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•	DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF HONOLUI 650 SOUTH KING STREET HONOLULU, HAWAII 96813	LU :
FRANK F. FASI Mayon	RECEIVED FEB 15 A8:50 FC. OF ENVIRONMENTED OUALITY CONTENT	SAM CALLEJO DIRECTOR AND CHIEF ENGINEER IN REPLY REFER TO: 90-11-0060
	February 14, 1990	
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Dr. Marvin T. Miura, Director Office of Environmental Quality Control State of Hawaii 465 South King Street, Room 104 Honolulu, Hawaii 96813

Dear Dr. Miura:

# Subject: Notice of Negative Declaration for the Reconstruction of Kawa Stream Culvert

This letter is a Notice of Negative Declaration for the subject project pursuant to Chapter 343, HRS. The project involves the use of City funds and City lands. This notice of determination is based on an Environmental Assessment prepared by the Division of Engineering after consultation with other governmental agencies. Four (4) copies of the Negative Declaration are attached.

The pertinent data for this notice are as follows:

- 1. <u>Proposing Agency</u> Department of Public Works, City and County of Honolulu
- 2. <u>Proposed Action</u> The proposed project involves the replacement of the existing damaged, multi-barreled corrugated metal pipe (CMP) culvert crossing Kawa Stream approximately 375 feet downstream of Mokulele Drive with a single span reinforced concrete box culvert.

The crossing at the existing culvert was used by maintenance vehicles to gain access to the opposite bank during stream maintenance activities. At present,

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Dr. Marvin T. Miura Page 2 February 14, 1990

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vehicular access to the opposite bank is not possible and maintenance activities must be limited to work which may be done by hand.

The capacity of the existing multi-barreled culvert is inadequate for large storm runoffs and has resulted in the overtopping of and damage to the existing structure. The proposed 12'x7.5' box culvert will alleviate this problem.

3. <u>Determination</u> - After assessing the potential environmental effects of the proposed project and consulting with other governmental agencies, we have determined that the project will not have significant impacts on the environment and an Environmental Impact Statement will not be prepared.

- 4. <u>Reasons for Supporting the Determination</u> Based on the criteria, the policies, guidelines, and provisions of Chapters 342, 343 and 344, HRS, the reason supporting the Negative Declaration Determination is that the proposed project will not:
  - affect rare or endangered species of flora or fauna.
  - affect any natural or cultural resources.
  - affect undeveloped lands.
  - conflict with existing land use and development plans.

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- have a significant long term effect on air quality, water quality or ambient noise levels.
- displace any residences or businesses.
- be located in close proximity to any known natural, historic, or archaeological sites.

Dr. Marvin T. Miura Page 3 February 14, 1990

5. Contact Person - Jolie Nishikawa Division of Engineering Department of Public Works City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813

Telephone No. 523-4041

Very truly yours,

C. Michael Hour S SAM CALLEJO Director and Chief Engineer

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Attach. (4)

Department of Land Utilization (w/attach.) CC:

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DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF HONOLULU

### ENVIRONMENTAL ASSESSMENT

#### FOR THE

st reconstruction of kawa stream culvert st

CITY AND COUNTY OF HONOLULU, OAHU, HAWAII

TMK: 4-5-70

This document is prepared pursuant to Chapter 343, HRS.

PROPOSING AGENCY: DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF HONOLULU 650 SOUTH KING STREET HONOLULU, HAWAII 96813

120 00 Date

RESPONSIBLE OFFICIAL:

1990-02-23- OA-FEA

W SAM CALLEJO Director and Chief Engineer

> PREPARED BY STRUCTURAL SECTION DIVISION OF ENGINEERING

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I. Description of Proposed Action and Statement of Objective

The proposed project involves the replacement of the existing damaged, multi-barreled corrugated metal pipe (CMP) culvert crossing Kawa Stream approximately 375 feet downstream of Mokulele Drive (See Appendix A - Site Map) with a larger, single span reinforced concrete box culvert.

The crossing at the existing culverts was used by maintenance vehicles to gain access to the opposite bank during stream maintenance activities and was designed to function as a ford during storms. The existing culverts are inadequate and cannot accomodate storm flows. Overtopping has damaged the travelway over the culverts. The culverts have remained in tact and are capable of carrying normal runoff. At present, vehicular access to the opposite bank is not possible and maintenance activities must be limited to those which may be done by hand and are labor intensive.

The drainage area is approximately 200 acres and the design discharge is 1400 cubic feet per second. The capacity of the existing culverts is inadequate with respect to large storm runoffs and has probably resulted in overtopping of the existing structure. The proposed 12'x7.5' box culvert will alleviate this problem.

II. Description of the Affected Environment

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The site of the proposed project is located in a residential area of Kaneohe (TMK: 4-5-70). The project area is approximately 11 miles from the State Capitol in Honolulu (see Appendix B - Location Map). The project area is zoned residential.

Kawa Stream is an unlined intermittant stream. In the section under consideration, it is within a City and County Right of Way that varies from 60 to 70 ft. It provides a limited water habitat for small populations of migratory native and alien fishes and crustaceans. Kawa Stream empties into a wetland that is identified in both <u>Wetlands and Wetland Vegetation of</u> <u>Hawaii</u> and <u>An Ornithological Survey of Hawaiian Wetlands</u>. Since the project is for replacement of a previously existing culvert and the contractor will be required to minimize turbidity and prevent the release of petrochemicals, no adverse effects on the wetlands are anticipated.

Flood Insurance Rate Maps indicate that the project site is within a Flood Hazard District. In accordance, the project has been designed to comply with Section 7.10, "Flood Hazard Districts" of the Land Use Ordinance.

The proposed project is not within the Special Management Area.

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The average annual rainfall is 40 inches per year. The average temperature varies from 73 degrees to 80 degrees Fahrenheit.

Wildlife in the project area consists of the usual common birds found in built-up areas of Honolulu, and no rare or endangered species are known to frequent the adjacent land.

There is no known archaeological or historical site in the immediate vicinity of the proposed site. A search of the Hawaii Register of Historic Places 1987, has revealed the closest historic site to be Kawaewae Heiau (Identification No. 80-10-354), located approximately 2200 feet east of the project site.

If items of historical or archaeological interest are discovered during construction, the work shall be stopped in the immediate vicinity, the items will be left undisturbed, and the State of Hawaii Historic Preservation Officer shall be notified.

III. Agencies Consulted in Making this Assessment

A. City and County of Honolulu

Department of General Planning
Department of Land Utilization

B. State of Hawaii

1. Department of Land and Natural Resources

2. Department of Health

3. Department of Business and Economic Development

C. U.S. Government

Department of Interior, Fish and Wildlife Service
Department of the Army, Corps of Engineers

Appendix D contains comments on the environmental assessment. The Fish and Wildlife Service had no comments on this project. A written response is pending. No comments were received from the Department of Business and Economic Development.

IV. General Description of the Project's Technical, Economic, Social, and Environmental Characteristics

The proposed work involves the replacement of existing damaged culverts (double 36" CMP) crossing Kawa Stream with a single

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span 12'x 7.5' reinforced concrete box culvert, 25 ft in length and reinforced concrete transitional slope lining (see Appendix C - Typical Section). The work requires excavation of approximately 200 cubic yards of material including the existing culvert.

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It is anticipated that construction will cost \$ 94,000.00. Construction is scheduled to begin during the summer of 1990 and will take approximately 60 calendar days to complete.

Operating funds from the Division of Road Maintenance, Department of Public Works, City and County of Honolulu, will be utilized for the cost of construction.

The project will not require the displacement or relocation of any persons. The existing City and County maintenance road will be used for site access.

Since the stream is an intermittant one, a United States Army Corps of Engineers Nationwide Permit will probably be granted.

The State Department of Land and Natural Resources will be consulted to assess the need for a stream alteration permit. The State Department of Health will also be consulted regarding the need for a 401 Water Quality Certification.

V. Identification and Summary of Major Impacts and Proposed Mitigation Measures

The environmental impact of the proposed project will be limited to the construction phase and may include the following temporary, unavoidable, adverse environmental effects:

A. Dust and Noise Emission: The discharge of dust into the atmosphere may occur during the construction period. This is, however, only a short-term effect on the environment. Dust will be reduced and controlled through the application of water and/or other appropriate methods. The specifications will contain provisions that will require the contractor to prevent dust nuisance at all times and have sufficient equipment and manpower at the job site to accomplish this.

Noise will be generated by construction equipment such as backhoes, compressors, and jackhammers during the project. The increase in noise level by construction equipment cannot be avoided, but will be controlled and limited to normal daylight working hours. The contractor will be required to obtain a Community Noise Permit pursuant to Chapter 43 of the State Public Health Regulations and comply with the provisions of Chapter 42,

Vehicular Noise Control for Oahu. Individuals that may be adversely affected by the construction noises will be residents of the surrounding community. The sound level from equipment noise has been estimated for locations at various distances from the work area. The results may be summarized as follows:

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Sound Level in Decibels in Community							
	Distance	Sound					
Nearest residence	50 ft	91	dB				
Nearest church	900 ft	66	dB				
	1200 ft	63	dB				
Nearest school	7800 ft	47					
Nearest medical center	• •	58					
Nearest park	2300 ft	50	uв				

B. Water Pollution: Since the project is located in a intermittant watercourse, construction will be scheduled during the summer (dry season), and provisions will be made to divert or transfer the water around the project site. This may be accomplished through the use of diversion ditches, pumps, sandbags, etc. This will minimize erosion and sedimentation during construction activities.

The contractor will be required to properly dispose of wash and dust control water and to take other precautionary actions during the course of construction operations to preclude the discharge of petrochemical products from construction equipment into stream waters.

Proper construction methods will be used to minimize disturbance to the stream bed, and prevent the entrance of debris and other deleterious materials into the watercourse.

C. Other: The contractor shall provide for continuous streamflow to minimize disturbance to the migratory fish and crustaceans indigenous to streams.

VI. Alternatives Considered

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The following courses of action were considered: (1) no action, (2) replacement with new CMP pipes, (3) the proposed project.

Alternative 1: If no action is taken, it will be very difficult to perform maintenance work in the stream. The existing culvert which crosses Kawa Stream for use by maintenance vehicles is damaged and not usable. As a result, such work will be both time consuming and costly.

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In addition, the capacity of the existing culverts would remain inadequate with respect to large storm runoffs.

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Alternative 2: If the existing CMP pipes were replaced with new ones, the drainage capacity would remain inadequate. If three 72" or two 90" CMP pipes were installed the drainage design criteria would be met. The structures resulting from this type of design would not fit in the existing stream cross-section. In addition, debris accumulation at the face of the multi-celled culverts is also probable and may result in stream overflow.

Alternative 3: Completion of the proposed project will enable maintenance personnel to efficiently maintain the stream using vehicles and motorized equipment even during periods of high runoff. It will also remove any obstructions to stream flow caused by the damaged culvert.

## VII. Determination

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After preparing an environmental assessment, we have determined that the proposed project will not have a significant impact on the environment, and an environmental impact statement will not be prepared.

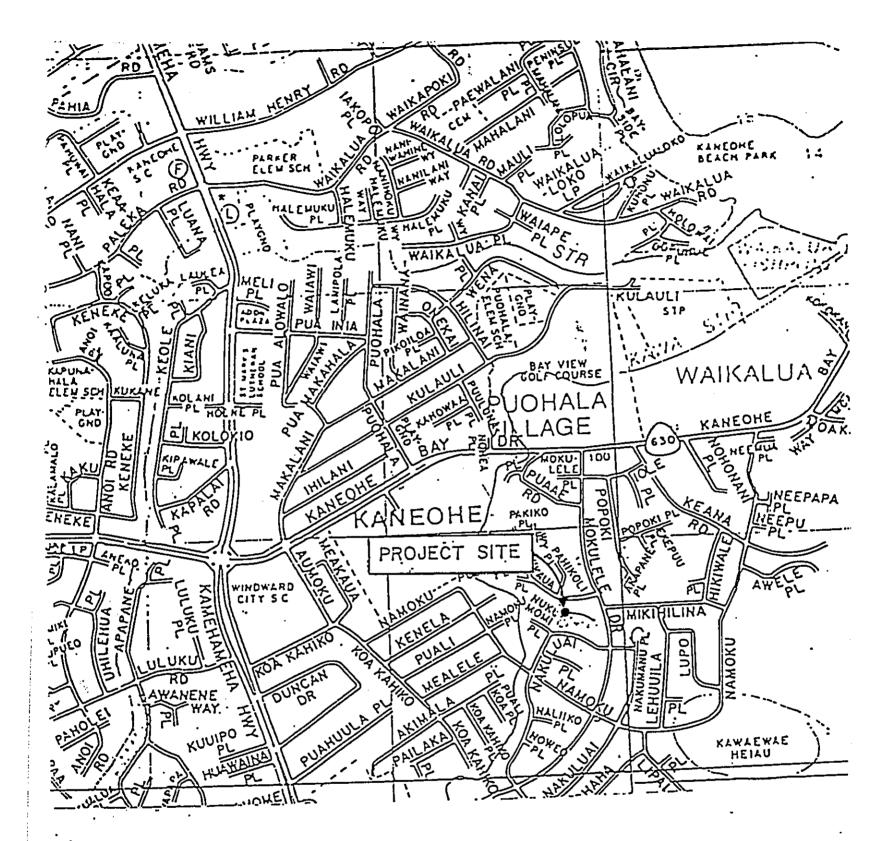
VIII.Reasons for Supporting the Determination

Based on the criteria, the policies, guidelines, and provisions of Chapters 342, 343 and 344, HRS, the reason supporting the Negative Declaration determination is that the proposed project will not:

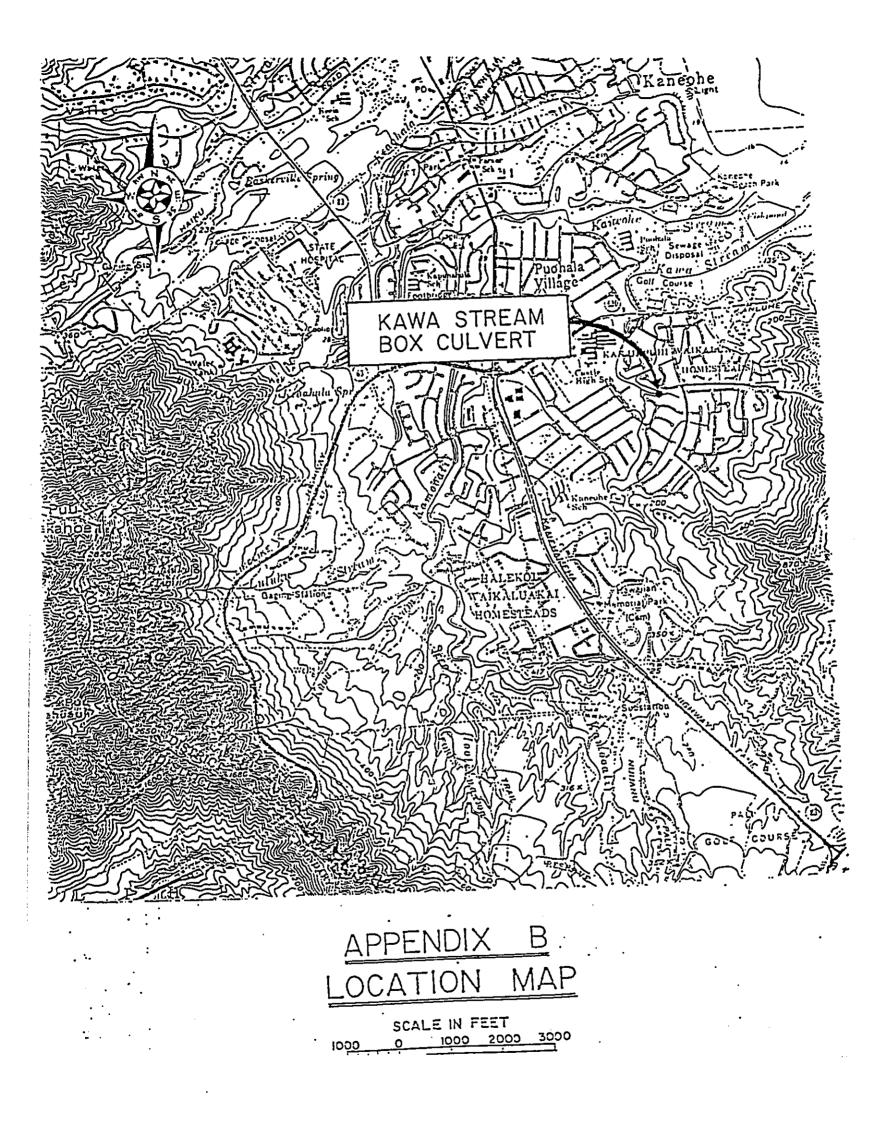
affect rare or endangered species of flora or fauna.

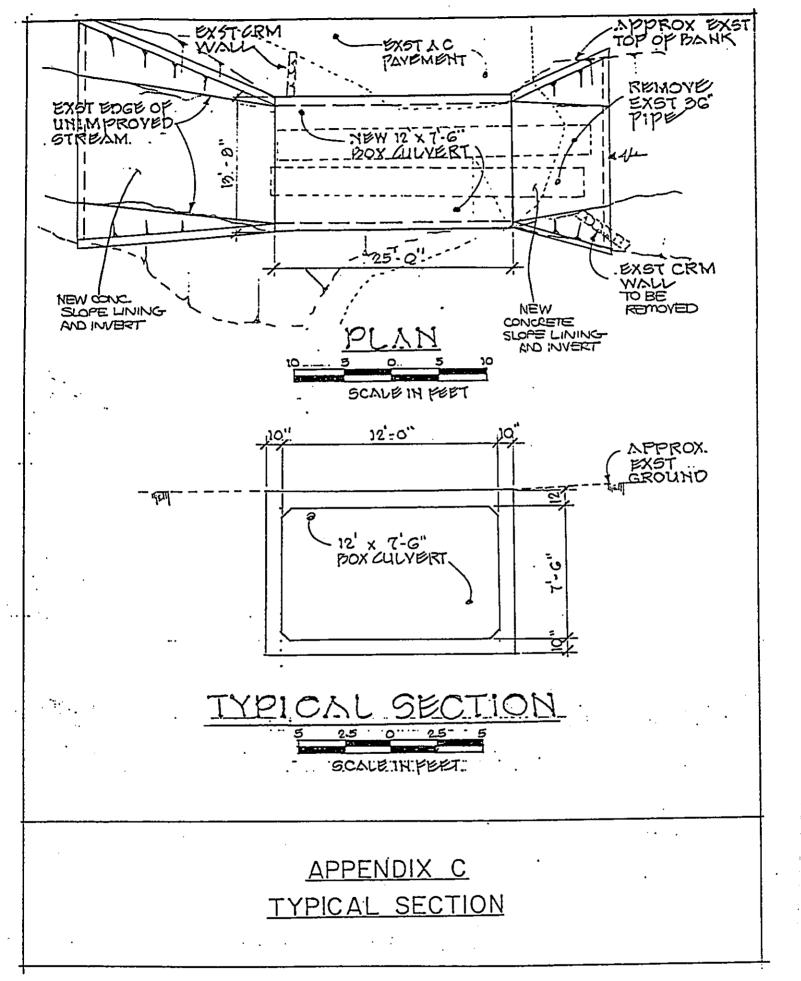
- affect any natural or cultural resources.
- affect undeveloped lands. \_
  - conflict with existing land use and development plans. have significant long term effect on air quality, water

  - quality or ambient noise levels.
- displace any residences or businesses. be located in close proximity to any known natural, ---historic, or archaeological sites.









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APPENDIX D - COMMENTS

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۰. . ) Mr. Sam Callejo SS:bm ς. ZONN C. LITTM, M.S. MICHAEL J. CANN. P. G. MICHAEL S., MAALA MICHAEL C. COL. P.S. MICHAEL R. COL. P.S. BUY G. PULMUMA MANUN TROMONL P.C. : Thank you for the oppartunity to review and provide comments on the Environmental Assessment for the reconstruction of the Rawa Stream culvert. Environmental Assessment for the reconstruction of the Rawa Stream culvert. The Environmental Assessment adequately describes cuising conditions. The Environmental Assessment adequately describes cuising conditions, potential inpacts and mitigation measures. The replacement of the pipe culverts with a box culvert is a desirable change, improving flood control and often limits the upstream movement of diadramous native stream species. The project does not appear to have a significant effect, provided all The project does noted in the Environmental Assessment are underflucken, mitigation measures noted in the Environmental Assessment are underflucken. Chapter 13-169-50, 11AR, require that no stream channel be altered until an application for a permit to undertake the work has been filed and a permit is issued by the Commission on Water Resource Management, provided that coutine streambed and drainageway maintenance activities and maintenance ļ Rcf. 89-11-0479 The State Water Code and its implementing administrative rule, 1.1.1 Environmental Assessment and Determinution of Permit Requirements Reconstruction of Kawa Stream Cuivett, TMK: 4-5-70, Kancohe, Oalu DEFARINENT OF LUID AND HATUMAL RESOURCES COMMESSION ON WATER RESOURCE MANAGEMENT STATE OF HAWAII . February 8, 1990 P. C. BOT 111 -Mr. Sam Callejo Director and Chief Engineer Department of Public Works City and Cuunty of Honolulu 650 South King Street llonolulu, Ilawaii 96313 Dear Mr. Callejo: : i . Shere work İ

Mr. Sam Calicjo -2. Fichruary R. 1990 of cauting facilities are exempt from obtaining a permit. The proposed project, the reconstruction of an existing cuberted stream crossing by its replacement with a single box cubert is considered to be exempt from our permit requirements.

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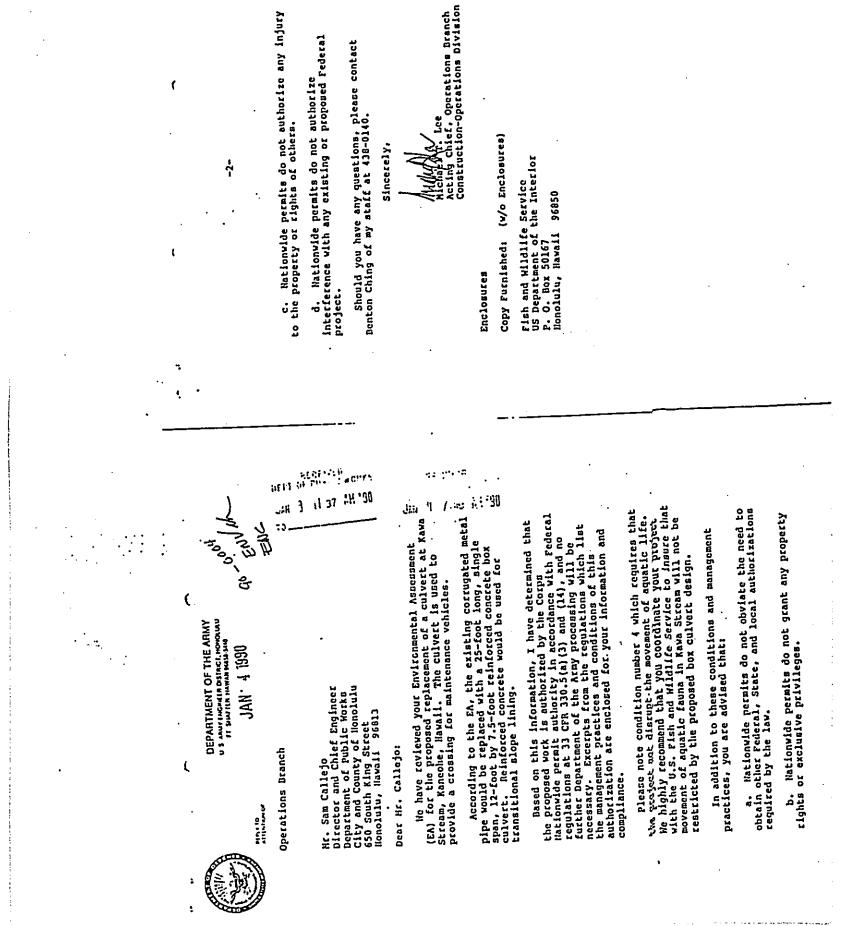
If you libre any questions regarding our comments, please cull Mr. George Matsumoto at 548-7619.

אולאוסטעד טנואאא Deputy Director Sinchrely,

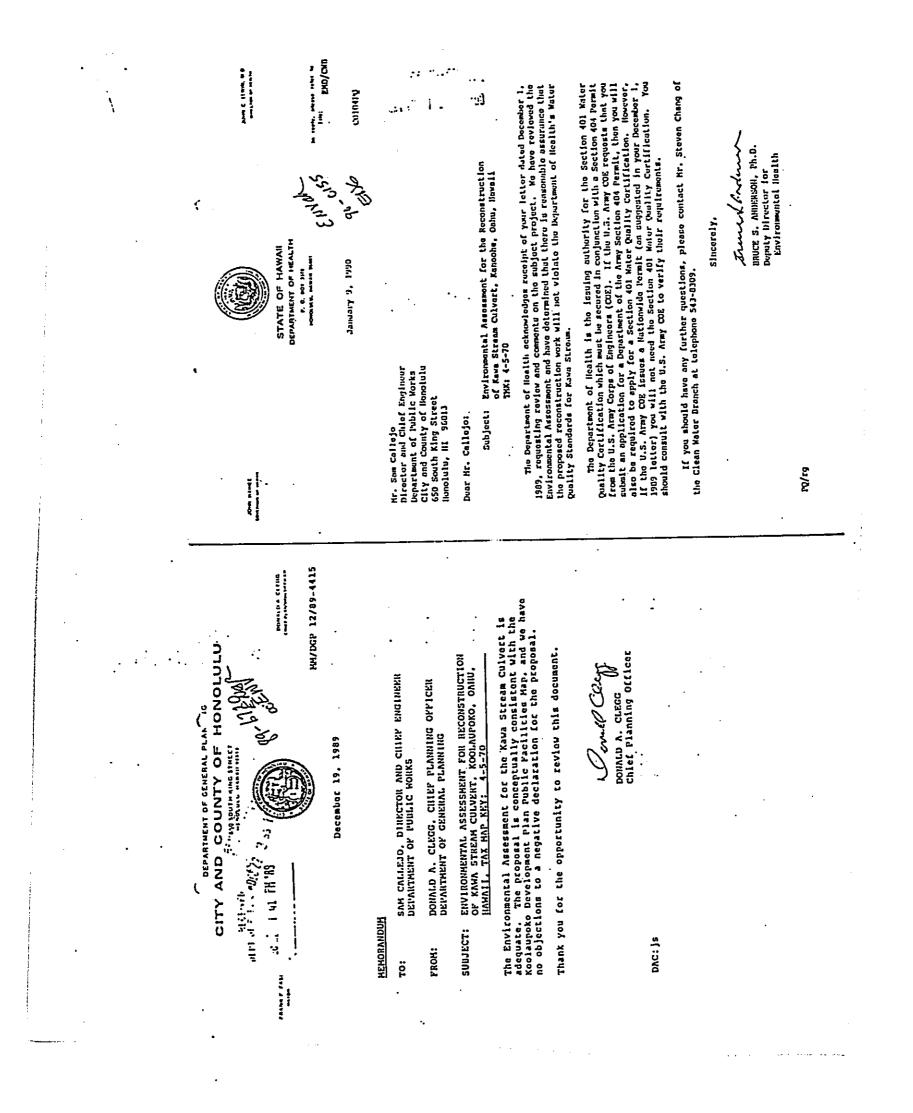
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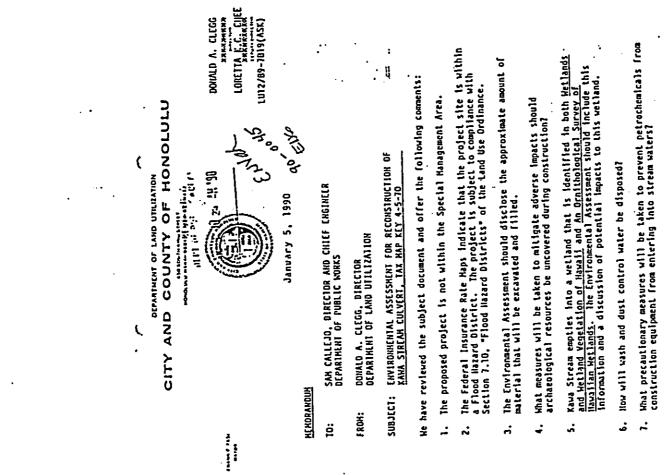
Dear Hr. Callejo: Thank you for the opportunity to review the Environmental Assessment (EN) for the Reconstruction of Kawa Stream Cuivert, Kancohe, Oahu. The following comments are offered: 611 1 J44 ô b. According to the Flood Thsurance Study for the City and County of Honolulu, a portion of the project area is in the Kava Stream floodway, Zone AE (special flood hazard area inundated by the 10-year flood), with a base flood elevation of 59 feet HSL. The remainder of the project area is in Zone X, "Other Areas" determined to be outside of the 500-year flood as designated by the Federal Emergency Hanaycant Agency in September 1987. a. The proposed project meets the conditions of a a bepartment of the Army nationwide permit for stream crossings. By separate letter, Operations Branch will notify you of their findings. For further information, please contact Operations Branch at 438-9258. dp (821 Kisuk Cheung Chief, Engineering Division ۰. . DEPARTMENT OF THE ARMY U.S. AndY ENGINEER DISTRICT, NONOLULU REETVID AFLEWID ٢ Sincerely, ATTATTOR 8 47 EN '9Beccaber 28, 1989 Hr. Sam Callejo Director and Chicf Engineer Department of Public Norks City and County of Nonolulu 650 South King Street Nonolulu, Navali 96813 Planking-Branch ۲

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Should you have questions regarding the above, you may contact Ardis Shaw-Kim of our staff at 523-4648.

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DOMALO A. CLEGG Director of Land Utilization

DAC:51 0233H/17

Please contact Jolie Nishikawa at 523-4041 with any questions you may have in regard to this matter. Director and Chiel Fingineer SAN CALLESO Lincial •'.. Mr. Donald A. Clegg l'age 2 Fchruary 8, 1990 90-11-0054 The project specifications require the contractor to minimize disturbance to the streambed during construction, prevent the entrance of debris and other deleterious material into the watercourse, properly dispose of wash and dust control water, and preclude the entrance of petrochemicals into the water. The method by which this is accomplished is up to the contractor selected, as long as he complies with the City and Since turbidity will be minimized during construction and the structure is a replacement of an existing one, no effect is anticipated on the wetland that Kawa Stream empties into. This is now stated in the assessment. discovery of archaeological artifacts in the construction of this culvert. The specifications for the project include a provision that the contractor notify the Hawail State Preservation Officer in the event that items of archaeological value are discovered. In response to your comment, mention of this requirement has been SUBJECT: RESPONSE TO YOUR MEMO OF JANUARY 5, 1990 ON THE ENVIRONMENTAL ASSESSMENT FOR RECONSTRUCTION OF KAWA STREAM CULVERT. TAX MAP KEY 4-5-70 Since the project will reconstruct an existing damaged culvert, we do not anticipate The approximate quantity of material to be excavated has been included in the CITY AND COUNTY OF HONOLULU SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER DEPARTMENT OF PUBLIC WORKS MR. DONALD A. CLEGG, DIRECTOR DEPARTMENT OF LAND UTILIZATION ۰., February 8, 1990 : 410 400 in and 472(47 HONOLON HANDA 472(1) included in the environmental assessment. environmental assessment. MENORANDUM County standards. FROM:

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