February 14, 1990

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. **Proposing Agency** - Department of Public Works,
   City and County of Honolulu

2. **Proposed Action** - 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,
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. **Determination** - 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. **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 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.
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,  

\[\text{[Signature]}\]  

by SAM CALLEJO  
Director and Chief Engineer  

Attach. (4)  

cc: Department of Land Utilization (w/attach.)
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

ENVIRONMENTAL ASSESSMENT
FOR THE
* RECONSTRUCTION OF KAWA STREAM CULVERT *
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

RESPONSIBLE OFFICIAL: C. Michael Street  2/07/90
(Signed)  SAM CALLEJO  Date
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 accommodate storm flows. Overtopping has damaged the travelway over the culverts. The culverts have remained intact 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

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 intermittent 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 Wetlands and Wetland Vegetation of Hawaii and An Ornithological Survey of Hawaiian Wetlands. 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.

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
   1. Department of General Planning
   2. 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
   1. Department of Interior, Fish and Wildlife Service
   2. 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" CHF) crossing Kawa Stream with a single
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.

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 intermittent 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 noise 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:

<table>
<thead>
<tr>
<th>Sound Level in Decibels in Community</th>
<th>Distance</th>
<th>Sound Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearest residence</td>
<td>50 ft</td>
<td>91 dB</td>
</tr>
<tr>
<td>Nearest church</td>
<td>900 ft</td>
<td>66 dB</td>
</tr>
<tr>
<td>Nearest school</td>
<td>1200 ft</td>
<td>63 dB</td>
</tr>
<tr>
<td>Nearest medical center</td>
<td>7800 ft</td>
<td>47 dB</td>
</tr>
<tr>
<td>Nearest park</td>
<td>2300 ft</td>
<td>58 dB</td>
</tr>
</tbody>
</table>

B. Water Pollution: Since the project is located in an intermittent 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

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

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

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.
APPENDIX A

SITE MAP

NOT TO SCALE
APPENDIX C

TYPICAL SECTION
APPENDIX D - COMMENTS
Mr. Sam Caldejo 
Director and Chief Engineer 
Department of Public Works 
City and County of Honolulu 
650 South King Street 
Honolulu, Hawaii 96813 

Dear Mr. Caldejo, 

Environmental Assessment and Determination of Permit Requirements: Reconstruction of Kawa Stream Culvert, 14-3-70, Kamuela, Ono

Thank you for the opportunity to review and provide comments on the Environmental Assessment for the reconstruction of the Kawa Stream culvert. The Environmental Assessment adequately describes existing conditions. The proposed project appears to have no significant negative environmental impact and mitigation measures are necessary. The project does not appear to have a significant effect, provided all mitigation measures noted in the Environmental Assessment are undertaken. A determination of Negative Declaration seems appropriate.

The State Water Code and its implementing administrative rules, Chapter 13-105-50, HWR, 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 pursuant to the Code and its regulations. Therefore, no alteration of the stream channel shall be undertaken until a permit is obtained.

Ref. 83-11-9019

Sincerely,

MANAIU TANOMIGI 
Deputy Director

February 8, 1990

Mr. Sam Caldejo

February 8, 1990

of existing facilities are exempt from obtaining a permit. This proposed
project, the reconstruction of an existing culvert stream crossing by its
replacement with a single box culvert is considered to be exempt from our
permit requirements.

If you have any questions regarding our comments, please call Mr.
George Matsuoka at 348-7619.
Dear Mr. Callejo:

Thank you for the opportunity to review the Environmental Assessment (EA) for the Reconstruction of Kawa Stream Culvert, Kaneohe, Oahu. The following comments are offered:

a. The proposed project meets the conditions of a Department 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 430-9725.

b. According to the Flood Insurance Study for the City and County of Honolulu, a portion of the project area is in the Kawa Stream Floodway, Zone AE (special flood hazard area inundated by the 100-year flood), with a base flood elevation of 39 feet NAD. The remainder of the project area is in Zone A, "Other Areas" determined to be outside of the 500-year flood as designated by the Federal Emergency Management Agency in September 1997.

Sincerely,

[Signature]

Kisuk Cheung
Chief, Engineering Division
Operations Branch

Mr. Sam Collejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
660 South King Street
Honolulu, Hawaii 96813

Dear Mr. Collejo:

We have reviewed your Environmental Assessment (EA) for the proposed replacement of a culvert at Kaau Stream, Kaneohe, Hawaii. The culvert is used to provide a crossing for maintenance vehicles.

According to the EA, the existing corrugated metal pipe would be replaced with a 25-foot long, single span, 12-foot by 7.0-foot reinforced concrete box culvert. Reinforced concrete would be used for transitional slope lining.

Based on this information, I have determined that the proposed work is authorized by the Corps Nationwide permit authority in accordance with Federal regulations at 33 CFR 136.5(a)(3) and (14), and no further department of the Army processing will be necessary. Excerpts from the regulations which list the management practices and conditions of this authorization are enclosed for your information and compliance.

Please note condition number 4 which requires that the project not disrupt the movement of aquatic life. We highly recommend that you coordinate your project with the U.S. Fish and Wildlife Service to ensure that movement of aquatic fauna in Kaau Stream will not be restricted by the proposed box culvert design.

In addition to these conditions and management practices, you are advised that:

a. Nationwide permits do not obviate the need to obtain other Federal, State, and local authorizations required by the law.

b. Nationwide permits do not grant any property rights or exclusive privileges.

c. Nationwide permits do not authorize any injury to the property or rights of others.

d. Nationwide permits do not authorize interference with any existing or proposed Federal project.

Should you have any questions, please contact Kent Cling of my staff at 438-0140.

Sincerely,

Michael J. Lee
Acting Chief, Operations Branch
Construction-Operations Division

Enclosures

Copy Furnished (w/o Enclosures)

Fish and Wildlife Service
US Department of the Interior
P. O. Box 50167
Honolulu, Hawaii 96850
MEMORANDUM

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: DONALD A. CLUEG, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR RECONSTRUCTION
OF KAWA STREAM CULVERT, KOKOAFOFO, OAHU,
HAWAII. DATE OF TEP. 12/18/89

December 19, 1989

MEMORANDUM

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: DONALD A. CLUEG, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR RECONSTRUCTION
OF KAWA STREAM CULVERT, KOKOAFOFO, OAHU,
HAWAII. DATE OF TEP. 12/18/89

The Environmental Assessment for the Kawa Stream Culvert is adequate. The proposal is conceptually consistent with the Koolaupoko Development Plan Public Facilities Map, and we have no objections to a negative declaration for the proposal.

Thank you for the opportunity to review this document.

Donald Chue
Chief Planning Officer

DAC: js

Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

January 2, 1990

Subject: Environmental Assessment for the Reconstruction of Kawa Stream Culvert, Kanakahi, Oahu, Hawaii

The Department of Health acknowledges receipt of your letter dated December 1, 1989, requesting review and comments on the subject project. We have reviewed the Environmental Assessment and have determined that there is reasonable assurance that the proposed reconstruction work will not violate the Department of Health's Water Quality Standards for Kawa Stream.

The Department of Health is the issuing authority for the Section 401 Water Quality Certification which must be secured in conjunction with a Section 404 Permit from the U.S. Army Corps of Engineers (COE). If the U.S. Army COE requests that you submit an application for a Department of the Army Section 404 Permit, then you will also be required to apply for a Section 401 Water Quality Certification. However, if the U.S. Army COE issues a Nationwide Permit (as expected in your December 1, 1989 letter) you will not need the Section 401 Water Quality Certification. You should consult with the U.S. Army COE to verify their requirements.

If you should have any further questions, please contact Mr. Steven Chang of the Clean Water Branch at telephone 543-8309.

Sincerely,

Bruce R. Anderson, Ph.D.
Deputy Director for Environmental Health

70/9
MEMORANDUM

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: DONALD A. CLEGG, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR RECONSTRUCTION OF KAMA STREAM CVERT, TAX MAP KEY K-6-30

January 9, 1990

We have reviewed the subject document and offer the following comments:

1. The project site is not within the Special Management Area.

2. The Federal Insurance Rate Maps indicate that the project site is within a Flood Hazard District. The project is subject to compliance with Section 7.10, "Flood Hazard Districts" of the Land Use Ordinance.

3. The Environmental Assessment should disclose the approximate amount of material that will be excavated and filled.

4. What measures will be taken to mitigate adverse impacts associated with excavation of archaeological resources that may be uncovered during construction?

5. Kama Stream empties into a wetland that is identified in both Wetlands and Wetland Regulation of Hawai‘i and as a Critical Biological Area of Hawai‘i Wetlands. The Environmental Assessment should include this information and a discussion of potential impacts to this wetland.

6. How will waste and control water be disposed?

7. What precautionary measures will be taken to prevent petrochemicals from entering into stream water?

Should you have questions regarding the above, you may contact Ardis Shaw-Kim of our staff at 523-4468.

Donald Clegg
DONALD A. CLEGG
Director of Land Utilization
MEMORANDUM

TO:    MR. DONALD A. CLEGG, DIRECTOR
       DEPARTMENT OF LAND UTILIZATION

FROM:  SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
       DEPARTMENT OF PUBLIC WORKS

SUBJECT: RESPONSE TO YOUR MEMO OF JANUARY 5, 1990 ON THE
         ENVIRONMENTAL ASSESSMENT FOR RECONSTRUCTION OF
         KAWA STREAM CULVERT, TAX MAP KEY 6-5-70

February 8, 1990

The approximate quantity of material to be excavated has been included in the
environmental assessment.

Since the project will reconstruct an existing damaged culvert, we do not anticipate
discovery of archaeological artifacts in the construction of this culvert. The
specifications for the project include a provision that the contractor notify the Hawaii
State Preservation Officer in the event that items of archaeological value are
discovered. In response to your comment, mention of this requirement has been
included in the environmental assessment.

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.

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 watercourses, properly dispose of wash and dust control water, and
exclude 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
County standards.

Please contact Jolie Nishikawa at 523-6341 with any questions you may have in regard
to this matter.

[Signature]
SAM CALLEJO
Director & Chief Engineer