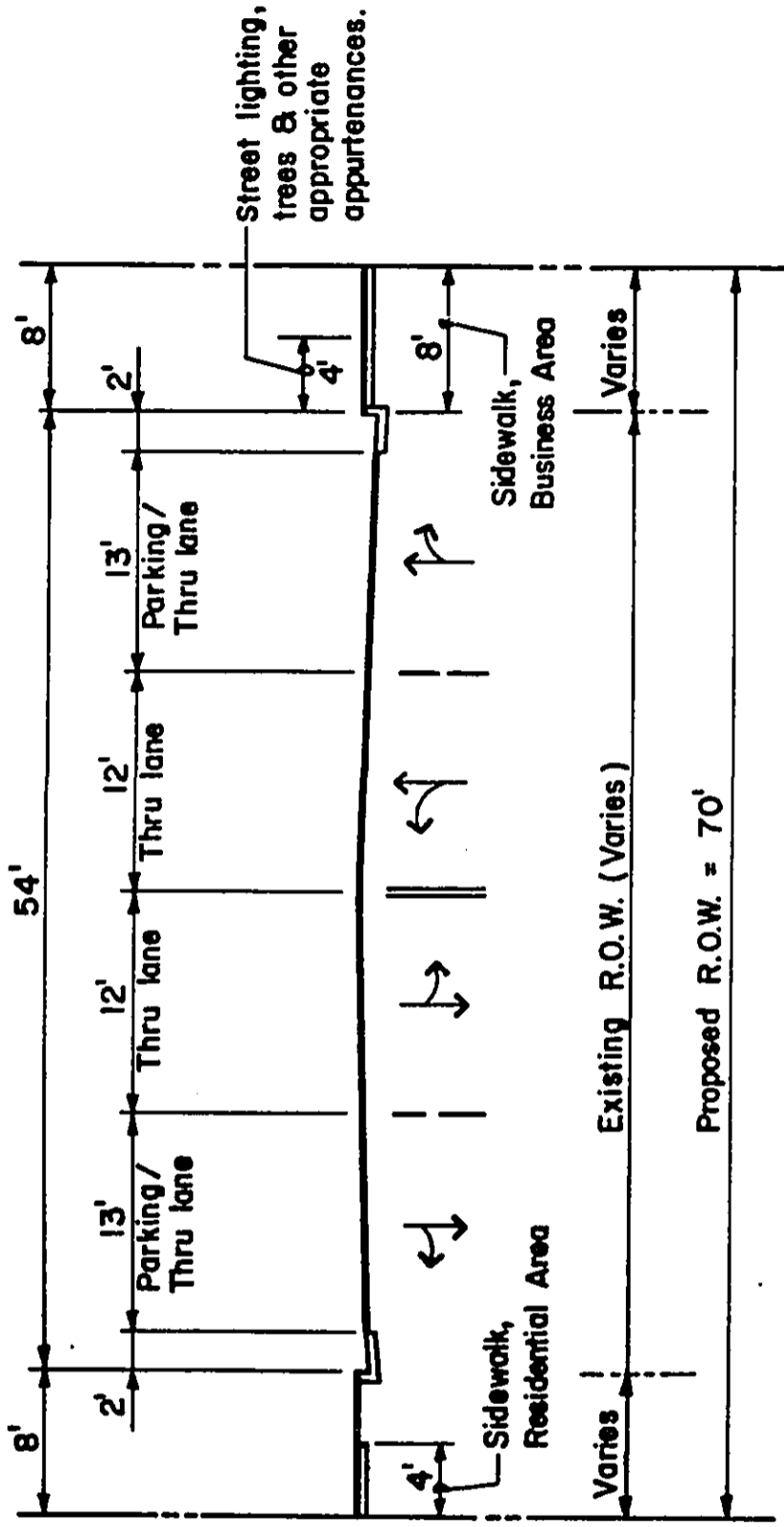


FIGURE 6
TYPICAL SECTION 2

ALTERNATIVE III

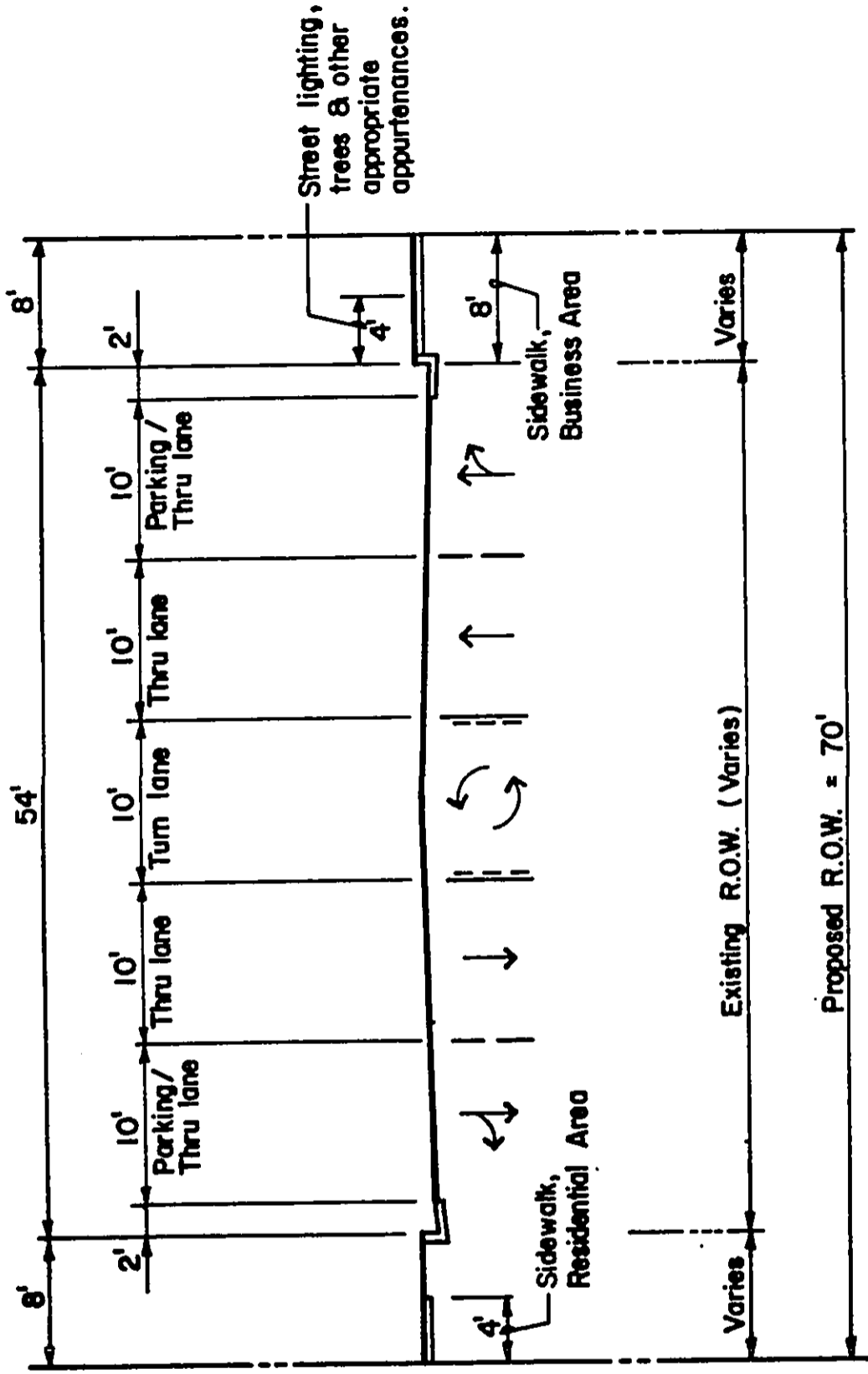


FIGURE 7
TYPICAL SECTION 3

ALTERNATIVE IV

Intersection levels of service were determined for the signalized Moanalua Road intersections at Honomanu Street, Kaamilo Street, and Aiea Heights Drive for morning (AM) and afternoon (PM) peak hour traffic demands and are summarized in Table 2.

In the No-Action and Alternative I analyses, limited capacities at the Honomanu Street and the Kaamilo Street intersections would not be able to serve projected peak hour traffic demands. The limited capacity would probably result in longer peak periods, forced changes in travel modes, or other actions on the part of individual users to lessen peak hour traffic demands. At capacity, the no-action case will be able to serve between 85 and 90 per cent of the projected traffic demand, while Alternative I would serve approximately 90 percent of the demand. Levels of service for the Aiea Heights Drive intersection shown in the table reflect the metering effect of the other intersections.

Alternatives II, III, and IV were analyzed for the projected traffic demands and it was determined that capacities would be adequate.

Levels of service would be appropriate for urban design in all locations except Alternative III, PM peak hour at Aiea Heights Drive. The analyses also indicated that on-street parking could be allowed on the north side (westbound traffic) in the AM peak period between Kaamilo Street and Aiea Library with Alternatives II, III, or IV and on the south side (eastbound traffic) in the PM peak period with Alternatives II or IV.

Other intersections were also checked; the stop controls to Hale Momi Place, Nalopaka Streets and Puakala Street were all found to have adequate capacity to serve expected traffic volumes in and out of those streets.

TABLE 2
TRAFFIC ANALYSIS

Peak Hour Traffic on Moanalua Road at:	<u>Honomanu St.</u> ¹		<u>Kaamilo St.</u>		<u>Aiea Heights Drive</u>	
	<u>AM</u>	<u>PM</u>	<u>AM</u>	<u>PM</u>	<u>AM</u>	<u>PM</u>
Intersection Levels of Service: ²						
Existing (1983)	E	E ³	E	E	C	F ⁴
Future (2005)						
No Build	E* ⁵	E*	D*	E*	D*	D*
Alternative I	E*	E*	C*	E*	E*	E*
Alternative II	D	B	C	D	D	D
Alternative III	C	B	C	C	D	E
Alternative IV	D	B	C	D	C	D
Preferred Alternative	D	B	C	D	C	D

Notes:

- 1 - Honomanu Street intersection analyzed as unsignalized for existing and as signalized for future conditions.
- 2 - As defined by Highway Capacity Manual:
 - Level B - stable conditions; slight restrictions, no delays exceed one cycle.
 - Level C - stable operation continues; greater restriction, but not objectionable.
 - Level D - approaching instability; possible substantial delays during short peaks, periodic clearance of queues.
 - Level E - capacity conditions; long queues and delays of several cycles.
 - Level F - intersection affected by queueing from downstream (ahead).

Levels of service for design (urban): desirable = C, minimum = D

- 3 - Calculation indicates that capacity is exceeded.
- 4 - Volume carried, if not externally affected, would result in Level C.
- 5 - * Indicates that volumes carried are less than projected demand due to limited capacities.

E. Project Schedule and Costs

The projected project schedule and estimated costs are presented in Table 3.

TABLE 3

PROJECT SCHEDULE AND COST

PROJECT SCHEDULE

<u>ITEM</u>	<u>ALT. I</u>	<u>ALT. II/III/IV & PREFERRED</u>
A) Completion of Planning Studies (EIS, Design Approval)	Late 1986	Late 1986
B) Design	1987	1987 - Mid-1988
C) Right-of-Way Acquisition	Mid-1987	Mid-1987
D) Bidding/Contract Award	1987	Mid-1988
E) Construction	Late 1987 -Late 1988	Late 1988 -Late 1990

PROJECT COSTS

<u>ITEM</u>	<u>ALT. I</u>	<u>ALT. II</u>	<u>ALT. III</u>	<u>ALT. IV</u>	<u>PREFERRED</u>
Construction	\$ 908,000	\$ 5,733,000	\$ 5,357,000	\$ 5,305,000	\$ 5,698,000
Preliminary Engineering	120,000	600,000	600,000	600,000	600,000
Right-of-Way Acquisition	<u>130,000</u>	<u>1,056,000</u>	<u>733,000</u>	<u>733,000</u>	<u>957,000</u>
SUBTOTAL	\$ 1,158,000	\$ 7,389,000	\$ 6,690,000	\$ 6,638,000	\$ 7,255,000
Contingency (5%)	<u>58,000</u>	<u>369,000</u>	<u>335,000</u>	<u>332,000</u>	<u>363,000</u>
TOTAL	\$ 1,216,000	\$ 7,758,000	\$ 7,025,000	\$ 6,970,000	\$ 7,618,000

This project is designated as a Federal Urban System project. Funding will be approximately 75% Federal and 25% local with the State and the City and County dividing the local share equally.

< **AFFECTED ENVIRONMENT**

V. AFFECTED ENVIRONMENT

A. Natural Environment

1. Topography

The project terrain varies from flat to rolling, creating steep slopes and sharp curves at several locations. Elevations range from 25 to 85 feet above mean sea level.

2. Geology

East of Pearl Harbor lies a cluster of overlapping tuff cones including Aliamanu, Makalapa, and Salt Lake craters². Near Aiea and within the project area, tuff deposits have well-defined, thin, nearly horizontal bedding, and are probably part of a delta that was growing into Pearl Harbor.

3. Soils³

The existing Moanalua Road right-of-way traverses over soils classified in the Lahaina (Lahaina silty clay, 0 to 3 percent slopes, LaA) Hanalei (Hanalei silty clay, 2 to 6 percent slopes, HnB); Wailua (Wailua stony silty clay, 3 to 8 percent slopes, W1B); and Waipahu (Waipahu silty clay, 0 to 2 percent slopes, W2A and Waipahu silty clay, 6 to 12 percent slopes, W2C) series; and Tropaquepts (TR).

The Lahaina Series consists of well-drained soils. These soils are developed in material weathered from basic igneous rock. They are nearly level to steep. Elevations range from 10 to 1,500 feet. The mean annual soil temperature is 72° F. Lahaina soils are geographically associated with Helemano, Hoolehua, Kahana, Molokai, Pamoia, and Wahiwawa soils.

The Hanalei Series consists of somewhat poorly drained soils. These soils are developed in alluvium derived from basic igneous rock. They are level to gently sloping. Elevations range from nearly sea level to 300 feet. The mean annual soil temperature is 74° F. Hanalei soils are geographically associated with Haleiwa, Hihimanu, Mokuleia, and Pearl Harbor soils.

The Wailua Series consists of moderately well drained soils on alluvial fans. These soils are developed in alluvium, weathered from basic igneous rock. They are nearly level to steep. Elevations range from 10 to 100 feet. The mean annual soil temperature is 73° F. Wailua soils are geographically associated with Honouliuli, Kaena, and Kawaihapai soils.

The Waipahu Series consists of well-drained soils. These soils are developed in old alluvium derived from basic igneous rock. They are nearly level to moderately sloping. Elevations range from nearly sea level to 125 feet. The mean annual soil temperature is 75° F. Waipahu soils are geographically associated with Hanalei, Honouliuli, and Wailua soils.

Tropaquepts are poorly drained soils that are periodically flooded by irrigation in order to grow crops that thrive in water. Elevations range from sea level to 200 feet. These soils have been flooded for varying lengths of time, and soil development differs in degree from place to place. Generally, the surface layer, about 10 inches thick, consists of dark-gray, soft, mucky silt loam. This layer overlies firm to compact silty clay loam, 5 to 10 inches thick, that is mottled with gray, yellow, and brown. The mottled layer overlies friable alluvium.

4. Climatology

Tradewinds (north-easterly) winds predominate 70 percent of the time, at an average velocity of 10.5 mph. Temperature varies between 68 and 80 degrees for the coolest and warmest months, respectively. Mean annual rainfall at Moanalua is approximately 30 inches.²³

5. Hydrology⁴

The Kalauao drainage basin, located about 7 miles Northwest of Honolulu, is one of eight major basins that drain into Pearl Harbor. The basin, which is located in Southern Oahu, has a drainage area of about 3.3 square miles. The basin's configuration is approximately rectangular with a length of about 7 miles and an average width of 1/2 mile. Elevations in the basin range from Mean sea level along the coast to over 2600 feet at the crest of the Koolau Range and average annual precipitation ranges from less than 30 inches in the low coastal areas to over 150 inches at the crest. The major land use in the basin is forest reserve, which includes about 70 percent of the land area, while the remaining land area is used for residential, apartment, commercial, and agricultural purposes. The two major hydrologic features of this basin are Kalauao Stream and Kalauao Springs. The Kalauao Springs are the result of cracks which occur in the thin alluvial layer immediately overlying the Koolau basalt. This feature is characteristic of the geology of the Pearl Harbor region, and numerous springs are present along the periphery of the harbor. The second major hydrologic feature of this basin is Kalauao Stream, which derives its natural discharge from both overland and groundwater sources. The overland flow originates as direct runoff from rainfall. The groundwater flow occurs as springs where the basal water table is intersected by topographic lows. Inasmuch as quantities of rainfall that are sufficient to sustain base flow occur only in the

mountains, and since the basal water table is intersected only in the coastal plain, Kalauao Stream is observed to be perennial in the upper elevations above approximately 750 feet, and in the lower elevations below about 30 feet. Moanalua Road, within the project boundaries, is located at an elevation of approximately 30 feet.

The water quality of the stream has been reported by Tenorio et. al⁵, and the U.S. Geological Survey⁶. From the data available, water samples included nitrates, phosphates, hardness, dissolved solids, PH, temperature, turbidity, alkalinity, and numerous other metallic and non-metallic materials. According to its' existing water quality, Kalauao Stream could be considered to be consistent with its Class 2 designation for most of the time.

The Aiea Stream also flows through Moanalua Road. The Aiea Streams's watershed is situated on the lower leeward slopes of the Koolau Mountains between Halawa Stream on the southeast and Kalauao Stream on the northwest. The watershed is approximately 4 miles long and averages 1/2 mile wide; the total area is approximately 1,250 acres (1.95 mi²). The Aiea Stream watershed has two major sub-basins which join just below Moanalua Road. The west basin drains approximately 370 acres and the east basin drains 880 acres. Figure 8 presents the locations of the Kalauao and Aiea streams relative to the project.

Existing water quality of the Aiea stream is being affected by the discharges from the C&H Refinery. The Refinery at Aiea takes in raw sugar and processes it by filtering and boiling to remove the impurities. The processed effluents are then discharged into the stream. Conversations with C&H Refinery has indicated that a National Pollution Discharge Elimination System (NPDES) permit, which places restrictions on the discharge of biochemical oxygen demand, total suspended solids, temperature, PH, and floatable solids and foam was obtained, and that present water quality is within standards allowable by the permit.⁷

6. Flora

The Moanalua Road alignment traverses through an existing residential community. Therefore, the flora species located within the area are common in urbanized regions and include trees, shrubs, and other ornamental plants. These plants have been planted and maintained by man's efforts and are not considered indigenous or rare.

7. Fauna

During the Early Coordination and Consultation Period for the project, conversation with the U.S. Fish & Wildlife Service indicated that there are no endangered or threatened fauna species in the project area and there are none likely to be listed.

A brief reconnaissance of Aiea Stream was made in conjunction with the Aiea Stream Flood Control Project in 1977, to assess the existing aquatic habitat and to determine what species were present.⁸ According to the reconnaissance, aquatic beetles and snails were found in the upper portions of the stream; while in downstream pools, guppies (family Poeciliidae), crayfish (Procambarus clarkii), tilapia (Tilapia mossambica), tadpoles, and bullfrogs (Rana catesbiana) were observed.

The Fish & Wildlife Service, U.S. Department of the Interior, in their report entitled, "Stream Channel Modification in Hawaii.

Part A: Statewide Inventory of Streams; Habitat Factors and Associated Biota," surveyed Kalauao Stream.⁹ Their survey indicated that the following native species, Awaous genivittatus and Eleotris sandwicensis, and exotic species, clarias fuscus, Misgurnus anguillicaudatus, Poecilia mexicana, Poecilia reticulata, and Xiphophorus helleri were found.

8. Archaeological Sites

The State Department of Land and Natural Resources (State Historic Preservation Officer) have indicated that there are no properties within the project limits listed in the National Register of Historic Places, however, a few plantation homes outside the project limits have been determined to be eligible for inclusion in the Register.

9. Visual

The project terrain varies from flat to hilly and is characterized by steep slopes and sharp curves at several locations.

10. Ambient Air Quality

A technical document entitled "Air Quality Assessment for Moanalua Road" was prepared by Barry D. Root, Air Pollution Consultant, for this project and is included in this document as Appendix A and is summarized as follows:

Applicable State and Federal ambient Air Quality Standards (AQS) are summarized in Table 4. Measurements of air pollutant concentrations at the nearest long-term monitoring stations are shown in Table 5. From the data presented, it appears that the levels of all monitored pollutants have been within Federal limits during the past seven years, but that levels of particulates, carbon monoxide, and ozone have sometimes exceeded allowable State AQS.

11. Ambient Noise Quality

Existing traffic noise along Moanalua Road was measured at eleven locations (receptor locations in Appendix B) during the week of August 27, 1983 for the purpose of calibrating the traffic noise model used in generating the Base Year and

TABLE 4

SUMMARY OF HAWAII AND NATIONAL AMBIENT AIR QUALITY STANDARDS
(Micrograms per Cubic Meter)

POLLUTANT	SAMPLING PERIOD	AMBIENT AIR QUALITY STANDARDS		
		NATIONAL		HAWAII
		Primary	Secondary	
Particulates	Annual Geometric Mean	75	60	--
	Annual Arithmetic Mean	--	--	55
	Maximum 24-Hour Average	260	150	100
Sulfur Dioxide	Annual Arithmetic Mean	80	--	20
	Maximum 24-Hour Average	365	--	80
	Maximum 3-Hour Average		1300	400
Nitrogen Dioxide	Annual Arithmetic Mean		100	70
Ozone	Maximum 1-Hour Average		240	100
Carbon Monoxide	Maximum 8-Hour Average		10	5
	Maximum 1-Hour Average		40	10
Lead	Calendar Quarter		1.5	1.5

- Notes: 1. Carbon Monoxide Standards are in milligrams per cubic meter.
2. National Standards based on 40 CFR Part 50; Hawaii Standards based on Title 11, Administrative Rules, Chapter 59.

TABLE 5

SUMMARY OF AIR POLLUTANT MEASUREMENTS AT NEAREST MONITORING STATIONS

POLLUTANT	1976	1977	1978	1979	1980	1981	1982
PARTICULATE MATTER							
No. of Samples	71	54	60	58	60	59	53
Range of Values	16-83	22-111	20-81	20-48	22-93	19-71	19-54
Average Value	41	40	37	33	36	34	31
No. of Times							
State AQS Exceeded	0	1	0	0	0	0	0
SULFUR DIOXIDE							
No. of Samples	72	52	58	56	52	56	43
Range of Values	5-50	5-38	5-74	5-63	5-15	5- 5	5-10
Average Value	5	5	15	10	5	5	5
No. of Times							
State AQS Exceeded	0	0	0	0	0	0	0
CARBON MONOXIDE							
No. of Samples	355	359	365	207		286	311
Range of Values	.5-24.2	0-19.6	0-20.7	0-17.3		1.2-13.8	0-4.6
Average Value	5.4	3.5	3.1	2.9		5.1	1.2
No. of Times							
State AQS Exceeded	41	22	19	10		13	0
OXIDANT (OZONE)							
No. of Samples	322	300	284	338	295	314	335
Range of Values	2-127	4-61	10-84	10-80	10-84	10-104	0-151
Average Value	40	25	33	39	48	37	32
No. of Times							
State AQS Exceeded	1	0	0	0	0	1	2
NITROGEN DIOXIDE							
No. of Samples	22					46	
Range of Values	11-44					6-77	
Average Value	27					25	
No. of Times							
State AQS Exceeded	0					0	

NOTES: See text for locations of monitoring stations. Carbon monoxide reported in milligrams per cubic meter; other pollutants in micrograms per cubic meter. Carbon monoxide and ozone readings are daily peak one hour values; other pollutant values are for a 24 hour sampling period.

SOURCE: State of Hawaii Department of Health

representative Future Year traffic noise contours. These measurements are provided in this report as Appendix B, "Acoustic Study for the Moanalua Road Project," and was prepared by Darby-Ebisu & Associates, Inc., Acoustical Consultants.

It was found that existing traffic noise at noise sensitive receptors along Moanalua Road are below 70 Leq(h). These noise sensitive receptors include single family residences, Aiea Library, St. Elizabeth Church school, Alvah Scott Elementary School, Seventh Day Adventist Church, and Bethany Assembly of God Church. Along all sections of Moanalua Road west of Aiea Heights Drive, traffic noise levels at noise sensitive receptors are at or below 65 Leq(h), and are within the federal criteria for traffic noise. East of Aiea Heights Drive, single family residences are currently exposed to slightly higher traffic noise levels of 65 to 67 Leq(h). Therefore, current ambient noise quality was found to be within federal standards.

B. Social Environment

1. Population¹⁰

Between the years 1970 and 1980, the population in Aiea increased 21.6 percent. This increase is below the 25.3 percent increase for the state and slightly higher than the 20.9 percent increase for the City & County of Honolulu. The neighboring Pearl City population increased by 55.4 percent. Table 6 presents the population trends between 1970 and 1980.

2. Housing, Cultural Aspects, Public Institutions, Neighborhoods, and Community Facilities

The Moanalua Road alignment traverses the existing Aiea community. Residential sites in the area consist primarily of older single-family dwellings. A cluster of commercial

TABLE 6
CENSUS POPULATION COUNTS

<u>Location</u>	<u>Resident Population</u>		<u>Percent Change</u>
	<u>1970</u>	<u>1980</u>	
State of Hawaii	769,913	964,691	25.3
City & County of Honolulu	630,497	762,534	20.9
Aiea*	34,192	43,610	21.6
Pearl City**	27,398	42,575	55.4

* Includes Aiea, Foster Village, Halawa Heights, and Waimalu.
Census tracts 0074, 0074.99, 0075.01, 0075.02, 0075.03, 0076, 0077.01,
0077.02, and 0078.02.

Census tract 0074.99 consist of persons living aboard vessels anchored off
tract 0074 in Pearl Harbor.

** Census tracts 0078.01, 0080.01, 0080.02, 0080.02, 0080.03, 0080.05, 0080.06,
0080.07 and 0081.

establishments, consisting of banks, gas stations, markets, stores, shops and restaurants are found around the Aiea Heights Drive-Moanalua Road intersection at the Aiea Shopping Center. Commercial and retail uses are also located at the Pearlridge Shopping Center. Other distinctive sites within the project area include St. Elizabeth's Church and School, Alvah A. Scott Elementary School, Our Savior Lutheran Church and School, the Aiea Library, the Bethany Assembly of God, the Seventh Day Adventist Church and the Hawaiian Electric Kaonohi Substation. Camp H.M. Smith and McGrew Pt. Naval Housing are also located in the general vicinity of the project site. Figure 8 presents the locations of these sites.

3. Fire Protection

The Aiea and Moanalua Fire Stations are located in close proximity to the Moanalua Road project boundaries.

A notice of construction will be sent to the Fire Department's Fire Alarm Bureau, so they may prepare response routes should an emergency incident occur in the area during construction.

4. Police Protection

The Pearl City Station provides primary police protection to the project area.

5. Public and Private Educational Facilities

The St. Elizabeth's Church and School, Alvah Scott and Aiea Elementary, Our Savior Lutheran School, Aiea Intermediate, and Aiea High Schools are located in the general vicinity of the project. Both Alvah Scott and Our Savior Lutheran schools lie in the immediate project area.

The projected fall enrollments for these schools are 750, 440, 350, 860 and 1600 respectively.

Design of the roadway improvements would provide safe and easy vehicular and pedestrian accesses to the Alvah Scott and Aiea Elementary Schools.

The Alvah Scott Elementary and Aiea High Schools are both serviced by school buses, six buses at Alvah Scott and ten buses at Aiea High. Existing access roadways will have sufficient width to accommodate the turning radii of these buses.

6. Recreational Facilities

Several parks and playgrounds are located in the near vicinity of the project area, including the Aiea Recreation Center, Pearl Harbor Park, Halawa District Park, and Moanalua Pool.

C. Economic Setting

1. Labor Force, Industry, and Services

Aiea's census data indicates that only 58.9 percent of persons 16 years and older are currently employed (Table 7). The majority of the employed are in technical sales and administrative support occupations, while only a small percent are in farming, forestry, and fishing occupations. Pearl Harbor Shipyard and Supply Center is a major employment center near the project area.

2. Income

The 1980 census reports that Aiea's median income and mean income per family are \$27,665 and \$30,107, respectively. Median and mean incomes for the Honolulu SMSA are \$23,554 and \$27,318. Per capita income for the Aiea population was \$8,734 in 1980.

TABLE 7
LABOR FORCE AND OCCUPATIONS¹¹

	Aiea		Honolulu SMSA	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Persons 16 Years and Over	25,269		574,903	
Employed Persons 16 Years and Over	14,874	58.9	324,113	56.4
Managerial and Professional Specialty Occupations	3,682	24.8	79,934	24.7
Technical Sales and Administrative Support Occupations	5,518	37.1	109,521	33.8
Service Occupations	2,151	14.5	56,939	17.6
Farming, Forestry, and Fishing Occupations	162	1.1	5,838	1.8
Precision Production, Craft, and Repair Occupations	1,951	13.1	36,546	11.3
Operators, Fabricators, and Laborers	1,410	9.5	35,335	10.9

D. Physical Setting

1. Potable Water System

The water distribution system within the roadway consists of 8- and 36-inch lines. The proposed installation of an additional 36-inch water main by City & County of Honolulu Board of Water Supply (BWS) will be coordinated with the roadway improvements.

2. Sewer System

Sewer lines are located below the existing roadway along the entire length of the proposed project.

3. Drainage System

Two streams, Kalauao and Aiea Stream are crossed by existing Moanalua Road, within the limits of the proposed project.

The Kalauao Stream crossing consists of a concrete bridge which spans 35 feet on full height abutments. Upstream and downstream of the bridge are low sections of CRM walls which line the east side of the channel for short distances. The remainder of the existing stream channel is overgrown and appears unimproved.

The Aiea Stream crossing is a short, concrete arch type bridge which has previously been widened with concrete girders. The bridge spans a 24-foot wide rectangular, concrete channel which extends upstream and downstream of the project site.

In the existing four-lane section, between Aiea Heights Drive and Aiea Interchange, storm runoff is intercepted by

curbside catch basins and piped to a large drainage culvert and Aiea Stream channel.

In the two-lane section, a lined drainage ditch carries storm runoff above grade and parallel to Moanalua Road between Kaamilo Street and Hale Momi Place, then empties into Kalauao Stream. Runoff collected by an open concrete channel, on the mauka side of Moanalua Road between Heleconia Street and Lilikoi Place, is routed under Moanalua Road via a 12' x 6' box culvert and discharges into Aiea Stream. The remainder of the two-lane section has no system for collecting storm runoff. The drainage is allowed to flow on the roadway and across the roadway transversely, and eventually finds a way to enter Kalauao or Aiea Stream. Steep transverse roadway grades and steep lateral grades on each side of the corridor, which drain towards Pearl Harbor, are the likely reason why no flooding problems have been reported in the area.

4. Gas System

Gas Company distribution lines include 4- and 16-inch pipelines along Moanalua Road from Aiea Interchange to Aiea Heights Drive.

5. Telephone System

Both underground and aerial communications lines are present along Moanalua Road.

6. Electrical System

The Hawaiian Electric Company (HECO) has installed pole mounted aerial transmission lines along the existing roadway. The aerial lines capacities are 12, 46, and 138 kilovolts. The HECO Kaonohi Substation is located along Moanalua Road between

the Hale Momi Place and Honomanu Street intersections. The high voltage (138 kv) transmission lines were installed in the 1960s with temporary wood poles within the project limits in recognition of the possibility of widening the roadway. Permanent steel poles were used in other areas which would be unaffected by the widening.

E. Planning Process

1. City and County of Honolulu General Plan¹². The General Plan for the City and County of Honolulu, a requirement of the City Charter, is a written commitment by the City and County government to a future for the Island of Oahu which it considers desirable and attainable. The proposed project is in compliance with the following City and County of Honolulu General Plan Objectives and Policies:

"To create a transportation system which will enable people and goods to move safely, efficiently, and at a reasonable cost....." (Transportation and Utilities; Objective A)

"Improve roads in existing communities to reduce congestion and eliminate unsafe conditions." (Transportation and Utilities; Objective A; Policy 5)

"Consider both environmental impact as well as construction and operating costs as important factors in planning alternative modes of transportation." (Transportation and Utilities; Objective A; Policy 6)

2. City and County of Honolulu Development Plan¹³. Development Plans, according to the Revised Charter of 1973, are relatively detailed guidelines for the physical development of the island. They are an intermediate means of implementing the objectives and policies of the General Plan. They are also meant to indicate the sequence in which development will occur.

Moanalua Road within the project boundaries, is located in the Primary Urban Center (PUC) Development Plan (DP) district. The DP Public Facilities Map indicates that the roadway between Kalauao Stream and the Aiea Interchange be improved within the existing right-of-way and that funding be provided within two to six years. The map also shows that additional right-of-way will be necessary for roadway improvements between Kalauao Stream and Alvah Scott Elementary School and between Laulima Street and Aiea Interchange.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

VI ENVIRONMENTAL CONSEQUENCES

VI. ENVIRONMENTAL CONSEQUENCES

The discussions of impacts in the following sections are based on the preferred alternative.

A. Urban and Community Impacts

1. Social and Economic Impacts

There will be benefits to be derived by all users of this section of Moanalua Road and by the community itself. Moanalua Road, between Kaluauo Stream and the Aiea Interchange, is currently substandard and is inadequate in accommodating the increased traffic volume generated by adjacent residential and commercial developments. The project will improve the existing Moanalua Road, thereby, reducing traffic congestion and hazards and increasing pedestrian safety. Wheelchair ramps will also be constructed for handicapped persons at all crosswalks.

It is anticipated that the proposed action, along a route which is not used extensively as a pedestrian thoroughfare, will have either minimal or no impact to the following social variables: neighborhood splitting, isolation of a distinct ethnic group, introduction of new developments, change in property values, change in school districts, and reduction of recreational resources. Additionally, specific social groups, including the elderly, handicapped, nondrivers, transit dependents, and minorities should not be impacted more than the rest of the community. The children will be provided safer pedestrian movement to Alvah Scott School, due to the provision of improved sidewalks.

Short-term economic gain is anticipated overall should the project be implemented. Although this will be of short duration, the

project will create work for the construction industry, service industries, and suppliers of construction materials. Further, there will be an infusion of cash into the local economy resulting from increased tax revenue accrued from the sale of supplies. There should be then, an increase in public expenditures, employment opportunities, accessibility, retail sales, and availability of retail goods and services. This overall economic gain will, however, be partially offset by some loss of business during peak hour restricted parking schedules. Pete's Taxi Stand will also be displaced. However, the project should have no effect on the partial distribution of development.

At this time, there are no known public or private plans for development within the project limits.

The Aiea Shopping Center is located near the eastern boundary point of the roadway. Pearl Ridge Shopping Center is located at the western boundary of the project.

During construction, accessibility to both shopping centers will be negatively impacted; however, upon completion, accessibility would improve to a level better than existing conditions.

2. Relocation Impacts

The City & County of Honolulu Department of Housing and Community Development (DHCD) prepared the "Conceptual Stage Relocation Program Plan" for the proposed project. The study, which is included in this report as Appendix C, basically discussed the availability of replacement housing, impacts on the community and relocation payments. DHCD found that the preferred alternative will cause the displacement of one residence. The displacement of only one house will have little sociological or economic impact upon the community. All efforts

will be made to provide this home owner with a replacement residence that is fee simple and is located in the Aiea, Pearl City, or Waipahu areas. This cost would be covered by the Department of Public Works, City and County of Honolulu.

Federal law provides for the payment of moving expenses and replacement housing payments to all residential tenants or owner-occupants. However, due to the high cost of housing in Hawaii, benefit maximums mandated by Federal laws may not be sufficient to accommodate the satisfactory relocation of the residence being displaced. Should this occur, alternatives presented under the Housing of Last Resort can be utilized. Reference to Appendix C will provide further discussion on these alternatives and presents a tabulation of replacement housing sales within the Aiea, Pearl City, and Waipahu areas.

3. Land Use Impacts

The project proposes the improvement of a closure gap to complete Moanalua Road. No induced or joint development is expected to result, since the area is already currently developed. The project is consistent with the following Federal, State, and County plans and regulations:

- a. State Land Use District Boundaries. The State Land Use Designation is "urban" along the entire roadway.
- b. State Transportation Plan¹⁴. Chapter 279 A, HRS, required the Department of Transportation to prepare a new Statewide Transportation Plan. Chapter 279 A, HRS required the plan to be directed "toward the ultimate development of a balanced, multi-modal statewide transportation system that services clearly identified social, economic and environmental objectives." The proposed project is in conformance with several policy statements regarding the "Statewide Highway System," a

separate program, specifically discussed in the State Transportation Plan. These policy statements include:

"Develop and Update Highway Master Plans which serve statewide needs relating to the efficient, safe, and convenient movement of people and goods within Hawaii." (Objective C)

"Promote the planning for and improvement of the primary, secondary, and urban highway and street systems consistent with state and county plans to control growth." (Objective C, Policy C (3))

"Improve safety on state and county highways and streets," (Objective C, Policy C (3), Implementing Action C (3) (b))

- c. City and County of Honolulu Zoning. The areas surrounding the project boundaries are comprised of lands zoned residential and business. The residential zoning is primarily comprised of R-4, R-5, and R-6 designations (Figure 9).

4. Considerations Relating to Pedestrians and Bicyclists

- a. Relationship of the Project to Local Plans for Bicycles and Pedestrian Facilities. The State Transportation Plan and County General Plan provide specific policies relating to bikeways and pedestrian safety.

"Improve vehicular and pedestrian safety on State and County highways and streets." (State Transportation Plan; Policy C (3); Implementing Action (b))

"Develop a bikeway system along state highways and county roads to promote low use energy alternative transportation statewide." (State Transportation Plan; E (1); Implementing Action (b))

"Develop and maintain an integrated ground transportation system consisting of the following elements and their primary purposes: Bikeways for recreational activities and trips to work, schools, shopping centers, and community facilities; and Pedestrian walkways-for getting around Downtown and Waikiki, and for trips to schools, parks, and shopping centers." (General Plan; Objectives A; Policy 1)

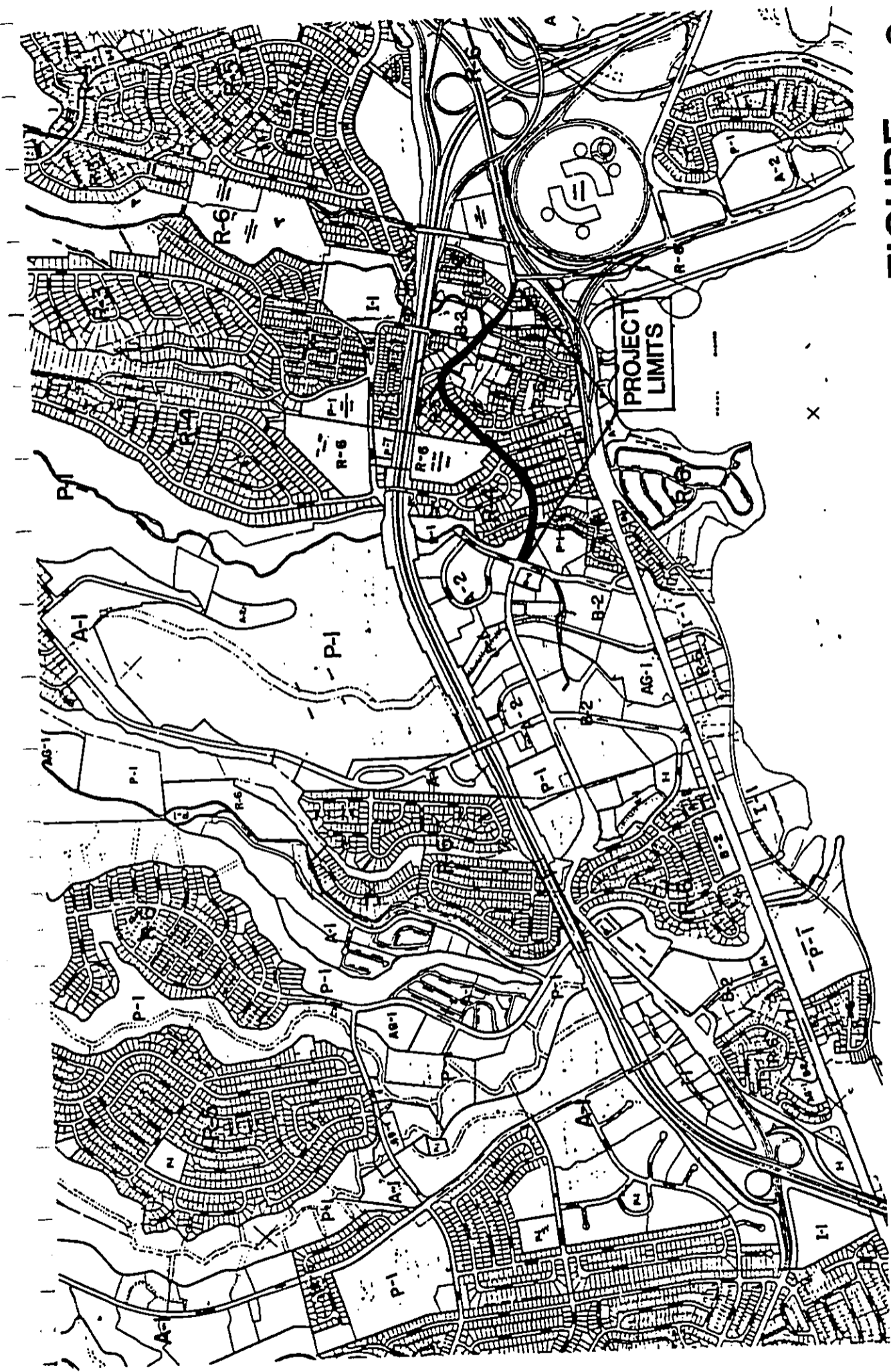


FIGURE 9
ZONING MAP

NOT TO SCALE

The preferred alternative will improve sidewalks to City standards. In residential areas, a four-foot wide concrete sidewalk and a three-and-a-half-foot planting and utility strip would be provided. In business areas, the entire width between curb and right-of-way line would be covered with concrete, creating an eight-foot wide sidewalk. Landscaping in the form of trees in tree wells within the sidewalk area, will be provided in conformance with the City's standards.

Four-foot wide standard City sidewalks would be provided on each side of the realigned roadway. Improvements to the sidewalks will provide for better pedestrian safety for the Alvah Scott School students.

Wheelchair ramps will be constructed at crosswalks and signalized intersections. Pedestrian signals and actuation buttons, if necessary, would be provided. Preliminary investigations do not indicate a need for pedestrian overpasses at any location.

Another State document, The State Bikeway Master Plan¹⁵ indicates that Moanalua Road within the project's limits should have bikelanes. Marked bikelanes have been considered in the development of the project, but have not been included because of several considerations. The project's roadway width is limited and marked bikelanes would take the space of the traffic lane. Additionally, on-street parking during off-peak hours may be allowed in certain areas, resulting in poor bikelane location in either the peak or the off-peak condition.

Unmarked bikelanes, in which the lanes nearest the curbs are of sufficient width to accommodate bicycles and larger vehicles, are possible in the preferred alternative where curb lane widths would be 14 feet.

- b. Current and Potential Bicycle and Pedestrian Activity. Current bicycle activity in the project area is limited. Potential bicycle activity generators include the schools, churches, and businesses along and near Moanalua Road. Current pedestrian activity includes school children and their parents in the vicinity of the schools and a broader mix of people in the business area. Senior citizen programs and other activities on church property also generate pedestrian traffic.

Bicycle and pedestrian travel along portions of the project is hazardous due to the existing narrow traffic lanes, substandard roadway curvature, and inadequate sidewalks. Five-year (1978-1982) accident records show a total of eleven traffic accidents involving pedestrians and one accident involving a motorized bicycle.

- c. Construction and Operation Impacts on Bicycling and Walking. During construction, the amount of noise and dust generated, and the number of construction machinery and vehicles on-site would represent a deterrent to pedestrian and bicyclist safety. In an attempt to minimize harm to residents of the community, a notice of the construction would be made public. The contractor will also cone-off the roadway to prevent access, if and when necessary.

During operations of the proposed action, bikelanes, if constructed, would provide a safer pathway for bicyclists. Pedestrian activity will also become safer, since traffic congestion and hazards would be reduced.

- d. Consistency With 23 USC 109 (n)¹⁶. The code reads as follows:

"The Secretary (of Transportation) shall not approve any project under this title that will result in the

severance or destruction of an existing major route for nonmotorized transportation traffic and light motorcycles, unless such project provides a reasonably alternate route or such a route exists."

Since the project will not sever or destroy an existing major route, alternative routes need not be provided.

5. Visual Impacts

The project proposes to improve the existing Moanalua Road within its general right-of-way and roadway alignment. The proposed action then, will not obscure or conflict with existing aesthetic values, and viewplanes from and of the roadway. Landscaping will be provided which will enhance the appearance of the roadway.

B. Physical Impacts

1. Air Quality

The proposed alternative will cause some short-term construction-related air quality impact of a magnitude directly proportional to the scale of the improvement and the amount of construction time required. However, a well timed work site watering program should be effective in controlling fugitive dust emissions.

A study of vehicular carbon monoxide emission rates on Moanalua Road, using the EPA computer model, MOBILE 2, shows that these rates decrease dramatically with increasing vehicular speed. Thus, the more a particular roadway improvement can increase vehicle flow, the lower will be the associated carbon monoxide emissions.

The EPA computer model, HIWAY 2, was used to calculate projected carbon monoxide (CO) concentrations at three intersections (Honomanu Street, Kaamilo Street, and Aiea Heights Drive) for target years 1985, 1995, and 2005 in order to assess the impact of the proposed modifications to Moanalua Road at these locations. Results of the modeling study show that maximum peak and eight hour CO concentrations at these locations are expected to be well within allowable Federal and State AQS even under the worst case of traffic and meteorological conditions considered for both the maximum improvement and the do-nothing alternative. Thus, no roadway improvements are necessary to insure compliance with existing AQS. In general, the maximum proposed improvement will result in lowering future CO concentrations in the project area by less than 1 milligram per cubic meter.

The State of Hawaii Air Pollution Control Implementation Plan is based on the Federal standards. This project is an area where the State implementation plan does not contain any transportation control measures. Therefore, the conformity procedures of 23 CFR 770 do not apply to this project.

It is stressed that the alternatives which have been proposed for consideration in this project are designed primarily to reduce traffic congestion and to improve safety. Any reductions in air pollution levels must be considered merely as desirable by-products of this effort. None of the proposed alternatives has any foreseeable negative air quality impacts.

2. Noise

Short-term noise impacts associated with drainage, sewer, utility, and street widening construction activities will occur as a result of the proposed project. Noise levels of diesel-powered construction equipment typically range from 80 to 90 dB at a distance of 50 feet. Because the proposed right-of-way widths of Moanalua Road are 70 to 80 feet, and because a major portion of the work will occur between the existing curb and the right-of-way, construction equipment will be operated within 30 feet of the walls of existing structures fronting Moanalua Road. Construction noise levels at existing structures will intermittently exceed 85 dB when work is being performed in front of these structures. State Department of Health Regulations currently regulate noise from construction activities under a permit system. Noise levels from construction activities could exceed 95 dB at the project boundary lines. Under current permit procedures, noisy construction activities which exceed 95 dB at the project boundary lines will be restricted to hours between 9:00 AM and 5:30 PM, from Monday through Friday, and excluding certain holidays. These restrictions would minimize construction noise impact on residences and churches, and have generally been successfully applied.

The existing and future traffic noise along Moanalua Road from Kalauao Stream to Aiea Interchange was studied to evaluate potential noise impacts resulting from the road widening project. Noise measurements were obtained, noise contours developed, and noise abatement alternatives evaluated. The Acoustical Study concluded that traffic noise levels under the preferred alternative, traffic noise levels would increase by various amounts. Federal exterior noise abatement criteria would not be exceeded, except at a few residential locations, where the degree exceeded is too small to accurately assess. Existing and future interior noise levels exceed federal and state criteria under conditions of open-windows and natural ventilation.

However, this is a local condition that is not attributable solely to the proposed project.

Noise-sensitive developments along Moanalua Road include single family residences, Aiea Library, St. Elizabeth's Church and School, Alvah Scott Elementary School, Seventh Day Adventist Church, and Bethany Assembly of God Church. Traffic noise impacts occurring from the preferred alternative are predicted to occur in the form of increased exterior noise levels of ranging from 1 to 7 dB. At receptors east of Aiea Heights Drive, future noise levels may exceed Federal Exterior Criteria by 1 dB.

Bethany Assembly of God Church and St. Elizabeth's School may be affected by minor traffic noise increases in the order of 1 Leq Unit. However, interior noise levels within a few classrooms of St. Elizabeth's School are predicted to exceed FHWA interior noise criteria under conditions of natural ventilation. It is recommended that noise mitigation provisions be provided for the affected rooms within this structure. Window air conditioning units in the four affected classrooms would reduce the future noise impacts to a level below the FHWA interior noise criteria, at a total cost of about \$6,000. A six foot high sound attenuation wall is suggested for noise mitigation at the Seventh Day Adventist Church at a cost of \$5,500. All mitigation measures suggested would reduce interior traffic noise levels below the FHWA criteria of 52 Leq for public use structures.

Noise impacts will vary with distance from the roadway centerline. Noise impacts will be greater if the space between the roadway and receptor was open (front yard), than if an intervening structure (wall or building) exists. In cases where residential levels exceed Federal and State criteria; the

report found that these levels would be exceeded by only 1 dB, an amount which is virtually unmeasurable. Mitigation measures that may be taken include barrier walls or air conditioning; however, it should be noted that the relatively small amount of noise impact excess may not require mitigation. At the early stages of design, noise impacts cannot be accurately predicted, therefore, actual impacts and mitigation measures will be assessed and implemented as necessary during later design stages.

3. Energy

A technical document, entitled "Comparative Energy Analysis for Moanalua Road" was prepared for this project by Barry D. Root, Energy Use Consultant. The document, included in this report as Appendix D, evaluates the energy utilization of each of the alternatives and provides discussions on direct and indirect energy uses. Direct energy use results from the increase in traffic volume due to the project, while indirect energy use is associated with the maintenance-related operational costs of the vehicles traveling along Moanalua Road.

Results of the comparative energy analysis are summarized in Table 8. The key assumption of the analysis is that widening Moanalua Road from 2 to 5 lanes will result in significantly decreased traffic congestion within the project area. For the target year considered, 1995, projected traffic volumes per lane indicate that the roadway would be categorized as "congested" for energy usage estimation purposes about 12 hours per day if no action was implemented, while the proposed improvement to 5 lanes would reduce this congested period to about 5 hours

TABLE 8
SUMMARY OF COMPARATIVE ENERGY USE

1995 DAILY EQUIVALENT ENERGY (million BTU)		
PROJECT ALTERNATIVES		
DIRECT ENERGY	NO-ACTION	MAXIMUM IMPROVEMENT
AUTOS/PICKUPS/VANS	136.96	100.62
SIX TIRE TRUCKS	9.36	6.86
COMBO-TRAILER TRUCKS	4.00	2.56
BUSES	5.26	4.42
TOTAL DIRECT	155.58	114.46
INDIRECT ENERGY		
VEHICLE MANUFACTURING	26.13	22.67
VEHICLE MAINTENANCE	52.85	45.87
FACILITY CONSTRUCTION	- 0 -	3.89
FACILITY MAINTENANCE	0.53	1.32
TOTAL INDIRECT	79.51	73.75
TOTAL DAILY ENERGY	235.09	188.21
EQUIVALENT BARRELS OF CRUDE OIL PER DAY	40.5	32.5

per day with an attendant decrease of about one stop per vehicle mile for each of the traffic volume categories considered.

To the extent that these assumptions hold true, there could be a potential energy savings of as much as 20 percent associated with the level of improvement being considered for this project. There are, however, numerous assumptions and estimates included in the energy analysis. The variation about the mean of these assumptions could also be as high as 20 percent in some cases. In spite of difficulties in specifically quantifying the magnitude of energy savings associated with projected improvements to Moanalua Road, the analysis indicates that it is almost certain that the energy savings produced by these proposed improvements will significantly exceed the energy costs of the improvements themselves.

Reference to Appendix D will provide detailed discussions regarding the various assumptions and the methodology utilized in conducting the comparative energy analysis.

4. Wild and Scenic Rivers

Currently, no rivers in the State of Hawaii are identified as a part of the wild and scenic river system.

5. Floodplain Impacts

The flood hazard map for the island of Oahu was prepared as part of the Flood Insurance Study by the U.S. Department of Housing and Urban Development, Federal Insurance Administration. Figure 10 shows the alignment of the portion of Moanalua Road to be improved; Zones A, B and C are delineated for the project area. Most of the improvements to Moanalua Road will not occur in a regulatory floodplain, but rather in an area designated as Zone C, areas of minimal flooding. Other portions

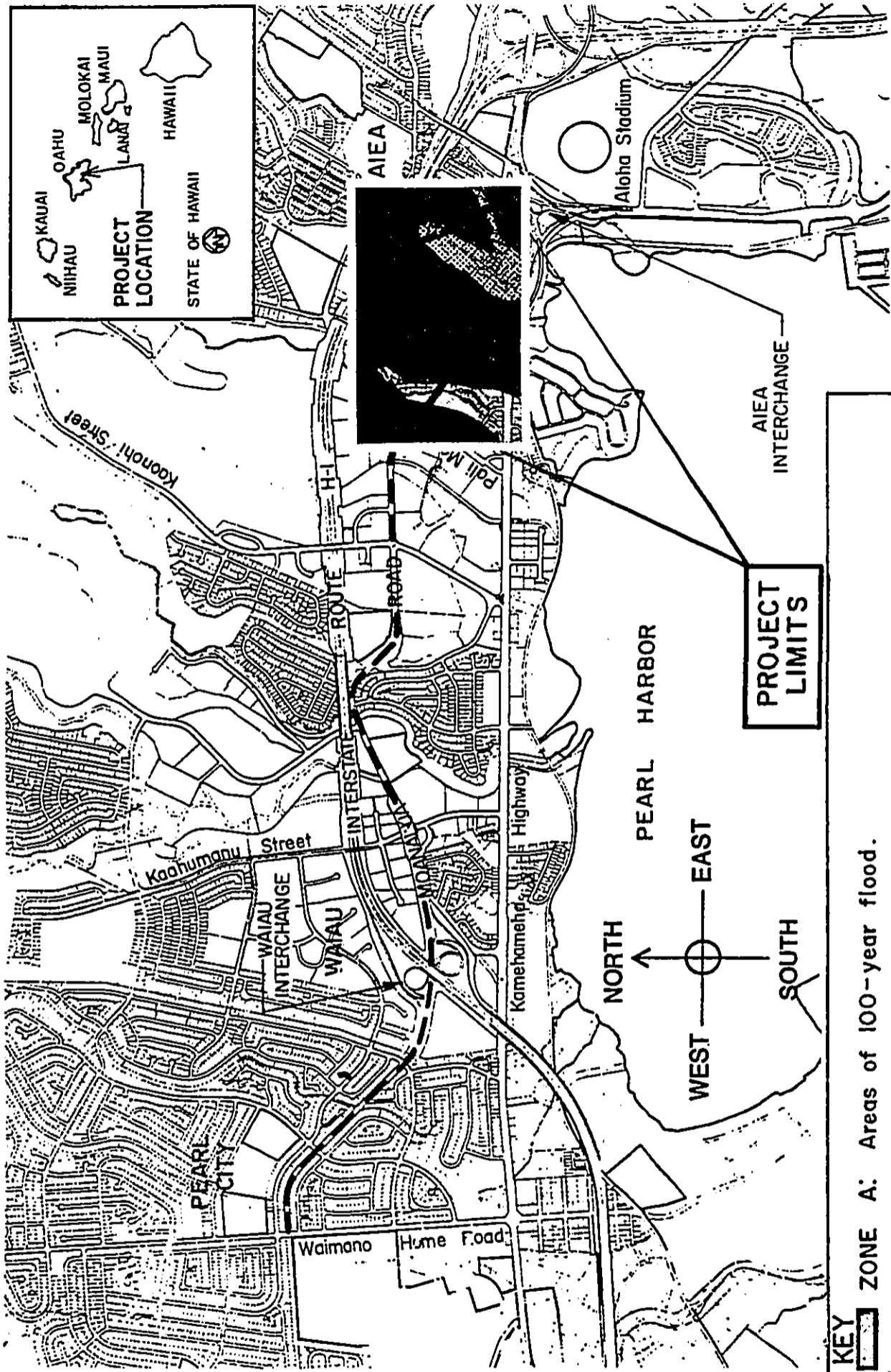


FIGURE 10

100 YEAR FLOOD HAZARD

NOT TO SCALE

of the road alignment are located in flood plain areas of Zone A and Zone B designations, and are subject to riverine flooding from Kalauao and Aiea Streams.

Since the potential for impact on floodplains exists, the project must be consistent with Executive Order (E.O.) 11988, Floodplain Management, dated May 24, 1977. The E.O. states that the project should comply with the "Procedures for Coordinating Highway Encroachments on Floodplains with the Federal Emergency Management Agency (FEMA)." The Hydraulic Study, however, that was prepared for this project reports that no increases in base flood elevation of the stream beds are anticipated and, therefore, is in compliance with E.O. 11988 and FEMA, and any formal coordination with FEMA is unnecessary. It is further anticipated that the project's impact on floodplains would be negligible since no stream modifications are being proposed. Reference to E.O. 11988 and the procedures paper¹⁷ will provide discussions regarding the circumstances which would ordinarily require coordination with FEMA, while the Moanalua Road Hydraulic Study¹⁸ will show that the potential increases in the base flood elevation for the adjacent streams would be below the 1-foot maximum normally allowed.

The Moanalua Road Hydraulic study is an evaluation of the impacts of the proposed modifications to the existing Moanalua Road crossings of Kalauao and Aiea Streams. The study consists of the following:

- a. Estimates of the 50-year and 100-year flood discharges in Kalauao and Aiea Streams based on the results of previous studies and using the City and County method.
- b. Water surface profiles for the above discharges for the existing conditions and the proposed improvements.

Previous studies used include the following:

1. Kalauao Flood Hazard Area, map FP-7, DLNR State of Hawaii, July 1971.
2. The Analysis of the Magnitude and Frequency of Floods on Oahu, Hawaii, U.S.G.S. WRI80-45, June 1980.

Studies were carried out for Kalauao Stream which has more than 27 years of recorded stream flow data. The 50-year and 100-year floods for Aiea Stream were estimated by interpolating the Kalauao Stream flow frequency curve on the basis of drainage areas, and from the general regression equation developed in above Study No. 2. In addition, the City and County Storm Drainage Standards were used to estimate the 50-year and 100-year floods for both streams.

The largest estimated flow values were selected for use in this study as these floods would have the greatest impact on flood water surface elevations and flooding in the project area. The 50-year and 100-year floods used for Kalauao Stream are 4,830 cfs and 5,800 cfs respectively. The peak floods used for Aiea Stream are 3,200 and 4000 cfs.

Flood water surface profiles were prepared for both streams for the existing and proposed conditions and for the 50-year and 100-year floods. For Aiea Stream there is no change in the water surface elevations, and for Kalauao Stream the proposed conditions result in a fairly significant lowering of the water surface elevation in the vicinity of the proposed crossing. The elevation differences are tabulated as follows:

DIFFERENCE IN PROPOSED VS.
EXISTING WATER SURFACE
PROFILES AT KALAUAO STREAM

<u>Location</u>	<u>50-Year Flood</u>	<u>100-Year Flood</u>
50' Upstream	- 3.3'	- 3.7'
10' Upstream	- 5.4'	- 5.7'
10' Downstream	- 1.5'	- 1.0'
50' Downstream	- 1.1'	- 1.0'

The extent of encroachment into the designated flood plain will be minimal and only to the extent of additional width of the right-of-way. The proposed action will improve an existing stream crossing, therefore, it is anticipated that there would be no additional risks associated with implementation of the action and no additional impacts on natural and beneficial floodplain values.

To further ensure that the proposed project would not support incompatible floodplain development, compliance will be made with Ordinance No. 80-62, Relating to Flood Hazard Districts, City and County of Honolulu¹⁹, if appropriate. In summary, the ordinance states "All proposed developments within the General Flood Plain District, shall be subject to review and approval by the Director (of Land Utilization, City and County of Honolulu)." In their submittal to the Director, the following would be included: topographic data, relationship of project to floodway and flood fringe areas as determined by a flood study, drainage report, and profiles of the area and the regulatory flood elevation. Measures to minimize flood plain impacts, and restore and preserve the natural and beneficial flood plain values would subsequently be coordinated with the City. Further, all applicable measures stated in the ordinance itself will be complied with.

The alterations to the bridge structures at Kalauao and Aiea Streams for the preferred alternative will not have any adverse impact on the flood water levels or the flooding problems in these two streams. The existing stream alignments will not be modified and therefore will remain within the existing stream rights-of-way.

6. Coastal Zone Impacts

Portions of the island of Oahu are subject to control by the Hawaii State Coastal Zone Management Program and Chapter 205A, Hawaii Revised Statutes.²⁰ It is the purpose of this program to comply with the requirements of the National Coastal Zone Management Act and "to provide for the effective management, beneficial use, protection, and development of the coastal zones of the several states." Sections 205A-2 and 205A-6 presents objectives and policies of the program. The following discusses those objectives and policies that are directly applicable to this project which lies outside of the Special Management Area. It can be assumed that those objectives and policies not discussed, have no relationship to the proposed action.

"Provide public or private facilities and improvements important to the State's economy in suitable locations." (Section 205A-2 (a) (5) Economic Uses (A))

The proposed action will improve the existing Moanalua Road. The impact resulting from construction of the improvements will provide the state with economical benefits.

"Identify and analyze significant archaeological resources." (Section 205A-6 (c) (2) Historic resources (A))

"Support State goals for protection, restoration, interpretation, and display of historic resources." (Section 205A-6 (c) (2) Historic resources (c))

This Environmental Impact Statement will identify the existence of significant archaeological resources and analyze them, if necessary. If the State Historic Preservation Officer determines any site found to be significant, the project will protect, restore interpret, and/or display the site.

"Develop and communicate adequate information on storm wave, tsunami, flood, erosion, and subsidence hazard"

"Control development in areas subject to storm wave, tsunami, flood, erosion, and subsidence hazard"

"Ensure that developments comply with requirements of the Federal Flood Insurance Program." (Section 205A-6 (c) (6) Coastal hazards (A) (B) (c))

A Coastal Zone Management (CZM) Consistency Determination for the proposed project was issued by the Department of Planning and Economic Development. This determination states that the proposed project complies with the Hawaii Coastal Zone Management Program at this stage of planning. A copy of this consistency statement can be found in Section XV. The CZM Consistency Determination will also be reviewed during the processing and review of the Department of the Army 404 Permit.

The Department of the Army, Corps of Engineers, has provided this project with the revised Flood Insurance Rate Map. The map indicates that portions of the roadway are located in flood plain areas of Zone A and Zone B designations and are subject to riverine flooding. However, the hydraulic study that was prepared for this project has indicated that no substantial increases in base flood elevation are expected and, therefore, no mitigative measures appear to be necessary.

7. Wetland Impacts

Discussions with the U.S. Department of Interior²¹ have indicated that no wetlands exist in the Aiea area which may be impacted by the proposed project.

8. Water Quality and Drainage Impacts

Due to the scope of work and scale of development, the project will not significantly impact the water quality of the adjacent streams or groundwater aquifers.

During construction, potential incidences of erosion and sedimentation may impact the water quality of the streams during a significant storm, resulting in increased nitrogen, phosphorus, and suspended solids. Thus, there exists the potential for the nehu bait fishery located at Pearl Harbor to be impacted. The Aiea and Kalauao Streams discharge into Pearl Harbor and any adverse impacts to the streams would ultimately impact the fishery. However, the potential for impacts to these waters are not anticipated to be high, since erosion and sedimentation problems would arise only during heavy storms and secondly, since all efforts would be made to minimize erosion problems on-site. The impact of construction activities will be mitigated by conforming to strict erosion control measures, including Chapter 23, Grading, Soil, Erosion, and Sediment Control, Revised Ordinances of Honolulu, 1978, as amended; the USDA Soil Conservation Services Erosion and Sediment Control Guide for Hawaii, 1981; and the State Department of Health's Water Quality Standards, Chapter 54, Title 11, Administrative Rules. Approval by the City & County of Honolulu Department of Public Works will be required to ensure proper erosion control. Examples of specific sediment and erosion control measures which may be utilized for this project include temporary and permanent erosion control planting, jute mesh slope protection, rip rap slope protection, gravel filter berms, silt fences, and sediment ponds. Specific designs and locations for such measures will be determined during the design of the project.

The possible occurrence of oil spills may also adversely impact

water quality of the streams. To ensure that this does not happen, no refueling operations will be allowed near stream beds, thus, reducing the chances of fuel and oil being spilled into the streams.

The Corp of Engineers has indicated that a Department of Army permit may be required for any fill or structure at Kalauao Stream.

The project will not alter existing drainage patterns or characteristics and will, in actuality, improve drainage conditions by reducing the amounts of sediment and debris currently found at the project area after storm activities. The existing 12' x 6' box culvert under Moanalua Road between Lilikoi Place and Aiea Stream will remain. Existing curbs and gutters within the project boundaries are either non-existent or too small to adequately intercept storm runoff. The proposed project will improve this situation by providing adequate curbs and gutters which will be able to intercept storm runoff and discharge it into adjacent streams. These improvements should, therefore, reduce the amounts of sediment and debris that maybe transported in the runoff and are normally found within the project area. Currently, storm runoff which goes cross corridor is flowing to the streams at random locations which, due to the flow concentration, could create greater erosion. Reduction of the cross corridor flow would therefore reduce the erosion potential downstream of the corridor.

After construction is completed, potential water quality impacts may result due to the increase in traffic volume and the subsequent increase in surface pollutants, including solids, organics, metals, nutrients, and bacteria. However, since the increase in traffic volume is projected to be only marginal, it is anticipated that the generation of pollutants, too, will be limited, thereby, reducing the project's impact on water quality.

It is also believed that impacts would be further minimized, since EPA approved biocides currently in use for roadside and stream maintenance, that may potentially affect water quality tend to break down more readily in comparison to the more lasting types of a few years ago. Finally, lead concentrations originating from automobiles should be steadily decreasing, since new automobiles have been designed to only utilize unleaded gasoline, which would reduce the output of lead into the environment.²²

9. Threatened or Endangered Species, Native Aquatic Fauna

Since the Moanalua Road alignment traverses through an existing residential community, the existence of any threatened or endangered species of mammals or avifauna appears unlikely. The Fish & Wildlife Service, U.S. Department of Interior, based on their surveys, have indicated through coordination conversations that only native and exotic species of stream biota were found within the Kalauao and Aiea Streams. No threatened or endangered species were observed. The Fish and Wildlife Service has further recommended that a bridge structure for crossing Kalauao Stream be considered because culverts can impede the upstream migration of native aquatic fauna by creating wide, laminar flows. If a bridge cannot be constructed, they recommend a low flow notch be provided in a concrete box culvert. Investigations and studies of alternative structure types during the design phase of the project will include consideration for upstream migration of native aquatic fauna.

10. Prime and Unique Agricultural Lands

The Moanalua Road alignment traverses through an existing urban community. The U.S. Department of Agriculture Soil Conservation Service Soil survey of Oahu indicates that there are no prime or unique agricultural lands in the general vicinity that would be impacted due to the proposed project.

11. Construction Impacts

Impacts resulting from construction related activities are short-term. Minor utility relocations including sewer and water will be required to accommodate the roadway widening, hence service interruptions to businesses and residences along the proposed alignment are anticipated. The contractor will be required to minimize the duration of service interruptions, however, these impacts are unavoidable. Interruptions may be expected throughout the duration of the construction period.

It is anticipated that construction of the proposed project will have some impact on the existing topography. The preferred alternative will impact the existing roadway at varying degrees along the project length. Some flora will be cleared during construction, however, existing vegetation is limited and located only along the roadways adjacent sidewalk areas. Landscaping will be provided in the residential sections of the roadway which will replace the vegetation uprooted during construction. Tree wells will be provided in conformance with City standards.

Fauna may be displaced or frightened away. However, after completion of the project, it is anticipated that the fauna will return for food and shelter in the community.

Since residences and businesses are located within the project area and adjacent to the roadway, some disruption to the community is anticipated during construction. The St. Elizabeth's Church and School, Alvah Scott Elementary School, Aiea Library, Aiea Seventh Day Adventist Church, Bethany Assembly of God, and Our Savior Lutheran Church and School are located adjacent to the roadway right-of-way and dust and noise generated during construction would disrupt their normal operations.

To minimize air pollution, a well timed work site watering program should be effective in controlling fugitive dust. The proposed project will also require construction specifications and compliance with State Department of Health, Rules and Regulations, which stipulate control measures (Section 11-60-5, Fugitive Dust, Chapter 60, Title 11, Air Pollution Control).

There will also be some short term air pollutant emissions from heavy construction vehicles. Many of these vehicles are diesel powered. Diesel engines produce significant amounts of nitrogen dioxide but very little carbon monoxide that is the major concern for this project. The air pollution impact of construction vehicles is expected to be miniscule compared to emissions from vehicles traveling on roadways within the project area.

The contractor will ensure that all construction equipment is in proper operating condition. Further, the project must comply with the provisions of Title 11, Administrative Rules Chapter 43, Community Noise Control for Oahu.

- a. The contractor must obtain a noise permit if the noise levels from the construction activities are expected to exceed the allowable levels of the regulations.
- b. Construction equipment and on-site vehicles or devices requiring exhaust of gas or air must be equipped with mufflers.
- c. The contractor must comply with the conditional use of the permit as specified in the regulations and the conditions issued with the permit. This includes minimizing noise impacts on classroom activities when operating near all schools along the project route.

Traffic noise from heavy vehicles traveling to and from the

construction site must be minimized in residential areas and must comply with the provisions of Title 11, Administrative Rules Chapter 42, Vehicular Noise Control for Oahu.

Erosion problems could arise during site preparation of the project, which may impact the adjacent streams. Though no significant problems are anticipated, the project will conform to Federal, State, and City & County of Honolulu regulations which stipulate erosion control measures.

In an attempt to minimize harm to residents of the community, a notice of construction initiation would be made public. The contractor will be required to keep the road open to all traffic during the progress of the work. This will probably require the construction of detours, particularly at the Kalauao and Aiea Stream crossings. Because of the necessity to maintain existing traffic and access to properties during construction, and to construct the roadway, bridges and utilities in stages, the construction period for this project could last up to 24 months.

12. Right-of-Way Impacts

There will be some effect on properties adjacent to the roadway widening where right-of-way will be required. Partial takes from front yards will necessitate the vertical adjustment of some lawn areas, driveways, garages and/or carports; and other front yard fixtures such as walls, mailboxes, landscaping and other property improvements will also be affected. In most cases these improvements may be relocated or reconstructed, and in these cases details would be worked out with the homeowners during the design phase, and the work performed by the contractor.

Remainder parcels which are substandard with regard to current

zoning regulations, but still useable, will be granted a variance from those regulations if the homeowners applies for a building permit.

Where construction will require removal of the residence, these impacts would be mitigated as discussed in Section VI.A.2
Relocation Impacts.

Listed below are the parcels which will be affected by right-of-way takes:

<u>Mauka</u>	<u>Makai</u>
Parcel	Parcel
9-8-12-38	* 9-8-16-53
9-8-12-45	* 9-8-16-54
9-8-12-11	9-8-25-19
9-8-30-30	9-8-25-1
9-8-30-37	9-8-18-51
9-8-30-38	9-8-18-76
9-8-30-39	9-8-18-77
9-8-29-3	9-8-18-89
* 9-9-43-29	* 9-9-12-17
	9-9-12-22
	9-9-12-24
	9-9-12-25
	9-9-12-45
	9-9-40-19

* Commercial Properties

13. Parking Impacts

Right-of-way requirements are also expected to affect parking

in the project area. Alvah A. Scott Elementary School may lose one parking stall, while the Bethany Assembly of God church may incur a loss of about ten stalls. However, in the preferred alternative, parking during non-peak traffic periods will be permitted in curb lanes where improvements provide adequate width. Some impact on businesses along the corridor may occur as a result of loss or restriction of curb-side parking.

14. Public Utilities

Construction activities will require the relocation and/or reconstruction of several utilities. Electric, telephone, and cable television overhead utilities which currently traverse the project will be affected and will require relocation. In addition, there are underground telephone lines which could also require relocation. Underground, there are existing sewer, water and gas lines which will require some adjustment or relocation, and a new 36-inch water main is proposed by the Board of Water Supply. Location of the main will be coordinated with them during the design and it will be included as part of the construction package.

C. Historic and Archaeological Preservation Effects

There are no known historic or archaeological sites within the project area. The State Historic Preservation Officer has indicated that the project does not affect any on historic properties which are listed on the Hawaii Register or the National Register of Historic Places, however, a few plantation homes along the project alignment are eligible for inclusion on the National Register of Historic Places. The State Historic Preservation Officer has also indicated that the proposed project will not have any effect on the historic character of the buildings. The existence of other significant sites are unlikely, since an existing roadway already traverses the area. However, in the event that any unanticipated sites or remains are uncovered,

the contractor will halt work and the State Historic Preservation Officer will be notified.

D. Section 4(f) Impacts

Aiea Park is in the general vicinity of the project area, however, there are no other parks, recreation areas, historic sites, wildlife refuges, etc. along the project alignment. Therefore, Section 4(f) does not apply to this project.

**PROBABLE ADVERSE ENVIRONMENTAL
EFFECTS AND MITIGATION MEASURES**

VII. ANY PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED AND MITIGATION MEASURES PROPOSED TO MINIMIZE IMPACTS

Adverse impacts were summarized in the previous section. Since the proposed project will improve conditions on an existing roadway, no adverse impacts are anticipated after construction is completed. Impacts resulting from operations should remain consistent with existing conditions or be improved.

Traffic noise impacts resulting from construction of the preferred alternative may require mitigation provisions as suggested by the Noise Quality study. This would include air conditioning units for affected rooms within the St. Elizabeth's Church and School, at an estimated cost of \$6,000. A six foot high sound attenuation wall was suggested for the Seventh Day Adventist Church, at an estimated cost of \$5500.

FHWA exterior noise criteria is predicted to be exceeded at two private residences at the Puakala Street Intersection. However, sound attenuation walls have not been recommended for these structures because a 10 foot wall height is required. The required decrease of only 1 Leq unit would be achieved at the expense of aesthetic, ventilation, and lighting effects on the residences. The 1 Leq unit is within the tolerance range of the noise prediction procedures and should have minimal impact.

VIII

**GOVERNMENT POLICY
OFFSETTING ADVERSE EFFECTS**

VIII. AN INDICATION OF WHAT OTHER INTERESTS AND CONSIDERATIONS
OF GOVERNMENTAL POLICIES ARE THOUGHT TO OFFSET THE
ADVERSE ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION

The current Long-Range Transportation Plan for 1985 guides transportation planning on Oahu and directs that Moanalua Road be improved. The plan is presently being updated to the year 2000, and it is assumed that Moanalua Road would be improved. The project is also consistent with the State Coastal Zone Management Program, Transportation Plan, and Bikeway Master Plan, and County General Plan and Development Plan.

IX

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

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

The preferred alternative will result in short-term adverse impacts such as increased generation of noise and fugitive dust, disrupted traffic flow, and loss of land for right-of-ways.

The long-term productivity of this project will offset these adverse impacts. The long-term productivity of this project includes the:

- A. Reduction of present and future traffic congestion.
- B. Increase in pedestrian safety.
- C. Provision of pedestrian and bicycle facilities, where possible.

Based on these considerations, and the fact that the adversity of all impacts can be minimized, it is considered that the long-term productivity of the selected alternative is beneficial for the community as well as the present and future land uses in the surrounding area.

X

**IRREVERSIBLE AND IRRETRIEVABLE
COMMITMENT OF RESOURCES**

X. ANY IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

As in any proposed action involving construction, the preferred alternative will result in the commitment of various resources which include:

- A. Construction materials such as concrete, steel, asphalt, rock, etc., may be utilized. Once used, these materials will be utilized for Moanalua Road for an indefinite time period.
- B. Labor will be used. Labor for this project will be required for construction, planning, engineering design, landscaping, purchasing, and services, etc. Once utilized, this labor is irretrievable. However, labor can be compensated, thus, generating monies into the island's economy.
- C. Additional land may need to be committed for roadway use. The exact amount of land will be determined during the design of the project. Once acquired for the selected proposed action, the land will be irretrievably committed.

XI

LIST OF PREPARERS

XI. LIST OF PREPARERS

Below is a listing of persons who provided information for the preparation of or were primarily responsible for preparing this Final Environmental Impact Statement (FEIS).

A. F. J. Rodriguez

Educational Background: B.A. Sociology/Business Administration

Professional Experience: 11 years work relating to environmental concerns and impact statements in Hawaii; President, Environmental Communications, Inc.

Responsibility: Coordinated efforts with subconsultants on technical environmental support studies; prepared the overall EIS documents.

B. Duane Morita

Educational Background: M.U.R.P., Urban and Regional Planning.

Professional Experience: 5 years work relating to Urban Planning; 2 year Environmental Impact Statement preparer with Environmental Communications, Inc.

Responsibility: Prepared Draft EIS document.

C. Taeyong M. Kim

Educational Background: B.A. Sociology, M.U.R.P. Candidate

Professional Experience: 2 years Environmental Impact Statement preparer with Environmental Communications, Inc.

Responsibility: Prepared EIS documents.

D. Yoichi Ebisu, P.E.

Educational Background: M.S.E.E.

Professional Experience: 18 years of experience in acoustics. Principal with Darby-Ebisu & Associates, Inc.

Responsibility: Responsible for data collection, noise contour calculations, and prepared the Acoustical Study for the Moanalua Road project.

- E. Barry D. Root
- Educational Background: M.A. Geography/Public Health
- Professional Experience: 5 years duty with U.S. Air Force, Air Weather Service; 6 years University Geography assistant/instruction; 5 years air pollution consultant in Hawaii.
- Responsibility: Prepared Appendix A, "Air Quality Assessment for Moanalua Road" and Appendix D, "Comparative Energy Analysis for Moanalua Road."
- F. Stan Kawaguchi, P.E.
- Educational Background: B.S.C.E., M.S.C.E.
- Professional Experience: 18 years in civil, structural, and transportation engineering. Vice President at Parsons Brinckerhoff Quade and Douglas, Inc.
- Responsibility: Coordinated overall efforts of engineering design.
- G. Tony D'Alessio, P.E.
- Educational Background: B.C.E.
- Professional Experience: 21 years in planning, design, and environmental assessment of highway and other civil engineering projects. Engineer at Parsons Brinckerhoff Quade and Douglas, Inc.
- Responsibility: Coordinated efforts of engineering design.
- H. Julian Ng, P.E.
- Educational Background: B.S.C.E.
- Professional Experience: 11 years civil and traffic engineering and transportation planning. Staff engineer at Parsons Brinckerhoff Quade and Douglas, Inc.
- Responsibility: Assist in coordinating efforts of engineering design.
- I. Susan Uejo, P.E.
- Educational Background: B.S.C.E.
- Professional Experience: 5 years civil and traffic engineering and transportation planning. Staff engineer at Parsons Brinckerhoff Quade and Douglas, Inc.
- Responsibility: Assist in coordinating efforts of engineering design.

Technical Review Assistance

Federal

U.S. Area Engineer
Department of Transportation
Federal Highway Administration

State

Kenneth Au
Department of Transportation

City and County of Honolulu

Chew Lun Lau, Environmental Engineer
Department of Public Works

Paul Won, Chief Highway Engineer
Department of Public Works

XII

SUMMARY OF UNRESOLVED ISSUES

XII. SUMMARY OF UNRESOLVED ISSUES

At this time, there are no unresolved issues from the standpoint of potential environmental impacts. The Draft EIS reviewed the alternatives for the proposed action and the selection of the preferred alternative will be approved upon acceptance of this EIS.

A list of necessary approvals required after completion of the EIS are listed in Chapter XIII.

XIII

APPROVALS

XIII. LIST OF NECESSARY APPROVALS

The following approvals or permits may be required for the preferred proposed action prior to its construction:

- A. Community Noise Permit. This permit must be obtained from the Department of Health when anticipated noise levels are expected to exceed the noise standards set forth in Title 11, Administrative Rules, Chapter 43, Community Noise Control for Oahu.
- B. Coastal Zone Management (CZM), Federal Consistency Notice. This permit is processed by the State Department of Planning and Economic Development. The Consistency Notice shows that a project is consistent with the objectives of the CZM program. It is necessary when the action (a) is initiated by a Federal agency; (b) will use Federal funds; and (c) requires Federal licenses or permits.
- C. Building Permit. This permit is required by the City and County of Honolulu Building Department when construction work is involved that would alter any sidewalk, curb or driveway in a public right-of-way.
- D. Grubbing, Grading, and Stockpiling Permit. This permit is required by the City and County of Honolulu Department of Public Works when any type of excavation work is employed.
- E. Erosion Control Permit. This permit is required by the City and County of Honolulu Department of Public Works to ensure proper erosion control.
- F. Department of the Army 404 Permit. This permit will be required for structures or construction work including excavation, dredging or discharging of dredged or fill material for the Kalauao Stream

crossing. The Aiea Stream crossing is approved by Nation-wide permit in accordance with 33 CFR 330.5(2)(14).

It should be recognized that an accepted EIS document is necessary to process these permits and approvals. Therefore, this EIS document is prepared to meet both Federal and State requirements.

February 12, 1986

Mr. Kent M. Keith, Director
Department of Planning and
Economic Development
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

Attention: Hawaii Coastal Zone Management Program (HCZMP)

Dear Mr. Keith:

Subject: Moanalua Road, Pali Momi Street to Aiea Interchange

The attached copy of the draft environmental impact statement (DEIS) for the subject project is transmitted for your review and HCZMP consistency determination. The project has been designated as part of the Federal Aid Urban System. The Federal Government is expected to fund approximately 75% of the cost with the State and City and County equally funding the remaining 25%. We are requesting a consistency determination with HCZMP, a requirement before federal funds can be released. We are presently working on the final environmental impact statement (FEIS) and would like to incorporate your DEIS comments into the FEIS.

Prior to construction, a U.S. Department of the Army permit under Section 404 of the Federal Water Pollution Control Act is required to be obtained for the project. Therefore, in the permit process the HCZMP will have another opportunity to review and ensure consistency of the project's impacts prior to implementation.

A completed Federal Consistency Supplemental Information Form is attached. Should you have any questions or require more information, please contact Paul Won at phone 527-5084.

Very truly yours,

RUSSELL L. SMITH, JR.
Director and Chief Engineer

PW:pto

Attach.

FEDERAL CONSISTENCY
SUPPLEMENTAL INFORMATION FORM

Project/Activity Title or Description: Moanalua Road, Pali Momi Street to
Aiea Interchange
Island Oahu Tax Map Key No. various Est. Start Date: 1987

APPLICANT OR AGENT

Name & Title Mr. Russell L. Smith, Jr., Director and Chief Engineer
Agency/Organization Department of Public Works Telephone 523-4341
Address 650 South King Street Zip 96813

TYPE OF APPLICATION (check one only)

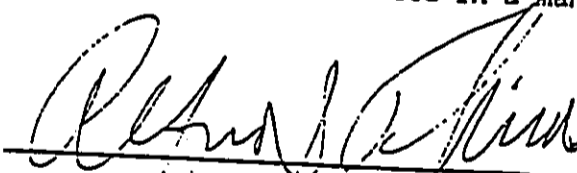
I. Federal Activity
(statement "a")

"The proposed activity is consistent with and will be conducted in a manner consistent to the maximum extent practicable with the Hawaii Coastal Zone Management Program."

Signature _____ Date _____

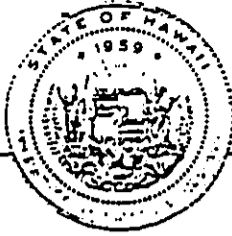
II. Permit or License
(statement "b")

"The proposed activity complies with Hawaii's Coastal Zone Management Program and will be conducted in a manner consistent with such a program."

Signature  Date 2/13/86

III. OCS Plan/Permit

IV. Grants & Assistance



DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

KAMAMAILU BUILDING, 250 SOUTH KING ST., HONOLULU, HAWAII
MAILING ADDRESS: P.O. BOX 2152 HONOLULU, HAWAII 96804 • TELEX: 7430250 HIOPEP

861379

GEORGE R. ARIYOSHI
GOVERNOR
KENT M. KEITH
DIRECTOR
MURRAY E. TOWILL
DEPUTY DIRECTOR
LINDA KAPUNIAI ROSEHILL
DEPUTY DIRECTOR

Ref. No. P-3691

March 13, 1986

DIVISIONS
BUSINESS AND INDUSTRY DEVELOPMENT DIVISION
ENERGY DIVISION
FOREIGN-TRADE ZONE DIVISION
LAND USE DIVISION
PLANNING DIVISION
RESEARCH AND ECONOMIC ANALYSIS DIVISION
OFFICES
ADMINISTRATIVE SERVICES OFFICE
INFORMATION OFFICE

ENGR

The Honorable Russell L. Smith, Jr.
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

RECEIVED
DIV. OF ENGINEERING
MAR 17 3 04 PM '86

Dear Mr. Smith:

Subject: Coastal Zone Management (CZM) Consistency Determination
Moanalua Road Improvements from Pali Momi Street to Aiea
Interchange (FC/86-006)

We have reviewed the subject consistency submission and Draft Environmental Impact Statement and find the proposed project consistent with Hawaii's CZM Program for the current stage of planning. As indicated in your February 12, 1986, letter, we will subsequently be reviewing related bridge construction work should it require a U.S. Department of the Army permit.

Your observance of the CZM consistency review procedures is appreciated.

Very truly yours,

Murray E. Towill
Kent M. Keith

RECEIVED
DEPT OF PUBLIC WORKS
MAR 17 2 10 PM '86

12-11-2007 10:11:11 AM

XIV

PARTIES CONSULTED EISPN

XIV. LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS CONSULTED
ON ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

In accordance with the Federal Highway Administration and NEPA procedures and the State's statute (Chapter 343, Hawaii Revised Statutes) a Notice of Intent (see XVI-2) was filed and published in the Federal Register and an "EIS Preparation Notice" was submitted to the Environmental Quality Commission (EQC) for publication in its EQC Bulletin. A "Consultant Period" of 30 to 60 days commenced after the EIS Preparation Notice was officially filed (the date of the Bulletin on which the EIS Preparation Notice was first published). The Consultation Period allowed interested agencies and organizations to make comments and to become consulted parties in the actual preparation of the EIS. As required by the Federal and State regulations, responses were sent to each agency and organization that provided substantive comments. The following are copies of the letters received and its subsequent responses.

A total of 45 letters were received in response to the EIS Preparation Notice. In most cases, the comments identified specific concerns that should be addressed in the EIS.

Table 9 identifies the agencies to whom copies of the EIS Preparation Notice were sent, the date of the comment, and the date of the response to the comment (when necessary).

Reduced, half-size copies of the letters received and responses to the comments are provided in the Final EIS.

TABLE 9

ORGANIZATIONS AND AGENCIES CONSULTED DURING EIS PREPARATION
NOTICE

<u>ORGANIZATIONS/AGENCIES</u>	<u>Date of Comments</u>	<u>Date of Responses</u>
<u>City and County</u>		
Police Department	9/19/83	10/26/83
Board of Water Supply	9/23/83	10/26/83
Fire Department	9/28/83	10/26/83
Department of Land Utilization	9/29/83	10/26/83
Department of General Planning	9/30/83	10/26/83
Department of Transportation Services	9/30/83	10/26/83
Department of Housing and Community Development	10/04/83	10/26/83
Oahu Metropolitan Planning Organization	10/05/83	10/26/83
<u>State</u>		
Department of Education	9/19/83	10/26/83
Department of Accounting and General Services	9/27/83	10/25/83
Department of Land and Natural Resources	10/06/83	10/26/83
<u>Federal</u>		
Headquarters, U.S. Navy	9/21/83	10/26/83
U.S. Army Corps of Engineers	9/22/83	10/26/83
U.S. Fish and Wildlife Service	9/26/83	10/26/83
<u>Organizations and Individuals</u>		
League of Women Voters	9/28/83	10/26/83
Bethany Assembly of God	10/02/83	10/26/83
Aiea Seventh-Day Adventist Church	10/05/83	11/04/83
Mrs. Nancy Chun	10/06/83	10/17/83
Hawaiian Electric Company, Inc.	10/06/83	10/26/83
Our Savior Lutheran School and Preschool	10/06/83	10/26/83

COMMENTS REQUIRING NO REPLY TO EIS PREPARATION NOTICE

<u>City and County</u>	<u>Date of Comments</u>
Department of Parks and Recreation	9/19/83
Building Department	9/27/83
<u>State</u>	
Commission on the Handicapped	9/19/83
Department of Agriculture	9/20/83
Department of Defense	9/23/83
Department of Planning and Economic Development	9/29/83
Department of Hawaiian Home Lands	10/04/83
U.H. Water Resources Research Center	10/11/83
<u>Federal</u>	
U.S. Department of Transportation, FAA	9/14/83
U.S. Department of Agriculture	9/19/83
Pacific Islands Forester	9/23/83
Soil Conservation Service	10/03/83
United States Department of the Interior	10/07/83
United States Senate, Daniel K. Inouye's Office	9/09/83
United States Senate, Spark M. Matsunaga's Office	9/15/83
<u>Organizations and Individuals</u>	
Cenpac Properties, Inc.	9/12/83
Hawaiian Association of Seventh-day Adventists	9/13/83
Eugene A. H. Magnier, M.D., F.A.C.C., Inc.	9/13/83
Watercress Associates	10/12/83
St. Elizabeth's Church	9/15/83
Yong & Helen Y. Kam	9/22/83
Cades Schutte Fleming & Wright, Attorneys at Law	10/06/83

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU

1400 SOUTH KING STREET
HONOLULU, HAWAII 96813

63-05738

DOUGLAS G. GIBB
CHIEF

WARRIEN FENNELORA
DEPUTY CHIEF



RECEIVED
SEP 22 11 25 AM '83

OUR REFERENCE CS-JS

September 19, 1983

Mr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Chun:

Subject: Environmental Impact Statement Preparation Notice
for Moanalua Road from Pali Momi Street to Aiea
Interchange

Thank you for the opportunity to review the subject document. We feel that the construction phase of the proposed project will have an impact on vehicular and pedestrian traffic in the area which in turn will affect demand on police services.

We have no objection to the proposed project and have no further comment at this time.

Sincerely,
Douglas G. Gibb
DOUGLAS G. GIBB
Chief of Police

DEPT OF PUBLIC WORKS
245 FR '83

ENV (Chun)
ENGR

301-13-C423

October 26, 1983

MEMORANDUM

TO: MR. DOUGLAS GIBB, CHIEF
HONOLULU POLICE DEPARTMENT

FROM: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: YOUR MEMORANDUM, DATED SEPTEMBER 19, 1983,
RELATING TO COMMENTS ON THE ENVIRONMENTAL
IMPACT STATEMENT PREPARATION NOTICE FOR
MOANALUA ROAD, FROM PALI MOMI STREET TO
AIEA INTERCHANGE

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road improvements from Pali Momi Street to Aiea Interchange. Construction impacts will be discussed in the Draft EIS. As you stated, construction activities, especially detours, will impact vehicular and pedestrian traffic. Two-way traffic would be maintained on Moanalua Road as much as possible. The contractor will be directed to provide safe and adequate vehicular and pedestrian access through the construction area.

Michael J. Chun
MICHAEL J. CHUN
Director and Chief Engineer

MN:PW:pto

BOARD OF WATER SUPPLY RECEIVED
CITY AND COUNTY OF HONOLULU, DEPARTMENT OF ENGINEERING
630 SOUTH BETHAVIA
HONOLULU, HAWAII 96813
SEP 27 1 26 PM '83

83-05881
ELEENR ANDERSON, Mayor
YOSHIE H. FUJIMURA, Chairman
FUMIHIRO HONOHONO, Vice Chairman
MICHAEL J. CHUN
WALTERA TOOTS JR.
ERNEST A. NATORI

ENGR
ENGR

September 23, 1983

TO: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: KAZU HAYASHIDA
BOARD OF WATER SUPPLY

SUBJECT: YOUR LETTER OF SEPTEMBER 8, 1983, ON THE
ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
FOR MOANALUA ROAD FROM PALLI MOMI STREET TO AIEA
INTERCHANGE

We have no objections to the proposed project. We
anticipate no adverse impacts on potable groundwater
resources or our water system facilities in the area.

We are currently coordinating the design work for
the installation of a 36-inch water main within the project
limits with your department.

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

Kazu Hayashida

KAZU HAYASHIDA
Manager and Chief Engineer

83-05881
SEP 27 1 26 PM '83

301-13-0421

October 26, 1983

MEMORANDUM

TO: MR. KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

FROM: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: YOUR MEMORANDUM, DATED SEPTEMBER 23, 1983,
RELATING TO COMMENTS ON THE ENVIRONMENTAL
IMPACT STATEMENT PREPARATION NOTICE FOR
MOANALUA ROAD, FROM PALLI MOMI STREET TO
AIEA INTERCHANGE

Thank you for your comments on the Environmental Impact
Statement Preparation Notice for Moanalua Road improvements
from Pali Momi Street to Aiea Interchange.

We are aware of the planned installation of a 36-inch water
main and will continue to coordinate the Moanalua Road
improvements with your department.

Michael J. Chun

MICHAEL J. CHUN
Director and Chief Engineer

MH:PW:pto

FIRE DEPARTMENT
COUNTY OF HONOLULU
1433 S. WERTZMAN STREET, ROOM 305
HONOLULU, HAWAII 96814

83-05467



M. M. NONAKA
CHIEF

ENUC
ENGR

SEP 30 8 23 AM '83

SILEEN R. ANDERSON
MAILING

September 28, 1983

RECEIVED
DEPT OF PUBLIC WORKS
SEP 29 2 37 PM '83

TO: MR. MICHAEL J. CHUN, DIRECTOR AND
CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: HELVIN M. NONAKA, FIRE CHIEF

SUBJECT: EIS PREPARATION NOTICE FOR THE IMPROVEMENTS TO
MOANALUA ROAD

Thank you for the opportunity to review and comment on the subject project. We have no objections to the subject project; however, a notice of construction should be sent to our Fire Alarm Bureau within sufficient time prior to your starting the project. This notice is necessary so we may prepare our response routes should an emergency incident occur in this area.

Helvin M. Nonaka
HELVIN M. NONAKA,
Fire Chief

MRH:ct/NSKH

301-13-0414

October 26, 1983

MEMORANDUM

TO: MR. MELVIN M. NONAKA, FIRE CHIEF
FIRE DEPARTMENT

FROM: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: YOUR MEMORANDUM, DATED SEPTEMBER 28, 1983,
RELAYING TO COMMENTS ON THE ENVIRONMENTAL
IMPACT STATEMENT PREPARATION NOTICE FOR
MOANALUA ROAD, FROM PALI MOHI TO AIEA
INTERCHANGE

Thank you for your comments on the Environmental Impact Statement Preparation Notice for Moanalua Road improvements from Pali Mohi Street to Aiea Interchange.

We will keep you advised of the project's progress so that you may prepare your response routes as necessary.

Michael J. Chun

MICHAEL J. CHUN
Director and Chief Engineer

JJC:WR:PW:pto

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU
 ENGINEERING
 100 SOUTH KING STREET
 HONOLULU, HAWAII 96813-1432

SEP 30 11 00 AM '83

83-05471



ENVI
 ENR

MICHAEL H. McELROY
 DIRECTOR
 ROBERT P. JONES
 DEPUTY DIRECTOR

September 29, 1983

LUS/83-5252 (JDH)

PLMT
 83

Comment: Because traffic volume and speed may increase in a residential area, buffers, landscaping and/or barriers should be considered to mitigate potential impacts from noise and traffic hazards. Also, runoff from construction activities should be carefully controlled and monitored for potential adverse impacts upon Aiea and Kalaauo Streams and the Pearl Harbor Nehu bait fishery.

If there are any questions, please contact John Nakagawa of our staff at 527-5038.

Janita Chee
 MICHAEL H. McELROY
 Director of Land Utilization

MHH:s1

MEMORANDUM

TO : DR. MICHAEL J. CHUN, DIRECTOR & CHIEF ENGINEER
 DEPARTMENT OF PUBLIC WORKS

FROM : MICHAEL H. McELROY, DIRECTOR

SUBJECT : ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
 (EISP/N) FOR HOANALUA ROAD IMPROVEMENTS FROM PALT NOHU
 STREET TO AIEA INTERCHANGE, AIEA, OAHU, HAWAII

We have reviewed the subject EISP/N and have the following comments:

1. **Reference:** Page 1, Section I, Part C. Project Description

Comment: The Draft EIS should provide a more detailed project description along with plans, maps and diagrams as required to illustrate the proposal.

2. **Reference:** Page 5, Section III, Part A. Impact on Social Characteristics

Comment: The affected community and residents' sentiments toward the project should be provided in the Draft EIS. Views and comments could be solicited through public informational meetings. This is important because they will be directly affected by both short-term impacts such as construction inconveniences and long-term impacts such as displacement.

3. **Reference:** Page 5-7, Section III, Part B. Impact on Environmental Characteristics

Mr. Michael M. McElroy

-2-

October 26, 1983

be included. The design of the selected alternative will incorporate vehicular and pedestrian safety features.



MICHAEL J. CHUN
Director and Chief Engineer

km:PW:pto

301-13-0415

October 26, 1983

MEMORANDUM

TO: MR. MICHAEL M. MCELROY, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: YOUR MEMORANDUM, DATED SEPTEMBER 29, 1983,
RELATING TO COMMENTS FOR THE ENVIRONMENTAL
IMPACT STATEMENT PREPARATION NOTICE FOR
MOANALUA ROAD, FROM PALI MOMI STREET TO AIEA
INTERCHANGE

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road Improvements from Pali Momi Street to Aiea Interchange.

The Draft EIS will provide more details of the various improvements being studied. Plans or diagrams will also be included to help illustrate the alternatives under consideration.

Public participation and input are being encouraged through the EIS process. The Department has already sent letters notifying the Moanalua Road residents and businesses about the proposed project. Copies of the EIS Preparation Notice have been sent to governmental agencies and representatives, community organizations and interested individuals. In addition, three informal meetings have already been held with interested community groups to discuss the project and to solicit public input. A public hearing will be held after the publication of the Draft EIS, and the selection of an alternative will consider public concerns.

A study of noise impacts and possible mitigation measures is presently being conducted and will be discussed in the Draft EIS. A discussion of construction impacts will also

RECEIVED
DIV. OF ENGINEERING
OCT 6 8 57 AM '83

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

83-055-79



WILLARD T. CHOW
CHIEF PLANNING OFFICER
ENR
RALPH KAWAHOTO
PLANNER

A copy of EPA's guidelines for EIS preparation for highway projects is enclosed for your information.

Ralph Kawahoto
RALPH KAWAHOTO
Planner

DGP9/83-8474

September 30, 1983

TO: DEPT. OF PUBLIC WORKS
FROM: DEPT. OF GENERAL PLANNING

MEMORANDUM

TO: Dr. Michael J. Chun, Director and Chief Engineer
Department of Public Works

VIA: Mr. Andrew I. T. Chang, Managing Director

SUBJECT: Environmental Impact Statement Preparation
Notice for Moanalua Road, from Pali Hwai Street
to Alea Interchange

In addition to the areas of concern expressed in the preparation notice, items of interest to us are as follows:

- Traffic impact to parallel east-west transportation corridors in the Alea community as commuters as well as local residents try to find alternatives to using the affected Moanalua Road section during construction.
- Traffic impact to mauka-makai local roadways and the potential hardships drivers may encounter in trying to reach mauka-makai destinations, e.g., schools, recreation areas, churches, etc.
- Impacts to commercial operations and the residential lots fronting Moanalua Road. Recent highway construction experiences near the Honolulu International Airport indicated that loss of vehicular accessibility to commercial properties and traffic rerouting patterns were major factors in causing economic hardships.
- The estimated two-year construction period seems excessive for a roadway improvement project of less than a mile. The project description may need to elaborate on this period in view of the daily traffic inconvenience that the community will be subjected to.

APPROVED:

W. T. Chow
WILLARD T. CHOW

Enclosure

301-13-0413

October 26, 1983

MEMORANDUM

TO: MR. WILLARD T. CHOH, DIRECTOR
DEPARTMENT OF GENERAL PLANNING

FROM: MICHAEL J. CIURI, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: YOUR MEMORANDUM, DATED SEPTEMBER 30, 1983,
RELATING TO COMMENTS ON THE ENVIRONMENTAL
IMPACT STATEMENT PREPARATION NOTICE FOR
HOANALUA ROAD, FROM PALI HIGH STREET TO
AIEA INTERCHANGE.

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Hoanalu Road improvements from Pali Komi Street to Aiea Interchange.

Construction impacts will be discussed in the Draft EIS. Two-way traffic on Hoanalu Road will be maintained as much as possible, and the rerouting of traffic will be kept to a minimum. The contractor will be required to provide safe and adequate vehicular and pedestrian access through the construction area and to the abutting properties. Hence, commercial properties will probably not experience economic hardship since vehicular access would be maintained.

The actual construction period is dependent upon the alternative selected. Also, the duration of construction activity will be affected by the allowance of traffic through the construction area, which restricts the contractor's working time and space.

As this project is funded in part by the Federal Highway Administration, EIS documents will be prepared in accordance with the National Environmental Policy Act (NEPA) as set forth by the U. S. Department of Transportation Federal Highway Administration guidelines.

MICHAEL J. CIURI
Director and Chief Engineer

[Handwritten signature]

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
 DIV. OF ENGINEERING
 HONOLULU MUNICIPAL BUILDING
 SOUTH KING STREET
 HONOLULU, HAWAII 96813

Oct 5 8 52 AM '83



EILEEN R. ANDERSON
 MAYOR
 ANDREW L.T. CHANG
 MANAGING DIRECTOR

83-05563

WILLIAM A. BONNETT
 DIRECTOR
 DAVID BRICE
 DEPUTY DIRECTOR

September 30, 1983

TE 9/83-3661

MEMORANDUM

TO: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
 DEPARTMENT OF PUBLIC WORKS

FROM: WILLIAM A. BONNETT, DIRECTOR

SUBJECT: EIS PREPARATION NOTICE FOR MOANALUA ROAD
 FROM PALI MOMI STREET TO AIEA INTERCHANGE

The project will impact traffic movements from abutting properties during the construction phase. Construction phasing should be carefully planned to minimize this impact.

In addition, the City's bus operations will also be impacted. Provisions to have the bus stops maintained at their present locations should be incorporated in the project. If there are any questions, please contact Kenneth Hirata, of my staff, at 523-4190.

William A. Bonnett
 WILLIAM A. BONNETT

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 DIVISION OF ENGINEERING
 OCT 1 2 12 PM '83

October 26, 1983

301-13-0412

MEMORANDUM

TO: MR. WILLIAM A. BONNETT, DIRECTOR
 DEPARTMENT OF TRANSPORTATION SERVICES

FROM: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
 DEPARTMENT OF PUBLIC WORKS

SUBJECT: YOUR MEMORANDUM, DATED SEPTEMBER 30, 1983,
 RELATING TO COMMENTS ON THE ENVIRONMENTAL
 IMPACT STATEMENT PREPARATION NOTICE FOR
 MOANALUA ROAD, FROM PALI MOMI STREET TO
 AIEA INTERCHANGE

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road improvements from Pali Poni Street to Aiea Interchange. Construction impacts will be discussed in the Draft EIS. During construction, two-way traffic on Moanalua Road will be maintained as much as possible. The contractor will be directed to provide safe and adequate vehicular and pedestrian access through the construction area and to the abutting properties.

The bus stops would be retained at their existing locations, wherever feasible. Any relocations of bus stops will be coordinated with your department.

Michael J. Chun
 MICHAEL J. CHUN
 Director and Chief Engineer

MJC



DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU 83-056-18
 RECEIVED
 DIVISION OF ENGINEERING
 650 SOUTH KING STREET
 HONOLULU, HAWAII 96813
 PHONE 533-4161
 OCT 7 1 36 PM '83
 OCT 5 1 39 PM '83
 JOSEPH K. CONANT
 DIRECTOR



October 26, 1983
 301-12-0410

MEMORANDUM
 TO: Michael J. Chun, Director & Chief Engineer
 Department of Public Works
 FROM: Joseph K. Conant
 SUBJECT: Environmental Impact Statement: Preparation Notice
 Moanalua Road Improvement: Pali Momi Street to Aiea
 Interchange

Thank you for forwarding the subject proposal for our review and comments.
 We note that the existing Moanalua Road has only two vehicular travelling lanes--one in each direction--is currently substandard and inadequate to accommodate increased traffic generated by adjacent residential and commercial developments. However, the improved Moanalua Road is expected to reduce accidents by better design and the installation of highway safety devices, increase pedestrian safety (sidewalk), especially for the school children.
 Additionally, the acquisition of lands for the proposed right-of-way will involve the displacement of one household and the relocation of several garages. The Department of Housing and Community Development will assist the household in minimizing the effects of displacement.
 We feel that the Moanalua Road improvement will relieve the traffic congestion and benefit the Halawa Community.

Joseph K. Conant
 JOSEPH K. CONANT

MEMORANDUM
 TO: MR. JOSEPH CONANT, DIRECTOR
 DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
 FROM: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
 DEPARTMENT OF PUBLIC WORKS
 SUBJECT: YOUR MEMORANDUM, DATED OCTOBER 4, 1983,
 RELATING TO COMMENTS ON THE ENVIRONMENTAL
 IMPACT STATEMENT PREPARATION NOTICE FOR
 MOANALUA ROAD, FROM PALI MOMI STREET TO
 AIEA INTERCHANGE

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road Improvements from Pali Momi Street to Aiea Interchange. We will be contacting your department at a later date for assistance in minimizing household displacements.

MICHAEL J. CHUN
 Director and Chief Engineer

jjj:jjj

OMPO

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DIV. OF ENGINEERING
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83-05720

Oahu
Metropolitan
Planning
Organization

State 1509
1164 Bishop Street
Honolulu, Hawaii 96813
(808) 533-4178
(808) 548-2638

ENVI
ENGR

RECEIVED
OCT 11 2 31 PM '83
DEPT. OF TRANSPORTATION
HONOLULU, HAWAII

October 5, 1983

Mr. Michael J. Chun, Director
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

Subject: EIS Preparation Notice for Hoanaluua Road from Pali Homi
St. to Aiea Interchange

Dear Mr. Chun:

We have reviewed the above mentioned Preparation Notice and offer the following minor comments:

1. The proposed project is identified in OHPO's Transportation Improvement Program which confirms the funding description presented in the Preparation Notice.
2. Under Section I.D., Alternative 5 (implementing turning movement restrictions) can also be considered a transportation systems management (TSM) action as is Alternative 2 (providing intersection improvements).

Thank you for providing us an opportunity to review this report.

Sincerely,

Gordon Lum
Acting Executive Director

GL:pjc

Executive Committee
WELCOM TAVETT
Chairman
MARETH RUPAHOAST
Vice Chairman
CLIFFORD I. UNAME
Member
BLANK T. TANGUCHA
Member

Seniors Members
JAMES AHI
ANTHONY K. LU CHANG
MARY GEORGE
GERALD T. HADOMO
CLIFFORD I. UNAME

Young Members
BRIAN T. TANGUCHA
JOAN HAYES
DONNA MERCADO RUM
JOHN J. MEDEROS
DWAYNE YOSHIMURA

City Council Members
PAISY T. HUI
TORRETTA HUI
GEORGE HUI
LEIGH HUI
WELCOM TAVETT
MARETH RUPAHOAST
JOAN HAYES
DWAYNE YOSHIMURA

Acting Executive Director
Gordon Lum

361-13-0-11

October 26, 1983

Mr. Gordon Lum
Acting Executive Director
Oahu Metropolitan Planning
Organization
1164 Bishop Street, Suite 1509
Honolulu, Hawaii 96813

Dear Mr. Lum:

Subject: Your letter, dated October 5, 1983,
relating to comments on the Environmental
Impact Statement Preparation Notice for
Hoanaluua Road, from Pali Homi Street to
Aiea Interchange

Thank you for your comments on the Environmental Impact
Statement (EIS) Preparation Notice for Hoanaluua Road
improvements from Pali Homi Street to Aiea Interchange.
The alternatives presented in the EIS Preparation Notice
were in the preliminary stage. We concern that Alternative 2
and 5 as described are both considered restrictive systems
management actions. We are presently developing an Alter-
native, and the TSM type actions may be combined with the
videning/construction actions for more effective improvements.
The alternative will be presented with greater detail in
the Draft EIS.

Ms. Ke Aloha Iuliana,
MICHAEL J. CHUN
Director and Chief Engineer

03/4

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OFFICE OF ENGINEERING
JUL 23 4 02 PM '83



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 226
HONOLULU, HAWAII 96813

September 19, 1983

OFFICE OF THE SUPERINTENDENT

Mr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
City & County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Dear Mr. Chun:

SUBJECT: EIS, Moanalua Road Widening

Our review and comments on the subject road widening project contained in our letter of July 9, 1979, to your department is still valid. A copy of that letter is enclosed.

Should there be any questions, please contact Mr. Howard Lau at 737-5231.

Sincerely,

Donnis H. Thompson
Donnis H. Thompson
Superintendent of Education

DHT:HL:j1

attach.

cc: Mr. James Edington
Central District

AN EQUAL OPPORTUNITY EMPLOYER

DR. DONNIS H. THOMPSON
SUPERINTENDENT

MA. AMYDOR



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 226
HONOLULU, HAWAII 96813

OFFICE OF THE SUPERINTENDENT

July 9, 1979

Mr. Wallace Miyahira
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Dear Mr. Miyahira:

SUBJECT: EIS Preparation Notice for the Proposed Moanalua Road, From Pali Momi Street to Aiea Interchange, FAU Project No. M-7200(1), Aiea, Oahu, Hawaii

We concur with the subject project with comments for consideration during the construction phase. Our comments reflect our concern for the safety of students walking to and from school and the need to provide for vehicular access.

Provisions should be included in the contract specifications to provide for safe pedestrian pathways to Alvah Scott Elementary School and Aiea High School. This is particularly true in the case of the elementary school as Moanalua Road serves as the primary access to the school.

Both schools are serviced by school buses, 6 buses at Alvah Scott and 10 buses at Aiea High. Specifications should include access roadways with sufficient width to accommodate the turning radius of these buses.

AN EQUAL OPPORTUNITY EMPLOYER

CHARLES G. CURR
SUPERINTENDENT

Mr. Wallace Miyahira
July 9, 1979
Page 2

It is suggested that the contractor be required to coordinate the needs of the school with the principals of the schools concerned. If additional information is required, please contact Howard Lau at 548-5704.

Sincerely,

CHARLES G. CLARK
Superintendent

CGC:HL:jl

cc: Central District
Central Services Division
Mr. Henry Imanaka

October 26, 1983

301-13-0422

Dr. Dennis H. Thompson
Superintendent
Department of Education
State of Hawaii
P. O. Box 2360
Honolulu, Hawaii 96804

Dear Dr. Thompson:

Subject: Your letter, dated September 19, 1983, relating to comments on the Environmental Impact Statement Preparation Notice for Moanalua Road, from Pali Momi Street to Aiea Interchange

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road improvements from Pali Momi Street to Aiea Interchange.

Construction activities will impact Moanalua Road traffic; however, vehicular and pedestrian accesses to Alvah A. Scott Elementary School and Aiea High School will be maintained during the construction period. As suggested, the contractor will be directed to provide safe and adequate accesses to these schools for school buses as well as pedestrians. Design modifications affecting the entrances to the schools will be coordinated with the DOE, and the Contractor will be required to coordinate his activities with the school principal. Both schools will be notified of the project's progress.

He ke aloha pūnahanā

Michael J. Chien
MICHAEL J. CHIEN
Director and Chief Engineer

3/11 MW:PW:pto



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SEP 30 8 23 AM '83

83-05451

HONOLULU
STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 116, HONOLULU, HAWAII 96810

LETTER NO. (P)1769.3

SEP 27 1983

ENVU
ENGR

SEP 27 1983

Dr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
Honolulu, Hawaii

Dear Dr. Chun:

Subject: Environmental Impact Statement
Preparation Notice for Moanalua
Road Improvements From Pali Momi
Street to Alea Interchange

We have reviewed the subject preparation notice and have the following comments to offer:

1. The widening of the subject portion of Moanalua Road will affect the existing accesses to Alvah A. Scott Elementary School and Alea Community Library.
2. The design of the subject roadway improvements should provide safe and easy vehicular and pedestrian accesses to the above facilities.
3. We would like to review the Environmental Impact Statement and the construction plans for the subject project when they become available.

If there are any questions, please have your staff call Mr. Herbert Ishida of the Public Works Division at 548-3921.

Very truly yours,

Michael J. Chun
MICHAEL J. CHUN
State Comptroller

301-13-041a

October 25, 1983

Honorable Hideo Murakami, Comptroller
Department of Accounting and
General Services
State of Hawaii
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Murakami:

Subject: Your letter, dated September 27, 1983, relating to comments on the Environmental Impact Statement Preparation Notice for Moanalua Road, from Pali Momi Street to Alea Interchange

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road improvements from Pali Momi Street to Alea Interchange.

The design of the Moanalua Road improvements and accesses, including those at Alvah A. Scott Elementary School and Alea Community Library will incorporate vehicular and pedestrian safety features.

A copy of the Draft EIS, Final EIS, and construction plans will be sent to you when they become available.

Me ke aloha pūnaha.

Michael J. Chun
MICHAEL J. CHUN
Director and Chief Engineer

if: MN:PW:pto

GEORGE B. SHAW
DIRECTOR OF THE
DIV. OF ENGINEERING

OCT 11 10 42 AM '83



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

83-05415
SUBMITTAL CHECK SHEET
PART OF LAND & NATURAL RESOURCES
EDGAR A. HANAU
DIRECTOR
DIVISIONS:
AGRICULTURE & HUNTING
AQUATIC RESOURCES
CONSERVATION AND
RECREATION
CONSTRUCTION & REPAIR
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

ENVAL
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Hon. M. J. Chun
DPW, C&C Honolulu
EIS Prep. Notice - Moanalua Road
Page Two
OCT 6 1983

Historic Sites

Our records indicate that this project does not occur on historic properties listed on the Hawaii Register or the National Register of Historic Places, or eligible for inclusion on the National Register of Historic Places.

If any previously unidentified sites or remains (such as artifacts, shell, bone, or charcoal deposits; human burials; rock or coral alignments, pavings, or walls) are encountered, please inform the applicant to stop work and contact our historic sites office at 548-7460 immediately.

Sincerely,

[Signature]
SUSUMU OHNO
Chairperson

Board of Land and Natural Resources
and
State Historic Preservation Officer

Honorable Michael J. Chun
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Dr. Chun:

We appreciate the opportunity to identify our concerns regarding the environmental impact of the Moanalua Road improvements. We have a few concerns to express:

Stormwaters and Erosion

Our interest lies with on-site erosion, sediment, and stormwater management, particularly with the control of possible pollution of the Aiea and Kalaauo streamwaters and the Pearl Harbor receiving waters. The U. S. Fish and Wildlife Service has expressed a similar concern. We recommend that the forthcoming environmental impact statement (EIS) adequately address pollution control measures.

Aquatic Life

The affected section of Moanalua Road crosses Kalaauo and Aiea Streams at points less than one-half mile upstream of East Loch, Pearl Harbor. Aiea Stream empties directly into Aiea ("Rainbow") Bay, which supports nehu stocks harvested for baitfish by the aku fleet.

We therefore suggest that the forthcoming EIS discuss impacts on the aquatic life of Kalaauo and Aiea Streams, and of Aiea Bay resulting from sediments produced by erosion of disturbed soils, from depletion of dissolved oxygen resulting from stream blockage, and from petroleum products and preservatives released by equipment, pavement, and other construction materials. The EIS should also discuss measures which will be adopted to mitigate impacts adverse to aquatic life.

PII--HOAHUALUA/PALI MOHI TO AIEA I/C

301-13-0609

October 26, 1983

Honorable Szeuru Ono
State Historic Preservation Officer
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Ono:

Subject: Your letter, dated October 6, 1983,
relating to comments on the Environmental
Impact Statement Preparation Notice for
Koolaula Road, from Pali Mohi Street to
Aiea Interchange

Thank you for your comments on the Environmental Impact
Statement (EIS) Preparation Notice for Koolaula Road Improv-
ements from Pali Mohi Street to Aiea Interchange.

Construction impacts on Aiea and Koolaula Streets and the
Koolaula Fish Hatchery will be discussed in the Draft
EIS. The contractor will be required to provide erosion
control measures in accordance with local ordinances.

Your office will be contacted if any sites or remains are
found during construction.

Me ke aloha pule,
?

MICHAEL J. CHEN
Director and Chief Engineer

MJC



RECEIVED
DIV. OF ENGINEERING
HEADQUARTERS
NAVAL BASE PEARL HARBOR
BOX 110
PEARL HARBOR, HAWAII 96860

SEP 23 8 44 AM '83

83-05282
IN REPLY REFER TO:
0028:WKL:jam
Ser 2035
21 SEP 1983

Dr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

ENV (44 16-)
ENGR

October 26, 1983

301-13-0419

Captain M. M. Dallam, CEC
U. S. Navy
Facilities Engineer
Headquarters, Naval Base
Pearl Harbor
Box 110
Pearl Harbor, Hawaii 96860

Environmental Impact Statement (EIS)
For Improvements to Moanalua Road, from
Pali Momi Street to Aiea Interchange

The EIS Preparation Notice for Moanalua Road, from Pali Momi Street to
Aiea Interchange has been reviewed.

We agree with the statement made in the last paragraph of page 6,
concerning the potential impact the construction work performed in Aiea
and Kalaueo Streams could have on the Pearl Harbor Nehu bait fishery.
Furthermore, silt and debris control measures should be provided during
construction.

Thank you for the opportunity to review the EIS Preparation Notice.

Sincerely,

M. M. Dallam

M. M. DALLAM
CAPTAIN, CEC, U. S. NAVY
FACILITIES ENGINEER
BY DIRECTION OF THE COMMANDER

Dear Captain Dallam:

Subject: Your Letter, 0028:WKL:jam, Ser 2035,
dated September 21, 1983, relating to
Comments on the Environmental Impact
Statement Preparation Notice for Moanalua
Road, from Pali Momi Street to Aiea
Interchange

Thank you for your comments on the Environmental Impact
Statement (EIS) Preparation Notice for Moanalua Road improve-
ments from Pali Momi Street to Aiea Interchange.

The impact of construction activities on Aiea and Kalaueo
Streams will be discussed in the Draft EIS. The contractor
will be required to provide erosion control measures during
construction in accordance with appropriate local ordinances.

Me ke aloha pulekana?
Michael J. Chun

MICHAEL J. CHUN
Director and Chief Engineer

MJC:WH:PW:pto

SEP 27 2 38 PM '83
DEPT OF PUBLIC WORKS





RECEIVED DEPARTMENT OF THE ARMY
DIV. OF PUBLIC WORKS DIVISION, CORPS OF ENGINEERS
ATTN: SHAFER, HAWAII 96858

SEP 28 9 12 AM '83

September 22, 1983

83-05343

ENUCY
ENGR

RECEIVED
DEPT OF THE ARMY
SEP 27 2 17 PM '83

Dr. Michael J. Chun, Director
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

Dear Dr. Chun:

Thank you for the opportunity to review the EIS Preparation Notice for Improvements to Moanalua Road, from Pali Komi Street to Aiea Interchange. The following comments are offered:

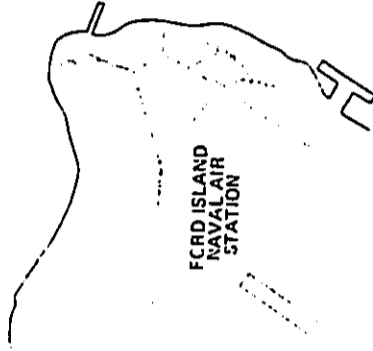
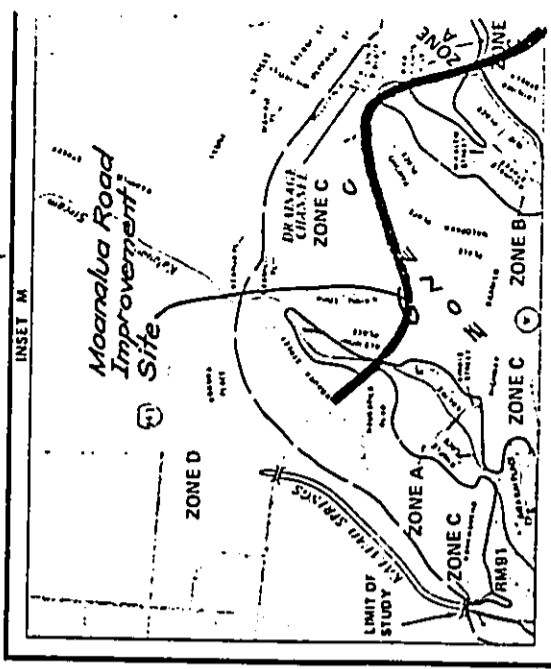
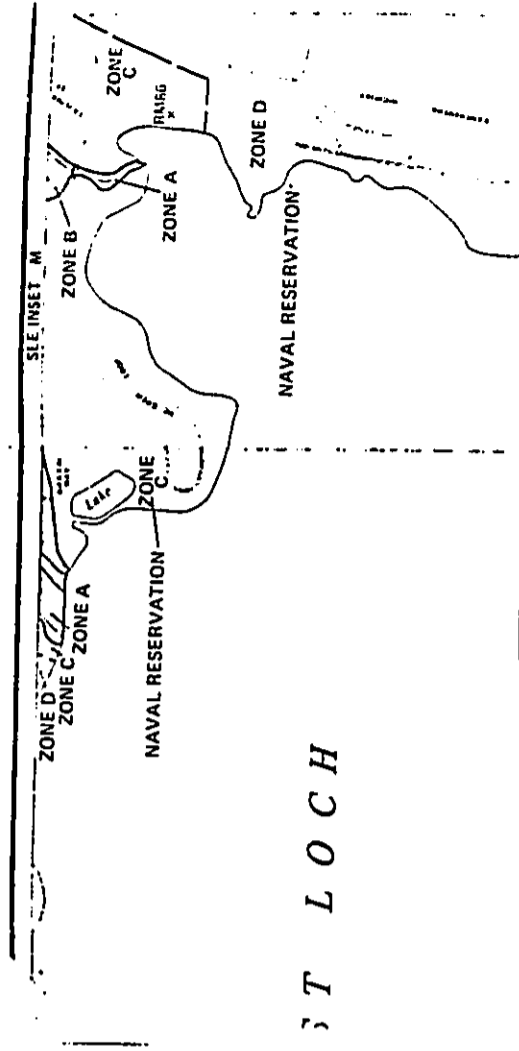
a. A Department of Army permit may be required for any fill or structure at Kalauao Stream. The Department of Public Works should submit concept drawings of the proposed crossing for review and permit requirement determinations.

b. Most of the improvements to Moanalua Road will not occur in a regulatory flood plain, but rather in an area of minimal flooding of Zone C designation. Portions of the road alignment are located in flood plain areas of Zone A and Zone B designations, and are subject to riverine flooding from Kalauao and Aiea Streams. Enclosure 1 is the flood hazard map for the Aiea area, prepared as part of the Flood Insurance Study for Oahu by the Federal Insurance Administration, and shows the alignment of the portion of Moanalua Road to be improved.

Sincerely,

Kiseuk Cheung
Chief, Engineering Division

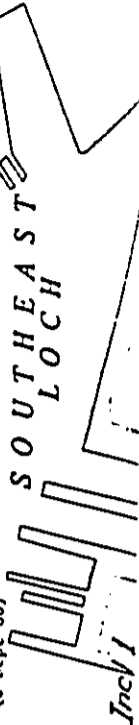
Enclosure



LOCATION OF

1.1 mile north of Capacity Boat
1.2 mile north of Power Pole #1.
1.3 mile north of Power Pole #2.
1.4 mile north of Power Pole #3.
1.5 mile north of Power Pole #4.
1.6 mile north of Power Pole #5.
1.7 mile north of Power Pole #6.
1.8 mile north of Power Pole #7.
1.9 mile north of Power Pole #8.
2.0 mile north of Power Pole #9.
2.1 mile north of Power Pole #10.
2.2 mile north of Power Pole #11.
2.3 mile north of Power Pole #12.
2.4 mile north of Power Pole #13.
2.5 mile north of Power Pole #14.
2.6 mile north of Power Pole #15.
2.7 mile north of Power Pole #16.
2.8 mile north of Power Pole #17.
2.9 mile north of Power Pole #18.
3.0 mile north of Power Pole #19.
3.1 mile north of Power Pole #20.

REFERENCE:
Flood Insurance Study for Oahu
Flood Insurance Rate Map
Scale: 1" = 1000 ft.
(3 Sept. 80)



Incl 1

4-MOANALUA ROAD PALI MOMI/ EA INTERC

October 26, 1983

301-13-0420

Mr. Kisuk Cheung
Chief, Engineering Division
Department of the Army
Pacific Ocean Division, Corps
of Engineers
Fort Shafter, Hawaii 96858

Dear Mr. Cheung:

Subject: Your letter, dated September 22, 1983,
relating to comments on the Environmental
Impact Statement Preparation Notice for
Moanalua Road, from Pali Momí Street to
Aiea Interchange

Thank you for your comments on the Environmental Impact
Statement (EIS) Preparation Notice for Moanalua Road improve-
ments from Pali Momí Street to Aiea Interchange.

Your comments on the flood plain encroachments will be
included in the Draft EIS. We will also submit our improve-
ment plans at a later date so that you may determine permit
requirements, if any.

Me ke alpha p...
Michael J. Chuah
MICHAEL J. CHUAH
Director and Chief Engineer

MM:PW:ptc

Hawaii Division
Box 50206
Honolulu, Hawaii 96850

February 6, 1985

HDA-HI

Col. Michael Jew's, District Engineer
USACE-ROD
Ft. Shafter, HI 96858

ATTN: R000-0
J. Emerson, M. Lee

Dear Col. Jew's:

Subject: Moanalua Road, Pali Momí Street to Aiea Interchange
Federal-aid Project #-7200(1)

As requested, by your staff, we are sending you documents for the deter-
mination of Section 404 applicability to this project. Documents trans-
mitted pertain to Kalaheo Stream and Aiea Stream crossings and consist of
Preliminary plans, sections and computations of the fill quantities in
each stream below the ordinary high water mark. Also included is a copy
of the pre-draft EIS.

Please advise us as soon as possible if the Section 404 permit requirements
will pertain to this project. If so, it is our understanding that the
Corps of Engineers may be a Cooperating Agency in the project EIS.

If you have any questions concerning the above material, please call
Mr. Cannon Jones at 546-5150.

Sincerely yours,

H. Rusanoto
H. Rusanoto
Division Administrator

Enclosures



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
PT. SHAFER, HAWAII 96850 -5440
March 1, 1985

OFFICE OF
OPERATIONS BRANCH

Hawaii Division
Box 50206
Honolulu, Hawaii 96850

March 6, 1985

HDC-HI

Mr. Russell L. Smith, Jr.
Director
City and County of Honolulu
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

Attention: Mr. Paul Wren

Dear Mr. Smith:

Subject: Moanalua Road, Pali Mxmi Street to Aiea Interchange,
Project No. H-7200(1)

Enclosed is a copy of the Department of the Army letter, dated March 1, 1985
regarding permit requirements for stream crossings on the subject project.

Contents of the letter are self-explanatory as to what will be required for
this project.

Sincerely yours,

H. Kusumoto
Division Administrator

By: *[Signature]*
N. L. Arthur
Assistant Division Administrator

cc: HW-PA with copy of Corps of Engineers letter.

Mr. H. Kusumoto
Division Administrator
U.S. Department of Transportation
Federal Highways Administration
P.O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

This is in reference to your letter of February 6, 1985
regarding the Moanalua Road Project, Pali Mxmi Street to Aiea
Interchange, Federal Aid Project H-7200(1).

A Department of the Army (DA) permit is required for the
Kalaauo Stream culvert crossing. The Aiea Stream culvert crossing
is approved by Nationwide permit in accordance with 33 CFR
330.5(a)(14). Because the culvert at the Kalaauo Stream is the
only structure within the entire highway project that requires a
DA permit, Corps of Engineers involvement in the Environmental
Impact Statement as a cooperating agency is not necessary.

Attached are the necessary forms to apply for a DA permit for
the Kalaauo Stream culvert. If you have any questions on this
matter please call the Corps' Operations Branch at 438-9258.

Sincerely,

[Signature]
H. Paresa
Assistant Chief, Construction-
Operations Division

Enclosure ✓



RECEIVED States Department of the Interior

SEP 28 9 12 AM '83

83-05391

FISH AND WILDLIFE SERVICE
300 ALA MOANA BOULEVARD
P. O. BOX 50167
HONOLULU, HAWAII 96850

ES
Room 6307

SEP 26 1983

ENUW
ENGR

Mr. Michael J. Chun
Director and Chief Engineer
City Department of Public Works
630 South King Street
Honolulu, Hawaii 96813

Re: EIS Prep Notice for Moanalua
Road, Pali Momi Street to Alea
Interchange

Dear Mr. Chun:

We have reviewed the subject document and offer the following recommendations for your consideration:

- a. The EIS should discuss direct and secondary effects of road construction and operation on streams and receiving waters in the project area.
- b. Efforts should be taken to avoid locating piers or abutments in stream beds or immediately adjacent to stream channels.

We appreciate this opportunity to comment.

Sincerely yours,

William R. Kramer
William R. Kramer
Acting Project Leader
Office of Environmental Services

cc: NMFS - WPPO
HDF&W
HDAR
EPA, San Francisco

SEP 27 2 17 PM '83

301-13-0417

October 26, 1983

Mr. William R. Kramer
Acting Project Leader
U. S. Department of the Interior
Fish and Wildlife Service
300 Ala Moana Boulevard
P. O. Box 50167
Honolulu, Hawaii 96850

Dear Mr. Kramer:

Subject: Your letter, dated September 26, 1983, relating to Comments on the Environmental Impact Statement Preparation Notice for Moanalua Road, from Pali Momi Street to Alea Interchange

Thank you for your comments on the Environmental Impact Statement (EIS) for Moanalua Road improvements from Pali Momi Street to Alea Interchange.

The impacts of construction activity and operations on streams in the project area will be discussed in the Draft EIS. Efforts to avoid impacts to stream beds and areas immediately adjacent to stream channels will be given strong consideration.

Me ke aloha pumehana,
Michael J. Chun
MICHAEL J. CHUN
Director and Chief Engineer

WJ:PW:pto



Save Energy This You Save America

83-05462

League of Women Voters

49 SOUTH HOTEL STREET, SUITE 314 HONOLULU, HAWAII 96813

September 28, 1983

City and County of Honolulu
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

EWV
EWV

Gentlemen:

In response to your letter of September 8th regarding environmental impacts of the Moanalua Road Improvement Project, we would like to submit the following questions:

Will one or both lanes of Moanalua Road be closed to traffic during the construction period? If so, for how long each day, during peak as well as non-peak hours? How will the environment be affected during the construction period?

Mobility on the Island is one of our transportation concerns and we would like to see the E.I.S. assess the project's effect on traffic flow during construction. Even though the construction is temporary, and the end result is a much needed improvement, a year or two of increased congestion will seem a long time to those depending on the only two, already clogged arteries through the area.

Thank you very much for this opportunity to comment.

SEP 30 08 23 AM '83
DIVISION OF ENGINEERING

Very truly yours,
Arlene Koo
Arlene Koo, President
League of Women Voters
of Honolulu

SEP 28 11 37 AM '83
SEP 28 11 37 AM '83

301-13-0416

October 26, 1983

Ms. Arlene Koo, President
League of Women Voters of Honolulu
49 South Hotel Street, Suite 314
Honolulu, Hawaii 96813

Dear Ms. Koo:

Subject: Your letter, dated September 28, 1983, relating to Comments on the Environmental Impact Statement Preparation Notice for Moanalua Road, from Pali Momi Street to Aiea Interchange

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road Improvements from Pali Momi Street to Aiea Interchange.

Construction activities will impact the traffic on Moanalua Road; however, the extent of this impact will depend upon the alternative selected. Furthermore, because of the mixture of residential and commercial properties along the corridor, two-way traffic would be maintained as much as possible. Rerouting of traffic through the local streets would be kept to a minimum. Construction impacts will be identified in greater detail in the Draft EIS.

Ma ke aloha puu hana
Michael J. Chitt
MICHAEL J. CHITT
Director and Chief Engineer

MM:PW:pto

RECEIVED
DIVISION OF ENGINEERING
DEPARTMENT OF TRANSPORTATION
OCT 10 1983

Bethany Assembly of God

83-05554

98-1125 Moanalua Road - P. O. Box 38 - Aiea, Hawaii 96701

Albert Cardrino, Pastor
Don Yoshida Jr., Assistant Pastor
Church Office: 468-3231
Parsonage: 671-1102

October 2, 1983

Dear Mr. Michael Chun

Having studied the material sent us concerning the WIDENING OF MAWALUA ROAD, we accept your request for suggestions by making the following recommendations.

1. Construct ON/OFF ramps on H-1 Freeway at Kaonohi Street. This would relieve Aiea of most of the traffic going to Pearlridge as well as traffic heading to Waimau, Newtown and even Pearl City.
2. Improve Moanalua Road through Aiea with sidewalks and repaving of road, but keep it the same width. A wider road would:
 - a. be more hazardous because of increased speeding that a wider road encourages.
 - b. cause the noise factor to rise to the point where we would find it extremely difficult to operate our Day Care and Pre-school (the oldest in Aiea). We would be forced to install air conditioning which would be very expensive and, we feel, a waste of energy.
 - c. cause our church to lose 10-12 parking spaces which is vital to our growing congregation. (Present attendance 240...approximately 50% service families). Bethany Assembly of God has been in Aiea since 1956 (27 years).
3. With Kanehameha Highway on one side and the H-1 Freeway on the other we see a need for a highway right through the middle of Aiea. Also with Aloha Stadium at its entrance and Pearlridge Shopping Center at its exit, Aiea has already suffered the loss of its treasured "lifestyle" and charm. It is fast becoming another horrible concrete jungle and an enlarged throughfare such as the one proposed would certainly hasten that day.

Sincerely,
Albert Cardrino
Albert Cardrino
Pastor of Bethany Assembly of God

OCT 11 11 12 AM '83
RECEIVED
OCT 10 1983

301-13-0431

October 31, 1983

Pastor Albert Cardrino
Bethany Assembly of God
98-1125 Moanalua Road
Aiea, Hawaii 96701

Dear Pastor Cardrino:

Subject: Your Letter, dated October 2, 1983, relating to Comments on the Environmental Impact Statement Preparation Notice for Moanalua Road, from Pali Momi Street to Aiea Interchange

Thank you for your comments on our Notice of Preparation for an Environmental Impact Statement (EIS) for Moanalua Road, from Pali Momi Street to Aiea Interchange. This project proposes to improve Moanalua Road within the stated limits to better serve existing and future traffic demands.

Transportation planning on Oahu has been guided by a Long Range Transportation Plan which was first developed in 1967 and subsequently reaffirmed by our elected officials as the basis for project planning. A study to update this plan is currently underway by the Oahu Metropolitan Planning Organization (OMPO). An improvement to Moanalua Road has been a part of the 1967 plan and its implementation would be consistent with the current OMPO studies.

Existing traffic data and projections of future traffic demands indicate that new ramps on Interstate Route H-1 at Kaonohi Street would not preclude the need for improvements along Moanalua Road. The improvements will be necessary to serve not only commuter traffic generated by Aiea residents, but also other traffic attracted by the many businesses, churches, schools, and other activities in the area. The need for Moanalua Road improvements will be discussed in greater detail in the Draft EIS.

Pastor Albert Cardrino

-2-

October 31, 1993

Your recommendation to keep the roadway the same width does not appear to provide adequate traffic service. However, several alternatives will be considered, including a "no-build" option. The EIS will address social and economic effects of the project as well as environmental impacts such as noise. If it is determined that there are noise impacts on the church and pre-school, in accordance with Federal Standards, these impacts would be mitigated in conjunction with this project. Right-of-way requirements will be dependent on the alternative selected; however, impacts on adjacent properties which result from property acquisition would be mitigated and/or compensated accordingly.

Thank you again for your comments and your interest in this project. We will contact you again when the Draft EIS is available. In the interim, should you have any questions, please contact the City's project engineer, W. Hamman, at phone 523-4071.

Me ke aha huna


MICHAEL J. CHU
 Director and Chief Engineer

cc: OMPO
 Affy

Mrs. Nancy Chun
3526 Ala Akulikuli Street
Honolulu, Hawaii 96818

October 6, 1983

Dr. Michael J. Chun
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

Dear Dr. Chun:

I am writing in regards to the environmental Impact Statement (EIS) for improvements to Moanalua Road, from Fall Moai Street to Aiea Interchange.

Approximately 15 years ago, residences in Aiea have petitioned to stop the widening of Moanalua Road because of the loss of property. Some people almost lost part of their houses!

I am against the widening because I might lose part of my property also!

The widening effort was dropped 15 years ago because the City and County of Honolulu decided enough traffic was diverted to the H-1 freeway and Kam highway. So why is this project brought to our attention again?

To provide better service for the community, I am for new sidewalks. Your replies are appreciated. Thank you for your concerns.

Sincerely,

Mrs. Nancy Chun

Mrs. Nancy Chun

cc:MC

83-05647

RECEIVED
DIV. OF ENGINEERING
OCT 13 1983
Ervell ENGR

301-13-0386

October 17, 1983

Mrs. Nancy Chun
3526 Ala Akulikuli Street
Honolulu, Hawaii 96818

Dear Mrs. Chun:

Subject: Your Letter, dated October 6, 1983, relating to improvements to Moanalua Road - Fall Moai Street to Aiea Interchange

Thank you for your comments concerning our proposed Moanalua Road project. For your information, the initial Moanalua Road project was terminated because the residents were not in favor of sharing in the cost of the road improvement under the improvement district project being considered at that time.

The existing Moanalua Road is substandard with sharp curves, limited sight distance and narrow shoulder areas. Our present project proposes to improve the roadway including the construction of curbs and sidewalks to increase pedestrian safety.

At the present time, the width and alignment of the proposed roadway have not been selected; however, if your property is one that will be affected, you will be notified.

Should you have any questions, please call W. Hammarhart of the Division of Engineering at 523-4071.

Me ke pihona pumehana,
Michael J. Chun
MICHAEL J. CHUN
Director and Chief Engineer

cc:PH:Rtpto

cc: Parsons, Brinckerhoff, Quade

and Douglas, Inc.

RECEIVED
DIV. OF ENGINEERING
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83-05692

RECEIVED
UNIVERSITY OF HAWAII
OCT 11 1 25 PM '83

RECEIVED
DEPT OF PUBLIC WORKS
OCT 11 9 43 AM '83

ENV 2-1
NV/G

October 6, 1983

Box 2750 / Honolulu, Hawaii / 96840

RICHARD L. O'CONNELL, P.E.
MANAGER, ENVIRONMENTAL DEPARTMENT
(808) 541-4888

Mr. Michael J. Chun
Director & Chief Engineer
Department of Public Works
City and County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813


Dear Mr. Chun:

Subject: Environmental Impact Statement Preparation Notice
Corner Moanalua Road-Pali Momi Street to Aiea
Interchange (Aiea, Oahu, Hawaii)

We have reviewed the EIS Preparation Notice and have the following comments:

1. There is no mention of HECO's overhead facilities in the subject area which will have to be relocated by this road improvement.
2. Kaonohi Substation
 - a. Any change in elevation of Moanalua Road will affect the substation driveway and drainage ditch fronting the substation.
 - b. Three existing 5" duct lines emanating from the substation will have to be adjusted or relocated.
3. Easements on private property for anchoring purposes will probably have to be revised.

Thank you for the opportunity to comment on this Environmental Impact Statement.

Sincerely,

Richard L. O'Connell
Manager, Environmental Department

SIC:cm

201-33-5417

October 26, 1983

Mr. Richard L. O'Connell
Manager, Environmental Department
Hawaiian Electric Company, Inc.
P. O. Box 2750
Honolulu, Hawaii 96840

Dear Mr. O'Connell:

Subject: Your letter, dated October 6, 1983, relating to comments on the Environmental Impact Statement Preparation Notice for Moanalua Road, from Pali Momi Street to Aiea Interchange.

Thank you for your comments on the Environmental Impact Statement (EIS) Preparation Notice for Moanalua Road improvements from Pali Momi Street to Aiea Interchange. Utility relocations will be discussed in the EIS and coordinated with the appropriate utility company. Any agreement affecting the Kaonohi Substation will be coordinated with HECO.

cc: to Aiea Interchange
RICHARD L. CHUN
Director and Chief Engineer



Our Savior Lutheran School and Preschool

98-1098 MOANALUA ROAD • AIEA, HAWAII 96701 • PHONE: 488-0000
DAVID A. HAAK, Principal

83-05696
October 6, 1983

Mr. Michael J. Chun
Director & Chief Engineer
Dept. of Public Works
City & County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Re: Environmental Impact Statement Preparation Notice
for

Moanalua Road
From Pali Homi Street to Aiea Interchange
Aiea, Oahu, Hawaii
FAUS Project No. M-7200 (1)

Dear Mr. Chun:

The following is the response of Our Savior Lutheran Church & School regarding the proposed project.

1D. Alternatives

Since Moanalua Road is a major thoroughfare, we urge the best possible improvement alternative be selected. Traffic will only increase in coming years as the area develops further. We must build for the future.

1E. Phasing and Funding

Speedy action is of utmost importance. Traffic congestion has been and continues to be a major problem. Pedestrian and vehicular safety is the prime concern. Corrective action on the stretch of road is long overdue.

111.A. Impact on Social Characteristics

We heartily concur that the implementation of this project will contribute greatly to the social well-being of the community in the area.

111.B. Impact on Environmental Characteristics

Care must be taken not to block or slow flow in Kalaiao Stream during or after construction. If blockage or slowing occurs, flooding of the playground and sanctuary on the low part of our property is inevitable during heavy rains.

General Comments

It would be our hope that during construction, continuous reasonable use of Moanalua Road can be maintained.

Proposed construction and improvements will mean the loss of some of our current playground space. We will need to continue making use of the remaining section of playground behind our church.

Since this and nearby sections of Moanalua Road runs through primarily residential sections and borders several schools (Alvah Scott, Aiea Elementary, St. Elizabeth, Our Savior Lutheran, Pearlridge Elementary, St. Timothy, Pearlridge Elementary, Maiau Elementary), several churches, and the proposed Pali Homi Medical Center, we strongly urge the Department of Public Works, Department of Transportation, City Council and any other appropriate bodies to pass measures restricting use of this road to autos and small trucks. Kamehameha Highway is an appropriate and satisfactory alternate route for medium and heavy truck traffic and there are sufficient cross streets providing easy access to all areas.

We strongly urge consideration of such action for traffic congestion, safety and noise factors.

Sincerely,

David A. Haak
David A. Haak
Principal

DAH/ak

cc: Mr. George Akahane
Dept. of Transportation

DIV. OF ENGINEERING
OCT 11 1 25 PM '83

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OCT 11 9 43 AM '83
ENGR
ENGR

301-13-0408

October 26, 1983

Mr. David A. Veak, Principal
Our Savior Lutheran School and French School
99-1099 Punaluu Road
Aiea, Hawaii 96701

Dear Mr. Veak:

Subject: Your letter, dated October 6, 1983,
relating to comments on the Environmental
Impact Statement Preparation Notice for
Punaluu Road, from Pali Koni Street to
Aiea Interchange

Thank you for your comments on the Environmental Impact
Statement (EIS) Preparation Notice for Punaluu Road
improvements from Pali Koni Street to Aiea Interchange.

The construction impacts on Aiea and Kalaheo Streets will be
discussed in the Draft EIS. Hydrological studies are
presently being conducted; the improvements to Punaluu Road
are not expected to worsen existing conditions.

During construction, two-way traffic would be maintained on
Punaluu Road as much as possible. The contractor will be
directed to provide safe and adequate vehicular and pedestrian
access through the construction area.

Light-duty requirements will be dependent on the alternative
selected. Since there are no designated truck routes or
cabs, the restriction of trucks on Punaluu Road is not a
feasible alternative at this time. However, your suggestion
on truck restrictions will be forwarded to the appropriate
agency.

Ke Ye Aiea Ikae,

MICHAEL J. CHURCH
Director and Chief Engineer

cc: Department of Transportation Services

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
DIV. OF ENGINEERING
SEP 22 11 25 AM '83

EILEEN M. ANDERSON
MAJOR



September 19, 1983

83-05331

EUNO I. KUDO
DIRECTOR

SAM L. CARL
SENIOR DIRECTOR

OSCAR M. ASAHIMA
EXECUTIVE ASSISTANT

ENU 09/19/83
ENGR

TO: MICHAEL J. CHUN, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: EMIKO I. KUDO

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
FOR IMPROVEMENTS TO MOANALUA ROAD

The proposed improvements to Moanalua Road will not have any impact on recreation facilities in proximity to the project site.

Thank you for the opportunity to review the EIS Preparation Notice.

Emiko I. Kudo
(Mrs.) EMIKO I. KUDO, Director

EIK:VC

BUILDING DEPARTMENT
CITY AND COUNTY OF HONOLULU
HONOLULU MUNICIPAL BUILDING
415 SOUTH KING STREET
HONOLULU, HAWAII 96813

SEP 28 1 27 PM '83

EILEEN M. ANDERSON
MAJOR



September 27, 1983

PB 83-746

ENU 4
ENGR

TO: MR. MICHAEL CHUN, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: ROY H. TANJI
DIRECTOR AND BUILDING SUPERINTENDENT

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
MOANALUA ROAD, FROM PALI MOMI STREET
TO AIEA INTERCHANGE
FAUS PROJECT NO. M-7200(1)

We have reviewed the Environmental Impact Statement Preparation Notice for Moanalua Road (from Pali Momi Street to Aiea Interchange) and have no comments.

Thank you for the opportunity to review the Environmental Impact Statement Preparation Notice.

Roy H. Tanji
ROY H. TANJI
Director and Building Superintendent

cc: J. Harada

SEP 28 9 07 AM '83
RECEIVED
DIVISION OF ENGINEERING

83-05416

ROY H. TANJI
DIRECTOR AND BUILDING SUPERINTENDENT
WILLIAM F. REMULAN
SENIOR DIRECTOR

JACK K. SUMA
CHAIRMAN, BOARD OF AGRICULTURE
SUZANNE D. PETERSON
DEPUTY TO THE CHAIRMAN



GEORGE B. ANIYOSHI
GOVERNOR
RECEIVED
DIV. OF ENGINEERING
SEP 22 11 25 AM '83

COMMISSION ON THE HANDICAPPED

Old Federal Building - 335 Merchant Street - Room 215 - Honolulu, Hawaii 96813 - Phone 548-7606

September 19, 1983

83-05272
ENV (4914)
ENGR

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

Dear Mr. Chun,

Thank you for keeping us advised of the proposed improvements to Moanalua Road by sending us the Environmental Impact Statement Preparation Notice. While we have no "environmental impact" comments, per se, we would like to comment that we are pleased with inclusion of the statement "wheelchair ramps will be constructed for handicapped persons at all crosswalks".

When the project materializes we would like to be kept apprised of the construction of such ramps.

Thank you for sending us the information.

Sincerely,
Jeff Nunn

JEFFREY D. NUNN
Chairman

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DIV. OF ENGINEERING
SEP 23 8 44 AM '83

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DEPT OF PUBLIC WORKS
SEP 22 2 37 PM '83

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 So. King Street
Honolulu, Hawaii 96814

September 20, 1983

83-05240
ENV (4914)
ENGR

DEPT OF AGRICULTURE
SEP 21 2 45 PM '83

MEMORANDUM

To: Mr. Michael J. Chun, Director
Department of Public Works
City and County of Honolulu

Subject: Environmental Impact Statement Preparation
Notice for Moanalua Road Improvements:
Pali Homi Street to Aiea Interchange
THK: 9-8-12: 18, 25, 29, 30
9-9-12: 38, 40, 42, 43, 44
Aiea, Oahu

The Department of Agriculture has reviewed the subject Notice and has no comments to offer.
Thank you for the opportunity to comment.

Jack K. Suma
JACK K. SUMA
Chairman, Board of Agriculture

"Support Hawaiian Agricultural Products"


 DEPARTMENT OF PLANNING
 AND ECONOMIC DEVELOPMENT
 CITY OF ENGINEERING
 750 SOUTH KING STREET, HONOLULU, HAWAII 96813

GEORGE F. ARDREY
 Kent H. Ke'ihana
 FRANK STANBANK
 83-05822

Oct 3 2 45 PM '83
 83-483

September 29, 1983

ENWU
 ENGR

MEMORANDUM

TO: The Honorable Michael J. Chun, Director
 Department of Public Works
 City and County of Honolulu

FROM: Takeshi Yoshihara

SUBJECT: Environmental Impact Statement Preparation Notice for
 Hoanaluua Road from Pali Momi Street to Alea Interchange.

Thank you for the opportunity to review your "Environmental
 Impact Statement for Hoanaluua Road from Pali Momi Street
 to Alea Interchange," dated September 8, 1983. We have
 no comment at this time.

Takeshi Yoshihara

TY/GS:cq

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 DEPT OF PLANNING
 OCT 3 1 51 PM '83

RECEIVED 83-05405
 CITY OF ENGINEERING
 SEP 28 9 12 AM '83



STATE OF HAWAII
 DEPARTMENT OF DEFENSE
 OFFICE OF THE ADJUTANT GENERAL
 240 DILLON ROAD, HONOLULU, HAWAII 96813

HIENG

23 SEP 1983


ENWU
 ENGR

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

Dear Mr. Chun:

We have received and reviewed the Environmental Impact Statement Preparation
 Notice for improvements to Hoanaluua Road, from Pali Momi Street to Alea
 Interchange. At the present time we have no comments to offer.

Yours truly,


 JERRY H. MATSUDA
 Major, HANG
 Contr & Engr Officer



GEORGE B. ARBORE
DIRECTOR
KENT M. KEITH
FRANK S. SCHWABEK
DEPUTY DIRECTOR

DEPARTMENT OF PLANNING
AND ECONOMIC DEVELOPMENT

STATE OF HAWAII
DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
150 SOUTH KING STREET, HONOLULU, HAWAII 96813



Ref. No. 8202
83-05778

ENUC
ENGR

October 7, 1983

RECEIVED
DEPT OF PUBLIC WORKS
OCT 13 2 41 PM '83

Dr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Dr. Chun:

Subject: EIS Preparation Notice for Moanalua Road Improvements,
Oahu

We have reviewed the subject preparation notice and have the following
comments.

The environmental impact statement (EIS) should contain information
on present and projected traffic volume and accident statistics for vehicles and
pedestrians on the Moanalua Road. A more detailed description of relocation
activities should be provided. The resulting distance of the houses from the
road should be specified for the road widening alternatives. Finally, we agree
that an analysis of air quality, noise and energy costs be included in the EIS.

Thank you for the opportunity to review the subject document.

Very truly yours,

Kent M. Keith
Kent M. Keith

cc: Office of Environmental Quality Control

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OCT 14 10 15 AM '83

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DIV. OF ENGINEERING
Oct 18 8 35 AM '83
University of Hawaii at Manoa



83-05847

Water Resources Research Center
Holmes Hall 203 • 2540 Dole Street
Honolulu, Hawaii 96822

ENVU
ENGR

11 October 1983

DEPT OF PUBLIC WORKS
OCT 11 1983

Dr. Michael J. Chun
Director & Chief Engineer
Department of Public Works
City & County of Honolulu
650 South King Street
Honolulu, HI 96813

Dear Dr. Chun:

SUBJECT: EIS Preparation Notice for Moanalua Road from Pali
Honi Street to Aiea Interchange, Aiea, Oahu, Hawaii
FAUS Project No. H-7200(1), September 1983

We have reviewed the subject EISPN and have no comment to offer
at this time. Thank you for the opportunity to comment. This material
was reviewed by WRCRC personnel.

Sincerely,

Edwin T. Murabayashi
Edwin T. Murabayashi
EIS Coordinator

FTH:jm

AN EQUAL OPPORTUNITY EMPLOYER

83-05587
RECEIVED
DIV. OF ENGINEERING
PROJECT OFFICES

RECEIVED
DIV. OF ENGINEERING
Oct 6 8 57 AM '83



MAUI OFFICE
P. O. BOX 11
MAUI, HAWAII 96752
MOLOKAI OFFICE
P. O. BOX 194
MOLOKAI, HAWAII 96741
HAWAII OFFICE
P. O. BOX 332
HONOLULU, HAWAII 96813

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P. O. BOX 1979
HONOLULU, HAWAII 96819

ENVU
ENGR

October 4, 1983

RECEIVED
DEPT OF PUBLIC WORKS
OCT 5 2 09 PM '83

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

Dear Mr. Chun:

SUBJECT: Moanalua Road, Pali Honi to Aiea Interchange

Reference is made to your letter of September 8, 1983, requesting
comments on the subject project.

The Department of Hawaiian Home Lands has reviewed the Environmental
Impact Statement Preparation Notice for the subject project and has no
comments to offer at this time as the project does not affect DHHL lands.

Thank you for giving us the opportunity to respond to the EIS.

Sincerely yours,

Georgiana K. Padeken
Georgiana K. Padeken
Chairman

GKP:RF:GH:oa



US Department of Transportation Federal Aviation Administration

RECEIVED WORKS
DEPT OF PUBLIC WORKS
SEP 15 2 46 PM '83

83-05/26
ENV
Eng

AIRPORTS DISTRICT OFFICE
P.O. BOX 50244
HONOLULU, HAWAII 96850
Telephone: (808)546-7129

September 14, 1983

Mr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Chun:

We have reviewed the Environmental Impact Statement Preparation Notice concerning proposed improvements to Moanalua Road from Pali Road Street to Aiea Interchange. This project should have no impact on programs under the purview of the Federal Aviation Administration.

Sincerely,

James H. Cox
JAMES H. COX
Airports District Office Manager



Edward Warren: First American Aloit



United States Department of Agriculture

Forest Service
630 Sansome Street
San Francisco, CA 94111

RECEIVED
DIV. OF ENGINEERING
SEP 23 4 02 PM '83

1950

Sept. 19, 1983

Dept. of Public Works
City and County of Honolulu
Attn: Michael J. Chun
Director and Chief Engineer
650 South King Street
L. Honolulu, Hawaii 96813

ENV (M)
ENGR

Dear Mr. Chun:

We have received and reviewed your Environmental Impact Statement Preparation Notice for Moanalua Road (FAUS Project No. H-7200(1)).

We have no comment and it will not be necessary to send us any further correspondence on the project.

Sincerely,

Jon D. Kennedy
JON D. KENNEDY, Director
Land Management Planning

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FS-500-118-83



US Department
of Transportation
Federal Aviation
Administration

SEP 2 2 1983

RECEIVED
UNIV. OF ENGINEERING

SEP 27 10 21 AM '83

P.O. Box 97007
Worship Center
Los Angeles, CA 90009

83-05350

ENVU
ENGR

Michael J. Chun
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Chun:

We are in receipt of the Environmental Impact Statement regarding improve-
ments to the existing Moanalua Road between Kalaueo Stream and the Area
Interchange. These improvements will not affect the safe and efficient use
of airspace by aircraft. Therefore, we have no objection to this project.

Sincerely,

Jerry D. Luce
Jerry D. Luce
Manager, Airspace & Procedures Branch

SEP 26 2 33 PM '83
DEPT OF PUBLIC WORKS

Pacific Islands Forester
State and Private Forestry
Honolulu, Hawaii

RECEIVED
UNIV. OF ENGINEERING
SEP 27 2 47 PM '83

83-05350

2100
September 23, 1983

ENVU
ENGR

Dr. Michael Chun
Director and Chief Engineer, DPM
City and County of Honolulu
650 S. King Street
Honolulu, HI 96813

Dear Dr. Chun:

The USDA Forest Service has reviewed the Environmental Impact Statement
Preparation Notice for the proposed Moanalua Road Project.

We feel the EIS will be adequately done if you address the impacts
included in your preparation notices.

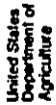
We do not feel we need to review the Draft EIS for this project.

Sincerely,

Robert V. Clayton
ROBERT V. CLAYTON
Pacific Islands Forester

SEP 27 1983

633



United States Department of Agriculture
Soil Conservation Service

83-05608
ENGR
Engy

83-05608
ENGR
Engy



United States Department of the Interior
GEOLOGICAL SURVEY

83-05691

Water Resources Division
P.O. Box 50166
Honolulu, Hawaii 96850

October 7, 1983

ENGR
ENGR

Dr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

Dear Dr. Chun:

Subject: EIS Preparation Notice for Moanalua Road - From Pali Hani
Street to Alien Interchange, Aiea, Oahu, Hawaii

We reviewed the subject preparation notice and have no comments to make.

In the future, please refer EIS preparation notices for comments to
Stratford Whiting, District Conservationist, at our Honolulu Field Office
(telephone: 546-8328). Mr. Whiting's mailing address is:

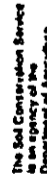
Soil Conservation Service
P.O. Box 50006
Honolulu, Hawaii 96850

Thank you for the opportunity to review the document.

Sincerely,

Francis C. H. Lum
FRANCIS C.H. LUM
State Conservationist

cc: S. Whiting



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DEPT OF PUBLIC WORKS
OCT 11 9 43 AM '83

TO _____

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

Dear Mr. Chun:

Subject: Improvements to Moanalua Road

The Hawaii District Office of the U.S. Geological Survey,
Water Resources Division, has reviewed the subject EIS
preparation notice and has no comments at this time.

Thank you for giving us an opportunity to review the
preparation notice.

Alpha.
Donna M. Hanks
DONNA M. HANKS
Acting District Chief

Enclosure

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DIV. OF ENGINEERING
OCT 11 1 24 PM '83

DAVID K. INOUE
HAWAII

RECEIVED
DIV. OF ENGINEERING
SEP 12 2 16 PM '83

United States Senate

September 9, 1983

83-04992

DAVID H. PETERS
EXECUTIVE ASSISTANT

Mr. Michael J. Chun
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street, 11th Floor
Honolulu, Hawaii 96813

Dear Mike:

Thank you for the copy of the Environmental Impact Statement Preparation Notice on the improvements to Moanalua Road, from Pali Hoei Street to Aiea Interchange.

Senator Inouye who is presently in Washington, D.C., appreciates your thoughtfulness in including his office on the distribution. He has no comments to make at this time.

Aloha,

David H. Peters
DAVID H. PETERS
Executive Assistant
Honolulu Office

DHP:cko

RECEIVED
DEPT. OF PUBLIC WORKS
SEP 12 10 03 AM '83

ENV (4)
ENGR

MARK M. MATSUNAGA
HAWAII

WASHINGTON OFFICE
100 H Street, NE
Washington, D.C. 20510
HONOLULU OFFICE
2144 Punchbowl Place, Suite 200
Honolulu, Hawaii 96819

United States Senate

WASHINGTON, D.C. 20510

September 15, 1983

83-05357

ENV (4)
ENGR

The Honorable Michael J. Chun
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mike:

Thank you for your letter of September 8, 1983 in which you informed me that the Department of Public Works will be preparing an environmental impact statement for proposed improvements to Moanalua Road.

I have noted with interest the purpose of this improvement project to reduce traffic congestion and hazards in the affected area, as well as to increase pedestrian safety. Although I appreciate your giving me this opportunity, I do not have any comments at this point which I would like considered during the drafting of the environmental impact statement.

Aloha and best wishes.

Sincerely,

Mark Matsunaga
Mark Matsunaga
U.S. Senator

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SEP 26 2 33 PM '83

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SEP 14 11 34 AM '83
GEN PAC
PROPERTIES

1150 SO. KING ST., SUITE 1101
Honolulu, Hawaii 96814
PH. 536-1902

83-05055

ENV - 9/14/83
ENGR.

September 12, 1983

Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Attention: Michael J. Chun
Director and Chief Engineer

Dear Mr. Chun:

Per your notice letter dated September 8, 1983, we hereby request a copy of the "EIS Preparation Notice" filed with the Environmental Quality Commission. As the managing agent for Aiea Shopping Center, we would like to know your improvement plans since they will have a dramatic affect on the merchants. Your attention to this request will be appreciated. Thank you.

Very truly yours,

GEN PAC PROPERTIES, INC.

Frank Halfner
Frank Halfner
President

HFH:dm

Hawaiian Association of Seventh-day Adventists
2728 PALI HIGHWAY • BOX 4037 • HONOLULU, HAWAII 96813 • TELEPHONE 574-3161

83-05120

Copy

September 13, 1983

Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

Re: THK 9-9-040:019

Dear Friends:

Our Aiea Seventh-day Adventist Church is located at 99-005 Moanalua Road, which is between Pali Homi Street and the Aiea Interchange. It appears that our property may be affected by the improvements which are planned to Moanalua Road.

Please send us two copies of the EIS preparation notice, which has been filed with the State Environmental Quality Commission. Please send one copy to me at the above address, and the other copy to Pastor John Sharp, Aiea Seventh-day Adventist Church, 99-005 Moanalua Road, Aiea 96701.

Thank you very much for this information.

Sincerely yours,

Robert W. Frost
Robert W. Frost
Vice-president of Finance

RMF/lr

Xc: Pastor John Sharp

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DIV. OF ENGINEERING
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September 13, 1983

EUGENE A. H. MAGNIER, M.D., F.A.C.C., INC.

RECEIVED
DIV. OF ENGINEERING
SEP 15 4 13 PM '83

END Y
Eng Y
83-05122

Department of Public Works
City and County of Honolulu
650 S. King St.
Honolulu, HI 96813

Dear Sirs:

Please send me a copy of the Environmental Impact Statement for Improve-
ments to Moanalua Road, from Pali Momi Street to Aiea Interchange.

Thank you.

Sincerely,

E. Magnier
Eugene A.H. Magnier, M.D., F.A.C.C.

EM:cd

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DIV. OF ENGINEERING
OCT 14 10 15 AM '83

HONOLULU OFFICE
ROOM 204-1028

83-05779
300 PEARL AND COE CENTER
98-1005 MOANALUA ROAD
AIEA, HAWAII 96701

ENMUU
ENGR

October 12, 1983

Department of Public Works
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Gentlemen:

It is my understanding that the Department of Public Works is preparing an Environmental Impact Statement (EIS) for improvements to Moanalua Road from Pali Momi Street to the Aiea Interchange and an EIS preparation notice has been filed with the State Environmental Quality Commission.

✓ Would you please send us copies of this EIS preparation notice and any additional information you might have.

Thank you for your assistance.

Sincerely,

WATERCRESS ASSOCIATES

James P. Wallace
James P. Wallace

RECEIVED
DIV. OF ENGINEERING
SEP 15 4 13 PM '83

SUITE 405 99 - 126 AIEA HEIGHTS DRIVE AIEA, HAWAII 96701 Phone: Office 487-6529 Exchange 524-2375

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DIV. OF ENGINEERING
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DIV. OF ENGINEERING
SEP 16 3 09 PM '83

St. Elizabeth's Church
99-312 MOANALUA ROAD
AIEA, HAWAII 96701

83-05148

ENR

September 15, 1983

RECEIVED
DEPT OF PUBLIC WORKS
SEP 16 2 11 PM '83

Dear Dr. Chun;

Concerning your letter to the Bishop Trust Company, Ltd. regarding property at THK: 9-9-043:029, I have been asked by Mr. Dolim to act as agent for the Roman Catholic Bishop of Honolulu in this matter, since I am pastor of the local parish in the area. I wish all correspondence concerning the possible enlargement of Moanalua Road to be sent to me with a carbon copy to Bishop Trust Company, Ltd. And, I wish to be notified of the Draft Environmental Impact Statement and any hearings in this matter.

Sincerely yours,

Daniel McFichol
Rev. Daniel McFichol
Pastor

Avoid Verbal Orders

Yang & Ma, Inc. "SAY IT IN WRITING"

15114 PACIFIC ST.
EAST-WEST HONOLULU, HI 96816

No. 9/27/83

To City & County of Honolulu
Dept. of Public Works

Phay and Am a copy of
the US Department of Justice
of Pali Home At to an interview
THK 98-018-090

John Lyden

Signed *John Lyden*
Keep This Copy For Reference

CS-00000000

PRINTED IN U.S.A.

83-05712

RECEIVED
DEPT. OF PUBLIC WORKS
HONOLULU, HAWAII 96813
OCT 11 10 43 AM '83

RECEIVED
SCHWITTE FLEMING & WRIGHT
ATTORNEYS AT LAW
1000 BROADWAY
P.O. BOX 939
HONOLULU, HAWAII 96808
TELEPHONE 808 531-8238
TELEX 7338389 CABLE LIT
TELEPHONE 808 331-9200

October 6, 1983

ENVM
ENBR

Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Gentlemen:

Enclosed is a copy of a letter dated September 8, 1983, which has been referred to me by JHL Enterprises. Pursuant to that letter, I would appreciate it if you would deliver to me a copy of the EIS Preparation Notice referred to in that letter.

Very truly yours,

Stanley M. Kuriyama

Stanley M. Kuriyama

Enclosure

Copy of E.I.S. Prep Notice
forwarded as requested.

H.R.D. 10/17/83

RECEIVED
DEPT. OF PUBLIC WORKS
OCT 11 2 30 PM '83

RECEIVED
SCHWITTE FLEMING & WRIGHT
ATTORNEYS AT LAW
1000 BROADWAY
P.O. BOX 939
HONOLULU, HAWAII 96808
TELEPHONE 808 531-8238
TELEX 7338389 CABLE LIT
TELEPHONE 808 331-9200



aiea seventh-day adventist church

89-005 moanalua road
aiea, hawaii 96701
(808) 488-9655

office of the pastor

October 5, 1983

Mr. Paul Non
Chief Highway Engineer
Dept. of Public Works
City & County of Honolulu
630 South King Street
Honolulu, HI. 96813

Dear Mr. Non,

In behalf of our church family I wish to express our thanks to you and your colleagues for presenting the proposed changes on Moanalua Road to us, and for answering questions on Tuesday evening, October 4. We feel this was a profitable meeting for all concerned.

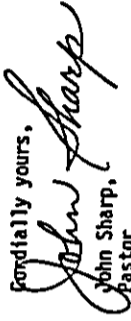
There are, however, some concerns that we have which I shall list below. These concerns are actually those we expressed to you at the meeting, but we want them on record in your office for reference to those who finally decide on which alternative to pursue.

1. If Moanalua Road is extended in width to the 80 foot maximum, this will bring the road very close to the front door of our church. It will remove about a third of our parking spaces which are already very limited, alter the present landscaping, and will necessitate some careful planning to make adjustment to the changes comfortable for us.
2. The much wider roadway will create difficulty for older citizens who need to cross it, and for school children coming from Alva Scott School to our side of the street. There is probably more foot traffic at this location when we come to church, and when school dismisses, than at most other locations along Moanalua Road.
3. With traffic flowing so much closer (and faster) past our church, the noise level will be much elevated above present levels. This elevation will interfere with the quietude desired in our worship services and other church meetings. We will definitely need to plan for some acceptable way to reduce this elevated noise level.
4. With the new grades that will naturally come along with the project, we must insure that rain water is prevented from flowing down into the neighbor's driveway just downhill from our church.

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DIV. OF ENGINEERING
OCT 19 10 24 AM '83

Thank you for giving consideration to these concerns when selecting the alternatives for upgrading Moanalua Road. May we hear from you as progress is made in the planning process so that we may be informed on all the matters of our concern.

Fondly yours,


John Sharp,
Pastor

301-13-0441

November 4, 1983

Mr. John Sharp, Pastor
Aiea Seventh-Day Adventist Church
99-005 Moanalua Road
Aiea, Hawaii 96701

Dear Pastor Sharp:

Subject: Your Letter, Dated October 5, 1983,
Relating to Comments on the Environmental
Impact Statement Preparation Notice for
Moanalua Road, from Pali Momi Street to
Aiea Interchange

Thank you for your comments on the Moanalua Road Improvements
between Pali Momi Street and Aiea Interchange.

The right-of-way requirements will depend on the alternative
selected. However, the impacts of property acquisition on
the Aiea Seventh-Day Adventist Church will be considered in
reaching that decision. Also, please be assured that if
there are impacts to church property, they would be mitigated
or compensated accordingly.

The concern for pedestrian safety is also a consideration in
the development of alternatives for this project, and the
alternatives will incorporate pedestrian safety features
such as elevated sidewalks, traffic walk signals, and
pedestrian crosswalks. Also, during construction, the
contractor will be required to provide safe and adequate
access to adjacent properties for pedestrians.

A study on the noise impacts which could result from this
project is presently being conducted and will be discussed
in the Environmental Impact Statement (EIS) along with
possible measures to mitigate those impacts. The drainage
within the area will also be considered. The Moanalua Road
improvements are expected to improve the existing drainage
conditions.

Mo ko aloha pumehana,

Michael S. Chun
MICHAEL S. CHUN
Director and Chief Engineer

**COMMENTS AND COORDINATION/ PUBLIC
HEARING COMMENTS AND EVALUATION**

XV. COMMENTS AND COORDINATION

A presentation on the subject project was given to attendees of the Aiea Neighborhood Board meeting held on September 19, 1983. The total number of persons present was about 50. Attendees included Neighborhood Board members, area residents, representatives of the County Department of Public Works, and several elected officials. Questions were raised about the project's impacts on existing houses. A relocation plan has been developed, as required in Federal Highway regulations.

A second presentation was given to the Aiea Nutritional Site people at the Seventh Day Adventist Church on the morning of September 29, 1983. About 100 persons attended, the majority of whom were senior citizens. Most concerns voiced were in regard to the additional distance these individuals would have to walk to cross the widened street, and some were concerned that property taking would affect local residents.

A third presentation was given to members of the Seventh Day Adventist Church on the evening of October 4, 1983. About 20 persons were present in addition to City and County DPW staff. Questions and concerns were raised about their potential loss of parking and landscaping, the greater difficulty for older citizens and school children in crossing a widened roadway, noise and drainage.

A fourth presentation was made following a town meeting in Aiea at the United Methodist Church. The meeting was sponsored by State Senator Norman Mizuguchi and State Representative Tom Okamura and was attended by about 50 persons, including City and County DPW staff. Questions raised at this meeting concerned coordination of this project with possible improvements to H-1, the need to improve Moanalua Road, parking, alternatives, landscape, public input, funding, speed limit and safety.

To comply with regulations regarding Early Coordination and Consultation, various agencies were contacted informing them of the proposed project. Additional comments were also received during the EIS Preparation Notice consultation period. The following is a listing of these agencies and a summary of what was discussed:

- 1) Federal Highway Administration (FHWA), DOT - The FHWA has issued a Notice of intent which was published in the Federal Register, Vol. 48, No. 176, Friday, September 9, 1983. This notice was issued to advise the public that an environmental impact statement will be prepared for a proposed highway project in the City and County of Honolulu, Hawaii.
- 2) U. S. Environmental Protection Agency (EPA) - The EPA's concerns on water quality included comments on drainage patterns affecting drainage hydrology, stream modifications and conformity to Federal, State and local plans and standards. The EPA recommended that the U. S. Army Corps of Engineers be contacted for determination of need for a Department of the Army permit.
- 3) U.S. Fish & Wildlife Service (F&WS) - The primary concern of the F&WS related to the potential generation of sediment runoff into the Aiea and Kalauao Streams during construction of the project. The F&WS also indicated that there are no endangered species in the project area, and there are none likely to be listed.
- 4) National Marine Fisheries Service (NMFS) - The NMFS was also concerned about construction work that would be performed in the streams, and the potential sediment runoff, turbidity and chemical (fuel) contamination that could endanger the Pearl Harbor nehu bait fishery. The NMFS suggested that construction in the stream beds, if any, be carefully controlled and/or limited to the dry season, to reduce the potential for erosion and sediment problems.
- 5) State Department of Land and Natural Resources (State Historic

Preservation Officer) - Discussions with the Department have indicated that there were no significant land-marks or sites within the project limits.

- 6) U.S. Department of the Army, Corps of Engineers - (COE)- The COE has determined that the Kalauao Stream culvert crossing requires a Department of the Army permit for structures and construction work. The Aiea Stream culvert crossing has been approved by Nationwide permit in accordance with 33 CFR 330.5(2)(14). Also, the COE declined involvement as a cooperating agency in the Environmental Impact Statement.
- 7) A Public Informational Meeting was held on August 8, 1985 and August 15, 1986 at Alvah Scott Elementary School in accordance with 23 CFR Part 790.
- 8) A summary of comments and evaluation of public input is included as Appendix A.
- 9) The Oahu Metropolitan Planning Organization has received the preferred alternative for the proposed project and has indicated that they have no objections.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

DEC 1 1983

Mr. H. Kusumoto, Division Administrator
Federal Highway Administration
U.S. Department of Transportation
P.O. Box 50206
Honolulu, HI 96850

Dear Mr. Kusumoto:

The Environmental Protection Agency (EPA) has reviewed the Notice of Intent for the project titled PROPOSAL TO IMPROVE MOANALUA ROAD BETWEEN PALI MOMI STREET AND THE AIEA INTERCHANGE, OAHU.

Our review is based on the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508). We have the enclosed comments to offer at this time.

We appreciate the opportunity to comment on the proposed project. Please send three copies of the Draft Environmental Impact Statement (DEIS) to this office at the same time it is officially filed with our Washington, D.C. office. We would also appreciate one copy of any Air and Water Quality Technical Reports which might accompany the DEIS. We also request notification of any public hearings to be held on this project. If you have any questions, please contact me at (415) 974-8188 or FTS 454-8188.

Sincerely yours,

A handwritten signature in cursive script that reads "Loretta Kahn Barsamian".

Loretta Kahn Barsamian, Chief
EIS Review Section

Enclosure (1 page)

Water Quality Comments

For each alternative the DEIS should:

1. Demonstrate the proposed project's consistency with Executive Order 11988 titled "Floodplain Management," dated May 24, 1977.
2. Assess the effects of proposed stream modifications upon floodplain development both upstream and downstream.
3. Completely describe current drainage patterns in the project locale.
4. Assess how altering drainage patterns and characteristics will affect drainage hydrology, surface runoff, erosion potential, soils, vegetation, and therefore water quality.
5. Discuss the project's conformity with state and local water quality management plans and Federal-state water quality standards.
6. Identify any project impacts on riparian (in-stream) habitats or conditions (such as changes in substrate, direction of stream flow or sediment levels).
7. Evaluate the potential for increased toxicity in the stream due to either discharge to the streams or runoff from surrounding areas.
8. Identify appropriate mitigation measures to protect water quality both during and after project construction.

404(b) Permit Comments

The Honolulu District Office of the U.S. Army Corps of Engineers should be contacted to determine the need for a Section 404 discharge permit for any portion of the proposed project. If a permit is required, EPA will review the project for compliance with Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the Clean Water Act. Our evaluation would focus on the maintenance of water quality and the protection of wetlands, fishery and wildlife resources. If applicable, the results of further study should indicate the amount of dredging required, potential disposal sites, types of fill material to be utilized, and quantities to be discharged into waters and wetlands that fall under Section 404 jurisdiction.

(4910-22)
DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
ENVIRONMENTAL IMPACT STATEMENT: CITY AND COUNTY OF
HONOLULU, HAWAII

AGENCY: Federal Highway Administration (FHWA), DOT

ACTION: Notice of intent

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared for a proposed highway project in the City and County of Honolulu, Hawaii.

FOR FURTHER INFORMATION CONTACT:

Mr. H. Kusumoto, Division Administrator

Federal Highway Administration

U. S. Department of Transportation

P. O. Box 50206

Honolulu, Hawaii 96850

Telephone: (808) 546-5150

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the City and County of Honolulu Department of Public Works and the State of Hawaii Department of Transportation, will prepare an environmental impact statement (EIS) on a proposal to improve Moanalua Road between Pali Momi Street and the Aiea Interchange in Kalauao, Aiea, on the island of Oahu, in the State of Hawaii. The total length of the proposed improvement is approximately 4,200 feet.

The proposed project would consist of widening and improving the existing Moanalua Road. Along both sides of the roadway, grade adjustment walls will be constructed as required. Driveway ramps will be reconstructed where necessary to provide access to existing driveways and garages. Existing street intersections will be modified, as necessary, to provide for safer traffic movement and smooth riding connections.

Moanalua Road, between Pali Momi Street and the Aiea Interchange, is currently substandard and is inadequate in accommodating the increased traffic volume generated by adjacent residential and commercial developments.

Alternatives under consideration include: (1) taking no action; (2) providing intersection improvements as a transportation systems management (TSM) action; (3) widening the existing two- and four-lane roadway to between four and six lanes; (4) constructing a divided four-lane roadway; and (5) implementing turning movement restrictions. Various combinations of the above alternatives will be studied.

No formal scoping meetings will be scheduled. However, FHWA will be meeting with several agencies to identify crucial issues and to ensure that matters of importance are not overlooked in the early stages of review. To further ensure that the full range of issues related to this proposed action is addressed and all significant issues are

identified, comments will be received from all interested agencies and parties, pursuant to Chapter 343, Hawaii Revised Statutes.

A public information meeting and a public hearing will be held; public notice will be given of the time and place of the meeting and of the hearing. The draft EIS will be available for public and agency review and comment.

Comments or questions concerning the proposed project and the EIS should be directed to the FHWA at the address provided above.

Issued on: 8/30/83



H. Kusumoto
Division Administrator
Honolulu, Hawaii

OMPO

Oahu
Metropolitan
Planning
Organization

June 16, 1986

Suite 1509
1164 Bishop Street
Honolulu, Hawaii 96813
(808) 523-4178
(808) 548-2638

Mr. Russell L. Smith, Jr.
Director & Chief Engineer
Department of Public Works
Honolulu Municipal Building
650 South King Street, 11th Floor
Honolulu, Hawaii 96813

Dear Mr. Smith:

Moanalua Road EIS

We have reviewed the preferred alternative for the improvement of Moanalua Road between Pali Momi Street and the Aiea Interchange and have no objections. This project is identified in the annual element of OMPO's FY 1986 Transportation Improvement Program which was endorsed by our Policy Committee in their November 26, 1985 meeting.

Sincerely,



Gordon G.W. Lum
Executive Director

GGWL:pc

XVI. DRAFT EIS COMMENTS AND EVALUATION

The following agencies, organizations and individuals have been sent copies of the Moanalua Road Draft EIS for their information and comments. This 30-day review period afforded consulted parties the opportunity to air their concerns and comments which are addressed in the Final EIS. Copies of all comments received on the Draft EIS are included in this section.

FEDERAL AGENCIES

Advisory Council on Historic Preservation
Council on Environmental Quality - Washington D.C.
Environmental Protection Agency
 Office of Federal Activities (A-104)
 Region IX Library
U.S. Department of Agriculture
 Soil Conservation Service, Honolulu
U.S. Department of Commerce
 National Oceanic & Atmospheric Administration, Honolulu
U.S. Department of the Air Force
 15th Airbase Wing
U.S. Department of the Army
 U.S. Army Corps of Engineers, Honolulu
U.S. Department of Energy, Honolulu
U.S. Department of Housing & Urban Development, Honolulu
U.S. Department of Interior
 Fish and Wildlife Service, Honolulu
 Office of Environmental Project Review, Washington D.C.
U.S. Department of Transportation
 14th Coast Guard District
U.S. Department of the Navy
 Commander Naval Base, Pearl Harbor

STATE AGENCIES

Commission on Transportation
Department of Accounting and General Services
Department of Agriculture
Department of Defense
Department of Education
Department of Hawaiian Home Lands
Department of Health
Department of Land and Natural Resources (3)
 State Historical Preservation Officer
Department of Planning & Economic Development
Department of Social Service & Housing
Oahu Metropolitan Planning Organization
Office of Environmental Quality Control (2)
State Energy Office

University of Hawaii
Environmental Center (4)
Marine Programs
Water Resources Research Center
State Archives

CITY & COUNTY AGENCIES

Board of Water Supply
Building Department
Department of General Planning
Department of Housing & Community Development
Department of Land Utilization
Department of Parks and Recreation
Department of Transportation Services
Fire Department
Honolulu City Council
Neighborhood Commission
Oahu Civil Defense Agency
Police Department
The Honorable Patsy Mink
Municipal Reference and Records Center

LIBRARIES

Aiea Library
DPED Library
Hawaii State Library (2)
Legislative Reference Bureau
Pearl City Regional Library
Kaneohe Regional Library
Kaimuki Regional Library
University of Hawaii
Hamilton Library
Sinclair Library

PUBLIC UTILITIES

GASCO, Inc.
Hawaiian Electric Company, Inc.
Hawaiian Telephone
Oceanic Cablevision

NEWS MEDIA

Honolulu Advertiser
Honolulu Star-Bulletin
Sun Press

STATE LEGISLATORS

Senator Richard Wong
Senator Benjamin Cayetano
Senator Joseph Kuroda
Senator Norman Mizuguchi
Representative Henry Peters
Representative Clarice Hashimoto
Representative Tom Okamura
Representative Brian Taniguchi

CONGRESSIONAL REPRESENTATIVES

The Honorable Daniel Inouye
The Honorable Spark Matsunaga
The Honorable Cecil Heftel
The Honorable Daniel Akaka

SCHOOLS - CHURCHES

Aiea High School
Alvah A. Scott School
Aiea Seventh-Day Adventist Church
Bethany Assembly of God
Our Savior Lutheran Church & School
St. Elizabeth School

ORGANIZATIONS

Aiea Neighborhood Board
Oahu Development Conference
Outdoor Circle
Life of the Land
Chamber of Commerce of Hawaii
Sierra Club, Hawaii Chapter
Bishop Museum
Citizens for Hawaii
Commission on the Handicapped
American Lung Association of Hawaii
Hawaii Transportation Association
League of Women Voters
Hawaiian Historic Society
Hawaii Bicycle League
Cancer Center of Hawaii
Colorado State University
Conservation Council for Hawaii
Hawaii Audubon Society
Health and Community Services Council of Hawaii
Historic Hawaii Foundation
Downtown Improvement Association
Downtown Business Council
Watercress Associates
Office of Hawaiian Affairs

MOANALUA ROAD COMMENTS AND EVALUATION

The following agencies have submitted substantive comments which have merited evaluation as presented in the following pages.

FEDERAL AGENCIES

United States Environmental Protection Agency
United States Department of the Interior
Fish and Wildlife Service
United States Department of the Interior
Office of the Secretary

STATE AGENCIES

Department of Health
Department of Land and Natural Resources
Office of Environmental Quality Control
University of Hawaii Environmental Center

CITY AND COUNTY OF HONOLULU

Department of General Planning
Fire Department

PUBLIC UTILITIES

Hawaiian Electric Company, Inc.
Hawaiian Telephone
Oceanic Cablevision

ORGANIZATIONS AND INDIVIDUALS

Aiea Neighborhood Board No. 20
Aiea Seventh-Day Adventist Church
Nancy Chun
Edward, Marlene and Damon Wilcox
Our Savior Lutheran Church and School
Gerald M. Tokuno, AIA

MOANALUA ROAD COMMENTS TO DRAFT EIS REQUIRING NO RESPONSE

FEDERAL AGENCIES

U.S. Department of Agriculture, Soil Conservation Service
U.S. Department of the Air Force, Headquarters, 15th Air Base
Wing (PACAF)
U.S. Department of the Army, U.S. Army Engineer District,
Honolulu
U.S. Department of Energy, Pacific Site Office
U.S. Department of Housing & Urban Development
Honolulu Area Office, Region IX
U.S. Department of the Navy
Headquarters, Naval Base Pearl Harbor

STATE AGENCIES

Department of Accounting & General Services, Division of
Public Works
Department of Agriculture
Department of Defense, Office of the Adjutant General
Department of Education
Alvah A. Scott Elementary School
Office of the Superintendent
Department of Hawaiian Home Lands
Oahu Metropolitan Planning Organization
University of Hawaii at Manoa
Cancer Research Center of Hawaii
Water Resources Research Center

CITY & COUNTY AGENCIES

Board of Water Supply
Building Department
City Council, Chairman
Department of Housing & Community Development
Department of Land Utilization
Department of Parks & Recreation
Oahu Civil Defense Agency
Police Department

CONGRESSIONAL REPRESENTATIVES

U.S. Senator Spark Matsunaga

INDIVIDUALS AND ORGANIZATIONS

Downtown Improvement Association
Hawaii Historic Foundation
The Outdoor Circle
Tadashi Kaneko



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

EVALUATION

United States Environmental Protection Agency, Region IX
November 6, 1985

1. The discussion on water quality impacts will be expanded in the FEIS to include possible techniques for erosion and sediment control. Because the type of structure selected at the Kalauao Stream crossing will have a direct bearing on which of these techniques will be needed, it is not possible to be specific at this time, but the study of the structure alternatives at the Kalauao Crossing will include the specific erosion and sediment control measures pertinent to each one.
2. Your additional comments on Section 404 Permit requirements have been noted. The Corps of Engineers has required a Section 404 permit. The concerns outlined for your evaluation will be considered.

AUG 1985

Mr. H. Kusumoto
Division Administrator
Federal Highway Administration
P. O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) titled MOANALUA ROAD FROM PALI MOHI STREET TO AIEA INTERCHANGE, HONOLULU COUNTY, HAWAII. We recommend that the Final Environmental Impact Statement (FEIS) discuss erosion control and water quality impacts in more detail, as outlined in our enclosed comments.

We have classified this DEIS as category LO, Lack of Objections (see attached "Summary of Rating Definitions and Follow-Up Actions"). The classification and date of EPA's comments will be published in the Federal Register in accordance with our public disclosure responsibilities under Section 309 of the Clean Air Act.

We appreciate the opportunity to review this DEIS. Please send three copies of the FEIS to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please contact Juli Jessen, Federal Activities Branch, at (415) 974-0257 or FTS 454-0257.

Sincerely yours,

Charles W. Murray, Jr.
Assistant Regional Administrator
for Policy and Management

Ref. VL B.R.

Enclosure (2 pages)

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

Water Quality Comments

The DEIS indicates that project development will conform with erosion control measures (p. VI-19). In the FEIS, this section should be expanded to discuss specific techniques. The discussion should include plans for stilling basins or other means to control sedimentation during and after construction. Because construction would span three rainy seasons, the FEIS should discuss means of controlling disturbed soils during rainstorms, such as protecting unpaved areas with burlap. Finally, revegetation to prevent erosion should be addressed.

The DEIS states that a Section 404 permit may be required (p. VI-19). If a permit is required, EPA will review the project for compliance with Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the Clean Water Act. EPA's evaluation will focus on the maintenance of water quality, the protection of fisheries and wildlife resources, and special aquatic sites, including wetlands. These regulations require that no discharge shall be permitted which will result in unacceptable adverse impacts on the aquatic ecosystem.

Environmental Impact of the Action

ID—Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CDD.

Adequacy of the Impact Statement

Category 1—Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally reviewed and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CDD.

*From: EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment



United States Department of the Interior

FISH AND WILDLIFE SERVICE
100 ALA MOANA BOULEVARD
P. O. BOX 52167
HONOLULU, HAWAII 96850

ES
Room 6307

JUL 7 9 1985

EVALUATION

Office of Environmental Services
Fish and Wildlife Service
United States Department of the Interior
November 6, 1985

1. When the project is in the design phase, consideration will be given to several types of stream crossings. Should a culvert crossing be selected, accommodation of Fish and Wildlife Service recommendations to allow for upstream migration of native aquatic fauna will be included.
2. The existing roadway, which has no curbs and limited drainage facilities, allows storm runoff from above the roadway to cross the corridor and continue overland toward Aiea or Kalanua Streams. An improved roadway and drainage system would intercept the cross-corridor storm runoff and discharge it directly into the streams. This will result in a reduction in unchannelized overland flow below the roadway and should further result in a reduction of erosion potential in that area.

Mr. Heiوشي Kusumoto
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Re: Draft Environmental Impact Statement, Moanalua Highway between Pali Komi Street and Aiea Interchange, Oahu

Dear Mr. Kusumoto:

The U.S. Fish and Wildlife Service has reviewed the referenced Draft Environmental Impact Statement (DEIS) and offers the following comments for your consideration.

The portion of the project of concern to the Service involves the replacement of the bridge over Kalanua Stream with a concrete box culvert.

Culverts can impede the upstream migration of native aquatic fauna by creating wide, shallow, laminar flows. This contrasts with the deeper and turbulent flow of natural streams. The Service recommends that a bridge alternative for crossing the Kalanua Stream be considered.

If a bridge over Kalanua Stream cannot be constructed, the Service recommends that a low flow notch be cast into the concrete box culvert. The floor of the low flow notch should be flush with the existing upstream bed and be approximately 3 feet deep by 5 feet wide. This low flow channel would allow the upstream migration of indigenous stream fauna.

Page VI-19 states the proposed project will provide "adequate curbs and gutters which will be able to intercept storm runoff and discharge it into adjacent streams. These improvements should, therefore, reduce the amounts of sediment and debris that maybe [sic] transported in the runoff and are normally found within the project area". The EIS should clarify how the improved curbs and gutters will reduce the amounts of sediment and debris carried in the runoff.



Save Energy and You Serve America!


1.

2.

The Service believes that the improved drainage conditions will increase the amount of sediments and debris that are discharged into the receiving streams and into Atea Bay. 2.

We appreciate the opportunity to comment.

Sincerely yours,


Ernest Kosaka
Project Leader
Office of Environmental Services

cc: DLNR
NMFS-WPPO

EVALUATION

U.S. Department of the Interior
Office of the Secretary
Pacific Southwest Region

November 6, 1985

1. When the project is in the design phase, consideration will be given to several types of stream crossings. Should a culvert crossing be selected, accommodation of Fish and Wildlife Service recommendations to allow for upstream migration of native aquatic fauna will be included.
2. The existing roadway, which has no curbs and limited drainage facilities, allows storm runoff from above the roadway to cross the corridor and continue overland towards Aiea or Kalauao Streams. An improved roadway and drainage system would intercept the cross-corridor storm runoff and discharge it directly into the streams. This will result in a reduction of unchannelized overland flow below the roadway and should further result in a reduction of erosion potential in that area.



UNITED STATES
DEPARTMENT OF THE INTERIOR

OFFICE OF THE SECRETARY

PACIFIC SOUTHWEST REGION
BOX 38008 • 490 GOLDEN GATE AVENUE
SAN FRANCISCO, CALIFORNIA 94102
(415) 896-8200

In Reply Refer To:
ER 85/1142

August 22, 1985

Mr. R. Kusumoto
Division Administrator
Federal Highway Administration
P.O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

This is in response to the request for the Department of the Interior's comments on the Draft Environmental Impact Statement for Moanalua Road (Pali Hoai Street to Aiea Interchange), Honolulu County, Hawaii.

The portion of the project that concerns the U.S. Fish and Wildlife Service involves the replacement of the bridge over Kalauao Stream with a box culvert.

Culverts can impede the upstream migration of native aquatic fauna by creating wide, shallow, laminar flows. This contrasts with deeper and turbulent flow of natural streams. The U.S. Fish and Wildlife Service recommends a bridge alternative for crossing the Kalauao Stream be considered.

If a bridge over Kalauao Stream cannot be constructed, the U.S. Fish and Wildlife Service recommends that a low flow notch be cast into the concrete box culvert. The floor of the low flow notch should be flush with the existing upstream bed and be approximately 3 feet deep by 5 feet wide. This low flow channel would allow the upstream migration of indigenous stream fauna.

Page VI-19 states the proposed project will provide "adequate curbs and gutters which will be able to intercept storm runoff and discharge it into adjacent streams. These improvements should, therefore, reduce the amounts of sediment and debris that maybe (sic) transported in the runoff and are normally found within the project area". The EIS should clarify how the improved curbs and gutters will reduce the amounts of sediment and debris carried in the runoff. The U.S. Fish and Wildlife Service believes that improved drainage conditions will increase the amount of sediments and debris that are discharged into the receiving streams and into Aiea Bay.

1.

2.

Mr. H. Kusumoto, Division Administrator

Thank you for the opportunity to comment. If you have any questions regarding these comments, please contact the Field Supervisor, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, Room 6307, Honolulu, Hawaii.

Sincerely,

Patricia Sanderson

Patricia Sanderson Port
Regional Environmental Officer

cc:

Mr. Russell L. Smith, Jr.
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Director, OEPR v/incoming
Regional Director, National Park Service
Regional Director, Fish and Wildlife Service
Regional Director, Geological Survey
Regional Director, Bureau of Mines



EVALUATION

State of Hawaii
Department of Health

November 6, 1985

1. Dust control measures will be fully implemented and enforced per State Regulations.

2. We refer you to Appendix B, the Noise Study for the proposed project, which describes traffic noise impacts in greater detail. The contractor will be required to conform to all applicable State regulations concerning noise.



STATE OF HAWAII
DEPARTMENT OF HEALTH

P. O. BOX 3275
HONOLULU, HAWAII 96811

July 26, 1985

GEORGE R. ANTONIO
Specialist in Health

CHARLES S. CLARK
Specialist in Health

IN REPLY, PLEASE REFER TO
EPM-85

MEMORANDUM

To: Mr. H. Kusumoto, Federal Highway Administration,
U.S. Department of Transportation
Ms. Letitia N. Uyebara, Office of Environmental Quality Control

From: Deputy Director for Environmental Health

Subject: Environmental Impact Statement (EIS) for Moanalua Road from Pali Momi
Street to Alea Interchange, Aiea, Oahu

Thank you for allowing us to review and comment on the subject EIS. We submit the following comments for your consideration:

Air

Dust control measures should be fully implemented and rigorously enforced.

Noise

1. There are concerns in the proposed project toward probable noise impacts from increase in vehicular traffic volume.
2. Construction activities must comply with the provisions of Title II, Administrative Rules Chapter 43, Community Noise Control for Oahu:
 - a. The contractor must obtain a noise permit if the noise levels from the construction activities are expected to exceed the allowable levels of the regulations.
 - b. Construction equipment and on-site vehicles or devices requiring an exhaust of gas or air must be equipped with mufflers.
 - c. The contractor must comply with the conditional use of the permit as specified in the regulations and the conditions issued with the permit. This includes minimizing noise impacts on classroom activities when operating near all schools along the project route.

Mr. H. Kusumoto
Mr. L. Uyehara
July 26, 1985
Page 2

3. Traffic noise from heavy vehicles traveling to and from the construction site must be minimized in residential areas and must comply with the provisions of Title II, Administrative Rules Chapter 42, Vehicular Noise Control for Oahu. 2.

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



MELVIN K. ROIZ

cc: Mr. Russell L. Smith

SENIOR CIVIL ENGINEER
Office of Land & Natural Resources
EDGAR S. HARRIS
Director of the Department
DIVISIONS:
APPLICABLE REGULATIONS
PLANNING AND
CONSTRUCTION AND
RECONSTRUCTION
CONSTRUCTION PROJECTS
LAND MANAGEMENT
STATE PLANS
WATER AND LAND MANAGEMENT

GEORGE R. JAYSON
Director of the Department



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P O BOX 621
HONOLULU, HAWAII 96808

JUL 17 1985

EVALUATION

November 6, 1985

State of Hawaii
Department of Land and Natural Resources

Erosion-sedimentation control measures will be implemented during construction, and will conform to Federal, State and City requirements as stated in the DEIS. Although no particular mitigation methods have yet been chosen, the methods of control will be determined during final design of the selected alternative, and will also depend upon the type of stream crossing selected.

Ms. Letitia N. Uyehara
Office of Environmental Quality Control
550 Halekaunila St., Room 301
Honolulu, Hawaii 96813

Dear Ms. Uehara:

We have reviewed the draft environmental impact statement (EIS) for Moanalua Road.

Because the road crosses Aiea and Kalaauo streams, adequate erosion-sedimentation control measures should be implemented to protect the quality of these stream waters.

Sincerely,

R. L. Smith, Jr.
RUSSELL L. SMITH, JR.
Chairperson

cc: Mr. H. Kusumoto
USDOOT, FHA

Mr. R. L. Smith, Jr.
C&C Honolulu, DPM

EVALUATION

State of Hawaii
Office of Environmental Quality Control

November 5, 1985

All residents whose property might be affected by this project were notified about the public hearing which was held on August 15, 1985 and were also advised of the availability of the subject EIS.



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

100 KALANIANA'OLU AVENUE, 3RD FLOOR
HONOLULU, HAWAII 96813

July 17, 1985

Mr. Russel L. Smith, Jr.
Director & Chief Engineer
Department of Public Works
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Smith:

Subject: Comments to Moanalua Road From Pali Moai Street to Aiea Interchange EIS

We suggest that the Department of Public Works notify residents along Moanalua Road whose property will be acquired by condemnation and that an environmental impact statement is available for review.

Sincerely,

Letitia N. Uyehara
Director

cc: FHWA

LETITIA N. UYEHARA
DIRECTOR

TELEPHONE NO.
948-9813



University of Hawaii at Manoa

Environmental Center
Crawford 217 • 2550 Campus Road
Honolulu, Hawaii 96822
Telephone (808) 948-7361

August 26, 1985
RE:0422

Mr. H. Kusumoto
Federal Highway Administration
U.S. Department of Transportation
Box 50206
Honolulu, Hawaii 96850

Ms. Letitia N. Uyebara
Office of Environmental Quality Control
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Mr. Kusumoto and Ms. Uyebara:

Draft Environmental Impact Statement
Moanalua Road
(Between Pali Momi Street to Aiea Interchange)
Aiea, Oahu

The above cited Draft Environmental Impact Statement (DEIS) addresses the potential environmental impacts related to the proposed improvements to Moanalua Road between Pali Momi Street and Aiea Interchange within the City and County of Honolulu. Under this plan a range of alternatives are presented from a "no action" case to the construction of additional lanes. The Environmental Center review has been prepared with the assistance of James Parrish, Hawaii Cooperative Fishery Research Unit; Paul Ekern, Agronomy and Soil Science; and Waiington Yee, Environmental Center.

Fauna

Statements concerning the minimization of sedimentation during construction are well taken as excessive sediments could effect the natural resources down stream, such as the Nehu fisheries in Pearl Harbor.

The DEIS does not mention the present conditions of the streams and channels that will be affected by this project. The inclusion of this information would be helpful in assessing impacts to stream biota associated with construction as well as the longer term impacts due to the stream channel modifications. Cemented channels, such as the box culverts proposed, in lieu of bridges, create an artificial substrate which may interfere with the passage of the stream biota. Expansion of the bridges, rather than culverts, would be the environmentally preferred alternative. The DEIS statement does not

AN EQUAL OPPORTUNITY EMPLOYER

Mr. H. Kusumoto
Ms. Letitia N. Uyebara

-2-

August 26, 1985

1. mention if the stream waters will be diverted during construction. If it will be necessary to divert water from the construction area then only partial diversion of the stream is preferred. Total diversion of the water by pumping around the construction site is generally not satisfactory since it inhibits the passage of fauna within the stream.

Page VI-20 has the wrong page number (IV-20).

Threatened or endangered species

2. The DEIS (page VI-20) states that, "The Fish and Wildlife Service, U.S. Department of Interior based on their surveys, have indicated that only native and exotic species of stream biota were found within the Kalaauo and Aiea streams, respectively." Are only native species in Kalaauo Stream and only exotic species in Aiea Stream?

Air quality

3. The discussion of ambient air quality (page V-7, V-10) indicates that during the past seven years, levels of particulates, carbon monoxide, and ozone have sometimes exceeded the allowable State air quality standards (AQS). Based on this statement and the supporting data (Tables 5 and 6) the conclusions drawn on the basis of the modeling studies (page VI-9) are not supported: "maximum peak and eight hour CO concentrations at these locations are expected to be well within allowable federal and state AQS even under worst case of traffic and meteorological conditions considered for both the maximum improvement and the do-nothing alternative."

A re-examination of the input parameters used in the modeling studies seems required.

Flood plain impact

4. On page VI-16, a reference to "Moanalua Road Hydraulic Study" is cited as justification for the base flood elevation below 1 foot maximum. Furthermore, the topographic data and the relationship of the project to floodways, etc. are cited as being submitted, in the future, to the City and County of Honolulu. Since no summaries of the studies are provided nor are they available as published reports, it is not possible to verify or evaluate the adequacies of the figures presented. A summary of these studies, or the pertinent findings, should be provided in the final EIS.

No reference is cited (page V-3) for the basis of the estimated mean annual rainfall of approximately 30 inches for Moanalua and the reference indicated for the hydrology section is an EIS document prepared in 1975. A recently published report, "Rainfall Frequency Study for Oahu, DLNR R73, 1984" should be consulted in determining flood peaks, frequencies and heights for Oahu.

Mr. H. Kusumoto
Ms. Letitia N. Uyehara

-3-

August 26, 1985

We appreciate the opportunity to comment on this DEIS and hope you will find our comments useful in completing the final document.

Yours truly,

Jacquelin M. Miller

Jacquelin M. Miller
Acting Associate Director

cc: Russell L. Smith, Jr., Dept. of Public Works
Patrick Takahashi, Act. Dir., Env. Ctr.
James Parrish
Paul Ekern
Wallington Yee

EVALUATION

Environmental Center
University of Hawaii at Manoa
November 6, 1985

1. A description of the present conditions of the streams and channels affected will be provided in the final Environmental Impact Statement (FEIS). We recognize that culverts can impact upstream migration of native aquatic fauna. During the design phase, several types of bridge or culvert crossings will be examined. If a box culvert solution is selected, accommodation to allow for upstream migration of aquatic fauna will be coordinated with the U.S. Fish and Wildlife Service. Mitigation of construction impacts will depend greatly upon the type of stream crossing selected. Mitigation measures and impacts will be considered in the investigation of stream crossing alternatives.
2. Native and exotic species of stream biota were found in both Kalaiao and Aiea streams. This will be clarified in the FEIS, Page VI-20.
3. The statement on page V-7 of the DEIS indicating that during the past seven years, levels of particulates, carbon monoxide and ozone have sometimes exceeded allowable ADS, refer to monitoring stations located at the Department of Health in downtown Honolulu. This information is provided for a comparative standard against the monitoring stations located

within the project area. This is explained in greater detail in the Air Quality Assessment located in Appendix A.

4. Pertinent findings from the "Moanalua Road Hydraulic Study" will be included in the Final EIS, along with additional references. Rainfall information will be updated in accordance with the DLNR R73, 1984 report, if appropriate.

Ref. V.A.5
VI.B.9

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



DONALD A. CLEGG
Chief Planning Officer
GREGG CONNELL
Deputy Chief Planning Officer

JB/DGP 7/85-1835

July 15, 1985

EVALUATION

City and County of Honolulu
Department of General Planning

November 5, 1985

1. The definition of Level B Service is included in the Final EIS.
2. Funding for Federal Aid Urban system projects is comprised of 75 percent Federal and 25 percent State matching funds. In this project, the City and County of Honolulu and the State will divide the 25% share equally.
3. The corrected elevations are shown in the Final EIS.
4. The construction timetable for the selected alternative is noted in the Final EIS.

Ref. Table 1
Table 3
V.A. 1

Ms. Letitia M. Uyebara, Director
Office of Environmental Quality Control
State of Hawaii
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Ms. Uyebara:

Draft Environmental Impact Statement (dEIS)
for the Moanalua Road Project (Pali Momi Street to
Aiea Interchange)--Your Letter Dated June 28, 1985

We have the following comments for your consideration.

1. Implementation of the Moanalua Road improvements from Pali Momi Street to the Aiea Interchange is in accord with the Development Plan Public Facilities Map for the Primary Urban Center. 1
2. Table 3 on page IV-15 of the dEIS appears to have omitted the definition of Level B services. 2
3. What proportion of the project cost, by percentage or in dollar amount, will each of the Federal/State/City governments absorb? 2
4. Page V-1 of the dEIS states:
"The project terrain varies from flat to rolling, creating steep slopes and sharp curves at several locations. Elevations range from 35 to 150 feet above sea level." 3

Ms. Letitia M. Uyebara
July 15, 1985
Page 2

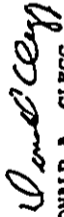
Examination of an aerial topo map (Scale: 1" = 200') for the Aiea area, however, reveals the high point along Moanalua Road within the project site is between 80' to 85' above sea level, near the Kaamilo Street intersection. 3

The 150' contour, on the other hand, crosses over Kaamilo Street about 1,850 feet or 0.35 miles mauka of Moanalua Road.

5. The duration of the construction period for this project, not noted in the DEIS, might be indicated. 4

Thank you for the opportunity to comment.

Sincerely,



DONALD A. CLEGG
Chief Planning Officer

cc: ✓ Federal Highway Administration
(Mr. H. Kusumoto)
Department of Public Works

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

1455 KALANOAULI DRIVE, ROOM 302
HONOLULU, HAWAII 96814



FRANK K. KAHOOHANOHANO
FIRE CHIEF
LIONEL S. TAMARA
DEPUTY FIRE CHIEF

FRANK F. FALK
FIRE CHIEF

EVALUATION
City and County of Honolulu
Fire Department
November 5, 1985

The project engineers will be in coordination with your department for fire apparatus accessibility and fire hydrant placement. A Notice of Construction will also be submitted to the Fire Alarm Bureau for response route planning.

July 9, 1985

Mr. H. Kusumoto, Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Subject: Draft EIS Statement, FHWA-HI-EIS-84-02-D
Moanalua Highway, Pali Momi Street to
Aiea Interchange, County of Honolulu,
State of Hawaii

We have reviewed the application submitted for the above subject and have no objections to the proposed project.

Consideration, however, should be given for fire apparatus accessibility to residence and fire hydrants in the proposed construction area.

A Notice of Construction should also be submitted to our Fire Alarm Bureau within sufficient time so we may prepare a new response route for our responding units.

Should you require further assistance, please do not hesitate to contact Battalion Chief Julio Agcaoil of our Fire Prevention Bureau at 943-3165.

Sincerely,
Frank K. KahooHanoHano
FRANK K. KAHOOHANOHANO
Fire Chief

FKK:smh

cc: Ms. Letitia N. Uyebara,
Office of Environmental
Quality Control
Mr. Russell L. Smith, Jr.,
Dept. of Public Works



EVALUATION

Hawaiian Electric Company, Inc.

November 6, 1985

1. The FEIS will be modified to delete reference to concrete poles.

2. During the final design, the project engineers will coordinate with Hawaiian Electric Company on plans for future powerlines crossing the project area, as well as for relocation of existing H.E.I. facilities.

Ref. V.D.6



Brenner Munger, Ph.D., P.E.
Manager
Environmental Department
(808) 548 6880

July 25, 1985

Mr. H. Kusumoto
U.S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Subject: Draft Environmental Impact Statement for 'Ioanalua Road from Pali Homi Street to Aiea Interchange

We have reviewed the subject Draft EIS and have the following comments:

1. On page V-16, reference is made to permanent concrete poles. To our knowledge, we did not install concrete poles in this area.
2. Future 138 kv lines will be required out of Maiau Power Plant and they may be required to traverse the project area.

Thank you for letting us comment on this project.

Sincerely,

Brenner Munger

Brenner Munger, Ph.D., P.E.
Manager, Environmental Department

SLC:cal

cc: Ms. Letitia N. Uyehara
State, OEQC

Mr. Russell L. Smith, Jr.
C&C, Dept. of Public Works

EVALUATION

Hawaiian Telephone Company

November 6, 1985

During the design phase the project engineers will continue to coordinate with Hawaiian Telephone Company on relocation of existing service lines.

HAWAIIAN TELEPHONE
GITB

July 31, 1985

Mr. H. Kusumoto
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
P.O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Draft EIS, FHWA-HI-EIS-84-02-D
Moanalua Highway, Aiea, Hawaii

We have reviewed the Draft Environmental Impact Statement for the proposed widening of Moanalua Road between Pali Momi Street and Aiea Interchange and would like to offer our comments at this time.

There are existing underground and overhead telephone lines within the project site which will probably require relocation to accommodate the roadway widening. The method and scope of construction work, if any, to be performed by Hawaiian Telephone Company will depend upon which of the five design alternatives being considered to improve traffic operations along Moanalua Road is selected.

Thank you for the opportunity to comment on this proposed project. If there are any questions, please call Nelson Yrizarry at 834-6222.

Sincerely,

G. Kaneko
G. Kaneko
Oahu Engineering & Construction
Manager

EVALUATION

Oceanic Cablevision

November 6, 1985

During the design phase the project engineers will coordinate with Oceanic Cablevision on the relocation of existing cable television facilities.



2669 Kalia Street • Honolulu, Hawaii 96819 • (808) 836-7888

July 31, 1985

U. S. Department of Transportation
Federal Highway Administration
REGION NINE
Hawaii Division
Box 50206
Honolulu, HI 96850

Attention: Mr. K. Kusumoto
Division Administrator

Subject: Draft EIS Statement, FHWA-HI-EIS-84-02-D
Moanalua Highway, Pali Momi Street to
Aiea Interchange, County of Honolulu,
State of Hawaii

Dear Mr. Kusumoto:

Reference the above proposal, Oceanic Cablevision has no major response to offer at this time.

Be advised, however, we do have existing aerial cable facilities along this route which is our major feed to Aiea and Halawa Heights areas. Accordingly, relocation of CATV facilities will be required along with other utilities within the area. Relocation costs resulting from this conversion will be furnished upon request.

Should there be any questions regarding actual requirements for relocation of our facilities, please contact Mr. Connie Souza (834-4154) or myself at 834-4145.

Respectfully,

Don Camacho

Don Camacho
Director, Plant/Facilities

DC:bs

24SH/b

EVALUATION

Alea Neighborhood Board No. 20

November 6, 1985

1. Elimination of left turn pockets will result in increased congestion at intersections when drivers attempting left turns block the through traffic lanes.

2. The recommended alternative in the section from Laulima Street to Alea Interchange includes a left turn lane which is necessary to reduce congestion. The overall right-of-way needed will be minimized by reducing lane widths to 10 feet.

AIEA NEIGHBORHOOD BOARD NO. 20
CIVIC CENTER LIBRARY
99 132 MOANALUA ROAD
AIEA, HAWAII 96701



August 20, 1985

TO: H. Kusumoto, Div. Admin., Federal Highway Admin.

FROM: Alice Takehara, Chairman

SUBJECT: Moanalua Road Widening Draft Environmental Impact Statement

On August 19, 1985, the Aiea Neighborhood Board members recommended Alternate III with modification for the Moanalua Road Draft Environmental Impact Statement with the following recommendations:

Recommendation

Justification

- | | | |
|--|---|----|
| 1. Eliminate all left turn pockets on Moanalua Road between Honomanu St. and Kaunahale St. | This would reduce right-of-way taking. | 1. |
| 2. Eliminate widening of roadway but improve the curb and sidewalk between Laulima St. and Alea Interchange. | 4-lane exist in this section. Right-of-way taking may not be necessary. | 2. |
| 3. Reduce the roadway width to 11 feet. | To deter speeding. | |

Your support would be much appreciated.

EVALUATION

Aiea Seventh-Day Adventist Church November 6, 1985

jalousie windows which face Moanalua Road are closed. The ground level windows and doors along the front and sides of the church may be opened for ventilation since they will be partially or completely shielded from the roadway by the wall or other intervening structures.

1. The recommended alternative in the section of Moanalua Road near the Aiea Seventh-Day Adventist Church is Alternative II which consists of five, 12-foot wide lanes and an 8-foot sidewalk area on each side of the roadway. Curb lanes would be 14 feet wide, and the total width of right-of-way is 80 feet. The five lanes will consist of two through lanes in each direction with a middle, two-way continuous left turn lane. During peak traffic periods all lanes will be utilized for through traffic. However, during off-peak traffic hours, including Saturdays and Sundays, parking will be allowed in the curb lane. This will provide some additional parking for church goers and will separate the church from traffic by one additional lane width.

2. The Noise Study in the Draft EIS (Appendix B) indicates that noise increases in the vicinity of the church are expected to be about 4dB but should not exceed levels above the FHWA exterior noise criteria. In order to meet interior noise criteria of the FHWA and the Department of Health a 6-foot high sound attenuation wall may be constructed along the roadway right-of-way which will reduce interior noise levels within the church from approximately 57 Leq(h) to approximately 50 Leq(h), providing that the upper level clear glass



aiea seventh-day adventist church

99-005 moanalua road
aiea, hawaii 96701
(808) 488-8655

office of the pastor
August 25, 1985

Mr. Heloashi Kusumoto
Division Administrator
Federal Highway Administration
U.S. Department of Transportation
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto,

I was privileged to give testimony at the public hearing held at the Alva A. Scott School Cafeterium on August 15 concerning the impact the Moanalua Road changes will have on our 300 plus member church congregation. This letter is intended to summarize the consensus of our thinking at the Aiea Seventh-day Adventist Church.

I have sketched on the attached sheet an expanded draft of Alternative II that has been proposed by the city and county of Honolulu. You will notice that the sketch calls for a SIXTH LANE to be included in the 80' right-of-way for use as a parking lane only on the street side closest to our church. This sixth lane will serve several useful purposes as follows: 1) Push the traffic flow one lane farther away from our church, 2) Provide additional parking on our side of the street, and 3) The narrowing of those thru-lanes to 11' will tend to slow the speed of traffic.

An example of the above suggested alternative already exists on Moanalua Road from Keonohi Street, all the way past the Pearl Ridge Shopping Center, nearly to Koauka Street. We also feel that a sixth parking lane could be beneficial to other churches who will be losing parking space as the road is widened, to other residents who have multiple vehicles or visiting guests and perhaps even some of the business places in the Aiea Shopping Center.

Another very important impact upon our Church and its purposes will be the increased noise levels produced by increased traffic flow past our church, as indicated in the DRAFT ENVIRONMENTAL IMPACT STATEMENT. Even now there are times when our services are interrupted by especially noisy traffic. Tape recordings taken during services verify this difficulty.

Mr. Heloashi Kusumoto
Page 2.

Because of the expected increases in noise level, we therefore have the following requests to submit for your consideration and implementation:

1. That a wall of reasonable height be constructed all along the frontage of our church property except for ingress and egress to the parking area. You will note this designation on the enclosed sketch. The height of this wall will vary as it fronts our property, but should be perhaps from 2.5 feet to 3.5 feet above the sidewalk level. This, of course, should be planned architecturally to provide the best appearance.
2. That funds from this project be allocated to provide for the installation of an adequate air-conditioning system for our Church sanctuary, along with the running of an additional power line to our premises to carry sufficient electrical power for the operation of the air-conditioning system. If worshippers are to get the greatest benefit from gathering in God's presence, it is essential that the noise must be abated to a level that insures quietude and provides an atmosphere of reverence.

As indication that the members of our congregation are in agreement with the above requests, I have enclosed several sheets listing the names of members who have both heard the explanations and indicate their agreement by signature.

Thank you for affording us opportunity to express our concerns and requests, and as progress is made on Moanalua Road's development, we trust that you will honor our requests.

Please send us a copy of the final Environmental Impact Statement also.

Sincerely yours,
John Sharp
John Sharp,
Pastor

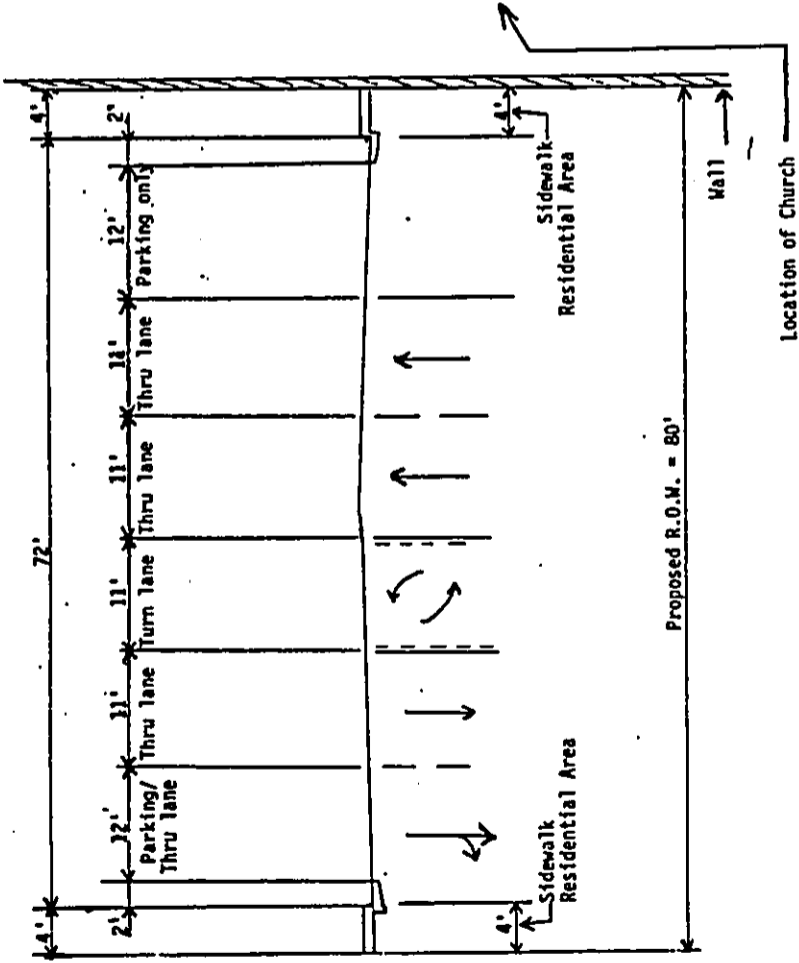
2.

1.

2.

MOAIALUA ROAD IMPROVEMENTS

We, the undersigned, are members of the Aiea Seventh-day Adventist Church, and have reviewed the Revised Version of Alternatives II and IV as shown on the attached sheet, and agree with the request of our church board as outlined in the accompanying letter written by our Pastor.



- | NAME | NAME |
|-------------------------------------|----------------------------|
| <i>Frank H. Roberts</i> | <i>William C. Robinson</i> |
| <i>Dr. James Dwyer</i> | <i>Robert J. Carpenter</i> |
| <i>John W. Taylor, Jr., D.D.</i> | <i>Richard A. Dwyer</i> |
| <i>Lucy C. Dwyer</i> | <i>Joseph H. Dwyer</i> |
| <i>Ken [unclear]</i> | <i>Wald W. Dwyer</i> |
| <i>Teopida Ecallejas</i> | <i>Sam P. Dwyer</i> |
| <i>Camille [unclear]</i> | <i>Robert [unclear]</i> |
| <i>Carlos Sanchez Perez</i> | <i>Robert Young</i> |
| <i>Richard [unclear]</i> | <i>Bosie Madoff</i> |
| <i>Abraham Kipoko Kunda</i> | <i>Melvin Hilliges</i> |
| <i>ABRAHAM BAYACA</i> | <i>Dr. [unclear]</i> |
| <i>[unclear]</i> | <i>Donald [unclear]</i> |
| <i>[unclear]</i> | <i>John [unclear]</i> |
| <i>[unclear]</i> | <i>Beatrice Tamura</i> |
| <i>Mr. & Mrs. Thomas Bayaca</i> | <i>[unclear]</i> |
| <i>Shomith Carl C. Bayaca</i> | <i>[unclear]</i> |
| <i>Gregoria T. Datangal</i> | <i>[unclear]</i> |
| <i>CARL & LINDA BAYACA</i> | <i>[unclear]</i> |
| <i>Mr. & Mrs. Steven Bayaca</i> | <i>[unclear]</i> |
| <i>ELVIE F. TUNGBALAN</i> | <i>[unclear]</i> |
| <i>Lerrie Joy B. Martinez</i> | <i>[unclear]</i> |
| <i>Dolores C. Maniiva</i> | <i>[unclear]</i> |
| <i>[unclear]</i> | <i>[unclear]</i> |

EVALUATION

No. Nancy Chun

November 6, 1985

1. The existing roadway section near the residence is already four lanes wide but one additional lane will be needed to accommodate left turn movements. This will help to reduce traffic congestion in this area. To minimize impacts to yours and other residences, the traffic lanes will be kept to 10 feet wide instead of 12 feet wide. No easement area will be taken from your property.
2. The projected exterior noise level at your residence is only 1 Lq above the FWA criteria, and this value is within the accuracy tolerance of the predictive noise measures. However, a planting screen of dense shrubs will be provided along the roadway at your residence.

The road widening improvement will reduce congestion which will reduce air pollutants.

RECEIVED
ENGINEERING DEPT. OF PUBLIC WORKS
AUG 22 1 57 PM '85

RECEIVED
ENGINEERING DEPT. OF PUBLIC WORKS
AUGUST 21, 1985

Dear Mr. Russell Smith Jr:

I am writing to you in regards to the Moanalua Road improvement. I suggest that you do not widen the road in front of my house at the corner of Moanalua Road and Puukala Street. (99-104 Puukala St) Widening of the road there is unnecessary; because, it is already a four lane divided highway. Widening of the road will cause environmental problems for the occupants living there. The side of my house, next to the road, is only a narrow pathway. If the pathway is made smaller, the occupants will have difficulty moving their furniture in and out of the side entrance.

The fumes and noises that come from the street are bad enough, as it is and bringing the street closer to my house will even make it worse. So please reconsider my point of view. The only improvement needed in my section is a level concrete sidewalk and a street lamp. Installing a traffic light on Puukala St. and Moanalua Rd would be beneficiary.

I will appreciate it if you will keep me informed of the progress of the Moanalua Road improvement plan.

Sincerely,

Nancy Chun

RECEIVED
DIV. OF ENGINEERING
August 25, 1985

AUG 27 4 18 PM '85

Mr. Russell L. Smith Jr.
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

8504365

ENGR

8. We recommend that an exit from the H-I ewa bound to the Pearlridge Center be considered.
We want Moanalua Road to be improved and feel that Alternative IV would be the most suitable for our community.

Dear Sir,

This letter is in regards to the proposed widening of Moanalua Road in Aiea.

Our residence is located at 98-536 Kaimu Loop, FHE: 198-030-037. The back of our property is above Moanalua Road. We will be affected by all the alternatives presented to us at the public hearing held on August 15, 1985, except Alternative I.

We request the following:

1. That alternative II be completely eliminated. We don't need another H-I or Kam Highway running through our community. We don't need more noise, pollution and speedsters in our environment.
2. That concrete sidewalks be laid the full length of the project.
3. The widening of Moanalua Road will create a bottleneck for the Honolulu bound traffic at the Aiea Interchange entering the H-I Freeway. We request that this problem be remedied.
4. Our property sits about 35 feet above Moanalua Road on unstable filled land. We know that this project will present an unsafe condition for our home, family, pets and guests. Our water runoff also flows towards Moanalua Road. We want to be assured that these problems will be taken care of during progress of the project.
5. We request a stonewall extend about 3 1/2 feet above our property level instead of a chain link fence on top of a stonewall.
6. We request that all telephone and hi-tension poles, remain on the makai side of the road in the area of our property, instead of hanging in our faces.
7. We request compensation not only for the lost of property, but also for the lost of property value.

(1)

RECEIVED
DEPT OF PUBLIC WORKS
AUG 27 1 42 PM '85

Sincerely,

Edward Wilson
Marlene M. Wilson
Demetri Wilson

(2)

EVALUATION

Mr. Edward Wilcox

November 6, 1985

1. The recommended alternative is a combination of Alternatives II and IV. These were selected because they most closely adhere to the four basic criteria for development of the project. This is defined in greater detail in the Final EIS.

2. Concrete sidewalks will be used for the entire length of the project.

3. It is not anticipated that implementation of this project will create congestion at the Aiea Interchange entrance to H-1 Freeway. Although traffic flow on Moanalua Road will be improved, this traffic is "metered" by the traffic signals along the proposed improvement. Further, once traffic is beyond the signal at Aiea Interchange there are no restrictions to traffic flow in the interchange itself.

4. All possible design safety precautions will be considered in any adjustments to your property required by this project. At this time there is no reason to believe that a safe design of your property adjustments cannot be achieved. However, if normal design practices do not satisfy recognized safety standards for these property adjustments, other measures will have to be considered.

5. Chain link fencing is currently proposed as the standard enclosure feature for property improvements along the project length.

6. Removal and/or relocation of utility lines will be handled during the design phase. Relocations of the lines may be required to be underground. However, if lines are placed above ground, consideration will be given to their location in regard to residences and other structures.

7. Details of compensation for property acquired for roadway right-of-way will be handled during the design phase by right-of-way agents and other authorized government representatives.

8. The City and County has discussed with the State DOT an additional exit from H-1 to Pearlridge. It has been determined that such a connection is not under consideration.

8E04264

EVALUATION

Our Savior Lutheran Church & School

November 6, 1985

The recommended alternative for this project includes a sidewalk area 8 feet wide on each side of the roadway for the full length of the project. This feature, combined with improvements to traffic flow such as a continuous two-way left turn lane, should greatly improve safety along this section of roadway.

OUR SAVIOR LUTHERAN CHURCH & SCHOOL

EMR-

JAMES R. RUSSOW, Pastor
(808) 486-3634
WAYNE H. DELVENTRAL, Principal
(808) 486-0000

August 22, 1985

98-1096 MOANALUA ROAD
AIEA, HAWAII 96701

RECEIVED
DEPT OF PUBLIC WORKS
AUG 27 1 42 PM '85

Mr. Russell Smith, Director
City and County of Honolulu
Dept. of Public Works
650 South King St.
Honolulu, HI 96813

Dear Mr. Smith:

Aloha nui loa ke Akua Iesu!

The Church Council, the governing board of Our Savior Lutheran Church, Aiea, is very concerned about the safety of traffic, pedestrians and cyclists on the narrow portion of Moanalua Road, especially near the Kalaueo Stream, which borders our church property. On Tuesday afternoon there was yet another traffic accident. This time a cyclist was struck by a vehicle coming over the rise on the Kalaueo Stream bridge. The cyclist received a severe arm injury.

We wholeheartedly support the proposed widening project now being given much attention. The earlier this much needed project is completed, the safer will be the traffic flow.

Since there are no sidewalks along this narrow portion of Moanalua Rd., pedestrians are in jeopardy. Of special concern are the students who walk to school along the road. Often they are inches away from the cars and trucks whizzing past in both directions in the morning and afternoon. It is a wonder that no students have been struck in recent years.

We support your project! Let's get started and finished!

Sincerely yours,
James R. Russow
James R. Russow
Pastor
Philip Kobler
Philip Kobler
Chairman



EVALUATION

Gerald M. Tokuno, AIA

November 6, 1985

1. Unlike the freeway which has restricted access for both vehicles and pedestrians, Moanalua Road will have virtually unrestricted access. Cross corridor movements will continue per the existing but will be enhanced by intersection improvements. Access to driveways and residences along the corridor will be direct, and pedestrian access to churches, schools, libraries and stores will be vastly improved by the sidewalks that will be provided.

2. The condition of the existing roadway is contributing greatly to the congestion you have noted. This project will improve the through traffic flow and will also facilitate travel within the community by improving access.

ARCHITECT
99-165 Moanalua Road, Suite 307, Aiea, Hawaii 96701 Telephone (808) 487-2002

GERALD M. TOKUNO AIA

August 19, 1985

Mr. Heiوشي Kusumoto
Division Administrator
Federal Highway Administration
U.S. Department of Transportation
Box 50706
Honolulu, HI 96850

Gentlemen,

Subject: Proposed Improvements to Moanalua Road
Between Pali Momi St. & Aiea Interchange

I would like to take this opportunity to make the following comments on the subject project:

1. Aiea Town is already bisected by the H-1 Freeway and Kamehameha Highway. The Freeway is a major barrier to mauka-makai access within Aiea.
2. Many local residents still do a lot of their neighborhood business (banking, service goods, & etc.) by walking to the small stores located in the vicinity of Moanalua Road and Aiea Heights Drive.
3. The proposed widening of Moanalua Road to a 70 or 80 foot wide roadway will cut across the very heart of Aiea. This will further limit mauka makai access and isolate portions of the community.
4. I believe that improvements are badly needed. But not at the cost of destroying the economic and social life of Aiea.
5. During commuting hours (especially in the afternoon) Moanalua Road is clogged with traffic making it almost impossible to travel within Aiea. The widening of Moanalua Rd. will further encourage people to use this route instead of the Freeway.

Mr. Heiوشي Kusumoto
Division Administrator
Federal Highway Administration
August 19, 1985

In conclusion I would like to see improvements along Moanalua Road, but not to the extent that it will further cut Aiea into small isolated neighborhoods surrounded on two or three sides by major highways. Please keep at least one street in Aiea for local traffic and encourage through traffic commuters to take either the H-1 Freeway or Kamehameha Highway. Thank you for this opportunity to express my thoughts on this matter.

Very Truly Yours,

Gerald M. Tokuno
Gerald M. Tokuno AIA

United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 50006
Honolulu, HI
96850

HDA - HI



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 15TH AIR BASE WING (FACAF)
HICKAM AIR FORCE BASE, HAWAII 96853-5000

9 JUL 1985

REPLY TO
ATTN OF: DEEV (Mr Fujimoto, 449-1831)

Mr. H. Kusumoto
U.S. Department of Transportation
Federal Highway Administration
Region Nine, Hawaii Division
P.O. Box 50206
Honolulu, HI 96850

Dear Mr. Kusumoto:

Subject: Draft EIS Statement, FHWA-EIS-HI-84-02-D
Moanalua Highway, Pali Moai Street to
Aiea Interchange, County of Honolulu,
State of Hawaii

We reviewed the subject statement and have no comments to make, but thank
you for the opportunity to review this document.

Sincerely,

Stratford L. Whiting
Stratford L. Whiting
District Conservationist

August 26, 1985

SUBJECT: Draft Environmental Impact Statement for the Moanalua Road, Pali Moai Street
to Aiea Interchange, City and County of Honolulu, State of Hawaii

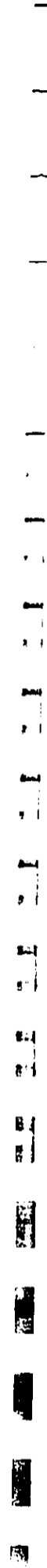
TO: US Department of Transportation
ATTN: Mr H Kusumoto
P. O. Box 50206
Honolulu, Hawaii 96850

1. This office has reviewed the subject EIS and has no comment relative to
the proposed project.

2. We greatly appreciate your cooperative efforts in keeping the Air Force
apprised of your project and thank you for the opportunity to review the docu-
ment. The EIS is returned for your file.

Robert M. Okazaki

ROBERT M. OKAZAKI
Chief, Engrg & Envtl Ping Div
Directorate of Civil Engineering
1 Atch
EIS





DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96830-5460

August 7, 1985

Mr. H. Kusumoto, Division Administrator
Federal Highway Administration
Region Nine, Hawaii Division
P. O. Box 50206
Honolulu, Hawaii 96850

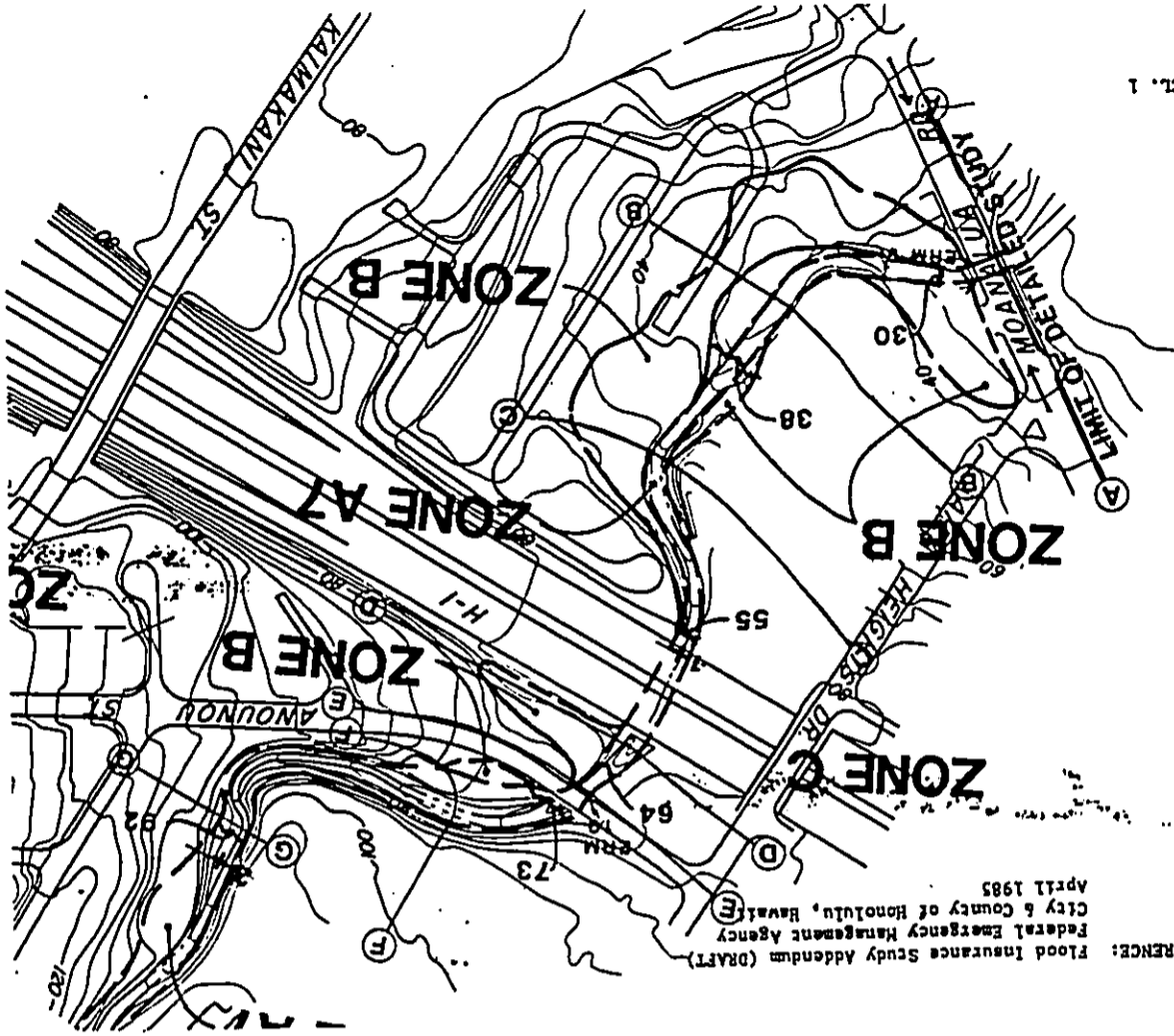
Dear Mr. Kusumoto:

Thank you for the opportunity to review and comment on the Draft EIS for Moanalua Highway, Pali Momi Street to Aiea Interchange, County of Honolulu, State of Hawaii. In relation to flood hazards, we have included for your information, Flood Insurance Rate Maps for Kalauao and Aiea Streams taken from an addendum (draft) to the Flood Insurance Study for the City and County of Honolulu. This study, which is presently in draft form, was prepared in April 1985. It provides more detailed information with respect to Zone A designated sections. At the crossing of Moanalua Road and Kalauao Stream, the area is designated Zone A4, with 100-year flood elevation of 20-25 feet mean sea level (MSL) (Encl 1 and 2). At the limit of the detailed study for Aiea Stream, Moanalua Road is shown within an area of Zone A7 designation with 100-year flood elevation of 30-35 feet MSL (Encl 3 and 4).

Sincerely,

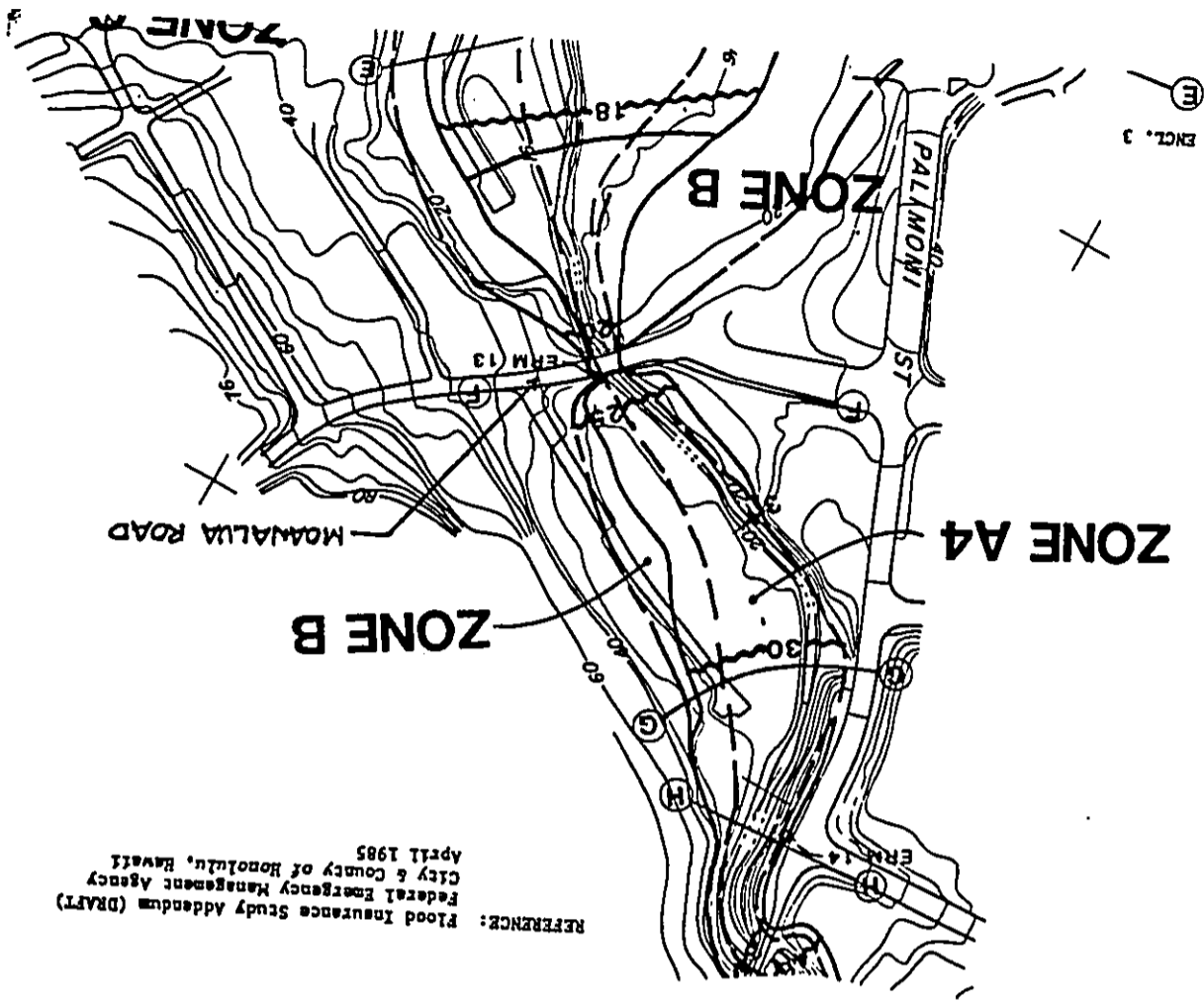
W. K. Cheung
W. K. Cheung
Chief, Engineering Division

Enclosures

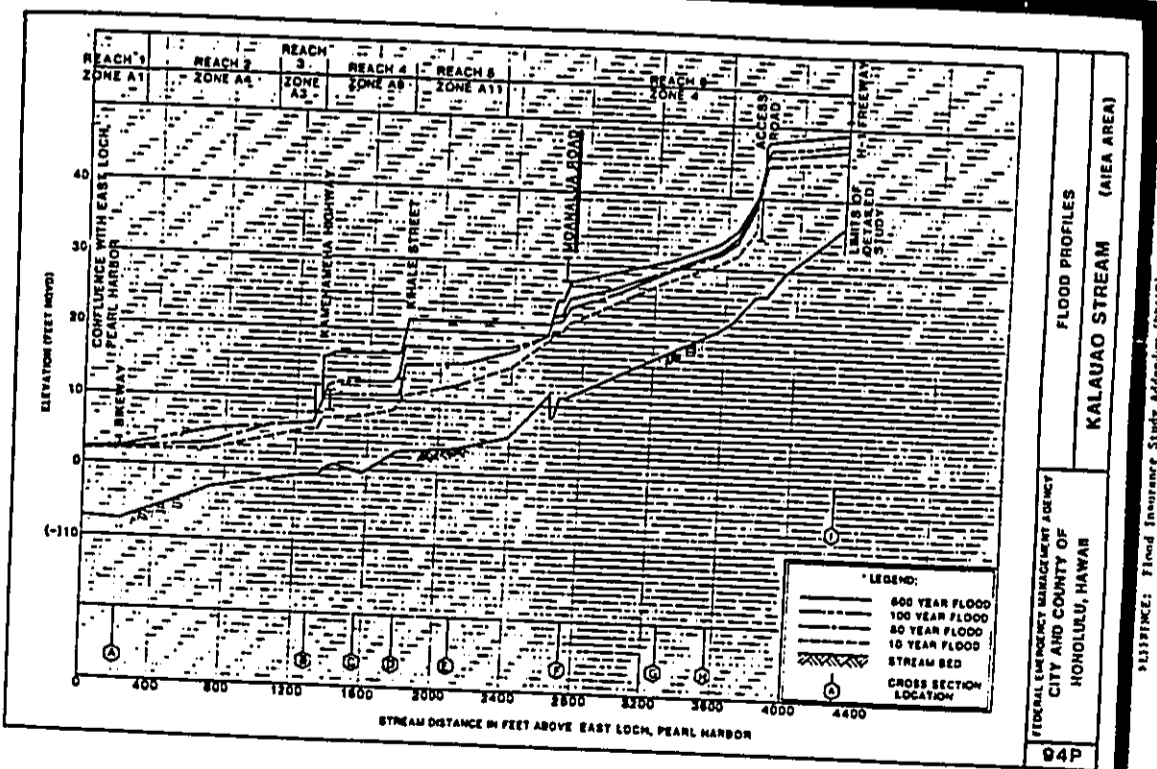


REFERENCE: Flood Insurance Study Addendum (DRAFT)
Federal Emergency Management Agency
City & County of Honolulu, Hawaii
April 1985

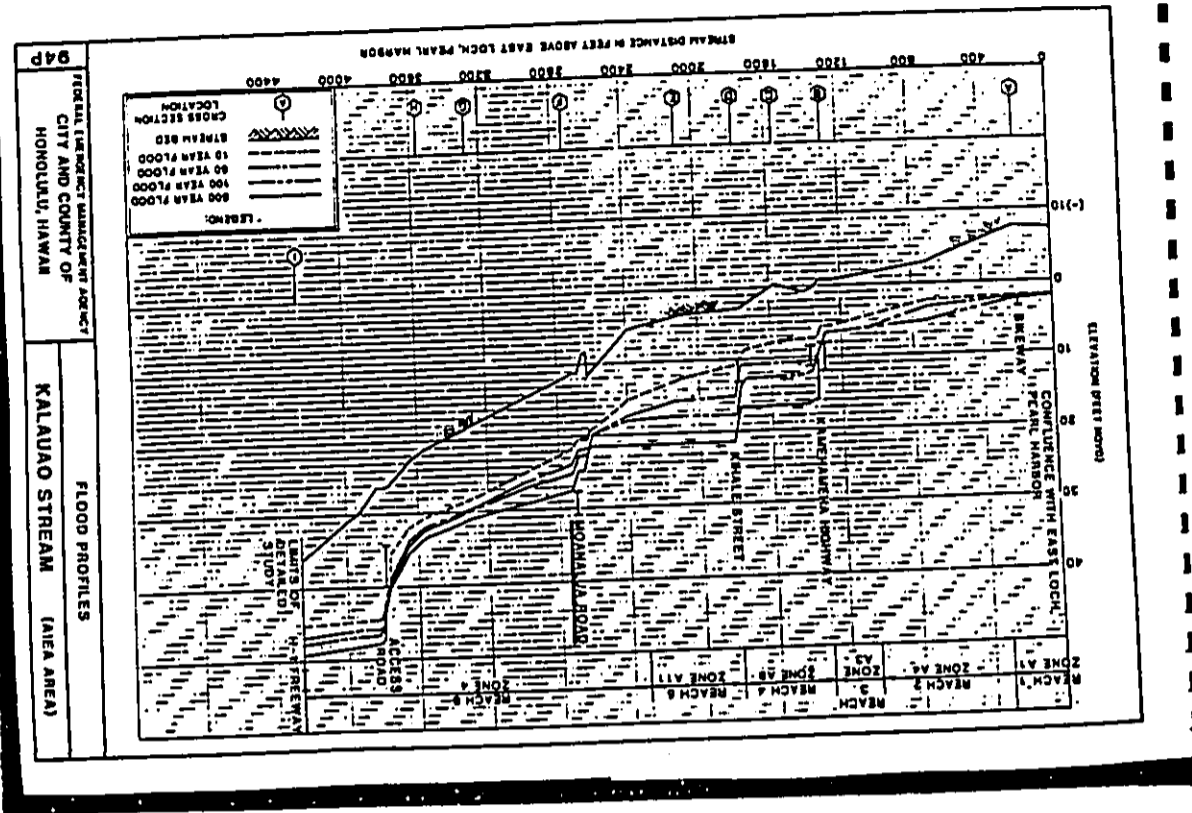
ENCL. 1
78,000 N
522,000 E



REFERENCE: Flood Insurance Study Addendum (DRAFT)
Federal Emergency Management Agency
City & County of Honolulu, Hawaii
April 1985

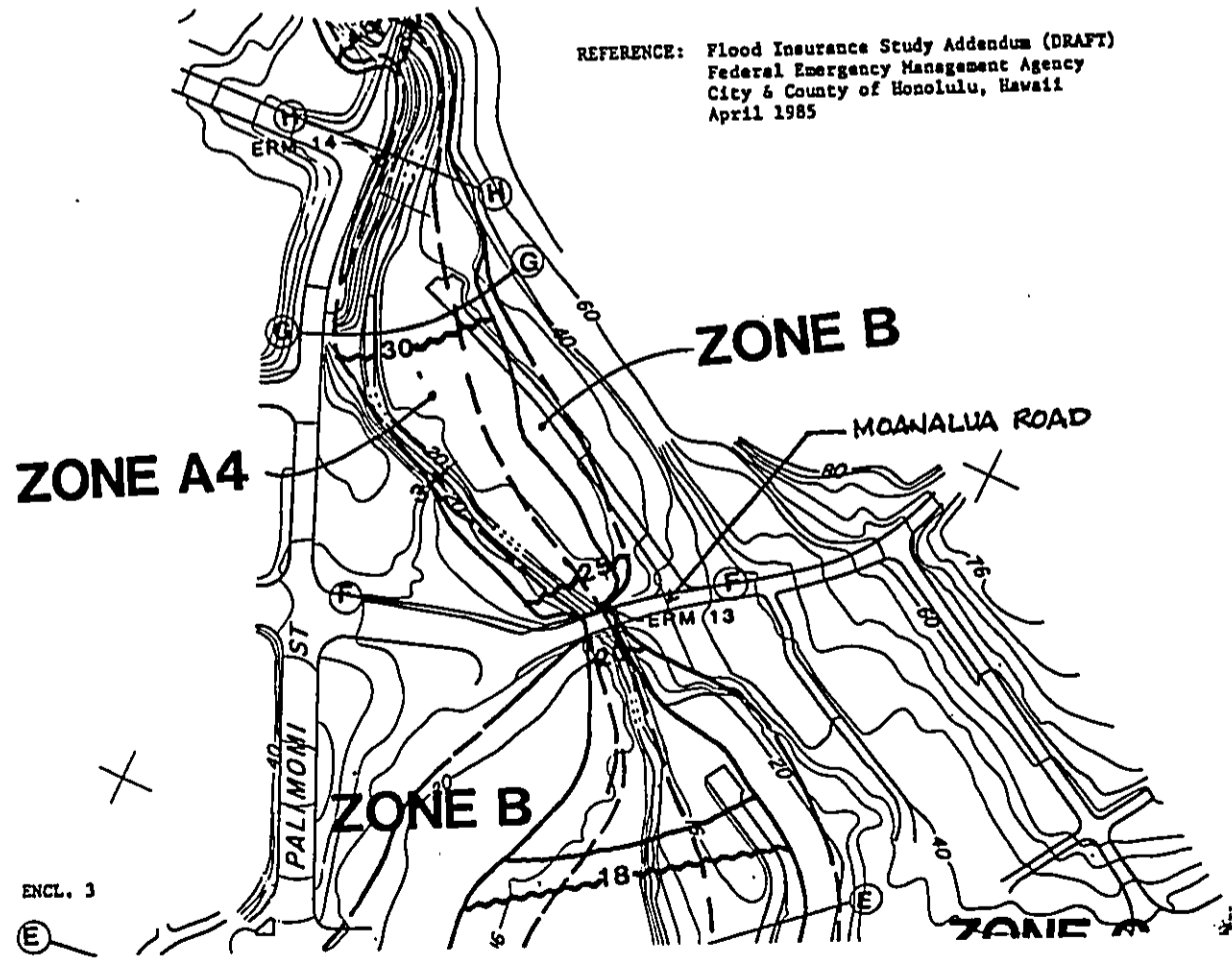


EXCL. 2



REFERENCE: Flood Insurance Study Addendum (Draft)
 Federal Emergency Management Agency
 City & County of Honolulu, Hawaii
 April 1985

ENCL. 3



REFERENCE: Flood Insurance Study Addendum (DRAFT)
 Federal Emergency Management Agency
 City & County of Honolulu, Hawaii
 April 1985



UNITED STATES
DEPARTMENT OF ENERGY
P.O. BOX 50168
HONOLULU, HAWAII 96850

July 1, 1985

Mr. H. Kusumoto
Division Administrator
U. S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

RE: Draft EIS, FHWA-HI-EIS-84-02-D

Dear Mr. Kusumoto:

After giving the Draft EIS Statement for this project a brief review, I have no substantive comments to present. This project will facilitate traffic flow and cut down on congestion, thereby contributing to a decrease in fuel consumption. This should result in a net savings in energy.

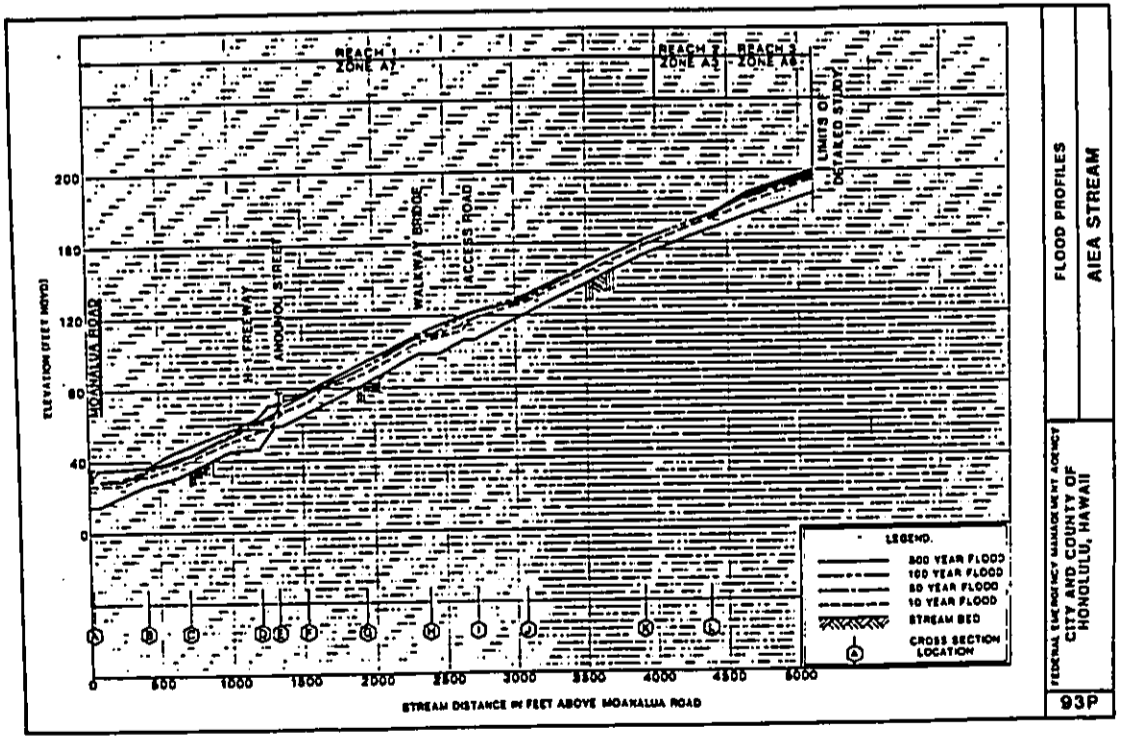
I am returning this draft statement and have no desire to receive a copy of the Final Environmental Impact Statement.

Best wishes with the project:

Sincerely,

John W. Shupe

John W. Shupe, Director
Pacific Site Office



REFERENCE: Flood Insurance Study Aiea Stream (DRAFT)
Federal Emergency Management Agency
City & County of Honolulu, Hawaii
April 1985

ENCL. 4

JACK K. SUWA
CHAIRPERSON, BOARD OF AGRICULTURE
SUZANNE D. PETERSON
DEPUTY TO THE CHAIRPERSON



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 So. King Street
Honolulu, Hawaii 96814
July 25, 1985

Mailing Address:
P. O. Box 22159
Honolulu, Hawaii 96822

GEORGE R. ARIYOSHI
GOVERNOR

HIDEO MURAKAMI
COMPTROLLER
MIKE N. TOMINAGA
DEPUTY COMPTROLLER

LETTER NO. (P)1714.5



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
P. O. BOX 118, HONOLULU, HAWAII 96810

GEORGE R. ARIYOSHI
GOVERNOR

OCT 23 1985

MEMORANDUM

To: Mr. H. Kusumoto
U. S. Department of Transportation
Federal Highway Administration

Mr. H. Kusumoto
U. S. Dept. of Transportation
Federal Highway Administration
Box 50206
Honolulu, HI 96850

Dear Mr. Kusumoto:

Subject: Moanalua Road from Pali Momi Street
to Aiea Interchange

We have reviewed the subject document and have no
comments to offer.

Very truly yours,

TEUANE TOMINAGA
State Public Works Engineer

SM:jk
cc: Ms. Letitia N. Uyehara
Mr. Russell L. Smith, Jr.

Subject: Draft Environmental Impact Statement (EIS)
for Moanalua Road from Pali Momi Street to
Aiea Interchange
Department of Public Works
City and County of Honolulu
TMK: 9-8-12: 18, 25, 29, 30
9-9-12: 38, 40, 42, 43, 44
Aiea, Oahu

The Department of Agriculture has reviewed the subject
Draft EIS and does not have any comments to offer.

Thank you for the opportunity to comment.

JACK K. SUWA
Chairman, Board of Agriculture

cc: Department of Public Works, C&C of Honolulu

GEORGE E. HAYASHI
MAIL ROOM



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
240 DUNDON WILD ROAD, HONOLULU, HAWAII 96814-4517

ALEXIS T. LUM
ADJUTANT GENERAL
OFFICE OF THE ADJUTANT GENERAL

DANIEL E. C. AU
COLONEL
OFFICE OF THE ADJUTANT GENERAL

HIENG

JUL 5 1985

Mr. H. Kuamato
U. S. Dept. of Transportation
Federal Highway Administration
Box 50206
Honolulu, HI 96850

Dear Mr. Kuamato:

Moanalua Road from Pali Komi Street to Aiea Interchange
Aiea, Oahu

Thank you for providing us the opportunity to review the above subject development.

We have completed our review and have no comments to offer at this time.

Yours truly,

Jerry M. Hatauda
Jerry M. Hatauda
Major
Hawaii Air
National Guard
Contr & Engr Officer

Enclosure

cc: Office of Environmental Quality Control
CAC of Honolulu, Dept. of Public Works



STATE OF HAWAII
DEPARTMENT OF EDUCATION
ALYAN A. SCOTT ELEMENTARY SCHOOL
28-1326 MOANALUA ROAD
AIEA, HAWAII 96701

August 27, 1985

U.S. Department of Transportation
Federal Highway Administration
Region Nine
Hawaii Division
Box 50206
Honolulu, Hawaii 96850

Dear Sir:

Reference your letter dated June 24, 1985. Subject: Draft EIS Statement, FHWA-HI-EIS-84-02-D Moanalua Highway, Pali Komi Street to Aiea Interchange, County of Honolulu, State of Hawaii.

In response to your letter, we submit a negative reply.

Sincerely,

Harold H.P. Look
Harold H.P. Look
Principal

HHPL:vt

GEORGE A. ANTONIO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 2200
HONOLULU, HAWAII 96810

July 9, 1985

OFFICE OF THE SUPERINTENDENT

FRANCIS M. HATANAKA
SUPERINTENDENT

GEORGE A. ANTONIO
GOVERNOR

PROJECT OFFICES
KANELOA OFFICE
P. O. BOX 175
KANELOA, HAWAII 96743
KAUNAOHA OFFICE
P. O. BOX 133
MCCO, HAWAII 96726



STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P. O. BOX 1071
HONOLULU, HAWAII 96810

July 18, 1985

PROJECT OFFICES
MAUI OFFICE
P. O. BOX 77
MAUI, HAWAII 96758
MOLOKAI OFFICE
P. O. BOX 188
MOLOKAI, HAWAII 96728
KAUAI OFFICE
P. O. BOX 332
KAUAI, HAWAII 96741

Mr. H. Kusumoto
U.S. Dept. of Transportation
Federal Highway Administration
P.O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

SUBJECT: Environmental Impact Statement
Moanalua Road from Pali Momi Street to Aiea Interchange

We have no further comment to add to our earlier response on the subject EIS. We note that our comments and the response from the Department of Public Works, City and County of Honolulu are incorporated into the EIS.

Should there be any questions, please contact Mr. Howard Lau at 737-4743.

Sincerely,

Francis M. Hatanaka
Superintendent

FMI:j1

cc: V. Honda, OBS
G. Kuwada, Central Dist.
R. Smith, C&C of Honolulu

U.S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Attn: Mr. H. Kusumoto
Hawaii Division Administrator

SUBJECT: Draft EIS statement, FHWA-HI-EIS-84-02-D
Moanalua Highway, Pali Momi Street to
Aiea Interchange, County of Honolulu,
State of Hawaii

Thank you for the opportunity to review the above document. The proposed project will not impact upon Hawaiian home lands programs.

We have no other comments to offer.

Sincerely yours,

GEORGIANA K. PAEDEN
Chairman

GKP:RF:JC:nh

AN EQUAL OPPORTUNITY EMPLOYER

OMPO

Oahu
Metropolitan
Planning
Organization

Suite 1509
1164 Bishop Street
Honolulu, Hawaii 96813
(808) 523 4178
(808) 548 2638

University of Hawaii at Manoa



Cancer Research Center of Hawaii
1230 Lanikala Street • Honolulu, Hawaii 96813
Telephone (808) 548-8415, 548-8418

July 8, 1985

Office of the Executive Director

July 9, 1985

Mr. Heloshi Kusumoto
Division Administrator
Federal Highway Administration
P.O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Moanalua Road Draft EIS

We have reviewed the draft EIS for the Moanalua Road project from Pali Momi Street to Aiea Interchange and concur with the subject project. As stated in the draft EIS, improvement of Moanalua Road within the study limits is assumed in OHPD's proposed long range transportation plan update for Oahu.

Thank you for the opportunity to review the draft EIS.

Sincerely,

Gordon G.W. Lum
Gordon G.W. Lum
Executive Director

GGHL:pjc

Mr. H. Kusumoto
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Region Nine, Hawaii Division
Box 50206
Honolulu, HI 96850

Dear Mr. Kusumoto:

Subject: Draft EIS Statement, FHWA-HI-EIS-84-02-D
Moanalua Highway, Pali Momi Street to
Aiea Interchange, County of Honolulu,
State of Hawaii

In reply to your letter to Dr. Lawrence Piette of June 24, 1985, we see no clear health risks related to cancer associated with this proposed work.

Sincerely,

Laurence N. Kolonel
Laurence N. Kolonel, Ph.D., M.D.
Acting Executive Director

LNK:abc

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED



University of Hawaii at Manoa

Water Resources Research Center
Holmes Hall 203 • 2540 Dole Street
Honolulu, Hawaii 96822

8 August 1985

Mr. H. Kusumoto
U.S. Dept. of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Ms. Letitia N. Uyehara
Office of Env. Quality Control
550 Halekupuia St., Room 301
Honolulu, Hawaii 96813

Dear Mr. Kusumoto and Ms. Uyehara:

SUBJECT: Draft Environmental Impact Statement, FHWA-HI-EIS-84-02-D,
Ipanalua Highway, Pali Momi Street to Alea Interchange,
County of Honolulu, State of Hawaii, June 1985

We have reviewed the subject EIS and have no comment to offer. Thank you for the opportunity to comment. This material was reviewed by WRRC personnel.

Sincerely,

Edwin T. Murabayashi
Edwin T. Murabayashi
EIS Coordinator

ETM:jm

cc: Russell L. Smith

AN EQUAL OPPORTUNITY EMPLOYER

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
830 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813



July 19, 1985

FRANK F. FASI, Mayor
ERNESTA WATARI, Chairman
LUTON J. AGADER, Vice Chairman
OSAKA B. GOYI
RYOKICHI HIGASHIMURA
PALILA R. RATH
RUSSELL L. SMITH, JR.
WAYNE J. YAMASAKI
KAZU HAYASHIDA
Manager and Chief Engineer

Mr. H. Kusumoto
U. S. Department of
Transportation
Federal Highway Administration
Hawaii Division
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Subject: Your Letter of June 24, 1985 on the Draft Environmental Impact Statement (EIS) for the Moanalua Road Improvements from Pali Momi Street to Alea Interchange

Thank you for allowing us to review the environmental document for the proposed roadway improvements. We have no objections to the project.

As noted in the report, we plan to install a 36-inch main within a short section of the roadway which is being coordinated with the Department of Public Works.

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

Very truly yours,

Kazu Hayashida
FOR KAZU HAYASHIDA
Manager and Chief Engineer

cc: Russ Smith, Jr.
Department of Public Works

BUILDING DEPARTMENT
CITY AND COUNTY OF HONOLULU
HONOLULU MUNICIPAL BUILDING
155 ALI'IPANUI STREET
HONOLULU, HAWAII 96813



HERBERT K. MURAKA
DIRECTOR
BUILDING DEPARTMENT

PB 85-647

July 10, 1985

Mr. H. Kusumoto
U. S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Subject: Draft EIS, FHWA-HI-EIS-84-02-D
Moanalua Road from Pali Momi Street
to Aiea Interchange
Aiea, Oahu

We have reviewed the subject draft EIS for the Moanalua Road (Pali Momi Street to Aiea Interchange) project and have no comments.

Thank you for the opportunity to review the draft EIS.

Very truly yours,

Herbert K. Muraka

HERBERT K. MURAKA
Director and Building Superintendent

cc: J. Harada
Public Works Dept.

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII 96813 / TELEPHONE 523-4000

GEORGE AKAHANE
CHAIRMAN

July 25, 1985

Mr. H. Kusumoto
U.S. Dept. of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

RE: Draft EIS Statement, FHWA-HI-EIS-84-02-D
Moanalua Highway, Pali Momi Street to Aiea Interchange,
County of Honolulu, State of Hawaii.

We have reviewed the draft EIS. The proposed highway improvement is on the Primary Urban Center Development Plan Public Facility Map. This essentially means that the City and County of Honolulu has formally recognized the need for this highway improvement in its land use policy planning.

Thank you for the opportunity to comment.

Yours truly,

George Akahane
GEORGE AKAHANE, CHAIRMAN
CITY COUNCIL

cc: Letitia N. Uyehara, OEQC with enclosure
Russell Smith, DPW

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

530 SOUTH KING STREET
HONOLULU, HAWAII 96813
PHONE 534-4101



FRANK F. FASI
DIRECTOR

ALVIN K. H. PANG
DIRECTOR

FRANK F. FASI
DIRECTOR



DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

530 SOUTH KING STREET
HONOLULU, HAWAII 96813 & 96819-4232

JOHN P. WHALEN
DIRECTOR

August 13, 1985

July 5, 1985

Mr. H. Kusumoto
U.S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Mr. H. Kusumoto
U.S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Ms. Letitia M. Uyehara
Office of Environmental Quality Control
State of Hawaii
450 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Subject: Environmental Impact Statement
Moanalua Road from Pali Momi Street to Aiea Interchange
Aiea, Oahu

Dear Mr. Kusumoto and Ms. Uyehara:

Thank you for your letter of June 24, 1985 requesting our comments regarding the EIS.

Moanalua Road Draft Environmental Impact Statement (EIS)
Moanalua Road from Pali Momi Street to Aiea Interchange

As you are aware, we had previously (October 3, 1983) submitted our response to the preparation notice for the subject proposal and we have no comments to offer but do appreciate the opportunity to review.

We have reviewed the above Draft EIS and find that it adequately addresses our concerns. We are returning the document herewith.

We will retain the EIS for our files.

Very truly yours,

Sincerely,

Alvin K. H. Pang
ALVIN K. H. PANG

John P. Whalen

JOHN P. WHALEN
Director of Land Utilization

cc: Mr. Russell L. Smith, Jr.
Department of Public Works

JPM:s1

cc: DPM

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



FRANK P. PASH
MAIL ROOM

July 19, 1985

Mr. H. Kusumoto
U. S. Department of Transportation
Federal Highway Administration
P. O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Subject: Environmental Impact Statement for Improvements to Moanalua Road
The proposed improvements to Moanalua Road will not have any impact on recreational facilities in proximity to the project route.

Thank you for the opportunity to review the completed Environmental Impact Statement.

Sincerely yours,

Tom Nekota
TOM T. NEKOTA, Director

TTM:ct

cc: Ms. Letitia M. Uyehara
Office of Environmental Quality Control
Mr. Russell L. Smith Jr.
Director & Chief Engineer City & County of Honolulu,
Department of Public Works

OAHU CIVIL DEFENSE AGENCY
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU HAWAII 96813



FRANK P. PASH
MAIL ROOM

TOM T. NEKOTA
MAIL ROOM

July 2, 1985

Mr. H. Kusumoto
U. S. Department of Transportation
Federal Highway Administration
P. O. Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Subject: Environmental Impact Statement Preparation Notice for
Moanalua Road from Pali Homi Street to Alea Interchange

Thank you for the opportunity to review and comment on the subject document.

We have no objection to the proposed project and have no further comment at this time.

Sincerely,

George L. Keruna
GEORGE L. KERUNA
Deputy Director Designate

Attachment

cc: Mr. Russell L. Smith, Jr.

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU

100 SOUTH KING STREET, HONOLULU, HAWAII 96813
TELEPHONE: 535-2100



DOUGLAS G. GIBB
CHIEF
POLICE DEPARTMENT
HONOLULU, HAWAII

SPARK M. MATSUNAGA
MEMBER

ADMINISTRATIVE SERVICES
100 SOUTH KING STREET
WASHINGTON, DC 20510

LEGISLATIVE SERVICES
3100 PUNAHOU DRIVE
HONOLULU, HI 96810

United States Senate

WASHINGTON, DC 20510

July 16, 1985

CHIEF DEPUTY
DEMOCRATIC WHIP

MEMBER

COMMITTEE ON ENERGY AND
NATURAL RESOURCES

COMMITTEE ON LABOR AND
HUMAN RESOURCES
COMMITTEE ON
VETERANS AFFAIRS

FOR REFERENCE DI-GF

July 9, 1985

Mr. H. Kusumoto
U. S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Subject: Moanalua Road From Pali Momi Street to Aiea
Interchange, City and County of Honolulu, State of
Hawaii

We have completed our review of the draft EIS for the proposed
Moanalua Road from Pali Momi Street to Aiea Interchange project and
have concluded that we do not have any objections to the project at
this time.

Thank you for giving us the opportunity to respond.

Sincerely,
Douglas G. Gibb
DOUGLAS G. GIBB
Chief of Police

Mr. Heleshi Kusumoto
Administrator, Hawaii Division
Federal Highway Administration
U. S. Department of Transportation
Box 50206
Honolulu, Hawaii 96850

Dear Heleshi:

Thank you for providing me a copy of the Draft
Environmental Impact Statement for the proposed construction
Of Moanalua Highway between Pali Momi Street and Aiea
Interchange on Oahu. Upon review, however, I have no comments
to offer in its regard.

Aloha and best wishes.

Sincerely,

Spark
Spark Matsunaga
U. S. Senator



DOWNTOWN IMPROVEMENT ASSOCIATION 1800 BISHOP STREET/SUITE 400 HONOLULU, HAWAII 96813 PHONE 331-2881

July 12, 1985

Mr. H. Kusumoto
Division Administrator
Federal Highway Administration
U.S. Department of Transportation
Box 50206
Honolulu, HI 96850

Dear Mr. Kusumoto:

Subject: Draft EIS Statement, FHWA-HI-84-02-D
Moanalua Highway, Pali Momi Street to
Aiea Interchange, County of Honolulu,
State of Hawaii

Thank you for the opportunity to review the above document.

Because there are no historic nor archaeological sites within
the project, we have no comment to make.

However if any unknown sites should be uncovered, the
contractor should halt work and notify the State Historic
Preservation Officer.

With all best wishes on the project which will enhance
transportation along the Moanalua Highway.

Sincerely yours,


Phyllis G. Fox
President

PGP:rk

July 1, 1985


Mr. H. Kusumoto
Division Administrator
U.S. Department of Transportation,
Federal Highway Administration
Box 50206 Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

Thank you for asking us to comment on the Moanalua Highway
improvements.

We have no comments to offer other than agreeing that imp-
rovements are needed and those proposed seem highly appropriate.

Very truly yours,


William A. Grant
Executive Director

100 BISHOP STREET/SUITE 400 HONOLULU, HAWAII 96813 PHONE 331-2881



THE OUTDOOR CIRCLE 200 No. Vineyard, Honolulu, Hawaii 96817

July 16, 1985

Mr. H. Kusumoto
U. S. Department of Transportation
Federal Highway Administration
Box 50206
Honolulu, HI 96850

Dear Mr. Kusumoto:

Thank you for sending us the Draft EIS statement for the proposed construction of Moanalua.

Upon reviewing it we find we have no comments or suggestions.

Sincerely,
Betty Crocker

Mrs. Theodore Crocker
President

BC:sp

July 25, 1985

Mr. Hiroshi Kusumoto
Division Administrator
Federal Highway Administration
U.S. Department of Transportation
P.O. Box 50206
Honolulu, Hawaii 96850

Re: EIS-Moanalua
Road Project

Dear Mr. Kusumoto:

Upon review of the draft EIS of the above captioned project and as a affected property owner, identified by TRM 9-9-42-51, I favor Alternative II.

Having waited this long period, I believe the highway should be built to adequately accommodate the heavy flow of auto traffic passing through this road.

Please place me on the list of individuals desiring a copy of the final EIS.

Very truly yours,

Hiroshi Kaneko
Hiroshi Kaneko
98-1175 Iliee Street
Aiea, HI 96701

XVII

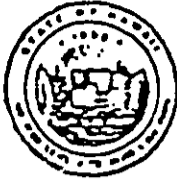
HISTORIC PROPERTIES

XVII. HISTORIC PROPERTIES

As stated earlier in Section VI, there are no known historic or archaeological sites within the project area. The State Historic Preservation Officer has indicated that the project does not affect any historic properties which are listed on the Hawaii Register or the National Register of Historic Places, however, a few plantation homes along the project alignment are eligible for inclusion on the National Register of Historic Places.

The State Historic Preservation Officer has determined, in concurrence with the Federal Highway Administration, that the proposed project will not have any effect on the historic character of those buildings.

Documentation of this agreement is provided in the following pages.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P O BOX 521
HONOLULU, HAWAII 96809

SUSUMU ONO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HANABU
DEPUTY TO THE CHAIRMAN

DIVISIONS:
AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

April 4, 1986

Mr. Keo Kim
Environmental Communications, Inc.
P.O. Box 536
Honolulu, Hawaii 96809

Dear Mr. Kim:

It has come to our historic preservation program's attention that several houses of possible historic significance appear to be within the project area of the proposed Moanalua Road widening. These houses are not currently listed in the National Register of Historic Places, and therefore we recommend that a survey be undertaken to identify and evaluate the houses in the vicinity of 99-028 through 99-104 Moanalua Road. This survey should include sufficient historical information pertaining to the houses so our agency and the Federal Highway Administration might be able to place the houses within their historical context and ascertain if any significant properties exist within the project area.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Susumu Ono".

SUSUMU ONO
Chairperson and State Historic
Preservation Officer

ENVIRONMENTAL
COMMUNICATIONS
INC.

F. J. RODRIGUEZ,
PRESIDENT

May 1, 1986

Mr. Susumu Ono
Chairperson and State Historic
Preservation Officer
State of Hawaii
Department of Land and Natural Resources
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Ono:

Subject: Moanalua Road Project Survey of Homes for Historical
Significance

In accordance with your letter dated April 4, 1986, concerning the possible historical significance of several homes within the Moanalua Road project area, we have conducted a survey to identify and evaluate the houses in the vicinity of 99-028 through 99-104 Moanalua Road. The locations of the homes surveyed are shown on the attached copy of the TMK 9-9-38.

A survey of the records by the City and County Department of Public Works, Division of Land Survey and Acquisition (copy attached) revealed that the properties and improvements thereon, were sold by the Oahu Sugar Company between 1952 and 1954. The records also show that in 1961 through 1963 some of the homes were reported to be from 23 to 34 years old, therefore, currently, some of these homes could be from 48 to 58 years old.

We contacted the Oahu Sugar Company to determine if records on these dwellings were available and spoke to a Mr. Yoshioka, an old timer who is soon to retire. Mr. Yoshioka can recall when the houses were constructed and resides in a similar dwelling outside the project area. According to Yoshioka, the houses were constructed by the Honolulu Plantation Company for their employees. The Oahu Sugar Company took over Honolulu Plantation Company in 1947 and at that time Yoshioka recalls that the records were "plenty" damaged by termites. Yoshioka volunteered to search for records on the homes and later reported that he was unable to locate anything. It is concluded that the records of these dwellings were either lost in the transfer from Honolulu Plantation to Oahu Sugar, damaged by termites, or destroyed by Oahu Sugar upon sale of the properties to the various owners.

On April 28, 1986, a visual survey of the homes was conducted by Mr. John Yoders, an architect licensed in the State of Hawaii. Mr. Yoders' report on these structures is as follows:

The homes were originally built as Plantation Housing, however their visual appearance for historical significance should not be based wholly on building "style" but on the siting as a small village-like group as well.

Mr. Susumu Ono
Page 2
May 1, 1986

What remains of the original siting are a random lot of homes, mostly remodeled, in bad state of repair or having been replaced with a number of newer "builder-type homes" of a fairly recent era. The four plantation examples remaining have vertical single board or narrow horizontal siding, hip roofs, boxed framed double-hung and casement windows and shaped roof rafter ends and are very insignificant to the total neighborhood appearance. Further, these houses are not unique architectural examples of their era and better examples of their era and better examples exist elsewhere on Oahu.

It can be concluded from the above that records of the dwelling structures are no longer in existence and that the structures are not architecturally significant. Further, although these dwellings are adjacent to the project, the highway plans show that they will not be affected by the project.

Very truly yours,

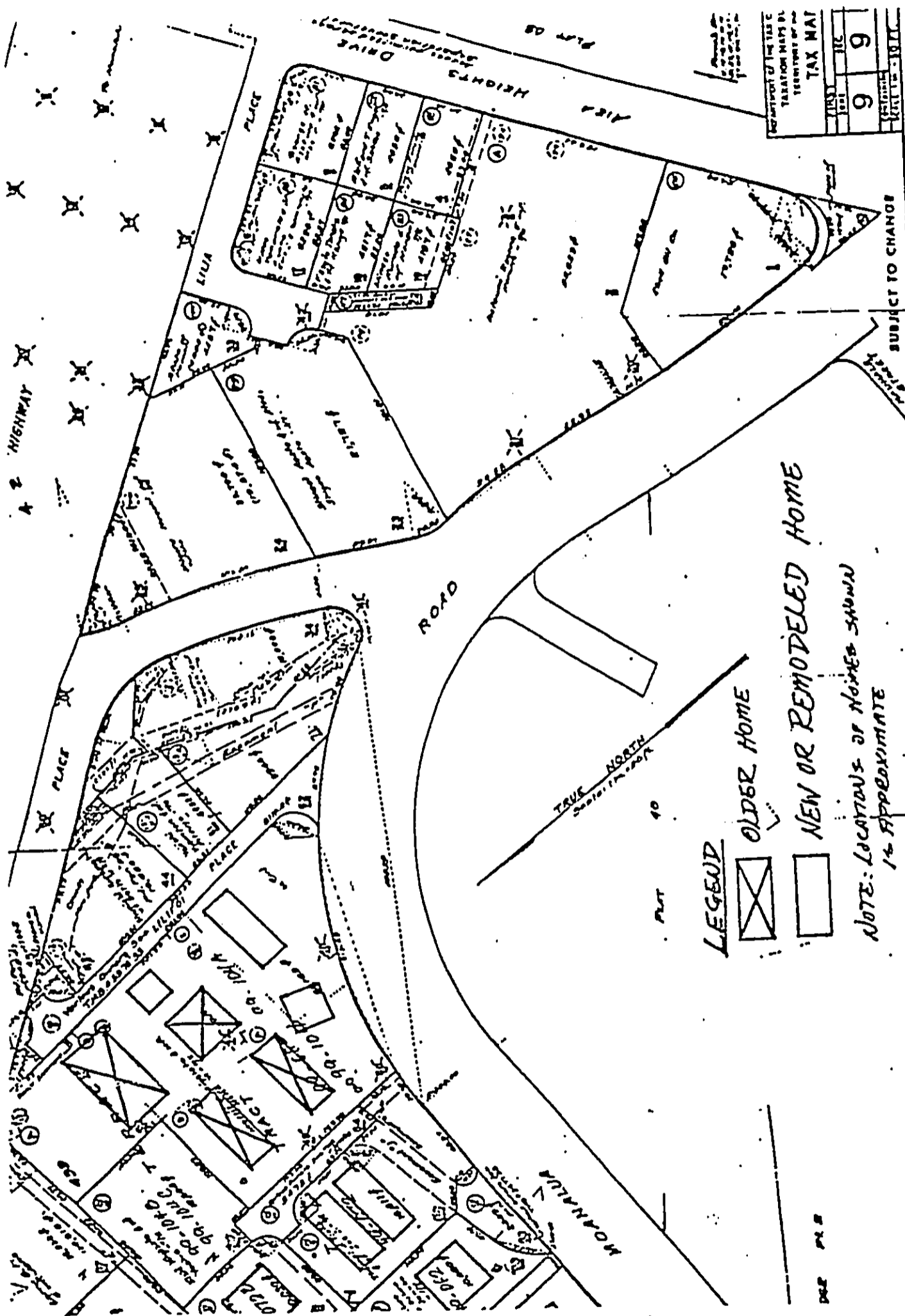


F. J. Rodriguez

FJR:ls

enclosure

cc: Tony D'Alessio ✓



DEPARTMENT OF THE ILES C
TERRITORY OF THE ILES C
TAX MAP

1951	9
1952	9
1953	9

1954

LEGEND

OLDER HOME

NEW OR REMODELED HOME

NOTE: LOCATIONS OF HOMES SHOWN
1/2 APPROXIMATE

PL 6-600 AIRS (THE CASE)

SUBJECT TO CHANGE

HIGHWAY

ROAD

TRUE NORTH

40 FEET

DEE PL 2

Hawaii Division
Box 50206
Honolulu, Hawaii 96850

August 15, 1986

HEC-HI

Mr. Susumu Ono
Chairperson and State Historic
Preservation Officer
State of Hawaii
Department of Land and
Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Ono:

Subject: Hawaii Project M-7200(1), Moanalua Road Widening,
Pali Momi Street to Aiea Interchange

As a result of comments received on the project Draft Environmental Impact Statement, we requested that the City and County of Honolulu complete a reconnaissance survey to identify potentially historic structures along the proposed widening of Moanalua Road between Pali Momi Street and the Aiea Interchange.

By letter dated April 4, 1986, a similar request was made by you to the City's consultant, Mr. Keo Kim of Environmental Communications, Inc.

Mr. F. J. Rodriguez of Environmental Communications, Inc. responded to your April 4, 1986 letter by transmitting field data gathered by Mr. John Yoders, who is a licensed architect with the consultant firm of Parsons, Brinckerhoff, Quade & Douglas. Mr. Yoders, reported that the plantation-type dwelling structures which are located along the proposed roadway widening are not unique architectural examples of their era and that better examples of their era exist elsewhere on Oahu. In addition, although these dwellings are adjacent to the project, the currently proposed highway widening plans show that new additional rights-of-way will not be required from any portion of these properties.

Copies of your letter of April 4, 1986 and Mr. Rodriguez's letter of May 1, 1986 are enclosed for your ready reference.

Based on our reviews of Mr. Ioders' report and the City's project Design Report, we have determined that the plantation-type dwellings along the proposed roadway widening are outside the area of the project's environmental impact as defined in 36 CFE 800.2(0); therefore, historic property eligibility determinations and protective provisions of 36 CFE Part 60 and Part 60C, respectively, do not apply.

We request your concurrence in our determination.

Sincerely yours,



E. Kusumoto
Division Administrator

Enclosure

GEORGE R. ARIYOSHI
GOVERNOR OF HAWAII



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

SUSUMU ONO, CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES
EDGAR A. HAMASU
DEPUTY TO THE CHAIRMAN

DIVISIONS:
AQUACULTURE DEVELOPMENT
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CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

October 6, 1986

Mr. H. Kusumoto, Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Region Nine
Hawaii Division
Box 50206
Honolulu, Hawaii 96850

Dear Mr. Kusumoto:

As you and Ralston Nagata discussed on October 1, 1986, our office believes the plantation houses located along the proposed Moanalua Road widening meet the criteria for listing in the National Register of Historic Places. Please inform us, if FHWA disagrees with this determination. Assuming FHWA agrees, this is to inform you that we concur with FHWA's determination that the proposed project will have no effect upon the historic character of these buildings.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "S. Ono".

SUSUMU ONO
Chairperson and State
Historic Preservation Officer

State of Hawaii
Department of Land and Natural Resources
HDA-HI Division Administrator

1st Endorsement
October 7, 1986

I agree the Plantation houses meet the criteria for listing. I appreciate your concurring that there is no effect upon the historic character of the plantation houses.

A handwritten signature in cursive script, appearing to read "H. Kusumoto".
H. Kusumoto

9-9-38-36	D 9/1/52 for Oahu Sugar 7629/48 10/13/52 Hirano, Howard H. April T TE		
	No Permit # (1963 - House approx. 34-years old)		
9-9-38-38	D 12/1/52 for Oahu Sugar 2648/164 12/18/52 to Matsuoka, Shigeru & Wakako TE		
	New dwelling Permit #93701		
9-9-38-39	D 11/1/52 for Oahu Sugar 2648/172 12/18/52 to Matsuoka, Shigeru & Wakako TE		
	Permit #104302 3/23/53		
9-9-38-40	D 8/1/52 for Oahu Sugar 2622-179 9/19/52 to Kawauchi, Benjamin & Laura TE		
	Built approx. 1953 No Permit #		
9-9-38-46	D 12/15/53 for Oahu Sugar 2776-82 12/30/53 to Miyasato, Morris & Helen TE		
	9 dwellings		
	1. 1962 - approx. 34-years old. No Permit #		
	2. Permit #135560 5/27/57		
	3. 1962 - approx. 24-years old		
	4. 1962 - approx. 34-years old No Permit #		
	5. 1962 - approx. 23-years old		
	6. 1962 - approx. 34-years old		
	7. 1962 - approx. 24-years old		
	8. Permit #150138 10/31/58		
	9. Permit #200047 10/1/62		
9-9-38-50	D 3/1/53 for Oahu Sugar 5/12/53 2693-30 to Miyasato, Eishi & Yoshie TE		
	Permit #174476 11/4/60		
9-9-38-51	D 11/1/53 for Oahu Sugar 2773-101 12/22/53		
	Permit #100440 4/16/71 to Gibo, Kenesny		
9-9-38-52	D 3/15/54 for Oahu Sugar 2813-340 4/20/54		
	No Permit #		
	1961, approx. 33-years old		

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APPENDIX A

MOANALUA ROAD PROJECT
PALI MOMI STREET TO AIEA INTERCHANGE
ALTERNATIVE EVALUATION AND RECOMMENDATION

INTRODUCTION

The purpose of this report is to evaluate the Moanalua Road alternatives which were presented in the project Draft Environmental Impact Statement (DEIS) and at the Public Informational Meeting and Public Hearing held on August 8, 1985 and August 15, 1985, respectively.

The evaluation includes consideration of public input and environmental impacts.

DESCRIPTION OF ALTERNATIVES

During the preliminary stage of this project, eight alternatives were developed. After comments were received on the Preparation Notice for the DEIS, these were narrowed down to four build alternatives, plus no-build. Development of these alternatives were based on four basic criteria:

1. Be consistent with the Long Range Transportation Plan.
2. Avoid major relocation of businesses and residences.
3. Maintain access to properties along Moanalua Road.
4. Provide reasonable operational characteristics.

The four build alternatives are described in greater detail in the Draft E.I.S., therefore the reader is referred to Chapter IV of that document, however they are summarized as follows:

- a. No-Action (no-build) but maintenance activities would be necessary.
- b. Alternative I - Transportation Systems Management actions (TSM).
- c. Alternative II - Eighty foot right-of-way with 64 feet curb to curb - five 12 foot wide lanes with middle two-way left turn lane.
- d. Alternative III - Seventy foot right-of-way, 54 feet curb to curb - 4 lanes, 12 foot through lane and 13 foot curb lane.
- e. Alternative IV - Seventy foot right-of-way, 54 feet curb to curb, five 10-foot wide lanes with middle two-way left turn lane.

PUBLIC INPUT ON ALTERNATIVES

Meetings with the following organizations were held to provide information, receive input and discuss concerns about the project:

Aiea Town Meeting	- February 23, 1983
Aiea Neighborhood Board	- September 19, 1983
Aiea Nutritional Site	- September 29, 1983
Aiea Seventh-Day Adventist Church	- October 4, 1983
Aiea Town Meeting	- February 24, 1984

In accordance with 23 CFR Part 790, a Public Informational Meeting and a Public Hearing were conducted on August 8 and August 15, 1985, respectively.

The project Draft Environmental Impact Statement was released on July 8, 1985 to the State Environmental Quality

Commission (EQC) and notices of availability of the DEIS appeared in the EQC Bulletin on July 8. Legal notices also appeared in the Sun Press, the Star Bulletin and the Advertiser on July 11, 1985. The commenting period for both the DEIS and the Public Hearing expired on August 26, 1985.

EVALUATION OF PUBLIC INPUT

The concerns, questions, comments and issues which were received during the DEIS and Public Hearing process have been summarized and are attached hereto. Major concerns which could involve the selection of an alternative or design of the selected alternative are summarized as follows:

Concerns:

Erosion Control and Sedimentation control.

Upstream migration of aquatic fauna.

Community noise.

Evaluation

Concerns for erosion and sediment control could affect the design or selection of the Kalauao Stream crossing but have little or no bearing on the selection of the alternative. Erosion control measures may be used to mitigate any potential sedimentation hazards, and the selection of the crossing type could also have a bearing on the erosion potential. Crossing type will be determined during the design stage and will require a structure evaluation and cost study.

Upstream migration of aquatic fauna may be accommodated by providing a low-flow notch in a culvert crossing, as recommended by the U. S. Fish and Wildlife Service, or by

providing a bridge crossing which would have very little impact on the existing streambed. This concern does not affect the selection of the alternative but would also have some bearing on the type of stream crossing provided for the selected alternative.

Community noise concerns may be mitigated by various techniques (walls, air conditioning, insulation, etc.) and so should not influence selection of the alternative.

Alternatives II, III and IV will increase noise impacts, but noise levels at sensitive receptors will not exceed federal criteria west of Aiea Heights Drive, and east of Aiea Heights Drive federal criteria may be exceeded by 1 dB, which is so small that it may not require mitigation. If mitigation is required, barrier walls or air conditioning may be used.

Comment

Aiea Neighborhood Board recommends Alternative III except eliminate turn pockets between Honomanu Street and Kauhale Street. Between Laulima Street and Aiea Interchange improve curbs and sidewalks but leave roadway as is. Reduce lane widths to 11 feet.

Evaluation

Elimination of turn pockets will not provide an adequate level of service at the intersections, because vehicles making left turns will be stopped in the left lane and will thus reduce capacity of the lane.

In the section from Laulima Street to Aiea I/C, leaving the existing roadway configuration as is could be a

consideration. The homes on the makai side would be impacted by any widening in this area and would lose their carports and/or parking areas. Reduction of lane widths to 11 feet in this area could also help to mitigate impacts.

Comment

Rep. Tom Okamura recommends Alternative IV except from Laulima Street to Aiea Interchange the existing roadway should remain at four lanes to avoid impact to residents.

Also recommends that consideration be given to a connection from Puakala Street to Kaimakani Street because of the problem with the Puakala/Moanalua Road intersection (sight distance restricted due to roadway curvature).

Also recommends further study of the Hale Momi/Moanalua Road intersection to improve left turns onto Moanalua Road.

Evaluation

Rep. Okamura's recommendation to maintain the existing section from Laulima Street to Aiea I/C coincides with that of the Neighborhood Board and, therefore the evaluation is the same. This comment also seems to reflect a community attitude or perception that this particular section does not significantly contribute to the traffic problems in the study area, and/or that there are possibly TSM solutions in this section which could improve existing conditions without major impact on adjacent residences. However, the recommendation to leave this section basically intact limits the possible solutions to the problem at the Puakala Street intersection. A possible solution at Puakala Street would be to eliminate

left turns from Puakala to Moanalua Road, however this should be reviewed with regard to impacts to Puakala residents.

The remaining large majority of the comments were mostly comments on environmental issues, impacts to existing residences and utilities, and editorial type comments on the Draft Environmental Impact Statement which have no bearing on the alternative selection or the design. Appropriate responses to comments will be provided in the Final EIS. No comments received on the DEIS could be classified as cause for major study or re-evaluation, and none of the Public Hearing comments rejected all of the build alternatives or recommended "No-Build".

Only one individual recommended Alternative I, although for the section from Kauhale Street to Aiea Interchange several individuals, Representative Okamura and the Aiea Neighborhood Board seem to favor some TSM type improvements to avoid impacts to adjacent residences.

Several individuals (4), one business association and one church favor Alternative II.

The Aiea Neighborhood Board favors Alternative III with modifications as discussed above.

Representative Okamura and the Wilcoxes favor Alternative IV, also with modifications mentioned above.

EVALUATION OF ALTERNATIVES

This project is needed to improve this 0.8 mile gap section of Moanalua Road between Pali Momi Street and Aiea Interchange, which is the last remaining section of an overall 3.3 mile improvement program. The project would then help to alleviate problems related to traffic capacity and volumes while increasing safety for all users of the roadway, vehicular and pedestrian alike. Future traffic volumes for the year 2005, which form the basis of the capacity evaluation, are expected to increase about 11 percent from current demands, and the existing section, which is currently inadequate, will be even more so in the future if improvements are not made.

The development of the alternatives was based on four basic criteria, as follows:

1. Be consistent with the Long Range Transportation Plan and complement the other transportation facilities in the surrounding area.
2. Avoid major relocation of businesses and residences.
3. Maintain access to properties along Moanalua Road.
4. Provide reasonable operational characteristics.

From DEIS comments and Public Hearing testimony, it appears that the majority of roadway users and area residents favor some type of improvement. Therefore, the Do-Nothing alternative is not a consideration. Furthermore it does not satisfy Criteria 1 and 4.

Alternative I, the TSM improvements, was recommended by only one individual. However, several persons recommended

reduced widening or no widening in the section from Laulima Street to Aiea Interchange, and TSM improvements would therefore be appropriate in this section, under those conditions. For the section from Pali Momi Street to Laulima Street this alternative does not satisfy Criteria 1, and will not satisfy Criteria 4 for the future year 2005 traffic demands.

Alternative II is a widening to full 80-foot wide right-of-way with 64 feet curb to curb and five lanes, with a center left turn lane. This alternative was recommended by more people who provided public hearing input than any other alternative, although the Public Hearing format is not an opinion survey. This alternative satisfies all four criteria, however, with regard to relocations, one residence would be taken and one business may be taken. These relocations, however, cannot be considered major. The resident owner of the impacted parcel will be compensated and aided by the City and County in locating a new home in or near Aiea, and it may be possible to shift the business (Pete's Taxi) from its present location at little cost, thereby maintaining its location and clientele. However, only moving costs for businesses are reimbursed, so some difficulty may be encountered in this regard. Other factors favoring this alternative are:

1. Existing right-of-way is already 80 feet for most of the improvement section, although some additional r.o.w. is required.
2. This cross-section is consistent with the existing improved section Ewa of Pali Momi Street.

Alternative III is a widening to a 70 foot right-of-way with 54 feet curb to curb and four lanes. This alternative was recommended by the Aiea Neighborhood Board with modifications such as: elimination of left turn lanes between Honomanu Street and Kauhale Street; leaving the roadway as is between Laulima Street and Aiea Interchange; and, reducing the lane width to 11 feet to reduce speeding. This alternative also satisfies all four of the basic criteria.

Factors favoring Alternative III include reduced right-of-way impacts, improved traffic service and safety, and no residential relocations, however Pete's Taxi would be impacted.

Factors which detract from this alternative include lack of a left turn lane thereby making access to residences more difficult while somewhat reducing safety. Also, the through traffic movement in the townbound direction is restricted to one lane where the median lane becomes a left turn only lane (at Kaamilo Street and Alvah Scott Elementary School).

Alternative IV is also a widening to a 70 foot right-of-way and 54 feet curb to curb, however five 10-foot wide lanes are provided with a middle two-way left turn lane. This alternative was recommended by Representative Tom Okamura and one other family, and also satisfies the four basic criteria. Rep. Okamura's recommendation had exceptions concerning the section from Laulima Street to Aiea Interchange where he recommended keeping that section at four lanes to reduce impact on residences.

Factors which favor Alternative IV include reduced right-

of-way impacts, improved traffic service including a middle left turn lane for improved safety and access to adjacent residences, no residential relocations and impact only on Pete's Taxi.

Factors detracting from Alternative IV include reduced lane width (10 feet, with 2-foot gutters on curb lanes).

RECOMMENDATION

Alternative I does not satisfy two of the four basic criteria and therefore it is recommended that it be dropped from further consideration. The three remaining widening alternatives improve capacity and operational characteristics to relatively similar levels and vary only in cost, overall width and laneage configuration. As the difference in cost is less than \$700,000, (\$5,529,000 to \$6,223,000) this factor should not affect the decision. The five lane configuration must be given preference over a four lane configuration from an operational and safety standpoint, and it also provides the greatest degree of flexibility for future adjustments, if required. Further, the five lane configuration with its middle left turn lane provides better access to Moanalua Road properties than the four lane configuration, and therefore satisfies Criteria 3 better than the four lane alternative.

The recommendation then focuses on Alternatives II or IV, both of which are 5 lanes. The difference between these two is a total of 10 feet in the width of right-of-way, and a difference in lane widths of 2 feet (12 feet versus 10 feet). From the operational and safety perspective, taking into consideration the horizontal and vertical curvature of the road, the 12 foot wide

lane is preferable because it provides a wider margin for driver error.

Between Alvah Scott Elementary School driveway to Aiea Heights Drive, the 80 foot right-of-way has already been acquired. Between Pali Momi Street and Alvah Scott the alignment of all alternatives was adjusted to minimize impacts on the Bethany Assembly of God Church and other residences, and this resulted in additional right-of-way acquisition requirements. Whether the right-of-way width is 70 feet or 80 feet, the same driveways and front yards will be impacted, although to different degrees, and the owners and residents will be equally inconvenienced during construction.

The 80-foot right-of-way will also require taking of one residence. This residence would also be impacted by the 70-foot right-of-way, but a portion of one wall of the home could be reconstructed under this alternative and the home salvaged. It is felt that the negative impacts of the 70-foot right-of-way on this residence could also be enough to justify a taking.

In view of the above discussion, it is recommended that Alternative II be selected for the section from Pali Momi Street to Aiea Heights Drive.

From Aiea Heights Drive to Aiea Interchange there were sufficient Public Hearing comments on the impacts of right-of-way taking to register concern. Under Alternative II, there would be impact to properties on the makai side, between Uahi Street and Aiea Interchange, and on the mauka side at the intersection of Puakala Street. Also affected would be St. Elizabeth's Church

and school property and the service stations on both sides, between Laulima Street and Uahi Street. Impacts on all of these could be reduced by going with the 70-foot right-of-way, Alternative IV in this section. Impacts could be further reduced between Uahi Street and Aiea Interchange by eliminating the left turn pocket into Uahi Street and the median separation at Aiea Interchange. It is therefore recommended that between Aiea Heights Drive and Aiea Interchange, Alternative IV be adopted with modifications as discussed above.

The Puakala Street intersection as discussed by Rep. Okamura, continues to be a problem which is not easily solved unless Moanalua Road is widened to five lanes in this area. However, the overall right-of way width required by five lanes creates impacts to properties on the makai side. To improve safety, it is recommended that turning movements at the Puakala-Moanalua Road intersection be limited to right in, right out. There is no solution to the limited sight distance at this intersection other than property acquisition from St. Elizabeth's or a complete shift in the location of the Aiea Interchange towards Pearl Harbor. However, this would also involve impacts to properties on the makai side of Moanalua between Uahi Street and Aiea Interchange.

SUMMARY OF COMMENTS
ON MOANALUA ROAD D.E.I.S.
AND PUBLIC HEARING

I. DEIS COMMENTS

1. City and County Fire Department.

Consideration should be given for fire apparatus accessibility, notice of construction to Fire Alarm Bureau.

2. Historic Hawaii Foundation.

Notify the State Historic Preservation Officer if unknown sites should be uncovered (during construction).

3. City and County Dept. of General Planning.

a. Omitted definition of Level B service (pg. IV-15).

b. Percentage of project cost funded by Federal, State and City should be included in Table 4, page IV-17.

c. Page V-1, project contour elevations incorrectly stated.

d. Duration of construction period should be indicated.

4. State of Hawaii Office of Environmental Quality Control

Notify residents whose property will be acquired along Moanalua Road, that an EIS is available for review.

5. State of Hawaii Dept. of Land and Natural Resources.

Adequate erosion control/sedimentation control measures should be implemented to protect the quality of stream waters.

6. City and County Board of Water Supply.

The plan to install a 36-inch water main within a short section of the roadway is being coordinated with D.P.W.

7. Tadashi Kaneko

Favor Alternative II, to accommodate heavy flow of traffic.

8. U. S. Dept. of the Interior - Fish and Wildlife Service.

- a. Culverts can impede upstream migration of native aquatic fauna, therefore a bridge crossing of Kalauao stream is recommended.
- b. If a bridge structure cannot be constructed, a low flow notch should be built to allow upstream migration.
- c. The EIS should clarify how improved curbs and gutters will reduce sediment and debris in the runoff.

9. Hawaiian Electric Co.

- a. On page V-16, the reference to concrete poles is incorrect.
- b. Future 138 kv lines will be required out of Waiiau and those may "traverse the project area".

10. Hawaiian Telephone Co.

Existing underground and overhead telephone lines may require relocation.

11. State of Hawaii Dept. of Health

- a. Dust control measures should be fully implemented and rigorously enforced.
- b. There are concerns for noise impacts from increased vehicular volumes.
- c. Construction activities must comply with rules with regard to community noise.

12. Oceanic Cablevision

Relocation of CATV facilities will be required.

13. U. S. Environmental Protection Agency

- a. Recommend more detail in discussion of erosion control and water quality.
- b. E.P.A. classified DEIS category LO.
- c. If a Section 404 permit is required, EPA will review the project for compliance with 40CFR230.

14. Dept. of the Army - U. S. Army Engineer District,
Honolulu.

Flood insurance Rate Maps for Kalauao and Aiea streams are provided by the Corps.

15. Aiea Neighborhood Board No. 20.

Recommends Alternative III with some modifications, such as: Eliminate left turn pockets between Honomanu Street and Kauhale Street; between Laulima and Aiea I/C improve curbs and sidewalk but leave roadway as is; reduce lane widths to 11 feet.

16. Nancy Chun.

Do not widen road at corner of Puakala Street and Moanalua Road (in front of 99-104 Puakala). Locating the roadway nearer towards house will create difficulty in moving furniture at side entrance, and will bring fumes and noise closer.

17. Our Savior Lutheran Church and School.

Concerned about safety and "wholeheartedly" supports the project.

18. Department of Interior-Office of Secretary.
Same concerns discussed in item 8.

19. University of Hawaii at Manoa-Environmental Center.

- a. The DEIS does not discuss the present conditions of streams and channels. Same concerns as discussed in item no. 8.
- b. The DEIS does not mention if stream waters will be diverted during construction. Only partial diversion is preferred.
- c. Native and exotic species of fish in which streams?
- d. Conclusions based on Air Quality modeling studies are not supported (page V-7, V-10, V1-19) and input parameters used in study should be re-examined.
- e. Recent report by DLNR (R73, 1984) should be consulted in determining flood peaks, frequencies and heights for Oahu.
- f. A summary of the Moanalua Road Hydraulic study should be provided in the FEIS.

20. Edward, Marlene and Damon Wilcox.

Eliminate Alternative II. Lay full-length sidewalks. The widening will create a bottleneck at Aiea I/C which should be remedied. Project will present an unsafe condition for our home, etc. Request a 3-1/2 foot high stone wall above their property, in lieu of a chain-link fence. Keep all utility lines on the makai side, (away from them). Request compensation for lost value as well as lost property. Recommend an exit from H-1 to Pearlridge Center be considered. Want Alternative IV.

II. PUBLIC HEARING COMMENTS

1. Reverend McNicoll - St. Elizabeth's Church and School.

Noise impacts on St. Elizabeth's Church and School have not been considered.

2. Anonymous: Will sidewalks be concrete?

3. Harvey H. Meeker.

Adopt Alternative II.

4. Councilman George Akahane: Discuss ramp connections to H-1 Freeway with the State and Feds.

5. Jerry Souza

- a. Only Alternative II is valid and conforms to the County General Plan.
- b. Compensate Bethany Assembly of God for loss of parking stalls. Construct a walkway from the church to Pearlridge parking lot as a temporary pedestrian walkway.
- c. Provide adequate police protection for traffic control to enhance pedestrian (school) safety.
- d. Compensate certain businesses for financial losses during construction and provide adequate parking for their customers.
- e. Install sound-proofing and air-conditioners in school classrooms and working areas (schools) and for businesses, too.
- f. Assure concurrent construction of 36-inch main and roadway.
- g. Accidents due to contractor's "negligence" shall not be contested by the City.

- h. D.P.W. should perform a survey on the use of a contra-flow lane on Kam Highway to ease the traffic burden on Moanalua Road.
 - i. Add an on-ramp to the H-1 Freeway at the Kaahumanu Street overpass. Study an exit ramp westbound on H-1 onto Kaahumanu overpass.
 - j. Make proper modifications to Kalauao Stream crossing to avoid accumulation of debris.
 - k. Purchase residence at 98-203 Hali Momi Place at a fair market value.
 - l. Requests that Elizabeth Dole, Secretary of Transportation not disburse funds to the City and that Section XII-1 be corrected to reflect his comments.
6. Bob Siarot, Chairperson, Transportation Committee, Aiea Neighborhood Board.
- a. Moanalua Road improvement is necessary, but benefits others (outside Aiea) since the thru traffic will benefit the most.
 - b. Must not "overkill". Alternative II is too much. Maximum design capacity will not insure full use of the facility unless the extremities have capabilities.
 - c. Recommend Alternative III, except eliminate all left turn pockets between Honomanu Street and Kauhale Street.
 - d. Eliminate widening between Laulima Street and Aiea Interchange.
 - e. Reduce roadway width (lanes) to 11 feet to deter speeding.
 - f. Requests an informational meeting during several phases of the design to keep the community abreast of the project.
 - g. No mention of Pete's taxi stand in the E.I.S.
7. Col. Nicholas Zunic: Recommends Alternative I. Feels that other alternatives are too much like a "super highway".
8. Rep. Tom Okamura:
- a. Recommends Alternative IV (Five 10-foot wide lanes) except from Laulima Street to Aiea Interchange it

should remain at four lanes to avoid impact on residents in that area.

b. Insists that certain steps be taken to ease disruptions as follows:

1. Minimal displacement of residences and businesses.
2. City to provide maximum assistance on a timely basis to those inconvenienced.
3. Utilize curb lanes for on-street parking during the off-peak hours. Limit restricted parking to A.M. peak hours, working days only.
4. Insure that construction proceeds in expeditious manner least disruptive to Aiea residents and businesses.

c. Three specific problem areas must be resolved:

1. Junction of Puakala Street and Moanalua Road is a congestion problem during certain times of the day. Serious consideration should be given to a second outlet that would connect Puakala Street with Kaimakani Street.
2. The two Ewa-bound lanes approaching Aiea Heights Drive. Left turns to the Speedy Supermarket area (shopping area) block the through traffic movement and this problem should be addressed.
3. The intersection of Hale Momi Place needs study to improve left turns onto Moanalua Road, compounded by extreme narrowness of Moanalua Road in this area.

9. Bill Sullivan, Aiea-Pearl City Business Association

Supports Alternative II.

10. John Sharp, Pastor, Aiea Seventh-Day Adventist Church

Approves Alternative II, but recommends widening of curb lane by an additional 4 feet in church area to allow for parking (take 4 feet from sidewalk area).

11. Mary Booth

Favors Alternative II.

12. Nancy Chun

- a. Does not want roadway widened in front of her house on corner of Puakala Street. Street would be closer to her home causing additional noise and air quality impacts.
- b. The only improvement needed is a level concrete sidewalk and street light.
- c. Recommends utilization of Ulune Street in lieu of Moanalua Road because it is already a wide street.
- d. Recommends Alternative IV because it would not affect residents.

13. Glenn Ako

Questions if speed limit will be posted at 35 m.p.h. and is concerned that a wide roadway will induce speeding. Also feels that a wider roadway will be equally congested as two existing lanes.

END

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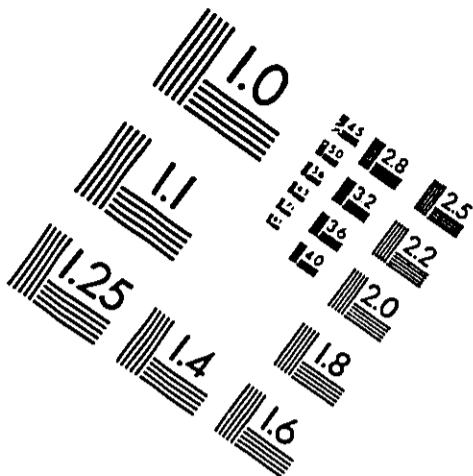
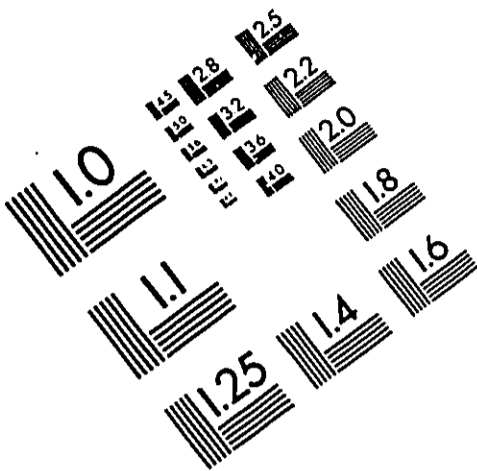
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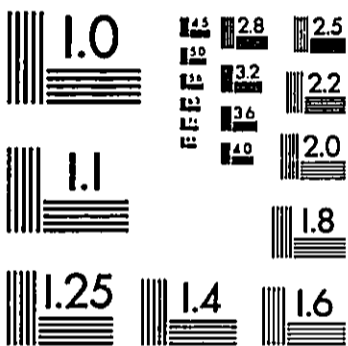
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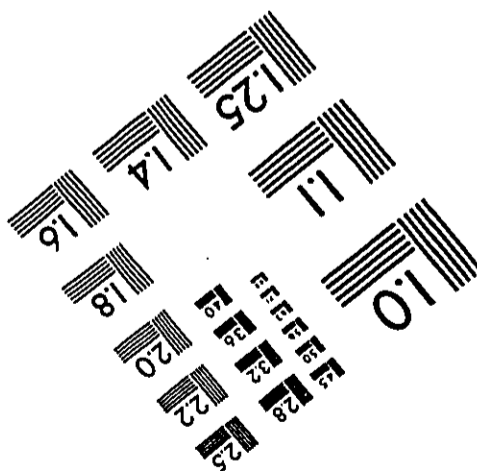
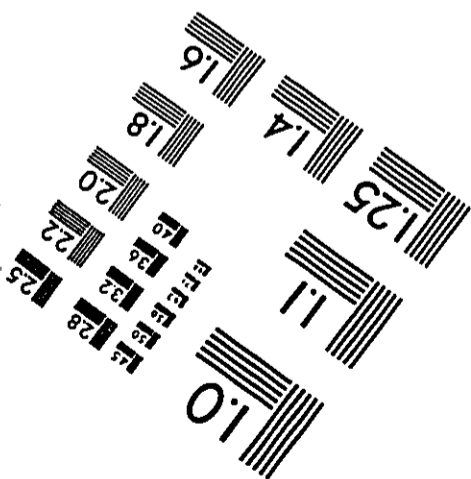


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