Kuhio Beach Park Expansion & Kalakaua Ave. Promenade

DEPARTMENT OF PLANNING AND PERMITTING

CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4414 • Fax: (808) 527-6743

JEREMY HARRIS
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JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

98/SMA-064 (AC)
98/SV-006 (AC)

August 25, 1998

Mr. Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
State Office Tower, Room 702
235 South Beretania Street
Honolulu, Hawaii 96813

Dear Mr. Gill:

CHAPTER 343, HRS
Environmental Assessment (EA)/Determination
Finding of No Significant Impact

Recorded Owner:		City and County of Honolulu
Applicant	:	Department of Design and Construction, City and County of Honolulu
Agent	:	R.M. Towill Corporation
Location	:	2453 Kalakaua Avenue, Waikiki, Oahu
Tax Map Keys	:	2-6-01: 02, 03, 04, 08, 15, 18 and Kalakaua Avenue
Request	:	Special Management Area Use Permit and Shoreline Setback Variance
Proposal	:	Kuhio Beach Park Expansion and Kalakaua Avenue Promenade
Determination	:	A Finding of No Significant Impact is Issued ✓

Attached and incorporated by reference is the Final EA prepared by the applicant for the project. Based on the significance criteria outlined in Chapter 200, State Administrative Rules, we have determined that preparation of an Environmental Impact Statement is not required.

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We have enclosed a completed OEQC Bulletin Publication Form and four copies of the Final EA. If you have any questions, please contact Art Challacombe of our staff at 523-4107.

Very truly yours,

JAN NAOE SULLIVAN
Director of Planning
and Permitting

JNS:am
Encls.

g:zd\feakuhio.adc

1998-09-23-OA-FEA- Kuhio Beach Park Expansion and Kalakaua Avenue Promenade

FINAL

Environmental Assessment
Prepared in Accordance with Requirements of Chapter 343, Hawaii Revised Statutes

Kuhio Beach Park Expansion & Kalakaua Avenue Promenade

HONOLULU, ISLAND OF OAHU, STATE OF HAWAII

AUGUST 1998

PREPARED FOR:
City and County of Honolulu
Department of Design and Construction
650 South King Street
Honolulu, Hawaii 96813

RMTC

R. M. Towill Corporation
420 Waiakamilo Road, Suite 411
Honolulu, Hawaii 96817-4941
Voice: (808) 842-1133
Facsimile: (808) 842-1937

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FINAL
ENVIRONMENTAL ASSESSMENT

Kuhio Beach Park Expansion & Kalakaua Avenue Promenade

HONOLULU, OAHU
HAWAII

AUGUST 1998

PREPARED FOR:
City and County of Honolulu
Department of Design and Construction
650 South King Street
Honolulu, Hawaii 96813

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

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PROJECT SUMMARY

Project:	Kuhio Beach Park Expansion & Kalakaua Avenue Promenade
Applicant:	City and County of Honolulu, Department of Design and Construction 650 South King Street Honolulu, Hawaii 96813
Agent:	*R.M. Towill Corporation* Contact: Colette Sakoda (Project Manager) Address: 420 Waiakamilo Road, Suite 411 Honolulu, Hawaii 96817-4941 Telephone: (808) 842-1133
Approving Agency:	City and County of Honolulu Department of Public Works
Tax Map Keys:	TMK : 2-6-01:02, 03, 04, 08, 15, 18 & 19
Location:	2453 Kalakaua Avenue, Honolulu, Hawaii 96815
Owner:	City and County of Honolulu & State of Hawaii TMK : 2-6-01:02, 03, 04, & 18 & Kalakaua Avenue City and County of Honolulu 650 South King Street, Honolulu, Hawaii 96813 Phone: 527-6315 Fax: 523-4767 TMK : 2-6-01:15 State of Hawaii (City and County of Honolulu, DPR)
Total Acreage:	± 5 acres (total)
Land Use:	Urban
Zoning:	Waikiki Special District, Public Precinct
Development Plan Land Use Map:	Park and Recreation
Existing Land Use:	Beach Park and Public Street Right-of-Way

SECTION 1
PROJECT BACKGROUND

1.1 PROPOSED ACTION

The City and County of Honolulu, Department of Design and Construction (DDC), proposes improvements to Kuhio Beach Park and Kalakaua Avenue, Waikiki, Oahu. The project will involve the facilities improvements for a 3.40-acre beach park and modifications to a portion of Kalakaua Avenue between Kaiulani and Kapahulu Avenues.

The project is located on the southshore of Oahu (**Figure 1**). The project site is situated within the Waikiki Special District adjacent to a long stretch of sandy shoreline. The purposes of the project are to expand usable beach park areas to the mauka direction, increase green space along Kuhio Beach, and conserve a recreational beach frontage. The entire project site is situated within the special management area (SMA). The DDC will be applying for an SMA Major Use Permit. Due to the proposed use of city and county funds for development, this project is subject to Chapter 343, Hawaii Revised Statutes, pursuant to Chapter 200, Title 11, Hawaii Administrative Rules, as amended. This Environmental Assessment is being prepared to address the environmental impacts anticipated for this project.

1.2 GENERAL DESCRIPTION

Kuhio Beach is situated within the judicial District of Primary Urban Center and identified as Tax Map Keys (TMKs): 2-6-01:02, 03, 04, 08, 15, 18 & 19. This area of Oahu has long been urbanized and is among the highest density resort areas of the State. Kuhio Beach is part of the over one mile long stretch of sandy shoreline, commonly known as Waikiki Beach. Waikiki Beach is the best known and most visited beach in the State, which extends from the Diamond Head end of Fort DeRussy to the Waikiki Aquarium (**Figure 2**). Approximately seven (7)-million repeat visitors utilized the beach park in 1995 alone.

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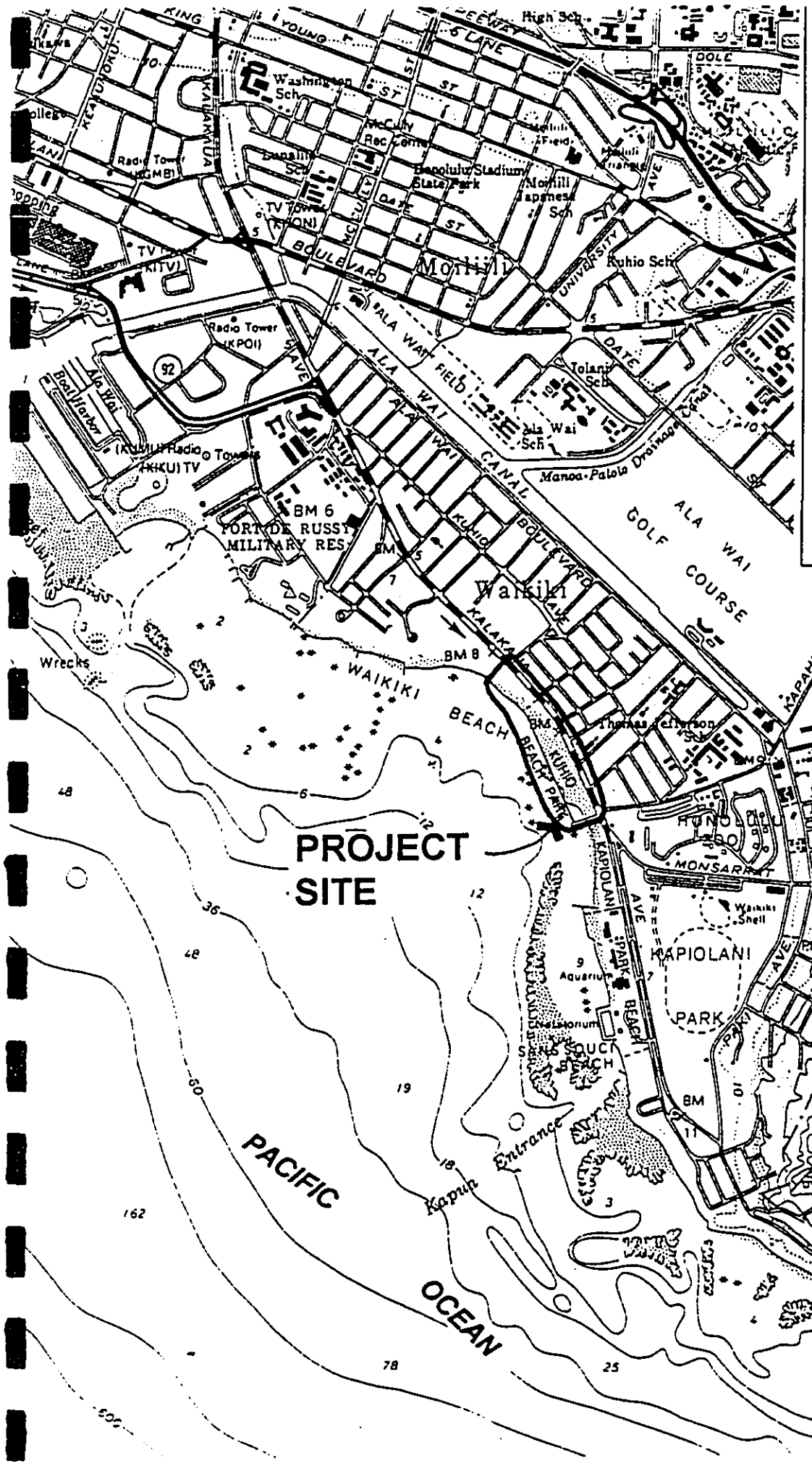

FIGURE 1

Location Map

KUHIO BEACH & KALAKAUA AVENUE IMPROVEMENTS
Honolulu, Oahu
Hawaii

R.M. TOWILL CORPORATION

AUGUST 1998

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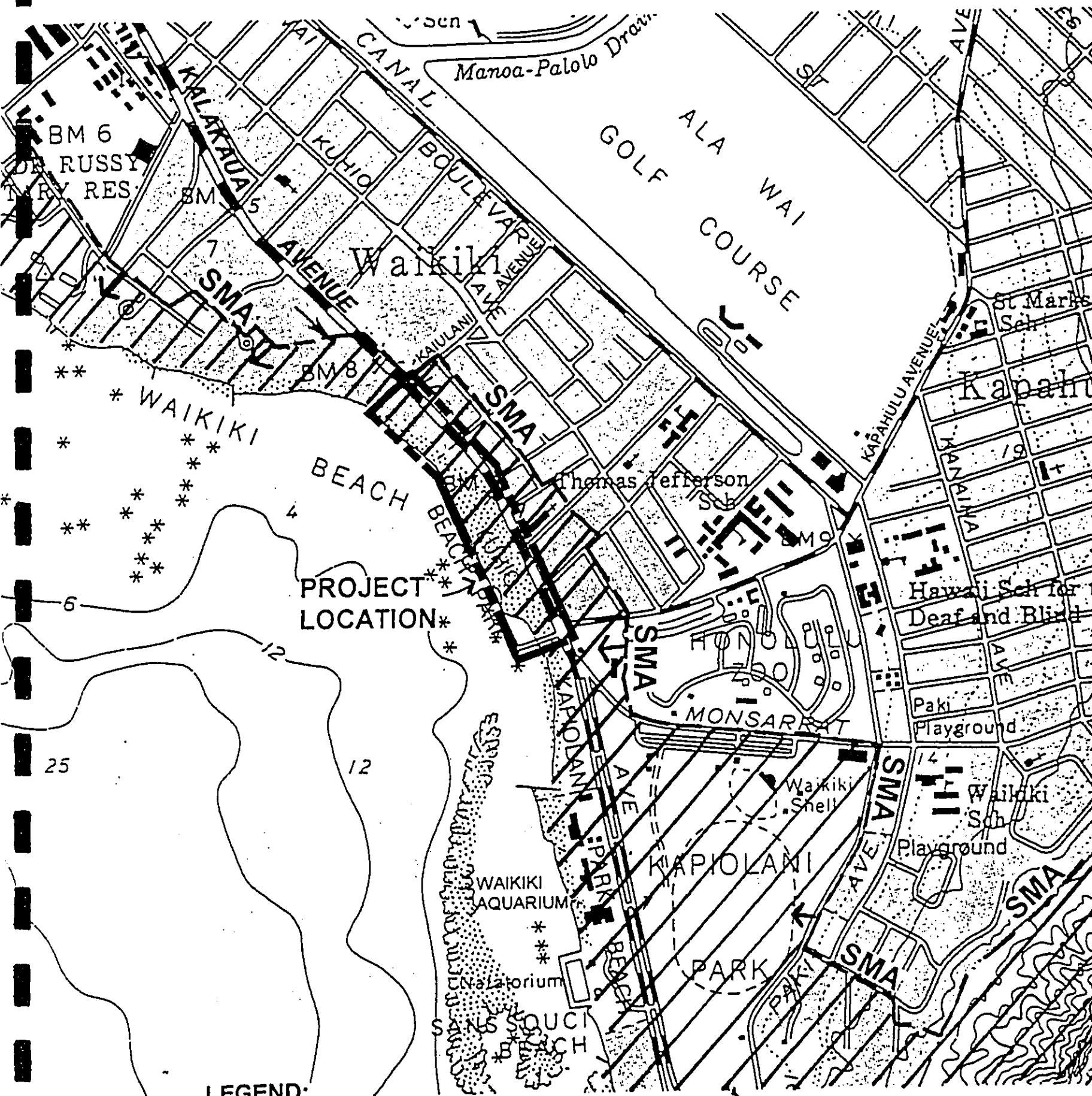


FIGURE 2

SMA Map

KUHIO BEACH & KALAKAUA AVENUE IMPROVEMENTS
Honolulu, Oahu
Hawaii

R.M. TOWILL CORPORATION

AUGUST 1998

Kalakaua Avenue forms the mauka border of Kuhio Beach Park. The roadway is an asphalt-paved four-lane one-way street, which functions as a major commercial street and provides access to hotels, shops, and other activities. The sidewalks along Kalakaua Avenue are the most heavily used pedestrianway in Waikiki. The mauka side of Kalakaua Avenue is fronted with high-rise hotels, store frontages, and condominiums. Both Kalakaua Avenue and Kuhio Beach Park are under jurisdiction of the City and County of Honolulu. A small portion at the western end of the beach park is owned by the State. However, the City and County of Honolulu, Department of Parks and Recreation (DPR) has been authorized to manage all State and City lands in Waikiki Beach.

Approximately 3.4 acres of Kuhio Beach Park currently contains the following facilities: one (1) comfort station; one (1) food concession; one (1) surfboard concession; (4) beachboy concessions; six (6) outdoor showers; and three (3) lifeguard towers.

1.3 SPECIAL MANAGEMENT AREA (SMA)

The entire project site is located within the special management area (SMA) as designated by City and County of Honolulu Ordinance Section 25-2.2 (see **Figure 2**). Since the project lies in the SMA and has a total construction cost in excess of $125,000.00, approval of a major SMA use permit is required. Prior to the Department of Land Utilization (DLU)'s acceptance of the SMA Use Permit request, the acceptance of a final Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) is required.

The project site is partially within the forty (40)-foot shoreline setback area. A Shoreline Setback Variance is required to proceed with the proposed improvements at the beach park.

SECTION 2
DESCRIPTION OF PROJECT

2.1 TECHNICAL CHARACTERISTICS

2.1.1 Use Characteristics

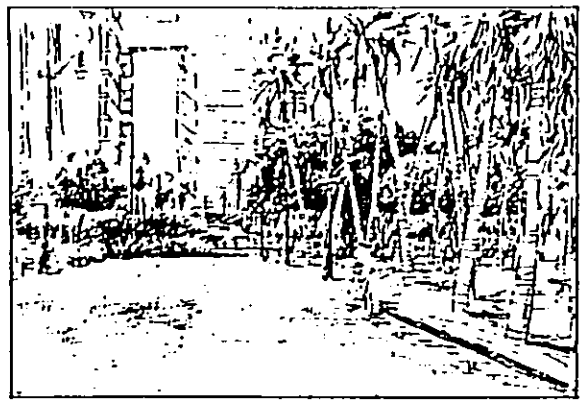
Kuhio Beach Park is located makai of Kalakaua Avenue between the Sheraton Moana Hotel and Kapiolani Park (**Figure 3**). The beach park is separated from mauka development by Kalakaua Avenue which is an asphalt-paved four-lane street. A long strip of sandy beach along Waikiki has been a gateway designation for both visitors and residents of Hawaii. Kuhio Beach Park occupies an area which is among the most crowded in Waikiki. Existing facilities and amenities include a police station, a food concession stand, a surfboard concession, three beachboy concessions, three lifeguard stands, six beach shower areas, outdoor tables, benches, bike racks, a seawall, and six arbors.

The proposed project will expand the landscaped ambiance of Kapiolani Park along Kuhio Beach and Kalakaua Avenue, enhance the mauka pedestrian link to Kuhio Beach, and improve public facilities and services for both visitors and local residents. Kalakaua Avenue would be transformed from a four-lane expanse of asphalt to a three-lane, tree-lined boulevard which accommodates loading bays for service vehicles and a meandering promenade for pedestrians. The proposed improvements will provide the added shade from new trees, as well as new grass and sand beach areas for sitting, relaxing, and enjoying the beach. The project will conserve a recreational beach frontage along the Waikiki shoreline and increase usable beach park areas by expanding the park in the mauka direction. There will be no increase of building structures on the beach. The proposed beach park improvement will comfortably accommodate the existing needs of visitors as well as residents.

2.1.2 Physical Characteristics

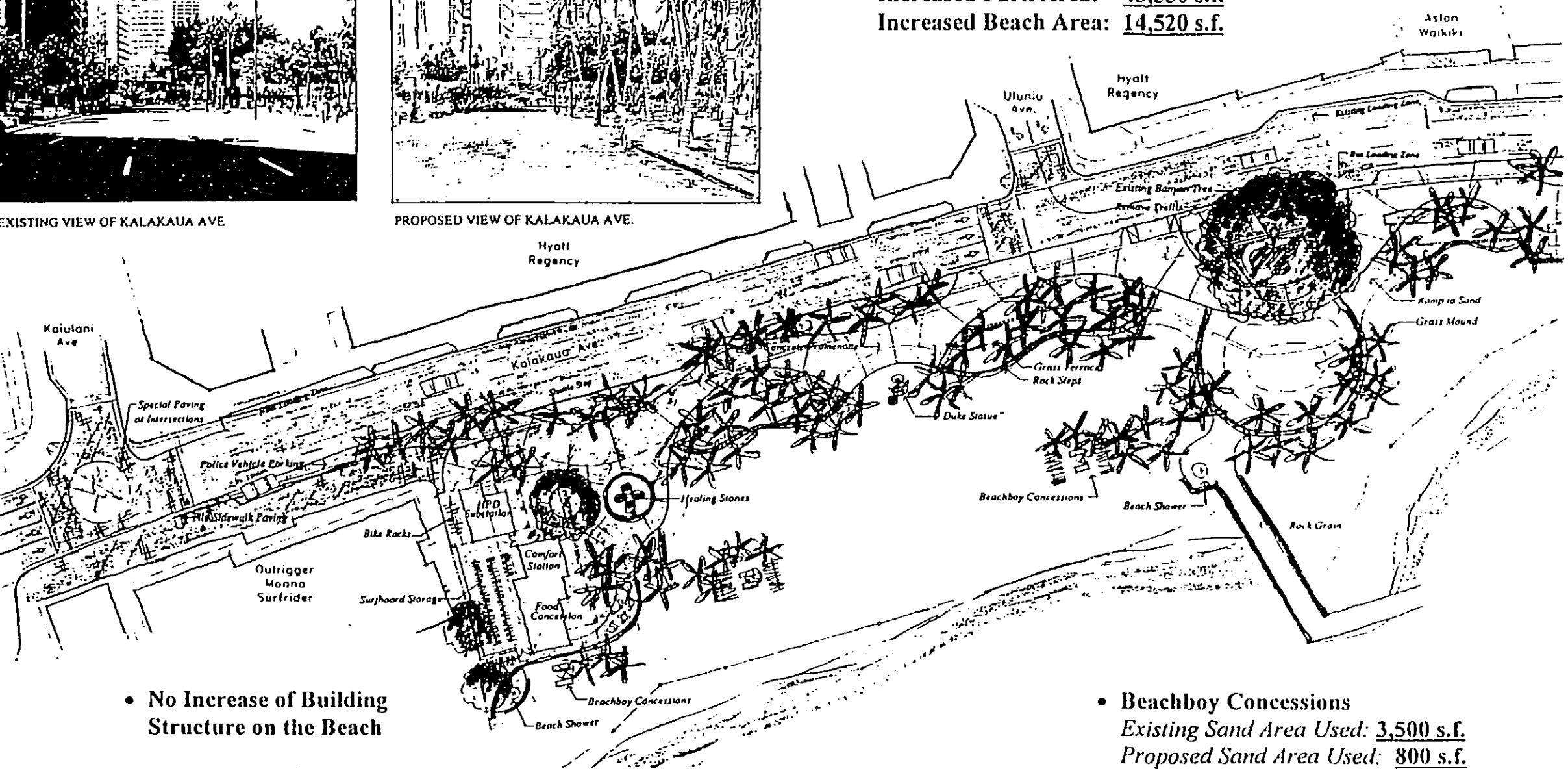
The project site includes approximately 3.4 acres of the beach park and Kalakaua Avenue right-of-way (ROW) between Kaiulani and Kapahulu Avenues. Most improvements proposed as a part

EXISTING VIEW OF KALAKAUA AVE.



PROPOSED VIEW OF KALAKAUA AVE.

Increased Park Area: 43,550 s.f.
Increased Beach Area: 14,520 s.f.



- **No Increase of Building Structure on the Beach**

- **Beachboy Concessions**
  Existing Sand Area Used: 3,500 s.f.
  Proposed Sand Area Used: 800 s.f.

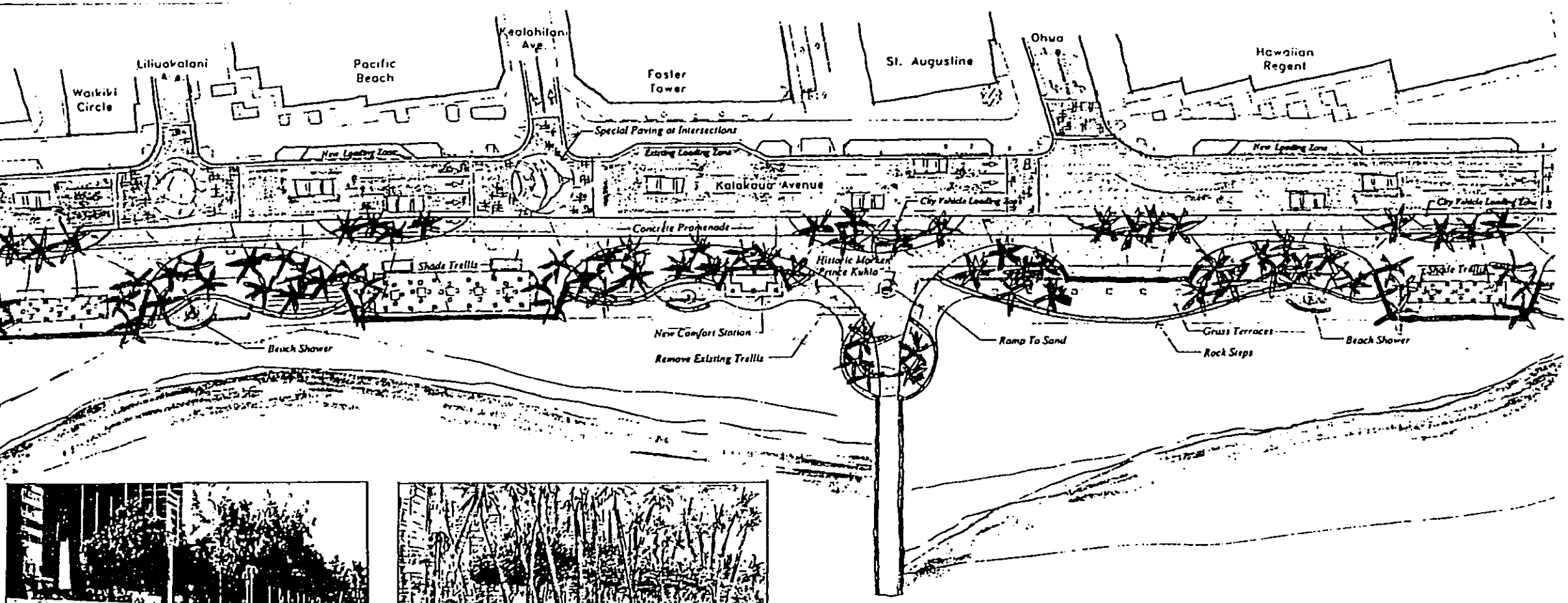
NOT TO SCALE

FIGURE 3a

Conceptual Site Plan

KUHIO BEACH & KALAKAUA AVENUE IMPROVEMENTS
Honolulu, Oahu
Hawaii

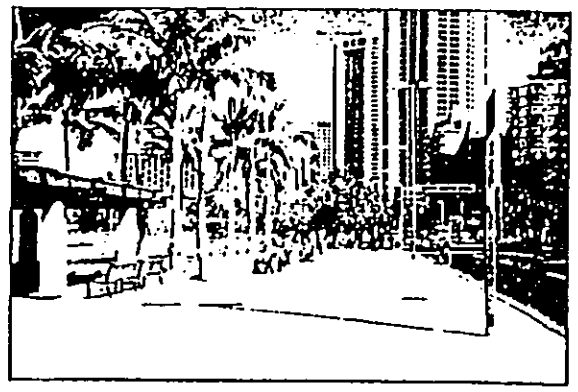
R.M. TOWILL CORPORATION



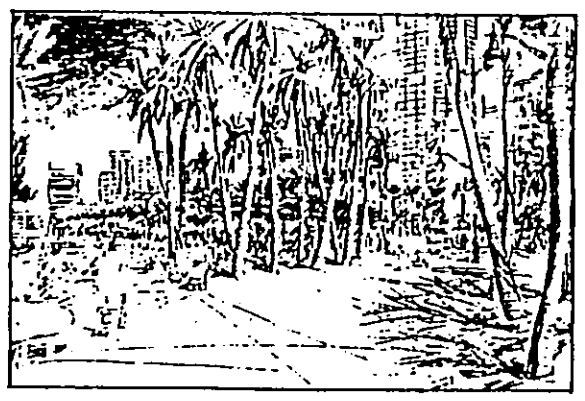
EXISTING TRANSITION
FROM SIDEWALK TO SAND

PROPOSED TRANSITION
FROM SIDEWALK TO SAND

- **Improved "Beach Park" Setting**



EXISTING SIDEWALK CONDITION



PROPOSED SIDEWALK CONDITION

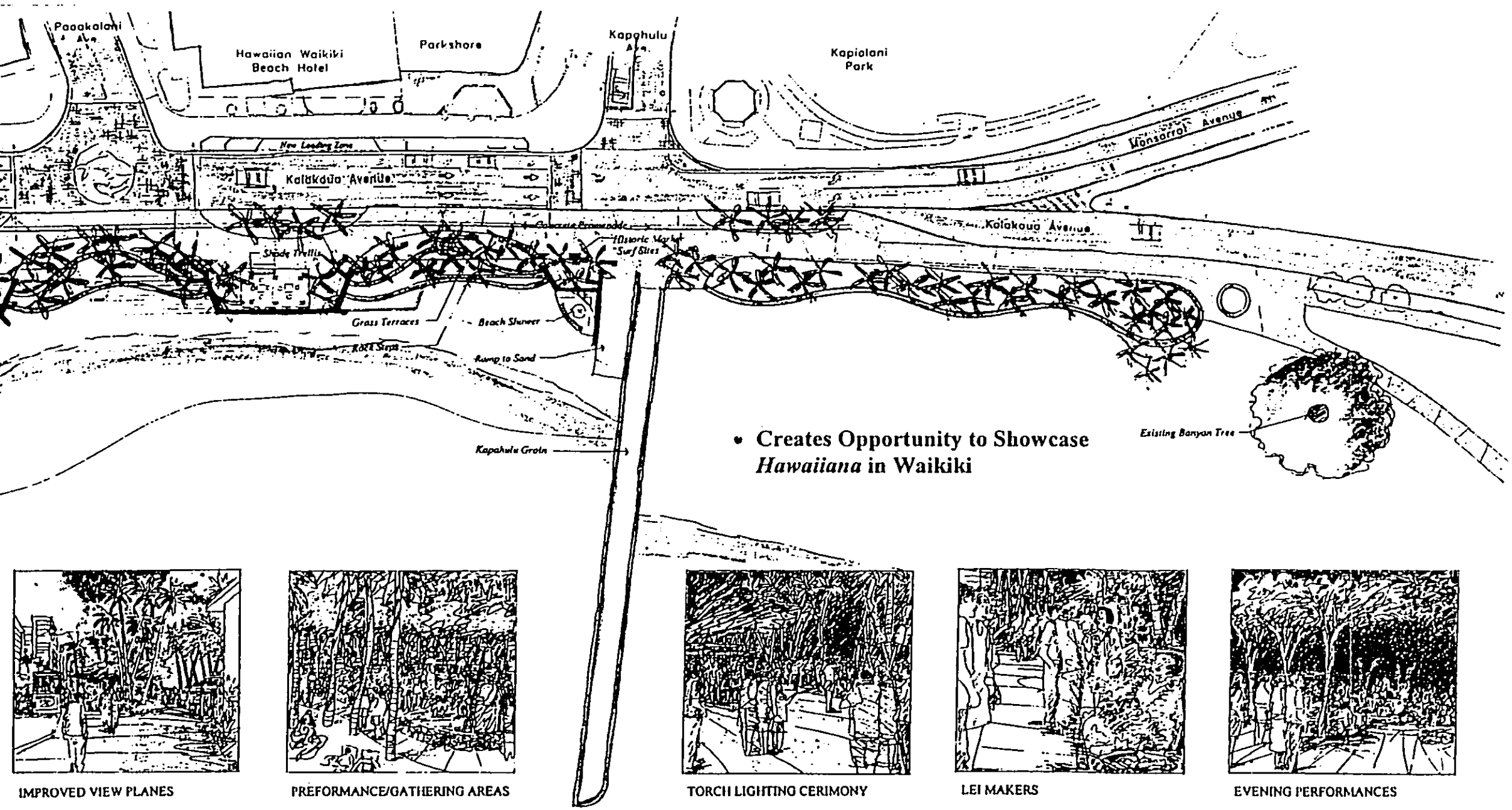
NOT TO SCALE

FIGURE 3b

Conceptual Site Plan

KUHIO BEACH &
KALAKAUA AVENUE
IMPROVEMENTS
Honolulu, Oahu
Hawaii

R.M. TOWILL CORPORATION



IMPROVED VIEW PLANES

PREFORMANCE/GATHERING AREAS

TORCH LIGHTING CERIMONY

LEI MAKERS

EVENING PERFORMANCES

NOT TO SCALE

FIGURE 3c

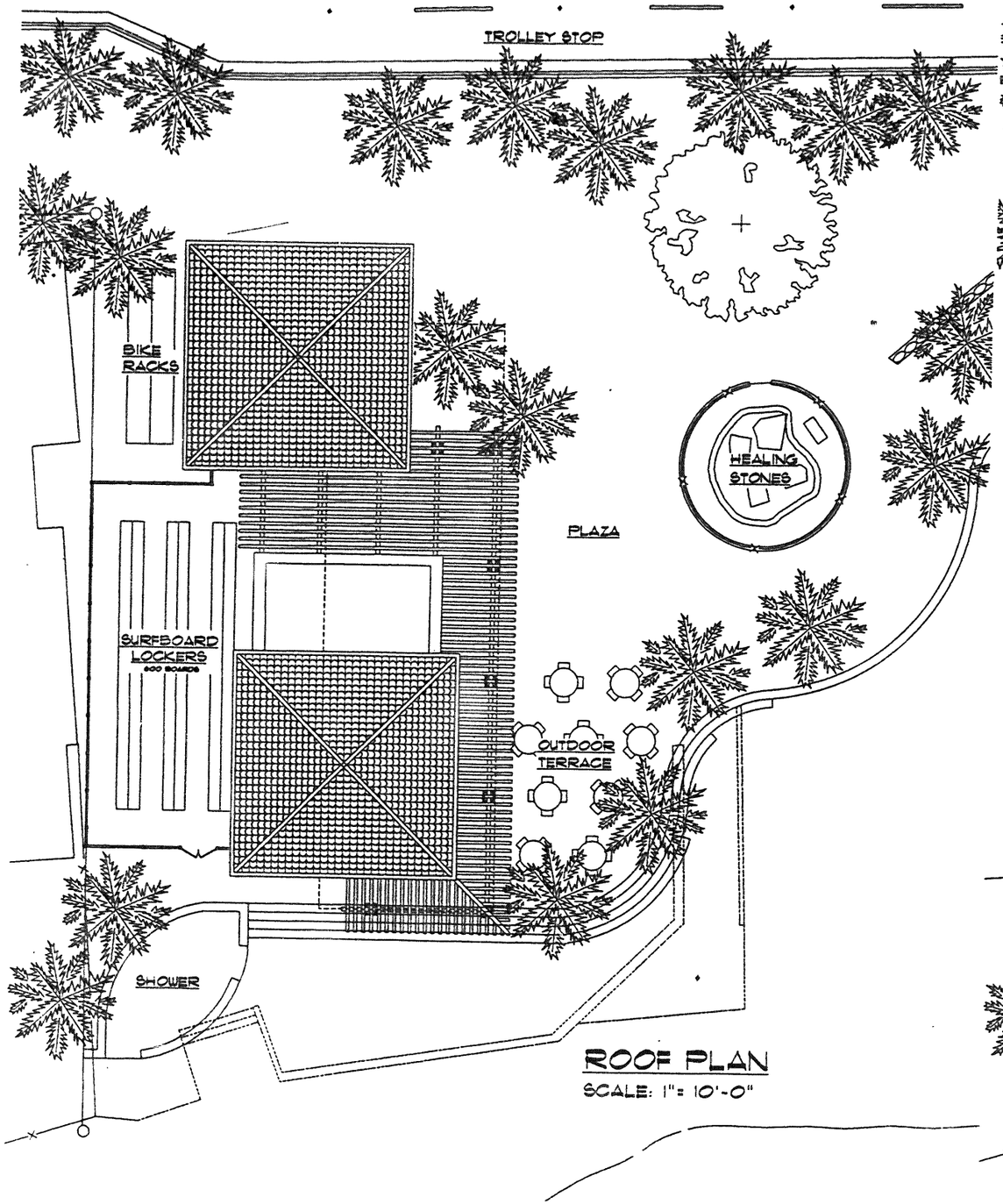
Conceptual Site Plan

KUHIO BEACH & KALAKAUA AVENUE IMPROVEMENTS
Honolulu, Oahu
Hawaii

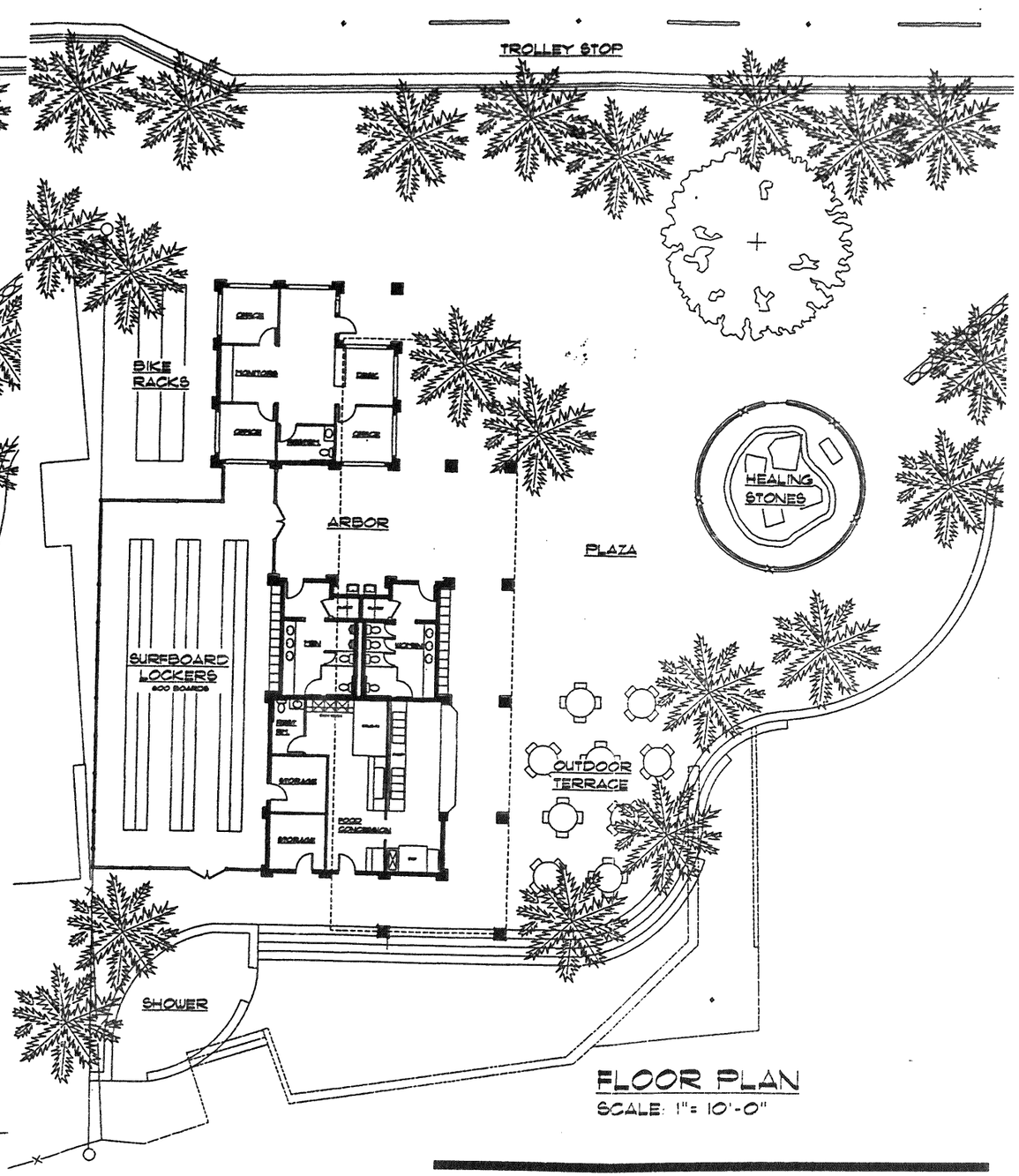
of this project involve the road ROW and land-side improvements to the public beach.

Kalakaua Avenue will be converted from four (4) lanes to three (3) lanes with makai passenger loading and emergency and service vehicle turnouts (see **Figure 3**). The loading zone turnouts will be provided at various locations to accommodate loading activities that presently occur in a curbside lane. At least one loading zone will be provided on each block along the mauka side of Kalakaua Avenue between Kaiulani and Kapahulu Avenues. Therefore, adequate service vehicle turnouts for hotels and shops on the mauka side of Kalakaua Avenue will be maintained. While reducing the makai curbside lane, turnout areas for police parking, shuttle bus stop, passenger loading zone, bus loading zone, and city vehicle loading zone, will be provided along the makai side of Kalakaua Avenue. Also, the project will continue to accommodate passage for bicycles along the makai side curb on Kalakaua Avenue. The proposed modifications on Kalakaua Avenue would allow additional space for sidewalk and landscape improvements between the roadway and the beach.

The major improvements proposed at the existing beach park area include the plaza area renewal. The facilities located within the existing plaza area (approximately 3,000 SF) at the western end of the beach park will be demolished and replaced with a new HPD Police Substation, comfort station, food concession, bike racks, surfboard concession, and beach shower (**Figure 4**). The proposed building structure will be designed to blend with the surroundings through the use of landscape and architectural features, materials, and colors that are similar to the existing design elements. The building style will be similar to the early 1900's territorial style, and consistent with the existing City and County buildings at the Kapiolani Park district. The new facilities at the plaza area will occupy 700 SF less areas than the ones that will be demolished (**Table 1**). Other improvements include an additional comfort station, a new shed, beachboy concessions, water fountains, and other beach support facilities (**Figure 5 & 6**). The proposed shed at the makai end of Kapahulu groin is still preliminary and not within the scope of this project period. Two new water features proposed by the project will be similar to the fountain located at the intersection of Ala Wai and Kapahulu Avenues. The proposed locations for the water fountains are by Banyan Tree and the mauka end of Kapahulu groin. However, the locations and designs of the new water fountain are also still preliminary.



ROOF PLAN
SCALE: 1"= 10'-0"



FLOOR PLAN
SCALE: 1"= 10'-0"

Kuhio Beach & Kalakaua Avenue Improvements

Mayor Jeremy Harris
Office of Waikiki Development

City & County of Honolulu
Department of Public Works

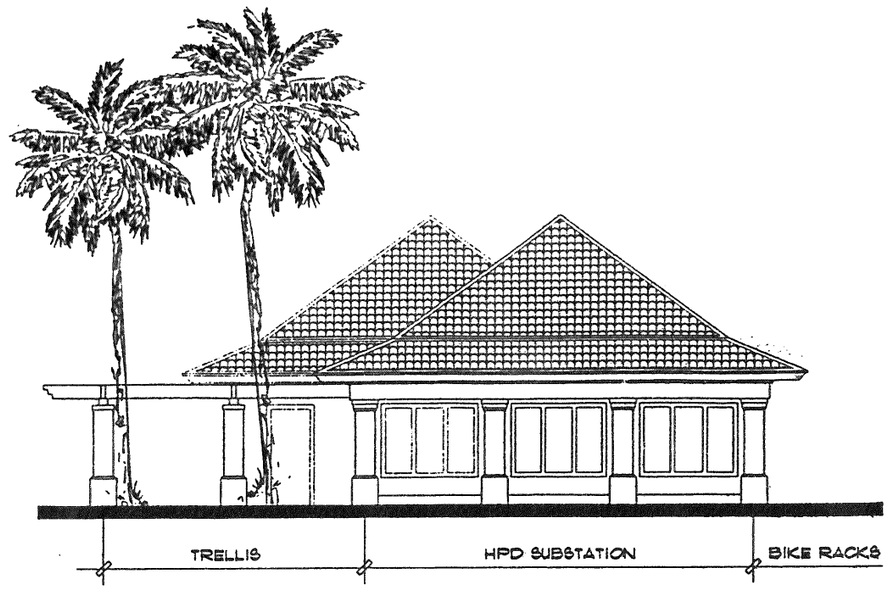
FIGURE 4a

Plaza Area Site Plan

KUHIO BEACH & KALAKAUA AVENUE IMPROVEMENTS
Honolulu, Oahu
Hawaii

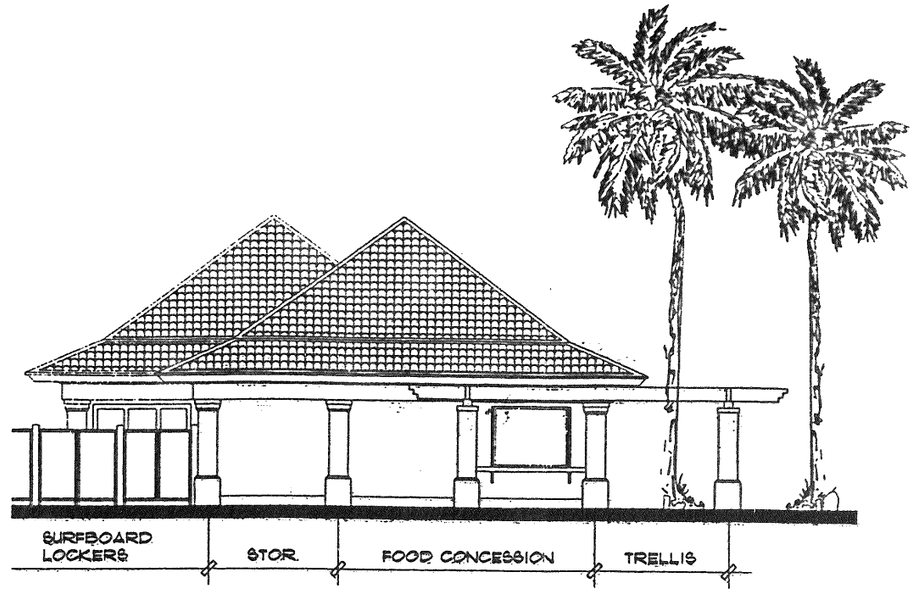
R.M. TOWILL CORPORATION

AUGUST 1998



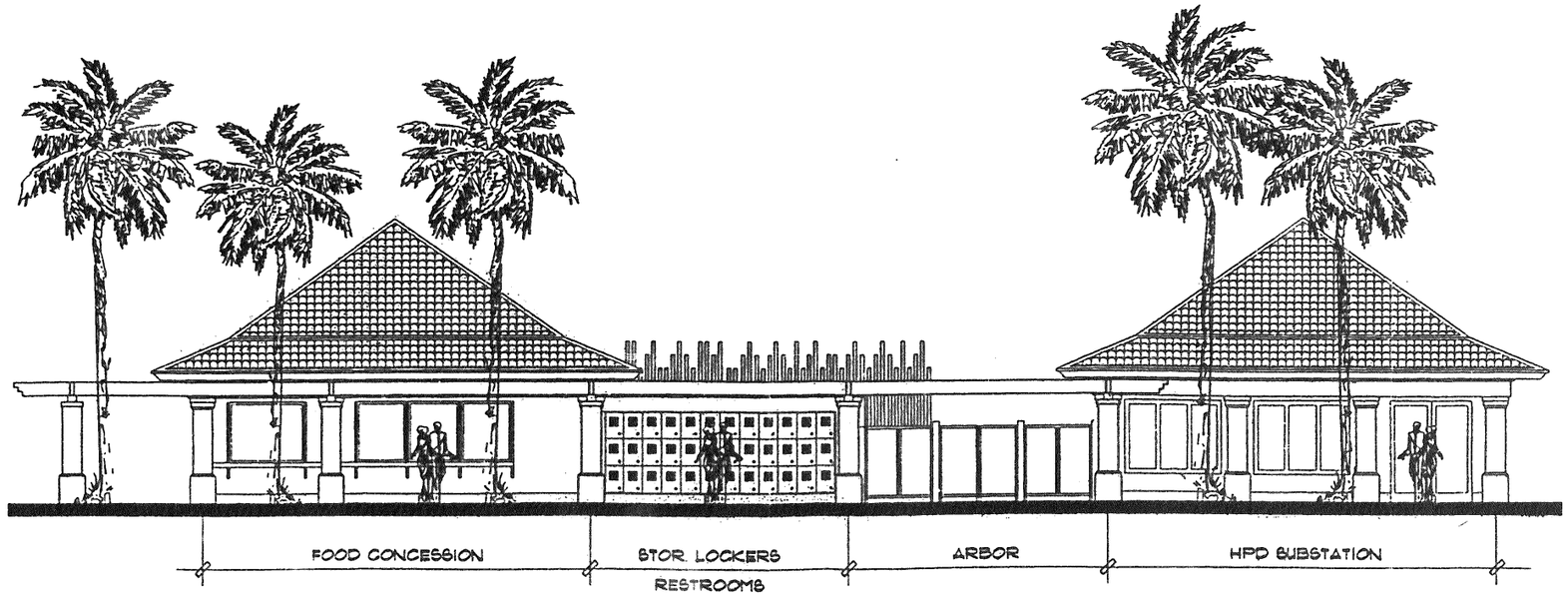
KALAKAUA AVE. ELEVATION

SCALE: 1"= 5'-0"



MAKAI ELEVATION

SCALE: 1"= 5'-0"



DIAMOND HEAD ELEVATION

SCALE: 1"= 5'-0"

Kuhio Beach & Kalakaua Avenue Improvements

Mayor Jeremy Harris
Office of Waikiki Development

City & County of Honolulu
Department of Public Works

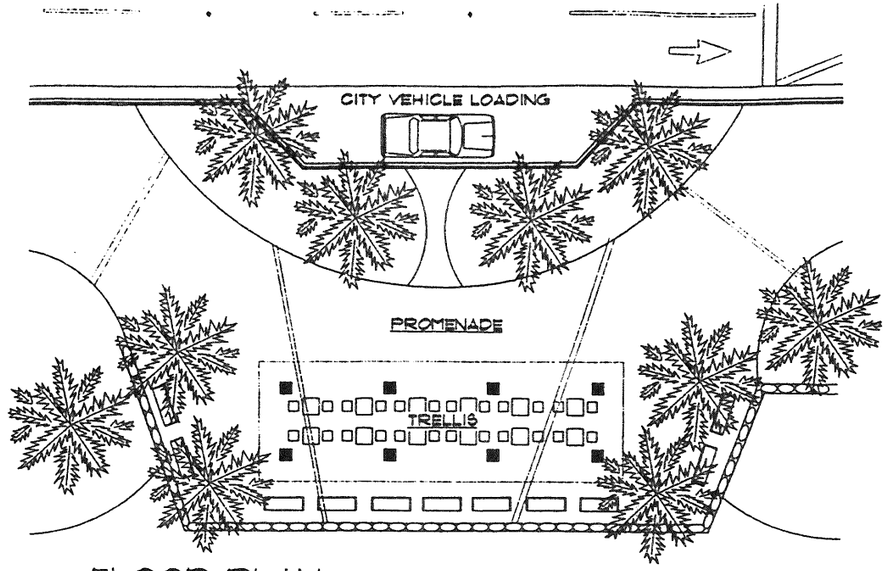
FIGURE 4b

Plaza Area Elevation

KUHIO BEACH & KALAKAUA AVENUE IMPROVEMENTS
Honolulu, Oahu
Hawaii

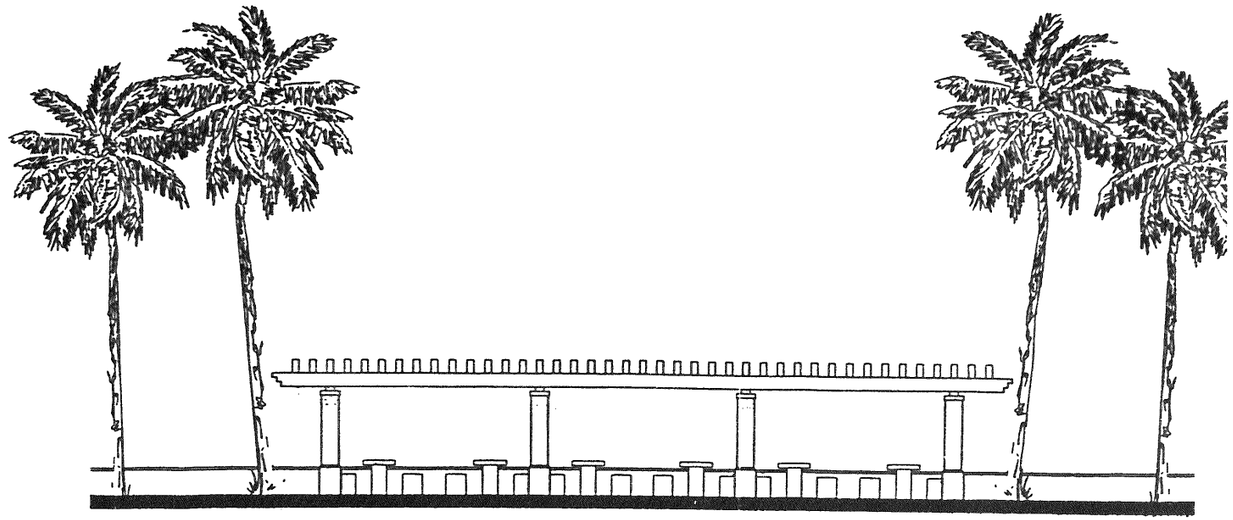
R.M. TOWILL CORPORATION

AUGUST 1998



FLOOR PLAN

SCALE: 1"= 10'-0"



MAUKA ELEVATION

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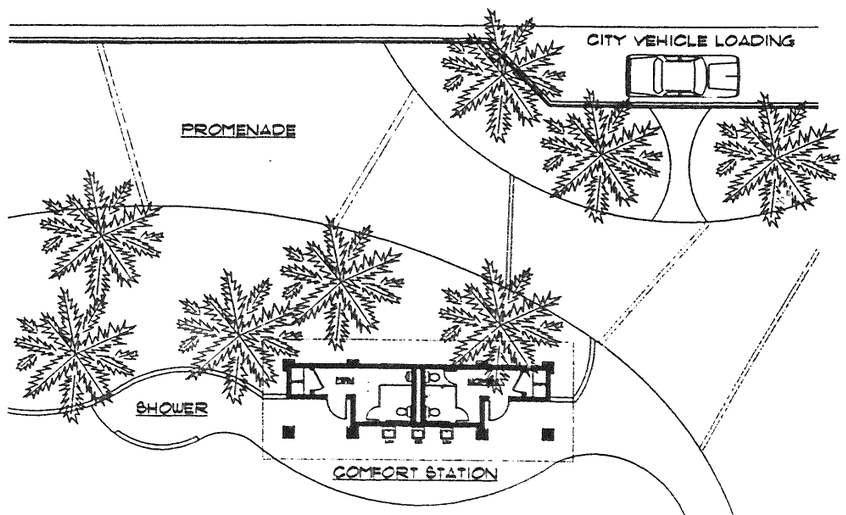
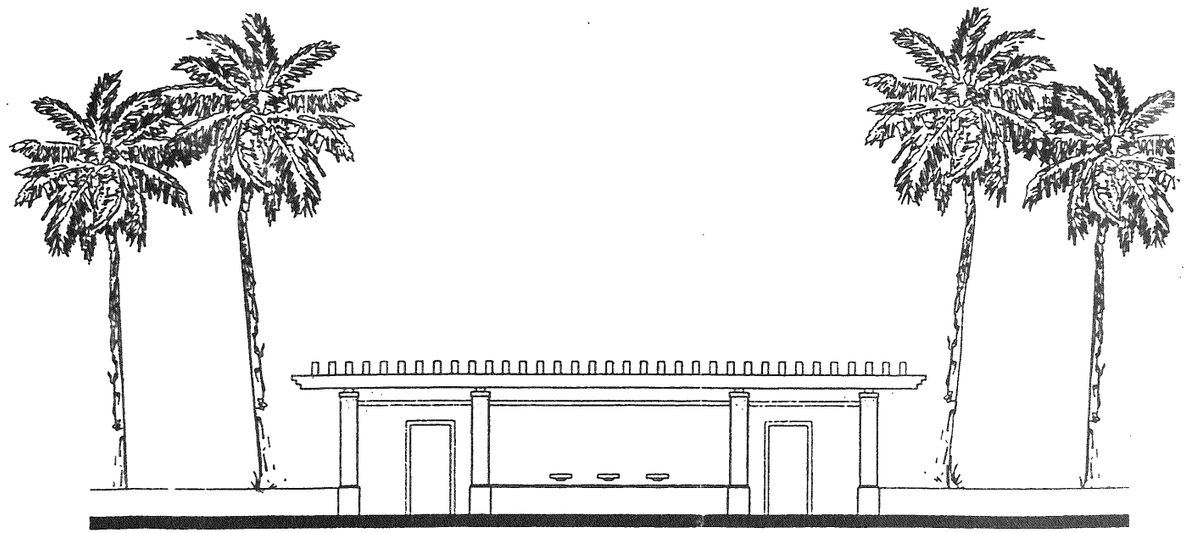


FLOOR PLAN

SCALE: 1"= 10'-0"



MAKAI ELEVATION

SCALE: 1"= 5'-0"

Kuhio Beach & Kalakaua Avenue Improvements

Mayor Jeremy Harris
Office of Waikiki Development

City & County of Honolulu
Department of Public Works

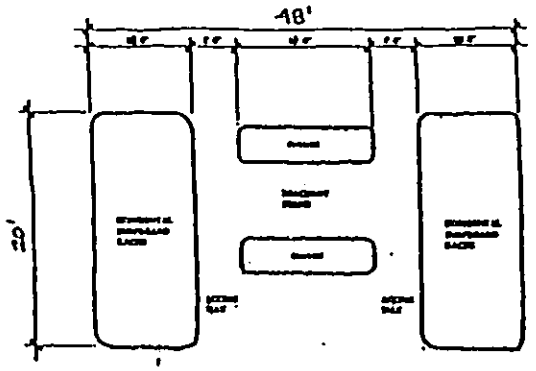
FIGURE 5

Comfort Station & Arbor
Site Plan & Elevation

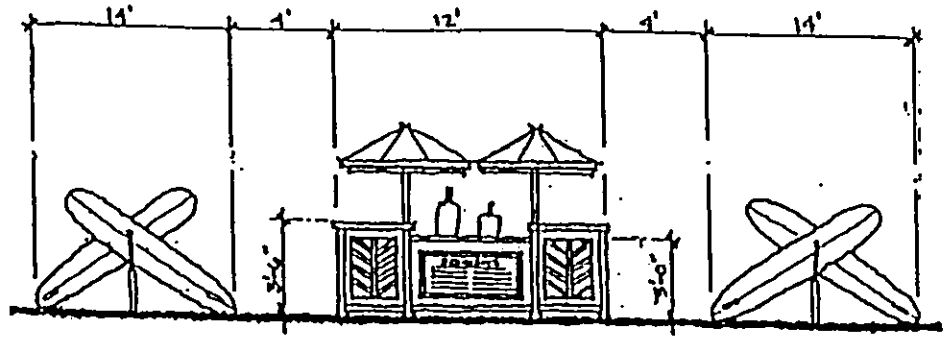
KUHIO BEACH &
KALAKAUA AVENUE
IMPROVEMENTS
Honolulu, Oahu
Hawaii

R.M. TOWILL CORPORATION

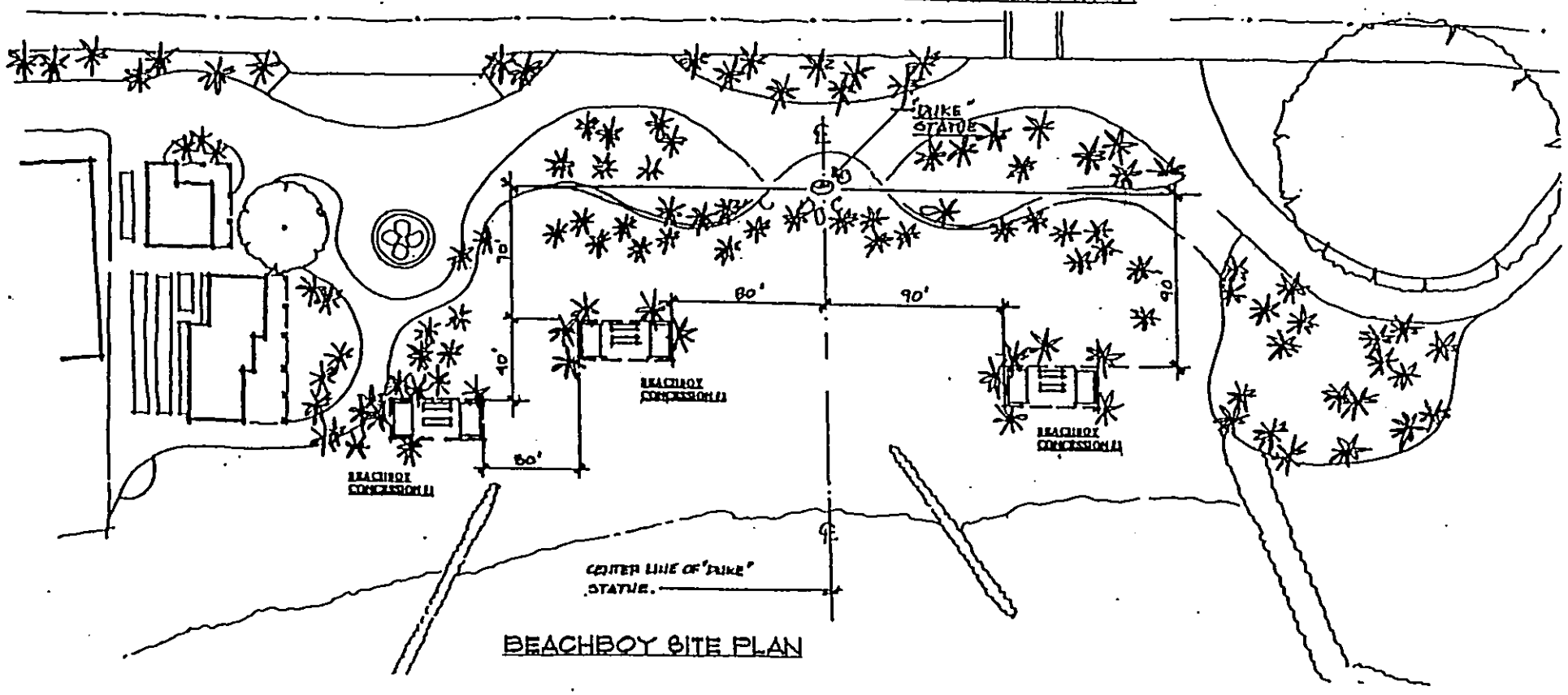
AUGUST 1998



BEACHBOY STAND PLAN



BEACHBOY STAND ELEVATION



BEACHBOY SITE PLAN

Kuhio Beach & Kalakaua Avenue Improvements

Mayor Jeremy Harris — *City & County of Honolulu*

Office of Waikiki Development — *Department of Public Works*

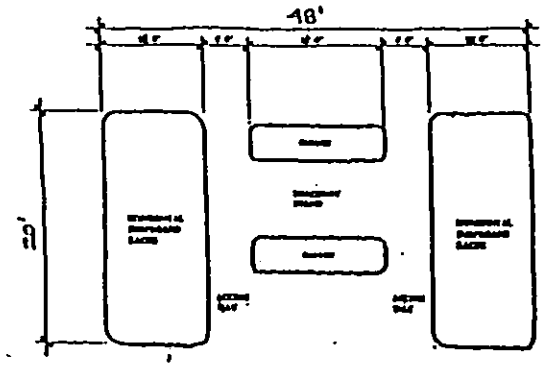
FIGURE 6a

Beachboy Concessions
Site Plan & Elevation

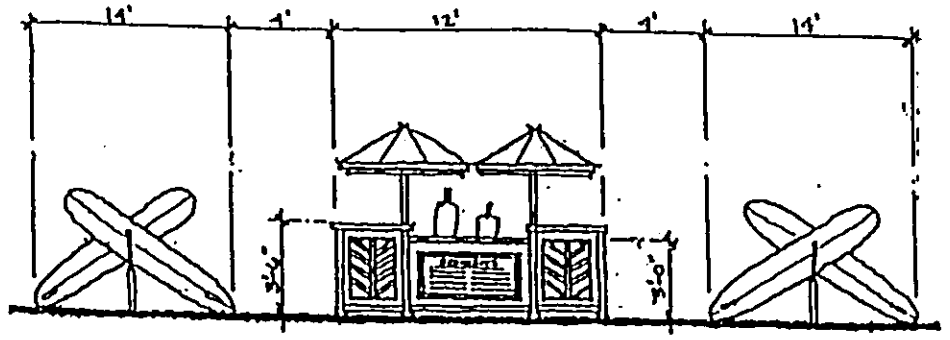
KUHIO BEACH &
KALAKAUA AVENUE
IMPROVEMENTS
Honolulu, Oahu
Hawaii

R.M. TOWILL CORPORATION

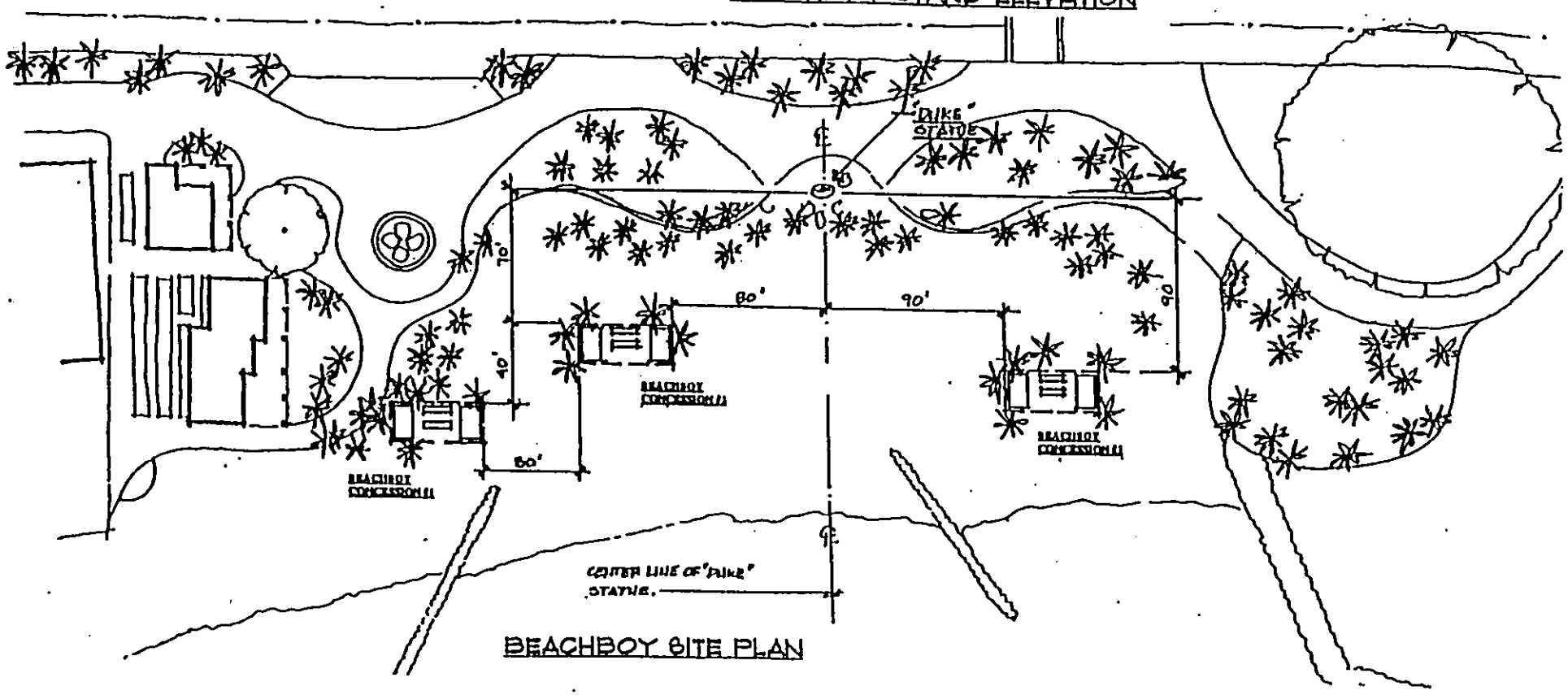
CORRECTION



BEACHBOY STAND PLAN



BEACHBOY STAND ELEVATION



BEACHBOY SITE PLAN

Kuhio Beach & Kalakaua Avenue Improvements

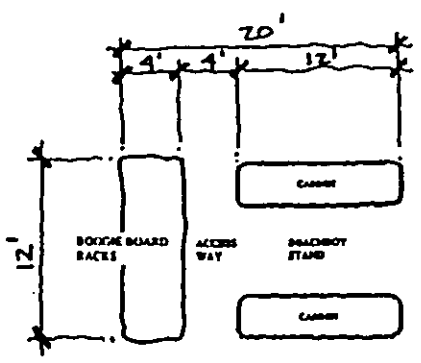
Mayor Jeremy Harris — *City & County of Honolulu*

Office of Waikiki Development — *Department of Public Works*

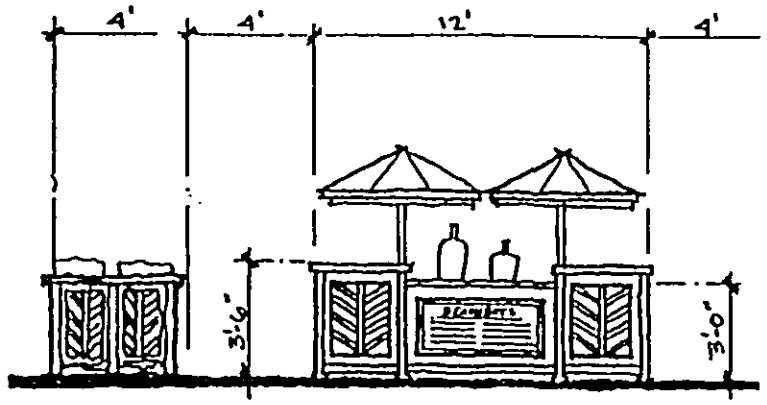
FIGURE 6a

Beachboy Concessions
Site Plan & Elevation

KUHIO BEACH &
KALAKAUA AVENUE
IMPROVEMENTS
Honolulu, Oahu
Hawaii



BEACHBOY STAND PLAN



BEACHBOY STAND ELEVATION

FIGURE 6b

Beachboy Concessions
Site Plan & Elevation

KUHIO BEACH &
KALAKAUA AVENUE
IMPROVEMENTS
Honolulu, Oahu
Hawaii

Table 1: Kuhio Beach Redevelopment Floor Area Takeoffs

	Existing	Proposed
Plaza Area		
H.P.D. Substation	625 sq.ft.	800 sq.ft.
Food Concession	1,100 sq.ft.	700 sq.ft.
Restrooms	800 sq.ft	600 sq.ft.
Storage	475 sq.ft.	200 sq.ft.
Total	**3,000 sq.ft.**	**2,300 sq.ft.**
Surfboard Lockers	500 sq.ft. (500 boards)	600 sq.ft. (600 boards)
Beachboy Concessions (Sand Area Used)	3,500 sq.ft./stand (4 stands)	960 sq.ft./stand (4 stands)
Total	**10,500 sq.ft.**	**1,920 sq.ft.**

The existing transition from sidewalk to sand is through concrete terraces and steps. The project will replace them with grassed terraces and rock steps. Increased green space between Kuhio Beach and Kalakaua Avenue will consist of grass mounds, terraces, trees, and planting. The landscaped areas will be designed in a less formal manner to create a relaxed resort atmosphere and promote the connection with other open space areas such as Kapiolani Park. The ocean view along Kuhio Beach will be improved by reducing paved areas and size of structures, moving structures out of sight line, and increasing vegetative covers and sand beach areas. Palm trees will be dominant planting features which create a tropical atmosphere and do not obstruct views. The proposed project will increase the park area by 43,550 square feet (SF) which include 14,520 SF of beach area. In addition, the proposed project will reduce the sand area used for each beachboy concession from the current 3,500 SF to approximately 960 SF. The total 8,020 SF of the areas that are currently occupied with beachboy concessions will become open sand areas.

2.1.3 Construction Characteristics

Development of the project will require excavation, filling, grading, general construction, and planting and landscaping. Clearing and grubbing will only take place within the areas that have already been paved and heavily developed.

Kalakaua Avenue improvements will involve replacement of asphalt pavement along the makai-end curbside lane between Kaiulani and Kapahulu Avenues. The surface of Kalakaua Avenue ROW will be saw cut to replace it with a pedestrian promenade, planting areas, and loading zone turnouts. The new pedestrian promenade will be enriched concrete to delineate the beach area. The planting areas will be graded to create grass mounds and to plant palm trees. The sections of the makai curbside lane that are currently engaged with loading activities will be designated for new loading zone turnouts.

Construction of the proposed facility improvements will require fencing off the beach park areas in the vicinity of the construction site for safety reasons. Some facilities and businesses will need to be temporarily closed or relocated. The plan for a new shed at the makai end of Kapahulu groin is preliminary, and the construction of the structure is not planned in this phase of the project.

The construction activity will be phased so that not more than the maximum permissible length shall be exposed at any one time. The existing trees and vegetation will be kept undisturbed as much as practicable. During construction, the site will be maintained under safe and clean conditions. Measures will be taken to expedite construction.

The contractor will schedule work activity between the hours of 8:30 a.m. to 3:00 p.m., Monday through Friday, excluding any State holidays. At least two through-lanes will be open while Kalakaua Avenue is worked on. In addition, the contractor shall provide ingress to and egress from driveways and public streets at all times. Should conditions warrant, the contractor may hire personnel to control the flow of traffic around the construction area.

The contractor will perform all applicable construction work in accordance with "the Standard Specifications for Public Works Construction " (September 1994) of the Department of Public Works (DPW), City and County of Honolulu, and the Revised Ordinances of Honolulu (ROH), 1978 as amended.

Additionally, construction and restoration of the existing pedestrian walk shall be performed in accordance with all applicable sections of the "Standard Specifications for Road and Bridge Construction" (1994). All work shall also conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" and the "Manual of Uniform Traffic Control Devices for Street Maintenance Operation." Further, construction plans shall be submitted for review and approval by the City and County of Honolulu, Department of Transportation Services.

2.1.4 Utilities

a. Water Supply and Sewer System

The Waikiki water system is part of the Honolulu Low Service (180') system. The water service enters Waikiki via McCully Street, Ala Moana Boulevard and Kalakaua Avenue on the west, and Kuhio Avenue on the east. The wastewater system in Waikiki is part of the Sand Island wastewater system. Three pump stations currently serve Waikiki. The project site will be served via the existing water and wastewater lines in Kalakaua Avenue. Any proposed facilities such as showers, water fountains, and comfort stations will not pose significant demands on the existing water and sewer systems.

b. Electrical Power

The power system to the site is serviced by Hawaiian Electric Company (HECO) through ductlines leading from Kalakaua Avenue. The present level of support facilities and services provides adequate services to handle the current demand at the project site. The proposed improvement is not anticipated to place enough of a demand to result in the need to increase the level of current facilities and services. The DDC will coordinate with HECO for electrical needs.

2.1.5 Access

Vehicular access to the project site is primarily along Kalakaua Avenue. Kalakaua Avenue is a four-lane one-way street that carries vehicular traffic in the southeasterly (or Diamond Head)

direction. The roadway provides access to hotels, shops, and other activities. The sidewalks along Kalakaua Avenue are heavily used by pedestrians in Waikiki. Most of the intersections on Kalakaua Avenue are signalized. Kapahulu Avenue provides an access to the project area from the mauka direction across Ala Wai Canal. Both Kalakaua and Kapahulu Avenues are city streets and used for minor traffic movements and a pedestrian crossing.

The proposed modification on Kalakaua Avenue is not anticipated to result in any unacceptable traffic conditions during future peak hours (**Appendix A**). A curbside lane is presently used mostly for loading activities for hotels, shops, and other activities. Loading zone turnouts will be provided at various locations to accommodate such activities.

2.2 ECONOMIC AND SOCIAL CHARACTERISTICS

2.2.1 Project Schedule and Cost

Development of the project will commence upon receipt of necessary permits. The project will be constructed in phases. Overall construction time required is estimated at 6 to 9 months.

The proposed improvements on Kuhio Beach Park and Kalakaua Avenue are not anticipated to have significant effects on the area's economic activities. Cost of full development of the project is estimated at approximately $13.5 million. The expanded beach park and improved facilities will relieve the current overcrowded condition at the beach park and comfortably accommodate both visitors and local residents. The proposed improvements in one of the most popular visitor spots in the State will help promote Waikiki as an international gateway destination, which will improve the quality of the living and recreational environments.

2.3 ENVIRONMENTAL CHARACTERISTICS

2.3.1 Climate and Air Quality

Average temperatures in Waikiki range between 72.8 and 80.3 degrees Fahrenheit during the coolest and warmest months, respectively. The extreme temperatures range from 51 to 95 degrees Fahrenheit. The average annual precipitation of the area is approximately 25 inches of

rain.

The present ambient air quality in the project area is generally considered good due to the prevailing tradewinds and the absence of "heavy" industries. Automobile emissions from traffic passing through Kalakaua Avenue are major sources of air pollution in the area.

Impacts: Except for short-term dust emissions during the construction phase of the project, the proposed improvements will not result in significant adverse impacts on the area's climatic conditions or air quality. The proposed landscape will help keep the sand from drifting onto Kalakaua Avenue.

Equipment that will be used during the construction phase will emit exhaust and airborne particulates, and construction work will also produce dust. Due to the close proximity to existing hotels, visitor destinations, and a thoroughfare along Kalakaua Avenue, appropriate mitigative measures will be employed by the contractor in order to reduce the potential for fugitive dust during construction of beach facilities and modifications on the Kalakaua Avenue ROW. Mitigative measures will include the following:

1. Construction will be phased to minimize the amount of excavation and exposed time of excavated areas.

2. Clearing and excavation will be held to the minimum necessary for site access and equipment.

3. Stockpiles will be covered with appropriate materials. Construction debris and excavated materials that will not be used for construction will be disposed of at permitted facilities.

4. The contractor will ensure proper vehicle maintenance. Construction trucks and equipment used at the site will be kept in good condition at all times.

5. Construction work will be scheduled to avoid peak traffic periods in Waikiki.

Also, normal tradewind patterns should disperse pollutant emissions generated by activities at the project site. Fugitive dust emissions will be reduced by following State DOH Rules and Regulations (Chapter 43, Section 10) which specify the control measures. Construction activities will comply with provisions of Hawaii Administrative Rules (HAR), Chapter 11-60.1, "Air Pollution Control, " Section 11-60.1-33 on Fugitive Dust.

2.3.2 Topography and Soils

The project site is situated on a relatively flat coastal strip. The shoreline along Waikiki Beach was originally formed from coral reefs and alluvial sediments. The nearshore marine environment of the southshore Oahu typically consists of shallow limestone reefs, with a gently sloping reef bottoms covered with sand patches.

Waikiki was once covered with extensive wetlands; however, the area has been converted to a filled dryland and in intensive urban use for over 50 years. Waikiki Beach has since been subjected to a severe erosion force. In order to protect the shoreline, sand importation has been performed to artificially nourish several sections of beach frontage. Much of the current Waikiki shoreline consists of imported soils and fill materials. The reef areas were subjected to dredging activities in order to improve swimming conditions and to increase boat access to the shoreline.

The shoreline of the Kuhio Beach Park presently consists of a system of groins and offshore seawalls. Most of the sand within the seawalls was brought in as part of public beach widening projects.

The project site and the vicinity were previously mapped by the U.S. Department of Agriculture Soil Conservation Service as a part of an overall soil survey of the Hawaiian islands. According to the Soil Survey, the majority of the site is covered with beach sand (BS) and jaucas sand (JaC) at the mauka side. Jaucas sand consists of excessively drained, calcareous soils that occur as narrow strips on coastal plains, adjacent to the ocean. Permeability is rapid. Runoff is very slow to slow. Workability is described as slightly difficult due to looseness and a lack of stability for supporting heavy equipment.

Impacts: The area has intensively been modified with filling, infrastructure improvements, and major hotel structures built near the water. The project will convert paved areas into grassed open space and planted median. The proposed beach facilities will be built within the areas that have been modified over time.

A majority of the work will be conducted mauka of the beach park. The project will not alter the configuration of the shoreline. During the actual construction phase, soil will temporarily be disturbed. However, upon completion of work, increased vegetative ground cover and landscaping will prevent further soil loss. The proposed project is not anticipated to have significant adverse effects on the current shoreline area.

2.3.3 Hydrology

According to the Flood Insurance Rate Map, the project is located in the area within Zone AE and X (**Figure** 7). Zone AE indicates "special flood hazard areas inundated by 100-year flood, base flood elevation is determined." The remaining area is within Zone X, which is defined as an "area determined to be outside 500-year flood plain." The Oahu Civil Defense Tsunami Evacuation Map indicates the entire project area is located within potential tsunami inundation areas.

Impacts: The proposed project is not anticipated to have significant adverse effects on the current drainage system of the area. The increased grassed open space and landscaped

lands will provide infiltration and buffer zones to reduce surface runoff. The development of the project will be in compliance with the requirements of Federal Flood Insurance Program, the City and County of Honolulu Drainage Standards, Grading Ordinance, and Development Standards for DLU Flood Hazards District.

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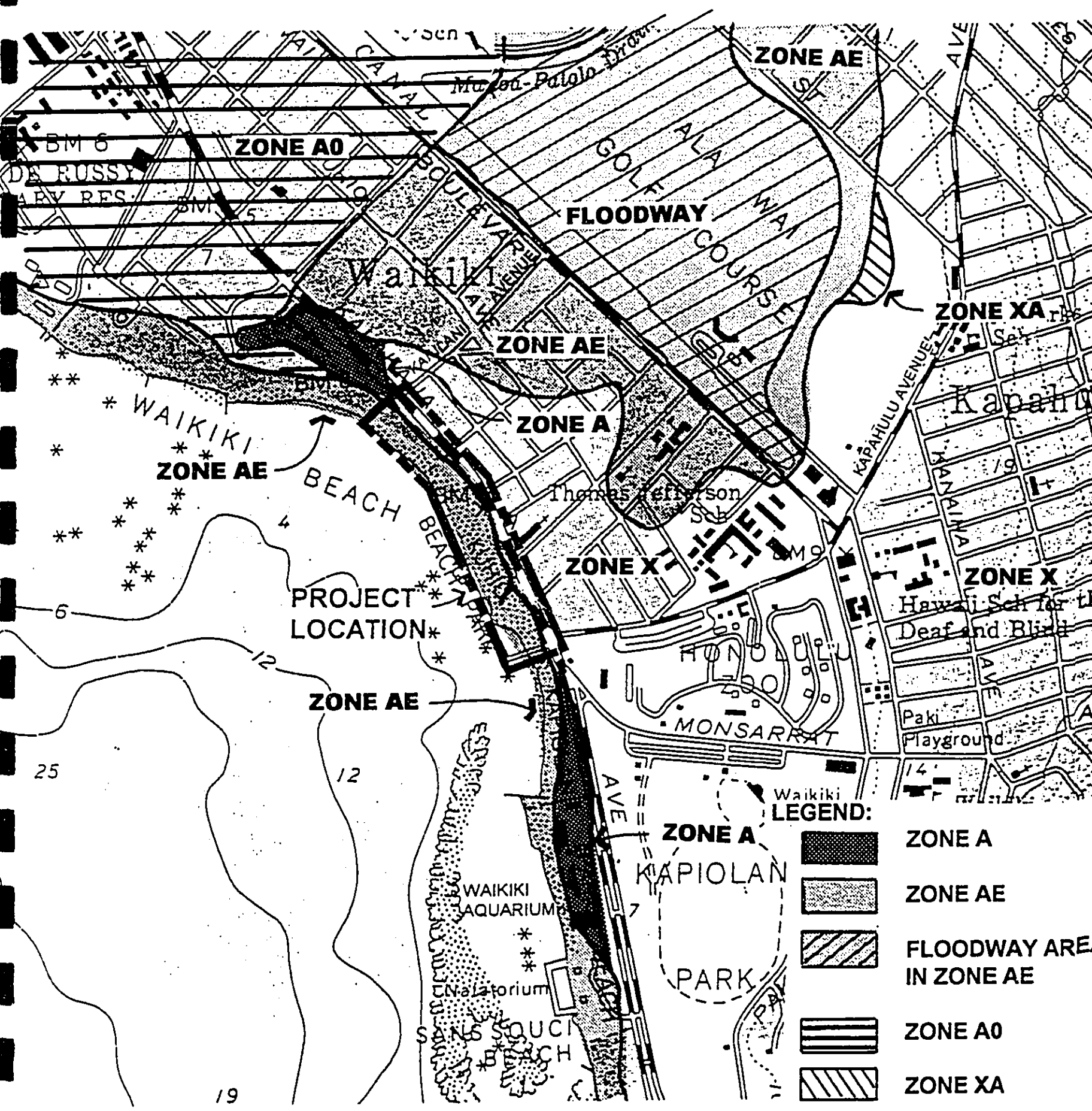

FIGURE 7

FIRM (FEMA)

KUHIO BEACH & KALAKAUA AVENUE IMPROVEMENTS
Honolulu, Oahu
Hawaii

R.M. TOWILL CORPORATION

AUGUST 1998

SECTION 3
AFFECTED ENVIRONMENT

3.1 SURROUNDING LAND USES AND LAND USE DESIGNATION

Waikiki is an urban resort area which has been characterized by an active street life, a wide range of entertainment, beach and waterfront amenities, and high-rise development. For over one hundred years, Waikiki has led the visitor industry in Hawaii. In 1995 alone, approximately 7-million repeat visitors utilized a beach park in Waikiki. The project area is now heavily utilized for resort purposes. However, the urbanization of Waikiki is a recent trend. Waikiki was once covered with extensive wetlands which had provided recreational and agricultural opportunities for residents. Conversion of the wetland areas to dryland started in the early 1900's.

The project site is located along approximately half a mile long stretch of public beach which is bordered by Kalakaua Avenue to the north, Moana Hotel to the west, and the Kapahulu Groin and Kapiolani Park to the east. Mauka of Kalakaua Avenue is crowded with a mixture of mid- and high-rise resort development. Kapiolani Park defines the eastern boundary of Waikiki and covers over 160 acres of the land at the foot of Diamond Head Crater. Kapiolani Park provides a range of recreational amenities, including beach facilities, ball fields, tennis courts, jogging trails, picnic and passive park areas, and the Waikiki Shell amphitheater.

The City and County of Honolulu and the State of Hawaii share the ownership of Kuhio Beach Park. The City has been authorized by the State to manage all State land within Kuhio Beach Park. The City Department of Parks and Recreation (DPR) currently regulates all organized and/or commercial activities within the beach park. Existing facilities and amenities include a police station, a food concession stand, a surfboard concession, four beachboy concessions, three lifeguard stands, six beach shower areas, outdoor tables, benches, bike racks, a seawall, and six arbors.

Offshore surf sites are popular with both visitors and local residents throughout the year. Every year during summer months (mid-May to October), Kuhio Beach Park is used as a staging area for local and national surf contests taking place almost every other week. The surrounding beach areas will also accommodate various activities and competitions, including surf events, canoe races, swimming meets, and professional beach volleyball tournaments.

The beach park is zoned within Waikiki Special District and designated as Public Precinct by the City and County of Honolulu. The City and County Development Plan Land Use classification identifies this area as Park and Recreation. The State Land Use classification is Urban. The existing land use is a public beach park.

Impacts: The proposed project will enhance quality of the beach park by increasing usable green space at the mauka side of the beach park, enhancing visual quality and aesthetics of the area, and improving beach facilities and public access to the beach. While removing one existing traffic lane of Kalakaua Avenue, loading zone turnouts will be provided at various locations to accommodate loading activities which presently occur at the curbside lane.

Some facilities and businesses located near the Kuhio Beach Park may need to be temporarily closed or relocated during the construction. Uninterrupted access to the Kuhio Beach Police Substation will be maintained except during the plaza reconstruction. While the plaza is being reconstructed, an appropriate sign will be posted on site to indicate locations of other substations within the Waikiki area. The substation at the Royal Hawaiian Shopping Center will be in closest proximity to the site, and police service will primarily be on-foot patrols during the time.

Construction operations will temporarily increase traffic on nearby roadways. Traffic control measures will be necessary to mitigate the effects of the increased traffic during the transportation of equipment and material to and from the site. The contractor will be

required to maintain safe access for the public beach and parks. Construction activities will temporarily restrict recreational uses at certain sections of the beach park, and some facilities and businesses will need to be temporarily closed or relocated. Appropriate mitigation measures will be developed to ensure minimal disruption to the surrounding commercial activities and continued recreational uses of the beach park area.

3.2 TERRESTRIAL FLORA AND FAUNA

No known endangered/threatened flora or fauna has been reported to exist on site. Kalakaua Avenue is a concrete-paved four lane street. Kuhio Beach Park is an intensively modified urban beach park. The park is covered with large areas of pavement, landscaping, and sandy beach. Daily mechanical beach cleaning and heavy beach uses prevent vegetation growth except in designated landscaping areas. The existing trees are common non-native species such as coconut palm, false kamani, kou, milo, banyan, and hibiscus. Wild animal life within the Waikiki area consists of mammals commonly found in other areas of Oahu. The fauna in the vicinity of the project site includes mongoose, rats, and feral cats and dogs.

Impacts: The proposed improvement project is not anticipated to have significant effects on the area's flora or fauna resources. No known endangered/threatened flora or fauna has been reported to exist on site. The proposed project will increase grassed and landscaped areas. In addition, only terrestrial fauna species found on sites are those animals considered to be pests. Although the animals near the project site will likely be displaced during construction activities, it will not be considered adverse or significant impacts.

3.3 MARINE FLORA AND FAUNA

As noted earlier, the current development of Waikiki started after the dredging of Ala Wai Canal to drain much of the swamp and estuary areas in the early 1920's. The infilling of wetland areas, dredging of drain channels, and construction of walls along the shoreline to control erosion have significantly altered the shallow marine communities in the waters adjacent to the project site.

The beach sand replenishment program in 1950-51 and in the mid-1960's must also have accelerated the decline of corals on the reef flats adjacent to Waikiki beach. The historical alterations of the shoreline environment have reduced diversity in the benthic and fish communities in the area. Marine species normally found along the nearshore zone include various small fishes, algae, and other marine invertebrate. The intertidal zones of the project area is occasionally subjected to high wave energy which in part helps explain the relatively low diversity of species.

Rare and threatened species which may be found along the area include the protected green sea turtle and, during the winter months, humpback whales. Waikiki is the most heavily urbanized of the Hawaiian Islands, and beaches are crowded with humans which would serve as a deterrent to selection of a suitable undisturbed habitat for marine resources. Humpback whales, another protected species, are also rarely observed offshore of Waikiki.

Marine waters off the Waikiki aquarium and the adjacent area have been designated as a Waikiki Marine Life Conservation District, managed by the State Department of Land and Natural Resources.

Any construction activity that generates fine particulate material will lower light levels and in the extreme, bury benthic communities. Sedimentation has been implicated as a major environmental problem for coral reefs. Increases in turbidity may decrease light level resulting in a lowering of primary productivity. When light levels are sufficiently decreased, hermatypic corals (i.e., the majority of the corals found on coral reefs) will eject their symbiotic unicellular algae (zooxanthallae) on which they depend as source of nutrition. However, in nature corals will eject their zooxanthallae and survive (by later acquiring more zooxanthallae) if the stress is not a chronic (long-term) perturbation.

Impacts: The construction will take place only at the mauka side of the beach park. Therefore, no adverse impacts are anticipated on marine flora or fauna. The potential for

impact to the shallow marine communities will be mitigated by appropriate erosion and sedimentation control measures such as silt fences/curtains and sand bags. The small scale and anticipated short duration of the project suggest a minimal impact to the coral reefs. In addition, through the use of silt curtains and/or sand bags at the construction site, adverse effects due to turbidity can be minimized by leaving a barrier of sand in place at the water's edge until completion of the project. Construction stormwater management and erosion control mitigation measures will be required and reviewed by the DDC and the State Department of Health (DOH) prior to the start of construction. Such design measures will be prepared in accordance with State and City rules and regulations.

3.4 WATER QUALITY

Variation in water quality parameters exists throughout the nearshore areas of Waikiki. Water quality is generally influenced by many factors including freshwater discharges from existing outlets, water circulation patterns, and wave activity. The dominant environmental factor shaping the nearshore environment off Waikiki appears to be the movement of sand, much of which originated in part from prior beach nourishment projects. High levels of dissolved nutrients and turbidity have been measured, exceeding the State Water Quality criteria for "dry" open coastal areas.

Impacts: The construction work is limited to the highly modified area at the mauka side of the beach park. The project is not anticipated to have significant effects on the water quality of the area.

3.5 SCENIC AND VISUAL RESOURCES

Waikiki is situated by open ocean, Diamond Head, and Koolau Mountain range, which creates a series of magnificent views. Makai view along Kalakaua Avenue between Kuhio Beach Park and Waikiki Aquarium provides a spectacular ocean view. The view toward Diamond Head from the beach park is one of the most distinguished coastal viewsheds of Oahu.

Impacts: The proposed project is not anticipated to result in significant adverse effects on the area's visual resources. Important viewsheds toward Diamond Head and the Pacific Ocean along Kalakaua Avenue will be maintained. The landscape areas will be designed in a less formal manner to create a relaxed resort atmosphere and to promote the connection with other open space areas such as Kapiolani Park. Palm trees will be dominant planting features because they represent a tropical atmosphere and do not obstruct views.

3.6 NOISE

The overall characteristics of the project vicinity range from high-density urban and residential development to open space environment. The existing ambient noise level in the project area can be characterized as being typical of urban communities. The major contributor to the noise level at the project site is vehicular traffic along Kalakaua Avenue. The other sources of the background noise include crowds, birds, wind, and surf along the shoreline.

Impacts: The proposed improvements to the park and Kalakaua Avenue ROW will not result in a significant increase in the current noise level. The construction activities will temporarily increase noise levels within the vicinity. Noise generated by construction activities will be mitigated to some degree by requiring contractors to adhere to State and local noise regulations. This includes ensuring that machinery is properly muffled and maintained.

3.7 HISTORIC/ARCHAEOLOGICAL RESOURCES

The Duke Kahanamoku statue and the Healing Stones are the only cultural and historic features that currently exist in Waikiki. The shoreline areas along Waikiki Beach have been extensively altered by past development activities. Any subsurface cultural artifacts that may have existed on site have probably been destroyed or replaced during previous developments. It is unlikely to encounter historic remains in the project area.

Impacts: The proposed project is not anticipated to have substantial impacts on cultural resources in the region. The Duke Kahanomoku statue and the Healing Stones will remain as the significant cultural focal points in Waikiki.

Although impacts to archaeological resources are not expected, if any unidentified cultural remains are uncovered during the course of the project, work in the immediate area will cease and the appropriate government agencies will be contacted for further instructions.

3.8 RECREATIONAL FACILITIES

The area is one of the most recognized visitor destinations in the State. A long stretch of sandy beach along Waikiki has been a gateway destination for both visitors and residents of Hawaii. Kuhio Beach is separated from mauka development by an asphalt-paved four-lane street, Kalakaua Avenue. The beach park occupies the area which is among the most crowded in Waikiki Beach. Existing facilities and amenities include a police station, a food concession stand, a surfboard concession, three beachboy concessions, three lifeguard stands, six beach shower areas, outdoor tables, benches, bike racks, a seawall, and six arbors. Kapiolani Park is situated at the eastern boundary of Kuhio Beach Park and covers over 160 acres of the land at the foot of Diamond Head Crater. Kapiolani Park provides a range of recreational amenities, including beach facilities, ball fields, tennis courts, jogging trails, picnic and passive park areas, and the Waikiki Shell amphitheater.

Impacts: The purpose of this project is to expand the landscaped ambiance of Kapiolani Park along Kuhio Beach and Kalakaua Avenue. The proposed improvements will provide the added shade from new trees, as well as new grass and sand areas for sitting, relaxing, and enjoying the beach. There will be no increase of building structures on the beach. The project will conserve a recreational beach frontage along the Waikiki shoreline and increase usable beach park areas by expanding the park in the mauka direction.

Construction activities will temporarily restrict recreational uses at certain sections of the beach park, and some facilities and businesses will need to be temporarily closed or relocated. However, these impacts will be only short-term and small scale. As much as practicable the construction activities will be scheduled to avoid conflict with any business, events, or activities that have been approved to use the beach park. Appropriate mitigation measures will be developed to ensure minimal disruption to the surrounding commercial activities and continued recreational uses of the beach park area. The project contractor will be required to maintain safe, uninterrupted, lateral pedestrian access along Kalakaua Avenue and the beach park.

SECTION 4
MITIGATION MEASURES

4.1 POTENTIAL SHORT-TERM IMPACTS AND MITIGATION

The proposed project is intended to relieve human impacts on Kuhio Beach Park and establish open space linkages between Kuhio Beach Park, Kalakaua Avenue and Kapiolani Park. Kuhio Beach Park is nearly always crowded, and the shoreline is under constant pressure from erosion forces. The proposed improvements will help reduce human impacts on the beach area and comfortably accommodate the existing levels of visitors' and residents' use of Waikiki Beach.

The project will generate short-term adverse impacts due to construction activities. The total construction period is estimated at 6 to 9 months; however, the actual work will be phased in order to minimize the anticipated impacts. The following is a discussion of potential short-term impacts and mitigation measures.

1. Kalakaua Avenue modifications will require blocking and removing surface pavements of the makai curbside lane between Kaiulani and Kapahulu Avenues. In order to avoid traffic congestion, at least two through lanes will be open during the construction period. The existing tour bus loading bay along Kalakaua Avenue between Police Station and the Duke Kahanamoku Statue will be closed. An alternative tour bus loading zone may need to be provided. If the pedestrianway along Kalakaua Avenue should be fenced off, alternative walkways will be designated during construction.

   In addition, the contractor shall provide ingress to and egress from driveways and public streets at all times. Should conditions warrant, the contractor may hire personnel to control the flow of traffic around the construction area.

2. In case the traffic flow should be limited only to two through lanes, traffic would be delayed. It is recommended by the City & County of Honolulu, Police Department

that special duty officers should be posted along the roadway to minimize the anticipated delays.

3. Construction of the proposed facility improvements will also require fencing off certain beach park areas. In order to mitigate these impacts, the project contractor will be required to maintain safe, uninterrupted, lateral pedestrian access along Kalakaua Avenue and the beach park.

3. Clearing and grubbing will disturb soils and cause some soil erosion. Adequate erosion control measures such as silt screens/curtains and/or sand bags will be provided to prevent silt and other undesirable materials from leaving the construction site. Prior to any construction, an Erosion Control Plan must be approved by the City and County of Honolulu. Following construction work, planting will be conducted, as appropriate, to minimize further soil loss.

4. Turbidity and siltation from excavation activities will be minimized and contained to the immediate vicinity of the excavation site through the use of effective silt containment devices and curtailment of work during adverse weather conditions. Excess material not utilized for fill will be disposed of at permitted facilities.

5. No construction materials will be stockpiled in the marine environment.

6. All waste generated from the project will be disposed of in accordance with applicable State and City regulations.

7. All on-site vehicles will be monitored for leaks and receive regular maintenance to reduce the probability of leakage. Petroleum products will be stored in appropriate containers and clearly labeled. Any asphalt substances will be used according to the manufacturer's recommendations.

8. A contingency plan to control petroleum products accidentally spilled during construction should be developed by the contractor. The manufacturers' recommended spill clean up method will be clearly posted and site personnel will be made aware of the information and location of clean up supplies. The contractor will coordinate spill prevention and clean up.

9. Construction operations will temporarily increase noise levels. Noise generated from construction activities will be mitigated to some degree by requiring the contractor to adhere to State of Hawaii DOH regulations and the City and County of Honolulu Noise Ordinance, which limits construction operations and resultant noise to daytime hours and specific maximum levels.

10. Construction activities will temporarily impact the area's air quality in the form of fugitive dust and emissions from construction equipment and vehicles. Fugitive dust emission will be reduced by following State DOH Rules and Regulations (Chapter 43, Section 10) which specifies the control measures. This type of emission will be controlled by frequent watering of the construction site. Another measure is to maintain equipment in proper working order.

4.2 POTENTIAL LONG-TERM IMPACTS AND MITIGATION

The project is not anticipated to result in significant long-term adverse effects. All anticipated adverse impacts are construction-related and only short-term.

The traffic study was conducted to determine potential impacts of the proposed Kalakaua Avenue modifications to traffic operations in the area (**Appendix A**). The study concluded that the proposed modifications on Kalakaua Avenue would not result in any unacceptable traffic conditions during future peak hours. Kalakaua Avenue is a city street and used for minor traffic movements and frequent pedestrian crossing. The roadway provides access to hotels, shops, and other activities. A curbside lane is presently used mostly for loading activities for hotels, shops, and other activities. Loading zone turnouts will be provided at various locations to accommodate

such activities.

Another traffic study is currently conducted by the City and County of Honolulu, Department of Transportation Services (DTS). One traffic lane along Kalakaua Avenue between Kaiulani and Kapahulu Avenues has been closed during the August of 1998 to conduct a pilot project to assess traffic impacts resulting from the lane reduction of the roadway. The results will be available by the end of September, 1998, upon completion of the Department's study.

The proposed project involves facility improvements along the mauka side of Kuhio Beach Park. The construction of a new comfort station will take place within highly modified areas, outside of the forty (40)-foot shoreline setback areas. The proposed improvements on Kuhio Beach Park and Kalakaua Avenue will allow the beach park to expand in the mauka direction, which will increase usable areas for both positive and passive recreational activities at the beach park and relieve congestion on the existing shoreline.

Planting and landscaping are integral elements of this project. The existing trees will be kept undisturbed as much as practicable. The landscaped areas will be designed in a less formal manner to create a relaxed resort atmosphere and promote a connection with nearby open space areas such as Kapiolani Park. A new comfort station between Kealohilani and Ohua Avenues and other beach facilities will be designed to blend in the surrounding landscape. The proposed improvements will provide the added shade from new trees, as well as new grass and sand areas for sitting, relaxing, and enjoying the beach. The project will enhance the aesthetics and recreational amenities of the area that is most frequently visited by the visitors and residents.

SECTION 5
RELATIONSHIP TO STATE AND COUNTY LAND USE PLANS AND POLICIES

5.1 THE HAWAII STATE PLAN

The Hawaii State Plan, Chapter 226, Hawaii Revised Statutes, serves as a written guide for the future long range development of the State. The Plan identifies statewide goals, objectives, policies, and priorities.

The proposed project would be in conformance with the State Plan's objectives and policies for the economy - visitor industry. According to Section 226-8 objectives and policies for the economy-visitor industry, and Section 226-23 socio-cultural advancement-leisure, the following policies would apply to the proposed project:

Section 226-8: Objectives and policies for the economy-visitor industry

(b)(2) Improve the quality of existing visitor destination areas.

Section 226-23: Objectives and policies for socio-cultural advancement-leisure

(b)(3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.

5.2 STATE LAND USE LAW

The project site lies within the state land use classification category of "urban". The proposed improvements to the existing park and roadway are permitted under this land use designation.

5.3 STATE FUNCTIONAL PLAN

The Hawaii State Functional Plans (Chapter 226, Hawaii Revised Statutes) provide a management program that allows use of State resources to improve current conditions and attend to various

social issues and trends. The proposed project is consistent with the State Functional Plan for Tourism and Recreation through the following Implementing Action:

TOURISM

OBJECTIVE II.A: Development and maintenance of well-designed visitor facilities and related developments which are sensitive to the environment, sensitive to the neighboring communities and activities, and adequately serviced by infrastructure and support services.

Policy II.A.7: Improve the quality of existing parks and recreational areas, and ensure that sufficient recreational areas--including scenic byways and corridors—are available for the future.

Implementing Action II.A.7.d: Develop plans, landscape and beautify Kapiolani Park, Kuhio Beach Park, Waikiki mini-parks, Ala Wai Boulevard, Ala Wai Canal, Ala Wai Promenade and Ala Moana Park.

RECREATION

OBJECTIVE I.A: Address the problem of saturation of the capacity of beach parks and nearshore waters.

Policy I.A.4: Develop areas mauka of existing beach parks to increase their capacities and to diversify and encourage activities away from the shoreline.

Implementing Action I.A.4.a: Connect beach parks with designated accessways for walking, jogging, bicycling, and hiking to offer diversification of activities away from the shoreline.

5.4 CITY AND COUNTY ZONING

The project site is located in Waikiki Special District and designated as Public Precinct by the City and County of Honolulu. The proposed project would be in conformance with the objectives of

social issues and trends. The proposed project is consistent with the State Functional Plan for Tourism and Recreation through the following Implementing Action:

TOURISM

OBJECTIVE II.A: Development and maintenance of well-designed visitor facilities and related developments which are sensitive to the environment, sensitive to the neighboring communities and activities, and adequately serviced by infrastructure and support services.

Policy II.A.7: Improve the quality of existing parks and recreational areas, and ensure that sufficient recreational areas--including scenic byways and corridors—are available for the future.

Implementing Action II.A.7.d: Develop plans, landscape and beautify Kapiolani Park, Kuhio Beach Park, Waikiki mini-parks, Ala Wai Boulevard, Ala Wai Canal, Ala Wai Promenade and Ala Moana Park.

RECREATION

OBJECTIVE I.A: Address the problem of saturation of the capacity of beach parks and nearshore waters.

Policy I.A.4: Develop areas mauka of existing beach parks to increase their capacities and to diversify and encourage activities away from the shoreline.

Implementing Action I.A.4.a: Connect beach parks with designated accessways for walking, jogging, bicycling, and hiking to offer diversification of activities away from the shoreline.

5.4 CITY AND COUNTY ZONING

The project site is located in Waikiki Special District and designated as Public Precinct by the City and County of Honolulu. The proposed project would be in conformance with the objectives of

Waikiki Special District, Section 7.80-1 of the LUO:

7.80-1(l) Emphasize a pedestrian-orientation in Waikiki. Acknowledge, enhance and promote the pedestrian experience to benefit both commercial establishments and the community as a whole. The walkway system shall be complemented by adjacent landscaping, open spaces, entryways, inviting uses at the ground level street furniture, and human-scale architectural details. Where appropriate, open spaces should be actively utilized to promote the pedestrian experience.

7.80-1(m) Provide-people oriented, interactive, landscaped open space to offset the high-density urban ambience. Open space are intended to serve a variety of objectives including visual relief, pedestrian orientation, social interaction, and fundamentally to promote a sense of "Hawaiianness" within the district. Open spaces, pedestrian pathway and other ground level features should be generously supplemented with landscaping and water features to enhance their value, constitute to a lush, tropical setting and promote a Hawaiian sense of place.

Development of public precinct lands for public uses and structures, such as this project, is a permitted principal use and would not conflict with the Special District objectives.

The project will require Waikiki Special District permits for construction of new beach facilities such as a comfort station and alteration of streetscape along Kalakaua Avenue right-of-way. The entire project site is located with the 100-foot shoreline setback area. The project will be designed and constructed to meet development standards for Waikiki Special District Public Precinct District as specified in Section 7.80-9 of LUO.

5.5 CITY AND COUNTY GENERAL PLAN & DEVELOPMENT PLAN

The General Plan identifies the long-range planning goals and objectives which the City and County of Honolulu attempts to accomplish in the interest of Oahu residents. The Development Plan Land Use classification identifies this area as Park and Recreation.

The proposed project is in conformance with the General Plan's objectives and policies for Economic Activity as well as Culture and Recreation:

Economic Activity

Objective B: To maintain the viability of Oahu's visitor industry.

Policy 1: Provide for the long term viability of Waikiki as Oahu's primary resort area by giving the area priority in visitor industry related public expenditures.

Policy 2: Provide for a high quality and safe environment for visitors and residents in Waikiki.

Policy 8: Preserve the well-known and widely publicized beauty of Oahu for visitors as well as residents.

Culture and Recreation

Objective D: To provide a wide range of recreational facilities and services that are readily available to all residents of Oahu.

Policy 3: Develop and maintain urban parks, squares, and beautification areas in high density urban places.

Policy 12: Provide for safe and secure use of public parks, beaches, and recreation facilities.

5.6 SPECIAL MANAGEMENT AREA (SMA) RULES AND REGULATIONS

The City and County of Honolulu has designated the shoreline and certain inland areas of Oahu as being within the special management area (SMA) as designated by City and County of Honolulu

Ordinance Section 25-2.2. SMA areas are defined sensitive environments that should be protected in accordance with the State's coastal zone management policies, HRS, Section 205A.

Since the project is located within the SMA boundary and has an estimated construction cost in excess of $125,000.00, approval of a major SMA use permit is required from the Department of Planning and Permitting (DPP) and City Council. This Environmental Assessment is prepared as a supplement to the SMA use permit application.

In addition, the project site is partially located within the forty (40)-foot shoreline setback area. All proposed buildings will be constructed outside of the setback area. Except for the small portions of the trellis at the plaza, new pavilion at the existing Kapahulu Groin, beachboy concessions, and several beach showers, no other structure will be built within the setback area. The small portions of the outdoor terraces at the plaza area and the platform by the Banyan tree arbor will be located within the shoreline setback area. Also, some of the grassed terraces that are proposed to replace the existing concrete ramps and steps will be affected by the setback area.

The project will comfortably accommodate the existing needs for the recreational uses of the area. A Shoreline Setback Variance is required to proceed with the proposed improvements. Compliance with the shoreline setback rules would require that Kuhio Beach Park remain with the existing over-crowded conditions with broad concrete-paved sidewalks. This would continue a hardship for the City and County of Honolulu who would be denied the reasonable use of public lands for the purpose of public enjoyments. Also, the waves and salt waters will eventually deteriorate the existing concrete ramps and steps. This hardship would be a lost opportunity to relieve the existing over-crowded beach park from on-going human impacts, improve beach access, and enhance aesthetics and visual quality of the area, which would fail to improve a recreational amenity in one of the most prominent visitor destinations in the State.

5.7 WAIKIKI MASTER PLAN (1992)

The Waikiki Master Plan, 1992, provides goals and policies to guide the physical developments of Waikiki. The plan was generated through a planning process which integrates inputs from representatives of government agencies, visitor industry organizations, City and State elected representatives, Waikiki property owners, professional associations, and citizen organizations.

The proposed project implements the following urban design goals and polices of the Waikiki Master Plan for Urban Design goals and policies:

Improve beaches and parks on the edges of Waikiki and make them more accessible by foot.

- Widen Waikiki Beaches and parks and add a pathway meeting the Americans with Disabilities Act along the mauka edge of the beach.

Increase open space within Waikiki

- Secure major public open spaces in conjunction with the redevelopment of large, strategically located sites, giving special emphasis to those within Waikiki's core area (between Kalakaua and Kuhio).

SECTION 6
RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

No short-term exploitation of resources resulting from the development of the project site for the beach park improvements and roadside modifications will have long-term adverse consequences. The proposed development will create increased grassed and landscaped lands. The existing beach areas will be restored and expanded in the mauka direction to provide a wide range of recreational opportunities.

Once construction activities for the necessary site preparation are completed there will be no negative effects on air and noise quality, wildlife, or residents of the area.

Long-term gains resulting from the development of the proposed project include provision of a world-class resort destination which accommodates both visitors' and residents' interests to enjoy the beautiful natural resources in Hawaii. The project will enhance the quality of the recreational land which is now heavily urbanized and overcrowded.

SECTION 7
IRREVERSIBLE/IRRETRIEVABLE COMMITMENT OF RESOURCES BY THE PROPOSED ACTION

Development of the proposed project will involve the irretrievable loss of certain environmental and financial resources. However, the costs associated with the use of these resources should be evaluated in light of recurring benefits through increased recreational amenities which are renewable resources.

It is anticipated that the construction of the proposed project will commit the necessary construction materials and human resources (in the form of planning, designing, engineering, construction and labor). Reuse for much of these materials and resources is not practicable, and labor expended for project development is not retrievable.

SECTION 8
DETERMINATION

This Environmental Assessment, prepared to support the SMA Use Permit application pursuant to Chapter 25 ROH - Shoreline Management, has concluded that the potential for impacts associated with the proposed action will be minimal.

The potential effects of the proposed project are evaluated based on the significance criteria in section 11-200-12 (Hawaii Administrative Rules, revised in 1996). The following is a summary of the potential effects of the action.

(1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource:

The area has intensively been altered for recreational and resort uses. The natural and cultural resources that was originally found on site have been replaced with pavements, artificial beaches, and shoreline protection structures. Also, the costs associated with the use of the existing resources should be evaluated in light of recurring benefits through increased beach park areas, recreational amenities, and aesthetics provided by the proposed improvements.

(2) Curtails the range of beneficial uses of the environment:

The project will not curtail the range of beneficial uses of the environment. The project will increase usable park areas and improve the current park facilities and access to the beach. The proposed improvements on the beach park will comfortably accommodate various needs for both visitors and residents using the park area. Construction activities will temporarily restrict recreational use of the certain beach park areas for public safety reasons, and some facilities and businesses will need to be temporarily closed or relocated.

Appropriate mitigation measures will be developed to ensure minimal disruption to the surrounding commercial activities and continued recreational uses of the beach park area.

(3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, HRS:

The project would be in conformance to the Chapter 344, HRS, State Environmental Policy. The project will improve recreational amenities and aesthetics of the Hawaii's most prominent visitor destination, which would benefit both visitors and residents of Hawaii. Increased green space along Kuhio Beach Park will be designed to showcase a sense of place that is uniquely Hawaiian.

(4) Substantially affects the economic or social welfare of the community or State:

The proposed project is not anticipated to have significant effects on the surrounding commercial activities. While reducing the makai curbside lane of Kalakaua Avenue, turnout areas for police parking, shuttle bus stop, bus loading zone, passenger loading zone, and city vehicle loading zone, will be maintained along the makai side of Kalakaua Avenue. At least one loading zone will be provided at each block along the mauka side of Kalakaua Avenue between Kaiulani and Kapahulu Avenues. Therefore, adequate service vehicle turnouts for hotels and shops along Kalakaua Avenue will be maintained.

The project will increase usable park areas, improve supporting facilities, and provide additional landscaping areas, which will benefit both visitors and local residents. The proposed improvements on the one of the most popular visitor destinations of the State would help promote Waikiki as an international gateway destination, which would improve economic environments of the State.

(5) Substantially affects public health:

The proposed project is not anticipated to have substantial effects on public health. The project will relieve the current overcrowded condition on Kuhio Beach Park by increasing usable park area. The proposed facility improvements on the beach would comfortably accommodate the existing level of recreational needs for both visitors and local residents.

(6) Involves substantial secondary impacts, such as population changes or effects on public facilities:

The proposed development would not result in substantial secondary impacts, such as population changes or effects on public facilities. The proposed improvement project is not anticipated to pose significant demands on the existing water and sewer systems. The present level of public facilities and services provides adequate services to handle the current demand at the project site. The improvement is not anticipated to place enough of a demand to result in the need to increase the level of current facilities and services.

(7) Involves a substantial degradation of environmental quality:

The area has intensively been modified by previous developments. The project will improve aesthetics and visual quality of the area by converting a concrete-paved vehicular lane into a landscaped pedestrian promenade and creating additional green space for recreational uses. Therefore, the proposed project is not anticipated to involve a substantial degradation of environmental quality.

(8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions:

The project will reduce the areas covered with impervious surface and increase sand and green areas. The proposed improvement is small scale and is not anticipated to result in

cumulative effects; therefore, it would not involve a commitment to larger actions.

(9) Substantially affects a rare, threatened, or endangered species, or its habitat:

The proposed project is not anticipated to have substantial effects on rare, threatened, or endangered species, or their habitats. As discussed in Sections 3.2 and 3.3, no known endangered/threatened flora or fauna has been reported to exist on site. In addition, construction work will take place within the area that has intensively been modified overtime.

(10) Detrimentally affects air or water quality or ambient noise levels:

The proposed project is not anticipated to cause significant effects on the area's long-term air or water quality or ambient noise levels. Construction activities at Kalakaua Avenue would involve excavation, pavement removal, and filling activities to convert a curbside lane into a landscaped promenade. Due to the proximity to the existing resorts, thoroughfare, and beach areas, there are potential impacts from fugitive dusts, increased noise, and soil erosion. Mitigative measures will be provided to minimize the impacts on the surrounding areas as described in Section 4. Upon completion of the work, the project will provide increased green space which buffers the beach park from traffics passing through Kalakaua Avenue.

(11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters:

The project is partially situated in a flood-prone plain. The entire area is within potential tsunami inundation areas as indicated by the Oahu Civil Defense Tsunami Evacuation Map. The development of the project will be in conformance with the requirements of

Federal Flood Insurance Program, the City and County of Honolulu Drainage Standards, Grading Ordinance, and Development Standards for DLU Flood Hazards District.

(12) Substantially affects scenic vistas and viewplanes identified in county or states plans or studies:

The proposed project is not anticipated to cause significant adverse effects on the area's visual resources. Important viewsheds toward Diamond Head and the Pacific Ocean along Kalakaua Avenue will be increased by reducing the paved areas and size of the structures and moving the structures out of sight line. The landscape areas will be designed in a less formal manner to create a relaxed resort atmosphere and promote connection with other open space areas such as Kapiolani Park.

(13) Requires substantial energy consumption:

The proposed improvement project is not anticipated to result in substantial energy consumption.

In accordance with the provision set forth in Chapter 343, Hawaii Revised Statutes, this Environmental Assessment has preliminarily determined that the project will not have significant adverse impacts to water quality, air quality, existing utilities, noise, archaeological sites, or wildlife habitat. Therefore, it is recommended that an Environmental Impact Statement (EIS) not be required and a Finding of No Significant Impact (FONSI) be issued for this project.

SECTION 9

NECESSARY PERMITS AND APPROVALS

9.1 CITY AND COUNTY OF HONOLULU

The following City and County Permits are required:

- Building Permit
- Construction Permit
- Grading, Grubbing, Excavating and Stockpiling Permits
- Industrial Wastewater Discharge Permit
- Special District permits
- Special Management Area (SMA) Use Permit
- Shoreline Setback Variances (SSV)
- Street Usage Permit

The following approvals are required by the City and County of Honolulu:

- Flood Determination in General Flood Plain District
- Landscaping Plan
- Board of Water Supply
- Department of Design and Construction, Division of Infrastructure Design and Engineering
- Department of Wastewater Management
- Sewer Connection Application

9.2 STATE

The following permits are required by the State:

- Air Pollution Permit - State Department of Health (Chapter 60)
- NPDES Permit for Construction Related Discharges - State Department of Health (Chapter 55)

The following approvals are required by the State:

- Archaeological Review - State Department of Land and Natural Resources, Historic Preservation Division
- Community Noise Control - State Department of Health (Chapter 43)
- Wastewater Systems - State Department of Health (Chapter 62)
- Commission on Persons With Disabilities

9.3 FEDERAL

No federal permit is required for this project.

9.4 UTILITY COMPANIES

Construction plans will be reviewed by the following utility companies:

- Gasco
- Hawaiian Electric Company
- Hawaiian Telephone Company
- Oceanic Cablevision

SECTION 10
CONSULTED AGENCIES AND PARTICIPANTS IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT

10.1 FEDERAL AGENCIES

U.S. Army Corps of Engineers

U.S. Department of Interior, Fish and Wildlife Service, Pacific Islands Ecoregion

10.2 STATE AGENCIES

Department of Business, Economic Development & Tourism, Office of Planning

Department of Health

Department of Land and Natural Resources, Historic Preservation Division

Department of Land and Natural Resources, Forestry and Wildlife Division

Office of Environmental Quality Control

Office of Hawaiian Affairs

10.3 CITY & COUNTY OF HONOLULU

Board of Education

Board of Water Supply

Department of Budget

Department of Design and Construction

Department of Environmental Services

Department of Parks and Recreation

Department of Planning and Permitting

Department of Transportation Services

Honolulu City Council

Honolulu Fire Department

Honolulu Police Department

10.4 OTHERS

ABC Stores

American Institute of Architects, Honolulu Chapter - Urban Design Committee

Charlie's Taxi

Hawaii Hotel Association

Hawaii Transportation Association

Hilton Hawaiian Village

Hyatt Regency Waikiki

Oahu Visitors Association

Ocean Safety & Lifeguard Services

Outrigger Enterprises, Inc.

Waikiki Area Action Association

Waikiki Improvement Association

Waikiki Neighborhood Board

Waikiki Residents Association

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Appendix A

TRAFFIC STUDY: KALAKAUA AVENUE MODIFICATIONS

Kaiulani Avenue to Kapahulu Avenue

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▶ TRAFFIC STUDY

KALAKAUA AVENUE MODIFICATIONS

Kaiulani Avenue to Kapahulu Avenue

▶ HONOLULU, HAWAII

▸prepared for:

City and County of Honolulu
Department of Public Works

▸prepared by:

Julian Ng, Incorporated
P. O. Box 816
Kaneohe, Hawaii 96744

▸January, 1998

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Traffic Study
Kalakaua Avenue Modifications
Kaiulani Avenue to Kapahulu Avenue

January, 1998

The City and County of Honolulu Department of Public Works has proposed improvements to Kuhio Beach, in Waikiki; as part of these improvements to expand the beach area, modifications to a portion of Kalakaua Avenue between Kaiulani Avenue and Kapahulu Avenue has been proposed. A traffic study was conducted to determine if these modifications would have any impacts to traffic operations in the area.

The proposed project is located along Kalakaua Avenue in Waikiki, between Kaiulani Avenue and Kapahulu Avenue (Exhibit 1). The traffic impact of the project would result from the proposed modification, which would close of one of the existing lanes on Kalakaua Avenue; the lane closure would permit additional space for landscaping improvements between the roadway and the beach.

Existing Traffic Conditions - Waikiki

All of the public roadways in Waikiki with the exception of Ala Moana Boulevard are City streets. Ala Moana Boulevard is a divided highway, with a typical section of six lanes. Ala Moana Boulevard is the major makai arterial east of downtown Honolulu. West of Kalakaua Avenue, Ala Moana Boulevard has two signalized intersections which are operated in six phases, at Kalia and Ena Roads and at Hobron Lane.

Of the City streets, Kalakaua Avenue is the main street through Waikiki, carrying vehicular traffic in the southeasterly (or diamondhead) direction. The street is a major commercial street and provides access to hotels, shopping centers, smaller shops, and other activities. The sidewalks along Kalakaua Avenue are the major pedestrianway in Waikiki.

Traffic entering Waikiki on Kalakaua Avenue across the Ala Wai Canal travels on an undivided street; between Ala Wai Boulevard and Ena Road, two diamondhead bound lanes are located makai of a landscaped median, and one diamondhead bound lane and two ewa bound lanes are located mauka of the median. Between McCully Street and Kuhio Avenue, Kalakaua Avenue has four lanes in the diamond head direction and a single lane for City buses in the ewa direction. Between Kuhio Avenue and Kapahulu Avenue, Kalakaua Avenue has four lanes traveling toward Diamond Head, with additional width at selected locations for loading zone turnouts.

Most of the intersections on Kalakaua Avenue are signalized. Operation is typically two-phase, with one phase for traffic on Kalakaua Avenue and one phase for the cross street. Pedestrian crossings generally occur with the parallel vehicular movement. A "Barnes Walk" crossing is used at several intersections: one phase is provided for the vehicular traffic on

Kalakaua Avenue and the other is used for minor traffic movements and the pedestrian crossing, which can be made in any direction, including diagonally across the intersection.

The State Highways Division has a traffic counting program which includes stations along Ala Moana Boulevard. The City and County of Honolulu Department of Transportation Services collects and maintains traffic count data for streets under City jurisdiction; many traffic counts have been taken within Waikiki between 1993 and 1996. Table 1 shows a portion of the traffic data available for streets within Waikiki. A review of the recent counts indicates that traffic volumes have not changed significantly over the past four years.

Table 1
TRAFFIC COUNT DATA

	24-hour Total	AM Peak Hour	PM Peak Hour
Ala Moana Boulevard at Ala Wai Bridge			
northwestbound (April 1996)	26,144	1,601	2,052
southeastbound (April 1996)	26,960	1,339	2,117
Ala Moana Boulevard (March 1996)			
westbound west of Kalakaua Avenue	15,592	1,116	990
eastbound approaching Kalakaua Avenue	19,768	1,023	1,257
Ala Wai Boulevard (westbound)			
approaching Paoakalani Avenue (July 1995)	20,525	1,704	1,390
approaching Lewers Street (July 1994)	30,063	2,026	2,061
approaching Kuamoo Street (July 1995)	41,648	2,357	2,805
approaching McCully Street (July 1995)	38,018	1,941	2,482
approaching Kalakaua Avenue ((July 1994)	20,762	1,339	1,311
Kalakaua Avenue (northwestbound)			
at Ala Wai Bridge (April 1996)	22,895	1,597	1,574
Kalakaua Avenue (southeastbound)			
at Ala Wai Bridge (April 1996)	26,340	1,396	1,852
approaching Ena Road (July 1995)	25,637	1,290	2,005
approaching Saratoga Road (August 1994)	36,688	2,142	2,489
approaching Lewers Street (July 1993)	33,621	1,746	2,289
approaching Seaside Avenue (July 1993)	33,009	1,656	2,262
approaching Kaiulani Avenue (May 1996)	27,574	1,357	1,938
approaching Uluniu Avenue (August 1995)	19,936	828	1,622
approaching Liliuokalani Avenue (August 1994)	23,928	1,181	1,756
approaching Paoakalani Avenue (August 1995)	21,957	1,015	1,742
approaching Kapahulu Avenue (September 1994)	14,284	620	1,193
southeast of Monsarrat Avenue (August 1995)	8,258	339	636

Sources: State Department of Transportation, Highway Planning Branch;
City and County of Honolulu Department of Transportation Services

Traffic data are also available at other locations, including most mauka-makai streets. The traffic data were reviewed and estimates were made of the daily traffic and peak hour in Waikiki, as illustrated in Exhibits 2 and 3.

Project Description

The proposed project provides additional sidewalk widths along Kalakaua Avenue between Kaiulani Avenue and Kapahulu Avenue. While one existing traffic lane is removed, loading turnouts are proposed at various locations to accommodate loading activities which presently occur in a curbside lane.

Exhibit 4 is a schematic showing the existing number of lanes on Kalakaua Avenue and the side streets within the project area. Kalakaua Avenue is a four-lane roadway with additional width provided for loading at three locations: makai side near the police substation between Kaiulani Avenue and Uluniu Avenue, and mauka side before and after Liliuokalani Avenue.

At the Kaiulani Avenue and Kapahulu Avenue approaches, the mauka lane is designated for left turns only. At the other intersections where mauka bound traffic is permitted on the side street, the mauka lane is an option lane used by through as well as left turning traffic. Three lanes continue beyond Kapahulu Avenue: the makai lane leads to the makai side of the divided Kalakaua Avenue within Kapiolani Park, while the other two lanes direct traffic onto Monsarrat Avenue.

At the intersections with Uluniu Avenue, Ohua Avenue, and Kapahulu Avenue, where there is significant makai bound traffic turning left onto Kalakaua Avenue, traffic signals stop the Kalakaua Avenue traffic for the side street traffic and the pedestrian crossing of Kalakaua Avenue; pedestrian crossing of the side street occurs in the phase in which Kalakaua Avenue traffic moves. At the other intersections, "Barnes Walk" phasing is used, in which traffic on Kalakaua Avenue is stopped to permit pedestrian crossing in any direction; no pedestrian crossing is permitted when traffic on Kalakaua Avenue has the green light.

Exhibit 5 illustrates the proposed modifications to Kalakaua Avenue. Between Kaiulani Avenue and Uluniu Avenue, the sidewalk will be widened into the mauka lane. The loading zone on the makai side that is presently used by police vehicles and for concessionaire loading would remain; however, its length may be shortened if the police substation is relocated. The reduction of one lane would not affect traffic on Kalakaua Avenue approaching Kaiulani Avenue since the mauka approach lane is already designated for left turns only.

The sidewalk widening on the mauka side continues across Uluniu Avenue; the existing curve in Kalakaua Avenue provides for a smooth transition of the traffic lanes as the sidewalk widening transitions from the mauka side to the makai side. The existing loading zone on the mauka side will be relocated to conform to the new curbline; a new loading

turnout is proposed on the makai side. Between Liliuokalani Avenue and Kapahulu Avenue, the sidewalk widening will be on the makai side; the mauka curb would remain in its existing location. A new loading turnout is proposed between Ohua Avenue and Paoakalani Avenue. The through lanes approaching the Kapahulu Avenue intersection would lead into Monsarrat Avenue; the lane leading to Kalakaua Avenue through Kapiolani Park is introduced as an added lane on the right on the far side of the Kapahulu Avenue intersection.

Traffic Analyses

The traffic count data included counts taken at various times of the year; counts taken during the summer were higher than during other months. However, there was sufficient data to derive estimates of existing peak hour traffic for a peak weekday during the summer. The morning peak hour (AM Peak Hour), which typically occurs between 8:00 and 9:00 AM, generally has less traffic than the afternoon peak hour (PM Peak Hour), which occurs around 4:30 to 5:30 PM. Exhibit 6 shows the existing peak hour volumes in the vicinity of the proposed project.

Traffic conditions are usually described by a "Level of Service" ranging from "A" (good) to "F" (poor). These Levels of Service are related to average delays experienced by motorists. Several complex analytical methods are available to determine these delays; however, the results would apply to the specific conditions used in the analysis. An simpler alternative method relates Levels of Service to capacities, using the ratio of volume to capacity (v/c ratio); in this method, Levels of Service are estimated as follows:

Level of Service A (little or no delay)	$v/c \leq 0.60$
Level of Service B (minor traffic delays)	$0.60 < v/c \leq 0.70$
Level of Service C (average traffic delays)	$0.70 < v/c \leq 0.80$
Level of Service D (long traffic delays)	$0.80 < v/c \leq 0.90$
Level of Service E (very long delays)	$0.90 < v/c \leq 1.00$
Level of Service F (congested, over capacity)	$v/c > 1.00$

The capacity of an urban street is controlled by the traffic which can be served by signalized intersections. A simplified analysis procedure, in which the capacity is the product of the number of lanes, the saturation flow (defined below), and the green/cycle ratio (also defined below), was used.

The saturation flow is the number of vehicles per hour that can flow in one lane, assuming that the flow is continuous (has a green light 100% of the time). The saturation flow under ideal conditions is 1,900 passenger cars per hour of green per lane; trucks and other large vehicles, as well as pedestrian conflicts, grades, curbside parking, transit bus stops, and lane widths will each reduce the saturation flow.

For Kalakaua Avenue within the study area, saturation flows of 1,400 vehicles per hour of green per lane were used for through lanes (minimal pedestrian conflicts). A

saturation flow rate of 1,000 vehicles per hour of green was used where there are pedestrian conflicts (such as the left turn lane at Kapahulu Avenue, in which left turns yield to the parallel pedestrian crossing). On the side streets turning onto Kalakaua Avenue and where pedestrian conflicts exist because of pedestrians' disregard of the signal, saturation flows of 1,200 vehicles per hour of green per lane were used.

The green/cycle ratio accounts for the traffic signal timing. Traffic signals reduce the capacity for each movement, since part of the total time is assigned to other movements. The typical cycle length for the signals along Kalakaua Avenue is 80 seconds, with the minor movement being timed for the pedestrian crossing of Kalakaua Avenue. For "Barnes Walk" crossings, a minor street green phase of 26 seconds is needed; 21 seconds would be required at the other intersections. The capacities and volume/capacity (v/c) ratios for each approach were computed and Levels of Service were determined.

Tables 2 and 3 summarize the findings of the capacity analyses for existing traffic and existing laneage on Kalakaua Avenue. As indicated in Tables 2 and 3, acceptable conditions (Level of Service D or better) are present at all intersections except the Kalakaua Avenue left turn lane to Kaiulani Avenue in the PM Peak Hour. Field observations confirm the analyses; at most intersections, the right lane on Kalakaua Avenue carried minimal traffic.

Table 2
EXISTING TRAFFIC CONDITIONS
AM Peak Hour

	Existing Volume	# of lanes	Saturation Flow	g/C ratio	v/c ratio	LOS
Kalakaua Avenue						
Through lanes at Uluniu Avenue	1,060	4	1,400	0.64	0.30	A
Approach to Liliuokalani Avenue	1,290	4	1,350	0.58	0.42	A
Approach to Kealohilani Avenue	1,070	4	1,300	0.58	0.36	A
Approach to Ohua Avenue	1,060	4	1,400	0.64	0.30	A
Approach to Paoakalani Avenue	1,270	4	1,350	0.58	0.41	A
Left turn lane at Kapahulu Avenue	410	1	1,000	0.64	0.64	B
Through lanes at Kapahulu Avenue	530	3	1,400	0.64	0.20	A
Side street approaches						
Uluniu Avenue left turns	230	2	1,200	0.26	0.37	A
Kealohilani Avenue left turn	10	1	1,000	0.32	0.03	A
Ohua Avenue left turns	210	2	1,200	0.26	0.34	A
Kapahulu Avenue left turns	250	1	1,200	0.26	0.80	D

Table 3
EXISTING TRAFFIC CONDITIONS
PM Peak Hour

	Existing Volume	# of lanes	Saturation Flow	g/C ratio	v/c ratio	LOS
Kalakaua Avenue						
Through lanes at Uluniu Avenue	1,650	4	1,400	0.64	0.46	A
Approach to Liliuokalani Avenue	1,850	4	1,350	0.64	0.60	A
Approach to Kealohilani Avenue	1,600	4	1,300	0.58	0.54	A
Approach to Ohua Avenue	1,580	4	1,400	0.64	0.44	A
Approach to Paoakalani Avenue	1,790	4	1,350	0.58	0.57	A
Left turn lane at Kapahulu Avenue	410	1	1,000	0.64	0.64	B
Through lanes at Kapahulu Avenue	970	3	1,400	0.64	0.36	A
Side street approaches						
Uluniu Avenue left turns	200	2	1,200	0.26	0.32	A
Kealohilani Avenue left turn	30	1	1,000	0.32	0.09	A
Ohua Avenue left turns	210	2	1,200	0.26	0.34	A
Kapahulu Avenue left turns	270	1	1,200	0.26	0.87	D

The capacity analyses were redone for future conditions to evaluate the effects of the proposed lane closures to the roadway. Because peak hour traffic volumes in Waikiki have not increased in recent history, future traffic volumes are expected to be similar to the existing volumes.

With the proposed lane closure, the timing of traffic signals within the project area could be adjusted to permit slightly more green time for Kalakaua Avenue, since the shorter distance for pedestrians crossing Kalakaua Avenue would require less green time for the secondary phase. A decrease in width of one lane (11 feet) could be accompanied by an increase in g/C ratio for Kalakaua Avenue of 0.04 at intersections where the minor street volumes are adequately handled. The capacity analyses were repeated for the future condition with the proposed street modifications. The results, shown in Tables 4 and 5, indicate that the proposed lane closure will not cause any unacceptable traffic conditions during future peak hours.

Other measures to increase vehicular capacities which should be considered include the reduction of pedestrian interference with traffic during the signal phases in which traffic is permitted to move. The relocation of the pedestrian signals (WALK/DON'T WALK) for the crossings parallel to Kalakaua Avenue away from the curb to a location over the sidewalk would increase the visibility of the signal for pedestrians, reduce confusion on the part of pedestrians, and increase safety and vehicular capacities by reducing vehicle/pedestrian conflicts. The mauka edge of the crosswalks where "Barnes Walk" is used should be brought closer to the curb, since the width of the crosswalk is not critical as pedestrians would be able to enter Kalakaua Avenue in crossing the side streets. The narrowed crossing would also

alert pedestrians that a special crossing is used at that intersection. If these measures are successful in reducing conflicts between vehicles and pedestrians, higher saturation flows for lanes in which left turns are permitted could be expected; lower v/c ratios and improved levels of service may result.

Table 4
FUTURE TRAFFIC CONDITIONS
AM Peak Hour

	Existing Volume	# of lanes	Saturation Flow	g/C ratio	v/c ratio	LOS
Kalakaua Avenue						
Through lanes at Uluniu Avenue	1,060	3	1,400	0.68	0.37	A
Approach to Liliuokalani Avenue	1,290	3	1,330	0.62	0.52	A
Approach to Kealohilani Avenue	1,070	3	1,270	0.62	0.45	A
Approach to Ohua Avenue	1,060	3	1,400	0.68	0.37	A
Approach to Paoakalani Avenue	1,270	3	1,330	0.62	0.51	A
Left turn lane at Kapahulu Avenue	410	1	1,000	0.64	0.64	B
Through lanes at Kapahulu Avenue	530	2	1,400	0.64	0.30	A
Side street approaches						
Uluniu Avenue left turns	230	2	1,200	0.22	0.44	A
Kealohilani Avenue left turn	10	1	1,000	0.28	0.04	A
Ohua Avenue left turns	210	2	1,200	0.22	0.40	A
Kapahulu Avenue left turns	250	1	1,200	0.26	0.80	D

Table 5
FUTURE TRAFFIC CONDITIONS
PM Peak Hour

Kalakaua Avenue						
Through lanes at Uluniu Avenue	1,650	3	1,400	0.68	0.58	A
Approach to Liliuokalani Avenue	1,850	3	1,330	0.68	0.68	B
Approach to Kealohilani Avenue	1,600	3	1,270	0.62	0.68	B
Approach to Ohua Avenue	1,580	3	1,400	0.68	0.55	A
Approach to Paoakalani Avenue	1,790	3	1,330	0.62	0.72	C
Left turn lane at Kapahulu Avenue	410	1	1,000	0.64	0.64	B
Through lanes at Kapahulu Avenue	970	2	1,400	0.64	0.54	A
Side street approaches						
Uluniu Avenue left turns	200	2	1,200	0.22	0.38	A
Kealohilani Avenue left turn	30	1	1,000	0.28	0.11	A
Ohua Avenue left turns	210	2	1,200	0.22	0.40	A
Kapahulu Avenue left turns	270	1	1,200	0.26	0.87	D

As indicated in Tables 4 and 5, acceptable conditions are present at all approaches affected by the proposed modification. The analyses indicate that the intersections would be able to accommodate an additional 25% [maximum v/c for LOS D (0.90) divided by highest v/c (0.72)] traffic on Kalakaua Avenue, which would be greater that the forecasted increase of 16% in daily vehicle trips from 1990 to year 2020 across the Manoa-Palolo screenline (a mauka-makai line across the east-west roadways, including those in Waikiki) from the *Oahu Regional Transportation Plan* (Table 2-6).

Other Changes to Waikiki Roadways

Several other roadway projects are being planned for Waikiki. These projects are located near the northwest end of Waikiki, where traffic volumes are typically higher than near the proposed lane closure project. Improvements to Kalakaua Avenue at the Ala Wai Canal and between the canal and Ala Moana Boulevard are listed in the Transportation Improvement Program of the City and County of Honolulu Department of Transportation Services, which would qualify the projects for Federal aid. These projects, however, lack local funding and are not being actively pursued at this time.

The State Highways Division has proposed the widening of the eastbound lanes of Ala Moana Boulevard, from west of Kalia Road to Kalakaua Avenue. One additional lane would be provided for eastbound traffic through the Kalia Road intersection. The additional lane would be carried to Kalakaua Avenue, where an additional right turn lane would be provided. The situation on Ala Moana Boulevard is quite different from the situation on Kalakaua Avenue between Kaiulani Avenue and Kapahulu Avenue. A six-phase operation of the signal at the intersection of Ala Moana Boulevard and Kalia Road is needed to accommodate the heavy left turn movements and the through traffic on Ala Moana Boulevard. This signal phasing, combined with the long pedestrian crossing of Ala Moana Boulevard, limits the g/C ratio for the eastbound through movement on Ala Moana Boulevard to less than 0.20. Peak hour conditions are described as LOS D for existing traffic, and if traffic demand increases by 0.5% per year as indicated by the *Oahu Regional Transportation Plan,* afternoon peak hour conditions would become LOS E by the year 2000. The addition of one lane for eastbound through traffic has been identified as a possible mitigation measure and has been recommended for implementation.

Koa Avenue Loading

Another concern in the vicinity of Kalakaua Avenue and Kaiulani Avenue is the loading and unloading activities that occur on Koa Avenue, between Kaiulani and Uluniu Avenues. This activity includes freight and passenger loading on both sides of the street.

Existing Conditions - Koa Avenue is a one-way street (diamond head bound) parallel to Kalakaua Avenue, running for two blocks between Kaiulani Avenue and Liliuokalani Avenue. While the street is 36 feet wide, it is used only for one lane of traffic. At the

Kaiulani Avenue intersection, it serves as the outlet for makai bound traffic on Kaiulani Avenue since the short block between Kalakaua Avenue and Koa Avenue is one-way mauka bound. An all-way stop controls traffic at the intersection of Koa Avenue and the makai bound Uluniu Avenue; Koa Avenue traffic stops before entering Liliuokalani Avenue, which is one-way mauka bound.

Koa Avenue between Kaiulani and Uluniu Avenues provide access to driveways to the basement parking garage for King's Village and to the service areas of the Hyatt Regency Hotel. While no curbside parking spaces are designated along Koa Avenue, freight loading zones are located on both sides. A bus loading zone for passengers is located on the makai side near the Koa Avenue entrance to the Hyatt Regency Hotel. Several residential apartment buildings are located mauka of Koa Avenue. Traffic counts taken in 1994 and 1996 by the Department of Transportation Services show weekday volumes of 6,050 and 5,840 vehicles per day. Daily traffic on Koa Avenue between Uluniu and Liliuokalani Avenue was 3,900 vehicles per day in a count taken in 1995.

Freight loading along Koa Avenue occurs throughout the day, with most activity occurring during hours when freight loading on Kalakaua Avenue is not permitted (9 AM to 10 PM). The loading areas serve deliveries to small shops and businesses along Kalakaua, Kaiulani, Uluniu, and Kuhio Avenues. Deliveries to the Hyatt Regency Hotel are scheduled by the hotel management during daylight hours to minimize noise impacts, since large trucks need to back up into or out of the loading areas.

The passenger loading area is used by tour companies and independent travelers. It is the designated loading/unloading area for guests at not only the Hyatt Regency, but also the Princess Kaiulani, Moana-Surfrider, Outrigger, and other hotels near Kaiulani Avenue. The busiest times are between 7 and 9 AM, and 4 and 6 PM, when hotel guests start on day or evening activities and are picked up by buses.

The tour bus operations have the highest use per vehicle, i.e., the vehicles are the largest and the loading and unloading requires the most time. While some tours are ready to board when the vehicle arrives, some vehicles wait at the loading area, with engines running to cool the interior with the air conditioning on. During most of the daylight hours, shuttle buses for various visitor attractions, such as shopping areas and cruises, pick up or drop off passengers in this area. These shuttle vehicles are typically vans or trolley replicas, and stop only long enough to load or unload passengers. The tour buses and shuttle vehicles leave the area by turning right onto Uluniu Avenue if they desire to get back to Kalakaua Avenue to proceed toward Diamond Head, or continue on Koa Avenue to turn left onto mauka bound Liliuokalani Avenue to get to Kuhio Avenue or to leave Waikiki via Ala Wai Boulevard.

Alternatives - Several alternatives to reduce traffic and other activity along Koa Avenue have been considered. These include converting Kaiulani Avenue between Kalakaua and Koa Avenues to two-way, relocating the bus loading zone to Kaiulani or Uluniu Avenue, limiting freight loading, and closure of Koa Avenue at various times of the day.

Conversion of Kaiulani Avenue to two-way traffic would require the widening of the street and reconstruction of portions of the sidewalk, including the loss of a portion of the sidewalk at the mauka-ewa corner of the intersection of Kalakaua Avenue and Kaiulani Avenue. Modifications to the traffic signal would also be necessary; the existing "Barnes Walk" crossing at this intersection may not be workable with traffic approaching from the mauka leg of the intersection. Without the "Barnes Walk" crossing, pedestrians crossing Kaiulani Avenue parallel to Kalakaua Avenue would conflict with the high volume of left turns, which would create increased vehicular delays at the intersection.

The conversion of Kaiulani Avenue to permit makai bound traffic to continue to Kalakaua Avenue could be expected to reduce traffic on Koa Avenue. Of the 6,000 or so daily vehicles on Koa Avenue, between half and 2/3 originated on makai bound Kaiulani Avenue, as indicated by traffic counts taken in 1994 and 1996. Much of this traffic, however, appears to be turning back in the mauka direction; the total makai bound volumes counted on Kaiulani and Uluniu Avenues in 1994 was 7,060 vehicles per day mauka of Koa Avenue and 5,010 vehicles per day makai of Koa Avenue. Koa Avenue is also the most direct route for entry into the Hyatt Regency parking garage (driveway on Uluniu Avenue makai of Koa Avenue) from Kalakaua Avenue.

The relocation of the passenger loading zone to Kaiulani Avenue between Kalakaua Avenue and Koa Avenue would also require a widening of Kaiulani Avenue, since the loading zone would take up one lane. The short block between Kalakaua and Koa Avenues limit the amount of curbspace which could be used, and any buses that cannot be served would either block traffic while waiting, or would need to make a large loop to recirculate to reapproach the loading zone. If combined with conversion to two-way, a two-lane widening (and related sidewalk narrowing) would be necessary.

The relocation of the passenger loading zone to Uluniu Avenue is not feasible. The distance between the driveways to the main entrance of the Hyatt Regency Hotel and the adverse impact of large vehicles to the sight lines for traffic exiting this area preclude the use of the ewa curb of Uluniu Avenue between Koa and Kalakaua Avenues. Use of the diamond head curb, which has a single driveway to the Hyatt parking garage, has the same constraints but a longer curbspace is available. However, since the buses load from the right, use of the diamond head curb would require that traffic on Uluniu Avenue be reversed to mauka bound; such a reversal will affect the circulation pattern and may require that traffic on Liliuokalani Avenue (and possibly Ohua and Paoakalani Avenues) also be reversed.

The relocation of the passenger loading zone to the triangular park near the intersection of Kaiulani Avenue and Kuhio Avenue has also been proposed. Use of the Kuhio Avenue edge of the triangle would conflict with the existing public bus operations. Locating a bus loading area on Kanekapolei Avenue on the ewa side of the triangle may be possible; however, the only way buses could get to this location would be from Kalakaua Avenue, turning left onto Kaiulani Avenue. If the bus loading area is located on Kaiulani Avenue across the triangular park, the makai corner of the triangular park would require

some modification to allow makai bound buses on Kanekapolei Avenue to turn onto Kaiulani Avenue, mauka bound, to access the bus loading area.

The reduction of passenger loading and unloading activity on Koa Avenue could also be achieved by limiting the use of the area to guests of the Hyatt Regency Hotel. This alternative, however, would force the tour bus companies to alter their operations to include stops at the other hotels or at an alternative location. Of the possible locations between Seaside and Ohua Avenues, the existing location appears to be the best: the street width has adequate width, the sidewalk and adjacent area is compatible for waiting, and vehicular access to the site is relatively easy.

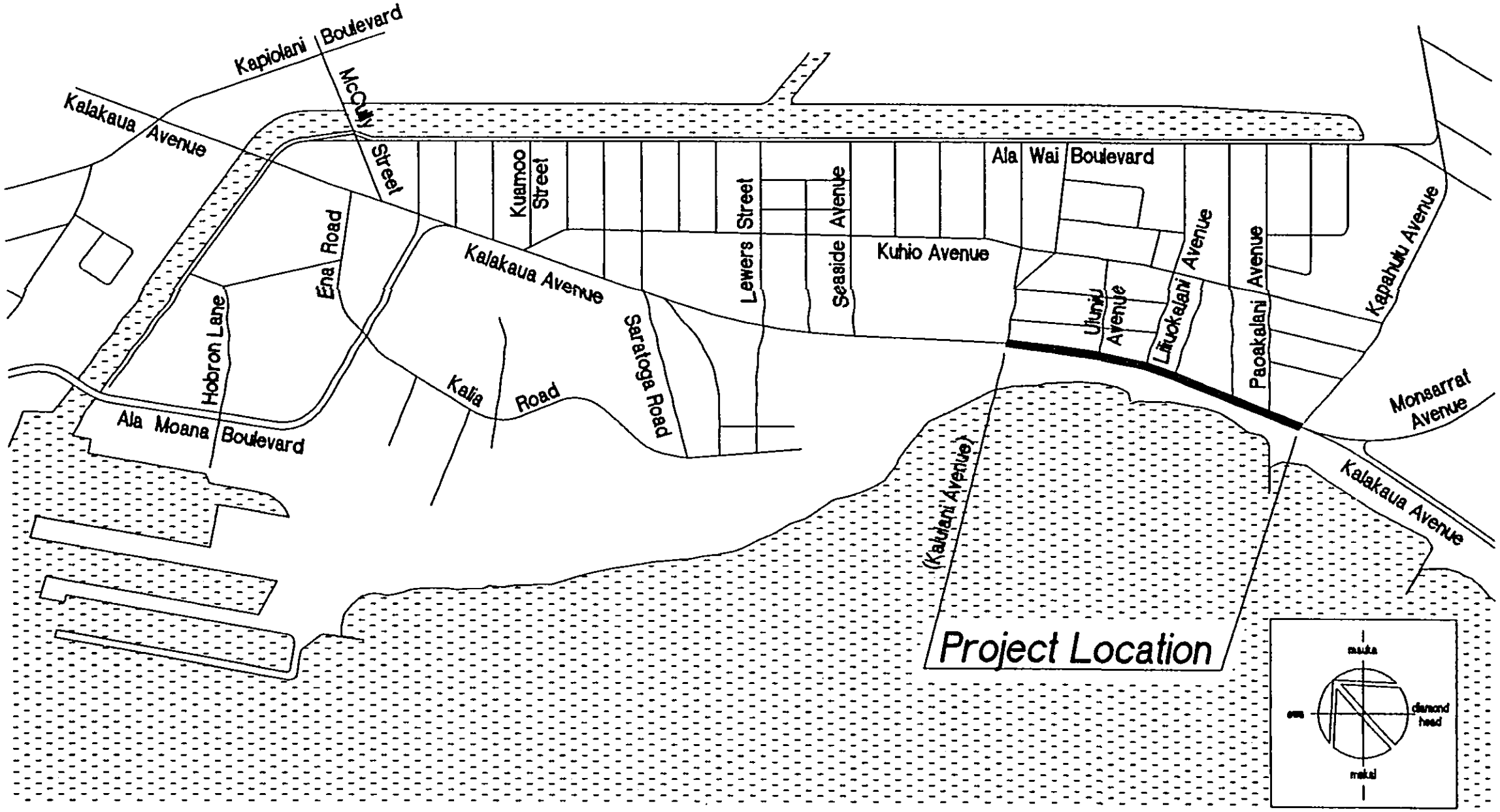
The limiting of freight loading operations would be done by signing and would require enforcement. Additional costs which may be incurred by the trucking companies or suppliers because of any new limitations will probably be passed on to the merchants and customers. This alternative, combined with a reevaluation of the time limits for loading on Kalakaua Avenue, should be evaluated further.

The closure of Koa Avenue at various times of the day would affect access to the King's Village parking garage and to the Hyatt Regency Hotel loading area. Closure would also affect traffic circulation since Koa Avenue is the only outlet from the intersection of Kaiulani and Koa Avenues. If combined with the conversion of Kaiulani Avenue to two-way traffic, closure could be possible. However, access to the Hyatt parking garage would be affected and additional traffic on Kalakaua Avenue between Kaiulani and Liliuokalani Avenues could be expected.

Proposed Action - In view of the constraints discussed above, the retention of existing loading activities on Koa Avenue is recommended. No changes in traffic circulation should be implemented solely for the purpose of reducing traffic on Koa Avenue. The separation of the two types of passenger loading activity (tour bus and shuttle) should be considered. The relocation of shuttle bus loading and unloading activity to Kalakaua Avenue would reduce the activity on Koa Avenue and ease some of the congestion that occurs during busy times. In addition, modifications in operations should be explored; these include the establishment of a convenient staging area, improved communications between the tour desks and drivers to reduce the time that tour buses are on Koa Avenue, and the reconsideration of limitations of freight loading, both on Koa Avenue and on Kalakaua Avenue.

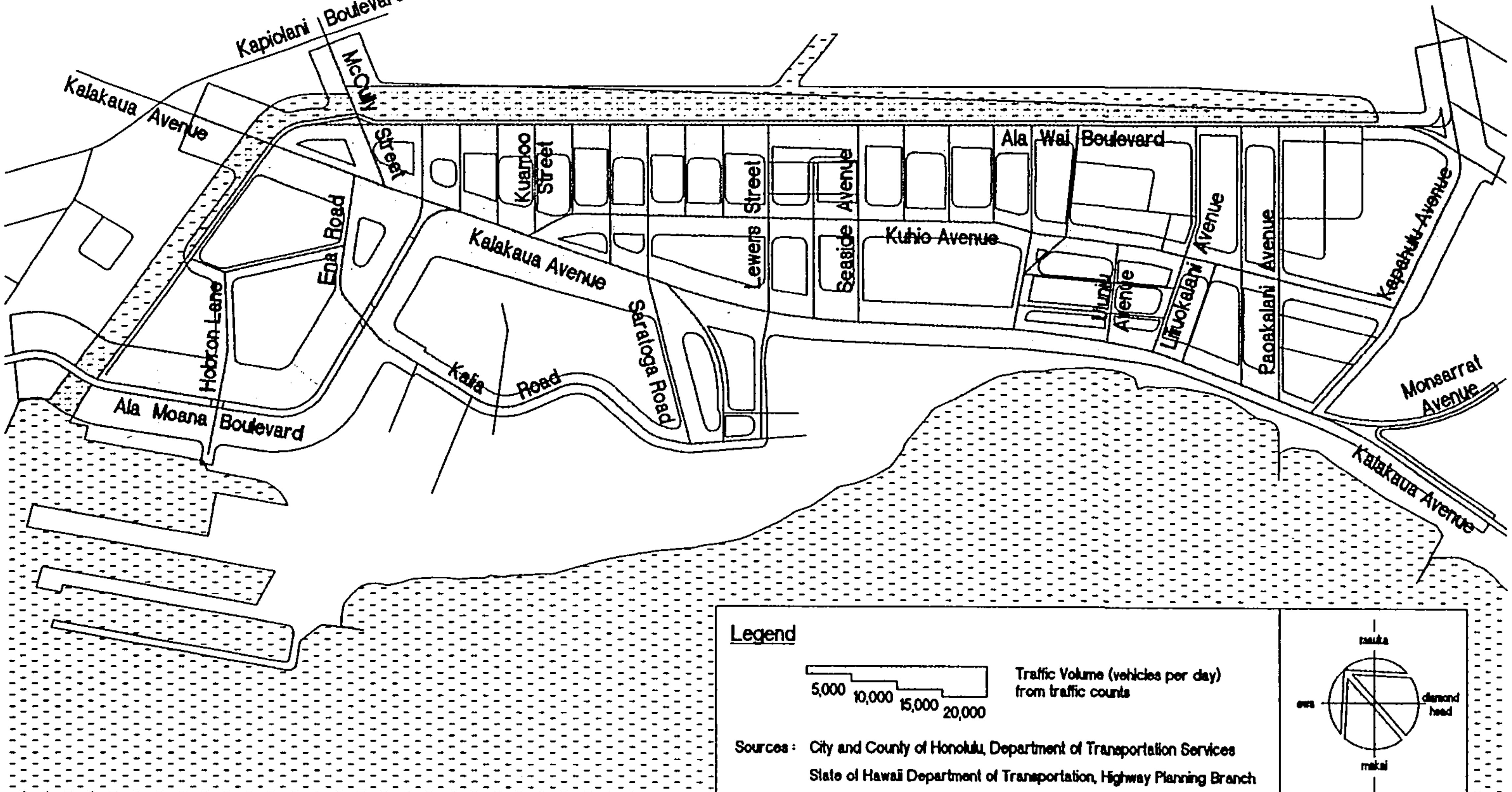
Conclusions and Recommendations

Existing peak hour traffic volumes are readily accommodated on Kalakaua Avenue between Kaiulani Avenue and Kapahulu Avenue. For future traffic demands, which are not expected to increase over existing volumes, a narrowed Kalakaua Avenue between Kaiulani Avenue and Kapahulu Avenue has been found to have sufficient capacity to provide acceptable peak hour conditions. With one less lane on Kalakaua Avenue, the signalized intersections from Uluniu Avenue to Kapahulu Avenue could operate with acceptable delay.



City and County of Honolulu Department of Public Works TRAFFIC STUDY KALAKAUA AVENUE MODIFICATIONS Kaiulani Avenue to Kapahulu Avenue	PROJECT LOCATION WAIKIKI, OAHU	Exhibit 1
	prepared by: Julian Ng, Inc. January, 1998	Not to Scale

KALAKAUA\WAIKIKI.DSN 1/21/98 13:27



City and County of Honolulu Department of Public Works

TRAFFIC STUDY

KALAKAUA AVENUE MODIFICATIONS

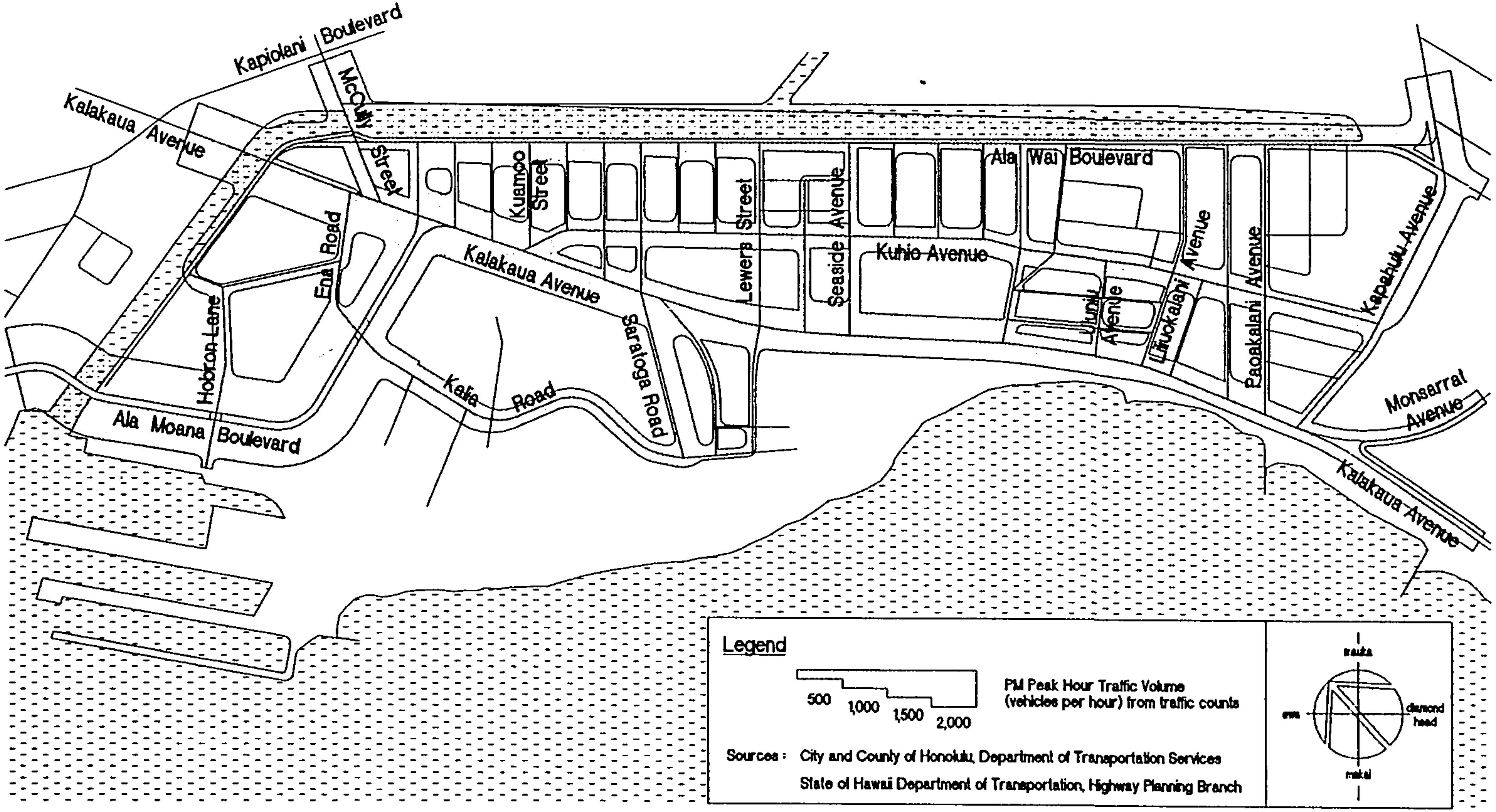
Kaiulani Avenue to Kapahulu Avenue

24-HOUR TRAFFIC
1993 - 1996

prepared by: Julian Ng, Inc. January, 1998

Exhibit 2

Not to Scale



City and County of Honolulu Department of Public Works

TRAFFIC STUDY

KALAKAUA AVENUE MODIFICATIONS

Kaiulani Avenue to Kapahulu Avenue

PM PEAK HOUR TRAFFIC
1993 - 1996

prepared by: Julian Ng, Inc.

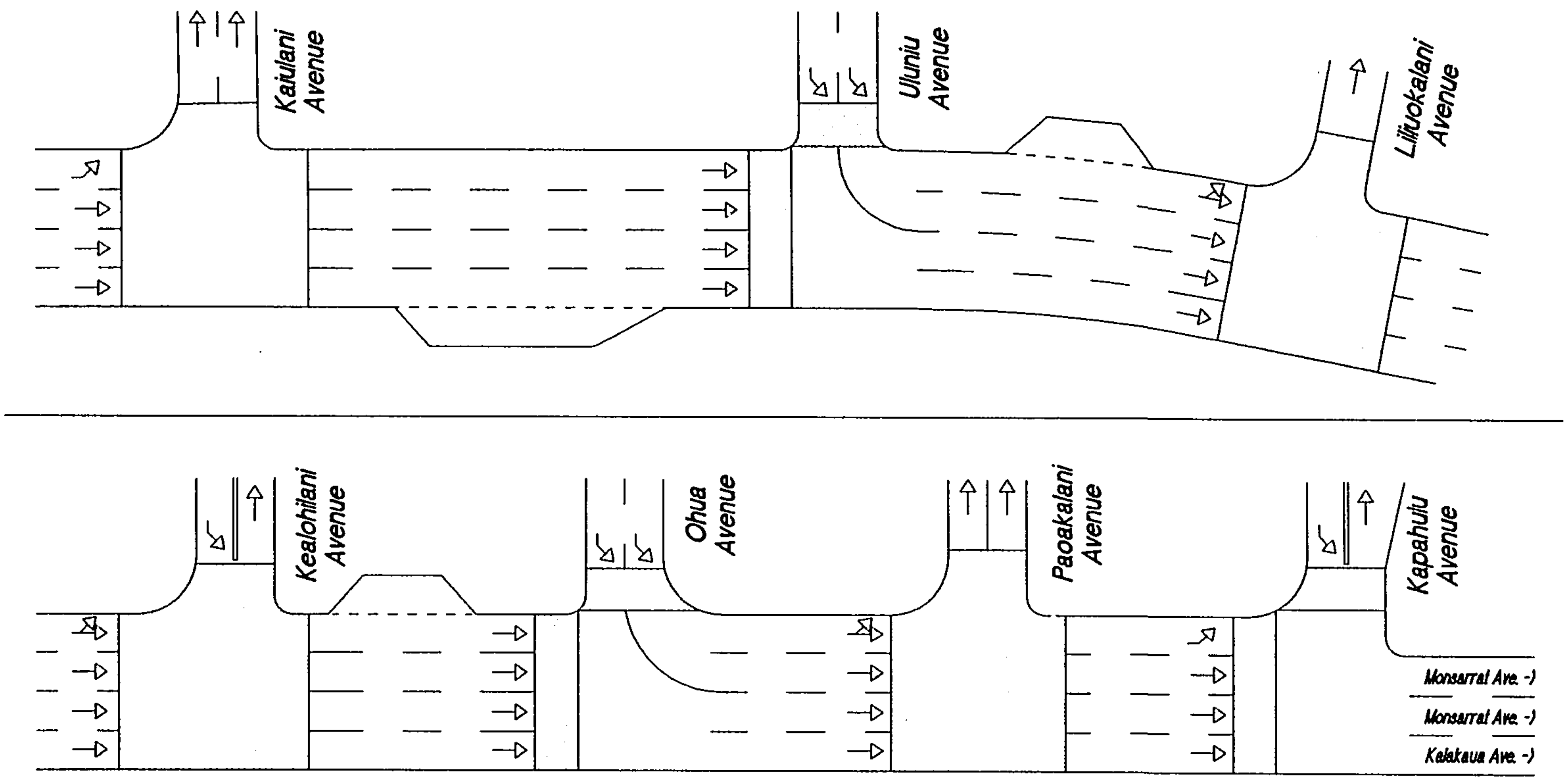
January, 1998

Exhibit

3

Not to Scale

0000 0007 1236



City and County of Honolulu Department of Public Works

TRAFFIC STUDY

KALAKAUA AVENUE MODIFICATIONS

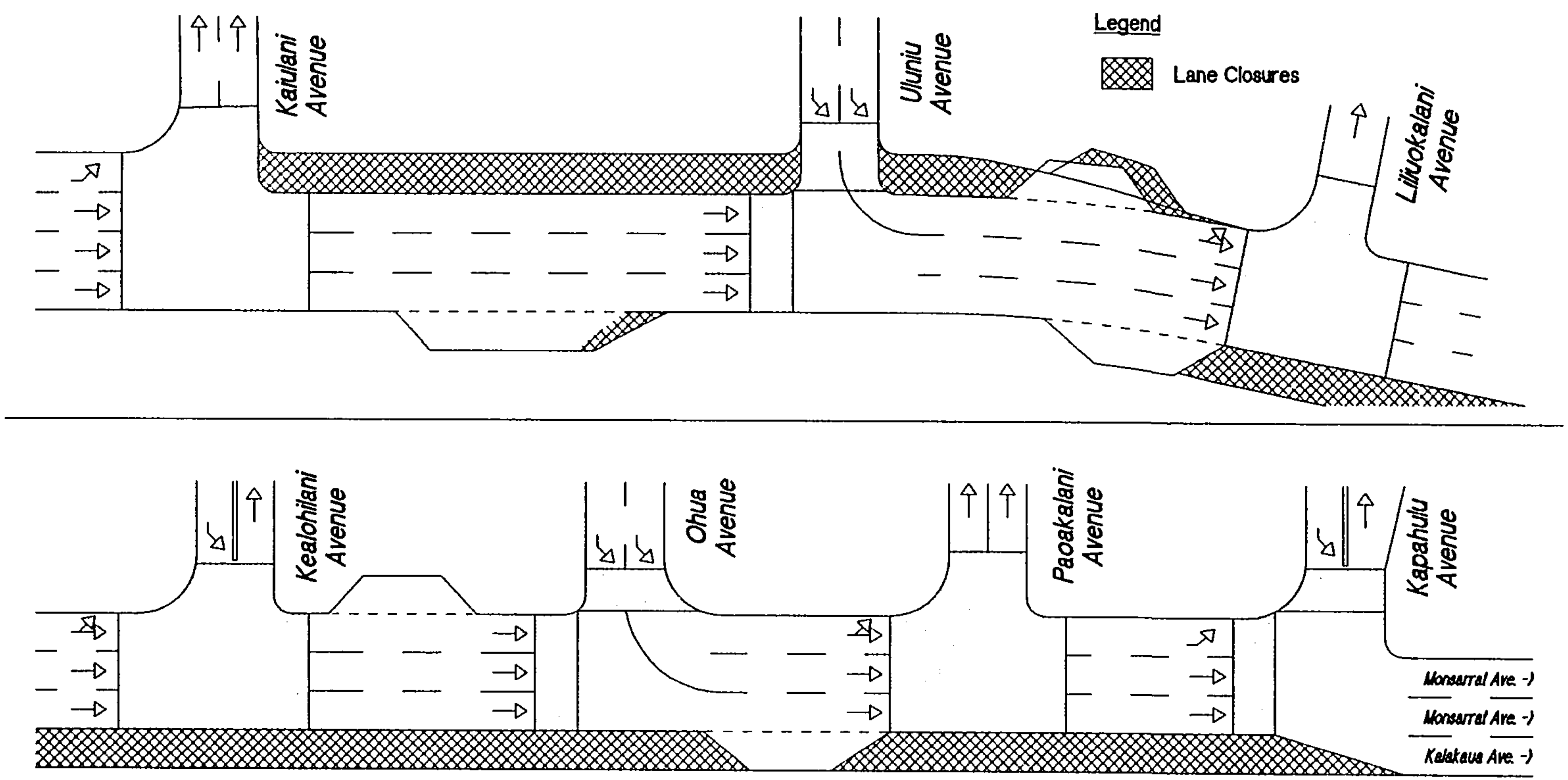
Kaiulani Avenue to Kapahulu Avenue

KALAKAUA AVENUE EXISTING LANEAGE

prepared by: Julian Ng, Inc. January, 1998

Exhibit 4

Not to Scale



City and County of Honolulu Department of Public Works

TRAFFIC STUDY

KALAKAUA AVENUE MODIFICATIONS

Kaiulani Avenue to Kapahulu Avenue

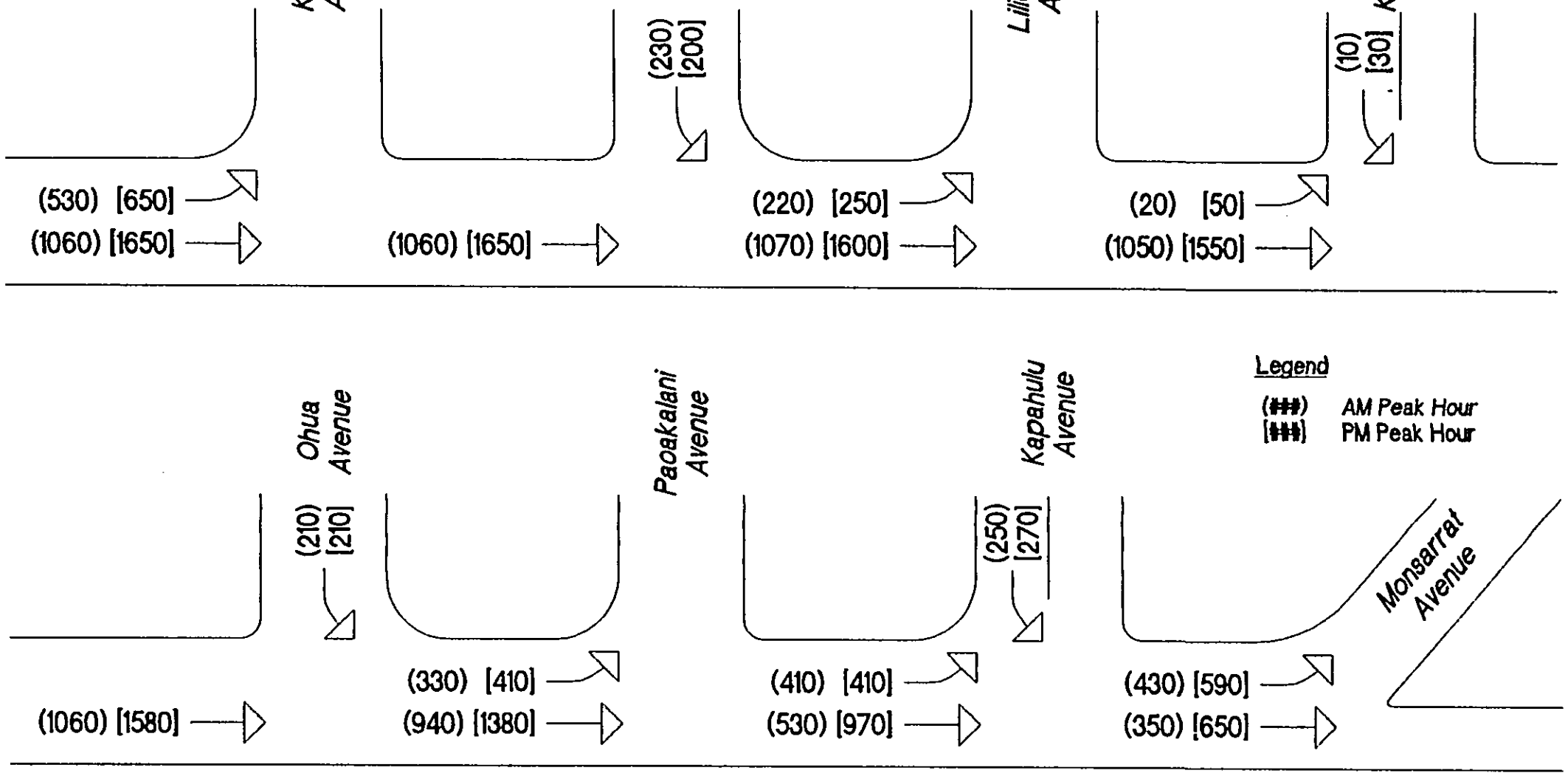
KALAKAUA AVENUE PROPOSED LANEAGE

prepared by: Julian Ng, Inc.

January, 1998

Exhibit 5

Not to Scale



Based on counts by : City and County of Honolulu, Department of Transportation Services

City and County of Honolulu Department of Public Works

TRAFFIC STUDY

KALAKAUA AVENUE MODIFICATIONS

Kaiulani Avenue to Kapahulu Avenue

PEAK HOUR TRAFFIC VOLUMES

Exhibit 6

prepared by: Julian Ng, Inc. January, 1998 Not to Scale

Appendix B

COMMENTS AND RESPONSES TO THE DRAFT ENVIRONMENTAL ASSESSMENT

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Ecoregion
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96850

'98 AUG 17 AM 8 29
DEPT OF PLANNING and PERMITTING
CITY & COUNTY OF HONOLULU

In Reply Refer To: KF

Jan Naoe Sullivan
Director of Planning and Permitting
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Re: Draft Environmental Assessment for the Kuhio Beach Park Expansion & Kalakaua Avenue Promenade

Dear Jan Naoe Sullivan:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Assessment (DEA) for the above referenced action. The DEA was prepared by R. M. Towill Corporation for the City and County of Honolulu. The applicant is the City and County of Honolulu. This letter has been prepared under the authority of and in accordance with provisions of the National Environmental Policy Act of 1969 [42 U.S.C. 4321 *et seq.*; 83 Stat. 852], as amended, the Fish and Wildlife Coordination Act of 1934 [16 U.S.C. 661 *et seq.*; 48 Stat. 401], as amended, the Endangered Species Act of 1973 [16 U.S.C. 1531 *et seq.*; 87 884], as amended, and other authorities mandating Service concern for environmental values. Based on these authorities, the Service offers the following comments for your consideration.

The purpose of the project is to effect facilities improvements for a 3.4 acre stretch of beach park, and modifications to sections of Kalakaua Avenue (between Kaiulani and Kapahulu Avenues), within the Waikiki Special District. Refurbishment activities involve expanding existing recreational areas of the park by converting Kalakaua Avenue from four to three lanes; installing loading bays for service vehicles and a promenade for pedestrians; demolishing and replacing plaza facilities at the western end of the beach park. Construction-related activities will involve excavating between 2,000 and 10,000 cubic yards of street pavement, rubble and sand at the project site.

GENERAL COMMENTS

The Service is concerned that the DEA does not include a description of the Waikiki Marine Life Conservation District, fronting the Waikiki Aquarium, and in the vicinity of the proposed project. A discussion of the coral reef resources within the Waikiki Marine Life Conservation District is integral to implementing measures to reduce impacts to coral reef resources within this area. The institutional significance of coral reefs has been established through their formal designation as "special aquatic sites" (40 CFR Part§230.44/FRv.45n.249). Though the DEA generally

describes the project-related construction activities, it does not articulate the amount of silt or sediment that might be expected to runoff into the marine environment during the construction phase, or ensuing beach replenishment activities. Also, there is no discussion of the potential transport of silt or sediment into the general vicinity of the Waikiki Marine Life Conservation District. Therefore, the Service recommends that the Final Environmental Assessment incorporate a description of the Waikiki Marine Life Conservation District, potential impacts and appropriate mitigation measures.

Page 4-2: Section 4 MITIGATION MEASURES

The DEA lists several potential short-term impacts and mitigation measures in section 4. The Service recommends that the following measures to minimize the degradation of water quality and impacts to fish and wildlife resources and habitats be incorporated into the project:

a. Turbidity and siltation from excavation activities should be minimized and contained to the immediate vicinity of the excavation site through the use of effective silt containment devices and curtailment of work during adverse weather conditions.

b No construction materials should be stockpiled in the marine environment.

c. No contamination of the marine environment (trash or debris disposal, etc.) should result from project-related activities; and

d. A contingency plan to control petroleum products accidentally spilled during construction should be developed. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of petroleum spills.

The Service believes that the incorporation of these measures into the project will greatly minimize the potential for project-related adverse impacts to fish and wildlife resources. Provided that the DEA is conditioned to reflect our recommendations, we will not object to a Finding of No Significant Impacts.

The Service appreciates the opportunity to provide comments on the proposed project. If you have questions regarding these comments, please contact Fish and Wildlife Biologist Kevin Foster at 808/541-3441 (fax: 808/541-3470).

Sincerely,

for Robert P. Smith
Pacific Islands Manager

cc: NMFS-PAO, Honolulu
USEPA-Region IX, Honolulu
DAR-State of Hawaii
CZMP-State of Hawaii
CWB-State of Hawaii

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR · HONOLULU, HAWAII 96813
Phone: (808) 523-4414 · Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

August 25, 1998

Mr. Robert P. Smith
Pacific Islands Manager
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

Re: Your Letter of August 14, 1998 Regarding the Draft Environmental Assessment for Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Honolulu, Oahu

Dear Mr. Smith:

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

The Final EA will include a description of the Waikiki Marine Life Conservation District, potential impacts and mitigation measures. Also, best management practices will be employed to prevent any potential discharge of dredged or fill materials from entering the ocean.

Your comments will be reflected in the Final EA for the proposed project. If you have further questions, please contact Art Challacombe at 523-4107.

Sincerely,

for JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

PHONE (808) 594-1888

FAX (808) 594-1865

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

98 JUL 27 AM 8:09
DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

July 20, 1998

Ms. Jan Naoe Sullivan
Director of Planning and Permitting
City & County of Honolulu
650 South King, 7th Floor
Honolulu, HI 96813

Subject: Environmental Assessment (EA) for Kuhio Beach Park Expansion & Kalakaua Avenue Promenade, Honolulu, Island of Oahu

Dear Ms. Sullivan:

Thank you for the opportunity to review the Environmental Assessment (EA) for Kuhio Beach Park Expansion & Kalakaua Avenue Promenade, Honolulu, Island of Oahu. The City & County of Honolulu is proposing improvements for 3.4 acres of Kuhio Beach Park and modifications to a portion of Kalakaua Avenue between Kaiulani and Kapahulu Avenues. Because the aforementioned modifications will be performed within the City & County's special management area (SMA) and will cost in excess of $125,000, approval of a major SMA use permit is required. Also a shoreline setback variance is required for the proposed improvements at the beach park.

The Office of Hawaiian Affairs (OHA) has reviewed the EA and has no major concerns at this time. The project site is located in the heart of Waikiki and has been substantially modified over the years. Thus, it is unlikely that indigenous flora and fauna species exist or that cultural resources could be uncovered during the improvements.

But OHA is concerned with the proposal to close one traffic lane at Kalakaua Avenue. OHA believes this reduction in traffic lanes will increase congestion and disrupt loading activities. Appendix A describes a traffic study assessing the impacts of the Kalakaua Avenue modifications. Koa Avenue is mentioned several times as one alternative to absorb loading activities from Kalakaua Avenue. Koa Avenue, however, is not depicted in any of the maps of the EA. This oversight precludes OHA from assessing the role of Koa Avenue in easing loading activities and traffic congestions.

Please contact Colin Kippen (594-1938), LNR Officer, or Luis Manrique (594-1758), should you have any questions on this matter.

Sincerely yours,

Randall Ogata
Administrator

Colin Kippen
Officer,
Land and Natural
Resources Division

cc: Board of Trustees
OEQC

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR · HONOLULU, HAWAII 96813
Phone: (808) 523-4414 · Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

August 25, 1998

Mr. Randall Ogata, *Administrator*
Office of Hawaiian Affairs
State of Hawaii
711 Kapiolani Boulevard, Suite 500
Honolulu. Hawaii 96813

Subject: Your Letter of July 20, 1998 Regarding the Draft Environmental Assessment for Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Honolulu, Oahu

Dear Mr. Ogata:

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

We acknowledge that the State OHA has "no major concerns" on the proposed development in Waikiki. With respect to your concerns on the traffic impacts from the proposed Kalakaua Avenue lane closure on Koa Avenue and the role of Koa Avenue, the following statement is prepared:

> Koa Avenue provides access to the surrounding commercial and residential buildings. Koa Avenue is actively used for freight and passenger loading for the adjoining hotels. No alternatives or plans have been made for Koa Avenue to absorb loading activities from Kalakaua Avenue. In fact, the traffic study in "Appendix A" suggests that the relocation of shuttle bus loading and unloading activity from Koa Avenue to the proposed loading areas along Kalakaua Avenue would reduce the activity on Koa Avenue and ease some of the congestion that is presently occurring on Koa Avenue during busy times.

Should you have further questions, please do not hesitate to call Art Challacombe at 523-4107. We will be happy to answer any questions you may have.

Sincerely,

JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

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

REPLY TO ATTENTION OF

Operations Branch

August 3, 1998

98 AUG -7 PM 2:11

DEPT OF PLANNING and PERMITTING
CITY & COUNTY OF HONOLULU

Ms. Jan Naoe Sullivan
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Ms Sullivan:

Thank you for the opportunity to review the Kuhio Beach Park Expansion and Kalakaua Avenue Promenade project. Based on the information provided, all of the construction activity will take place above the high tide line and will not require a Department of the Army permit. It is recommended that best management practices be employed to prevent any potential discharge of dredged or fill materials from entering waters of the U.S.

If you have any further questions, please contact Mr. Alan Everson of my staff at 438-9258, extension 11 and refer to File No. 980000263.

Sincerely,

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

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR HONOLULU, HAWAII 96813
Phone: (808) 523-4414 Fax (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

August 25, 1998

Mr. George P. Young, P.E.
Chief, Operations Branch
Department of the Army
U.S. Army Engineering District, Honolulu
Ft. Shafter, Hawaii 96858-5440

Subject: Your Letter of August 3, 1998 Regarding the Draft Environmental Assessment for Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Honolulu, Oahu

Dear Mr. Young:

Thank you for reviewing the Draft Environmental Assessment for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

We acknowledge that the DA permit will not be required for this project. Your recommendation, regarding the preparation of the best management practices, will be taken under advisement.

If you have further questions or comments, please contact Art Challacombe at 523-4107.

Sincerely,

for Jan Naoe Sullivan
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

BENJAMIN J. CAYETANO
GOVERNOR
SEIJI F. NAYA
DIRECTOR
BRADLEY J. MOSSMAN
DEPUTY DIRECTOR
RICK EGGED
DIRECTOR, OFFICE OF PLANNING

DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM

OFFICE OF PLANNING
235 South Beretania Street, 6th Flr., Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Tel.: (808) 587-2846
Fax. (808) 587-2824

Ref. No. P-7615

July 31, 1998

98 AUG 11 AM 7:57

Ms. Jan N. Sullivan
Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Ms. Sullivan:

Subject: Chapter 343, HRS and Chapter 25, ROH, Environmental Assessment for a Project Within the Special Management Area, Shoreline Setback and Waikiki Special District for the Kuhio Beach Park Expansion and Kalakaua Avenue Promenade

We have reviewed the above referenced document, which indicates that the City is proposing to construct major improvements at the Kuhio Beach Park and Kalakaua Avenue. Included in the proposal is a reconstruction of the existing facilities, adding more landscaping on the beach and along Kalakaua Avenue. The proposal will reduce Kalakaua Avenue from four lanes to three lanes. The plaza area will be improved by new buildings and facilities to house the police substation, food concession, comfort station, surfboard lockers, and beachboy concessions.

We note that the proposal will result in a complete redevelopment of the Kuhio Beach Park, and an overall expansion of the beach area. This would be accomplished by the reduction of area allotted to these facilities, which would be reduced from the current 13,500 square feet to just 4,220 square feet. Also, the reduction of the roadway on Kalakaua Avenue will allow for the addition of landscaping and widening of the beach park. We also understand that certain areas of the beach will be fenced off during construction for safety reasons or facilities closed or relocated, as necessary. However, the construction activity will be phased to mitigate adverse impacts to visitors and other users of the park. Overall construction time is estimated to be six to nine months. According to the document, the proposed project will cost about $13.5 million.

We have the following additional concerns and comments:

1. Page 1-4, and page 5-3. The document indicates that some work will be done within the shoreline setback area, and it also indicates that there is a 100-foot shoreline setback. According to the document, all of the proposed work is within the 100-foot shoreline setback. However, it does not specify where the shoreline is on the attached maps and schematic drawings. It is difficult to determine whether all of the work is within the shoreline setback area. The document should clarify this proposal through maps and written documentation as necessary.

2. The State Department of Land and Natural Resources, Boating Division, is proposing to reconstruct the Kuhio Beach Park "slippery walls", and replenish the sand along the beach. This project should be coordinated with the Boating Division.

3. Page 4-2, no. 3. The construction will include grubbing and grading activities. The document indicates that adequate soil erosion control measures and silt screens and/or sand bags may be used to prevent silt and materials from leaving the construction site. We also note that the project will require a NPDES permit from the Department of Health. Best management practices should be utilized to prevent adverse impacts on the beach and marine life. Dust from construction activities could also adversely impact the beach sand. Care should be taken to prevent the discoloration of the sand and other adverse impacts to the beach and nearshore waters.

The project will improve Kuhio Beach Park, and the City should be commended for proposing a project which will allow for the expansion and more efficient use of the Park area. If you have any questions, please contact Lorene Maki of my staff at 587-2888.

Sincerely,

Rick Egged
Director
Office of Planning

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4414 • Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

August 25, 1998

Mr. Rick Egged, Director
Office of Planning
Department of Business, Economic Development & Tourism
235 South Beretania Street, 6th Floor
Honolulu, Hawaii 96804

Subject: Your Letter of July 31, 1998 Regarding the Draft Environmental Assessment for Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Honolulu, Oahu

Dear Mr. Egged:

Thank you for reviewing the Draft Environmental Assessment for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

The following has been prepared to address your concerns:

1. Shoreline Setback Area
A shoreline survey has been prepared for this project. The plan graphics that will be included in the Final EA will indicate the high tide lines and 40-foot setback lines. Also, a brief description of justification for the variance will be presented in the final EA.

2. DLNR, Boating Division "Slippery Walls" Reconstruction
The project will take place mauka of the beach park. The proposed project is not anticipated to impact "slippery walls" or the shoreline configuration. Also, the project will be scheduled to be completed prior to commencement of "slippery walls" project. We will be coordinating with the State DLNR, Boating Division regarding the referenced project.

3. NPDES Permit
The Department of Design and Construction will be applying for coverage under the State of Hawaii General NPDES Permit for construction storm water, for the referenced project.

Your comments will be reflected in the Final EA for the proposed project. If you have further questions, please contact Art Challacombe at 523-4107.

Sincerely,

for JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

BENJAMIN J. CAYETANO
GOVERNOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

GARY GILL
DIRECTOR

August 19, 1998

Mr. Randall K. Fujiki, Director
Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Fujiki:

Subject: Draft Environmental Assessment for the Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Oahu

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

1. Please describe the measures that will be taken during design and construction to maintain the existing architectural style of the park.

2. Please indicate in a site plan the certified shoreline and shoreline setback line. Show any structures that are proposed to be built within the shoreline setback area. Please justify why these structures need to be located within this area. To the extent possible, structures should located mauka of the shoreline setback area. Describe alternative site plans that would locate structures mauka of this area.

3. According to the conceptual site plan, a landscaped area is proposed Diamond Head of the Kapahulu Groin near a sandy area where international professional volleyball tournaments are held. Please describe the impact of the project on the volleyball tournament site.

4. Kalakaua Avenue will be converted from 4 lanes to 3 lanes with makai passenger loading and emergency and service vehicle turnouts. Please describe how these improvements will affect bicyclist travelling along Kalakaua Avenue towards Waikiki Aquarium. Please consider establishing a separate bicycle lane along Kalakaua Avenue.

5. We recommend that the City design, construct, and operate the park in a manner that would:

   - Promote mass transportation, bicycling, and pedestrian access
   - Use renewable energy sources, and reduce energy consumption
   - Use non-potable water for irrigation and minimize water usage
   - Use recycled and non-toxic materials during construction, promote recycling activities during operations, and reduce waste
   - Preserve and promote the cultivation of native Hawaiian plants

   Please list any specific measures that the City will implement to achieve the above goals.

6. Under the listing of permits and approvals, please include "shoreline setback variance."

7. Please consult with nearby groups (neighborhood boards, user groups, businesses, etc.) and individuals who may be affected by the proposed project.

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

Sincerely,

for Gary Gill
Director

c: R.M. Towill

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4414 • Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

August 25, 1998

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

Dear Mr. Gill:

Subject: *Your Letter of August 19, 1998 Regarding the Draft Environmental Assessment for* Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Honolulu, Oahu

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade. Your letter to Randall Fujiki, dated August 19, 1998, was forwarded to our department.

The following has been prepared to address your concerns:

1. Towards maintaining the identity of Waikiki, development of the proposed project will be undertaken to provide open space relief, landscaping, and low-rise building forms to complement existing developed properties and the surrounding environment.

   The planting and landscaping are integral elements of the design. The proposed building structure will be designed to blend with the surrounding area through the use of landscape and architectural features, materials, and colors that are similar to the existing design elements. The building style will be similar to the early 1900's territorial style, and consistent with the existing City and County buildings at the Kapiolani Park district.

   During construction, the site will be maintained in safe and clean conditions. Measures will be taken to expedite construction.

2. The plan graphics that will be included in the Final EA will indicate the high tide lines and 40-foot setback lines. Also, a brief description of justification for the variance will be presented in the final EA.

3. The project will not curtail any use of international professional volleyball tournaments. Access to the sand beach area will be maintained at all times. The construction activities will be scheduled to avoid conflict with any permitted events or activities at the park.

4. The project will not curtail any use by bicyclists. The project will continue to accommodate passage for bicycles along the makai side curb on Kalakaua Avenue.

5. While reducing the makai curbside lane, turnout areas for police parking, shuttle bus stop, passenger loading zone, bus loading zone, and city vehicle loading zone, will be provided along the makai side of Kalakaua Avenue. Also, as earlier stated, the project will accommodate passage for bicycles along the makai side curb on Kalakaua Avenue.

   The proposed modifications on Kalakaua Avenue would allow additional space for sidewalk and landscape improvements between the roadway and the beach. Therefore, the project will encourage the use of mass transportation, bicycling, and pedestrian access.

   The major improvements proposed at the existing beach park area include the plaza area renewal. The facilities located within the existing plaza area (approximately 3,000 square feet) at the western end of the beach park will be demolished and replaced with a new HPD Police Substation, comfort station, food concession, bike racks, surfboard concession, and beach shower. The new facilities at the plaza area will occupy 700 square feet less area than the ones that will be demolished, which will reduce energy consumption.

6. The Environmental Assessment Section 9, Item 9.1 is revised to reflect your comments.

7. Section 10 of the Final EA will include the list of groups and agencies contacted during the preparation of the plan .

Your comments will be reflected in the Final EA for the proposed project. If you have further questions, please contact Art Challacombe at 523-4107.

Sincerely,

for JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

98 AUG 11 PM 2:06

DEPT OF PLANNING AND PERMITTING
CITY & COUNTY OF HONOLULU

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
ALBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
CONSERVATION AND ENVIRONMENTAL AFFAIRS
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

REF:HP-JE

AUG 10 1998

LOG NO: 22035
DOC NO: 9808nn01

Jan Naoe Sullivan
Director of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Ms. Sullivan:

SUBJECT: Environmental Assessment for Kuhio Beach Park Expansion and Kalakaua Avenue Promenade
TMK: 2-6-01: 02,03,04 and 18

Thank you for your Environmental Assessment submittal dated July 16, 1998 for the Kuhio Beach Park Expansion and Kalakaua Avenue Promenade. This project will occur in an area that has been disturbed in the past primarily through other beach improvement projects. No known significant historic resources lie within the specified project boundaries. Thus we concur that this undertaking will have "no effect" on any known historic structures.

Because your project will remove and landscape one existing lane of Kalakaua Avenue, there is the possibility that burials might be encountered during your construction activities. Should this happen, work shall cease immediately in the immediate vicinity of the find. The contractor shall immediately contact the State Historic Preservation Division at 587-0013 which will assess the significance of the find and recommend an appropriate mitigation measure.

Aloha,

for MICHAEL D. WILSON, Chairperson and
State Historic Preservation Officer

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR HONOLULU, HAWAII 96813
Phone: (808) 523-4414 Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C CHEE
DEPUTY DIRECTOR

August 25, 1998

Mr. Michael D. Wilson
Chairperson and State Historic Preservation Officer
Department of Land and Natural Resources
State Historic Preservation Division
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Subject: Your Letter of August 10, 1998 Regarding the Draft Environmental Assessment for Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Honolulu, Oahu

Dear Mr. Wilson:

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade. We acknowledge that the State HPD has determined that the development of the proposed project will have "no effect" on any known historic structures. The Final EA will include the provisions that the proper steps will be taken in case any remains are encountered during the course of the project.

If you have any questions, please contact Art Challacombe at 523-4107.

Sincerely,

for JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

FIRE DEPARTMENT

CITY AND COUNTY OF HONOLULU

3375 KOAPAKA STREET SUITE H425
HONOLULU HAWAII 96819-1869

JEREMY HARRIS
MAYOR

ATTILIO K. LEONARDI
FIRE CHIEF

JOHN CLARK
DEPUTY FIRE CHIEF

July 28, 1998

98 JUL 31 AM 8:11
DEPT OF PLANNING and PERMITTING
CITY & COUNTY OF HONOLULU

TO: JAN NAOE SULLIVAN, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: ATTILIO K. LEONARDI, FIRE CHIEF

SUBJECT: ENVIRONMENTAL ASSESSMENT
CHAPTER 343, HRS AND CHAPTER 25, ROH
PROJECT WITHIN THE SPECIAL MANAGEMENT AREA,
SHORELINE SETBACK AND WAIKIKI SPECIAL DISTRICT
PROJECT NAME : KUHIO BEACH PARK EXPANSION AND
KALAKAUA AVENUE PROMENADE
LOCATION : 2453 KALAKAUA AVENUE, WAIKIKI, OAHU
TMK : 2-6-01: 02, 03, 04, 18 AND KALAKAUA AVENUE
STAFF PLANNER : ART CHALLACOMBE
HFD INTERNAL NO. OL 98-268

We received your memorandum of July 15,1998, regarding the environmental assessment for the subject project and do not foresee any adverse environmental impact for the affected area if this project is approved.

Should you need additional information, please contact Battalion Chief Charles Wassman of our Fire Prevention Bureau at 831-7778.

Attilio K. Leonardi

ATTILIO K. LEONARDI
Fire Chief

AKL/CW:bh

DEPARTMENT OF PLANNING AND PERMITTING

CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR HONOLULU, HAWAII 96813
Phone: (808) 523-4414 Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

August 25, 1998

TO: ATTILIO K. LEONARDI, FIRE CHIEF
FIRE DEPARTMENT

FROM: JAN NAOE SULLIVAN, DIRECTOR

SUBJECT: YOUR LETTER OF JULY 28, 1998 REGARDING THE DRAFT ENVIRONMENTAL ASSESSMENT
CHAPTER 343, HRS AND CHAPTER 25, ROH
PROJECT NAME: KUHIO BEACH PARK EXPANSION AND KALAKAUA AVENUE PROMENADE
LOCATION: 2453 KALAKAUA AVENUE, WAIKIKI OAHU
TMK: 2-6-01:02, 03, 04, 18 AND KALAKAUA AVENUE
STAFF PLANNER: ART CHALLACOMBE
HFD INTERNAL NO.OL98-268

Thank you for reviewing the Draft Environmental Assessment for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade. We acknowledge that the Fire Department does not foresee any adverse environmental impact for the affected area if this project is approved.

If you have any questions, please contact Art Challacombe at 523-4107.

Sincerely,

for JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

POLICE DEPARTMENT

CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111

JEREMY HARRIS
MAYOR

LEE D. DONOHUE
CHIEF

WILLIAM B. CLARK
MICHAEL CARVALHO
DEPUTY CHIEFS

OUR REFERENCE CS-DL

August 6, 1998

98 AUG 11 AM 8:18
DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

TO: JAN NAOE SULLIVAN, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: LEE D. DONOHUE, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: ENVIRONMENTAL ASSESSMENT
CHAPTER 343, HRS, AND CHAPTER 25, ROH
PROJECT WITHIN THE SPECIAL MANAGEMENT AREA,
SHORELINE SETBACK AND WAIKIKI SPECIAL DISTRICT
2453 KALAKAUA AVENUE, WAIKIKI, OAHU
TAX MAP KEYS 2-6-01: 02, 03, 04, 18 AND KALAKAUA AVENUE

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

The proposed project during its construction phase will have a definite impact on the services to be provided by the Honolulu Police Department. In spite of the stated mitigation measures, construction dust and noise will inevitably generate complaints which patrol officers will have to respond to.

Please note that the District 6 staff are currently in the process of addressing the impact that the reduction from four lanes of traffic to three lanes on Kalakaua Avenue will have. However, during the construction phase, any reduction to two lanes of traffic will cause traffic delays, as tour bus operators and tourists in private vehicles slow down or stop along the way. We would like to recommend that special duty officers be posted along the route to minimize these anticipated delays.

It is difficult to determine the exact impact at this time, but there is the possibility that blind spots in and around the construction sites could be ideal venues for drug transactions and other criminal activity. In addition, tourists and residents will not have the convenience of "walking-in" to the substation to file complaints or to ask questions.

Further, we would like to recommend that the principles of crime prevention through environmental design be used as a means of minimizing criminal activity after the proposed project is completed.

If there are any questions or comments, please call me at 529-3175 or Major John Kerr or Captain Karl Godsey of District 6 at 529-3361.

LEE D. DONOHUE
Chief of Police

By JAMES FEMIA
Assistant Chief
Administrative Bureau

cc: District 6

DEPARTMENT OF PLANNING AND PERMITTING

CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR · HONOLULU, HAWAII 96813
Phone: (808) 523-4414 · Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C CHEE
DEPUTY DIRECTOR

August 25, 1998

TO: LEE D. DONOHUE, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

FROM: JAN NAOE SULLIVAN, DIRECTOR

SUBJECT: YOUR LETTER OF AUGUST 6, 1998 REGARDING THE DRAFT ENVIRONMENTAL ASSESSMENT
CHAPTER 343, HRS AND CHAPTER 25, ROH
PROJECT NAME: KUHIO BEACH PARK EXPANSION AND KALAKAUA AVENUE PROMENADE
LOCATION: 2453 KALAKAUA AVENUE, WAIKIKI OAHU

Thank you for reviewing the Draft Environmental Assessment for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade. We acknowledge that the District 6 is currently undertaking traffic impact analyses for the reduction from four lanes of traffic to three lanes on Kalakaua Avenue. Also, we acknowledge that any reduction to two lanes of traffic will cause traffic delays, as tour bus operators and visitors in private vehicles slow down or stop along the way, and that special duty officers should be posted along the route to minimize these anticipated delays.

With respect to the crime prevention methods during and after construction, the following has been prepared to address your concerns:

1. Uninterrupted access to the Kuhio Beach Police Substation will be maintained except during the plaza reconstruction. While the plaza is being reconstructed, an appropriate sign will be posted on site to indicate locations of other substations within the Waikiki area. The substation at the Royal Hawaiian Shopping Center will be in closest proximity to the site, and police service will be provided primarily on-foot patrols during the time.

2. The proposed pedestrian promenade is intended to encourage pedestrian circulation and increase visibility. The planting and landscaping will be designed to maintain visual penetration along the beach park.

Your comments will be reflected in the Final EA for the proposed project. If you have further questions, please contact Art Challacombe at 523-4107.

Sincerely,

for JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

0000 0007 1253

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 527-6663 • FAX: (808) 527-6675

JEREMY HARRIS
Mayor

KENNETH E. SPRAGUE, P.E., Ph.D.
Director

CHERYL K. OKUMA SEPE, ESQ.
Deputy Director

SWQ 98-13

August 14, 1998

98 AUG 14 AM 8:05
DEPT OF PLANNING and PERMITTING CITY & COUNTY OF HONOLULU

MEMORANDUM

TO: JAN NAOE SULLIVAN, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: KENNETH E. SPRAGUE, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL SERVICES

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (FILE NOS. 98/SMA-064 AND 98/SV-006) FOR KUHIO BEACH PARK EXPANSION AND KALAKAUA AVENUE PROMENADE, 2453 KALAKAUA AVENUE, TMK: 2-6-0: 02, 03,04, 18, AND KALAKAUA AVENUE

We have no comments on the draft environmental assessment for the project.

If you have any questions, please call Gerald Takayesu at local 6104.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR · HONOLULU, HAWAII 96813
Phone: (808) 523-4414 · Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

August 25, 1998

TO: KENNETH E. SPRAGUE, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL SERVICES

FROM: JAN NAOE SULLIVAN, DIRECTOR

SUBJECT: YOUR LETTER OF AUGUST 14, 1998 REGARDING THE DRAFT ENVIRONMENTAL ASSESSMENT FOR KUHIO BEACH PARK EXPANSION AND KALAKAUA AVENUE PROMENADE (FILE NUMBERS 98/SMA-064 AND 98/SV-006)

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

We acknowledge that you have no comments, for the referenced EA. If you have any questions, please contact Art Challacombe at 523-4107.

Sincerely,

JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843
PHONE (808) 527-6180
FAX (808) 533-2714

98 AUG 13 PM 2:11

DEPT OF PLANNING & PERMITTING
CITY & COUNTY OF HONOLULU

August 7, 1998

TO: JAN SULLIVAN, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: CLIFFORD S. JAMILE, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM OF JULY 16, 1998 REGARDING THE DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED KUHIO BEACH PARK EXPANSION AND KALAKAUA AVENUE PROMENADE, WAIKIKI, OAHU, TMK: 2-6-01: 02, 03, 04, 18 AND KALAKAUA AVENUE

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

We have the following comments:

1. The existing water system is presently adequate to accommodate the park expansion. Construction drawings should be submitted for our review and approval.
2. Please verify that the tax map keys encompass the entire project area.
3. There are one 2-inch, two 2½-inch and one 3-inch meters currently serving TMK: 2-6-1: 2, 3, 4, 8. There are no existing water services to TMK: 2-6-1: 15, 18 and 19.
4. The availability of water will be confirmed when the building permit application is submitted for our review and approval. When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.
5. If a 3-inch or larger meter is required, the construction plans showing the installation of the water meter should be submitted for our review and approval.
6. The proposed project is subject to Board of Water Supply cross-connection control requirements prior to the issuance of the building permit application.

If you have any questions, please contact Barry Usagawa at 527-5235.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4414 • Fax: (808) 527-6743

August 25, 1998

TO: CLIFFORD S. JAMILE, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

FROM: JAN NAOE SULLIVAN, DIRECTOR

SUBJECT: YOUR LETTER OF AUGUST 7, 1998 REGARDING THE DRAFT ENVIRONMENTAL ASSESSMENT
CHAPTER 343, HRS AND CHAPTER 25, ROH
PROJECT NAME: KUHIO BEACH PARK EXPANSION AND KALAKAUA AVENUE PROMENADE

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

We acknowledge that the existing water supply is presently adequate for the proposed park expansion. Construction drawings will be submitted for your review and approval. We will confirm the availability of water to your office prior to issuance of building permits. The project will ensure that the proposed improvements will be in conformance with Board of Water Supply cross-connection control requirements. The project will comply with applicable BWS guidelines and requirements.

Your comments will be reflected in the Final EA for the proposed project. If you have further questions, please contact Art Challacombe at 523-4107.

Sincerely,

for JAN NAOE SULLIVAN
Director of Planning and Permitting

cc. Colette Sakoda, RMTC
Tomo Murata, RMTC

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4414 • Fax: (808) 527-6743

JEREMY HARRIS
MAYOR

JAN NADE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

98/SMA-064(AC)
98/SV-006(AC)

August 24, 1998

Ms. Colette Sakoda
R.M. Towill Corporation
420 Waiakamilo Road, Suite 411
Honolulu, Hawaii 96817

Dear Ms. Sakoda:

Draft Environmental Assessment (EA) For
Kuhio Beach Park Expansion and Kalakaua Avenue Promenade
Waikiki, Oahu
Tax Map Keys: 2-6-1: 2, 3, 4, 8, 15 and 18

Thank you for your submittal on the above-referenced Draft EA document. We offer the following comments:

1. The proposed project requires approval of a Shoreline Setback Variance as well as a Special Management Area Use Permit. As such, the EA should include information regarding the structures proposed to be placed within the shoreline setback. In addition, the EA should provide justification for the variance. Generally, a justification of "hardship" or "unique circumstances" associated with the project development is needed in order for an approval of a variance to occur.

2. Are plans for a bike path to be included in the proposal? If not, how will existing bicycle users be accommodated with the proposed project?

3. A certain amount of grading and excavation is assumed to be required during construction of the project. The EA should describe in detail, the location and amount of fill and excavation to be performed and the mitigation measures which will be taken to ensure that nearshore coastal waters will not be adversely impacted during construction.

4. The EA states that sand will replace existing hardscape along the makai side of Kalakaua Avenue. While this concept is consistent and beneficial in meeting Special Management Area objectives and policies, we are curious as to where the sand source is located which will implement the beach widening.

5. We understand that the Department of Transportation Services (DTS) is in the process of evaluating the results of a demonstration project for the subject project. We will defer any detailed comments until the findings of the evaluation is completed.

6. During the progress of this project, subject to the findings of the evaluation, definitive plans specifying the language and use of the various sections of Kalakaua Avenue should be coordinated with the DTS, prior to submittal of the construction plans for this project to our department.

7. The municipal wastewater system is available and adequate to accommodate the proposed project. The project will expand the landscaped ambiance of Kapiolani Park along Kuhio Beach and Kalakaua Avenue, enhance the mauka pedestrian link to Kuhio Beach, and improve public facilities and services. Existing facilities will be demolished and replaced by a new HPD Police Substation, comfort station, food concession, bike racks, surfboard concession, and beach shower. The floor area of the proposed facilities will be 700 square feet less than the existing facilities.

8. Attached is a map showing the existing sewer lines within the subject area. Plans to relocate the existing wastewater collection system should be coordinated with our department.

9. This statement shall not be construed as confirmation of sewage capacity reservation. Sewage capacity reservation is contingent on submittal and approval of a "Sewer Connection Application" form. The applicant will also need to submit an Industrial Wastewater Discharge Permit application.

10. Please show typical site sections and a complete site plan with contours that show proposed mounds, terraces and steps.

11. Discuss how the proposed street lamps will affect the surrounding areas with any light and glare impacts. Will there be any proposed mitigation measures?

12. When processing the Special District Permit application, provide schematic design drawings of the proposed structures, promenade, and landscaping improvements. Provide existing

12. When processing the Special District Permit application, provide schematic design drawings of the proposed structures, promenade, and landscaping improvements. Provide existing site plans showing property lines, setback lines, existing grades, finish floor elevations, street trees, landscaping, street lamps, street furniture, and paved surfaces; floor plans showing room names, dimensions, and floor area; building sections and elevations showing building heights and building finish materials; and planting materials (species, size, and spacing).

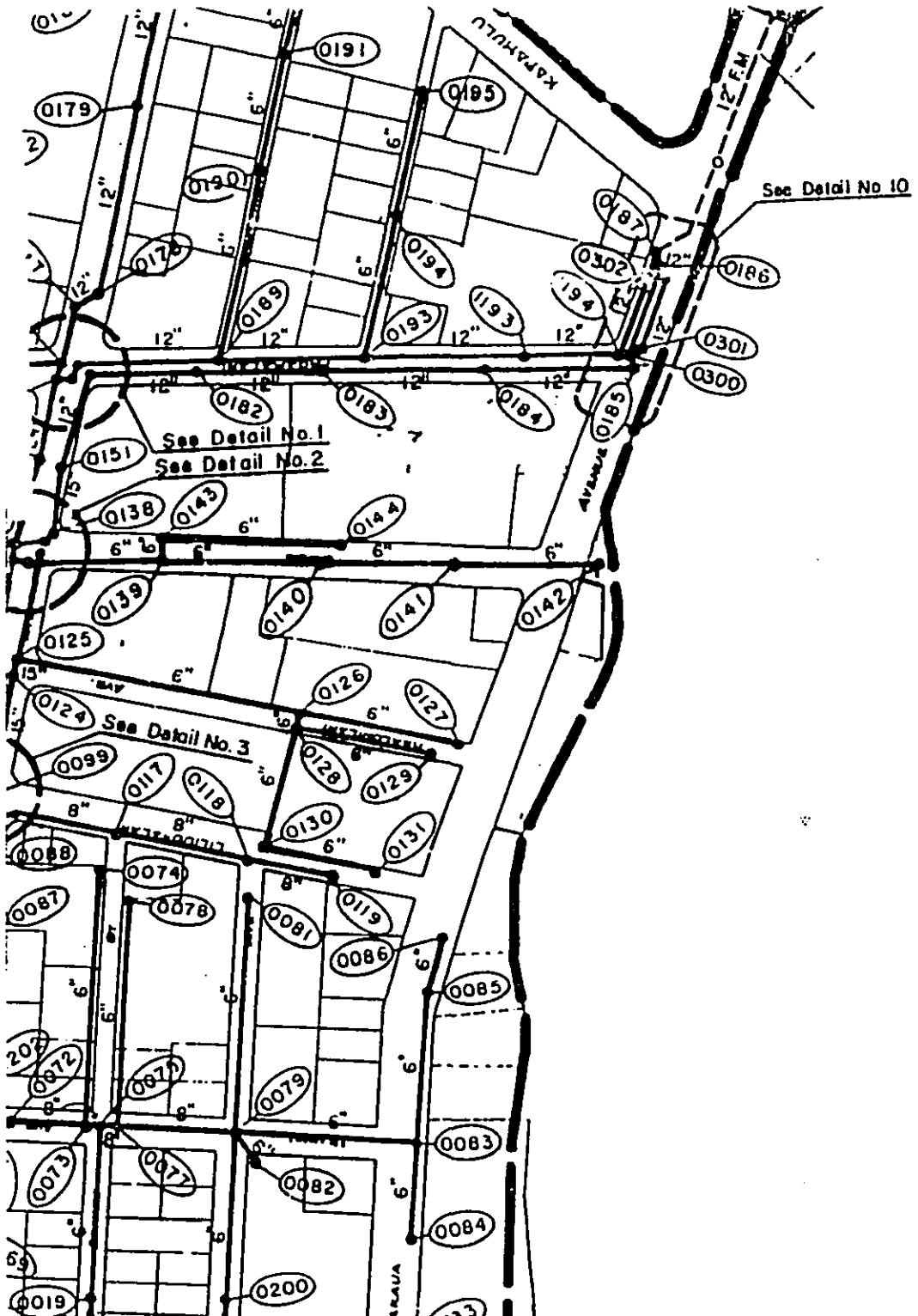
13. Please submit street tree plans for review by our Urban Design Branch.

We appreciate the opportunity to comment on the project. Should you have any questions, please call Mr. Art Challacombe of our staff at 523-4107.

Very truly yours,

JAN NAOE SULLIVAN
Director of Planning
and Permitting

JNS:am
attach.
cc: Department of Design and Construction
g:\dk\uhioca.adc



420 Waiakamilo Road
Suite 411
Honolulu, Hawaii 96817-4941
Telephone 808 842 1133
Fax 808 842 1937
eMail rmtowill@h-one.com

R. M. TOWILL CORPORATION
SINCE 1930

Planning
Engineering
Environmental Services
Photogrammetry
Surveying
Construction Management

August 25, 1998

Ms. Jan Naoe Sullivan
Director of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: Your Letter of August 18, 1998 Regarding the Draft Environmental Assessment for Kuhio Beach Park Expansion and Kalakaua Avenue Promenade, Honolulu, Oahu

Dear Ms. Sullivan:

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Kuhio Beach Park Expansion and Kalakaua Avenue Promenade.

The following has been prepared to address your concerns:

1. Shoreline Setback:
The plan graphics that will be included in the final EA will indicate the high tide lines and 40-foot setback lines. Also, a brief description of justification for the variance will be presented in the Final EA.

2. Bike Plans:
The project will not curtail of Kalakaua Avenue use by bicyclists. The existing levels of the bike activities will be maintained. The project will continue to accommodate bicyclists along the makai side curb on Kalakaua Avenue.

3. Grading and Excavations:
Clearing and grubbing will only take place within the areas that have already been paved and heavily developed. The project will require limited grading and excavation in order to convert the paved area into landscaped environment. Best management practices will be employed to prevent any potential discharge of dredged or fill materials from entering the shoreline area.

4. Sand Source:
The sand source has not yet been determined. Information on such will be provided before the start of construction.

5. DTS Demonstration Project
The DTS is currently conducting the traffic analyses of the project area. The results will be available by the end of September, 1998, upon completion of the Department's study.

6. Coordination with DTS
The language and use of various sections of Kalakaua Avenue will be coordinated with DTS, prior to submittal of construction plans to DPP.

7. Municipal Wastewater System
We acknowledge that the municipal wastewater system is available and adequate to accommodate the proposed project.

8. Wastewater Collection System
The Department of Design and Construction (DDC) will be coordinating with the DPP, Wastewater Branch, regarding any plans to relocate to the existing wastewater collection system.

9. Sewage Capacity
The DDC will submit a Sewer Connection Application as well as an Industrial Wastewater Discharge Permit application.

10. Site Plan
The detailed site plans and elevations will be submitted to the Urban Design Branch for staff review when the SDP is sought.

11. Street Lights
Any light and glare impacts from the proposed street lamps will be mitigated through proper design of the lighting system by restricting height and number of light fixtures, the use of appropriate shielding, and orienting the light toward the ground.

12. Special District Permit (SDP)
We will be furnishing all necessary information when the SDP is submitted.

13. Street tree plans
The detailed site plans will be submitted to the Urban Design Branch for staff review when the SDP is sought.

Your comments will be reflected in the Final EA for the proposed project. If you have further questions, please contact me or Tomo Murata at 842-1133.

Sincerely,

Colette Sakoda
R.M. Towill Corporation

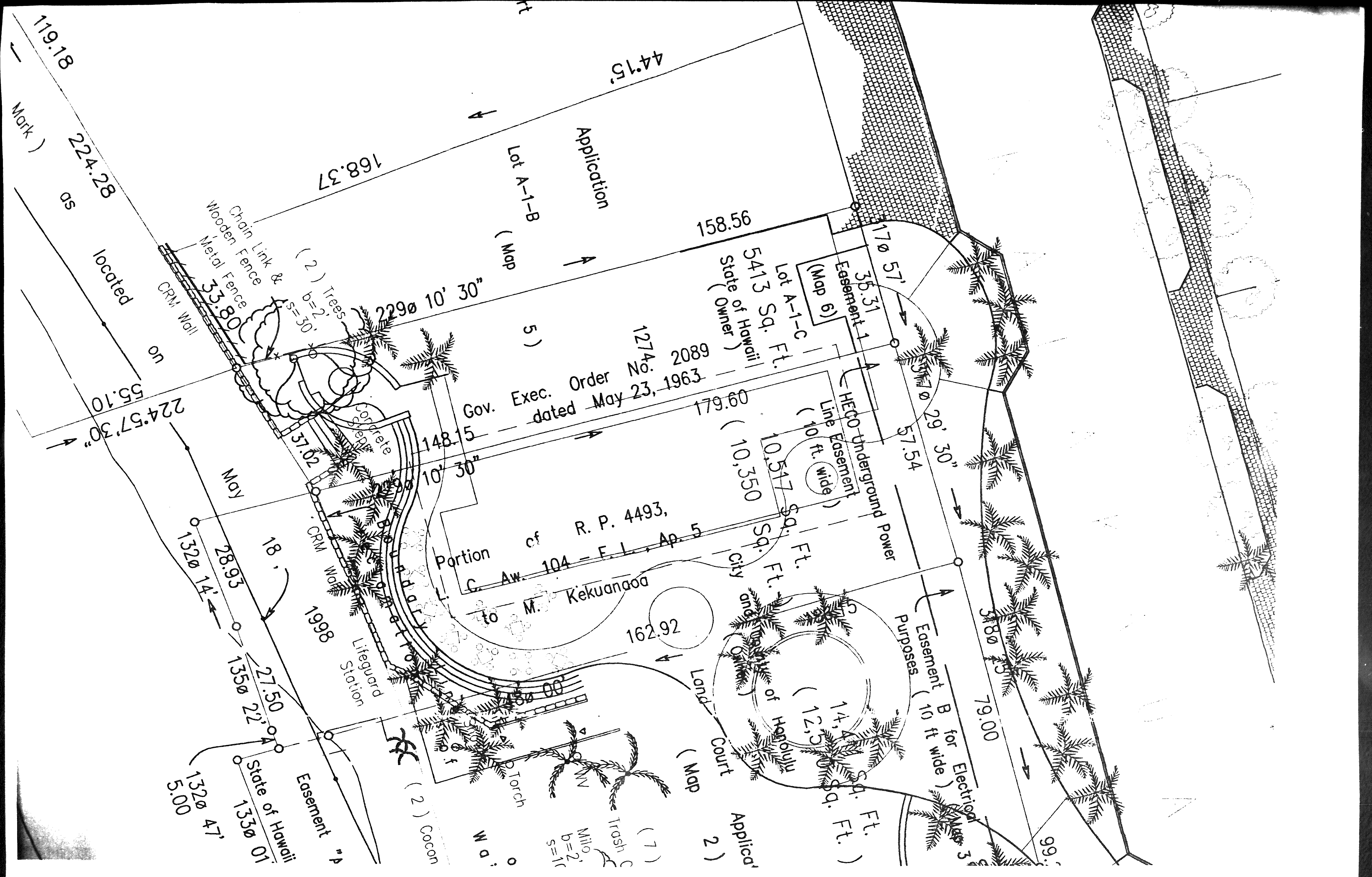
cc. Tomo Murata, RMTC

Appendix C

SITE PLANS

Appendix C

SITE PLANS



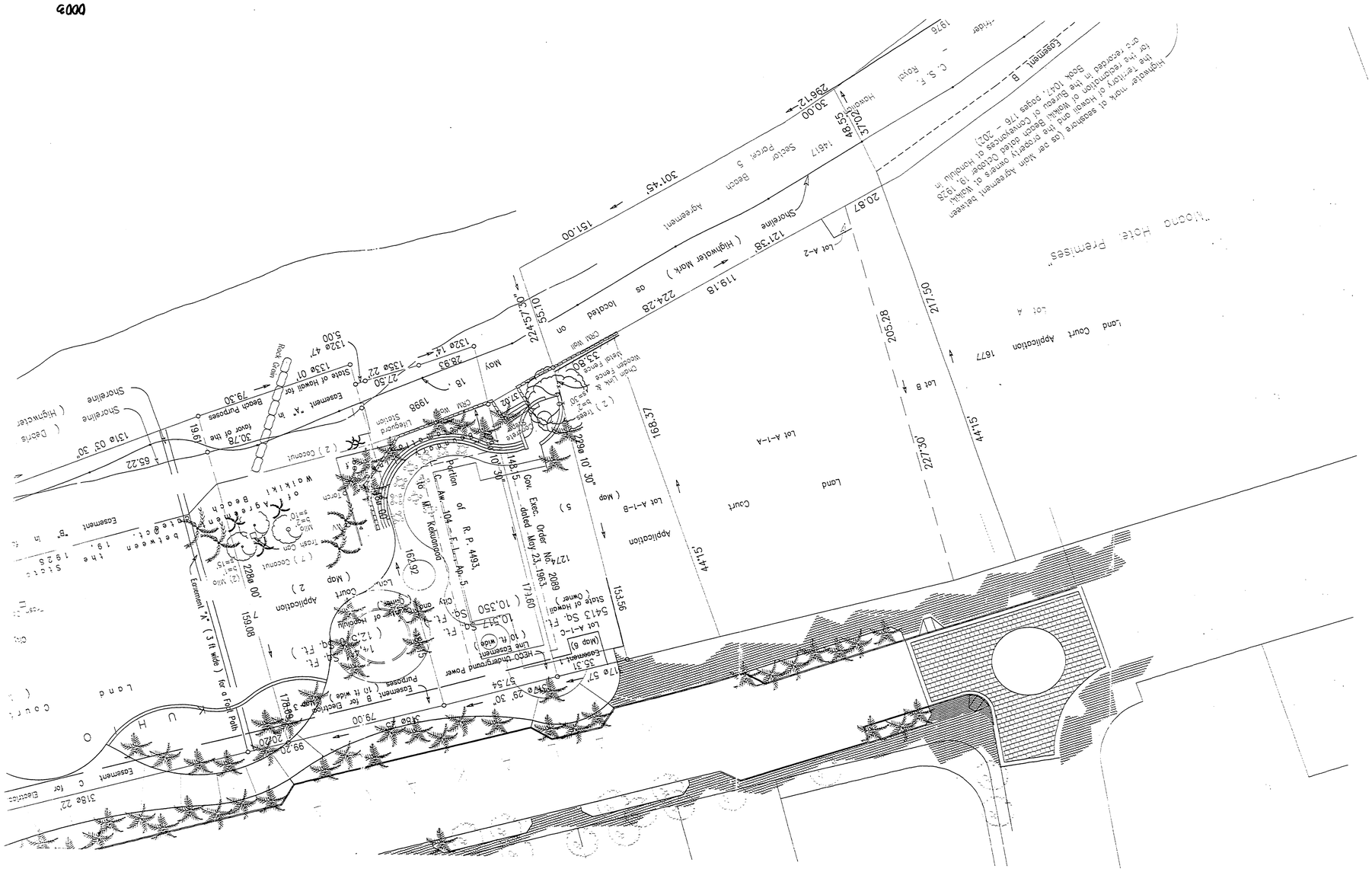
119.18
224.28
168.37
44°15'
Application
Lot A-1-B
(Map 5)
158.56
Chain Link &
Wooden Fence
Metal Fence
CRM Wall
33.80
(2) Trees
b=2'
s=30'
229ø 10' 30"
55.10
224°57'30"
Lot A-1-C
5413 Sq. Ft.
State of Hawaii
(Owner)
Easement 1
(Map 6)
35.31
17ø 57'
1274
Gov. Exec. Order No. 2089
dated May 23, 1963
179.60
148.15
37.02
Concrete Steps
HECO Underground Power
Line Easement
(10 ft. wide)
10,517 Sq. Ft.
(10,350 Sq. Ft.)
29' 30"
57.54
Portion of R. P. 4493,
L. C. Aw. 104 - F. L., Ap. 5
to M. Kekuanaoa
City and County of Honolulu
162.92
CRM Wall
Lifeguard Station
May 18, 1998
28.93
132ø 14'
27.50
135ø 22'
132ø 47'
5.00
State of Hawaii
133ø 01'
Land Court
(Map 2)
Easement B for Electrical Purposes (10 ft wide)
79.00
Torch
Trash
Milo

0000 0007 1261

OVERSIZED DRAWING/MAP

PLEASE SEE 35MM ROLL

0003

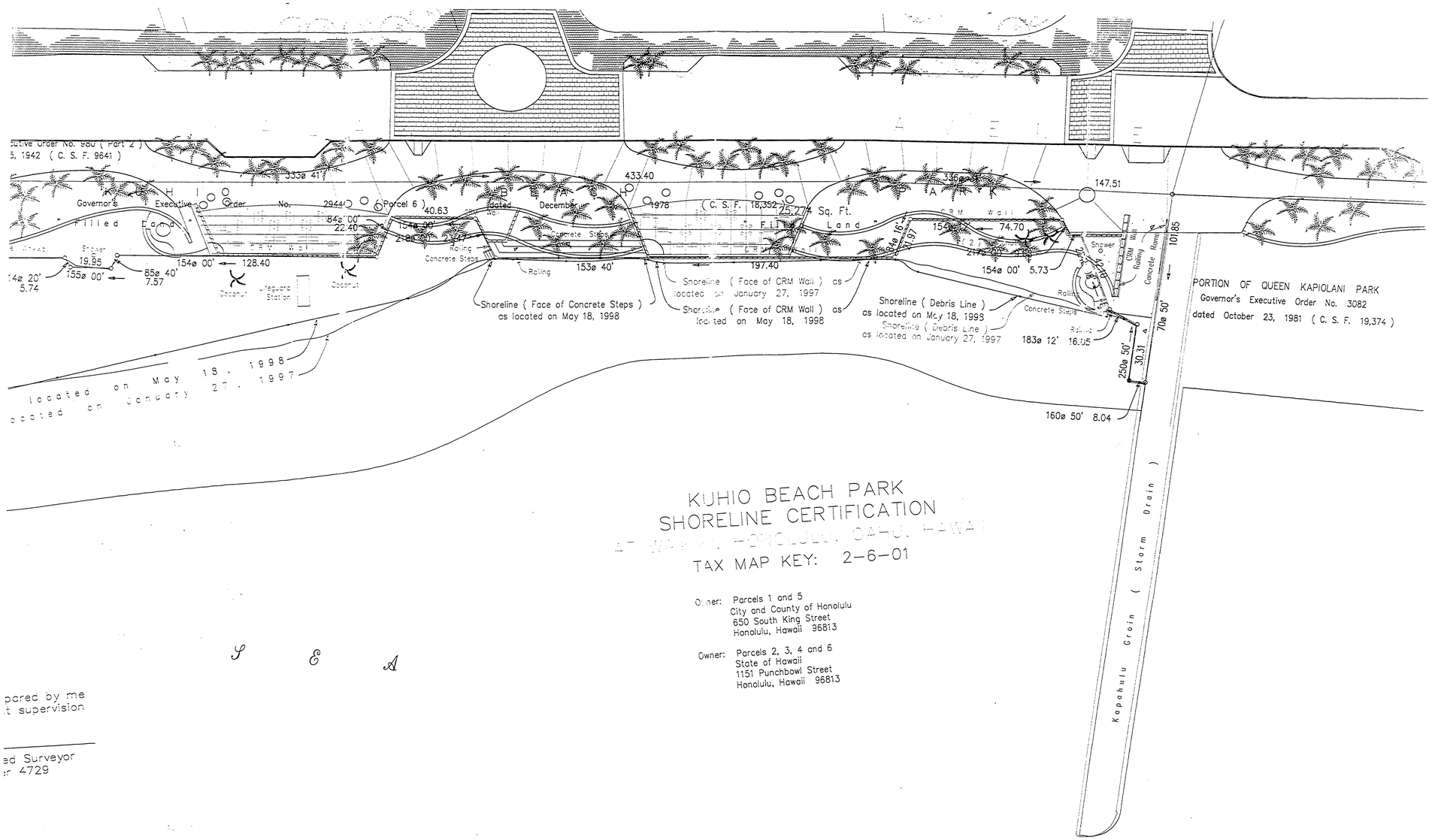

"Moana Hotel Premises"
Land Court Application 1677
Lot A
Lot B
227°30'
44°15'
217.50
205.28
Land Court Lot A-1-A
Application Lot A-1-B (Map 5)
168.37
Lot A-2
20.87
Shoreline (Highwater Mark) as located on
121°38'
119.18
224.28
224°57'30"
55.10
Highwater mark at seashore (as per Main Agreement between the Territory of Hawaii and the property owners at Waikiki for the reclamation of Waikiki Beach dated October 19, 1928 and recorded in the Bureau of Conveyances at Honolulu in Book 1047, pages 176 - 202)
Easement B
C. S. F.
Royal Hawaiian
Surfrider 1976
14617 Sector Beach Agreement Parcel 5
301°45'
151.00
48.55
37°02'
30.00
296°12'
17ø 57'
35.31
Easement 1 (Map 6)
317ø 29' 30"
57.54
HECO Underground Power Line Easement (10 ft. wide)
Lot A-1-C
5413 Sq. Ft.
State of Hawaii (Owner)
153.56
Gov. Exec. Order No. 1274 2089 dated May 23, 1963.
171.60
10,517 Sq. Ft.
(10,350 Sq. Ft.)
Portion of R. P. 4493, L. C. Aw. 104 - F. L., Ap. 5 to M. Kekuanaoa
162.92
City and County of Honolulu (Owner)
14,4 Sq. Ft.
(12,5 Sq. Ft.)
Land Court Application (Map 2)
318ø 15'
79.00
Easement B for Electrical Purposes (10 ft wide) Map 3
99.20
20.20
178.69
159.08
228ø 00'
229ø 10' 30"
148.5
10' 30"
Boundary of Agreement
Easement "A" (3 ft wide) for a Foot Path
(7) Coconut
Trash Can
(2) Milo b=1' s=15'
Milo b=2' s=10'
Torch
(2) Coconut
(2) Trees b=2' s=30'
Concrete Steps
Chain Link & Wooden Fence
Metal Fence
33.80
CRM Wall
37.02
Lifeguard Station
May 18, 1998
28.93
132ø 14'
27.50
135ø 22'
132ø 47'
5.00
Easement "A" in favor of the State of Hawaii for Beach Purposes
30.78
133ø 01'
79.30
19.61
Rock Groin
of Agreement between the State of Hawaii dated Oct. 19, 1928 Waikiki Beach
Easement "B" in
65.22
131ø 03' 30"
Shoreline (Debris
Shoreline (Highwater
318ø 22'
Easement C for Electrical
K U H I O
Land Court
City
Trash Can

0000 0007 1262

OVERSIZED DRAWING/MAP

PLEASE SEE 35MM ROLL

0004



KUHIO BEACH PARK
SHORELINE CERTIFICATION

AT WAIKIKI, HONOLULU, OAHU, HAWAII

TAX MAP KEY: 2-6-01

Owner: Parcels 1 and 5
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Owner: Parcels 2, 3, 4 and 6
State of Hawaii
1151 Punchbowl Street
Honolulu, Hawaii 96813

S E A

pared by me
t supervision

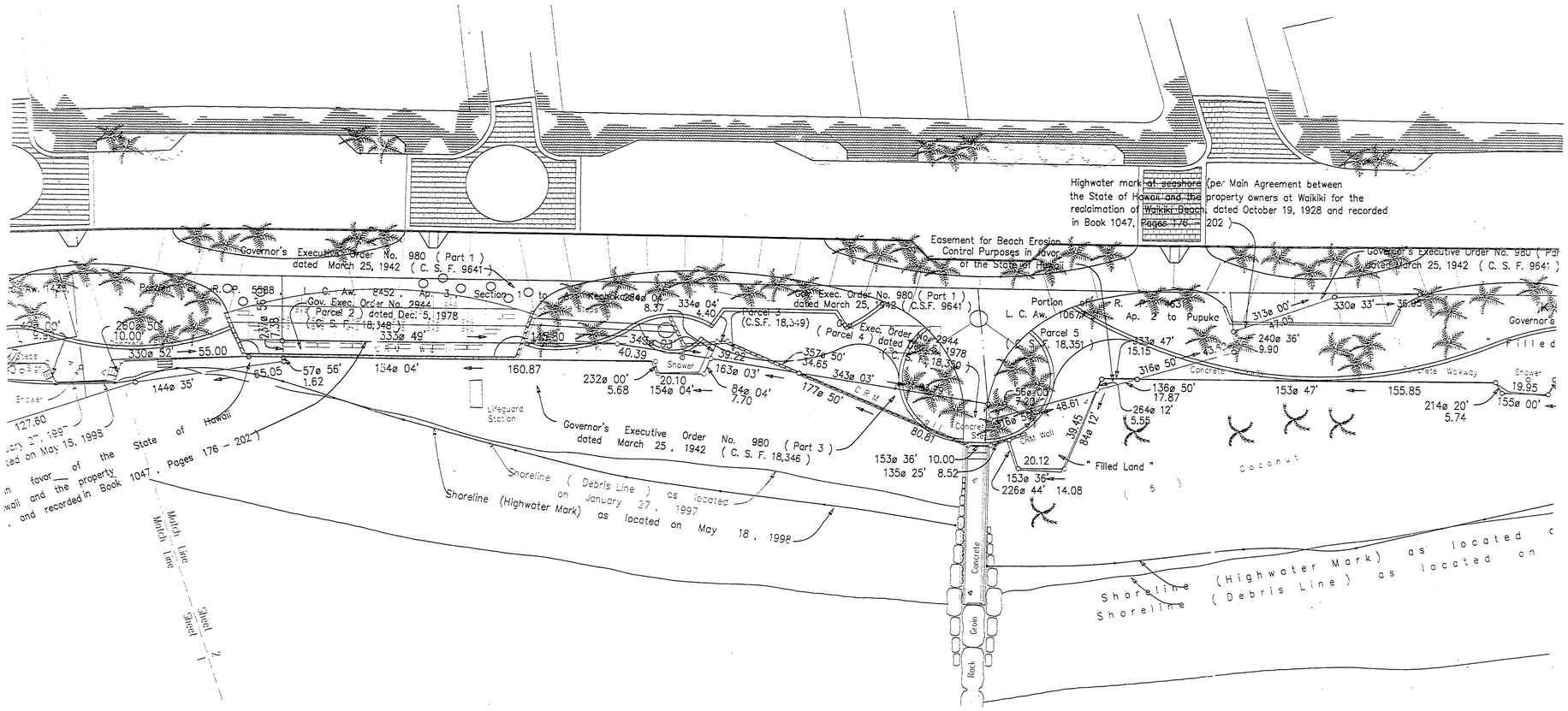
ed Surveyor
r 4729

0000 0007 1263

OVERSIZED DRAWING/MAP

PLEASE SEE 35MM ROLL

0005



Notes:

Coordinates and azimuths are referred to Government Survey Triangulation Station "Leahi" ⚠

This work was prepared by me or under my direct supervision

Registered Licensed Surveyor
Certificate Number 4729

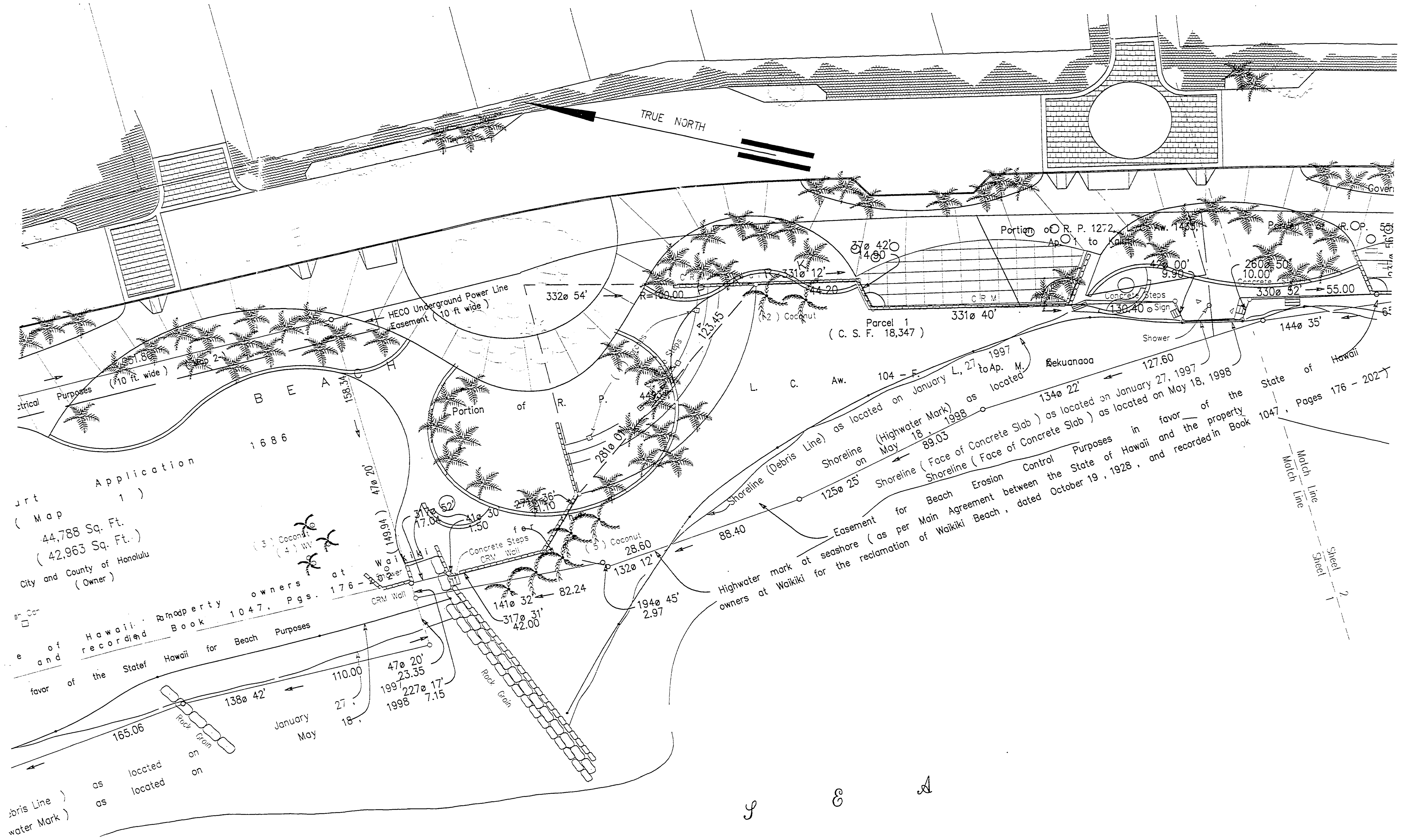
0005

0000 0007 1264

OVERSIZED DRAWING/MAP

PLEASE SEE 35MM ROLL

0006



TRUE NORTH
HECO Underground Power Line Easement (10 ft. wide)
Parcel 1
(C. S. F. 18,347)
Shoreline (Debris Line) as located on January 27, 1997
Shoreline (Highwater Mark) as located on May 18, 1998
Shoreline (Face of Concrete Slab) as located on January 27, 1997
Shoreline (Face of Concrete Slab) as located on May 18, 1998
Easement for Beach Erosion Control Purposes in favor of the State of Hawaii
Highwater mark at seashore (as per Main Agreement between the State of Hawaii and the property owners at Waikiki for the reclamation of Waikiki Beach, dated October 19, 1928, and recorded in Book 1047, Pages 176 - 202)
Match Line
Sheet 2
Match Line
Sheet 1
44,788 Sq. Ft.
(42,963 Sq. Ft.)
City and County of Honolulu
(Owner)
Concrete Steps
CRM Wall
Rock Groin
Shower
Sign
Coconut
S E A

0006

Appendix D

BEST MANAGEMENT PRACTICES

BEST MANAGEMENT PRACTICES (BMP)

City and County of Honolulu
Department of Design and Construction (DDC)
KUHIO BEACH PARK EXPANSION & KALAKAUA
AVENUE PROMENADE, HONOLULU, HAWAII

In accordance with requirements for Best Management Practices to be applied before, during, and after potential pollution-producing activities, the following methods, measures and practices will be applied to the construction of the Kuhio Beach Park Expansion & Kalakaua Avenue Promenade, between Kaiulani and Kapahulu Avenues, TMKs: 2-6-01: 02, 03, 04, 08, 15, 18, and 19.

PROJECT DESCRIPTION

Development of the project will require excavation, filling, grading, general construction, and planting and landscaping. All construction work will take place within the area that is presently covered with the impervious surface. No new structures will be added to the existing sand areas. Fill materials will be placed to convert the areas that are currently covered with the impervious surface into landscaped strips.

Construction activities will include:

- Demolition, clearing and grubbing
- Reconstructing the plaza area and beach support facilities
- Improving beach access
- Providing drainage and grading
- Landscaping

A detailed work schedule will be provided, following approval of this permit application and selection of the construction contractor. Development of the project will commence upon receipt of necessary permits. Overall construction time required is estimated at 6 to 9 months. The total area for the project will be approximately five (5) acres. The project will be constructed in phases to minimize the areas that may be left exposed at any one time. Time to construct each phase will be dependant on the construction contractor.

Construction stormwater management and erosion control mitigation measures will be required and reviewed by the DDC and the State Department of Health (DOH) prior to the start of construction. Such design measures will be prepared in accordance with State and City rules and regulations.

BEFORE CONSTRUCTION

The following practices will be observed, in particular, along the makai boundary of the project:

1. Some portions of the makai project boundary lies adjacent to the sand beach areas. It is anticipated that silt fences will be used to mitigate potential discharges of turbidity to the Pacific Ocean. The construction contractor will assess onsite preconstruction conditions and decide at that time, if the use of a silt curtain or sand bag is feasible. Such control measures would be installed prior to the start of construction and removed following completion of construction periods.

2. The contractor and construction crew will be instructed to avoid use of unstable or sand areas for staging of construction equipment and materials. During construction activities near the sand areas, construction equipment and materials will be kept adjacent to the site within the work area protected by silt curtains and/or sand bags.

DURING CONSTRUCTION AND INSTALLATION

During construction the potential for release of sediments into Kuhio Beach will be carefully controlled. In order to mitigate any potential for turbidity, control measures such as silt fences will be placed around the work sites.

A site specific plan will be provided by the construction contractor undertaking demolition and grading work. The following is a generic description of controls and practices that will be employed as part of the construction effort.

1. Construction Management Technique

   1a. Clearing and grubbing will be held to the minimum necessary for grading and equipment operation.

   1b. Construction activities will be sequenced to minimize the exposure time of cleared surface area. Areas of one phase will be stabilized before starting another phase. Both vegetative and structural controls will be in place to stabilize the areas by temporarily and permanently protecting disturbed soil surface from rainfall impacts and runoff. After completing the work in one area, the area will be cleared of construction related trash and debris, and equipment mobilized to the next phase.

1c. Erosion and sedimentation control measures will be in place and functional at each work site before construction operations begin, and will be maintained throughout the construction period.

1d. The construction contractor's assigned individual will make sure all erosion and sedimentation controls are maintained and functional throughout all phases of the project.

1e. The stock pile will be covered with vinyl or similar materials to prevent it from being washed off by the storm water. Construction debris and excavated materials that will not be used for construction will be disposed of at permitted facilities.

2. Vegetative Controls

2a. Existing ground cover will not be destroyed, removed or disturbed more than twenty (20) calendar days prior to the start of grading operations.

2c. Areas that remain unfinished for more than 30 calendar days will be hydromulched to provide temporary soil stabilization.

2d. After achieving finished grades, all slopes and exposed areas will be permanently stabilized, as required, by hydromulching with grass seed as soon as practicable.

3. Structural Controls

3a. Storm water flowing toward the construction materials area will be diverted as much as practicable using the appropriate controls such as berms, as determined by the project contractor depending on the site conditions. Storm water flowing toward exposed sections will similarly be diverted using the aforementioned controls such as berms.

3b. Silt fences/curtains and/or sand bags will be installed along the construction site. The purpose of the such measures is to filter the runoff flowing across the work site.

AFTER CONSTRUCTION

Upon completion of construction the following will be executed:

1. New planting and landscaping areas will be backfilled and covered with appropriate specified plant and soil materials.

2. The barriers will remain in place, where necessary, to facilitate drying of the concrete materials and ensure safety of the pedestrians and beach goers.

3. The area will be cleared of construction related trash and debris.

4. Equipment mobilized to the site will be removed.

5. Excess material not utilized for fill will be removed and disposed of in accordance with applicable County and State Regulations.

6. All excess materials will be removed. No new discharge materials will be added to the existing shoreline.