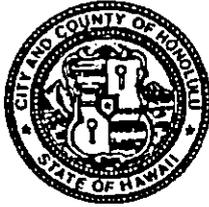


DEPARTMENT OF DESIGN AND CONSTRUCTION  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 2ND FLOOR  
HONOLULU, HAWAII 96813  
Phone: (808) 523-4564 • Fax: (808) 523-4567

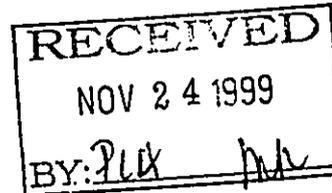
JEREMY HARRIS  
MAYOR



RANDALL K. FUJIKI, AIA  
DIRECTOR

ROLAND D. LIBBY, JR., AIA  
DEPUTY DIRECTOR

November 23, 1999



Genevieve Salmonson, Director  
Office of Environmental Quality Control  
State Office Tower  
235 South Beretania Street, Room 702  
Honolulu, Hawaii 96813

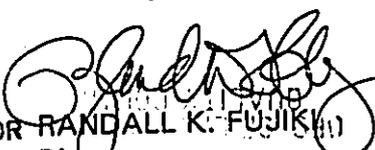
Dear Ms. Salmonson:

Subject: Finding of No Significant Impact (FONSI) for  
Makiki District Park Master Plan Update  
Kulaokahua, Honolulu, Hawaii

The Department of Design and Construction has reviewed the comments received during the 30-day public comment period which began on October 8, 1999. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the December 8, 1999 Environmental Notice.

We have enclosed a completed OEQC Publication Form and four copies of the final Environmental Assessment. Please call Mr. Daniel Takamatsu of the Facilities Design and Engineering Division at 527-6301 if you have any questions.

Sincerely,

  
FOR RANDALL K. FUJIKI  
Director

99 NOV 26 AM 10:06

RKF:gt

Attachments

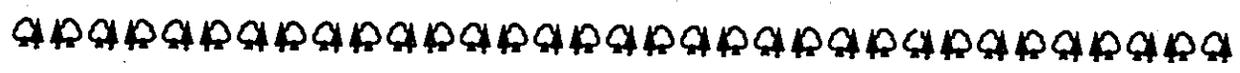
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DEC 8 1999

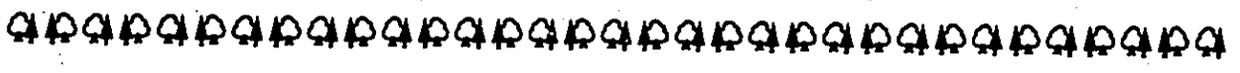
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1999-12-08-DA-~~FEA~~-

FINAL ENVIRONMENTAL ASSESSMENT



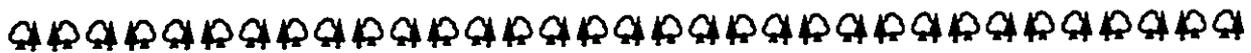
***MAKIKI DISTRICT PARK MASTER PLAN UPDATE***  
KULAOKAHUA, HONOLULU, HAWAII



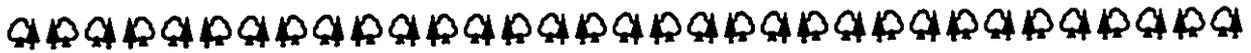
Prepared For

**Department of Design and Construction**  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

FINAL ENVIRONMENTAL ASSESSMENT



***MAKIKI DISTRICT PARK MASTER PLAN UPDATE***  
KULAOKAHUA, HONOLULU, HAWAII



Prepared in Partial Fulfillment of the Requirements of  
Chapter 343, Hawaii Revised Statutes and Chapter 200,  
Administrative Rules, State Department of Health

Prepared For

**Department of Design and Construction**  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Prepared By

**Paul Louie and Associates, Inc.**  
1712 South King Street, Suite 201  
Honolulu, Hawaii 96826

and

**Gerald Park Urban Planner**  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814

**November 1999**

## SUMMARY INFORMATION

---

**Project:** Makiki District Park Master Plan Update  
Kulaokahua, Honolulu, Hawaii

**Proposing Agency:** Department of Design and Construction  
City and County of Honolulu  
650 South King Street, 2<sup>nd</sup> Floor  
Honolulu, Hawaii 96813

**Accepting Authority:** Department of Design and Construction for  
Mayor, City and County of Honolulu

**Tax Map Key:** 2-4-22: 1, 26, 34, 45  
**Land Area:** 378,829 square feet  
**Land Owner:** City and County of Honolulu

**Tax Map Key:** 2-4-22: 17, 25, 28, 33  
**Land Area:** 29,209 square feet  
**Land Owner:** State of Hawaii

**State Land Use Designation:** Urban  
**Development Plan Area:** Primary Urban Center  
**Development Plan Land Use Map:** Park  
**Public Facilities Map:** P/Modifications w/in 6 years  
**Zoning:** P-2  
Punchbowl Special District

**Need for Assessment:** Use of County Lands and Funds

**Contact Person:** Stanford Kuroda  
Department of Design and Construction  
Facilities Design & Engineering Division  
City and County of Honolulu  
650 South King Street, 9<sup>th</sup> Floor  
Honolulu, Hawaii 96813

Telephone: 523-4755

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## SECTION 1

## DESCRIPTION OF THE MASTER PLAN

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### A. Introduction

The Department of Design and Construction, City and County of Honolulu has engaged Paul Louie and Associates, Inc. to prepare a master plan report that updates the 1977 Makiki Park Master Plan. The 9.37 acre (408,038 square feet) Makiki District Park ("Park") is identified as TMK: 2-4-22: 1, 17, 25, 26, 28, 33, 34, and 45. The Park, which is located in Lower Makiki, Honolulu, is bounded by Keeaumoku Street on the north, Makiki Street on the south, Wilder Avenue on the east, and the Lunalilo Freeway on the west. A Location Map is shown in Exhibit 1.

### B. Objectives of the Master Plan

The purpose of the 1999 Makiki District Park Master Plan Update ("Master Plan Update") is to evaluate the development concepts adopted in the 1977 Makiki Park Master Plan ("1977 Master Plan") and to update the original Development Plan in response to current and future recreational needs of the community. The Master Plan Update does not supersede the 1977 Master Plan but builds on current information and community concerns for the implementation of future projects, and recommends development options for Makiki District Park.

The primary objective of the 1977 Master Plan was to provide as much open green landscaped space as possible while providing adequate physical facilities to meet the leisure and recreational needs of all groups. To achieve these objectives, the master plan divided the Park into three functional areas. The first functional area was a picnic and general field activity area that was meant to be an oasis amidst the high-rise, high density apartments in the area and secondarily buffer the interior of the Park from the buildings and traffic on surrounding streets. The second functional area was the center of the site which included space for indoor and outdoor activities. The four former Hawaiian Sugar Planters Association buildings were proposed for renovation to accommodate indoor recreational activities and the outdoor facilities consisted of a swimming pool, tot lot, senior citizens area, and community gardens. The third functional area was the area adjacent to the freeway which would accommodate all the noisy activities and those activities that may be lighted for night use. The concept was to remove all the noisy lighted activities as far away as possible from the residences surrounding the Park (Chapman et.al., 1977).

The development concept of the Master Plan Update in principle retains the functional area concepts of the 1977 Master Plan but fine tunes the concepts by creating more open space by further consolidating future recreation activities and physical facilities to one area of the Park. The Development Plan proposes siting all physical recreational facilities, including a swimming pool, on the side of the Park closest to the freeway and the existing play courts. This will effectively move noise producing activities away from the residential areas located on the other three sides of the Park and thus further expand the open area at the opposite side of the Park.

A third concept is to improve pedestrian and vehicle circulation within the Park and to provide parking in compliance with current land use requirements without a significant loss of usable park lands. The proposed Makiki District Park Master Plan Update is described in the next section.



### C. Technical Characteristics

The Master Plan Update proposes an array of recreational facilities and site improvements to encourage the use of Makiki District Park. Some of the site improvements have their origin in the 1977 Master Plan while some are recommended as a result of a more current City and community based planning process. The improvements proposed by the Master Plan Update are described below and shown on Exhibit 1-2.

#### 1. Swimming Pool Facility

The 1977 Master Plan for Makiki District Park proposed locating a swimming pool near the middle of the Park. The Master Plan Update proposes a new location for the pool to provide more open space and to accommodate other recreational activities and facilities in the Park.

A Swimming Pool Complex will be built on an existing grassy area between the play courts and the Arts and Crafts Building. The grassy area is the former site of the Lishman Building. Proposed are a swimming pool, training pool, a Pool Building, and bleacher seating for about 100 people.

The 25-yard swimming pool will be designed to Department of Parks and Recreation ("DPR") standards. It will have 8 striped lanes and a graduated depth of 3½ feet to 5 feet deep. A wheelchair lift into the pool will accommodate the physically challenged. Deep diving will not be allowed thus no diving boards or platforms are proposed.

The training pool is intended for use by young swimmers and children learning to swim. The 16-foot by 20-foot pool will have a graduated depth of 2 feet to 3 feet. A low fence will physically separate the training pool from the main pool for the safety of the young swimmers.

Separate filtration systems for the swimming pool and the training pool will be installed. The facility will be lighted for night use. Adequate deck space is provided for portable lifeguard stands and sunning.

The Pool Building will house the pool manager's office which will be located in an area that allows supervision of the pool entry, the 25-yard pool, and the training pool. Separate restrooms, showers, changing areas, lockers for men and women, and storage space for pool equipment and maintenance will be in the Pool Building. The single level building has a maximum height of 20 feet and will be designed to identify with and complement the character of the adjoining historic Park buildings.

An aluminum ornamental fence consistent with the historical character of the adjoining buildings will enclose the entire facility. Appropriate landscape plantings will be kept to a minimum to avoid having debris blow into the pool.

#### 2. Walking/Jogging Path

A number of park users currently walk or jog around the Park but there is no path or layout for this form of exercise, thus, a formal Walking /Jogging Path is proposed. The 6-foot wide concrete path will circle the open play area and connect to existing walkways near the recreation buildings. The path will continue around the buildings and the play courts creating a loop around the entire Park. Trees and pole lights will line the path where it meanders through the open play area. The path converges in two areas where works of art will be located and serve as focal points.

### **3. Pedestrian Entries**

New pedestrian entries will be built at the corner of Keeaumoku Street and Wilder Avenue and at the corner of Makiki Street and Wilder Avenue. Both entries will connect to the proposed Walking/Jogging Path at the open play area. These new entries will provide defined entries for park users in the neighborhood where none now exist.

### **4. Courtyard**

A new Courtyard is proposed in the area formed by the Administration Building, Library, Arts and Crafts Building, and Agee Hall. The Courtyard will function as a focal point for the existing buildings by providing a more organized configuration than the existing walkway system as well as active program use. Use of the space will vary with two, large existing trees in this area to remain providing shade for groups and bench seating areas provided for users to sit, talk story, or "just plain people watch".

### **5. Relocated Play Equipment Area**

The existing Play Equipment Area is currently an independent function in the middle of the Park. It is separated from other areas of the Park and in an inconvenient location for its users. It will be relocated near to the Swimming Pool Facility where more activities take place. The relocated Play Equipment will be installed on a resilient surfacing similar to the existing. Seating will be provided for adults to sit and supervise their children.

### **6. Community Gardens Site Improvements**

The existing Community Gardens will be kept in the same location with several site improvements are proposed. The existing tool shed will be relocated from the makai side of the gardens to the mauka side. The existing compost pile is an unsightly heap and will also be moved near to the relocated tool shed. A new driveway from Makiki Street will provide access to both facilities. The Community Gardens and their support functions will be enclosed by an aluminum ornamental fence and surrounded by a landscaping hedge. The fence will improve the Garden's appearance, help to minimize vandalism and theft, and identify the gardens as a separate function in the Park.

### **7. Redesign Parking Lot-Keeaumoku Street**

The off-street parking lot on Keeaumoku Street will be redesigned to improve vehicle circulation and provide more parking stalls. The existing parking lot with the new basketball court (a separate project) allows for about 61 stalls. The new parking lot will provide parking for 85 vehicles in marked stalls. Several existing trees will have to be relocated and new trees will be planted.

### **8. Redesign Parking Lot-Makiki Street**

The off-street parking lot on Makiki Street will be reconfigured and the pavement reconstructed to accommodate more parking stalls. The present parking lot is temporarily paved, without marked stalls, and can accommodate about 19 vehicles on one side only. The redeveloped lot will be double loaded to provide about 31 stalls.

#### **9. Access Road**

A 22-foot wide, two-way access road connecting the parking lot off Keeaumoku Street with Makiki Street is planned for the area behind the existing play courts. This space is not actively used. About 20 parking stalls will be provided perpendicular to the rear of the play courts. A row of trees planted between the road and the Freeway will help to buffer visual and noise impacts of the Freeway.

#### **10. Skateboard Park Facility**

A Skateboard Park Facility is planned to be located under the Keeaumoku Street Overpass. The Skateboard Park will have a skating area for skateboarding and rollerblading. It will possibly contain several gently sloped ramps and banks of various shapes and some street features. The makai bay is proposed for the site of the skating area because of its higher overhead clearance.

The site is owned by the State of Hawaii and leased to Catholic Charities who park their vans under the Overpass. Catholic Charities has agreed to allow the City to construct the Skateboard Facility on the makai bay and they will continue to park their vans on the mauka bay. The City will allow Catholic Charities to use the Park's parking lot to enter and park their vans under the Overpass.

Pedestrian access to the Skateboard Park and vehicle access for maintenance will be provided from the Keeaumoku Street parking lot.

#### **11. Infrastructure**

Upgrading of or additions to the existing infrastructure will be required for some of the proposed facilities primarily the swimming pool. Preliminary engineering for the pool indicates that a new sewer lateral for the restrooms and showers, drain lines, and water service are required. A 3-inch quick fill water line for pool use is needed and will be brought to the site from Keeaumoku Street. It is not known at this time if this line will be metered separately from other water systems serving the Park.

Electrical lines will be brought underground to the pool for power and lighting and buried along the jogging path. Service can be taken from existing electrical facilities serving the Park.

#### **12. Landscaping and Lighting**

Landscaping, primarily in the use of trees, will be added to parking areas, the perimeter of the Park, and along the access road. These plantings will supplement existing trees, help define and identify use areas, buffer park spaces from uses outside the Park, and provide shade. Detailed landscape and planting plans will be prepared as part of the design of each planned improvement.

New ornamental pole light fixtures to complement the existing historic building design style will be installed in the parking lots, the access road behind the tennis courts, in the vicinity of the existing park buildings, and open spaces to provide better visibility and security in these areas and allow for better night use of the Park.

#### **D. Economic Characteristics**

Improvements proposed by the Master Plan Update will be implemented over a period of years depending on availability of funds. A five phase schedule by Park areas is shown in Exhibit 1-3. The

phasing schedule also recommends the priority of the improvements to aid in requesting public funds in the years ahead. The phasing plan also seeks to minimize potentially adverse impacts on park users while keeping sections of the park open for recreational use during construction. The recommended schedule of improvements is presented below.

Phase 1	Expand open play field; relocate trees; install irrigation system.
Phase 2	Construct swimming pool and pool building; construct Makiki Street parking lot; construct walkways between pool and Makiki Street parking lot; construct skateboard facility.
Phase 3	Relocate play equipment; renovate courtyard area; reconfigure Keeaumoku Street parking lot; construct walkways in open play field; construct entries at Keeaumoku and Makiki Streets.
Phase 4	Construct service road and parking area between Keeaumoku Street parking lot and Makiki Street.
Phase 5	Relocate tool shed and compost pile and erect perimeter fence at community garden.

The cost for Phases 1 and 2 is estimated at \$ 3.6 million and funding has been appropriated by the Honolulu City Council as part of the City's Capital Improvements Program. Design and construction of Phases 3, 4, and 5 will be implemented as funding is made available.

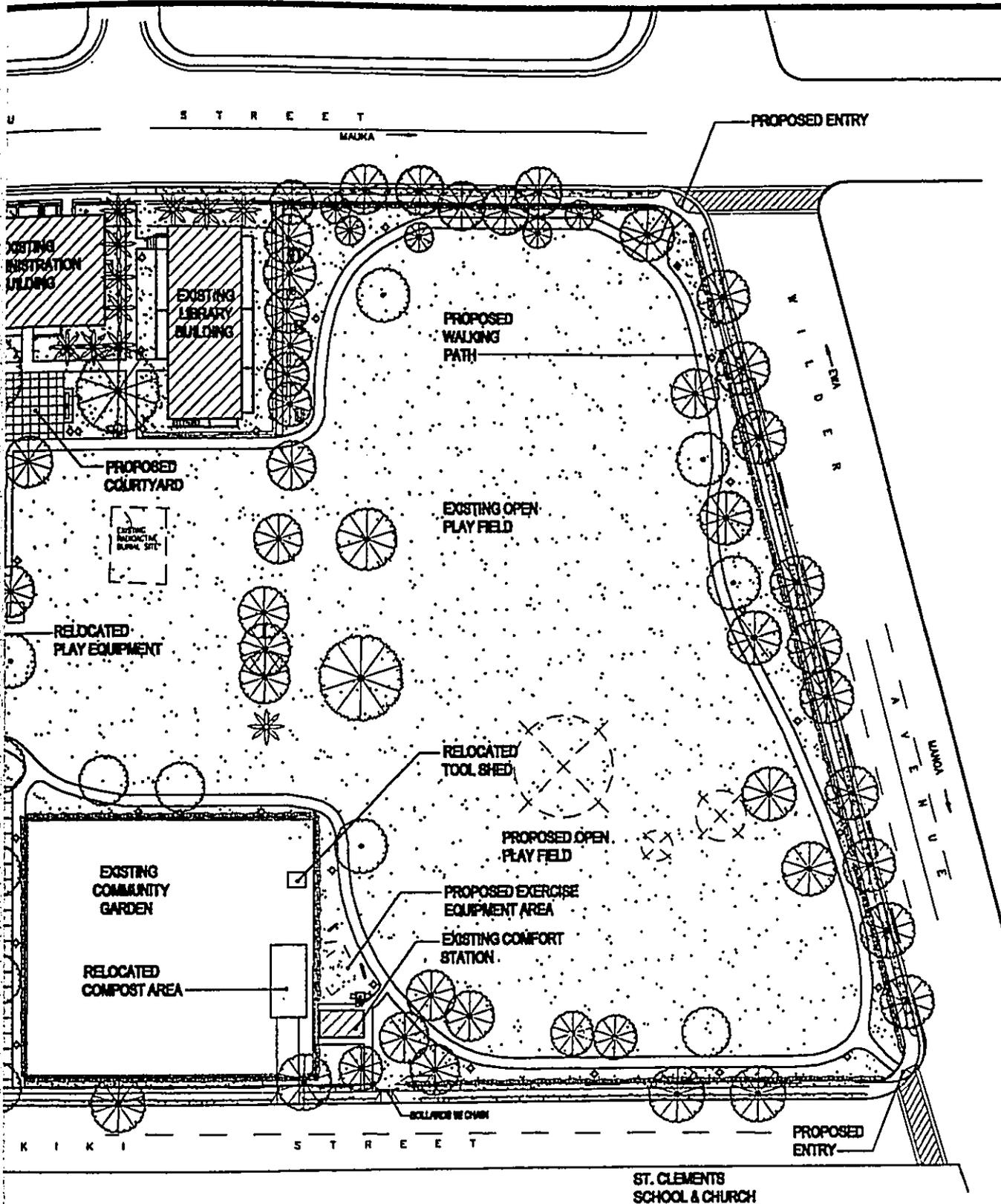
#### **E. Land Tenure**

Most of the grounds comprising Makiki District Park is owned by the City and County of Honolulu. In addition to owning the land on which the Park is located (TMK: 2-4-22: 01 comprising an area of 367,824 square feet), the City and State of Hawaii share ownership of several parcels between the Park and the H-1 Freeway. City owned property includes TMK: 2-4-22: 26, 34, and 45 comprising a land area of 11,005 square feet. State owned land (TMK: 2-4-22: 17, 25, 28, and 33) totals 29,709 square feet. The four parcels are leased to the City through the year 2038.

One parcel of 10,000 square feet located under the elevated section of Keeaumoku Street (TMK: 2-4-22: 48) is owned by the State of Hawaii but is not part of Makiki District Park. This parcel is leased to Catholic Charities by the State of Hawaii.

#### **F. Social Characteristics**

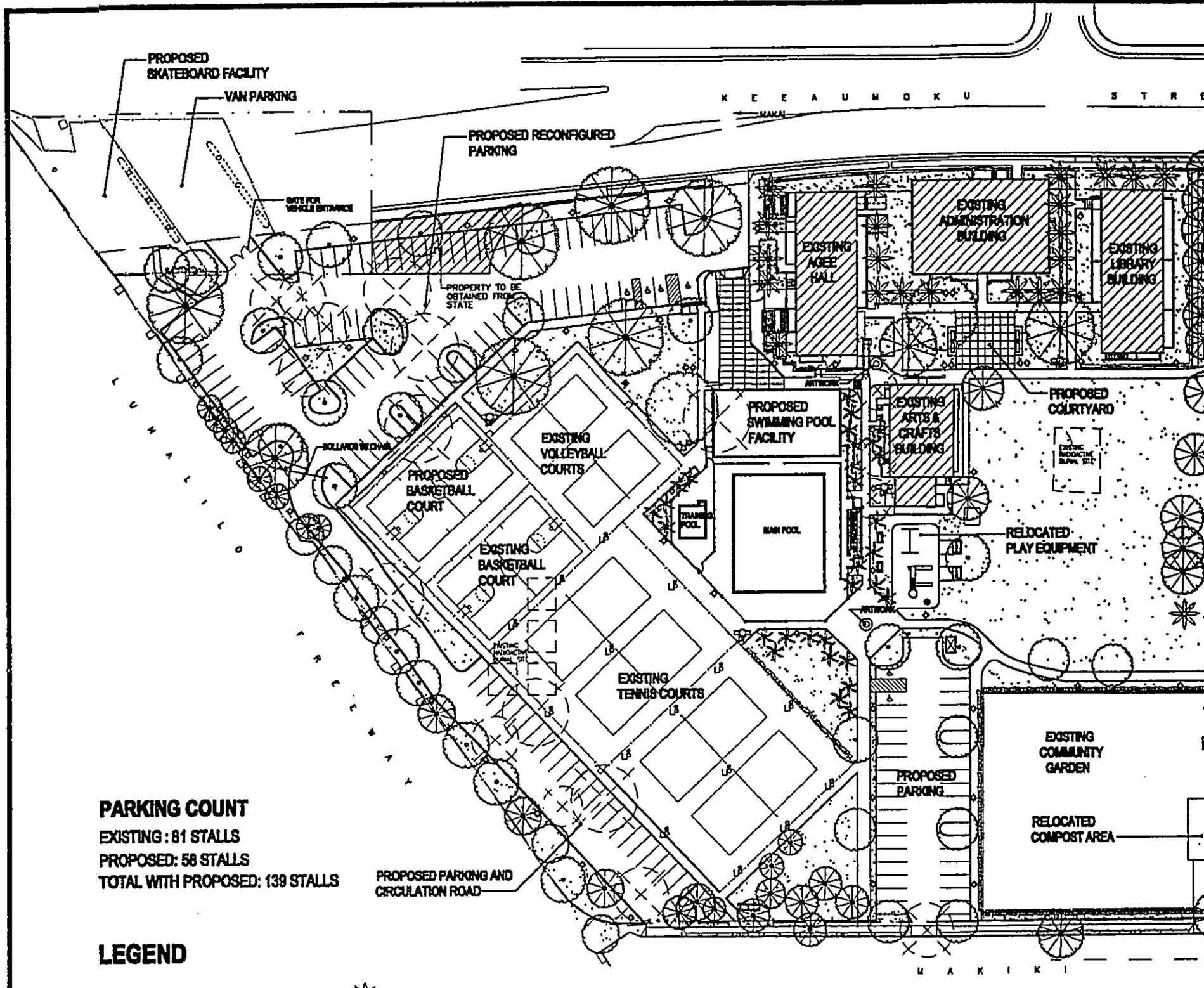
No residential or commercial activities will be displaced by the proposed park improvements.



# MAKIKI DISTRICT PARK MASTER PLAN



DEPARTMENT OF DESIGN AND CONSTRUCTION CITY & COUNTY OF HONOLULU		PROJECT:	
DESIGNED BY: PL	REVIEWED BY: PL	DATE: 8-2-88	APPROVED:
MASTER PLAN FOR MAKIKI DISTRICT PARK 1988 UPDATED MASTER PLAN		OFFICE: DEPARTMENT OF LAND AND CONSERVATION DIVISION:	
PAUL H. LOUIE LICENSED PROFESSIONAL ARCHITECT No. 4051		REVISION:	DATE:
DEPARTMENT OF PARTS AND RECORDS		REVISION:	DATE:
DEPARTMENT OF PARTS AND RECORDS		REVISION:	DATE:



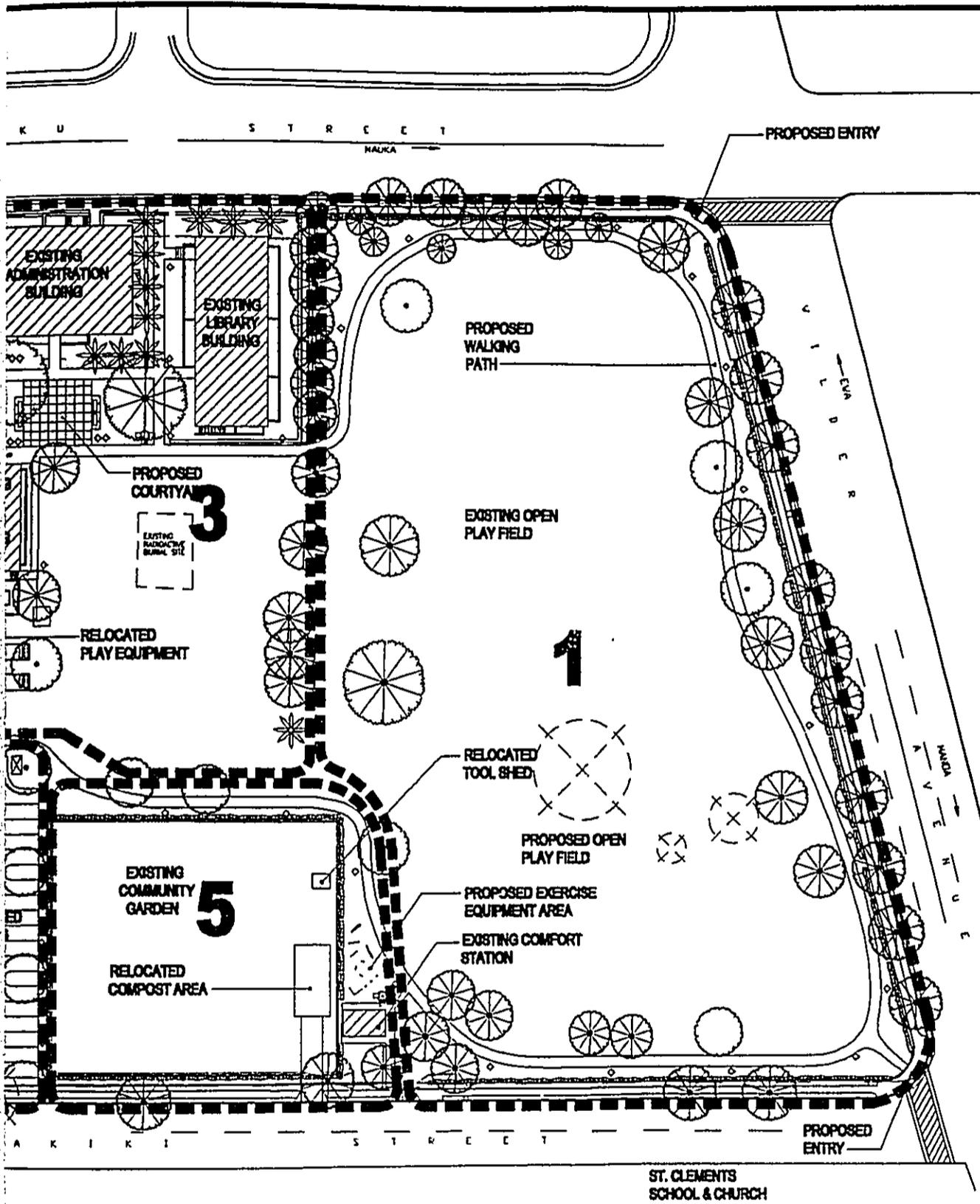
**PARKING COUNT**  
 EXISTING : 81 STALLS  
 PROPOSED: 58 STALLS  
 TOTAL WITH PROPOSED: 139 STALLS

**LEGEND**

- |                                |                       |
|--------------------------------|-----------------------|
| ◆ POLE LIGHT FIXTURE           | ✱ NEW LARGE PALM TREE |
| ◊◊ POLE LIGHT FIXTURE (DOUBLE) | ⊙ EXISTING TREE       |
| ⊂ EXISTING COURT LIGHTS        | ⊙ RELOCATED TREE      |
| ⊕ DRINKING FOUNTAIN            | ○ NEW TREE            |
| ⊠ TRASH ENCLOSURE              | ⊗ REMOVED TREE        |
| ✱ NEW SMALL PALM TREE          | — HEDGE               |
| ✱ EXISTING PALM TREE           | — PROPERTY LINE       |
| □ BENCH                        |                       |
| ⊞ GRASS                        |                       |

# MAKIKI DISTRICT PARK

## 1999 UPDATED MASTER PLAN

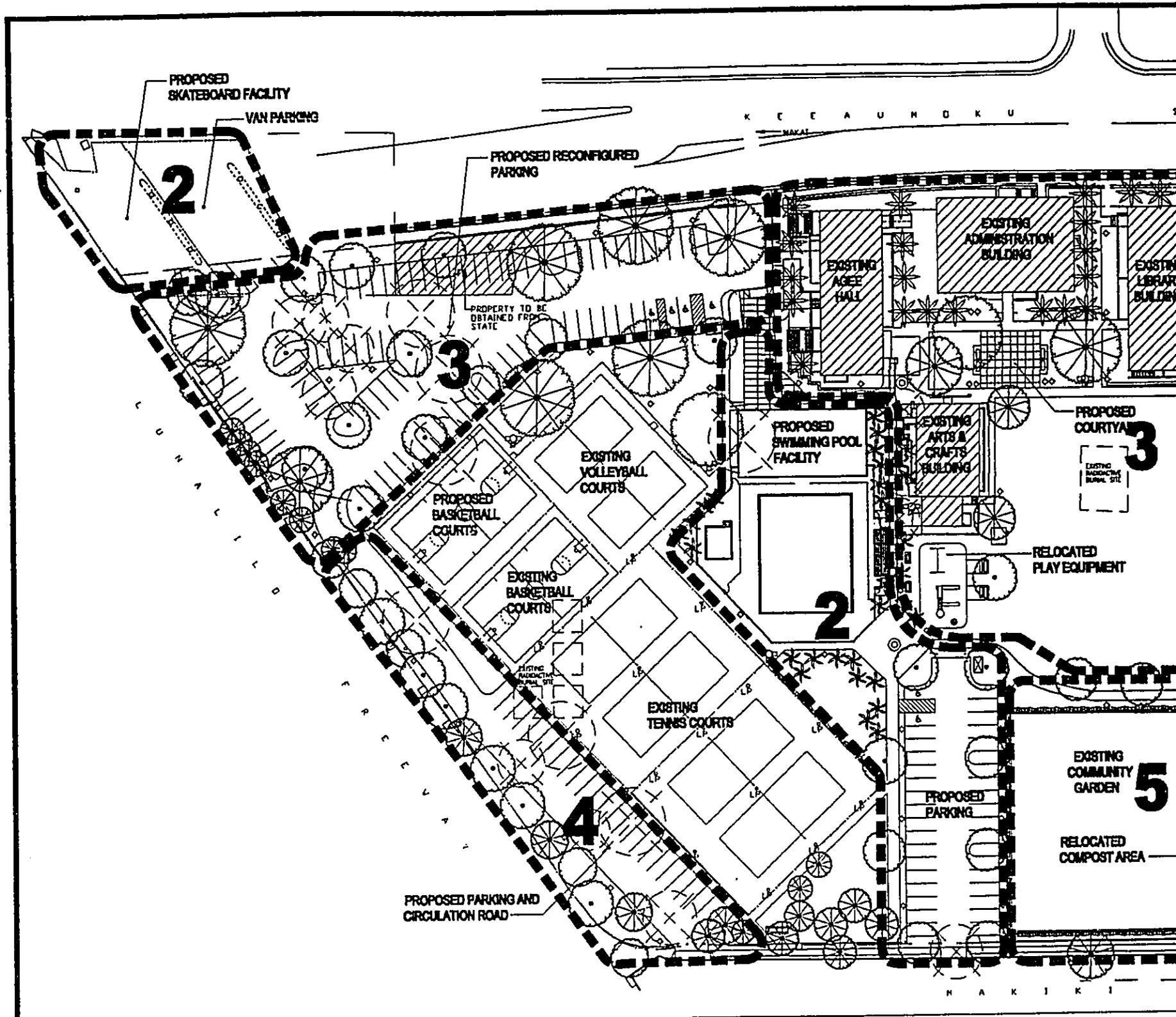


# TRICT PARK

## OF UPDATED MASTER PLAN



DEPARTMENT OF DESIGN AND CONSTRUCTION CITY & COUNTY OF HONOLULU		<b>MASTER PLAN</b> FOR <b>MAKIKI DISTRICT PARK</b> 2000 UPDATED MASTER PLAN - PHASE 0	
APPROVED BY: PL STAFF DATE: 8-2-99 APPROVED:	APPROVED BY: [Signature] DATE: [Date] APPROVED: [Signature]	APPROVED BY: [Signature] DATE: [Date] APPROVED: [Signature]	APPROVED BY: [Signature] DATE: [Date] APPROVED: [Signature]
PAUL H. LOUIE LICENSED PROFESSIONAL ARCHITECT No. 4081 HAWAII		[Empty space for notes or additional signatures]	



# MAKIKI DISTRICT PARK

## CONSTRUCTION PHASING OF UPDATED MA

## SECTION 2

## DESCRIPTION OF THE AFFECTED ENVIRONMENT

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### A. Existing Conditions

#### 1. Recreation

Outdoor recreation facilities at Makiki District Park include outdoor play courts consisting of 2 volleyball courts, a basketball court, 4 tennis courts, and a tennis practice court located in the southern corner of the Park. Small open play fields are located in the center of the Park with a larger play field on the Wilder Avenue side of the Park. These fields generally are used for soccer practice by youth teams and unstructured play by older people. A children's play apparatus is located in the center of the Park.

A picnic area is located adjacent to the open field near the corner of Wilder Avenue and Makiki Street. This tree shaded area appears to be well used and most picnickers seem to prefer setting up beach chairs beneath the trees rather than using the few picnic tables. Earth mounds in the area were intended to act as privacy barriers between picnicking groups and to create variety and interest in the landscape. A comfort station is located nearby off Makiki Street. Community gardens are located along the Makiki Street edge of the Park. There are 160 garden plots, each 10' X 10' in area. Community gardeners rent the plots from the City Department of Parks and Recreation ("DPR"), Community Garden Program..

#### 2. Buildings

Along the Keeaumoku Street side of the Park, the four buildings built by the Hawaiian Sugar Planters Association ("HSPA") were renovated for recreational use by the DPR. Arranged in a quadrangle with a grass courtyard in the center, the buildings include the former HSPA Administration Building, library (Lyon Hall), auditorium (Agee Hall), laboratories and offices, and arts and crafts. At one time, the City proposed replacing Lyon Hall with a new building but the construction of a new building was not funded by the City Council.

The Makiki Library, a reading library, is housed in Lyon Hall. Classes and activities are offered in Agee Hall and the Arts and Crafts Building (the former laboratory building). The West Honolulu District Office, DPR is located in the Administration Building.

#### 3. Programs

Classes and activities for children, teens, and adults are offered at Makiki District Park. Children's classes include arts and crafts, cooking, volleyball, basketball, and tennis. Adult and seniors classes include ceramics, aerobics, guitar/ukulele lessons, hula, tennis, cooking, quilting, and dance. During the summer, the DPR provides a summer fun program for children.

#### 4. Current Improvement Projects

Work will be commencing on resurfacing the existing play courts and constructing a new basketball court next to the existing outdoor play courts. In addition, drinking fountains, walkways, curbs, and ramps for the handicapped will be installed in the area near the play courts. Security lighting will be added at the Keeaumoku Street parking lot and the play court lighting systems will be improved.

A second project will regrade the grass mounds in the picnic area. The mounds have not been used for the purpose for which they were created and a level area in that part of the park will provide more usable open space. Trees in the area will also be relocated to the perimeter of the park and a new irrigation system installed there and in the larger play field area.

#### **B. Climate**

Climatic conditions in Honolulu are characterized by relatively constant temperatures, abundant sunshine, persistent tradewinds, and moderate humidity. Mean temperatures ranges from 73° F in the winter to 82° F during the summer. Average rainfall is about 20 inches annually with most rainfall occurring between November and April. Relative humidity ranges between 56 and 72 percent.

#### **C. Topography**

The Park is relatively flat having been graded for experimental growing of sugar cane and more recently for recreational uses. Ground elevation gently falls from a high of 63 feet above mean sea level (msl) at the Makiki Street/Wilder Avenue corner to a low of 44 feet msl in the western corner of the Keeaumoku Street Parking lot. Measured diagonally along this gradient, the average slope is 2%.

Several earth mounds, which were created for separation between picnic areas, in the eastern corner of the Park rise no more than 4 feet above the surrounding grade. The mounds are used as a natural play feature.

#### **D. Geology and Soils**

Soil Conservation Service Soil Maps (1972) identify a single soil type--Makiki Clay Loam, 0-2 percent slopes--as occurring over the entire property. Because the site was used for sugar cane experiments which may have considered different soil types as a factor in growing sugar cane, it is not known if only Makiki clay loam is present or if some site soils are a mixture of imported soils.

According to the Service, this soil is moderate to rapidly permeable, runoff is slow, and erosion hazard is slight. Makiki clay loam is a well drained soil and used almost entirely for urban purposes.

#### **E. Flood Hazards**

Makiki District Park and almost all of Makiki is designated Flood Zone X on Flood Insurance Rate Map Panels for the area (Federal Emergency Management Agency, 1990). Zone X is defined as "areas determined to be outside the 500 year flood plain."

#### **F. Flora and Fauna**

Bermuda grass, which is planted in the open areas of the Park, is the predominant vegetation type. Trees such as monkey pod, royal poinciana, narra, plumeria, African tulip, rainbow shower, Christmas berry, and Hong Kong Orchid are used to landscape the various use areas, streets and parking lots, and to accent specific areas of the park or buildings. Red and white hibiscus shrubs are planted around the play courts, the perimeter of the park, and several of the administration buildings. Other plants include Monstera, areca palm, bird of paradise, bougainvillea, ti, croton, mock orange, panax, and scattered individuals of aloe and lau'ae fern. All are common plant materials and none are considered rare, threatened or endangered or proposed for that status.

Two trees, which we were not able to identify, grow in the building's quadrangle--- one fronting the Library and the other the Arts and Crafts Building. Given the size of the trees, they were probably planted by employees of the HSPA. Two other trees growing on the makai side of the children's play equipment also were not identified.

#### G. Historical Features

There are no recorded historic or archaeological features in the Park. Two historic-era burials were uncovered during trenching operations in the Park in 1979 (Facility Technics/Hawaii, 1996) thus there is a potential for subsurface features to be unearthed.

The former HSPA buildings are not placed on either the National or Hawaii Register of Historic Places. The buildings, however, are considered to have historic significance because they are over 50 years old. The Administration Building was constructed in 1916, the Arts and Crafts Building in 1926, and Agee Hall and Lyon Hall in 1949. The character of the buildings are reminiscent of Renaissance Revival architectural style.

#### H. Environmental Hazards

Since the 1940s, the former Hawaiian Sugar Planters Association used small quantities of radioactive materials in their experiments and these materials were buried on the site. In a letter of January 9, 1976 from the director of HSPA to the Department of the Corporation Council [sic] of the city and County of Honolulu, a description of disposition of potentially harmful chemicals and radioactive materials as well as a simple map of radioactive burial sites were included. In the accompanying description, it is stated that the burials conform to all requirements of the Environmental Protection Agency, the Occupational Safety and Health Administration and the Nuclear Regulatory Administration, that the Nuclear Regulatory Administration has confirmed their findings and that the property can be released for unrestricted use (Hogan Chapman et.al., 1977).

The 1977 Makiki Park Master Plan shows radioactive material buried at five locations. Four of the locations are under the existing tennis courts and the fifth is in the open area between the Arts and Craft Building and the Library. It is believed that the materials are still on the premises.

#### I. Land Use Controls

State Land Use District:	Urban
Oahu General Plan:	Primary Urban Center
Development Plan Area:	Primary Urban Center
Development Plan Land Use:	Park
	Medium Density (portion Parcel 17)
Development Plan Public Facilities:	P/Modifications within 6 years
Zoning:	P-2 General Preservation
	A-2 Medium Density (portion parcel 17)
Special District:	Punchbowl

Public uses and facilities are a permitted principal use of the P-2 and A-2 zoning districts. Park use and the proposed modifications thus are consistent with the land use controls for the site. The height limit for structures in the P-2 zoning district is 15 feet (25 feet if setbacks are provided). Because Makiki District Park is located within the Punchbowl Special District, there is a 0' height limit for the

Park but not the Keeaumoku Street parking lot. The height limit for the Punchbowl Special District is the controlling standard.

## **J. Public Facilities**

### **1. Circulation**

Makiki District Park is bounded by streets and highways on four sides and accessible by vehicle or on foot from Wilder Avenue and Makiki and Keeaumoku Streets. There is no vehicle or pedestrian access from the Lunalilo Freeway.

The Freeway is the major physical barrier separating the Park and lower Makiki above King Street. The only physical link between the Park and this area is the Keeaumoku Street overpass (Chapman et.al., 1977). Keeaumoku Street is the main generator of vehicle traffic from the makai side of the Freeway (Ibid, 1977). Wilder Avenue, a north-south street, borders the Park on the east. Traffic signals controls vehicle movement at its intersection with Keeaumoku Street and Makiki Street. Makiki Street which borders the Park on the south dead ends where it meets the Freeway.

The Park is also accessible by TheBus, the City bus service, with routes on Keeaumoku Street and Wilder Avenue.

### **2. Parking**

The primary surface parking lot is entered from Keeaumoku Street. This paved lot has approximately 23 parking stalls. A driveway through this parking lot leads to an adjoining paved parking lot with 48 stalls near the basketball courts. The number of stalls in this lot will decline slightly when construction of the second basketball court is completed.

The Makiki Street parking lot is unimproved. About 19 vehicles can park side by side on one side of the parking area. Other parking available near the Park is on-street parking along Keeaumoku Street, Wilder Avenue, and Makiki Street. There are time restrictions for on-street parking.

### **3. Water**

The on-site water system is served by existing 4-inch metered lines which connect to a Board of Water Supply 12-inch water main in Makiki Street.

The off-site water system is maintained by the Board of Water Supply, City and County of Honolulu. In addition to the water main located in Makiki Street, the municipal water system includes a 12-inch main in Wilder Avenue and an 8-inch main in Keeaumoku Street.

### **4. Wastewater**

Land and residential developments surrounding the Park and the Park itself are sewered. An 8-inch line and a 4' X 5' sewer tunnel are located within Wilder Avenue. Residential uses along Makiki and Keeaumoku Streets are serviced by 8" sewer lines.

A 60-inch sewer line runs beneath the Park. The line enters the Park at the corner of Wilder and Makiki Streets, curves to the west (makai) until it parallels Makiki Street (approximately 160 feet

inside the Park). The line passes on the north side of the community gardens, under the tennis courts, and continues on under the Lunalilo Freeway. A 24-inch sewer also runs about 20 feet inside the Park between Makiki and Keeaumoku Streets.

Wastewater from the comfort station fronting Makiki Street is disposed through a 6" lateral which discharges into the 8" Makiki Street sewer. Similar sized sewer laterals convey wastewater from the former HSPA buildings into the Keeaumoku Street sewer.

Wastewater from this section of Honolulu is collected and conveyed to the Sand Island Wastewater Treatment Plant for treatment and ocean disposal.

#### 5. Drainage

Storm runoff is collected by an 18-inch drain line along Wilder Avenue that discharges into a 24-inch line running along Keeaumoku Street. Runoff from the Ewa side of the park is collected by drain inlets under the sidewalk and conveyed through 18-inch lines to the 24-inch line in Keeaumoku Street. Runoff from the Diamond Head side of the Park drains to a 24-inch line passing under Makiki Street and the Lunalilo Freeway.

#### 6. Power

Electrical power is furnished by three 37.5 KVA Hawaiian Electric Company ("HECo") transformers on an existing utility pole on Makiki Street. HECo secondary cables make the transition from overhead to underground service near the Makiki Street parking lot.

### K. Public Services

#### 1. Police and Fire

Police service originates from the Honolulu Police Department headquarters on South Beretania Street. The police are working with Park staff and community activists to minimize loitering in the Park during night hours and to secure both parking lots.

The Makiki Fire Station is located 4 blocks north at the corner of Wilder Avenue and Piikoi Street. The station is authorized 15 personnel and 5 are on watch at all times. The primary piece of fire fighting equipment is an engine truck.

#### 2. Recreation

Makiki District Park is the primary recreation facility in the Makiki area. A second recreation facility, Cartwright Neighborhood Park, is physically separated from the Park by the Lunalilo Freeway. There are several other recreational facilities and areas within the boundaries of Neighborhood Board No. 10. These include the Archie Baker Mini-Park, Makiki Street Mini-Park, Punahou Square, Piikoi Street Mini Park, Thomas Square, and Dole Community Park. The location of the latter two parks, which is quite distant from Makiki, suggests these parks perhaps are more commonly perceived to be in the Ala Moana/Sheridan and Punchbowl communities, respectively.

## SECTION 3

## SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

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The scope of the project was discussed with the consulting architect and staff of the Department of Design and Construction. State and County agencies were contacted for information relative to their discipline. Time was spent in the field noting site conditions and conditions in the vicinity of Makiki District Park. The sum total of consultations and field investigations helped to identify existing conditions and features which could affect or be affected by the project. These influencing conditions include:

- Makiki District Park has provided active and passive recreational opportunities for residents of the Makiki community and the City and County of Honolulu since 1979;
- Traffic noise primarily from the Lunalilo Freeway is audible throughout the Park;
- No threatened or endangered flora or fauna are found on the premises;
- There are no recorded archaeological or cultural resources on the ground surface;
- Four former buildings that were built by the Hawaiian Sugar Planters Association are considered to be of historic significance by the State Historic Preservation Division, Department of Land and Natural Resources because they are 50 years old or older;
- Makiki District Park is not located within a flood hazard area;
- There are no streams, wetlands, ponds, or other fresh water bodies of water on the grounds; and
- Road, water, wastewater, drainage and utility systems are adequate to accommodate the proposed activities.
- Low-level radioactive isotopes consisting of cesium 137 and carbon 60 are buried at two locations in the Park.

The discussion of environmental impacts is based on impacts resulting from implementation of the Master Plan for Makiki District Park. Plans for improvements described in this Assessment have not been prepared which makes a detailed assessment of environmental impacts difficult. The proposed improvements will be phased over a period of years as funds become available. Short-term or construction related impacts will recur as each improvement is built and variations in the significance of impacts are expected. For example, construction of the swimming pool is expected to have the most pronounced impacts because of attributes such as its size, long construction time, and effort required to build. In comparison, constructing the two entries into the Park should not result in substantial environmental impacts.

### A. Short-term Impacts

#### 1. Site Work

Site work is the construction activity that is most disruptive on the environment. This first activity in the construction process entails demolition, grubbing and clearing, grading, excavation, backfilling, hauling and stockpiling soil, and installing needed infrastructure. In general, site work significantly alters the appearance and physical features of the land (or site) and is a prerequisite for building the permanent improvements to follow.

Site work exposes soil thus increasing the opportunities for runoff and erosion. Quantities of material to be excavated is not known at this time. It is anticipated that soil loss can be mitigated to an

acceptable level. All grading will comply with the erosion control ordinance of the City and County of Honolulu and approved grading plans. Best Management Practices (BMPS) for erosion and runoff control during construction will be prepared and submitted to the Department of Planning and Permitting for review and approval. If necessary, special precautions or procedures will be identified in the construction notes on construction drawings.

## 2. Air Quality

Site work is a persistent source of fugitive dust. Site contractors are aware that dust is a nuisance to both workers and people living, working, and in this instance recreating near to work sites and it is imperative for them to maintain stringent dust controls. Frequent water sprinkling is probably the most effective dust control measure used on and around construction sites but the Contractor may choose to implement other measures based on their experience with similar projects and job sites.

The Contractor also will be responsible for general housekeeping of the site and for keeping adjacent park areas and streets free of mud, sediment, and construction litter and debris. Pollution control measures will comply with Chapter 60.1, Air Pollution Control, Administrative Rules, State Department of Health.

## 3. Noise

Construction noise, like fugitive dust, cannot be avoided. Construction work can produce noise that interferes with library activities, office functions, and enjoyment of a particular area. Although the administration, library, and arts and crafts buildings are enclosed, they are close enough to individual job sites such that construction activities will be audible inside. Construction noise would be audible in residential areas nearest to the Park. It should be noted noise from nearby streets, particularly the Lunalilo Freeway, are audible in the Park and may help to attenuate construction noise.

Maximum permissible daytime noise levels for the Class A zoning district (which includes lands zoned preservation) set by the State Department of Health is 55 dBA measured within the zoning district and at or beyond the property line. Construction work may temporarily exceed this standard and, per Administrative Rules (Chapter 46) of the Department of Health, the Contractor will obtain a Variance from Pollution Controls permit prior to construction. Construction will be limited to between the hours of 7:00 a.m. to 3:30 p.m., Mondays through Fridays.

## 4. Archaeology

No archaeological surface features exist on the Park grounds. Should subsurface archaeological features be unearthed, work in the immediate area will cease and preservation authorities notified for investigation and proper disposition of the finds.

## 5. Flora and Fauna

Vegetation will be grubbed to construct the proposed improvements. Bermuda grass will be replaced by the swimming pool, jogging path, access road, and relocated children's play equipment area. Some trees in the Keeaumoku Street parking lot will be removed and relocated elsewhere in the Park or replanted in the parking lot along with new trees.

None of the existing flora to be removed is listed or proposed for listing as rare, threatened, or endangered species thus adverse impacts are not anticipated.

#### 6. Environmental Hazards

Existing radioactive waste buried at the Park will not be disturbed by the proposed construction work. No environmental hazards are known to exist at locations where the proposed improvements are planned.

#### 7. Construction Traffic

Construction vehicles hauling men and materials will contribute to traffic on Wilder Avenue and Maikiki and Keeaumoku Streets. Material deliveries will be scheduled during non-peak traffic hours to minimize impacts on local traffic. Heavy vehicles traveling to and from the project site will comply with the provisions of Chapter 42, Vehicular Noise Control for Oahu, Hawaii Administrative Rules.

Truck traffic and construction activity will be most pronounced during excavation for the swimming pool. Excavated material which cannot be used in other areas of the Park will be hauled off-site to an approved disposal site.

Construction in the right-of-way will interrupt traffic on adjoining streets. This is expected to result in slightly longer travel times and generally inconvenience motorists and pedestrians. Temporary traffic tie-ups may not be avoidable and the contractor will implement measures to provide access past work sites and minimize the inconvenience to the general public. Traffic control plans will be submitted to the Department of Transportation Service, City and County of Honolulu for review and approval. Measures to be taken to mitigate traffic impacts include but are not limited to:

- Posting warning signs on both sides of the work area to alert motorists of road work and to slow traffic speed;
- Positioning traffic cones or other directional devices in the roadway to guide vehicles around work areas;
- Posting flagmen to assist in traffic control;
- Limiting construction to between 8:00 AM and 2:30 PM, Monday through Friday.

For safety purposes, trenches will be covered with traffic plates during non-working hours and safety devices and signs posted for the duration of the construction period.

#### 8. Solid Waste

Green waste and construction debris will be removed by the site contractor(s) and general contractor(s) respectively and hauled to approved disposal sites.

#### 9. Recreation and Public Safety

Certain areas of the Park may be closed to facilitate construction. For example, the Contractor building the swimming pool may require using a section of the Keeaumoku Street parking lot for a construction staging area. This would necessitate closing portions of the Keeaumoku Street parking lot and thus reducing the number of stalls available for public use. The parking lot driveway will be used

by construction vehicles for entering and exiting the site and a mixing of construction vehicle and recreational traffic may not be desired for safety purposes. Similarly, sections of the existing open play area may be fenced or barricaded while the jogging path is being built and the children's play equipment relocated. The closing of these and other areas affected by construction will be temporary and done for safety reasons. The duration will be kept to a minimum by appropriate scheduling of construction activities.

### C. Long-term Impacts

Improvements proposed in the Master Plan coupled with on-going projects (e.g. removing the picnic mounds to expand the open play field) should provide for current and future leisure and recreation needs of park users and attract more users to the Park. The walking/jogging path offers pedestrians and joggers a safer alternative than the sidewalks and streets of Makiki where they compete with bicyclists and motorists. The path will be lighted for night use which is not possible under existing conditions.

With the exception of mound removal, the proposed improvements will not cause the loss of any existing outdoor recreational activity or activity area within the Park that is not being replaced or relocated elsewhere on the premises. The swimming pool will remove a grass field used as a practice field by youth soccer teams and the activity will be relocated to the former picnic area which is being graded to create more open space for field activities.

The Swimming Pool Facility is expected to be one of if not the major recreation attraction at the Park. It is the only improvement for which there is a parking requirement. The Land Use Ordinance requires 28 off-street parking stalls of which two stalls are required to be accessible per the Americans with Disabilities Act Design Guidelines.

Both pools will be operated and maintained per the standards of Chapter 13A "Public Swimming Pools" Hawaii Administrative Rules, State Department of Health. The pools cannot open for public use and operate until a Swimming Pool permit has been obtained from the State Department of Health.

The Swimming Pool Facility will generate employment opportunities associated with its management and operation. Most City swimming pools have a full-time pool manager and custodian. In addition to providing swimming instruction, water training activities (e.g. lifesaving), and scheduling recreational swimming activities, the manager is responsible for hiring adequate staffing to maintain and operate the pool. Most pool staff (lifeguards and attendants) generally are hired on a part-time basis and the number of positions will depend in part on how many persons are required to operate the pool per City swimming pool policies.

The swimming pool budget is estimated annually (\$1999) at approximately \$79,000 in staff salaries and \$64,000 in operating expenses to operate and maintain the pool. The latter estimate includes an initial expense of approximately \$12,700 for office and pool equipment.

Makiki District Park is closed from 10:00 PM to 5:00 AM and no changes to these hours are proposed. Lighting the swimming pool and the walking path will encourage evening and night use by community residents. New and improved light fixtures to be installed in the parking lots, the access road behind the tennis courts, and in the vicinity of the existing park buildings will provide better visibility and security in these areas during night hours. This may discourage loitering which some people have

pointed out as a common problem even at the present time. Improved lighting should also aid police officers who routinely patrol the area.

The swimming pool, additional basketball and volleyball courts, and the skateboard facility will increase vehicle traffic to the Park. The existing system of streets adjoining the Park should be able to accommodate the increase and no significant changes to the existing street system are proposed.

Improvements to the existing Keeaumoku Street and Makiki Street parking lots are intended to mitigate potential traffic congestion resulting from increased use of the new recreational facilities. The two parking lots will be reconfigured to improve circulation and accommodate additional parking. The Master Plan Update proposes to add 58 new stalls to the 81 existing stalls for a total of 139 stalls. Because there is no off-street parking requirement for parks per se, the Department of Planning and Permitting has determined that only the Swimming Pool Facility has an off-street parking requirement. The parking requirement is 28 parking stalls of which two will be ADA compliant.

The proposed two-way access road behind the existing playcourts should alleviate traffic congestion experienced in the Keeaumoku Street parking lot caused by having only a single entry/exit to the parking lot from a busy street.

The proposed improvements will not significantly alter the visual qualities of Makiki District Park. Most improvements will be noticeable as a new feature but over time will blend in with the existing environment.

Because of its size which takes up the most room, and the absence of an existing pool, the swimming pool and swimming pool building are the most prominent and visible additions. Besides consolidating recreation activities and physical facilities to one area of the Park, the pool was located so that the Pool Building would spatially and architecturally fit with the adjoining four existing Park buildings. As stated in the Project Description, the building will be designed to identify with and complement the character of the other Park buildings. The proposed Pool Building exceeds the 0' height limit for the Park established by the Punchbowl Special District and the DPR will request a waiver of the height requirement. The Pool Building will be painted to match the color of the existing buildings. Over time, the pool facility too will blend with the existing environment. Exterior elevations of the pool structure are shown in Figures 3-1 and 3-2 (OEQC, 1999).

The swimming pool is estimated to have a volume of approximately 141,750 gallons of water and the training pool a volume of 5,600 gallons. Water will be provided from an existing 8-inch line in Keeaumoku Street. It is anticipated that water for the pool will be metered separately from other uses in the park and supplied to the pool through a 3-inch quick fill line. Average daily water usage has not been determined but some loss is expected due to evaporation and overflow to the on-site drainage system.

A sewer lateral from the pool will connect to existing lines available at the park. The size of the lateral and point of connection will be determined during pool design. The existing sewer has sufficient capacity to accommodate wastewater flow from the swimming pool facility. In addition, overflow water from the swimming pool will be discharged into the sewer system.

The presence of low-level radioactive isotopes buried in the Park and its potential effects on public health and safety were raised by several agencies and organizations during the Draft Environmental Assessment public review period (OEQC, Honolulu Fire Department, Montessori Community School).

Subsequent research of records at the Department of Parks and Recreation Services, consultation with Department of Health staff (Radiation Branch), and review of the Evaluation Report prepared by the Nuclear Regulatory Commission (1988) indicates that the park was and remains cleared for public use and the buried isotopes do not pose a health risk to park users.

In 1976, the Hawaii Sugar Planters' Association ("HSPA") informed the City and County of Honolulu that radioactive isotopes consisting of an estimated 2.1 millicuries (mCi) of cesium (Cs-137) and 0.8 microcuries (uCi) of cobalt (Co-60) were buried on the HSPA property at 1527 Keeaumoku Street. The isotopes were mixed with 25 cubic yards of soil and buried at two locations. HSPA acknowledged using various chemicals in its research and that all chemicals such as acids, alkalies, solvents, insecticides, herbicides and radioactive isotopes (except for what was buried) were moved to their new location in Aiea or disposed of properly.

The isotopes were buried in five pits at the two locations. Some of the soil mixture was buried in four pits under the existing tennis courts at a depth of 12 feet. Soil also was buried 8 feet below ground surface in the cellar of a former greenhouse. The greenhouse was located about 60 feet to the south of Lyon Hall (the present Makiki Library). The soil was not deposited in containers of any kind. The burials were conducted in accordance with Nuclear Regulatory Commission ("NRC") regulations (10 CFR Part 20 Section 20.304) in effect at the time. According to HSPA, "there is no radiation at the surface detectable above the natural background at these burial sites" and "the property meets all applicable standards for release for unrestricted use." The burial locations are shown on the Master Plan (Figure 2) presented in the Draft Environmental Assessment.

In December 1975, an NRC inspector had surveyed the site and determined that all contamination had been removed, buried on-site, or shipped to a NRC authorized low-level waste site within the continental U.S. in accordance with NRC regulations. In February 1976, the NRC released the site for unrestricted use.

In 1987, concern about radioactive materials being buried on the property was raised again. A sewer tunnel was proposed for construction in the park and the alignment of the tunnel would pass close to the burial sites under the tennis courts. The Makiki Neighborhood Board had expressed concern that "the sewer tunnel project might create a pathway for release of radioactive material from the site."

In response to public concerns, a team from the NRC was summoned to investigate the property. The site investigation was undertaken in November 1987 by specialists from the NRC with assistance from the Department of Health ("DOH"). Surveys were conducted at areas around the sewer tunnel project including a 50' deep vertical shaft at the northeast corner of the park. Random measurements taken 1 meter above ground at the neighborhood garden plots, tennis and basketball areas, "greenhouse" burial area, and tunnel excavation areas revealed no readings above natural background. The natural background criterion was established at 6 microroentgens per hour.

The NRC criterion for small areas (less than 20 square meters) of soil contamination is 20 microroentgens per hour above natural background at 1 meter above the ground. This is an extremely conservative number and is based on the "worst case" assumption that a person would be continuously present on the contaminated soil. The highest one meter levels measured at Makiki Park was 4 microroentgens per hour above background (or 10 microroentgens per hour).

Following their investigation, the NRC concluded that "radiation levels in the park pose no hazard to the public even under the most extreme examples of exposure such as ingesting the soil and the low

levels (approximately 2 millicuries of cesium 137) of radioactive material properly disposed of by burial on the site should remain undisturbed and pose no health hazard to the public, including workers who are excavating a sewage tunnel beneath the park."

In addition, NRC recommended "that no action need to be taken with the soil anywhere in Makiki Park. Prior to any future excavation of areas within Makiki Park, it is recommended that the NRC and HDOH (Hawaii Department of Health) be consulted regarding any potential disturbance of the original burial sites."

Since the HSPA site was declared safe for public use in 1976 and 1987 by the NRC, no subsequent monitoring of the burial sites or other areas in the Park has been conducted. DOH specialists conducted an ambient survey on November 19, 1999 which revealed background levels of 3-6 microrentgens per hour above the burial sites. According to the DOH, this is within the normal background radiation level (2 to 12 microrentgens) found elsewhere.

The Department of Parks and Recreation Services and Department of Design and Construction, City and County of Honolulu, have no plans to disturb the burial sites.





## SECTION 4

## ALTERNATIVES TO THE PROPOSED ACTION

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### A. No Action

A No Action alternative would preclude the occurrence of all environmental impacts, short and long-term, beneficial and adverse as described in this Assessment. A No Action alternative would maintain the status quo with recreation planning being guided by the 1977 Master Plan. The full utilization of the resources committed by the City and community residents to provide recreation facilities and activities needed by the community would not be possible. In addition, the community will not be able to enjoy the benefits of a swimming program which would be open to the general public.

### B. Alternative Location

The location of the proposed improvements and the improvements themselves will achieve the design goals established by the Master Plan. The Master Plan Update is not proposing uses and facilities significantly different from the 1977 Master Plan. The design and recreation facilities of this current effort build on the 1977 Master Plan and reflect community sentiment of what the Park should be and the kind of recreation activities that should be emphasized. It reflects the best location of the proposed improvements. Other alternative locations would not work as well.

**SECTION 5****PERMITS AND APPROVALS**

Permits and approvals required for the project are indicated below. Other permits and approvals may be required depending on final construction plans.

<u>PERMIT/APPROVAL</u>	<u>AUTHORITY</u>
State of Hawaii	
Variance From Pollution Controls	Department of Health
Public Swimming Pool	Department of Health
NPDES General Permits	Department of Health
Discharge of Hydrotesting Water	
Discharges Associated with Construction Activities	
City and County of Honolulu	
Grubbing, Grading, and Stockpiling Permit	Department of Planning and Permitting
Building Permit for Building, Electrical, Plumbing Sidewalk/Driveway and Demolition Work	Department of Planning and Permitting
Minor Special District Permit	Department of Planning and Permitting
Waiver (Height, Building Area, Parking, Yard)	Department of Planning and Permitting
Permit to Excavate Public Right-of-Way (Trenching)	Department of Planning and Permitting
Street Usage Permit	Department of Transportation Services

**SECTION 6****AGENCIES AND ORGANIZATIONS TO BE CONSULTED**

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The Draft Environmental Assessment for the Makiki District Park Master Plan Update was published in the Office of Environmental Quality Control Environmental Notice of October 8, 1999 and October 23, 1999. Publication in the Environmental Notice initiated a 30-day public review period which ended on November 8, 1999. The Draft Environmental Assessment was mailed to agencies and organizations listed below. An asterisk \* identifies agencies and organizations that submitted written comments during the review period. All comment letters and responses are found in Appendix A.

**State of Hawaii**

Department of Health  
\*Office of Environmental Quality Control  
Department of Land and Natural Resources  
\*State Historic Preservation Division  
\*Department of Transportation

**City and County of Honolulu**

Board of Water Supply  
\*Department of Environmental Services  
\*Department of Parks and Recreation  
\*Department of Planning and Permitting  
Department of Transportation Services  
\*Fire Department  
Police Department

**Agencies and Organizations**

\*Hawaiian Electric Company  
Honorable Andy Mirikitani, Councilmember  
\*Maikiki/Lower Punchbowl/Tantalus Neighborhood Board No. 10  
\*Board of Directors, Montessori Community School  
\*Executive Director, Montessori Community School  
\*Parent Faculty Association, Montessori Community School  
Makiki Library (Placement)  
Manoa Library (Placement)  
Moiliili-McCully Library (Placement)

## SECTION 7

## DETERMINATION OF SIGNIFICANCE

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Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (§11-200-12). The relationship of the proposed project to these criteria is discussed below.

- 1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

There are no natural or cultural resources on the ground surface that would be destroyed. Should subsurface features be unearthed, historic authorities will be notified for disposition of the finds.

- 2) Curtails the range of beneficial uses of the environment;

The project does not curtail the beneficial uses of the environment.

- 3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii.

- 4) Substantially affects the economic or social welfare of the community or State;

The project will not substantially affect the economic or social welfare of the State.

- 5) Substantially affects public health;

Public health will not be adversely affected by the proposed project.

Low-level radioactive isotopes consisting of cesium 137 and cobalt 60 are buried at two locations in the Park. The isotopes are buried at depths of 8 feet and between 9-12 feet at the respective locations. Public concern over the presence of the radioactive isotopes prompted the Nuclear Regulatory Commission ("NRC") to investigate the burial sites in 1976 and 1987. On both occasions, the NRC investigators found the burials to be in compliance with NRC regulations and radiation measurements taken above the burial sites did not exceed NRC standards for small areas (less than 20 square meters). Following their investigation in 1987, the NRC concluded that "the low levels of (approximately 2 millicuries of cesium 137) of radioactive material properly disposed of by burial on the should remain undisturbed and pose no health hazard to the public ..."

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

Substantial secondary impacts are not anticipated.

- 7) Involves a substantial degradation of environmental quality;

Environmental quality of the site and surrounding neighborhood will not be degraded.

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

The proposed action does not involve a commitment for larger actions. However, the Master Plan recommends a series of improvements to attain the goals of the Master Plan. The improvements will be constructed over a period of time as public funding becomes available and is appropriated for expenditure at Makiki District Park.

- 9) Substantially affects a rare, threatened or endangered species, or its habitat;

There are no rare, threatened or endangered flora or fauna on the premises.

- 10) Detrimentially affects air or water quality or ambient noise levels; or

Ambient air quality will be affected by fugitive dust and combustion emissions during construction but can be controlled by measures stipulated in this Assessment. Construction noise will be pronounced during site preparation work but should diminish once the buildings are erected. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health.

Erosion control measures will be prescribed in grading plans and best management practices prepared for the project.

- 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.

Makiki District Park is not located in a flood hazard area or tsunami inundation zone.

- 12) Substantially affects scenic vistas and view planes identified in county or state plans or studies, or:

The proposed improvements will not affect scenic vistas identified in county plans for the area.

- 13) Requires substantial energy consumption.

Energy consumption has not been determined.

Based on the above criteria, implementation of the Makiki District Park Master Plan Update will not result in significant adverse environmental impacts and an Environmental Impact Statement should not be required.

## REFERENCES

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- Hogan Chapman Cobeen Weitz & Associates, Inc. 1977. *Makiki Park Master Plan*. Prepared for the Department of Parks and Recreation, City and County of Honolulu.
- Facility Technics/Hawaii. 1996. *Final Environmental Impact Statement and Site Selection Study for the New Manoa Public Library*. Prepared for State of Hawaii Department of Accounting and General Services.
- Federal Emergency Management Agency. 1990. *Flood Insurance Rate Map*. Community Panel No. 150001 0120C.
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- Nuclear Regulatory Commission. 1988. *Trip Report for Makiki Park Radiological Evaluation*. Prepared by James L. Montgomery, Chief, Nuclear Materials Safety and Safeguards Branch.
- U.S. Department of Agriculture, Soil Conservation Service. 1972. *Soil Survey Report for Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. In Cooperation with the University of Hawaii Agricultural Experiment Station.

**APPENDIX A**

**SUMMARY OF PROJECT PROCESS**

## Summary of Project Process

An initial Master Plan Concept was developed to include future projects at the Makiki District Park. This Concept was presented to the Department of Design and Construction (DDC) and the Department of Parks and Recreation (DPR) for their review and input.

The Master Plan Concept was then presented to a small group from the Neighborhood Board (NHB) No. 10 (Makiki/Lower Punchbowl/Tantalus) in September 1998 and then again to the full Neighborhood Board and the community a week later (see Appendix A for meeting minutes). There were many questions and concerns from the Board and the community, but the majority present, including members of the Neighborhood Board were in support of the Plan. The NHB did not have a quorum present, so it could not vote on a motion to support the Master Plan Concept.

The Makiki Complex presented the Master Plan Concept to the Community Garden Association gardeners at Makiki District Park in October 1998, since they were not present at the September 1998 NHB meeting. The gardeners were not in support of the Plan and they did not want to move the Community Gardens from their current location.

PLA, Inc. was asked to return to the NHB meeting in November 1998 to address the questions and concerns of the community gardeners. We were informed that a petition had been submitted to the Mayor's Office to stop the relocation of the Community Gardens, the construction of the Swimming Pool Facility and the construction of a proposed parking structure (the petition stated parking structure, but the proposed parking was actually a surface parking lot). The majority of the community present represented the community gardeners. The gardeners were very adamant of not moving from their current location. They claimed they have taken years to cultivate their current gardens and several older gardeners would not be able to relocate.

There were also concerns about the Swimming Pool Facility. The people present did not feel the Swimming Pool Facility was needed in the Park anymore since many apartments in the area have their own pools. However, previous community meetings in the past years, regarding the Swimming Pool at the Park, had been met with a large amount of community support. The NHB passed a motion unanimously to keep the community gardens in place and have the Master Plan design work around the existing gardens. They also passed another motion that a new survey be completed to determine the present need of the Swimming Pool Facility in the Makiki District.

The Master Plan Concept was revised to leave the existing community garden plots in place and also to reconfigure and repave the existing parking lot on Makiki Street to accommodate more cars. This revised Plan was presented to the NHB at their February 18, 1999 meeting. The community members as well as the NHB were in support of the Plan. The NHB voted to support the revised Master Plan Concept (8 yes, 0 no, 2 abstain). The motion to support did not carry because the Board lacked nine affirmative votes required for passage of the motion. In the following NHB meeting on March 18, 1999, the Board voted to support the revised Makiki District Park Master Plan Concept (11 yes, 0 no) and the motion carried.

The Master Plan Concept Plan was also presented to the Makiki Vision Team #10 on March 27, 1999 as an update and for informational purposes. There were a few questions that were addressed by PLA, Inc. at this meeting.

**APPENDIX B**  
**COMMENTS AND RESPONSES**

BENJAMIN J. CAVETANO  
GOVERNOR



STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

226 SOUTH KULANIANA STREET  
SUITE 702  
HONOLULU, HAWAII 96813  
TELEPHONE: (808) 548-4125  
FACSIMILE: (808) 548-4126

GENEVEVE SALMONSON  
DIRECTOR



Randall Fujiki  
October 4, 1999  
Page 2

October 5, 1999

Randall Fujiki, Director  
Department of Design & Construction  
650 South King Street  
Honolulu, Hawaii 96813

Attention: Stanford Kuroda

Dear Mr. Fujiki:

Subject: Draft Environmental Assessment (EA) for Makiki District Park Master Plan Update

We have the following comments to offer:

1. Two-sided pages: In order to reduce bulk and conserve paper, we recommend printing on both sides of the pages in the final document.
2. Funding: The project funding is given for phases 1 and 2 only. Disclosure of all state or county funds involved, including any federal funds flowing through the state or county, is required by the EIS law. If not known at this time, how will future funding be disclosed? We recommend that EAs be prepared for each phase, describing not only funding and source, but also design, construction, impacts and mitigation details.
3. Hazardous waste: The evaluation in this draft EA of the non-harmful nature of the buried radioactive materials is now 23 years old. A removal and mitigation plan may currently be required in light of changing agency and regulatory standards. Please consult the Department of Health's Noise, Radiation and Indoor Air Quality Branch at 585-4701 regarding a removal plan, and document your contact in the final EA.
4. Solid waste disposal: Methods noted in the draft EA are not viable. Disposal of green waste is no longer permitted at H-POWER and construction debris is no longer accepted at Waimanalo Gulch. In the final EA:

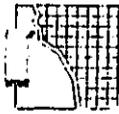
- a) Explain why green waste cannot be added to the compost heap on site;
- b) Indicate where construction debris will be removed to. We recommend recycling as a disposal method.
5. Visual Impacts: Include renderings of the proposed buildings and any proposed landscaping that show the final appearance of the project. We recommend the use of native Hawaiian trees and plants for the landscaping.
6. Historic features: Consult with the State Historic Preservation Division of the Department of Land and Natural Resources concerning impacts to the HSPA buildings and document your contacts in the final EA.
7. Community consultation: Have there been, or will there be, any community meetings or presentations on the update? If so, include in the final EA the dates and a synopsis of each.
8. Contacts: In the final EA document all contacts made during the pre-consultation phase of this project and include copies of any correspondence.
9. Bicycling facilities: Will there be bicycle racks on site?

If you have any questions, please call Nancy Heinrich at 586-4185.

Sincerely,

*Genevieve Salmonson*  
GENEVEVE SALMONSON  
Director

c: Gerald Park



**GERALD PARK**  
Urban Planner

Planning  
Land Use  
Research  
Environmental  
Studies

1400 Piccini Street  
Suite 816  
Honolulu, Hawaii  
96814-3021

Telephone:  
(808) 942-7484

Facsimile:  
(808) 942-7485

e-mail:  
gerald@urbanplanner.com

November 23, 1999

Genevieve Salmonson, Director  
Office of Environmental Quality Control  
State of Hawaii  
235 South Beretania Street, Suite 702  
Honolulu, Hawaii 96813-2437

Dear Ms. Salmonson:

Subject: Makiki District Park Master Plan Update  
Kulaokahua, Honolulu, Hawaii

Thank you for reviewing and offering comments to the Draft Environmental Assessment prepared for the subject project. We offer the following responses to your comments in the order presented.

1. Duplex printing for the Final Environmental Assessment will be considered.
2. Future funding will be disclosed in the Capital Improvement Program Budget of the City and County of Honolulu. The Makiki District Park Master Plan Update describes the array of improvements proposed for the Park through the year 2005 and discloses the potential short and long-term impacts of all the improvements.
3. Mr. Russell Takata, Supervisor, Radiation Section of the State Department of Health indicated to us that the Department of Health does not have jurisdiction in matters concerning the buried low-level radioactive materials. Makiki Park was cleared for unrestricted public use by the Nuclear Regulatory Commission in 1976 and 1987. A removal and mitigation plan is not required.
4. Green waste is not being accepted at the HI-POWER plant and construction debris is no longer accepted at Waimanalo Gulch. The site contractor will be responsible for removing green waste and the general contractor responsible for removing construction debris.
5. Renderings of the swimming pool have been included in the Final Environmental Assessment. Your comment about using native Hawaiian trees and plants for the landscaping has been passed on to the landscape architect.
6. A copy of the Draft Environmental Assessment was transmitted to the State Historic Preservation Division for review. The agency commented, "Since the historic buildings will be utilized and the only new building, the swimming pool facility, will not obstruct the public view of these buildings, we concur with the master plan as proposed." Their comment letter is appended in the Final Environmental Assessment.
7. A summary of public presentations and community consultations on the Makiki District Park Master Plan Update will be included in the Final Environmental Assessment.
8. Agencies and organizations were consulted about the project during the master plan process.

Genevieve Salmonson  
November 23, 1999  
Page 2

9. Bicycle racks are not proposed in the Master Plan. The provision of bicycle racks, however, can be considered during the design of the individual improvements.

Your comments and our responses will be included in the Final Environmental Assessment.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park  
Principal

c: S. Kuroda, DDC

DEPUTY DIRECTOR  
BRIAN K. IMAI  
OLENIA OKAMOTO



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
889 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO  
STP 8.9290

October 11, 1999

RECEIVED  
20/13 99

DEPUTY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL SERVICES  
CITY AND COUNTY OF HONOLULU  
650 SOUTH KING STREET, 2ND FLOOR • HONOLULU, HAWAII 96813  
PHONE: 808 537 6623 • FAX: 808 537 6625 • Website: www.ccs.hawaii.gov



KENNETH E. SPRAGUE, P.E., P.O.  
Director  
HART FERRALLA  
Energy Services

ENV 99-113

RECEIVED  
10-7-99

OCT -3 1999

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street  
Honolulu, HI 96814

Dear Mr. Park:

Subject: Draft Environmental Assessment (DEA)  
Makiki District Park Master Plan Update  
TMK: 2-4-22: 1, 17, 25, 26, 28, 33, 34 and 45

We have reviewed the subject DEA and have no comments to offer at this time.  
Should you have any questions, please contact Alex Ho at 523-4150

Sincerely,  
  
KENNETH E. SPRAGUE  
Director

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Makiki District Park Master Plan Update - Draft EA  
Thank you for your transmittal requesting our review of the subject proposal.

The project is not anticipated to have a significant impact on our State transportation facilities.  
We appreciate the opportunity to provide comments.

Very truly yours,

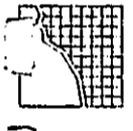
KAZU HAYASHIDA  
Director of Transportation

**CITY AND COUNTY OF HONOLULU**  
FIRE DEPARTMENT  
3375 KOAHPA STREET, SUITE 8125  
HONOLULU, HAWAII 96819-1869



ALBERT HARRIS  
MAYOR

ATTILIO K. LEONARDI  
FIRE CHIEF  
JOHN CLARE  
SECURITY/EMS CHIEF



**GERALD PARK**  
Urban Planner

3  
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(808) 942-7485  
e-mail:  
geraldpark@aol.com

November 23, 1999

Attilio K. Leonard, Fire Chief  
Fire Department  
City and County of Honolulu  
3375 Koaopa Street, Suite 8125  
Honolulu, Hawaii 96819-1869

Dear Chief Leonard:

Subject: Makiki District Park Master Plan Update  
Kulaokahua, Honolulu, Hawaii

Thank you for reviewing and offering comments to the Draft Environmental Assessment prepared for the subject project. We have reviewed records of file at the Department of Parks and Recreation, consulted with staff of the Department of Health—Noise, Radiation and Indoor Air Quality Branch, and reviewed documents prepared by the Nuclear Regulatory Commission (1988) concerning the burial of radioactive isotopes at Makiki District Park to better understand this potential public health and safety issue. We offer the following response to your comments.

In 1976, the Hawaii Sugar Planters' Association ("HSPA") informed the City and County of Honolulu that radioactive isotopes consisting of an estimated 2.1 millicuries (mCi) of cesium (Cs-137) and 0.8 microcuries (uCi) of cobalt (Co-60) were buried on the HSPA property at 1527 Koaunoko Street. The isotopes were mixed with 25 cubic yards of soil and buried at two locations. HSPA acknowledged using various chemicals in its research and that all chemicals such as acids, alkalies, solvents, insecticides, herbicides and radioactive isotopes (except for what was buried) were moved to their new location in Aiea or disposed of properly.

The isotopes were buried in five pits at the two locations. Some of the soil mixture was buried in four pits under the existing tennis courts at a depth of 12 feet. Soil also was buried 8 feet below ground surface in the cellar of a former greenhouse. The greenhouse was located about 60 feet to the south of Lyon Hall (the present Makiki Library). The soil was not deposited in containers of any kind. The burials were conducted in accordance with Nuclear Regulatory Commission ("NRC") regulations (10 CFR Part 20 Section 20.304) in effect at the time. According to HSPA, "there is no radiation at the surface detectable above the natural background at these burial sites" and "the property meets all applicable standards for release for unrestricted use." The burial locations are shown on the Master Plan (Figure 2) presented in the Draft Environmental Assessment.

In December 1975, an NRC inspector had surveyed the site and determined that all contamination had been removed, buried on-site, or shipped to a NRC authorized low-level waste site within the continental U.S. in accordance with NRC regulations. In February 1976, the NRC released the site for unrestricted use.

In 1987, concern about radioactive materials being buried on the property was raised again. A

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Makiki District Park Master Plan Update  
Makiki District Park  
Kulaokahua, Honolulu, Hawaii  
HFD Internal No. OL 99-202

We received your letter dated September 29, 1999, regarding the Makiki District Park Master Plan Update.

The presence of radioactive materials buried at five locations on the project creates a concern as to the type of isotope(s) and quantity of materials. The notification letter sent by the Hawaiian Sugar Planters Association to the Department of the Corporation Counsel on January 9, 1976, may have sufficed at that time. However, we will require an update from your office indicating the current status of the radioactive materials. Please include the method of burial and locations on the property. The statement on page 2-3, paragraph H, needs amplification: "It is believed that the materials are still on the premises."

Should you have any questions, please call Acting Battalion Chief Alan Chong of our Fire Prevention Bureau at 831-7778.

Sincerely,

for ATTILIO K. LEONARDI  
Fire Chief

AKLJAC:jf

Chief Attilio K. Leonard  
November 23, 1999  
Page 2

sewer tunnel was proposed for construction in the park and the alignment of the tunnel would pass close to the burial sites under the tennis courts. The Makiki Neighborhood Board had expressed concern that "the sewer tunnel project might create a pathway for release of radioactive material from the site."

In response to public concerns, a team from the NRC was summoned to investigate the property. The site investigation was undertaken in November 1987 by specialists from the NRC with assistance from the Department of Health ("DOH"). Surveys were conducted at areas around the sewer tunnel project including a 30' deep vertical shaft at the northeast corner of the park. Random measurements taken 1 meter above ground at the neighborhood garden plots, tennis and basketball areas, "greenhouse" burial area, and tunnel excavation areas revealed no readings above natural background. The natural background criterion was established at 6 microroentgens per hour.

The NRC criterion for small areas (less than 20 square meters) of soil contamination is 20 microroentgens per hour above natural background at 1 meter above the ground. This is an extremely conservative number and is based on the "worst case" assumption that a person would be continuously present on the contaminated soil. The highest one meter levels measured at Makiki Park was 4 microroentgens per hour above background (or 10 microroentgens).

Following their investigation, the NRC concluded that "radiation levels in the park pose no hazard to the public even under the most extreme examples of exposure such as ingesting the soil and the low levels (approximately 2 millicuries of cesium 137) of radioactive material properly disposed of by burial on the site should remain undisturbed and pose no health hazard to the public, including workers who are excavating a sewage tunnel beneath the park."

In addition, NRC recommended "that no action need to be taken with the soil anywhere in Makiki Park. Prior to any future excavation of areas within Makiki Park, it is recommended that the NRC and HDOH (Hawaii Department of Health) be consulted regarding any potential disturbance of the original burial sites."

Since the HSPA site was declared safe for public use in 1976 and 1987 by the NRC, no subsequent monitoring of the burial sites or other areas in the Park has been conducted. DOH specialists conducted an ambient survey on November 19, 1999 which revealed background levels of 3-6 microroentgens per hour above the burial sites. According to the DOH, this is within the normal background radiation level (2 to 12 microroentgens) found elsewhere.

The Department of Parks and Recreation Services and Department of Design and Construction, City and County of Honolulu, have no plans to disturb the burial sites.

Your comment and our response will be included in the Final Environmental Assessment.

Chief Attilio K. Leonard  
November 23, 1999  
Page 3

Sincerely,

GERALD PARK URBAN PLANNER



Gerald Park  
Principal

c: S. Kuroda,

1.0/0.1339 11:25 303555956

FULL LOUIE S. SSO, FAX 808-531-2750 HONOLULU HI 96813-5001  
Hawaiian Electric Company, Inc.



Scott W.H. Sall, P.E.  
Member  
Environmental Department

99 OCT 29 12:51

October 28, 1999

Department of Design and Construction  
City and County of Honolulu  
650 South King street  
Honolulu, HI 96813

Attention: Mr. Stamford Kuroda

Subject: Makiki District Park Master Plan Update

Thank you for the opportunity to comment on your September 1999 DEA for the Makiki District Park Master Plan Update. We have reviewed the subject document and have no comments at this time.

HECO shall reserve further comments pertaining to the protection of existing powerlines bordering the project area until construction plans are finalized. Again, thank you for the opportunity to comment on this DEA.

Sincerely,



WINNER OF THE EDISON AWARD  
FOR BEST POWER SPEED MOUNTAIN JUDGE

BENJAMIN J. CAYetano  
GOVERNOR OF HAWAII

RECEIVED  
11/2/99

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION  
Kalshauer's Building, Room 555  
501 Kalia Avenue  
Honolulu, Hawaii 96813

October 27, 1999

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

SUBJECT: Makiki District Park Master Plan Update  
TMK: 2-4-22:01, 26, 34, 45, Honolulu, Oahu

Thank you for transmitting the Draft Environmental Assessment of the Makiki District Park Master Plan Update. Since the historic buildings will be utilized and the only new building, the swimming pool facility, will not obstruct the public view of these buildings, we concur with the master plan as proposed. While this area has been highly graded and developed, there were two historic-era burials uncovered in 1979. In the unlikely event that historic sites, including human burials, are uncovered during routine construction activities, all work in the vicinity must stop and the State Historic Preservation Division must be contacted at 692-8015.

Thank you for the opportunity to comment. Should you have further questions, please call Tonia Moy at 692-8030.

Aloha,

DON-HIBBARD, Administrator  
State Historic Preservation Division

TM:jk

DEPUTY  
JANET E. KAMRLO

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND RESOURCES  
EMPOWERMENT  
CONSERVATION  
CRAFTSMANSHIP AND ARTS  
HISTORIC PRESERVATION  
LAND  
NATURAL RESOURCES  
NATURAL RESOURCE MANAGEMENT

LOG NO: 24314  
DOC NO: 9910tm10  
Architecture

CITY AND COUNTY OF HONOLULU

DEPARTMENT OF PLANNING AND PERMITTING

480 SOUTH KING STREET - HONOLULU, HAWAII 96813  
TELEPHONE: (808) 525-4414 • FAX: (808) 527-9743

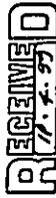


JERRY HARRIS  
Mayor

JAN NAOE SULLIVAN  
DIRECTOR  
LORETTA A.C. CHEE  
SENIOR ASSISTANT

1999/CLOG-6435 (TC)  
1999/SDD-87

November 3, 1999



Mr. Gerald Park  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814

Dear Mr. Park:

Draft Environmental Assessment (EA) For  
Makiki District Park Master Plan Update  
Tax Map Key 2-4-22: 1, 17, 25, 26, 28, 33, 34 and 45

We have reviewed the Draft EA for the above-referenced project received on October 1, 1999, and our comments relative to the Punchbowl Special District, are as follows:

1. A minor special district permit and a waiver for the proposed project are required. Please be advised that exceptions to the 0-foot height limit are required for structures, poles, and fences. In addition, a waiver may also be required for parking and structures in the required yard, and to exceed the maximum building area.
2. All fences and walls exceeding 36 inches in height should be set back a minimum of 18 inches along all major streets - Kesaumoku Street, Wilder Avenue, and Makiki Street.
3. Exterior lighting should be subdued and shielded to minimize glare and spillage onto passing vehicular and pedestrian traffic.
4. Ground level mechanical equipment for the proposed swimming pool facility should be shielded from pedestrian views using appropriate fences, walls, and landscaping.
5. New parking facilities should comply with the landscaping and screening requirements of the Land Use Ordinance.

Mr. Gerald Park  
Page 2  
November 3, 1999

If you have any questions, please contact Anthony Ching of our Urban Design Branch at 527-5833.

Very truly yours,

*Barbara A. Moon*  
for JAN NAOE SULLIVAN  
Director of Planning  
and Permitting

JNS:am

cc: Stanford Kuroda, Department of  
Design and Construction  
Office of Environmental Quality Control

dec0716evsl

RECEIVED  
11/22/99

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

950 SOUTH KING STREET, 10TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: 808-525-1182 • FAX: 825-2084



WILLIAM D. BALFOUR, JR.  
DIRECTOR

MICHAEL J. AME  
CITY DIRECTOR

JEREMY HARRIS  
MANAGER

November 23, 1999

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

Dear Ms. Sullivan:

Subject: Makiki District Park Master Plan Update  
Kulaokahua, Honolulu, Hawaii  
1999/CLOG-6435 (TC)

Thank you for reviewing and offering comments to the Draft Environmental Assessment prepared for the subject project. We offer the following response to your comments.

1. The Department of Design and Construction will be requesting a minor special district permit and waivers to the 0' height limit, parking and structures in the required yard, and exceeding the maximum building area.

2-5. We have referred these comments to the Department of Design and Construction for consideration in design plans to be prepared for the various improvements.

Your comments and our responses will be included in the Final Environmental Assessment.

Sincerely,

GERALD PARK URBAN PLANNER

*Gerald Park*  
Gerald Park

c: S. Kuroda, DDC

GERALD PARK  
Urban Planner  
Planning  
Land Use  
Research  
Environmental  
Studies

1400 Rycroft Street  
Suite 1076  
Honolulu, HI, Hawaii  
96814-3021

Telephone:  
(808) 942-7484  
Facsimile:  
(808) 942-7485  
e-mail:  
geraldpark@aol.com

November 2, 1999

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Makiki District Park Master Plan Update  
Makiki District Park  
Kulaokahua, Honolulu, Hawaii

We have reviewed the above-referenced document and have no comments or recommendations to offer on the project at this time.

Thank you for the opportunity to review the master plan update. Should you need further information, please contact Mr. Norman Morikuni, West Honolulu District Manager, at 522-7070.

Sincerely,

*W.D. Balfour, Jr.*  
WILLIAM D. BALFOUR, JR.  
Director

WDB:cu  
(11/2/99)



**MONTENESSORI  
COMMUNITY**  
C O M M U N I T Y

1239 Nehoa Street  
Honolulu, Hawaii 96822  
Phone: (808) 522-0244  
Fax: (808) 522-0250

Where children  
build their  
foundation  
for success

Affiliated with the  
American Montessori Society

November 5, 1999

City and County of Honolulu  
Department of Design and Construction  
650 South King Street  
Honolulu, Hawaii 96813  
Attn: Mr. Stanford Kuroda

**RECEIVED**  
11/6/99

Dear Mr. Kuroda:

Subject: Public Comment, Draft Environmental Assessment (EA), Makiki District Park Master Plan Update (September 1999)

As representatives of the parent community at Montessori Community School, we reviewed with interest the EA and other information on the Makiki Park master plan update. Montessori Community School often uses Makiki District Park for outings and activities with students, who range in age from 2 to 12. We look forward to implementation of the planned improvements at the park.

However, past use of the park by Hawaii Sugar Planters Association and burial of radioactive isotopes in the park during the 1970s presents a concern to us. The only reference in the EA to this situation was in Chapter 2, Section H, Environmental and Chapter 3, Section A-6, Environmental Hazards. It seems that the most recent information on the burial of radioactive materials was provided in documents dated 1977.

We would like to know whether any monitoring of radioactive burial locations has occurred since 1977, and whether any more recent information on the status of the radioactive material exists. If there is no recent documentation or monitoring information available, we request that follow-up be performed immediately to determine whether any leakage of radiation has occurred, and possibly to remove the containers with radioactive material if that is indicated by monitoring data.

In a park that is heavily used by community members, and particularly by children, it is troubling that radioactive material has been buried there with possibly no follow-through by the state or county on its disposition in more than 20 years. We thank you for the consideration of our comments, and look forward to receiving your response.

Sincerely,  
Board Members, Parent Faculty Association, Montessori Community School

*Carla Allison* *Jane Dewell* *Peira Lenz*  
Carla Allison Rhonda Cabello Jane Dewell Peira Lenz  
*Lisa Llewellyn* *Nancy Young*  
Lisa Llewellyn Patsy Jom Nancy Young

cc: Mr. Gerald Park, Urban Planner  
Ms. Genevieve Salmonson, Director, Office of Environmental Quality Control

November 23, 1999

Montessori Community School  
1239 Nehoa Street  
Honolulu, Hawaii 96822

Dear Board Members and Parent Faculty Association:

Subject: Makiki District Park Master Plan Update  
Kuisokabua, Honolulu, Hawaii

Thank you for reviewing and offering comments to the Draft Environmental Assessment prepared for the subject project. We have reviewed records of file at the Department of Parks and Recreation, consulted with staff of the Department of Health—Noise, Radiation and Indoor Air Quality Branch, and reviewed documents prepared by the Nuclear Regulatory Commission (1988) concerning the burial of radioactive isotopes at Makiki District Park to better understand this potential public health and safety issue. We offer the following response to your comments.

In 1976, the Hawaii Sugar Planters' Association ("HSPA") informed the City and County of Honolulu that radioactive isotopes consisting of an estimated 2.1 millicuries (mCi) of cesium (Cs-137) and 0.8 microcuries (uCi) of cobalt (Co-60) were buried on the HSPA property at 1527 Keaumoku Street. The isotopes were mixed with 25 cubic yards of soil and buried at two locations. HSPA acknowledged using various chemicals in its research and that all chemicals such as acids, alkalies, solvents, insecticides, herbicides and radioactive isotopes (except for what was buried) were moved to their new location in Aiea or disposed of properly.

The isotopes were buried in five pits at the two locations. Some of the soil mixture was buried in four pits under the existing tennis courts at a depth of 12 feet. Soil also was buried 8 feet below ground surface in the cellar of a former greenhouse. The greenhouses were located about 60 feet to the south of Lyon Hall (the present Makiki Library). The soil was not deposited in containers of any kind. The burials were conducted in accordance with Nuclear Regulatory Commission ("NRC") regulations (10 CFR Part 20 Section 20.304) in effect at the time. According to HSPA, "there is no radiation at the surface detectable above the natural background at these burial sites" and "the property meets all applicable standards for release for unrestricted use." The burial locations are shown on the Master Plan (Figure 2) presented in the Draft Environmental Assessment.

In December 1975, an NRC inspector had surveyed the site and determined that all contamination had been removed, buried on-site, or shipped to a NRC authorized low-level waste site within the continental U.S. in accordance with NRC regulations. In February 1976, the NRC released the site for unrestricted use.

In 1987, concern about radioactive materials being buried on the property was raised again. A sewer tunnel was proposed for construction in the park and the alignment of the tunnel would pass close to the burial sites under the tennis courts. The Makiki Neighborhood Board had expressed

Montessori Community School  
November 23, 1999  
Page 2

concern that "the sewer tunnel project might create a pathway for release of radioactive material from the site."

In response to public concerns, a team from the NRC was summoned to investigate the property. The site investigation was undertaken in November 1987 by specialists from the NRC with assistance from the Department of Health ("DOH"). Surveys were conducted at areas around the sewer tunnel project including a 50' deep vertical shaft at the northeast corner of the park. Random measurements taken 1 meter above ground at the neighborhood garden plots, tennis and basketball areas, "greenhouse" burial area, and tunnel excavation areas revealed no readings above natural background. The natural background criterion was established at 6 microroentgens per hour.

The NRC criterion for small areas (less than 20 square meters) of soil contamination is 20 microroentgens per hour above natural background at 1 meter above the ground. This is an extremely conservative number and is based on the "worst case" assumption that a person would be continuously present on the contaminated soil. The highest one meter levels measured at Makiki Park was 4 microroentgens per hour above background (or 10 microroentgens).

Following their investigation, the NRC concluded that "radiation levels in the park pose no hazard to the public even under the most extreme examples of exposure such as ingesting the soil and the low levels (approximately 2 millicuries of cesium 137) of radioactive material property disposed of by burial on the site should remain undisturbed and pose no health hazard to the public, including workers who are excavating a sewage tunnel beneath the park."

In addition, NRC recommended "that no action need to be taken with the soil anywhere in Makiki Park. Prior to any future excavation of areas within Makiki Park, it is recommended that the NRC and HDOH (Hawaii Department of Health) be consulted regarding any potential disturbance of the original burial sites."

Since the HSPA site was declared safe for public use in 1976 and 1987 by the NRC, no subsequent monitoring of the burial sites or other areas in the Park has been conducted. DOH specialists conducted an ambient survey on November 19, 1999 which revealed background levels of 3-6 microroentgens per hour above the burial sites. According to the DOH, this is within the normal background radiation level (2 to 12 microroentgens) found elsewhere.

The Department of Parks and Recreation Services and Department of Design and Construction, City and County of Honolulu, have no plans to disturb the burial sites.

Your comments and our response will be included in the Final Environmental Assessment.

Montessori Community School  
November 23, 1999  
Page 3

Sincerely,

GERALD PARK URBAN PLANNER



Gerald Park  
Principal

c: S. Kuroda, DDC

NOV-8-86 11:13:05

FAX NO. 808 523 4187

H. U. C.

November 6, 1999

RECEIVED

Mr. Stanford Kuroda  
Department of Design and Construction  
Facilities Design & Engineering Division  
City and County of Honolulu  
650 South King Street, 9th Floor  
Honolulu, HI 96813

FACILITIES DESIGN & ENG  
DIVISION  
CITY AND COUNTY OF HONOLULU

Dear Mr. Kuroda:

Subject: Makiki District Park Master Plan  
Update, Honolulu

The Planning and Zoning Committee of the Makiki Lower Punchbowl/Tantalus  
Neighborhood Board No. 10 has the following comment on the Makiki District Park Draft Environmental  
Assessment.

On page 2-3, under Environmental Hazards the Makiki Park users haven't received  
any updated information on the radioactive materials in this assessment since 1977. Radioactive  
measurements on the surfaces of buried sites should be taken to determine the adequacy of Nuclear  
Regulatory Administration requirements since the burial of twenty years ago. These measurements  
would ensure the park users of the sites safety.

Neighborhood Board will review this comment on the EA at its next meeting on  
November 18th. However, they authorized the committee to send a letter to you to meet the Nov. 8th  
deadline ( See the minutes of the Oct. 21st Neighborhood Board meeting ).

Sincerely,

Charles Carole  
Chair  
Planning and Zoning Committee

November 23, 1999

Charles Carole, Chair  
Planning and Zoning Committee  
Makiki/Lower Punchbowl/Tantalus Neighborhood Board No. 10  
c/o Neighborhood Commission, City Hall, Room 400  
Honolulu, Hawaii 96813

Dear Mr. Carole:

Subject: Makiki District Park Master Plan Update  
Kulaohou, Honolulu, Hawaii

Thank you for reviewing and offering comments to the Draft Environmental Assessment prepared  
for the subject project. We have reviewed records of file at the Department of Parks and  
Recreation, consulted with staff of the Department of Health—Noise, Radiation and Indoor Air  
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site for unrestricted use.

In 1987, concern about radioactive materials being buried on the property was raised again. A

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Urban Planner

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email:  
geraldpark@aol.com

Charles Carole  
November 23, 1999  
Page 2

sewer tunnel was proposed for construction in the park and the alignment of the tunnel would pass close to the burial sites under the tennis courts. The Makiki Neighborhood Board had expressed concern that "the sewer tunnel project might create a pathway for release of radioactive material from the site."

In response to public concerns, a team from the NRC was summoned to investigate the property. The site investigation was undertaken in November 1987 by specialists from the NRC with assistance from the Department of Health ("DOH"). Surveys were conducted at areas around the sewer tunnel project including a 50' deep vertical shaft at the northeast corner of the park. Random measurements taken 1 meter above ground at the neighborhood garden plots, tennis and basketball areas, "greenhouse" burial area, and tunnel excavation areas revealed no readings above natural background. The natural background criterion was established at 6 microroentgens per hour.

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Your comments and our response will be included in the Final Environmental Assessment.

Charles Carole  
November 23, 1999  
Page 3

Sincerely,

GERALD PARK URBAN PLANNER



Gerald Park

c: S. Kuroda, DDC

NOV 05 1999 14:38



1111 Kalia Street  
Honolulu, Hawaii 96811  
Phone: (808) 523-4784  
Fax: (808) 523-4785

Where children  
belong  
Journals  
for parents

Approved and  
Authorized Signatory

FM 05 09 523 4784

November 5, 1999  
City and County of Honolulu  
Department of Design and Construction RECEIVED  
650 South King Street  
Honolulu, HI 96813  
Attn: Mr. Stanford Kuroda

Subject:  
Public Comment, Draft Environmental Assessment (EA), Makiki District  
Park Master Plan (September 1999)

Dear Kuroda:

The Board of Directors of the Montessori Community School of Honolulu is seriously concerned with the potential of radiation poisoning at the Makiki District Park. We strongly urge the City and County of Honolulu to monitor this site for radiation leaks and exposure.

Chapter 2, Section, H Environmental and Chapter 3, Section A-4, Environmental Hazards, of the Environmental Assessment associated with the Makiki Park Master Plan, indicated that the Hawaii Sugar Planters Association buried radioactive isotopes in the area during the 1970s. It is possible that this material is low level laboratory radiation which has dispersed since its disposal nearly thirty years ago. It is also possible that this material remains radioactive and harmful to the community. In either case the reasonable and prudent action would be to investigate, evaluate and take responsible remedial action as necessary.

We appreciate your attention to this matter and await your response.

Sincerely,

*Melinda Ashton, M.D.*

Melinda Ashton, M.D.  
President, Montessori Community School Board of Directors

cc: Mr. Brian Schatz, Representative District 24  
Mr. Andy Minkihimi, Council District 5  
Ms. Carol Fukunaga, Senate District 12  
Ms. Genevieve Salmonson, Director, Office of Environmental Quality Control

GERALD PARK  
Urban Planner  
J  
Planning  
Land Use  
Research  
Environmental  
Studies  
J

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96814-3021  
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(808) 942-7484  
Facsimile:  
(808) 942-7485  
e-mail:  
geraldpark@csd.com

November 23, 1999  
Melinda Ashton, M.D.  
President, Montessori Community School Board of Directors  
Montessori Community School  
1239 Nohoa Street  
Honolulu, Hawaii 96822

Dear Dr. Ashton:

Subject: Makiki District Park Master Plan Update  
Kuliokohua, Honolulu, Hawaii

Thank you for reviewing and offering comments to the Draft Environmental Assessment prepared for the subject project. We have reviewed records of file at the Department of Parks and Recreation, consulted with staff of the Department of Health—Noise, Radiation and Indoor Air Quality Branch, and reviewed documents prepared by the Nuclear Regulatory Commission (1988) concerning the burial of radioactive isotopes at Makiki District Park to better understand this potential public health and safety issue. We offer the following response to your comments.

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Melinda Ashton, M.D.  
November 23, 1999  
Page 2

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In response to public concerns, a team from the NRC was summoned to investigate the property. The site investigation was undertaken in November 1987 by specialists from the NRC with assistance from the Department of Health ("DOH"). Surveys were conducted at areas around the sewer tunnel project including a 50' deep vertical shaft at the northeast corner of the park. Random measurements taken 1 meter above ground at the neighborhood garden plots, tennis and basketball areas, "greenhouse" burial area, and tunnel excavation areas revealed no readings above natural background. The natural background criterion was established at 6 microroentgens per hour.

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Melinda Ashton, M.D.  
November 23, 1999  
Page 3

Your comments and our response will be included in the Final Environmental Assessment.  
Sincerely,

GERALD PARK URBAN PLANNER



Gerald Park  
Principal

c: S. Kuroda, DDC

11/05/99 11:11 AM

340230300

FILE



MONTESSORI  
COMMUNITY  
SCHOOL

1239 Nehoa Street  
Honolulu, Hawaii 96813  
Phone: (808) 732-0944  
Fax: (808) 732-0289

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November 5, 1999

NOV 9 1999

City and County of Honolulu  
Department of Design and Construction  
650 South King Street  
Honolulu, Hawaii 96813  
Attention: Mr. Stanford Kuroda

Dear Mr. Kuroda,

I understand that you are inviting public comment regarding an environmental assessment for the Makiki District Park Master Plan Update. I am concerned about the presence of radioactive isotopes that are buried in the park. Although the Department of Health gave its approval when the isotopes were buried, I wonder if the situation continues to be safe. Has the situation been monitored since the burial? What are the results? Should the isotopes be removed to ensure public safety?

As a long time resident of Makiki and the director of a school for young children in the area, I know that the park is the gathering place for many people including our school's children. I am sure you will agree that prevention is of paramount importance as it relates to the health and safety of everyone. I appreciate the opportunity to express my concerns and trust you will consider it seriously.

Sincerely,

*Patsy Tom*  
Patsy Tom  
Executive Director

GERALD PARK  
Urban Planner

Planning  
Land Use  
Research  
Environmental  
Studies

1400 Pycroft Street  
Suite 676  
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96814-3021

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Facsimile:  
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e-mail:  
gerald@gsaol.com

November 23, 1999

Patsy Tom, Executive Director  
Montessori Community School  
1239 Nehoa Street  
Honolulu, Hawaii 96822

Dear Ms. Tom

Subject: Makiki District Park Master Plan Update  
Kulaokahua, Honolulu, Hawaii

Thank you for reviewing and offering comments to the Draft Environmental Assessment prepared for the subject project. We have reviewed records on file at the Department of Parks and Recreation, consulted with staff of the Department of Health—Noise, Radiation and Indoor Air Quality Branch, and reviewed documents prepared by the Nuclear Regulatory Commission (1988) concerning the burial of radioactive isotopes at Makiki District Park to better understand this potential public health and safety issue. We offer the following response to your comments.

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Patsy Tom  
November 23, 1999  
Page 2

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Patsy Tom  
November 23, 1999  
Page 3

Sincerely,

GERALD PARK URBAN PLANNER

  
Gerald Park  
Principal

c. S. Kuroda, DDC

**CITY AND COUNTY OF HONOLULU**

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HONOLULU, HAWAII 96813 - AREA CODE (808) 528-3111  
<http://www.honolulu.gov>

JEREMY HARRIS  
MAYOR



LEE O. DONOHUE  
CHIEF  
WILLIAM S. CLARK  
MICHAEL CARVALHO  
DEPUTY CHIEFS

OUR REFERENCE CS-DL/KL

November 15, 1999

**RECEIVED**  
11-16-99

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Thank you for the opportunity to review the Environmental Assessment for the Makiki District Park Master Plan Update.

We believe that this project should have no significant impact on calls for police services. However since Keeaumoku Street is used during both the morning and evening "rush hours" to access the H-1 Freeway, we are recommending that there be no obstructions to traffic before 8 a.m. and after 3 p.m. during the construction phases.

If there are any questions, please call me at 529-3255 or Major Henry Lau of District 1 at 529-3386.

Sincerely,

LEE D. DONOHUE  
Chief of Police

BY   
EUGENE UEMURA, Assistant Chief  
Support Services Bureau



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. BOX 3378  
HONOLULU, HAWAII 96801

November 16, 1999

92-070A/cpo

**RECEIVED**  
11-17-99

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Draft Environmental Assessment (DEA)  
Makiki District Park Master Plan Update  
Makiki District Park  
Honolulu, Hawaii  
TRAK: 2-4-22: 1, various

Thank you for allowing us to review and comment on the subject document. We have the following comments to offer:

Solid Waste

The Master Plan Update should follow the goals and priorities of the Hawaii Integrated Solid Waste Management (ISWM) Act (Chapter 342G, HRS) and the City and County of Honolulu ISWM Plan. Chapter 342G, HRS established a goal of 50% waste diversion by the year 2000 for the State of Hawaii and directs State and County agencies to "consider solid waste management practices and processing methods in the following order of priority:

- (1) Source reduction;
- (2) Recycling and bioconversion, including composting; and
- (3) Landfilling and incineration.\*

On this basis, and to the extent that it is economically feasible, the project should prefer composting of green wastes over incineration. The Environmental Assessment should also assess the economic benefits of sending construction debris to a construction and demolition landfill within the City and County of Honolulu, instead of the Waimanalo Gulch Landfill.

The City and County should also adopt practices to reduce volumes of solid waste generated by the project. A list of waste minimization measures is enclosed for their consideration.

Since the park ownership is shared between the City and County of Honolulu and the State of Hawaii, it is especially important that the Master Plan Update address every opportunity to include recycling and composting practices in the improvement and maintenance of the Park. We recommend that recycled-content materials be used wherever feasible. Crushed recycled glass is now available for water filtration purposes and asphalt for paving applications. Use locally-produced compost and mulch for landscaping purposes. Recycled plastic lumber is also manufactured in Hawaii into different types of outdoor furniture; it provides a weather resistant alternative to traditional lumber.

Should you have any questions on this matter, please contact Mr. John Valera of the Office of Solid Waste Management at 586-4240.

#### Control of Fugitive Dust

There is a significant potential for fugitive dust emissions during the construction activities. Implementation of adequate dust control measures during all phases of construction is warranted.

Construction activities must comply with provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust.

The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to:

- a. Planning the different phases of construction, focusing on minimizing the amount of dust generating materials and activities, centralizing on-site vehicular traffic routes, and locating potentially dusty equipment in areas of the least impact;
- b. Providing an adequate water source at the site prior to start up of construction activities;

- c. Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d. Controlling of dust from shoulders and access roads;
- e. Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f. Controlling of dust from debris being hauled away from project site.

If you have any questions regarding these issues on fugitive dust, please contact the Clean Air Branch at 586-4200.

Sincerely,



GARY GILL  
Deputy Director for  
Environmental Health

Enclosure

cc: OSWM  
OEQC