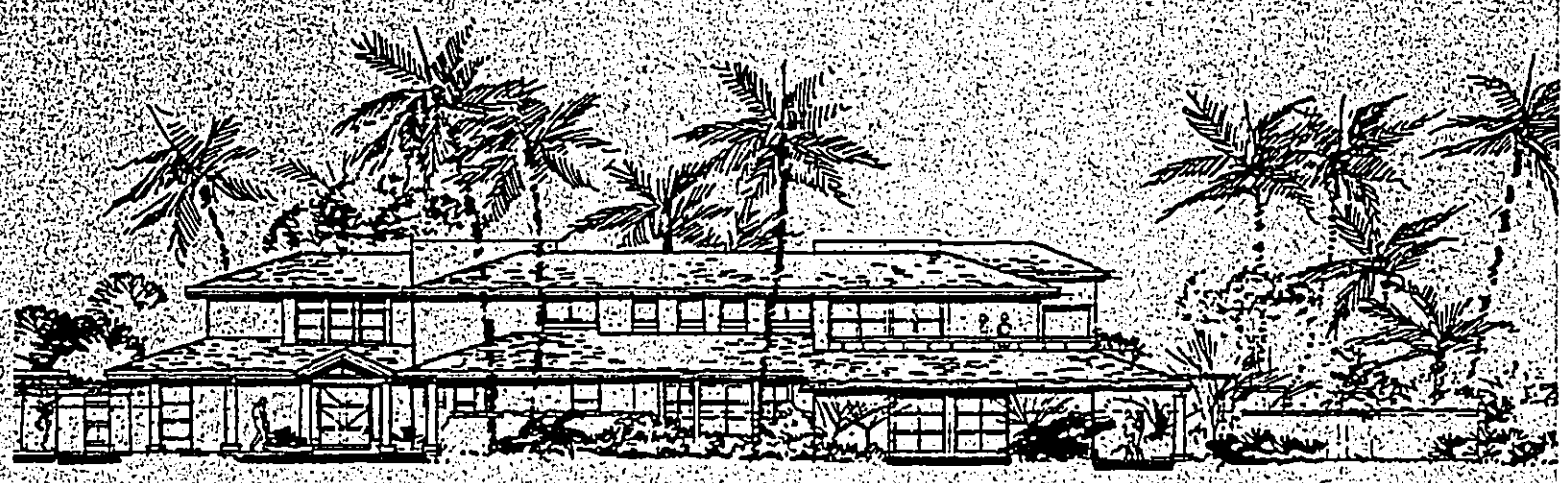
1991-05-08-OA-FEA

HALE O'KAINALU

Environmental Assessment and Special Management Area Permit Application

TMK 4-3-18: 67



FEBRUARY 1991

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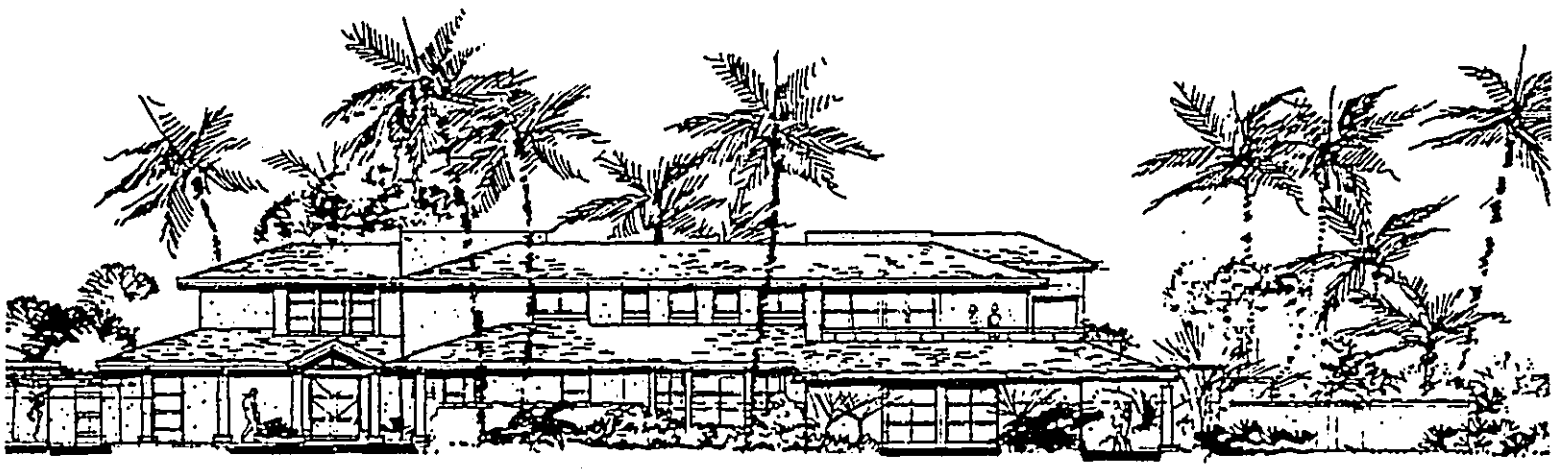

FEBRUARY 1991

CITY AND COUNTY OF HONOLULU
DEPARTMENT OF LAND UTILIZATION
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

DLU MASTER APPLICATION FORM

Additional data, drawing/plans, and fee requirements are listed on a separate sheet titled "Instructions for Filing." *PLEASE ASK FOR THESE INSTRUCTIONS.*

All specified materials and fees must accompany this form; incomplete applications could delay processing. You are encouraged to consult with department staff in completing the application. Please call the appropriate phone number given in the "Instructions for Filing" sheet.
Please print legibly or type the required information.

PERMIT REQUESTED (Check one or more as appropriate)

Clusters:
- ☐ Agricultural Cluster
- ☒ Cluster Housing
- ☐ Country Cluster

Conditional Use Permits:
- ☐ Type 1 ☐ Type 2

- ☐ Existing Use
- ☐ Flood Hazard Variance

- ☒ Park Dedication
- ☐ Plan Review Use
- ☐ Planned Development-Housing
- ☐ Shoreline Setback Variance
- ☐ Site Plan Review

- ☐ Site Development Plan
- ☐ Special District. _____ (Indicate District)

- ☒ Special Management Area Permit/Assessment
- ☐ State Special Use Permit
- ☐ Subdivision
- ☐ Sunlight Reflection
- ☐ Variance from LUO Sec.(s): _____

- ☐ Waiver (public uses/utilities)
- ☐ Zero Lot Line
- ☐ Zone Change. From _____ to _____
- ☐ Zoning Adjustment, LUO Sec (s): _____

TAX MAP KEY(S): 4-3-18: 67
LOT AREA: 94,656 square feet
ZONING DISTRICT: R-10 Residential STATE LAND USE DISTRICT: Urban

STREET ADDRESS/LOCATION OF PROPERTY: 510 North Kalaheo Avenue
Kailua, Hawaii 96734

RECORDED FEE OWNER:
Name: Pan Pacific Ventures
Mailing Address: Attn: David Cole
510 North Kalaheo Avenue
Phone Number:
Signature:

APPLICANT:
Name: Mr. & Mrs. David Cole
Mailing Address: 510 North Kalaheo Avenue
Kailua, Hawaii 96734
Phone Number:
Signature:

PRESENT USE OF PROPERTY/BUILDING: Residential

AUTHORIZED AGENT/CONTACT PERSON:
Name: CJS Group Architects
Mailing Address: 1188 Fort Street Mall, Suite 200
Honolulu, Hawaii 96813
Phone Number: 524-4485
Signature:

PROJECT NAME (if any): Hale O' Kainalu

PROJECT PROPOSAL (Briefly describe the proposed activity or project) Cluster housing development to permit construction of five dwellings on 94,656 square foot parcel. Present R-10 zoning would allow development of nine units.

FOR DEPARTMENT USE ONLY FILE NO. _____
Submitted Fee Amount: $ _____
Date Application Accepted: _____ Accepted By: _____
Date of Public Hearing: _____
- ☐ Approved
- ☐ Approved with conditions indicated below.
- ☐ Denied for reason(s) given below.
- ☐ Exempt project.

THIS COPY, WHEN SIGNED BELOW, IS NOTIFICATION OF THE ACTION TAKEN.

Signature Title Date

The above approval does not constitute approval of any other required permits, such as building permits.

DLU 190 56 (REV 2/87)

Hale O'Kainalu

Environmental Assessment and Negative Declaration

TMK 4-3-18: 67

February 1991

Prepared by:
PBR HAWAII

Pepared for:
MR. and MRS. DAVID COLE

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HALE O'KAINALU
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I. GENERAL INFORMATION

A. APPLICANT:

Mr. and Mrs. David Cole
510 North Kalaheo Avenue
Kailua, Hawaii 96734

B. RECORDED FEE OWNER:

Pan Pacific Ventures
Attn: Mr. David Cole
510 North Kalaheo Avenue
Kailua, Hawaii 96734

C. AGENT:

CJS Group Architects Ltd.
1188 Fort Street Mall, Suite 200
Honolulu, Hawaii 96813
(808) 524-4485

D. TAX MAP KEY:

Lot 315 of Land Court Application 323 (Map 173) at Pueohala, Kailua, Koolaupoko, Oahu, Hawaii. TMK: 4-3-18: 67

E. LOT AREA:

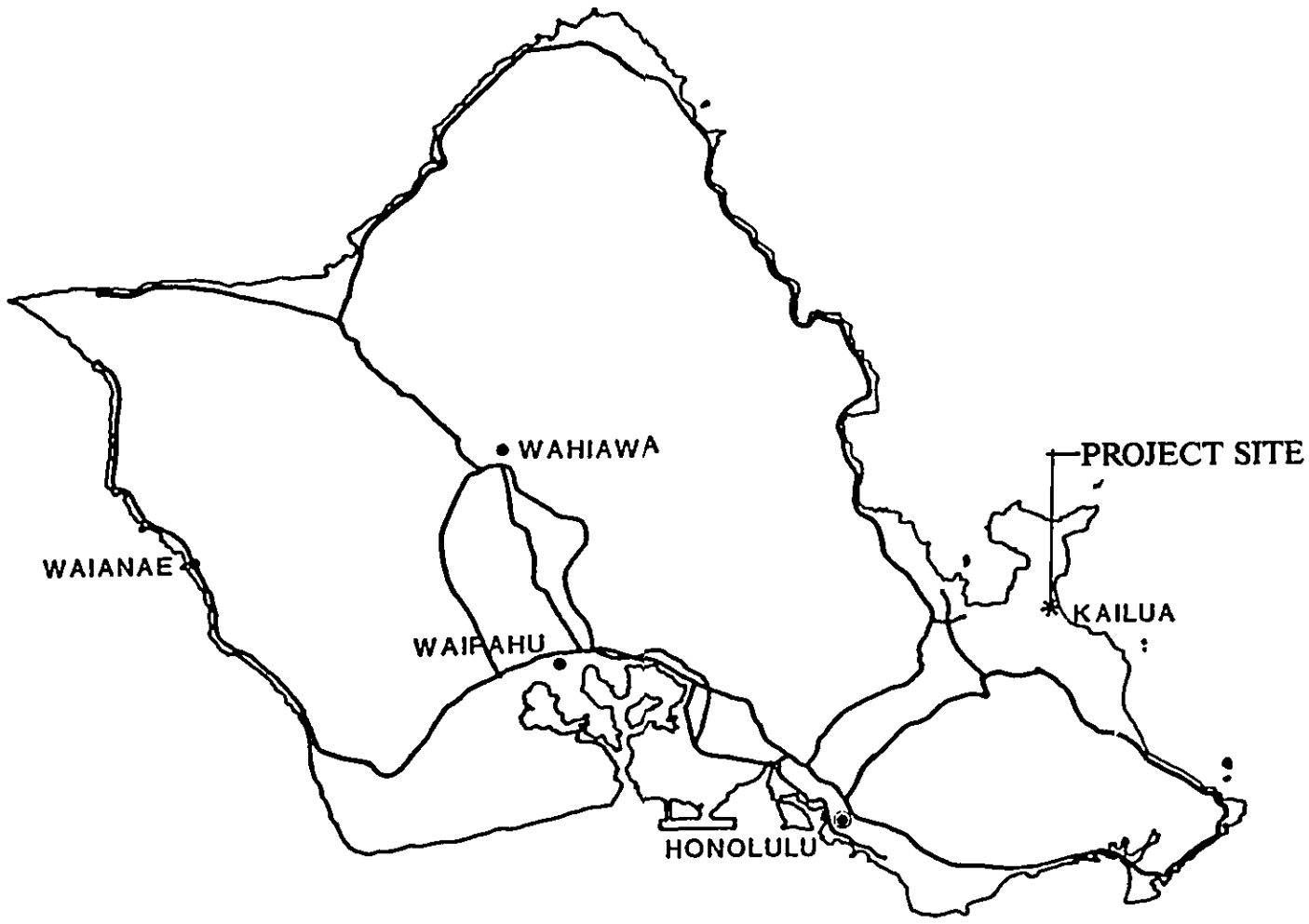
94,656 square feet (Acreation may expand parcel area in future)

F. AGENCIES CONSULTED IN MAKING ASSESSMENT:

City and County of Honolulu Department of Land Utilization
City and County of Honolulu Department of General Planning
City and County of Honolulu Department of Public Works
State of Hawaii Department of Land and Natural Resources
State of Hawaii Historic Sites Preservation Division

G. APPROVING AGENCY:

Director of Department of Land Utilization
650 South King Street
Honolulu, Hawaii 96813



ISLAND OF OAHU

FIGURE 1
ISLAND LOCATION MAP
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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II. DESCRIPTION OF THE PROPOSED ACTION

A. GENERAL DESCRIPTION

The subject property is located in Kailua, Oahu, makai of North Kalaheo Avenue and adjacent to Kailua Beach (see Figure 2). The property on which the proposed project would be developed is presently used for residential purposes with large landscaped lawn areas. All adjacent lands are also utilized for residential purposes or for ocean based recreation associated with Kailua Beach. The entire site is owned in fee by Mr. and Mrs. David Cole and their four children, doing business as Pan Pacific Ventures. The site is located entirely within the "R-10 Residential" zoning district and entirely within the City and County of Honolulu Special Management Area (SMA). Access from North Kalaheo Avenue is provided by a private roadway shared by the Applicant and two other properties who individually reside on TMK's: 4-3-18: 65, 66.

The conceptual plan for the proposed Cluster-housing project (tentatively named Hale O' Kainalu) includes three primary structures. One structure will serve as a single family dwelling, while the remaining two structures will contain two dwellings each. the total number of dwelling units planned is five. Each unit will utilize extensive landscaping, outdoor gathering spaces, swimming pools, and a garage. A common driveway and "entry court" will provide vehicular access to the units. A tennis court is also planned to provide additional recreational opportunities to project residents. This facility is intended to satisfy the City's park dedication requirements.

Specifically, the overall layout and design of the conceptual plan is reflected in Alternative #1 and Alternative #2. Each alternative contains five dwelling units of approximately the same interior square footage, height, and sited in accordance with all applicable setbacks. The primary difference between the two alternatives involves the configuration of the interior dwellings within the makai structures. Where the two dwelling units illustrated in Alternative #1 share a common wall and are located "side-by-side", the dwellings of Alternative #2 share a common ceiling/floor and are located on separate upper and lower floors. A secondary benefit of Alternative #2, is reflected in the distance between structures and the landscape design opportunities afforded by the approximately 70' wide central "fairway" and view corridor. This amenity provides an extensive use of exterior spaces, heavily landscaped, with a "natural" swimming pool constructed of lava rock and other similar materials.

All unit types will contain 4 bedrooms and 6 bathrooms. The mauka house (Structure #1) contains 5,250 square feet, while each of the makai structures contain 5,480 square feet. In addition, five garages are each 600 square feet and a tennis pavillion is 415 square feet. For both alternatives shown, the mauka house (Structure #1) is identical, and comprised of a single family detached unit located in the area of the small knoll. Two separate makai structures (identified as Structures #2 and #3) will contain four of the

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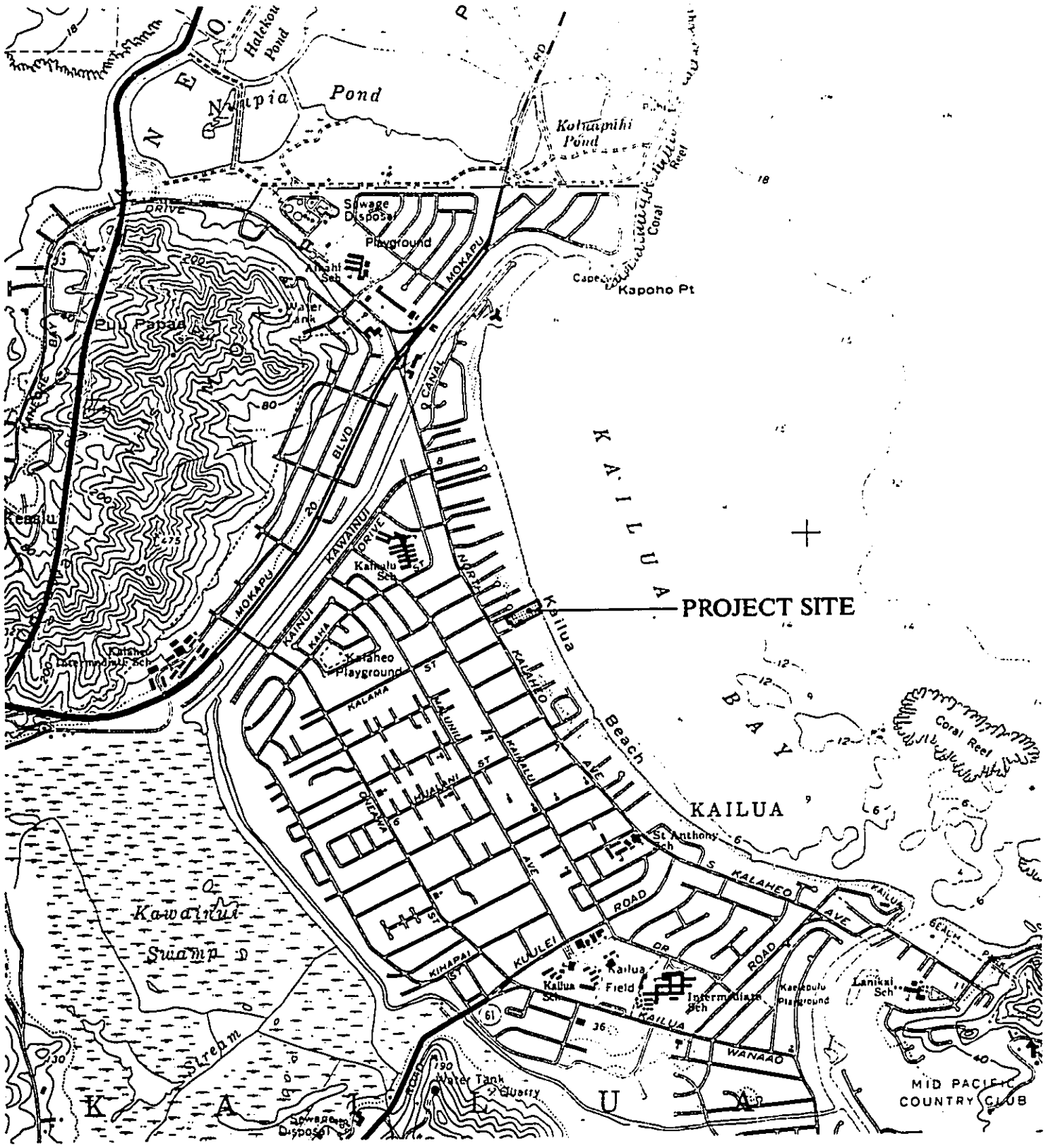

FIGURE 2
REGIONAL LOCATION MAP
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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units, but be attached by sharing a common wall (Alternative #1, unit types B and C) or by sharing a common ceiling/floor (Alternative #2, unit types B and C). A table of unit sizes is shown below for each alternative.

Unit Type	Square Feet	Bedroom/Baths
A (Structure #1)	5,250	4/6
B (Alt #1)	5,480	4/6
C (Alt #1)	5,480	4/6
B (Alt #2)	5,480	4/6
C (Alt #2)	5,480	4/6

The above calculations exclude 600 square feet for garages and have been calculated based on the Land Use Ordinance formula for determining square footage.

Unit Type A (Both Alternatives #1 and #2) Two story dwelling with living/dining, kitchen, and family rooms at 1st floor level with 2 bedrooms stepping up on higher grade levels to the master suite on the 2nd floor. A study/guest room is freestanding although linked with a roofed breezeway. A garage is also linked to the main building with a roofed breezeway.

Unit Type B (Alt #1) Two story building with living, dining, study, and guest rooms on the 1st floor level. Bedrooms are located on the 2nd floor. A garage is linked to the main building with a roofed breezeway.

Unit Type C (Alt #1) Same general description as Type B although "mirror image". As indicated, Units B and C of Alternative #1 share a common wall.

Unit Type B (Alt #2) Groundfloor dwelling unit with living, dining, study/library, guest room and bath, powder room, bedrooms, and master bedroom. Rooms are located either side of a central "spine" hallway with windows at each end to serve as a focal point. The garage is linked to the main building with a roofed breezeway. A formal entrance from the central "fairway".

Unit Type C (Alt #2) Same general description as Type B, although located on second story level. Rooms include living/dining, study/library, lanai and covered breezeway from garage. Same general description as Type B, with rooms organized along either side of a central spine gallery.

The projected sale price of the units would be at the upper end of the residential products offered in the Kailua area and would be sold in fee simple. No rentals are planned. If all

entitlements are in place by mid-1991, unit construction can begin in early 1992, and be completed within 12 to 18 months. No government subsidies are involved in this project.

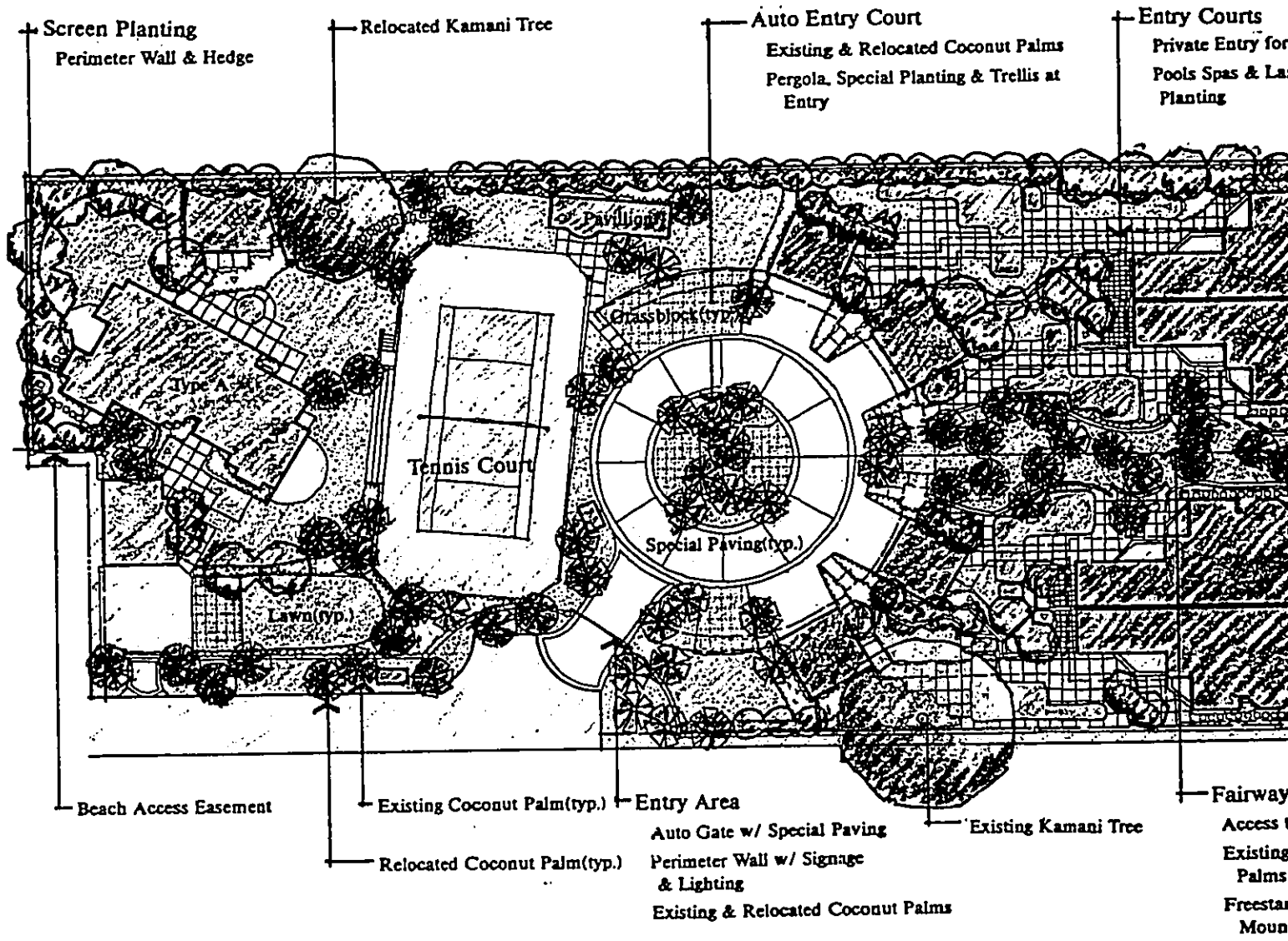
In planning a project below the allowed zoning density, it is the applicant's intent to maintain the low density residential character of the surrounding neighborhood, preserve the heavily landscaped aesthetic quality of the site, and reduce the visual impact of residential structures proximate to Kailua Beach. No variances to height, side, front, or shoreline setbacks will be necessary. It is anticipated that the project development and construction period will require approximately 12 - 18 months.

The purpose of the proposed project is to provide expanded housing opportunities while developing a design with maximum flexibility to fully utilize the physical attributes of the site. A low density "in-fill" project of this kind will be accomplished with no expenditures of public funds while increasing the efficiency of existing infrastructure.

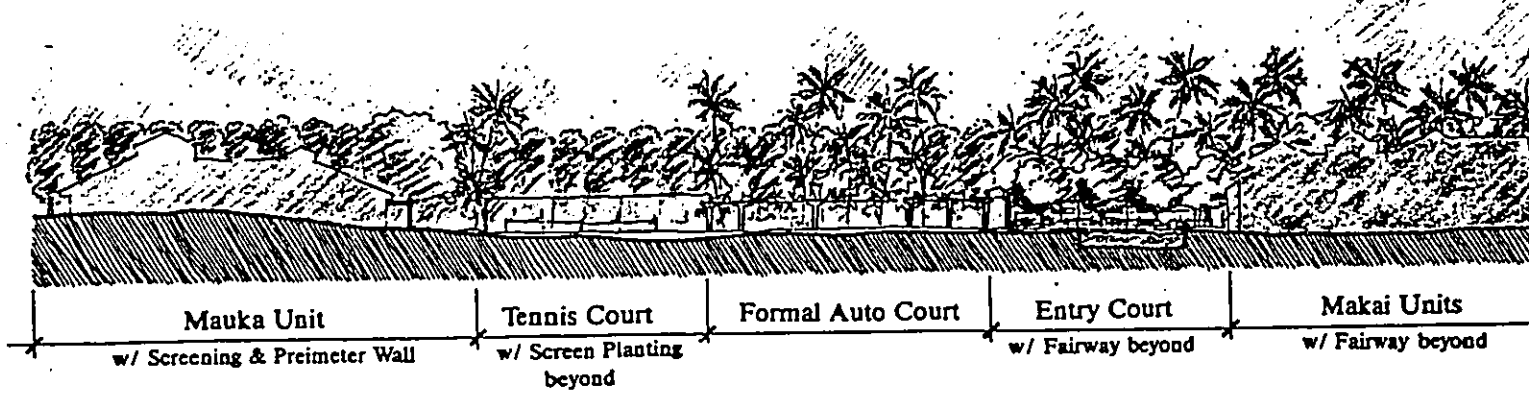
To achieve these stated project goals, the Applicant must comply with provisions of Chapter 200, Environmental Impact Statement Rules of the Department of Health, State of Hawaii; obtain a Special Management Area Permit (SMP) from the City and County of Honolulu, a Cluster-housing Development Permit, and comply with the City's Park Dedication Ordinance. The proposed project would redevelop the subject property into a "cluster" housing project comprised of 5 residential dwelling units. (See Tax Map Key, Figure 3.)

Presently, the property is zoned "R-10 Residential" which would permit a maximum of 9 dwellings. As such, the proposed cluster project would establish residential densities significantly below densities allowed under the present zoning designation.

This Environmental Assessment (EA) has been prepared in accordance with the provisions of Hawaii Revised Statutes (HRS) Chapter 343 and Title 11, Department of Health, Chapter 200, Environmental Impact Statement Rules, Sections 11-100-9 through 11-200-13. A description of the affected environment, the alternatives considered to date, proposed mitigation measures, determination of environmental impact, and the reasons supporting those determinations are provided. The information contained in this EA has been developed from site visits and generally available information regarding the environmental characteristics of the project site and surrounding area.

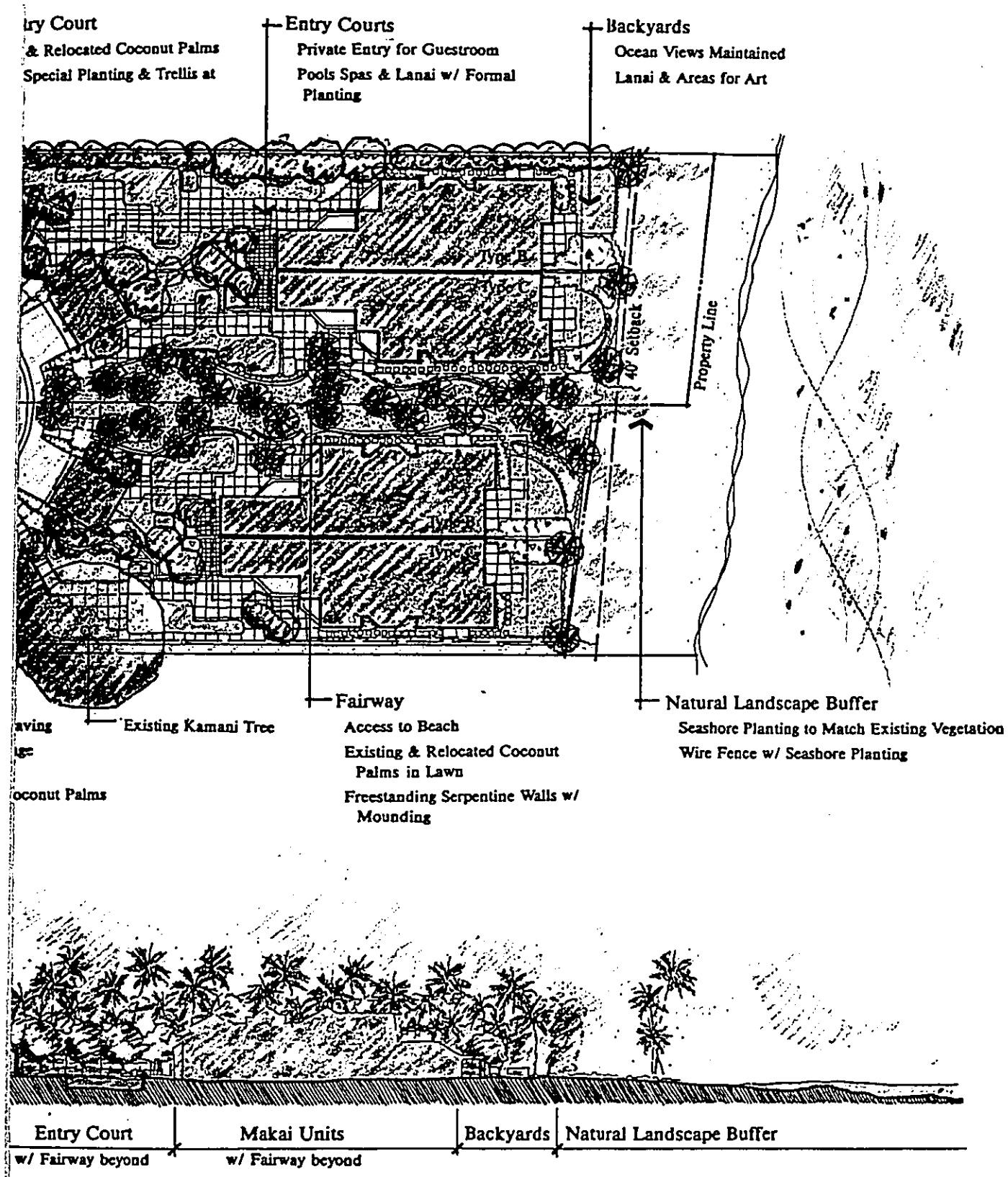


Schematic Landscape Plan



Schematic Site Profile

Alternate 1



Hale O' Kainalu

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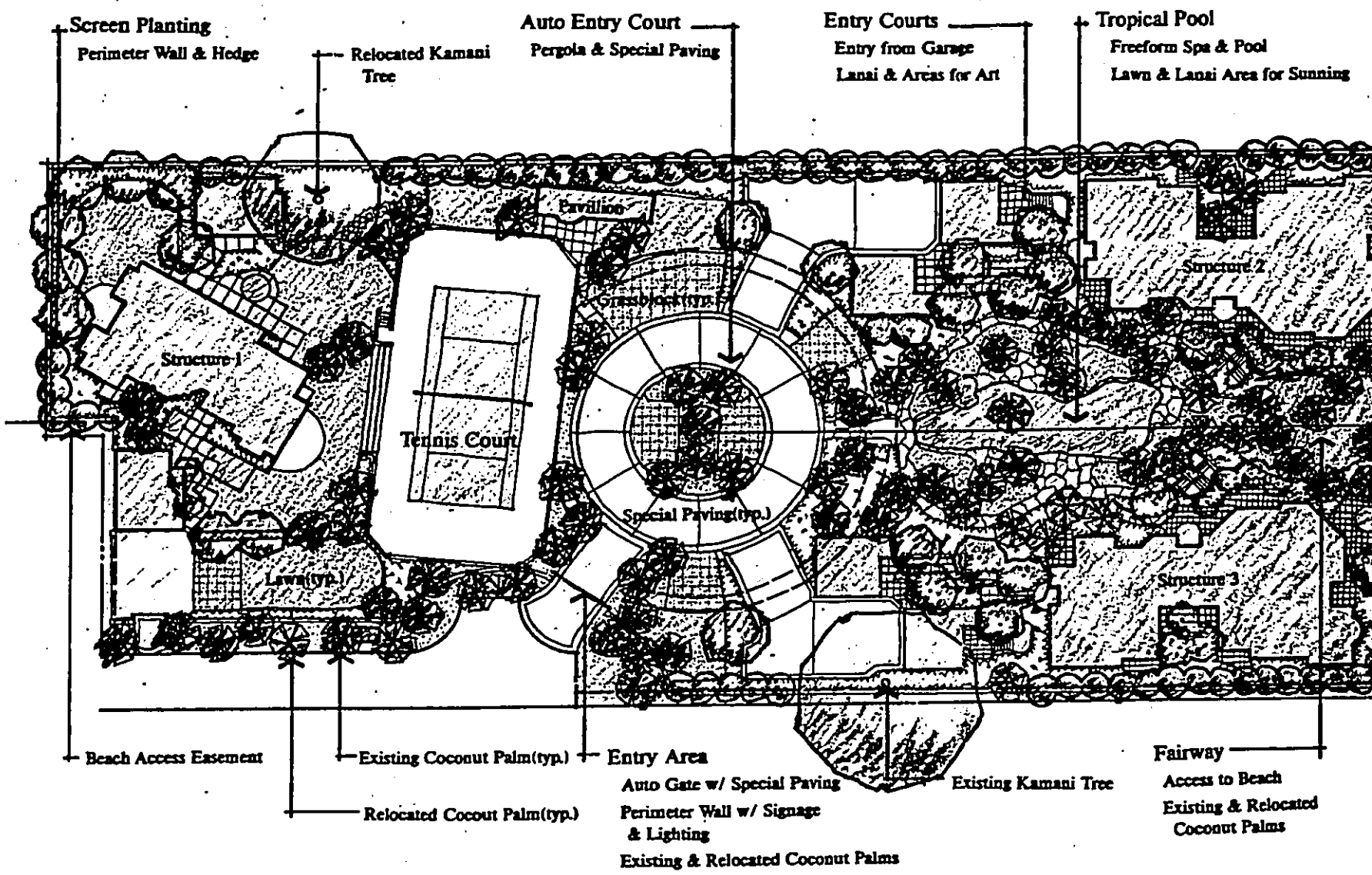
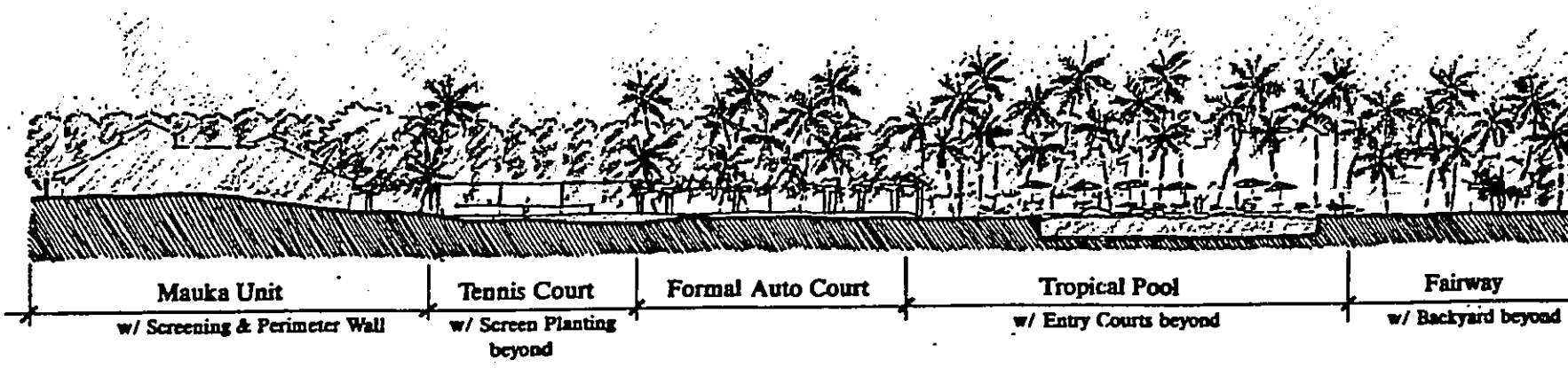
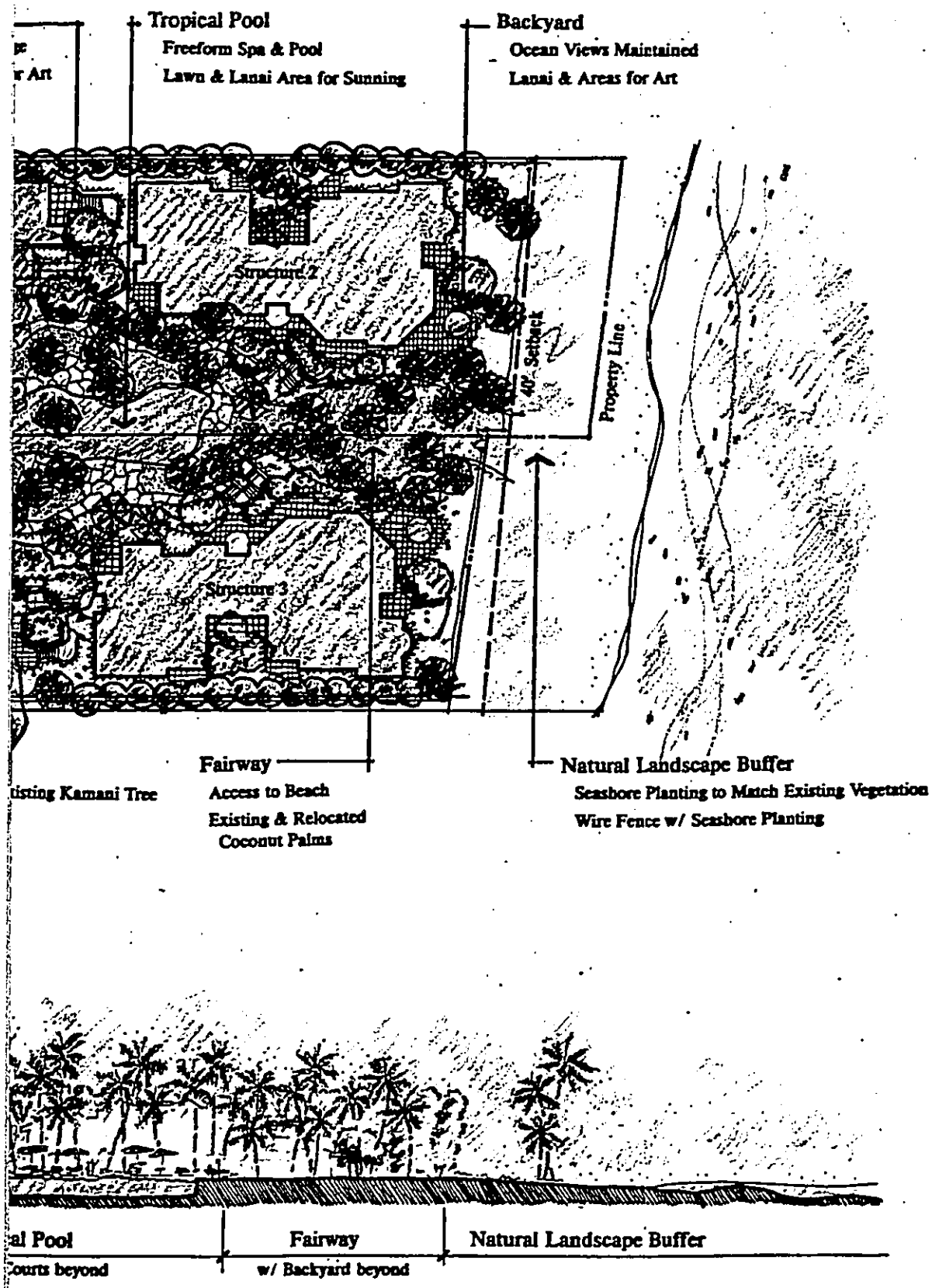


Schematic Landscape Plan



Schematic Site Profile

Alternate 2



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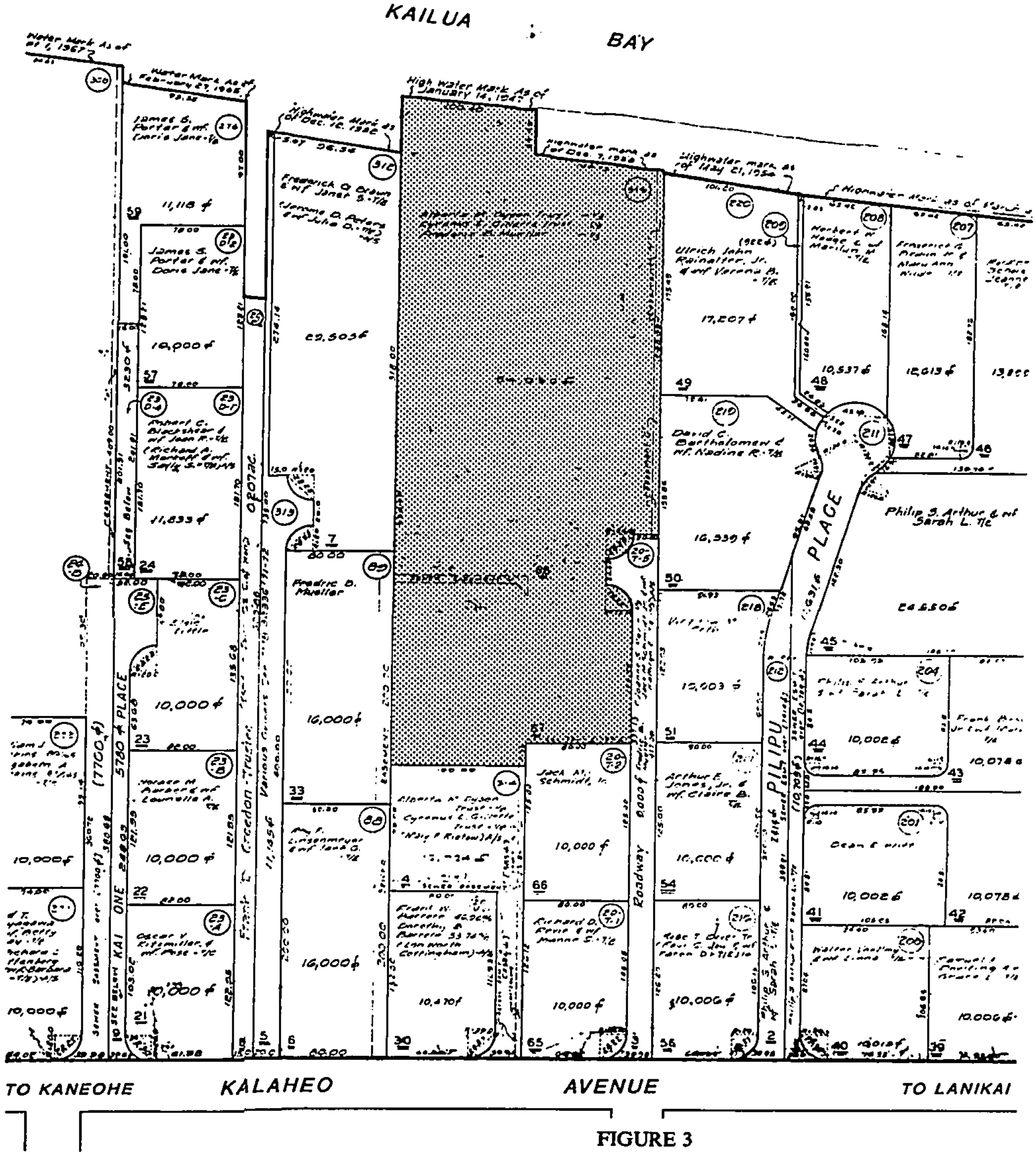

FIGURE 3
TAX MAP KEY
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: LD. CT. APP. 323 & TAXATION MAPS BUREAU DATA,
TAX MAP KEY:4-3-18, JANUARY 4, 1991

B. TECHNICAL CHARACTERISTICS

1. Use Characteristics

Presently, the site contains three major structures (see Figure 4), a driveway, swimming pools, and open space recreation areas. All surrounding properties (exclusive of Kailua Beach) consist of single family residential structures on building sites of between 10,000 and approximately 30,000 square feet (see Figure 4). Kailua Beach is located along the northeast boundary of the subject property.

2. Physical Characteristics

Property lines, lot size, certified shoreline, shoreline setback line, reference datum, ground elevations, and existing structures are depicted on Figure 5. The shoreline was certified by the Chairman of the Department of Land and Natural Resources on August 6, 1990.

Presently, the driveway access is screened from adjoining properties on the southeast boundary by a wood fence of approximately 6 feet. Other screening is established by landscape buffers and topographical features. Some adjacent structures are significantly higher than existing fencing or landscaping, visually impacting the subject property. Existing structures, significant plant materials and landscaping, and other site features will mitigate the visual impacts that may result from project development.

3. Construction and Design Characteristics

All existing structures and pavement surfaces will be demolished and removed from the site prior to construction. No larger plant materials will be destroyed, however, landscape design criteria may require the relocation of the more desireable individual plant specimens. The planned landscape will contain significantly more mature plant materials than presently on site.

No significant clearing, grubbing, grading, or filling is planned. The only clearing involves removal of existing structures, concrete, and minimal site preparation work to accommodate new residential structures, tennis court, swimming pools, and paved areas. Topographical characteristics will remain largely unchanged.

New structures will not exceed the allowable height for the applicable "R-10" residential zoning designation. Two detached structures will contain four dwelling units with two units in each structure. One common wall will be shared between the two units. The third residential structure is a single family dwelling located near the mauka end of the subject property.

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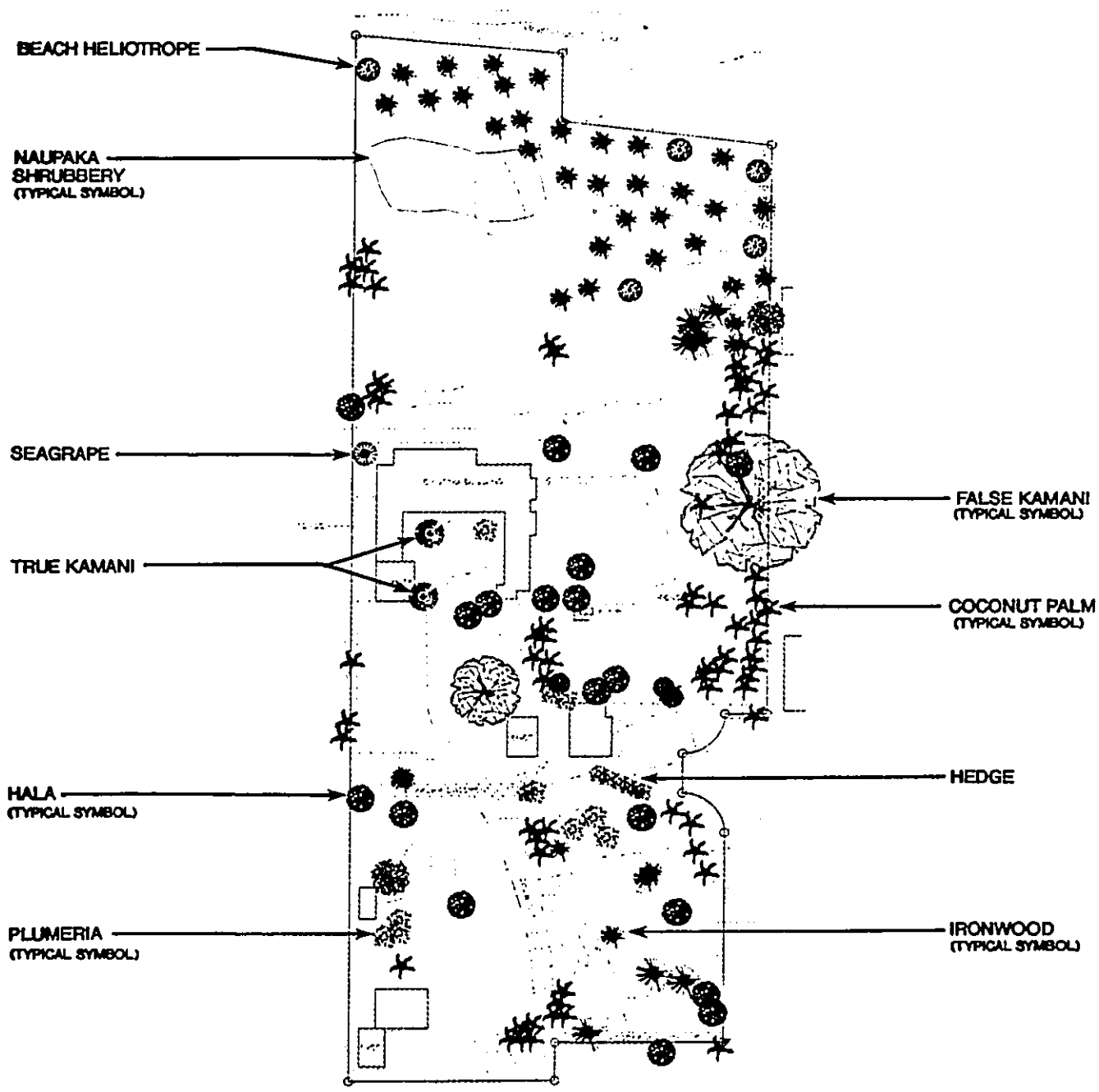

FIGURE 4
EXISTING SITE CONDITIONS
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: H. AU AND ASSOCIATES, INC., SEPTEMBER 1986

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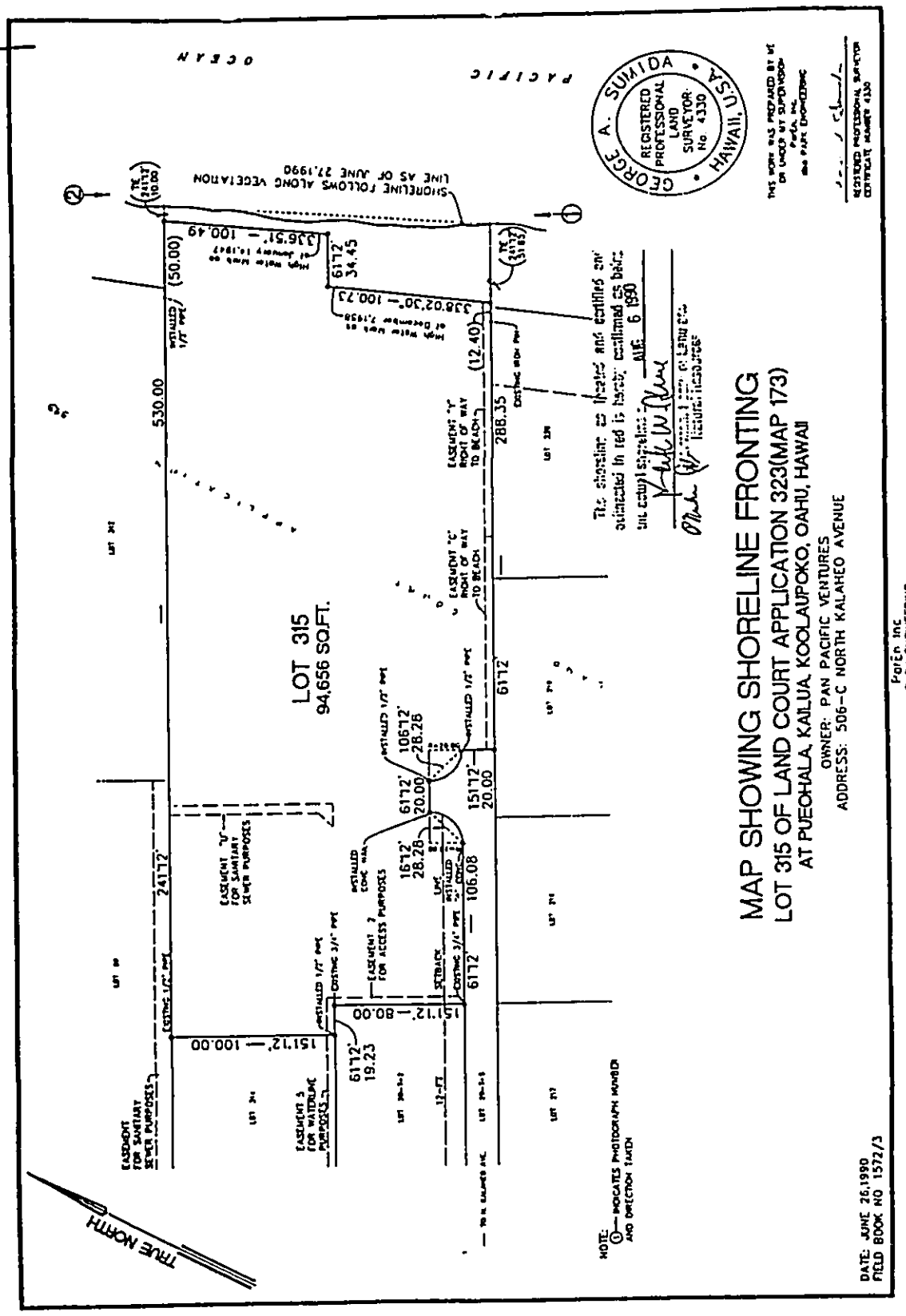

FIGURE 5
CERTIFIED SHORELINE
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: MAP SHOWING SHORELINE FRONTING, LOT 315 OF LAND COURT APPLICATION 323(MAP 173), JUNE 26, 1990

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Building design will reflect an open "Hawaiian" architectural style with large sliding doors opening onto outdoor patios and landscaped gardens. Outdoor swimming pools may be a typical feature for each dwelling unit. A centrally located vehicular entry will access a central focal point comprised of a circular driveway, landscape feature, and walkways that present a private individualized entry feature for each unit. Although extensive landscaping will dominate the site, visual corridors toward the ocean will be established to ensure that each unit receives unobstructed views of the ocean while visually buffering views from other adjoining dwellings on-site. Figure 6 reflects opportunities and constraint on the project site.

Major design opportunities include the panoramic views afforded by Kailua Beach, the presence of extensive mature landscaping, and the large size of the subject property. (Figure 6 shows opportunities and constraints.) Possible design constraints include proximity of existing residential structures resulting in possible visual and acoustic impacts.

Utility services required for the project consist of water, sewer, electrical, telephone, and television cable.

Water service will be provided by a 2" distribution line to be located within a waterline easement located within the existing water line easement through TMK:4-3-18: 4. This line will connect to the Board of Water Supply Line located along North Kalaheo Avenue. All applicable fire safety regulations regarding fire hydrant placement will be implemented.

Similarly, sewage collection lines will follow a sewer line easement corridor from the subject property to North Kalaheo Avenue. In accordance with an "Application for Sewer Connection" dated September 6, 1990, the existing 36" sewer line in Kalaheo Avenue can accommodate the five proposed single family dwelling units (see Appendix A). As such, the City's central sewage system will be utilized as permitted by the Division of Wastewater Management and no on site sewage treatment or disposal will occur.

On-site electrical, telephone, and cable television service will be placed underground. Similarly, no significant off-site improvements to existing electrical, telephone, or cable television systems will be required to service the five proposed dwelling units. All improvements necessary to connect to central utility systems will be provided by the Applicant.

Removal of solid waste generated from construction and during occupancy of the dwelling units will be provided by the City's Refuse Collection and Disposal Division of the Department of Public Works. Refuse will be disposed of in the Kapaa Landfill.

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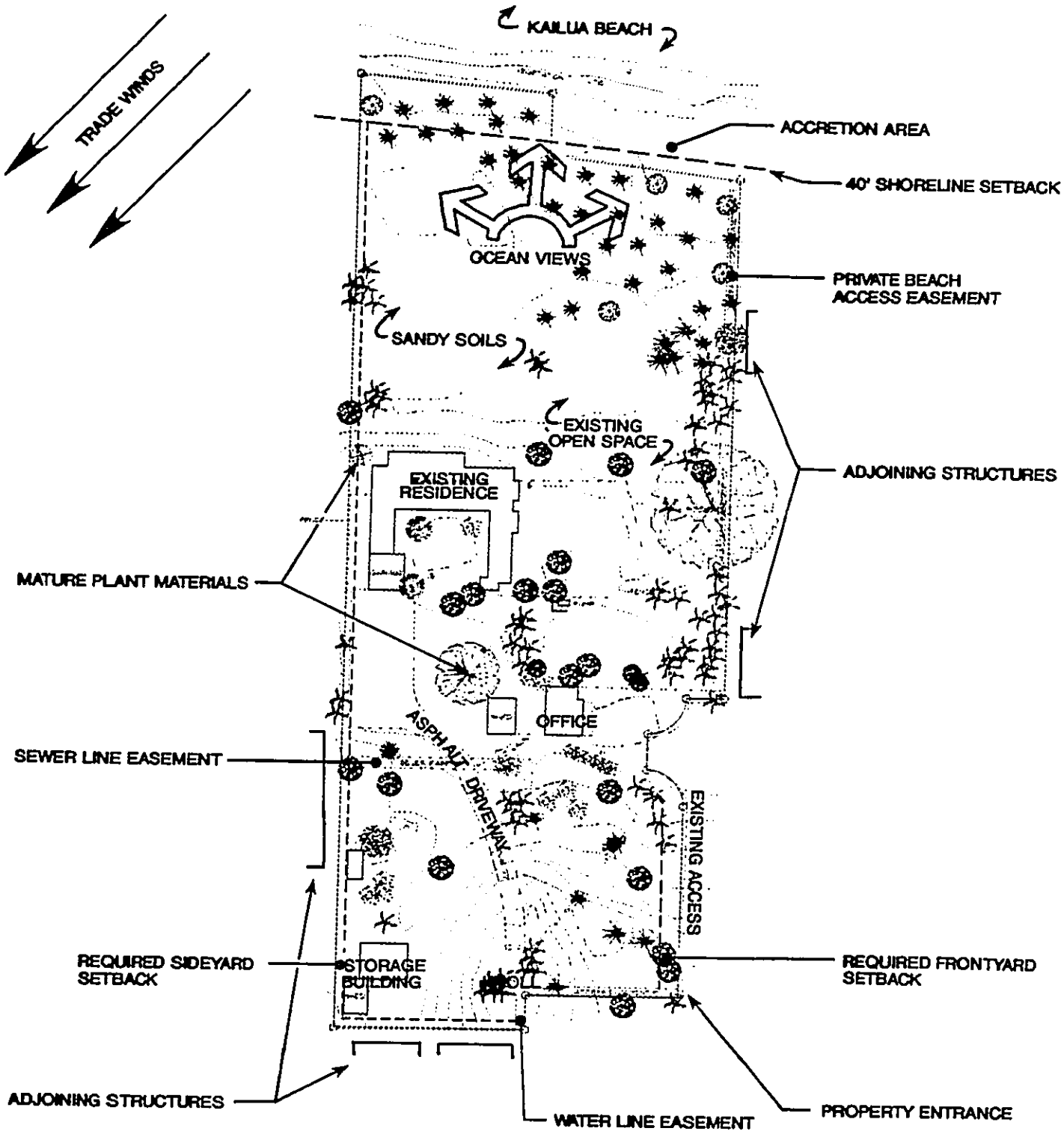

FIGURE 6
OPPORTUNITIES & CONSTRAINTS
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

Given the reduced densities proposed compared to those as currently permitted by the R-10 zoning, no significant impacts to existing City infrastructure and services (above those currently planned) are expected to result from project development. Indirectly, impacts generated by the project will be reduced relative to the 9 units that could be developed under present zoning regulations. (See Figure 7 for the complete proposed Site Plan and Figure 8 for the conceptual landscape plan.)

C. ALTERNATIVE CONCEPTS

In keeping with applicable rules and regulations and sound land planning practices, those alternatives which could feasibly attain the objectives of the proposed action, have been examined. The alternatives investigated have included alternative layouts (see Section II, A), a residential subdivision, alternative uses of the property and the alternative of "no-alternative".

Although the final layout and configuration of the proposed project will be refined through development of actual construction drawings and as the market conditions dictate, the proposed conceptual design and layout is considered to be the more appropriate from land use and infrastructural perspectives. In addition, the proposed project does not affect existing view plains to the ocean, preserves significant open space, does not impact any cultural features, and enhances the visual character of the area through landscape improvements and adherence to design guidelines in keeping with an overall master plan for the property. No other land uses such as commercial or agricultural would be appropriate within the surrounding residential setting.

The "no-action" alternative would not be consistent with stated objectives of the project, nor the existing entitlements established by the R-10 zoning.

D. ECONOMICAL AND SOCIAL CHARACTERISTICS

Construction related costs comprised of site preparation work, infrastructure development, unit construction, and landscaping, are expected to range between $5,000,000 and $6,000,000. Land values are estimated (based on comparable recent sales in the neighborhood) at approximately $75.00 to $90.00 per square foot. Total value is estimated to range from $12.1 and $14.5 million dollars.

Assuming all approvals are obtained without unexpected delays, the Applicant estimates that the required entitlements will be in place by mid-1991, with construction planned for early 1992. Actual construction is expected to span approximately 12 to 18 months.

Presently, dwellings designed with similar amenities, views, and located adjacent to Kailua Beach, are priced toward the upper range of residential product offered in Kailua. Given the anticipated project development costs and the resale values typical of residential dwellings in the surrounding neighborhood, the units proposed for the project will be

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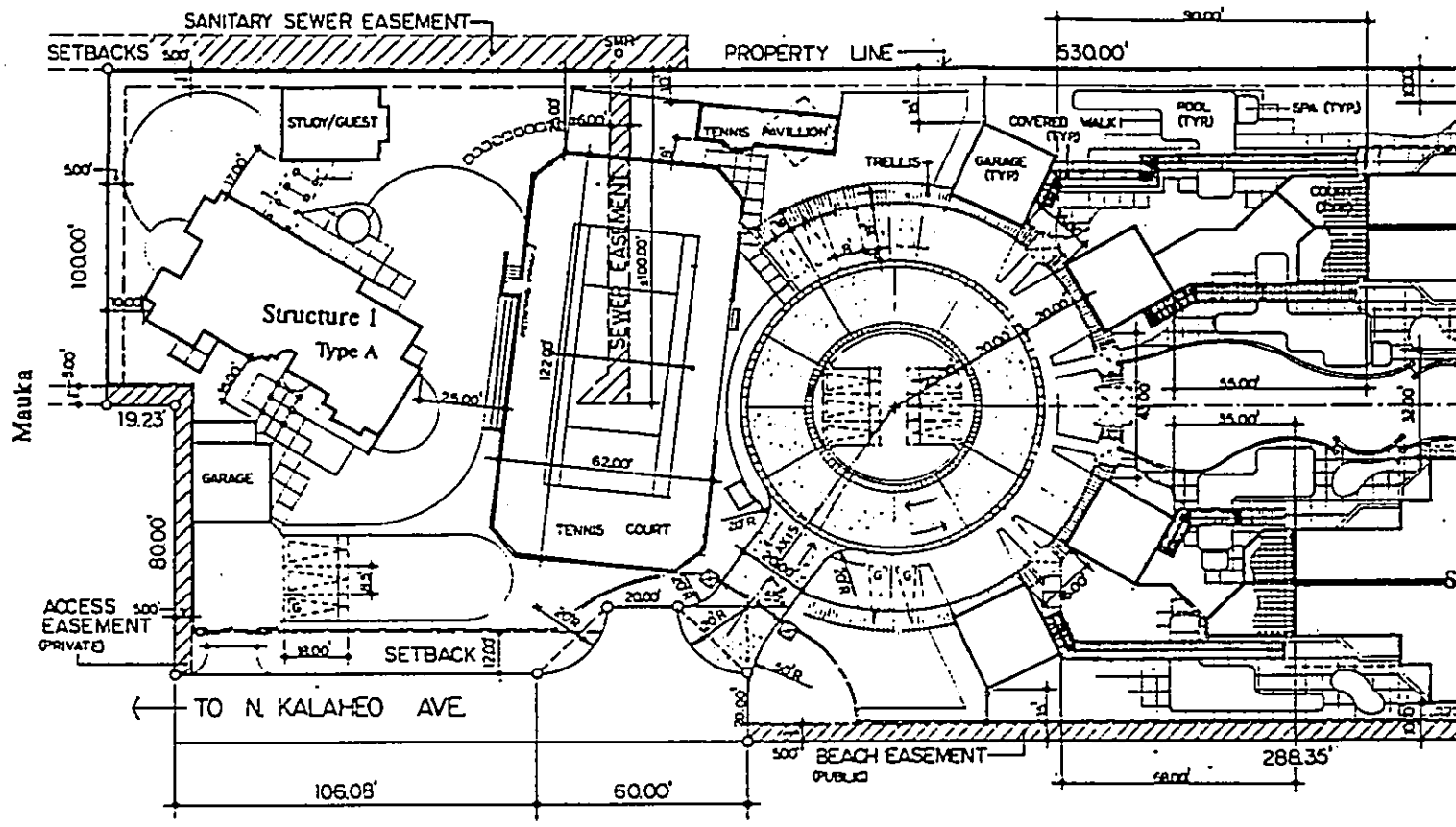
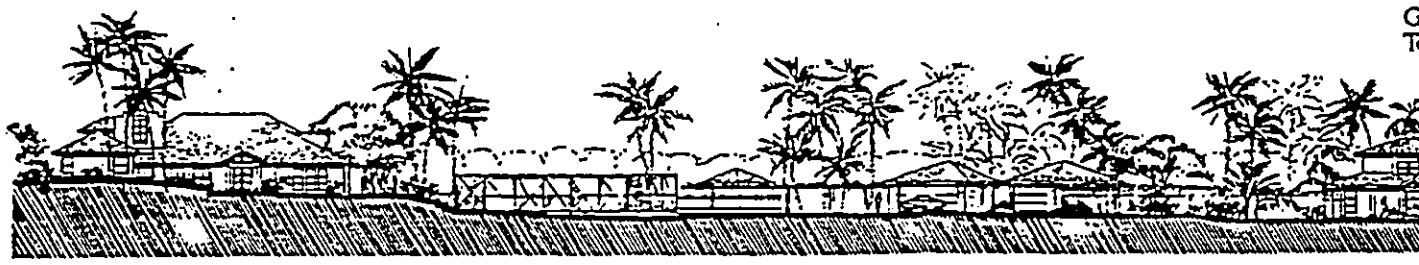


Project Site Plan · Alternative 1



Site Section

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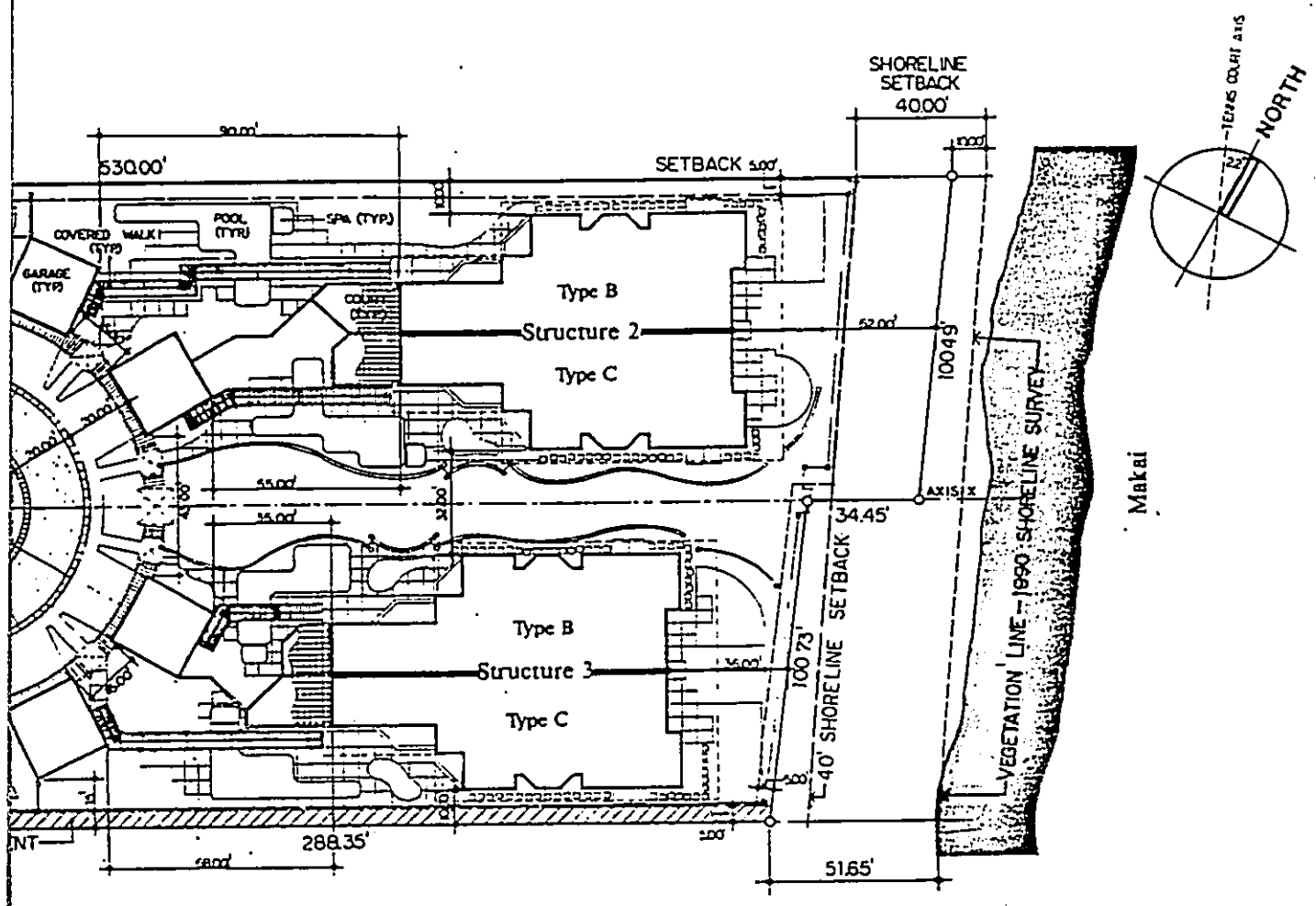
FIGURE 7
PROJECT SITE PLAN – ALTERNATIVE 1



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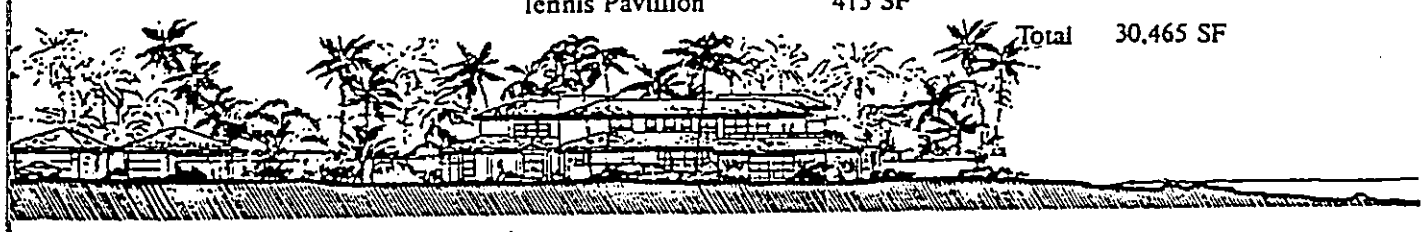
LOT COVERAGE CALCULATIONS

Total Lot Zoning Area		94,656 SF
R-10 Maximum Building Area at 50%		47,328 SF
Proposed Building Area		
Structure 1	5,250 SF	
2	10,960 SF	
3	10,960 SF	
Garages 5@ 576	2,880 SF	
Tennis Pavillion	415 SF	
	Total	30,465 SF



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the cjs group architects ltd.

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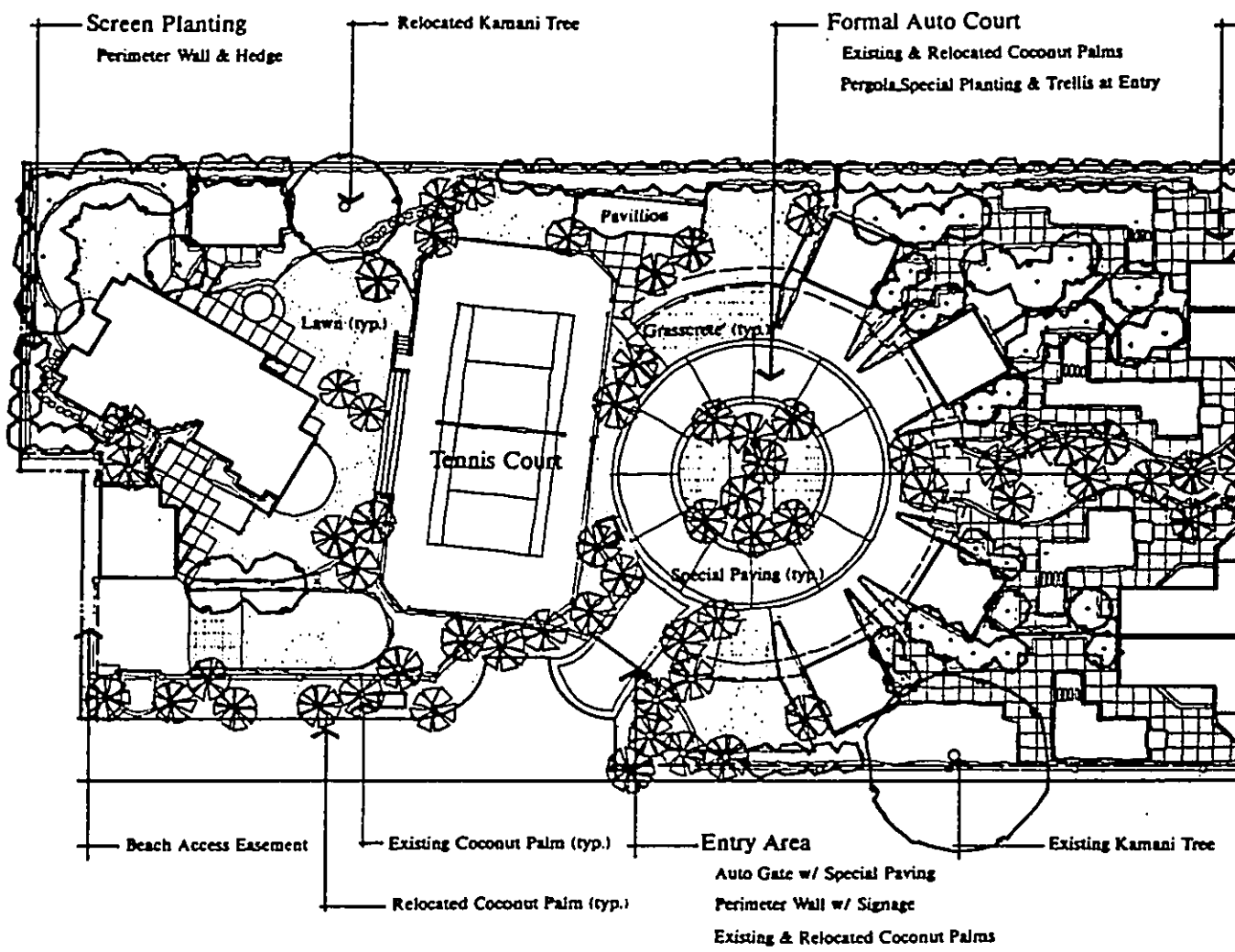
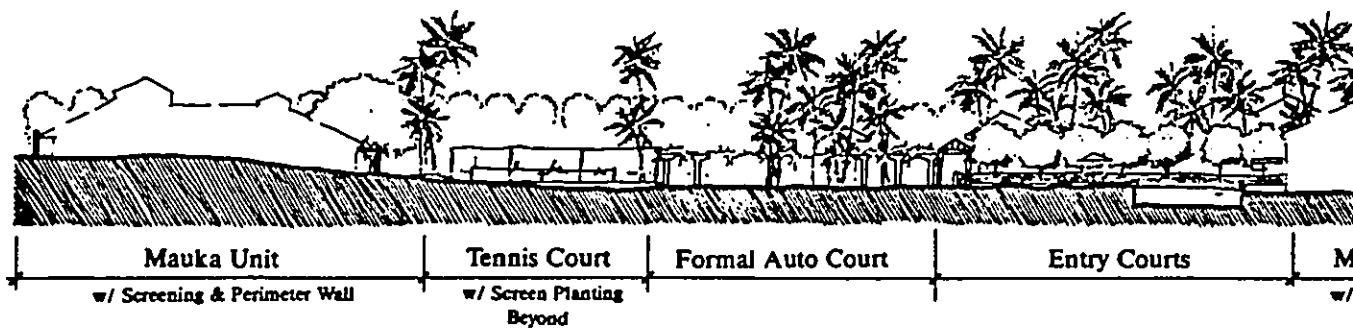


Schematic Landscape Plan



Schematic Site Profile

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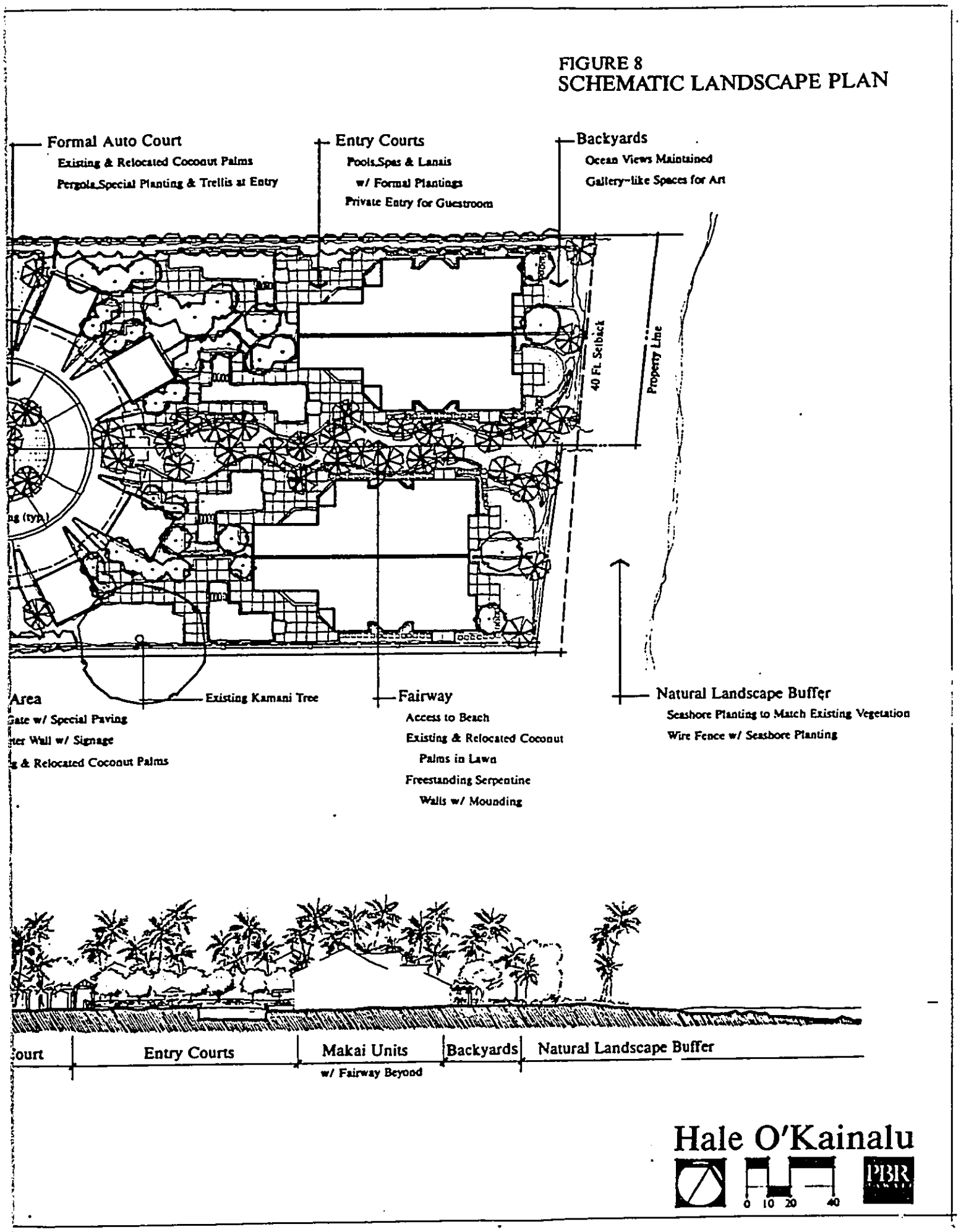
FIGURE 8
SCHEMATIC LANDSCAPE PLAN



similarly priced and designed to ensure a successful integration into the surrounding character of the neighborhood.

E. ENVIRONMENTAL CHARACTERISTICS

1. Soils

Jaucas sand (JaC) – According to the U.S.D.A. Soil Conservation Service, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai,", the soil type identified on the subject property is classified as "Jaucas sand" (JaC) and "Beach sand" (BS).

Specifically, this soil consists of excessively drained, calcareous soils that occur as narrow strips on coastal plains adjacent to the ocean. These soils are developed in wind and water deposited sand from coral and sea shells. As such, generally all of Kailua between Kawainui Marsh and Kailua Bay is comprised of the "Jaucas sand" soil type.

Slopes characteristic of this soil range from 0 to 15 percent, but seldom exceed 7 percent. The soils is single grain, pale brown to very pale brown, sandy and more than 60 inches deep. The surface layer may be dark brown due to an accumulation of organic matter. Permeability is rapid and runoff is generally very slow. Water erosion is slight, but wind erosion can be a problem where vegetation has been removed.

The "Beaches" (BS) as defined by the soil survey, occur as sandy, gravelly, or cobbly areas on all islands. Washed and rewashed by ocean waves, the Beaches soils consist mainly of light–colored sands derived from coral and seashells. Although these soils are technically classified as Beaches, these soils are located well mauka of the August 9, 1990 certified shoreline and vegetation line. As such, this portion of the subject property is <u>not</u> used as a public beach, nor do the high waves reach impact these soils or portion of the site.

Inasmuch as the site is located within a highly urbanized area, the Agricultural Land of Importance to the State of Hawaii (ALISH) and University of Hawaii Land Study Bureau (LSB) rating systems are not applicable to the subject property. The Soil Survey is presented in Figure 9.

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FIGURE 9
SOIL SURVEY
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: SOIL SURVEY OF THE ISLANDS OF KAUAI, OAHU, MAUI, MOLOKAI, AND LANAI, STATE OF HAWAII, UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE AND THE UNIVERSITY OF HAWAII, AUGUST 1972

2. Topography

The topographic relationship of the site to major landforms or other features, is primarily the proximity of the site to Kailua Beach. No major topographic features such as mountains, headlands, valleys, streams, channels, springs, or marshes are applicable to the site.

As depicted in Figure 10, the slope of the site is relatively uniform ranging from the highest elevation of 19 feet above mean sea level to approximately 5 feet along the Kailua Beach property line. A small grassy knoll is located adjacent to the mauka property line that rises approximately 6 feet above the surrounding lawn area. This feature contains the steepest slopes (approximately 10 percent maximum) found on the property and has been selected in the conceptual plan as the site for the single family detached dwelling. However, due to the small drainage area associated with these slopes and the sandy soil texture, no significant drainage impacts associated with the knoll will affect project development.

3. Drainage

Presently, surface runoff does not generally occur except during very intense storm events. Runoff from hard surfaces such as roofs and pavement, is quickly absorbed by the sandy soils and into the brackish ground water table located just under the surface. A small ridge (approximately one foot higher than the surrounding property), is located roughly parallel to Kailua Beach that was formed by an accumulation of sand from wave and wind action. This barrier will restrict virtually all surface runoff from reaching Kailua Beach.

4. Flood Insurance Rate Map

As depicted in Figure 11, the Flood Insurance Rate Map (FIRM) identifies the flood hazard for the subject property as "other areas" determined to be outside the 500 year flood plain. As such, none of the subject property is located within the FIRM 100-year flood hazard area, nor will the Land Use Ordinance Flood Hazard District apply.

5. Other Hazards

Beach erosion is also not considered a hazard. Since the previous Certified Shoreline Survey (conducted in December, 1958), the shoreline has accreted by approximately 5,500 square feet as determined in the more current survey certified by the Department of Land and Natural Resources (DLNR) in August, 1990 (see Figure 5). Although the 1990 shoreline survey has been certified, the ownership of the accretion area is still being resolved between DLNR and the property owner.

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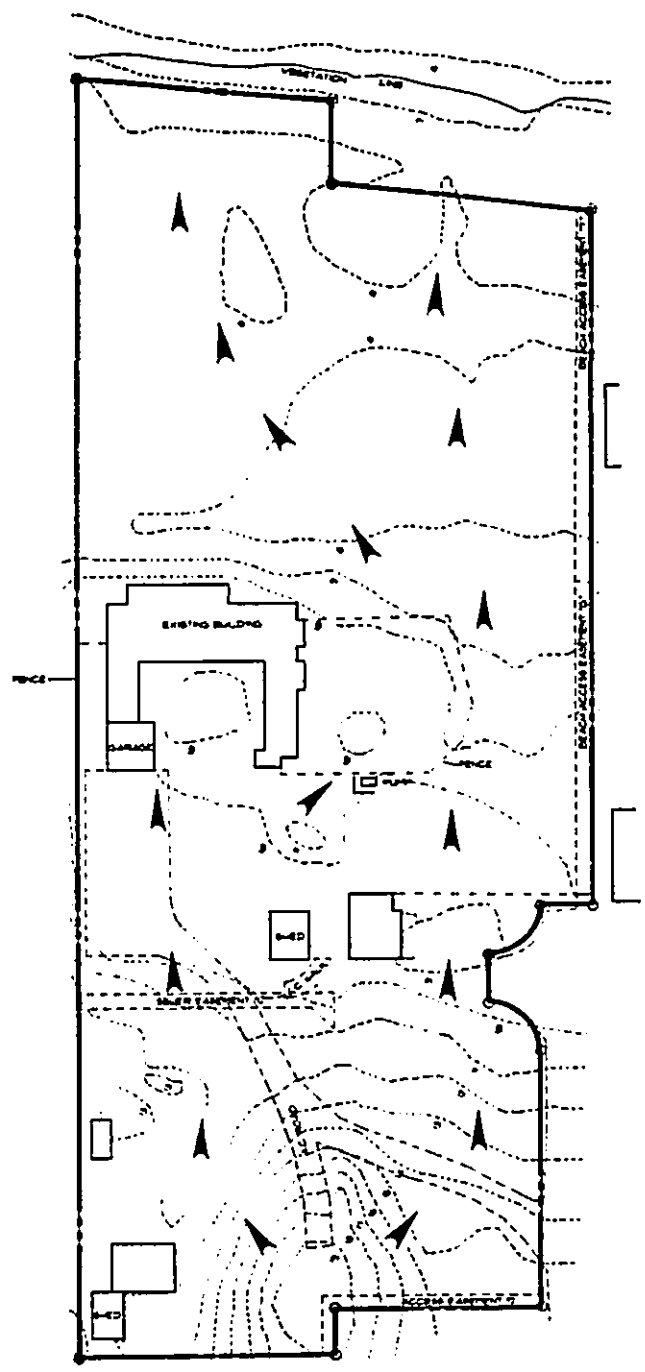

DRAINAGE FLOW DIRECTION

FIGURE 10
TOPOGRAPHY/DRAINAGE
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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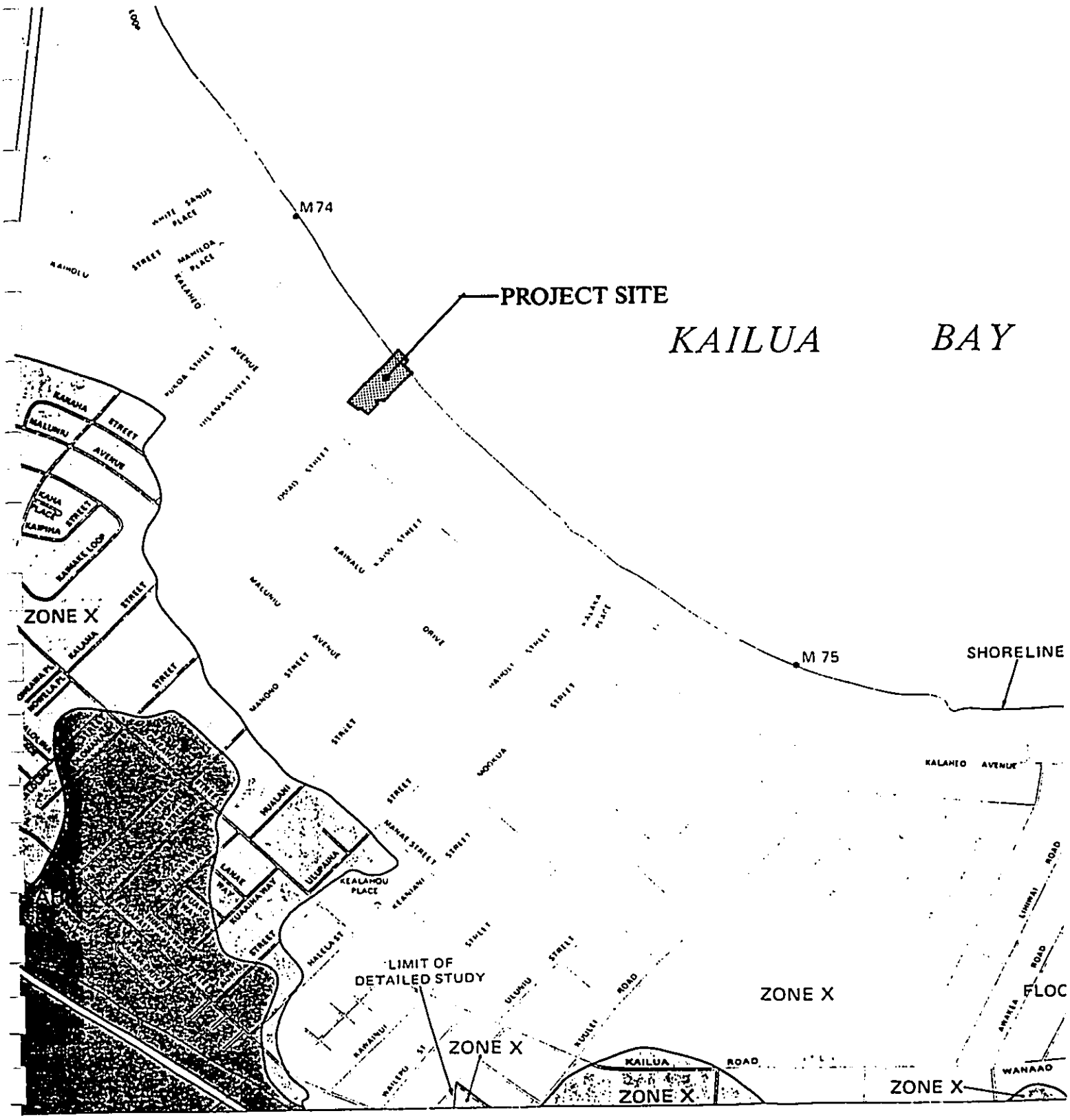

FIGURE 11
FLOOD INSURANCE RATE MAP
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: FLOOD INSURANCE RATE MAP.

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Previous high water marks were surveyed in 1947 and 1958 to determine the location of the shoreline. However, according to "Beach Changes on Oahu as Revealed by Aerial Photographs, Department of Planning and Economic Development – Urban and Regional Planning Program and the Hawaii Institute of Geo-physics, University of Hawaii, Kailua Beach grew throughout its length except for a small portion during the period from 1949 to 1957. During a monitoring interval from 1957 to 1963, accretion was also prevalent with "especially high growth in the middle section of the beach". Generally, net accretion has continued along the shoreline of the subject property up to the present. This is opposed to parts of Lanikai Beach which have eroded appreciably in recent years.

No other potential natural hazards are known to exist on the subject property.

6. Other Information Applicable to the SMA

Public Access

Public access to the publicly owned Kailua Beach is provided by an easement in favor of the City and County of Honolulu over TMK: 4-3-18: 8 located approximately 100 feet from the northwestern edge of the subject property. This beach access point is well known in the community and is heavily used. Development of the project as proposed will not impact the availability or accessibility of the beach. Private easements "2", "G", and "Y" also provide a right-of-way to the beach for property owners that reside makai of the subject property. Figure 12 depicts adjoining land use and shows public access.

Visual Attributes

The only significant roadway containing intermittent views of Kailua Beach and the shoreline, is North Kalaheo Avenue. Presently, existing single family structures located between the subject property and North Kalaheo Avenue, block any views that may have existed. The proposed residential structures will be largely invisible in the makai direction from North Kalaheo Avenue. No alterations to existing landforms or proposed project related construction will adversely effect water resources, scenic and recreational amenities, or increase the potential danger of floods, landslides, erosion, siltation, or failure in the event of earthquake.

Similarly, shoreline side view impacts are also expected to be minimal. Buffered by palms and other shoreline plantings, the views from Kailua Beach will continue to reflect the "Hawaiian-style" architecture and landscape architecture. Large open lawn areas with structures set well back from the vegetation line, will preserve and enhance the visual amenities of the project area. Building heights will not protrude above those of adjoining structures.

FIGURE 12
ADJOINING LAND USE
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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III. AFFECTED ENVIRONMENT

A. RELATIONSHIP TO SURROUNDING AREA

The subject property is located central to the primary residential district of Kailua. Surrounding land uses are exclusively residential at densities of approximately 4.3 units per acre, significantly higher than the densities being proposed by the Applicant of 2.3 units per acre. Presently, permitted residential zoning allows a density similar to the 4.3 units per acre of the surrounding neighborhood without EA, SMA, Cluster, or Park Dedication review and approvals. Consequently, the Applicant is proposing densities at a level approximately 50 percent less than currently permitted by the existing R-10 zoning and present densities characteristic of the surrounding residential neighborhood.

It is the Applicant's intent to maintain the present low density, high quality, open character on the property, while integrating the project into the residential neighborhood through architectural and landscape design techniques. Existing view corridors will be preserved, uniformity of materials selected and continuity of architectural design will ensured through implementation of design guidelines.

Land use regulatory restrictions are applicable from both State and County jurisdictions. The following plans, programs, and regulations apply from a land use perspective.

1. State

Hawaii State Plan

The Hawaii State Plan, Revised, was developed by the State to "serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State of Hawaii; provide a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water, and other resources; improve coordination of state and county plans, policies, programs, projects, and regulatory activities; and to establish a system for plan formulation and program coordination to provide for an integration of all major state and county activities."

As stated in "Section 226-4 (2) State Goals", it shall be the goal of the State to achieve:

"A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of people."

Specific objectives, policies and priority actions contained in the State Plan relevant to the proposed project are discussed below.

Section 226-12 Objective and policies for the physical environment - scenic, natural beauty, and historic resources.

226-12(b)(2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.

226-12(b)(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

Discussion:

The proposed site plan, architecture, and landscape plan design elements have evolved to conceptually integrate the project into an open "Hawaiian-style" residential complex. View corridors from within and exterior to the site maintain the overall visual character of the site, surrounding neighborhood, and Kailua Beach. The orientation and visual impact of the project when viewed from Kailua Beach will be similar to the present open landscaped lawn area.

State Land Use (205, HRS)

The State Land Use Law regulates the classification and uses of land to accommodate growth and development, and to protect natural resources. To implement the provisions of Chapter 205, the State has established a Land Use Commission (LUC) to determine appropriate land uses for all lands within the State and to classify these lands into Urban, Agricultural, Rural, or Conservation Districts.

The subject property is currently classified by the LUC as entirely within the State "Urban District" (Figure 13 Lands such as these, classified as Urban by the LUC, are generally regulated by the County General Plan, Development Plan, zoning ordinances, and (along shoreline areas) Special Management Area (SMA) regulations.

As such, the existing and proposed uses for the subject property are permitted within the State Urban District. On the County level, the City and County of Honolulu Land Use Ordinance has designated the site as R-10 Residential. Additionally, all of the subject TMK parcels are located within the Special Management Area and are subject to the provisions of the City's Special Management Area Ordinance.

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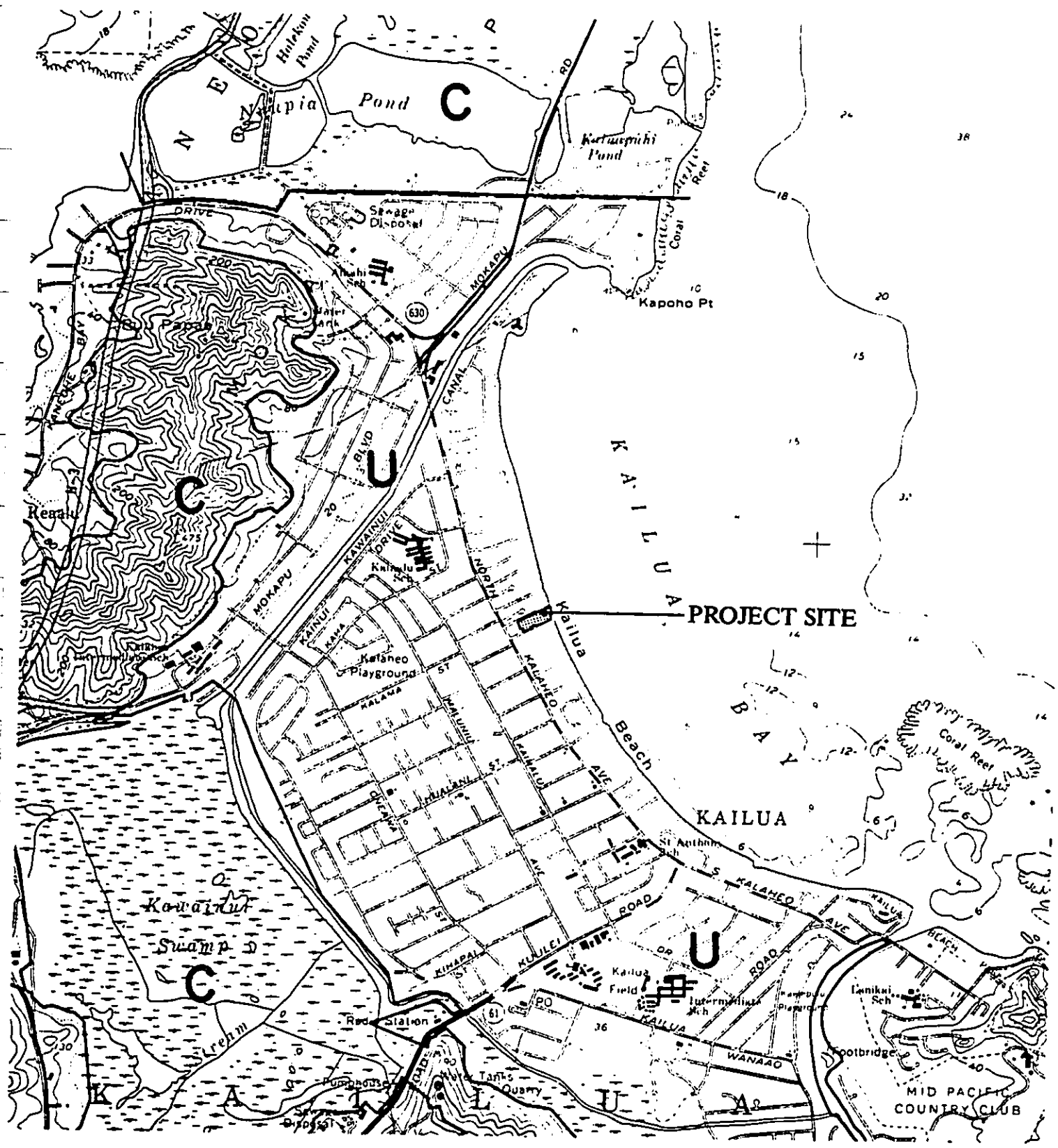

FIGURE 13
STATE LAND USE
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: STATE LAND USE OFFICE,
STATE LAND USE COMMISSION,
O-14, MOKAPU

Environmental Impact Statements (Chapter 343, HRS)

Title 11, Department of Health Administrative Rules, Chapter 200, states that an Environmental Impact Statement is required when significant environmental effects are determined and when any of five geographical designations and two administrative categories are applicable to a proposed action.

Therefore, the proposed residential cluster is applicable to Chapter 343 requirements that "Any use within the shoreline area as defined in Section 205A-41, Hawaii Revised Statutes" requires compliance with Chapter 343. The subject property is located within the City and County of Honolulu Special Management Area (SMA) and the proposed action is defined as a "development" subject to the provisions of the SMA.

Determination

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:

- The proposed action will not involve an irrevocable commitment to any significant natural or cultural resource;
- The proposed action will increase the range of beneficial uses of the environment;
- The proposed action will be in concert with the state's and county's long-term environmental policies, goals and guidelines;
- The proposed action will not involve significant secondary impacts such as population changes or effects on public facilities that are not already contemplated;
- The proposed action does not include elements that would substantially affect public health or overall environmental quality;
- The proposed action will not affect known rare, threatened or endangered species or habitats;

- The proposed action will incorporate appropriate mitigation measures to ensure that long-term air or water quality or ambient noise levels will not be detrimentally affected;

- The proposed action is individually limited and will not have a cumulative effect upon the environment or involve a larger commitment for larger actions.

2. City and County of Honolulu

The City and County of Honolulu has developed an extensive program of land use planning and regulatory mechanisms that include a General Plan, Development Plan Areas, Public Facility Maps, and a comprehensive Land Use Ordinance (LUO). Development Plan Land Use is shown in Figure 14 and County Zoning is displayed in Figure 15.

General Plan

The General Plan establishes a statement of long-range social, economic, environmental and design objectives to be achieved within a 20 year time horizon. Additionally, the General Plan established Population Guidelines for each Development Plan area.

According to the Population Distribution projections of the General Plan, the Koolaupoko population will increase from the 1980 level of 109,373 persons to a range of 109,900 – 121,900 persons in 2010. Given that the total number of proposed units is five, the total maximum population of the project be approximately 15 to 25 persons (3 to 5 residents per unit). Comparatively, based on the same calculation formula, the present R-10 zoning (if built-out to maximum allowable density), could generate a resident population of 27 to 45 persons. However, given the stated development goals of providing open space and sensitive integration into the surrounding residential neighborhood, the applicant has selected the lower density and projected resident population as the preferred development concept.

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FIGURE 14
DEVELOPMENT PLAN–LAND USE
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: DEPARTMENT OF LAND UTILIZATION, CITY & COUNTY OF HONOLULU, KOOLAUPOKO DEVELOPMENT PLAN, LAND USE MAP, ORDINANCE NO. 83-8, MAY 10, 1983

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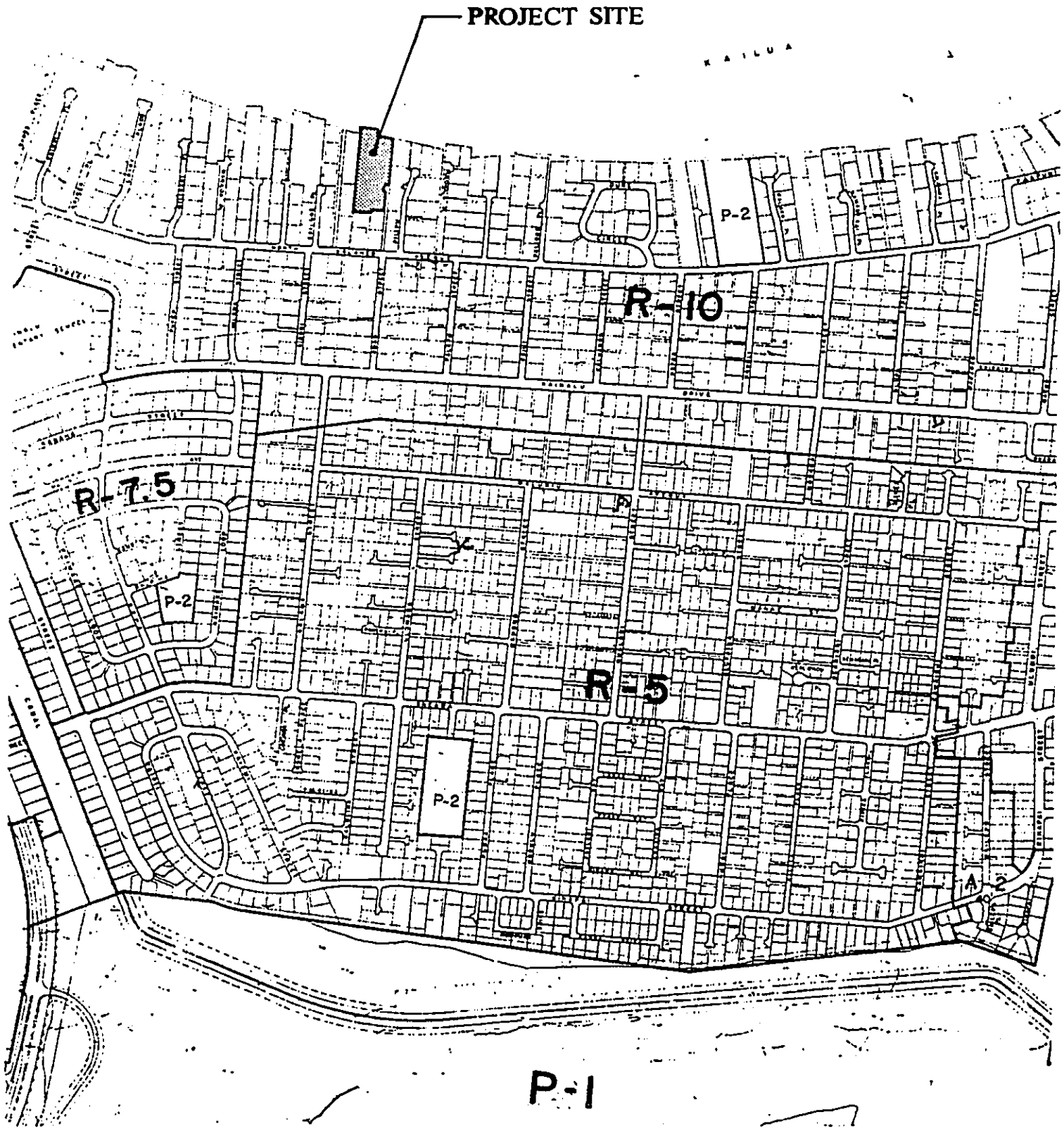

FIGURE 15
COUNTY ZONING
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: DEPARTMENT OF LAND UTILIZATION, CITY & COUNTY OF HONOLULU,
ZONING MAP NO. 23, KAILUA TO KEOLU,
ORDINANCE NO. 86-124, OCTOBER 22, 1986

Development Plan

To implement the policies and objectives of the General Plan, the Development Plans have been formulated to establish a relatively detailed guide for the future physical development of the island. The Development Plans provide for land use and public facilities planning as well as indicate the sequence in which development will occur. They must implement and accomplish the objectives and policies of the General Plan. This is also true for the zoning and public facility maps. In addition, the subject property is appropriately designated as "Residential" on the Koolaupoko Development Plan Map.

Land Use Ordinance (LUO)

The entire subject property (94,656 square feet) is classified by the City and County of Honolulu Land Use Ordinance (LUO) as R-10 Residential. The R-10 designation signifies that building sites must be at least 10,000 square feet is size. However, it is also the intent of the LUO R-10 classification to allow for a range of residential densities, including zero lot line, cluster and common wall housing arrangements. Based strictly on existing lot size and assuming 10,000 square foot lots, the subject property could be subdivided into 9 building sites.

As an alternative to subdivision of the property, the LUO also permits "Cluster" development of the site after appropriate Special Management Area approvals are completed. According to the LUO, the intent of Cluster Housing is to allow development of housing sites which would otherwise be difficult to develop under conventional City subdivision standards, allow flexibility in housing types (including attached units), encourage innovative design and efficient open space, minimize grading and roadway widths, and provide common amenities. Through implementation of the Cluster provisions, a much more compatible and efficient use of space is possible with the unique design constraints characteristic of the site dimensions.

The attendant benefits of the proposed site plan, include adherence with shoreline setback requirements, visually pleasing open space amenities, and relatively low density.

It is the Applicant's intent to implement the Cluster Housing provisions, but at densities lower that otherwise permissible by the R-10 zoning. Presently, the site has two small dwellings on the property. Approval of the proposed Cluster development would increase the existing number dwellings by three units for a total of five dwelling units on-site.

B. RELATIONSHIP TO PUBLIC FACILITIES/NATURAL RESOURCES

1. Public Facilities

Schools

Public schools servicing the Kailua community and the subject property, consist of Kainalu Elementary School, Kailua Elementary School, Kailua Intermediate School, Kalaheo High School, and Kailua High School. For the 1986 – 1987 school year, enrollment for these schools totaled 4,864 students.

According to the State Department of Education, minimum enrollments for planning new schools are: elementary (400 students), intermediate (400), intermediate/high school (750), and elementary/intermediate/high school (1,000). Given the relatively minimal increase in regional population associated with the proposed subdivision, no new schools will be required as a result of project development.

Assuming a maximum of two school age residents per unit in the proposed development, a maximum of eight additional students would be generated. The addition of these students, will equate to an increase of 0.16 percent to the approximate total student enrollment. As such, existing educational facilities should not be significantly impacted by development of the proposed Cluster Housing project.

Police and Fire

Police and fire protection facilities which service the subject property are located approximately one mile away on Kuulei Road in Kailua. A burglar alarm system will be installed to alert the police when warranted. No facility improvements are required, except for the provision of fire hydrants which will be installed on the subject property in accordance with City regulations.

Recreation

Public recreational opportunities are provided primarily by the adjacent Kailua Beach and Kailua Beach Park. The proposed development of five residential dwellings and the population generated by them will not significantly impact the capacities or availability of these recreational resources.

Access to Kailua Beach will not be affected. In addition, all park dedication ordinance requirements will be implemented by the Applicant.

2. Natural Resources

Rare, Threatened, or Endangered Species

The subject property has been extensively altered from the natural condition by years of use for residential purposes. The existing plant species are generally typical of Hawaiian landscaped gardens. None of the plant materials are considered rare, threatened, or endangered. All are readily available from commercial nurseries. The more common plant species currently used on-site for landscaping purposes have been listed below.

Ironwood	Hala	Plumeria
False Kamani	Coconut Palms	Brassaia
Beach Heliotrope	Naupaka	Beach Morning Glory
Autograph	Laua'e Fern	Sea Grape
Ginger	Spider Lily	

No rare, threatened, or endangered animal species exist on the subject property. Only those typically found in urbanized residential environments are known to be present. These may occasionally include domestic cats, dogs, rodents, birds, and introduced pests. Development of the proposed project will not result in lost habitats for any species that presently exist.

Wildlife and Wildlife Preserves

No wildlife preserves are proximate to the subject property, nor will the proposed dwelling units impact wildlife on-site temporarily. The intensity of residential development in the neighborhood and community is not a suitable habitat for most wildlife species.

Wetlands

No wetlands as defined by the U.S. Army Corps of Engineers are located on the subject property.

Fisheries

As no runoff above the normally occurring levels will enter the ocean from the subject property after project build-out, any fisheries associated with Kailua Bay will not be impacted.

Other Coastal/Natural Resources

Other coastal or natural resources, herein described, are not known to exist on the subject property and will not be impacted by project development.

C. RELATION TO HISTORIC/CULTURAL AND ARCHAEOLOGICAL RESOURCES

According to the Department of Land and Natural Resources Historic Sites Preservation Division (personal communication with Carol Kawachi), no historic sites are known to presently exist on the subject property. The only archaeological resources previously identified, concern individual Hawaiian burials that have been uncovered by wave action and construction activity at the opposite ends of Kailua Beach. Specifically, burials were found proximate to Lanikai Beach and Kapoho Point. Other burials have been uncovered adjacent to Kawainui Marsh and the Kawainui Channel.

Due to the relatively "young" geological age of soil deposits characteristic of the subject property, and previous construction activities that have occurred on the site, the likelihood that archaeological sites are present is not considered significant. If any evidence of archaeologically significant resources are uncovered during project grubbing and site preparation phases of development, construction in that area will cease and the State Historic Sites Preservation division of the Department of Land and Natural Resources will be immediately notified.

A monitoring procedure will be established to accompany the grubbing and excavation phased of development as a precautionary measure to insure full compliance with County, State,and Federal regulations. If the need for further archaeological study of the site is indicated, the study will adhere to all applicable requirement of the Department of Land and Natural Resources.

D. COASTAL VIEWS AND LANDFORMS

The City and County of Honolulu, has conducted a comprehensive view shed assessment documented in "Coastal View Study, City and County of Honolulu Department of Land Utilization, 1987". In this study, the existing visual resources of the entire Oahu coastline are inventoried, prioritized, and documented. The coastal viewshed which may be affected by the project is provided in Figure 16.

According to the Coastal View Study, the Kailua Bay view shed is relatively small and "bounded by Mokapu Point and Wailea Point, and contains the areas of Kailua and Lanikai. While pedestrian views are available from the shoreline, the entire coastline (with the exception of Kailua Beach Park) is tightly lined with existing residential homes, effectively eliminating public coastal views from the road." According to the Coastal View Study, this lateral coastal view is highly vivid and illustrates a unified visual composition between the viewshed and the predominant residential land uses that line the

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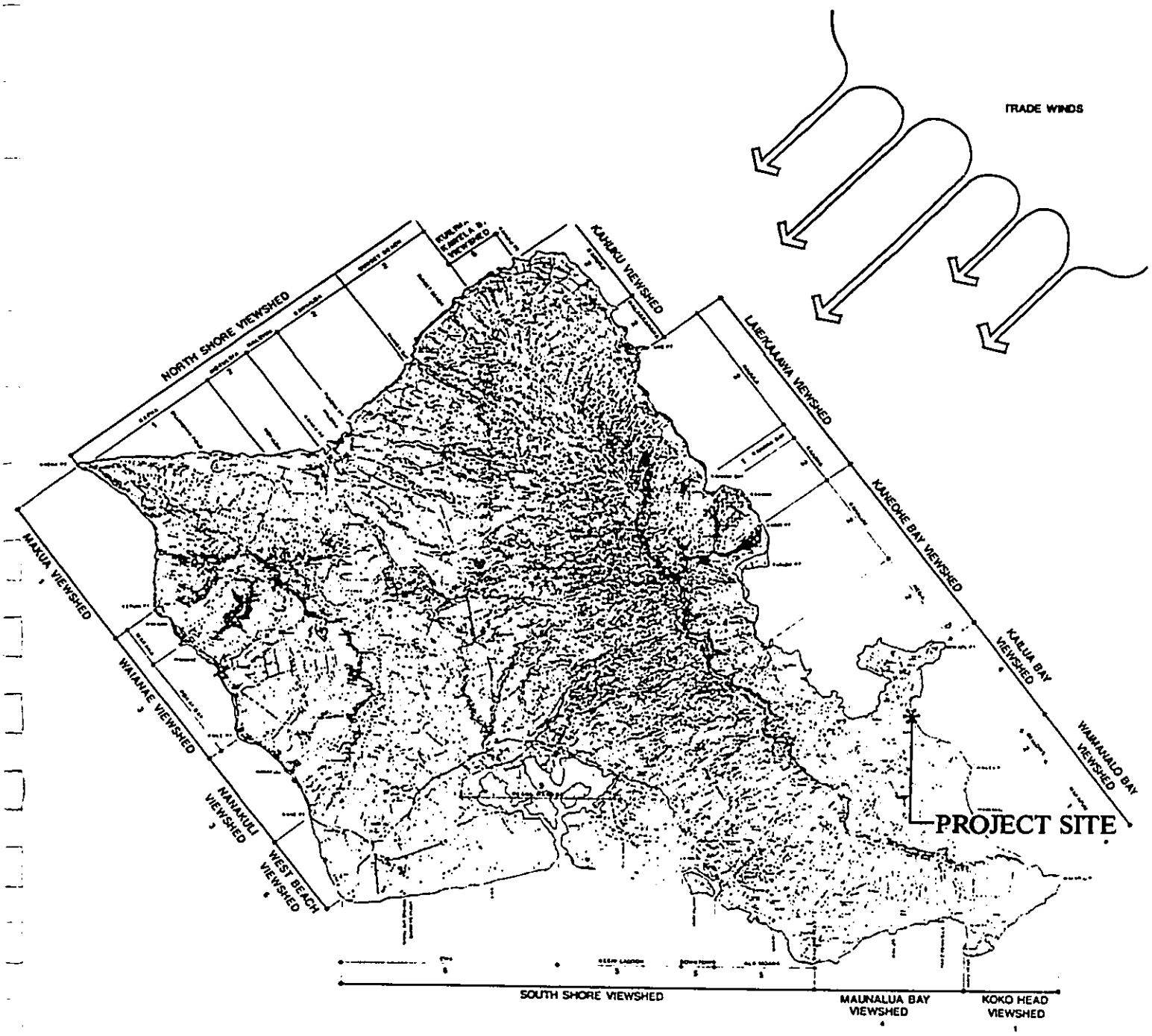

ISLAND OF OAHU

FIGURE 16
VIEW SHED / TRADE WINDS
ENVIRONMENTAL ASSESSMENT
HALE O' KAINALU

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SOURCE: COASTAL VIEW STUDY, C & C OF HONOLULU, DEPARTMENT OF LAND UTILIZATION, 1987

shoreline. Viewing distance across the bay is approximately 3.5 miles.

Specifically, the Coastal View Study, has classified the Kailua Bay Viewshed as a "Type 4". This view shed occurs in fully suburban residential communities, fully developed between the shoreline and coastal highway. The only recommendation for management of the visual resource associated with this viewshed, is;

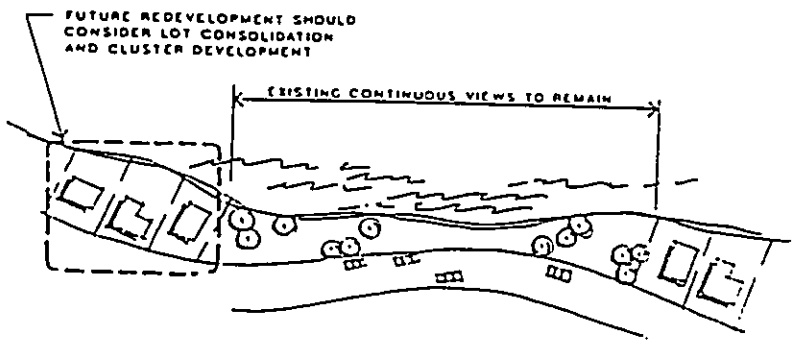
> "Scrutinizing public improvements to public beach parks to insure that existing view openings are not encroached upon with unnecessary screening or the placement of structures."

The Coastal View Study also evaluated existing zoning designations to determine whether entitlements established by zoning could impact the viewshed. As stated in the Study;

> "An investigation of the zoning maps did not uncover any inconsistencies with the Development Plans or any instances where the height regulations would adversely impact any of the coastal view resources."

Design guidelines recommended to protect the viewshed that are applicable to the proposed Cluster Housing project, include Guidelines 1.2, 1.3, and 2.1 as follows:

1.2 "Existing continuous views from the coastal highway should remain unobstructed. Redevelopment adjacent to continuous views should consider clustering to structures as a way to expand the view."

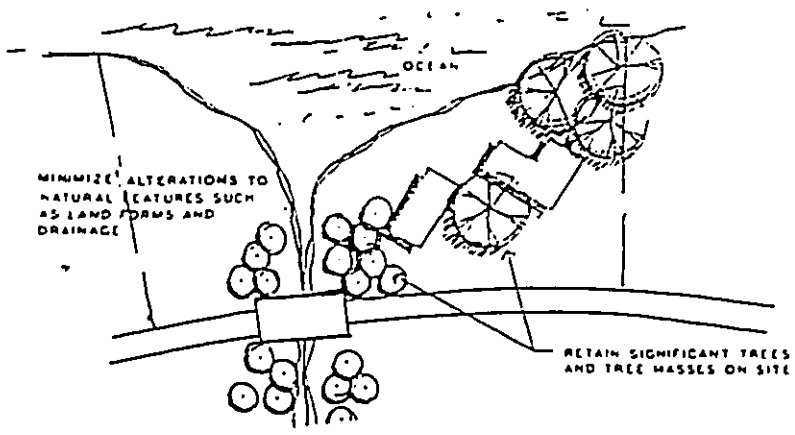


Discussion:

Although there are no views from North Kalaheo Avenue to Kailua Beach, the proposed Cluster Housing project will maintain and enhance views to the greatest extent possible as recommended in Guideline 1.2. Additionally, the reduced density from that currently permitted by the R-10 zoning, will effectively create a sense of openness and maximize potential views. Establishing view corridors directed toward the ocean and envisioned by the proposed site plan, is not possible with the restrictions inherent in a conventional

subdivision.

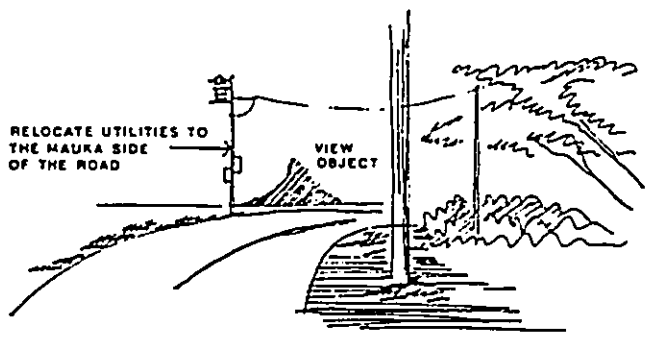
1.3 "Alteration to existing natural features such as coastal land forms, drainage patterns and stands of existing trees should be discouraged, unless necessary for health and safety, environmental protection, or enhancement of views from public areas."



Discussion:

No alterations to existing natural features, coastal land forms, drainage patterns, and existing plant materials are necessary. The shoreline (and access) will be unchanged, overall drainage patterns will be maintained, and use of plant materials will be enhanced to integrate the residential architecture into the surrounding landscape and land forms. Significant tree masses will be maintained.

2.1 "Overhead utilities along the coastal highway should be located on the mauka side of the orad or placed underground when they are in an area where they would otherwise interfere with a continuous shoreline view."



Discussion:

All necessary utility lines leading from North Kalaheo Avenue into the subject property will be placed underground.

E. WATER QUALITY IMPACTS

Water quality impacts associated with the proposed project would result from surface drainage and infiltration characteristics associated with on-site topography and permeability of the soil profile.

As previously described, the on-site topographical characteristics of the subject property do not furnish the necessary slope or other drainage features that would permit significant surface drainage discharge into the ocean. Although the amount of impermeable surfaces will increase above the current condition, on-site drainage features will be established to allow for the maximum infiltration of surface runoff during intense storm events. These consist of retention areas, grassed drainageways, roof gutters, and other methods commonly associated with residential developments.

The generally high permeability of the soils will also mitigate the potential for creating unacceptable off-site surface runoff. Additionally, the proximity of the ocean to the subject property eliminates any potential use of the underlying ground water as a potable water source. No potable water sources exist down slope from the subject property. As such, fertilizers and other chemicals associated with urban landscaping will not impact the ground water resource or off shore receiving waters. The amount of landscaped lawn area will slightly decrease, although the quantity of larger plant materials will actually increase above the current condition.

F. PHOTO RECONNAISSANCE

As depicted below, the existing structures found on the subject property are typical of the surrounding residential neighborhood and the open aesthetic qualities characteristic of Kailua Beach. The proposed cluster housing project is designed to maintain and enhance these qualities by reducing allowable densities and expanding the use of plant materials beyond the present landscape treatment.

1. Structures Adjacent or Proximate to Subject Property

Several two story structures located on adjoining properties are generally built up to the zoning setback line and are very visible from within the subject property. Consequently, the proposed project will visually alter existing views as perceived from the off-site second story windows of adjacent dwellings. However, the extensive landscaping and open space quality of the proposed master plan will generally improve and enhance the

visual image of the property, especially when considering the higher densities of adjoining residential properties. In addition, the visual presence of the proposed residential structures, is entirely representive of what should be expected within a residential neighborhood (see Photo Series 1).

2. Kailua Beach and Mauka Visual Characteristics

Looking into the subject property from Kailua Beach, existing structures are well integrated into the dense landscaping. Although proposed residential structures will architecturally utilize a greater portion of the lot width, the open character and extensive use of heavily landscaped lanai areas, will not affect views from the beach. Inasmuch as no structures will protrude into the shoreline setback area, the visual corridor established by Kailua Beach and open space character of the subject property will remain essentially the same.

3. Existing Entry Features

Only the driveway entrance and associated fencing are currently visible from North Kalaheo Avenue. After project build-out, no major portions of the proposed residential structures will be visible from the travelled portion of the roadway. The existing visual character of the neighborhood when viewed from the roadway will be unchanged.

4. Existing and Proposed Open Space Areas

Presently, open space is comprised of large lawn areas mauka of the main residence, a volley ball play/lawn area, and less heavily vegetated areas proximate to Kailua Beach (see Photo Series 4). After project development and establishment of the landscape plan, open space areas available to project residents will be located makai of each beach front unit, along a central "fairway" leading from the drivecourt to the beach area, and small private spaces provided for each unit.

5. Miscellaneous

The existing project site entry gate and fencing is depicted in Photo Series 5. No clearly defined landscaped entry statement is present. Other landscape features and edge treatments are also shown. Note that the entry fencing is typical of all existing fencing as illustrated in the Existing Site Map, Figure 4.

DOCUMENT CAPTURED AS RECEIVED

ADJACENT STRUCTURES
Photo Series 1

Two-story building on east edge. Note height of building relative to fence.

Adjacent east edge. Note fencing and lack of second story windows.

Adjacent West (mauka) edge. Knoll represents height elevation and steepest slopes on site. Adjacent structures are clearly visible from within subject property.

DOCUMENT CAPTURED AS RECEIVED

KAILUA BEACH VIEWS
Photo Series 2

View across beach toward Lanikai. Note vegetation line and building setback from beach.

Views looking toward Kaneohe across edge of Kailua Beach. Vegetation typical of project site.

Adjacent property viewed from Kailua Beach.

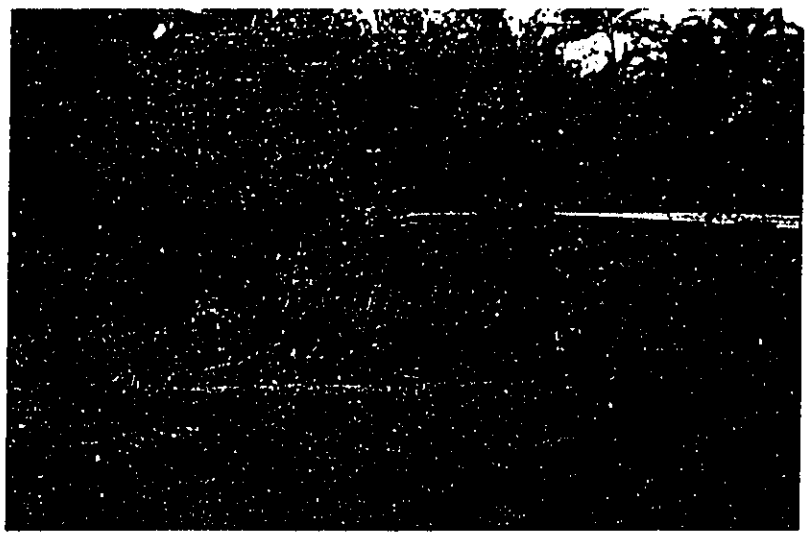
DOCUMENT CAPTURED AS RECEIVED

ENTRY FEATURES
Photo Series 3

Existing driveway, fencing, and landscape features looking mauka toward North Kalaheo.

Existing driveway looking makai from project entry. Coconut trees will be retained in drivecourt center "island".

Storage and office structures.



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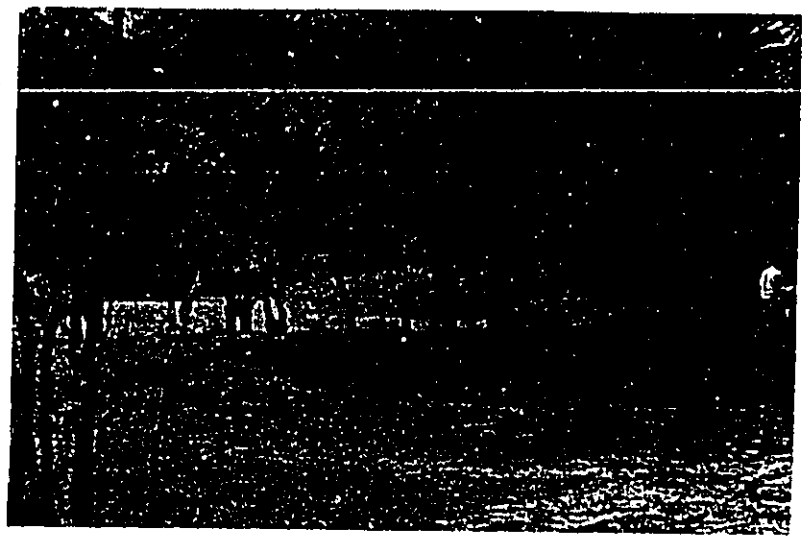
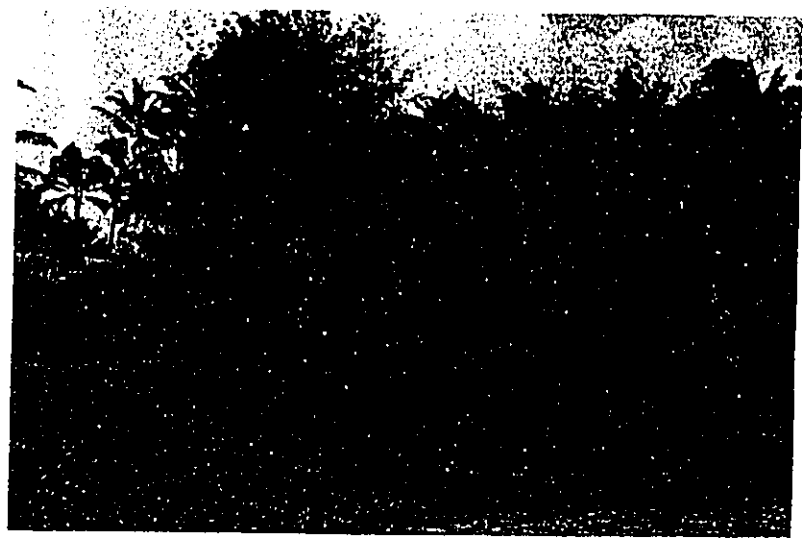
EXISTING OPEN SPACE AREAS
Photo Series 4



Open space features viewed from beach area in mauka direction.

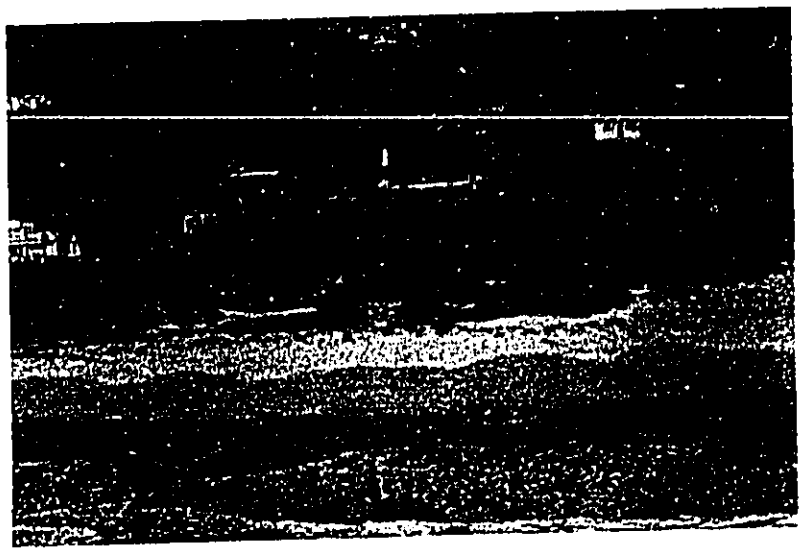
Note large lawn area and understory plant materials.



Transition area between Kailua Beach and open space/lawn areas.

DOCUMENT CAPTURED AS RECEIVED

MISCELLANEOUS
Photo Series 5



Aerial view of subject property from above Kailua Beach.

Existing fencing and landscaping.

Existing edge treatment.

IV. PROJECT IMPACTS

A. COASTAL ZONE MANAGEMENT OBJECTIVES

Hawaii Coastal Zone Management Act

The objectives of the Hawaii Coastal Zone Management (CZM) Act as set forth in Chapter 205A, Hawaii Revised Statutes, applies to the protection and maintenance of valuable coastal resources. The proposed Cluster Housing project conforms to the applicable CZM objectives as follows:

A) Erosion control measures will be undertaken during project construction to mitigate the potential impact of near shore siltation during intense storm events. Design of project drainage systems will follow all design standards of the City and County of Honolulu to ensure the adequate conveyance and management of storm water. No project generated runoff will be discharged into the ocean. Protection of groundwater resources will also be ensured by the use of on-site retention basins.

B) No development or construction will occur within the 100-year flood hazard zone as identified in the Flood Insurance Rate Maps.

Inasmuch as the proposed project is consistent with the presently designated Urban State Land Use District and the City and County of Honolulu R-10 Residential zoning designation, the proposed project does not conflict with existing land use regulatory controls. Consequently, none of the proposed improvements are in conflict with any plans, programs, or other activities of the State Coastal Zone Management Program.

B. SPECIAL MANAGEMENT AREA IMPACTS

The Special Management Area (SMA) is defined by ordinance of the City and County of Honolulu to establish additional development controls along Oahu's shoreline areas. Specifically, development is generally defined as grading, removing, dredging mining, or the extraction of any materials; and the construction, reconstruction, demolition, or alteration of the size of any structure. Consequently, the proposed improvements will be subject to approval under provisions set-forth by the City and County of Honolulu's SMA Ordinance 84-4 as amended.

According to Section 4, SMA Review Guidelines, the Council shall review development proposed in the Special Management Area to insure:

(1) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas, and natural reserves is provided to the extent consistent with sound conservation principles;

(2) Adequate and properly located public recreation areas and wildlife preserves are reserved;

(3) Provisions are made for solid and liquid waste treatment, disposition, and management which will minimize adverse effects upon Special Management Area resources; and,

(4) Alterations to existing land forms and vegetation except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure in the event of earthquake.

Discussion:

Public access to Kailua Beach will not be affected or altered. The subject property is proximate to a major public access which runs between North Kalaheo Avenue and Kailua Beach. Similarly, existing private beach access easements will not be impacted by the proposed project.

Liquid and solid waste will be disposed of as prescribed by applicable City rules and regulations. No significant improvements to these public facilities will be required.

No adverse effects to water resources, scenic and/or recreational amenities will be created by the proposed project. Runoff into the ocean will be mitigated, the property will be visually enhanced, and recreational opportunities will comply with applicable City ordinances. No natural hazards are associated with the subject property.

In addition, no development shall be approved unless the Council has first found that:

(1) the development will not have any substantial adverse environmental or ecological effect...;

(2) The development is consistent with the objectives and policies set forth in Section 3 and area guidelines contained in Section 205A-26, Hawaii Revised Statutes;

(3) The development is consistent with the County General Plan, development plans, zoning and subdivision codes and other applicable Ordinances.

Discussion:

As stated herein, the proposed Cluster Housing project will not generate significant environmental impacts, is consistent with the guidelines set forth for the Coastal Zone Management program, Section 205A–26. In addition, the subject property and planned development is consistent with the County General Plan, development plans, zoning and subdivision codes and other applicable Ordinances.

C. The Council shall seek to minimize, where reasonable:

(1) Dredging, filling or otherwise altering any bay, estuary, salt march, river mouth, slough, or lagoon.

(2) Any development which would reduce the size of any beach or other area usable for public recreation.

(3) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach.

(4) Any development which would substantially interfere with or detract from the line of sight toward the sea from the State highway nearest the coast.

(5) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

Discussion:

The proposed project will not impact water quality, fisheries, wildlife habitats, agricultural uses, public access or size relative to Kailua Beach, or fill in any important aquatic resource. The proposed development will not be visible from any State highway nearest the coast.

V. MITIGATION MEASURES

A. WATER

The proposed five unit cluster housing development will utilize potable water provided by distribution lines located along North Kalaheo Avenue. Source, storage, and distribution facilities are presently adequate to accommodate the proposed project. The only off-site improvement will involve the upgrading of existing water lines between North Kalaheo Avenue and the subject property. The Applicant will pay all appropriate fees for necessary improvements, hook-up, and metering to the Board of Water Supply system in accordance with applicable regulations.

B. SEWERS

Sewage collection lines are presently located along North Kalaheo Avenue. According to the Division of Wastewater Management, the sewer system can accommodate the five proposed single family dwellings without upgrade to the 36" sewer line located under North Kalaheo Avenue. As such, no off-site improvements will be required. The Applicant will provide funding for all necessary improvements or provide other fees as may be required by the City Division of Wastewater Management.

C. ROADWAYS/TRAFFIC

The five proposed dwelling units represent an reduction in the number of dwelling units allowed under the existing R-10 residential zoning. Assuming two vehicles per unit, the proposed density will generate approximately 10 vehicles as opposed to 18 vehicles that could be anticipated at maximum zoning buildout. As such, the existing roadway system which is adequate to accommodate densities planned for the R-10 zoning, is also adequate to handle any increase in traffic levels that may result from the lesser densities of project development. Therefore, no off-site traffic mitigation measures are necessary to accommodate project related traffic.

D. DRAINAGE

Off site drainage impacts will be mitigated by the development of on-site retention basins or swales to control flows, permit on site sedimentation of runoff constituents, and to allow for on-site ground water recharge.

The proposed residential landscape will provide permanent ground cover which will significantly control both wind and water based soil erosion.

E. SOLID WASTE DISPOSAL

The proposed project will not cause a change in the manner in which area-wide solid wastes are presently collected and disposed. As such, the project is not expected to result in any adverse impacts relative to solid waste disposal.

F. UTILITIES

No negative impacts on utility systems will result from the development of this project. However, cumulative impacts of this and other projects on an island-wide scale will impact future needs. To mitigate the impact of electrical and communication system development, all necessary on-site utility infrastructure improvements will be provided by the Applicant.

G. RECREATIONAL SERVICES/RESOURCES

Development of the cluster housing project will comply with all applicable park dedication requirements as determined by the City and County of Honolulu. In addition, this type of on-site recreational development will mitigate any off-site use of County recreational facilities in the region that may occur. No other mitigative measures are proposed.

H. POLICE AND FIRE PROTECTION

Police and fire protection services are adequate to accommodate the needs of project development. Although cumulative impacts may result from the future expansion of Kailua's population, the project as proposed will actually lessen the need for additional police and fire protection since the site will not be developed to maximum zoning capacity.

I. SCHOOLS

The Applicant will keep the Department of Education appraised of the development schedule to assure that the educational demands and requirements are met in a timely manner. Only minimal impacts on the public school system are anticipated as a result of project development. As previously described, no new schools will be required as a result of project development.

Special Management Area Permit

Chapter 33, Revised Ordinances of Honolulu

SPECIAL MANAGEMENT AREA IMPACTS

The Special Management Area (SMA) is defined by ordinance of the City and County of Honolulu to establish additional development controls along Oahu's shoreline areas. Specifically, development is generally defined as grading, removing, dredging mining, or the extraction of any materials; and the construction, reconstruction, demolition, or alteration of the size of any structure. Consequently, the proposed improvements will be subject to approval under provisions set-forth by the City and County of Honolulu's SMA Ordinance 84-4 as amended.

The following Review Guidelines establish the primary criteria used by the Council in evaluating the suitability of development within the Special Management Area.

REVIEW GUIDELINES

- According to Section 4, SMA Review Guidelines, the Council shall review development proposed in the Special Management Area to insure:

  (1) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas, and natural reserves is provided to the extent consistent with sound conservation principles;

  (2) Adequate and properly located public recreation areas and wildlife preserves are reserved;

  (3) Provisions are made for solid and liquid waste treatment, disposition, and management which will minimize adverse effects upon Special Management Area resources; and,

  (4) Alterations to existing land forms and vegetation except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure in the event of earthquake.

Discussion:

Public access to Kailua Beach will not be affected or altered. The subject property is proximate to a major public access which runs between North Kalaheo Avenue and Kailua Beach. Similarly, existing private access easements will not be impacted by the proposed project.

Liquid and solid waste will be disposed of as prescribed by applicable City rules and regulations. No significant improvements to these public facilities will be required.

No adverse effects to water resources, scenic and/or recreational amenities will be created by the proposed project. Runoff into the ocean will be mitigated, the property will be visually enhanced, and recreational opportunities will comply with applicable City ordinances. No natural hazards are associated with the subject property.

o In addition, no development shall be approved unless the Council has first found that:

(1) The development will not have any substantial adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or compelling public interest. Such adverse effect shall include, but not be limited to the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options;

(2) The development is consistent with the objectives and policies set forth in Section 3 and area guidelines contained in Section 205A-26, Hawaii Revised Statutes;

(3) The development is consistent with the County General Plan, development plans, zoning and subdivision codes and other applicable Ordinances.

Discussion:

As stated herein, the proposed Cluster Housing project will not generate significant environmental impacts, and is consistent with the guidelines set forth for the Coastal Zone Management program, Section 205A-26. In addition, the subject property and planned development is consistent with the County General Plan, development plans, zoning and subdivision codes and other applicable Ordinances.

o The Council shall seek to minimize, where reasonable:

(1) Dredging, filling or otherwise altering any bay, estuary, salt march, river mouth, slough, or lagoon.

(2) Any development which would reduce the size of any beach or other area usable for public recreation.

(3) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach.

(4) Any development which would substantially interfere with or detract from the line of sight toward the sea from the State highway nearest the coast.

(5) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

Discussion:

The proposed project will not impact water quality, fisheries, wildlife habitats, agricultural uses, public access or size relative to Kailua Beach, or fill in any important aquatic resource. The proposed development will not be visible from any State highway nearest the coast, nor will it impact water quality, fisheries, wildlife habitats or potential or existing agricultural use of the subject property.

ASSESSMENT FILING PROCEDURES

As required by the SMA Ordinance, an Environmental Assessment Negative Declaration for the proposed project has been prepared and is provided herein. Included in the EA are the following filing requirements applicable to the Special Management Area Permit.

(a) A completed application form (to be obtained from the Agency). See cover page.

(b) A tax map key identification of the property on which the applicant proposed his development. See Figure 3 of the Environmental Assessment.

(c) A plot plan of the property drawn to scale. See Figures 4 & 5 of the Environmental Assessment.

(d) A written description of the proposed development and a statement of objectives, and an estimate of the valuation of the development. See Section II, A and D; of the Environmental Assessment.

(e) A written description of the affected environment which addresses the development's technical and environmental characteristics. See Sections III, IV, and V of the Environmental Assessment.

(f) A shoreline survey if the parcel abuts the shoreline. See Figure 5 of the Environmental Assessment for Shoreline Survey Certified by the Department of Land and Natural Resources dated August 6, 1990.

(g) Any other relevant plans or information pertinent to the analysis of the development required by the agency. All pertinent information is herein described or within the Cluster–housing Application and/or the Park Dedication Application.

Appendix A

DIVISION OF WASTEWATER MANAGEMENT
City and County of Honolulu

55/30

RECEIVED
DIV. WWM
JAN 11 1 14 PM '91
PUBLIC SERVICE
SECTION

APPLICATION FOR SEWER CONNECTION
(Allow at least three weeks for processing of application)

PLEASE PRINT

PART A - TO BE FILLED BY APPLICANT

1. Project Name: KALAHEO CLUSTER DEVELOPMENT
2. Address or Location: 510 [redacted] NORTH KALAHEO AVENUE
3. Tax Map Key: 4-3-18:67
4. Type Development: PD-H ___ Cluster ✓ Subdiv. ___ Apt. ___ Other: ___
5. Total No. of Units 5 (Give breakdown below)
   Studio ___ 1 Bdrm. ___ 2 Bdrm. ___ 3 Bdrm. ___
   4 Bdrm. ___ Other: ___
6. Sewer Connection Work Desired: (Give length, size, depth, etc.)
   CONNECT NEW 4" TO EXIST SEWER
7. Approximate Date Connection is Required: 1991
8. Number and Type of Existing Structures on Property: 3 RESIDENCE
   (Check One: Structures to Remain ___ To be Demolished X)
9. Remarks: [illegible]
10. Information provided By: (MAILING ADDRESS)
    Name: STEVEN HARANO Date: JAN 9 1991
    Firm: WM DEAN ALCON & ASSOC. Phone: 842-0300
    Address: 905 UMI ST. SUITE 101 HONOLULU 96819
    Street City Zip Code

PART B - TO BE FILLED BY DIVISION OF WASTEWATER MANAGEMENT

1. Present Zoning: ___ General Plan: ___
2. Sewers: Adequate ✓ Inadequate ___ Not Available ___
   Other: ___
3. Charges: Yes* ✓ No ___
   a. Sewer Assessment ___ Rate X ___ Area sq. ft.... $ ___
   b. Sewer Connection ..... $ ___
   c. Total Estimated Charge ..... $ ___
4. Remarks:* Wastewater system facility charge = $ 7162.00
5. Application:
   Approved: G. Saavedra, Jr. Date 1-14-91
   (Valid for One Year After Date of Approval)
   Not Approved: ___ Date ___

RECEIVED
SEP 10 1990
cjs group architects

DIVISION OF WASTEWATER MANAGEMENT
City and County of Honolulu

44/30

RECEIVED
DIV. WWM
SEP 5 11 17 AM
PUBLIC SERVICE SECTIO

APPLICATION FOR SEWER CONNECTION
(allow at least three weeks for processing of application)

PLEASE PRINT

PART A - TO BE FILLED BY APPLICANT

1. Project Name: KALAHEO CLUSTER DEVELOPMENT
2. Address or Location: 526 NORTH KALAHEO AVENUE
3. Tax Map Key: 4-3-18 : 67 LOT AREA 94636 SF
4. Type Development: PD-H ___ Cluster ✓ Subdiv. ___
   Apt. ___ Other: ___
5. Total No. of Units 7 (Give breakdown below)
   Studio ___ 1 Bdrm. ___ 2 Bdrm. ___ 3 Bdrm. ___
   4 Bdrm. ✓ Other: ___
6. Sewer Connection Work Desired: (Give length, size, depth, etc.)
   EXISTING SEWER
7. Approximate Date Connection is Required: 1991
8. Number and Type of Existing Structures on Property: 1 RESIDENCE
   (Check One: Structures to Remain ___ To be Demolished ✓)
9. Remarks: ___
10. Information provided By: (MAILING ADDRESS)
    Name: LOUISA POTGIETER Date: Sept 5, 90
    Firm: CJS ARCHITECTS Phone: 524-4485
    Address: 1188 FORT ST MALL, NO. 200 (Street) HON. (City) HI 96813 (Zip Code)

PART B - TO BE FILLED BY DIVISION OF WASTEWATER MANAGEMENT

1. Present Zoning: ___ General Plan: ___
2. Sewers: Adequate ___ Inadequate X Not Available ___
   Other: The sewer system can only accommodate 5 single family dwelling units. The 36 inch sewer line in Kalaheo Ave. must be upgraded to accommodate more units. No holding tank system will be allowed.
3. Charges: Yes ___ No ___
   ~~a. Sewer Assessment ___ X ___ sq. ft. $ ___~~
   Rate Area
   b. Sewer Connection ..... $ ___
   c. Total Estimated Charge ..... $ ___
4. Remarks: ___
5. Application:
   Approved: ___ Date ___
   (Valid for One Year After Date of Approval)
   Not Approved: A. Saucha, Jr. Date 9/6/90

WM. DEAN ALCON & ASSOCIATES, INC.
Engineers & Surveyors
905 Umi St. Suite 101
HONOLULU, HI 96819
(808) 842-0300
FAX (808) 847-0444

JOB COLE CLUSTER DEVELOPMENT
SHEET NO. _____ OF _____
CALCULATED BY SH DATE 1/16/01
CHECKED BY _____ DATE _____
SCALE _____

DRAINAGE CALCULATIONS

REFERENCE: STORM DRAINAGE STANDARDS, DEPT. OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

METHOD: RATIONAL METHOD : Q=(C)(I)(A)
RECURRENCE INTERVAL : Tm = 10 YRS

	EXISTING CONDITION	NEW DEVELOPMENT
(A) AREA (ACRES)	2.20 ACRES	2.20 ACRES
TERRAIN	GROUND COVER PREDOMINATELY SAND, SITE IMPROVEMENTS COVER 15% OF TOT. AREA	GROUND COVER PREDOMINATELY SAND, SITE IMPROVEMENTS TO COVER 50% OF TOT. AREA
(C) RUNOFF COEFFICIENT (TABLE 2, PG 15)	0.55	0.65
FLOW LENGTH (FT.)	550 FT.	550 FT.
SLOPE	1.8% (AVE)	2.0% (AVE)
TIME OF CONCENTRATION (MIN.) (PLATE 3, PG 18)	14 MIN.	12 MIN.
1 HOUR RAINFALL INTENSITY (IN.) (PLATE 1, PG 16)	1.9 INCHES	1.9 INCHES
CORRECTION FACTOR (PLATE 4, PG 18)	2.0	2.1
(I) DESIGN RAINFALL INTENSITY	3.80 INCHES	3.99 INCHES
(Q) RUNOFF QUANTITY (CFS)	4.60 CFS	5.71 CFS

wm dean alcon & associates, inc.

905 umi street
suite 101
honolulu, hawaii 96819
telephone: (808) 842-0300

January 8, 1991
wdaa # 902250

Honolulu Fire Department
1455 S. Beretania St., 3rd Flr.
Honolulu, Hawaii 96814

ATTENTION: MR. LIONEL CAMARA, FIRE CHIEF

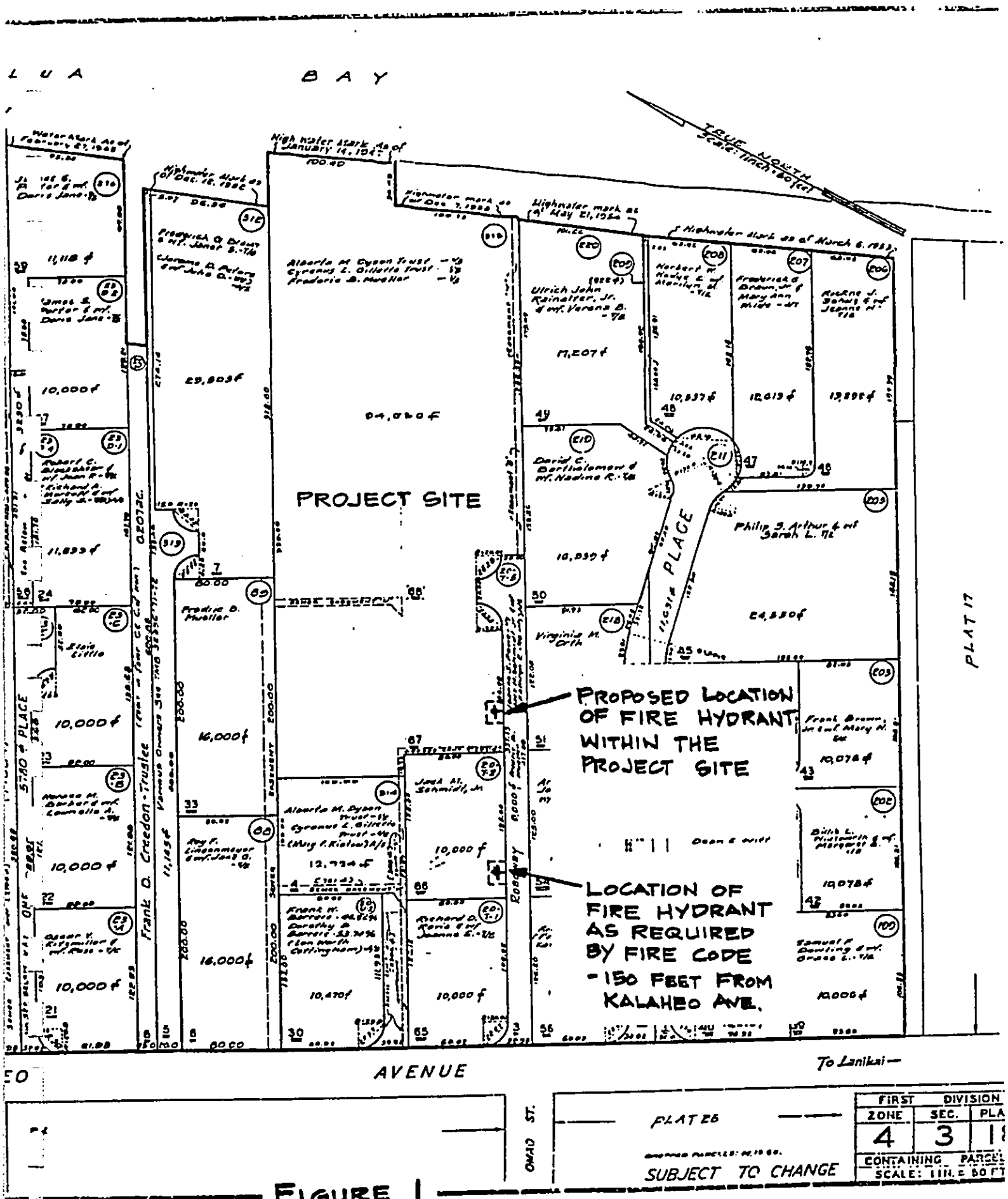
Dear Chief Camara:

RE: MODIFICATION TO FIRE PROTECTION REQUIREMENTS
KALAHEO RESIDENCE CLUSTER DEVELOPMENT
TAX MAP KEY : 4-3-18 : 67

The residence located at 506-C North Kalaheo Avenue, Kailua (TMK: 4-3-18: 67) is proposing to replace its existing dwelling with a new cluster housing development. The parcel is located approximately 230 feet off of Kalaheo Avenue (figure 1). Between this property and Kalaheo Avenue are two other parcels (TMK: 4-3-18: 65 & 66). The owners of these three parcels also share ownership in a private access roadway (parcel 3).

An existing fire hydrant (W-77) is located near the roadway entrance, along the shoulder of Kalaheo Avenue. After meeting with the Fire Department - Plan Review Section, it was determined that additional on-site hydrants will be neccessary. The Fire Department Code calls for a fire hydrant to be located 150 feet from Kalaheo Avenue. This will Require installing the fire hydrant in the adjoining property (parcel 66), along with the granting of an easement by it's owner. Therefore, initiating such an action will be difficult.

In view of the situation, we hereby request that the minimum hydrant spacing requiremnt be waived to allow the fire hydrant to be installed within the subject property. consequently, the need for a fire hydrant will still be met, however, its location will be further than the required 150 feet from Kalaheo Avenue. This appears to be the most viable solution in keeping with fire protection requirements.



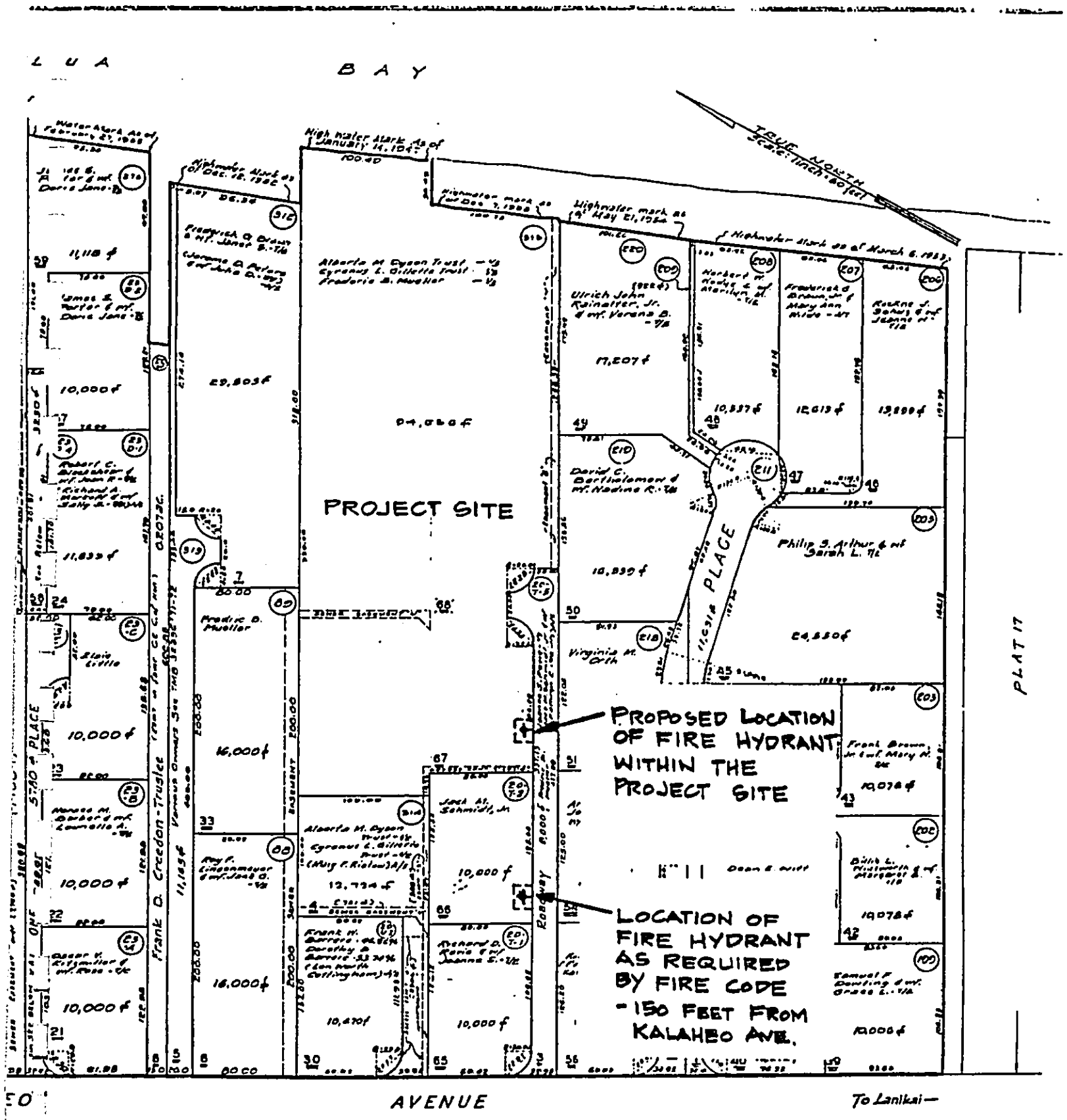
BAY
TRUE NORTH
PROJECT SITE
PROPOSED LOCATION OF FIRE HYDRANT WITHIN THE PROJECT SITE
LOCATION OF FIRE HYDRANT AS REQUIRED BY FIRE CODE -150 FEET FROM KALAHEO AVE.
PLACE
PLAT 17
AVENUE
To Lanikai
PLAT 26
SUBJECT TO CHANGE
FIRST DIVISION
ZONE
SEC.
4
3
CONTAINING PARCEL

FIGURE 1

CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING

XEROX COPY WITH NON-REMOVABLE ATTACHMENT



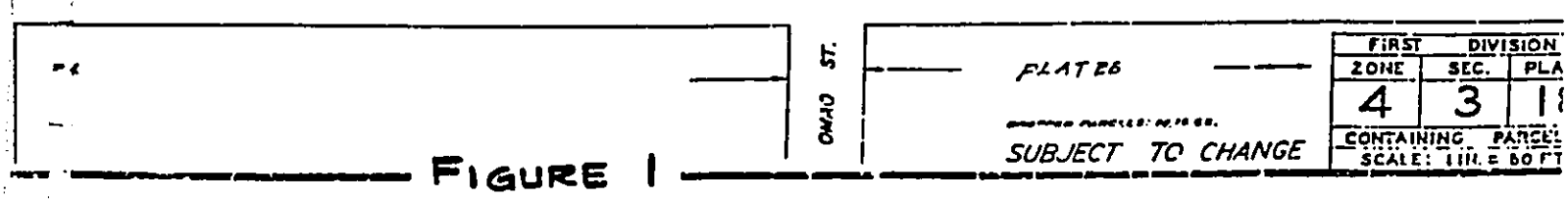


FIGURE 1

Please feel free to call our office if you have any questions or would like to discuss this matter further. Your prompt attention to this matter will be greatly appreciated.

Yours very truly,

WM. DEAN ALCON & ASSOCIATES, INC.

Steven Harano, P.E.
Project Engineer

Enclosure

Appendix B

Pan Pacific Ventures, L.P.
510 North Kalaheo Avenue
Kailua, Hawaii 96734
Ph. 808 263-3443

February 1, 1991

Department of Land Utilization
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: **Letter of Authorization: Special Management Area Application; Cluster Housing Application; Park Dedication Application**
TMK: 4-3-18-67

Pan Pacific Ventures, A Hawaiian Limited Partnership, authorizes the CJS Group to act as our Agent in processing the above referenced applications.

Very truly yours,

Pan Pacific Ventures, L.P.

David C. Cole
General Partner

cc: C. Smith
W. Brooks
PBR HAWAII
J. Watanabe