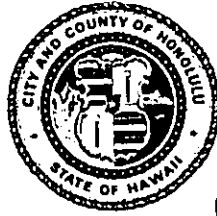


Ahuimanu Dewatering
Fac.

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4341 • FAX: (808) 527-5857

JEREMY HARRIS
MAYOR



RECEIVED

'97 MAY -8 A11:34

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

JONATHAN K. SHIMADA, PhD
DIRECTOR AND CHIEF ENGINEER
ROLAND D. LIBBY, JR.
DEPUTY DIRECTOR
ENV 97-083

May 6, 1997

Mr. Gary Gill, Director
Office of Environmental Quality Control
235 So. Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Finding of No Significant Impact (FONSI)
Ahuimanu Dewatering Facility for Storm Drain Equipment
TMK: 4-7-37:30, 4-7-4:06 (Por.), Kaneohe, Oahu, Hawaii

The Department of Public Works, City and County of Honolulu, has reviewed the comments received during the 30-day public comment period which began on December 23, 1996. The agency has determined that this project will not have significant environmental effect and has issued a Finding of No Significant Impact. Please publish this notice in the May 23, 1997, Environmental Notice.

We have enclosed a completed OEQC Environmental Notice Form and four copies of the Final Environmental Assessment. If you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4150.

Very truly yours,

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

JONATHAN K. SHIMADA, PhD
Director and Chief Engineer

Encls.

58

MAY 23 1997

1997-05-23-0A-*FEA-Ahuimanu*
Dewatering Facility for Storm Drain
Equipment

FILE COPY

FINAL ENVIRONMENTAL ASSESSMENT

AHUIMANU DEWATERING FACILITY FOR
STORM DRAIN EQUIPMENT
Ahuimanu, Oahu, Hawaii

May 1997

PREPARED FOR:
CITY & COUNTY OF HONOLULU
Department of Public Works
Road Maintenance Division

PREPARED BY:
R. M. TOWILL CORPORATION
420 Waiakamilo Road, Suite 411
Honolulu, Hawaii 96817-4941

FINAL
ENVIRONMENTAL ASSESSMENT

DEWATERING FACILITY FOR
STORM DRAIN EQUIPMENT

Ahuimanu, Oahu, Hawaii

MAY 1997

Proposing Agency:
Road Maintenance Division
Department of Public Works
City and County of Honolulu

Prepared By:
R. M. Towill Corporation
420 Waiakamilo Road, Suite 411
Honolulu, Hawaii 96817

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**SECTION 1
PROJECT SUMMARY**

Proposing Agency: Road Maintenance Division
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Landowners: Ahuimanu WWPTF: City and County of Honolulu

Proposed Project: Construction of a dewatering facility adjacent to and part of the existing Ahuimanu Wastewater Treatment Plant. The dewatering facility will be for the exclusive use by the Road Maintenance Division of the Department of Public Works, City and County of Honolulu. This site replaces the originally designated Kaneohe site which was located on the Kaneohe Wastewater Treatment Plant.

Project Location: Adjacent to and part of Ahuimanu WWPTF; Kaneohe

Project Area: 0.20 acre
TMK: 4-7-37:30 is owned by the City and County of Honolulu
4-7-4: Por. 6 owned by City and County of Honolulu also

Existing Zoning: Country

Development Plan Designation: 4-7-4: Por.6: Public, Quasi-Public
4-7-37:30: Agricultural

Surrounding Land Uses: Ahuimanu WWPTF; drainage channel

SECTION 2 INTRODUCTION AND BACKGROUND

2.1 OVERVIEW

In February 1996 a Negative Declaration was issued for various Dewatering Facilities for Storm Drain Equipment for the Road Maintenance Division, Department of Public Works, City and County of Honolulu. This Environmental Assessment evaluated, among four sites, a site in Kaneohe that was bounded by Kaneohe Stream, Waikalua-Loko Fish Pond, and Bay View Golf Course in the area of south Kaneohe Bay. In response to the Kaneohe Neighborhood Board's concerns regarding potential traffic impacts and a future park the City and County of Honolulu relocated the proposed site to the Ahuimanu Wastewater Preliminary Treatment Facility away from Kaneohe Bay. See Figure 2-1.

This proposed site is located adjacent to an existing sewage treatment facility alongside Kahekili Highway. The site is a more acceptable location for a dewatering facility because it will not require improvements to adjacent Kahekili Highway. Further, the proposed location is at sufficient distance from Kaneohe Bay such that potential impacts to the Bay and the Special Management Area are no longer an issue. The purpose of this environmental assessment is to evaluate the proposed project at the Ahuimanu location.

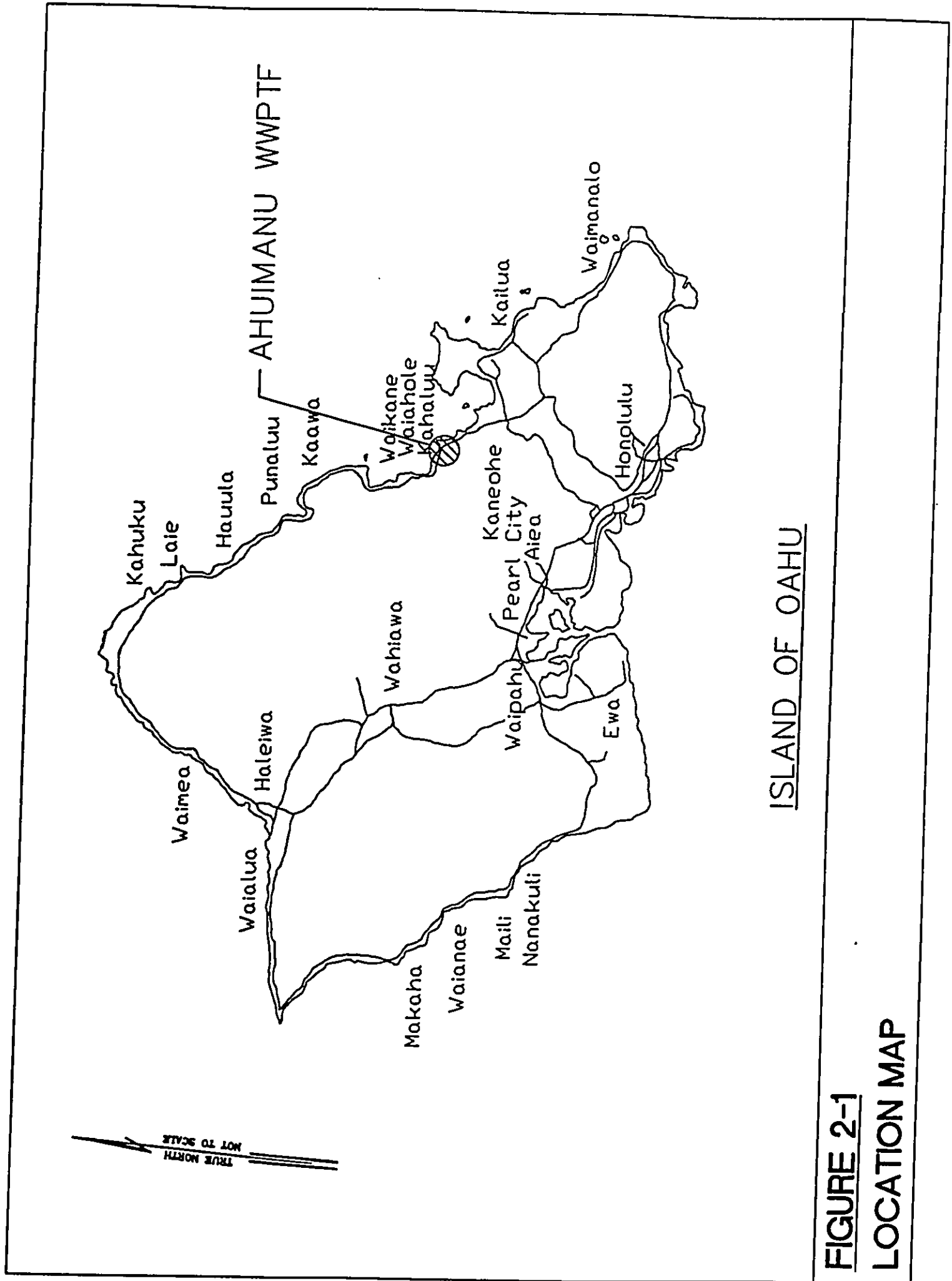
2.1.1 Responsibility

The City and County of Honolulu's Department of Public Works, Road Maintenance Division is responsible for cleaning the municipal storm drain system. The storm drain system consists of drainage channels/ditches, catch basins, manholes, inlet boxes, drain pipes, and roadway gutters.

2.1.2 Current Cleaning Procedure

To facilitate cleaning, the Road Maintenance Division utilizes a special truck designed for this type of work. The main components of the trucks are a water storage tank, high pressure hose, vacuum system, and waste storage tank.

First, water from the high pressure hose is used to soften and loosen the debris. The cleaning crew then uses the vacuum system to remove the debris and load it into the waste storage tank. The liquid in the waste tank is defined as washwater since it now consists of rubbish, inorganic materials, organic materials, and other debris. Typically, the high pressure hose and vacuum hose are used alternately for storm systems with hard packed debris. The vacuum system utilizes an 8-inch diameter hose to remove the debris. Anything larger than 8 inches or too heavy for the vacuum system is removed manually and loaded onto an accompanying dump truck.



ISLAND OF OAHU

FIGURE 2-1
LOCATION MAP

After completion of the cleaning operation, the majority of the debris is retained in the waste storage tank. The truck is then driven to a designated site to empty its load. The load is removed through a large hatch at the back of the cylindrical waste tank, which when opened, allows the contents to empty by gravity. Any residual debris within the waste storage tank is washed out with potable water using the high pressure hose.

2.1.3 Designated Site

The debris is unloaded at a designated site and not taken directly to the landfill due to current disposal restrictions. These intermediate sites provide time for the washwater to separate from the solids and allow the remaining solids to air dry. The designated sites are located at the base yards of the Road Maintenance Division. An earthen basin is constructed over an impermeable surface in which the debris is dumped. The liquid is then absorbed by the earthen material. This practice is an interim measure until permanent dewatering facilities are in place.

2.1.4 Solids Disposal

After draining to a point where no free liquids remain, the solids are taken to the nearest landfill for disposal. Currently, it takes about two weeks for sufficient drying to occur. There is no roof covering over the debris so if rain occurs, the time for drying is extended.

2.1.5 Liquids Disposal

The washwater is absorbed by the earthen basin and allowed to dry. After drying, the dirt is also transported to the landfill.

2.2 COMPLIANCE WITH HAWAII'S LAW

This Environmental Assessment (EA) for Dewatering Facilities complies with Chapter 343, HRS, and Title 11, Department of Health, Chapter 200, rules and regulations. Consultation with various public agencies and private organizations was conducted to obtain their input on the planned facilities and their locations.

2.3 OBJECTIVE

The objective of the dewatering facilities is to provide a system that will allow washwater to separate from debris removed from the storm drain system.

2.4 APPLICANT

The applicant is the City and County of Honolulu, Department of Public Works.

2.5 GOVERNMENT REGULATIONS AND POLICIES

2.5.1 Landfill Disposal Requirements

According to Hawaii Administrative Rules, Title 11, Chapter 58.1 Solid Waste Management Control, bulk or non-containerized liquid waste may not be placed in municipal solid waste land fill (MSWLF) units. Liquid waste is defined as waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA Pub. No. SW-846.

A full range of tests is required prior to disposal at the Waimanalo Gulch Sanitary Landfill, including TCLP, cyanides, sulfides, PCB's, and ignitability.

The washwater is still liquid waste when unloaded from the waste storage tank. It cannot be taken directly to the landfill for disposal. The washwater needs to be separated from the solids before the solids can be transported to the landfill.

2.5.2 Filtrate Disposal Requirements

Filtrate is defined in this EA as the liquid waste after it has been treated by the earthen filter.

The discharge of industrial wastewater into a public sewer system is governed by the Revised Ordinances of Honolulu, April 1995, section 14-1.9. These ordinances are administered by the Department of Wastewater Management of the City and County of Honolulu. The washwater generated from the cleaning operation is classified as industrial wastewater and must comply with the ordinances before discharge can occur. The entire section of the ordinance listing those restrictions are included in Appendix A, some of the notable restrictions of the ordinances are listed herein:

- * Water or waste which may contain more than 100 mg/l concentration of fats, oils, or grease.
- * Gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid, or gas.
- * Garbage that has not been properly shredded to a size of 1/4" or less so that all particles will be carried freely under normal flow conditions in the public sewers.
- * Ashes, cinders, sand, mud, straw shaving, metal, glass, rags, feathers, tar, plastic, wood, paunch, manure, paper ware either whole or ground or any other solid or viscous substances normally dry, solid wastes capable of causing obstruction to the flow in or damage to sewers or other interference with the proper operation of the sewerage works.

- * Water or waste having a pH lower than 5.5 or higher than 9.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel or the sewerage works.
- * Water or waste containing suspended solids of such character or quantity that unusual attention or expense is required to handle such materials at a sewage treatment plant.
- * Water added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limitations.

The filtrate must be tested for its contents before disposal into the wastewater system. If all conditions are met and none of the limits are exceeded, then the filtrate is directed to the nearest municipal sewer system. If conditions are not met or maximum limits exceeded, then the washwater must undergo further treatment before discharge into the municipal sewer system.

2.6 PERMITS

2.6.1 Industrial Wastewater Discharge Permit

This permit process is administered by the Department of Wastewater Management, City and County of Honolulu. A permit to connect shall be obtained before any connection may be made to the public sewer. Said permit will be issued only after an application for a building permit has been filed. All connections for industrial wastewater shall require an Industrial Wastewater Discharge Certificate before a permit to connect is issued.

2.6.2 Special Management Area Permit (SMP)

Administered by the Department of Land Utilization, City and County of Honolulu. An SMP is required for construction within SMA boundaries as defined by the City and County of Honolulu's Ordinance No. 85-105, December 2, 1985. The Ahuimanu site is located outside (specifically mauka) of the SMA boundary.

2.6.3 Department of Army Permit

Administered by the U. S. Army Corps of Engineers, a Department of Army (DA) permit is required for the operation of facilities which may result in a discharge to navigable waters. A DA permit is not required for the Ahuimanu WWTP because there will be no discharge into navigable waters.

2.6.4 Coastal Zone Management Permit

Administered by the U. S. Coast Guard and is directly related to the Department of Army permit. Since the Department of Army permit is not required, the Coastal Zone Management permit is not

required.

2.6.5 Land Use Ordinances

Applicable land use ordinances as administered by the Department of Land Utilization, City and County of Honolulu

2.6.5.1 Existing Use (EU) Permit

An Existing Use (EU) permit is not required because the proposal is a permitted principal use under the Country district (DLU, Nov. 8, 1996 letter, see Appendix).

2.6.5.2 Conditional Use Permit (CUP)

Wastewater treatment facilities are considered "public uses and structures" and are allowed as a principal use under AG-2, I-2, and P-2 (see attached 95/TNT-5).

2.7 LOCATION FOR DEWATERING FACILITY

The proposed dewatering facility will be constructed on parcel 4-7-37:30 and partially on the plant's site. The treatment plant is in operation. The basic dewatering facility which is generally common to all approved dewatering facilities is described below.

2.8 PROPOSED DEWATERING FACILITY

2.8.1 Handling Wastewater

The vacuum trucks will remove debris from storm drain systems and then unload the waste in the settling basins. From the settling basins the washwater flows to the drying beds which also contains an earthen filter. After passing the earthen filter, the washwater becomes filtrate. The filtrate flows to a final pretreatment unit before discharge into the municipal sewer system.

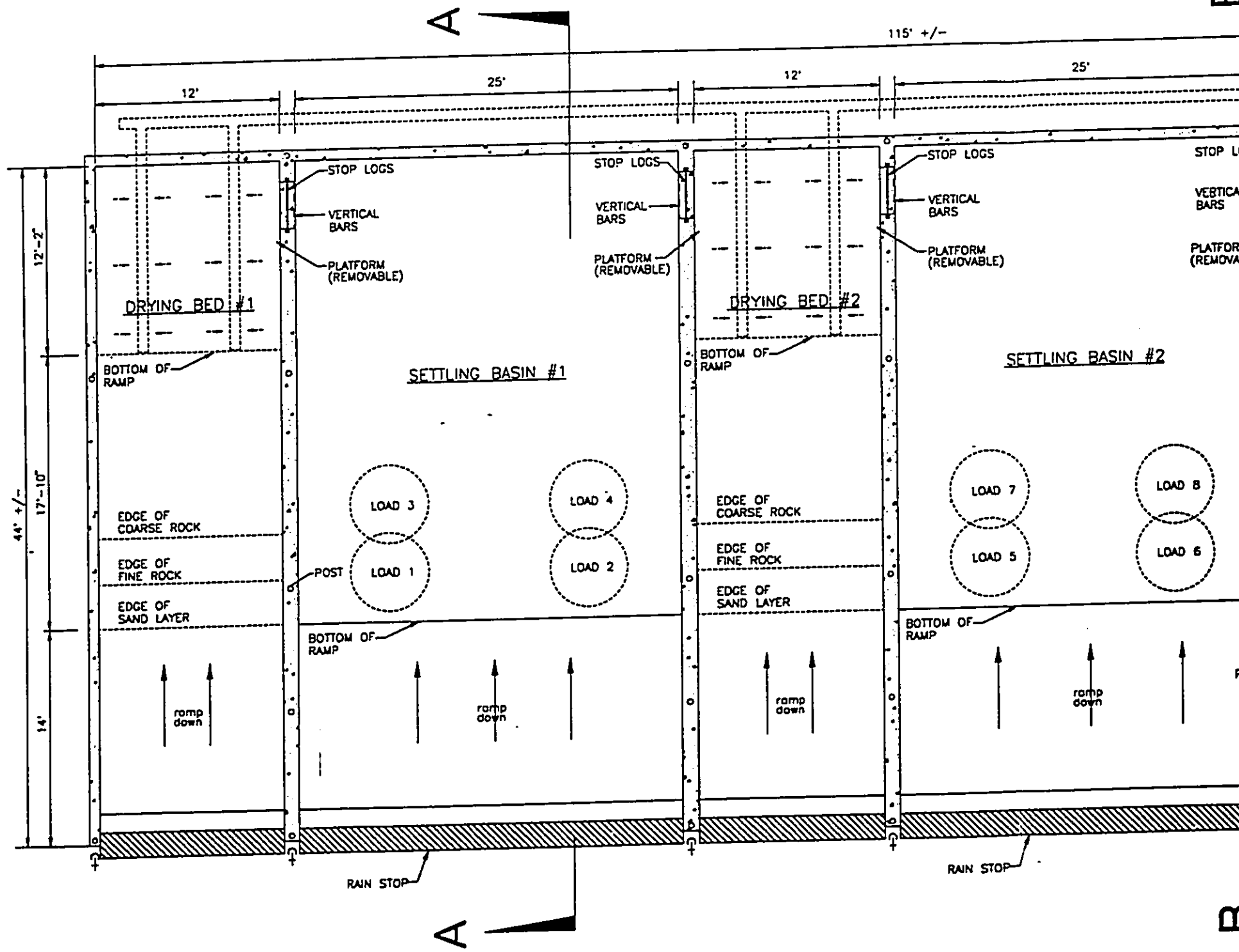
For the proposed dewatering facility, see Figure 2-2 for the plan view, Figures 2-3 and 2-4 for section views, and Figure 2-5 for the oil interceptor pit.

2.8.2 Settling Basin

2.8.2.1 Capacity

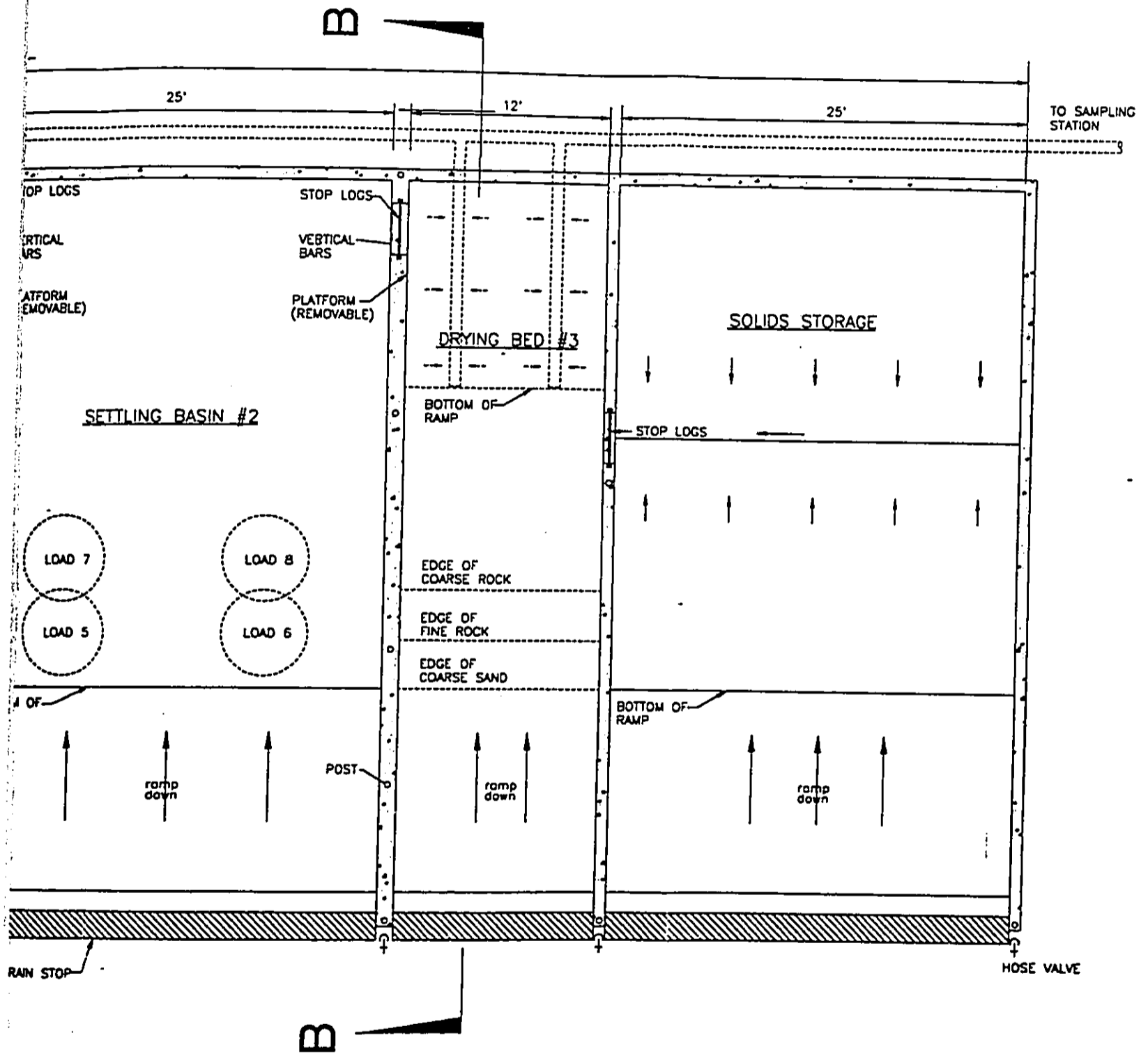
The minimum capacity of each settling basin is 4,000 gallons which is the expected volume for a typical day. Two settling basins are provided to allow cleaning and/or maintenance of one basin. The capacity of a settling basin is therefore:

$$4,000 \text{ gallons} = 534.7 \text{ CF each}$$



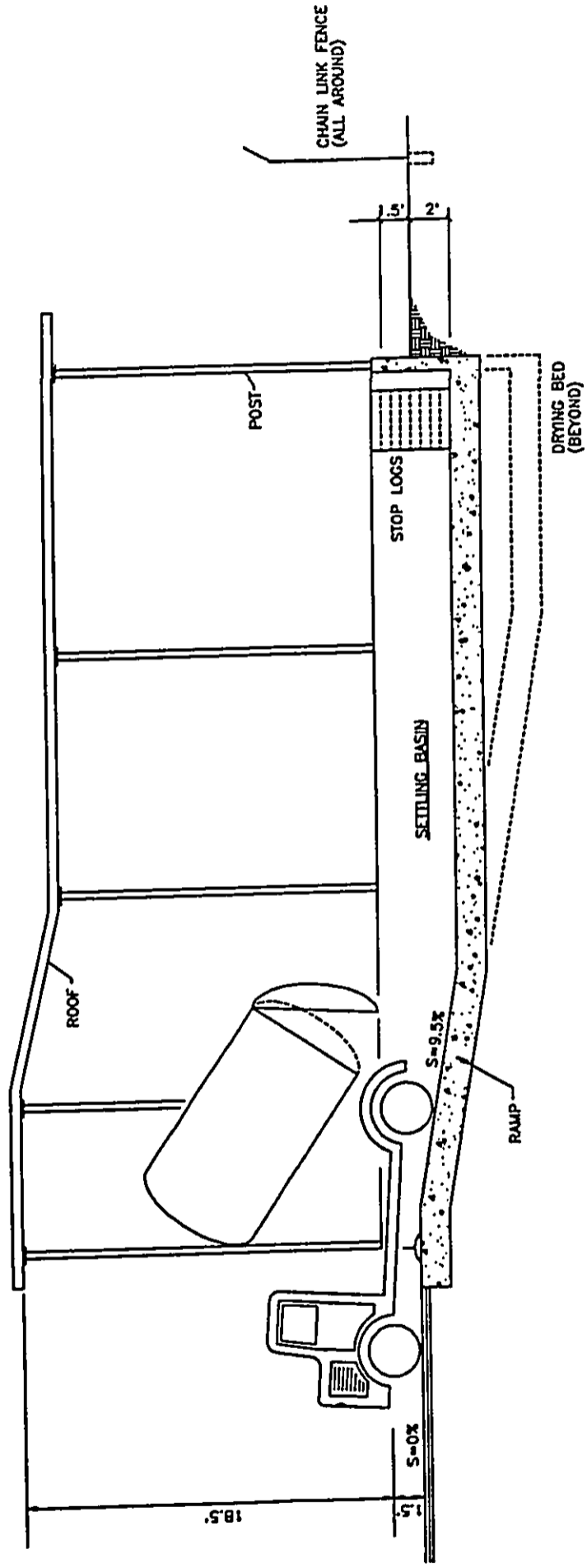
DEWATERING FACILITY PLAN
SCALE: 1/8" = 1'-0"

FIGURE 2.2
DEWATERING FACILITY PLAN



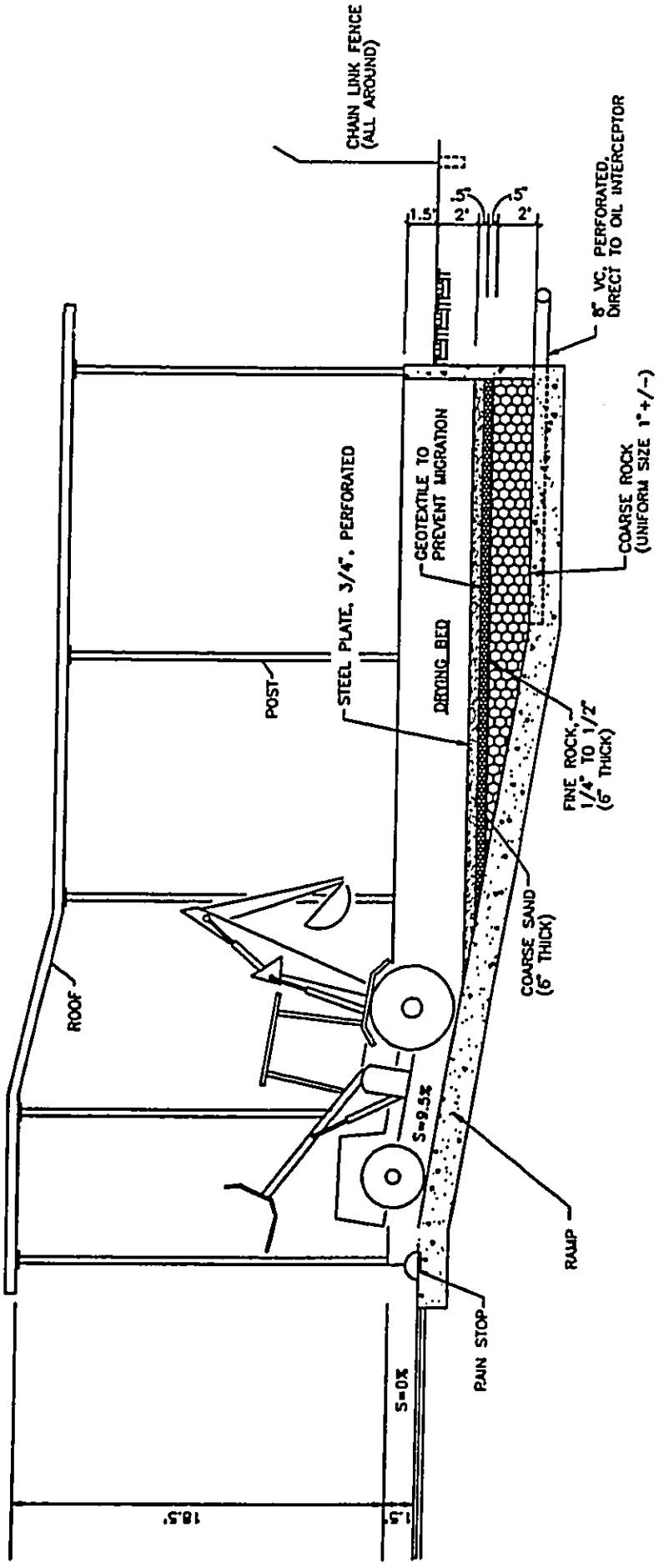
FACILITY PLAN





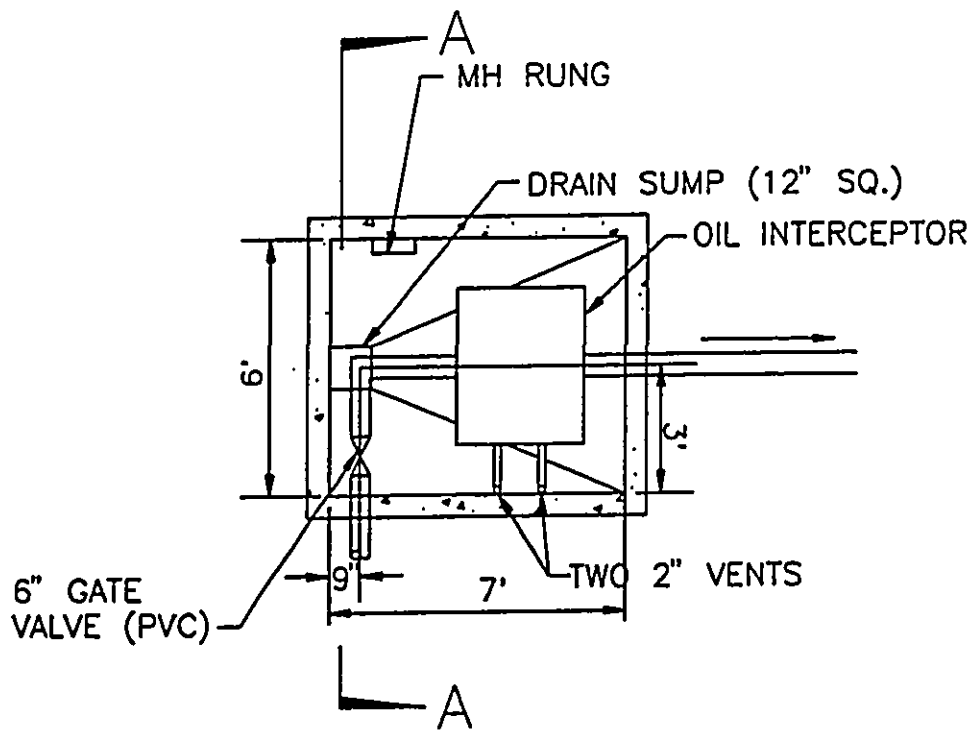
SECTION A - A
 SCALE: 1/8" = 1'-0"

FIGURE 2-3
 SETTLING BASIN - SECTION VIEW

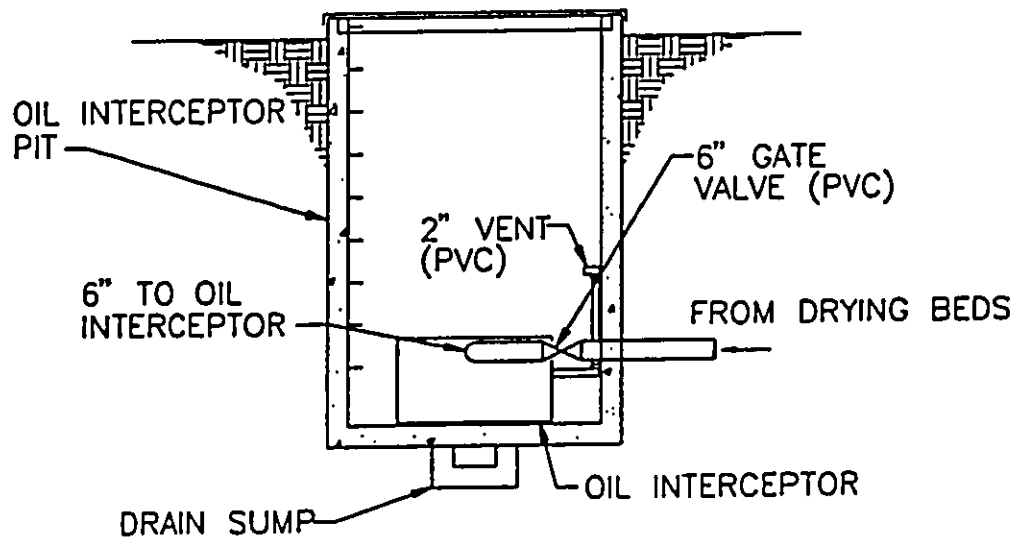


SECTION B - B
SCALE: 1/8" = 1'-0"

FIGURE 2-4
DRYING BED - SECTION VIEW



BOTTOM PLAN



SECTION A-A

FIGURE 2-5
OIL INTERCEPTOR PIT

2.8.2.2 Minimum Dimensions

The depth of the settling basin should be kept as high as possible to keep the collection drain pipe and pretreatment unit at a higher elevation. A reasonable depth for the containment volume is 2 feet below finish grade. The minimum area for 534.7 CF is then:

$$\text{Area} = (534.7 \text{ CF}) / (2 \text{ FT}) = 267.4 \text{ SF}$$

A reasonable width for the drying bed is 25 feet because this allows the vacuum truck to reverse at two locations per bed avoiding blockage by the accumulation of solids. The increased width also provides room for a large loader to maneuver within the basin. If the width is 25 feet, the minimum required length is:

$$\text{Length} = (267 \text{ SF}) / (25 \text{ FT}) = 10.7 \text{ ft}$$

SAY 11 ft long minimum

The volume of 25 ft x 11 ft x 2 ft includes the minimum volume only for one day. By request of the Road Maintenance Division, increase the capacity of the basin by extending the length to 30 ft. +/- The volume is now 1,500 CF or 11,222 gallons.

2.8.2.3 Substructure

Below grade, concrete settling basin, water tight, sloped to drain towards the stop logs. The substructure walls will protrude above grade to ensure the surging from the unloading process does not overflow the bed.

A ramp is provided from the road into the settling basin. This feature allows the vacuum truck to reverse in for unloading. The ramp also allows the loader to be driven into and out of the basin for removal of solids.

A wheel stop is provided in front of the basin to preclude intrusion of rainwater by sheet flow. The wheel stop is high enough to keep the rainwater out yet low enough to allow the vacuum truck and loader to traverse it.

2.8.2.4 Superstructure

The roof shall be fabricated metal type mounted on steel posts or steel pipe. Installation of near transparent roof panels will be considered to allow sunlight onto the debris.

The roof must be high enough to allow the waste storage tank to be inclined without interference. The height must also accommodate the bucket of the loader. The roof may be lower towards the back of the basin.

The settling basins will not have full height walls on any of the sides.

2.8.2.5 Stop Logs

Stop logs are provided to control the flow of liquids out of the settling basin and into the drying beds. The stop logs will be manually removed from top down to lessen the migration of silt along the bottom of the basin.

2.8.3 Drying Bed

2.8.3.1 Capacity

There is no minimum capacity for each drying bed since the rate of washwater through the earthen filter cannot be determined. The rate of flow into the drying bed may be controlled with the stop logs. Multiple drying beds are provided to contain consecutive days of cleaning and/or if another bed is down for maintenance.

2.8.3.2 Minimum Dimensions

The dimensions of the drying beds are estimated only and is sized for convenience in relation to the settling basins.

2.8.3.3 Substructure

Below grade, concrete drying bed, water tight, sloped to drain towards the collection pipes. The substructure walls will protrude above grade and to match the settling basin walls. Minimal surging is anticipated as the washwater enters the drying bed. A ramp is provided for entry into the drying bed by the loader.

The washwater will be treated by the following earthen filter within the drying bed:

- * The top surface will be a steel plate, 3/4-inch thick, and perforated with 2-1/8-inch diameter holes. The steel plate is used for two reasons, 1) to protect the sand surface against erosion by water flow, and 2) to provide a firm surface that will allow the loader to scoop up the solid debris.
- * A 6-inch layer of coarse sand. Coarse sand is adequate for filtration and will prolong the useful life of the sand layer.

- * A layer of geotextile to prevent the sand from migrating downward into the fine rock structure. The geotextile must be adequate to allow the flow of water by gravity.
- * An 6-inch thick layer of fine rock.
- * A 2-foot layer of coarse rock. The rock size shall be large enough so that the perforated collection pipe does not become clogged with rock.

A wheel stop is provided in front of bed to preclude intrusion of rainwater by sheet flow.

2.8.3.4 Superstructure

The drying beds will be under the same superstructure as the settling basins.

2.8.3.5 Collection Drain Pipes

At the bottom of the drying beds will be a system of collection drain pipes. These pipes will be located at the lowest points of the bed to ensure capture of all filtrate. A series of pipes will be placed across the length of the bed to facilitate draining. The flows for individual outlets is variable and is not a factor in sizing the pipe. To be conservative, use 6-inch diameter collection pipes. The pipe material may be PVC or vitreous clay (VC).

2.8.4 Solids Storage Area

A storage area for solids will be provided adjacent to the settling basin. The area will be approximately 150 square feet and will also be covered with the same roof structure. The storage area will act as a temporary site for dewatered solids and will be used whenever scheduling and manpower requirements prohibit the immediate removal of debris. The storage area will not be used unless absolutely necessary.

2.8.5 Filtrate Processing

The dewatering process will produce variable flows since the rate of dewatering is dependent on the type of solids mixed within the washwater. For example, the dewatering rate is higher for solids such as bricks, rocks, or stones and slower for pebbles, grit, and sand. The higher flow rates are anticipated to have less of a need for solids separation whereas the slower flow rate will require adequate solids separation. The estimated peak flow from dewatering is say 50 gpm.

2.8.5.1 Pretreatment Unit

After collection in the drain pipes, the filtrate will be directed to an oil interceptor. This pre-treatment unit will remove any oily particles that may get past the earthen filter.

2.8.5.2 Intercepted Oils

No oils are anticipated except for inadvertent or illegal spills. When necessary, the oil will require manual removal into approved containers for specialized disposal.

2.8.6 Solids Processing

After the washwater is drained off, the large solids will remain in the settling basin and drying beds and will be allowed to dry. After drying to a point where no free liquids remain, a large loader is used to transfer the solids onto dump trucks. To facilitate the transfer operation, the settling basins and drying beds are provided with ramps to allow the loader to drive into and out of the structure. The dump trucks then transport the solids to the local landfill.

2.8.7 Sitework

2.8.7.1 Road

The road fronting the dewatering facility will be asphaltic concrete and designed for the weight of the fully loaded vacuum truck. The geometrics of the road will also consider the turning radii of the truck such that adequate room for maneuvering is provided.

2.8.7.2 Potable Water

A potable water line will be extended to the dewatering facility. The treatment plant has an adequate water main near the proposed facility. The potable water provides a means of washing the waste storage tank, vacuum truck, settling basins, and drying beds. The water outlet may also be used to refill the water tank of the vacuum truck.

2.8.7.3 Chain-link Fence

To secure the drying beds against safety threats, a chain-link fence shall be provided completely around the facility. The fence will have barbed wire and provided with swing gates for vehicle and personnel access.

SECTION 3
AHUIMANU WASTEWATER PRELIMINARY TREATMENT FACILITY

3.1 PROJECT SITE AND LAND USE

3.1.1 Land Owner and Land Use

Tax Map Key 4-7-4:Portion 6 owned and operated by the Department of Wastewater Management, City and County of Honolulu, and 4-7-37:30, owned by the Road Maintenance Division, City and County of Honolulu, see Figure 3-1. Parcel 4-7-37:30 is vacant except for a paved road connecting Kahekili Highway and the concrete drainage channel. The road is used by the Road Maintenance Division for maintenance of the drainage channel. The proposed dewatering facility lies completely within the two parcels. There are no easements within the vacant parcel.

The Ahuimanu Wastewater Treatment Facility was built in 1965 and commenced operation soon after. It was converted to a preliminary treatment facility on September 29, 1994.

3.1.2 Surrounding Land Use

The USGS topographic map is used to indicate the surrounding areas, see Figure 3-2. The parcel is bounded by Kahekili Highway to the west, concrete drainage channel to the east, the Ahuimanu WWPTF to the south and the same concrete drainage channel to the north.

3.1.3 Surrounding Roads

Entry to the parcel is via a 20-foot wide "limited access permitted" opening from Kahekili Highway. The limited access permitted opening is the only entry onto the parcel. There are no other surrounding roads.

3.2 PHYSICAL ENVIRONMENT

3.2.1 Hydrology and Drainage

There is an existing drainage ditch across the vacant parcel. The drainage ditch connects the roadside ditch to the drainage channel.

The soils are part of Kaena-Waiialua Association, poorly drained to excessively drained soils that have a fine textured to coarse textured subsoil or underlying material, on coastal plain and in drainageways. Soil series HnA, Hanalei silty clay.

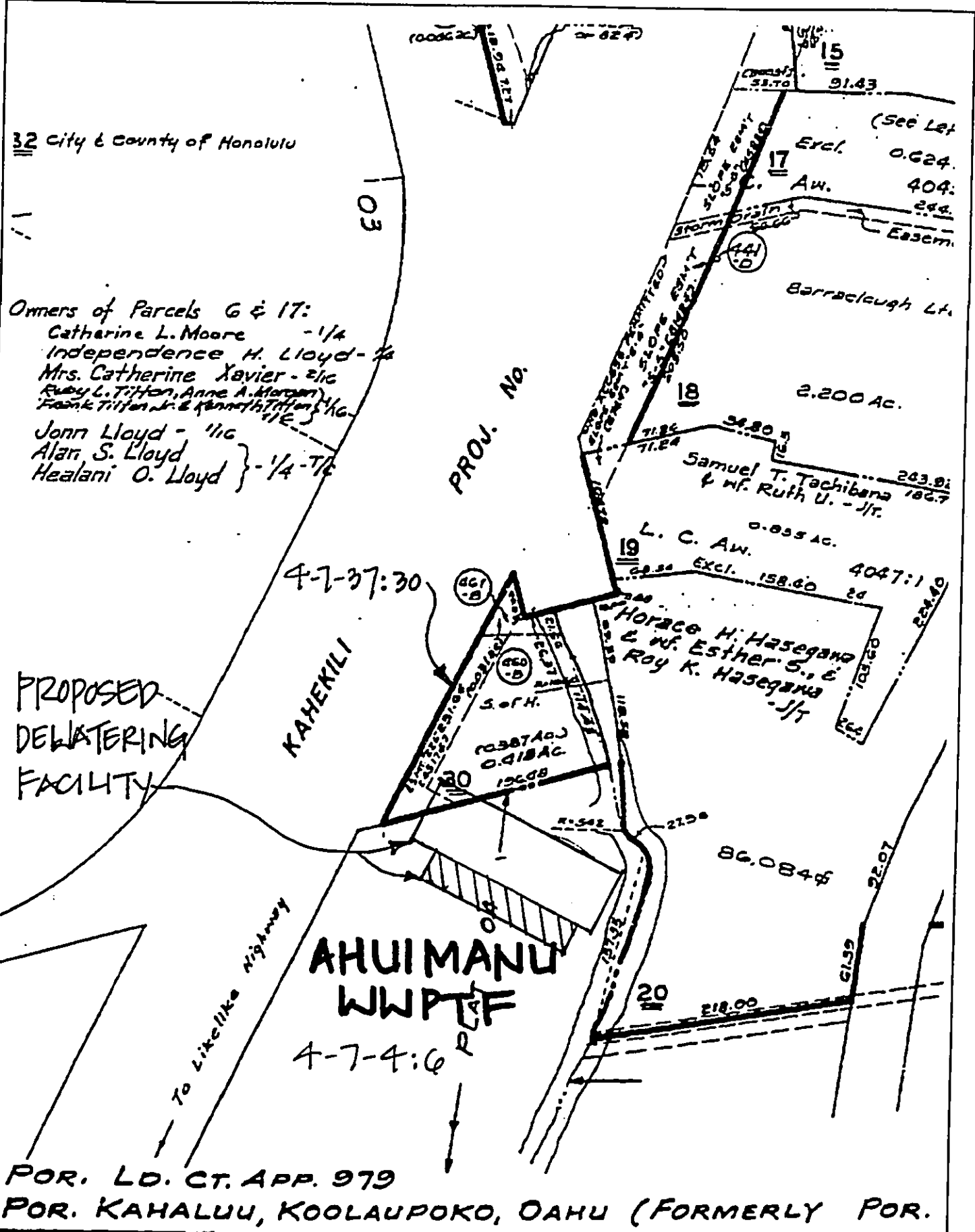


FIGURE 3-1

TAX MAP KEY

AHUIMANU WWPTF

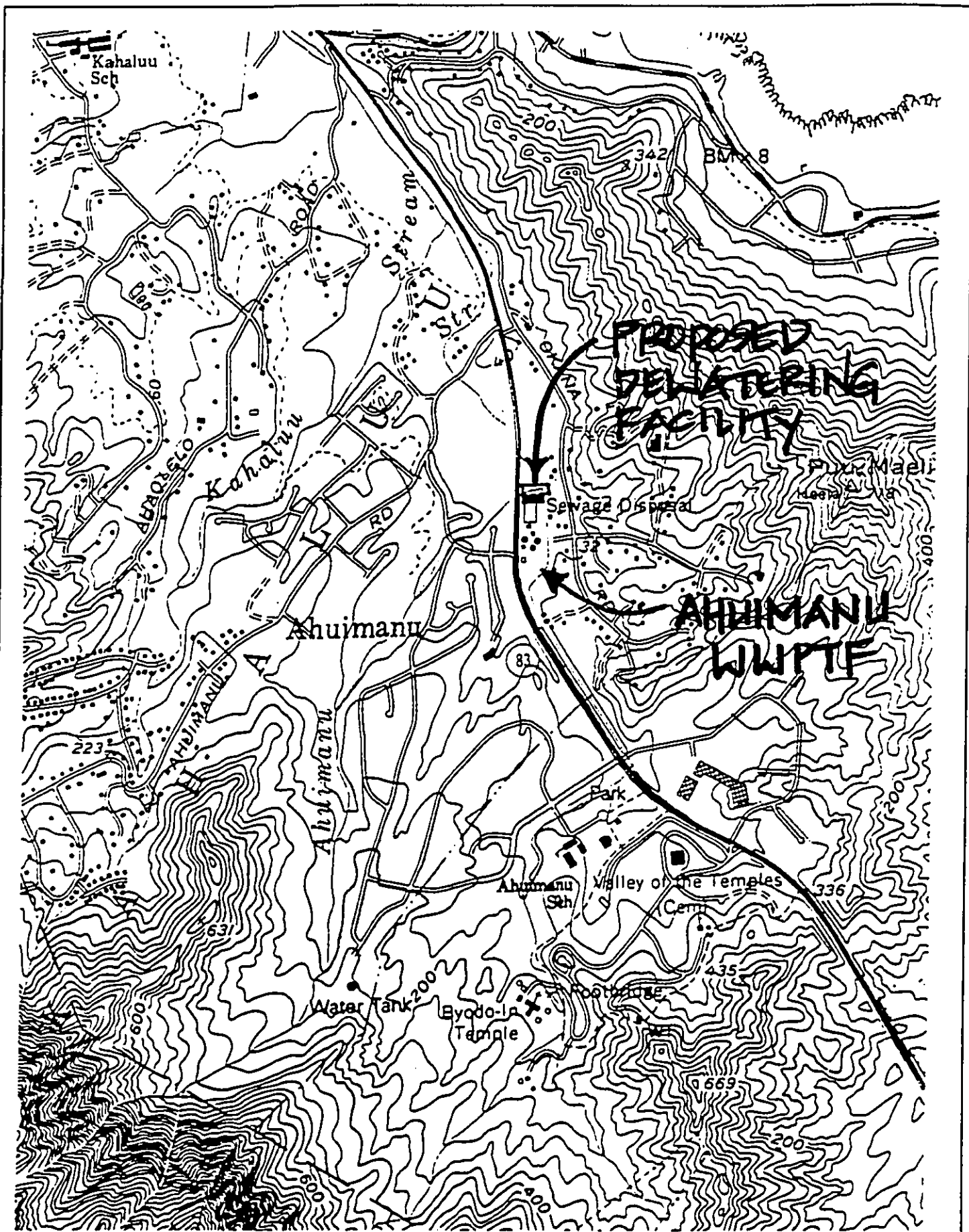


FIGURE 3-2

U.S.GEOLOGICAL SURVEY

AHUMANU WWPTF

3.2.2 Topography

The vacant lot is relatively level throughout with neither dips nor mounds. There is an existing polishing pond (now used for emergency storm flow storage only) on the treatment plant site. A portion of the dewatering facility will be located over the pond. The pond is 4-5 feet deep.

3.2.3 Flood Hazard

In accordance with the FEMA Flood Insurance Rate Map, dated September 1990, TMK no. 4-7-37: 30 is within Flood Zone AE, in which a portion of the eastern side of the property is within the AE Floodway. TMK no. 4-7-04: 06 is within Flood Zones X and AE. A portion of the eastern side of the property is also within the AE Floodway. Flood Zone AE is a flood-fringe district in the 100-year flood plain. See Figure 3-3. The engineering design incorporates criteria promulgating these flood designations.

3.2.4 Flora and Fauna

The Ahuimanu Wastewater Preliminary Treatment Plant is an industrial area and has little flora and fauna. In the area of the proposed dewatering facility there is grass and a few trees including two monkey pods, one plumeria, one umbrella, one coconut, and a banana cluster.

Most of the terrestrial fauna are found in the lands mauka of the project site and these are the birds and mammals typically found in the mountain areas. Besides the exotic or introduced species, there are some rare indigenous species of Hawaiian birds such as the elepaio found in the forest reserve areas.

3.2.5 Ambient Noise

The ambient noise is generated by equipment in the existing treatment facility. Traffic noise from Kahekili Highway is predominant in the area.

3.2.6 Ambient Air Quality

The air quality is, at worst case, consistent with that of a treatment plant.

3.3 INFRASTRUCTURE SYSTEMS IN THE VICINITY

3.3.1 Wastewater

The Ahuimanu WWPTF is in operation and can accept filtrate from the dewatering facility. Near the influent pump station is a special manhole where a sewer pipe can be connected.

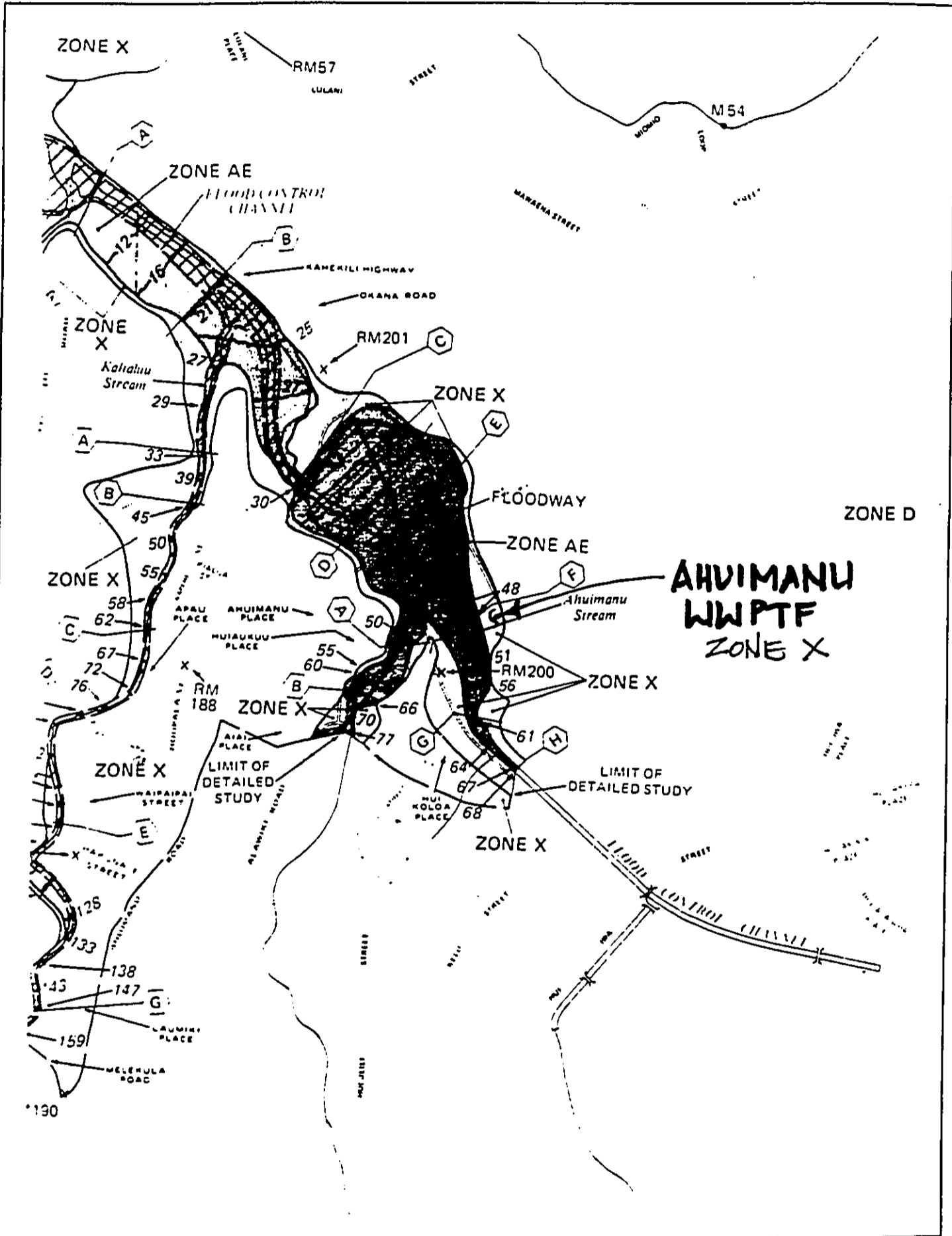


FIGURE 3-3
FLOOD INSURANCE RATE MAP **AHUIMANU WWPTF**

3.3.2 Water

There is an active water system around the Ahuimanu WWPTF. The nearest water pipe is a 1-1/4-inch water line near the proposed location for the dewatering facility. If inadequate, there is an existing 2-inch line within the treatment plant site.

3.3.3 Traffic

Traffic volume to and from the plant is light.

3.4 SOCIO-ECONOMIC ENVIRONMENT

3.4.1 Archaeological and Historical Resources

There are no known archeological or historical resources. The Kahaluu Fish Pond also known as the Kahonua Fish Pond is located in the vicinity of the project area is registered on the National Register of Historic Places. However, the Kahaluu Fish Pond will not be adversely affected by the proposed dewatering facility.

3.4.2 Visual and Aesthetic Considerations

The dewatering facility will be co-located with the Ahuimanu WWPTF which is exposed to public view from Kahekili Highway. Because the proposed facility will be designed to be consistent with the existing WWTP, the view will be nearly unchanged with the exception of two single story buildings within the WWTP facility.

3.5 PROJECT DESCRIPTION

3.5.1 Site and Accessibility

The facilities will be located at the south side of the parcel in an existing open area and will encroach onto the treatment plant parcel. Access to the parcel is through an improved road from Kahekili Highway into the parcel. See Figure 3-4.

3.5.2 Filtrate to Municipal Sewer System

The processed filtrate will enter the treatment plant's sewer system. The connection will be made with piping and will remain within the boundaries of the parcel.

3.5.3 Solids Disposal

Debris will be loaded onto dump trucks and tested for approval to dispose wastes at Waimanalo Gulch Landfill.

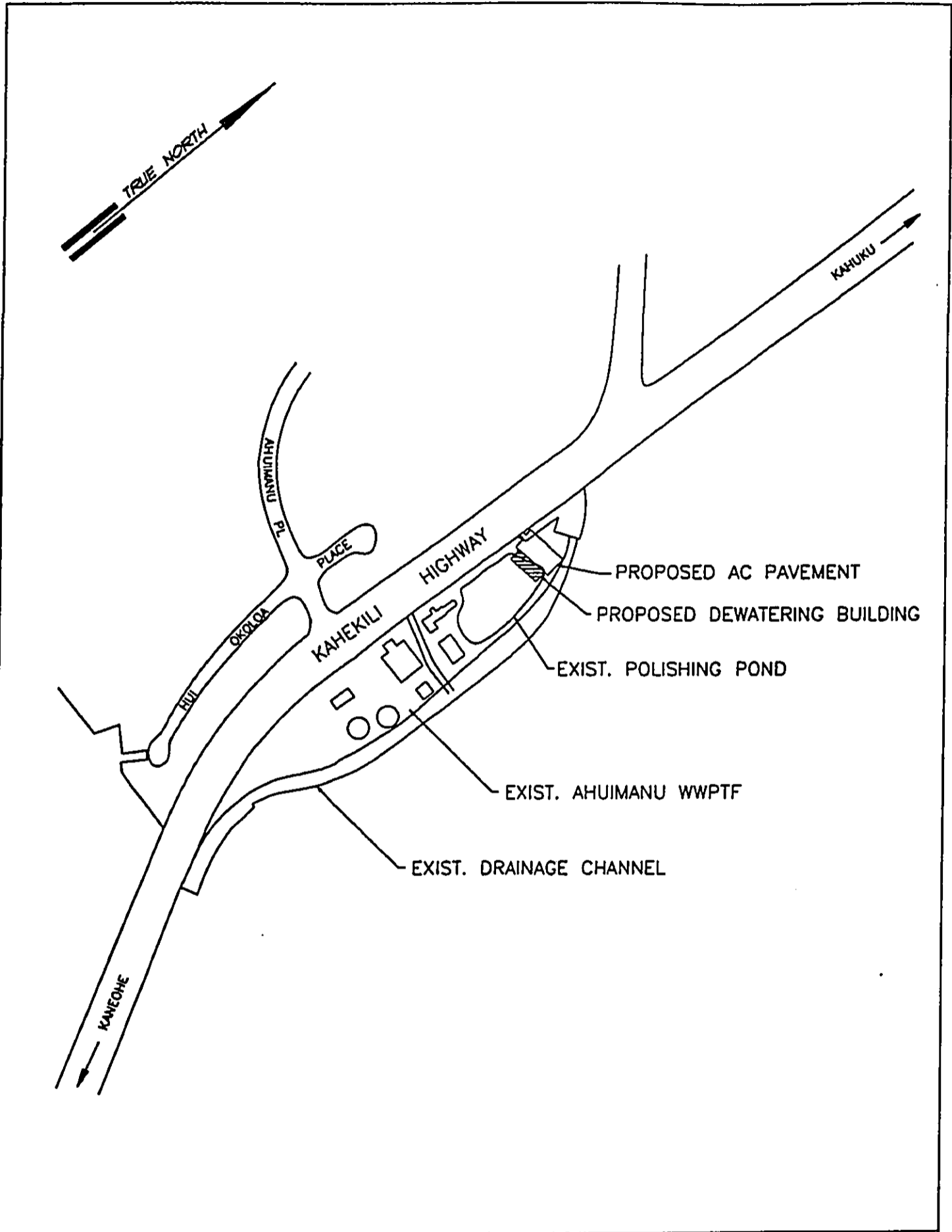


FIGURE 3-4
SITE PLAN

AHUIMANU WWPTF

3.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

3.6.1 Impact on Land Use

The estimated land usage is 0.20 acre and will be within the treatment plant's two parcels. The dewatering facilities will not impact the operation of the treatment plant except to share water and electricity. The dewatering facility is compatible with the surrounding land use and therefore does not adversely impact the land.

Existing roadways are adequate for passage of the vacuum truck and dump truck. The frequency of use is expected to be twice in the morning and twice in the afternoon. The operation of the dewatering facility will not be a significant contributor to local traffic.

3.6.2 Impact on Hydrology

The dewatering facilities may be affected by 100 year flooding but to an average depth of less than 1 foot. The building is being designed to ensure the containment walls are higher than the flood elevation level.

The ramp entering the beds are protected against sheet flow run-off and flooding conditions.

3.6.3 Impact on Topography

The drying beds will be constructed below grade to an approximate depth of 6.5 feet. The limit of the excavation is nearly 115 feet by 44 feet for an area of 5,060 SF. No mounds are required.

3.6.4 Impact on Flora and Fauna

The dewatering facilities will require that the existing trees be removed.

3.6.5 Impact on Ambient Noise

Because the dewatering facilities will not have any powered equipment, no additional noise will be generated. Noise will however, be generated by the dump truck and loader which are required to transport and load the solid waste. That noise will be intermittent.

3.6.6 Impact on Air Quality

The addition of the dewatering facilities is not expected to generate odors because the filtrate is expected to drain readily. The filtrate goes directly into collector pipes and is immediately pre-treated, filtrate is not exposed to atmosphere. After pre-treatment the filtrate is directed to the sewer system for final treatment. The remaining solids are left to dry and will be regularly transported to the landfill.

3.6.7 Impact on the Infrastructure

The quantity of filtrate leaving the dewatering facility will not be high enough to impact the treatment plant. The existing sewer manhole where the connection is proposed, is adequate for the additional load.

The impact to the water system will be minimal. At most, the dewatering facility will include a new 2-inch water line tapped off of the existing 6-inch water main. More likely, the existing 1-1/4-inch water line near the proposed site will be used.

SECTION 4 ALTERNATIVES

4.1 NO ACTION

The "No Action" alternative cannot be considered because the existing dewatering operation is in constant jeopardy of violating the no "free liquids" statute of Chapter 58.1. Free liquids are not permitted in municipal landfills.

4.2 DO NOT USE WATER FOR CLEANING

If water is not used to clean the storm drain equipment, the debris may be dry enough to be taken directly to a landfill. Dry enough would depend on the "free liquids" criteria and each situation will be unique.

If the cleaning crews do not use water, the cleaning operation would be extremely difficult in cases where the storm drain system has dried and caked dirt, sand, mud, etc.. This condition was recently observed in the field. At one catch basin in particular, the effort would have been much higher and the result less satisfactory if water had not been used.

4.3 EVAPORATION OF FILTRATE

Place the debris in a covered containment area and allow free liquids to evaporate. This eliminates dewatering the debris, pretreat the washwater, and directing the filtrate into the municipal sewer system.

The evaporation of free liquids requires a long time. The drying beds remain unusable and more units would be required to allow continual cleaning of storm drainage equipment. To enhance evaporation and limit stagnation, the settling basins and drying beds would have to be designed with more land area and less depth. Mechanical blowers could be used to enhance evaporation, however, the electrical and maintenance costs are prohibitive.

SECTION 5
RELATIONSHIP OF PROPOSED ACTION TO LAND USE PLANS

5.1 HAWAII STATE PLAN

In general, the development of the dewatering facilities follow the revised Hawaii General State Plan (Hawaii Revised Statutes, Chapter 226, May 1986) by supporting the objectives for the prudent use and effective protection of the physical environment.

The development also follows the objectives and policies for facility systems including maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid waste.

5.2 RELATION TO 205A AND SMA GUIDELINES

Chapter 205A, Hawaii Revised Statutes, defines the Coastal Zone Management Area and provides objectives relating to the preservation, protection, and restoration of natural resources within the coastal zone. The proposed construction of the dewatering facilities is compatible with the SMA guidelines, specifically:

- * Ensures wildlife preserves are reserved.
- * Provisions are made for solid and liquid waste treatment disposition.
- * Alterations to existing land forms and vegetation will cause minimum adverse effects to water resources and minimum danger of floods, erosion, or siltation.
- * The development will not have any substantial adverse environmental or ecological effect.
- * That the development is consistent with the objectives, policies, and special management area guidelines enacted by the legislature.
- * The development is consistent with the City and County of Honolulu's General Plan and zoning requirements.

5.3 CITY AND COUNTY OF HONOLULU'S GENERAL PLAN

The dewatering facilities conform to the City and County of Honolulu's General Plan of December 8, 1992

5.3.1 Natural Environment

Objective A is "To protect and preserve the natural environment of Oahu." The proposed dewatering facilities are compatible with policies 4, 6, 7, and 8 of Objective A.

5.3.2 Transportation and Utilities

Objective B is "To meet the needs of the people of Oahu for an adequate supply of water and for environmentally sound systems of waste disposal." The proposed dewatering facilities are compatible with policies 5 and 7 of Objective B.

5.4 CITY AND COUNTY OF HONOLULU'S SPECIFIC PLANS

The preliminary EA was submitted to the City and County of Honolulu's Planning Department for review and comment. The Planning Department confirms the proposed location is consistent with the Public, Quasi-public, and Agricultural (State parcel) land use designations on the Koolaupoko Development Plan Land Use Map. The proposed improvements would not require an amendment to the Development Plan Public Facilities Map.

SECTION 6
IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The City and County of Honolulu's Department of Public Works is committed to constructing these facilities. Once constructed, the dewatering facilities will provide a central location for the processing of water laden debris.

The irreversible and irretrievable resources include land area, building materials, and labor expended for the construction of the dewatering facilities.

SECTION 7
AGENCIES CONTACTED FOR THIS ENVIRONMENTAL ASSESSMENT

7.1 CITY AND COUNTY OF HONOLULU

7.1.1 Road Maintenance Division, Department of Public Works

Mr. Albert Miyashiro was contacted to ensure the purpose of this project was in conformance to their needs. Secondly, there was a need to find out the current methods in place for cleaning and disposing of debris. Mr. Miyashiro and his field crews provided information on the methods, equipment used, and manpower requirements for a typical cleaning operation.

A field observation of the actual cleaning procedure was made to supplement the descriptive data and to conduct first hand observation of the actual debris being removed.

7.1.2 Refuse Division, Department of Public Works

Mr. Wayne Hamada, Disposal Operations Engineer, was contacted (523-4775) on the possibility of discharging free liquids in landfills. According to Mr. Hamada, "free liquids" are not allowed in municipal landfills. The only City landfills still in operation on Oahu are located at Waimanalo Gulch in Nanakuli and Kapaa in Kailua.

7.1.3 Division of Water Quality, Department of Wastewater Management

Ms. Cheryl Kaneshiro was contacted (527-5137) to discuss the project intent and to clarify the latest Industrial Wastewater Discharge Provisions. These provisions apply to all water-carried waste and wastewater excluding domestic wastewater and uncontaminated water.

7.1.4 Department of Planning

Mr. Eugene Takahashi was contacted (527-6022) to discuss the nature of the project. Mr. Takahashi was already familiar with the design intent and based on preliminary information, did not foresee any conflicts. Mr. Takahashi will be apprised of any changes and will provide further review as required.

7.2 STATE OF HAWAII

7.2.1 Division of Forestry and Wildlife, Department of Land and Natural Resources

Mr. Dave Smith, Wildlife Manager, was contacted (973-0786) to obtain map(s) of any bird or wildlife refuge under State jurisdiction. There were none in the vicinity of the four sites.

7.2.2 Clean Water Branch, Department of Health

Ms. Joanne Seto, was contacted to confirm requirements for storm water disposal. Since the proposed facility does not discharge to State waters, a national pollutant discharge elimination permit (NPDES) is not required for the operation of the facility. An NPDES however, may be required for construction activities.

7.3 FEDERAL GOVERNMENT

7.3.1 Fish and Wildlife Service, Department of the Interior

Mr. Mike Silbernagle, Wildlife Biologist, was contacted (637-6330) to discuss the project intent and to obtain map(s) of any Federally protected bird or wildlife refuge. There were no wildlife refuge sites near the proposed facilities to be affected or disturbed.

SECTION 8 DETERMINATION

The Draft Environmental Assessment was circulated for internal and public review for 30 days through the Office of Environmental Quality Control (OEQC) Environmental Notice. The analysis, evaluation and public review of the proposed action have determined that the project will not result in any significant environmental effects at the Ahuimanu site. Therefore, a Finding of No Significant Impact (FONSI) is in order.

Based on the analysis of the significance criteria in Section 11-200-12 of the 1996 Hawaii Environmental Impact Statement rules, the potential effects can be summarized as: the project will

- (1) Not curtail the range of beneficial uses of the environment;
- (2) Not involve a substantial degradation of environmental quality or ecology of the area;
- (3) Not have significant effects on the economic or social welfare of the community or the state;
- (4) Not have substantial effects on public health;
- (5) Not have significant adverse impact on archaeological or cultural resources;
- (6) Conform to Chapter 344, HRS, State Environmental Policy
- (7) Not result in substantial secondary impacts nor have significant cumulative effects;
- (8) Not have substantial impacts on rare, threatened or endangered species, or their habitat;
- (9) Not result in significant impacts on the area's long-term air or water quality or ambient noise levels; and,
- (10) Not affect environmentally sensitive areas.

APPENDIX A

**Sec. 14-1.9, Use of Public Sewers,
Ordinances of Honolulu**

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The entire cleanout shall be installed within the property and at the expense of the property owner. In improvement district projects, the city may install all or a portion of the riser extension at city expense when directed by the director. A sewer manhole in lieu of the above cleanout shall be installed when directed by the director.

- (2) If an existing lateral connection does not include a cleanout as described above, the property owner shall have one installed within 60 calendar days after written notice has been given the owner by the director.
- (3) Special control structures and other appurtenances shall be constructed by the applicant when required by the director.
- (c) Lateral Installation Charges. An applicant for lateral sewer installation shall pay for installation charges in accordance with the schedule of charges in Section 14-3.2.
(Sec. 11-1.5, R.O. 1978 (1987 Supp. to 1983 Ed.); Sec. 11-1.5, R.O. 1990; Am. Ord. 90-50, 94-46)

Sec. 14-1.9 Use of public sewers—Restrictions.

- (a) Inflow shall not be permitted in the sewer system. Thus, no person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, or subsurface drainage into any public sewer or any private sewer which is connected to the public sewer.
- (b) No person shall enter, obstruct, uncover or tamper with any portion of the public sewer, or connect to it, or discharge any wastewater or any other substance directly into a manhole or other opening in the public sewerage system other than in accordance with requirements established by this chapter and through service sewers approved by the director, except that the director may grant permission and establish requirements and policies for such direct discharge.
- (c) No person or party shall remove or demolish any building or structures with plumbing fixtures connected directly or indirectly to the public sewer without first notifying the department of such intention. All openings, in or leading to the public sewer line or lines caused by such work, shall be sealed watertight and inspected by the department before being backfilled.
- (d) No person shall fill or backfill over, or cause to cover, or obstruct access to, any sewer manhole.
- (e) No person shall erect any improvements, structures or buildings over public sewers without the written permission of the director.
- (f) The general and specific prohibitions set forth by the federal regulations at 40 CFR Section 403.5 are hereby incorporated into this chapter by reference.
- (g) No person shall discharge or cause to be discharged any of the following into any public sewer or any private sewer that is connected to a public sewer:
 - (1) Any pollutant(s) which cause pass-through or interference of the wastewater treatment plant;
 - (2) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR Section 261.21. At no time shall two successive readings on an explosion hazard meter at the point of discharge into the system be over five percent, nor shall any single reading be over ten percent of the lower explosive limit of the meter;
 - (3) Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.5 or higher than 11.0, unless the POTW is specifically designed to accommodate such discharges;
 - (4) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
 - (5) Any pollutant, including oxygen-demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;
 - (6) Heat in the amounts which will inhibit biological activity in the POTW resulting in interference, but in no case shall heat be permitted in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit);
 - (7) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through;
 - (8) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

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14-1.9

REVISED ORDINANCES OF HONOLULU

- (9) Any trucked or hauled pollutants except at discharge points designated by the POTW;
- (10) Ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, paper ware either whole or ground or any other solid or viscous substances or normally dry, solid wastes capable of causing obstruction to the flow in or damage to sewers or other interference with the proper operation of the sewerage works;
- (11) Any wastewater containing toxic pollutants such as herbicides and insecticides, in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, or create a toxic effect in the receiving waters of the POTW. A toxic pollutant shall include, but is not limited to, any pollutant identified pursuant to Section 307(a) of the Federal Water Pollution Control Act, as amended;
- (12) Any unusual volume of flow or concentration of wastes constituting "slugs" as defined herein without notification to the POTW;
- (13) Water or wastes which have been contaminated by radioactive materials;
- (14) Water added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limitations set by the POTW or the federal categorical pretreatment standards;
- (15) Water or wastes containing in excess of the following local limits:
 - 0.50 mg/L Arsenic
 - 0.69 mg/L Cadmium
 - 2.77 mg/L Total chromium
 - 3.38 mg/L Copper
 - 1.90 mg/L Total cyanide
 - 0.60 mg/L Lead
 - 0.50 mg/L Mercury
 - 3.98 mg/L Nickel
 - 2.00 mg/L Selenium
 - 0.43 mg/L Silver
 - 2.61 mg/L Zinc
 - 2.00 mg/L Phenolic compounds
 - 100.00 mg/L Oil and grease;
- (16) Water or wastes with concentrations exceeding national categorical pretreatment standards promulgated by the U.S. Environmental Protection Agency in accordance with Sections 307(b) and (c) of the Federal Water Pollution Control Act, as amended. The national categorical pretreatment standards in 40 CFR Chapter I, Subchapter N, Parts 405-471, are hereby incorporated into this section. These standards, unless specifically noted otherwise, shall be in addition to all applicable pretreatment standards and requirements set forth in this chapter and, if more stringent than limitations imposed under this section, shall immediately supersede the limitations imposed under this section;
- (17) Any substance which may cause a city sewage treatment plant's effluent or any other products thereof, such as residues, sludges, or scum to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to a city sewage treatment plant cause it to be in noncompliance with sludge use or the disposal criteria, guidelines or regulations developed under Section 405 of the Federal Water Pollution Control Act (P.L. 92-500), as amended; any criteria, guidelines, or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, or the Toxic Substances Control Act; or State of Hawaii criteria applicable to the sludge management method being used;
- (18) Any substance which will cause the city's sewage treatment plant to violate its national pollutant discharge elimination system permit or State of Hawaii water quality standards; and
- (19) Any wastewater with an oil and grease content greater than 100 mg/l or having detrimental characteristics so as to cause obstruction to structures, equipment within the sewer system or interference with the operation of the POTW; and any wastewater containing substances that may precipitate, solidify or become viscous at temperatures between 40 degrees Fahrenheit and 100 degrees Fahrenheit.

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- (h) Grease and oil interceptors shall be provided for the separation and retention of oil, grease, flammable substances, sand, solids, acidic or alkaline substances or other harmful ingredients from industrial wastewater before discharge into the public sewer system.
 - (1) A grease interceptor shall be required when deemed necessary by the director for slaughterhouses, food packing establishments, restaurants, drive-ins, bars serving cooked foods, cafeterias, school kitchens, hotels, hospitals, or other establishments where oil and grease of vegetable or animal origin are discharged into the public sewer system.
 - (2) An oil interceptor shall be required when deemed necessary by the director for service stations, repair shops, automobile washing facilities, or other establishments where oil, gasoline, kerosene or other light density volatile substances are discharged into the public sewer system.
 - (3) All interceptors shall be constructed and installed in accordance with the requirements for industrial interceptors and grease interceptors for commercial kitchens specified in the Uniform Plumbing Code published by the International Association of Plumbing and Mechanical Officials, as adopted by Chapter 19, ROH 1990, as amended.
 - (4) All grease and oil interceptors shall be maintained in efficient operation at all times by the owner at the owner's expense. In general, once a month will be sufficient. However, the frequency of cleaning may be more or less than once a month. In maintaining these interceptors, the owner shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain records of the dates, amounts and means of disposal which are subject to review by the director.
- (i) Any industrial user who shall discharge or cause to be discharged into the public sewers any water or wastes having more than 200 mg/l of suspended solids or BOD₅ shall be obligated to pay a surcharge in accordance with Section 14-6.6 to the department occasioned by the extent to which such water or waste shall contain an excess over the foregoing limitation of concentration.
- (j) Where preliminary treatment facilities are provided for any wastewater as a condition of its acceptance, they shall be maintained continuously in satisfactory and effective operation by the owner at the owner's expense.
- (k) When required by the director, the owner of any property served by a building sewer carrying industrial wastes shall install monitoring and recording equipment, and a suitable control manhole in the building sewer to facilitate observation, sampling and measurement of the waste. Such manhole shall be readily accessible and safely located, and shall be constructed in accordance with plans approved by the director. If applicable, the manhole shall be designated in the industrial user's discharge permit as its approved sample location. The manhole shall be installed and maintained by the owner at the owner's expense.
- (l) All pretreatment program monitoring activities discussed in this chapter shall be conducted in accordance with the methods and procedures in 40 CFR Part 136 and shall be made at the sampling location identified in the industrial wastewater discharge permit.
- (m) Dilution is prohibited as a substitute for treatment. Except where expressly authorized to do so by an applicable pretreatment standard or requirement, no industrial user shall ever increase the use of process water, or in any other way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a pretreatment standard or requirement. The director may impose mass limitations on industrial users which are using dilution to meet applicable pretreatment standards or requirements, or in other cases where the imposition of mass limitations is appropriate.
- (n) Any discharge which would be considered a hazardous waste, if disposed of in a different manner, shall be prohibited from the sewer system.
- (o) In addition to the provisions of this chapter, all industrial users shall comply with all applicable requirements set forth in federal categorical pretreatment standards and other applicable federal regulatory standards, applicable state orders and water quality control regulations, sewage discharge permits and orders issued to the city by federal and state agencies, federal and state pretreatment program approval conditions, local discharge limitations and regulations promulgated by the director and the city, and any other applicable requirement regulating the discharge of wastewater into the sewerage system. The director is authorized to develop and enforce such local limitations as the director deems necessary for the city's compliance with state and federal laws and requirements and the enforcement of this chapter set forth in Sections 14-5.15 through 14-5.20.

(Added by Ord. 94-46; Am. Ord. 94-73)

→ END SEC 14-1.9

APPENDIX B

**95/INT-5, City and County of Honolulu,
Department of Land Utilization**

INTERPRETATION WRITE-UP FORM

Date: November 16, 1995

Interp. No.: 95/INT-5

LUO Section(s): Sec. 21-9.1, Definitions - "Public Uses and Structures"

Problem Statement: How are public uses and structures to be regulated: As "public uses and structures" which are principal uses in all zoning districts, or under provisions for comparable land use classifications (e.g., utility installations; schools, elementary, intermediate or high; outdoor recreation; offices, etc.)?

Interpretation: Any use or structure which satisfies the definition of "public uses and structures" shall be regulated as a public use or structure.

The only exceptions are those public uses and structures specifically enumerated as Plan Review Uses (PRUs) under Sec. 21-3.160-1(a), including: hospitals, prisons, airports, colleges and universities, trade or convention centers, and golf courses. Public uses must also continue to comply with special district requirements, as applicable.

Justification: The Land Use Ordinance (LUO) provides a specific definition for "public uses and structures". The language in the definition for this land use classification is inclusive for any use or structure: (1) Conducted by, or owned or managed by government, (2) on property under the control of government, (3) to fulfill government functions and provide government services for the benefit of the public in accordance with public policy. Any use or structure which entirely meets the definition for "public uses and structures" should be classified as such. Public uses and structures shall be regulated accordingly, with the exception of those uses specified by the LUO for separate regulation as PRUs.



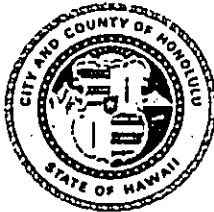
Director's Signature
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APPENDIX C

**Comments to the Preliminary
Draft Environmental Assessment**

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



JEREMY HARRIS
MAYOR

KENNETH E. SPRAGUE
DIRECTOR AND CHIEF ENGINEER

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

November 29, 1996

Mr. Thomas E. Arizumi, P.E., Chief
Environmental Management Division
Department of Health
P. O. Box 3378
Honolulu, Hawaii 96813


Dear Mr. Arizumi:

Subject: Dewatering Facility for Storm Drain Equipment at
Ahuimanu, Oahu, Hawaii Ref. No. PO915JS

Your letter of September 13, 1996 regarding the subject project has been received.
Because no stormwater discharges will be allowed at this project site, NPDES criteria are not applicable.

Thank you for participating in this phase of the project.

Sincerely,

for 
Kenneth E. Sprague
Director and Chief Engineer

cc: R. M. Towill Corporation (Gordon Chong)

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		<i>[initials]</i>	
		<i>[initials]</i>	

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September 13, 1996

P0915JS

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

Dear Mr. Sprague:

Subject: Dewatering Facility for Storm Drain Equipment
 at Ahuimanu, Oahu, Hawaii

The Department of Health (Department) acknowledges receipt of the draft Environmental Assessment (EA) for the subject project dated September 1996.

This draft EA evaluates the Dewatering Facility for Storm Drain Equipment at the Ahuimanu Sewage Treatment Plant. This location replaces the proposed Kaneohe Wastewater Treatment Plant site indicated in the September 1995 and October 1995 draft EAs.

The Department's comments for this September 1996 draft EA are the same as those in the Department's letter dated September 22, 1995 and November 1, 1995.

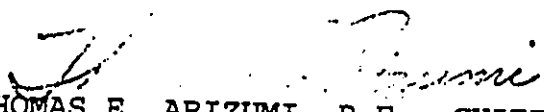
The Department emphasizes that a National Pollutant Discharge Elimination System (NPDES) Permit is not required if there is absolutely no discharge to State waters. As stated in Item No. 2 of the Department's September 22, 1995 letter, "if there are stormwater discharges associated with the industrial activities as defined in 40 Code of Federal Regulations §§122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi) into State waters, the applicant shall obtain coverage under a NPDES General Permit."

[Handwritten notes]
 N/A

Mr. Kenneth E. Sprague
September 13, 1996
Page 2

Should you have any questions, please contact Ms. Joanna L. Seto,
Engineering Section of the Clean Water Branch, at 586-4309.

Sincerely,

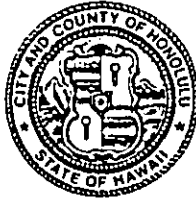

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

JLS/rm

c: ✓ Gordon Chong, R.M. Towill Corporation
Road Maintenance Division, Department of Public Works,
City and County of Honolulu

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4341 • FAX: (808) 527-5857



JEREMY HARRIS
MAYOR

KENNETH E. SPRAGUE
DIRECTOR AND CHIEF ENGINEER

DARWIN J. HAMAMOTO
DEPUTY DIRECTOR

November 29, 1996

MEMORANDUM

TO: PATRICK ONISHI, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM: *fw* KENNETH E. SPRAGUE, DIRECTOR AND CHIEF ENGINEER *AJx TP*

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
DEWATERING FACILITY FOR STORMWATER DRAIN EQUIPMENT AT
AHUIMANU WASTEWATER TREATMENT PLANT SITE
TMK: 4-7-37: 30 AND 4-7-4: POR. 6

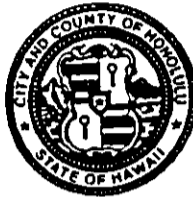
We are in receipt of your letter dated November 8, 1996 regarding the subject project. Your comments 1 through 4, relating to flood designations for specific areas within the project site are appreciated.

For your information, the engineering design details already reflect required elevations that address any flood zone constraints. The Final EA will incorporate this information and your editorial comment in Item No. 5.

cc: R. M. Towill Corporation (Gordon Chong)

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

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



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JEREMY HARRIS
MAYOR

PATRICK T. ONISHI
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

96-05846(DT)

96 EA Comments Zone 4

November 8, 1996

who did EA?
CMS 2 copy given

Mr. Gordon Chong
R. M. Towill Corporation
420 Waiakamilo Road, Suite 411
Honolulu, Hawaii 96817-4941

Dear Mr. Chong:

Draft Environmental Assessment (DEA)
Ahuimanu Wastewater Treatment Plant (WWTP)
Tax Map Keys (TMKs): 4-7-37: 30 and 4-7-04: por. 06

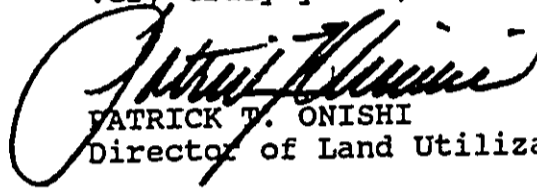
We have reviewed the above DEA to construct a dewatering facility at the above sites and have the following comments:

1. *PPW site* TMK: 4-7-37: 30 is within Flood Zone AE, in which a portion of the eastern side of the property is within the AE Floodway. No portion of the dewatering facility can be constructed within the AE Floodway, unless a Flood Hazard Variance is obtained from our department.
2. *Waiakamilo site* TMK: 4-7-04: 06 is within Flood Zones X (Shaded) and AE. A portion of the eastern side of the property is also within the AE Floodway.
3. Flood Zone AE is a flood-fringe district in the 100-year flood plain. Construction in the AE flood-fringe area is subject to the Flood Hazard District provisions of Section 7.10 of the City's Land Use Ordinance (LUO). A completed flood hazard certification form will be reviewed by our department for compliance with Section 7.10 of the LUO.
4. The use must comply with LUO standards for height, yard setbacks, parking, lot coverage, etc., unless waivers are attained.
5. Page 6 of the DEA incorrectly states that an Existing Use (EU) Permit is required for the project. The proposal is a permitted principal use under the Country District.

Mr. Gordon Chong
Page 2
November 8, 1996

If you have any questions regarding the flood requirements, please contact our Subdivision Branch at 527-5838. The Plan Review Branch can answer the zoning and parking lot requirements at 523-4131.

Very truly yours,



PATRICK T. ONISHI
Director of Land Utilization

PTO:am

cc: Department of Public Works

9605846.djt



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

CS -

REPLY TO
ATTENTION OF

October 10, 1996

Operations Branch

Mr. Gordon Chong
R.M. Towill Corporation
420 Waiakamilo Road
Suite 411
Honolulu, Hawaii 96817-4941

DK		KTS	
WAC	✓	WAC	
RET		RET	
REC'D	OCT 11 1996	RMTC	
		gc	
		msw	

Dear Mr. Chong:

This is in reply to your request dated September 4, 1996, for comments on the draft Environmental Assessment to construct a dewatering facility for storm drain equipment in Ahuimanu, Oahu, Hawaii. Based on the information provided, I have determined that the dEIS does not involve any specific activities or structures involving work in waters of the United States. Therefore a DA permit is not required. In the future, if the applicant proposes activities in or near jurisdictional waters, consultation should take place with our Operations Branch to determine if a DA permit may be required.

If you have any further questions, please contact Mr. Alan Everson at 438-9258, extension 11. Please refer to File No. 970000004.

Sincerely,

Rosemary C. Hargrave
for Rosemary C. Hargrave
Acting Chief, Operations Branch

NO REPLY NEEDED FOR DEPT. OF ARMY LETTER
DATED OCTOBER 10, 1996

APPENDIX D

**Comments and Responses to the
Draft Environmental Assessment**

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

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

DK		KTS	
WES		NM	
RTT		PF	
REC'D .IAN 23 1997 RMTC			

[Handwritten initials: WES, RTT, KTS, NM, PF]
[Handwritten initials: RMTC]
[Handwritten initials: GC]
[Handwritten initials: CMS]

January 21, 1997

Mr. Kenneth Sprague, Director
City and County of Honolulu
Department of Public Works
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Sprague,

Subject: Draft Environmental Assessment for the Ahuimanu
Dewatering Facility for Storm Drain Equipment, Oahu

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

1. The proposed dewatering facility will be located next to the Ahuimanu Wastewater Treatment Plant. The treatment plant is in full view of a major public highway in a scenic area of windward Oahu. Virtually no visual buffer exists to shield the facility from public view. Please illustrate the cumulative visual impacts of both facilities and describe mitigation measures such as plantings and landscaping to reduce these impacts.
2. What is the current and future status of the Ahuimanu Wastewater Treatment Plant?
3. Please provide reasons for supporting the determination based on an analysis of the significance criteria in section 11-200-12 of the 1996 Hawaii Environmental Impact Statement Rules.

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

Sincerely,

Gary Gill
Director

c: R.M. Towill

DK		KTS	
WES		NM	
RTT		RF	
REC'D APR 16 1997 RMTC			

ENV 97-061

April 15, 1997

Mr. Gary Gill, Director
 Office of Environmental Quality Control
 State of Hawaii
 236 South Beretania Street, Suite 702
 Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Ahuimanu Dewatering Facility for Storm Drain Equipment,
 Oahu, Draft Environmental Assessment

We have received your letter dated January 21, 1997, regarding the subject project. The following has been prepared in response to your questions.

- a. The additional facility improvements proposed by this action will add to the cumulative visual impact of both facilities. The Road Maintenance Division plans to visually screen the proposed dewatering facility with landscaping and plantings to reduce these impacts.
- b. The utility of the Ahuimanu Wastewater Treatment Plant as a wastewater treatment facility is minimized. The existing pond will be used as an emergency bypass in the future.
- c. Based on an analysis of the significance criteria in Section 11-200-12 of the 1996 Hawaii Environmental Impact Statement rules, the potential effects can be summarized as: the project will, (1) not curtail the range of beneficial uses of the environment; (2) not involve a substantial degradation of environmental quality or ecology of the area; (3) not have significant effects on the economic or social welfare of the community or the state; (4) not have substantial effects on public health; (5) not have significant adverse impact on archaeological or cultural resources; (6) conform to Chapter 344, HRS, State Environmental Policy; (7) not result in substantial secondary impacts nor have significant cumulative effects;

Mr. Gary Gill, Director
Page 2
April 14, 1997

(8) not have substantial impacts on rare, threatened or endangered species, or their habitat; (9) not result in significant impacts on the area's long-term air or water quality or ambient noise levels; and (10) not affect environmentally sensitive areas.

Please contact Mr. Alex Ho, Environmental Engineer, at 523-4150 should you have any further questions.

Very truly yours,

JONATHAN K. SHIMADA, PhD
Director and Chief Engineer

bcc: R.M. Towill Corp. (Colette Sakoda)