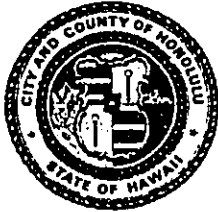


DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK F. FASI
MAYOR

C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER

FELIX B. LIMTIACO
DEPUTY DIRECTOR

WPP 92-453

September 29, 1992

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

92 OCT -6 AG:14

RECORDED

Mr. Brian J.J. Choy, Director
State Office of Environmental Quality Control
220 South King Street
Central Pacific Plaza, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

Subject: Pearl City Force Main West Loch Crossing Cathodic Protection, Oahu, Hawaii, TMK: 9-1-10, 9-3-02

This letter is a Notice of Negative Declaration for the Pearl City Force Main West Loch Crossing Cathodic Protection, Oahu, Hawaii, pursuant to Chapter 343, HRS. The construction of the proposed cathodic protection system for existing force main piping will be funded entirely by the City and County of Honolulu. This notice of determination was based on an environmental assessment prepared by the Division of Wastewater Management and after consulting with other agencies and individuals. The pertinent data for this notice are as follows:

1. Proposing Agency - Department of Public Works, City and County of Honolulu.
2. Proposed Action - This project proposes to provide an impressed current cathodic protection system to mitigate external corrosion of 2,200 lineal feet of existing dual 42-inch diameter ductile iron underground/underwater wastewater force main piping which crosses the West Loch channel of Pearl Harbor. All construction work will be done on property owned by the U.S. Navy.

Environmental impacts are primarily short-term relating to construction activities of the project. The contractor shall be required to mitigate any impacts during the construction by following City, State, and Federal regulations in regards to noise, dust, posting warning signs and covering or barricading trenches when required for safety. The long-term impact of possible damage to other existing underground structures and utilities by stray current electrolysis will be minimized by testing and appropriate mitigative work which will be included in the construction contract.

Mr. Brian J. J. Choy

- 2 -

September 29, 1992

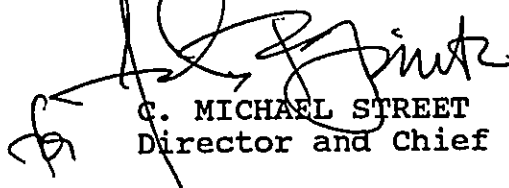
3. Draft Environmental Assessment (EA) - No comments were received from the draft EA which was published in the Office of Environmental Quality Control Bulletin dated August 23, 1992.
4. Determination - After preparing an environmental assessment and consulting with other agencies and individuals, we have determined that the proposed project will not have a significant impact on the environment and an Environmental Impact Statement will not be prepared.
5. Reasons Supporting Determination - Reasons and conclusion supporting the determination are based on the following criteria. The proposed project will not:
 - a. destroy any archaeological, historical or cultural resources;
 - b. directly affect any rare or endangered species, flora or fauna;
 - c. conflict with the State's environmental policies and goals expressed in Chapter 344, HRS;
 - d. affect the economic or social welfare of the community or state;
 - e. involve an environmentally sensitive area;
 - f. degrade environmental quality.

The proposed wastewater improvements is consistent with the Development Plan Public Facilities Map.

6. Contact Person - Richard Leong
Division of Wastewater Management
Department of Public Works
Honolulu Municipal Building, 14th Floor
650 South King Street
Honolulu, Hawaii 96813

Telephone No. 527-5863

Very truly yours,


C. MICHAEL STREET
Director and Chief Engineer

1992-10-23-0A-FEA-Pearl City Force Main West
Loch

ENVIRONMENTAL ASSESSMENT

FOR

PEARL CITY FORCE MAIN WEST LOCH CROSSING CATHODIC PROTECTION

OAHU, HAWAII

TMK: 9-1-10, 9-3-02

This document is prepared pursuant to Chapter 343, H.R.S.

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

RESPONSIBLE OFFICIAL: C. Michael Street 10/27
C. MICHAEL STREET Date
Director and Chief Engineer

Prepared by:

Division of Wastewater Management

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I. DESCRIPTION OF THE PROPOSED ACTION AND STATEMENT OF OBJECTIVES

This project will provide an impressed current cathodic protection system to mitigate external corrosion of approximately 2,200 lineal feet of existing dual 42-inch diameter ductile iron underground/underwater wastewater force mains which cross the West Loch channel of Pearl Harbor as shown on the attached map. The existing dual force mains transmit raw sewage from wastewater pump stations in Pearl City and Waipahu to an 84-inch diameter reinforced concrete pipe gravity sewer which terminates at the Honouliuli Wastewater Treatment Plant.

The construction work, which will be done entirely on U.S. Navy property, will include installation of electrical continuity bonding wires at each pipe joint, impressed current rectifiers, deep-well anode beds, and electrical wiring. Since the force mains are situated 60 feet below sea level at the channel crossing, the bonding wires will be installed on the inside surface of the force mains instead of on their exterior surface. The bonding wire installations will require construction of temporary access (entry) points into the force mains from land on each side of the West Loch channel crossing, dewatering and disposal of the sewage inside the force mains, and cleaning the interior surface of the piping.

All construction work will be done on land owned by the U.S. Navy on each side of the West Loch channel except for the bonding wire installations, which will be done inside the underground/underwater force main piping. Provisions will be included in the design documents to minimize any aboveground construction activity within 40 feet of the shoreline to minimize any adverse effects upon the coast environment.

Preliminary agreements have been made to obtain electrical power for the impressed current system from the U.S. Navy's electrical distribution system at the West Loch Naval Ammunition Depot. The City and County of Honolulu will coordinate the design in accordance with the Navy's requirements and enter into a utility agreement for use of the Navy's electrical power. All power poles, cables, equipment, and impressed current rectifiers that are required for this project will be installed in the City and County of Honolulu's existing permanent sewer easement.

The construction work will be done during the dry season so that only one of the dual force main pipelines will be required to be in service to maintain full continuous wastewater flow to the treatment plant while work is taking place on the other line. All raw sewage and water used in cleaning the force main will be pumped directly

into the other active force main to eliminate any pollutant discharge into the West Loch channel.

The installation of the cathodic protection system will mitigate corrosion on the exterior surface of the force mains, thereby eliminating a major source of wastewater leaks.

II. AGENCIES CONSULTED IN THE ASSESSMENT PROCESS

The following agencies and organizations were requested to review and comment on the draft environmental assessment. Asterisks in the list denote those agencies who responded in writing. All comments received are included at the end of this determination.

A. STATE OF HAWAII

Department of Business, Economic Development & Tourism

- * Department of Health
- * Department of Land & Natural Resources
- * Department of Transportation
- * Office of Environmental Quality Control

B. CITY AND COUNTY OF HONOLULU

- * Department of Parks & Recreation
- * Department of Land Utilization
- * Department of General Planning
- * Board of Water Supply

Waipahu Neighborhood Board No. 22

C. FEDERAL GOVERNMENT

- * U.S. Army Corps of Engineers

* U.S. Navy

D. PRIVATE COMPANIES

Oahu Sugar Company

III. DISCUSSION OF THE ASSESSMENT PROCESS

This environmental impact assessment is prepared in accordance with Section 11-200-9 of the Environmental Impact Statement Rules, Title 11, Chapter 200, Department of Health, State of Hawaii, pursuant to Chapter 343, Hawaii Revised Statutes.

An assessment at the earliest practicable time is necessary in order to determine and evaluate any significant environmental impacts due to the proposed action. The potential impacts will be identified and evaluated to determine the need for an environmental impact statement.

IV. DESCRIPTION OF THE AFFECTED ENVIRONMENT

All construction work will be done on land owned by the U.S. Navy on each side of the West Loch channel except for the bonding wire installations, which will be done inside the underground/underwater force main piping. Provisions will be included in the design documents to minimize any aboveground construction activity within 40 feet of the shoreline to minimize any adverse effects upon the coast environment.

The construction site on the northeast side of the West

Loch channel, which is covered with California grass and haole koa trees, is directly adjacent to an unpaved cane haul road. The land on this side of the West Loch channel is owned by the U.S. Navy and is leased to Oahu Sugar Company for sugar cane farming. No construction work directly in the cultivation areas is anticipated for this project.

The construction site on the southwest side of the West Loch channel is located in a flat grassy area of the West Loch Naval Ammunition Depot which is outside the secured (restricted) area to the southeast.

V. GENERAL DESCRIPTION OF THE ACTION'S TECHNICAL, SOCIAL, ECONOMIC AND ENVIRONMENTAL CHARACTERISTICS

A. TECHNICAL CHARACTERISTICS

The cathodic protection system will consist of impressed current rectifiers, underground anodes, associated cables. Construction work will include modification of the existing force mains to allow internal cleaning and access, installation of electrical bonding wires inside the force mains, and excavation necessary to install the underground anodes and cables. All permanent cathodic protection system installations will be located within the existing 25-foot wide permanent sewer easement for the force mains.

B. SOCIAL CHARACTERISTICS

All construction activity will be contained within the existing permanent sewer easement except for temporary storage of materials and equipment which might be required near the project site. Construction will not affect the public use of any facility.

C. ECONOMIC CHARACTERISTICS

This project is estimated to cost approximately \$1,600,000 and will be funded entirely by the City and County of Honolulu.

D. ENVIRONMENTAL CHARACTERISTICS

The Environmental Impact Statement for the Honouliuli Interceptor Sewer System, which was prepared for the construction of the dual force mains in 1976, revealed that there were no known endangered species of flora or fauna nor any known natural, historic, or archaeological sites within the project site. It is judged that these findings are still valid. However, should any evidence of archaeological sites be uncovered during excavation, construction will be halted and the State Historic Preservation Office will be notified.

VI. IDENTIFICATION AND SUMMARY OF MAJOR IMPACTS AND PROPOSED MITIGATION MEASURES

A. PRIMARY SHORT-TERM IMPACTS

Primary short-term impacts will result from construction activities at only the sites of the

northeast and southwest sides of the West Loch channel. Use of construction equipment such as backhoes, trucks, and compactors will create noise, dust and exhaust emissions. Construction activities will not interfere with vehicular traffic and other utilities.

B. PRIMARY LONG-TERM IMPACTS

Damage to nearby underground metallic utilities by stray current electrolysis is a possible long-term adverse effect that is typical of impressed current systems. However, all nearby underground/underwater utilities which may be affected by the proposed impressed current system will be identified and located during the design phase, and provisions will be made in the construction contract for testing, monitoring, and mitigative actions to eliminate the possible occurrence of stray current electrolysis.

C. MITIGATION MEASURES PROPOSED TO MINIMIZE IMPACTS

No construction will be accomplished on public highways or residential areas. Construction activities will be controlled by existing laws and the contract specifications, and enforced through field inspections. Work may be performed only between the hours of 7:00 A.M. to 3:30 P.M. The Contractor will be required to comply with the provisions of Title 11, Chapter 43, "Community Noise Control of Oahu", of the State Department of Health Administrative Rules.

During construction operations, the Contractor will be required to comply with Paragraph 11-60-5, Fugitive Dust, Chapter 60, Air Pollution Control, Title 11, Administrative Rules, State of Hawaii, pertaining to dust control. The Contractor shall also be required to observe all Federal, State, and City rules and regulations concerning noise, air and water pollution during the construction period. The prevailing winds are expected to disperse emission concentrations; however, the Contractor will be responsible for the maintenance of all equipment to minimize emissions.

The Contractor will be required to comply with safety precautions and measures in the "Rules and Regulations Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Public Highways", adopted by the State Highway Safety Coordinator, and the "Manual on Uniform Traffic Control Devices for Streets and Highways, Part IV Traffic Controls for Highway Construction and Maintenance Operation", U.S. Federal Highway Administration, dated 1981.

The Contractor shall be required to coordinate his construction operations with the U.S. Navy and Oahu Sugar Company, thus minimizing disruption of their facilities in the project site.

In the event that any previously unidentified sites or remains such as artifacts, shell, bone or charcoal deposits, human burials, rock or coral alignments, pavings, or walls are encountered, the Contractor shall be required to contact the Historic Sites office of the Department of Land and Natural Resources. Work in the immediate area shall be delayed until the Historic Sites office assesses the impact and makes recommendations for mitigative activity, if warranted.

The long-term negative impact of possible damage by stray current electrolysis will be eliminated by testing and appropriate preventive measures to be incorporated into the project. Upon completion of the construction work but prior to permanently energizing the impressed current system, a corrosion control consultant, hired by the City for the project, shall perform stray current interference testing, adjust impressed current system output, and direct the Contractor to take appropriate mitigative action to prevent stray current electrolysis damage to other nearby underground utilities and structures.

VII. ALTERNATIVES CONSIDERED

A. NO ACTION

If no action is taken, the existing dual force main piping will continue to be susceptible to external corrosion which will result in leakage of raw sewage

into Pearl Harbor.

B. REPLACEMENT OF FORCE MAIN

Replacement of the existing dual force main piping with new high density polyethylene (HDPE) piping is not feasible at this time due to the high replacement cost (\$4.7 million). Furthermore, the channel would have to be dredged to a depth of approximately 60 feet due to the U.S. Navy requirements, which will have a greater negative environmental impact on the area.

C. REPLACEMENT OF FORCE MAIN USING TRENCHLESS TECHNOLOGY

Replacement of the force main utilizing horizontal directional drilling or microtunneling construction techniques are not feasible at this time due to the high estimated construction cost (\$4 million).

D. INTERNAL LINING IN EXISTING FORCE MAIN

The alternative of installing an internal epoxy liner in the existing dual force mains is not feasible since the underground/underwater force main is too long for the liner installation. It is not feasible to construct a 60-foot deep cofferdam in the middle of the West Loch channel which would be required for splicing of liners installed from each side of the channel.

E. INTERNAL PIPE IN EXISTING FORCE MAIN (SLIP-LINING)

The alternative of inserting a smaller diameter high-density polyethylene (HDPE) pipe inside the existing 42-inch force main piping is not feasible since the

maximum size pipe (36-inch diameter) that can be inserted into the force main will restrict the sewage flow and will result in excessive flow velocity and frictional losses in the piping system.

VIII. PRELIMINARY DETERMINATION

This environmental assessment presently shows that the project will have no significant impact on the environment and an Environmental Impact Statement is not required. Therefore, in accordance with the provisions of Chapter 343, Hawaii Revised Statutes, a Negative Declaration may be determined to be in order.

IX. FINDINGS AND REASONS SUPPORTING PRELIMINARY DETERMINATION

The following findings and reasons support the determination that there will be no significant effect on the environment as a result of this project:

- A. There are no direct negative social or economic impacts resulting from the proposed action due to the subsurface nature of the project.
- B. All short-term impacts will be minimized in accordance with applicable City and County of Honolulu, State of Hawaii and Federal rules and regulations.
- C. Appropriate mitigative measures will be taken to eliminate the possible long-term adverse impact of stray current electrolysis damage.
- D. No rare or endangered wildlife exist in the affected area.
- E. No archaeological, historical or cultural sites will

be affected by the project. Should any possible significant archaeological resources be uncovered by construction work at the project site, appropriate measures for evaluating and determining courses of action will be available in the construction contract provisions.

- F. The primary benefit of this proposed project is to protect the existing dual wastewater force mains from external corrosion damage.

APPENDIX

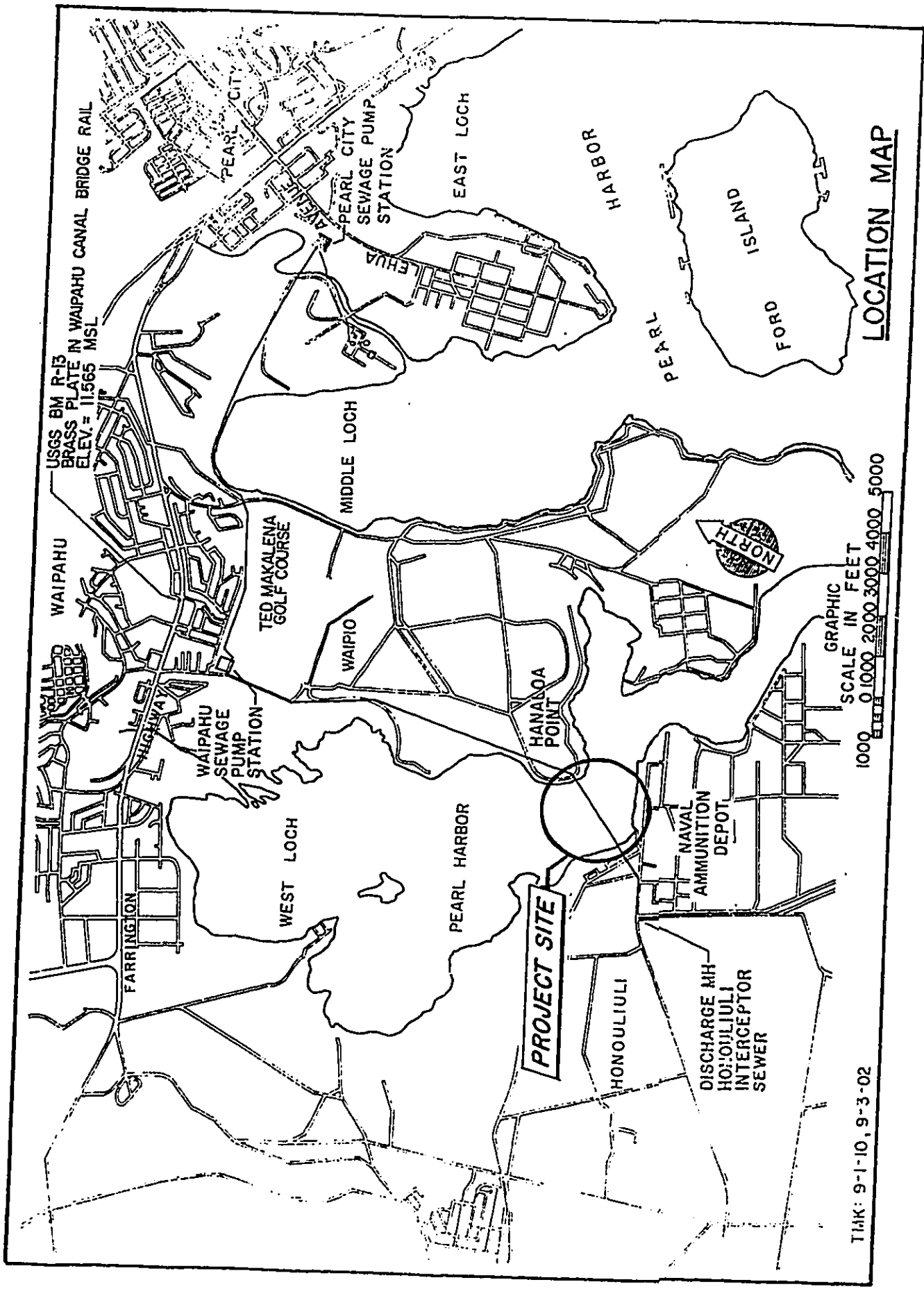


FIGURE 1

COMMENTS FROM CONSULTED PARTIES

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



RECEIVED
DEPT. OF PUBLIC WORKS
September 13, 1991 2:53 PM '91
TO _____

FRANK F. FASI, Mayor 91-3697
DONNA B. GOTH, Chairman
WALTER O. WATSON JR., Vice Chairman
JOHN W. ANDERSON JR.
SAM CALLEJO
EDWARD Y. HIRATA
MAURICE H. YAMASATO
KAZU HAYASHIDA
Manager and Chief Engineer

WWM

8/1
8/1

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

FROM: KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER *KHJ*
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM DATED AUGUST 29, 1991 REGARDING THE
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED PEARL
CITY MAIN WEST LOCH CROSSING CATHODIC PROTECTION

We have no objections to the proposed wastewater force main project. We have no water facilities in the vicinity of the project.

If you have any questions, please contact Bert Kuioka at 527-5235.

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

RECEIVED
DEPT OF PUBLIC WORKS

SEP 12 4 04 PM '91

TO _____

91-3627

WWM
WALTER M. OZAWA
DIRECTOR
ALVIN K.C. AU
DEPUTY DIRECTOR

FRANK F. PASI
MAYOR



September 11, 1991

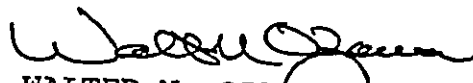
TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: WALTER M. OZAWA, DIRECTOR

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR PEARL CITY
FORCE MAIN WEST LOCH CROSSING CATHODIC
PROTECTION

A review of this Environmental Assessment for cathodic protection for the sewer force main from Hanalea Point under the West Loch channel to the Honouliuli side shows that the entire project lies within U.S. Navy property although it is being funded by the City and County of Honolulu.

We have no objections to the project since it will not affect City park land.


WALTER M. OZAWA, Director

WMO:ei

DEPARTMENT OF GENERAL PLANNING
CITY AND COUNTY OF HONOLULU

91-3784

FRANK F. FASI
MAYOR

RECEIVED
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SEP 24 11 06 AM '91

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



SIC
WWM
BENJAMIN B. LEE
CHIEF PLANNING OFFICER
ROLAND D. LIBBY, JR.
DEPUTY CHIEF PLANNING OFFICER

ET 8/91-2822

September 17, 1991

MEMORANDUM

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

FROM: BENJAMIN B. LEE, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR PEARL CITY FORCE
MAIN WEST LOCH CROSSING CATHODIC PROTECTION, OAHU,
HAWAII

This is in response to your letter of August 29, 1991 requesting comments on providing a cathodic protection system to mitigate external corrosion of an existing, dual, 42-inch diameter wastewater force main.

We have no objections to the proposed project, and we concur with your determination of a negative declaration for this project.

Thank you for the opportunity to comment on this EA. Should you have any questions, please contact Eugene Takahashi at 527-6022.

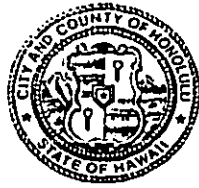
B. Lee
BENJAMIN B. LEE
Chief Planning Officer

BBL:js

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

550 SOUTH KING STREET
HONOLULU HAWAII 96813 • (808) 523-4433

FRANK F. FASI
MAYOR



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RECEIVED
91-3848

WWM 9/26

DONALD A. CLEGG
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

LU8/91-7125 (DJK)

September 26, 1991

MEMORANDUM

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

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

SUBJECT: SPECIAL MANAGEMENT AREA REVIEW

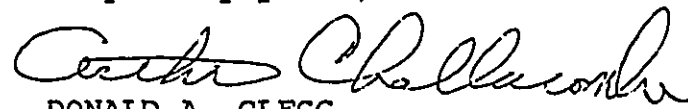
Tax Map Key : 9-1-10, 9-3-2
Type of Project: Cathodic Protection System to
Mitigate External Corrosion at the
Pearl City Force Main West Loch
Crossing

The proposed project on the referenced tax map key has been reviewed. We find that it:

- Is not within the Special Management Area.
- Is within the Special Management Area, but is not defined as "development" and is therefore, Exempt (Exemption No. 4).

Should you have any questions, please contact the Environmental Affairs Branch at 523-4077.

Very truly yours,


DONALD A. CLEGG
Director of Land Utilization

DAC:lg
lu7125.lag

JOHN WAIHEE
GOVERNOR

RECEIVED
DEPT OF PUBLIC WORKS
SEP 27 3 33 PM '91



91-3859
BRIAN J. J. CHOY
Director

TO _____ STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813

WWM

21

31

September 24, 1991

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

Dear Mr. Callejo:

Subject: Draft Environmental Assessment for the Pearl City Force
Main West Loch Crossing Cathodic Protection

Thank you for the opportunity to review the subject document. We
have no comments to offer.

Sincerely,

Brian J. J. Choy

Brian J. J. Choy
Director

JOHN WAIHEE
GOVERNOR

RECEIVED
DEPT. OF PUBLIC WORKS
SEP 23 1 26 PM '91
TO _____



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

91-22
etc
EDWARD Y. HIRATA
DIRECTOR
DEPUTY DIRECTORS
AL FANG
JOYCE T. OMINE
JEANNE K. SCHULTZ
CALVIN M. TSUDA

IN REPLY REFER TO:

WWM

September 16, 1991

HAR-EP 1104.92

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

Dear Mr. Callejo:

Subject: Draft Environmental Assessment for
Pearl City Force Main West Lock Crossing
Cathodic Protection, Oahu, Hawaii

Thank you for giving us the opportunity to comment on the subject
project. We have no comment to offer for this project.

Very truly yours,


Edward Y. Hirata
Director of Transportation

JOHN WAIHEE
GOVERNOR OF HAWAII

RECEIVED
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OCT 3 11 27 AM '91



Handwritten: Draft
WWM

Handwritten: 91-3922

WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTES
KEITH W. AHUE
MANABU TAGOMORI
Dan T. Kochi

Handwritten: JF
SL
LN

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

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES CONSERVATION AND ENVIRONMENTAL AFFAIRS
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE HISTORIC PRESERVATION PROGRAM
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

REF:OCEA:SKK

OCT 2 1991

FILE NO.: 92-152
DOC. NO.: 1756E

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

Dear Mr. Callejo:

Subject: Draft Environmental Assessment for Pearl City Force Main
West Loch Crossing Cathodic Protection
Location: Oahu

Thank you for giving our Department the opportunity to comment on this matter. We have reviewed the materials you submitted and have the following comments.

Brief Description:

The applicant proposes to provide an impressed current cathodic protection system to mitigate external corrosion of approximately 2,200 lineal feet of existing 42-inch diameter ductile from underground/underwater wastewater force mains which cross the West Loch channel of Pearl Harbor. The existing mains transmit raw sewage from wastewater pump stations in Pearl City and Waipahu and terminate at the Honouliuli Wastewater Treatment Plant.

Construction will be done on U.S. Navy property and include installing electrical continuity bonding wires at each pipe joint, impressed current rectifiers, deep-well anode beds and electrical wiring. The force mains are situated 60 feet below sea level at the channel crossing; because of this the bonding wires will be installed on the inside surface of the force mains instead of on their exterior surface.

The bonding wire installations will require construction of temporary access (entry) points into the force mains from land on both sides of the West Loch channel crossing, dewatering and disposal of the sewage inside the force mains and cleaning the interior surface of the piping.

Damage to nearby underground metallic utilities by stray current electrolysis is a possible long-term adverse effect that is typical of impressed current systems. These utilities will be located and identified during the design phase of the project and provisions will be made in the construction contract for testing, monitoring, and mitigative actions to eliminate possible occurrence of stray current electrolysis.

The applicant feels that installing the cathodic protection system will mitigate corrosion on the exterior surface of the force mains and eliminate a major source of wastewater leaks.

AQUATIC RESOURCES COMMENTS:

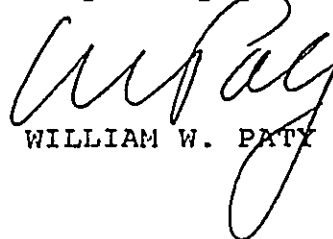
The applicant should take precautionary measures to insure that there is no leakage of raw sewage or cleaning agent into the marine environment when the force mains are dewatered and the interior surface of the piping is cleaned.

HISTORIC PRESERVATION DIVISION COMMENTS:

A review of our records shows that this project takes place within State site 50-80-13-9992, the Pearl Harbor Naval Base, which was placed on the National Register of Historic Places in 1964. The project involves modifications to existing wastewater force mains that traverse the West Loch of Pearl Harbor. Land alteration activities are restricted to entry points into the force main, and will involve excavation of previously disturbed deposits. Since there are no known historic buildings or historic sites in the vicinity of these land disturbance activities, we believe that the project will have "no effect" on historic sites.

Thank you for your cooperation on this matter. Please feel free to call me or Sam Lemmo at our Office of Conservation and Environmental Affairs, at 548-7837, should you have any questions.

Very truly yours.


WILLIAM W. PATY

JOHN WAIHEE
GOVERNOR OF HAWAII

RECEIVED
DEPT OF PUBLIC WORKS



91-4190
JOHN C. LEWIN, M.D.
DIRECTOR OF HEALTH

NOV 10 34 AM '91

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

In reply, please refer to:

October 15, 1991

91-317

cc Dir/Dep Ast 10/21/91
10/20 WWM

M
81

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

Dear Mr. Callejo:

Subject: Draft Environmental Assessment for Pearl City Force
Main West Loch Crossing Cathodic Protection
Oahu, Hawaii
TMK: 9-1-10, 9-3-02

We have reviewed the subject document dated August 29, 1991, and have the following comments to offer:

Wastewater

We strongly support the proposed project. However, we do reserve the right to review all the detailed wastewater plans for conformance to applicable rules.

However, we recommend that the planned construction work be done during the dry season so that only one of the dual force main pipelines will be required to be in service to maintain full continuous wastewater flow to the treatment plant while work is taking place on the other line.

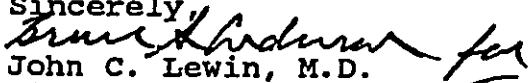
If you should have any questions, please contact Mr. Harold Yee of the Wastewater Branch at 586-4294.

Clean Water

The City & County of Honolulu will be required to implement proper disposal methods of all sewage and debris removed from the force mains in accordance with their existing National Pollutant Discharge Elimination System (NPDES) permit. No sewage or dewatering discharges will be allowed to enter water of the United States without proper treatment.

Mr. Sam Callejo
October 15, 1991
Page 2

If you have any questions on this matter, please contact
Mr. Walter West, at 586-4309.

Sincerely,

John C. Lewin, M.D.
Director of Health



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 230
FT. SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF:

September 11, 1991

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91-3623

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Planning Division

TO _____

WLOM

DIV. OF
WATERWAYS
MANAGEMENT

SEP 12 PM 5 04

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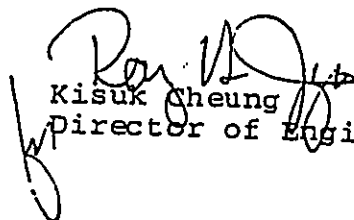
Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Callejo:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment (EA) for Pearl City Force Main West Loch Crossing Cathodic Protection, Oahu, Hawaii (TMK 9-1-10, 9-3-02). The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

- a. The proposed project will not require a DA permit.
- b. The project site is located within the waters of Pearl Harbor and is not in any designated flood hazard zones.

Sincerely,


Kisuk Cheung
Director of Engineering

EAC Branch



U.S. DEPARTMENT OF THE NAVY
NAVAL BASE PEARL HARBOR
PEARL HARBOR, HAWAII 96319

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OFFICE OF PUBLIC AFFAIRS
OCT 19 2 02 PM '91

91-114

01

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

Dear Mr. Callejo:

DRAFT ENVIRONMENTAL ASSESSMENT FOR PEARL CITY FORCE
MAIN CROSSING CATHOLIC WEST LOCK PROTECTION, OAHU, HAWAII

Your letter WPP 91-375 of August 29, 1991 was forwarded to this command for a consolidated response. We have reviewed the subject environmental assessment (EA) and provide the following comments:

- a. Location of rectifiers, anode beds, electrical service and additional easement requirements should be addressed.
- b. Construction impacts resulting from any dewatering of the force mains and temporary facilities needed for construction should be addressed.
- c. Operation and maintenance impacts, such as electrical power consumption and future replacement of anodes, should be addressed.

Additionally, should the City plan to use Navy power, the City must obtain the Navy's approval prior to starting the design of the electrical system. After obtaining approval, the design work for the connections should be coordinated with the Utilities Department, Public Works Center Pearl Harbor.

Prior to construction, the Navy would like to participate in your review of construction drawings, for the project and receive all plans developed to eliminate stray currents, and any reports on the testing and monitoring done for stray currents.

Thank you for the opportunity to review your draft EA, and we look forward to continued communication regarding this project. Should you have any questions, the Navy point of contact is Mr. Bill Liu, telephone 471-3324.

Sincerely,

W.K. Liu

W. K. LIU
Principal Navy Civil Engineer
P. 67000000
Mr. Commander

October 25, 1991

VEZ 91-58

Commander
Naval Base Pearl Harbor
Box 110
Pearl Harbor, HI 96860-5020

Gentlemen:

Subject: Your Letter Dated October 16, 1991 (11000 Ser 00F(232)/2326)
Regarding Draft Environmental Assessment for Pearl City
Force Main West Lock Crossing Catholic Protection.

This letter is forwarded in response to your review comments of the subject draft environmental assessment.

Our design consultant, ConGeo Engineering, Inc., is preparing an engineering report which will address your concerns regarding the project. We will forward a copy of this report, including all subsequent design documents, for your review when they become available.

In reference to your comment regarding the use of Navy electrical power, we recently submitted a letter (see attachment) to the Navy Public Works Center (PWC PEARL) requesting power for the proposed impressed current system based upon preliminary design data from ConGeo. Therefore, connection to and utilization of the Navy electrical system shall be designed in strict accordance with PWC PEARL's requirements.

Thank you for your cooperation in regard to this project. We hope that we can count on your future support for increasing the reliability of service of this critical pipeline. If you have any questions regarding this project, please contact Lloyd Shiata at 317-3846.

Very truly yours,

Sam Callejo
SAM CALLEJO

Director and Chief Engineer

Attachment
LFC
WAC