



Waiohuli Water Tank

**DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-7109**

RECEIVED

May 13, 1998

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Mr. Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813-2437

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Dear Mr. Gill:

**Subject: WAIOHULI TANK REPLACEMENT
FINAL ENVIRONMENTAL ASSESSMENT/FINDING OF NO SIGNIFICANT IMPACT
Tax Map Key: 2-2-17:portion of 6
Waiohuli, Maui, Hawaii**

We are filing the Final Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) for the Waiohuli Tank Replacement project in compliance with Chapter 343, Hawaii Revised Statutes, and Chapter 11-200 Hawaii Administrative Rules, State Department of Health. The County of Maui Department of Water Supply has reviewed the comment letters received during the public review period and has determined that the project qualifies as a FONSI.

Enclosed are four (4) copies of the Final EA/FONSI, a completed OEQC Publication Form and a disk file of the summary project description. We respectfully request that notice of this filing be published in the May 23, 1998 issue of your Environmental Notice.

Please contact me at 243-7816, or Barry Toyota of Wilson Okamoto & Associates, the EA consultant, at 946-2277 if you have any questions.

Thank you for your attention to this matter.

Sincerely,

David R. Craddick
Director

/HK:sc

Enclosures: Final EA/FONSI (4)
Publication Form
Disk file

cc: Barry Toyota, Wilson Okamoto & Associates, Inc. (w/o enclosures)

MAY 23 1998

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Waiohuli Water Tank

**Final Environmental Assessment
and
Finding of No Significant Impact
(FONSI)
for
Waiohuli Tank Replacement

Waiohuli, Maui, Hawaii**

Prepared For:

**County of Maui
Department of Water Supply**

Prepared By:

Wilson Okamoto & Associates, Inc.

May 1998

**Final Environmental Assessment
and
Finding of No Significant Impact (FONSI)
for
Waiohuli Tank Replacement

Waiohuli, Maui, Hawaii**

Prepared For: County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793

**Responsible
Official:**



5/13/98

**David R. Craddick
Director
Department of Water Supply
County of Maui**

Date

Prepared By: Wilson Okamoto & Associates, Inc.
Planners & Engineers
1907 South Beretania Street, Suite
400
Honolulu, Hawaii 96826

May 1998

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PREFACE

This Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) is prepared pursuant to Chapter 343, Hawaii Revised Statutes, and Title 11, Chapter 200, Administrative Rules, State of Hawaii Department of Health, in order to document the environmental effects from the implementation of the proposed water system improvements on privately-owned land in Waiohuli, Island of Maui, Hawaii (Tax Map Key (TMK): 2-2-17: portion of 6). The proposed project is an agency action by the County of Maui, Department of Water Supply. The preparation of the EA arises from the use of county funds for project site acquisition and improvements. The proposed action is not anticipated to generate any significant adverse impacts on the environment.

Subsequent to the November 8, 1994 publication of the Draft EA in the State Office of Environmental Quality Control's (OEQC) Bulletin, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, the Final EA and FONSI determination has been filed with the OEQC.

SUMMARY SHEET

Proposing Agency: County of Maui Department of Water Supply

Accepting Agency: County of Maui Department of Water Supply

Tax Map Key: 2-2-17: portion 6

Location: Waiohuli, Maui, Hawaii

Affected Area: Approximately 1.46 acres
(0.6-acre for water tank, 30,000 square feet (0.69-acre) access
easement and 7,400 square feet (0.17-acre) utility easement)

Landowner: The Estate of James Campbell (Fee)
James Sakugawa (Lessee)

Existing Use: Pasture

**State Land Use
Classification:** Agricultural

**Community Plan
Designation:** Agriculture

County Zoning: Interim

Proposed Action: Water system improvements, including a 0.5 MG water storage
tank and perimeter road, access and utility easements, and
appurtenances.

Impacts: No significant impacts are anticipated from the construction and
operation of the proposed water tank system improvements.

Determination: Finding of No Significant Impact (FONSI)

**Agencies
Consulted in
Pre-Assessment
Process:**

State of Hawaii

Department of Agriculture
Department of Land and Natural Resources Historic Preservation
Division

County of Maui

Department of Water Supply
Planning Department

**Agencies
Consulted in
Draft EA
Process:**

Federal

U.S. Department of Agriculture
U.S. Army Corps of Engineers
U.S. Department of the Interior Fish and Wildlife Service

State of Hawaii

Department of Agriculture
Department of Business, Economic Development & Tourism
Department of Land and Natural Resources Land Division
Department of Land and Natural Resources Historic Preservation
Division
Department of Land and Natural Resources Commission on Water
Resource Management
Department of Health
Department of Health Environmental Management Division
Department of Transportation
Office of Planning
Department of Hawaiian Home Lands
Office of Hawaiian Affairs
University of Hawaii Water Resources Research Center
University of Hawaii Environmental Center

County of Maui

Department of Water Supply
Planning Department
Department of Public Works & Waste Management
Department of Parks and Recreation
Economic Development Agency
Councilmember Alice L. Lee

I. INTRODUCTION

A. Project Location

The County of Maui Department of Water Supply (DWS) is proposing to construct a new 0.5 million gallon (MG) water tank, perimeter road and appurtenances on 0.6 acre of land in the community of Waiohuli, East Maui. The project site lies mauka of the community of Waiohuli along the western slopes of Haleakala. It is located adjacent to and southeast of the intersection of Polipoli Road and Middle Road, approximately 0.4 miles east of Kula Highway within the Waiohuli-Keokea Homesteads (see Figure 1). The site for the new water tank is located 450 feet east of Polipoli Road, at an elevation of approximately 3,573 feet mean sea level. The project site lies approximately 360 feet south of an existing leaking 70,000-gallon water storage tank.

B. Land Ownership

The project site occupies a portion of TMK: 2-2-17:6 which is currently owned in fee by James Campbell Trust Estate and leased by James Sakugawa for cattle grazing. The County of Maui plans to acquire approximately 0.6-acre of the parcel to construct the water tank, a 32-foot wide easement (approximately 0.69-acre) for a new roadway to the water tank site, and a 20-foot wide utility easement (approximately 0.17-acre).

C. Existing and Surrounding Uses

The project site is currently pasture land underlain by rocky outcrops. Vegetation on the project site consists of grasses typical of pasture lands. The project site is primarily surrounded by pasture land and forest areas within the rural and sparsely populated Waiohuli-Keokea Homesteads.

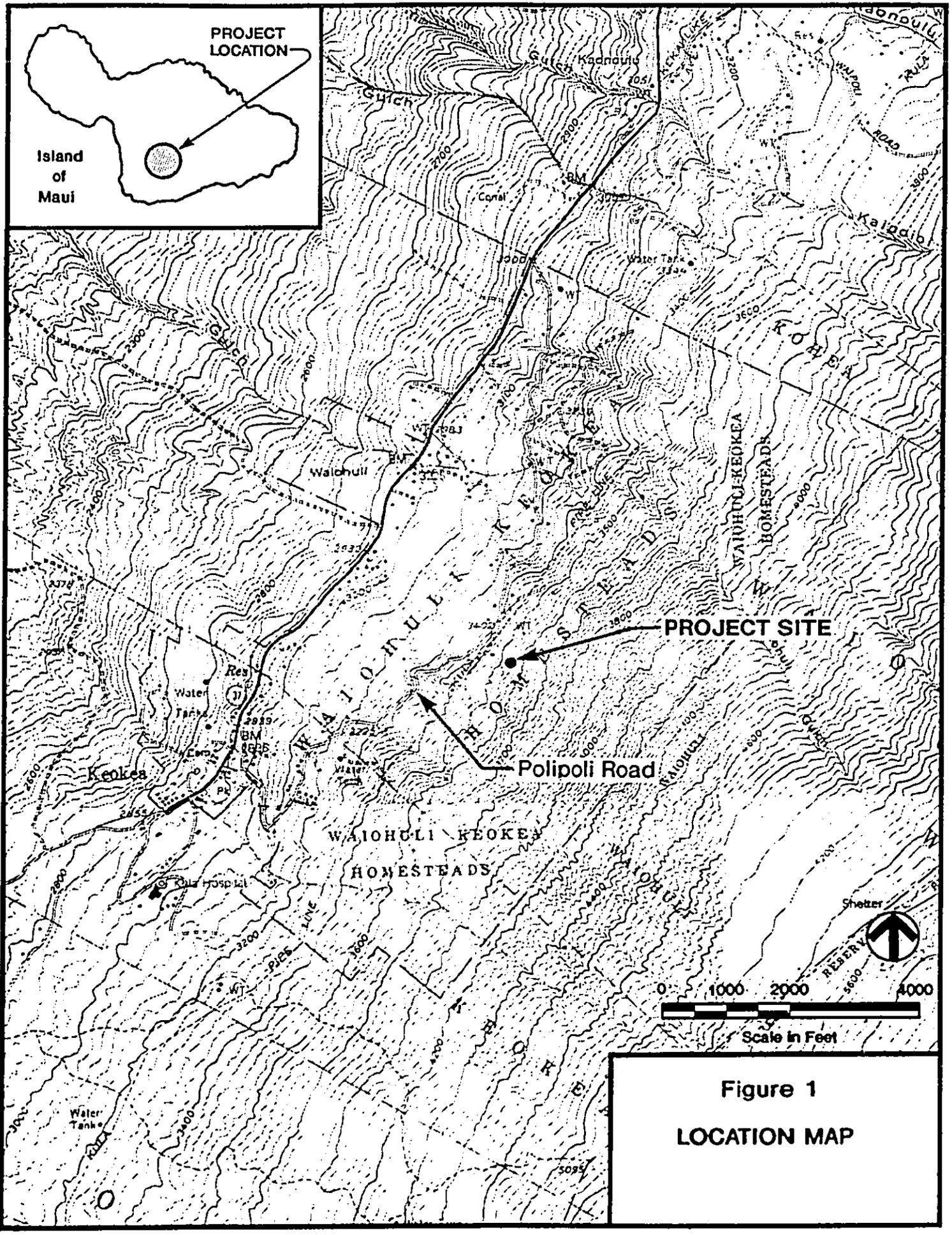


Figure 1
LOCATION MAP

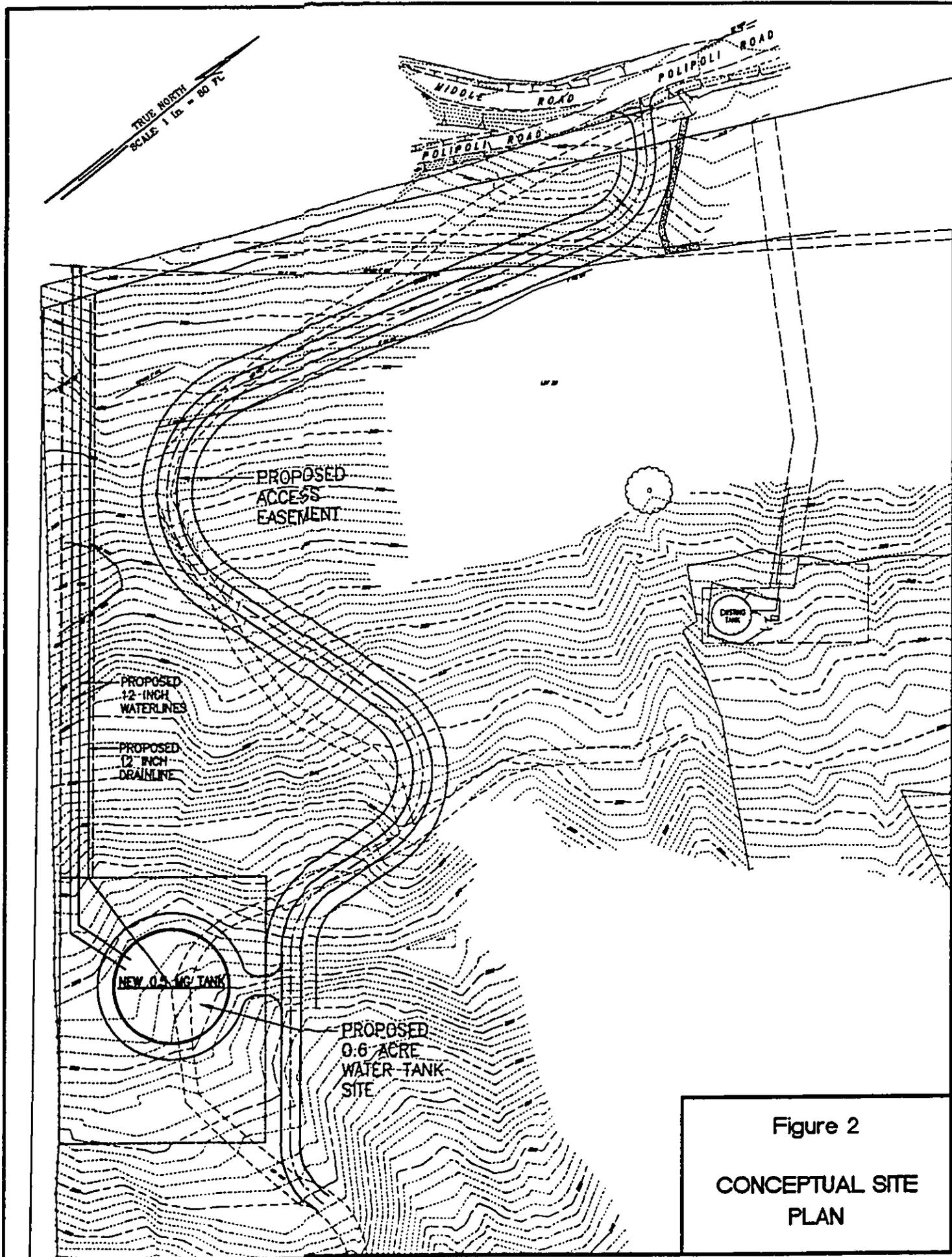
II. PROJECT DESCRIPTION

A. Project Need

The proposed 0.5 MG water storage tank is intended to provide sufficient storage of water to meet the needs of the existing residential and agricultural uses in Waiohuli-Keokea Homesteads and the Kamaole water system. This project is especially necessary since drought conditions periodically afflict Upcountry Maui. Because of past water shortage problems, the DWS has limited development in the area by restricting the issuance and size of water meters. To compound the problem, the nearby existing 70,000-gallon water tank is corroded and leaking and is unable to adequately supply the area during periods of peak flow. In the event of shut-down or demolition of the existing tank, the proposed 0.5 MG water tank will continue to provide the area with a supply of water.

B. Project Features

The water system improvements consist of constructing a 0.5 MG water storage tank, a perimeter road around the new tank, and appurtenances including gates, fencing and waterline and drainline connections (see Figure 2). The approximately 0.6-acre project site which will be acquired by the County of Maui DWS includes the area for the proposed 0.5 MG water tank and perimeter road. Two 12-inch waterlines and a 12-inch drainline will be constructed along the southern side of TMK: 2-2-17: 6 from Polipoli Road to the new water tank within an approximately 7,400-square foot (0.17-acre) utility easement to be acquired by the County of Maui DWS. An approximately 30,000-square foot (0.69-acre) access easement between Polipoli Road and the new water tank will also be acquired. The existing 70,000-gallon water tank will be demolished once the new 0.5 MG tank is constructed and operational.



C. Estimated Project Schedule/Cost

Construction will begin upon approval of all required governmental construction permits. The estimated time for construction of the water tank, roadway and appurtenances is approximately 1 year. Total development costs are estimated at \$1,000,000 and will be appropriated through County of Maui funds.

III. DESCRIPTION OF THE EXISTING ENVIRONMENT

A. Geology

The island of Maui is composed of two volcanic mountains; the older West Maui Volcano, and the younger Haleakala Volcano. These two dormant shield volcanoes are linked by a broad plain which formed when lava flows from Haleakala Volcano joined the West Maui Mountains landmass. The project site is situated on the western slope of Haleakala on lavas of the Kula volcanic series.

B. Hydrology

There are no surface water sources on the project site. The nearest surface water source is Waiohuli Gulch, an intermittent stream located about 2,500 feet to the north. Basal groundwater resources are assumed to underlay the Waiohuli area at a depth of several thousand feet below the project site.

The Waiohuli area is supplied surface water from the Upper Kula System, one of four systems which comprise the Makawao and Kula System. The entire Makawao-Pukalani-Kula area is currently served by the Makawao and Kula System through four water sources; the Upper Kula, Lower Kula, Kamole Forebay and Kailiili Intake, and Hamakua Ditch Intake (Kula Agricultural Park) Systems.

The Upper Kula System is located along the 4,000-foot elevation and collects surface water from Haipuaena, Puohakamoa and Waiakamoi Streams. The surface water is treated at the Olinda water treatment plant which has a capacity of 1.7 MGD. Water from the Olinda water treatment plant is transferred to the Waiohuli tank via 8- and 12-inch transmission lines.

C. Topography

The site of the proposed water tank is situated at an elevation of approximately 3,573 feet mean sea level. The topography of the site is fairly uniform, and slopes from the proposed water tank area in the east down to Polipoli Road to the west. Slopes range between 25 and 30 percent. Rock outcrops are present in places within the proposed access and utility easements and water tank site, and in the surrounding area.

D. Soils and Agricultural Productivity

The U.S. Department of Agriculture Soil Conservation Service's *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai* identifies the soil on the property as Kaipoi very rocky loam (KDVE). Soil of this type consists of land on smooth to rolling high mountain slopes with rock outcrops which cover 10 to 25 percent of the surface. Slope on these soils is generally 7 to 40 percent. Surface layer of the soil is black loam about 10 inches thick. The subsoil, about 51 inches thick, is black and very dark brown silt loam or silty clay loam that has a subangular blocky structure. The substratum is ash and cinders. The soil is neutral in the surface layer and mildly alkaline to neutral in the subsoil. Permeability is moderately rapid. Runoff is slow to medium, and the erosion hazard is slight to moderate. The available water capacity is about 2.6 inches per foot in the surface layer and about 1.6 inches per foot in the subsoil. This type of soil is commonly used for pasture and wildlife habitat.

This soil classification is corroborated by the University of Hawaii Land Study Bureau's *Detailed Land Classification--Island of Maui*. The Land Study Bureau classifies soil on the property as E90, or soil which is excessively-drained, rocky, and unsuitable for agricultural tilling.

E. Climate

Maui's climate varies according to altitude and is influenced by leeward/windward locations. Lowland areas tend to have a semi-tropical climate, while higher elevations are characterized by temperate climates. The climate of the Waiohuli area is typically partly cloudy. Mean annual rainfall ranges between 30 and 40 inches. Prevailing winds are the northeasterly tradewinds which generally blow between 13 to 24 miles per hour. Temperatures average about 65°F in the coolest month and 78°F in the warmest month.

F. Flora and Fauna

The entire project site is used as pasture land and is entirely covered by grassland typical of grazing.

The fauna of the area consists of introduced species common throughout the Hawaiian Islands. Although domesticated cattle are apparent, other fauna such as rats, mice, mongoose and dogs may also appear on the project site. There are no Federal or State of Hawaii listed or candidate threatened or endangered species of flora or fauna on the project site.

G. Archaeological and Historical Resources

The project site consists of pasture land and is entirely covered by grassland. Consultation was conducted with the State Department of Land and Natural Resources (DLNR) Historic Preservation Division on April 22, 1998 (see Appendix A, Draft EA Consultation Correspondence, State DLNR Historic Preservation Division consultation letter dated May 1, 1998). The project site may once have been the location of pre- or post-Contact farming, perhaps with scattered houses. However, the subject property has

been subjected to considerable alteration due to historic ranching and agriculture, so it is unlikely that significant historic sites will be encountered today.

H. Air and Noise Quality

The ambient noise and air quality in the region is excellent due to the distance from highway traffic and industrial uses, and due to the prevailing northeasterly tradewinds.

I. Population

The island of Maui is the third most populous in the State with a population of 106,100 in July 1995, an increase of 16 percent from 1990. According to the Hawaii Department of Business, Economic Development & Tourism (DBED&T) economic and demographic projections, the County of Maui's resident population is expected to increase by 50 percent to 145,200 by the year 2010, twice as fast as Oahu's 26 percent for the same period.

The Makawao District of the County of Maui has experienced substantial growth since 1970, when the resident population was 9,979. The population increased by 90.4 percent to 19,005 in 1980, another 53.7 percent to 29,207 in 1990, and another 16.7 percent to 34,087 in 1995.

J. Economy

The County of Maui's economy is based on tourism and the construction and agricultural industries. In 1990, the County of Maui began planning infrastructure developments in response to increased urbanization and population growth which has occurred over the past several years. In real estate, Maui has the second tightest condominium and the

third tightest single-family home markets in the state. The County also had a persistent labor shortage in 1990.

Through 1994, total visitors to the State were 6,430,300 persons, 5 percent above 1993. Maui experienced an increase of 4.2 percent during the same period. Maui's westbound visitor count increased 6.1 percent for a total of 1,852,710 visitors for the same period. Eastbound visitors numbered 449,980, a decrease of 3 percent during the same period. Through 1995, Maui's hotel occupancy rate was 7.7 percent higher than in 1993.

The construction industry has declined on Maui in the last several years. Construction put-in-place declined 10 percent to \$187 million in 1995. Private permits authorized through the same period increased by 10.4 percent to \$215.1 million, and public contracts awarded through the same period also increased by 3.1 percent to \$22.2 million.

Maui pineapple, diversified crops and livestock have experienced an approximately 3.4 percent decline from 1994 to 1995. For the same period, Maui's sugar industry experienced an approximately 3 percent decline in production. A major contributor to the economy of the Waiohuli area is agriculture, particularly diversified crops and livestock which were factors contributing to the 3.4 percent decline in agriculture on the island of Maui between 1994 to 1995.

K. Scenic Views

The project site is located along the slope of Haleakala and provides views of this slope and of the central Maui plain below. Other than natural formations and tree cover, there are no obstructions to views in any direction. From Polipoli Road, the project site appears as open pasture land.

L. Roadways

Haleakala Highway and Kula Highway, both 2-lane highways, provide the major transit route through the Makawao District. The project site is accessible from Kula Highway via Polipoli Road, a 2-lane roadway.

M. Drainage System

There is no drainage infrastructure in the vicinity of the project site. According to the *Detailed Land Classification--Island of Maui*, soils on the project site are excessively-drained. According to the *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai*, soil found in this area consists of land on smooth to rolling high mountain slopes with rock outcrops which cover 10 to 25 percent of the surface. The slope is generally 7 to 40 percent. According to the Flood Insurance Rate Map prepared for the area by the Federal Emergency Management Agency, the project site is located in Zone C, an area of minimal flooding.

N. Water System

Water for the proposed 0.5 MG water tank will come from the Upper Kula System, one of four systems in the Makawao and Kula Aquifer System (see Table below). Water is presently stored in a 70,000-gallon steel tank located approximately 360 feet north of the project site. This water originates from stream flow approximately 5.2 miles northeast of the project site which is transported to the nearby Olinda Water Treatment Plant. After treatment, the water is transferred to the Omaopio tank, then is transmitted southwest to the 70,000-gallon Waiohuli tank through an 8-inch gravity-flow line. The Waiohuli tank provides water to the Waiohuli-Keokea Homesteads and the Kamaole water system located south of the project site.

MAKAWAO AND KULA WATER SYSTEM SOURCES	
Surface Sources	1990 Total Withdrawals (MGD)*
Upper Kula System	0.85
Lower Kula System	2.13
Kamole Forebay and Kailiili Intake	2.40
Hamakua Ditch Intake (Kula Agricultural Park)	0.13
Total	5.51

* Where 1990-1991 data was not available, the latest data (usually 1987) is shown.
Source: Maui Community Plan Update--Infrastructure Assessment, County of Maui, September 1992.

The Department of Water Supply recognizes a projected shortage of water source and limits allocation and issuance of water meters.

IV. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS

A. State Land Use Districts

Pursuant to Chapter 205, Hawaii Revised Statutes (HRS), all lands in the State of Hawaii are classified into one of four land use designations: Urban, Rural, Agricultural, and Conservation. The proposed water system improvements, including the water tank, access and utility easements, and perimeter road, are located within land designated Agricultural. The proposed development is compatible with this designation.

B. County of Maui General Plan

The County of Maui General Plan is a narrative document which sets forth strategies to shape the County's physical, social and economic environments. These strategies are expressed as statements of objectives and policies which are used by the County in decision-making and in developing and implementing plans and programs.

The following objectives and policies concern water supply within the County:

OBJECTIVE:

- (1) To provide an adequate supply of domestic and irrigation water to meet the needs of our people.

POLICIES:

- (1) Support water supply services to those areas which historically experience critical water problems.
- (9) Maintain the right to manage our transmission and deliverance systems at the County level.

- (10) Develop sufficient water supply during drought seasons so as to keep agricultural activities viable.

The proposed Waiohuli water system improvements will serve the domestic and agricultural needs of the Waiohuli area. Current shortages experienced during times of drought will be mitigated through the water system improvements. Funds for the proposed improvements and land acquisition will be provided by the County of Maui.

OBJECTIVE:

- (2) To make more efficient use of existing supplies of water.

POLICIES:

- (5) Maximize use of existing water sources by expanding storage capabilities.

The proposed Waiohuli water system project includes expansion of water storage capabilities at the nearby existing Waiohuli water tank site by construction of a replacement 0.5 MG water storage tank.

C. Makawao-Pukalani-Kula Community Plan

The Makawao-Pukalani-Kula Community Plan is the primary decision making tool used by the County for implementing the County General Plan. The Makawao-Pukalani-Kula Community Plan land use map designates the project site as Agriculture (see Figure 3). The use of the site for water storage would be in accord with the Makawao-Pukalani-Kula Community Plan's Agriculture designation. The proposed 0.5 MG water tank will provide additional storage of water for residential and agricultural uses in the area.

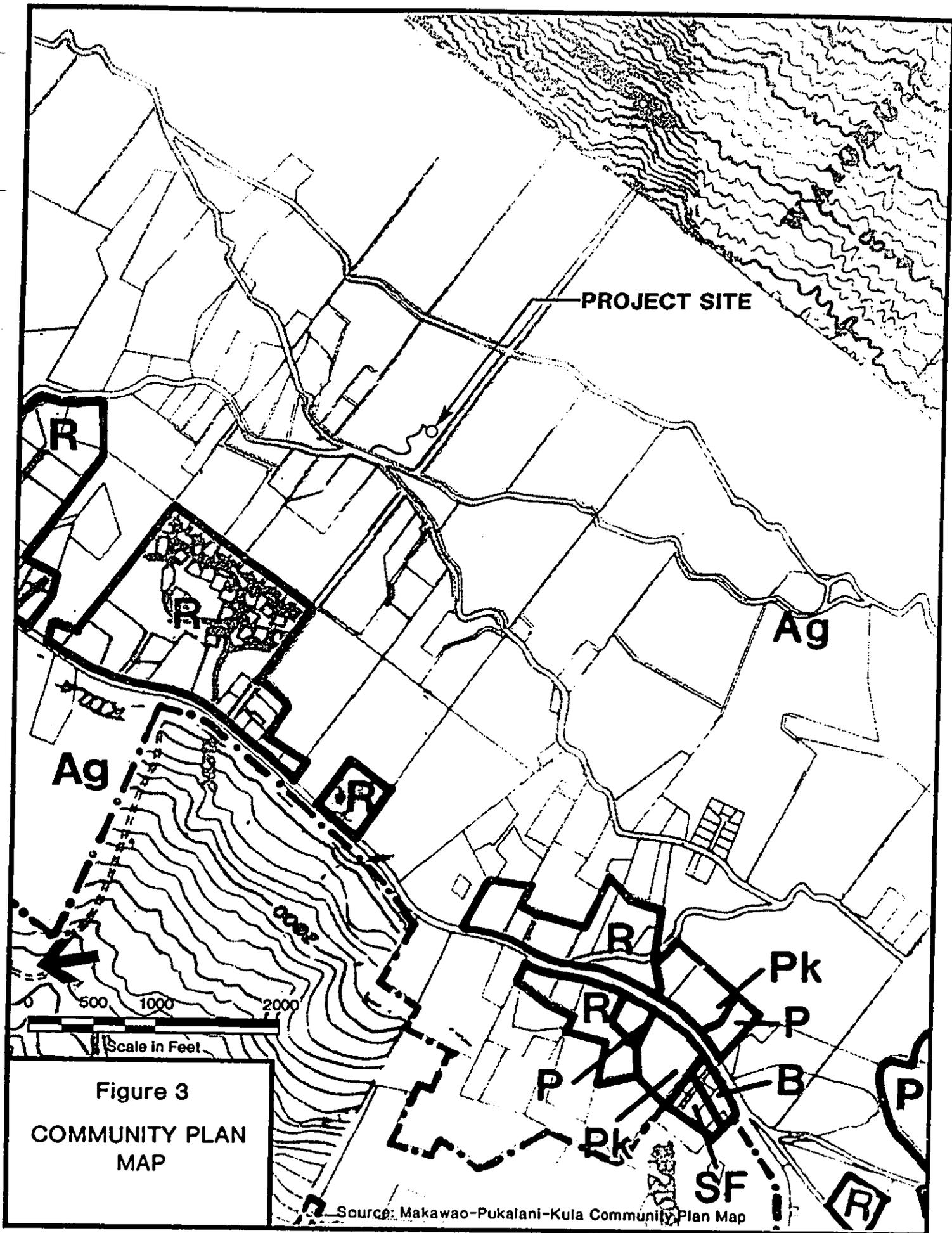


Figure 3
COMMUNITY PLAN
MAP

Source: Makawao-Pukalani-Kula Community Plan Map

D. County of Maui Zoning

The County of Maui zoning designation of the project site is Interim. As a public utility use, the proposed water tank improvements are a permitted use in the Interim zoning designation.

E. Required Permits and Approvals

The following is a summary of the major permits and approvals which may be required prior to construction of the proposed project.

State of Hawaii

Department of Land and Natural Resources, Historic Preservation Division

- Chapter 6E, HRS Historic Preservation

Office of Environmental Quality Control

- Environmental Assessment

County of Maui

Department of Public Works & Waste Management

- Grading Permit
- Excavation Permit
- Grubbing Permit
- Drainage Plan Approval
- Subdivision

V. POTENTIAL IMPACTS AND PROPOSED MITIGATION MEASURES

A. Short-Term Impacts

Short-term impacts are those associated with construction activities such as removing vegetation, grading and excavating, and actual construction. Short-term impacts associated with these construction activities include potential impacts on water quality, soils, flora and fauna, archaeological resources, noise, air quality, and traffic.

1. Water Quality and Soils

The project site is located on the slopes of Haleakala and contains rock outcrops which cover 10 to 25 percent of the surface. The slope is generally between 25 and 30 percent. Because of this steep gradient, excavation of a level building pad in the slope will be necessary to a depth of approximately 15 feet.

No significant impacts on water quality are anticipated during development of the project site from erosion or surface runoff. Clearing and grading operations at the project site will temporarily expose the underlying soil to rain until the water tank is built and landscaping is planted. Groundcover will be planted for erosion control as soon as possible after grading. The required County grading standards will be complied with to minimize erosion potential during construction of the proposed water tank project.

2. Flora and Fauna

Earthwork operations will remove vegetative cover on the water tank site and within the access and utility easements which consists entirely of grassland typical

of grazing. There are no Federal or State of Hawaii listed or candidate threatened or endangered species of flora or fauna on the project site. No significant impacts to flora or fauna will result from project construction.

3. Archaeological Resources

Based on consultation with the State DLNR Historic Preservation Division, construction of the proposed water tank system improvements will have "no effect" on significant historic sites (see Appendix A, Draft EA Consultation Correspondence, State DLNR Historic Preservation Division consultation letter dated May 1, 1998). However, if in the event that any unrecorded historic sites are encountered, construction will be halted and immediate archaeological consultation shall be sought from the State DLNR Historic Preservation Division.

4. Noise

A temporary increase in local noise levels can be anticipated during construction of the facilities. Sources of noise will include construction vehicles and equipment operating to, from and on site. Noise impacts will be mitigated to the extent possible through the use of mufflers on construction equipment and daytime construction periods.

The area is thinly populated and adequate distance separates the proposed water tank from the nearest noise sensitive neighbors. The nearest resident is located approximately 300 feet south of the proposed water tank.

5. Air Quality

Ambient air quality is expected to temporarily decline in the immediate vicinity during construction due to dust and emissions from construction vehicles and equipment. Due to the distance of the project site from the nearest residences, there should be no adverse air quality impacts from the project. Dust control measures such as water sprinkling and spraying will be implemented when necessary.

6. Traffic

Due to the ingress of construction workers and materials, there will be a slight temporary increase in local traffic on Polipoli Road during the construction period. Based on the light level-of-service traffic conditions on this rural road, there should be no significant impacts to traffic from construction of the project.

B. Long-Term Impacts

Long-term impacts are those associated with the operation and maintenance of the new water tank. They include potential impacts on drainage, flora and fauna, noise, scenic resources, traffic, and the local economy.

1. Drainage System

The proposed water system improvements are anticipated to increase rainfall runoff very slightly by increasing the tank pavement area. Runoff from the site will be accommodated by existing sheetflow patterns.

2. Flora and Fauna

The water system improvements will displace existing flora and fauna, but landscaping will restore some of the vegetative cover and naturally occurring flora and fauna will rejuvenate. There are no Federal or State of Hawaii listed or candidate threatened or endangered species in the area.

3. Noise

Long-term noise quality will not be significantly altered by the proposed water tank improvements. No adverse impacts are anticipated on any current or future noise-sensitive uses.

4. Air Quality

Other than emissions from maintenance vehicles which will make periodic visits to the project site, there will be no adverse long-term air quality conditions generated by the project. Due to the distance of the project site from sensitive sources, the long-term air quality impacts from vehicle emissions on the project site will be insignificant.

5. Visual Resources

No significant visual impacts to neighboring parcels will result from the construction of the 0.5 MG water tank. The proposed water tank will be approximately 75 feet in diameter and 20 feet in height. Mitigative measures will include cutting approximately 15 feet into the hillside prior to construction of the

0.5 MG water tank. Views over and through the site will not be significantly altered from any vantage point in the surrounding area.

6. Traffic

Traffic will not be significantly affected by the proposed improvements. The water tank should largely be self-sustaining, with the exception of the need for personnel to make periodic checks of water levels and water quality and to perform routine groundskeeping and maintenance work.

7. Economy

The existing tank is leaking and its capacity is inadequate for the area's agricultural demands. Increased water supply from the new 0.5 MG tank will provide adequate water to allow farmers and ranchers to maximize their output and increase production to supply the local market. Thus, the State's dependence on imported produce will be reduced which will result in a boost to the local economy.

VI. ALTERNATIVES TO THE PROPOSED ACTION

The potential alternatives to the proposed action include locating an alternative site for the proposed water tank project and the "no action" alternative.

There will be no major adverse environmental impacts from construction of the 0.5 MG water tank at the proposed location. The proposed location for the new water tank is at the appropriate elevation to provide sufficient water pressure for the Waiohuli-Keokea Homesteads and Kamaole water system. Therefore, use of an alternative site for the proposed 0.5 MG water tank is not a feasible alternative.

The "no action" alternative would result in no new water tank. The existing water tank is unable to adequately supply the area during periods of peak flow and needs repair. In the event of shut-down or demolition of the existing tank, water would only be provided to the Waiohuli-Keokea Homesteads and Kamaole water system service areas by the 8-inch gravity flow line. Stored water will not be available during drought or periods of peak demand. Under the "no action" alternative, the objective of supplying adequate domestic water and water for agricultural uses would not be achieved. The "no action" alternative is not a feasible option to the development of the proposed project.

VII. NOTICE OF DETERMINATION

A. Proposing Agency

County of Maui Department of Water Supply

B. Accepting Agency

County of Maui Department of Water Supply

C. Description of Proposed Action

The County of Maui DWS is proposing to construct a new 0.5 MG water tank, perimeter road and appurtenances on 0.6 acre of land in the community of Waiohuli, East Maui (TMK: 2-2-17: portion 6). The proposed 0.5 MG water storage tank is intended to provide sufficient storage of water to meet the needs of the existing residential and agricultural uses in Waiohuli-Keokea Homesteads and the Kamaole water system. The water system improvements consist of constructing the 0.5 MG water storage tank, a perimeter road around the new tank, and appurtenances including gates, fencing and waterline and drainline connections. The approximately 0.6-acre project site which will be acquired by the County of Maui DWS includes the area for the proposed 0.5 MG water tank and perimeter road. Two 12-inch waterlines and a 12-inch drainline will be constructed along the southern side of TMK: 2-2-17: 6 within an approximately 7,400-square foot (0.17-acre) utility easement to be acquired by the County of Maui DWS. An approximately 30,000-square foot (0.69-acre) access easement between Polipoli Road and the new water tank will also be acquired. The nearby existing leaking and corroded 70,000-gallon water tank will be demolished once the new 0.5 MG tank is constructed and operational.

D. Determination and Reasons Supporting Determination

The Waiohuli Tank Replacement Draft EA was filed with the State OEQC and published in the November 8, 1994 publication of the OEQC Bulletin. A total of 8 comment letters were received during the 30-day public review period. Based on the significance criteria set forth in Section 11-200-12 of Title 11, Chapter 200, Administrative Rules, State of Hawaii Department of Health, the County of Maui Department of Water Supply has determined that the proposed project will have no significant adverse impact on the environment, and that an Environmental Impact Statement is not required. The reasons supporting this determination are described below according to these significant criteria.

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

Development of the proposed water tank and access and utility easement improvements will require an irrevocable commitment of approximately 0.6 acres of pasture land. The proposed improvements will not involve a loss or destruction of any cultural resource.

2. *Curtails the range of beneficial uses of the environment.*

The intention of the proposed facility improvements is to commit the affected project site to the proposed use over the long-term. This will preclude use of approximately 0.6 acres for pasture land purposes. In the context of the surrounding vicinity, however, the decrease of 0.6 acres for pasture land use is relatively negligible.

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

The proposed action is consistent with the environmental policies, goals and guidelines set forth in Chapter 344, HRS.

4. *Substantially affects the economic or social welfare of the community or State.*

The proposed Waiohuli water system improvements will serve the domestic and agricultural needs of the Waiohuli area. Current shortages experienced during times of drought will be mitigated through the water system improvements. Increased water supply from the new tank will provide adequate water to allow farmers and ranchers to maximize their output and increase production to supply the local market. Thus, the State's dependence on imported produce will be reduced which will result in a boost to the local economy.

5. *Substantially affects public health.*

Implementation of the proposed project will not affect public health.

6. *Involves substantial secondary impacts, such as population changes or effects on public facilities.*

The proposed project is not expected to induce population growth or influence the future distribution of the island's population. Rather, the proposed Waiohuli water tank system improvements will serve the domestic and agricultural needs of the Waiohuli area by providing additional storage of water.

7. *Involves a substantial degradation of environmental quality.*

The proposed project is not expected to involve a substantial degradation of environmental quality as it is not anticipated to have any environmental affect on air or water quality, noise or environmentally sensitive areas.

8. *Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.*

The project considers all of the improvements necessary for the proposed water tank system. No additional impacts beyond the project site are anticipated.

9. *Substantially affects a rare, threatened, or endangered species, or its habitat.*

As the project site consists entirely of grassland typical of grazing, there is anticipated to be no adverse affect on rare, threatened or endangered species or its habitat from the construction or operation of the proposed project.

10. *Detrimentially affects air or water quality or ambient noise levels.*

Operation of the new water tank is not anticipated to detrimentally affect air or water quality or ambient noise levels. Due to the distance of the project site from sensitive sources, air quality impacts from periodical maintenance vehicle emissions will be insignificant.

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

The project site does not contain environmentally sensitive areas and implementation of this project will not have significant effects on such areas.

12. *Substantially affects scenic vistas and viewplanes identified in county or state plans or studies.*

The proposed project will not affect any scenic vistas and viewplanes identified in county or state plans or studies.

13. *Requires substantial energy consumption.*

Construction and operation of the proposed project will not require substantial energy consumption.

E. Name, Address and Phone Number of Contact Person

County of Maui Department of Water Supply
200 South High Street
Wailuku, Maui, Hawaii 96793
Contact: Herbert Kogasaka
Phone: (808) 243-7835

VIII. CONSULTATION

A. Pre-Assessment Consultation

The following agencies and organization were consulted during the pre-assessment phase of the Draft EA.

State of Hawaii

Department of Agriculture
Department of Land and Natural Resources Historic Preservation Division

County of Maui

Department of Water Supply
Planning Department

Organizations

Estate of James Campbell

B. Draft EA Consultation

The agencies and individuals listed below were sent copies of the Draft EA with a request for their comments on the project. Of those who formally replied, some had no comments while others provided comments as indicated by the * and **, respectively. All written comments and responses are reproduced in Appendix A.

Federal

U.S. Department of Agriculture
** U.S. Army Corps of Engineers
** U.S. Department of the Interior Fish and Wildlife Service

State of Hawaii

Department of Agriculture
Department of Business, Economic Development & Tourism
Department of Land and Natural Resources Land Division
** Department of Land and Natural Resources Historic Preservation Division

- * Department of Land and Natural Resources Commission on Water Resource Management
- Department of Health
- Department of Health Environmental Management Division
- ** Department of Transportation
- Office of Planning
- Department of Hawaiian Home Lands
- Office of Hawaiian Affairs
- * University of Hawaii Water Resources Research Center
- University of Hawaii Environmental Center

County of Maui

- Department of Water Supply
- ** Planning Department
- ** Department of Public Works & Waste Management
- Department of Parks and Recreation
- Economic Development Agency
- Councilmember Alice L. Lee

REFERENCES

Armstrong, Warwick R. ed. *Atlas of Hawaii*. Second Edition. University of Hawaii Press. 1983.

Belt, Collins & Associates, Ltd. *Study of Surface Water Development for Maui Up-Country Water Systems*. Prepared for County of Maui Department of Water Supply. January 1985.

County of Maui. *The General Plan of the County of Maui*. Ordinance 1052 - Ordinance adopting the General Plan and providing for community plans for the County of Maui, June 1980.

County of Maui Department of Water Supply and State of Hawaii Department of Land and Natural Resources. *Maui County Water Use and Development Plan*. March 1990.

County of Maui Department of Water Supply. *Technical Report - Water Use and Development Plan - County of Maui*. 1989.

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First Hawaiian Bank, Research Department. *Supplement to Economic Indicators--Maui County Profiles*. July/August 1993.

George A. L. Yuen & Associates, Inc. *Water Resources Protection Plan*. Volumes I & II. Prepared for State Commission on Water Resources Management. Department of Land and Natural Resources. Honolulu, Hawaii. June 1990.

Hasting, Martin, Chew, & Associates, Ltd. *Makawao-Pukalani-Kula Community Plan*. Prepared for the County of Maui.

Land Study Bureau, University of Hawaii. *Detailed Land Classification -Island of Maui*. L.S.B. Bulletin No. 7. May 1967.

Michael T. Munekiyo Consulting. *The General Plan of the County of Maui - 1990 Update*. Prepared for County of Maui Planning Department. September 1990.

State of Hawaii Department of Business and Economic Development & Tourism. *County of Maui Facts and Figures 1994*.

State of Hawaii Department of Business and Economic Development & Tourism. *The State of Hawaii Data Book*. November 1995.

Stearns, Harold T. *Geology of the State of Hawaii*. Second Edition. Pacific Books, Publishers. Palo Alto, California. 1966.

United States Department of Agriculture Forest Service, Soil Conservation Service. *Water Resources Study for Upcountry Maui, Island of Maui, Hawaii - Final Report*. Prepared for County of Maui. April 1989.

United States Department of Agriculture, Soil Conservation Service. *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. University of Hawaii Agricultural Experiment Station, 1972.

United States Department of Commerce. *1990 Census of Population and Housing Characteristics, Census Tracts - Hawaii*. 1990.

Wilson Okamoto & Associates, Inc. *Maui Community Plan Update - Infrastructure Assessment*. Prepared for County of Maui Planning Department. September 1992.

APPENDIX A

Consultation Comments Received

**Pre-Assessment Consultation
Correspondence**



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 4TH FLOOR
HONOLULU, HAWAII 96813

STATE HISTORIC PRESERVATION DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES

- DEPUTY DIRECTOR
- JOSEPH W. HENDERSON
- DEPUTY DIRECTOR
- AGRICULTURE DEVELOPMENT PROGRAMS
- AGRICULTURAL RESOURCES CONSERVATION AND ENVIRONMENTAL AFFAIRS
- CONSERVATION AND RESTORATION
- RECREATION DEVELOPMENT
- LAND AND NATURAL RESOURCES
- LAND MANAGEMENT
- STATE PARKS
- WATER AND LAND DEVELOPMENT

June 7, 1994

Ms. Lauren Nagata
Wilson, Okamoto & Associates
P.O. Box 3530
Honolulu, Hawaii 96811

LOG NO: 11814
DOC NO: 9406KD02

Dear Mr. Nagata:

SUBJECT: Chapter 6E (HRS) Historic Preservation Review of a Proposed Water Tank Improvement Project
Maiohuli, Makawao, Maui
TRK 2-2-17, POF 6

Thank you for providing additional information regarding the scope of the proposed water tank replacement project, and regarding the stone enclosure located adjacent to the proposed project area. The information was requested by our office (letter dated May 17, 1994) in order to aid in our assessment of potential impacts the project might have on historic sites.

The project site is located on the east side of Polipoli Road, at its intersection with Middle Road, in Maiohuli. During a field visit to the site, State Historic Preservation Division staff observed a stone walled enclosure and two areas of stacked stones on rock outcrops within the area shown on the project plan. In our request, you submitted a more detailed plan of the proposed work, and information regarding the history and origin of the stone enclosure.

According to your informant, Mr. Henry Rice, the enclosure dates to circa 1955, when the walls of a pre-existing cattle corral were rebuilt in their entirety. The original structure was built as a cattle corral by the Kaonoulu Ranch circa 1920. According to the detailed construction plans, the proposed access road will follow an existing roadway from Polipoli Road in the area of the enclosure, resulting in no direct impacts to the structure.

The two areas of stacked stones located on rock outcrops are beyond the area of tank and road construction, and will likewise not be impacted by the proposed work.

Ms. Lauren Nagata
Page 2

Based on your recently provided information, we believe that this project will have "no effect" on historic sites.

Please contact Ms. Theresa K. Donham at 243-5169 if you have any questions.

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

KD:jfn

**Draft EA Consultation
Correspondence**



United States Department of the Interior

FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS OFFICE
500 ALA MOANA BLVD, SUITE 3-580
HONOLULU, HI 96813
tel (808) 541-3441 fax (808) 541-3470

RECEIVED
MAY 17 1995

In Reply Refer To: C.A.W

Barry Toyota
Wilson Okamoto & Associates, Inc.
P.O. Box 3530
Honolulu, Hawaii 96811

MAY 12 1995

Re: Review of draft Environmental Assessment for the proposed Waiohuli Tank Replacement, Waiohuli, Maui, Hawaii.

Dear Mr. Toyota

The U.S. Fish and Wildlife Service (Service) has reviewed the draft Environmental Assessment for the proposed Waiohuli Tank Replacement, Waiohuli, Maui, Hawaii. The project applicant is the County of Maui. Department of Water Supply. The proposed project involves the construction of a new 0.5 million gallon (MG) water tank; perimeter road; and appurtenances to replace the existing leaking 70,000 gallon water storage tank, which lies mauka of the community of Waiohuli along the western slopes of Haleakala. The Service offers the following comments for your consideration:

The Service does not anticipate direct adverse impacts to fish and wildlife resources to result from the proposed project. However, the Service recommends that the following measures to minimize the degradation of water quality be incorporated into the design and construction of the proposed project: (1) all construction-related materials should be free of pollutants and (2) erosion from grading activities should be minimized and contained to the immediate vicinity of construction through the use of effective erosion control measures and the curtailment of grading activities during adverse weather conditions. Provided that the final Environmental Assessment reflects the foregoing requirements, the Service will concur with a finding of no significant impact.

The Service appreciates the opportunity to provide these comments on the proposed project. If you have questions regarding these comments, please contact Fish and Wildlife Biologist Christine Willis at 808/541-3441.

Sincerely,

Brooks Harper

Brooks Harper
Field Supervisor
Ecological Services

cc: DAR, Hawaii



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1708
HAUJUKU, MAUI, HAWAII 96753-2708

April 28, 1998

Mr. Brooks Harper
Field Supervisor, Ecological Services
Fish and Wildlife Service
United States Department of the Interior
500 Ala Moana Boulevard, Suite 3-580
Honolulu, Hawaii 96813

Dear Mr. Harper:

Subject: Waiohuli Tank Replacement
Draft Environmental Assessment (EA)
TMK: 2-2-17: Portion 6
Waiohuli, Maui, Hawaii

Thank you for your letter dated May 12, 1995 (Ref. C.A.W) indicating that the Service does not anticipate direct adverse impacts to fish and wildlife resources as a result of the proposed project. A copy of the letter is attached for your reference.

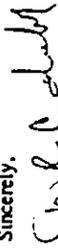
Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Finding of No Significant Impact determination with the State Office of Environmental Quality Control.

During design and construction of the proposed project, measures will be taken to ensure that all construction-related materials are free of pollutants to the extent possible. As indicated in Section V.A.1. of the Draft EA, the required County of Maui grading standards will be complied with to minimize erosion potential during project construction.

Mr. Brooks Harper
Fish and Wildlife Service
United States Department of the Interior
April 28, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EA.
We appreciate your interest and participation in the consultation phase of the
environmental review process.

Sincerely,



David R. Craddick
Director

/IK:sc

Attachment: Ltr dtd 5/12/95

cc: Mr. Barry Toyota, Wilson Okamoto & Associates, Inc.

January 20, 1995

Planning Division

County of Maui
Department of Water Supply
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Sir/Madam:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Waiohuli Tank Replacement Project, Waiohuli, Maui (TMK 2-2-17: por. 6). The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

a. Based on the information provided, a DA permit will not be required for this project.

b. The flood hazard information provided on page III-6 of the environmental assessment is correct.

Sincerely,



Ray H. Jyo, P.E.
Director of Engineering

Copies Furnished:

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

Mr. Barry Toyota, Project Engineer
Wilson Okamoto & Associates, Inc.
PO Box 3530
Honolulu, Hawaii 96811



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1108
WAILUKU, MAUI, HAWAII 96783-1108

April 28, 1998

Mr. Ray H. Jyo, P.E.
Director of Engineering
U.S. Army Engineering District, Honolulu
Fort Shafter, Hawaii 96858-5440

Dear Mr. Jyo:

Subject: Waiohuli Tank Replacement
Draft Environmental Assessment (EA)
TMK: 2-2-17: Portion 6
Waiohuli, Maui, Hawaii

Thank you for your letter dated January 20, 1995 commenting on the subject Draft EA.
A copy of the letter is attached for your reference.

Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Finding of No Significant Impact determination with the State Office of Environmental Quality Control.

We acknowledge your confirmations that a Department of Army permit will not be required for the subject project and that the flood hazard information provided in the EA is correct.

Mr. Ray H. Jyo, P. E.
Director of Engineering
U. S. Army Engineering District, Honolulu
February 28, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EA.
We appreciate your interest and participation in the consultation phase of the
environmental review process.

Sincerely,



David R. Craddock
Director

/HK:sc

Attachment: Lr dtd 1/20/95

cc: Mr. Barry Toyota, Wilson Okamoto & Associates, Inc.

STEPHEN J. CRADDOCK
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH ERNO STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

May 1, 1998

Mr. Barry Toyota
Wilson Okamoto & Associates, Inc.
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Toyota

SUBJECT: Chapter 6E-42 Historic Preservation Review of the Newly Proposed
Waiohuli Water Tank Replacement Environmental Assessment
Waiohuli Ahupua'a, Makawao District, Island of Maui
TMK 2-2-17-6

This letter is a Historic Preservation review of the newly proposed Waiohuli Water Tank Replacement Environmental Assessment located in Waiohuli Ahupua'a. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division. No field check was conducted of the subject property, although staff archaeologist Boyd Dixon was shown photographs of the newly proposed tank location and access road by Mr. Toyota on April 22, 1998.

Our office reviewed a previous location proposed for this water tank (SHPD DOC NO. 9406KDD2 and 9501SE 03) in which the undertaking was found to have "no effect" on significant historic sites. The newly proposed tank site may have been the location of pre- or post-contact farming, perhaps with scattered houses. However, the subject property has been subjected to considerable alteration due to historic ranching and agriculture, so it is unlikely that significant historic sites will be encountered today.

We therefore find the newly proposed undertaking to have "no effect" on significant historic sites. As a contingency, should any unrecorded historic sites (i.e. subsurface pavings, artifacts, or human skeletal remains) be inadvertently uncovered during construction, we recommend that all work should cease in the vicinity and the contractor should immediately contact the State Historic Preservation Division.

If you have any questions please contact Boyd Dixon at 243-5169

Alaha

DON HIBBARD, Administrator
State Historic Preservation Division

BD/jen

cc: Ralph Nagamine, Maui County Department of Public Works (fa: 243-7972)
David Blanc, Maui County Department of Planning (fa: 243-7634)

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

STEPHEN J. CRADDOCK
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH ERNO STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

January 20, 1995

Mr. David Craddock
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793

Dear Mr. Craddock:

SUBJECT: Waiohuli Tank Replacement, Draft Environmental Assessment (Draft EA)
Waiohuli, Island of Maui, Hawaii
TMK: 2-2-17: por. 6

Thank you for the opportunity to comment on the Draft EA for the Waiohuli Tank Replacement. According to our records, Ms. Theresa Donham of the Maui State Historic Preservation Division conducted a field inspection of the subject parcel on May 6, 1994. She recorded three historic sites: a former cattle corral which dates to ca 1920, and two areas of stacked stone. Given the detailed construction plans provided, neither the proposed access road nor the construction of the tank replacement will have an impact on these sites. Therefore, we believe that this project will have "no effect" on historic sites.

Please contact Ms. Theresa K. Donham at 243-5169 or Ms. Sara Collins at 587-0013 if you have any questions

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

SC:ab

cc: Mr. Gary Gill, Office of Environmental Quality Control
Mr. Barry Toyota, Wilson Okamoto & Associates

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DUPTY
DEPUTY COMMISSIONER

AGRICULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
CONSERVATION AND ENVIRONMENTAL AFFAIRS
CONSERVATION AND RESOURCES ENFORCEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION DIVISION
LAND MANAGEMENT
PLANNING AND DESIGN
WATER AND LAND DEVELOPMENT

LOG NO. 13644
DOC NO. 9501SE03

RECEIVED
JAN 31 1995

WILSON OKAMOTO & ASSOCIATES



**BOARD OF WATER SUPPLY
COUNTY OF MAUI**

P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-7109
Telephone (808) 243-7816 • Fax (808) 243-7833

May 12, 1998

Mr. Don Hibbard, Administrator
Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
33 South King Street, 6th Floor
Honolulu, HI 96813

Dear Mr. Hibbard:

Subject: Waiohuli Tank Replacement
Draft Environmental Assessment (EA)
Waiohuli, Maui, Hawaii

Thank you for your letters dated January 20, 1995 (LOG No.: 13644, DOC No.: 9501SC03) and May 1, 1998 (LOG No.: 21419, DOC No.: 9804BD21) commenting on the subject Draft EA. Copies of the letters are attached for your reference.

Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements have been re-sited to a different location within the same parcel, approximately 360 feet to the south. Pursuant to consultation with Mr. Royd Dixon of your staff on April 22, 1998, a determination of "no effect" on significant historic sites for the new location was issued by your Department by the letter dated May 1, 1998. This information will be reflected in the Final EA.

Should any unrecorded historic sites be inadvertently uncovered during construction of the water tank system improvements, construction will be halted and immediate contact will be made with the State Historic Preservation Division.

Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Findings of No Significant Impact determination with the State Office of Environmental Quality Control.

Your letters, along with this response, will be reproduced in the forthcoming Final EA. We

appreciate your interest and participation in the consultation phase of the environmental review process

Sincerely,

David R. Craddick
Director

Attachments

cc: Mr. Barry Toyota, Wilson Okamoto & Associates, Inc.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER AND LAND DEVELOPMENT

P.O. BOX 311
HONOLULU, HAWAII 96809

February 6, 1995

Mr. Barry Toyota
Project Engineer
1907 S. Beretania Street
Honolulu, Hawaii

Dear Mr. Toyota:

Waiohuli Tank Replacement
Draft Environmental Assessment

This is in reference to your letter of January 6, 1995. Thank you for the opportunity to review the draft environmental assessment of the proposed County of Maui Department of Water Supply, Waiohuli Tank Replacement. We do not have any comments on the proposed construction of the 500,000 gallon tank.

Sincerely,

MANABU TAGOMORI
Manager/Chief Engineer

ME:ek

MAUI COUNTY DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1108
WAILUKU, MAUI, HAWAII 99725-7108



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI

P.O. BOX 1108
WAILUKU, MAUI, HAWAII 99725-7108

April 28, 1998

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

Dear Mr. Wilson:

Subject: Waiohuli Tank Replacement
Draft Environmental Assessment (EA)
TMK: 2-2-17: Portion 6
Waiohuli, Maui, Hawaii

This is to acknowledge the letter dated February 6, 1995 from Mr. Manabu Tagomori, former Manager/Chief Engineer of the State Department of Land and Natural Resources Division of Water and Land Development, indicating that his Department has no comments on the subject Draft EA. A copy of the letter is attached for your reference.

Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Finding of No Significant Impact determination with the State Office of Environmental Quality Control.

Mr. Michael D. Wilson, Director
Department of Land and Natural Resources
State of Hawaii
April 28, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EA.
We appreciate your interest and participation in the consultation phase of the
environmental review process.

Sincerely,



David R. Craddick
Director

/HK:sc

Attachment: Ltr dtd 2/6/95

cc: Mr. Barry Toyola, Wilson Okamoto & Associates, Inc

BENJAMIN J. CAJETANO
DIRECTOR



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

January 17, 1995

Mr. David Craddock, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawaii 96793

Dear Mr. Craddock:

Subject: Waiohuli Tank Replacement
Draft Environmental Assessment
TMK: 2-2-17: por. 6

The proposed development will not have an impact on our transportation facilities in the area.
We appreciate the opportunity to provide comments.

Very truly yours,

KAZU HAYASHIDA
Director of Transportation

cc: Wilson Okamoto & Associates, Inc.
OEQC

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTOR
STATE OF HAWAII
GLENN H. CHAMBERLAIN
JOYCE I. CHAMBERLAIN

WILSON OKAMOTO
5778 6548



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1108
WAILUKU, MAUI, HAWAII 96793-7108

April 28, 1998

Mr. Kazu Hayashida
Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Hayashida:

Subject: Waiohuli Tank Replacement
Draft Environmental Assessment (EA)
TMK: 2-2-17: Portion 6
Waiohuli, Maui, Hawaii

Thank you for your letter dated January 17, 1995 indicating that the proposed development will not have any impact on your Department's transportation facilities in the area. A copy of the letter is attached for your reference.

Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Finding of No Significant Impact determination with the State Office of Environmental Quality Control.

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
April 28, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EA.
We appreciate your interest and participation in the consultation phase of the
environmental review process.

Sincerely,



David R. Craddick
Director

/HK:sc

Attachment: Ltr did 1/17/95

cc: Mr. Barry Toyota, Wilson Okamoto & Associates, Inc.

University of Hawaii at Manoa
Water Resources Research Center



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 7108
WAILUKU, MAUI, HAWAII 96793-7108

MEMORANDUM

10 January 1995

TO: County of Maui
Department of Water Supply
200 South High Street
Wailuku, Maui, Hawaii 96793

FROM: Roger S. Fujioka *RS Fujioka*
Director, WRRRC

SUBJECT: Draft EA

Water Resources Research Center does not object and, therefore, has no specific comments to the Draft Environmental Assessment for Waiohuli Tank Replacement.

April 28, 1998

Mr. Roger Fujioka, Ph.D.
Director
Water Resources Research Center
University of Hawaii at Manoa
Holmes Hall 283
2540 Dole Street
Honolulu, Hawaii 96822

Dear Dr. Fujioka:

Subject: Waiohuli Tank Replacement
Draft Environmental Assessment (EA)
TMK: 2-2-17: Portion 6
Waiohuli, Maui, Hawaii

Thank you for your letter dated January 10, 1995 indicating that the Water Resources Research Center does not object and, therefore, has no specific comments on the subject Draft EA. A copy of the letter is attached for your reference.

Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Finding of No Significant Impact determination with the State Office of Environmental Quality Control.

AN EQUAL OPPORTUNITY EMPLOYER

RSF:jmn

Mr. Roger Fujioka, Ph.D., Director
Water Resources Research Center
University of Hawaii at Manoa
April 28, 1998
Page 2

Your letter, along with this response, will be reproduced in the forthcoming Final EA.
We appreciate your interest and participation in the consultation phase of the
environmental review process.

Sincerely,



David R. Craddick
Director

/HK:sc

Attachment: Memo dtd 1/10/95

cc: Mr. Barry Toyota, Wilson Okamoto & Associates, Inc.



DEPARTMENT OF WATER SUPPLY
 COUNTY OF MAUI
 P.O. BOX 1108
 WAILUKU, MAUI, HAWAII 96793-7108

LINDA CROCKETT UNOUE
 Mayor



COUNTY OF MAUI
 PLANNING DEPARTMENT
 200 S. HIGH STREET
 WAILUKU, MAUI, HAWAII 96793

11/18/94
 BRIAN W. MISKAE
 Director
 GWYNETH Y. OHAI
 Deputy Director

April 28, 1998

MEMORANDUM

TO: DAVID BLANE, DIRECTOR OF PLANNING
 FROM: DAVID R. CRADDICK, DIRECTOR OF WATER SUPPLY
 SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR WAILOHULI
 TANK REPLACEMENT

This is in regard to your Memorandum dated November 15, 1994 and our response Memorandum dated November 22, 1994 regarding the subject Draft EA. Copies of the memoranda are attached for your reference.

Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Finding of No Significant Impact determination with the State Office of Environmental Quality Control.

The aforementioned correspondence, along with this response, will be reproduced in the forthcoming Final EA. Should you have any questions, please feel free to contact me at Ext. 7816.

/HK:sc

Attachments: Memo dtd 11/22/94
 Memo dtd 11/15/98

cc: Mr. Barry Toyota, Wilson Okamoto & Associates, Inc.

MEMORANDUM

Date: November 15, 1994
 To: David Craddick, Director
 Board of Water Supply
 From: BRIAN MISKAE
 PLANNING DIRECTOR
 RE: Environmental Assessment (EA) for Waihohuli Tank Replacement

Thank you for allowing us to comment on the above referenced project.

The draft EA dated October 1994 for the project is correct in as much that the Makawao-Pukalani-Kula (M-P-K) Community Plan (CP) designation for the project area is agriculture. Pursuant to HRS 205-4.5 (7)--public, private, quasi-public--major water storage tanks are permissible uses within the agricultural districts. The proposed project would be consistent with both the State Land Use and Community Plan designation.

The EA fails to mention that "water supply and quality" is identified as a major problem by the M-P-K CP. That language within the M-P-K CP states that a separate domestic and irrigation water system should be established. The M-P-K CP states that water for irrigation is unnecessarily treated to domestic standards. The proposed project would perpetuate an inefficient system of supplying high quality domestic water for irrigation purposes.

BWM/JA 87



BOARD OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1108
WAILUKU, MAUI, HAWAII 96793-7108

November 22, 1994

MEMORANDUM

TO: *Brian Miskae*
BRIAN MISKAЕ, DIRECTOR OF PLANNING

FROM: DAVID R. CRADDICK, DIRECTOR OF WATER SUPPLY

SUBJECT: ENVIRONMENTAL ASSESSMENT (EA) FOR WAIHOHULI TANK
REPLACEMENT - YOUR COMMENTS OF NOVEMBER 15, 1994

Thank you for your comments on the subject project.

We acknowledge the Makawao-Pukalani-Kula Community Plan statement that a separate domestic and irrigation system should be established. The Board of Water Supply has agreed with the State Department of Agriculture to co-sponsor the dual water line with the State Department of Agriculture.

Unfortunately, the need to up-size the reservoir is overdue. The plan is to construct the larger size reservoir until such time as the dual water system becomes a reality. At that time, we plan to offer the up-sized reservoir for non-portable use, as part of our contribution to the project and construct a much smaller reservoir for domestic water.

Should you have any questions, please feel free to contact me at ext. 7816.

GMI:ms

cc: Ed Kagehiro ✓
Ellen Kraftsow

"By Water All Things Find Life"

LEONARD CHETTI, INC.
MAYOR
GEORGE N. KAYA
Director
CHARLES JENCKS
Deputy Director
ARON SHIMOTO, P.E.
Chief Staff Engineer



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
LAND USE AND CODES ADMINISTRATION
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

RALPH MAGNINE, L.S., P.E.
Land Use and Codes Administration
KASSIE MILLER, P.E.
Wastewater Reclamation Division
LLOYD P. W. LEE, P.E.
Engineering Division
DAVID WISSMAR, P.I.
Solid Waste Division
BRIAN HASHIRO, P.E.
Highways Division



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1108
WAILUKU, MAUI, HAWAII 96793-7108

December 15, 1994

Mr. Barry Toyota, Project Engineer
Wilson Okamoto & Associates, Inc.
1907 S. Beretania Street
Honolulu, HI 96826

SUBJECT: Draft Environmental Assessment
WAIOHULI TANK REPLACEMENT
TMN: 2-2-017.por. 6

Dear Mr. Toyota:

We reviewed the above draft environmental assessment and noted that creation of the proposed lot and access easement requires Title 18 (Subdivision) processing.

If you have any questions regarding this letter, please call me at 243-7845.

Very truly yours,

George N. Kaya

GEORGE N. KAYA
Director of Public Works & Waste
Management

RMN:ey
xc: Engineering Division
Solid Waste Division
Wastewater Reclamation Division
Bruce Anderson
David Craddick
a c3mmocomment

April 28, 1998

MEMORANDUM

TO: GEORGE N. KAYA, DIRECTOR OF PUBLIC WORKS & WASTE
MANAGEMENT
FROM: DAVID R. CRADDICK, DIRECTOR OF WATER SUPPLY
SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR WAIHULI
TANK REPLACEMENT

Thank you for your letter dated December 15, 1994 commenting on the subject Draft EA. A copy of the letter is attached for your reference.

Subsequent to the November 8, 1994 publication of the subject Draft EA, the proposed water tank improvements were re-sited to a different location within the same parcel, approximately 360 feet to the south. Since the anticipated environmental impacts are unchanged with the new location, we are proceeding to file the Final EA and Finding of No Significant Impact determination with the State Office of Environmental Quality Control.

We acknowledge that creation of the proposed lot and access easement requires Title 18 (Subdivision) processing and will coordinate with your Department on this matter.

Your letter, along with this response, will be reproduced in the forthcoming Final EA. Should you have any questions, please feel free to contact me at Ext. 7816.

/HK:sc
Attachment: Ltr did 12/15/94

cc: Mr. Barry Toyota, Wilson Okamoto & Associates, Inc.

END

CERTIFICATION

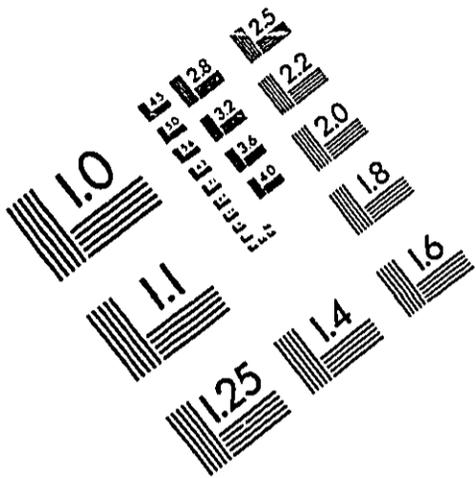
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2004

DATE

Jelle Kaai

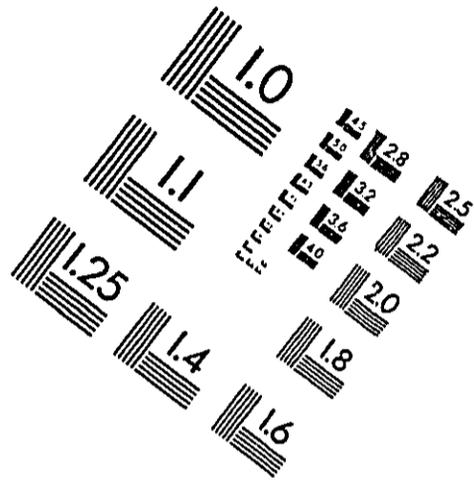
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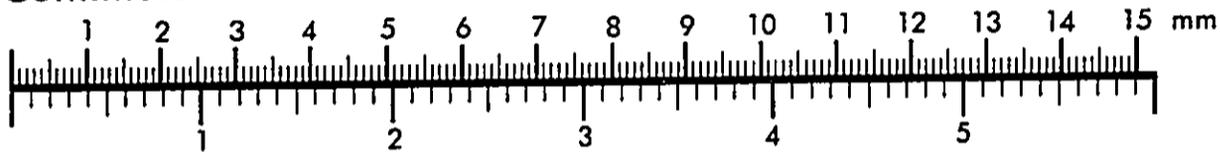
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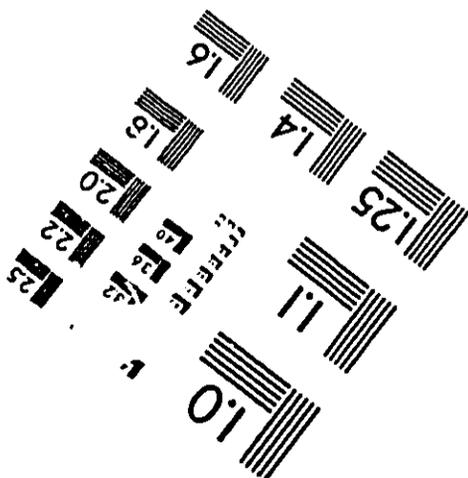
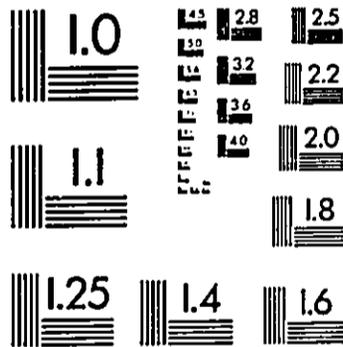
1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202



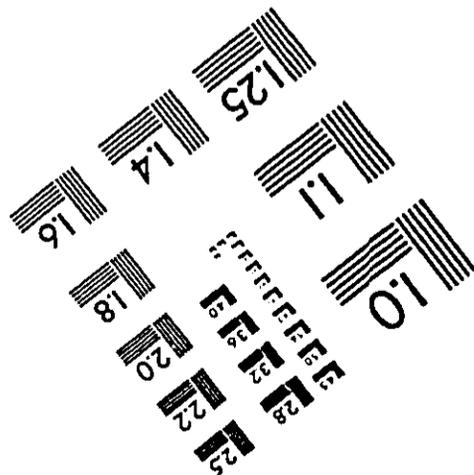
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