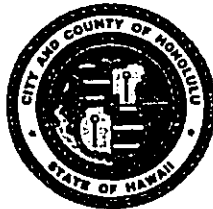


DEPARTMENT OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK F. FASI
MAYOR

KENNETH M. RAPPOLT
DIRECTOR

FELIX B. LIMTIACO
DEPUTY DIRECTOR

WEP 93-387

August 19, 1993

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

Dear Mr. Choy:

Subject: Final Environmental Assessment (EA) in Anticipation of a
Negative Declaration for the Proposed Septage Handling Facilities
at the Kahuku Wastewater Treatment Plant (WWTP)
Kahuku, Hawaii, Tax Map Key: 5-6-2: 24

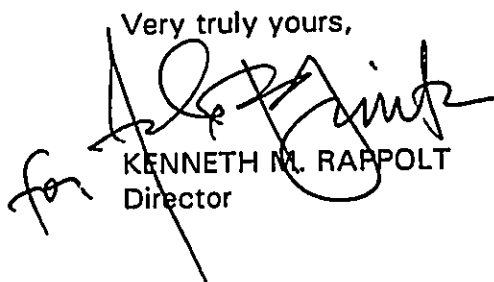
This letter constitutes a notice of determination by this department after the potential impacts of the proposed project have been assessed according to Title 11, Chapter 200, Environmental Impact Statement Rules, and Chapter 343, of the Hawaii Revised Statutes relating to Environmental Impact Statements. The determination has been made that an environmental impact statement is not required based on the environmental assessment prepared by our consultants, Parametrix, Inc.

Based on our determination, we are filing a Final EA in anticipation of a Negative Declaration. The department is submitting with this transmittal, four copies of the Final EA and an OEQC publication form for this project.

We are requesting publication in your OEQC Bulletin of September 8, 1993.

Should there be any questions, please have your staff contact Mr. Robert Ishida at 527-5847.

Very truly yours,


KENNETH M. RAPPOLT
Director

Attachments

1993-09-08-0A-*FEA-Kahuku Wastewater Treatment Plant
Septic Handling facilities* SEP - 8 1993

Final Environmental Assessment

This Environmental Assessment prepared pursuant
to Chapter 343, Hawaii Revised Statutes (HRS)

For The

Septage Facilities on Oahu

North Shore WWTP

Tributary Area

Kahuku WWTP

TMK: 5-6-02: 24
Kahuku, Oahu, Hawaii

Proposing Agency:

Department of Wastewater Management
City and County of Honolulu
650 S. King Street
Honolulu, HI 96813

Responsible Official:


Kenneth M. Rappolt, Director

8/18/93

Date

Prepared For:

Department of Wastewater Management
City and County of Honolulu

Prepared By:
Parametrix, Inc.

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EXHIBIT

Correspondence - Agencies Consulted

I. SUMMARY

CHAPTER 343, HRS
ENVIRONMENTAL ASSESSMENT (EA)

Proposing Agency: Department of Public Works
City & County of Honolulu

Action: Agency

Project Name: North Shore Septage Facilities: Kahuku WWTP

Project Description: The Kahuku Waste Water Treatment Plant (WWTP) is being evaluated to determine the potential impacts that septage handling and processing will have on the long range operations on Oahu's North Shore. The proposed septage handling facility will consist of the following:

Septage receiving station consisting of an inlet box and a concrete apron;
aerated grit removal tanks;
comminutor or grinder for solids reduction;
influent pump station;
dual sequencing batch reactors for septage treatment;
effluent pump station;
dual aerobic digestors;
sludge pump station;
vertical screw press facility;
and thickened sludge pump station;
and other related units.

Project Location: Kahuku WWTP, Kahuku, Oahu (See Figure 1)

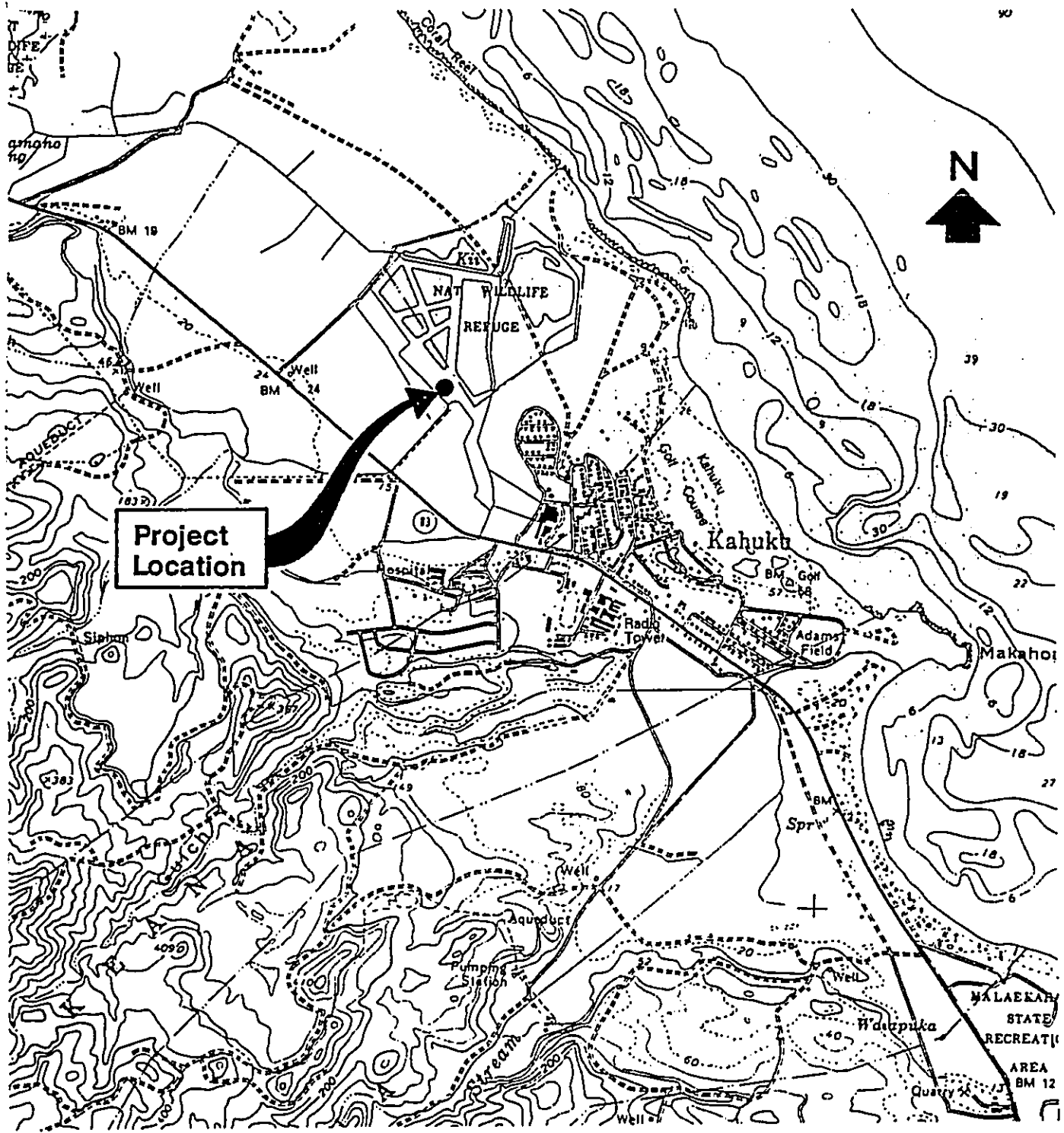
Tax Map Key: 5-6-02: 24

Area: 18,388 square feet

State Land
Use Designation: Agriculture

County Zoning
Designation: AG-2 (See Figure 4)

*North Shore Septage Facilities:
Kahuku WWTP*



Parametrix, Inc.

Septage Facilities on Oahu North Shore, Tributary Area
Kahuku

Location Map

PMX 22-2096-02

Figure 1

Page 2

Koolauloa Development
Plan Land Use Map
Designation:

Public Facility

Landowner:

City & County of Honolulu

Contact:

F. J. Rodriguez
c/o Parametrix Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813
Tel. (808) 524-0594

II. PROJECT DESCRIPTION

A. Technical Characteristics

1. The septage wastes generated within the North Shore service area are primarily cesspool septage, septic tank waste, waste activated sludge (WAS) and preloader waste from private treatment plants. Small quantities of chemical toilet waste and grease trap waste are also generated in the sparsely populated service area. Individually, each type of waste exhibits different characteristics; in general however, the wastes are highly variable, anaerobic, high strength wastes. Estimated Cesspool Septage Quantities for the North Oahu District were 744,000/gallons per month in 1990. For the year 2010, the monthly rate is estimated to reach 1,090,000/gallons per month. (Table 2-13, page 2-17 *Septage Handling Facilities on Oahu, North Shore Service Area*, Parametrix, December, 1992.)
2. Septage handling and treatment fall into three general categories: land disposal; independent treatment facilities; and handling at wastewater treatment plants. In the "*Septage Handling Facilities on Oahu, North Shore Service Area, December, 1992*", it was concluded that handling septage at existing WWTP was the most economically cost effective and environmentally sound method of handling septage. For the North Shore service area, a minimum of two septage treatment facilities was considered necessary for the following reasons:
 - shorter hauling distances with associated higher efficiencies in truck and labor usage.
 - improved compatibility with the long term plan for septage treatment and handling at regional and sub regional wastewater treatment facilities.

The two proposed facilities would be at Kahuku and Paalaa-Kai WWTP.

The septage facilities are needed to relieve existing treatment plants from present overload conditions and to reduce the hauling distance for municipal and private pumpers serving the North Shore service area.

Septage generated within the North Shore Service area consists primarily of cesspool septage. A highly concentrated wastewater, septage is traditionally treated by processes used at WWTPs. The handling of septage however is markedly different from domestic sewage and requires special consideration for proper design of receiving and handling facilities. Considerations for treating septage at a WWTP are:

- a. Ability of the plant to accommodate septage

- b. Addition to liquid and solid waste handling stream
 - c. Mode of waste input
 - d. Receiving station
Waste discharge station
Pre-treatment
 - e. Substances which could inhibit microbiological activity
 - f. Odor Control
3. Septage is a high organic strength, high solids content waste. Addition of a highly concentrated waste such as septage in relatively small quantities can substantially increase the organic and solids loading at a WWTP. The volume of septage that can be handled is generally dependent on three major factors:
- a. Volume and nature of the waste flow
 - b. Biological oxidation capacity of the plant
 - c. Solids handling capacity of the plant
4. Septage can be classified as the following types of waste material:
- a. Cesspool septage - can be described as a highly variable anaerobic waste having a high solids and organic content. For a properly operating cesspool, cleaning would be required very infrequently, approximately in the range of once every five years. Cesspool failure, as characterized by sewer backups and or diminished sewer capacity, can occur due to high groundwater levels, poor soil conditions, and clogging of sidewall openings by solids deposition or microorganisms growth. Cesspool failure generally requires pumping to remove accumulated waste liquids and solids. High pressure washing or chemical additives are sometimes used to remove solids, grease or growths from the sidewalls. The waste load generated from pumping a failed cesspool is cesspool septage.
 - b. Septic tank septage - can be described as a highly variable anaerobic slurry containing large amounts of grit and scum, high solids and organic content, and often an accumulation of heavy metals. It is also characterized by a highly offensive odor, the ability to foam, and poor settling and dewatering characteristics. The septic tank itself is the treatment component where scum and solids are separated from the wastewater providing a degree of treatment similar to a primary treatment process. The sludge and scum are retained within the tank

where they undergo anaerobic stabilization, a digestion process. The partially clarified liquid flows to the disposal component comprised of a leaching field, seepage pit, or other effluent disposal systems. Solids retained within the septic tank are anaerobically digested, stabilizing and reducing the solids volume. The solids accumulation can reach a point where cleaning is required to prevent solids carryover and clogging of the disposal system. The mixture of partially digested solids and wastewater removed from the septic tank comprise septic tank septage. Septic tank cleaning frequency ranges from once every year to once every five years, with an average of once every three years.

- c. Waste activated sludge - There are approximately 27 private wastewater treatment plants located within the North Shore Service Area. These private facilities provide wastewater treatment service for residential projects ranging from multiple housing units arranged in parallel, to package extended aeration activated sludge plants, to large facultative lagoons. Two types of waste are generated by private treatment plants: preloader waste, and waste activated sludge. Approximately 25 of the 27 private treatment facilities use a form of the activated sludge treatment process. The Turtle Bay WWTP and the Waialeale Farm WWTP are biological pond systems that essentially generate no excess solids for disposal at treatment plants. However, over time, stabilized sludge deposits at the bottom of the ponds may require removal and disposal. The majority of the private treatment plants use the extended aeration modification of the activated sludge process. This process generates a relatively low amount of excess solids; however, for efficient treatment, some excess solids, or waste activated sludge (WAS) must be removed on a regular basis. Because WAS amounts at private treatment plants are small, it is generally not feasible for these plants to have complete solids handling and disposal facilities.
- d. Preloader Waste - are characterized as a variable, anaerobic, high strength waste that can contain large amounts of grit, hair, oil, and grease. Preloader wastes are captured at the influent end of the treatment plant and generally contain floatables, oil and grease, grit, and readily settleable materials. As determined in a previously conducted study, (City & County of Honolulu, "Septage Handling Facilities on Oahu North Shore Service Area, December, 1992" preloaders are essentially septic tanks operating under high hydraulic loading rates. Based on the similarity between septic tanks and preloaders, preloader waste characteristics were assumed to be similar to septic tank septage.
- e. Chemical Toilet Waste - On Oahu, chemical toilets are portable units that are typically used at locations such as construction sites, areas where permanent facilities are inadequate for a short term special event, and areas where permanent facilities are non-existent. Chemical toilet wastes are currently discharged into the municipal system at designated manholes. Within the North Shore area,

discharge of chemical toilet wastes into the municipal collection system is not allowed. In general, the waste must be transported to the Honouliuli WWTP or to designated manholes in Pearl City for discharge into the City's system.

f. Grease Trap Waste - Grease Traps are required by plumbing codes, the City's Sewer Ordinance, and are designed to separate fats, oils, and grease from wastewater flows from establishments such as restaurants prior to discharge into a sewage collection system. In general, the grease captured in grease traps is primarily comprised of edible oils that separate readily from the wastewater and accumulate at the liquid surface. Grease buildup cause a number of problems including:

- coating and build up in sewer systems;
- excessive accumulation of floating materials;
- formation of grease balls in clarifiers;
- formation of dense scum layers in digesters; and
- poor effluent quality leading to coating and build up in effluent injection wells and reducing effluent disposal capacity.

5. There are two methods of handling septage at a WWTP:

- a. Addition to the liquid treatment stream;
- b. Addition to the solids handling stream.

In general, septage input into the headworks of the liquid stream flow of the treatment plant is desirable since the majority of the solids can be removed with the primary sludge. This is particularly true at plants with primary clarification. At secondary treatment plants without primary sedimentation, addition of septage to the liquid stream can overload biological processes resulting in major process upsets and poor effluent quality. At these secondary treatment plants, addition to the solids handling stream would be desirable.

B. Social and Economic Characteristics

Discharge of cesspool septage at the Kahuku WWTP is limited to municipal pumper trucks only. Private haulers must transport wastes to the Honouliuli WWTP for treatment and disposal. A new treatment facility recently completed at the Turtle Bay Resort consists of a new aerated pond treatment facility. The system has not yet been

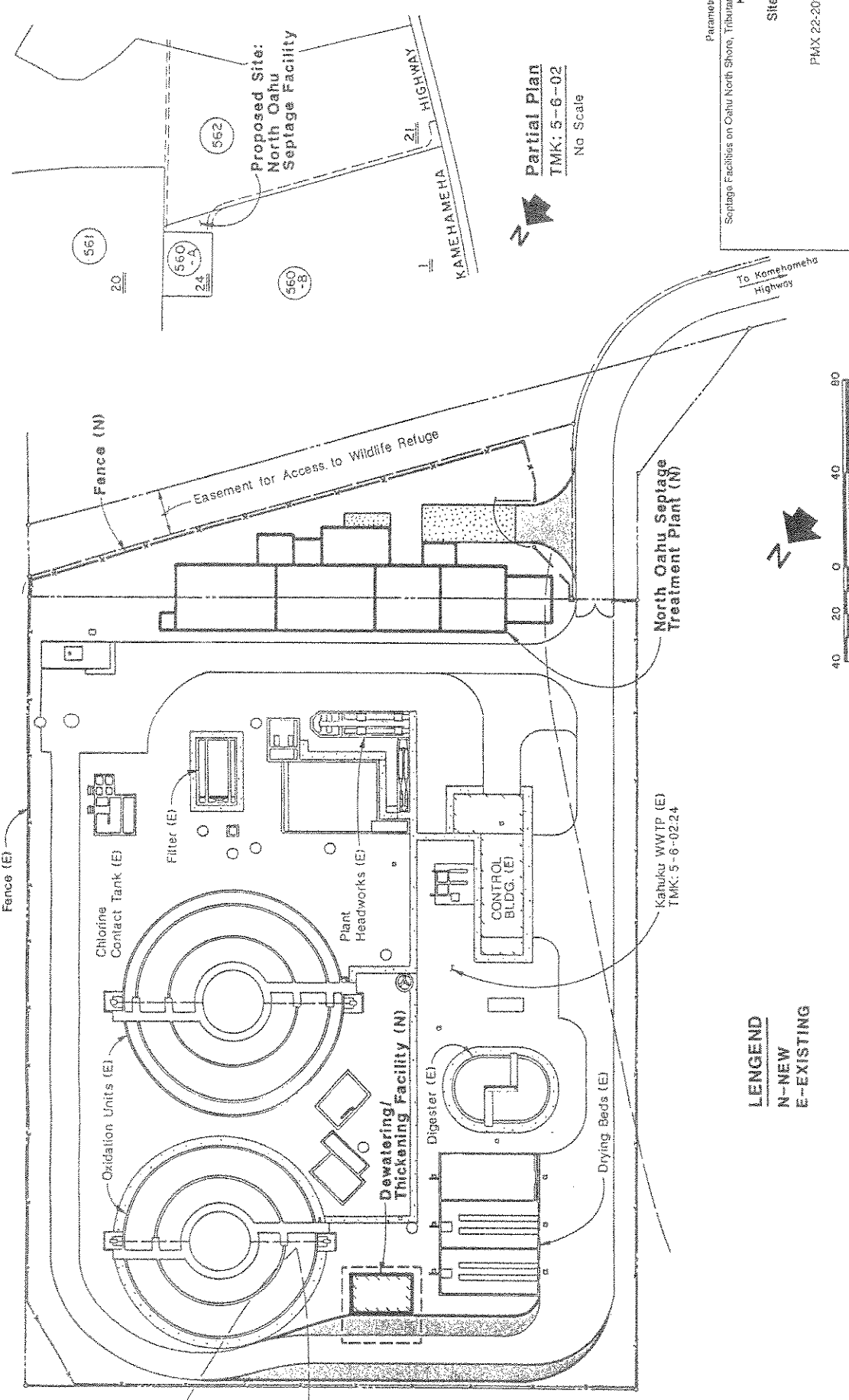
accepted by the City & County DWWM for operation and maintenance. Originally, the Kahuku WWTP was designed and built as a secondary treatment facility designed for an average daily flow of 200,000 gallons per day (gpd). Expansion construction to a capacity of 400,000 gpd was recently completed.

C. Environmental Characteristics

The proposed septage improvements are to be placed adjacent to the existing Kahuku WWTP located at TMK: 5-6-02: 24. The existing plant is a square shaped parcel of approximately 2.06 acres. The septage improvements will be within the Facility boundaries on a currently vacant portion of the plant. The site is bordered on the north, east, and west, by the James Campbell National Wildlife Refuge, Kii Unit. It is bordered on the south by agricultural lands, currently fallow. In the proposed improvements area, the septage facilities will be designed to function with minimum impacts to the adjacent land uses. The plant is approximately 0.2 miles makai of Kamehameha Highway, and nearly 900 feet from the nearest residential area.

Screening and buffering is present, with the existing landscaping located within the fenced area. At the present time, the facility has oleander lining the plant boundaries, and various types of trees and shrubs are scattered throughout the plant site. These include coconut, plums, Madagascar olive, and New Zealand Flax. A new boundary fence will be placed along the septage facility (See Figure 2).

The new septage facilities will not increase the concerns of odor generation since the receiving area consists of ports that will take the pump truck contents directly into the WWTP. The prevailing trade winds and the relative distance from the Kahuku Plantations residential area will continue to maintain the odor concerns to a minimum.



LENGEND
 N-NEW
 E-EXISTING

Parametrix, Inc.
 Septage Facilities on Oahu North Shore, Tributary Area
 Kahuku

Site Plan

PMX 22-2096-02

Figure 2
 Page 9

Proposed Site:
 North Oahu
 Septage Facility

Partial Plan
 TMK: 5-6-02
 No Scale

North Oahu Septage
 Treatment Plant (N)

Kahuku WWTP (E)
 TMK: 5-6-02:24

561

560
 -A
 24

562

560
 -B

21 HIGHWAY

KAMEHAMEHA

To Kamehameha
 Highway

Scale in Feet
 0 20 40 80

III. AFFECTED ENVIRONMENT

A. Geographical Characteristics

1. Topography

The proposed Septage handling facility at the Kahuku WWTP is planned for the north-east corner of the plant site. At the present time, the planned expansion will consist of approximately 18,388 square feet of structural improvements. (See Figure 2)

2. Soils

Soils at the Kahuku WWTP site are classified as Jaucas Sand (JaC) "a land type that occurs as narrow strips on coastal plains, adjacent to the ocean. It consists of excessively drained, calcareous soils that occur on all the islands of this survey area. They developed in wind and water deposited sand from coral and seashells." USDA/SCS 8/72 Soil Survey of Islands of Kauai, Oahu, Molokai, and Lanai, State of Hawaii.

3. Vegetation

At the proposed location for the septage handling facility improvements, there are no varieties of indigenous or threatened species of vegetation as the Kahuku WWTP is an existing industrial facility. There are introduced species of plant material on the total parcel, but not at the proposed septage facility location. Existing landscaping of trees and shrubs will not be affected.

B. Hydrological Characteristics

1. Drainage

Onsite drainage will be provided with the existing system of drainage. The proposed improvements to provide septage handling will not increase drainage loading on the existing drainage system. In the event of accidental spills of the septage material, there are operational procedures that will mitigate the spillage and minimize the impacts into the adjacent coastal zone.

2. Coastal Zone Management Program/City & County of Honolulu Special Management Area (SMA) Use Permit

The project site is located in the Special Management Area Boundary, and a permit for the SMA will be prepared and processed with the City Department of Land Utilization. (See Figure 3)

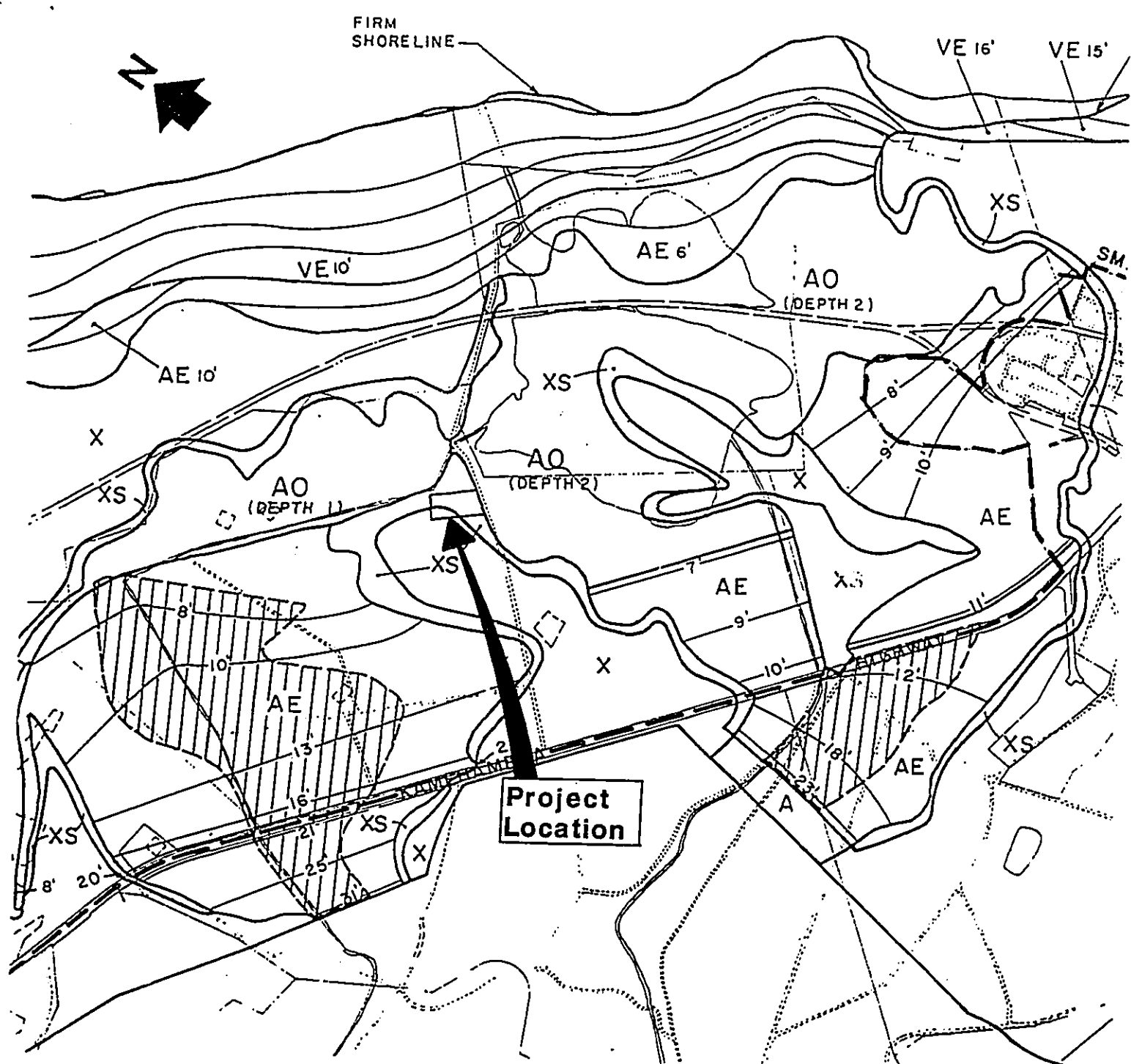
Compliance with the Coastal Zone Management Act is under the review jurisdiction of the Office of State Planning, who will review this document as a routine evaluation.

C. Biological Characteristics

The location of the proposed Septage Handling Facilities at the Kahuku Waste Water Treatment Plant is on previously disturbed lands. There will be little if any impacts to the existing biota due to this proposed project. Plant and animal species prevalent at the Kahuku WWTP are exotic or introduced species and will not be affected by this project. Adjacent to the WWTP is the Kii Unit of the James Campbell National Wildlife Refuge. Construction of the septage facility improvements will need to be coordinated so that construction activity will not coincide with the nesting period of the Hawaiian Waterbirds within the adjacent refuge area.

D. Historic and Archaeological Characteristics

The previously disturbed nature of the proposed Septage Facility site precludes the possibility of uncovering sites with historic or archaeological significance. In the event that sites are uncovered, construction work will be halted and the State Historic Preservation Division, Department of Land and Natural Resources will be advised.



Parametrix, Inc.
 Septage Facilities on Oahu North Shore, Tributary Area
 Kahuku

SMA Boundary Map

PMX 22-2096-02

Figure 3
 Page 12

IV. SUMMARY OF MAJOR IMPACTS AND MITIGATIVE MEASURES

A. Impacts

Impacts due to the implementation of the proposed project improvements can be viewed in two areas: short and long term. Short term impacts, beneficial and adverse, generally result from construction related activities. These are consequently of short duration and are related and limited to the construction phase of site improvements, i.e. on site and structural. Topographic alterations will result from the onsite grading necessary to provide an even and stable building platform for the structural improvements.

Care should be taken that off site improvements do not conflict with the nesting patterns of wildlife avifauna at the Kii Wildlife Preserve.

Other onsite improvements will be to provide ready access for the septage vehicles to reach the unloading ports; the connection of the utilities; the onsite drainage improvements to tie in with the drainage system; and the perimeter fencing to secure the facilities since the project location is adjacent to the an improved Urban setting.

Long term impacts result from the implementation and operation of the proposed project. These will include:

- increased truck/pumper traffic;
- potential increase in odor problems;
- disturbance to the adjacent wildlife preserve.

B. Mitigative Measures

Short term or construction related impacts will be contractor responsibility to adhere to the State Department of Health Regulations on Community Noise for Oahu. This will be done by avoiding the "gunning" of equipment; working only during the normal operating hours of 7:00 a.m. to 3:30 p.m.; and installing appropriate muffler noise abatement devices on all construction equipment.

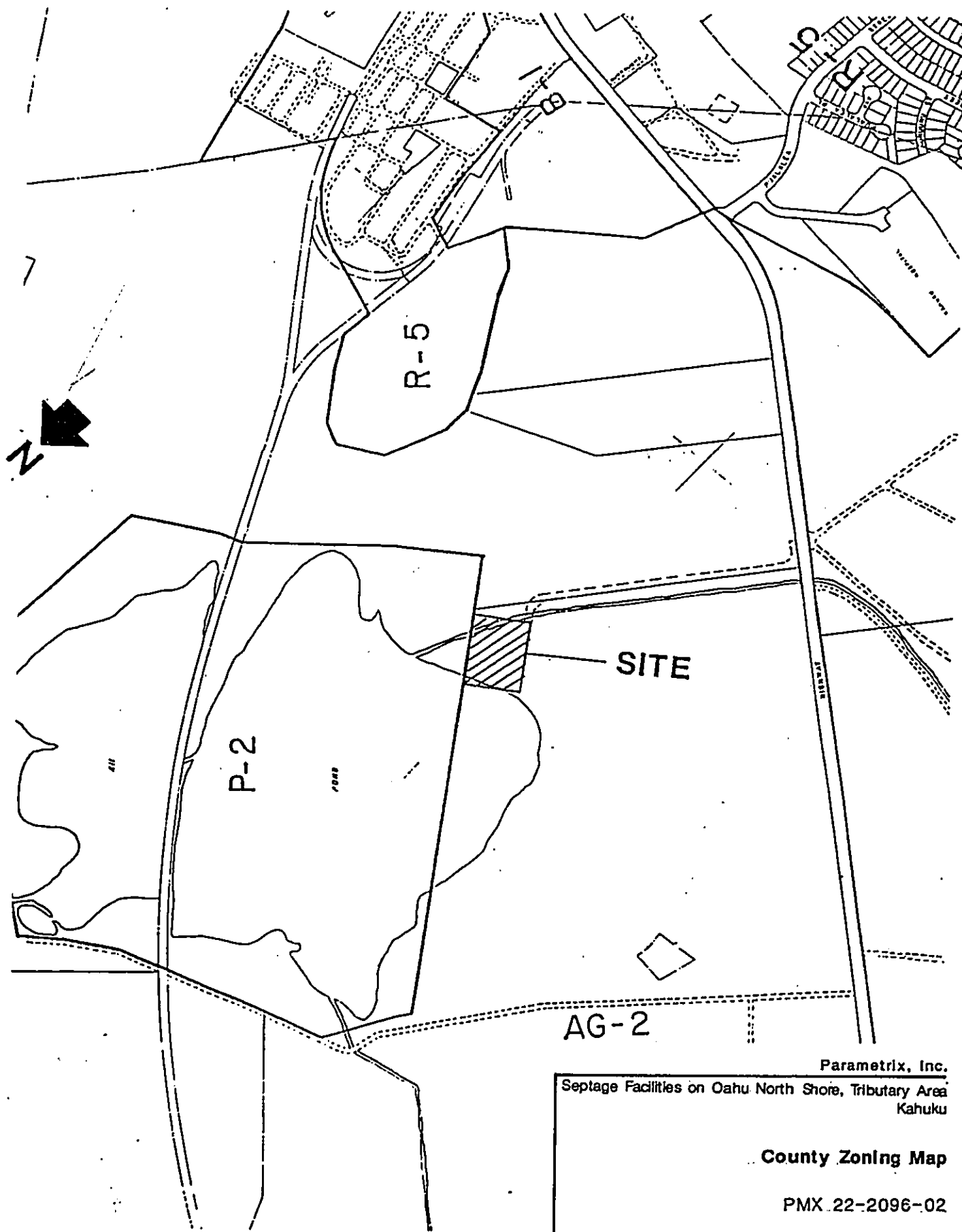
Fugitive Dust will be abated by adhering to the State Department of Health Regulations on Air Pollution Control. Total construction time is not expected to create undue hardship to the adjacent urban uses since the major part of the work will be structural. Long term mitigative measures will be primarily the function and responsibility of the WWTP operators who will be accepting septage as a category of liquid waste.

V. ALTERNATIVES CONSIDERED

Alternatives

The selected site location has taken into consideration the existing operations at Kahuku WWTP and the decision to place the Septage Facilities at the designated north-east corner was based on the use which requires ready ingress and egress for septage vehicles. Other areas were evaluated and discarded due to the potential traffic congestion that could result. These included: the Turtle Bay WWTP; Laie WWTP; Wahiawa WWTP; Paalaa-Kai WWTP; and Honouliuli WWTP.

The "No Action" alternative would have resulted in the selected site remaining unused and the volume of septage continuing to be a problem for treatment and disposal.



Parametrix, Inc.
Septage Facilities on Oahu North Shore, Tributary Area
Kahuku

County Zoning Map

PMX.22-2096-02

Figure 4
Page 15

VI. DETERMINATION, FINDINGS, AND REASONS SUPPORTING DETERMINATION

After completing an assessment of the potential environmental effects of the proposed action, and consulting with other government agencies, it has been determined that a Notice of Negative Declaration can be anticipated. This will be completed after the pre-agency consultation period and Draft Environmental Assessment has been posted in the OEQC Bulletin. The policies, guidelines, and provisions of Chapters 342, 343, and 344 Hawaii Revised Statutes were consulted in the evaluation process.

1. The proposed project will not adversely affect the physical and social environment. There may be minor discomfort and annoyances to the Kamehameha Highway traffic during construction, but these will be mitigated by adherence to applicable City traffic control ordinances.
2. There will be no permanent degradation of the existing ambient air quality and community noise levels. During the construction phase, the air and noise standards will be temporarily affected, but these effects will be temporary and short term in nature.
3. No residences or businesses will be disrupted by the project. The site is part of the Kahuku WWTP and the Septage Handling Facility is a consistent use and compatible with the overall WWTP.
4. There are no endangered plant species on the project site, and the prevailing flora and fauna are exotic or introduced species.
5. There are no known natural, historic, or archaeological sites within the project's metes and bounds.
6. The project will be consistent with the prevailing Land Use District Urban designation; the Development Plan Facilities Map; and the Zoning designation of Ag-2.
7. There are no significant adverse secondary effects on population, future development, and public facilities due to this project.

VII. LIST OF PREPARERS

Parametrix, Inc.

Hawaii Pacific Engineers, Inc.

VIII. FUNDING AND PHASING

This Project will be funded entirely by the applicant, the Department of Public Works, Division of Wastewater Management, City & County of Honolulu. All improvements will be designed and built to County Building code standards. Construction will commence after all required permits have been processed and completed. Construction costs are estimated to be \$2,700,000.00 and the work will be completed in one phase, with total funding to be provided by the City & County of Honolulu.

IX. LIST OF AGENCIES CONSULTED DURING THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT

ORGANIZATIONS AND AGENCIES:

Agency	Date of Consultation	Date Comment Received
<u>State of Hawaii</u>		
Mr. Harold Masumoto, Director Office of State Planning		5-3-93
Mr. Keith W. Ahue, Chair State Dept. of Land & Natural Resources		
Dr. Bruce Anderson, Dep. Director State Dept. of Health		
Mr. T. Harano, Chief Highways Division State Dept. of Transportation		4-16-93
Mr. Mufi Hanneman, Director Department of Business & Economic Development		4-27-93
<u>City & County of Honolulu</u>		
Mr. Robin Foster Dept. of General Planning		4-30-93
Mr. Donald A. Clegg, Director Dept. of Land Utilization		
Mr. C. Michael Street, Ch. Engr. Dept. of Public Works		
Mr. Joseph N. Magaldi, Director Dept. of Trans. Services		
Mr. Michael S. Nakamura, Chief Honolulu Police Department		4-20-93
Mr. Donald Chang, Chief Honolulu Fire Department		4-19-93

*North Shore Septage Facilities:
Kahuku WWTP*

19

May 5, 1993

Agency	Date of Consultation	Date Comment Received
Mr. Kazu Hayashida, Manager Board of Water Supply		4-28-93
Ms. Rene Mansho City Council		
North Shore Neighborhood Board #27		
U. S. Department of Interior Fish & Wildlife Service		
Mr. Lloyd M. Haraguchi, Project Manager The Estate of James Campbell		4-30-93

*North Shore Septage Facilities:
Kahuku WWTP*

20

May 5, 1993

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU
3375 KOWALAN STREET, SUITE 402
HONOLULU, HAWAII 96819-1889



FRANK P. PASH
CHIEF

April 14, 1993

Mr. F. J. Rodriguez
Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Dear Mr. Rodriguez:

SUBJECT: KAHUKU SEPTAGE HANDLING FACILITIES
Environmental Assessment Pre-Agency Review
PMC Project No.: 22-2096-01

We have reviewed the subject material provided and foresee no adverse impact in Fire Department facilities or services.

Access for fire apparatus, water supply and building construction shall be in conformance to existing codes and standards.

Should you have any questions, please call Assistant Chief Attilio Leonardi of our Administrative Services Bureau at 831-7775.

Very truly yours,

DONALD S. M. CHANG
Fire Chief

AKL:ny

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
430 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK P. PASH
CHIEF

April 22, 1993

MEMORANDUM

TO: MR. DONALD S. M. CHANG, CHIEF
FIRE DEPARTMENT

FROM: C. MICHAEL STREET, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: ENVIRONMENTAL ASSESSMENTS PRE-AGENCY REVIEW FOR
KAHUKU SEPTAGE HANDLING FACILITIES

We have received your department comments dated April 14, 1993 for the subject project and respond as follows:

1. All access for fire apparatus, water supply, and building construction shall be in conformance with existing codes and standards.
2. The department position of no adverse impact in Fire Department facilities or services is duly noted.

Thank you for your timely comments and continuing cooperation.

C. MICHAEL STREET
Director and Chief Engineer

C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX B. LUMINICO
SENIOR ENGINEER

WEP 93-135

RECEIVED
APR 19 1993

PARAMETRIX, INC.
HONOLULU

DONALD S. M. CHANG
FIRE CHIEF
RICHARD M. SETO, JR.
DEPUTY FIRE CHIEF

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

930 SOUTH KING STREET
HONOLULU, HAWAII 96813



C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER

FELIX B. LUTJACKO
SENIOR DIRECTOR

WEP 93-136

April 22, 1993

Mr. T. Harano, Chief
Department of Transportation
Highways Division
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Harano:

Subject: Environmental Assessments for Pre-Agency Review
for the Kahuku Septage Handling Facilities

We have received your agency comments dated April 14, 1993, stating that the proposed facilities will not affect the State highway facilities.

Thank you for your timely comments and continuing cooperation.

Very truly yours,

C. MICHAEL STREET
Director and Chief Engineer

REED JOHNSON
DIRECTOR

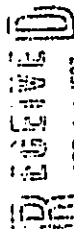
DEPUTY DIRECTOR
JOYCE T. DURKE
AL PANG
JEANNE K. SCHULTZ
CALVINIA TSOUDA

IN REPLY REFER TO:

HWY-PS
2.6350

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-3001

April 14, 1993



PARAMETRIX, INC.
HONOLULU

Mr. F. J. Rodriguez
Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Dear Mr. Rodriguez:

Kahuku Septage Handling Facilities

The proposal to design and build septage facilities at the Kahuku Waste Water Treatment Plant will not affect our State highway facilities.

Very truly yours,

T. HARANO
Chief
Highways Division

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
881 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 535-3111



FRANK J. FASI
MAYOR

OUR REFERENCE BS-LK

April 19, 1993

PARAMETRIX, INC.
MICHAEL J. RODRIGUEZ
HAROLD M. LAWSAHI
DEPUTY CHIEF

RECEIVED
APR 20 1993



FRANK J. FASI
MAYOR

April 23, 1993

C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX S. LUTHECO
SENIOR DESIGNER

WEP 93-139

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
100 SOUTH KING STREET
HONOLULU, HAWAII 96813

MEMORANDUM

TO: MICHAEL S. NAKAMURA, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

FROM: C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER

SUBJECT: ENVIRONMENTAL ASSESSMENTS PRE-AGENCY REVIEW FOR
KAHUKU SEPTAGE HANDLING FACILITIES

We have received your department comments dated April 19, 1993 on the above project and respond as follows:

Mitigative measures will be employed to minimize dust, noise, odor and traffic problems.

Thank you for your timely comments and continuing cooperation.

C. Michael Street
C. MICHAEL STREET
Director and Chief Engineer

Mr. F. J. Rodriguez
Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Dear Mr. Rodriguez:

This is in response to your letter of March 30, 1993 about septage facilities at the Kahuku Waste Water Treatment Plant.

The Honolulu Police Department notes that mitigative measures will be employed to minimize dust, noise, odor, and traffic problems, which would be our major concerns. We have no other comments at this time.

Thank you for the opportunity to review this document.

Sincerely,

MICHAEL S. NAKAMURA
Chief of Police

By *Eugene Uemura*
EUGENE UEMURA
Assistant Chief of Police
Administrative Bureau

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
630 SOUTH BERTANA STREET
HONOLULU HAWAII 96813
APR 28 1993



PARAMETRIX, INC.
HONOLULU
April 21, 1993

Mr. F.J. Rodriguez
Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Dear Mr. Rodriguez:

Subject: Your Letter of March 30, 1993 Regarding the Environmental Assessment
Pre-Agency Review for the Kahuku Septage Handling Facilities at the Kahuku
Wastewater Treatment Plant (WWTP), PMX Project No. 22-2096-01,
Kahuku, Oahu. TMK: 5-6-02: 24.

Thank you for the opportunity to review and comment on the proposed project to
construct additional septage handling facilities at the WWTP.

We have no objections to the proposed project and anticipate no adverse impacts to our
water system facilities in the area.

If you have any questions, please contact Roy Doi at 527-5121.

Very truly yours,

KAZU HAYASHIDA
Manager and Chief Engineer

cc: Robert Ishida
(Department of Public Works)

FRANK F. PASI, Mayor
WALTER O. WATSON, Jr., Chairman
MARGARET H. YALOWITZ, Vice Chairman
SUSAN M. DANFORTH, ANTHONY C. DOFF
JOHN W. ANDERSON, JR.
MELISSA T. J. LIMA
C. MICHAEL STREET
KAZU HAYASHIDA
Manager and Chief Engineer

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
400 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK F. PASI
MAYOR

C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX B. LUMILAGO
DEPUTY DIRECTOR

May 6, 1993

MEP 93-152

MEMORANDUM

TO: MR. KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

FROM: C. MICHAEL STREET, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: SEPTAGE HANDLING FACILITIES ON OAHU:
KAHUKU WASTEWATER TREATMENT PLANT

We have received your agency comments dated April 21, 1993 on the
above proposed project and respond as follows:

We acknowledge the BWS position that states "The proposed project
will have no adverse impacts to the BWS water system facilities,
and there are no objections to the project."

Thank you for your timely comments and continuing cooperation.

C. MICHAEL STREET
Director and Chief Engineer

PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU
450 SOUTH KING STREET
HONOLULU, HAWAII 96813

RECEIVED
APR 30 1993



ROBIN FOSTER
CHIEF PLANNING OFFICER
ROLAND D. LEBST, JR.
DEPUTY CHIEF PLANNING OFFICER

MM 3/93-863

FRANK P. FAH
MAYOR



C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX B. LAMIAO
SENIOR DIRECTOR

HEP 93-164

April 28, 1993

May 7, 1993

Mr. F. J. Rodriguez
Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

MEMORANDUM

TO: MR. ROBIN FOSTER, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: C. MICHAEL STREET, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: PRE-AGENCY ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED
SEPTAGE HANDLING FACILITIES AT KAHUKU WASTEWATER
TREATMENT PLANT. TAX MAP KEY: 5-6-02: 24

Dear Mr. Rodriguez:
Preliminary Draft Environmental Assessment
for the Septage Handling Facilities
at the Kahuku Waste Water Treatment Plant
Tax Map Key: 5-6-02: 24

We have received your department comments dated April 28, 1993
and we respond as follows:

The Planning Department has reviewed the subject document
and offers the following comments:

Inclusion of the Development Plan Land Use map indicating "Public
Facility" has been made in the Summary section of the E.A.
document. We have attached a copy for your files.

1. The proposed project is designated "Public Facility" on
the Koolauloa Development Plan (DP) Land Use Map. This
designation should be included in the "Summary" section
of the proposed project.
2. The Koolauloa Development Plan (DP) Public Facilities
Map was recently amended by Ordinance 91-56 to allow
for sewage treatment plant improvements to accommodate
septage handling at the Kahuku Waste Water Treatment
Plant.

Thank you for your timely comments and continuing cooperation.

Thank you for the opportunity to comment. Should you
have any questions, please contact Mel Murakami of our staff at
527-6020.

Robin Foster
ROBIN FOSTER
Chief Planning Officer

C. Michael Street
C. MICHAEL STREET
Director and Chief Engineer

Attachments

RF:ft

THE ESTATE OF JAMES CAMPBELL

April 28, 1993

RECEIVED
APR 30 1993

Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

PARAMETRIX, INC.
HONOLULU

Attn: F. J. Rodriguez

Dear Mr. Rodriguez:

Thank you for providing us with the opportunity to comment on the Environmental Assessment for the Kahuku Septage Handling Facilities. Having reviewed the document, we have no major comments. We would, however, direct your attention to:

Page 7, last paragraph: Statement that, "the new septage facility will not increase the concerns of odor generation";

Page 10: Statement "potential increase in odor problem".

The two statements appear to be contradictory and require clarification. If there exists a potential increase in odor problems, then surely the new septage facility will increase the concerns of odor generation.

Again, thanking you for the opportunity and should you have any questions, please contact me at 544-3102.

Very truly yours,



Lloyd M. Haraguchi
Project Manager
Community Development

01041100AK10067

Sum. 500, 505 Fort Street Mall, Has Fabo, Hwa at 505/11 (808) 546 1541

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
150 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK P. PARI
MAYOR

C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX LUTHERICO
DEPUTY DIRECTOR

May 7, 1993

WEP 93-161

Mr. Lloyd M. Haraguchi
Project Manager
Community Development
Estate of James Campbell
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

Dear Mr. Haraguchi:

Subject: Pre-Agency Draft Environmental Assessment for the proposed Septage Handling Facilities at the Kahuku Wastewater Treatment Plant. TMK: 5-6-2: 24

We have received your comments dated April 28, 1993 on the proposed improvements and we respond as follows:

1. Page 7, last paragraph: This narrative describes the designed method of processing the septage directly into the main treatment plant process. The nature of the materials being handled will always have the potential for unpleasant odors. Odor control systems and chlorine solution systems will be installed to prevent odor problems.

Thank you for your timely comments and continuing cooperation.

Very truly yours,



C. MICHAEL STREET
Director and Chief Engineer

LETTERHEAD
EXECUTIVE OFFICE



STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
Room 104, Old Federal Building
335 Northward Street
Honolulu, Hawaii 96813
Telephone: 587-3033

LAND USE
COMMISSION

JOHN WALS
LARRY HANAUSSALA
BARBARA EMIL STARR
BCE ICC
LARRY HANAUSSALA

RECEIVED
APR 27 1993

DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM
PARAMETRIX, INC.
HONOLULU

Central Pacific Post 329 South King Street 10th Floor, Honolulu, Hawaii
Mailing Address: P.O. Box 2336, Honolulu, Hawaii 96804 Telephone: (808) 546-2100 Fax: (808) 546-2377



April 16, 1993

Mr. F. J. Rodriguez
Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Dear Mr. Rodriguez:

The Department of Business, Economic Development & Tourism is pleased to submit the enclosed comments on the Draft Environmental Assessment for Septage Facilities on Oahu: Kahuku Septage Handling Facilities, Pealaa-Kai Septage Handling Facilities, and Sand Island Septage Handling Facilities.

The comments were provided by the Land Use Commission. Questions regarding these comments may be directed to Esther Ueda, LUC Executive Officer at 587-3826.

Thank you for the opportunity to comment.

Sincerely,

Mufi Hamann
Mufi Hamann

Enclosure

April 13, 1993

SUBJECT: Director's Referral No. 93-101-N
Draft Environmental Assessment for Septage Facilities on Oahu: (Kahuku Septage Handling Facilities, Pealaa-Kai Septage Handling Facilities, Sand Island Septage Handling Facilities)

We have reviewed the subject draft environmental assessments and have the following comments to offer:

Kahuku Septage Handling Facilities

- 1) The tax map key identification on page 1 of the Draft EA is in error. The current tax map key should read THK: 5-6-2: por. 24.
- 2) We confirm that the project location is within the State Land Use Agricultural District.
- 3) The existing sewage treatment plant was the subject of SP78-317/City and County of Honolulu, Department of Public Works, approved by the LUC on January 11, 1979.
- 4) Based on Figure 2 of the respective Draft EA, it appears that the proposed septage handling facility involves THK: 5-6-2: por. 1 (east of THK: 5-6-2: 24). This should be clarified in the Final EA and amendments made accordingly. We also note that if expansion into THK: 5-6-2: por. 1 is proposed, another Special Permit or amendment to SP78-317 is needed.
- 5) The project site is nearby to an area recommended for reclassification from the Agricultural District to the Conservation District under the Draft State Land Use District Boundary Review - Oahu, currently being conducted by the Office of State Planning. Specifically, the Kii Unit of the James Campbell National Wildlife Preserve is a Priority 2 recommendation.

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

440 SOUTH KING STREET
HONOLULU, HAWAII 96813



C MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
PEARL & HERMES
SEPTAGE DIVISION

WEP 93-158

May 12, 1993

Mr. Mufi Hanneman, Director
Department of Business,
Economic Development & Tourism
P. O. Box 2359
Honolulu, Hawaii 96804

Dear Mr. Hanneman:

Subject: Pre-Agency Comments on Septage Facilities at
Kahuku Wastewater Treatment Plant

We have received your department comments dated April 16, 1993 on the proposed facilities and we respond as follows:

1. The incorrect Tax Map Key designation will be corrected to 5-6-2: 24.
2. Your confirmation of the project location being within the State Land Use Agricultural District is acknowledged.
3. We acknowledge your statement: "The existing sewage treatment plant was the subject of SP78-117/City and County of Honolulu, Department of Public Works approved by the LUC on January 11, 1979."
4. Clarification of the site location of the proposed Septage Facilities will be made in the Draft E.A. to be circulated in the OEQC Bulletin. If it is determined that the proposed septage facilities will require an amendment to the SP78-117, this will be done in the appropriate schedule. At the present time, the documentation is for an SMA permit.
5. We acknowledge the efforts of the Office of State Planning regarding the Kii Unit of the James Campbell National Wildlife Preserve as a Priority 2 recommendation.

Thank you for your timely comments and continuing cooperation.

Very truly yours,

[Signature]
C MICHAEL STREET
Director and Chief Engineer

Paalaa-Kai Septage Handling Facilities

- 1) We confirm that the project location, identified as TMK: 6-6-34: 33 & 34, is within the State Land Use Urban District and not the Agricultural District as stated on page 1 of the respective Draft EA.
- 2) Review of Figure 2 of the respective Draft EA indicates that proposed improvements are within TMK: 6-6-34: por. 33 and por. 35. It appears that no improvements are proposed within 6-6-34: 34. This should be clarified in the Final EA and references amended accordingly.

Sand Island Septage Handling Facilities

- 1) We wish to note that because the proposed septage handling facility will not involve the total parcel, the TMK identification should read as TMK: 1-5-41: por. 5.
- 2) We confirm that the project location, identified as TMK: 1-5-41: por. 5, is within the State Land Use Urban District.

We have no further comments to offer at this time.

EU:LRA:th



OFFICE OF STATE PLANNING

Office of the Governor

MAILING ADDRESS: P.O. BOX 3440, HONOLULU, HAWAII 96814-0340
STREET ADDRESS: 2ND SOUTH HOTEL STREET, 17TH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE: (808) 537-7344, 807-7000

Ref. No. C-8-

RECEIVED
MAY 5 1993

April 29, 1993

PARAMETRIX, INC.
HONOLULU

Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Attn: F.J. Rodriguez
Dear Mr. Rodriguez:

We received your three letters of March 30, 1993 soliciting comments and concerns regarding the draft Environmental Assessments (EA) for the proposed Septage Facilities at the Kahuku, Paalaa-Kai, and Sand Island Waste Water Treatment Plants (WTP), and we have the following response.

The draft EAs correctly state all three WTPs are located within the Special Management Area (SMA) of Oahu, and thus will require permits processed by the Department of Land Utilization. However, the Office of State Planning, as lead agency for Hawaii's Coastal Zone Management Program, and not the Department of Business, Economic Development, and Tourism as stated in the draft EAs, routinely monitors the processing of SMA permits by the various counties. Finally, involvement of Federal funds, as stated in the draft EAs, is not the sole determinant of whether this project must comply with the Coastal Zone Management Act. The Federal Coastal Zone Management Act of 1972, as amended, provides that many federal actions, such as the granting of federal permits and licenses, must comply with the approved Coastal Zone Management program of the respective state.

If you have any questions, please contact our Coastal Zone Management Program at 587-2876.

Sincerely,

Harold S. Masumoto
Harold S. Masumoto
Director

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

430 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK P. JEN
DIRECTOR

C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX B. LANTIERO
SENIOR DIRECTOR

May 6, 1993

HEP 93-155

Mr. Harold S. Masumoto, Director
Office of State Planning
P. O. Box 3540
Honolulu, Hawaii 96811-3540

Dear Mr. Masumoto:

Subject: Pre-Agency Comments on Septage Handling Facilities
at Kahuku Wastewater Treatment Plant

We have received your agency comments dated April 29, 1993 on the above proposed project and we respond as follows:

1. Revisions to the Draft E.A. document will be made to correct the incorrect reference to the Coastal Zone Management Act review jurisdiction. We direct you to the revisions which are attached.

Thank you for your timely response and continuing cooperation.

Very truly yours,
C. Michael Street
C. MICHAEL STREET
for Director and Chief Engineer

Attachments

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU
430 SOUTH KING STREET
HONOLULU, HAWAII 96813 • PHONE 525-4433



FRANK FASI
MAYOR

DONALD A. CLEGG
DIRECTOR
LORETTA K. CHIE
DEPUTY DIRECTOR
93-02125 (DT)

May 10, 1993

Mr. Fred J. Rodriguez
Parametrix, Inc.
1164 Bishop Street, Ste. 1600
Honolulu, Hawaii 96813

Dear Mr. Rodriguez:

Environmental Assessment (EA) For
Kahuku Wastewater Treatment Plant (WWTP)
Tax Map Key: 5-6-2: 24

We have reviewed your EA to construct seepage facilities at the above-described project site and have the following comments:

1. Project Description/Drawings

The Final EA should indicate the size of the proposal. A narrative description of the existing structures should be added to the Final EA.

Elevation drawings should be included in the Final EA. A topographic map clearly showing elevation contours should also be included. Existing elevation contours should be shown with dotted lines, while final elevation contours should be shown with solid lines.

2. Drainage

Page 8 of the Draft EA states that an existing drainage system will accommodate runoff from the project site. The Final EA should describe the drainage system including the point of its discharge.

Mitigative measures to prevent runoff during construction should be discussed in the Final EA.

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
430 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK FASI
MAYOR

C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX P. LIMTIACO
DEPUTY DIRECTOR

May 25, 1993

WEP 93-184

MEMORANDUM

TO: MR. DONALD A. CLEGG, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM: C. MICHAEL STREET, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: PRE-AGENCY COMMENTS ON THE PROPOSED SEPTAGE HANDLING FACILITY AT THE KAHUKU WASTEWATER TREATMENT PLANT (WWTP). KAHUKU, OAHU. T.M.K.: 5-6-2:24.

We have received your comments dated May 10, 1993, and we respond as follows:

1. Project Description/Drawings

Page 1, Section I, Summary, describes the proposed seepage handling facility comprised of the following units within approximately 18,388 square feet of land.

- Septage receiving station consisting of an inlet box and a concrete apron.
- Aerated grit removal tanks.
- Comminutor or grinder for solids reduction.
- Influent pump station.
- Dual sequencing batch reactors for septage treatment.
- Effluent pump station.
- Dual aerobic digesters.
- Sludge pump station.
- Vertical screw press facility.
- Thickened sludge pump station.
- Other related units and facilities.

The following description for the existing wastewater treatment plant (WWTP) will be added to the draft environmental assessment:

"Description of Existing WWT

The original WWT was constructed in 1980 for a design capacity of 0.2 million gallons per day (MGD). The WWT, which was expanded to increase its capacity to 0.4 MGD in 1992, serves Kahuku area. The WWT consists of a headworks, flow equalization facility, pump station, secondary treatment units (oxidation ditch), backwash filter, chlorine contact chamber, sludge pump station, sludge digester, two sludge thickeners, sand filters, and control building. The septage handling facility will be constructed adjacent to the WWT, but it is a completely separate system to treat only septage wastes. The septage handling facility is proposed to mitigate indiscriminate dumping of septage wastes in the WWT collection system."

Elevations of the proposed facility improvements as well as topographic contours will be available when the consultant starts the design phase. The Site Plan, Figure 2 indicates the new facilities as distinguished from the existing facilities. The existing grade is flat and elevation varies between approximately 6 and 9 feet. Although some adjustment of elevations is expected, the finished elevations will not be higher than the highest existing point. We will maintain the drainage flow pattern as close as possible to that of existing and prevent adverse effect on the surrounding lands. The new tanks will be constructed similar to those existing, i.e. the top of tank wall will be approximately 3 to 4 feet higher than the finished grade. The structures such as pump stations will be approximately 10 to 12 feet above the finished grade.

2. Drainage

The proposed septage facilities will maintain the existing natural surface drainage pattern and will not increase the current drainage flow at the Kahuku WWT. The grounds will be landscaped with crushed rock to prevent a concentrated flow of rain runoff. The improvements consist primarily of low-profiled tanks and structures.

Mitigative measures for construction related runoff will be provided in the construction general notes of the final construction drawings. All provisions to comply with the State Department of Health standards for erosion control and runoff will be met.

3. Wildlife

Will the proposal be constructed so that the Hawaiian Waterbirds nesting season at the adjacent wetland will not be disturbed? What is the proposed schedule for construction?

4. Solid Waste

The method of solid waste disposal should be included in the Final EA.

5. Alteration To Land Forms

The Final EA should describe the amount of grading and filling that will be performed on the site.

6. Flood Zone

The Flood Zone for the project site is shown on Figure 3 of the Draft EA. The Final EA, however, does not mention whether the proposal is within a flood hazard area.

7. Alternatives

Page 11 of the Draft EA states that there would be potential traffic congestion if the septage facilities were constructed at other WWT sites. (The Final EA should explain how the proposed activities at the alternative sites would cause traffic congestion and whether the congestion would be short or long term.) The Final EA should further discuss these alternative sites.

8. Tax Map Key (TMK)

It appears that page 1 of the Draft EA lists an incorrect TMK for the project site. This should be corrected in the Final EA.

9. Visual Concerns

Will the proposed structure be visible from Kamehameha Highway? The Final EA should describe how any potential visual impacts will be mitigated.

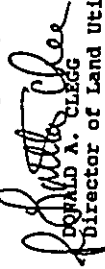
Mr. Fred J. Rodriguez
Page 3
May 10, 1993

10. Special Management Area

The proposal is within the Special Management Area and will require a Special Management Area Use Permit.

Thank you for the opportunity to comment. If you have any questions, please contact Dana Teramoto of our staff at 523-4648.

Very truly yours,


DONALD A. CLEGG
Director of Land Utilization

DAC:ak
hwtp.djt

Mr. Donald A. Clegg

- 3 -

May 25, 1993

3. Wildlife

The requirements for phasing the construction with the nesting seasons of various bird species will be coordinated with the U.S. Department of Fish and Wildlife. The construction schedule will be included in the construction documents.

4. Solid Wastes

The septage wastes to be received at the septage handling facilities will be limited to cesspool waste, chemical toilet waste, restaurant grease trap waste, and the like to be treatable in the facilities. The sludge generated from the solids handling system will be dried and hauled away for final disposal at a landfill as has been done for the sludge from the existing WTPP.

5. Alteration to Land Forms

Final grading plans for the portion of the Kahuku WTPP to be developed for the septage handling facilities have not been completed at this time and we are not able to provide the amount of material that will be involved. However, because the finished grade will essentially match that of the existing, the amount of grading and filling will be minimal.

6. Flood Zone

The Kahuku WTPP is within Flood Insurance Rate Map (FIRM) zones XS and AO, and is not in a flood hazard area.

7. Alternatives

In the review of the cited alternative sites, traffic congestion was a consideration that led to the site selection at the Kahuku WTPP. The alternative sites reviewed and discarded in consideration for the Kahuku Septage Handling Facility were the Turtle Bay WTPP, Laie WTPP, Wahiawa WTPP, Paalaa-Kai WTPP, and Honouliuli WTPP. These WTPPs are located away from the service area of the project location. Hauling septage wastes away from the service area will cause traffic congestion along the routes to those WTPPs.

8. Tax Map Key

The misstated THK has been corrected.

Mr. Donald A. Clegg

- 4 -

May 25, 1993

9. Visual Concerns

There will be very low profile improvements. The tallest building will be approximately 12 feet high and will have a minimal visual effect from Kamehameha Highway, about 1,500 feet away.

10. Special Management Area

The SMA permit will be prepared and processed in the normal schedule process.

Thank you for your continued cooperation.



C. MICHAEL STREET
Director and Chief Engineer

DEPARTMENT OF PUBLIC WORKS



SENIOR JAMES CAMPBELL
BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 921
HONOLULU, HAWAII 96809
FILE NO.: 93-527
DOC. NO.: 2712
MAY 4 1993

Mr. Fred Rodriguez
Parametrix, Inc.
1164 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Dear Mr. Rodriguez:
SUBJECT: Draft Environmental Assessment (DEA): Septage Facility at the
Kahuku Wastewater Treatment Plant, Kahuku, Oahu, TMK: 5-6-02: 24

We have reviewed the DEA information for the subject project transmitted
by your letter dated March 30, 1993, and have the following comments:

Brief Description:

The City and County of Honolulu plans to design and build septage
facilities at the Kahuku Wastewater Treatment Plant (WWTP). The proposed
septage handling facility will consist of a receiving station consisting
of an inlet box and concrete apron; aerated grit removal tanks; comminutor
or grinder for solids reduction; effluent pump station; dual aerobic
digesters; and other related units.

The proposed site is located adjacent to the existing Kahuku WWTP, within
the facilities boundaries on a currently vacant portion of the plant. The
site is bordered on the north, east and west by the James Campbell
National Wildlife Refuge, Kii Unit, and on the south by fallow
agricultural lands. The developer proposes to design the septage
facilities to function with minimum impacts to adjacent land uses.

Division of Forestry and Wildlife

The Division of Forestry and Wildlife (DOFW) comments that:

- 1) DOFW does not anticipate any major environmental problems with the
site clearing or construction, assuming there is coordination with
the U.S. Fish and Wildlife Service on such activities relative to the
wildlife breeding seasons at the National Wildlife Refuge.

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU



C. MICHAEL STREET
DIRECTOR AND CHIEF ENGINEER
FELIX B. LIMTIACO
SENIOR INSPECTOR

May 17, 1993
WEP 93-172

Mr. Keith W. Ahue, Chair
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Ahue:

Subject: Pre-Agency Comments on the Proposed Septage
Handling Facilities at the Kahuku Wastewater
Treatment Plant (WWTP), Kahuku, Oahu
TMK: 5-6-02:24

We have received your comments dated May 4, 1993, and we respond
as follows:

- 1. We will closely coordinate the site clearance and
construction requirements with the U.S. Fish and
Wildlife Service relative to the wildlife breeding
seasons at the James Campbell National Wildlife Refuge.
- 2. The site can be landscaped with crushed rock to avoid
the use of herbicides as has been done on the existing
WWTP grounds.
- 3. Impacts to the adjacent James Campbell Wildlife Refuge
are remote if not minor in nature. All improvements
will take place as indicated on the site plan and will
have installation of mechanical equipment that will
permit adequate processing of septage wastes.
- 4. The septage handling facility will have its own
treatment units independent of the existing WWTP. The
solids generated from the sludge handling system will
be dried and hauled away for final disposal at a
landfill. The effluent will be combined with the WWTP
effluent and injected into the strata by means of the
existing injection wells.

Mr. F. Rodriguez

-2-

File No.: 93-527

- 2) DDFW is concerned with the use of herbicides on the site for grounds maintenance and leaching of said herbicides into the adjacent wetlands.
- 3) Impacts to the adjacent James Cuzbell National Wildlife Refuge are not adequately addressed in the DEA.
- 4) The DEA is not clear on what the disposition of the byproducts will be once they are delivered to the facility and treated; is it to be ejected into the adjacent lands, injected into the strata, hauled off in trucks, or piped into a disposal site?
- 5) Will the treatment plant and receiving body for the sludge and solids be able to handle the increased volume of septage?

Division of Aquatic Resources

The Division of Aquatic Resources (DAR) comments that the final EA should describe mitigation measures that would minimize erosion and storm runoff during construction and prevent all septage from entering the water table either as a result of percolation through the soil or via runoff. Also, precautions should be taken to prevent contaminants from entering the nearby Kii Pond, which is part of the National Wildlife Refuge, or the nearby coastal waters.

Finally, insufficient information has been provided to determine whether the proposed septage facility at the Kahuku WTP will be designed to accept and process commercial, industrial and agricultural wastes from the private haulers. This information should be provided in the final EA.

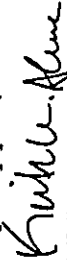
Historic Preservation Division

The Historic Preservation Division (HPD) comments that a review of their records shows that there are no known historic sites at the proposed project location. The location map in the DEA shows that the project will be located on an old military runway. Since the construction of the runway would have destroyed any historic sites that were present, HPD believes that this project will have "no effect" on historic sites.

We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to contact Steve Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,


KEITH W. AHUE

Mr. Keith W. Ahue


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5. The existing Kahuku WTP is presently treating the combined flow of septage wastes and wastewater from the collection system. Once the septage handling facilities are completed, the existing WTP will treat only wastewater from the collection system with the septage handling facilities treating septage wastes separately. This method of providing separate treatment will prevent the occurrence of a "treatment process upsetting event" at the existing WTP due to high strength septage wastes. It will also enhance the treatability of wastewater.
6. The general construction notes in the construction plans will cover the Division of Aquatic Resources concerns on potential erosion and storm runoff during the construction phase. The notes will include the requirements of the State Department of Health NPDES program to prevent surface runoff into coastal zone areas. Reference to the Kii Pond will also be made in the construction documents. Septage wastes will be limited to cesspool waste, chemical toilet waste, restaurant grease trap waste, and the like to be treatable in the septage handling facilities.
7. We acknowledge the Historic Preservation Division's statement of "No effect on historic sites."

Thank you for your continued cooperation.

Very truly yours,


C. MICHAEL STREET
Area Director and Chief Engineer