



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
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OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

September 26, 2001

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

Dear Ms. Salmonson,

Subject: Finding of No Significant Impact (FONSI)
for Lahaina Water Treatment Facility Modifications
TMK 4-6-018:012 (Por.), Lahaina, Maui, Hawaii

The County of Maui Department of Water Supply has reviewed the comments received during the 30-day public comment period which began on April 23, 2001. The County of Maui Department of Water Supply has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the October 8, 2001 OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form, four copies of the Final EA, and the project summary on disk. Please call Mr. Larry Winter at (808) 270-7835 if you have any questions.

Sincerely,

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

DRC/HPE/lw

xc Hawaii Pacific Eng.

"By Water All Things Find Life"

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**Final Environmental Assessment and
Finding of No Significant Impact (FONSI) for
(Lahaina Water Treatment Facility Modifications)
Lahaina, Maui, Hawaii**

Prepared For:
Department of Water Supply
County of Maui

Prepared by:
Hawaii Pacific Engineers

DWS Job No. 00-05
September 26, 2001
HPE 0031

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Finding of No Significant Impact (FONSI) for
Lahaina Water Treatment Facility Modifications
Lahaina, Maui, Hawaii**

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**Lahaina Water Treatment Facility Modifications
Final Environmental Assessment**

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Final Environmental Assessment**

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Executive Summary

EXECUTIVE SUMMARY

The County of Maui, Department of Water Supply proposes to fund the development of modifications to existing water treatment facilities at Lahaina, Maui (TMK 4-6-18: por.12). Pursuant to Chapter 343, Hawaii Revised Statutes, and Chapter 200 of Title 11, Administrative Rules, Environmental Impact Statement Rules, this Environmental Assessment documents the project's technical characteristics and environmental impacts, and advances findings and conclusions relative to the significance of the project.

Proposing Agency and Landowner

The Proposing Agency for the project is the County of Maui, Department of Water Supply (DWS). The landowner of the affected property is the State of Hawaii.

Contact Person

For further information, contact Mr. David R. Craddick, Director, County of Maui, Department of Water Supply, 200 S. High Street, Wailuku, Hawaii 96793, or at telephone (808) 270-7816.

Property Location and Description

The project site is located at the existing Lahaina Water Treatment Facility above the western shore of the island of Maui. The site is located approximately 1,500 feet mauka (east) of Lahainaluna High School campus, on lands owned by the State of Hawaii (TMK 4-6-18:12). The northern limit of the site is defined by a steep cliff forming one side of the Kanaha Stream Valley. Open pasture and rangeland border the site to the south and east. Lahainaluna High School agricultural land borders the site to the west.

Proposed Action

The DWS proposes modifications to the existing Lahaina Water Treatment Facility (WTF) consisting of:

- Construction of a pre-engineered building over the existing presedimentation basin and
- Construction of a new sludge lagoon.

The proposed modifications will not impact the treatment capacity of the Lahaina WTF.

The existing presedimentation basin is a rectangular, open, concrete structure. Because the top of the basin is exposed to sunlight, the raw water within the basin is susceptible to algae growth. Increased amounts of algae in the raw water accelerate the rate at which the microfiltration system becomes fouled. Construction of a pre-engineered building over the presedimentation basin is proposed to provide a covering to reduce algae growth within the basin. The pre-engineered building will consist of a steel frame with aluminum roofing but no side panels. The roof will have eaves to limit the amount of direct sunlight hitting the water surface. Fascias

along the north and south faces and aluminum panels for the existing guardrails will be provided to further reduce the amount of direct sunlight hitting the water surface within the basin. The columns of the pre-engineered building will be bolted to the top of the presedimentation basin. Lights will be provided for lighting the interior of the building.

The overflow and drain lines from the existing presedimentation basin were designed to discharge to the storm drain system which discharges to Kanaha Stream. The facility was originally designed to operate without any chemical addition. However, under current operations, coagulant is periodically injected into the raw water upstream of the presedimentation basin for color removal. Because the facility is currently treating the raw water with coagulant upstream of the presedimentation basin, discharges from the basin to the Kanaha Stream are not allowed without additional treatment and a National Pollution Discharge Elimination System (NPDES) permit. Construction of a new sludge lagoon to handle and dispose of discharges from the presedimentation basin is proposed. This will eliminate the discharge to Kanaha Stream and the need for a NPDES permit. The new sludge lagoon will be similar in construction to the existing sludge lagoons. The new sludge lagoon will be constructed in the sloped area between the presedimentation basin and existing sludge lagoons. The lagoon will be constructed with an open bottom utilizing graded rock and gravel media with a top layer of sand. The free liquid will percolate into the subsurface soil structure while the solids will be retained on the top layer of sand media. Periodic removal of the solids retained on sand layer will be required. An access road and ramp will be constructed to the sludge lagoon for truck access to remove the dewatered solids.

Other proposed improvements related to the new water treatment facilities include:

1. Extension of the existing 12-foot wide paved access road to the site;
2. Construction of a chain link fence and gate to secure the proposed facilities.

Findings and Determination

The proposed modifications to the Lahaina WTF are intended to reduce operation and maintenance effort and improve treatment operations at the facility. The benefits derived from this project are significant in terms of the public health and welfare, as treated water produced by the facility will continue to meet the highest standards of water quality for surface water sources while efficiently using DWS resources.

The proposed modifications will involve earthwork and building construction activities. In the short-term, these activities may create temporary nuisances normally associated with construction activities. Construction vehicles, for example, will require access to the site through the Lahainaluna High School campus. Vehicles will utilize a perimeter road that currently provides access to the existing State and County water facilities. With traffic monitoring normally conducted for construction activities of this nature, the short-term impacts to the school are not anticipated to be significant. The project site is isolated away from the school and adjacent urban residential areas, and construction activities at the site are not anticipated to adversely impact these areas. Earthwork activities may create a disturbance for Hawaiian geese

or Nene that have been known to nest in the area. Construction personnel will be educated on appropriate measures to take if Nene geese are sighted in the area during construction. With proper education, short-term disturbances to the Nene geese are not anticipated to be significant.

From a long-term perspective, the additional water treatment facilities are not anticipated to result in adverse environmental impacts. The new facilities will be compatible in scale, mass and height with the existing water system facilities at the site. There are no surface archaeological features or rare/threatened species of flora at the site and the use of previously graded lands for the proposed improvements will not affect these environmental resources. Nene geese have been known to nest in the area of the existing water treatment facility. However, the proposed facilities are not anticipated to impact the ability of the geese to use the site for nesting in the future. Ambient air and noise characteristics will not be altered as a result of the proposed improvements to the Lahaina WTF. The new sludge lagoon will prevent further discharges from the presedimentation basin to Kanaha Stream. Elimination of discharges to Kanaha Stream will have a beneficial impact to the water quality in the stream. Percolation of the presedimentation basin discharges in the new sludge lagoon is not anticipated to impact groundwater resources due to the filtering action of the sand and gravel media. The dewatered sludge should not consist of hazardous or toxic chemicals and will be disposed of at a landfill in keeping with current sludge disposal practices.

Operationally, the Lahaina WTF will continue to be fully automated and require daily maintenance checks. The proposed improvements are anticipated to reduce the operation and maintenance effort required at the treatment facility. Reduction in operation and maintenance effort should reduce the daily traffic to the facility. These ongoing maintenance visits to the plant are not expected to create undue nuisance to the school or surrounding residential neighborhoods.

This assessment for the proposed modifications to the Lahaina WTF shows that no significant impact on the environment will occur and an Environmental Impact Statement is not required. Therefore, in accordance with the provisions of Chapter 343, Hawaii Revised Statutes, a Finding of No Significant Impact (FONSI) is concluded to be in order.

Chapter 1

Introduction and Background

CHAPTER 1 INTRODUCTION AND BACKGROUND

GENERAL

The County of Maui Department of Water Supply (DWS) proposes modifications to an existing water treatment facility in Lahaina, Maui, Hawaii. The Lahaina Water Treatment Facility (WTF) is located above the western shore of the island of Maui as shown on Figure 1-1. The facility is located approximately 1,500 feet mauka (east) of the Lahainaluna High School campus as shown on Figure 1-2. To provide the context in which the proposed modifications are to be undertaken, this chapter describes the existing water treatment facility and existing operations at the facility that establishes the need for the proposed modifications.

EXISTING WATER TREATMENT FACILITY

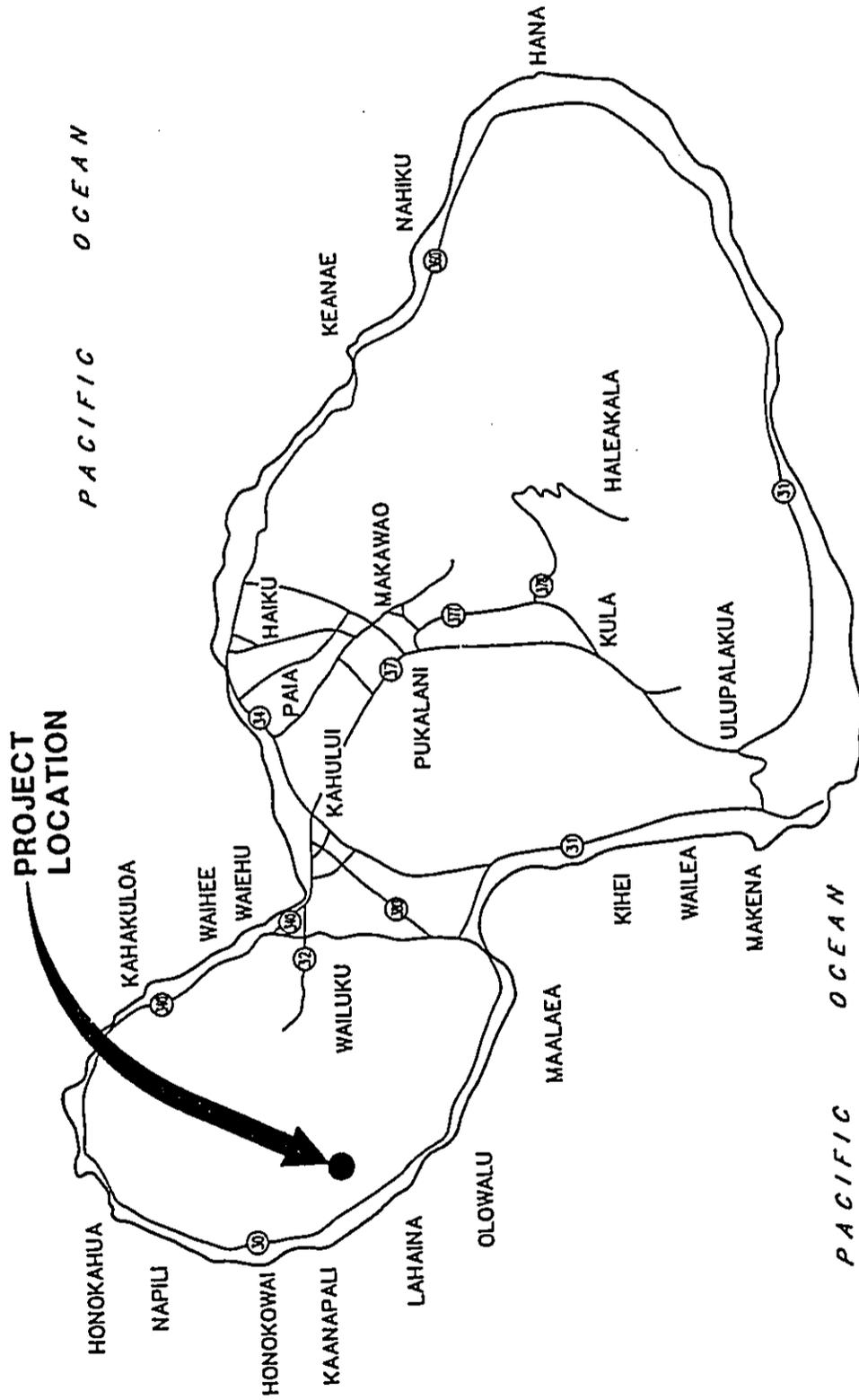
The Lahaina WTF is a continuous microfiltration plant constructed in 1997. The facility is owned and operated by the County of Maui Department of Water Supply (DWS). The facility is located on lands owned by the State of Hawaii. Surface water is currently treated at the facility by a microfiltration system followed by chlorination for the production of drinking water. The facility consists of a stream intake, a distribution screen box, a presedimentation basin, microfiltration units, and a clearwell. Treated water is stored in a 1.0 million gallon storage reservoir for distribution to various users in the Lahaina District.

Water diverted from the Kanaha Stream is allocated pursuant to a three party amended agreement executed by the State of Hawaii, County of Maui and Pioneer Mill Company, Ltd. in 1982. The agreement establishes priorities for water use from the Kanaha diversion intake that can accommodate a flow of up to 2.7 million gallons per day (mgd). The allocations provide for guaranteed flows for Lahainaluna High School, the County of Maui and Pioneer Mill. Pioneer Mill Company has since stopped its sugar cane cultivation activities and is now limited to smaller diversified agriculture operations.

The Lahaina WTF has a rated capacity of 1.65 mgd. There are three microfiltration units at the facility, each with a capacity of 675 gallons per minute (gpm). The rated capacity of the Lahaina WTF is based on operation with one unit out of service and the remaining two units operating at 85 percent of full capacity. Although the system is rated for 1.65 mgd, with one unit operating as a standby, all three units may be operated to provide output up to a peak treatment capacity of 2.92 mgd. Due to the standard capacities of the treatment units and the earlier construction of the Kanaha Stream intake, the peak treatment capacity is slightly greater than the intake capacity.

A presedimentation basin upstream of the microfiltration units is provided for gravity settlement of silt during periods of high turbidity. The microfiltration units are located within the Treatment Plant Building. The chlorination system and ammoniator are located within a separate building. The ammoniator was incorporated into the facility in the event that trihalomethane (THM) production became a problem in the treated water. However, the ammoniator is currently not used for treated water production. Backwash from the microfiltration units is discharged to a dual compartment sludge lagoon. Since the startup of the facility, one of the compartments of

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Lahaina Water Treatment Facility Modifications
 Maui, Hawaii
 Lahaina Water Treatment Facility

LOCATION MAP

FIGURE
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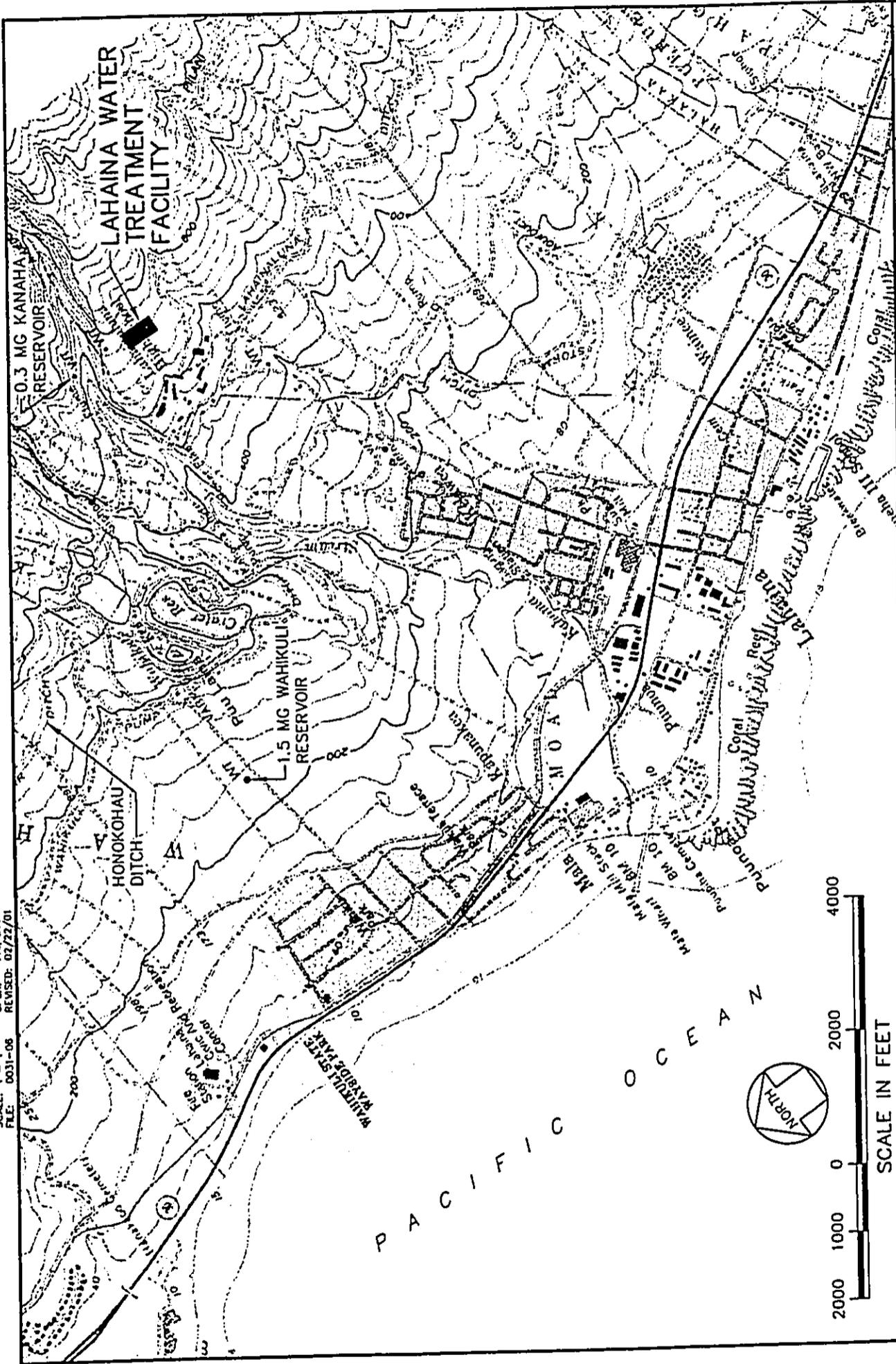


FIGURE 1-2

VICINITY PLAN

Lahaina Water Treatment Facility Modifications
 Maui, Hawaii

HPE Hawaii Pacific Engineers

the existing sludge lagoon has been modified by replacement of the impermeable clay bottom of the lagoon with gravel. After the modification, the free liquid in the sludge lagoon percolates into the ground rapidly. The DWS is planning to modify the other compartment of the existing sludge lagoon in a similar fashion.

PROJECT NEED

The existing presedimentation basin is a rectangular, open, concrete structure. Because the top of the basin is exposed to sunlight, the raw water within the basin is susceptible to algae growth. Increased amounts of algae in the raw water accelerate the rate at which the microfiltration system becomes fouled. Removal of algae from the microfiltration units is more difficult than removal of suspended solids due to the stringy structure of the algae. Algae growth also increases the frequency at which the presedimentation basin requires draining and cleaning. Increased cleaning frequencies for the microfiltration units and presedimentation basin increase the operation and maintenance effort required at the facility. Currently, additional manpower for operation and maintenance within the DWS is limited. Efforts to obtain additional qualified State-certified operators have been unsuccessful. To limit water surface exposure to sunlight, a pre-engineered building to cover the existing presedimentation basin is proposed.

The overflow and drain lines from the presedimentation basin were designed to discharge to the storm drain system which discharges to Kanaha Stream. The facility was originally designed to operate without any chemical addition. However, under current operations, coagulant is periodically injected into the raw water upstream of the presedimentation basin for color removal. Because the facility is currently treating the raw water with coagulant upstream of the presedimentation basin, discharges from the basin to the Kanaha Stream are not allowed without additional treatment and a National Pollution Discharge Elimination System (NPDES) permit. To comply with a NPDES permit, a filtration system for the discharge from the presedimentation basin and water quality monitoring would be required. A new sludge lagoon for handling and disposing of discharges from the presedimentation basin is proposed. This will eliminate the discharge to Kanaha Stream and the need for a NPDES permit.

Chapter 2

Description of the Proposed Project

CHAPTER 2 DESCRIPTION OF THE PROPOSED PROJECT

GENERAL

The Lahaina Water Treatment Facility (WTF) is a continuous microfiltration plant constructed in 1997. Surface water is currently treated at the facility by presedimentation and microfiltration followed by chlorination for the production of drinking water. Treated water is stored in a reservoir for distribution to various users in the Lahaina District. After startup of the plant, facilities were added to pretreat the water with coagulant for color removal. Also since startup of the facility, significant algae growth in the presedimentation basin and existing sludge lagoon has occurred, resulting in modifications to the sludge lagoon and necessitating frequent cleaning of the presedimentation basins. Due to these changes at the facility, modifications to the facility are proposed. This chapter describes the project location and proposed modifications.

PROJECT LOCATION AND LANDOWNERSHIP

The Lahaina WTF is located above the western shore of the island of Maui. The facility is located approximately 1,500 feet mauka (east) of the Lahainaluna High School campus. The facility is owned and operated by the County of Maui Department of Water Supply (DWS). The Lahaina WTF is located on lands owned by the State of Hawaii. The water source for the facility is the Kanaha Stream. A steep cliff leading down to Kanaha Stream borders the Lahaina WTF on the north. The Lahaina WTF is bounded on the south and east by rangeland and bounded on the west by Lahainaluna High School agricultural land.

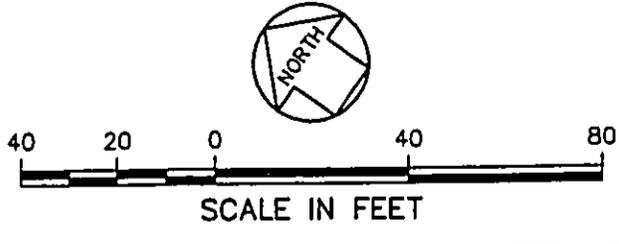
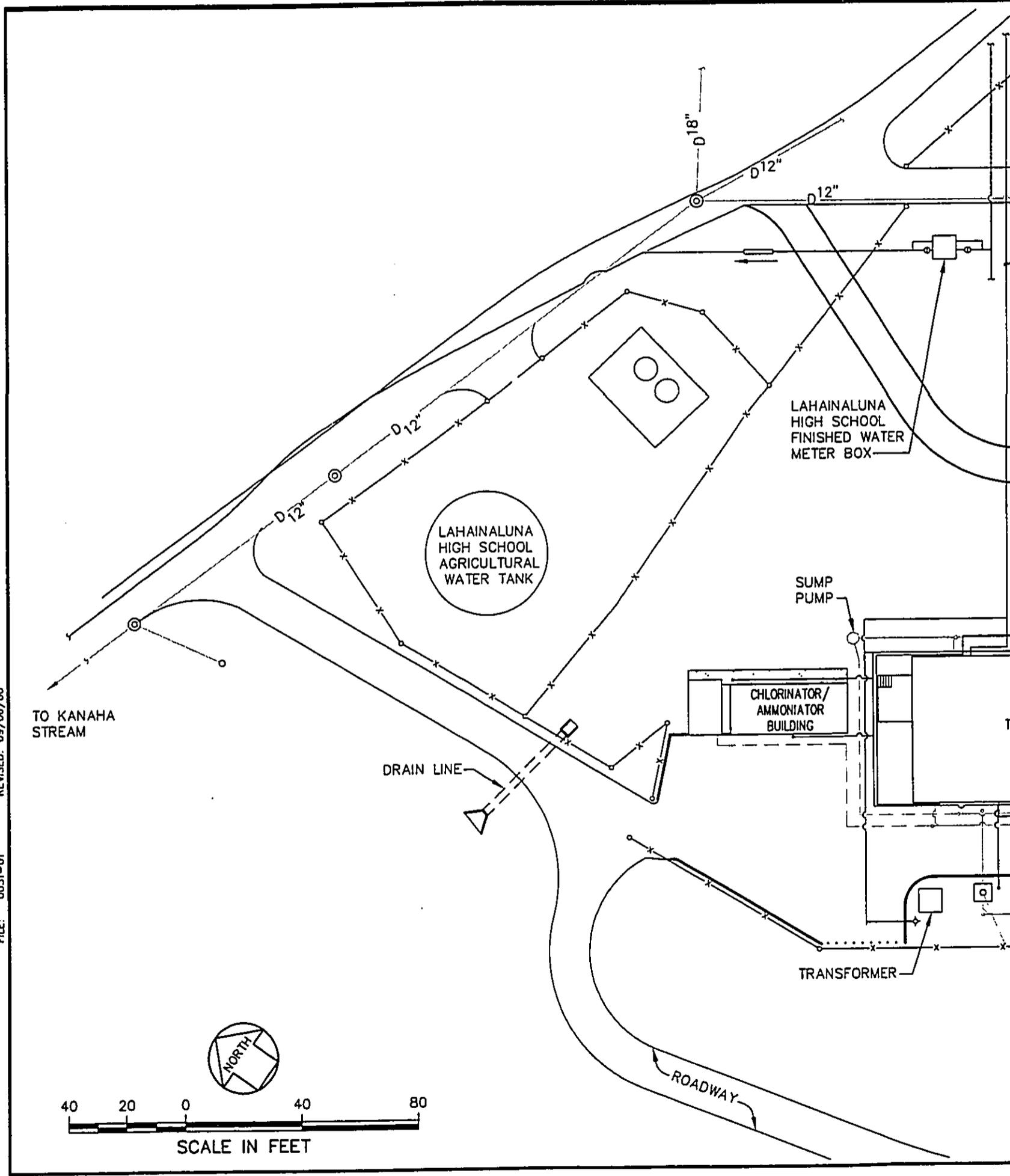
PROPOSED IMPROVEMENTS

The DWS proposes modifications to the existing Lahaina WTF consisting of constructing a pre-engineered building over the existing presedimentation basin and constructing a new sludge lagoon. The proposed modifications are shown on Figure 2-1.

Construction of a pre-engineered building over the entire presedimentation basin is proposed to limit the water surface exposure to sunlight. Limiting the water surface exposure to sunlight is expected to reduce the rate of algae growth within the basin. The building will be installed in lieu of individual covers for each of the presedimentation basin compartments. The pre-engineered building will consist of a steel frame with aluminum roofing but no side panels. The roof will have eaves to limit the amount of direct sunlight hitting the water surface. Fascias along the north and south faces and aluminum panels for the existing guardrails will be provided to further reduce the amount of direct sunlight hitting the water surface within the basin. The columns of the pre-engineered building will be bolted to the top of the presedimentation basin. Lights will be provided for lighting the interior of the building. A cross-section of the proposed building is shown on Figure 2-2.

Construction of a new sludge lagoon is proposed to handle and dispose of discharges from the presedimentation basin. Overflow and drain lines from the presedimentation basin were designed to discharge to the storm drain system which discharges to Kanaha Stream.

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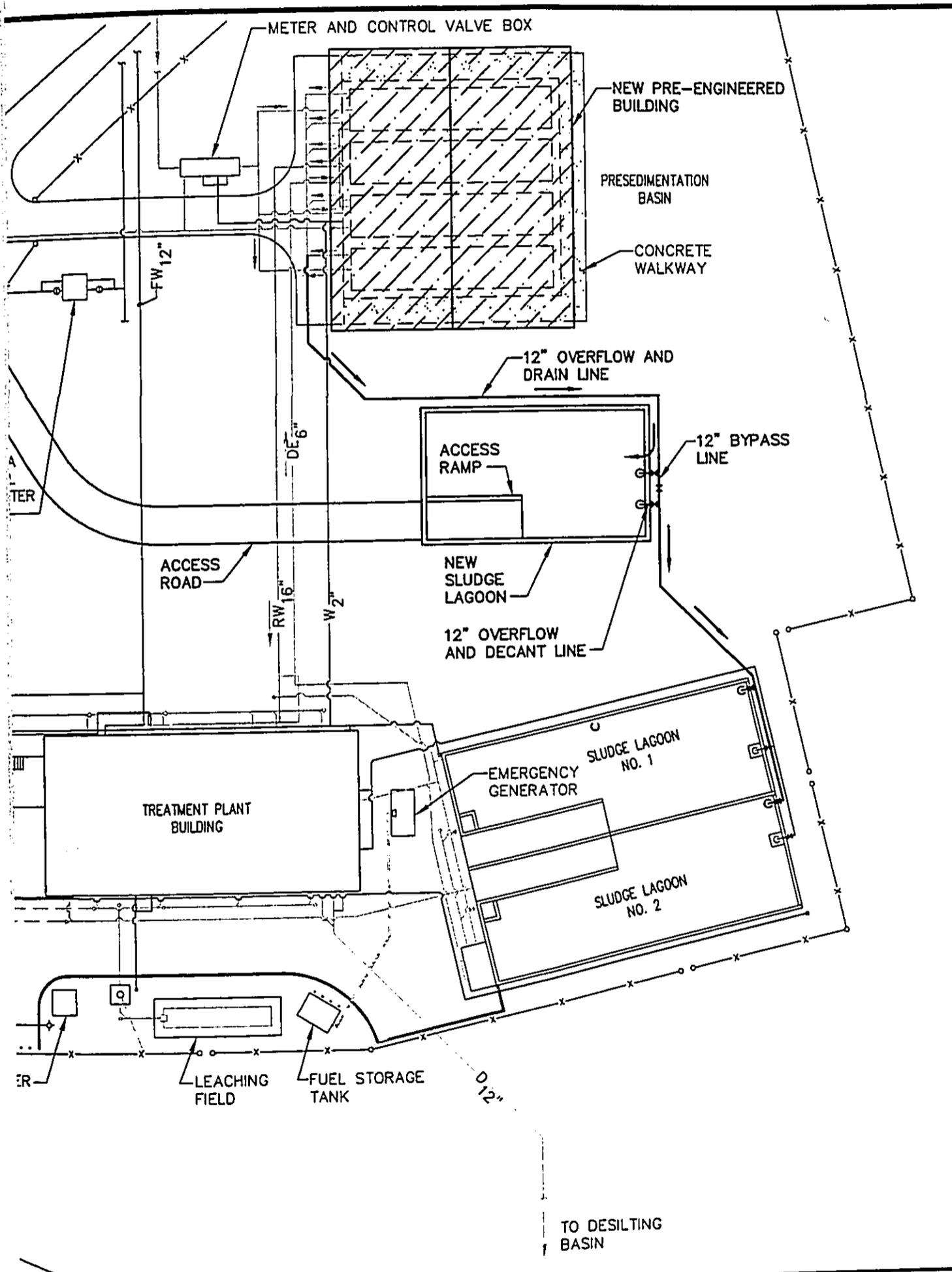


FIGURE 2-1

PROPOSED MODIFICATIONS

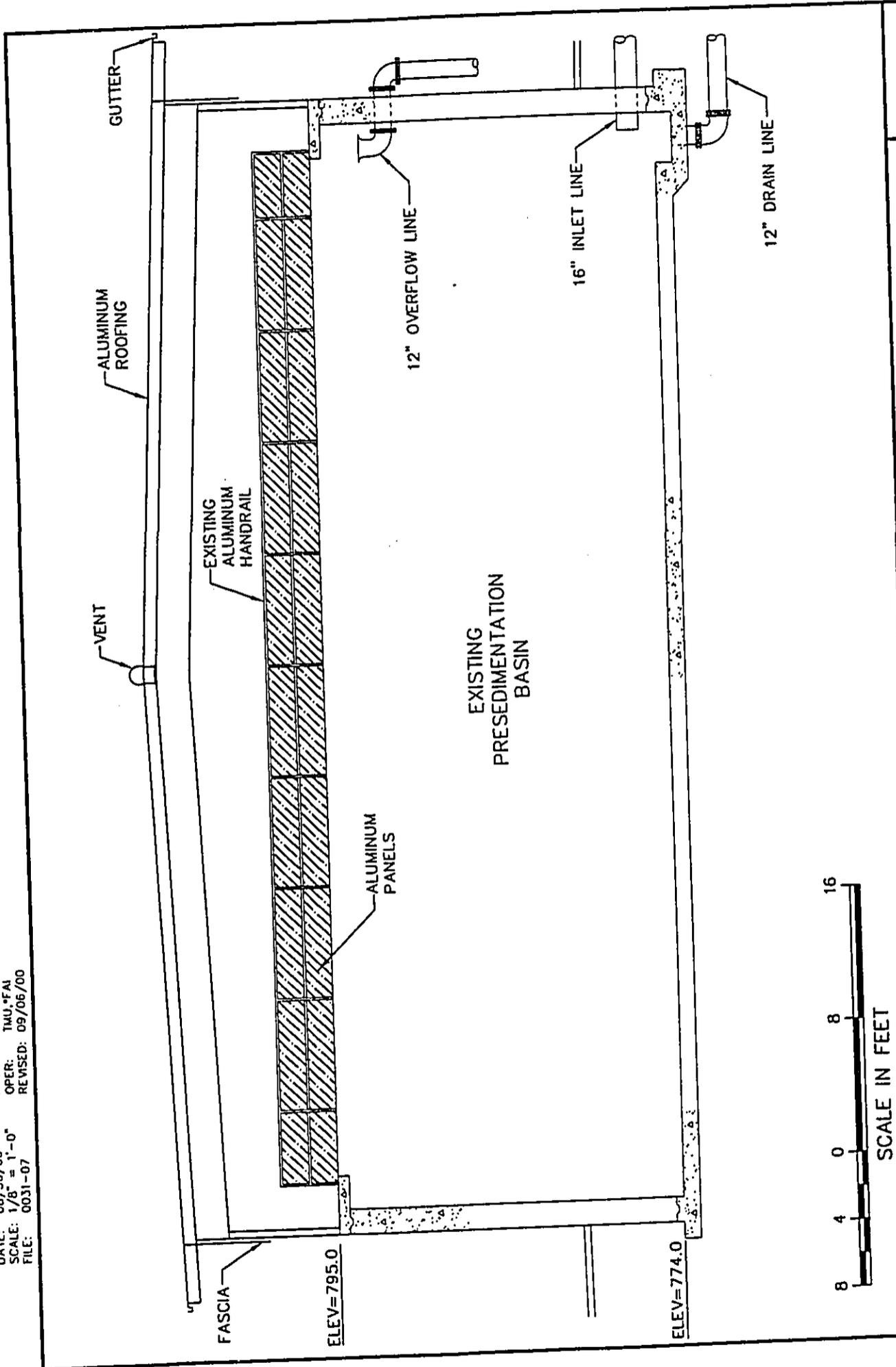
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Maui, Hawaii



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Lahaina Water Treatment Facility Modifications
 Maui, Hawaii
 Lahaina Water Treatment Facility

PROPOSED PRE-ENGINEERED BUILDING

FIGURE
 2-2

Construction of the new sludge lagoon will eliminate discharges to Kanaha Stream and the need for a NPDES permit. The new sludge lagoon will be similar in construction to the existing sludge lagoons. The new sludge lagoon will be constructed in the graded, sloped area between the presedimentation basin and existing sludge lagoons. The lagoon will be constructed with an open bottom utilizing graded rock and gravel media with a top layer of sand. The free liquid in the presedimentation basin discharge will percolate into the subsurface soil structure while the solids will be retained on the sand media. Periodic removal of the solids retained on the top layer of sand will be required. An access road and ramp will be constructed for truck access to the sludge lagoon for removal of dewatered solids. A cross-section of the proposed sludge lagoon is shown on Figure 2-3.

The estimated probable construction cost for the proposed improvements is \$1,000,000. The proposed improvements will require the use of Department of Water Supply funds. This project may be funded by Federal funds through the State of Hawaii's Drinking Water State Revolving Fund (DWSRF) program, which would constitute a federal action, and will require the project to meet all Hawaii DWSRF program requirements.

PRELIMINARY DEVELOPMENT SCHEDULE

Implementation of the proposed modifications to the presedimentation basin should be immediate to reduce operation and maintenance effort and costs at the presedimentation basin and to reduce the potential for NPDES violations. The design of the proposed modifications is scheduled to occur from March 2001 to August 2001. Construction of the proposed modifications is scheduled to occur from November 2001 to May 2002.

PERMITS AND APPROVALS REQUIRED

The following County permits are required:

- Grading Permit
- Building Permit

The following approvals are required by the County:

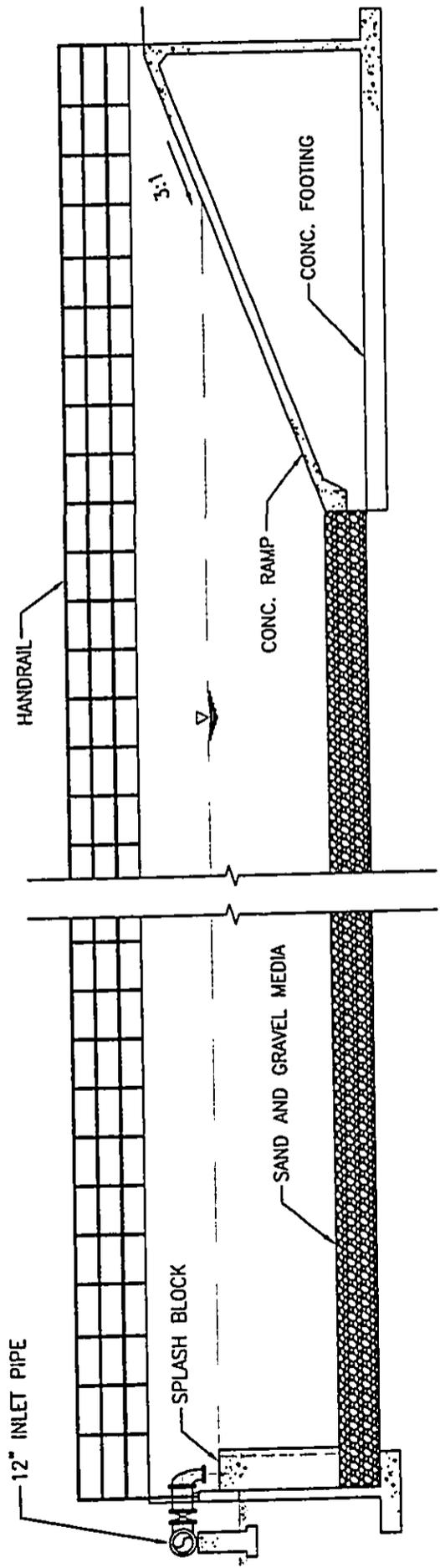
- Department of Water Supply
- Department of Public Works and Waste Management (Land Use & Codes Administration)
- Department of Planning

The following approvals are required by the State:

- Archaeological Review – State Department of Land and Natural Resources, Historic Preservation Division
- Community Noise Control – State Department of Health (Chapter 43)
- Rules Relating to Potable Water Systems – State Department of Health (Chapter 20)
- Commission on Persons with Disabilities
- Department of Health, NPDES Notice of Intent (hydro-testing)

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	<p>Lahaina Water Treatment Facility Modifications Maui, Hawaii</p>	<p>PROPOSED SLUDGE LAGOON</p>	<p>FIGURE 2-3</p>
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No Federal permits or approvals are required for the proposed action.

Construction plans will be reviewed by the following utility companies:

- Maui Electric Company

Chapter 3

Description of the Existing Environment

CHAPTER 3 DESCRIPTION OF THE EXISTING ENVIRONMENT

PHYSICAL SETTING

Existing Land Use

The proposed improvements will be located within the boundaries of the existing Lahaina Water Treatment Facility. The existing facility is located on lands owned by the State of Hawaii. The facility is owned and operated by the County of Maui Department of Water Supply. The location of the existing Lahaina WTF and the surrounding land ownership are shown on Figure 3-1. The proposed location for the new sludge lagoon had previously been graded and is currently vacant and covered with introduced species of grasses and weeds.

Climate

The climate in Lahaina is relatively uniform year-round. Lahaina's tropical latitude, its position relative to storm tracts and the Pacific anticyclone, and the surrounding ocean combine to produce this stable climate. Variations in climate among different regions are largely due to local terrain.

Average temperatures at the project site are approximately two degrees Fahrenheit lower than the town of Lahaina. Temperatures for the site have been estimated by using the Lahaina Station located in Wahikuli as a base, and assuming that temperature decreases 3.3 degrees with every 1,000 feet of elevation (Environment Study Corp., 1979). August is historically the warmest month, while January and February are the coolest. Average temperatures in the town of Lahaina range between 71.5 degrees Fahrenheit to 78 degrees Fahrenheit.

Rainfall at Lahaina is highly seasonal, with most precipitation occurring between October and April when winter storms hit the area. Situated on the leeward side of the West Maui Mountains, this region receives most of its rainfall in late afternoon and early evening, after seabreezes take moisture upslope during the day. Precipitation data collected at the Wahikuli Station (#364) show that on average January is the wettest month, with 3.8 inches of precipitation, while June is the driest, with just 0.2 inches. The average annual total is 19.3 inches.

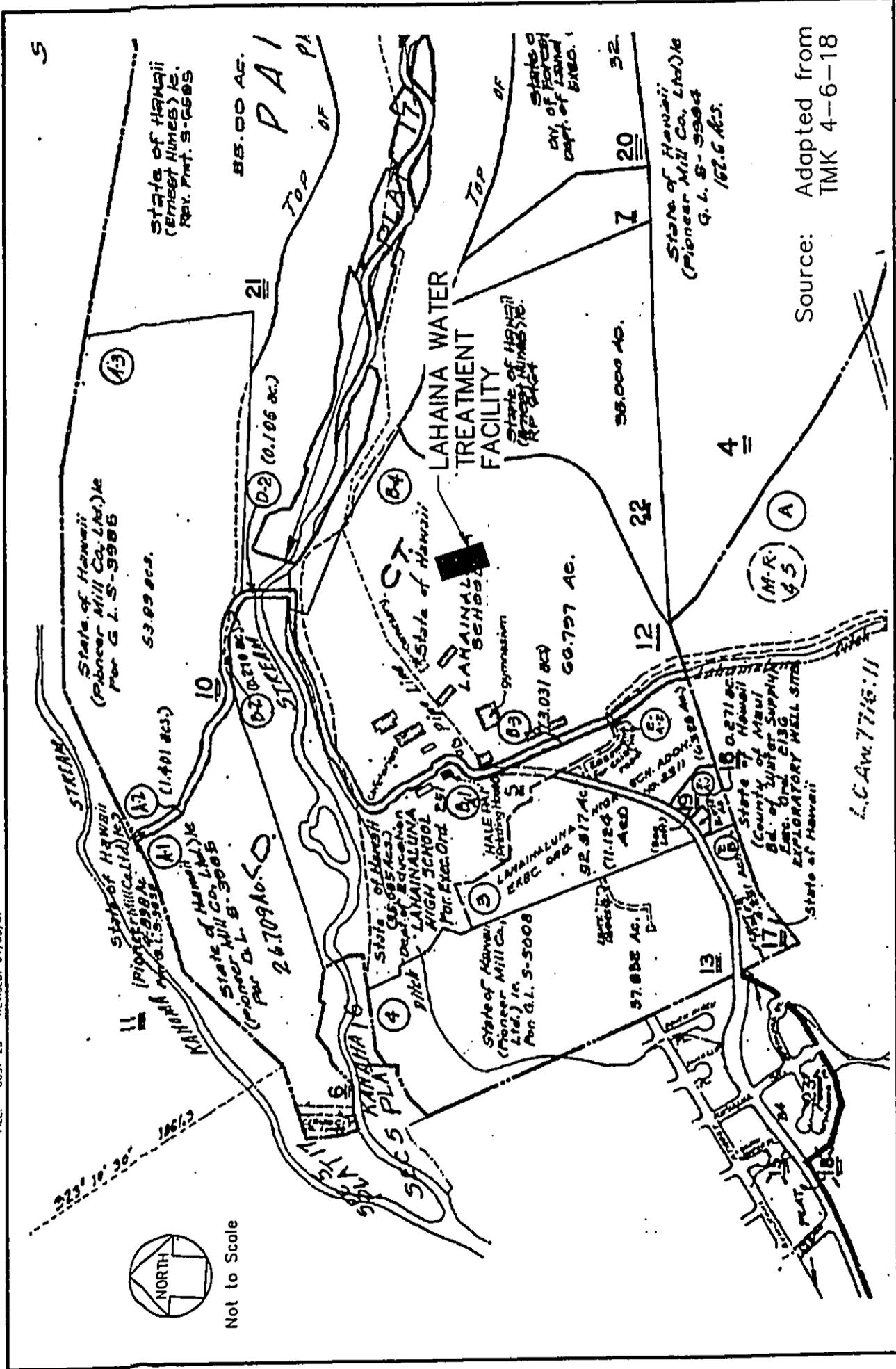
The winds in the Lahaina area are also seasonal. The northeasterly tradewind occurs 90 percent of the time during the summer, and just 50 percent of the time in the winter. Wind patterns also vary on a daily basis, with tradewinds generally being stronger in the afternoon. During the day, winds blow onshore toward the warmer land mass. In the evening, the reverse occurs, as breezes blow toward the relatively warm ocean.

Topography and Soils

The proposed site is situated on moderately sloping lands at approximately 770-foot elevation. The Kanaha Gulch runs in an east to west direction, adjacent to the site proper. Terrain in the

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Source: Adapted from
 TMK 4-6-18

FIGURE
 3-1

PROJECT LOCATION AND
 SURROUNDING LAND OWNERSHIP

Lahaina Water Treatment Facility
 Maui, Hawaii

Lahaina Water Treatment Facility Modifications
 Maui, Hawaii

Hawaii Pacific Engineers

vicinity of the project site can be characterized as uniform and even, sloping approximately 15 percent.

At a regional scale, the topography of West Maui ranges from the gently sloping coastal areas to steep ridges and large amphitheater valleys. The maximum elevation of the West Maui Mountains is 5,788 feet at Puu Kukui. From the summit, streams flow in a radial pattern, indicating that the lava surface of the volcano set the original stream course.

Underlying the proposed site and surrounding lands is the Waiakoa-Keahua-Molokai soil association. Figure 3-2 shows the soil associations for the island of Maui. The soils belonging to this association are well-drained, moderately fine textured and are located on low uplands. They were formed in material weathered from basic igneous rocks and make up roughly 15 percent of the Island. Waiakoa soils comprise roughly 30 percent of the association and have a surface layer of dark, reddish brown, friable silty clay loam. The subsoil is dark reddish-brown and very dark grayish-brown, friable silty clay loam. Keahua soils make up 20 percent of the association and have a surface layer of dark reddish-brown, friable silty clay loam. Keahua subsoil is dark reddish-brown, firm silty clay loam. Molokai soils comprise an additional 10 percent of the association. These soils have a surface layer of dark reddish-brown, friable silty clay loam and a subsoil of dark-red and dusky-red, friable silty clay loam and clay loam. The remaining 40 percent of the association consists of Alaeloa, Haliimaile, Kahana, Koele, Lahaina, Paia, Wahikuli, Wailuku, and Wainee soils.

The particular soil type at the Lahaina WTF site is Lahaina Silty Clay, 15 to 25 percent slope (LaD). Figure 3-3 shows the soil types in the area of the existing WTF. For this soil, runoff and the erosion hazard are moderate (U.S. Dept. of Agriculture Soil Conservation Service, 1972).

Lands underlying the project site are designated as "E" lands by the University of Hawaii Land Study Bureau. This classification system rates lands on a scale of "A" to "E", reflecting land productivity characteristics. Lands designated "A" are considered to be of highest productivity with "E"-rated lands ranked lowest.

Geology

The Lahaina District lies on the west side of a dome-shaped volcano referred to as the West Maui Mountains. The dome has been reduced by erosion from a summit altitude estimated to have been 7,000 feet to 5,788 feet at Puu Kukui. The volcanic dome of the West Maui Mountains includes several long, narrow valleys created by stream erosion. The sloping plains between valleys are eroded volcanic remnants that form valuable agricultural lands. Along the coastline and at the foot of the valley are relatively level lands created by sediment deposition.

Volcanic formations in the West Maui area are classified into three stratigraphic units known as the Wailuku Basalt, Honolua Volcanic, and Lahaina Volcanic (Austin, Tsutsumi & Associates, 1991). The bulk of the exposed lava belongs to the Wailuku Basalt. Principal aquifers are located within the Wailuku Basalt because of the rock type's high permeability and numerous

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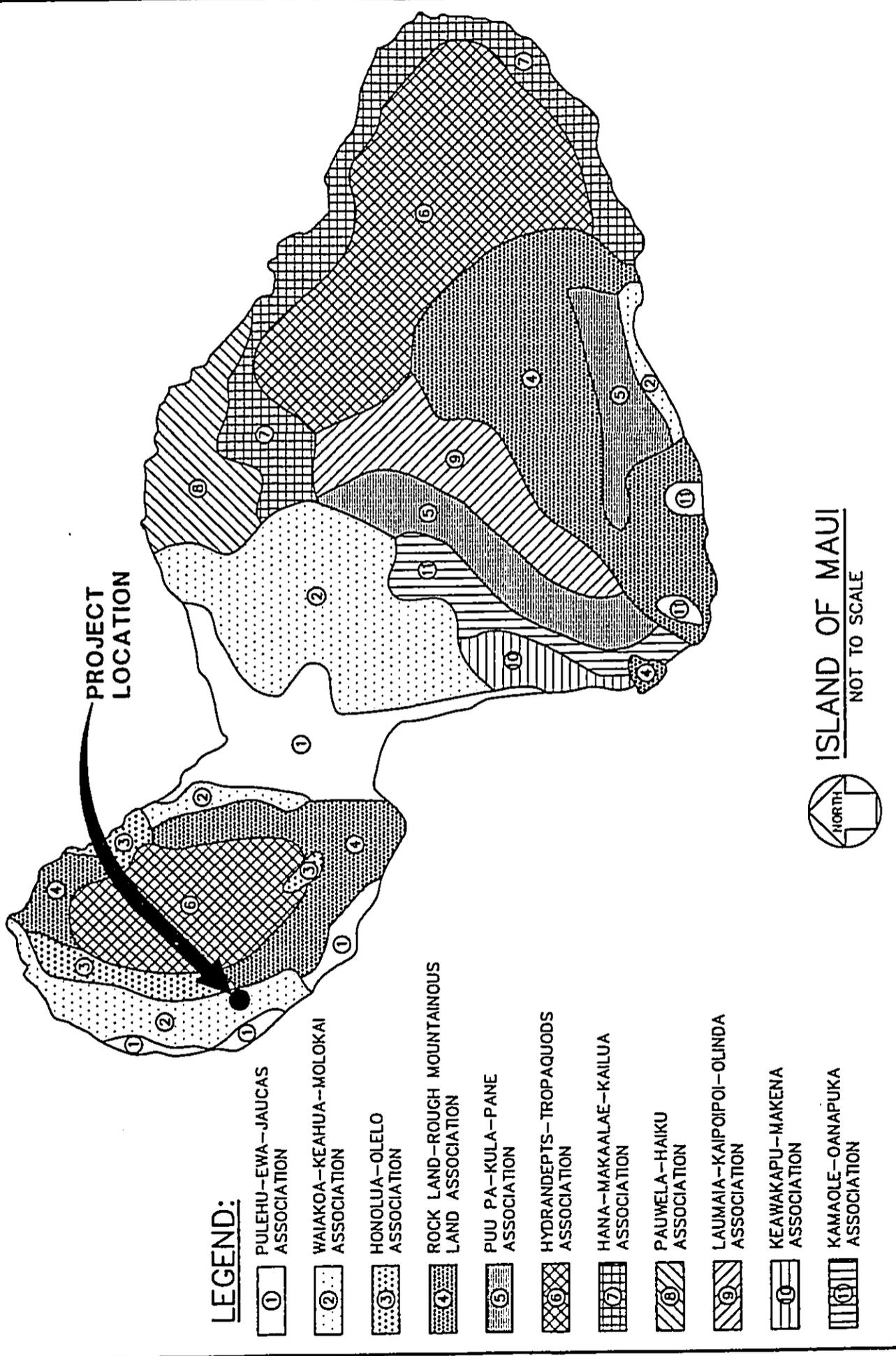


FIGURE 3-2

SOIL ASSOCIATION

Lahaina Water Treatment Facility Modifications
 Maui, Hawaii
 Lahaina Water Treatment Facility



dikes. These aquifers are the source of domestic water for the West Maui area. Of the three stratigraphic units, the Wailuku Basalt is the oldest, with an estimated dated age of 1.58 to 1.97 million years.

Following a short period of volcanic inactivity, lava of the Honolua Volcanic emerged to form a 50 to 500 feet thick stratigraphic layer over most of the Wailuku dome. The massive rock formations of the Honolua series are much less permeable and are generally too discontinuous to function as aquifers. Age data places the occurrence of the Honolua Volcanic at about 1.5 million years ago. Following the period of the Honolua Volcanic, small periodic eruptions occurred, building isolated cones and forming short flows along the western shoreline. These formations are attributed to the Lahaina Volcanic whose distribution is limited to the Lahaina vicinity. The deposits of the Lahaina series are not extensive enough to be used as water-bearing formations.

In addition to the three stratigraphic units described above, the region includes sedimentary alluvial deposits that cover the low coastal plain from Ukumehame to Lahaina Town. These sediments form a caprock which confine the basal aquifer underlying the coastal plains.

Hydrology

a. Groundwater

The hydrologic region of West Maui is referred to as the Lahaina Sector, which encompasses six (6) aquifer systems (Mink, 1990). Table 3-1 lists the six West Maui aquifer systems. The Lahaina Sector includes the region from Honokohau Valley in the north to Ukumehame Valley in the south. Each of the aquifer systems encompasses coastal basal and high-level dike-impounded waters. The aquifer systems for Maui are shown on Figure 3-4.

Most of the shafts and drilled wells of the region are located on or near the coastal plain, tapping the underlying basal lens. The basal lens in the Lahaina Sector is not very thick due to the lack of an effective confining caprock. Maximum groundwater heights, in fact, are around five (5) feet above mean sea level. Maui-type wells have an inclined entrance followed by a horizontal section similar to a gallery. Maui-type shafts were used in this area to keep chloride contents at reasonable levels by just skimming the surface of the lens. Lanai-type wells have an inclined entrance followed by a vertical shaft. Lanai-type wells were used in this area for developing water from between dikes.

Dike impounded aquifers can be found approximately 18,000 feet inland from shore in the Lahaina region. Dike-confined waters in the Lahaina Sector are tapped by tunnels in many of the larger valleys. Generally, the aquifers connect, though the connection may be very weak in some cases. Much water is stored in the dike-confined compartments, and excess volumes escape either to other dike compartments or to streams. Minor perched aquifers also exist in the region in the Honolua Volcanic. These waters seep into streams, contributing, for example, to the perennial flow of Honokohau Stream.

Table 3-1
West Maui Aquifer Systems

Aquifer System	Area (square miles)
Honokohau	13.23
Honolua	17.61
Honokowai	22.67
Launiupoko	18.29
Olowalu	6.81
Ukumehame	10.61

Source: Mink, John, 1990.

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ISLAND OF MAUI

TOTAL = 476 MGD

HYDROLOGIC UNITS

Sustainable Yield / Aquifer Code

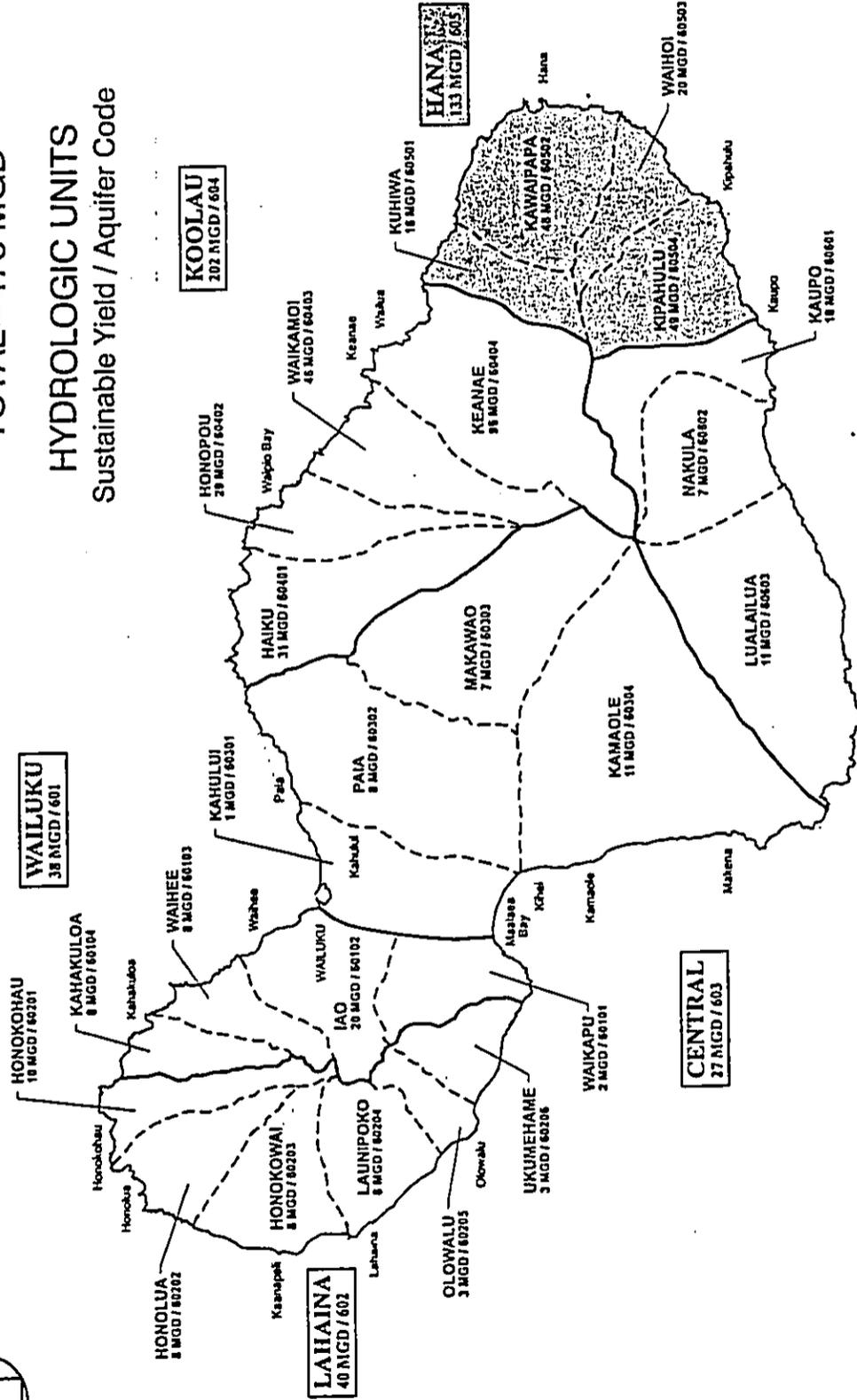


FIGURE 3-4

AQUIFER SYSTEM MAP

Lahaina Water Treatment Facility Modifications
 Maui, Hawaii
 Lahaina Water Treatment Facility



For the aquifer systems in the Lahaina sector, a sustainable yield of 40 million gallons per day (mgd) of groundwater has been determined. However, in 2000, only 6.25 mgd was used. Groundwater usage in the 1990s was in the order of 28 mgd. The significant decrease in groundwater consumption is primarily due to reduction in use by Pioneer Mill Company, Ltd. The reduction in irrigation recharge may impact the sustainable yield for the aquifers in the Lahaina sector.

b. Surface Water

Approximately 56.2 mgd of available surface water in the Lahaina District is estimated. Pioneer Mill is the heaviest user, using between 3.9 and 7.8 mgd. Other users are Maui Land and Pineapple Co., Ltd. (1.5 to 4.5 mgd), Kapalua (2.0 to 4.0 mgd), Department of Water Supply (4.0 mgd), and other domestic users (0.4 mgd) (Maui County Departments of Planning and Water Supply, 1990).

Surface water in the region originates in the West Maui Mountains. Because of the region's location on the leeward side of the mountains, streamflows are mostly confined to the higher elevations. Stream diversions make up the largest source of water supply in the region. Unlike twenty years ago, groundwater is used only sparingly for irrigation, though it still is the source of most domestic supply. Increasingly, however, surface water from Honokohau Stream and Kanaha Stream is being diverted for potable use.

The water source for the existing Lahaina WTF is the Kanaha Stream. Average streamflow just upstream of the Kanaha Intake is 5.0 mgd. Maximum flows have been recorded as high as 17.7 mgd, while minimum flows have been as low as 1.9 mgd. The capacity of the diversion intake and pipe system is 2.7 mgd. Data for Kanaha Stream indicate an average turbidity of 1 to 2 Nephelometric Turbidity Units (NTU) during summer months and less than 10 NTU during the winter months (Camp Dresser & McKee, Inc., 1990). Peaks of 100 NTU have been recorded during heavy rainfall. Color was detected in water samples from Kanaha Stream with a maximum of 35 color units (CU). Total dissolved solids in Kanaha Stream were in the range of 16 to 148 mg/l.

Flood and Tsunami Hazard

The project site lies in an area of minimal flood and tsunami hazard as determined by the Flood Insurance Rate Maps. In particular, the site is located along the foothills of the West Maui Mountains, well beyond the coastal tsunami inundation areas. Moreover, the elevation and local terrain of the site provide for adequate drainage to preclude flooding from storm runoff.

Flora and Fauna

A flora and fauna survey of the site was conducted at the project site as part of previously proposed improvements by the DWS (Environment Impact Study Corp., 1979). Flora at the project site included numerous common weeds and shrubs, such as buffelgrass, milkweed, Spanish needle, castor bean, lantana, koa haole, and Ilima. There are no sensitive, rare or threatened flora at the project site.

Avifauna common to the site and surrounding environs include the common mynah, Japanese white-eye, spotted dove, barred dove, house finch, and Pacific golden plover. The only endemic birds expected at the site are the Hawaiian owl or Pueo and the Hawaiian goose or Nene. Since the completion of the existing water treatment facility, Nene geese have used portions of the facility for nesting sites. Mammals expected at the site include feral cat, house mouse, Norway rat, Polynesian rat, mongoose and pig. The project site is not considered a significant habitat for wildlife other than the Nene or Pueo.

Archaeological Resources

An archaeological inventory survey of the area conducted as part of the original facility construction concluded that the site has been extensively disturbed (Bishop Museum, 1991). Given the previous use of the site for ranching and by the Lahainaluna School, no surface archaeological features were recorded in the project area. Furthermore, there were no archaeological features uncovered during the construction of the existing water treatment facility.

Air Quality

There are no point sources of airborne emissions in the immediate vicinity of the project site. The Pioneer Mill raw sugar processing plant is located 1.6 miles west of the site. The site is also located in proximity to lands previously utilized for sugar cane cultivation by Pioneer Mill. In 1999, Pioneer Mill closed the sugar processing plant and stopped their sugar cane cultivation activities. The dried out sugar cane fields are a source of dust under sufficiently windy conditions. However, when the mill was in operation, the dust and equipment emissions from the processing plant and cultivation activities generally did not affect air quality at the project site. Thus, under current conditions and even if sugar cane cultivation activities were to resume, the air quality in the project vicinity would be described as good.

Noise Characteristics

The parcel is surrounded by open, undeveloped lands to the north, south, and east. Lahainaluna High School is located approximately 1,500 feet to the west. In this context, background noise at the site is limited to natural (e.g., wind) conditions and treatment plant noises.

Cultural Resources

Historically, the West Maui region has been a significant agricultural area prior to western contact. The traditional district of Lahaina on the leeward half of West Maui extended from Honokowai to Maalaea. The Lahaina district was composed of 21 ahupua'a, most of which were small and concentrated around the population center in Lahaina. The town of Lahaina was for a period of time the capital of the Hawaiian Kingdom and a major port of call for the Pacific whaling fleet in the mid-19th century. The influx of westerners was greater in Lahaina than elsewhere on Maui, and served as the primary base for missionary expansion. As in the rest of Hawaii, the late 19th century witnessed the coming of the plantation era. Many historic sites and structures in Lahaina reflect the region's pre-contact, Hawaiian Monarchy, missionary and

plantation history. Important cultural resources in the area of the project site include the Lahaina Historic District, Pioneer Mill, Lahainaluna High School, and the Kahoma and Kanaha Stream valleys.

SOCIO-ECONOMIC SETTING

Land Use and Community Character

The vast majority of lands in West Maui are either State designated "Conservation" or "Agricultural". Generally, "Conservation" lands occupy the higher elevations, while the "Agricultural" district spans the middle ground. Major exceptions to this trend are the Honolua Stream and Pohakupule Gulch areas where the "Conservation" district extends down to sea level.

"Urban" designated lands, then, are left to occupy the lower elevations along the coast. The communities of Kahana-Napili-Kapalua and Kaanapali contain Community Plan designations reflective of their resort nature. Lahaina, meanwhile, is more typical of a residential community. Single family, business, light industrial, and agricultural zones prevail in Lahaina.

A key feature of the region is the town of Lahaina, which is designated a National Historic District as the one-time whaling capital of Hawaii. Today, it is the visitor industry that defines Lahaina Town and other coastal resort communities of West Maui.

Part of West Maui's attraction can be attributed to its year-round dry and warm climate, complemented by many white-sand beaches and scenic landscape. Most all of the visitor accommodations are located in Lahaina and the resort communities of Kaanapali, Kahana, Napili, and Kapalua. The privately owned and operated Kapalua-West Maui Airport at Mahinahina conveniently links the region to Oahu and other neighbor islands.

Sugar cane and pineapple fields occupy much of the land in the area. Alexander and Baldwin's Hawaii Commercial and Sugar (HC&S), a vital part of the region's economy, survives as one of Hawaii's few remaining sugar operations. Maui Land and Pineapple's fields sprawl along the slopes of the West Maui Mountains north of Lahaina.

Population

Just as the visitor count has grown, the resident population of the region surrounding the project site has increased dramatically in the last three decades. Population gains were especially pronounced in the 1970s as the rapidly developing visitor industry attracted many new residents. The resident population has increased from 5,524 in 1970, to 10,284 in 1980, to 14,574 in 1990. The most recent census population (1995) for Lahaina is 16,137. The West Maui Community Plan suggests a regional population between 21,149 and 22,633 by 2010.

Growth patterns at the County level exhibit a similar pattern. The County's 1980 resident population of 71,000 has since grown to the present 122,000. The estimated County population for the year 2010 is 136,400 (DBEDT, 2000).

Economy

The economy of Maui is heavily dependent upon the visitor industry. The dependency on the visitor industry is especially evident in West Maui, which has emerged as one of the State's major resort destination areas. Hotels in West Maui typically boast higher occupancy rates than the rest of the Island, with Kaanapali hotels doing especially well.

Agriculture is another vital component of the West Maui economy. Maui Land and Pineapple's fields remain an important component of the region's agricultural base. Sugar operations on Maui are dominated by Alexander and Baldwin's Hawaii Commercial and Sugar (HC&S). The sugar industry suffered a loss in 1999 due to the closing of Pioneer Mill Company in West Maui.

The availability of jobs, primarily in the service sector, continues to strengthen the economy on Maui. During the first half of 2000, the County was a leader in the state in job creation, up 2 percent for the year resulting in a declining unemployment rate of 4.6 percent (First Hawaiian Bank, Research Dept., 2000).

Public Services

The project site is within the Lahaina Police Station service area, which services the Lahaina District. The Lahaina Station is located in the Lahaina Civic Center complex at Wahikuli, and was built in the early 1970s. The Lahaina Patrol includes 37 full-time personnel, including supervisors, police officers, and administrative support staff.

Fire prevention, suppression and protection services for the Lahaina District is provided by the Lahaina Fire Station, also located in the Lahaina Civic Center. The Station is staffed with a minimum of eight firefighters and a maximum of ten firefighters per 24-hour shift.

The only major medical facility on the Island is Maui Memorial Medical Center, located approximately 20 miles from Lahaina, midway between Wailuku and Kahului. The 197-bed facility provides general, acute, and emergency care services. Private medical offices, however, are found in West Maui. For example, regular hours are offered by the Maui Medical Group, West Maui Healthcare Center, and Kaiser Permanente Lahaina Clinic.

West Maui is served by numerous recreational facilities offering diverse opportunities for the region's residents. There are 17 County parks and three State beach parks in West Maui. Approximately one-third of the County parks are situated along the shoreline and are excellent swimming, diving, and snorkeling areas. In addition, Kaanapali and Kapalua Resorts operate world-class golf courses that are available for public use.

The State of Hawaii, Department of Education operates four public schools in West Maui: Lahainaluna High School; Lahaina Intermediate School; King Kamehameha Elementary School; and Princess Nahienaena Elementary School. All of the public schools are located within the Lahaina Town area.

UTILITIES

Roadway System

Honoapiilani Highway, State Highway 30, is the main roadway serving the West Maui region. This highway is the only link between West Maui and the rest of the island. A narrow, winding, one-lane segment of highway extends around the north coast of the island to Waihee, providing limited access. Regionally, Honoapiilani Highway is the main arterial connecting Lahaina, Kaanapali, and Kapalua. The State of Hawaii is proposing a bypass highway to run mauka of the existing highway from Launiupoko to Honokowai in an effort to relieve congestion on Honoapiilani Highway.

Access to the project site will be via a paved service road from Lahainaluna High School. The major collector leading to the school is Lahainaluna Road.

Wastewater Systems

The County's wastewater collection and transmission system and the Lahaina Wastewater Reclamation Facility (WWRF) accommodate the region's wastewater needs in the lower, more populated areas. The Lahaina WWRF, located along Honoapiilani Highway just north of Kaanapali Resort, has a design capacity of 9.0 mgd. Currently, usage is at 5.6 mgd. The Lahaina WWRF is a secondary activated sludge plant with chlorine disinfection and tertiary filtration. Approximately 26.4% of the treated wastewater is disinfected with ultraviolet radiation and reclaimed for irrigation and other beneficial purposes.

Because there are no sewers nearby, the Lahaina WTF is serviced by a septic tank and leaching field for the restroom facilities and drain lines in the Treatment Plant Building.

Solid Waste Disposal

With the closing of the Olowalu Landfill, all solid wastes generated in the Lahaina region are transported to the Central Maui Sanitary Landfill in Puunene. In 1994, approximately 83.6 tons each day of residential and commercial waste was transported to the landfill from West Maui. This accounts for approximately 20 percent of the volume entering the landfill in Central Maui.

Dewatered solids from the existing sludge lagoons are transported to the Central Maui Sanitary Landfill.

Drainage System

Stormwater runoff is currently directed around and away from the site to the Kanaha Stream gulch or to the Lahainaluna High School agricultural field. Storm runoff from the site is directed to one of two desilting basins located makai of the Lahaina WTF.

Electrical Power

Electrical power to the site is currently provided by Maui Electric Company, Ltd., via overhead lines.

Chapter 4

Potential Impacts and Mitigation Measures

CHAPTER 4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACTS TO THE PHYSICAL ENVIRONMENT

Topography/Landform

The proposed project will involve the clearing, grubbing and re-grading of approximately 0.55-acres of unused land located within the boundaries of the existing water treatment facility for the new sludge lagoon. In general, finished contours will follow existing grades to minimize earthwork costs and maintain existing drainage patterns that tie into the immediate surrounding lands. The project will comply with the requirements of the County grading ordinance and drainage rules.

Erosion Control

Construction activities may increase the potential for erosion from the site. Temporary and permanent erosion control measures will be implemented during the construction to minimize the impacts of erosion from the site. Use of silt fences and stabilized construction entrances are proposed during the construction period. The two existing desilting basins that are part of the storm drain system at the facility will minimize discharges of sediment and silt to Kanaha Stream.

Hydrology

The overflow and drain lines from the presedimentation basin will be directed to the new sludge lagoon. The discharges from the presedimentation basin will consist of surface water with some dissolved and precipitated coagulant chemicals. The free liquid in the presedimentation basin discharges will percolate into the subsurface soil structure while the solids will be retained on the sand media. Percolation of the presedimentation basin discharges is not anticipated to impact groundwater resources due to the filtering action of the sand and gravel media. The small amount of dissolved coagulant chemical present is considered safe for the drinking water supply.

The overflow and drain lines from the presedimentation basin were designed to discharge to the storm drain system which discharges to Kanaha Stream. However, presedimentation basin discharges are currently diverted to one of the desilting basins at the Lahaina WTF. Discharges from the desilting basin will enter Kanaha Stream. Directing the overflow and drain lines to the new sludge lagoon will prevent any further discharges from the presedimentation basin to Kanaha Stream. Elimination of discharges to Kanaha Stream will have a beneficial impact to the water quality in the stream.

Flora and Fauna

There are no known rare, endangered or threatened species of flora within or surrounding the project site. As such, the removal of existing vegetation is not considered an adverse impact to this component of the natural environment.

The existing water treatment facility has been used as a nesting site for the endangered Hawaiian goose or Nene. Precautions for protecting endangered Nene geese in the area will be established during the construction period based on the recommendations of Department of Land & Natural Resources Forestry and Wildlife Division personnel. The contractor will be required to educate construction personnel to prevent feeding and harassment of the birds. Construction personnel will also be instructed not to release predators caught in trap lines installed by Forestry and Wildlife Division personnel. Furthermore, the contractor will be required to immediately contact the Forestry and Wildlife Division if the Nene geese are sighted during construction activities. The short-term construction activities are not anticipated to disturb the Nene geese significantly.

The Hawaiian owl or Pueo is considered a species of concern for the Lahaina area. The owls have been sighted in Lahaina valley but not in the general area of the treatment facility. The contractor will be required to immediately contact the Forestry and Wildlife Division if owls are sighted during construction activities.

The removal of approximately 0.55 acres of existing vegetation and potential nesting area for the new sludge lagoon is not anticipated to adversely impact to the area's fauna and avifauna population. There are other grazing sites available for the Nene geese and their preference for nesting sites has been in another location of the treatment facility.

Air Quality and Noise

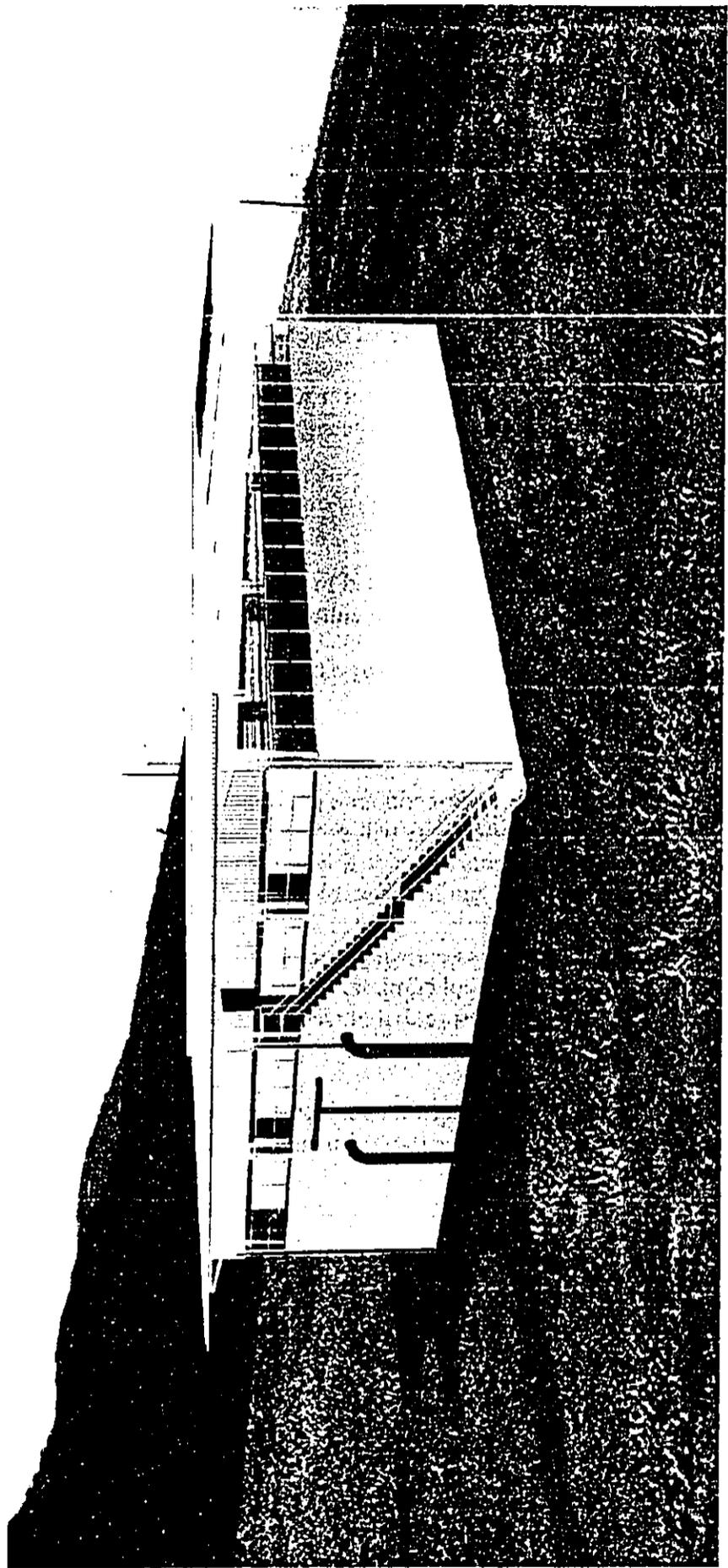
Air quality and noise parameters in the immediate vicinity of the project are anticipated to be affected by short-term construction activities. Earthwork operations, for example, will result in fugitive dust being generated. Similarly, noise will be generated from construction equipment such as bulldozers, loaders, and semi-trailers. Because the project site sits within semi-active agricultural lands, construction impacts are not considered adverse. Dust control and noise control measures along the access road to the water treatment facility will be implemented due to the proximity to Lahainaluna High School.

On a long-term basis, the project will not generate adverse air quality or noise conditions. The additional treatment facilities will not result in the release of noxious gases, particulates or odors.

Scenic and Open Space Resources

The project site is not a part of a unique or valuable scenic resource. The location of the site, mauka of Lahainaluna High School, offers a locale visually screened from the school and the residential area to the west. The pre-engineered building and sludge lagoon will be compatible in scale, mass and height with existing water system facilities located at the site. The color scheme of the new facilities will be of a medium earth tone intensity. Colored aluminum roofing and framing for the pre-engineered building over the presedimentation basin will be used to minimize the visual impact of the building from the public roadway. A sketch of the proposed pre-engineered building for the presedimentation basin is shown on Figure 4-1. Accordingly, the proposed project is not anticipated to adversely impact the open space or scenic character of project site and environment.

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Lahaina Water Treatment Facility Modifications
Lahaina Water Treatment Facility
Maui, Hawaii

PROPOSED PRESEDIMENTATION
BASIN COVER

FIGURE
4-1

Archaeological Resources

The project site has been previously disturbed and no surface archaeological features are found at the site. Construction of the new sludge lagoon will not require excavation in previously undisturbed lands. Due to the extensive disturbance of the project area, no further archaeological work is recommended.

As a precautionary measure, the contractor will be made aware of potential encounters with artifacts or remains such as shell, bones or charcoal deposits. If such items are encountered during construction, the work will be halted in the immediate vicinity of the find and the find will be protected from further damage. The contractor will be required to immediately contact the State Historic Preservation Division to assess the significance of the find and recommend an appropriate mitigation measure if necessary.

Cultural Resources

Due to the limited scope of the project, the proposed modifications at the existing water treatment facility are not anticipated to impact the cultural resources in the area.

IMPACTS TO THE SOCIO-ECONOMIC ENVIRONMENT

Population and Economy

The proposed project will impact the socio-economic environment by stimulating the economy in the short term. The proposed modifications will provide employment for contractors and their employees, material suppliers, and others associated with the construction industry. However, the project will involve an irreversible and irretrievable commitment of funds.

Construction equipment such as materials-carrying trucks will need to utilize the service road that traverses the Lahainaluna High School campus. Access requirements for the contractor will need to be coordinated with school to ensure that nuisance and student safety concerns are appropriately addressed.

On a long-term basis, this project will benefit the residents of the service area by preventing overflow and drain line discharges from the presedimentation basin to Kanaha Stream.

Agriculture

The project site is not utilized for cultivation of agricultural crops. The University of Hawaii Land Study Bureau (LSB) classifies the site as "E", indicating lands of lowest agricultural productivity. Use of approximately 0.55 acres within the existing facility for the new sludge lagoon is not considered significant.

Public Services

The water treatment facility will continue to be fully automated and the proposed modifications are not expected to directly generate new permanent employment requirements in the region. As such, there are no anticipated project associated impacts upon public service needs, such as police and fire protection, medical facilities, recreational facilities and schools.

IMPACTS TO UTILITIES

Roadways

Construction vehicles will require access to the site through the Lahainaluna High School campus. Vehicles will utilize a perimeter road that currently provides access to the existing State and County water facilities located mauka of the school. Traffic monitoring and coordination with the school will minimize inconveniences normally associated with construction.

The proposed improvements are anticipated to reduce the operation and maintenance effort required at the treatment facility. Reduction in operation and maintenance effort should reduce the daily traffic to the facility. The project will not create any permanent adverse impacts upon the vehicle circulation patterns at the school.

Wastewater Systems

The proposed improvements are not anticipated to generate additional wastewater. The Lahaina WTF is currently serviced by a septic tank and leaching field system for the restroom facilities and drain lines in the Treatment Plant Building.

Solid Waste Disposal

The new sludge lagoon will generate additional dewatered sludge at the Lahaina WTF. The dewatered sludge is anticipated to consist of silt and small amounts of sediment settled from the raw stream water, algae, and coagulation compounds. The facility currently uses aluminum chloro-hydrate (ACH) for coagulation. Aluminum chloro-hydrate is generally recognized as safe by the Food and Drug Administration (FDA) and is approved for use as a drinking water treatment chemical by the National Sanitation Foundation (NSF). The sludge should not consist of any hazardous or toxic chemicals. The dewatered sludge from the new sludge lagoon is anticipated to be similar to the sludge from the existing sludge lagoons. The dewatered sludge from the existing sludge lagoons is currently disposed of at the Central Maui Sanitary Landfill. Based on a conservative raw water turbidity of 5 NTU and an average flow of 1.5 mgd, the additional sludge volume estimated to be generated by the new sludge lagoon is approximately 42 cubic yards each year. Due to the presence of the coagulation compounds, use of treated solids would not be valuable for agricultural use. Disposal of the sludge will be coordinated with the Department of Public Works Solid Waste Management Division.

Drainage System

Stormwater runoff is currently directed around and away from the site to the Kanaha Stream gulch or to the Lahainaluna High School agricultural field. Storm runoff from the site is directed to one of two desilting basins located makai of the Lahaina WTF. The proposed modifications will result in similar drainage patterns and will not adversely impact adjacent and downstream properties. Presedimentation basin discharges are currently diverted to one of the desilting basins at the Lahaina WTF. Construction of the new sludge lagoon will end the use of the existing desilting basin to handle discharges from the presedimentation basin.

Electrical Power

Additional electrical power requirements at the site for lighting at the existing presedimentation basin will be coordinated with Maui Electric Company, Ltd.

Chapter 5

Relationship to Land Use Plans, Policies and Controls

CHAPTER 5
RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

STATE LAND USE DISTRICTS

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes the four major land use districts in which all lands in the State are placed -- "Urban", "Rural", "Agricultural", and "Conservation". The subject property is located within the "Agricultural" district. Figure 5-1 shows the land use districts near the project site.

Water treatment facilities are not a permitted use within the "Agricultural" district and, as such, the DWS has obtained a Special Use Permit pursuant to Section 15-15-95 of the Hawaii Land Use Commission Rules. The LUC Rules provide that certain "unusual and reasonable" uses may be permitted within the "Agricultural" district. The existing water treatment facility is consistent with the guidelines for determining an "unusual and reasonable" use as follows:

Guideline: The use shall not be contrary to the objectives sought to be accomplished by Chapters 205 and 205A, HRS, and the rules of the Commission.

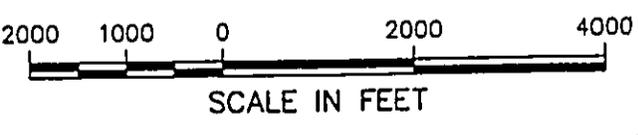
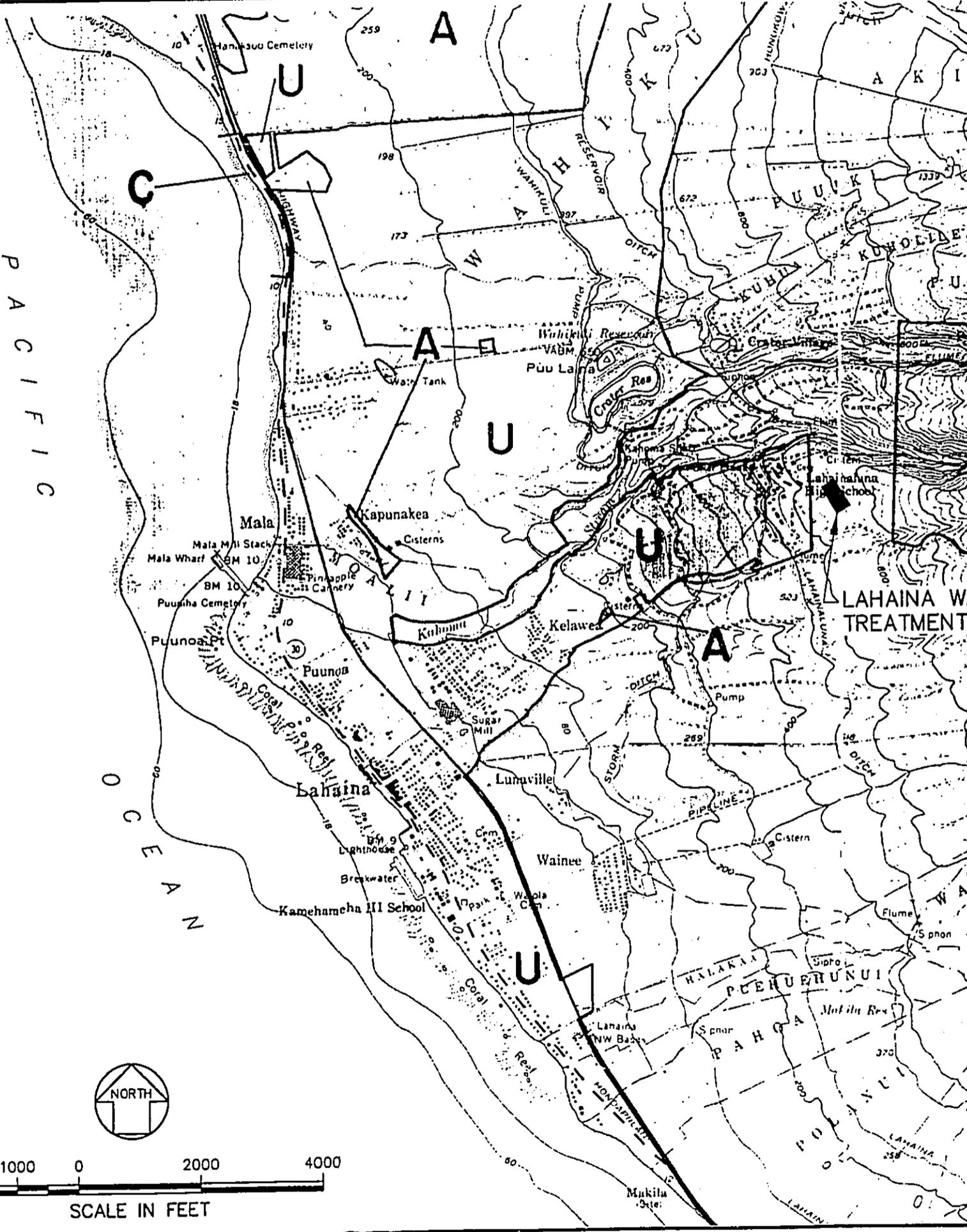
Response: The general intent of the State Land Use law is "to preserve, protect and encourage the development of land in the State for those uses to which they are best suited in the interest of the public health and welfare of the State of Hawaii". Furthermore, pursuant to Chapter 205A, HRS, it is an objective of the State Coastal Zone Management Program to "provide public or private facilities and improvements important to the State's economy in suitable locations". As a facility determined to be essential to maintaining the public health and welfare of the residents of Lahaina, the siting of the treatment facility is suitable in terms of its relationship to the surrounding environment.

Guideline: The desired use would not adversely affect surrounding property.

Response: With the exception of the Lahainaluna High School campus and its existing water supply facilities, the lands surrounding the existing water treatment facility are undeveloped and vacant. The Lahaina WTF does not adversely impact the daily operations of the school. The treated water provided to the school meets the requirements of the Surface Water Treatment Rule to assure the long-term health and well-being of the school's staff and students.

Guidelines: The use would not unreasonably burden public agencies to provide roads and streets, sewers, water drainage and school improvements, and police and fire protection.

Response: The Lahaina WTF is a fully automated system requiring only daily maintenance checks. There will be no new employment or resident



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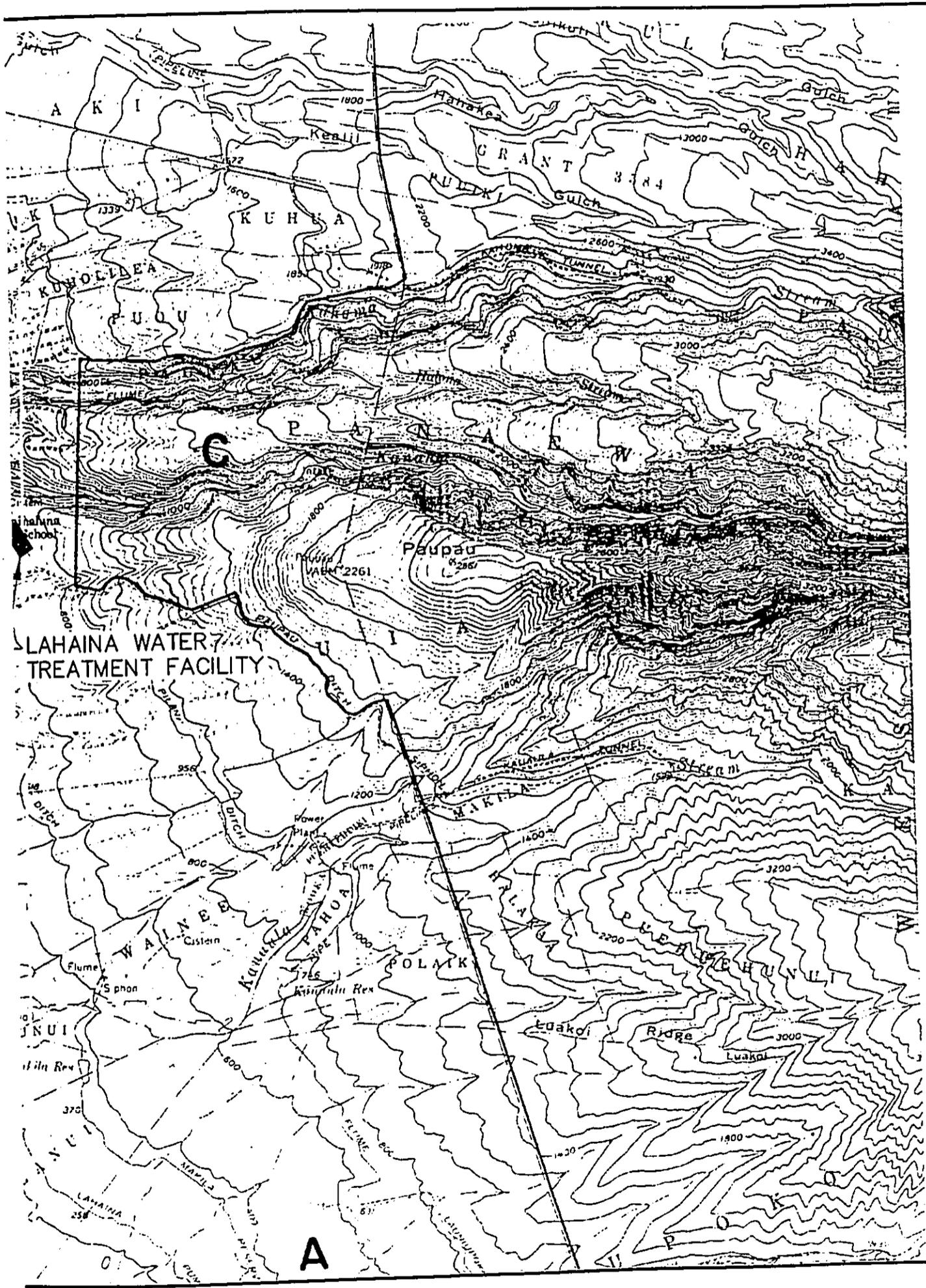


FIGURE 5-1

STATE LAND USE DISTRICT MAP

Lahaina Water Treatment Facility Modifications
Maui, Hawaii
Lahaina Water Treatment Facility



population increase directly attributable to the facility. In this regard, the facility does not impact public services and infrastructure in the vicinity.

Guideline: Unusual conditions, trends and needs have arisen since the district boundaries and rules were established.

Response: The implementation of the Surface Water Treatment Rule, effective December 31, 1990, required the DWS to take appropriate measures to meet new surface water quality standards. The site of the water treatment facility is considered the optimum location from a water system's engineering standpoint. Moreover, the siting of the plant will not generate adverse environmental impacts.

Guideline: The land upon which the proposed use is sought is unsuited for the uses permitted within the district.

Response: The land upon which the WTF is located is classified as "E" lands by the University of Hawaii Land Study Bureau. This designation indicates that the site and the surrounding State "Agricultural" lands possess a low agricultural productivity value. The use of the site for the water treatment facility does not displace nor impact agricultural activity important to the Island's economy.

A Special Use Permit for the existing water treatment facility has been reviewed and approved by the Maui Planning Commission. The Special Use Permit will be amended to reflect the proposed modifications to the existing treatment facilities.

HAWAII STATE PLAN

The Hawaii State Plan (HRS, Chapter 226) is a guide for the long-term development of the State. It identifies goals, objectives, policies, and priorities that have been established as a basis for making decisions affecting the quality of life in Hawaii. The proposed modifications to the existing treatment facility is consistent with and supports the following Hawaii State Plan objectives and policies:

a. **Physical environment – land, air, and water quality (Section 226-13)**

Objective:

Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives: (1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources, and (2) Greater public awareness and appreciation of Hawaii's environmental resources.

Policies:

(i) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.

b. Facility systems -- water (Section 226-16)

Objective:

Planning for the state's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capabilities.

Policies:

(i) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.

c. Socio-cultural advancement -- health (Section 226-20)

Objective:

Planning for the state's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives: (1) Fulfillment of basic individual health needs of the general public, and (2) Maintenance of sanitary and environmentally healthful conditions in Hawaii's communities.

Policies:

(i) Provide programs, services and activities that ensure environmentally healthful and sanitary conditions.

HAWAII WATER PLAN

The State Water Code requires the development of the Hawaii Water Plan to guide the Commission on Water Resource Management in assuring economic development, good municipal services, agricultural stability, and environmental protection. The Hawaii Water Plan utilizes an Integrated Resource Planning (IRP) approach to facilitate planning and decision-making processes. Implementation of an IRP approach is designed to enable the State and Counties to set priorities and develop appropriate strategies to meet the State's growing water demands.

Insofar as the proposed project's intent is to facilitate the protection and management of surface water resources, the project is consistent with the Hawaii Water Plan.

GENERAL PLAN OF THE COUNTY OF MAUI

The General Plan of the County of Maui (1990 Update) provides long-term goals, objectives and policies directed toward the betterment of living conditions in the County. Addressed are social, environmental, and economic issues that influence both the quantity and quality of growth in Maui County.

Implementation of the General Plan would be facilitated by the proposed modifications to the water treatment facility. The following General Plan objective and policy are addressed by this project:

Objective:

To provide public utilities which will meet community needs.

Policy:

Seek improvement in the operation of public facilities.

WEST MAUI COMMUNITY PLAN

Nine community plan regions have been established in Maui County. Each region's growth and development is guided by a Community Plan, which contain objectives and policies drafted in accordance with the County General Plan. The purpose of the Community Plan is to outline a relatively detailed agenda for carrying out these objectives.

The proposed project falls within the jurisdiction of the West Maui Community Plan, adopted in 1996. The proposed project would facilitate implementation of the West Maui Community Plan by addressing the objective to "promote drainage and stormwater management practices that prevent flooding and protect coastal water quality...."

Maps are included within each Community Plan in order to capture spatially the intent of the plan. The project site is designated "Public" by the West Maui Community Plan Land Use map. Figure 5-2 shows the Community Plan land uses near the project site.

COUNTY WATER USE AND DEVELOPMENT PLAN

The Maui County Water Use and Development Plan consists of a technical report and an executive summary. The Plan is based on the County's nine Community Plans, and is to be used for guiding future land use planning, water source development, resource protection, and water quality goals (Department of Planning and Department of Water Supply, 1990).

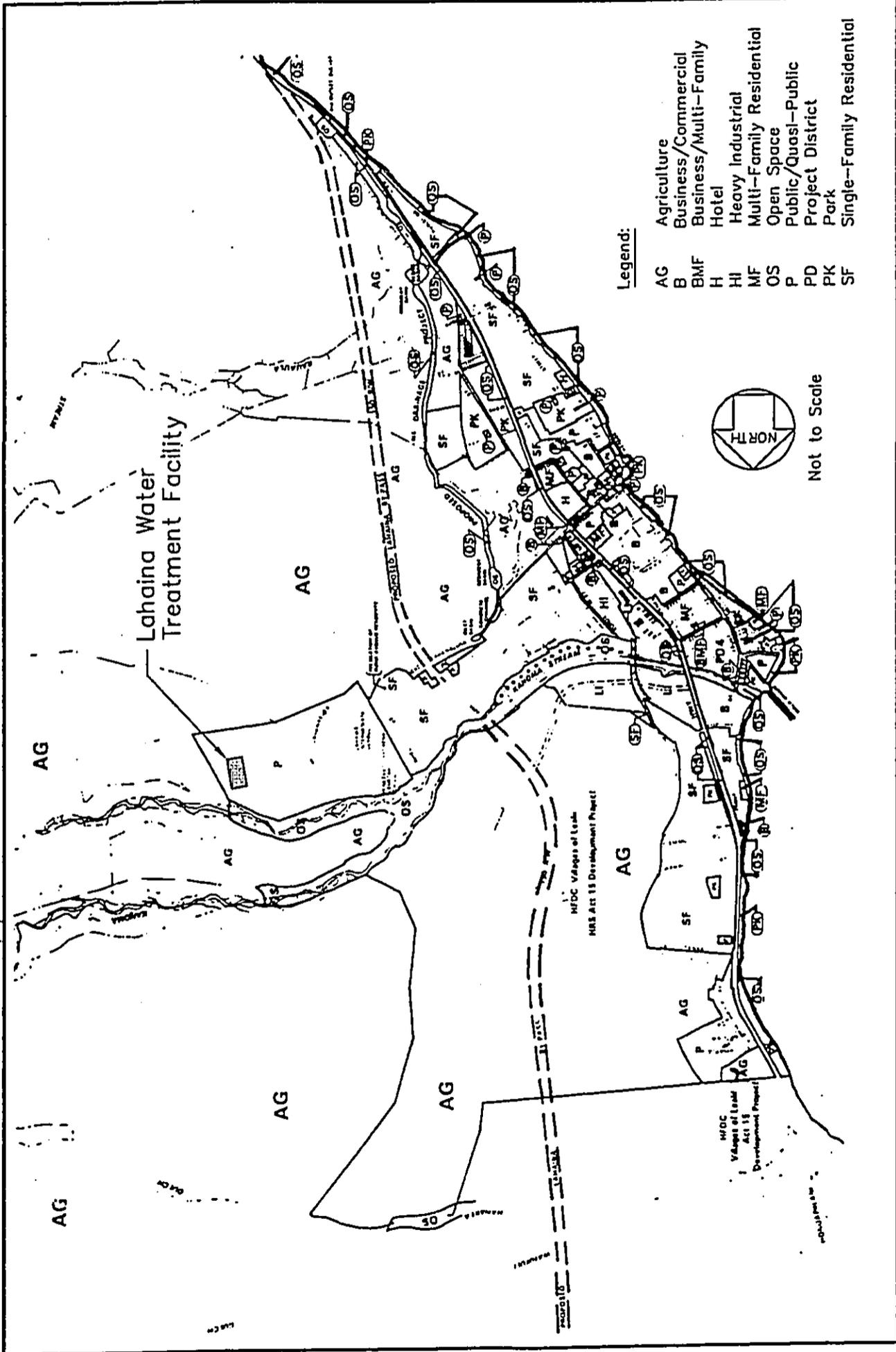
Insofar as the proposed project's intent is to enhance the production of drinking water from surface water resources, the project is consistent with the Water Use and Development Plan.

COASTAL ZONE MANAGEMENT (CZM) PROGRAM

The Coastal Zone Management Program (HRS, Chapter 205A) is a comprehensive statement describing the objectives and policies for regulating public and private uses in the coastal zone management area. The CZM area is defined as "the waters from the shoreline to the seaward limit of the state's jurisdiction and all land areas excluding those lands designated as state forest reserves" (HRS Supp., Section 205A-1). The Hawaii CZM program is approved by the Federal government pursuant to Public Law No. 92-583.

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Hawaii Pacific Engineers
Lahaina Water Treatment Facility Modifications
 Maui, Hawaii

COMMUNITY PLAN LAND USE MAP

FIGURE 5-2

The objectives of the Hawaii CZM program are as follows:

- A. Provide coastal recreational opportunities accessible to the public and protect coastal resources uniquely suited for recreational activities that cannot be provided elsewhere;
- B. Protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture;
- C. Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources;
- D. Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems;
- E. Provide public or private facilities and improvements important to the state's economy in suitable locations; and ensure that coastal dependent development such as harbors and ports, energy facilities, and visitor facilities, are located, designed, and constructed to minimize adverse impacts in the coastal zone area;
- F. Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution;
- G. Improve the development review process, communication, and public participation in the management of coastal resources and hazards;
- H. Stimulate public awareness, education, and participation in coastal management; and maintain a public advisory body to identify coastal management problems and provide policy advice and assistance to the CZM program;
- I. Protect beaches for public use and recreation; locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion; and
- J. Implement the State's ocean resources management plan.

The proposed modifications to the existing Lahaina WTF are in keeping with the foregoing objectives. The proposed project will not impact coastal resources, coastal development, or valuable coastal ecosystems. There are no known natural or manmade, historic or prehistoric resources within the project site. The color and relative sizes of the proposed modifications will be designed to minimize visual impacts to the surrounding areas. Elimination of the drain and overflow discharges from the presedimentation basin to Kanaha Stream will have a beneficial impact on the water quality of the stream.

The County of Maui's Special Management Area (SMA) permit procedures have been established within the framework of the CZM program. The County has defined Special

Management Areas along the shoreline in which special controls on developments are established to avoid permanent losses of valuable resources and to ensure adequate access to beaches, recreation areas and natural reserves. The existing water treatment facility is not within the County SMA boundaries.

Chapter 6

Alternatives to the Proposed Action

CHAPTER 6 ALTERNATIVES TO THE PROPOSED ACTION

GENERAL

Alternatives for the presedimentation basin cover and facilities to handle and dispose of discharges were developed and evaluated in an engineering report prepared for the County of Maui Department of Water Supply.

PRESEDIMENTATION BASIN COVER

The primary objectives for the presedimentation basin cover are to prevent water surface exposure to direct sunlight and to minimize the additional operation and maintenance effort required. Preventing direct sunlight from hitting the water surface within the presedimentation basin is desired to reduce the rate of algae growth within the basin. The existing presedimentation basin is currently uncovered. Reduction of algae growth within the presedimentation basin will reduce the frequency of cleaning required for the presedimentation basin and the microfiltration units. Use of chlorine to control algae growth within the presedimentation basin is not possible due to the sensitivity of the downstream microfiltration membranes. Due to limited manpower available at the treatment facility, minimizing the additional operation and maintenance effort required is also a primary objective. The Department of Water Supply is currently understaffed and obtaining additional qualified personnel recently has been difficult.

The alternatives were also developed with consideration of the configuration of the presedimentation basin, operation and maintenance requirements, and flexibility to add equipment in the future. The alternatives for the presedimentation basin covers were required to completely cover all of the openings in the basin with consideration of the location of the existing handrails. Because the cells of the presedimentation basin will need to be drained and cleaned periodically, the covers were required to be removable. The frequency of draining and cleaning of the presedimentation basin is estimated to be once every six weeks. Due to anticipated increasingly stringent regulations for water treatment facilities, the facility may be required to install flocculation equipment within the presedimentation basin. Evaluation of the alternatives considered flexibility for future modifications at the presedimentation basin.

No Action Alternative

The no action alternative would leave the existing presedimentation basin in its present state. In its present state, the presedimentation basin is subject to significant algae growth. The accumulation of algae within the presedimentation basin accelerates the rate at which the microfiltration units become clogged and increases the cleaning frequency required. Increased cleaning frequency of the microfiltration units will increase membrane cleaning chemical usage, backwash water consumption, power usage and manpower requirements. The accumulation of algae within the presedimentation basin also increases the frequency of cleaning required for the basin. Without any reduction in algae growth, the frequency of draining and cleaning of the basin is estimated to be once every four weeks.

The no action alternative requires a substantial expenditure of DWS time, resources and manpower to operate and maintain the treatment facility. From an operational standpoint, this increases the cost of drinking water production.

Retractable Fabric Covers

An alternative involving installing retractable fabric covers for each of the four compartments of the presedimentation basin was also considered. The retractable fabric cover would consist of a high performance reinforced geomembrane that would be manually rolled up along the frame to expose the tank interior. The rolled up cover would be secured on one end of the tank during operation and maintenance procedures. The fabric cover would be supported by low profile arches constructed of structural grade aluminum. The retractable fabric cover system would consist of a single geomembrane sheet covering half of each compartment with a walkway in the middle of the cover system. The geomembrane would be securely attached to one side of the cover system perimeter and held in position by quick-release closures on the other three sides.

The existing guardrails would be removed and reinstalled into the frame of the fabric cover. The reinstalled guardrails would extend an additional four-inches into the walkway reducing the walkway width to two-feet four-inches. However, the guardrails would be reinstalled in a removable configuration. With a removable configuration, the guardrails could be temporarily removed to increasing the available work space during the periodic cleaning of the basin. OSHA regulations require guardrails or floor coverings for floor holes. When uncovered, the floor hole must be constantly attended or protected by a removable railing. The fabric cover can support the weight of a person walking across the panel. However, the fabric cover is not designed for heavy traffic. Leaving the guardrails in place would discourage heavy traffic across the fabric covers and provide fall protection when the covers are not in place.

The estimated present worth lifecycle cost, with a 20-year lifecycle and a 7.625 percent discount factor, for this alternative is approximately \$340,000. The estimated probable construction cost and annual operation and maintenance cost are \$210,000 and \$12,500, respectively. Periodic lubrication of the nuts and bolts of the cover system is recommended for easy removal of the fabric cover. Additional manpower would be required to remove the fabric cover for periodic maintenance and daily inspections of the presedimentation basin. For proper operation and maintenance of the water treatment process, operators need to regularly observe the characteristics of the floc within the presedimentation basin. Removal of the aluminum handrails would be optional for periodic maintenance of the presedimentation basin. An additional 415 manhours each year for operation and maintenance is estimated for this alternative. The required frequency for opening and closing the fabric covers and the limited range of observation were considered to be disadvantages to this alternative. On the other hand, this alternative will completely eliminate raw water sunlight exposure within the presedimentation basin. Complete elimination of sunlight exposure, direct and indirect, is anticipated to result in greater algae reduction than elimination of direct sunlight alone. However, due to the additional operation and maintenance effort required, this alternative was not considered to be the most suitable alternative.

Proposed Pre-Engineered Building

This alternative involves installing a pre-engineered building over the entire presedimentation basin. The building would be installed in lieu of individual covers for each of the presedimentation basin compartments. The pre-engineered building would consist of a steel frame with aluminum roofing but no side panels. The roof eaves would have 10-foot overhangs on the east and west faces and 4-foot overhangs on the north and south faces to limit water surface exposure to direct sunlight. Fascias along the north and south faces and aluminum panels for the existing guardrails would be provided to further eliminate water surface exposure to direct sunlight.

The columns of the pre-engineered building would be bolted to the top of the presedimentation basin. The columns of the pre-engineered building would extend approximately eight-inches into the outer perimeter walkway reducing the walkway width to two-feet eight-inches at the columns. Lights would be provided for lighting the interior of the building.

The estimated present worth lifecycle cost, with a 20-year lifecycle and a 7.625 percent discount factor, for this alternative is approximately \$415,000. The estimated probable construction cost and annual operation and maintenance cost are \$412,000 and \$130, respectively. Additional manpower is not required for this alternative. Other alternatives that involve increased manpower requirements are less favorable due to limited staffing at the Department of Water Supply. Although this alternative does prevent direct sunlight from reaching the water surface, the water within the presedimentation basin would still be exposed to indirect sunlight. The reduction in algae growth due to elimination of direct sunlight is anticipated to be sufficient to reduce operation and maintenance efforts. Future surface water treatment rules may require the installation of flocculators within the presedimentation basin. Installation of the flocculators within the basin would be simpler with the pre-engineered structure than with the fabric covers. Although the lifecycle cost is greater, the proposed action represents a minimal operation and maintenance effort alternative that facilitates future installation of equipment in the presedimentation basin.

PRESEDIMENTATION BASIN DISCHARGES

The alternatives for handling and disposing of discharges from the existing presedimentation basin were based on the existing layout of the facility. The facility is located on the slopes of the west Maui mountain range. The finished grades around the existing structures are generally at a 2:1 slope. Alternatives for handling and disposing of discharges from the presedimentation basin considered the existing topography at the facility.

The proposed alternatives were developed with consideration of the anticipated decrease in the magnitude and frequency of discharges from the presedimentation basin. The Lahaina WTF personnel currently draw down the water level in one side of the presedimentation basin to one-half of the normal operating depth prior to discharging. The water level in the presedimentation basin is drawn down by processing the water through the treatment plant rather than discharging the water to the drainage system. The remaining liquid corresponds to a volume of approximately 130,000 gallons. However, if required, the facility personnel feel that they could

draw down the basin water level to approximately one-fourth of the depth prior to discharging. Under their current operations, facility personnel are able to drain and clean one cell of the basin in one day. The alternatives were developed to allow the facility personnel to continue this practice. The frequency of discharges from the basin is anticipated to range between once each month to once every six months. Because the facility is not manned on a regular basis, and because of the shortage of qualified personnel, the operation and maintenance effort associated with the alternatives were required to be low.

No Action Alternative

The no action alternative would leave the existing presedimentation basin in its present state. The overflow and drain lines from the presedimentation basin were designed to discharge to Kanaha Stream. The facility was originally designed to operate without any chemical addition. However, under current operations, coagulant is periodically injected into the raw water upstream of the presedimentation basin for color removal. Because the facility is currently treating the raw water with coagulant upstream of the presedimentation basin, discharges from the basin to the Kanaha Stream are not allowed without additional treatment and a National Pollution Discharge Elimination System (NPDES) permit. As a temporary means of handling and disposing of drain line discharges from the presedimentation basin, the drain flows are being diverted to a desilting basin located south of the facility. The desilting basin is part of the drainage system at the facility. Continued diversion of the presedimentation basin discharges to the existing desilting basin is not a suitable alternative due to the potential for the dewatered solids washing out during heavy rains. Continued diversion of the presedimentation basin discharges to the existing desilting basin would also result in increased manpower requirements.

Treatment and Disposal of Water to Kanaha Stream

This alternative involves installation of two parallel filtration systems and drain lines to treat discharges from the presedimentation basin. The filtration system would be a roll-off style container filter with a removable tarp cover. The filter container would be constructed of carbon steel with two layers of 50-mesh polypropylene screen filter media placed along the bottom and sides of the container. The drainage ports from the filtration system would be connected to the existing storm drain system. A National Pollution Discharge Elimination System (NPDES) permit would be required for the discharge from the filtration system to the storm drain. The filtration system would be installed on a concrete pad in the sloped area between the presedimentation basin and existing sludge lagoons. Periodic removal of the solids retained in the filter container would be required.

Each filtration system would have a capacity of 20 cubic yards and would be approximately 22-feet long, 8.5-feet wide, and 4.5-feet deep. This would provide sufficient volume to discharge approximately 8,000 gallons from the presedimentation basin to the filtration system. Staging the discharge from the presedimentation basin would be required due to the limited capacity of the filtration system. As the solids accumulate within the container filter, the rate at which the water passes through the filtration system would decrease. Dewatered solids would be disposed by transporting the roll-off container to the landfill and dumping the contents of the container.

The filter media could then be reused for additional filtration of presedimentation basin discharges.

The requirements of the NPDES permit would be based on the State Water Quality limits for inland waters. The NPDES permit would require turbidity below 2 NTU and total suspended solids concentration below 10 mg/l in the discharge. To meet the NPDES permit limits, a filtration system for the discharge from the presedimentation basin would be required. In addition to meeting the State Water Quality limits for inland waters, monitoring of the water quality for each discharge would be required. The filtration system discharge could be subject to additional constraints in the NPDES permit at the discretion of the State Department of Health. Due to the use of an alum coagulant at the presedimentation basin, a polymer mixing and injection system would be provided with the filtration system to ensure that the discharge from the filtration system meets the requirements of the NPDES permit. The polymer system would consist of a 500-gallon mixing tank, polymer injection pump, flow meter, and static mixer. A fresh water line would be required for dilution of the polymer prior to injection. The polymer system would be skid mounted next to the filtration system.

An influent pump station would be provided to ensure a consistent feed to the filtration system. A filtrate pump station would be provided to transport the filtered water back to the storm drain system. To dispose of the dewatered solids in the container filter, the entire roll-off container could be transported to the landfill or the solids in the container could be transferred to a dump truck for disposal at the landfill. Removal of the solids from the container filter after each cleaning of a cell in the presedimentation basin is anticipated. An access road to the filtration system and concrete pad would be provided to allow trucks to move the roll-off container. Area lights for the filtration system were not included because maintenance at the filtration system is anticipated to occur during normal working hours.

The estimated present worth lifecycle cost, with a 20-year lifecycle and a 7.625 percent discount factor, for this alternative is approximately \$800,000. The estimated probable construction cost and annual operation and maintenance cost are \$533,000 and \$26,400, respectively. The polymer system and pump stations would require additional operation and maintenance effort by the DWS personnel. Due to a limited shelf life, restocking of the concentrated polymer would be required periodically. Because there is a limit to the number of times the filter media can be reused, periodic removal and replacement of the filter media would be required. Due to the additional equipment and manpower required, this alternative was not considered to be suitable.

Proposed Sludge Lagoon

This alternative involves construction of a new sludge lagoon similar to the existing sludge lagoons to handle discharges from the presedimentation basin. The new sludge lagoon would be constructed in the sloped area between the presedimentation basin and existing sludge lagoons. The lagoon bottom would be constructed with graded rock and gravel media and a top layer of sand. The free liquid in the presedimentation basin discharge would percolate into the subsurface soil structure while the solids would be retained on the sand media. Periodic removal of the solids retained on the top layer of sand would be required.

The new sludge lagoon would be a reinforced concrete structure, approximately 70-feet long, 40-feet wide, and 8-feet deep. The upslope wall of the structure would be a retaining wall with the height needed to accommodate the dimensions and elevations needed for the sludge lagoon. This would provide sufficient volume to discharge approximately 130,000 gallons from the presedimentation basin to the new sludge lagoon. Drawing down the water level in the designated cell of the presedimentation basin approximately half way prior to discharge to the sludge lagoon would be required.

A ramp would be provided in the new sludge lagoon to allow access for a tractor/loader to remove the dewatered solids. An access road to the sludge lagoon would be constructed to allow truck access to the sludge lagoon. Because the presedimentation basin would be able to drain by gravity to the new sludge lagoon, pumps would not be required for this alternative. Area lights for the new sludge lagoon were not included because maintenance at the lagoon is anticipated to occur during normal working hours.

The estimated present worth lifecycle cost, with a 20-year lifecycle and a 7.625 percent discount factor, for this alternative is approximately \$580,000. The estimated probable construction cost and annual operation and maintenance cost are \$537,000 and \$3,900, respectively. Over time, the rate at which the presedimentation basin discharges percolate into the subsurface soil structure would decrease as the solids begin to fill the voids of the top layer of sand. Periodic removal and replacement of the top layer of sand would be required as the solids from the presedimentation basin discharge begin to plug the media. The proposed action represents a cost-effective alternative with operations similar to the existing operations at the water treatment facility.

Chapter 7

Findings and Determination

CHAPTER 7 FINDINGS AND DETERMINATION

The proposed modifications to the Lahaina WTF are intended to reduce operation and maintenance effort and improve treatment operations at the facility. The benefits derived from this project are significant in terms of the public health and welfare, as treated water produced by the facility will continue to meet the highest standards of water quality for surface water sources while making more cost-efficient use of DWS resources.

The proposed project will involve earthwork and building construction activities. In the short-term, these activities may create temporary nuisances normally associated with construction activities. Construction vehicles, for example, will require access to the site through the Lahainaluna High School campus. Vehicles will utilize a perimeter road that currently provides access to the existing State and County water facilities. With traffic monitoring normally conducted for construction activities of this nature, the short-term impacts to the school are not anticipated to be significant. The project site is isolated away from the school and adjacent urban residential areas, and construction activities at the site are not anticipated to adversely impact these areas. Earthwork activities may create a disturbance for Hawaiian geese or Nene that have been known to nest in the area. Construction personnel will be educated on appropriate measures to take if Nene geese are sighted in the area during construction. With proper education, short-term disturbances to the Nene geese are not anticipated to be significant.

From a long-term perspective, the additional water treatment facilities are not anticipated to result in adverse environmental impacts. The new facilities will be compatible in scale, mass and height with the existing water system facilities at the site. There are no surface archaeological features or rare/threatened species of flora at the site and the use of previously graded lands for the proposed improvements will not affect these environmental resources. Nene geese have been known to nest in the area of the existing water treatment facility. However, the proposed facilities are not anticipated to impact the ability of the geese to use the site for nesting in the future. Ambient air and noise characteristics will not be altered as a result of the proposed improvements to the Lahaina WTF. The new sludge lagoon will prevent further discharges from the presedimentation basin to Kanaha Stream. Elimination of discharges to Kanaha Stream will have a beneficial impact to the water quality in the stream. Percolation of the presedimentation basin discharges in the new sludge lagoon is not anticipated to impact groundwater resources due to the filtering action of the sand and gravel media. The dewatered sludge should not consist of hazardous or toxic chemicals and will be disposed of at a landfill in keeping with current sludge disposal practices.

Operationally, the Lahaina WTF will continue to be fully automated and require daily maintenance checks. The proposed improvements are anticipated to reduce the operation and maintenance effort required at the treatment facility. Reduction in operation and maintenance effort should reduce the daily traffic to the facility. These ongoing maintenance visits to the plant are not expected to create undue nuisance to the school or surrounding residential neighborhoods.

This assessment for the proposed modifications to the Lahaina WTF shows that no significant impact on the environment will occur and an Environmental Impact Statement is not required. Therefore, in accordance with the provisions of Chapter 343, Hawaii Revised Statutes, a Finding of No Significant Impact (FONSI) is concluded to be in order.

Reasons supporting the above determination include:

- 1) The proposed action does not involve an irrevocable commitment or loss of or destruction of any natural or cultural resources. There are no known significant natural or cultural resources associated with the project site. Past development of the project area has already substantially altered the site from its natural condition. There are no known impacts to cultural resources in the area.
- 2) The proposed action does not curtail the range of beneficial uses of the environment. The proposed project is consistent with land use plans, policies and controls and would not curtail beneficial uses of the environment in the area.
- 3) The proposed action is in concert with the State's long term environmental policies, goals and guidelines as expressed in Chapter 344, HRS, and any revisions and amendments thereto, court decisions and executive orders. No long-term adverse environmental conflicts are foreseen. The project will prevent discharges from the existing presedimentation basin to Kanaha Stream and associated water quality impacts.
- 4) The proposed action does not substantially affect the economic or social welfare of the community or State. The economic impact will be related primarily to short-term construction related activities.
- 5) The proposed action does not involve substantial secondary impacts, such as population changes or effects on public facilities. The proposed project will not result in an increase of population in the area.
- 6) The proposed action does not have significant adverse effects on public health. Only the short-term impacts have potential for affecting public health. Construction activities will be regulated to minimize noise, dust, and exhaust emissions. The project will have positive long-term public health benefits by continuing the production of drinking water meeting the highest standards of water quality for surface water sources.
- 7) The proposed action does not involve a substantial degradation of environmental quality. The existing physical aspects of the surrounding area will be preserved. Prevention of discharges from the presedimentation basin to Kanaha Stream will benefit water quality.
- 8) The proposed action is individually limited and cumulatively, does not have a significant effect upon the environment or involve a commitment for larger actions. The project is limited in scope to improvements within the existing water treatment facility.

- 9) The proposed action does not substantially affect rare, threatened or endangered species or habitats. Based on review of available information, no endangered flora are anticipated to be found within the project site. Precautions for protecting endangered Hawaiian geese or Nene in the area will be established during the construction period based on the recommendations of Department of Land & Natural Resources Forestry & Wildlife Division personnel.
- 10) The proposed action does not detrimentally affect air, water quality, or ambient noise levels. Short-term impacts on air, water quality and noise may occur during the construction period, but will be mitigated by construction practices and will be regulated by the projects plans and specifications.
- 11) The proposed action does not affect 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 or coastal waters. The proposed project is not located within an environmentally sensitive area. The project is not anticipated to have any significant adverse impacts on fresh or coastal waters.
- 12) The proposed project does not substantially affect scenic vistas and viewplanes identified in County or State plans or studies. The project site is not a part of a unique or valuable scenic resource. The proposed modifications will be compatible in scale, mass and height with existing water system facilities located at the site.
- 13) The proposed action does not require substantial energy consumption. The additional energy required to light the new pre-engineered building is not significant.

Chapter 8

**Agencies Contacted During the Preparation of the
Environmental Assessment**

CHAPTER 8
AGENCIES CONTACTED DURING THE PREPARATION
OF THE ENVIRONMENTAL ASSESSMENT

A list of parties contacted for the environmental assessment is presented below. Agencies and organizations responding with comments to the Pre-Consultation letter are marked below with an asterisk (*). Agencies and organizations responding with comments to the Draft Environmental Assessment are marked with an ampersand (&). Those who responded with no comments are marked with a plus (+).

1. U.S. Department of Agriculture Natural Resource Conservation Service (*)(&)
2. U.S. Army Corps of Engineers (+)
3. U.S. Department of the Interior Water Resources Division (+)
4. State of Hawaii Department of Accounting and General Services (+)
5. State of Hawaii Department of Agriculture (+)
6. State of Hawaii Department of Business, Economic Development & Tourism (&)
7. State of Hawaii Department of Education (&)
8. State of Hawaii Department of Hawaiian Home Lands (+)
9. State of Hawaii Department of Health (&)
10. State of Hawaii Department Land and Natural Resources (&)
11. State Historic Preservation Division Department Land and Natural Resources (&)
12. State of Hawaii Office of Hawaiian Affairs (*)
13. State of Hawaii Department of Transportation (+)
14. Office of Environmental Quality Control (&)
15. University of Hawaii Water Resources Research Center
16. County of Maui Department of Public Works (*)
17. County of Maui Department of Planning (*)
18. County of Maui Fire Department (+)
19. County of Maui Police Department (+)
20. Maui Electric Company, Ltd. (&)

21. Maui Land and Pineapple Co. (+)
22. Pioneer Mill Company
23. West Maui Taxpayers Association
24. Lahaina Public Library
25. Lahaina Restoration Foundation
26. Lahaina Town Action Committee
27. University of Hawaii Environmental Center (&)

Copies of the Pre-Consultation comment letters are located in Appendix A. Copies of the Draft Environmental Assessment comment and response letters are located in Appendix B.

References

REFERENCES

Austin, Tsutsumi & Associates, Inc., West Maui Water Master Plan, Prepared for County of Maui, Department of Water Supply, April 1991.

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University of Hawaii, Department of Geography, Atlas of Hawaii, Second Edition, 1983.

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Appendices

Appendix A

Pre-Consultation Assessment Comments and Responses

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



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

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

In reply, please refer to:
File:

RECEIVED

FEB 1 2001

HAWAII PACIFIC
ENGINEERS INC.

January 8, 2001

TO: Those Persons Requesting Department of Health
Comments on Land Use Documents

FROM: June Harrigan-Lum, Manager *June Harrigan-Lum*
Environmental Planning Office

SUBJECT: Temporary Discontinuance of Coordinated Land Use
Reviews

Our land use review coordinator, Mr. Art Bauckham, is retiring on January 31, 2001. We will be filling Mr. Bauckham's position as soon as possible. In the meantime, starting on January 15, 2001, the Environmental Planning Office (EPO) will not be accepting any land use documents for coordinated replies.

If you would like staff in a specific branch or office (for instance, the Wastewater Branch) to comment on your proposal, you are welcome to contact the staff directly. A list of the Branch/Office names is enclosed for your reference. If you have already sent a copy of the document to the Department of Health (EPO), and you wish to have us send it to a specific branch, you may call 586-4337 and ask the clerical staff to send it to the appropriate branch. Please describe the document and the date of your cover letter.

You may call the above number and check with the clerical staff to see when coordinated responses from this office will resume.

Thank you for your cooperation and patience in this matter.

Enclosure

c: DDEH

Branches and Offices in the Environmental Health Administration

Hazard Evaluation and
Emergency Response Office----586-4249

Environmental Planning Office---586-4337

Clean Air Branch-----586-4200

Clean Water Branch-----586-4309

Safe Drinking Water Branch-----586-4258

Solid & Hazardous Waste Branch--586-4226

Wastewater Branch-----586-4294

Noise and Radiation Branch-----586-4700

Sanitation Branch-----586-8000

Food and Drug Branch-----586-4725

Vector Control Branch-----831-6767



MAUI LAND & PINEAPPLE COMPANY, INC.

January 31, 2001

RECEIVED
FEB 2 2001

Ms. Tina M. Nakasone
Project Engineer
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813-2830

**HAWAII PACIFIC
ENGINEERS INC.**

Dear Ms. Nakasone:

Subject: Lahaina Water Treatment Facility
Presedimentation Basin Modifications
Pre-Consultation for Environmental Assessment
Lahaina, Maui, Hawaii

We are in receipt of your letter of January 26, 2001, requesting for pre-consultation comments in regards to the above project. We have no comments to offer at this time.

We appreciate the opportunity to provide our comments. If you have any questions or wish to discuss the matter, please do not hesitate to contact us.

Mahalo,

Warren A. Suzuki
Vice President/Land Management & Development

C: Wes Nohara



BENJAMIN J. CAYETANO
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810

LETTER NO. (P) 1085.1

FEB - 7 2001

RECEIVED

FEB 8 2001

HAWAII PACIFIC
ENGINEERS INC.

Ms. Tina M. Nakasone
Project Engineer
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813-2830

Dear Ms. Nakasone:

Subject: Lahaina Water Treatment Facility
Presedimentation Basin Modification
Pre-Consultation for Environmental Assessment

Thank you for the opportunity to review the pre-consultation
Environmental Assessment for the subject project.

The project does not impact any Department of Accounting and
General Services projects or existing facilities. Therefore, we
have no comments to offer.

Should you have any questions, please have your staff call
Mr. Allen Yamanoha of the Planning Branch at 586-0488.

Sincerely,

A handwritten signature in black ink, appearing to read "Gordon Matsuoka".

GORDON MATSUOKA
Public Works Administrator

AY:mo

c: Mr. Raynor Minami, DOE FSSB w/Hawaii Pacific Engineers, Inc.
letter



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

REPLY TO
ATTENTION OF

February 16, 2001

Regulatory Branch

RECEIVED
FEB 21 2001

Ms. Tina M. Nakasone
Project Engineer
Hawaii Pacific Engineers
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813

HAWAII PACIFIC
ENGINEERS INC.

Dear Ms. Nakasone:

This responds to your request, on behalf of the County of Maui Department of Water Supply, for pre-consultation comments on preparation of an Environmental Assessment for proposed modifications to the existing Lahaina Water Treatment Facility (WTF), Maui. We have reviewed the proposed modifications with respect to the Corps' authority to issue Department of the Army (DA) permits under Section 404 of the Clean Water Act.

Based on the project description you provided with your original letter and the additional information you provided via telephone to Mr. Peter Galloway of my staff on February 14, 2001, I have determined that the proposed project will not involve the discharge of dredged or fill material into Kanaha Stream or other waters of the U.S., including adjacent wetlands; therefore, a DA permit is not required.

Should you have any questions regarding this determination, please contact Mr. Galloway at (telephone 438-8416; fax 438-4060). File number 200100127 has been assigned to this project.

Sincerely,

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

BENJAMIN J. CAYETANO
GOVERNOR



PAUL G. LeMAHIEU, Ph.D.
SUPERINTENDENT

STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

RECEIVED

FEB 26 2001

OFFICE OF THE SUPERINTENDENT

February 20, 2001

HAWAII PACIFIC
ENGINEERS INC.

Ms. Tina M. Nakasone
Hawaii Pacific Engineers
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813

Dear Ms. Nakasone:

Subject: Lahaina Water Treatment Facility – Pre-Consultation

The Department of Education has no comment on the proposed project at this time.

Thank you for the opportunity to respond.

Very truly yours,

A handwritten signature in cursive script that reads "Paul G. LeMahieu".

Paul G. LeMahieu, Ph.D.
Superintendent of Education

PLeM:hy

cc: P. Yoshioka, DAS
MDO

PHONE (808) 594-1888

FAX (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

RECEIVED

FEB 28 2001

HAWAII PACIFIC
ENGINEERS INC.

February 26, 2001

Tina M. Nakasone
Project Engineer
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Ste 1003
Honolulu, HI 96813-2830

Dear Ms. Nakasone,

Thank you for the opportunity to pre-consult on the Lahaina Water Treatment Facility.

From your pre-consultation letter, it is not clear whether this Water Treatment Facility will require excavating previously undisturbed lands. If excavation is required, you will be required to submit archaeological and cultural assessments of the area per Chapter 343 of Hawai'i Revised Statutes. You will also be required to submit a burial plan per Chapter 6E of HRS.

OHA has no further comments at this time.

If you have any questions, please call Pua Aiu, policy analyst, at 594-1931.

Sincerely,

A handwritten signature in black ink, appearing to read "Colin Kippen".

Colin Kippen
Deputy Administrator, Hawaiian Rights Division

cc: BOT
Administration

RECEIVED

MAR 1 - 2001

HAWAII PACIFIC
ENGINEERS INC.



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

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

February 26, 2001

LD-NAV

Ref.: LAHAINAWTFPCDEA.RCM

Tina M. Nakasone, Project Engineer
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813

Dear Ms. Nakasone:

SUBJECT: Pre-consultation - Environmental Assessment for
Proposed Lahaina Water Treatment Facility Pre-
Sedimentation Basin Modification Project, Lahaina,
Island of Maui, Hawaii

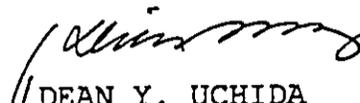
Thank you for the opportunity to review and comment on the
subject proposed project.

Your Pre-consultation letter dated January 9, 2001,
pertaining to the subject proposed project was submitted to our
appropriate divisions for their review and comment.

Enclosed are copies of our Land Division Engineering Branch
and Maui District Land Office comment. The Department has no
other comment to offer at this time.

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

Very truly yours,


DEAN Y. UCHIDA
Administrator

C: Maui District Land Office

'01 FEB 05 AM 09:47 WATER & LAND

RECEIVED
LAND DIVISION

2001 FEB 13 A 11:39

DEPT. OF LAND &
NATURAL RESOURCES
LD/NAV OF HAWAII

Ref.: LAHAINAWTFPCDEA.COM

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii

February 1, 2001

Suspense Date: 02/16/01

MEMORANDUM:

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

FROM: Dean Y. Uchida, Administrator
 Land Division

SUBJECT: Hawaii Pacific Engineers, Inc. Consultant
 Pre-consultation for Environmental Assessment
 Proposed: Lahaina Water Treatment Facility Pre-
 sedimentation Basin Modification, Lahaina, Maui,

Please review the project summary and submit your comments (if any) on Division letterhead (signed and dated) within the time (suspense date) requested above. Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0438.

If this office does not receive your comments on or before the suspense date, we will assume there are no comments.

() We have no comments.

(XX) Comments attached.

Signed: *Andrew M. Monden*

ANDREW M. MONDEN, CHIEF ENGINEER

Date: *2/13/01*

DLNR-LAND DIVISION
ENGINEERING BRANCH

COMMENTS

LD/NAV
Ref.: LAHAINAWTFPCDDEA.COM

COMMENTS

The proposed modifications to the existing Lahaina Water Treatment Facility do not affect our current projects and programs.

The project site, according to FEMA Community Panel Number 150003 0161 C, is located in Zone C. This is an area of minimal flooding (No Shading). Please coordinate with County NFIP Officer to ensure compliance with the requirements of the County's flood ordinance.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

54 South High Street, Room 101
Wailuku, Hawaii 96793-2198

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

MEMORANDUM

DATE: February 8, 2001

TO: Mr. Dean Y. Uchida
Land Division Administrator

FROM: Louis Wada *L. Wada*
Maui District Land Agent

SUBJECT: Pre-consultation for Environmental Assessment for Lahaina Water Treatment Facility, Presedimentation Basin Modifications,

The Maui District Land Office is unable to locate any Land Board approval(s) or subsequent disposition for the Lahaina Water Treatment Facility located mauka of Lahainaluna High School, tax map key (2) 4-6-18: 12. The subject land is under Executive Order No. 25 to DOE for Lahainaluna High School.

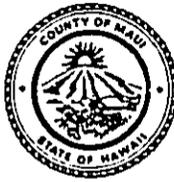
Thank you for allowing us to be part of the pre-consultation review and please call me at 984-8105 should you have any questions.

c: Maui Board Member
District Files

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

February 27, 2001

RECEIVED

MAR 2 - 2001

HAWAII PACIFIC
ENGINEERS INC.

Ms. Tina M. Nakasone, Project Engineer
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813-2830

Dear Ms. Nakasone:

RE: Pre-Consultation for Environmental Assessment - Lahaina Water Treatment Facility, Pre-Sedimentation Basin Modifications, Tax Map Key: 4-6-018:012 (Por.)

Thank you for your letter of January 26, 2001, requesting pre-consultation comments be sent to your office. Based upon the information and site plan provided, the Maui Planning Department (Department) assumes that the project is located in the tax map key as noted above. The Department recommends that the Tax Map Key Number be used in identifying the project.

The Department's files indicate that on November 22, 1994, the Maui Planning Commission approved a time extension to initiate construction on or before January 27, 1996, for the Lahaina Water Treatment Facility, as required by Condition No. 3 of the State Land Use Commission Special Use Permit (SUP), on approximately 2.8 acres of land in the State Agricultural District located above Lahainaluna High School. A preliminary compliance report was submitted on February 7, 1995, however, no final compliance report has been submitted. The original permit (Docket No. 91/SUP-017), was approved by the Maui Planning Commission on January 28, 1992. One of the conditions (Condition No. 8) of the SUP states that the color scheme of the buildings shall be of a medium earth tone intensity.

The Draft Environmental Assessment (EA) should also address the color scheme of the new building. Your letter states that the pre-engineered building will consist of a steel frame building with aluminum roofing. The Department is concerned about the reflections that may be created by the aluminum roofing and the visual impact of the building from the public roadway. This matter should be addressed in the Draft EA.

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
PLANNING DIVISION (808) 270-7735; ZONING DIVISION (808) 270-7253; FACSIMILE (808) 270-7634

Quality Seamless Service - Now and for the Future

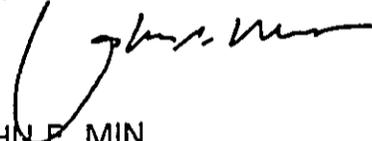
Ms. Tina M. Nakasone, Project Engineer
February 27, 2001
Page 2

An amendment to the existing State Special Use Permit (Docket No. 91/SUP-017) or a new State Land Use Commission Special Use Permit would be required.

The Department has enclosed a copy of the Zoning and Flood Confirmation Request Form for your information.

If you have any questions, please call Julie Higa, Staff Planner, of this office at 270-7814.

Very truly yours,



JOHN E. MIN
Planning Director

JEM:JH:cmb

Enclosure

c: Clayton Yoshida, AICP, Deputy Planning Director
Julie Higa, Staff Planner
Project File
General File
S:\ALL\JULIE\ENVIRONM\ahainawater treatment\preconsultation.ltr.wpd



DEPARTMENT OF PLANNING

ZONING AND FLOOD CONFIRMATION REQUEST FORM

APPLICANT: Hawaii Pacific Engineers PHONE NO.: 808 524 3771
ADDRESS: 1132 Bishop St, Suite 1003 Honolulu 96813-2830
PROJECT NAME: Lahaina Water Treatment Facility
ADDRESS AND/OR LOCATION: Lahaina
TMK NUMBER(S): EMK 4-6-018:012

ZONING INFORMATION

STATE LAND USE Agricultural COMMUNITY PLAN Agricultural
COUNTY ZONING Agricultural

FLOOD INFORMATION

FLOOD HAZARD AREA * ZONE C
BASE FLOOD ELEVATION N/A mean sea level, 1929 National Geodetic Vertical Datum or for Flood Zone AO, FLOOD DEPTH N/A feet.
FLOODWAY [] Yes or [X] No

FLOOD DEVELOPMENT PERMIT IS REQUIRED [] Yes or [X] No
* For flood hazard area zones B or C; a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

FOR COUNTY USE ONLY

REMARKS/COMMENTS:
[] Additional information required.
[] Information submitted is correct.
[] Correction has been made and initialed.

Reviewed and Confirmed by:
[Signature]

2/23/01
Date

Signature
Zoning Administration and Enforcement Division

S:\ALL\FORMS\FLOODZNING.REQ8/15/00

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JANET E. KAWELO
LUNNEL NISHIOKA

STATE OF HAWAII

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MAR 6 - 2001

HAWAII PACIFIC
ENGINEERS INC.

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhihewa Building, Room 555
601 Kamakila Boulevard
Kapolei, Hawaii 96707

February 22, 2001

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

LOG NO: 27014 ✓
DOC NO: 0102CD14

MEMORANDUM

TO: Mr. Dean Uchida, Administrator
Land Division

FROM: Mr. Don Hibbard, Administrator
State Historic Preservation Division 

SUBJECT: Chapter 6E-8 Historic Preservation Review Pertaining to the Hawaii Pacific Engineers, Inc. Consultant Pre-Consultation for the Environmental Assessment for the Proposed Lahaina Water Treatment Facility Pre-sedimentation Basin Modification Construction Project
Kuia Ahupua`a, Lahaina District, Island of Maui
TMK: 4-6-18:012

Thank you for the opportunity to comment on the Hawaii Pacific Engineers, Inc. Consultant pre-consultation for the environmental assessment for the proposed Lahaina Water Treatment Facility Pre-sedimentation Basin Modification Construction Project. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the subject property.

Based on the submitted document, we understand the proposed undertaking is located approximately 1500 feet mauka (east) of the Lahainaluna School Campus, on lands owned by the State of Hawaii. The steep cliff forming one side of the Kahana Stream Valley forms the northern boundary of the project area. The proposed undertaking consists of the construction of a new sludge lagoon to be located in the sloping area between the existing pre-sedimentation basin and the existing sludge lagoon, as well as the construction of an access road and ramp.

In 1991, the Bishop Museum conducted an archaeological inventory survey of the proposed project area, during which no historic sites were identified. The general area seems likely to have once been the location of pre-Contact farming, perhaps with scattered houses. However, based on the negative findings of the inventory survey, we believe it is unlikely that significant historic sites will be encountered today.

Given the above information, we believe the proposed undertaking will have "no effect" on significant historic sites.

Please call Cathleen Dagher at 692-8023 if you have any questions.

CD:jen

c: Ms. Tina M. Nakasone, Hawaii Pacific Eng., Inc. 1132 Bishop St., Suite 1003 Hon., HI 96813-2830



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

P.O. Box 50004
Honolulu, HI
96850

Our People...Our Islands...In Harmony

March 2, 2001

RECEIVED

MAR 7 - 2001

HAWAII PACIFIC
ENGINEERS INC.

Ms. Tina M. Nakasone, Project Engineer
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813-2830

Dear Ms. Nakasone:

Subject: Pre-Consultation for Environmental Assessment (EA) – Lahaina Water
Treatment Facility Pre-sedimentation Basin Modifications, Lahaina, Hawaii

We have reviewed the above mentioned document and have the following comments to offer:

We are concerned about the treatment of solid material from the facility. Where will the treated solids be removed to and will the solids be used for agriculture? If so, it may be possible to work with Lahainaluna High School to use the solids in their agricultural courses as well as any overflow of water for agricultural use by the school or other agriculture producers.

Thank you for the opportunity to review this document.

Sincerely,

KENNETH M. KANESHIRO
State Conservationist

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955



COUNTY OF MAUI
**DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT**
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

RALPH NAGAMINE, L.S., P.E.
Land Use and Codes Administration

RON R. RISKA, P.E.
Wastewater Reclamation Division

LLOYD P.C.W. LEE, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

ANDREW M. HIROSE
Solid Waste Division

March 6, 2001

RECEIVED
MAR 9 - 2001

Ms. Tina M. Nakasone
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Suite 1003
Honolulu, Hawaii 96813-2830

**HAWAII PACIFIC
ENGINEERS INC.**

Dear Ms. Nakasone:

**SUBJECT: PRE-CONSULTATION FOR ENVIRONMENTAL ASSESSMENT
LAHAINA WATER TREATMENT FACILITY**

We are responding to your letter dated January 26, 2001 requesting comments on the above referenced project.

1. The project shall comply with the provisions of the County grading ordinance and the drainage rules.

If you have any questions regarding this letter, please call me at 270-7845.

Sincerely,

for **DAVID GOODE**
Director of Public Works
and Waste Management

DG:mt



May 22, 2001

Ms. Tina M. Nakasone
Hawaii Pacific Engineers, Inc.
1132 Bishop Street, Suite 1003
Honolulu, HI 96813-2830

RECEIVED
MAY 24 2001

HAWAII PACIFIC
ENGINEERS INC.

Subject: Lahaina Water Treatment Facility
Presedimentation Basin Modifications
Pre-construction for Environmental Assessment

Dear Ms. Nakasone,

We appreciate the opportunity to comment on this project and apologize for the late response to your letter dated January 26, 2001.

We have reviewed your submittal in regards to our facilities located at the subject project and found that your modifications to the Lahaina Water Treatment Facility will not in any way impact our electrical facilities located on the site. Therefore, we have no objections to this project.

Should you have any further concerns, please contact me at 871-2366.

Sincerely,

Gregorysenn Kauhi
Distribution Engineering Supervisor

Appendix B

Draft Environmental Assessment Comments and Responses

BENJAMIN J. CAYETANO
GOVERNOR



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
236 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4186
FACSIMILE (808) 586-4186

April 26, 2001

RECEIVED
APR 30 2001

HAWAII PACIFIC
ENGINEERS INC.

Mr. David Craddick, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawai'i 96793

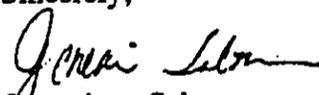
Dear Mr. Craddick:

Subject: Draft Environmental Assessment for the Lahaina Water Treatment Facility
Modifications, Maui

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

1. Please consult with the US Fish and Wildlife Service to determine what steps need to be taken to minimize impacts on the endangered Nene.
2. Please consult with Lahainaluna High School to determine what steps should be taken to minimize inconvenience to the school.

Sincerely,


Genevieve Salmonson
Director

c: HPE



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-6109

TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauewater.org

July 2, 2001

RECEIVED

JUL 10 2001

HAWAII PACIFIC
ENGINEERS INC.

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

Dear Ms. Salmonson,

Subject: Draft Environmental Assessment (DEA) for Lahaina Water Treatment
Facility Modifications, TMK 4-6-018:012 (Por.), Lahaina, Maui, Hawaii

Thank you for reviewing the subject document and for your correspondence of April 26, 2001. We offer the following responses to your comments:

1. Consult with US Fish and Wildlife Service. We have consulted with the Department of Land and Natural Resources Forestry and Wildlife Division regarding steps needed to minimize impacts to the endangered Nene. Proposed precautions to minimize impacts to the Nene have been incorporated into the final environmental assessment. These precautions will also be incorporated into the project construction documents.
2. Consult with Lahainaluna High School. The Contractor will be required to consult with the school administration prior to construction to minimize impacts to the school during the construction period. Requirements to consult with the school administration and restricted access hours through the school campus have been included in the project specifications.

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,

David R. Craddick
Director
DRCH/PE/lw

bcc: Hawaii Pacific Engineers (Tina Nakasone)

JUL 06 2001

"By Water All Things Find Life"

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University of Hawai'i at Mānoa

Environmental Center
A Unit of Water Resources Research Center
Krauss Annex 19 • 2500 Dole Street • Honolulu, Hawai'i 96822
Telephone: (808) 956-7361 • Facsimile: (808) 956-3980

May 23, 2000
EA:0257

Mr. David Craddick
County of Maui
Department of Water Supply
P.O. Box 1109
Wailuku, Hawaii 96793

Dear Mr. Craddick:

Draft Environmental Assessment
Lahaina Water Treatment Facility Modifications
Lahaina, Maui

The County of Maui, Department of Water Supply proposes to construct modifications at its existing water treatment facility in Lahaina, Maui. The site is located approximately 1,500 feet mauka of Lahainaluna High School Campus on lands owned by the State of Hawaii. The subject property is currently occupied by an existing presedimentation basin. The proposed modifications include construction of a pre-engineered building over the presedimentation basin and the construction of a new sludge lagoon. The purpose of the building is to curtail algae growth in the presedimentation basin by reducing exposure to sunlight to the water. The new sludge lagoon will provide overflow and drain line discharges from the existing basin. The start date of the project is November 2001, and is estimated to be completed May 2002. The estimated cost of the project is approximately \$1,000,000.00.

This review was prepared with the assistance of Roger Babcock, Department of Civil Engineering, and Niyati Ni, Environmental Center.

General Comments

In general we find that the Draft Environmental Assessment provides some justification for the need of the proposed project. We wonder however, why the proposed pre-engineered building alternative was chosen over the retractable fabric cover alternative. According to your analysis, it seems the fabric cover would be the most cost-effective solution. The pre-engineered building costs more in the short and long run and is less efficient at keeping out all the sunlight.

Mr. Craddick
May 23, 2001
Page 2

Another one of our concerns is with the potential for damage to nene (*Brunta sandwicensus*) the native Hawaiian geese who are known to nest in the proposed project area. We address this concern in more detail in the section on fauna below.

Existing Water Treatment Facility

In the second paragraph on page 1-1 of this section of the Draft Environmental Impact Assessment (DEA) it is stated that the Kanaha diversion intake can accommodate a flow of 2.7 mgd. In the next paragraph it states that if all three units are operating, the peak treatment capacity is 2.92 mgd or about .2 mgd over what the intake can accommodate. Could you clarify this in the final draft?

Visual Character

The DEA describes the addition of a roof structure for the presedimentation tanks to reduce algae growth which interferes with subsequent microfiltration and the addition of a sludge lagoon for periodic disposal of overflow from those basins. We concur with the DEA (page 4-2) that the roof structure will not have adverse impacts on the visual character of environment if it is painted in a neutral color to help camouflage the building from the surrounding environment.

Water Quality

The sludge lagoon will only be needed periodically and only to dispose of basically clean water. The water going into the lagoon will percolate into the groundwater after it is filtered by sand and gravel. This is surface water which, in and of itself, will not harm the ground water. It may contain some dissolved and precipitated coagulant chemicals. The existing situation (discharge to the stream) is not acceptable because of the precipitated chemicals; however, the precipitated chemicals will not enter the groundwater via the proposed sludge lagoon. A small amount of dissolved coagulant chemicals should not be considered pollutants since they are present in the drinking water supply already delivered to Maui residents.

Fauna

The nene is on the endangered species list, and the Hawaiian owl (*Asio Flammeus sandwicensus*) is a species of concern according to the Department of Land and Natural Resources. The section on fauna in pages 3-9 and 3-10 fails to mention these important conditions. The Flora and Fauna section on page 4-1 states in the last paragraph that "there are no known rare, endangered or threatened species of wildlife in the project vicinity." Yet, in the next sentence it is stated that the site is "used as a

Mr. Craddick
May 23, 2001
Page 3

nesting site for the endangered Hawaiian goose or nene." If the nene use the site or an adjacent area then you should report that there are endangered species in the vicinity.

Nene, the endangered Hawaiian goose is known to nest in the area of the existing water treatment facility. Due to construction activities, there is potential for damage to the nesting site. It is important to note that winter is the breeding season for the nene which coincides with the proposed project's time line from November 2001 to May 2002 (page 2-4). We recommend that the project be started and completed in the spring and summer to avoid possible damage to the nests. The DEA is also deficient in what actions will be taken in case of a nene sighting. It is stated on page 4-1 that "precautions for protecting endangered nene geese in the area will be established during the construction period based on the recommendations of Department of Land & Natural Resources Forestry & Wildlife Division personnel." The plan should state before construction begins what steps will be taken to protect the nene from harm. What steps will construction personnel take if they see the bird?

The DEA states in page 4-2 that "removal of approximately 0.55 acres of existing vegetation and potential nesting area for the new sludge lagoon is not anticipated to adversely impact the area's fauna and avifauna population." Removal of the .55 acres will most definitely have impacts on the nene especially if it is the area in which the nene have been known to nest. Nene are herbivores which rely on grass and plants near where it lives. We strongly recommend that steps be taken to protect the endangered nene.

The flora and fauna survey cited in the DEA was conducted in 1979. This survey is rather old. The area might have changed. We suggest that a more up to date survey be used for this section or a biologist conduct an update on the area.

Erosion Control

The section on erosion control on page 4-1 states that "temporary and permanent erosion control measures will be implemented during construction." What type of measures are being contemplated? Can the project be timed to occur in the drier summer months, May to September when rainfall is typically very low (only 0.2 inches in June).

Conclusion

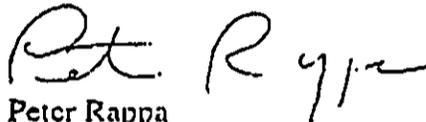
The DEA should elaborate on potential impacts to the threatened nene and the pueo, a species of concern. It should, at a minimum, discuss ways to protect the nene from damage to their habitat. Measures of mitigation for the nene should be spelled out before construction begins, and the time line of the project should be reconsidered.

Mr. Craddick
May 23, 2001
Page 4

We also question why the retractable fabric cover was not chosen over the more expensive, less efficient pre-engineered building.

We thank you for the opportunity to review this Draft Environmental Assessment.

Sincerely,



Peter Rappa
Environmental Review Coordinator

cc: OEQC
Tina Nakasone, Hawaii Pacific Engineers
Roger Babcock, Department of Civil Engineering
James Moncur, WRRRC
Niyati Ni, Environmental Center



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI

P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-6109
TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauiwater.org

July 2, 2001

Mr. Peter Rappa, Environmental Review Coordinator
University of Hawaii, Environmental Center
2500 Dole Street, Krauss Annex 19
Honolulu, Hawaii 96822

RECEIVED

JUL 12 2001

HAWAII PACIFIC
ENGINEERS INC.

Dear Mr. Rappa,

Subject: Draft Environmental Assessment (DEA) for Lahaina Water Treatment Facility
Modifications, TMK 4-6-018:012 (Por.), Lahaina, Maui, Hawaii

Thank you for reviewing the subject document and for your correspondence of May 23, 2001.
We offer the following responses to your comments:

1. General Comments. Although the retractable fabric cover alternative was slightly less expensive than the pre-engineered building alternative, the fabric cover does not provide as much flexibility for existing operations and future equipment installation within the existing presedimentation basin. The existing presedimentation basin also serve as a flocculation basin. For proper operation and maintenance of the water treatment process, operators regularly observe the characteristics of the floc. The required frequency for opening and closing the fabric covers and the limited range of observation were considered to be significant disadvantages. Future surface water treatment rules may require the installation of flocculation equipment within the presedimentation basin. Installation and operation of equipment within the basin would be simpler with the pre-engineered structure than with the fabric covers. Increased manpower requirements are also a concern at the Department of Water Supply. For these reasons, the pre-engineered building alternative was determined to be more cost-effective for implementation at the Lahaina Water Treatment Facility. Additional clarification will be provided in the final environmental assessment.
2. Existing Water Treatment Facility. The peak treatment capacity of the facility, 2.92 mgd, is greater than the capacity of the Kanaha Stream intake, 2.7 mgd. The stream intake was constructed prior to the construction of the treatment facility. Due to the standard capacities of the treatment units, the treatment capacity is greater than the intake capacity. Additional clarification will be provided in the final environmental assessment.

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3. Visual Character. We acknowledge your concurrence for the use of medium earth tone colors to minimize visual impacts of the pre-engineered building to the surrounding environment.
4. Water Quality. We concur with your assessment that the precipitated chemicals in the discharge from the presedimentation basin will not enter the groundwater via the proposed sludge lagoon.
5. Flora and Fauna. The discussion of the existing flora and fauna and potential impacts to the flora and fauna will be revised in the final environmental impact to clearly indicate the presence of the endangered Nene and species of concern, Pueo. DLNR Forestry and Wildlife has informed us that the nesting season for the Nene is typically between November and March. For the past two years, they have nested during December and January within other parts of the site and surrounding areas, not within the proposed construction zone. Timing of the construction will be coordinated to minimize impacts during the nesting season to the extent possible. However, delaying the start of construction until after the nesting season is not possible due to the expiration of construction funds (July 2002). DLNR Forestry and Wildlife has indicated that they may be able to relocate the Nene during the construction period if necessary. Proposed precautions to protect the endangered Nene include educating construction personnel about the Nene and preventing feeding and harassment of the birds by construction personnel. Construction personnel will be instructed to immediately call the DLNR Forestry and Wildlife if the birds are sighted within the site, and to stop work in the general area if the birds enter the construction zone during the construction period. DLNR Forestry and Wildlife will also be notified at the start of construction and shall be kept informed of the construction schedule. Pueo have been sighted in the valleys of Lahaina but not in the general area of the treatment facility. Construction personnel will be instructed to immediately call DLNR Forestry and Wildlife personnel if Pueo are sighted during construction.

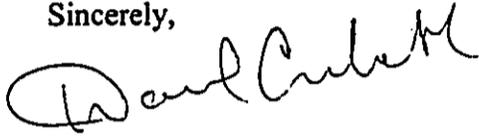
Removal of 0.55 acres of existing vegetation and potential nesting area is not anticipated to adversely impact the endangered Nene. The affected area is entirely within the existing treatment plant site. The remaining area within the site and outside the treatment facility for grazing is considerably large. The proposed location of the new sludge lagoon (0.55 acres) does not include areas that the Nene have used as nesting sites in the past. Precautions to protect the Nene have been implemented at the facility during the past nesting seasons.

A more recent survey of the project site by Bishop Museum (August 1991) did not indicate the presence of any sensitive, rare or threatened flora. Due to the limited size and scope of this project, a survey of the existing flora and fauna species was not included as part of the project.

6. Erosion Control. Silt fences and stabilized construction entrances will be used during the construction of the proposed modifications. These requirements have been incorporated into the construction documents. There are also two existing desilting basins that are part of the storm drain system at the facility. Due to the timing of the expiration of the construction funds (July 2002), limiting construction of the facilities to the drier months of May thru September is not likely.

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,



David R. Craddick
Director

DRC/HPE/lw

bcc: Hawaii Pacific Engineers (Tina Nakasone)



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

210 Iml Kala St.
Suite 209
Wailuku, HI 96793

01 JUL 12 13:09

Our People...Our Islands...Our Harmony
DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

DATE: July 11, 2001

Mr. John E. Min, Director
Department of Planning
County of Maui
250 S. High Street
Wailuku, Hawaii 96793

Dear Mr. Min,

SUBJECT: Lahaina Water Treatment Facility Modifications --Amendment to SU permit
TMK: 4-6-018: por. 012
I.D. 91/SUP-017

The treatment and disposal of water to Kanaha Stream should be piped directly into the stream and discharged parallel into the stream.

The sediment basins constructed during the initial construction phase of the facility has since been poorly operated and maintained. The basins need to be annually or at least periodically cleaned out and maintained.

The maintenance road that services the facility will need to be paved or heavily rolled with gravel. Heavy trucks and constant travel to the site by facility personnel have created ruts and constant dust problems for the school. A classroom and study class has been initiated adjacent to the facility, and noise, dust and safety would be of-concern.

Thank you for the opportunity to comment.

Sincerely,

Neal S. Fujiwara
District Conservationist

cc. Mr. Michael Nakano, Principal, Lahainaluna High School



DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

P.O. BOX 1109

WAILUKU, MAUI, HAWAII 96793-6109

TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauewater.org

September 21, 2001

Mr. Neal S. Fujiwara, District Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
210 Imi Kala Street Suite 209
Wailuku, Hawaii 96793

Dear Mr. Fujiwara,

Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit
TMK 4-6-018:012 (Por.), I.D. 91/SUP-017, Lahaina, Maui, Hawaii

Thank you for reviewing the subject document and for your correspondence of July 11, 2001. We offer the following responses to your comments:

1. Treatment and disposal of water to Kanaha Stream from the existing Presedimentation Basin will be discontinued with the construction of the sludge lagoon in this project.
2. Periodic maintenance of the desilting basins servicing the facility is not part of the project scope but is included in the facility's operation and maintenance program. Cleaning of the desilting basins is performed on an as-needed basis.
3. During construction of the new facilities, dust control, noise control, and safety precautions will be implemented along the maintenance road to insure the safety of the nearby classroom. We anticipate these measures will sufficiently control dust and noise associated with the construction activities. Thus, construction of a paved roadway is not included in the project scope.

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Mr. Neal S. Fujiwara
September 21, 2001
Page 2

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,



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

HPE/lw

cc: Simone Bosco, Department of Planning
Tina Nakasone, HPE

Aug-07-01 02:53pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-207 P.11/12 F-628

BENJAMIN J. CAYetano
GOVERNOR



PAUL G. LOMAHIEU, Ph.D.
SUPERINTENDENT

STATE OF HAWAII
DEPARTMENT OF EDUCATION
LAHAINALUNA HIGH SCHOOL
FOUNDED 1831
980 LAHAINALUNA ROAD
LAHAINA, HAWAII 96751-1399

01 JUL 19 P3:12

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

July 17, 2001

Mr. John E. Min, Director
Department of Planning
County of Maui
250 S. High Street
Wailuku, HI 96793

Dear Mr. Min:

I have two concerns that are related to the Lahaina Water Treatment Facility.

One concern is the dust. The maintenance dirt road that services the treatment facility is in need of paving. Heavy vehicles and other equipment have created ruts in the road and lots of dust in the area. This dust is very bad for the health of our students and school personnel. A paved roadway would really cut down on the dust and the noise.

Another concern is security. Our Alternative Learning Center is housed in this area, including a lab, hydroponics, aquaculture, nursery and a classroom. Many of the decorative plants, fish and vegetables have been stolen this past year. Currently, there is a chain that runs across the entrance at the bottom of the gym. However, the metal posts that hold the chain are constantly removed or the chain is cut. I would like to request a cattle gate for this purpose.

I would appreciate any assistance in our requests. We look forward to hearing from you. If you have any questions, please call me at 662-4000.

Sincerely,

Michael M. Nakano

Michael M. Nakano
Principal

Cc: Ms. Gwen Ueoka, Maui District Superintendent
Mr. Neal S. Fujiwara, District Conservationist

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER



DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

P.O. BOX 1109

WAILUKU, MAUI, HAWAII 96793-6109

TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauiwater.org

September 21, 2001

Mr. Michael M. Nakano, Principal
State of Hawaii Department of Education
Lahainaluna High School
980 Lahainaluna Road
Lahaina, Hawaii 96751

Dear Mr. Nakano,

**Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit
TMK 4-6-018:012 (Por.), I.D. 91/SUP-017, Lahaina, Maui, Hawaii**

Thank you for reviewing the subject document and for your correspondence of July 17, 2001. We offer the following responses to your comments:

1. During construction of the new facilities, dust control and noise control will be implemented along the maintenance road to insure the safety of the nearby students and school personnel. We anticipate these measures will sufficiently control dust and noise associated with the construction activities. Thus, construction of a paved roadway is not included in the project scope.
2. The proposed project is not anticipated to increase the security risk for the school facilities located near the water treatment facility. Thus, the installation of a cattle gate in place of the existing metal posts and chain is not included in the project scope.

"By Water All Things Find Life"

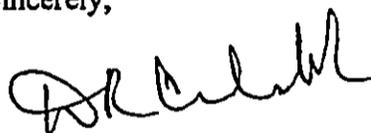
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Mr. Michael M. Nakano
September 21, 2001
Page 2

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Craddick", written in a cursive style.

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

HPE/lw

cc: Simone Bosco, Department of Planning
Tina Nakasone, HPE

Aug-07-01 02:53pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242819

T-207 P.10/12 F-629



JAMES "KIMO" APANA
MAYOR

OUR REFERENCE
tv
YOUR REFERENCE

POLICE DEPARTMENT COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411



01 JUL 18 P3:44

THOMAS M. PHILLIPS
CHIEF OF POLICE

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

MEKUAUPIO R. AKANA
DEPUTY CHIEF OF POLICE

July 17, 2001

MEMORANDUM

TO : JOHN E. MIN, PLANNING DIRECTOR

FROM : THOMAS M. PHILLIPS, CHIEF OF POLICE

SUBJECT : I.D. 91/SUP-017
 TMK: 4-6-018:012 Por. of
 Project
 Name: Lahaina Water Treatment Facility Modifications -
 Amendment to Special Use Permit
 Applicant: Department of Water Supply

No further recommendation or comment is necessary or desired.

Refer to enclosed comments and/or recommendations.

Thank you for giving us the opportunity to comment on this project. We are returning the Draft Environmental Assessment was submitted for our review.

Robert Tam Ho
Assistant Chief Robert Tam Ho
For: THOMAS M. PHILLIPS
Chief of Police

Enclosure

Aug-07-01 02:53pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242819

T-207 P.08/12 F-628

BENJAMIN J. CAYETANO
GOVERNOR



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

LORRIN W. PANG, M.D., M.P.H.
MAUI DISTRICT HEALTH OFFICER

01 JUL 19 P3:31

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
ENVIRONMENTAL PROTECTION AND HEALTH SERVICES
54 HIGH STREET, ROOM 300
WAILUKU, MAUI, HAWAII 96793

July 17, 2001

Mr. John Min
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: **Lahaina Water Treatment Facility Modifications**
TMK: (2) 4-6-018: 012 Por. of
91/SUP-017

Thank you for the opportunity to comment on the amendments to the Special Use Permit which will allow modifications and improvements to the Lahaina Water Treatment Facilities. We have no comments to offer at this time.

Should you have any questions, please call me at 984-8230.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Matsubayashi".

Herbert S. Matsubayashi
District Environmental Health Program Chief

c: Phillip Dendel



01 JUL 19 P3:12

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

July 17, 2001

Mr. John E. Min
Planning Director
Maui Planning Department
250 S. High Street
Wailuku, HI 96793

Dear Mr. Min:

Subject: Lahaina Water Treatment Facility Modifications
TMK: 4-6-018:012 por. of
I.D.: 91/SUP-017

Thank you for allowing us to comment on the subject project.

In reviewing the information transmitted and our records, we have no objection to the subject project. If new load will be added to the existing MECO electrical service, we encourage the developer's electrical consultant to meet with us as soon as practical to verify the project's electrical requirements so that service can be provided on a timely basis.

If you have any questions or concerns, please call Dan Takahata at 871-2385.

Sincerely,

Neal Shinyama
Manager, Energy Delivery

NS/dt:ikh



**DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI**

P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-6109
TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauiwater.org

September 21, 2001

Mr. Neal Shinyama, Manager, Energy Delivery
Maui Electric Company, Ltd.
210 West Kamehameha Avenue
P.O. Box 398
Kahului, Hawaii 96733

Dear Mr. Shinyama,

Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit
TMK 4-6-018:012 (Por.), I.D. 91/SUP-017, Lahaina, Maui, Hawaii

Thank you for reviewing the subject document and for your correspondence of July 17, 2001. We offer the following responses to your comments:

New loads will be added to the existing MECO electric service at the Lahaina Water Treatment Facility. The project electrical consultant will be contacting your office in the near future to verify the project's electrical requirements.

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,

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

HPE/lw

cc: Simone Bosco, Department of Planning
Tina Nakasone, HPE

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Aug-07-01 02:53pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-207 P.07/12 F-629



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

REPLY TO
ATTENTION OF

July 17, 2001

01 JUL 18 P3:43

Civil Works Technical Branch

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

Ms. Simone Bosco, Staff Planner
Department of Planning
County of Maui
250 South High Street
Wailuku, Maui 96793

Dear Ms. Bosco:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Lahaina Water Treatment Facility Project, Lahaina, Maui (TMK 4-6-18: por. 12). We do not have any additional comments to offer beyond those previously provided in our letter dated February 16, 2001.

If you require additional information, please feel free to contact Ms. Jessie Dobinchick of our Civil Works Technical Branch staff at (808) 438-8876.

Sincerely,

James Pennaz
James Pennaz, P.E.
Chief, Civil Works
Technical Branch

Aug-07-01 02:52pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-207 P.06/12 F-628



01 JUL 20 P3:44

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
54 South High Street, Room 101
Wailuku, Hawaii 96793-2198

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

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

MEMORANDUM

DATE: July 18, 2001
TO: Simone Bosco, Staff Planner
County of Maui, Planning Department
FROM: Jason Koga *J. Koga*
Maui District Land Agent
SUBJECT: 91/SUP-017, Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit, Department of Water Supply

The Maui District Land Office of the Department of Land and Natural Resources has no additional comments on the proposed amendment to Special Use Permit other than those provided on February 8, 2001, as exhibited in the Draft Environmental Assessment.

Thank you for allowing us to review and comment on the permit application. You may contact us at 984-8100 should you have any questions.

c: Maui Land Board Member
Nick Vaccaro



DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

P.O. BOX 1109

WAILUKU, MAUI, HAWAII 96793-6109

TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauiwater.org

September 21, 2001

Mr. Jason Koga, Maui District Land Agent
State of Hawaii Department of Land and Natural Resources
Land Division Maui District Land Office
54 South High Street, Room 101
Wailuku, Hawaii 96793

Dear Mr. Koga,

Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit
TMK 4-6-018:012 (Por.), I.D. 91/SUP-017, Lahaina, Maui, Hawaii

Thank you for reviewing the subject document and for your correspondence of July 18, 2001. We offer the following responses to your comments:

The Lahaina Water Treatment Facility is located on land allocated to the Department of Education (DOE) under Executive Order No. 25 for Lahainaluna High School. A participation agreement between the DOE and the County of Maui was implemented to allow the construction of the original water treatment facility. Finalization of this agreement to allocate lands to the County of Maui is still pending.

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,

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

HPE/lw

cc: Simone Bosco, Department of Planning
Tina Nakasone, HPE

"By Water All Things Find Life"

Printed on recycled paper



5106

BENJAMIN J. CAYSTANO
GOVERNOR



ANTHONY J.H. CHING
EXECUTIVE OFFICER

01 JUL 25 P3 02

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
P.O. Box 2359
Honolulu, HI 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

July 23, 2001

Mr. John E. Min
Planning Director
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Draft Environmental Assessment ("DEA")
Project Name: Lahaina Water Treatment Facility Modifications -
Amendments to 91/SUP - 017
Applicant: Department of Water Supply, County of Maui
TMK: 4-6-018: portion of 012
Lahaina, Maui, Hawaii

We have reviewed the subject application and DEA forwarded by your transmittal dated July 5, 2001, for the construction of the new treatment facilities at Lahaina, Maui, Hawaii.

Based upon our review of the subject application and DEA, we have the following comments:

1. The subject project area as described in the subject application appears to be in the State Land Use Agricultural District.
2. Regarding Chapter 5., Relationship to Land Use Plans, Policies, and Controls, we recommend that the Applicant provide a more detailed discussion on how the proposed use is not contrary to the applicable objective and policy areas sought to be accomplished by Chapter 205A, Hawaii Revised Statutes, pursuant to Section 15-15-95 (b) (1), Hawaii Administrative Rules.

Aug-07-01 03:33pm From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

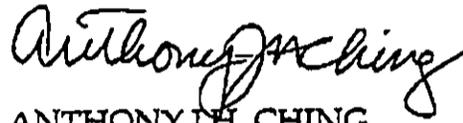
T-208 P.02/02 F-635

Mr. John E. Min
July 23, 2001
Page 2

Thank you for the opportunity to provide comments on the subject application and DEA.

Should you require clarification or further assistance in this matter, please contact Russell Kumabe of my staff at (808) 587-3822.

Sincerely,



ANTHONY J.H. CHING
Executive Officer



**DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI**

P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-6109
TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauewater.org

September 21, 2001

Mr. Anthony J.H. Ching, Executive Officer
State of Hawaii
Department of Business, Economic Development & Tourism
Land Use Commission
P.O. Box 2359
Honolulu, Hawaii 96804

Dear Mr. Ching,

Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit
TMK 4-6-018:012 (Por.), I.D. 91/SUP-017, Lahaina, Maui, Hawaii

Thank you for reviewing the subject document and for your correspondence of July 23, 2001. We offer the following responses to your comments:

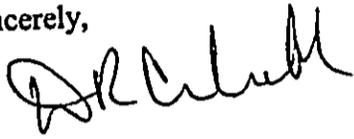
1. The subject land is located in the State Land Use Agricultural District. A Special Use Permit (Docket No. 91/SUP-017) has been issued to allow the construction of the water treatment facility. This permit is currently being amended to allow the construction of additional facilities at the water treatment facility.
2. More detail has been provided in Chapter 5, Relationship to Land Use Plans, Policies, and Controls, regarding project compliance with applicable objectives and policies of the Coastal Zone Management Program (Chapter 205A, Hawaii Revised Statutes). The proposed project complies with all applicable objectives and policies.

"By Water All Things Find Life"

Mr. Anthony J.H. Ching
September 21, 2001
Page 2

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,



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

HPE/lw

cc: Simone Bosco, Department of Planning
Tina Nakasone, HPE

Aug-07-01 02:52pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-207 P.04/12 F-628

BENJAMIN J. CAYETANO
GOVERNOR



BRIAN K. MINAAI
DIRECTOR

DEPUTY DIRECTORS
GLENN M. OKIMOTO
JADINE Y. URASAKI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 98813-5087

01 JUL 30 P3:10

IN REPLY REFER TO:

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
STP 8.9968

July 25, 2001

Mr. John E. Min
Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit (SUP)
TMK: 4-6-018: 012 Por. of

Thank you for your transmittal requesting our review of the subject project.

The proposed development will not impact our State transportation facilities.

We appreciate the opportunity to provide comments.

Very truly yours,

BRIAN K. MINAAI
Director of Transportation

Aug-07-01 02:52pm

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-207 P.03/12 F-628

BENJAMIN J. CAYETANO
GOVERNOR



AUG -1 P4:00

WAYNE H. KIMURA
COMPTROLLER

DEPT OF PLANNING
COUNTY OF MAUI
STATE OF HAWAII RECEIVED
DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
SURVEY DIVISION
P. O. BOX 119
HONOLULU, HAWAII 96810

RESPONSE REFER TO:

FILE NO. _____

July 31, 2001

MEMORANDUM

TO: Mr. John E. Min, Planning Director
Maui County Planning Department

ATTN.: Mr. Simone Bosco, Staff Planner

FROM: Randall M. Hashimoto, State Land Surveyor

SUBJECT: I.D.: 91/SUP-017
TMK: 4-6-018:012 Por. of
Project Name: Lahaina Water Treatment Facility
Modifications - Amendment to
Special Use Permit
Applicant: Department of Water Supply

The subject proposal has been reviewed and confirmed that no Government Survey Triangulation Stations and Benchmarks are affected. The Survey Division has no objections to the proposed project.

Should you have any questions, please call me at 586-0390.

Randall M. Hashimoto
for RANDALL M. HASHIMOTO
State Land Surveyor

Aug-07-01 02:52pm From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-207 P.02/12 F-628

JAMES "KIMO" APANA
Mayor

DAVID C. GOODE
Director

MILTON M. ARAKAWA, A.I.C.P.
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955



01 AUG -3 10:02
COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
AND WASTE MANAGEMENT
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
RECEIVED

RALPH NAGAMINE, L.S., P.E.
Land Use and Codes Administration

RON R. RISKA, P.E.
Wastewater Reclamation Division

LLOYD P.C.W. LEE, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

Solid Waste Division

August 1, 2001

MEMO TO: JOHN E. MIN, PLANNING DIRECTOR

F R O M: *for* DAVID GOODE, DIRECTOR OF PUBLIC WORKS AND WASTE
MANAGEMENT *Milton Arakawa*

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
LAHAINA WATER TREATMENT FACILITY MODIFICATIONS.
AMENDMENT TO SPECIAL USE PERMIT
TMK: (2) 4-6-018:POR. OF 012
91/SUP-017

We have reviewed the subject draft environmental assessment and have no comments.

If you have any questions regarding this memorandum, please call Milton Arakawa at Ext. 7845.

MA:jso
S:\LUCA\CZM\Lahaina WTF

Aug-30-01 11:48am From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-408 P.03/03 F-048

13575

JAMES "KIMO" APANA
MAYOR



CLAYTON T. ISHIKAWA
CHIEF

FRANK E. FERNANDEZ, JR.
DEPUTY CHIEF

'01 AUG 13 P1:00

COUNTY OF MAUI
DEPARTMENT OF FIRE CONTROL

200 DAIRY ROAD
KAHULUI, MAUI, HAWAII 96732
(808) 270-7561
FAX (808) 270-7919

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

August 10, 2001

Ms. Simone Bosco
Staff Planner
Department of Planning
County of Maui
250 South High Street
Wailuku, Hi. 96793

Subject: I.D. 91/SUP-017
TMK: 4-6-018:012
Project Name: Lahaina Water Treatment Facility Modifications

Dear Ms. Bosco:

Thank you for the opportunity to comment on the Lahaina Water Treatment project.

The Department of Fire Control has reviewed the literature for the park project and has no comment at this time, however, the department wishes to reserve the right to comment upon submittal of plans and specifications.

If you have any questions, please call me at 270-7122.

Sincerely,

Lance Wendel
Lance Wendel
Fire Plans Examiner

5700
Aug-30-01 11:48am

From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-408 P.01/01 F-050

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



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

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

01 AUG 16 P3:59

In reply, please refer to:
DEPT OF PLANNING
COUNTY OF MAUI 01-084/epo
RECEIVED

August 13, 2001

Mr. John E. Min, Planning Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Subject: Lahaina Water Treatment Facility Modifications

Thank you for allowing us to review and comment on the subject proposal. We have the following comments to offer at this time:

Safe Drinking Water Branch

The proposed project is currently on the Drinking Water State Revolving Fund (DWSRF) loan program priority list. If the County of Maui, Department of Water Supply, wishes to be eligible for DWSRF construction loan funding for this project, the following program requirements must be met:

1. The Environmental Assessment must include a statement which notes: "This project may be funded by Federal Funds through the State of Hawaii's Drinking Water State Revolving Fund (DWSRF) program, which would constitute a federal action, and will require the project to meet all Hawaii DWSRF program requirements." No statement is made in the present environmental assessment;
2. The above statement must also be included in the notice published in The Environmental Notice, published per the State Environmental Review Process, by the Office of Environmental Quality Control; and
3. The County must include the DWSRF Boiler Plates in the bid and specification documents and comply with all DWSRF and environmental requirements at the onset, and throughout the construction of the project.

Mr. John E. Min, Planning Director
August 13, 2001
Page 2

Please note that while the above requirements must be met in order to qualify for DWSRF funding, there is no guarantee that a DWSRF loan will be given. DWSRF funding is limited and the highest priority is projects, which address the greatest risk to human health.

If you have any questions, please call Ms. Denise Dang of the Safe Drinking Water Branch at 586-4258.

Sincerely,



GARY GILL
Deputy Director
Environmental Health Administration

c: Herbert S. Matsubayashi



**DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI**

P.O. BOX 1109

WAILUKU, MAUI, HAWAII 96793-6109

TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauiwater.org

September 21, 2001

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

Dear Mr. Gill,

**Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit
TMK 4-6-018:012 (Por.), I.D. 91/SUP-017, Lahaina, Maui, Hawaii**

Thank you for reviewing the subject document and for your correspondence of August 13, 2001. We offer the following responses to your comments:

The County of Maui, Department of Water Supply does wish to be eligible for Drinking Water State Revolving Fund (DWSRF) construction loan funding for this project. The project documents have been revised as follows:

1. The Environmental Assessment has been revised to include a statement which notes "This project may be funded by Federal Funds through the State of Hawaii's Drinking Water State Revolving Fund (DWSRF) program, which would constitute a federal action, and will require the project to meet all Hawaii DWSRF program requirements".
2. The above statement will also be included in the notice published in The Environmental Notice.
3. The project bid and specification documents have been revised to include the DWSRF program requirements. The contractor will be required to comply with all DWSRF and environmental regulations throughout the project duration.

"By Water All Things Find Life"

Printed on recycled paper



Mr. Gary Gill
September 21, 2001
Page 2

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,



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

HPE/lw

cc: Simone Bosco, Department of Planning
Tina Nakasone, HPE

09/05/2001 16:31 FAX 808 973 9467

ARMD/PDO

001

BENJAMIN J. CAYETANO
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

JAMES J. NAKATANI
Chairperson, Board of Agriculture

LETITIA N. UYEHARA
Deputy to the Chairperson

Mailing Address:
P.O. Box 22159
Honolulu, Hawaii 96823-2159

Fax: (808) 873-9613

September 5, 2001

FACSIMILE TRANSMITTAL (1 pages) 270-7634

To: John E. Min, Director
Department of Planning
County of Maui

From: James J. Nakatani, Chairperson
Board of Agriculture

Subject: Amendment to Special Use Permit (SUP-017)
Lahaina Water Treatment Facility Modifications
Maui County Department of Water Supply
TMK: 4-6-18: por. 12 Lahaina, Maui

The Department of Agriculture has reviewed the subject application and finds the project will not impact the agricultural resources of the area. Should you have any questions, please contact Earl Yamamoto at 973-9466.

c: Tina Nakasone, Hawaii Pacific Engineers, Inc.

lahainawtfm.e01





STATE OF HAWAII '01 SEP -7 P3:12
DEPARTMENT OF LAND AND NATURAL RESOURCES

LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809
September 5, 2001

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

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

LD-NAV
Ref.: SUP-017.RCM

Honorable John E. Min
Planning Director
County of Maui
Planning Department
250 S. High Street
Wailuku, Hawaii 96793

Dear Mr. Min:

Attn: Simone Bosco, Staff Planner

SUBJECT: Review: Amendment to Special Use Permit
Project: Lahaina Water Treatment Facility
I. D.: 91/SUP-017
Applicant: Department of Water Supply
Location: Lahaina, Maui, Hawaii
Tax Map Key: 2nd/ 4-6-18: portion 12

Thank you for the opportunity to review and comment on the proposed project.

We had submitted your subject informational material to our Division of Aquatic Resources, Commission on Water Resource Management, Land Division Planning and Technical Services, Land Division Engineering Branch and Land Division Maui District Land Office.

The Department of Land and Natural Resources has no comment to offer.

Should you have any questions, please feel free to contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 1-808-587-0438.

Very truly yours,

HARRY M. YADA
Acting Administrator

c: Maui District Land Office

Sep-19-01 04:38pm From-DEPT OF PLANNING COUNTY OF MAUI

808-242819

T-554 P.02/04 F-384

BENJAMIN J. CAYetano
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGUIRRE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWELO
LUNNEL NISHIOKA

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakunihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

01 SEP 19 P2:12

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND RESOURCES
IMPROVEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS

September 13, 2001

Mr. John E. Min, Planning Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

LOG NO: 28181 ✓
DOC NO: 0109CD12

Dear Mr. Min,

**SUBJECT: Chapter 6E-8 Historic Preservation Review Pertaining to the Draft Environmental Assessment and Application for the Amendment to the Special Management Area Use Permit for the Proposed Lahaina Water Treatment Facility Modifications
Kuia Ahupua'a, Lahaina District, Island of Maui
TMK: 4-6-18:012 por.**

Thank you for the opportunity to review and comment on the Draft Environmental Assessment (DEA) for the amendment to the Special Management Area Use Permit for the proposed Lahaina Water Treatment Facility modifications.

Based on the submitted DEA, we understand the proposed undertaking consists of clearing, grading, and grubbing approximately 0.55 acres of unused land within the boundaries of the existing water treatment facility for the construction of new treatment facilities in Lahaina. The proposed new facilities will consist of the construction of a pre-engineered building, to be located over the existing presedimentation basin, and a new sludge lagoon, to be located in a sloped area between the existing presedimentation basin and existing sludge lagoons. We also understand from the DEA, that as a precautionary measure, the contractor will be made aware of potential encounters with historic artifacts or materials such as marine shell, human skeletal remains, and charcoal deposits. If such materials are observed, the DEA states that the work will be halted in the immediate vicinity of the find, the find will be protected from additional disturbance, and this office will be contacted immediately.

Although we have issued previous correspondence to the contrary, a search of our records indicates the proposed project area has not undergone an archaeological inventory survey. The Bishop Museum conducted a reconnaissance survey in 1991. No subsurface testing was conducted during the reconnaissance survey and it does not meet our current standards pertaining to an inventory survey. During the reconnaissance survey, an historic (c 1930s) stone and masonry foundation was identified, but a State Site Number was not issued. The foundation was believed to be either a water tank foundation related to ranching activities or the foundation of the teachers' cottages associated with the Lahainaluna School, but the function was not determined.

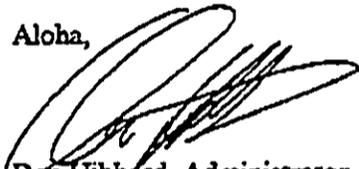
Mr. John E. Min
Page 2

Nonetheless, given the extensive disturbance of the proposed project area, we believe it is unlikely that intact historic sites will be encountered during the proposed project. We believe the proposed undertaking will have "no effect" on historic sites.

However, as a contingency, we reiterate that in the event that historic remains (human skeletal remains, etc.) are inadvertently encountered during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Office needs to be contacted immediately at 243-5169, on Maui, or at 692-8023, on O'ahu.

Please call Cathleen Dagher, at 692-8023, if you have any questions.

Aloha,



Don Hibbard, Administrator
State Historic Preservation Division

CD:jen



DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

P.O. BOX 1109

WAILUKU, MAUI, HAWAII 96793-6109

TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauiwater.org
September 21, 2001

Mr. Don Hibbard, Administrator
State of Hawaii Department of Land and Natural Resources
Historic Preservation Division
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

Dear Mr. Hibbard,

Subject: Lahaina Water Treatment Facility Modifications
Amendment to Special Use Permit
TMK 4-6-018:012 (Por.), I.D. 91/SUP-017, Lahaina, Maui, Hawaii

Thank you for reviewing the subject document and for your correspondence of September 13, 2001. We offer the following responses to your comments:

The stone and masonry foundation identified during the Bishop Museum reconnaissance survey in 1991 is not located within the 0.55 acres proposed for the new treatment facilities. We concur with the "no effect" on historic sites for the proposed project. Provisions to cease construction in the event that historical remains are encountered have been included in the project specifications and drawings.

A copy of your letter and this response will be included in the final environmental assessment. Please feel free to contact Mr. Larry Winter of our department at (808) 270-7835 if there are any questions.

Sincerely,

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

HPE/lw

cc: Simone Bosco, Department of Planning
Tina Nakasone, HPE

"By Water All Things Find Life"

Printed on recycled paper



Sep-18-01 04:38pm From-DEPT OF PLANNING COUNTY OF MAUI

808-242818

T-554 P.04/04 F-384

BENJAMIN J. CAYETANO
GOVERNOR
STATE OF HAWAII



RAYNARD C. SOON
CHAIRMAN
HAWAIIAN HOMES COMMISSION

JURIE M. K. M. YAMAGUCHI
DEPUTY CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P.O. BOX 1874
HONOLULU, HAWAII 96813

01 SEP 19 12:11

DEPT OF PLANNING
COUNTY OF MAUI
RECEIVED

September 17, 2001

The Honorable John E. Min, Director
County of Maui, Department of Planning
250 South High Street
Wailuku, Maui, Hawaii 96793

Attn: Simone Bosco

Dear Mr. Min:

Subject: Lahaina Water Treatment Facility Modifications -
Amendment to Special Use Permit, 91/SUP-017,
TMK 4-6-18:12 por., Lahaina, Maui, Dated April, 2001

Thank you for the opportunity to review the subject application.
The Department of Hawaiian Home Lands has no comment to offer.

If you have any questions, please call Daniel Ornellas of our
Planning Office at 586-3836.

Aloha,

Daniel Ornellas
Raynard C. Soon, Chairman
Hawaiian Homes Commission

CC: Simone Bosco