

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567  
WEB SITE ADDRESS: www.co.honolulu.hi.us

JEREMY HARRIS  
MAYOR



July 24, 2002

RECEIVED

RAE M. LOUI, P.E.  
DIRECTOR

ERIC G. CRISPIN, AIA  
DEPUTY DIRECTOR

02 JUL 24 AM 11:15  
GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL  
CDD-BS 02-0128

Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control  
State of Hawaii  
235 South Beretania Street, Suite 702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Finding of No Significant Impact (FONSI) for Manoa Stream  
Tributary Retaining Wall, TMK: 2-9-38: 14, Honolulu, Oahu,  
Hawaii

The City and County of Honolulu, Department of Design and Construction, has reviewed the comments received during the 30-day public comment period which began on April 23, 2002. We have determined that this project will not have significant environmental effects and have issued a FONSI. Please publish this notice in the August 8, 2002 OEQC Environmental Notice. ✓

We have enclosed a completed OEQC Publication Form, four copies of the final Environmental Assessment, a hard copy project summary, and the project summary on diskette. If you have any questions, please call Ray Nakahara of the Civil Division at 523-4041.

Very truly yours,

A handwritten signature in black ink, appearing to read "Raem Loui".

RAE M. LOUI, P.E.  
Director

RN:pto

Encl.

78

AUG 8 2002

FILE COPY

2002-08-08-0A-FEA-

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

FINAL ENVIRONMENTAL ASSESSMENT

FOR THE

(MANOA STREAM TRIBUTARY RETAINING WALL)

HONOLULU, OAHU, HAWAII

TAX MAP KEY: 2-9-038:014

This document is prepared pursuant to Chapter 343, HRS

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

RESPONSIBLE OFFICIAL:

  
\_\_\_\_\_  
RAE M. LOUI, P.E.  
Director

7/23/02  
Date

JULY 2002

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I. Description of Proposed Action and Statement of Objective

The proposed project involves the construction of a cement rubble masonry (CRM) retaining wall with a 4-foot high chain link fence in a segment of an Unnamed Tributary of Manoa Stream (stream).

The project proposes to stabilize the existing unlined bank between existing CRM stream walls with a new CRM wall. The unlined bank has eroded and has reduced the width of the access road at the top of the bank and erosion may eventually affect the existing stream walls.

The proposed project area is along the same stream where the City constructed 85 lineal feet of CRM wall approximately 220 feet downstream of the proposed project in 2000 (See Appendix B – Site Plan). A Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI) were issued for the Kahiwa Place Drainage Ditch Improvements and the FONSI was published in the June 23, 1998 issue of the Office of Environmental Quality Control (OEQC) Bulletin. No public comments were received. Additional information relating to existing conditions, environmental impacts, mitigative measures and comments by agencies and individuals can be found in the FEA.

II. Description of the Affected Environment

The proposed project is located in Manoa Valley, Honolulu, Oahu, Hawaii along the stream adjacent to TMK: 2-9-038:035. The project is approximately 700 feet northeast of the intersection of East Manoa Road and Kahaloa Drive. (See Appendix A - Location Map). The project area is zoned residential.

The stream is a perennial stream lined with CRM stream walls and concrete invert upstream of the project area. Downstream of the project area has CRM stream walls on the west side and further downstream on the south side. The invert and the opposite side of the stream are natural.

Upstream of the project site is a timber bridge that is used to access two properties.

The stream right-of-way is owned and maintained by the City and County of Honolulu. Properties on both sides of the stream are privately owned.

Wildlife in the project area consists of mongooses, rats, and the usual common birds found in built-up areas of Honolulu. No rare or endangered species are known to frequent the lands adjacent to the proposed project. According to the Department of Land and Natural Resources (DLNR) Division of Aquatic Resources, fishes that can be found in the stream include liberty mollies, swordtails, guppies, armored catfishes, dojos, and crayfish. Small numbers of 'o'opu nakea can also be found.

There are no known archaeological or historical sites in the immediate project area. In the Kahiwa Place Drainage Ditch Improvements FEA, the DLNR State Historic Preservation Division (SHPD) determined that the project site contained no significant archaeological features and a letter of "no effect" was issued by SHPD.

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

The proposed improvements include the construction of 32 lineal feet of CRM wall, 12 to 15 feet high with a 4-foot high chain link fence. (See Appendix C and D)

No adverse hydraulic effects are expected to result from the construction of the new wall. Hydraulic calculations show that there will be minimal velocity increase at the downstream end of the project. Therefore there should be no significant increase in bank erosion of the properties downstream of the project site. Pre-improvement hydraulic calculations were performed using the original stream cross sections.

The project has an estimated construction cost of \$140,000. It is anticipated that construction will begin in April 2003 and will take approximately 60 calendar days to complete. CIP funds for the Fiscal Years 2002 and 2003 will be used for the project.

The project will require the acquisition of a wall easement (approximately 130 square feet) from the owners of TMK: 2-9-38:35. The area of the property is 1130 square feet and is used only for access to TMK: 2-9-38:11 and 33.

The project will not require the displacement or relocation of any people.

The new wall will prevent stream bank erosion within the project site and will prevent the contribution of sedimentation nutrients into the stream and eventually the Ala Wai Canal.

### IV. 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, construction equipment, 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 application of water and/or appropriate methods. The specifications will contain provisions that will require the Contractor to control dust nuisance at all times and have sufficient equipment and manpower at the job site to accomplish this.

Particulate emissions from construction equipment may also occur. All motorized construction equipment shall be maintained in good mechanical condition and

equipped with emission controls to help preserve ambient air quality.

Noise will be generated by construction equipment such as backhoes and trucks. The increase in noise level by construction equipment cannot be avoided, but will be controlled and limited to normal daylight working hours. If necessary the Contractor will be required to obtain a Community Noise Permit pursuant to the Administrative Rules of the Department of Health Chapter 11-46 on "Community Noise Control". 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:

<u>Location</u>	<u>Distance from Project</u>	<u>Sound Level</u>
(1) Nearest residence	50 ft	85 dB
(2) Nearest church	2100 ft	52 dB
(3) Nearest school	1300 ft	56 dB
(4) Nearest hospital	2400+ft	51 dB
(5) Nearest playground	1200 ft	57 dB
(6) Nearest library	2400+ft	51 dB

The highest level of noise will be experienced by the private property owners abutting the project site. These property owners also have an interest in completion of the project since it will mitigate erosion of the embankment and improve access to their homes..

- B. Water Quality: Provisions will be made to divert or transfer the water around the work area. This may be accomplished with sandbags, pipes, pumps, etc. This will minimize erosion and sedimentation during construction activities. The Contractor shall monitor all pollution control measures daily to ensure that they are in good working order.

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 the stream.

The Contractor will be required to minimize disturbance to the stream bed and prevent the entrance of debris, litter, and other deleterious materials into the water.

- C. Archaeological Deposits: Since the construction involves filling of the stream bank in an eroded segment of stream, no impact on archaeological deposits is anticipated. The specifications will, however, require the Contractor to contact the Historic

Sites Section of the Department of Land and Natural Resources in the event that such deposits are encountered.

- D. Disturbance to Marine Life: Since the work does not include the lining of the invert and stream flow will be continuously diverted around the work area, the impact on marine life is not considered to be significantly adverse. Aquatic life will likely reestablish itself following construction.

V. Alternatives Considered

The following courses of action were considered: (1) no action, (2) the proposed project.

Alternative 1: If no action is taken, erosion of the embankment in the project area would continue and result in reducing the width of the access road and possible damage to the existing stream walls.

Alternative 2: Implementation of the proposed project for a CRM stream wall would stabilize the slope and preclude further erosion and property damage.

VI. Agencies Consulted in Making this Assessment

The following agencies were consulted in the preparation of the Environmental Assessment (EA). Those agencies that responded with comments are indicated by an \*. A copy of all of the agencies correspondence during the 30-day comment period has been included in Appendix E.

A. City and County of Honolulu

1. Department of Planning and Permitting\*
2. Councilmember Ann Kobayashi

B. State of Hawaii

1. Department of Land and Natural Resources\*
2. Department of Health\*
3. Office of State Planning
4. Senator Brian T. Taniguchi
5. Representative Ed Case

C. U.S. Government

1. Department of Interior Fish and Wildlife Service
2. Department of the Army Corps of Engineers\*

D. Other

1. Manoa Neighborhood Board No. 7
2. Ms. Lynne Kaneshiro\*
3. Mr. & Mrs. Ralph Kaneshiro
4. Wong Nin Estate
5. Mr. Kenneth Nagahiro

VII. Notice of Finding of No Significant Impact

This Environmental Assessment document constitutes a Notice of Finding of No Significant Impact (FONSI). Although several potential negative impacts are expected from the proposed project during construction, these impacts are temporary and can be mitigated through measures identified in Paragraph IV. Therefore, an Environmental Impact Statement will not be required for the proposed improvements.

The FONSI determination was made in accordance with the Hawaii Revised Statutes, Chapter 343 and the "Significant Criteria" listed in the Department of Health Rules (11-200-12). The proposed project would have a significant impact on the environment if it meets any one of the following "Significant Criteria":

A. Involves an irrevocable commitment to loss or destruction of any natural or cultural resource

The project site was not found to be the habitat for any endangered or threatened species of native birds or mammals. Although the project will result in the removal and destruction of some common vegetation and fauna habitats where the new CRM wall will be constructed, the current inhabitants can easily reestablish themselves in other parts of the stream.

There were no findings of significant archaeological or historic sites at the project area. However if archaeological artifacts or bones are discovered during construction, work in the area will cease, and the Historic Preservation Office of the Department of Land and Natural Resources will be notified.

B. Curtails the range of beneficial uses of the environment

CRM walls line the stream upstream of the project site and on one side of the stream downstream of the site. Adding approximately 32 lineal feet of new CRM wall between existing walls will not significantly affect the appearance or limit the use of the area. The stream is sometimes accessed by neighborhood children who catch fish or play in the water. Such activities may be restricted during construction, but will resume following the completion of the project.

- C. Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders

The project is consistent with the State's Long-Term Environmental Policies established in Chapter 344, HRS.

- D. Substantially affects the economic or social welfare of the community or State

The project will have minor economic and social welfare effects to the community and the City. The property owners of TMK: 2-9-38:11 will have a safer access to their homes because the new wall will restore the eroded driveway. By constructing the wall now, the City will avoid future repair costs that may occur due to erosion of the existing stream walls. The new wall will also prevent sedimentation nutrients from entering and affecting the stream and the Ala Wai Canal.

- E. Substantially affects public health

The project will be of short duration (60 days) and the adverse effects of construction on ambient air quality, noise levels, and water quality will be short term and can be mitigated through compliance with Federal, State and City and County regulations. A site-specific Best Management Practices (BMP) plan will be implemented during the construction phase. The quality of stream water is expected to improve following construction because of the reduction of sedimentation from embankment erosion.

- F. Involves substantial secondary impacts, such as population changes or effects on public facilities.

The project will not generate substantial secondary impacts such as population changes or effects on public facilities.

- G. Involves a substantial degradation of environmental quality

The project is not expected to degrade the environmental quality of the area significantly. See Paragraph E

- H. Is individually limited, but cumulatively has considerable effect upon the environment or involves a commitment for larger actions

The project does not have a considerable effect upon the environment and is not a commitment for a larger action. The City does not have any immediate plans for future improvements to the stream.

- I. Substantially affects a rare, threatened, or endangered species, or its habitat

There are no rare, threatened, or endangered species of flora or fauna in the vicinity of the project area.

- J. Detrimentially affects air or water quality or ambient noise levels

See Paragraph E.

- K. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach erosion-prone area, geologically hazardous land estuary, fresh water, or coastal waters

The project is not located in a flood plain, tsunami zone, beach erosion-prone area, geologically hazardous land estuary, or coastal waters. However it will have a short-term impact on the fresh water stream. See Paragraph E. The new wall will not be damaged by stream flow.

- L. Substantially affects scenic vistas and viewplanes identified in county or state plans or studies.

The project will not affect any vistas or viewplanes.

- M. Requires substantial energy consumption

The project will not require substantial energy consumption. The project is small and once the wall is constructed, additional energy will not be required, except for future repair work.

#### VIII. Permits and Approvals

The following permits and approvals are anticipated for the project:

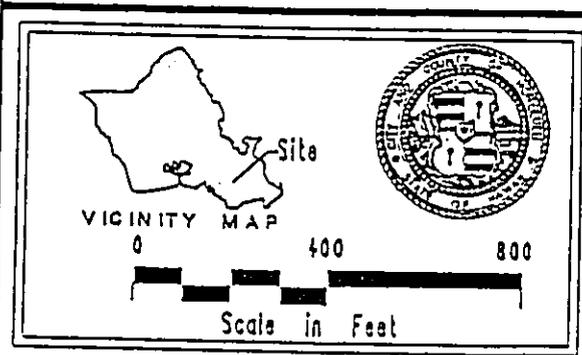
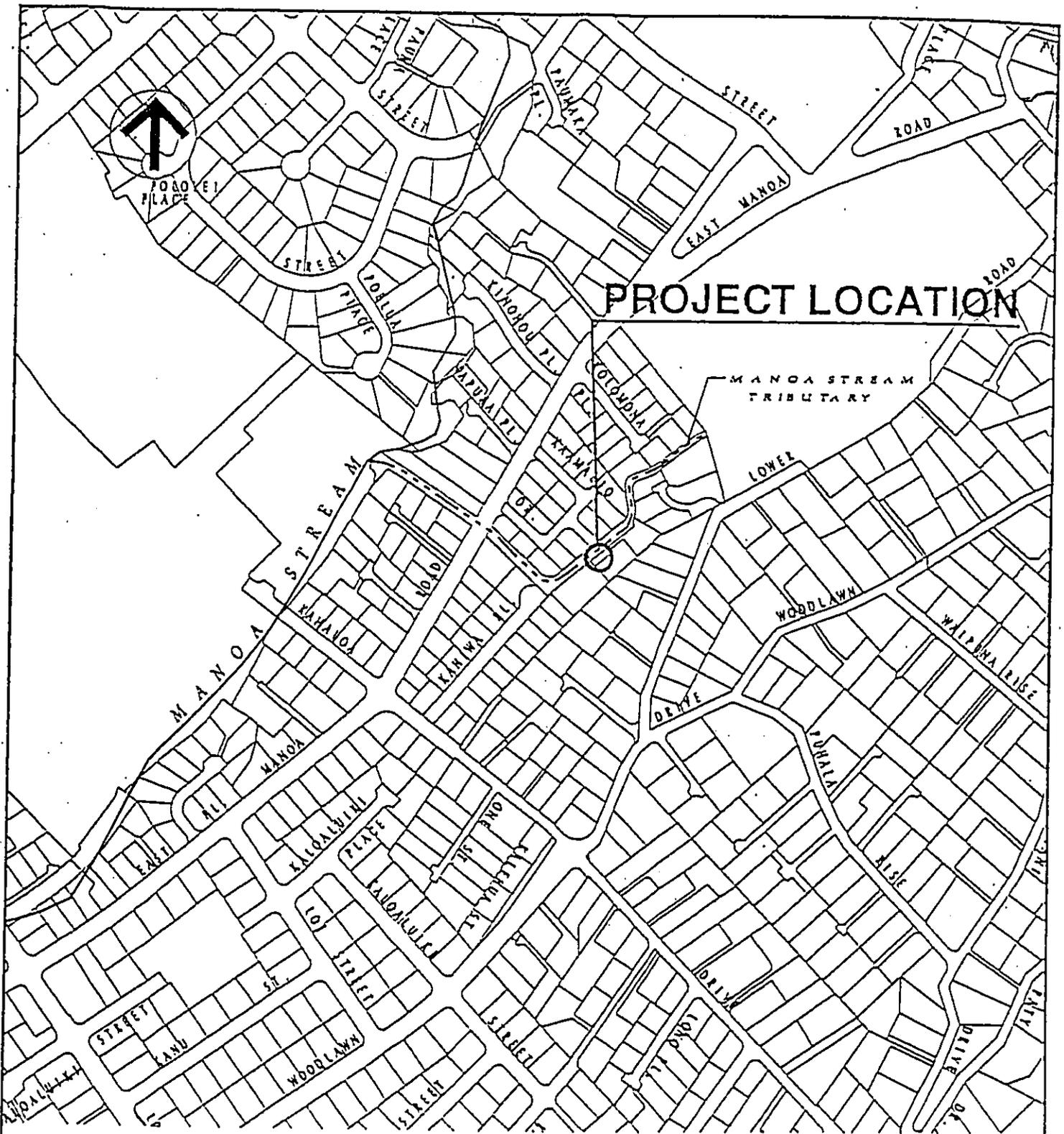
1. U.S. Army Corps of Engineers, Section 404 Permit
2. State Department of Land and Natural Resources, Stream Channel Alteration Permit (SCAP)
3. State Department of Health, Clean Water Branch, Section 401, Water Quality Certification.
4. State Department of Health, Clean Water Branch, National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Dewatering
5. Office of State Planning, Coastal Zone Management (CZM) Federal Consistency Determination

IX. Proposing Agency

City and County of Honolulu, Department of Design and Construction

X. Approving Agency

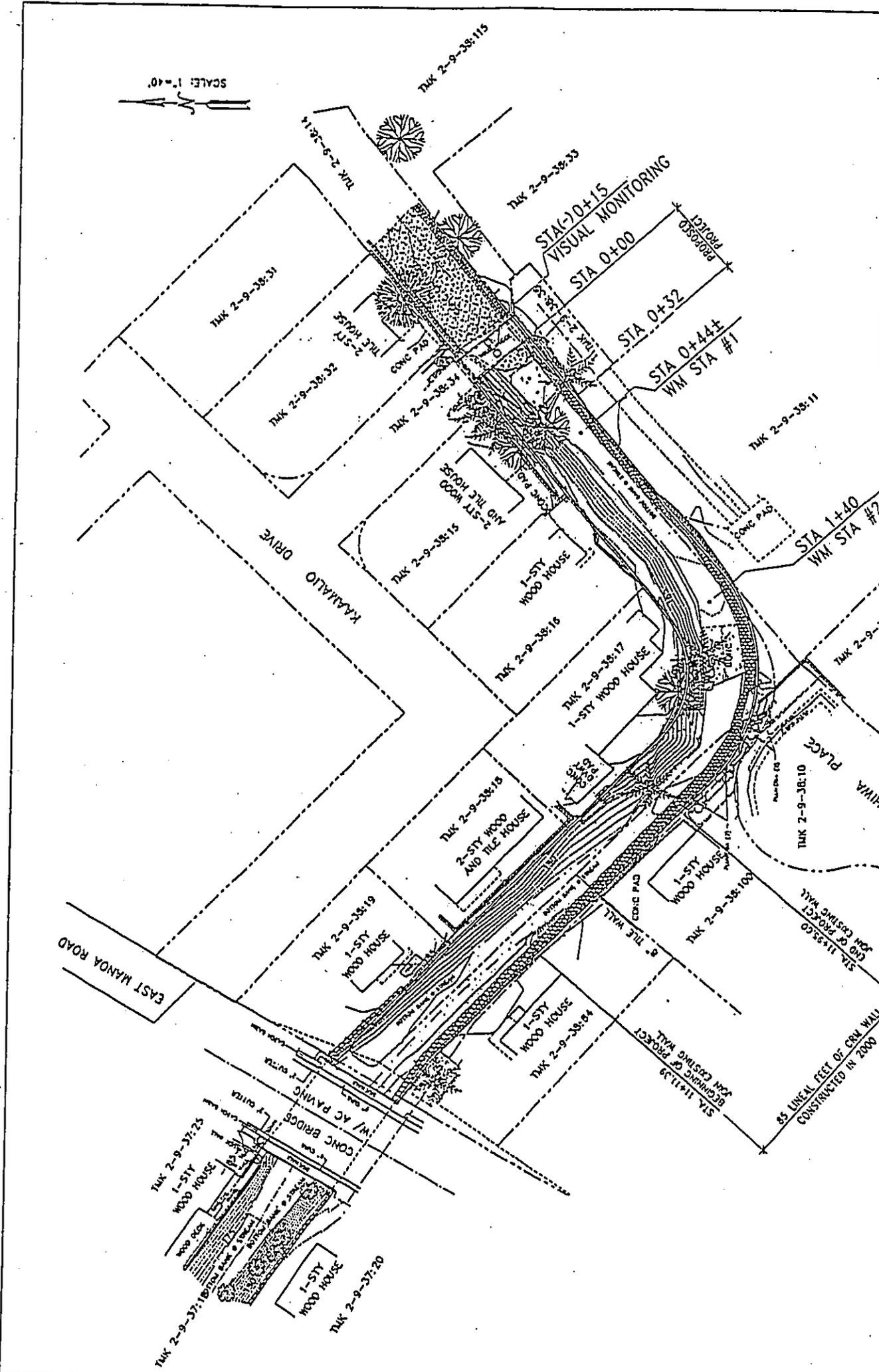
City and County of Honolulu, Department of Design and Construction



**MANOA STREAM TRIBUTARY  
RETAINING WALL**

TMK: 2-9-038:014

**APPENDIX A - LOCATION MAP**



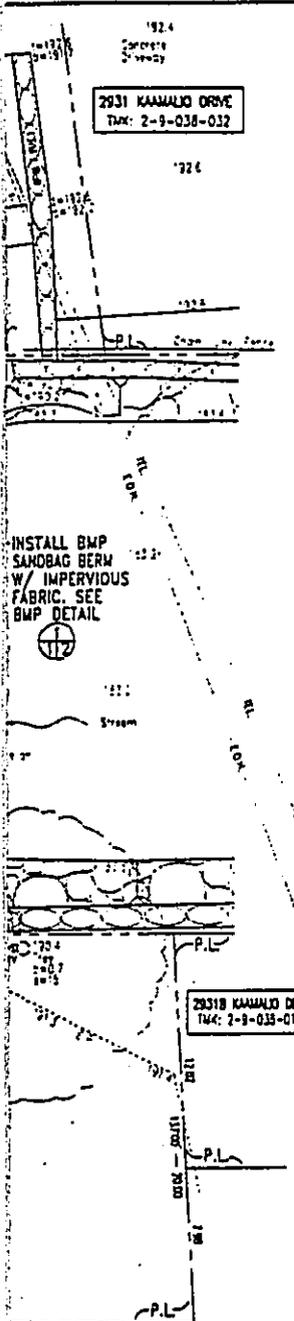
SCALE: 1"=40'

DEPT. OF DESIGN & CONSTRUCTION  
 CITY AND COUNTY OF HONOLULU  
 MANOA STREAM TRIBUTARY  
 RETAINING WALL  
 TNK: 2-9-038-014

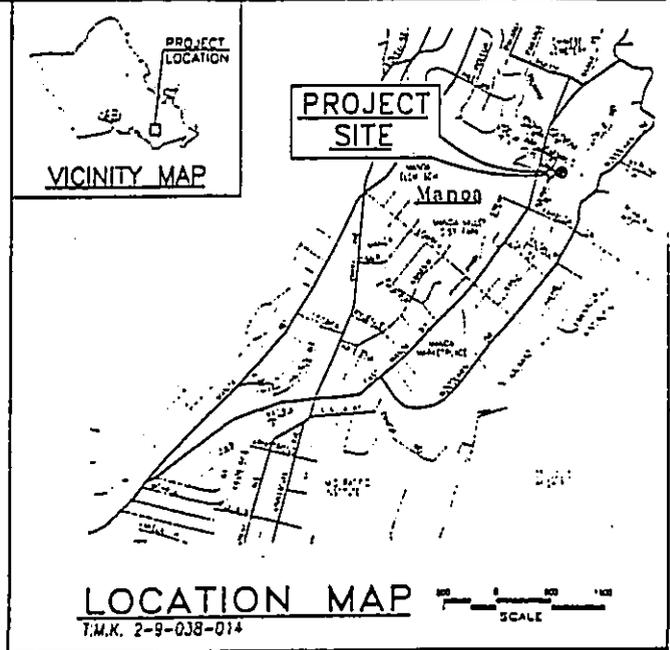
APPENDIX B - SITE PLAN



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LEGEND	
<b>NEW</b>	
	New C.R.M. Retaining Wall
	New Chain Link Fence
	New Edge of Pavement (E.P.)
<b>EXISTING</b>	
	Chain Link Fence
	Edge of Pavement (E.P.)
	E.O.M. Overhead Electrical Line
	TEL Overhead Telephone Line
	Water Line
	Property Line
	Utility Pole & Guy Wire
	New Fence
	Tree
<b>ABBREVIATIONS</b>	
BB	Bottom Bench
EXIST	Existing
UP	Utility Pole
TB	Top Bench
WM	Water Main
WV	Water Valve



## CONSTRUCTION NOTES

- ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII.
- THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. THE CONTRACTOR SHALL MAKE ALL REMEDIAL ACTIONS AS NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, CHAPTER 11-54 "WATER QUALITY STANDARDS" AND CHAPTER 11-55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC BEST MANAGEMENT PRACTICES (BMP) PLAN FOR CITY AND DOH APPROVAL. A POSSIBLE BMP PLAN IS SHOWN ON THE DRAWINGS.
- IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015), AND THE CIVIL ENGINEERING BRANCH, D.P.P. (523-4831).
- FOR BENCH MARK, SEE SHEET 1.

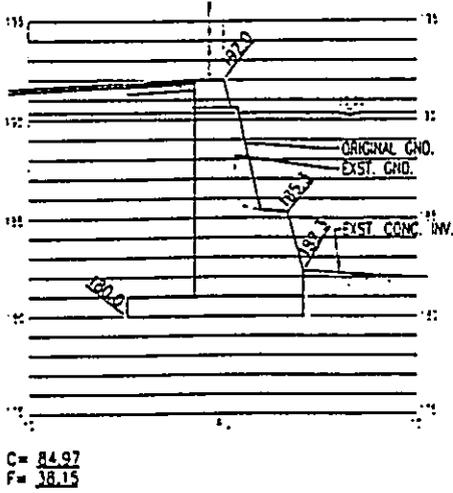
## GENERAL NOTES

- VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, EXISTING STRUCTURES AND THE NEW WORK PRIOR TO THE START OF CONSTRUCTION. REPORT ANY DISCREPANCIES FOR RESOLUTION OR CLARIFICATION.
- PROVIDE ADEQUATE TEMPORARY SHORING AND BRACING OF THE NEW AND EXISTING STRUCTURES AT ALL TIMES DURING CONSTRUCTION.
- ALL FOUNDATIONS SHALL BEAR ON FIRM UNDISTURBED GROUND.
- ALL EXCAVATIONS SHALL BE PROTECTED AND GUARDED AGAINST DANGER TO LIFE, LIMB AND PROPERTY. SHORING, SHEETING, CRIBBING AND LAGGING SHALL BE PROVIDED AND INSTALLED AS REQUIRED, TO PRESERVE THE EXCAVATIONS, EARTH BANKS, ADJACENT STRUCTURES AND PROPERTY FROM DAMAGE RESULTING FROM THE NEW WORK.
- CONCRETE SHALL BE C&C CLASS 'A'.
- REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM 615, GRADE 60.

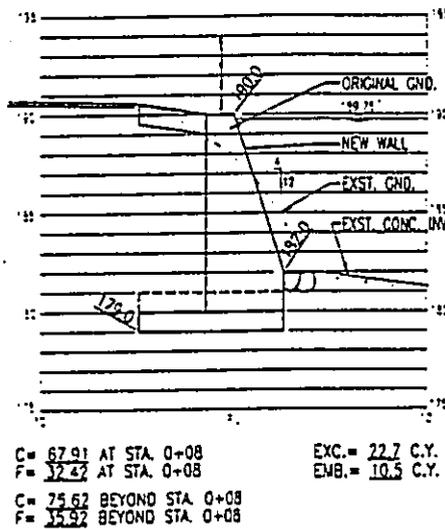
## APPENDIX C

APPROVED:				
DIRECTOR, DEPARTMENT OF DESIGN AND CONSTRUCTION			DATE	
REVISION	DATE	DESCRIPTION	ENGR. APPROVED	
DEPARTMENT OF DESIGN AND CONSTRUCTION CITY AND COUNTY OF HONOLULU CIVIL DESIGN AND ENGINEERING DIVISION				
<b>MANOA STREAM TRIBUTARY RETAINING WALL</b>				
MANOA, HONOLULU, OAHU, HAWAII				
PLAN, ELEVATION, LOCATION MAP, NOTES				
DESIGN R.N.	APPROVED:		<b>1</b> SHEET 1 OF 2 SHEETS	
DRAWN C.S.	 CHIEF, CIVIL DESIGN & ENGINEERING DIV. DDC.			
CHECKED -				
DATE -				
JOB NO. 20-02	FILE	DRAW	FOLDER	NUMBER

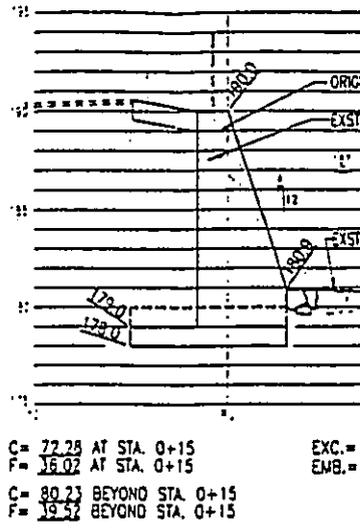
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SECTION A  
0+00



SECTION B  
0+08



SECTION C  
0+15

C = 84.97  
F = 38.15

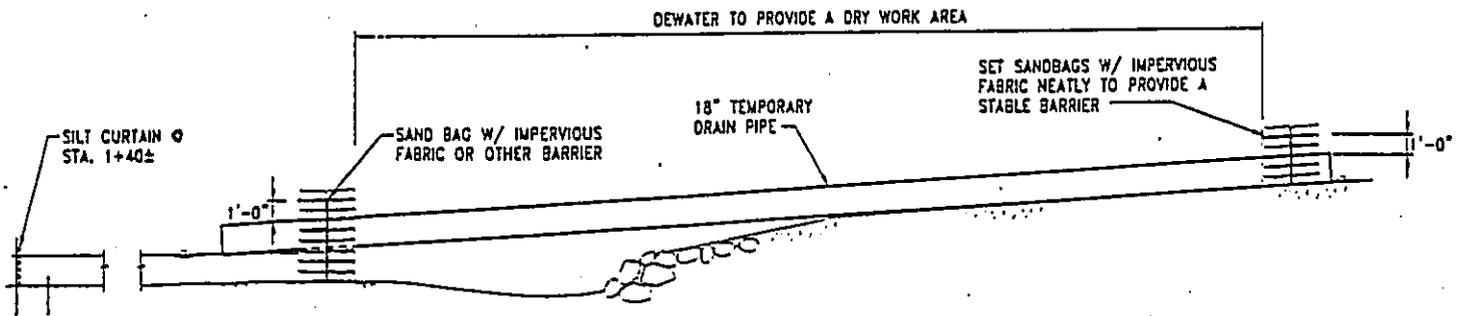
C = 67.91 AT STA. 0+08  
F = 32.42 AT STA. 0+08  
C = 75.62 BEYOND STA. 0+08  
F = 35.92 BEYOND STA. 0+08

EXC. = 22.7 C.Y.  
EMB. = 10.5 C.Y.

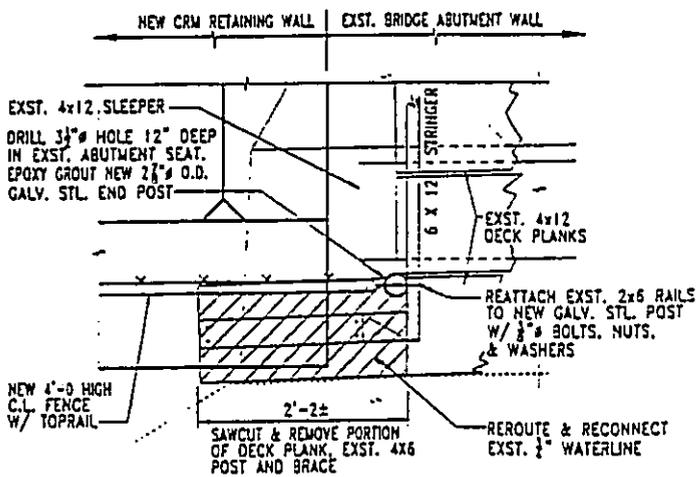
C = 72.28 AT STA. 0+15  
F = 36.02 AT STA. 0+15  
C = 80.23 BEYOND STA. 0+15  
F = 39.57 BEYOND STA. 0+15

## CROSS SECTION

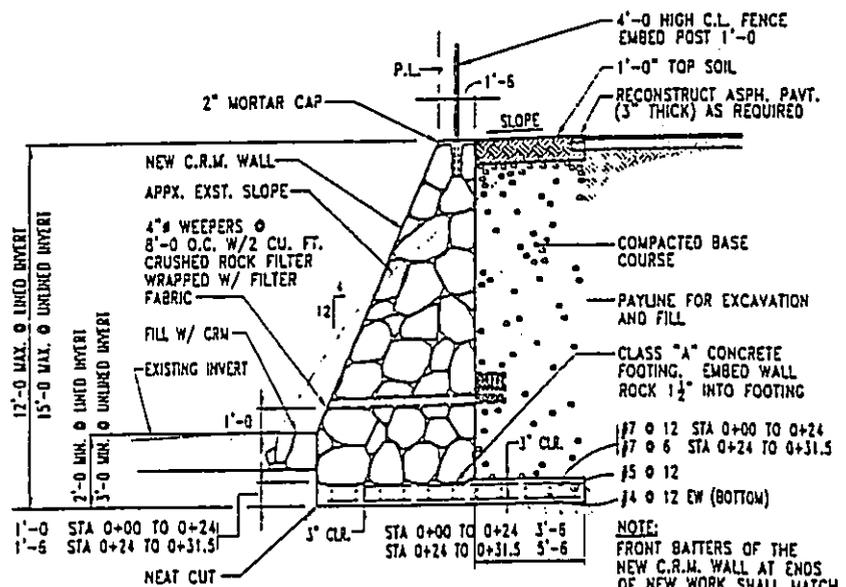
SCALE: HORIZ. = 1"=5'  
VERT. = 1"=5'



1  
1/2 BMP DETAIL  
SCALE: 1"=5'



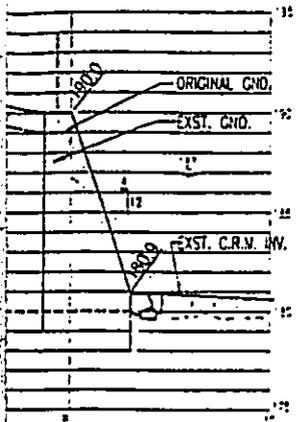
2  
1/2 CONNECTION DETAIL  
SCALE: N.T.S.



3  
1/2 TYPICAL WALL SECTION  
SCALE: 1/4" = 1'-0"

NOTE:  
FRONT BATTERS OF THE NEW C.R.M. WALL AT ENDS OF NEW WORK SHALL MATCH THE EXISTING WALLS AND SHALL TRANSITION TO 4:12 FRONT BATTER IN 8 FEET.

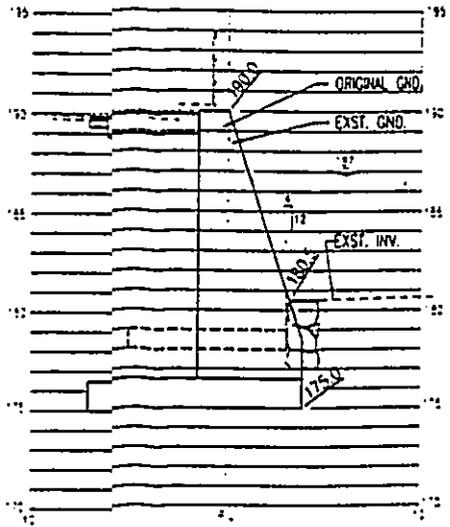
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+15  
 +15  
 STA. 0+15  
 STA. 0+15  
 SECTION C  
 0+15

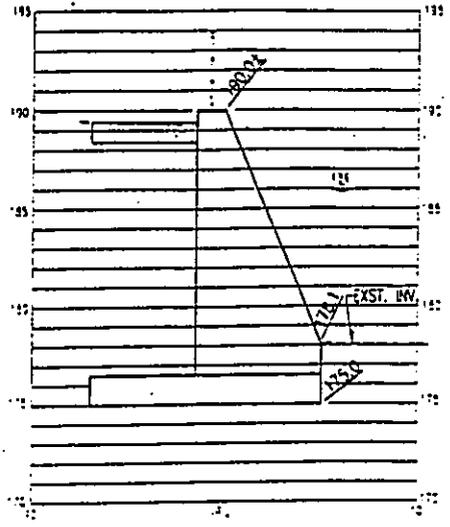
## SECTION C

HORIZ. = 1"=5'  
 VERT. = 1"=5'



C = 91.76 AT STA. 0+24  
 F = 37.97 AT STA. 0+24  
 EXC. = 28.7 C.Y.  
 EMB. = 12.9 C.Y.  
 C = 147.07 BEYOND STA. 0+24  
 F = 73.44 BEYOND STA. 0+24

## SECTION D



C = 145.35  
 F = 71.00  
 EXC. = 40.8 C.Y.  
 EMB. = 20.1 C.Y.

## SECTION E

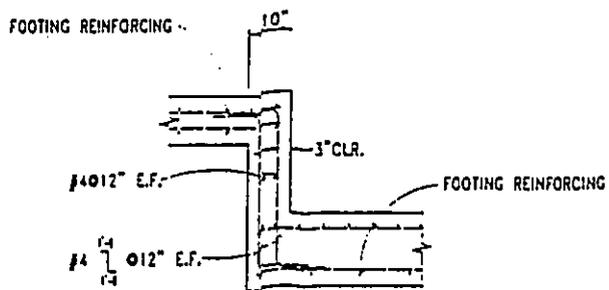
**TOTALS:**  
 EXC. = 111.4 C.Y.  
 EMB. = 52.9 C.Y.

## BEST MANAGEMENT PRACTICES NOTES

1. INSTALL AND MAINTAIN SAND BAG BERM AND PIPE.
2. INSTALL AND MAINTAIN SILT CURTAINS.
3. WATER CONSTRUCTION AREA FOR DUST CONTROL.
4. ASSURE THAT ALL VEHICLES LEAVING THE SITE SHALL BE FREE OF MUD.

4 C.L. FENCE  
 1'-0"  
 SOIL  
 CONCRETE ASPH. PAVT.  
 AS REQUIRED

10" BASE  
 FOR EXCAVATION  
 CONCRETE EMBED WALL INTO FOOTING  
 STA 0+00 TO 0+24  
 STA 0+24 TO 0+31.5  
 (BOTTOM)



4
112
**STEPPED FOOTING DETAIL**  
 SCALE: 1/2" = 1'-0"

## APPENDIX D

REVISION	DATE	DESCRIPTION	ENGR.	APPROVED	
DEPARTMENT OF DESIGN AND CONSTRUCTION CITY AND COUNTY OF HONOLULU CIVIL DESIGN AND ENGINEERING DIVISION					
<b>MANOA STREAM TRIBUTARY RETAINING WALL</b> MANOA, HONOLULU, OAHU, HAWAII					
CROSS SECTIONS, TYPICAL WALL SECTION STRUCTURAL DETAILS, BMP DETAIL & NOTES					
DESIGN	R.N.	APPROVED:	<b>2</b>		
DRAWN	E.S.		SHEET 2		
CHECKED		DATE	OF 2 SHEETS		
DATE					
JOB NO. 20-02		FILE	DRAW	FOLDER	NUMBER

**APPENDIX E**

**AGENCY CORRESPONDENCE DURING THE  
30-DAY COMMENT PERIOD**

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567  
WEB SITE ADDRESS: [www.co.honolulu.hi.us](http://www.co.honolulu.hi.us)

JEREMY HARRIS  
MAYOR



RAE M. LOUI, P.E.  
DIRECTOR

ERIC G. CRISPIN, AIA  
DEPUTY DIRECTOR

GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

July 18, 2002

CDD-BS 02-0107

Mr. Michael Constantinides  
2923A Kaamali Drive  
Honolulu, Hawaii 96822

Dear Mr. Constantinides:

Subject: Response to Comments on the Draft Environmental Assessment for  
the Manoa Stream Tributary Retaining Wall Project. TMK: 2-9-38: 14

Thank you for your letter of April 4, 2002 in response for comments on the Draft Environmental Assessment (DEA) for the subject project.

Your request that the existing coconut tree on the stream bank be removed prior to the proposed project cannot be accommodated. Both the waterline lateral and tree are located on private property and are the private property owners' responsibility until land rights are obtained and the project can officially move forward. The location of your water line may be adjusted during the project and you will be provided with continuous water service.

If you have any questions, please call Ray Nakahara of the Civil Division at 523-4041.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Raem Loui".

RAE M. LOUI, P.E.  
Director

*for info*  
RN:pto

CD

RECEIVED  
DEPT OF DESIGN & CONSTR  
C & C OF HONOLULU

Michael & Lynne Constantinides

2923A Kaamali Drive, Honolulu, HI 96822

02 APR -8 AM 8:35

DDE  
Received

April 4, 2002

APR - 9 2002

Mr. Rae M. Loui, P.E.  
City and County of Honolulu  
650 South King Street, 11th Floor  
Honolulu, HI 96813

COED

02400709

Dear Mr. Loui,

My wife Lynne and I thank you for the opportunity to comment on the Draft Environmental Assessment (DEA) titled "Manoa Stream Tributary Retaining Wall, Tax Map Key 2-9-038:014", prepared by the Department of Design and Construction. We find the project proposal, stated objectives, and summary of potential impacts and mitigation to be thorough and appropriate.

The project proposal includes removal of an existing coconut tree on the stream bank. The root ball of this tree has been partially exposed due to the stream bank erosion described in the DEA. We fear that this tree has become unstable and dangerous, and recently were forced to employ a temporary repair measure to our water supply line which appeared to be ruptured by the shifting root ball. We kindly ask that you consider removing this hazardous tree soon, prior to the stated wall construction date of April, 2003. If this early removal is possible, please have your field crew contact us prior to conducting the work, as we would wish to discuss the integrity of our temporary water supply pipe with them.

Sincerely,



Michael Constantinides

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DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR  
HONOLULU, HAWAII 96813  
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JEREMY HARRIS  
MAYOR



RAE M. LOUI, P.E.  
DIRECTOR  
ERIC G. CRISPIN, AIA  
DEPUTY DIRECTOR  
GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

July 17, 2002

CDD-BS 02-0108

Mr. George P. Young, P.E.  
Chief, Regulatory Branch  
Department of the Army  
U.S. Army Engineering District, Honolulu  
Fort Shafter, Hawaii 96858-5440

Dear Mr. Young:

Subject: Response to Comments on the Draft Environmental Assessment for  
the Manoa Stream Tributary Retaining Wall Project, TMK: 2-9-38:14

Thank you for your letter of April 4, 2002 in response to our request for comments on the Draft Environmental Assessment (DEA) for the subject project. The application for the Department of Army (DA) permit was submitted on May 16, 2002 for your review.

If you have any questions, please call Ray Nakahara of the Civil Division at 523-4041.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Raem Loui".

RAE M. LOUI, P.E.  
Director

for  
RN:pto

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



DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FT. SHAFTER, HAWAII 96858-5440

CD Design  
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REPLY TO  
ATTENTION OF

April 4, 2002

02 APR -8 AM 8:36

Regulatory Branch

APR -9 2002

COED

msy  
Ms. Rae M. Loui, P.E., Director  
Department of Design and Construction  
City and County of Honolulu  
650 South King Street, 11<sup>th</sup> Floor  
Honolulu, Hawaii 96813

02-400708

Dear Ms. Loui:

This letter responds to your letter, dated March 29, 2002, requesting comments concerning the Draft Environmental Assessment (DEA) for the Manoa Stream Tributary Retaining Wall Project. Based on the information provided in the DEA and a site visit by a member of my staff, I have determined that a Department of the Army (DA) permit will be required for the project.

If you have any questions concerning this determination, please contact William Lennan of my staff at 438-6986 or FAX 438-4060, and reference File No. 200200255.

Sincerely,

George P. Young, P.E.  
Chief, Regulatory Branch

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567  
WEB SITE ADDRESS: [www.co.honolulu.hi.us](http://www.co.honolulu.hi.us)

JEREMY HARRIS  
MAYOR



RAE M. LOUI, P.E.  
DIRECTOR  
ERIC G. CRISPIN, AIA  
DEPUTY DIRECTOR  
GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

July 17, 2002

CDD-BS 02-0110

Ms. Dierdre S. Mamiya, Administrator  
Land Division  
Department of Land and Natural Resources  
State of Hawaii  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Mamiya:

Subject: Response to Comments on the Draft Environmental Assessment for  
the Manoa Stream Tributary Retaining Wall Project, TMK: 2-9-38: 14

Thank you for your letters of April 24 and May 13, 2002 in response to our request for comments on the Draft Environmental Assessment (DEA) for the subject project. We offer the following responses to your comments:

1. COMMENT: Commission on Water Resource Management:

The DEA acknowledges the need for a Stream Alteration Permit.

RESPONSE: We are currently in the process of preparing the stream channel alteration permit application. We will be submitting the completed application to the Department of Land and Natural Resources Commission on Water Resource Management for approval.

2. COMMENT: Division of Aquatic Resources:

This particular stretch of stream is particularly vulnerable to erosion during periods of heavy rainfall. Although we normally advocate leaving stream channels intact, in this particular situation, construction of the CRM retaining wall will resolve a long-standing erosion problem. We, therefore, have no objection to the proposed project, provided appropriate mitigative measures are taken to minimize erosion, and prevent cement products, oil, gas, lubricants, and other

Ms. Dierdre S. Mamiya  
Page 2  
July 17, 2002

toxic substances associated with the use of heavy equipment from falling or leaching into the stream.

**RESPONSE:** Construction will be scheduled during the drier summer months to the extent practical to minimize the impact to the water quality downstream of the project site. The contractor will implement appropriate control measures to preserve water quality as specified under the conditions of the Department of Army permit and will prepare a site specific Best Management Practices plan and monitoring plan in accordance with the Department of Health requirements.

If you have any questions, please call Ray Nakahara of the Civil Division at 523-4041.

Very truly yours,



RAE M. LOUI, P.E.  
Director

*Am Just*  
RN:pto 



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SD  
J. S. J.

02 APR 25 AM 11:18

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

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

DDG  
Received

April 24, 2002

LD-NAV  
Ref.: CDED-BS02-003.RCM

APR 26 2002  
L-2238/1928/2260/2086

Honorable Rae M. Loui, P.E., Director  
Department of Design and Construction  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Ms. Loui:

Subject: Review: DRAFT ENVIRONMENTAL ASSESSMENT  
Applicant: C&CoH Department of Design and Construction  
Project: Construct a Cement Rubble Masonry (CRM) Retaining Wall  
(Approximately 32 Lineal Feet) and a 4-foot High Chain Link Fence in a  
Segment of an Unnamed Tributary of Manoa Stream  
Location: Manoa Valley, Honolulu, Island of Oahu, Hawaii  
TMK: 1st/ 2-9-038: 014

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Thank you for the opportunity to review and comment on the subject matter.

A copy of the Draft Environmental Assessment covering the proposed project was distributed to the following Department of Land and Natural Resources' Divisions for their review and comment:

- Division of Aquatic Resources
- Division of Forestry & Wildlife
- Commission on Water Resource Management
- Land Division Engineering Branch
- Land Division Oahu District Land Office

Attached herewith is a copy of the Commission on Water Resource Management's comment related to water resources. The Department has no other comment to offer on the subject matter.

Should you have any questions, please feel free to contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 587-0438.

Very truly yours,

*Marlene E. Under*  
DIERDRE S. MAMIYA  
Administrator

C: Oahu District Land Office

BENJAMIN J. CAYSTANO  
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN  
CHAIRPERSON

BRUCE S. ANDERSON  
MEREDITH J. CHING  
CLAYTON W. DELA CRUZ  
BRIAN C. NISHIDA  
HERBERT M. RICHARDS, JR.

LINNEL T. NISHIOKA  
DEPUTY DIRECTOR

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LAND DIVISION

2002 APR 19 A 9:12

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P.O. BOX 621  
HONOLULU, HAWAII 96809  
APR 19 2002

DEPT.  
NATURAL  
STAT.

TO: Dede Mamiya, Administrator  
Land Division

FROM: Linnel T. Nishioka, Deputy Director  
Commission on Water Resource Management (CWRM)

SUBJECT: Draft Environmental Assessment (DEA) C&CoH Department of Design and Construction  
CRM Retaining Wall at an Unnamed Tributary in Manoa Stream.  
(TMK: 2-9-038:014)

FILE NO.: CDED-BS02-0033

A handwritten signature in black ink, appearing to read "Linnel T. Nishioka".

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

- We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.
- We recommend coordination with the Land Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.
- The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.
- Groundwater withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- We are concerned about the potential for degradation of instream uses from development on highly erodible slopes adjacent to streams within or near the project. We recommend that approvals for this project be conditioned upon a review by the corresponding county's Building Department and the developer's acceptance of any resulting requirements related to erosion control.
- If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).
- If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.
- OTHER: The DEA acknowledges the need for a Stream Channel Alteration Permit.

If there are any questions, please contact David Higa at 587-0249.

LDCDED-BS02-0033



STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 LAND DIVISION  
 P.O. BOX 821  
 HONOLULU, HAWAII 96809

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

April 4, 2002

LD-NAV  
 Ref.: CDED-BS02-0033

Suspense Date: 4/19/02

MEMORANDUM:

TO: XXX Division of Aquatic Resources  
 XXX Division of Forestry & Wildlife  
 Division of State Parks  
 Division of Boating and Ocean Recreation  
 Historic Preservation Division  
 XXX Commission on Water Resource Management  
 Land Division Branches of:  
 Planning and Technical Services  
 XXX Engineering Branch  
 XXX Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator  
 Land Division

SUBJECT: Review: Draft Environmental Assessment  
 Applicant: C&CoH Department of Design and Construction  
 Project: Construct a Cement Rubble Masonry (CRM)  
 Retaining Wall (Approximately 32 Lineal Feet)  
 and a 4-Foot High Chain Link Fence in a Segment  
 of an Unnamed Tributary of Manoa Stream  
 Location: Manoa Valley, Honolulu, Oahu, Hawaii  
 TMK: 1<sup>st</sup>/ 2-9-038: 014

Please review the attached Draft Environmental Assessment covering the subject matter and submit your written comments and recommendations (if any) on Division letterhead signed and dated on or before the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0438. If this office does not receive your comments by the suspense date, we will assume there are no comments.

( ) We have no comments.

(✓) Comments attached.

Signed:

Date: APR 19 2002

APR 19 2002  
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02 MAY 16 PM 1:35

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

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

May 13, 2002

MAY 17 2002

LD-NAV  
L-2238/1928/2260/2086/2484  
Ref.: CDED-BS02-003.RCM2

Honorable Rae M. Loui, P.E., Director  
Department of Design and Construction  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

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02401073

Dear Ms. Loui:

Subject: Review: DRAFT ENVIRONMENTAL ASSESSMENT  
Applicant: C&CoH Department of Design and Construction  
Project: Construct a Cement Rubble Masonry (CRM) Retaining Wall  
(Approximately 32 Lineal Feet) and a 4-foot High Chain Link Fence in a  
Segment of an Unnamed Tributary of Manoa Stream  
Location: Manoa Valley, Honolulu, Island of Oahu, Hawaii  
TMK: 1st 2-9-038: 014

This is a follow-up to our letter (Ref.: CDED-BS02-0033.RCM) to you dated April 24, 2002, pertaining to the subject matter.

Attached herewith is a recently received copy of the Division of Aquatic Resources' comment.

The Department of Land and Natural Resources has no other comment to offer on the subject matter.

Should you have any questions, please feel free to contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 587-0438.

Very truly yours,

DIERDRE S. MAMIYA  
Administrator

C: Oahu District Land Office

State of Hawaii  
Department of Land and Natural Resources  
DIVISION OF AQUATIC RESOURCES  
April 22, 2002

MEMORANDUM

To: Dierdre S. Mamiya, Administrator  
Land Division  
From: William S. Devick, Administrator *WSD*  
Division of Aquatic Resources  
Subject: Comments on   x   Draft Environmental Assessment

Comments Requested By: Nick Vaccaro

Summary of Project

Title: CRM Retaining Wall  
Proj. By: C & C of Honolulu, Dept. of Design and Construction  
Location: Manoa Stream, Oahu, Hawaii

Brief Description:

The Department of Design and Construction, City and County of Honolulu, proposes to construct a cement masonry (CRM) retaining wall with a 4-foot high chain link fence in a segment of an unnamed tributary of Manoa Stream. The wall will be 32 feet long and 12-15 feet high. The purpose of the retaining wall is to stabilize the existing unlined bank between existing CRM stream walls. The unlined bank has eroded and has reduced the width of the access road at the top of the bank and erosion may eventually undermine the existing stream walls.

Comments:

This particular stretch of stream is particularly vulnerable to erosion during periods of heavy rainfall. Although we normally advocate leaving stream channels intact, in this particular situation, construction of the CRM retaining wall will resolve a long-standing erosion problem. We therefore have no objection to the proposed project, provided appropriate mitigative measures are taken to minimize erosion, and prevent cement products, oil, gas, lubricants and other toxic substances associated with the use of heavy equipment from falling or leaching into the stream.

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567  
WEB SITE ADDRESS: www.co.honolulu.hi.us

JEREMY HARRIS  
MAYOR



RAE M. LOUI, P.E.  
DIRECTOR

ERIC G. CRISPIN, AIA  
DEPUTY DIRECTOR

GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

July 24, 2002

CDD-BS 02-0122

Mr. Gary Gill, Deputy Director  
Department of Health  
State of Hawaii  
P.O. Box 3378  
Honolulu, Hawaii 96801

Dear Mr. Gill:

Subject: Response to Comments on the Draft Environmental Assessment for the Manoa Stream Tributary Retaining Wall Project, TMK: 2-9-38: 14

Thank you for your letter of April 25, 2002 in response to our request for comments on the Draft Environmental Assessment (DEA) for the subject project. We offer the following responses to your comments:

**CLEAN WATER BRANCH (CWB)**

**Comment:** The applicant should contact the Army Corps of Engineers to identify whether a federal permit (including a Department of Army permit) is required for this project. A Section 401 Water Quality Certification is required for "Any applicant of Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharges into the navigable waters..." pursuant to Section 401(a)(1) of the Federal Water Pollution Act (commonly known as the "Clean Water Act").

**Response:** The application for the Department of Army (DA) permit was submitted on May 16, 2002. We are currently in the process of preparing the Section 401 Water Quality Certification application. We will be submitting the completed application to the Department of Health for approval following a response from the DA on permit requirements.

**Comment:** A National Pollutant Discharge Elimination System (NPDES) general permit coverage is required for the following discharges to waters of the State:

- a. Discharge of storm water runoff associated with industrial activities, as defined in Title 40, Code of Federal Regulations, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi);
- b. Discharge of storm water runoff associated with construction activities that involve the disturbance of five (5) acres or greater, including clearing, grading, and excavation;
- c. Discharge of treated effluent from leaking underground storage tank remedial activities;
- d. Discharge of once thorough cooling water less than one million gallons per day;
- e. Discharge of hydro-testing water;
- f. Discharge of construction dewatering effluent;
- g. Discharge of treated effluent from petroleum bulk stations and terminals; and
- h. Discharge of treated effluent from well drilling activities.

Any person requesting to be covered by a NPDES general permit for any of the above activities should file a Notice of Intent with the Department of Health, Clean Water Branch (CWB) at least thirty (30) days prior to commencement of any discharges to State waters.

**Response:** The applicable NPDES general permit application(s) will be filed with the State Department of Health Clean Water Branch at least 30 days prior to the commencement of the discharge(s) as required.

**Comment:** If construction activities involve the disturbance of one acre or greater, including clearing, grading, and excavation, and will take

Mr. Gary Gill  
Page 3  
July 24, 2002

place or extend after March 10, 2003, an NPDES general permit coverage is required for discharges of storm water runoff into State waters.

*Response:* This requirement does not apply since the project area is less than one acre.

*Comment:* The applicant may be required to apply for an individual NPDES permit if there is any type of activity in which wastewater is discharged from the project into State waters.

*Response:* No wastewater discharge is anticipated from the project into State waters.

#### CLEAN AIR BRANCH (CAB)

*Comment:* Control of Fugitive Dust

Due to the nature and location of the project, there is significant potential from fugitive dust emissions during removal, transport, and installation activities. The project activities will occur within close proximity to neighboring residential dwellings as well as major thoroughfares. Therefore, implementation of adequate dust control measures during all phases of construction is warranted.

Construction activities must comply with provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust. The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to:

- a. Planning the different phases of construction, focusing on minimizing the amount of dust generating materials and activities, centralizing on-site vehicular routes, and locating potentially dusty equipment in areas of the least impact;
- b. Providing an adequate water source at the site prior to start up of construction activities;

- c. Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d. Controlling dust from shoulder and access roads;
- e. Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f. Controlling of dust from debris being hauled away from project site.

**Response:** The General Conditions of Construction for the City and County of Honolulu specifies that the contractor shall maintain all excavation, embankment, stockpile, and all other work within or adjoining the project site free from dust which would cause a hazard or nuisance. Appropriate dust control mitigation measures will be implemented during construction.

#### NOISE, RADIATION AND INDOOR AIR QUALITY (NRIAQ) BRANCH

**Comment:** All project activities shall comply with the Administrative Rules of the Department of Health, Chapter 11-46, on "Community Noise Control".

**Response:** The General Conditions of Construction Contracts for the City and County of Honolulu specifies that the contractor shall comply with the provisions of Chapter 46, Community Noise Control for Oahu, of the State Department of Health, Administrative Rules. When required, the contractor shall obtain a community noise permit.

#### ENVIRONMENTAL PLANNING OFFICE (EPO)

**Comment:** Manoa Stream TMDL Implementation

The entire length of Manoa Stream (including all of its perennial tributaries) is listed by the U.S. Environmental Protection Agency as an "impaired water body" under section 303(d) of the Clean Water Act. Under this section, the Department of Health (DOH) must establish Total Maximum Daily Loads (TMDLs) for pollutants that cause this impairment. TMDLs suggest how the

existing pollutant loads may be reduced in order for water quality standards to be attained.

Total Maximum Daily Loads for total nitrogen and total phosphorous in the Ala Wai Canal were established by DOH in 1996. Proposed revisions to these TMDLs are pending. DOH and the City and County of Honolulu funded the preparation of a water quality management and implementation plan for the watershed that was published by the Ala Wai Canal Watershed (AWCW) Water Quality Improvement Project Steering Committee in 1998. Because Manoa Stream flows into the Ala Wai Canal, we would expect the Environmental Assessment to demonstrate how the project will contribute to (1) the achievement of nitrogen and phosphorous load restrictions established by the TMDLs; (2) the attainment of water quality standards for nitrogen and phosphorous; (3) the recovery and perpetuation of protected uses in the water body; and (4) the implementation of recommendations and proposed solutions contained in the AWCW Management & Implementation Plan.

*Response:* The construction of the retaining wall will prevent stream bank erosion and the contribution of nutrients into the stream and the Ala Wai Canal. The construction area will be bermed with sandbags during construction to prevent sediment from entering the stream. A silt curtain will be installed downstream of the project site as an additional precaution.

The project is not likely to produce any long-term significant changes to the chemical environment. The stream experiences very low flows from urban runoff (except during storms) and the proposed improvement is not expected to cause any changes in the chemical composition of that runoff. The proposed length of improvement of 32 lineal feet is very short compared to the entire Manoa, Palolo, and Makiki Stream networks. Thus significant changes in the Ala Wai Canal water quality are not anticipated with respect to the proposed project.

*Comment:* Page 1 of the DEA notes that "Downstream of the project area has CRM stream walls on the west side and further downstream on the south side. The invert and the opposite side of the stream are natural." While the proposed project would stabilize the slope and

Mr. Gary Gill  
Page 6  
July 24, 2002

preclude further erosion and property damage in the project area, without additional information about the stability of the downstream channel it is unclear whether the same is true for downstream areas that may be impacted by potential project-related adverse hydraulic effects.

**Response:** The proposed project will have minimal or no impact on erosion of the downstream properties. Hydraulic calculations show that there will be a minimal velocity increase (0.19 feet per second) due to the improvement.

**Comment:** Page 2 of the DEA states "No adverse hydraulic effects are expected to result from the construction of the new wall because the channel cross section will be restored to its original cross section prior to erosion occurring." This expectation relies upon assumptions that (1) the proposed CRM wall and the "original" cross section material are hydraulically identical and (2) the "original" bank and cross section does not generate adverse hydraulic effects. Reliance upon these assumptions could be bolstered in the Environmental Assessment by explaining the basis for the assumptions and distinguishing between existing, "original", and "natural" conditions.

**Response:** Pre-improvement hydraulic calculations were made based on original stream cross sections (prior to erosion occurring) and when compared to post-improvement calculations showed a minimal increase in velocity.

If you have any questions please call Ray Nakahara of the Civil Division at 523-4041.

Very truly yours,



RAE M. LOUI, P.E.  
Director



Pr Sha  
RN:pto

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



DEPT. OF DESIGN & CONSTR  
CITY & COUNTY OF HONOLULU

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

02 APR 26 AM 8:45

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

In reply, please refer to:

File:

02-083/cpo

April 25, 2002

APR 26 2002

APR 25 10 56 AM '02

RECEIVED

Ms. Rae M. Loui, P.E., Director *RM*  
Department of Design and Construction  
City and County of Honolulu  
650 South King Street, 11<sup>th</sup> Floor  
Honolulu, Hawaii 96813

02-083

Dear Ms. Loui:

Subject: Draft Environmental Assessment (DEA)  
Manoa Stream Tributary Retaining Wall Project  
Tax Map Key: 2-9-038:14

Thank you for the opportunity to review and comment on the subject proposal. The DEA was routed to the various branches of the Environmental Health Administration. We have the following comments.

Clean Water Branch (CWB)

1. The applicant should contact the Army Corps of Engineers to identify whether a federal permit (including a Department of Army permit) is required for this project. A Section 401 Water Quality Certification is required for "Any applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters...", pursuant to Section 401(a)(1) of the Federal Water Pollution Act (commonly known as the "Clean Water Act").
2. A National Pollutant Discharge Elimination System (NPDES) general permit coverage is required for the following discharges to waters of the State:
  - a. Discharge of storm water runoff associated with industrial activities, as define in Title 40, Code of Federal Regulations, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi);

Ms. Rae M. Loui, P.E., Director  
April 25, 2002  
Page 2

- b. Discharge of storm water runoff associated with construction activities that involve the disturbance of five (5) acres or greater, including clearing, grading, and excavation;
- c. Discharge of treated effluent from leaking underground storage tank remedial activities;
- d. Discharge of once through cooling water less than one million gallons per day;
- e. Discharge of hydro-testing water;
- f. Discharge of construction dewatering effluent;
- g. Discharge of treated effluent from petroleum bulk stations and terminals; and
- h. Discharge of treated effluent from well drilling activities.

Any person requesting to be covered by a NPDES general permit for any of the above activities should file a Notice of Intent with the Department of Health, Clean Water Branch (CWB) at least thirty (30) days prior to commencement of any discharges to State waters;

- 3. If construction activities involve the disturbance of one acre or greater, including clearing, grading, and excavation, and will take place or extend after March 10, 2003, an NPDES general permit coverage is required for discharges of storm water runoff into State waters; and
- 4. The applicant may be required to apply for an individual NPDES permit if there is any type of activity in which wastewater is discharged from the project into State waters.

If you have any questions, please contact the Clean Water Branch at (808) 586-4309.

Clean Air Branch (CAB)

*Control of Fugitive Dust*

Due to the nature and location of the project, there is a significant potential for fugitive dust emissions during the removal, transport, and installation activities. The project activities will occur within close proximity to neighboring residential dwellings as well as major thoroughfares. Therefore, implementation of adequate dust control measures during all phases of construction is warranted.

Ms. Rae M. Loui, P.E., Director  
April 25, 2002  
Page 3

Construction activities must comply with provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust. The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to:

- a. Planning the different phases of construction, focusing on minimizing the amount of dust generating materials and activities, centralizing on-site vehicular traffic routes, and locating potentially dusty equipment in areas of the least impact;
- b. Providing an adequate water source at the site prior to start up of construction activities;
- c. Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d. Controlling of dust from shoulders and access roads;
- e. Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f. Controlling of dust from debris being hauled away from project site.

If you have any questions regarding these issues on fugitive dust, please contact the Clean Air Branch at 586-4200.

Noise, Radiation and Indoor Air Quality (NRFAQ) Branch

All project activities shall comply with the Administrative Rules of the Department of Health, Chapter 11-46, on "Community Noise Control".

If you have any questions, please contact the NRFAQ at (808) 586-4701.

Environmental Planning Office (EPO)

*Manoa Stream TMDL Implementation*

The entire length of Manoa Stream (including all of its perennial tributaries) is listed by the U.S. Environmental Protection Agency as an "impaired water body" under section 303(d) of the Clean Water Act. Under this section, the Department of Health (DOH) must establish Total Maximum Daily Loads (TMDLs) for pollutants that cause this impairment. TMDLs suggest how the existing pollutant loads may be reduced in order for water quality standards to be attained.

Total Maximum Daily Loads for total nitrogen and total phosphorous in the Ala Wai Canal were established by DOH in 1996, proposed revisions to these TMDLs are pending DOH and the City and County of Honolulu funded the preparation of a water quality management and

Ms. Rae M. Loui, P.E., Director  
April 25, 2002  
Page 4

implementation plan for the watershed that was published by the Ala Wai Canal Watershed (AWCW) Water Quality Improvement Project Steering Committee in 1998. Because Manoa stream flows into the Ala Wai Canal, we would expect the Environmental Assessment to demonstrate how the project will contribute to (1) the achievement of nitrogen and phosphorous load reductions established by the TMDLs; (2) the attainment of water quality standards for nitrogen and phosphorous; (3) the recovery and perpetuation of protected uses in the water body; and (4) the implementation of recommendations and proposed solutions contained in the AWCW Management & Implementation Plan.

Page 1 of the DEA notes that "Downstream of the project area has CRM stream walls on the west side and further downstream on the south side. The invert and the opposite side of the stream are natural." While the proposed project would stabilize the slope and preclude further erosion and property damage in the project area, without additional information about the stability of the downstream channel it is unclear whether the same is true for downstream areas that may be impacted by potential project-related adverse hydraulic effects.

Page 2 of the DEA states "No adverse hydraulic effects are expected to result from the construction of the new wall because the channel cross section will be restored to its original cross section prior to erosion occurring." This expectation relies upon assumptions that (1) the proposed CRM wall and the "original" cross section material are hydraulically identical and (2) the "original" bank and cross section does not generate adverse hydraulic effects. Reliance upon these assumptions could be bolstered in the Environmental Assessment by explaining the basis for the assumptions and distinguishing between existing, "original" and "natural" conditions.

If you have any questions or would like more information on our TMDL program, please contact David Penn, Program Coordinator, Environmental Planning Office, at (808) 586-4337.

Sincerely,



GARY GILL  
Deputy Director  
Environmental Health Administration

c: CWB  
CAB  
NRFAQ  
EPO

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567  
WEB SITE ADDRESS: www.co.honolulu.hi.us

JEREMY HARRIS  
MAYOR



RAE M. LOUI, P.E.  
DIRECTOR

ERIC G. CRISPIN, AIA  
DEPUTY DIRECTOR

GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

July 17, 2002

CDD-BS 02-0109

MEMORANDUM

TO: MR. RANDALL K. FUJIKI, AIA, DIRECTOR  
DEPARTMENT OF PLANNING AND PERMITTING

FROM: RAE M. LOUI, P.E., DIRECTOR  *Rae M. Loui*   
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE MANOA STREAM  
TRIBUTARY RETAINING WALL PROJECT, TMK: 2-9-038:14

In response to your memorandum 2002/ELOG-888 (DF) of May 3, 2002, we offer the following responses to your comments:

1. COMMENT: Submit a Subdivision Application to the Site Development Division to create the proposed wall easement.  
RESPONSE: The Division of Land Survey will prepare and submit the Subdivision Application for the proposed wall easement.
2. COMMENT: Submit construction plans to the Site Development Division for One Time Review (OTR).  
RESPONSE: Construction plans will be submitted when completed.

If you have any questions, please call Ray Nakahara of the Civil Division at Extension 4041.

*RN:pto*   
RN:pto  *[Signature]*

bcc: Land Division

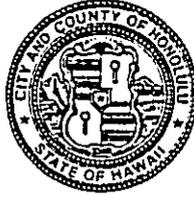
DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET • HONOLULU, HAWAII 96813  
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6743 • INTERNET: www.co.honolulu.hi.us

CD  
RECEIVED  
DEPT OF DESIGN & CONSTRUCTION  
C & C OF HONOLULU

02 MAY -6 AM 8:36

JEREMY HARRIS  
MAYOR



May 3, 2002

RANDALL K. FUJIKI, AIA  
DIRECTOR

LORETTA K.C. CHASE  
DEPUTY DIRECTOR  
Received

2002/ELOG-888 (DF)

MAY -7 2002

COED

MEMORANDUM

TO: RAE M. LOUI, P.E., DIRECTOR *RML*  
DEPARTMENT OF DESIGN AND CONSTRUCTION

FROM: *R. K. Fujiki*  
RANDALL K. FUJIKI, AIA, DIRECTOR  
DEPARTMENT OF PLANNING AND PERMITTING

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE MANOA STREAM  
TRIBUTARY RETAINING WALL PROJECT, TMK: 2-9-038: 014

02-40097

Pursuant to your March 27, 2002 memorandum, we have the following comments to offer:

1. Submit a Subdivision Application to the Site Development Division to create the proposed wall easement; and
2. Submit construction plans to the Site Development Division for One Time Review (OTR).

If there are any questions, please have your staff contact Don Fujii at Extension 7320.

RKF:ky

Doc No. 152629 rev1

DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU

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JEREMY HARRIS  
MAYOR



RAE M. LOUI, P.E.  
DIRECTOR  
ERIC G. CRISPIN, AIA  
DEPUTY DIRECTOR  
GEORGE T. TAMASHIRO, P.E.  
ASSISTANT DIRECTOR

July 17, 2002

CDD-BS 02-0121

Ms. Genevieve Salmonson Director  
Office of Environmental Quality Control  
State of Hawaii  
236 South Beretania Street, Suite 702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Response to Comment on the Draft Environmental Assessment for the  
Manoa Stream Tributary Retaining Wall Project. TMK: 2-9-38: 14

Thank you for your letter of May 8, 2002 in response to our request for comments on the Draft Environmental Assessment (DEA) for the subject project. We offer the following response to your comment:

**COMMENT:** Please provide your reasons for the finding of no significant impact in accordance with the criteria listed in section 11-200-12 of the EIS Rules. (See attached example.)

**RESPONSE:** The thirteen items in Section 11-200-12 of the EIS Rules have been addressed in the Final Environmental Assessment.

If you have any questions, please call Ray Nakahara of the Civil Division at 523-4041.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Rae M. Loui".

RAE M. LOUI, P.E.  
Director

Handwritten initials and a signature, possibly "RN:ptd".  
RN:ptd

BENJAMIN J. CAYETANO  
GOVERNOR



DEPT OF ENVIRONMENT & CONSERVATION  
OFFICE OF ENVIRONMENT QUALITY CONTROL  
HONOLULU

02 MAY 13 AM 8:06

GENEVIEVE SALMONSON  
DIRECTOR

DDC  
Received

MAY 13 2002

2002

02401035

STATE OF HAWAII  
OFFICE OF ENVIRONMENT QUALITY CONTROL

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

May 8, 2002

*ms*  
Ms. Rae M. Loui, Director  
Department of Design and Construction  
City and County of Honolulu  
650 South King Street, 11<sup>th</sup> Floor  
Honolulu, Hawaii 96813

Dear Ms. Loui:

Subject: Draft Environmental Assessment for the Manoa Stream Tributary Retaining Wall,  
Oahu

Thank you for the opportunity to review the subject document. We have the following comments.

1. Please provide your reasons for the finding of no significant impact in accordance with the criteria listed in section 11-200-12 of the EIS Rules. (See attached example.)

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

Sincerely,

Genevieve Salmonson  
Director

MAY 13 2002

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