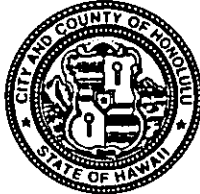


*Koko Head 170 ft. Water Reservoir
addition*

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4414 • FAX: (808) 527-6743

JEREMY HARRIS
MAYOR



June 25, 1996

PATRICK T. ONISHI
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

96/SMA-011 (JT)
96-03998

The Honorable Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Gill:

SPECIAL MANAGEMENT AREA ORDINANCE
CHAPTER 25, ROH
Environmental Assessment/Determination
Finding of No Significant Impact

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

96 JUN 25 P4:03

RECEIVED

Recorded Owner: Board of Water Supply, City and County of Honolulu
Applicant : Maunalua Associates, Inc.
Agent : Kusao & Kurahashi, Inc.
Location : 7381 Kalaniana'ole Highway - Koko Head
Tax Map Key : 3-9-12: por. 07
Request : Special Management Area Use Permit
Proposal : To construct a 1.0 million gallon water reservoir
Determination : A Finding of No Significant Impact is issued ✓

Attached and incorporated by reference is the Final Environmental Assessment (FEA) prepared by the applicant for the project. Based on the significance criteria outlined in Chapter 200, State Administrative Rules, we have determined that preparation of an Environmental Impact Statement is not required.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the FEA. If you have any questions, please contact Joan Takano of our staff at 527-5038.

Very truly yours,

Patrick T. Onishi
PATRICK T. ONISHI

Director of Land Utilization

PTO:am
Enclosures

g:negsaa11.jht

71

1996-07-08-0A-FEA-KOKO HEAD 170-FT WATER
RESERVOIR ADDITION

JUL 8 1996

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FILE COPY

DEPT. OF LAND AND NATURAL RESOURCES
OFFICE OF PERMITS AND COMPLIANCE

**SPECIAL MANAGEMENT AREA USE PERMIT APPLICATION
AND FINAL ENVIRONMENTAL ASSESSMENT REPORT
KOKO HEAD 170-FOOT WATER RESERVOIR ADDITION
Maunaloa, Oahu, Hawaii
Tax Map Key: 3-9-12: 7**

MAUNALUA ASSOCIATES, INC.
6600 Kalaniana'ole Highway, Suite 300
Honolulu, Hawaii 96825

APPLICANT

UFG OF ENVIRONMENTAL
QUALITY CONTROL

96 JUN 25 P4:10

RECEIVED

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

AGENT

JUNE 1996

1995 JUN 24 PM 2:09

DEPT. OF LAND & NATURAL RESOURCES
CITY & COUNTY OF HONOLULU

**SPECIAL MANAGEMENT AREA USE PERMIT APPLICATION
AND FINAL ENVIRONMENTAL ASSESSMENT REPORT
KOKO HEAD 170-FOOT WATER RESERVOIR ADDITION
Maunaloa, Oahu, Hawaii
Tax Map Key: 3-9-12: 7**

MAUNALUA ASSOCIATES, INC.
6600 Kalaniana'ole Highway, Suite 300
Honolulu, Hawaii 96825

APPLICANT

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

AGENT

JUNE 1996

KUSAO & KURAHASHI, INC.

Planning and Zoning Consultants

WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

June 21, 1996

Mr. Patrick T. Onishi, Director
Department of Land Utilization
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

Attention: Mr. Art Challacombe, Chief
Environmental Affairs Branch

Dear Mr. Onishi:

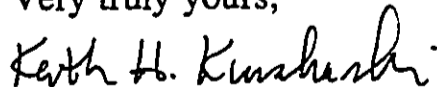
**Subject: Special Management Area Permit Application and Final
Environment Assessment Report for the Proposed Koko Head
170-Foot Water Reservoir Addition, Maunaloa, Oahu, Hawaii
Tax Map Key: 3-9-12: 7**

On behalf of the applicant, Maunaloa Associates, Inc., I hereby submit five (5) copies of the Special Management Area Use Permit Application and Final Environmental Assessment Report.

Based on the enclosed Final Environmental Assessment, the applicant respectfully requests a negative declaration for the project. The project's impact on the environment and neighboring properties will be minimal and mitigation measures will be implemented by the applicant to further reduce these impacts.

Your assistance in processing this request is sincerely appreciated. Should there be questions or you require additional information, please contact our office.

Very truly yours,



Keith H. Kurahashi

cc: Maunaloa Associates, Inc.

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**SPECIAL MANAGEMENT AREA USE PERMIT APPLICATION
AND FINAL ENVIRONMENTAL ASSESSMENT REPORT
KOKO HEAD 170-FOOT WATER RESERVOIR ADDITION
Maunaloa, Oahu, Hawaii
Tax Map Key: 3-9-12: 7**

I. INTRODUCTION

This Special Management Area Use Permit Application and Final Environmental Assessment Report for the construction of a 1.0 million gallon (mg) water reservoir, located in Hawaii Kai, was prepared pursuant to requirements established within Chapter 25, Revised Ordinances of Honolulu, as amended, since the site is in the Special Management Area, and pursuant to Title 11, Chapter 200, Section 11-200, Environmental Impact Statement (EIS) Administrative Rules, State Department of Health (DOH), since the site is in the State Conservation District. It was also prepared in accordance with the Department of Land Utilization's "Content Guide for Preparing an Environmental Assessment Required with an Application for a Special Management Area Use Permit (SMP) Chapter 25, Revised Ordinances of Honolulu, as amended".

This final environmental assessment provides the basis for a Negative Declaration determination for the proposed project pursuant to Chapter 25, Revised Ordinances of Honolulu, as amended and Section 11-200-2 of the DOH, EIS Administrative Rules.

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

II. GENERAL INFORMATION

- A. Applicant : Maunalua Associates, Inc.
P.O. Box 25007
Honolulu, Hawaii 96825
Mr. Michael M. Morita
Project Manager
- B. Approving Agency : Department of Land Utilization
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813
- C. Recorded Fee Owner : Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96813
- D. Agent : Kusao & Kurahashi, Inc.
Planning and Zoning Consultants
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814
(808) 538-6652
- E. Tax Map Key : 3-9-12: 7
- F. Location : The project site is located on the south side of Kalaniana'ole Highway, on the ewa slope of Koko Head. It is adjacent to the Koko Head Regional Park in Hawaii Kai and has a street address of 7381 Kalaniana'ole Highway (See Exhibit 1).

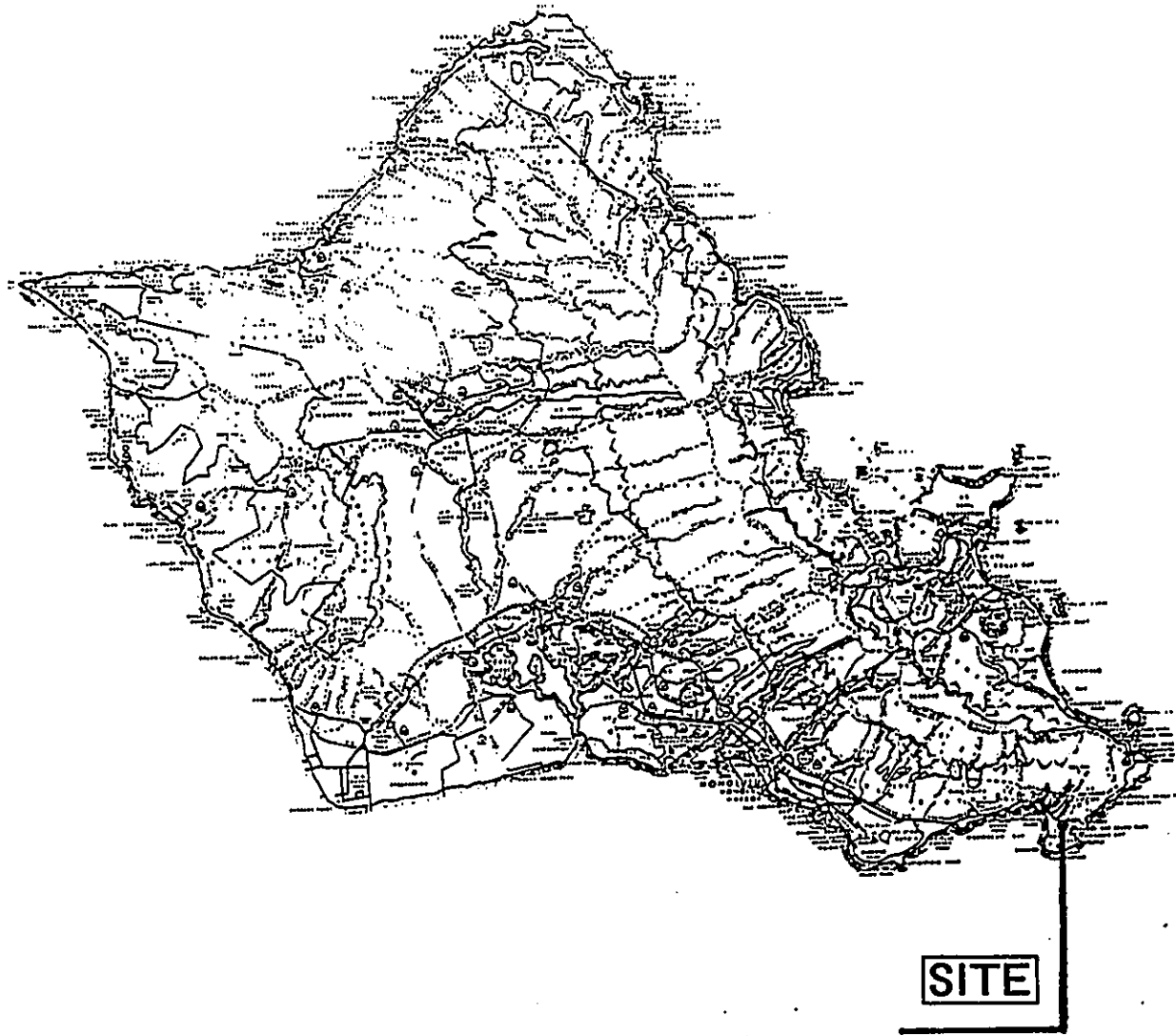


EXHIBIT 1

LOCATION MAP

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

- G. Lot Area : 2.038 acres
- H. State Land Use : Conservation
- I. Development Plan
 - Land Use Map : Preservation (Exhibit 2)
 - Public Facilities Map : No improvements planned within the site.
- J. Zoning : P-1 Restricted Preservation District (Exhibit 3).
- K. Special District : Special Management Area (Exhibit 4).
- L. Existing Use : The subject property is developed with an existing 1.0 mg water reservoir and pump station.
- M. Agencies Consulted : Board of Water Supply

III. DESCRIPTION OF THE PROPOSED ACTION

- A. General Description
 - 1. Proposed Project

The applicant plans to construct a 1.0 million gallon (mg) water reservoir for additional water storage next to the existing 1.0 mg water reservoir on this 2.038 acre site within Hawaii Kai (Site Plan,

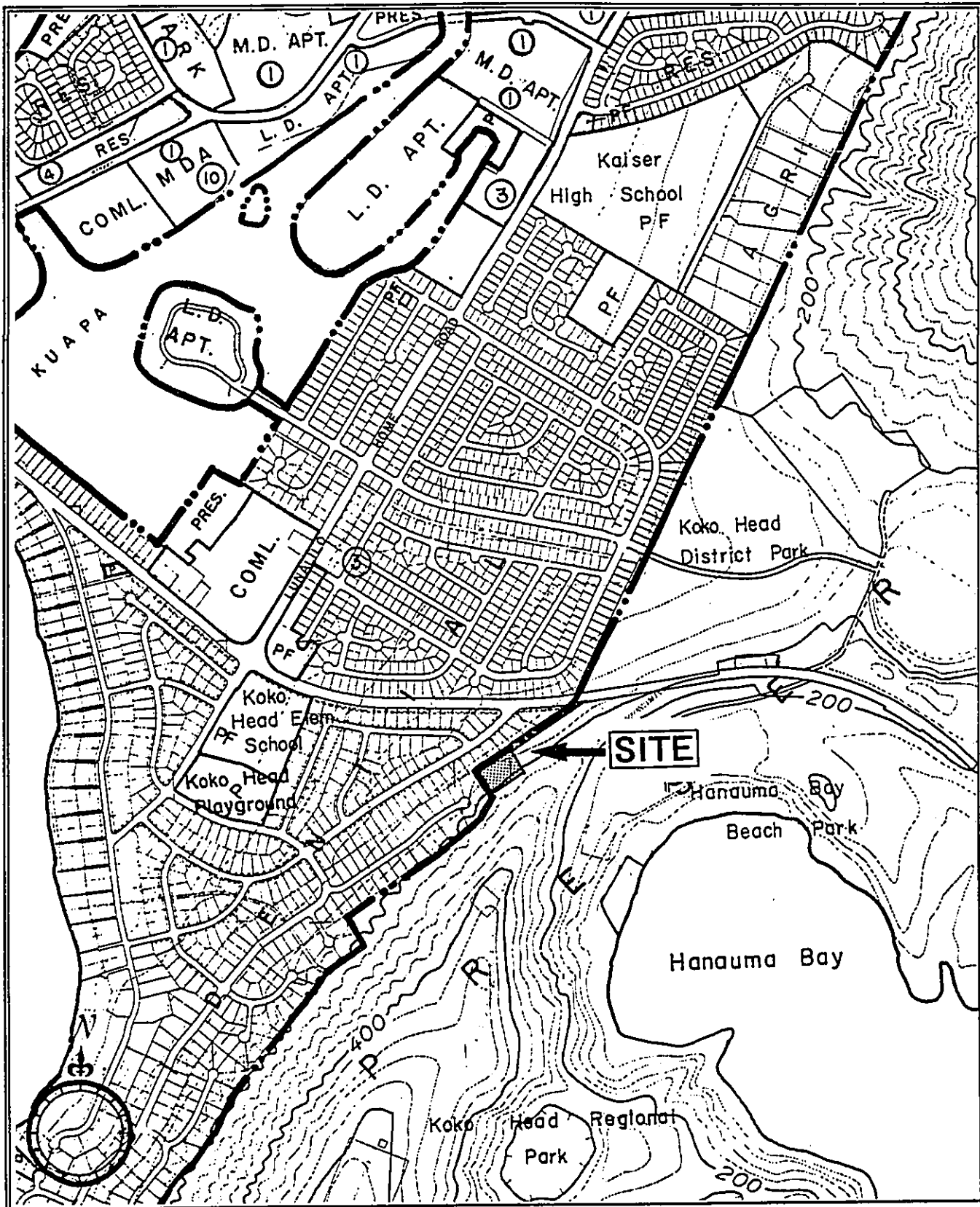
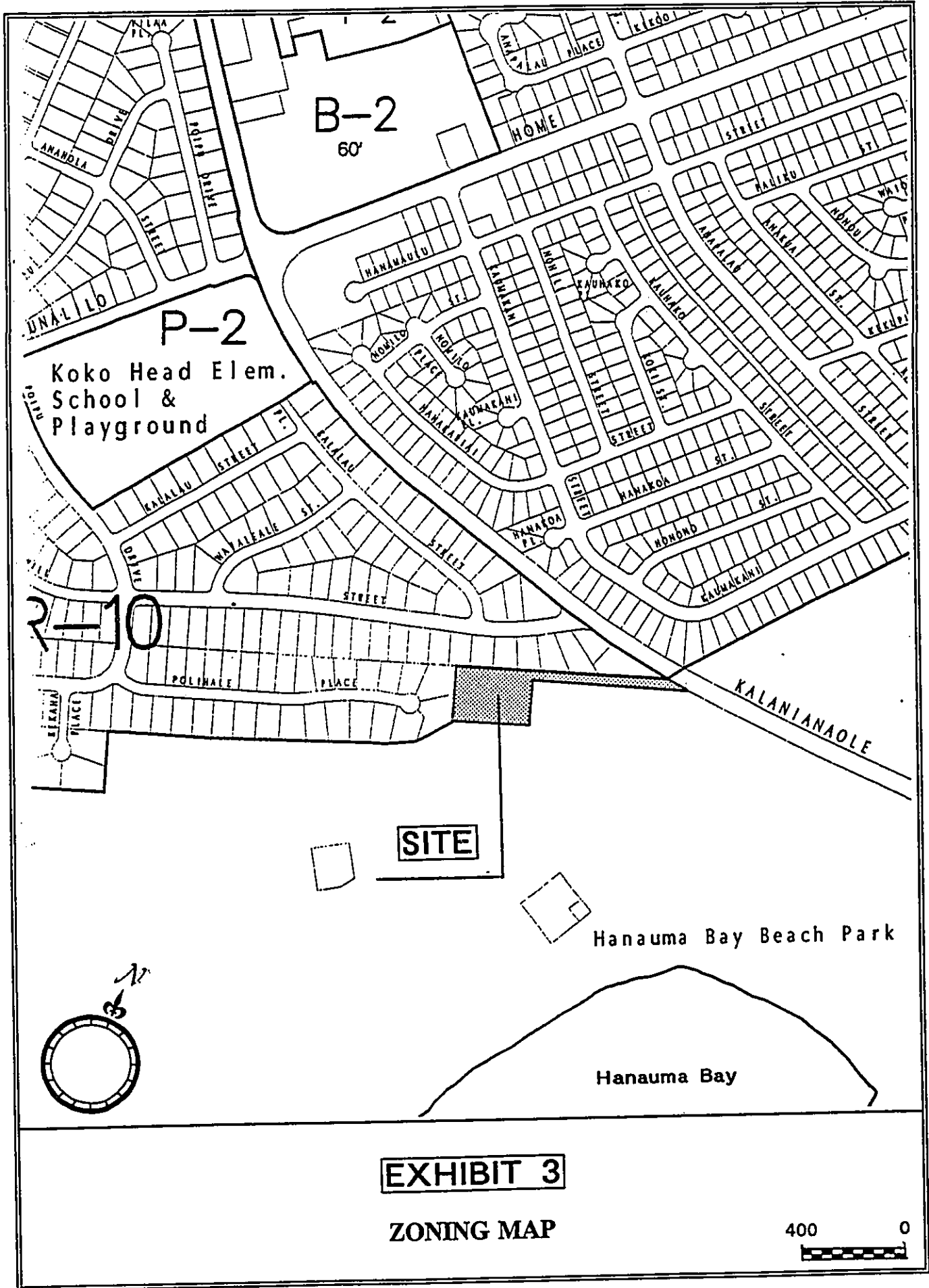


EXHIBIT 2

**DEVELOPMENT PLAN
LAND USE MAP**





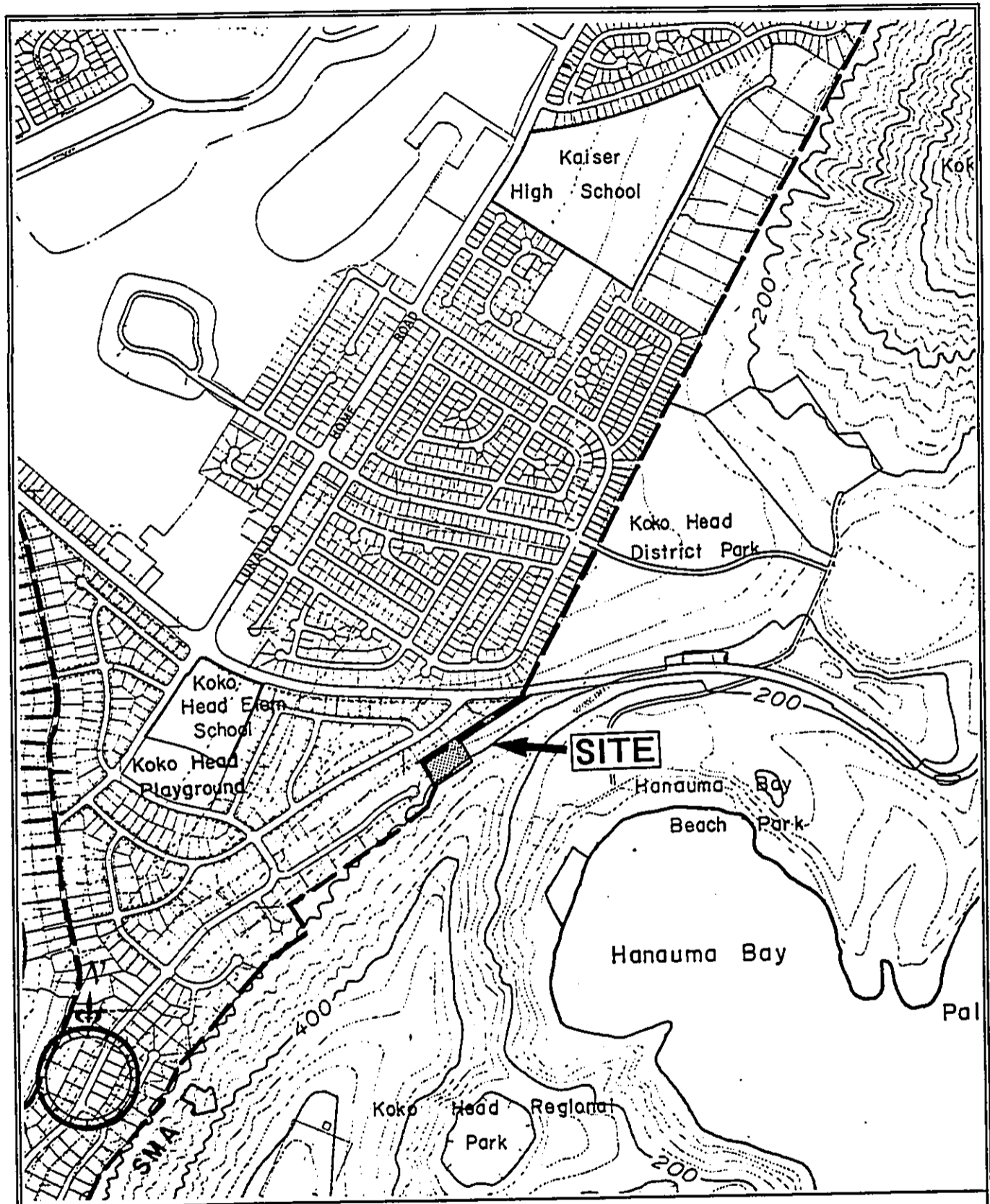


EXHIBIT 4

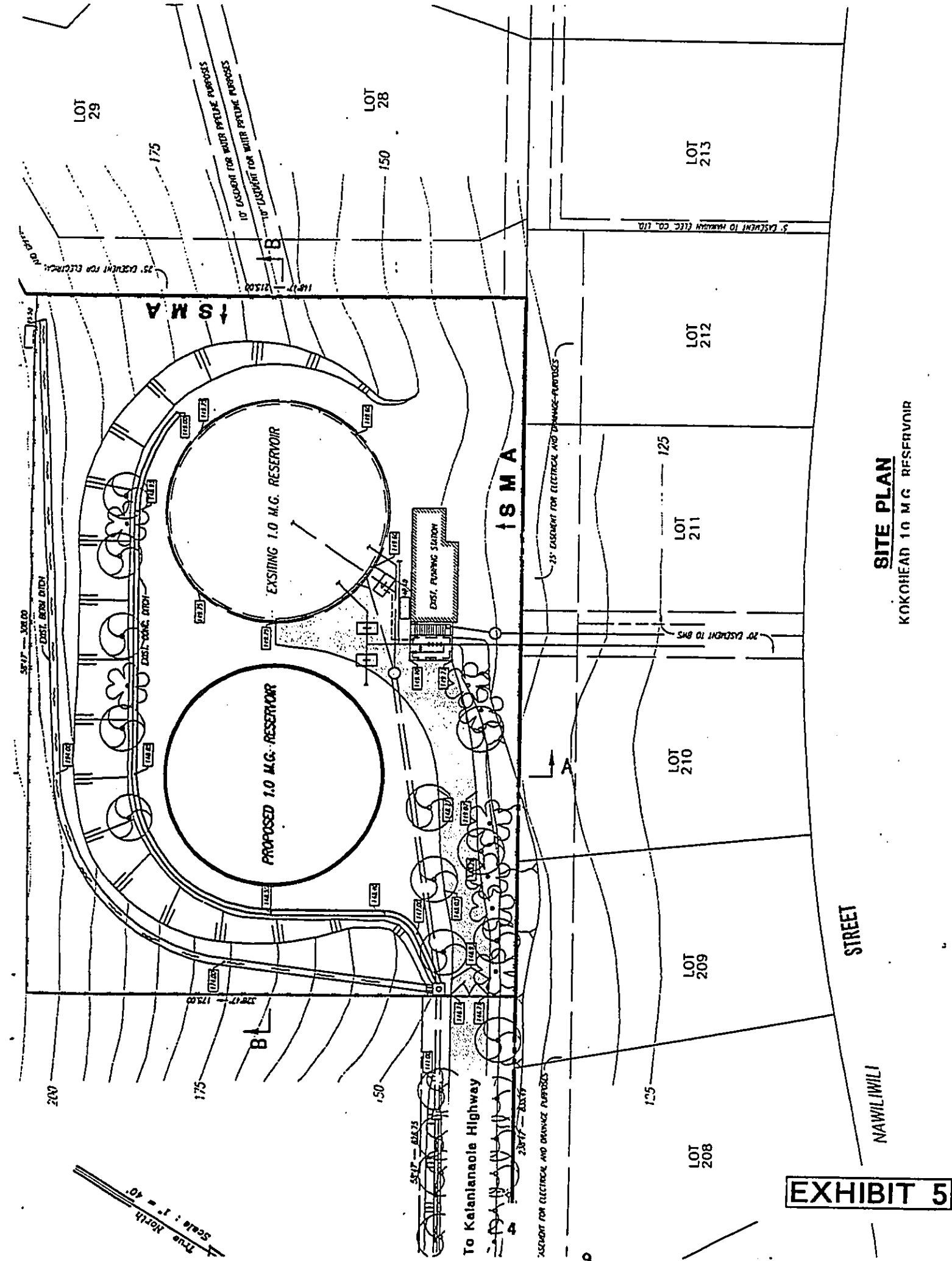
SPECIAL MANAGEMENT AREA MAP



Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

Exhibit 5). The proposed project will consist of the proposed 1.0 mg water reservoir and connection to the existing pump station and underground piping and valves.

The project site was originally developed in the early 1960's based on plans approved by the Board of Water Supply. The plot plan depicts a 1.0 mg water reservoir that has been built and a second (future) 1.0 mg water reservoir to be built on the lot. The site was graded and developed with a cut in the slope to accommodate both the existing water reservoir and the planned future water reservoir. Because of this earlier preparation of the site, the installation of the new water reservoir will require very limited grading, possibly just the excavation to construct footings for the new reservoir. A copy of the Plot Plan approved by the Board of Water Supply for the site in 1960 is provided in Appendix I and details the site preparation plan for both the existing and future water reservoirs. We have also provided recent photographs in Appendix II which depicts the existing development on the site and the vacant area reserved for the future water reservoir.



SITE PLAN
 KOKOHEAD 10 M.G. RESERVOIR

EXHIBIT 5

True North
 Scale: 1" = 40'

2. Location

The project site is located on the south side of Kalaniana'ole Highway on the ewa slopes of Koko Head. It is adjacent to the Koko Head Regional Park in Hawaii Kai and has a street address of 7381 Kalaniana'ole Highway. The project site is within the East Honolulu Development Plan area, Hawaii Kai Neighborhood Board and the Census Tract No. 1.02. The 2.038 acre parcel is ewa of the Koko Head Regional Park and Hanauma Bay. The project site, zoned P-1 Restricted Preservation District, is adjacent to two zoning districts. To the south is the Koko Head Regional Park, which is also zoned P-1 Restricted Preservation District. The Maunalua Triangle residential subdivision, zoned R-10 Residential District, is located to the north.

3. Land Use Approvals

a. State Land Use

The project site is in the State Land Use Conservation District. The proposed project will require a Conservation District Use Permit (CDUP) approval from the State Department of Land and Natural Resources (DLNR). The

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

applicant is in the process of preparing and submitting a CDUP application in coordination with the State DLNR for review and approval. This report is submitted to meet the requirements of Chapter 343, Hawaii Revised Statutes, and Title 11; Chapter 200, Environmental Impact Statement Rules.

b. Development Plan

The East Honolulu Development Plan (DP) Land Use Map designates the 2.038 acre property as Preservation. The proposed reservoir use will be consistent with the site's Preservation designation.

c. Zoning

The project site is zoned P-1 Restricted Preservation District which places use of the site under State jurisdiction. As discussed earlier, the applicant is in the process of preparing and submitting a CDUP application in coordination with the State DLNR for review and approval.

d. Special Management Area Use Permit

The project site is within the Special Management Area and will require a Special Management Area (SMA) Use Permit from the City's Department of Land Utilization. This report is submitted to meet the requirements of Chapter 25 of the Revised Ordinances of Honolulu.

B. Technical Characteristics

1. Land Use Details

The 2.038 acre subject property contains an existing 1.0 mg water reservoir and pump station. The site development includes the existing 1.0 mg water reservoir, pump station, underground piping, valves, grass, shrubs and trees. The proposed reservoir being developed is needed to provide for the water needs of the existing and future Hawaii Kai area residents and businesses.

As discussed earlier, the proposed project will consist of an additional 1.0 mg water reservoir connecting to the existing pump station and underground piping and valves.

Koko Head 170-Foot Reservoir Addition
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This project site was sized and graded to accommodate the existing 1.0 mg water reservoir as well as the proposed 1.0 mg water reservoir. The initial underground piping and valves were also installed to accommodate this proposed 1.0 mg water reservoir. The proposed water reservoir will provide the necessary storage capacity to meet future development, consistent with the East Honolulu DP Land Use Map.

2. Infrastructure/Utilities/Service Details

a. Water

This site contains a 1.0 mg reservoir which is currently providing water storage to the surrounding Hawaii Kai district. The proposed reservoir will provide an additional 1.0 mg water storage facility to meet the existing and planned water storage requirements for the Hawaii Kai district. The applicant proposes to construct and dedicate the 1.0 mg water reservoir to the City and County of Honolulu, Board of Water Supply.

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

b. Electricity/Telephone Services

Electrical and telephone services are currently provided to the site by the Hawaiian Electric Company and the Hawaiian Telephone Company, respectively. The proposed addition should not require a significant expansion of the existing service demand.

c. Wastewater Disposal

There will be no wastewater generated by the proposed or existing water reservoir.

d. Solid Waste

There will be no solid waste generated by the proposed or existing water reservoir.

e. Roadways and Parking

The project site is accessed by the two lane section of the, State owned, Kalaniana'ole Highway running from Hawaii Kai to Waimanalo. The proposed project will not adversely affect traffic conditions in the surrounding area. Trips generated by the proposed project will be restricted to plant

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

personnel (8 times a month) and maintenance crew (4 times a month) visits, occurring twelve (12) times a month. The proposed project will not significantly change the present level of service for traffic on Kalaniana'ole Highway.

C. Economic And Social Characteristics

The applicant expects to begin construction of the proposed 1.0 mg water reservoir in the 1997 to Year 2000 time frame, depending on demand.

The project costs are estimated as follows:

1. Land Acquisition (Land owned by the BWS)	\$	0
2. Construction		
Materials	\$	380,000
Equipment	\$	300,000
Demolition	\$	10,000
Landscaping	\$	10,000
Labor	\$	600,000
Total	\$	1,300,000

The proposed reservoir will provide additional storage to meet the demand for future service in the Hawaii Kai Area.

The project will also provide temporary, short term employment during the construction phase of the project.

The proposed project will have no impact on the social characteristics of the neighborhood.

D. Environmental Characteristics

1. Soils

The majority of the subject site is made up of Rock Land (rRK). Rock Land is made up of areas where exposed rock covers 25 to 90 percent of the surface. It occurs on all five islands. The rock outcrops and very shallow soils are the main characteristics. The rock outcrops area mainly basalt and andesite. This land type is nearly level to very steep. The project site was previously graded to create a level pad site for both the existing and proposed reservoirs. Elevations range from nearly sea level to more than 6,000 feet.

Rock Land is used for pasture, wildlife habitat, and water supply. The natural vegetation at the lower elevations consists mainly of kiawe, klu, piligrass, Japanese tea, and koa haole. Lantana, guava, Natal redtop, and molassegrass are dominant at the higher elevations. This land type is also used for urban development.

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

Along the north border of the project site is Koko Silt Loam, 6 to 12 percent (KsC) slope soils. The Koko Series consist of well-drained soils on fans and volcanic spurs on the island of Oahu. These soils developed in alluvium washed from deposits of volcanic ash, cinders, and tuff. They are gently sloping to moderately steep. Elevations range from about 140 to 220 feet above sea level. Koko soils occur near Koko Head, Koko Crater, and Diamond Head. They are geographically associated with Lualualei soils.

These soils are used for Homesites, pasture, and truck crops. The natural vegetation consists of kiawe, klu, koa haole, fingergrass and bristly foxtail.

2. Topography

The project site was previously graded to create a relatively level pad area to accommodate two 1.0 mg water reservoirs and appurtenant facilities. Elevation of the project site is approximately 150 feet above mean sea level (msl) and the surrounding areas slope downward toward the Portlock subdivision, which is nearly at sea level elevation. Hanauma Bay is approximately 1,100 feet southeast

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

of the project site.

3. Drainage

Sheet flow from the project site runs north into an existing 25-foot easement for drainage and electrical purposes. Drainage south of the project site runs into the existing earth berm ditch and concrete ditch south of the existing reservoir. Drainage and surface run-off patterns will not significantly change or increase.

4. Flooding

According to the Federal Flood Insurance Rate Maps (FIRM) for the City and County of Honolulu, the site is within Flood Zone D. Flood Zone D, is an area in which flood hazards are undetermined. Situated at the 150-foot elevation on the ewa (upper) slopes of Koko Head, flood hazards at this site are minimal.

IV. AFFECTED ENVIRONMENT

A. Subject Site and Surrounding Area

The State Land Use Map designates the project site and surrounding areas, Conservation District. The project site is located on the south side of Kalaniana'ole Highway on the ewa slopes of Koko Head. It is adjacent to the Koko Head Regional Park in Hawaii Kai and has a street address of 7381 Kalaniana'ole Highway. The project site is within the East Honolulu Development Plan area, Hawaii Kai Neighborhood Board and the Census Tract No. 1.02. The 2.038 acre parcel is ewa of the Koko Head Regional Park and Hanauma Bay. The project site, zoned P-1 Restricted Preservation District, is adjacent to two zoning districts. To the south is the Koko Head Regional Park, which is also zoned P-1 Restricted Preservation District. The Maunalua Triangle residential subdivision, zoned R-10 Residential District, is located to the north.

Areas above the 200-foot elevation consists of vegetated and bare mountain slopes except for a Board of Water Supply Reservoir at the 405-foot elevation. Areas at or below the 200-foot elevation include vegetated

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

and bare mountain slopes and the residential developments in the Maunaloa Triangle to the north and Portlock to the west.

B. Coastal or Natural Resources

1. Public Shoreline and Recreation Areas

The project site does not contain shoreline access or recreation areas and will not affect access to the State Koko Head Recreational Park which is adjacent to the project site. The project site is situated on the ewa slopes of Koko Head, while the access to the Hanauma Bay Nature Park is located on the opposite slopes, which further minimizes impact of the construction activities on the Park.

The applicant will follow the State and City regulations regarding construction noise and hours of operation. Upon completion, the project site will meet State and City development standards. Occasional maintenance visits will result in minimal traffic impact to the adjacent Kalaniana'ole Highway.

2. Rare or Endangered Wildlife Species

The site does not contain any significant wildlife habitats, or rare or endangered flora and fauna. Only a few sparrows and doves

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

were observed on the project site. The surrounding terrain and fencing around the site minimizes the access to the site by most other animals common to the area including mongoose, cats, and dogs, however, mice, mynahs and cardinals may also be found on the site on occasion.

The proposed reservoir will have no impact on rare or endangered flora and fauna or any other flora and fauna on the site. The reservoir will be situated on a cleared area prepared for the future reservoir when the existing reservoir was first constructed.

C. Historic and Archaeological Resources

Although there are documented archaeological sites some distance away, (Koko Head petroglyphs and the Hanauma Rock Shelter, see Exhibit 6) there are no known archaeological or historic sites within the project site. The Hanauma Rock Shelter is the closest archaeological site and is located approximately 1,000 feet away, which is near the Hanauma Bay Nature Park parking lot.

The subject property is not listed on either the Hawaii or National Registers of Historic Places. Since the site has been extensively developed

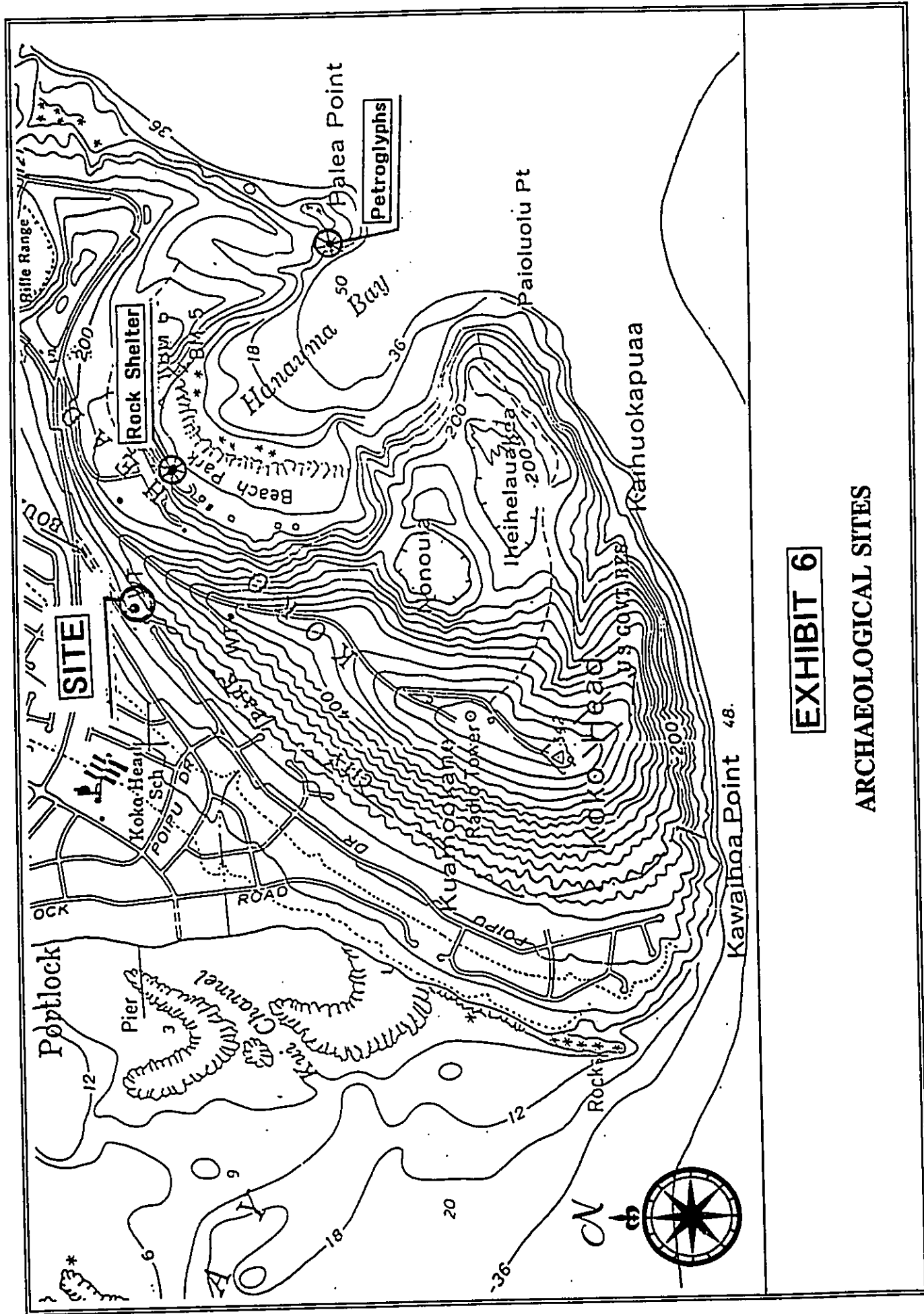


EXHIBIT 6

ARCHAEOLOGICAL SITES

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

with no previous record of historic or archaeological discoveries, the proposed project will not disturb any such sites or artifacts. With no previous record of historic or archaeological discoveries and the extensive development existing on the site, the proposed project is not expected to have an impact on archaeological resources. In addition, since the site was previously graded and developed with a cut in the slope to accommodate both the existing water reservoir and this planned future water reservoir, the installation of the new water reservoir will require very limited grading, possibly just excavation to construct footings for the new reservoir.

During the construction of the project, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

D. Coastal Views

The proposed reservoir will be developed, adjacent to the existing reservoir, within the existing property. Coastal views, makai, towards Maunalua Bay will not be obstructed since there is no development above

the reservoirs and the reservoirs are slightly recessed in the mountain.

The view from the shoreline mauka will also not be affected since the proposed reservoir is similar in size and shape to the existing reservoir and will be located at the edge of the residential subdivision and slightly screened with a row of trees.

The reservoir will be painted in a neutral earth-tone color as required by the BWS to match the existing reservoir. We will continue the existing landscape treatment that screens the existing water reservoir from view. If necessary, additional trees will be added to provide further landscaped screening of the proposed reservoir.

E. Water Quality

The project will involve minimal grading to excavate footings for the reservoir and impact to receiving waters will be minimal. The proposed reservoir will provide additional storage to meet the demand for future service in the Hawaii Kai Area.

There is approximately 7.0 mg of existing water storage in the existing low-level water systems (water reservoirs in the 170-foot spillway elevation). The existing demand for the Hawaii Kai area is approximately

Koko Head 170-Foot Reservoir Addition
Special Management Area Use Permit * Final Environmental Assessment

6,270,200 gallons of water storage. Undeveloped lands currently zoned for urban development will require approximately 1,059,900 gallons of additional water storage. The lands designated for future urban development in the Hawaii Kai area within the East Honolulu DP Land Use Map will require between 384,700 and 534,700 gallons of additional water storage. The total existing and future Hawaii Kai residences and businesses as planned on the existing East Honolulu DP Land Use Map will require between 7,714,800 and 7,864,800 gallons of water storage capacity. This could result in a shortage of up to 864,800 gallons of water storage. The proposed 1.0 mg water reservoir is planned to provide the necessary storage capacity to accommodate the existing and planned increases in water storage requirements for the Hawaii Kai area.

V. SPECIAL MANAGEMENT AREA GUIDELINES

The City's Special Management Area (SMA) Guidelines are contained in Chapter 25, Revised Ordinances of Honolulu (ROH), as amended, and are the counterparts to the State's Coastal Zone Management Guidelines set forth in

Chapter 205A, Hawaii Revised Statutes. The following discussion describes how the proposed project satisfies the City's SMA Guidelines.

A. TERMS AND CONDITIONS OF DEVELOPMENT

- 1. Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas and natural reserves is provided to the extent consistent with sound conservation principles.**

As discussed earlier, the project site does not contain shoreline access or recreation areas and will not affect access to these areas. The project site is situated on the slopes of Koko Head and does not provide opportunities for beach or recreation area access.

- 2. Adequate and properly located public recreation areas and wildlife preserves are reserved.**

The proposed reservoir will not affect public recreation areas or wildlife preserves. The City's Park at Hanauma Bay will not be affected by the proposed reservoir. The State Park provides adequate access to the Bay and Koko Head hiking trails.

- 3. Provisions are made for solid and liquid waste treatment,**

disposition and management which will minimize adverse effects upon Special Management Area resources.

As discussed earlier, the proposed and existing water reservoirs will not generate liquid or solid waste which may affect the Special Management Area, since the project site will not be manned on a full time basis.

- 4. Alterations to existing land forms and vegetation; except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquake.**

As discussed earlier, the proposed project will be built on a previously graded level pad and will not require a significant amount of site work or grading. Minor clearing, grubbing and grading work will be confined to the limits of the construction site as part of the building permit application. The project site was sized and graded to accommodate the existing 1.0 mg reservoir as well as the proposed 1.0 mg reservoir in the initial development of the site and very little

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grading will occur for this project. As mentioned earlier, the only grading to occur is expected to be excavation to construct footings for the new reservoir. As a result, soil erosion and siltation within the site is not anticipated. Due to its current state of development and location, project construction will not obstruct, eliminate, or affect any existing scenic or recreational amenities within the property or the surrounding area.

B. REQUIRED COUNCIL FINDINGS

- 1. The development will not have any substantial adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or compelling public interest.**

As discussed throughout this report, the proposed improvements will have minimal effect on the environment or ecology due to its location and the relatively small amount of development planned. The project site was sized and graded to accommodate the existing 1.0 mg reservoir as well as the proposed additional 1.0 mg reservoir in the initial development of the site and very little grading will occur for

this proposal. Drainage impacts during construction will be mitigated to insure that no adverse impact to the coastal waters will occur.

2. **The development is consistent with the objectives and polices set forth in Section 25-3.1 and area guidelines contained in HRS Section 205A-26.**

As discussed in this section, "Conformance with Special Management Area Guidelines", the project is consistent with the objectives and policies of Section 25-3.1 of the Revised Ordinances of Honolulu and the area guidelines contained in HRS Section 205-A-26.

3. **The proposed project is consistent with the County General Plan, Development Plan and Zoning.**

The proposed 1.0 mg water reservoir is consistent with the County General Plan. The proposed project will be located "in areas where they will least obstruct important views of the mountains and the sea", as stated in the General Plan, Natural Environment Policy 3, Objective B. The proposed project will be located next to an existing water reservoir which is located approximately 600 feet from

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Kalaniana'ole Highway.

The proposed reservoir will be screened from view from Kalaniana'ole Highway similar to the screening provided for the existing reservoir. Being situated against the middle portion of the profile of Koko Head, the existing and proposed reservoirs do not alter the skyline or affect ocean or coastal views. The applicant will provide additional landscaping as needed to further screen the reservoirs from public view.

The proposed project will also help to implement Policies 1 and 2 of Transportation and Utilities, Objective B. The proposed project will help to develop "and maintain an adequate supply of water for both residents and visitors" and "adequate supply of water for agricultural and industrial needs".

The proposed project will also help to implement Policy 2 of the Transportation and Utilities Objective C. The proposed project will "provide improvements to utilities in existing neighborhoods to reduce substandard conditions". The new reservoir will be constructed in order to maintain or improve the present quality of

lifestyle for the existing as well as future residents of Hawaii Kai.

The East Honolulu Development Plan (DP) Land Use Map designates the 2.038 acre property as Preservation. The proposed renovation and expansion will be consistent with the site's Preservation designation for water supplies.

The project site is zoned P-1 Restricted Preservation District which places use of the site under State jurisdiction. As discussed earlier, the applicant is in the process of preparing and submitting an application for a CDUP in coordination with the State DLNR.

C. IMPACTS TO BE MINIMIZED

- 1. Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon.**

The proposed project is not located in any bay, estuary, salt marsh, river mouth, slough or lagoon, therefore, will not have any type of dredging, filling or otherwise alterations of these land/water forms.

- 2. Any development which would reduce the size of any beach or other area usable for public recreation.**

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The proposed project will not reduce the size of the beach or other area usable for public recreation. The initial development of the project site included space and underground systems to accommodate the proposed 1.0 mg reservoir.

3. **Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the Special Management Area and the mean high tide line where there is no beach.**

As discussed earlier, the proposed project will not reduce or impose restrictions upon public access within the Special Management Area. The project will confine its improvements to the project site and will not affect access to tidal and submerged lands, beaches, or portions of rivers and streams within the Special Management Area.

4. **Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast.**

As discussed earlier, the proposed reservoir will be located 600 feet from Kalaniana'ole Highway, adjacent to the existing reservoir.

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The proposed reservoir is recessed into the slope of Kokohead and will not detract from the line of sight toward the sea from the highway.

5. **Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.**

As discussed earlier, the proposed project will be built on a previously graded level pad and will not require a significant amount of site work or grading. There are no significant land forms in this area that will require mass grading in the development of the site. Minor clearing, grubbing and grading work will be confined to the limits of the construction site as part of the building permit application. As a result, soil erosion and siltation within the site is not anticipated and the proposed project will have minimal impact on water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

The off-shore coastal waters will not be adversely affected by the potential increase in surface runoff due to the increase in lot coverage since an adequate drainage system is in place and the proposed additional lot coverage is small in relation to the overall drainage area.

VI. COASTAL ZONE MANAGEMENT

A. OBJECTIVES

1. Recreational Resources

The project will not affect coastal recreational opportunities accessible to the public. As discussed earlier, the project site does not contain shoreline access or recreation areas and will not affect access to these areas. The project site is situated on the slopes of Koko Head and does not provide opportunities for beach or recreation area access.

2. Historic Resources

Although there are documented archaeological sites some

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distance away, (Koko Head petroglyphs and the Hanauma Rock Shelter, see Exhibit 6) there are no known archaeological or historic sites within the project site. The Hanauma Rock Shelter is the closest archaeological site and is located approximately 1,000 feet away, which is near the Hanauma Bay Nature Park parking lot.

The subject property is not listed on either the Hawaii or National Registers of Historic Places. Since the site has been extensively developed with no previous record of historic or archaeological discoveries, the proposed project will not disturb any such sites or artifacts. With no previous record of historic or archaeological discoveries and the extensive development existing on the site, the proposed project is not expected to have an impact on archaeological resources. In addition, since the site was previously graded and developed with a cut in the slope to accommodate both the existing water reservoir and this planned future water reservoir, the installation of the new water reservoir will require very limited grading, possibly just excavation to construct footings for the new reservoir.

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During the construction of the project, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

3. Scenic and Open Space Resources

Due to its current state of development and location, project construction will not obstruct, eliminate, or affect any existing scenic, open space or recreational amenities within the property or the surrounding area.

4. Coastal Ecosystems

The project site is situated over 3,000 feet away from Maunalua Bay and about 1,100 feet away from Hanauma Bay, scaled off of a flat map. With the downslope to Maunalua Bay and the up then down slope to Hanauma Bay the actual distance is even greater. This distance and the fact that the project site is on the opposite slopes of Koko Head from Hanauma Bay will minimize impacts to coastal

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ecosystems. The primary impact will occur during construction of the reservoir. In order to mitigate temporary construction impacts on coastal water ecosystems and water quality, best management practices will be followed in minimizing drainage impacts to the near shore waters. Mitigation measures may include small sedimentation ponds as needed.

5. Economic Uses

As a public facility related to infrastructure required to service the residential population, as provided for on existing county planning documents, the project will not affect the State's economy, except for provision of short-term construction employment and related tax impacts.

6. Coastal Hazards

Given the project site's distance from the coastline and its relatively high elevation (150 feet), the property will not be subject to impacts from coastal hazards.

7. Managing Development

This project will not affect the development review process,

communication, or public participation in the management of coastal resources and/or hazards.

8. Public Participation

This project will not affect public awareness, education or participation in coastal management.

9. Beach Protection

Given the project site's distance from the coastline, the project will not affect the public's use of beaches in the surrounding area.

10. Marine Resources

Given the project site's distance from the coastline, the project will not affect the marine resources, nor will it affect the State's ocean resources management plan.

B. Policies

1. Recreational Resources

The project will not affect coastal recreational opportunities or resources. As discussed earlier, the project site does not contain shoreline access or recreation areas and will not affect access to these areas. The project site is situated on the slopes of Koko Head and

does not provide opportunities for beach or recreation area access. The project will not affect the coordination or funding of coastal recreational planning and management. The project will also have no impact on the provision of adequate, accessible, and diverse recreational opportunities in the coastal zone management area.

2. Historic Resources

Although there are documented archaeological sites some distance away, (Koko Head petroglyphs and the Hanauma Rock Shelter, see Exhibit 6) there are no known archaeological or historic sites within the project site. The Hanauma Rock Shelter is the closest archaeological site and is located approximately 1,000 feet away, which is near the Hanauma Bay Nature Park parking lot.

The subject property is not listed on either the Hawaii or National Registers of Historic Places. Since the site has been extensively developed with no previous record of historic or archaeological discoveries, the proposed project will not disturb any such sites or artifacts. With no previous record of historic or archaeological discoveries and the extensive development existing on

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the site, the proposed project is not expected to have an impact on archaeological resources. In addition, since the site was previously graded and developed with a cut in the slope to accommodate both the existing water reservoir and this planned future water reservoir, the installation of the new water reservoir will require very limited grading, possibly just excavation to construct footings for the new reservoir.

During the construction of the project, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

3. Scenic and Open Space Resources

Due to its current state of development and location, project construction will not obstruct, eliminate, or affect any existing scenic, open space or recreational amenities within the property or the surrounding area. The project will not affect scenic resources or

coastal views. The project will minimize alteration of natural landforms by situating in a site previously graded to accommodate the reservoir. This reservoir is not a coastal dependent project and has been located in an inland area at a 150-foot elevation on the ewa slopes of Koko Head.

4. Coastal Ecosystems

The project site is situated over 3,000 feet away from Maunalua Bay and about 1,100 feet away from Hanauma Bay, scaled off of a flat map. With the downslope to Maunalua Bay and the up then down slope to Hanauma Bay the actual distance is even greater. This distance and the fact that the project site is on the opposite slopes of Koko Head from Hanauma Bay will minimize impacts to coastal ecosystems. The primary impact will occur during construction of the reservoir. In order to mitigate temporary construction impacts on coastal water ecosystems and water quality, best management practices will be followed in minimizing drainage impacts to the near shore waters. Mitigation measures may include small sedimentation ponds as needed.

5. Economic Uses

As a public facility related to infrastructure required to service the residential population as provided for on existing county planning documents, the project will not affect the State's economy except for the provision of short-term construction employment and related tax impacts. This reservoir is not a coastal dependent project and has been located in an inland area at a 150-foot elevation on the ewa slopes of Koko Head.

6. Coastal Hazards

Given the project site's distance from the coastline and its relatively high elevation (150 feet), the property will not be subject to impacts from coastal hazards nor will it exacerbate or affect coastal hazards.

7. Managing Development

This project will not affect the development review process, communication, or public participation in the management of coastal resources and/or hazards.

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8. Public Participation

This project will not affect public awareness, education or participation in coastal management.

9. Beach Protection

Given the project site's distance from the coastline, the project will not affect the public's use of beaches in the surrounding area.

10. Marine Resources

Given the project site's distance from the coastline, the project will not affect the marine resources, nor will it affect the State's ocean resources management plan.

**VII. AGENCY COMMENTS ON THE DRAFT
ENVIRONMENTAL ASSESSMENT**

Copies of agency comments are provided in Appendix III, along with a detailed response to the concerns and issues presented.

VIII. MITIGATION MEASURES

In order to mitigate temporary construction impacts on air quality, the contractor will be directed to incorporate frequent (twice daily) watering of exposed soil areas and to landscape the project site as soon as possible, upon completion of construction to minimize the length of time of soil exposure. Contractors working on the project will also be directed to insure that their vehicles engines are properly maintained to insure efficient operation and minimize vehicle exhaust fumes. Project contractors will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality of Kalanianaʻole Highway is most sensitive.

In order to mitigate temporary construction impacts on noise, the contractor will be directed to insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractor complies with existing noise regulations of the State and County.

In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing drainage impacts to the near

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shore waters. Mitigation measures may include small sedimentation ponds as needed. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

**IX. BASIS FOR A NEGATIVE DECLARATION FOR THE PROPOSED
KOKO HEAD 170-FOOT WATER RESERVOIR**

A. Description of the Proposed Action

The applicant plans to construct a 1.0 million gallon (mg) water reservoir for additional water storage next to the existing 1.0 mg water reservoir on this 2.038 acre site within Hawaii Kai. The proposed project will consist of the proposed 1.0 mg water reservoir and connection to the existing pump station and underground piping and valves.

The project site was originally developed in 1960 based on plans approved by the Board of Water Supply. The plot plan depicts a 1.0 mg water reservoir that has been built and a second (future) 1.0 mg water reservoir on the lot. The site was graded and developed with a cut in the slope to accommodate both the existing water reservoir and the planned

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future water reservoir. Because of this earlier preparation of the site the installation of the new water reservoir will require very limited grading, possibly just the excavation to construct footings for the new reservoir.

The applicant considered four alternative sites for this reservoir project, including this Koko Head site, the existing Kaluanui 170-foot Reservoir site, the existing Kamiloiki 170-foot Reservoir site, and a proposed Kamilo Ridge Reservoir site. The four sites are on the marina side of Hawaii Kai since most of the planned developments (approved on the zoning and/or development plan land use maps) occurs in this side of Hawaii Kai.

In reviewing the grading plans for the Kaluanui and the Kamiloiki sites, both sites were graded for only the existing reservoirs on each site. Both sites have cut slopes on three sides and a fill slope on the fourth side. Based on the grading plans and location of the existing reservoirs on each site, these sites cannot accommodate an additional 1.0 million gallon reservoir. In contrast, the Koko Head site was graded and prepared for an additional 1.0 million gallon reservoir when it was first developed in 1960.

The schematic plan for the proposed reservoir at the Kamilo Ridge

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site indicates that Kamilo Ridge can accommodate a 1.0 million gallon reservoir. However, in contrast to the Koko Head site, all improvements for the new site must be constructed, including access driveway, water transmission main from Hawaii Kai Drive to the reservoir, grading, storm drain system, electric and telemetering facilities, 1.0 million gallon reservoir, on-site piping control building and site work. The cost for the additional work developing this site over and above the cost of construction of the reservoir itself is about \$1,230,000. This would be \$1,230,000 more than what it would cost to develop the reservoir at the Koko Head site. In addition, construction of a second reservoir at the Koko Head site would also be less obtrusive and objectionable to the public than introducing a new facility at Kamilo Ridge.

Based on these findings, the Koko Head site, which would require a minimal amount of grading, would be substantially less impacting on surrounding residents, and would be less costly than the other three sites, was selected for the proposed reservoir.

B. Determination and Reasons Supporting Determination

The proposed project would not have a significant effect on the

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environment and therefore preparation of an environmental impact statement is not required. Based on the "Significance Criteria", Section 12 of Hawaii Administrative Rules Title 11, Chapter 200, "Environmental Impact Statement Rules", which were reviewed and analyzed, we have come to the following conclusions:

1. **No irrevocable commitment to loss or destruction of any natural or cultural resource would result.**

The Koko Head site was originally graded and developed with a cut in the slope to accommodate both the existing water reservoir and the planned future water reservoir and use of the site would not result in the loss of any natural resource. The site is fenced and locked with access provided only to Board of Water Supply (BWS) personnel. No significant natural resources are present on the site.

Although there are documented archaeological sites some distance away, (Koko Head petroglyphs and the Hanauma Rock Shelter) there are no known archaeological or historic sites within the project site. The Hanauma Rock Shelter is the closest archaeological site and is located approximately 1,000 feet away, which is near the

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Hanauma Bay Nature Park parking lot. The subject property is not listed on either the Hawaii or National Registers of Historic Places.

Since the site has been extensively developed with no previous record of historic or archaeological discoveries, the proposed project will not disturb any such sites or artifacts. With no previous record of historic or archaeological discoveries and the extensive development existing on the site, the proposed project is not expected to have an impact on archaeological resources.

In addition, since the site was previously graded and developed with a cut in the slope to accommodate both the existing water reservoir and this planned future water reservoir, the installation of the new water reservoir will require very limited grading, possibly just excavation to construct footings for the new reservoir.

During the construction of the project, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will stop work and contact the Historic Preservation Office for review and approval of mitigation

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measures.

2. **The action would not curtail the range of beneficial uses of the environment.**

The project will not curtail the range of beneficial uses of the environment. The project site is situated in a restricted access area where the BWS personnel are the only ones allowed entry. It does not serve any recreational purpose or provide any other beneficial use of the environment. The project will provide for water storage to meet the storage needs of the existing and planned development (approved on the zoning and/or development plan land use maps). It will provide a beneficial use of the environment to support the Hawaii Kai community with water storage to meet their needs in case of an emergency, should the existing water sources shut down or certain transmission lines from the water sources be incapacitated.

3. **The proposed action does not conflict with the state's long-term environmental policies or goals and guidelines.**

The State's environmental policies and guidelines are set forth in Chapter 344, Hawaii Revised Statutes, "State Environmental

Policy". The broad policies set forth include conservation of natural resources and enhancement of the quality of life. As discussed earlier, the project does not affect significant natural resources. The project will enhance the quality of life for the residents of the Hawaii Kai community by providing water storage to meet their needs in case of an emergency, should the existing water sources shut down or certain transmission lines from the water sources be incapacitated.

4. **The economic or social welfare of the community or state would not be substantially affected.**

Construction of the reservoir would result in temporary economic benefits to the construction industry. It will provide a benefit to the social welfare of the Hawaii Kai community by providing water storage to meet their needs in case of an emergency, should the existing water sources shut down or certain transmission lines from the water sources be incapacitated. The impacts from the reservoir itself will be minimal since it is situated on a site that was graded and developed with a cut in the slope to accommodate both the existing water reservoir and the planned future water reservoir. By

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maintaining and possibly adding to the existing landscaping, the site can be adequately screened from public view.

5. **The proposed action does not substantially affect public health.**

The proposed action will actually have a positive impact on public health by providing emergency water storage capacity to meet the needs of the Hawaii Kai community.

6. **No substantial secondary impacts, such as population changes or effects on public facilities, are anticipated.**

The proposed reservoir is designed to accommodate development already approved on the City and County of Honolulu's Development Plans and/or Zoning Maps. As such it will not provide an impetus for additional increases in population. The project will not have an impact on public facilities.

7. **No substantial degradation of environmental quality is anticipated.**

The project will have minimal impact on environmental quality. The reservoir facility's only long term impact would be on views and would be similar in impact to the existing reservoir, which is screened from view by landscaping. The reservoir will not affect noise

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environment or air quality of the surrounding area, except for temporary impacts during construction.

In order to mitigate temporary construction impacts on air quality, the contractor will be directed to incorporate frequent (twice daily) watering of exposed soil areas and to landscape the project site as soon as possible, upon completion of construction to minimize the length of time of soil exposure. Contractors working on the project will also be directed to insure that their vehicles engines are properly maintained to insure efficient operation and minimized vehicle exhaust fumes. Project contractors will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality of Kalaniana'ole Highway is most sensitive.

In order to mitigate temporary construction impacts on noise, the contractors will be directed to insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractors comply with existing noise regulations of the State and County.

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In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing drainage impacts to the near shore waters. Mitigation measures may include small sedimentation ponds as needed. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

8. **The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable affects on the environment.**

The proposed project does not involve a commitment to larger actions nor will it result in cumulative impacts to the environment. As mentioned earlier, the proposed reservoir is designed to accommodate development already approved on the City and County of Honolulu's Development Plans and/or Zoning Maps. As such it will not provide an impetus for additional increases in population. The project will not have an impact on public facilities.

9. **No rare, threatened or endangered species or their habitats would be affected.**

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As mentioned earlier, the site is a controlled access site with only the BWS personnel allowed entry. Being fenced in and landscaped with plants introduced by the BWS, no rare, threatened, or endangered species or their habitats would be affected.

10. **Air quality, water quality or ambient noise levels would not be detrimentally affected.**

In order to mitigate temporary construction impacts on air quality, the contractor will be directed to incorporate frequent (twice daily) watering of exposed soil areas and to landscape the project site as soon as possible, upon completion of construction to minimize the length of time of soil exposure. Contractors working on the project will also be directed to insure that their vehicles engines are properly maintained to insure efficient operation and minimized vehicle exhaust fumes. Project contractors will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality of Kalaniana'ole Highway is most sensitive.

In order to mitigate temporary construction impacts on noise,

the contractors will be directed to insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractors comply with existing noise regulations of the State and County.

In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing drainage impacts to the near shore waters. Mitigation measures may include small sedimentation ponds as needed. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

11. **The project would not affect environmentally sensitive areas, such as flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters.**

No environmentally sensitive areas would be affected. The project will not be situated on land involving or affecting flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters. The proposed reservoir will

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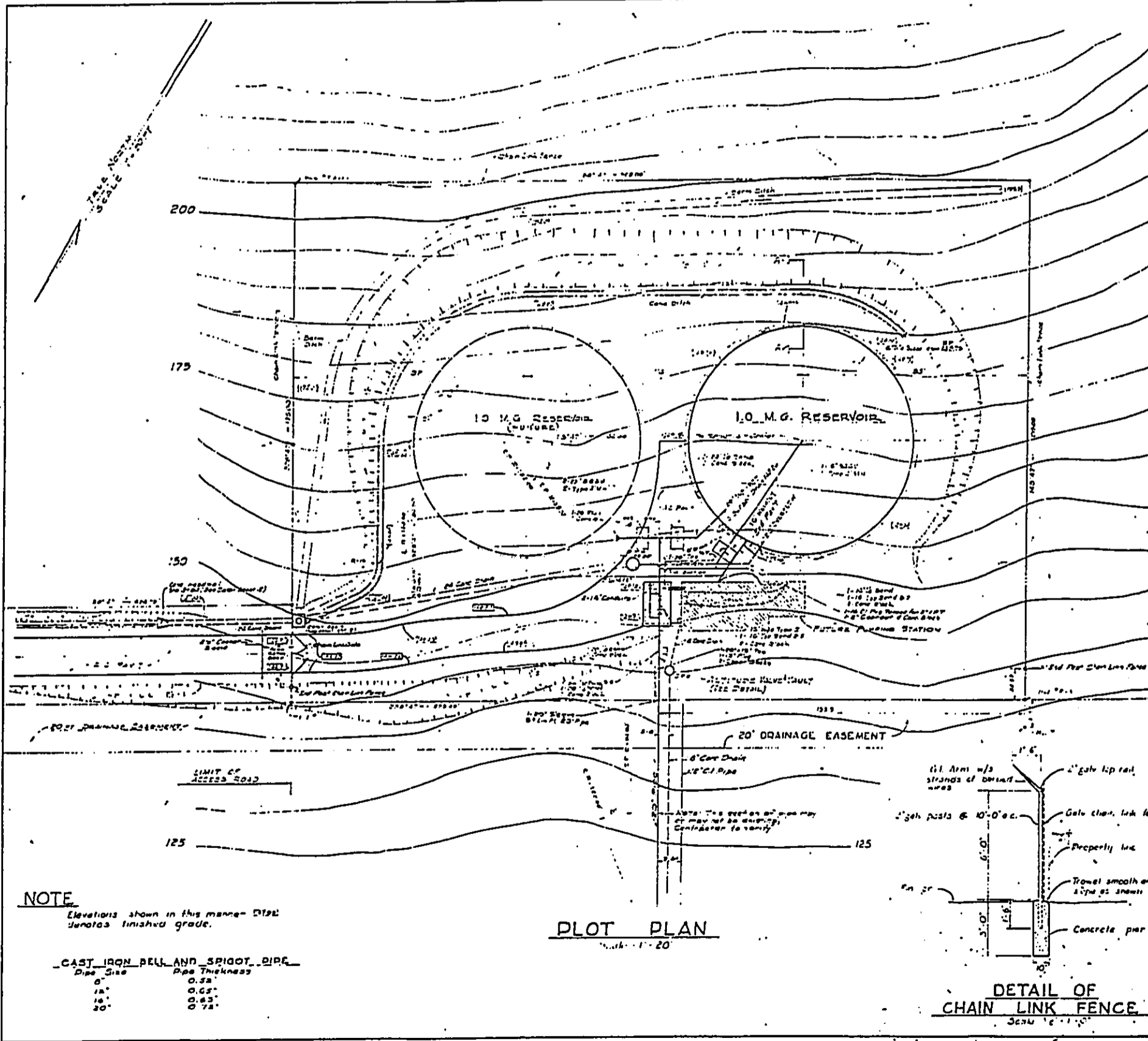
share a site with an existing reservoir that has been at that location for over 30 years.

X. CONCLUSION

Based on the foregoing report, the applicant respectfully requests your approval of a negative declaration for this Final Environmental Assessment and subsequently, your approval of our request for a Special Management Area Use Permit to allow the construction of the proposed 1.0 mg water reservoir proposed in this report. The project will be developed and constructed in a fashion that will be sensitive to the environment.

APPENDIX I
1960 RESERVOIR PLAN

DOCUMENT CAPTURED AS RECEIVED



NOTE
Elevations shown in this manner DIME denotes finished grade.

CAST IRON BELL AND SPIGOT PIPE

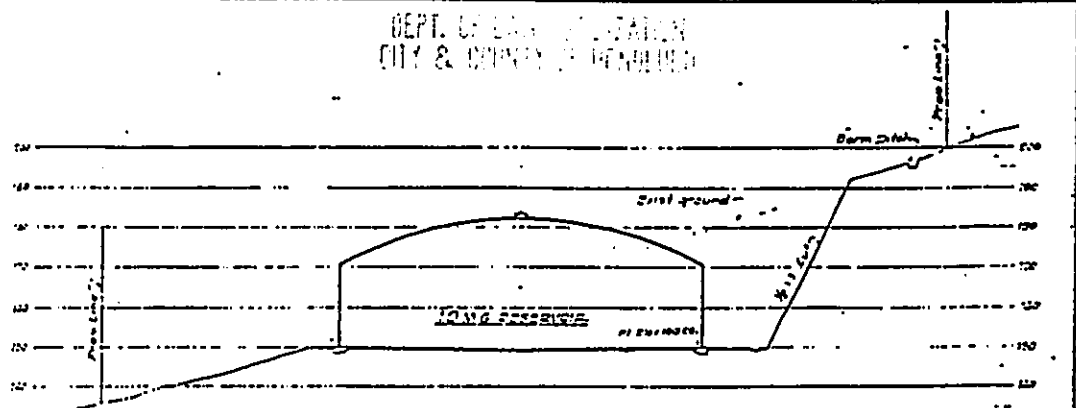
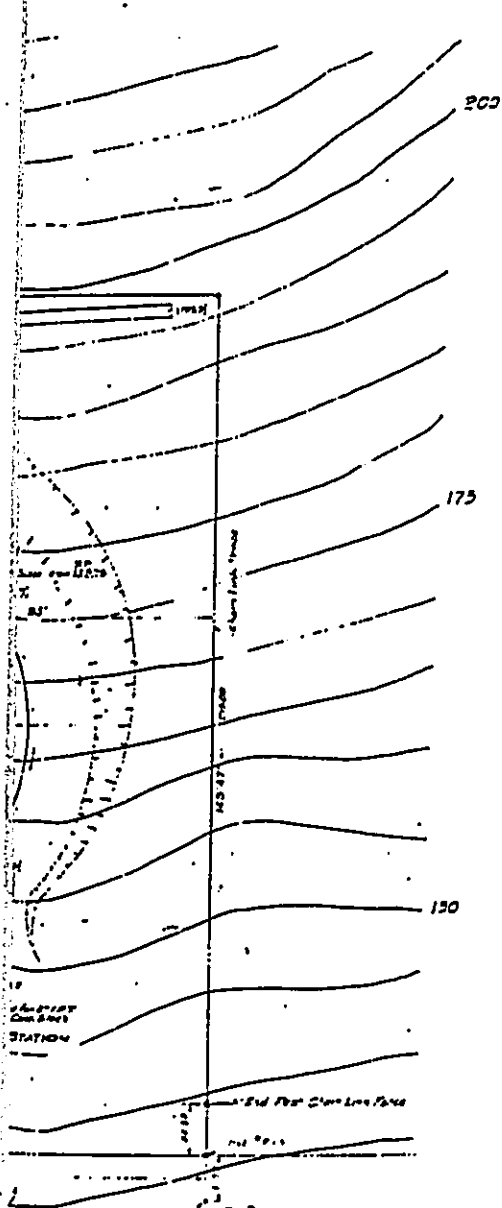
Pipe Size	Pipe Thickness
6"	0.52"
12"	0.65"
18"	0.85"
24"	0.72"

PLOT PLAN
Scale: 1" = 20'

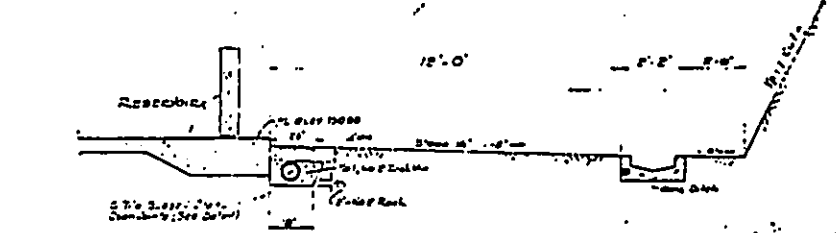
DETAIL OF CHAIN LINK FENCE
Scale: 1" = 10'

1976 JUN 24 PM 2:00

DEPT. OF PUBLIC UTILITIES
CITY & COUNTY OF DENVER



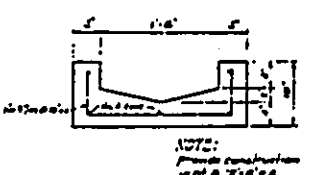
TYPICAL SECTION
Scale 1"=20'



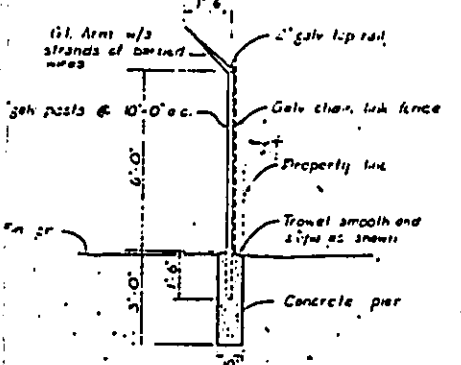
SECTION A-A
Scale 1/2"=1'-0"



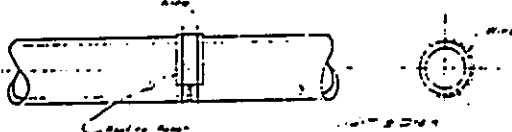
DET. OF BERM DITCH
Scale 1"=1'-0"



DET. OF CONC. DITCH
Scale 1"=1'-0"



DETAIL OF CHAIN LINK FENCE
Scale 1/2"=1'-0"



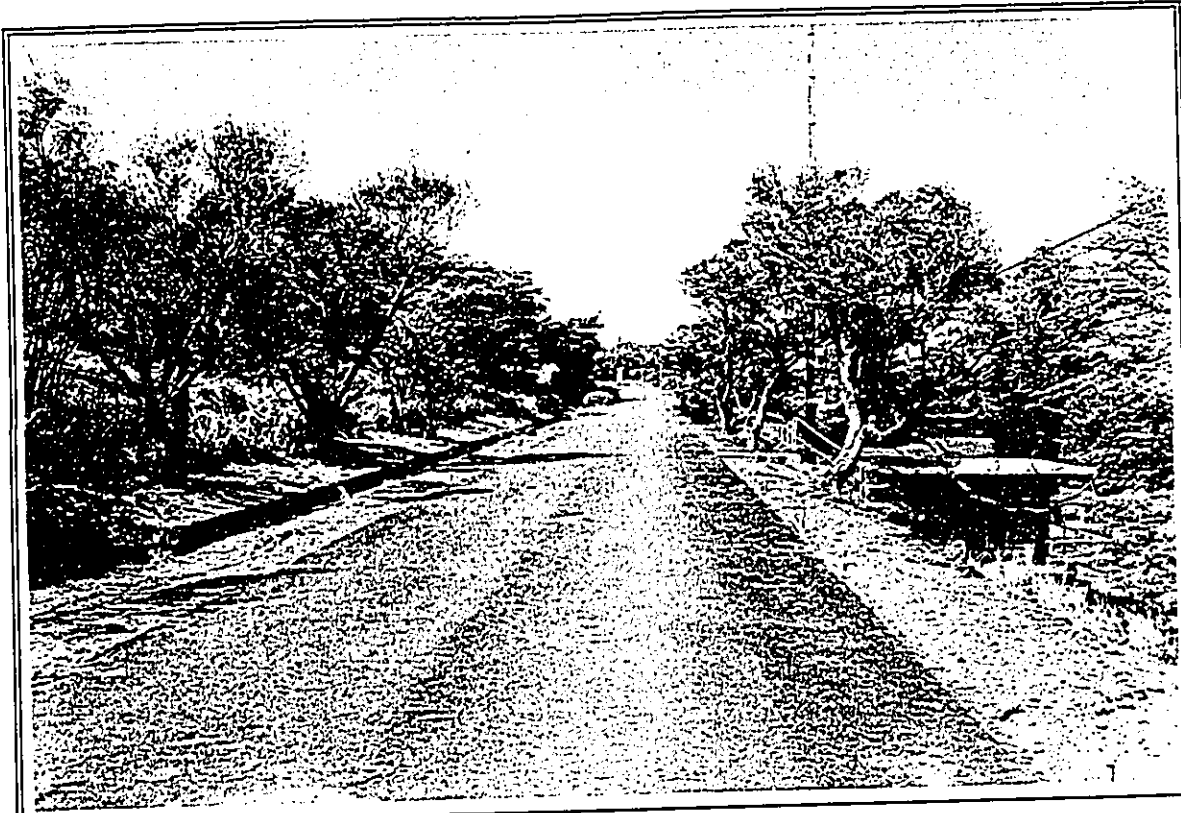
DET. OF TILE DRAIN
Scale 1"=1'-0"

NOTE: Section A-A shows the reservoir area - Section A-A shows the reservoir area.

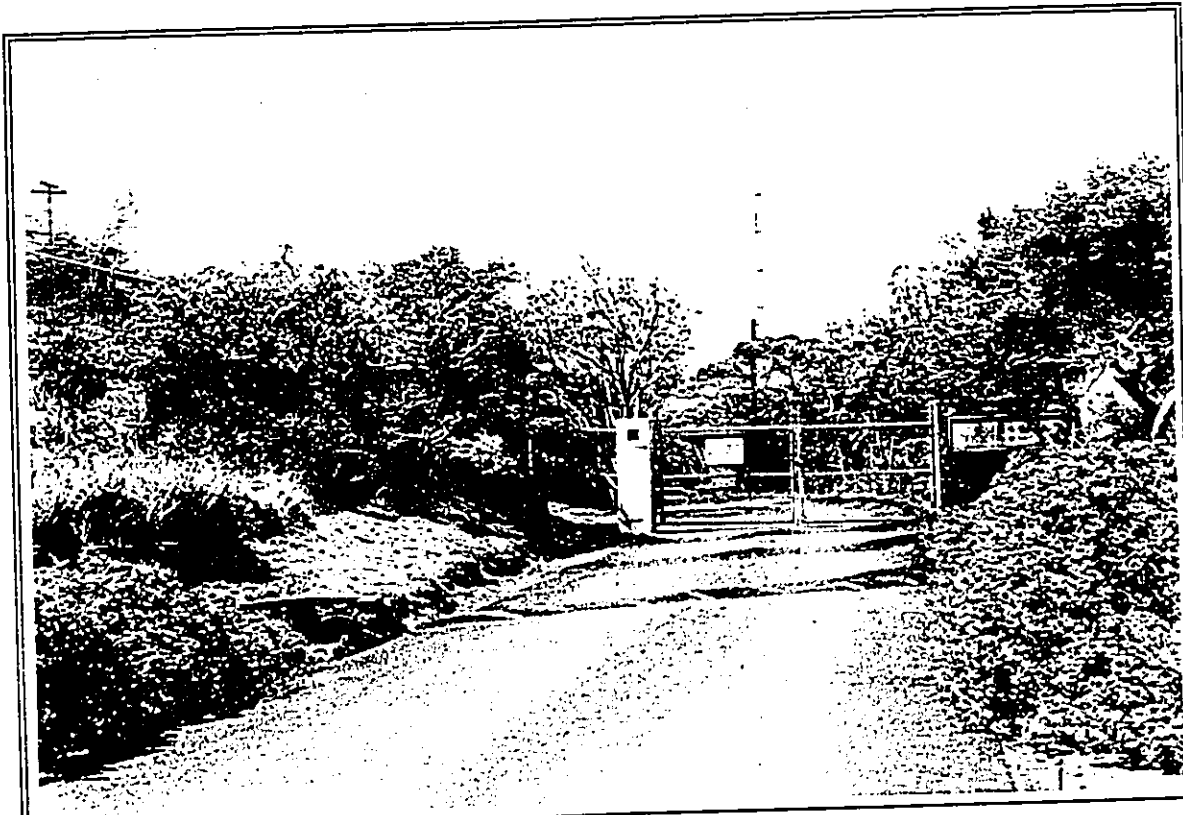
FIELD BOOK NO. 639
CALC BOOK NO. 122

JOB 202 W		DESIGNED BY W.L.
KOKO HEAD ONE MILLION GALLON		DRAWN BY R.H.
PRESTRESSED CONCRETE RESERVOIR		TRACKED BY R.H.
PLOT PLAN		ENGINEER T.I.
APPROVED: <i>[Signature]</i>		CHECKED BY S.C.
SCALE OF SHEET	DATE 5/20/63	FILE 2
BOARD OF WATER SUPPLY		NO. 15
SHEET 2 OF 15 SHEETS		2

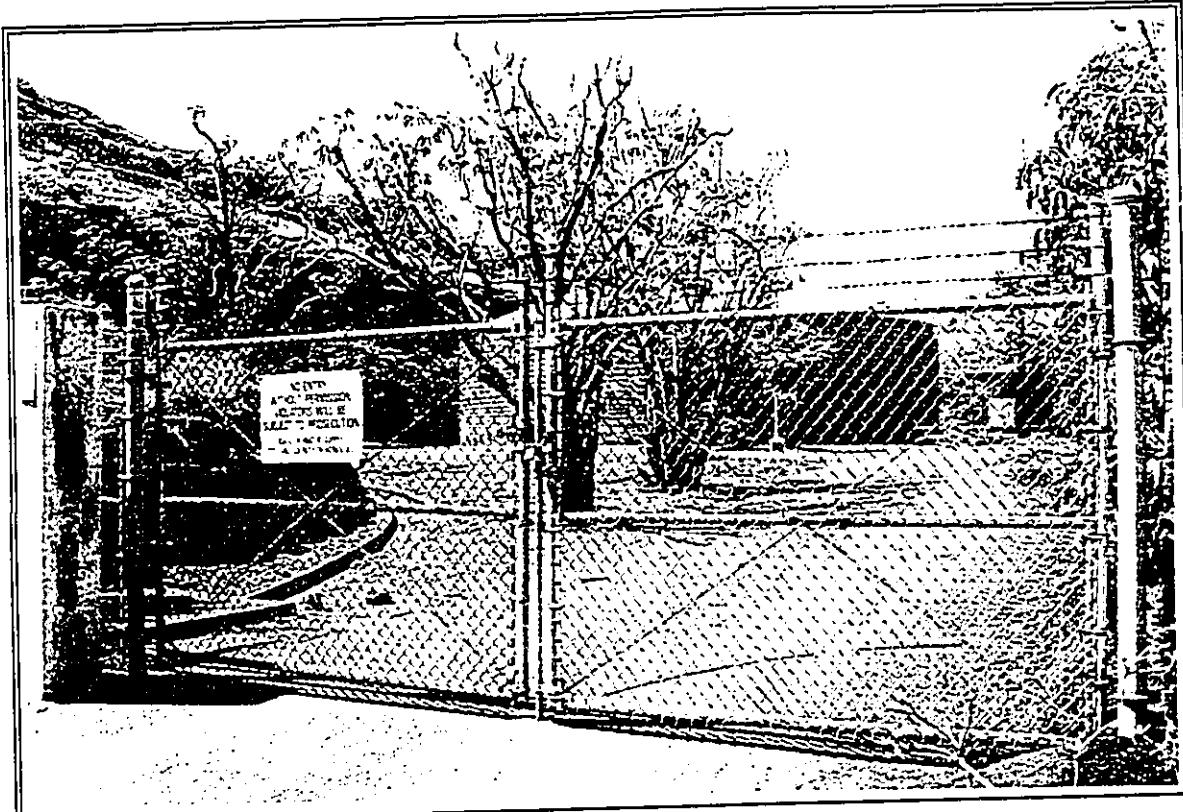
APPENDIX II
SITE PHOTOGRAPHS



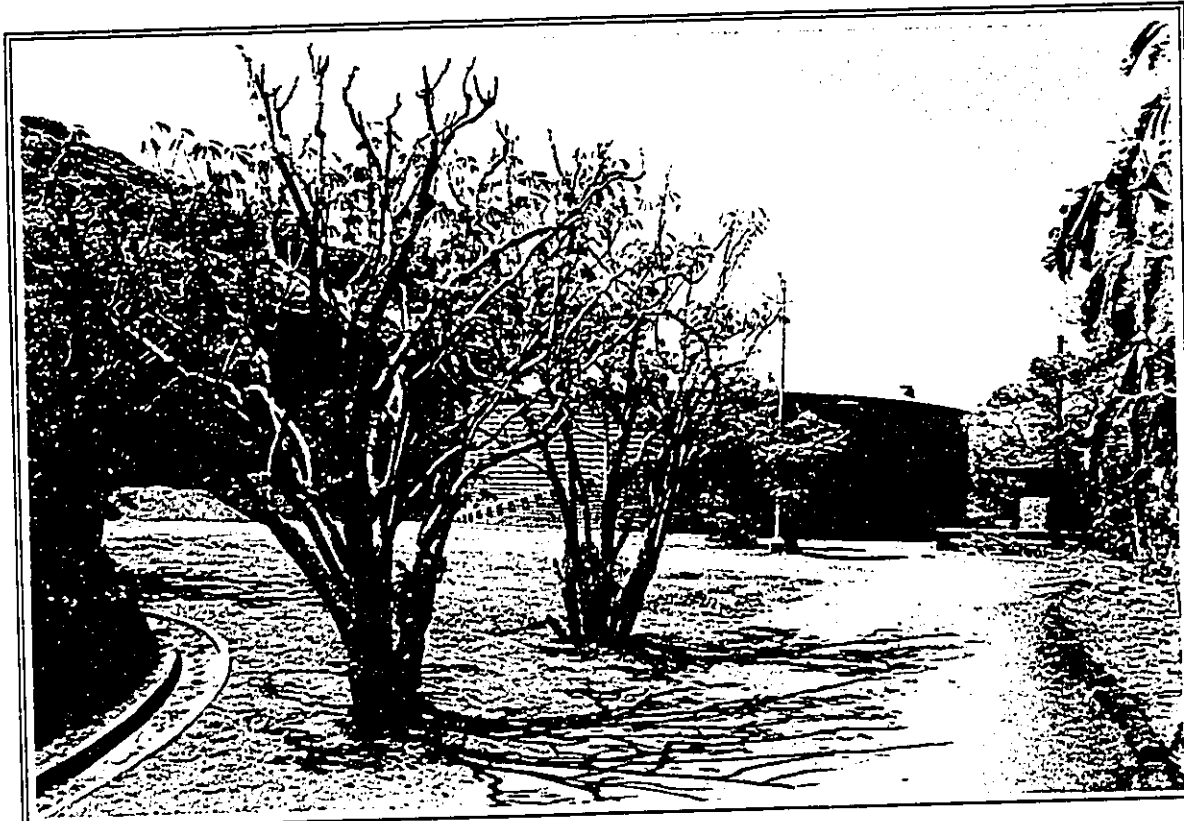
View 1
View From Kalaniana'ole Highway Into Project Site



View 2
View Outside of Security Gate



View 3
View Of Existing 1.0 mg Water Reservoir



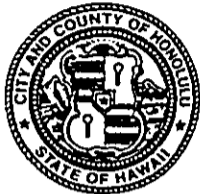
View 4
View Of Existing 1.0 mg Water Reservoir

APPENDIX III
AGENCY COMMENTS

96-01767

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAII 96813

JEREMY HARRIS
XXXXXXXXXXXX
MAYOR



DONA L. HANAIKE
XXXXXXXXXXXX
DIRECTOR

ALVIN K.C. AU
DEPUTY DIRECTOR

March 19, 1996

1996 MAR 25 AM 10:32
DEPT. OF LAND UTILIZATION
CITY & COUNTY OF HONOLULU

TO: PATRICK T. ONISHI, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM: DONA L. HANAIKE, DIRECTOR
DEPARTMENT OF PARKS AND RECREATION

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR KOKO HEAD WATER
RESERVOIR, KOKO HEAD, OAHU, 96/SMA-011(JT)
TAX MAP KEY 3-9-12: 07

This responds to the subject environmental assessment prepared for the proposed project.

Based on our review of the subject document, we have no comments to offer at this time.

Should you have any questions, please contact Brian Suzuki of our Advance Planning Branch at extension 6316.

For DONA L. HANAIKE
Director

DLH:ei

We Add Quality to Life

KUSAO & KURAHASHI, INC.

Planning and Zoning Consultants

WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

May 31, 1996

Ms. Dona L. Hanaïke
Director
Department of Parks and Recreation
650 So. King Street, 10th Floor
Honolulu, Hawaii 96813

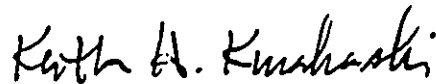
Dear Ms. Hanaïke:

**Subject: Draft Environmental Assessment for the Koko Head 170-Foot
Reservoir - Office of Environmental Quality Control
Response Dated April 19, 1996**

On behalf of the applicant, Maunalua Associates, Inc., I would like to thank you response to the Department of Land Utilization's request for comments regarding the subject Environmental Assessment.

Your letter and our response will be included in the Final Environmental Assessment.

Very truly yours,



Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Associates, Inc.

96-02085



OFFICE OF STATE PLANNING

Office of the Governor

MAILING ADDRESS: P.O. BOX 3540, HONOLULU, HAWAII 96811-3540
STREET ADDRESS: 250 SOUTH HOTEL STREET, 4TH FLOOR
TELEPHONE: (808) 587-2846, 587-2800

BENJAMIN I. CAYETANO, Governor

FAX: Director's Office 587-2848
Planning Division 587-2824

Ref. No. Z-0070

April 1, 1996

The Honorable Patrick T. Onishi
Director
Department of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Attn: Ms. Joan Takano

Dear Mr. Onishi:

Subject: Special Management Area Use Permit Application and Draft Environmental Assessment Report - Koko Head 170-Foot Water Reservoir Addition

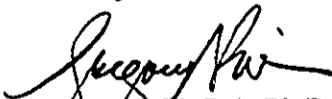
We have the following comments on the above document. The project is required to comply with the Coastal Zone Management (CZM) objectives and policies, and a complete assessment of the project's compliance should be incorporated into the environmental assessment.

However, we note that the document does not identify the source of water for the 1.0 mg reservoir. This is necessary to determine whether there will be impacts to other water sources or fresh water ecosystems. This concern is based on policy 4(D) of Chapter 205A which states, "Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards."

Page 8 refers to Appendix I and II which are described as a 1960 Plot Plan by the Board of Water Supply and recent area photographs. However, these appendices were not included in the document. They appear to be important to evaluating the project's compliance with the CZM objective and policies relating to scenic and open space resources.

We appreciate the opportunity to provide comments. If there are any questions, please contact Christina Meller of our CZM Program at 587-2845.

Sincerely,


Gregory G. Y. Pai, Ph.D.
Director

cc: Department of Land and Natural Resources, CWRM
Office of Environmental Quality Control

APR 1 1996
OFFICE OF STATE PLANNING
HONOLULU, HAWAII

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6852
FAX (808) 521-4292

May 31, 1996

Gregory G.Y. Pai, Ph.D.
Director
Office of State Planning
Office of the Governor
P.O. Box 3540
Honolulu, Hawaii 96811-3540

Dear Mr. Pai:

**Subject: Draft Environmental Assessment for the Koko Head 170-Foot
Reservoir - Office of State Planning
Comments Dated April 1, 1996**

Thank you for your prompt response to the Department of Land Utilization's request for comments on the subject Draft Environmental Assessment (DEA).

The project's compliance with the Coastal Zone Management (CZM) objectives and policies will be included in the Final Environmental Assessment.

The water to be stored in the proposed 1.0 MG reservoir will come from existing wells that presently fill the existing 1.0 MG reservoir on the property. If water is available from the Board of Water Supply's (BWS) existing water sources at the time the proposed reservoir is built in the 1997 to year 2000 time frame, no new wells will be required to fill the reservoir. However, if existing water sources are not sufficient, those future projects which created the demand for this additional storage will not be granted approval by BWS until additional water sources are developed by BWS or the landowners and/or developers of those projects.

We inadvertently failed to include Appendices I and II in the DEA. They will be included in the Final EA for the project. A copy of these two appendices are included for your consideration.

Gregory G.Y. Pai, Ph.D.
Page 2

Your letter and this response will be included in the Final Environmental Assessment.

Should there be questions, or should you wish to discuss this project further, please contact me.

Very truly yours,

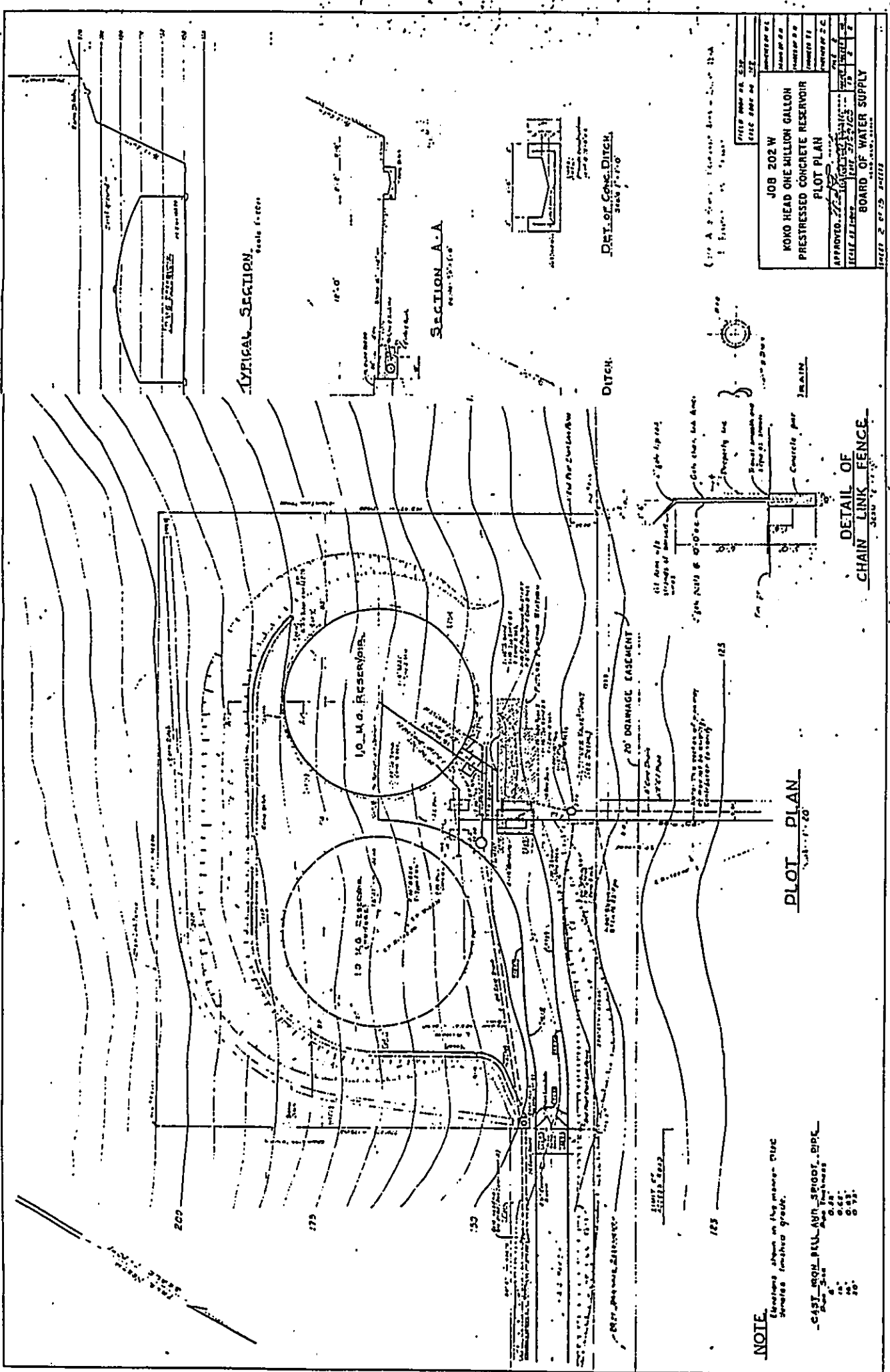
Keith H. Kurahashi

Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Associates, Inc.

APPENDIX I
1960 RESERVOIR PLAN

DOCUMENT CAPTURED AS RECEIVED

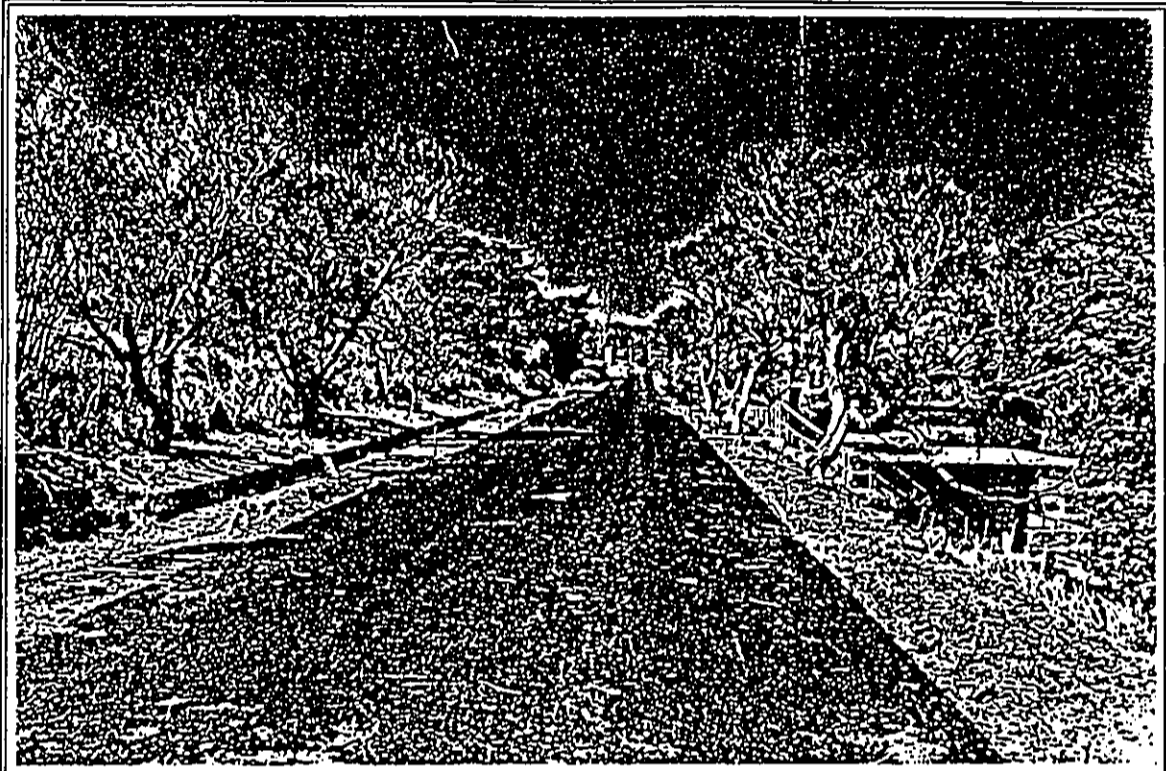


NOTE.
 Elevations shown in this drawing are
 based on finished grade.
 -ELEV. FROM M.L.L. - 100.00 FT. - 100.00 FT.
 100.00 FT. 100.00 FT.
 100.00 FT. 100.00 FT.
 100.00 FT. 100.00 FT.

FILED 1964 APR 22	1964 APR 22
PROJECT NO. 202 W	1964 APR 22
JOB 202 W	
KOKO HEAD ONE MILLION GALLON	
PRESSED CONCRETE RESERVOIR	
PLOT PLAN	
APPROVED: [Signature]	1964 APR 22
SCALE: AS SHOWN	1964 APR 22
BOARD OF WATER SUPPLY	

1964 APR 22

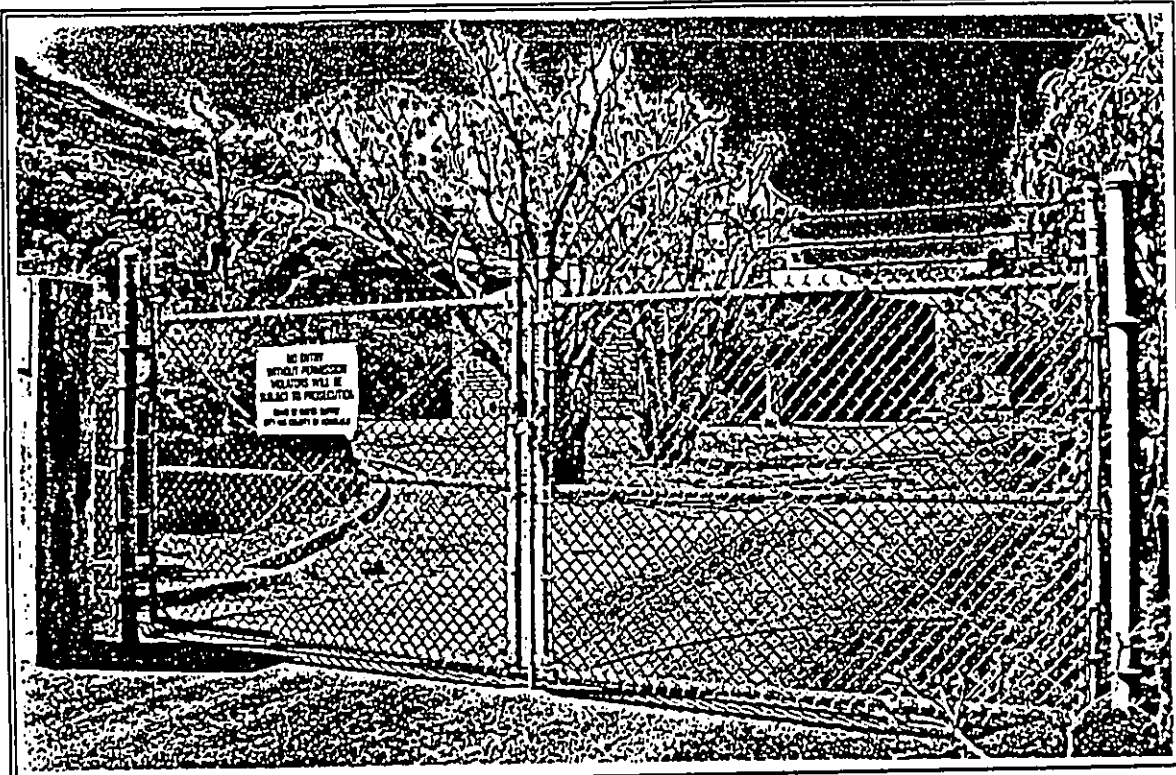
APPENDIX II
SITE PHOTOGRAPHS



View 1
View From Kalaniana'ole Highway Into Project Site



View 2
View Outside of Security Gate



View 3
View Of Existing 1.0 mg Water Reservoir



View 4
View Of Existing 1.0 mg Water Reservoir

187-C Hokuani Street
Hilo HI 96720

April 2, 1996

Maunalua Associates, Inc.
P.O. Box 25007
Honolulu HI 96825

Dear Sir or Madam:

Re: Draft Environmental Assessment for Koko Head 170-foot
Water Reservoir Addition

Thank you for the opportunity to comment on this Draft EA. My comments follow:

DLU Master Application Form:

On the blank in this form where the applicable state land use district is to be written in, the application states that the parcel is in the "Urban" land use district. This is at variance with information elsewhere in the application, where it is clearly indicated that the land is in the "Conservation" district. This should be corrected.

Water Source:

The proposed action is construction of a water tank which, the Draft EA states, "is needed to provide for the water needs of the existing and future Hawai'i Kai area residents and businesses" (page 12). But it is wrong to think the environmental impacts of this action are limited to those narrowly associated with the brick-and-mortar phase. Underlying the project is the assumption that water will be available to fill it. Thus, the Draft EA should address the source of water that will be stored in and drawn from this tank.

Will additional wells need to be developed to supply this tank, or will existing wells that feed the adjoining tank simply be pumped at a higher rate? What will the effect be on the source aquifer? Will well-drilling or well-pumping permits need to be obtained or existing ones amended by application to the Commission on Water Resource Management?

Future Needs:

Justification for this tank is provided on page 24, where the statement is made: "Undeveloped lands currently zoned for urban development will require approximately 932,700 gallons of additional water storage." But how much of this additional storage is needed in the areas that can be served by a tank at the 170-foot elevation? The implication in the Draft EA is that the 1 mg-reservoir planned in this project will suffice to serve all new needs, when full build-out of "existing and future Hawaii Kai residences and businesses" occurs. Yet many of the anticipated residential sites are above the 170-foot elevation, as I understand it. How will those areas be served by this tank?

Finally, I would ask if the full build-out anticipates City Council final approval of the consent decree approved in U.S. Federal Court as settlement of various lawsuits filed by Maunalua Associates and others against the City and County of Honolulu. If so, then it may be premature to obtain approvals for developments ancillary to this build-out unless and until final Council approval is obtained and has withstood such legal challenges as will probably be brought.

Maunalua Associates, Inc.
Page Two

April 2, 1996

Liability:

I am given to believe by the Draft EA that this reservoir will be turned over to the Honolulu Board of Water Supply, to become part of its municipal water delivery system. In the event there is an eventual failure of this tank that might involve damage to private property, and which results from faulty construction, will the Board of Water Supply be indemnified against claims for that damage by the developer? Or will the BWS (i.e., the public) be forced to pay the tab without recourse to legal action against the builder or developer?

Thank you, again, for the opportunity to comment on this Draft EA. I look forward to your response.

Yours truly,

Patricia Tummons

cc: OEQC
Department of Land Utilization, City and County of Honolulu
Division of Land Management, Department of Land and Natural Resources
Kusao & Kurahashi, Inc. ✓

KUSAO & KURAHASHI, INC.

Planning and Zoning Consultants

WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

May 31, 1996

Ms. Patricia Tummons
187-C Hokulani Street
Hilo, Hawaii 96720

Dear Ms. Tummons:

Subject: Draft Environmental Assessment for Koko Head 170-foot
Water Reservoir Addition

On behalf of the applicant, Maunalua Associates, Inc., I would like to thank you for your comments, dated April 2, 1996, regarding the subject Environmental Assessment. The following is a summary of our responses to your comments and concerns:

DLU Master Application Form:

Thank you for informing us of this error. We will submit a letter to the Department of Land Utilization correcting the Application's State Land Use designation to "Conservation" district.

Water Source:

The water to be stored in the proposed 1.0 MG reservoir will come from existing wells that presently fill the existing 1.0 MG reservoir on the property. If water is available from the Board of Water Supply's (BWS) existing water sources at the time the proposed reservoir is built in the 1997 to year 2000 time frame, no new wells will be required to fill the reservoir. However, if existing water sources are not sufficient, those future projects which created the demand for this additional storage will not be granted approval by BWS until additional water sources are developed by BWS or the landowners and/or developers of those projects.

Future Needs:

The 932,000 gallons of additional water storage required for undeveloped lands currently zoned for urban development were inadvertently understated. The correct amount is 1,059,900 gallons. These currently zoned lands will all be served by the 170-foot reservoir system.

Ms. Patricia Tummons
Page 2

The purpose of obtaining land use approvals to construct the additional 1.0 MG reservoir is not associated with the proposed entitlement under the consent decree pending approval by the U.S. Federal Government as settlement of various lawsuits. As indicated in our application report, the reservoir is required for existing urban zoned lands and lands that already received Development Plan approvals for urban development.

The full build-out that we are preparing for with this reservoir is based on uses already approved by the City Council on the existing zoning and development plan land use map for the Hawaii Kai area.

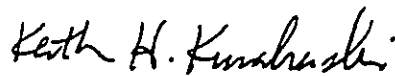
The full build-out does not require City Council final approval of the consent decree approved in U.S. Federal Court as settlement of the various lawsuits filed by landowners and developers in Hawaii Kai.

Liability:

As discussed in the application report, the applicant will develop the proposed reservoir at no cost to the City and dedicate it to the Honolulu Board of Water Supply (BWS). The construction drawings for the reservoir will be subject to review and approval by BWS and must meet BWS standards. Prior to dedication, the BWS will inspect the reservoir, built according to BWS standards. This is common practice for large public infrastructure constructed by private developers and dedicated to the City. The BWS will then be responsible for the reservoir through a formal agreement dedicating the improvements to the BWS. The liability for the design and construction of the reservoir would probably lie with the engineering firm that designed the reservoir and the contractor that built it. Their liability would probably extend beyond the point of dedication of the facility to the City and possibly run to the end of the projected useful life of the reservoir.

Again, thank you for your comments and concerns. Should you have any additional questions or concerns please contact our office.

Very truly yours,



Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Associates, Inc.

96-02109

LIFE OF THE LAND

HAWAII'S OWN ENVIRONMENTAL ACTION GROUP
EDUCATION, RESEARCH, LOBBYING & LITIGATION
PROTECTING HAWAII'S FRAGILE ENVIRONMENT

APRIL 4, 1996

Patrick T. Onishi, Director
Department of Land Utilization
City and County of Honolulu
650 S. King St, 7th Floor
HONOLULU, HI 96813

Maunalua Associates, Inc
P. O. Box 25007
Honolulu, HI 96825

Kusao & Kurahashi, Inc
Planning and Zoning Consultants
210 Ward Ave, Suite 12
Honolulu, HI 96814

DEPT. OF LAND UTILIZATION
CITY & COUNTY OF HONOLULU

1996 APR -8 11 4:13

Re: **Special Management Area Permit Application
Proposed Koko Head 170-Foot Water Reservoir Addition
Maunalua, Oahu, Hawaii. Tax Map Key: 3-9-12:7**

The proposed water tower may service DPed (Development Plan approved) and Zoning approved development. The water to fill it will come from the difference between water allocated to Hawaii Kai and the current Hawaii Kai usage (7.0 mgd daily allowance minus 6.3 mgd current usage). So far, so good.

But the water tower will not be needed for several years. Then why build it now? Because the water tower is a requirement of the Unilateral Agreement between the City and County of Honolulu, Bishop Estate and Maunalua Associates (Kaiser Development Corporation).

Who then is the applicant? If it is only Maunalua, then the settlement is industry initiated --> and this segment is part and parcel to a larger development which requires an EIS.

If the applicant includes the City and County of Honolulu, then why are they omitted from the applicant page.

If the City and County is really interested in following an EIR process, whatever that is, then they should. Further deviations from state and federal law will provide additional ammunition in the legal challenge which is coming.

Henry Q Curtis

HENRY Q CURTIS
Executive Director

KUSAO & KURAHASHI, INC.

Planning and Zoning Consultants

WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

May 31, 1996

Mr. Henry Q. Curtis
Executive Director
Life of the Land
1111 Bishop St., Suite 511
Honolulu, Hawaii 96813

Dear Mr. Curtis:

**Subject: Draft Environmental Assessment for the Koko Head 170-Foot
Reservoir - Office of Environmental Quality Control
Comments Dated April 4, 1996**

Thank you for your prompt response to the Department of Land Utilization's request for comments on the subject Draft Environmental Assessment (DEA).

The water reservoir will be built between 1997 and the year 2000. It is projected that at that point in time, we will be close to fully utilizing the capacity of the existing reservoirs and additional water storage will be necessary to allow development in Hawaii Kai on already zoned lands. The land use permit process, including processing the Conservation District Use Permit, is expected to continue over the next six to eight months. Upon receipt of the land use approvals construction drawings will have to be prepared and reviewed and approved by the City. The actual construction of the reservoir will be timed to insure that future development (approved on the zoning and/or development plan land use maps) will not be held up for lack of storage capacity.

The applicant is Maunalua Bay Associates, Inc. and not the City and County of Honolulu. As is true with most public facilities of this type, the reservoir will eventually be turned over (dedicated) to the City at no cost, but it will be built by Maunalua Bay Associates, Inc., the applicant.

We are processing this application in full compliance with State and County laws (Federal laws are not applicable for this project). Permits required for this reservoir are being processed independent of the EIR process since the reservoir is not an infrastructure required for projects in the EIR. This reservoir will be needed to support existing and planned development (approved on the zoning and/or development plan land use maps) regardless of what occurs during the EIR process. It is prudent on our part to have the


Mr. Henry Q. Curtis
Page 2

approvals necessary to construct this reservoir in place and to be able to construct this reservoir in advance of the full utilization of the storage capacity of existing reservoirs.

Your letter and this response will be included in the Final Environmental Assessment.

Should there be questions or should you wish to discuss this project further, please contact me.

Very truly yours,



Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Bay Associates, Inc.

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

April 8, 1996

Mr. Patrick Onishi
Director of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Onishi:

Subject: Draft Environmental Assessment for the Koko Head 170-foot Reservoir

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

1. Please provide details about the future water needs of the Hawaii Kai area relating to this project. Which parcels would this reservoir serve? How many housing units are involved?
2. Mitigation measures to reduce visual impacts should be proposed. We suggest painting the reservoir tank in a neutral earth-tone color and landscaping to minimize visual impacts.
3. Mitigation measures to reduce air quality and water quality impacts during construction must be proposed.
4. Please provide reasons for supporting the determination based on an analysis of the significance criteria in section 11-200-12 of the Hawaii Environmental Impact Statement Rules. Refer to section D of the enclosed sample as a guideline.

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

Sincerely,


Gary Gill
Director

c: Michael Morita
Keith Kurahashi

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 536-6652
FAX (808) 521-4292

May 31, 1996

Mr. Gary Gill
Director
Office of Environmental Quality Control
State of Hawaii
220 So. King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Draft Environmental Assessment for the Koko Head 170-Foot Reservoir - Office of Environmental Quality Control Comments Dated April 8, 1996

Thank you for your prompt response to the Department of Land Utilization's request for comments on the subject Draft Environmental Assessment (DEA).

The following responds to each of the four comments that you provided:

1. We have enclosed a copy of a portion of Zoning Map No. 1 for Hawaii Kai which details the projects zoned but not developed that will be supported by the proposed reservoir addition. We have also enclosed a table describing the water storage requirements for each of the zoned projects.

We have also enclosed a copy of a portion of the Development Plan Land Use Map for East Honolulu which details the projects designated on the Development Plan (DP) but are not yet zoned. We have again enclosed a table describing the water storage requirements for each of the DP projects.

The projected water storage requirements are based on Board of Water Supply's (BWS) standards, which are summarized as follows:

Board of Water Supply Water Storage Standards

- | | | |
|----|---------------------------|----------------|
| a. | Single Family Residential | 750 gals./unit |
| b. | Multi-Family Units | 600 gals./unit |

Mr. Gary Gill, Director
Page 2

c.	Industrial	6,000 gals./acre
d.	Commercial	4,500 gals./acre
e.	Parks	6,000 gals./acre

The existing reservoir system and this planned Koko Head 170-foot reservoir will jointly service the existing and planned development (approved on the zoning and/or development plan land use maps). It is not possible to specify which particular parcels will be served by this reservoir, however, because of its location, there is a good chance that this reservoir will primarily serve existing development and zoned lands near the marina, which would free other existing reservoirs to service other areas that include existing and planned developments (approved on the zoning and/or development plan land use maps). An overall service area for the 170-foot elevation reservoirs is enclosed.

2. The reservoir tank will be painted in a neutral earth-tone color as required by the BWS to match the existing reservoir. We will continue the existing landscape treatment that screens the existing water reservoir from view. If necessary, additional trees will be added to provide further landscaped screening of the proposed reservoir.
3. In order to mitigate temporary construction impacts on air quality, the contractor will be directed to incorporate frequent (twice daily) watering of exposed soil areas and to landscape the project site as soon as possible, upon completion of construction to minimize the length of time of soil exposure. Contractors working on the project will also be directed to insure that their vehicles engines are properly maintained to insure efficient operation and minimized vehicle exhaust fumes. Project contractor's will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality of Kalaniana'ole Highway is most sensitive.

In order to mitigate temporary construction impacts on noise, the contractor will be directed to insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractor complies with existing noise regulations of the State and County.

Mr. Gary Gill, Director
Page 3

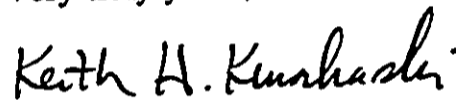
In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing drainage impacts to the near shore waters. Mitigation measures may include small sedimentation ponds as needed. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

4. We have enclosed reasons for supporting the negative declaration determination based on an analysis of the significance criteria in Section 11-200-12 of the Hawaii Environmental Impact Statement Rules.

Your letter and this response will be included in the Final Environmental Assessment.

Should there be questions or should you wish to discuss this project further, please contact me.

Very truly yours,



Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Bay Associates, Inc.

**NOTICE OF DETERMINATION
NEGATIVE DECLARATION FOR THE PROPOSED
KOKO HEAD 170-FOOT WATER RESERVOIR**

A. Applicant

Maunalua Associates, Inc.

B. Accepting Authority

Department of Land Utilization

C. Description of the Proposed Action

The applicant plans to construct a 1.0 million gallon (mg) water reservoir for additional water storage next to the existing 1.0 mg water reservoir on this 2.038 acre site within Hawaii Kai. The proposed development will consist of the proposed 1.0 mg water reservoir and connection to the existing underground piping, valves and pump station.

The project site was originally developed in 1960 based on plans approved by the Board of Water Supply. The plot plan depicts a 1.0 mg water reservoir that has been built and a second (future) 1.0 mg water reservoir on the lot. The site was graded and developed with a cut in the slope to accommodate both the existing water reservoir and the planned future water reservoir. Because of this earlier preparation of the site the installation of the new water reservoir will require very limited grading, possibly just the excavation to construct footings for the new reservoir.

The applicant considered four alternative sites for this reservoir project, including this Koko Head site, the existing Kaluanui 170-foot Reservoir site, the existing Kamiloiki 170-foot Reservoir site, and a proposed Kamilo Ridge Reservoir site. The four sites are on the marina side of Hawaii Kai since most of the planned developments (approved on the zoning and/or development plan land use maps) occurs in this side of Hawaii Kai.

In reviewing the grading plans for the Kaluanui and the Kamiloiki sites, both sites were graded for only the existing reservoirs on each site. Both sites have cut slopes on three sides and a fill slope on the fourth side. Based on the grading plans and location of the existing reservoirs on each site, these sites cannot accommodate an additional 1.0 million gallon reservoir. In contrast, the Koko

Head site was graded and prepared for an additional 1.0 million gallon reservoir when it was first developed in 1960.

The schematic plan for the proposed reservoir at the Kamilo Ridge site indicates that Kamilo Ridge can accommodate a 1.0 million gallon reservoir. However, in contrast to the Koko Head site, all improvements for the new site must be constructed, including access driveway, water transmission main from Hawaii Kai Drive to the reservoir, grading, storm drain system, electric and telemetering facilities, 1.0 million gallon reservoir, on-site piping control building and site work. The cost for the additional work developing this site over and above the cost of construction of the reservoir itself is about \$1,230,000. This would be \$1,230,000 more than what it would cost to develop the reservoir at the Koko Head site. In addition, construction of a second reservoir at the Koko Head site would also be less obtrusive and objectionable to the public than introducing a new facility at Kamilo Ridge.

Based on these findings, the Koko Head site, which would require a minimal amount of grading, would be substantially less impacting on surrounding residents, and would be less costly than the other three sites, was selected for the proposed reservoir.

D. Determination and Reasons Supporting Determination

The proposed project would not have a significant effect on the environment and therefore preparation of an environmental impact statement is not required. Based on the "Significance Criteria", Section 12 of Hawaii Administrative Rules Title 11, Chapter 200, "Environmental Impact Statement Rules", which were reviewed and analyzed, we have come to the following conclusions:

1. **No irrevocable commitment to loss or destruction of any natural or cultural resource would result.**

The Koko Head site was originally graded and developed with a cut in the slope to accommodate both the existing water reservoir and the planned future water reservoir and use of the site would not result in the loss of any natural resource. The site is fenced and locked with access provided only to Board of Water Supply (BWS) personnel. No significant natural resources are present on the site.

Although there are documented archaeological sites some distance away, (Koko Head petroglyphs and the Hanauma Rock Shelter) there are no known archaeological or historic sites within the project site. The Hanauma Rock Shelter is the closest archaeological site and is located approximately

1,000 feet away, which is near the Hanauma Bay Nature Park parking lot. The subject property is not listed on either the Hawaii or National Registers of Historic Places.

Since the site has been extensively developed with no previous record of historic or archaeological discoveries, the proposed development will not disturb any such sites or artifacts. With no previous record of historic or archaeological discoveries and the extensive development existing on the site, the proposed development is not expected to have an impact on archaeological resources.

In addition, since the site was previously graded and developed with a cut in the slope to accommodate both the existing water reservoir and this planned future water reservoir, the installation of the new water reservoir will require very limited grading, possibly just excavation to construct footings for the new reservoir.

During the construction of the project, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

2. **The action would not curtail the range of beneficial uses of the environment.**

The project will not curtail the range of beneficial uses of the environment. The project site is situated in a restricted access area where the BWS personnel are the only ones allowed entry. It does not serve any recreational purpose or provide any other beneficial use of the environment. The project will provide for water storage to meet the storage needs of the existing and planned development (approved on the zoning and/or development plan land use maps). It will provide a beneficial use of the environment to support the Hawaii Kai community with water storage to meet their needs in case of an emergency, should the existing water sources shut down or certain transmission lines from the water sources be incapacitated.

3. **The proposed action does not conflict with the state's long-term environmental policies or goals and guidelines.**

The State's environmental policies and guidelines are set forth in Chapter 344, Hawaii Revised Statutes, "State Environmental Policy". The broad

policies set forth include conservation of natural resources and enhancement of the quality of life. As discussed earlier, the project does not affect significant natural resources. The project will enhance the quality of life for the residents of the Hawaii Kai community by providing water storage to meet their needs in case of an emergency, should the existing water sources shut down or certain transmission lines from the water sources be incapacitated.

4. **The economic or social welfare of the community or state would not be substantially affected.**

Construction of the reservoir would result in temporary economic benefits to the construction industry. It will provide a benefit to the social welfare of the Hawaii Kai community by providing water storage to meet their needs in case of an emergency, should the existing water sources shut down or certain transmission lines from the water sources be incapacitated. The impacts from the reservoir itself will be minimal since it is situated on a site that was graded and developed with a cut in the slope to accommodate both the existing water reservoir and the planned future water reservoir. By maintaining and possibly adding to the existing landscaping, the site can be adequately screened from public view.

5. **The proposed action does not substantially affect public health.**

The proposed action will actually have a positive impact on public health by providing emergency water storage capacity to meet the needs of the Hawaii Kai community.

6. **No substantial secondary impacts, such as population changes or effects on public facilities, are anticipated.**

The proposed reservoir is designed to accommodate development already approved on the City and County of Honolulu's Development Plans and/or Zoning Maps. As such it will not provide an impetus for additional increases in population. The project will not have an impact on public facilities.

7. **No substantial degradation of environmental quality is anticipated.**

The project will have minimal impact on environmental quality. The reservoir facility's only long term impact would be on views and would be similar in impact to the existing reservoir, which is screened from view by

landscaping. The reservoir will not affect noise environment or air quality of the surrounding area, except for temporary impacts during construction.

In order to mitigate temporary construction impacts on air quality, the contractor will be directed to incorporate frequent (twice daily) watering of exposed soil areas and to landscape the project site as soon as possible, upon completion of construction to minimize the length of time of soil exposure. Contractors working on the project will also be directed to insure that their vehicles engines are properly maintained to insure efficient operation and minimized vehicle exhaust fumes. Project contractor's will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality of Kalaniana'ole Highway is most sensitive.

In order to mitigate temporary construction impacts on noise, the contractors will be directed to insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractors comply with existing noise regulations of the State and County.

In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing drainage impacts to the near shore waters. Mitigation measures may include small sedimentation ponds as needed. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

8. **The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable affects on the environment.**

The proposed project does not involve a commitment to larger actions nor will it result in cumulative impacts to the environment. As mentioned earlier, the proposed reservoir is designed to accommodate development already approved on the City and County of Honolulu's Development Plans and/or Zoning Maps. As such it will not provide an impetus for additional increases in population. The project will not have an impact on public facilities.

9. **No rare, threatened or endangered species or their habitats would be affected.**

As mentioned earlier, the site is a controlled access site with only the BWS personnel allowed entry. Being fenced in and landscaped with plants

introduced by the BWS, no rare, threatened, or endangered species or their habitats would be affected.

10. **Air quality, water quality or ambient noise levels would not be detrimentally affected.**

In order to mitigate temporary construction impacts on air quality, the contractor will be directed to incorporate frequent (twice daily) watering of exposed soil areas and to landscape the project site as soon as possible, upon completion of construction to minimize the length of time of soil exposure. Contractors working on the project will also be directed to insure that their vehicles engines are properly maintained to insure efficient operation and minimized vehicle exhaust fumes. Project contractors will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality of Kalaniana'ole Highway is most sensitive.

In order to mitigate temporary construction impacts on noise, the contractors will be directed to insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractors comply with existing noise regulations of the State and County.

In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing drainage impacts to the near shore waters. Mitigation measures may include small sedimentation ponds as needed. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

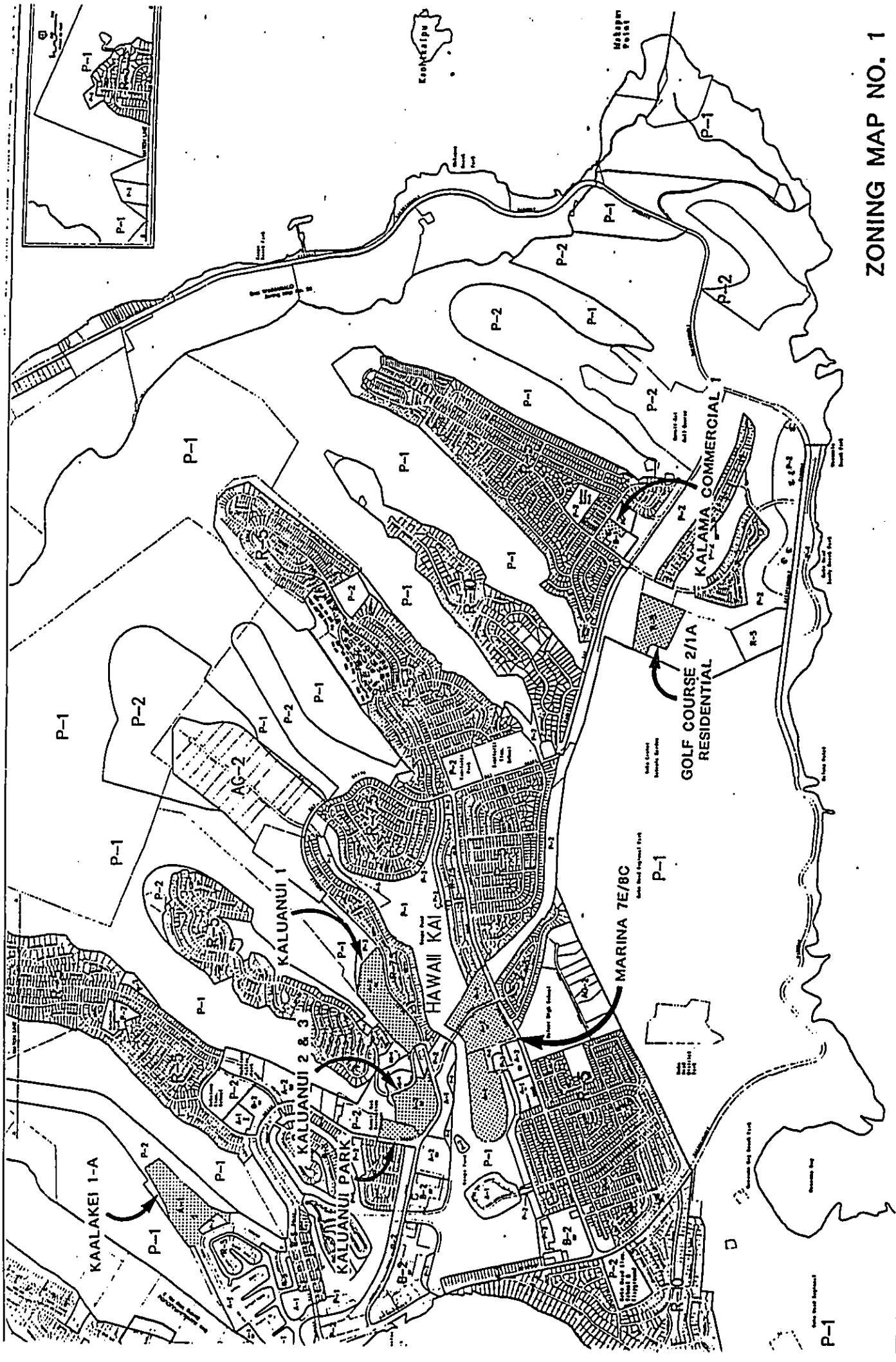
11. **The project would not affect environmentally sensitive areas, such as flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters.**

No environmentally sensitive areas would be affected. The project will not be situated on land involving or affecting flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters. The proposed reservoir will share a site with an existing reservoir that has been at that location for over 30 years.

**HAWAII KAI
WATER STORAGE REQUIREMENTS
FOR THE LOWER ELEVATION LANDS**

Project	Tax Map Key	Zoning	No. of Units/ Acreage	Water Storage Required (Gallons)
Golf Course 2/1A	3-9-10: Por. 01	R-5	116 units	87,000
Kaalakei 1-A	3-9-36: 1, 2 & 3	A-1	252 units 120 beds	67,900
Kalama Commercial	3-9-10: Por. 28	B-1	2.4 acs.	11,000
Kaluanui 1	3-9-08: Por. 13	A-2	290 units	174,000
Kaluanui 1 - Remnant	3-9-08: Por. 13	A-2	34 units	20,400
Kaluanui 2 & 3	3-9-08: Por. 40	A-2	503 units	301,800
Kaluanui Park	3-9-08: 39	P-2	3.3 acs.	19,800
Marina 7E/8C	3-9-08: 36	A-1, A-2	630 units	378,000
Total				1,059,900

DOCUMENT CAPTURED AS RECEIVED



ZONING MAP NO. 1

HAWAII KAI

**HAWAII KAI
WATER STORAGE REQUIREMENTS
FOR THE LOWER ELEVATION LANDS**

Existing Development	6,270,200 gallons
Existing Zoned Lands	<u>1,059,900 gallons</u>
Total	7,330,100 gallons

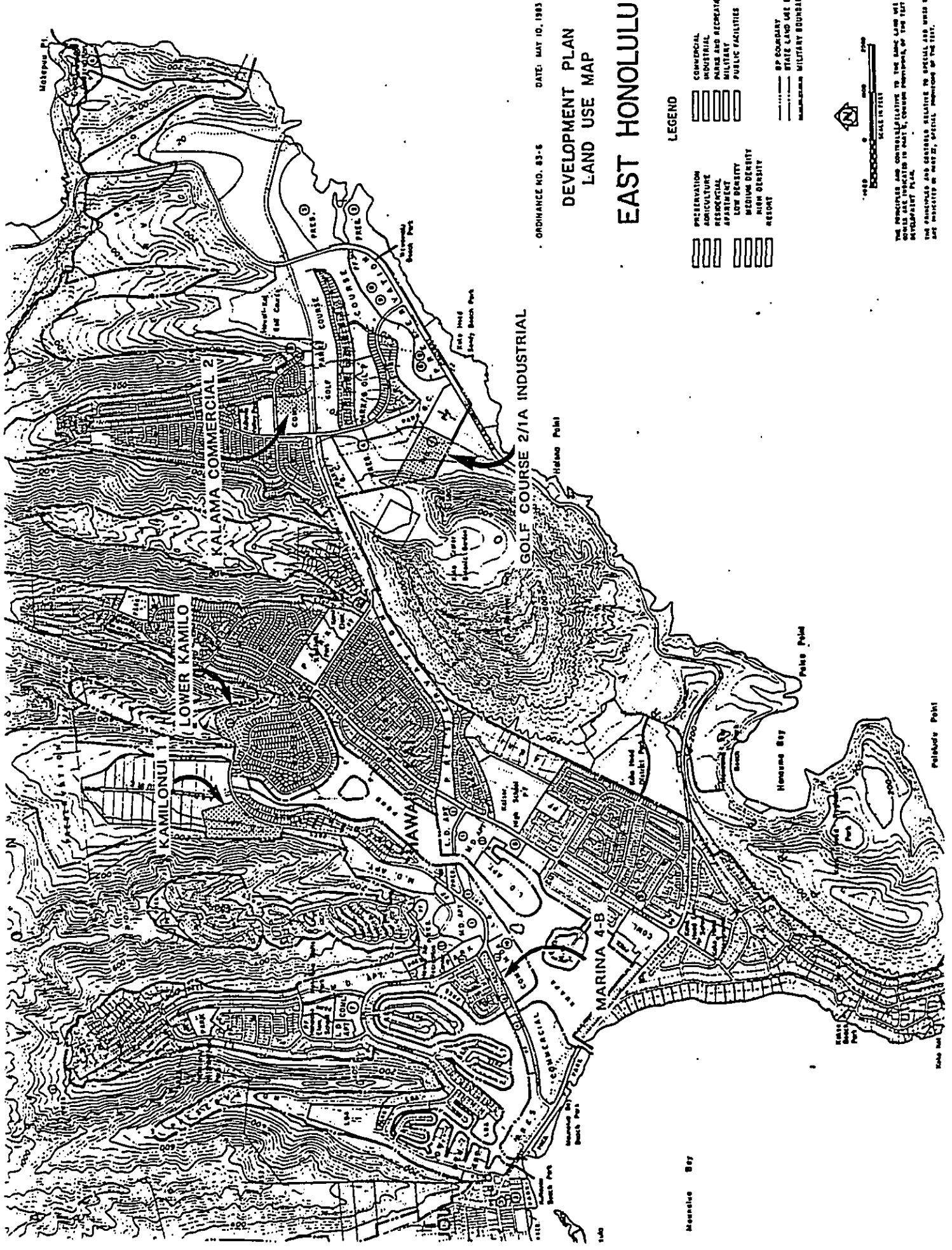
Urban Development Plan Designations

Lower Kamilo Ridge 66 to 108 single-family	9.0 acres (Res.)	49,500 to 81,000 gallons
Marina 4-B 38 to 60 single-family	5.1 acres (Res.)	28,500 to 45,000 gallons
Kamilonui-1 340 to 510 low-rise apartments	17.4 acres (LDA)	204,000 to 306,000 gallons
Golf Course 2/1A	10.9 acres (Ind.)	65,400 gallons
Kalama Valley	8.3 acres (Comm.)	<u>37,300 gallons</u>
Total		384,700 to 534,700 gallons

**Total Storage Requirements Based on Zoning and the
Existing East Honolulu Development Plan Land Use Map**

Between 7,714,800 and 7,864,800 gallons

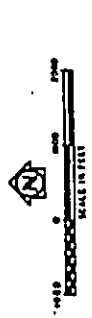
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ORDINANCE NO. 83-5 DATE: MAY 10, 1983
**DEVELOPMENT PLAN
 LAND USE MAP**

EAST HONOLULU

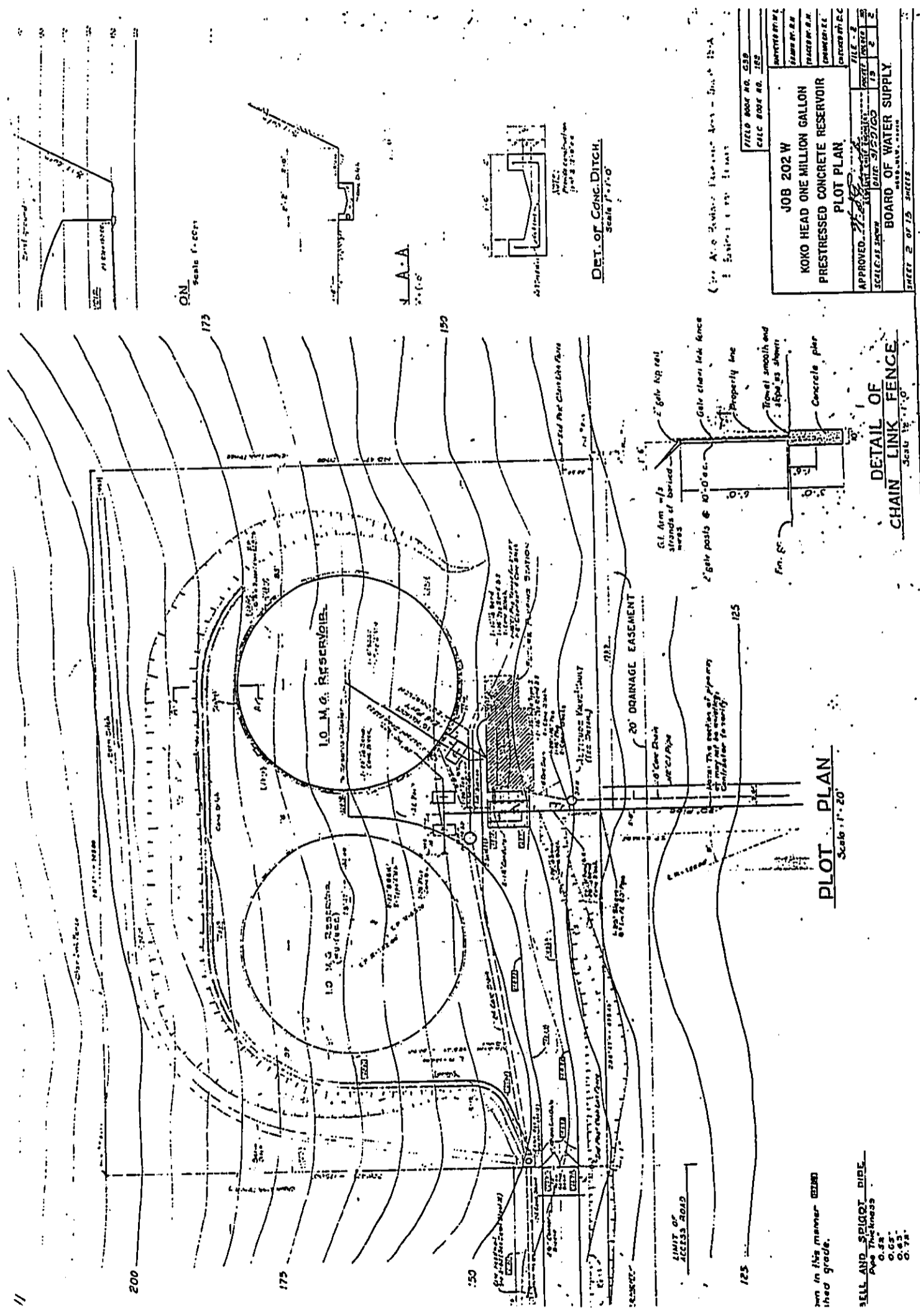
- LEGEND**
- | | | | |
|--|----------------|--|----------------------|
| | PRESERVATION | | COMMERCIAL |
| | AGRICULTURE | | INDUSTRIAL |
| | RESIDENTIAL | | PARKS AND RECREATION |
| | APARTMENT | | MILITARY |
| | LOW DENSITY | | PUBLIC FACILITIES |
| | MEDIUM DENSITY | | STATE LAND USE B |
| | HIGH DENSITY | | MILITARY BOUNDARIES |
| | RESORT | | |



THE BOUNDARIES AND CONTROLS RELATIVE TO THE LAND USE MAP ARE SUBJECT TO CHANGE IN ACCORDANCE WITH THE CITY'S DEVELOPMENT PLAN.
 THE BOUNDARIES AND CONTROLS RELATIVE TO SPECIAL AND ZONED ARE INDICATED BY DASHED OR SOLID LINES OF THE CITY.

Honolulu Bay

DOCUMENT CAPTURED AS RECEIVED



WELL AND SPIGOT PIPE
 Run in the manner shown
 into grade.
 Pipe Thickness
 0.32"
 0.65"
 0.83"
 0.78"

PLOT PLAN
 Scale 1" = 20'

DETAIL OF CHAIN LINK FENCE
 Scale 1" = 10'

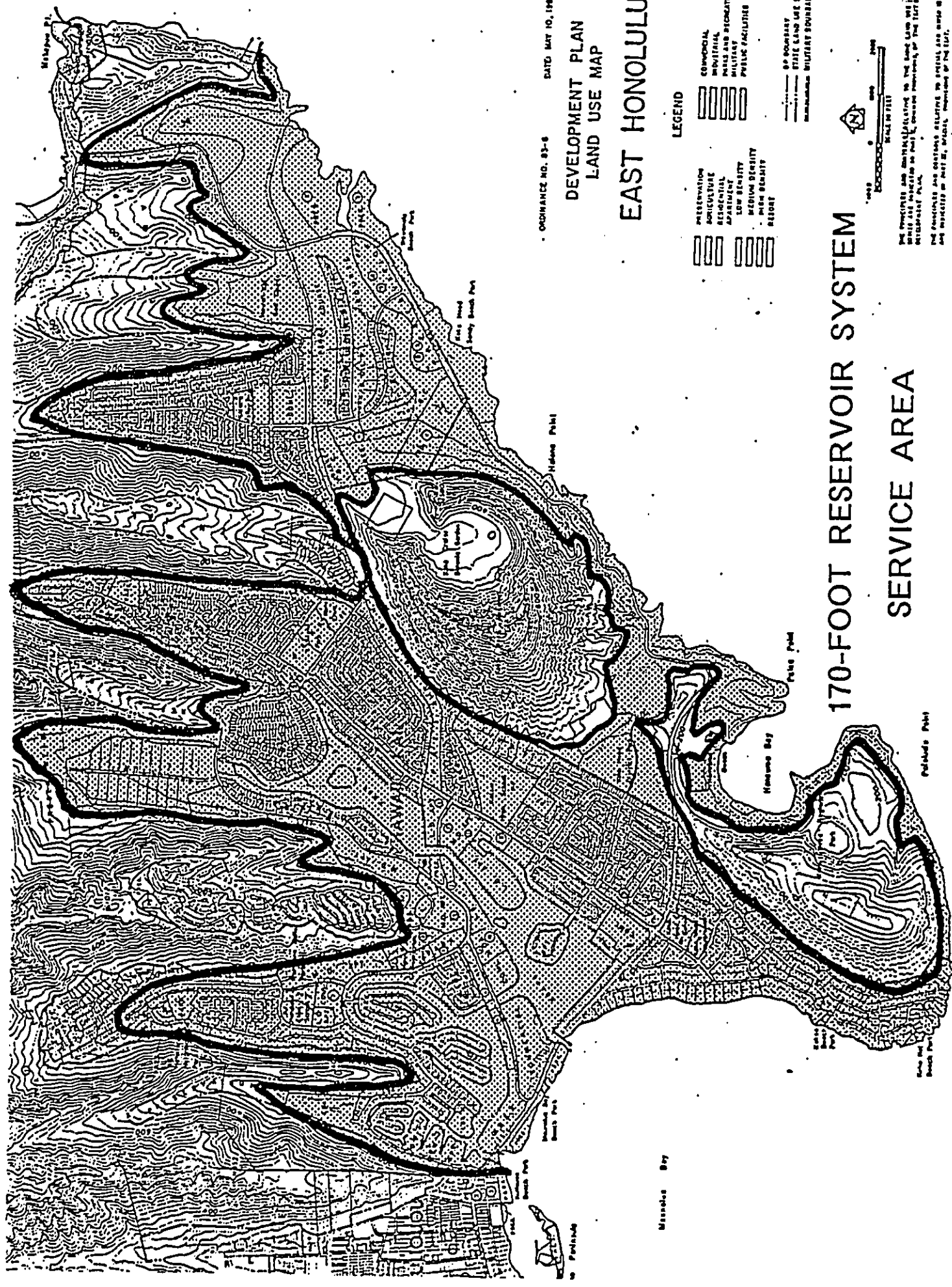
DET. OF CONC. DITCH
 Scale 1" = 10'

C.I.N.
 Scale 1" = 50'

FIELD BOOK NO. 559	FILE - 2
CELL BOOK NO. 252	DATE 3/20/53
JOB 202 W KOKO HEAD ONE MILLION GALLON PRESTRESSED CONCRETE RESERVOIR PLOT PLAN	
APPROVED: [Signature]	SCALE SHEET NO. 19
SCALE SHEET NO. 19	SCALE SHEET NO. 2
BOARD OF WATER SUPPLY 1952-1953	
SHEET 2 OF 15 SHEETS	

(See A-10 Reservoir Foundation Plans - Sheets 15-A
 & 15-B for details)

DOCUMENT CAPTURED AS RECEIVED

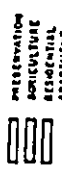

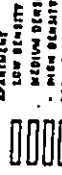













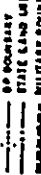
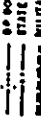



ORDINANCE NO. 83-8 DATE MAY 10, 1963

DEVELOPMENT PLAN LAND USE MAP

EAST HONOLULU

LEGEND

- | | | | |
|-------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|----------------------|
|  | RESERVATION |  | COMMERCIAL |
|  | AGRICULTURE |  | INDUSTRIAL |
|  | RESIDENTIAL |  | PARKS AND RECREATION |
|  | APARTMENT |  | MILITARY |
|  | LOW DENSITY |  | PUBLIC FACILITIES |
|  | MEDIUM DENSITY |  | |
|  | HIGH DENSITY |  | |
|  | REIORT |  | |
-  COUNTY BOUNDARY
 STATE LAND USE ZONE
 170-FOOT RESERVOIR SYSTEM

170-FOOT RESERVOIR SYSTEM

SERVICE AREA

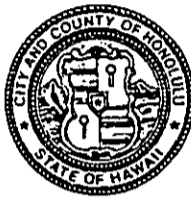


THE PROPOSED AND DEVELOPED AREAS IN THIS MAP ARE BASED ON THE 1962 LAND USE MAP AND THE 1962 ZONING MAP. THE PROPOSED AREAS ARE BASED ON THE 1962 LAND USE MAP AND THE 1962 ZONING MAP. THE DEVELOPED AREAS ARE BASED ON THE 1962 LAND USE MAP AND THE 1962 ZONING MAP.

PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

JEREMY HARRIS
MAYOR



CHERYL D. SOON
CHIEF PLANNING OFFICER

CAROLL TAKAHASHI
DEPUTY CHIEF PLANNING OFFICER

ET 4/96-0899

April 19, 1996

MEMORANDUM

TO: PATRICK T. ONISHI, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM: CHERYL D. SOON, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

SUBJECT: SPECIAL MANAGEMENT AREA USE PERMIT APPLICATION
AND DRAFT ENVIRONMENTAL ASSESSMENT REPORT FOR
KOKO HEAD 170-FOOT WATER RESERVOIR ADDITION

Thank you for giving us the opportunity to review the Draft Environmental Assessment (DEA) for the proposed Koko Head 170-foot water reservoir addition. We have reviewed the subject document and offer the following comments:

- We are currently processing an amendment to the East Honolulu Development Plan Public Facilities Map for the proposed water reservoir addition. The City Planning Commission endorsed the proposed amendment (95/EH-1001(IC)) during their April 3, 1996 meeting.
- Page 25 of the DEA states: "The proposed 1.0 mg water reservoir is planned to provide the necessary storage capacity to accommodate the existing and planned increases in water storage requirements for the Hawaii Kai area." The Final Environmental Assessment (FEA) should identify the proposed 170-foot water reservoir water service area.
- Page 29 of the DEA states: "The existing and proposed reservoirs will not be visible from the roadway." Portions of the existing water reservoir is visible from Kalaniana'ole Highway. The FEA should discuss how this proposed project would be consistent with the section on Public Views, Section 24-4.2.(a)(2)(A) of the East Honolulu Development Plan Special Provisions.

Patrick T. Onishi, Director
Department of Land Utilization
April 19, 1996
Page 2

Should you have any questions, please contact Eugene Takahashi of our staff at 527-6022.



CHERYL D. SOON
Chief Planning Officer

CDS:lh

cc: ✓ Kusao and Kurahashi
OEQC

KUSAO & KURAHASHI, INC.

Planning and Zoning Consultants

WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

May 31, 1996

Ms. Cheryl D. Soon
Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

Dear Ms. Soon:

**Subject: Draft Environmental Assessment for the Koko Head 170-Foot
Reservoir - Office of Environmental Quality Control
Comments Dated April 19, 1996**

Thank you for your response to the Department of Land Utilization's request for comments on the subject Draft Environmental Assessment (DEA).

The Final EA will include a map identifying the service area for the existing and proposed 170-foot reservoir system (enclosed). All four reservoirs within this 170-foot service area are interconnected by large water mains (16 inches in diameter to 36 inches). Although these reservoirs are separated by about one mile from each other to better serve the locations in the service area, the large interconnecting water mains allow the water levels in the four reservoirs to generally be the same level at any given time.

Page 29 of the Final EA will be revised to state:

"The proposed reservoir will be screened from view from Kalaniana'ole Highway similar to the screening provided for the existing reservoir. Being situated against the middle portion of the profile of Koko Head, the existing and proposed reservoirs do not alter the skyline or affect ocean and coastal views. The applicant will provide additional landscaping as needed to further screen the reservoirs from public view."

Ms. Cheryl D. Soon
Page 2

Your letter and this response will be included in the Final Environmental Assessment.

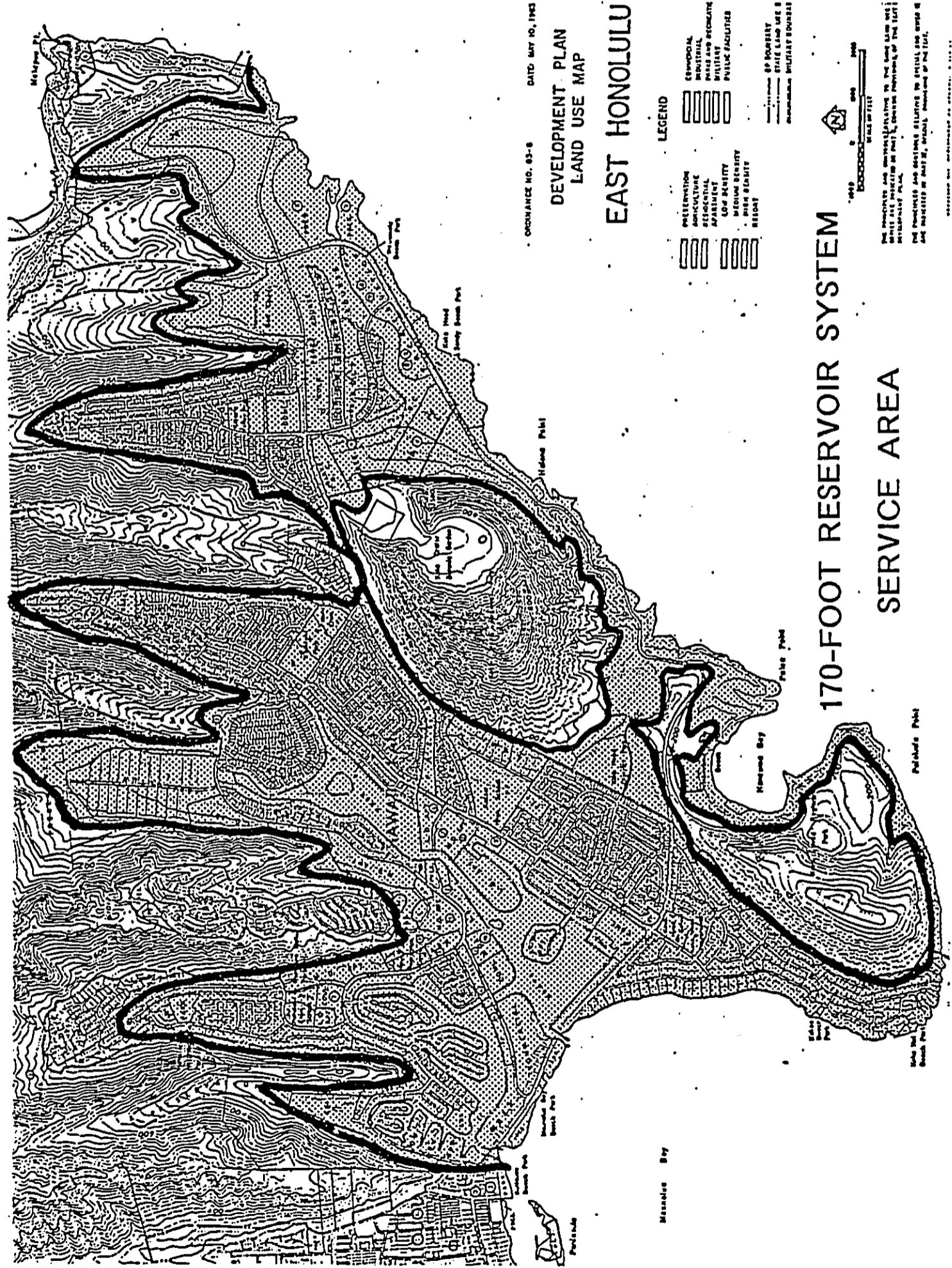
Should there be questions or should you wish to discuss this project further, please contact me.

Very truly yours,

Keith H. Kurahashi

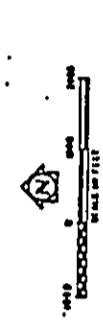
Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Bay Associates, Inc.



ORDINANCE NO. 83-8 DATE: MAY 10, 1963
DEVELOPMENT PLAN
LAND USE MAP
EAST HONOLULU

- LEGEND**
- RESERVATION
 - AGRICULTURE
 - RECREATION
 - AMBIENT
 - LOW DENSITY
 - MEDIUM DENSITY
 - HIGH DENSITY
 - RESIDENTIAL
 - COMMERCIAL
 - INDUSTRIAL
 - OFFICE AND BUSINESS
 - MILITARY
 - PUBLIC FACILITIES
 - STATE LAND USE
 - MILITARY BARRACKS

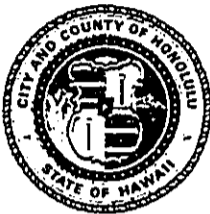


170-FOOT RESERVOIR SYSTEM
SERVICE AREA

THE PROPOSED AND UNPROPOSED AREAS TO BE BOUND BY THE 170-FOOT RESERVOIR SYSTEM ARE SHOWN ON THIS MAP. THESE AREAS ARE NOT NECESSARILY BOUND BY THE 170-FOOT RESERVOIR SYSTEM. THE PROPOSED AND UNPROPOSED AREAS TO BE BOUND BY THE 170-FOOT RESERVOIR SYSTEM ARE SHOWN ON THIS MAP. THESE AREAS ARE NOT NECESSARILY BOUND BY THE 170-FOOT RESERVOIR SYSTEM.

REVISIONS AND AMENDMENTS TO THIS MAP ARE SHOWN ON THIS MAP.

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU
850 SOUTH KING STREET
HONOLULU, HAWAII 96813 • (808) 523-4432



JEREMY HARRIS
MAYOR

PATRICK T. ONISHI
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

96/SMA-011(JT)

April 25, 1996

Mr. Keith H. Kurahashi, President
Kusao & Kurahashi, Inc.
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

Dear Mr. Kurahashi:

Project Name : Koko Head 170-Foot Water Reservoir
File No. : 96/SMA-11(JT)
Tax Map Key : 3-9-12: 7

We are forwarding copies of all comments we have received relating to the Draft Environmental Assessment (DEA) of the above-referenced project.

In accordance with the provisions of Chapter 343, Hawaii Revised Statutes, you must respond in writing to these and any other comment which were received during the 30-day comment period which began with publication of a notice of availability of the DEA in The Environmental Notice on March 8, 1996. The final Environmental Assessment must include these comments and a response, as well as revised text, if appropriate.

If you have any questions, please contact Joan Takano of our staff at 527-5038.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Patrick T. Onishi", is written over the typed name.

PATRICK T. ONISHI
Director of Land Utilization

PTO:am
Enclosures

g:kokocom.jht

KUSAO & KURAHASHI, INC.

Planning and Zoning Consultants

WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6852
FAX (808) 521-4292

June 5, 1996

Mr. Patrick T. Onishi
Director
Department of Land Utilization
City and County of Honolulu
650 So. King Street, 7th Floor
Honolulu, Hawaii 96813

Attention: Ms. Joan Takano
Environmental Assessment Branch

Dear Mr. Onishi:

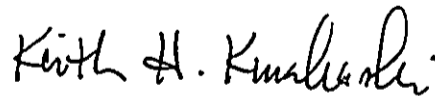
Project Name : Koko Head 170-Foot Water Reservoir
File No. : 96/SMA-11 (JT)
Tax Map Key : 3-3-12: 7

Thank you for forwarding copies of the comments received relating to the Draft Environmental Assessment of the above referenced project.

In accordance with the provisions of Chapter 343, Hawaii Revised Statutes, we have responded to each of the comments received during the 30-day comment period. We have also responded to comments received after the end of the 30-day comment period. Copies of our responses are enclosed and will be included in the Final Environmental Assessment, as well as revisions to the text as noted.

Should there be questions, please contact me.

Very truly yours,



Keith H. Kurahashi

cc: Maunalua Bay Associates, Inc.

772

96-02610

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

1995 APR 29 AM 8:07

DEPT. OF LAND UTILIZATION
CITY & COUNTY OF HONOLULU



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P.O. BOX 621
HONOLULU, HAWAII 96809

MICHAEL D. WILSON
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT S. COLOMA-AGARAN

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

APR 26 1996

REF:LM-AJ

Honorable Patrick T. Onishi
Director of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Onishi:

SUBJECT: Draft Environmental Assessment (DEA)
Koko Head Water Reservoir
7381 Kalaniana'ole Highway - Koko Head
Tax Map Key: 3-9-12: 07

FILE NO. A109

We have reviewed the subject DEA and would like to offer the following comments:

Commission of Water Resource Management

We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.

Thank you for the opportunity to review the subject DEA. We have no further comments to offer at this time. If you have any questions, please contact Al Jodar of the Land Division at 587-0424.

Aloha

Gilbert S. Coloma-Agaran
for MICHAEL D. WILSON

KUSAO & KURAHASHI, INC.

Planning and Zoning Consultants

WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652

FAX (808) 521-4292

May 31, 1996

Mr. Michael D Wilson, Chairperson
Board of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

**Subject: Draft Environmental Assessment for the Koko Head 170-Foot Reservoir - Department of Land and Natural Resources, Commission of Water Resource Management
Comments Dated April 26, 1996**

Thank you for your response to the Department of Land Utilization's request for comments on the subject Draft Environmental Assessment (DEA).

The Board of Water Supply (BWS) as the landowner for the proposed reservoir site has seen and approved the filing of both the East Honolulu Development Plan Public Facilities Map Amendment application and the Special Management Area (SMA) Use Permit and Draft Environmental Assessment applications. Their signature and approval will also be required for the Conservation District Use Permit application that will be filed with your office in the near future.

Based on BWS's opportunities for review and approval of our permit applications and construction drawings as the landowner of the parcel that the reservoir will be situated on and since the reservoir after completion will be dedicated to the county at no cost to the county, we expect that the reservoir will be incorporated into the county's water use plan.


As mentioned above, we are currently processing an amendment to the East Honolulu Development Plan Public Facilities Map which would place the reservoir on the county's public and private infrastructure planning document.

Mr. Michael D. Wilson
Page 2

Your letter and this response will be included in the Final Environmental Assessment.

Should there be questions or should you wish to discuss this project further, please contact me.

Very truly yours,



Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Bay Associates, Inc.

96-02835

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

1996 MAY -7 PM 2:56

DEPT. OF LAND UTILIZATION
CITY & COUNTY OF HONOLULU



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

MICHAEL D. WILSON
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
DEPUTY
GILBERT S. COLOMA-AGARAN

AQUACULTURE DEVELOPMENT
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RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT
WATER RESOURCE MANAGEMENT

MAY - 6 1996

REF:LM-AJ

Honorable Patrick T. Onishi
Director of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Onishi:

FILE NO. A109

SUBJECT: Draft Environmental Assessment (DEA)
Koko Head Water Reservoir
7381 Kalaniana'ole Highway - Koko Head
Tax Map Key: 3-9-12: 07

We have additional comments on the subject DEA to offer.

The Oahu District Office of Land Management has no objections to the addition of the one million gallon water reservoir by the Board of Water Supply, City and County of Honolulu, on the Board of Water Supply's property located on the lower slopes of Koko Head, at Maunalua, Oahu subject to:

1. That the applicant correct the DLU Master Application Form to reflect the correct State Land Use District as Conservation and not as Urban.
2. That the proposed Special Management Use Permit from the City and County of Honolulu be obtained by the applicant and that the terms and conditions of the SMA permit be strictly adhered to.
3. That the Conservation District Use Permit be obtained from the Department of Land and Natural Resources, State of Hawaii, and that the terms and conditions of said CDUP be strictly adhered to.
4. That the applicant, in this and future cases, install the reservoirs in recesses or depressions in a ridge to reduce the profile on the visual plain. Installation of reservoirs on the center of the ridge line or adjacent to it devastates the contour and appearance of the land, such as the reservoir installed by the applicant on Paheehee Ridge in Waianae.
5. That the applicant obtain all other required Federal, State and County permits prior to construction of the project.

Should you have any questions, you may contact Al Jodar at 587-0424.

Aloha

Gilbert S. Coloma-Agaran
for MICHAEL D. WILSON

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

May 31, 1996

Mr. Michael D Wilson, Chairperson
Board of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

**Subject: Draft Environmental Assessment for the Koko Head 170-Foot Reservoir - Department of Land and Natural Resources, Commission of Water Resource Management
Additional Comments Dated May 6, 1996**

Thank you for your response to the Department of Land Utilization's request for comments on the subject Draft Environmental Assessment (DEA).

The following responds to each of the five comments that you provided:

1. We will correct the Department of Land Utilization (DLU) Master Application Form to reflect the correct State Land Use District as Conservation and not Urban. Thank you for bringing this error to our attention.
2. We are processing a Special Management Area (SMA) Use Permit with DLU and if approved, we will strictly adhere to the conditions of the SMA Use Permit.
3. We are preparing a Conservation District Use Permit (CDUP) application that will be filed with your office in the near future. We will strictly adhere to the terms and conditions of this CDUP.

Mr. Michael D. Wilson
Page 2

4. The applicant, in this and future cases will make every effort to install reservoirs in recesses or depressions in a ridge to reduce the profile on the visual plain.
5. The applicant will obtain all other required Federal, State and County permits prior to construction of the project.

Your letter and this response will be included in the Final Environmental Assessment.

Should there be questions or should you wish to discuss this project further, please contact me.

Very truly yours,

Keith H. Kurahashi

Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Bay Associates, Inc.

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
WARD PLAZA
210 WARD AVENUE, SUITE 124
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FAX (808) 521-4292

June 5, 1996

Mr. Michael D Wilson, Chairperson
Board of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Draft Environmental Assessment for the Koko Head 170-Foot Reservoir - Department of Land and Natural Resources, Commission of Water Resource Management Additional Comments Dated May 6, 1996

Although we responded to your comments in a letter dated May 31, 1996, we are submitting this letter to clarify a point made by your office in the fourth condition presented in your comment letter dated May 6, 1996. It was stated that:

- "4. That the applicant, in this and future cases, install the reservoirs in recesses or depressions in a ridge to reduce the profile on the visual plain. Installation of reservoirs on the center of the ridge line or adjacent to it devastates the contour and appearance of the land, such as the reservoir installed by the applicant on Paheehee Ridge in Waianae."

We just wanted to clarify that the applicant for the Koko Head 170-Foot Reservoir, Maunalua Bay Associates, Inc., is not the applicant that installed the reservoir on Paheehee Ridge in Waianae.

Should there be questions or should you wish to discuss this project further, please contact me.

Very truly yours,

Keith H. Kurahashi
Keith H. Kurahashi

cc: Department of Land Utilization
Maunalua Bay Associates, Inc.