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DEPARTMENT OF LAND UTILIZATION
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OFF. OF ENVIRONMENTAL
QUALITY CONTROL

CHAPTER 343, HRS
ENVIRONMENTAL ASSESSMENT/DETERMINATION
Negative Declaration

Recorded Owner/Applicant	:	Peter A. Paanakker <i>Seawall</i>
Agent	:	Norman L. Bechtold
Location	:	44-391 Kaneohe Bay Drive, Kaneohe, Oahu
Tax Map Key	:	4-4-6: 01
Request	:	Construct CRM Seawall Within 40-foot Shoreline Setback
Determination	:	Environmental Impact Statement (EIS) Not Required

Attached and incorporated by reference is the environmental assessment prepared by the applicant for the project.

On the basis of the environmental assessment, we have determined that an Environmental Impact Statement is not required.

APPROVED

Donald A. Clegg

DONALD A. CLEGG

Director of Land Utilization

DAC:lg

1990-12-23-0A-FAA-

FILE COPY

ENVIRONMENTAL ASSESSMENT

*** PAANAKKER PROPERTY SEAWALL***

KANEOHE, OAHU, HAWAII

TMK 4-4-06:01

August 1990

ENVIRONMENTAL ASSESSMENT

**PAANAKKER PROPERTY SEAWALL
Kaneohe, Oahu, Hawaii**

TMK 4-4-06:01

Prepared For:

Mr. Peter Paanakker
44-391 Kaneohe Bay Drive
Kaneohe, Hawaii 96744

Prepared By:

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(808) 528-5228

August 1990

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**ENVIRONMENTAL ASSESSMENT
FOR
PAANAKKER RESIDENCE SEAWALL
KANEHOHE, OAHU, HAWAII**

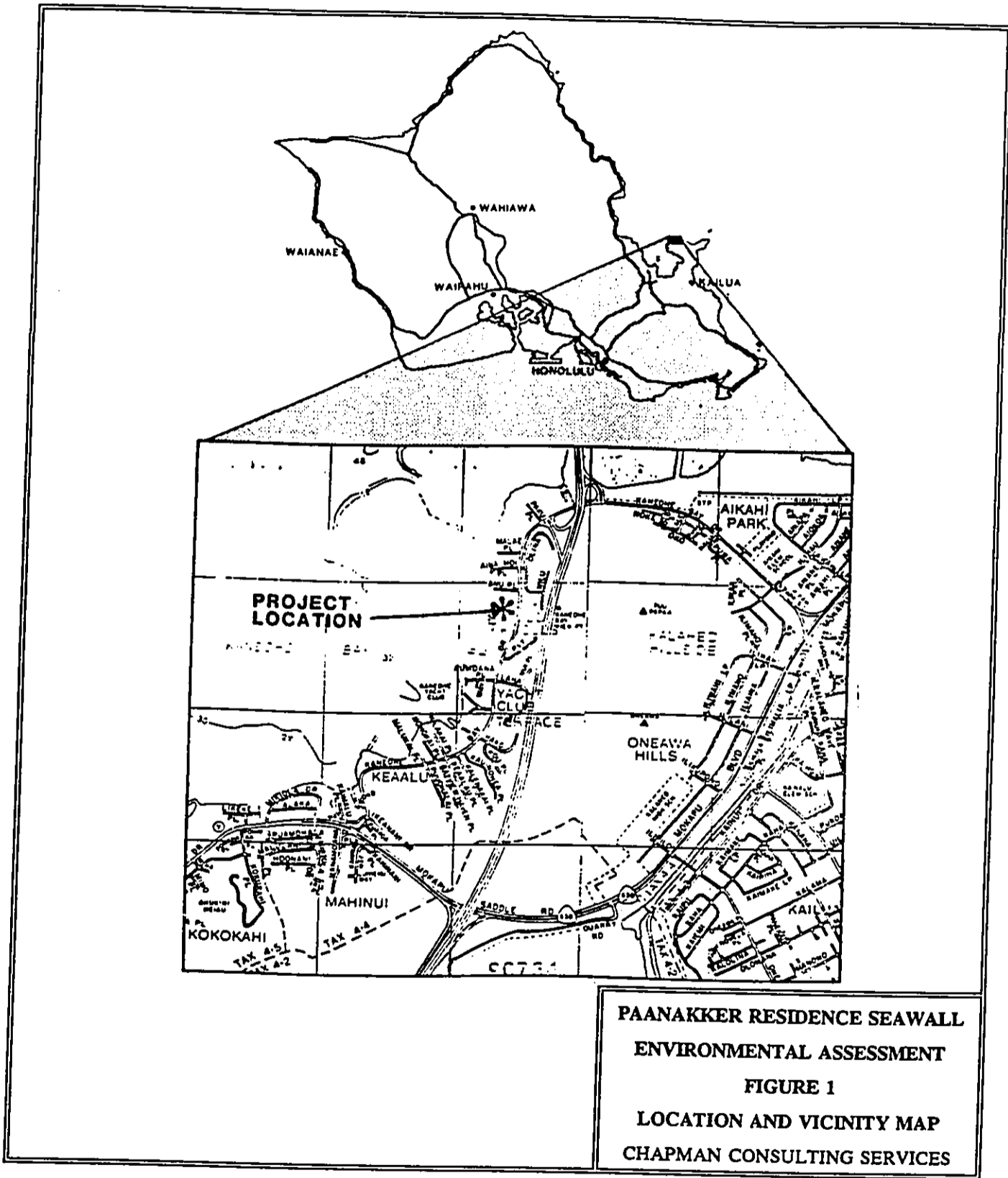
1. INTRODUCTION

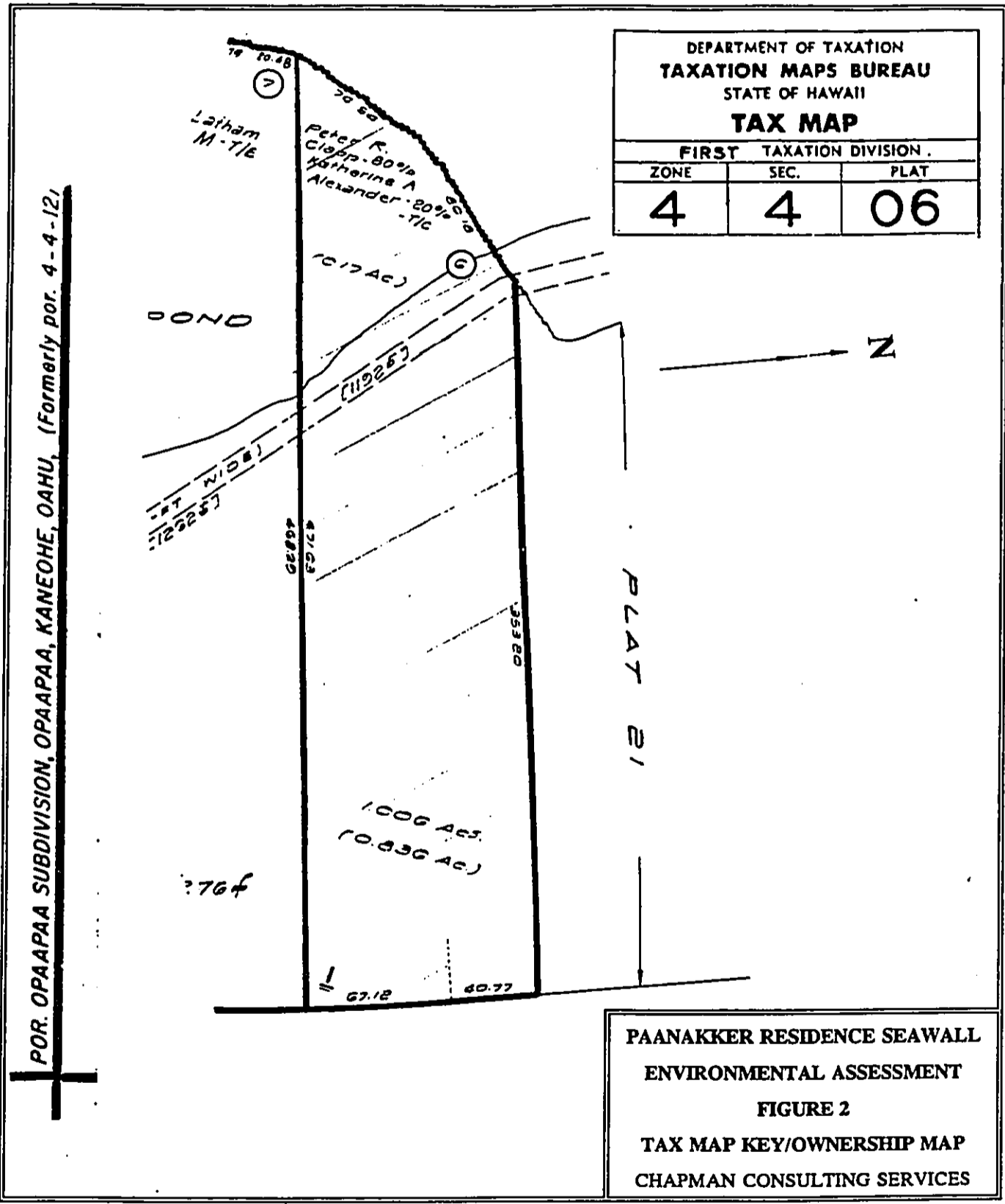
1.1 PURPOSE AND CONTENT OF THIS DOCUMENT

This Environmental Assessment (EA), is in support of a Shoreline Setback Variance Application for the repair and construction of a seawall fronting a single family residence on Kaneohe Bay, Kaneohe, Oahu, Hawaii. This EA has been prepared in accordance with the provisions of the City and County of Honolulu, Department of Land Utilization Instructions for Submitting and filing a Shoreline Setback Variance Application, Ordinance No. 4631, as amended; Hawaii Revised Statutes (HRS), Chapter 343; and Title 11, Department of Health, Chapter 200, Environmental Impact Rules, Sections 11-200-9 through 11-200-13. This EA represents the initial assessment of potential environmental impacts of the proposed project. A description of the existing and proposed project (action); the relation of the project to the 40-foot shoreline setback line; the affected environment; alternatives considered to date; proposed mitigation measures; preliminary impact determinations based on the information presented herein; and the reasons supporting those determinations are provided. The information contained herein has been drawn from site visits, environmental, planning and preliminary engineering studies, as well as plans prepared for the proposed project. Information has also been drawn from generally available sources regarding the environmental characteristics of the project site and surrounding area.

1.2 REGIONAL SETTING

The proposed project, which consists of the construction of a lava rock seawall across the entire bayfront of the subject property, is located on the southeastern shoreline of Kaneohe Bay, at 44-391 Kaneohe Bay Drive (Figure 1). The project site is a single family residence identified as Tax Map Key (TMK) 4-4-06:01 (Figure 2). The property is further identified as Lot 6, Opaapaa Subdivision and is about one-acre in size.





1.3 REQUESTED GOVERNMENTAL ACTION

To allow construction of the seawall across the bayfront of the property and the return section of wall, the fee owner is requesting that the City and County of Honolulu, Department of Land Utilization, grant a Shoreline Setback Variance (SSV) for the proposed construction activities. The seawall is necessary to provide security and to protect the property from continuing erosion due to tidal action and surface water runoff flow through the City and County of Honolulu drainage ditch. Should the SSV not be granted, the property would continue to erode, thereby infringing on the fee owner's quiet enjoyment of his property. Following issuance of the requested SSV, the property owner would be requesting appropriate building permits from the City and County for the construction of the seawall

2. GENERAL DESCRIPTION OF THE PROPOSED ACTION'S TECHNICAL, SOCIAL, ECONOMIC AND ENVIRONMENTAL CHARACTERISTICS

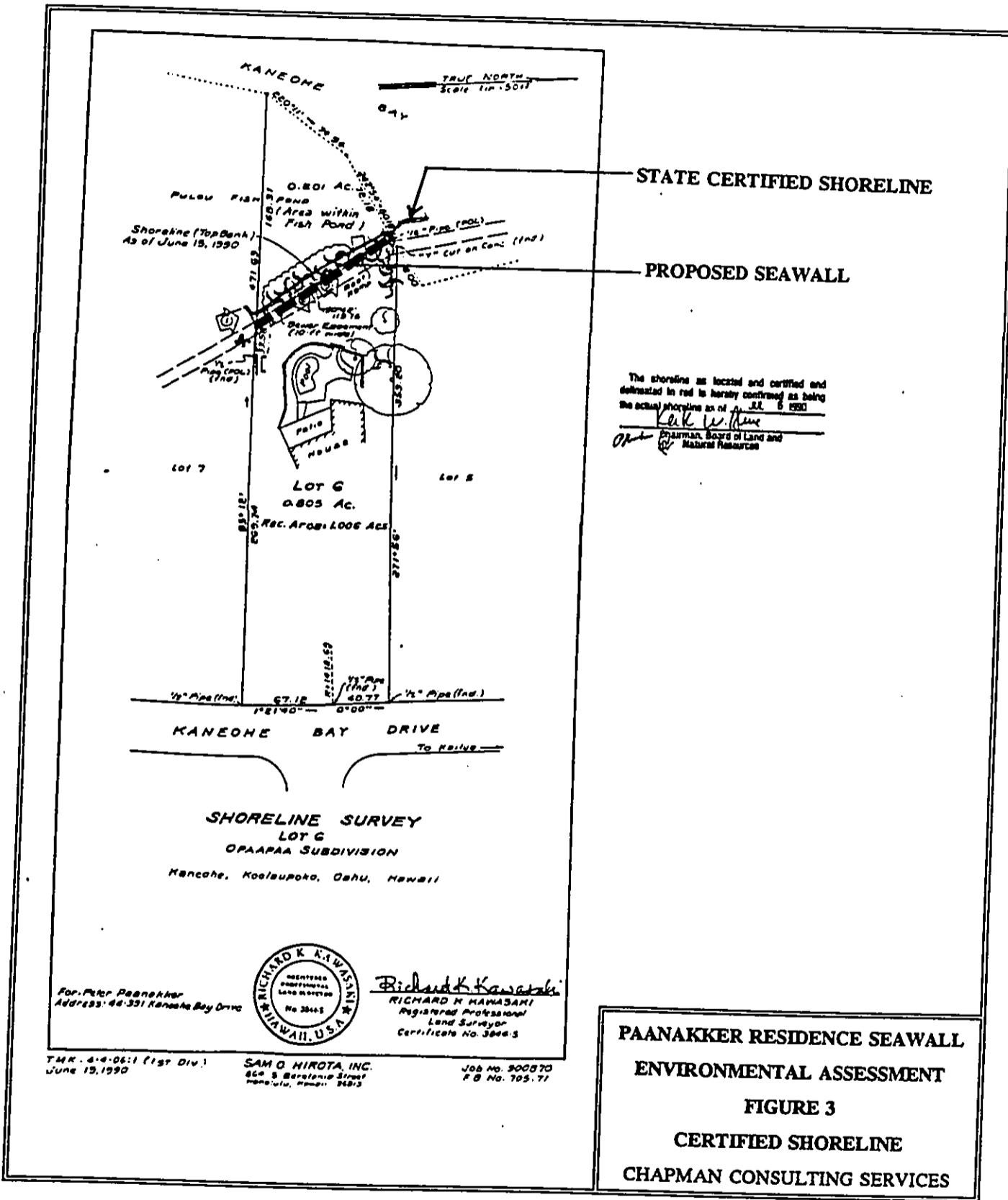
2.1 DESCRIPTION OF THE PROPOSED PROJECT

The proposed project includes the following items:

- Acquisition of a Shoreline Setback Variance for the repair and construction of a seawall;
- Design of the seawall repairs and construction;
- Repairing and constructing the seawall.

The first two listed items are being performed concurrently.

As indicated above, the project site is located on Tax Map Key parcel 4-4-06:01, which is owned in fee by Mr. Peter Paanakker. TMK 4-4-06:01 has an area of approximately 1.0 acres and a shoreline frontage of about 120 feet. The new seawall would be constructed mauka of the state certified shoreline (Figure 3) all along the bay front of the property. All work would be performed within the property boundaries. There would be no encroachment on state submerged or tidal lands and the seawall would not affect the present limited public access along the shoreline. The single family residence located on the property, and all appurtenances thereto, are mauka of the 40-foot shoreline setback line. No other changes to the uses of the property or structures located on the property are contemplated under this action.



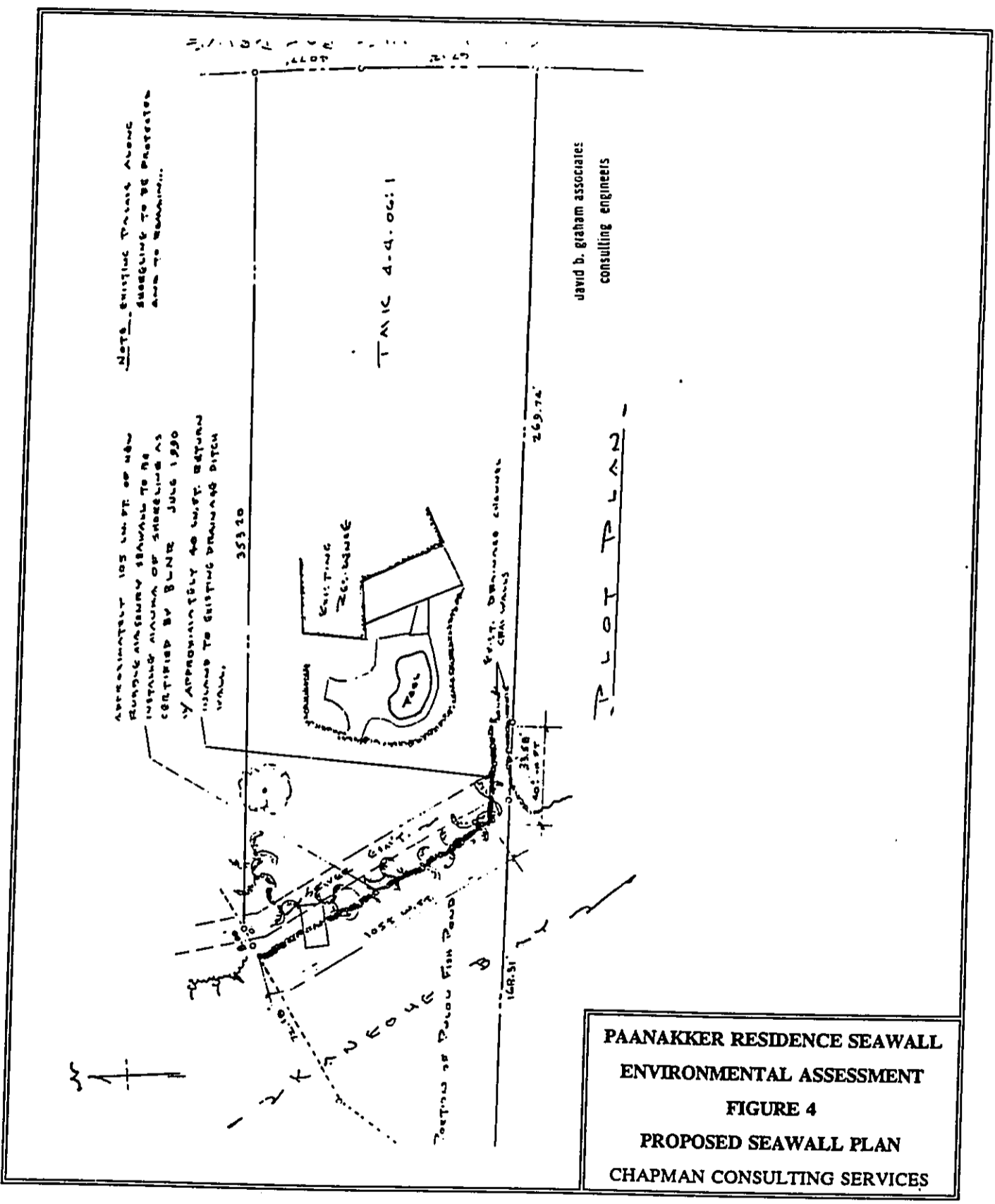
2.2 TECHNICAL DESCRIPTION OF THE PROPOSED ACTION

The proposed seawall would be constructed of concrete rubble masonry with cement mortar binding individual rocks in place and a 3-inch concrete cap on top of the wall. The seawall would be constructed on a concrete footing approximately 3 feet 10-inches wide at the bottom and 6 inches high on top of a 2-inch crushed rock base. Depending on the slope of the existing grade, from 4 feet to about 3 feet of the wall would be below grade and the wall would extend above grade, on the makai side, about 2 feet. The seawall will be about 16 inches wide at the top and will require trenching to construct the footing and below grade sections. The footing/below grade section trench will be back-filled with the native materials removed during trenching. Construction details are shown on Figures 4 and 5.

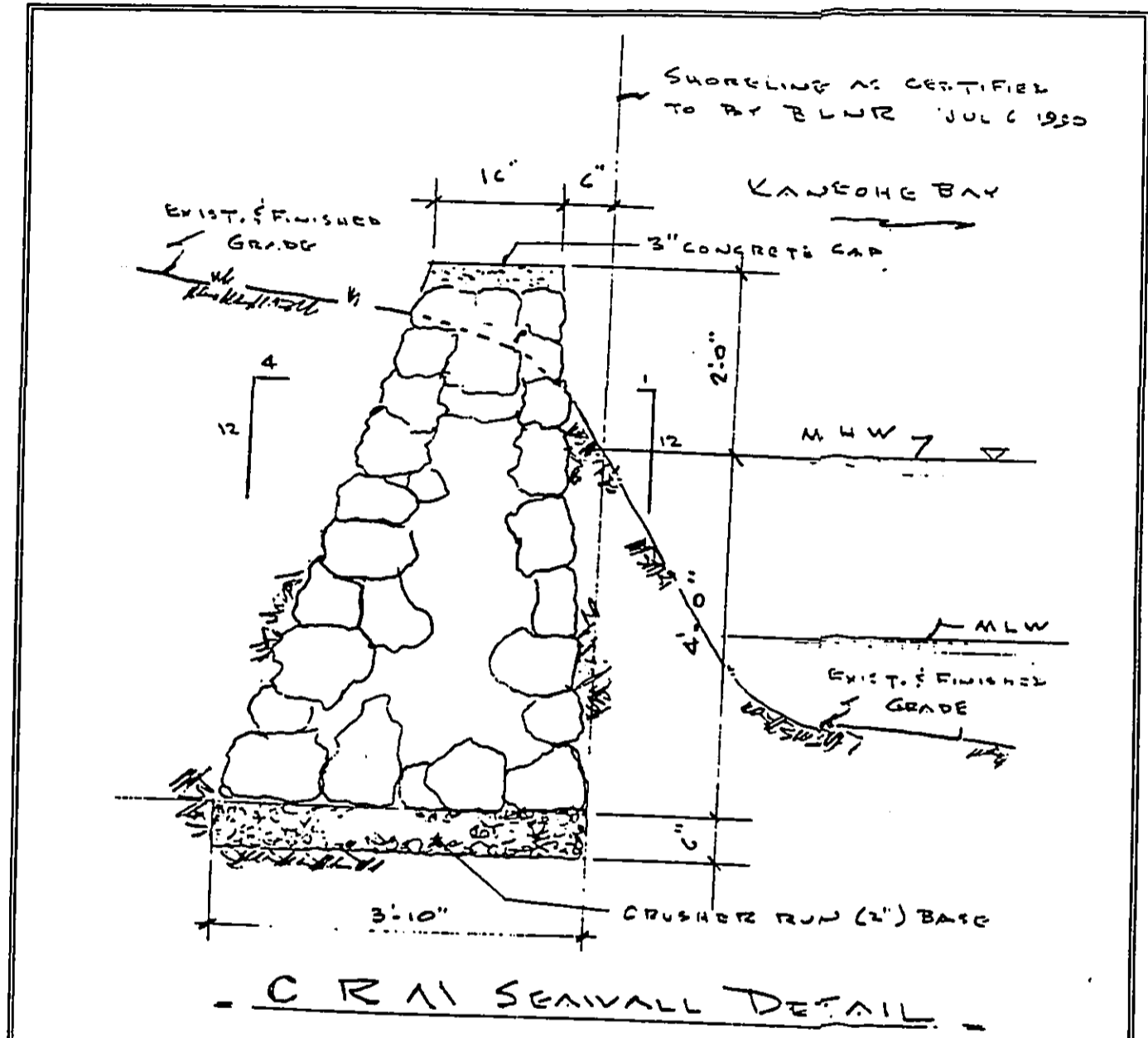
The new seawall is not expected to have any impact of the beach profile, offshore depths, foreshore or backshore areas, littoral transport, cyclical or abnormal changes in beach form, changes to water level, wave runoff or changes in sources of sand. As indicated in Figure 4, the new seawall will be constructed above the mean high water (MHW) level. There is no beach fronting the property at present. The shoreline slopes from the state certified shoreline to the tidal submerged land area, which is a muddy, soft silt bottom. The property is protected from normal and storm waves by a mangrove island fronting the property and by the fact that the property is located on the extreme southeastern side of Kaneohe Bay. Storm and/or tsunami waves have not affected the property in the past. The new seawall has been designed to protect the property from further erosion and normal and storm waves, should they reach the property. The structural life expectancy of the wall is 30 years.

2.3 AFFECTED ENVIRONMENT

The project site is located on the southeastern shoreline of Kaneohe Bay, within the Kaneohe Bay front residential community, approximately one-quarter mile north of Kaneohe Yacht Club. The preset State Land Use classification of the property is Urban and the present county zoning is R-3. The property is presently designated residential on the City and County of Honolulu Koolaupoko Development Plan Land Use Map (Ordinance No. 83-8, May 10, 1983). There are no public facilities planned for the property as indicated on the City and County of Honolulu Koolaupoko Development Plan Public Facilities Map (Ordinance 83-8, May 10, 1983) although Kaneohe Bay Drive is programmed for additional right-of-way beyond the 6-year planning period. A 10-foot wide sewer easement crosses the property within the 40-foot



PAANAKKER RESIDENCE SEAWALL
ENVIRONMENTAL ASSESSMENT
FIGURE 4
PROPOSED SEAWALL PLAN
CHAPMAN CONSULTING SERVICES



david b. graham associates
consulting engineers

PAANAKKER RESIDENCE SEAWALL
ENVIRONMENTAL ASSESSMENT
FIGURE 5
SEAWALL CROSS SECTION
CHAPMAN CONSULTING SERVICES

shoreline setback line. In addition, there is a City and County of Honolulu drainage channel that runs along and within the southern boundary of the subject property. The proposed seawall project will not involve any changes to the drainage channel and/or its entry into Kaneohe Bay. However, the new wall will include a return section to meet the existing drainage channel wall. The federal Flood Insurance Rate Map (FIRM) for the subject property designates the property as Zone D, areas in which flood hazards are undetermined. This is equal to the LUO Flood Hazard District designation for the property. There are no other geologically hazardous land conditions to which the property is subjected. Because of its location and the protection offered within Kaneohe Bay by sandbars, reefs and the mangrove island fronting the property, it is unlikely that high waves or storm waves, other than those caused by a catastrophic hurricane or tsunami, would affect the subject property. The seawall has been designed to provide protection against further erosion of the property.

The coastal views of the proposed project site are shown on Figures 6A through 6D. As shown, the site is typical of many single family residences fronting Kaneohe Bay. The proposed project is not expected to significantly affect these views. The nearest public shoreline access point is approximately one-quarter mile north of the subject property. However, because of the muddy bay bottom characteristics of the site, few people utilize the public access and use of the shoreline is generally limited to immediate area residents. Public shoreline access will not be affected by the proposed project.

The vegetation of the shoreline and area immediately offshore is dominated by the mangrove island directly makai and a part of the subject property. The flora of the subject property is typical of other single family residences in the area and contains a predominance of introduced landscape plants. There are no known endangered or threatened species of plants or candidate species of plants on the project site.

Similarly, the fauna of the project site is typical of the urban Kaneohe area and is dominated by introduced species, e.g., doves, mynas, sparrows, etc. The submerged lands makai of the subject property are muddy and support a limited marine fauna typical of the muddy bay conditions. A few rock crabs, sea cucumbers, and a few species of fish, mostly tilapia, are the primary marine/brackish water species. There are no known endangered or threatened species of terrestrial or marine wildlife inhabiting or frequenting the subject property.



FIGURE 6 A
VIEW OF SHORELINE LOOKING SOUTH



FIGURE 6 B
VIEW OF SHORELINE LOOKING NORTH

PAANAKKER RESIDENCE SEAWALL
ENVIRONMENTAL ASSESSMENT
FIGURE 6 A & B
VIEWS OF PROPERTY
CHAPMAN CONSULTING SERVICES



FIGURE 6 C
VIEW ALONG SHORELINE
LOCATION OF SEAWALL



FIGURE 6D
VIEW OF CITY AND COUNTY
OF HONOLULU DRAINAGE CHANNEL

PAANAKKER RESIDENCE SEAWALL
ENVIRONMENTAL ASSESSMENT
FIGURE 6 C & D
VIEWS OF PROPERTY
CHAPMAN CONSULTING SERVICES

The proposed project is not expected to significantly affect the geology, hydrology or drainage of the project area; the air or noise quality aspects of the project area; or the public facilities and services of the area. Similarly, there are no known archaeological, cultural or historical features or sites within the project boundaries.

3. IDENTIFICATION AND SUMMARY OF MAJOR IMPACTS, ALTERNATIVES CONSIDERED AND MITIGATION MEASURES

3.1 MAJOR IMPACTS

The proposed seawall project will generally not affect the existing physical, natural, social or economic environmental characteristics of the project site or area. There will be some minor alterations to the general topography of the property and some limited clearing of vegetation, but these actions are expected to be minimal, limited to the immediate seawall area and not affect the overall environmental characteristics of the area or project property. The economic impacts of the project would be limited to the value of the new seawall construction and the protection afforded the property.

3.2 ALTERNATIVES CONSIDERED

In keeping with applicable EIS rules and regulations and in keeping with sound land planning practices, those alternatives which could feasibly meet the objectives of the proposed action, even though more costly, have been examined. The alternatives investigated have included utilizing another location within the property boundaries for the seawall; the proposed action (construction of a new seawall); and the alternative of "no-action".

The alternative of utilizing other possible building sites within the property boundaries was investigated and rejected because it would not accomplish the purposes of the proposed project, i.e., stop shoreline erosion of the property. Construction of the seawall at some location other than immediately mauka of the certified shoreline would not accomplish the project purpose. The alternative of "no action", similarly would result in continued erosion of the property and the inability to meet the project objectives.

3.3 PROPOSED MITIGATION MEASURES

The mitigation measures proposed to ensure that potential adverse environmental impacts are minimized include limiting construction activities to daytime hours and adherence to federal, state and county environmental protection, health, safety and construction rules and regulations. Care will be taken during construction of the seawall to ensure that construction materials and debris do not enter the bay waters. Other mitigation measures do not appear warranted.

4. FINDINGS

In considering the significance of potential environmental effects, the applicant has considered the sum of effects on the quality of the environment and evaluated the overall cumulative effects of the proposed action. The applicant has considered every phase of the proposed action, the expected consequences, both primary and secondary and the cumulative as well as the short- and long-term effects of the proposed action. As a result of these considerations, the applicant has determined that:

1. The proposed action does not involve an irrevocable commitment to loss or destruction of any significant natural or cultural resource;
2. The proposed action increases the range of beneficial uses of the environment;
3. The proposed action is in concert with the State and County's long-term environmental policies, goals and guidelines as expressed in Chapter 343 HRS, and any revisions and amendments thereto, court decisions and executive orders;
4. The proposed action does not substantially adversely affect the economic or social welfare of the community or state;
5. The proposed action does not involve substantial secondary impacts, such as population changes or effects on public facilities that are not already contemplated;
6. The proposed action does not substantially affect public health;
7. The proposed action does not involve substantial degradation of environmental quality;

8. The proposed action does not substantially affect rare, threatened or endangered species or habitats;
9. The proposed action does not detrimentally affect air or water quality or ambient noise levels;
10. The proposed action does not substantially affect an environmentally sensitive area such as flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary or coastal waters; and,
11. The proposed action is individually limited and cumulatively does not have a considerable effect upon the environment or involve a larger commitment for larger actions.

Further, it appears that the proposed action is compatible with the locality and surrounding project area and appropriate to the physical conditions and capabilities of the area to be served; the existing physical and environmental aspects of the subject area will be preserved; the proposed action will not result in any significant adverse effects to the environment; and the proposed action is in keeping with the objectives and purposes of the project site and area. The applicant will be responsible for and comply with all applicable statutes, ordinances and rules of the federal, state and county governments.