

DRAFT ENVIRONMENTAL ASSESSMENT

***SUNSET BEACH NEIGHBORHOOD PARK
SITE DEVELOPMENT PLAN***

Pupukea, District of Ko'olauloa, O'ahu, Hawai'i

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

August 2008

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Prepared in Partial Fulfillment of the Requirements of Chapter 343,
Hawaii Revised Statutes and Hawaii Administrative Rules, Title 11, Chapter 200
Department of Health, State of Hawaii and Chapter 25, Special Management Area
Revised Ordinances, City and County of Honolulu

Prepared for

Department of Design and Construction

City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Prepared by

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August 2008

PROJECT PROFILE

Project: Sunset Beach Neighborhood Park
Site Development Plan

Proposing Agency: Department of Design and Construction
City and County of Honolulu
650 South King Street, 11th Floor
Honolulu, Hawaii 96813

Approving Agency: Department of Design and Construction
for Mayor, City and County of Honolulu

Location: Pupukea, District of Ko'olauloa, O'ahu

Tax Map Key: 5-9-005: 070
Land Area: 6.0 acres
Landowner: City and County of Honolulu

State Land Use Designation: Urban
General Plan: Rural
Sustainable Communities Plan: North Shore
SCP Land Use Map: Rural
Public Infrastructure Map: North Shore
No Symbol

Zoning: P-2 General Preservation
Special Management Area: Inside Special Management Area
Existing Use: Public Neighborhood Park

Need for Environmental Assessment: Propose the use of County land and funds
(\$11-200-5(c)), Hawaii Administrative Rules

Anticipated Determination: Finding of No Significant Impact

Contact Person: Clifford Y.L. Lau, Chief
Facilities Division
Department of Design and Construction
City and County of Honolulu
650 South King Street, 11th Floor
Honolulu, Hawaii 96813

Phone: 768-8478

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The Department of Design and Construction, City and County of Honolulu, proposes to construct park improvements at Sunset Beach Neighborhood Park located at Pupukea, District of Ko'olauloa, City and County of Honolulu, State of Hawai'i. Sunset Beach Neighborhood Park is bounded by Sunset Beach Elementary School to the east, Kamehameha Highway to the west, and a mix of single-family residences and vacant land to the north and south. The park is identified as Tax Map Key 5-9-005: 070 with an area of 6.0 acres. A Location Map and Tax Map are shown in Figures 1 and 2.

A. Purpose of the Project

The purposes of the proposed improvements are to: 1) replace deteriorating park recreation facilities; 2) upgrade the existing facilities to meet current Department of Parks and Recreation ("DPR") and Department of Design and Construction ("DDC") standards for recreation facilities; 3) provide accessible recreation facilities in compliance with Americans with Disabilities Act Accessibility Guidelines ("ADAAG") requirements; and 4) improve drainage conditions near the comfort station, pavilion and play courts.

The Site Development Plan proposes to keep the existing parking area, comfort station, pavilion, play courts, and ball fields at their current general locations. Two proposed changes are to switch the location of the tennis courts with the volleyball court and the location of the children's play apparatus. The existing children's play apparatus is deteriorated and will be removed by the DPR. Space will be set aside adjacent to the relocated volleyball court for a new children's play apparatus or a second volleyball court. These changes will help to improve the drainage conditions near the comfort station, pavilion, and play courts.

B. Technical Characteristics

1. Recreation Facility Improvements

Existing backstops at both softball fields will be replaced with new Type "C" softball backstops. The Type "C" backstop is 23 feet in height. Eight-foot high chain link fencing will extend 60-feet from the backstop down the foul ball area for first and third bases. Accessible dugouts and an accessible drinking fountain will be constructed at each field. Accessible concrete walkways will provide access from the parking lot to both fields. Improvements to the infields include possible grading, grassing, and adjustments to the irrigation system.

A soccer field (330' x 180') will be aligned northeast to southwest and overlap the two softball fields.

The existing play court surfaces have deteriorated beyond the upper surface and into the pavement and base. Other components of the play courts such as the fencing, gates and court equipment also have deteriorated to the point of replacement. The Site Development Plan, therefore, proposes to reconstruct all existing court facilities---two basketball courts, two tennis courts, and one volleyball court. All the existing play court facilities will be

demolished and new play courts installed. Existing court perimeter fencing will be replaced with standard 10' high fencing.

The existing flood lighting system for the courts will be replaced by a new lighting system using shoebox fixtures. Shoebox fixtures minimize light spillage. The courts will be illuminated according to City standards and use metal halide lamps. The light fixtures for the basketball and volleyball courts will be 39-feet high and 25-feet high for the tennis courts.

A 10-foot high practice tennis wall will be constructed on one side of the tennis courts. A 4-foot high chain link fence will be installed on top of the wall to minimize errant tennis balls from leaving the court.

The location of the existing tennis and volleyball courts will be switched with each other as part of the reconstruction.

The rubber-like resilient surface of the existing children's play apparatus surface is in deteriorating condition and the play apparatus will be removed. A space adjacent to the new volleyball court will be set aside for either a second volleyball court or a new children's play apparatus. For this environmental assessment, it is presumed that the play apparatus will be constructed. If a second volleyball court is needed, the play apparatus will be demolished. The construction cost for a new volleyball court as shown on Table 1 includes demolition of the play apparatus.

2. Access and Parking

No change to the layout of the driveway, existing parking lot, and the number of parking stalls (19 regular and 2 accessible stalls) is proposed. A section of the parking lot comprising the existing accessible parking stalls, however, may need to be demolished. Demolition is required to adjust the finish grade, curbing, and slope of the accessible parking stalls to comply with ADAAG requirements.

New 25-foot high light poles will be installed along the sidewalk fronting the parking lot to illuminate the driveway entry and parking lot. The light fixtures will also be shoebox type to minimize light spillage.

3. Drainage

Drainage improvements to address localized depressions in the vicinity of the comfort station, play apparatus, pavilion, and courts include drywells and minor grading. The removal and relocation of the children's play apparatus, switching of the tennis courts and volleyball court, and construction of a low cement rubble masonry (crm) wall at the pavilion provides the ability to grade for positive drainage in the area.

No drainage changes are proposed in the area of the two softball fields and multi-purpose field. In general, runoff from the school and ball field area will continue to sheet flow towards Kamehameha Highway.

4. Landscaping

Trees will be planted in the grass area to the west of the new volleyball court and backstop at Softball Field No. 1. Five silver buttonwood trees adjacent to the basketball courts will be removed as needed for construction of the improvements and replaced as determined by DPR. The oleander hedge planted on two sides of the tennis courts will be removed. The use of native plants in the landscape will be considered.

5. Ancillary Improvements

Walkways will be illuminated according to City standards.

A cement rubble masonry (crm) or concrete wall will be constructed on two sides of and under the roof of the existing pavilion. The wall will allow minor grading between the pavilion and courts to eliminate existing depressions and facilitate positive drainage. The height the wall will be 18" and could be used as a seat wall by pavilion users.

Accessible drinking fountains will be installed at the court facilities and at each of the softball fields behind the backstop. One accessible picnic table will be placed under the autograph trees along the first base side of Softball Field No 1.

An accessible route is planned from the parking lot and public transit stop at Kamehameha Highway to the comfort station, pavilion, court facilities, and softball fields. An accessible walkway between the tennis and basketball courts will extend to the property line to provide access from Sunset Beach Elementary School. Accessible walkways will range from 5 to 10 feet in width.

C. Economic Characteristics

The Site Development Plan will be implemented over several improvement projects. Funding for the reconstruction of play courts is the first priority. Design funds have been appropriated and appropriation of construction funds is anticipated in 2009 or 2010. Implementation of the latter projects will be contingent on the availability of public funds and priority assigned to the respective improvement. A list of proposed improvements and a cost estimate for the improvements is presented in Table 1.

The reconstruction of play courts will take approximately one year to complete. All court facilities will be closed and use of the facilities suspended. Construction times for other improvements phases have not been projected.

The City and County of Honolulu owns Sunset Beach Neighborhood Park and the Department of Parks and Recreation maintains and regulates uses in the Park.

D. Social Characteristics

Accessible walkways and parking stalls will be designed in compliance with rules, regulations, and accessibility standards for outdoor recreation areas pursuant to the Americans with Disabilities Act Accessibility Guidelines.

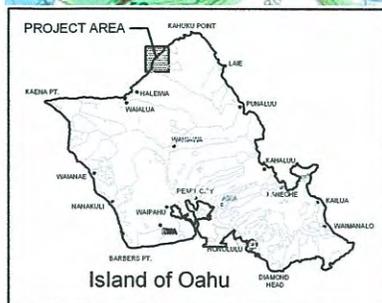
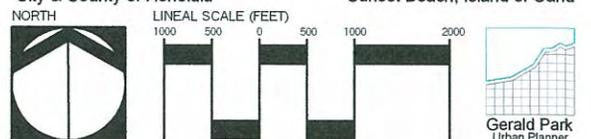
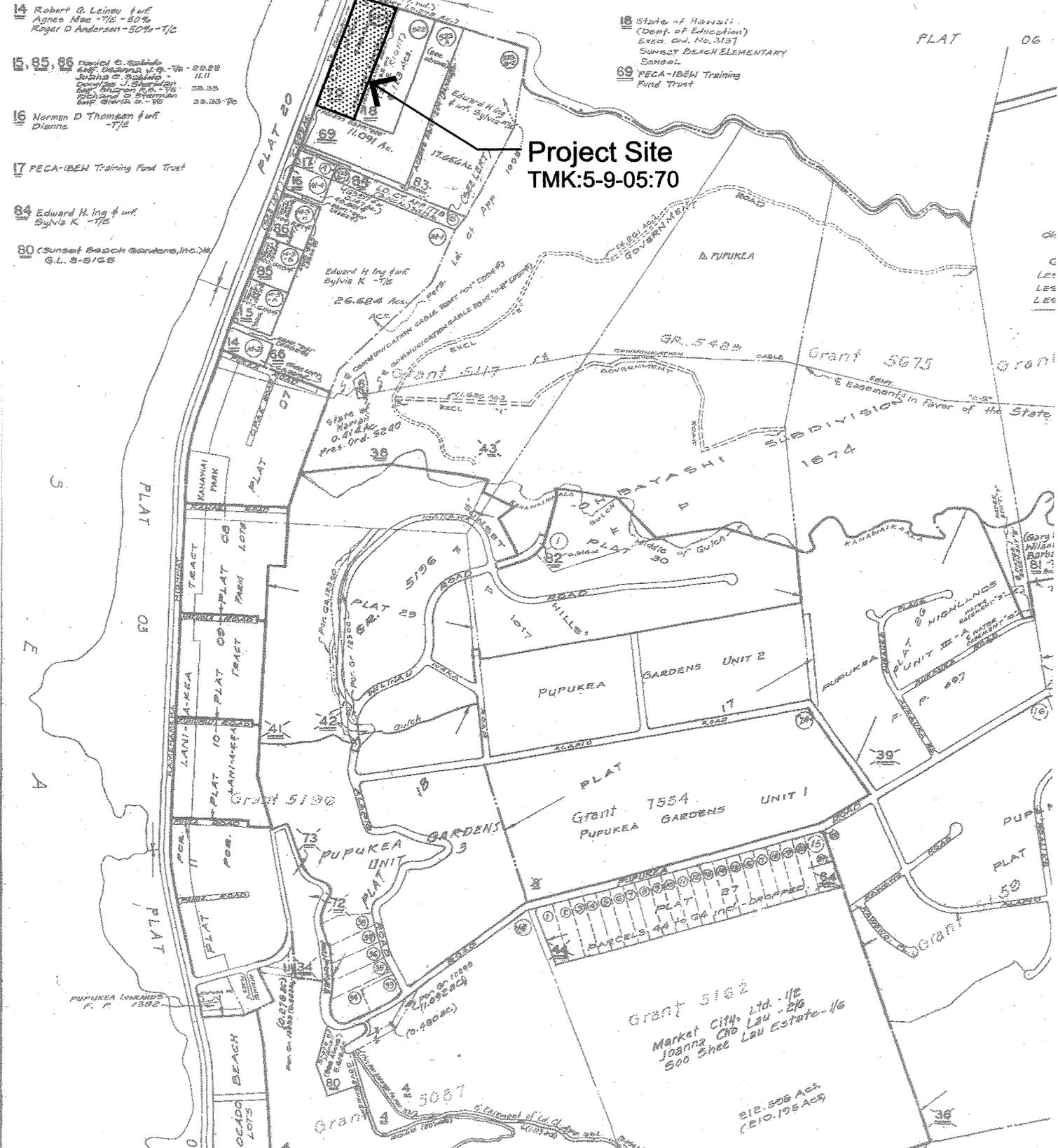


Figure 1
 Location Map
 Sunset Beach Neighborhood Park

City & County of Honolulu Sunset Beach, Island of Oahu



Source: USGS, Waimea Quadrangle



Project Site
TMK:5-9-05:70

- 14 Robert G. Leinu & wife
 Agnes Mae - 7/6 - 50%
 Roger D. Anderson - 50% - T/C
- 15, 95, 96 Daniel C. Spalding
 Capt. Edward H. Ing - 7/6 - 20.25
 Joshua C. Spalding - 11.11
 Constance J. Spalding - 30.25
 Edw. H. Ing & wife - 7/6
 Edw. H. Ing & wife - 7/6
 Edw. H. Ing & wife - 7/6
- 16 Norman D. Thomson & wife
 Diana - 7/6
- 17 PECA-IBEN Training Fund Trust
- 64 Edward H. Ing & wife
 Sylvia K. - 7/6
- 80 Sunset Beach Gardens, Inc. &
 G.L. 5-5155

- 15 State of Hawaii
 (Dept. of Education)
 Exec. Ord. No. 3137
 SUNSET BEACH ELEMENTARY
 SCHOOL
- 69 PECA-IBEN Training
 Fund Trust

FIRST DIVISION		
ZONE	SEC.	PLAT
5	9	05
CONTAINING PARCELS		
SCALE: AS NOTED		

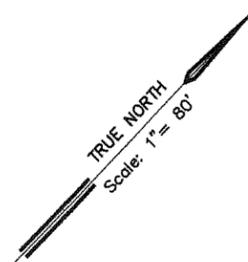
Figure 2
Tax Map Key
Sunset Beach Neighborhood Park

City & County of Honolulu
 Sunset Beach, Island of Oahu

NORTH

LINEAL SCALE (FEET)
 1000 500 0 500 1000 2000

Gerald Park
 Urban Planner
 July 2008



PROJECT DATA AND DEVELOPMENT REQUIREMENTS:

SUNSET BEACH NEIGHBORHOOD PARK
 59-350 KAMEHAMEHA HIGHWAY
 HALEIWA, HAWAII 96712
 TMK: 5-9-005: 070
 AREA: 6.00 ACRES
 FLOOD ZONE: X
 HEIGHT LIMIT: 25- FEET
 SPECIAL MANAGEMENT AREA: YES
 SPECIAL DISTRICT: NONE
 STATE LAND USE: URBAN
 ZONING (LJO): P-2 GENERAL PRESERVATION DISTRICT
 EXISTING USE: PUBLIC OUTDOOR RECREATIONAL FACILITY

MAXIMUM ALLOWABLE BUILDING AREA AT 5%
 = 13,068 SQ. FT.

BUILDING AREA TABLE:

FACILITY	AREA, S.F.	PERCENT, %
COMFORT STATION	790	
PAVILION	680	
DUGOUTS (4 TOTAL)	776	
TOTAL	2,246	0.86

PARKING STALL REQUIREMENTS:

FACILITY	REQUIRED NO. OF STALLS	TOTAL NO. OF STALLS
COMFORT STATION	NONE	0
PAVILION (680 S.F.)	1 STALL PER 200 S.F.	4
PLAYCOURTS (2) BASKETBALL (2) VOLLEYBALL (2) TENNIS	3 STALLS PER COURT	18
BALLFIELDS (2) SOFTBALL	12 STALLS PER FIELD	24
PLAY APPARATUS	NONE	0
TOTAL		46*

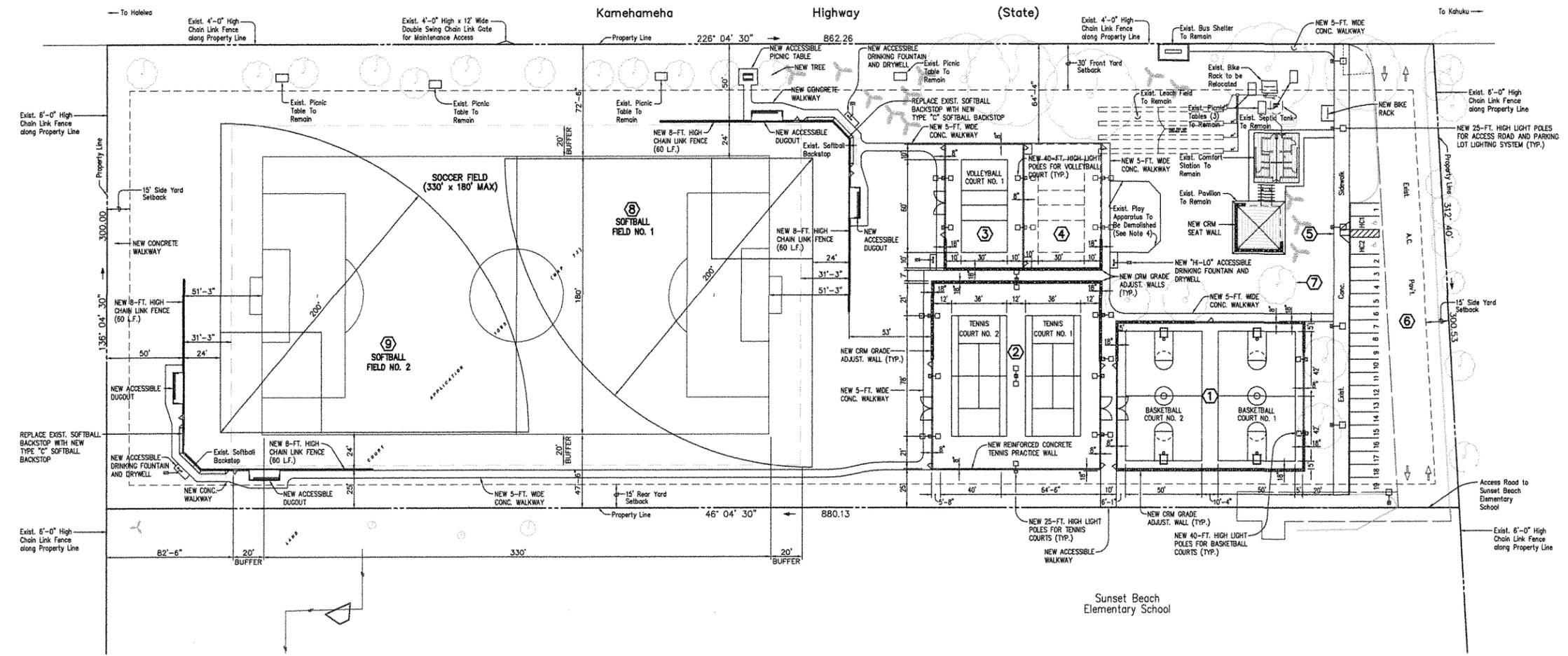
EXISTING PARKING STALLS PROVIDED:

PARKING STALL	TOTAL
STANDARD:	
OFF-STREET (WITHIN PARK)	19
ON-STREET (ALONG KAMEHAMEHA HIGHWAY)	27
TOTAL	46
STANDARD ACCESSIBLE (WITHIN PARK)	1
VAN ACCESSIBLE (WITHIN PARK)	1
TOTAL	48

*THE TOTAL NUMBER OF PARKING STALLS REQUIRED INCLUDES ACCESSIBLE PARKING STALLS.

ACCESSIBLE PARKING STALL REQUIREMENTS:

ACCESSIBLE PARKING STALL	TOTAL
STANDARD ACCESSIBLE	1
VAN ACCESSIBLE	1
TOTAL	2



PROPOSED MASTER PLAN IMPROVEMENTS:

- ① RECONSTRUCT TWO (2) BASKETBALL COURTS INCLUDING GRADE ADJUSTMENT WALLS, ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, BACKSTOPS, LIGHTING SYSTEM AND ACCESSORIES.
- ② RECONSTRUCT TWO (2) TENNIS COURTS INCLUDING GRADE ADJUSTMENT WALLS, ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- ③ RECONSTRUCT ONE (1) VOLLEYBALL COURT INCLUDING GRADE ADJUSTMENT WALLS, ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- ④ SPACE FOR VOLLEYBALL COURT NO. 2 OR PLAY APPARATUS.
- ⑤ RECONSTRUCT 10- FEET WIDE CONCRETE WALKWAY AND CURB RAMP AS REQUIRED TO PROVIDE AN ACCESSIBLE ROUTE FROM THE ACCESSIBLE PARKING STALLS TO THE COMFORT STATION, PAVILION, PLAYCOURTS AND BALLFIELDS.
- ⑥ RECONSTRUCT ASPHALT CONCRETE PARKING LOT AND DRIVEWAY AS REQUIRED TO PROVIDE ACCESSIBLE PARKING STALLS. INSTALL NEW PARKING LOT LIGHTING SYSTEM.
- ⑦ REMOVE EXISTING SILVER BUTTONWOOD TREES ADJACENT TO BASKETBALL COURTS (5 TOTAL) AS REQUIRED FOR CONSTRUCTION OF IMPROVEMENTS AND REPLACE WITH NEW TREES.
- ⑧ SOFTBALL FIELD NO. 1 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, PICNIC TABLE, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING
- ⑨ SOFTBALL FIELD NO. 2 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING

Figure 3
 Site Development Plan
 Sunset Beach Neighborhood Park
 City & County of Honolulu
 Koolauloa, Island of Oahu

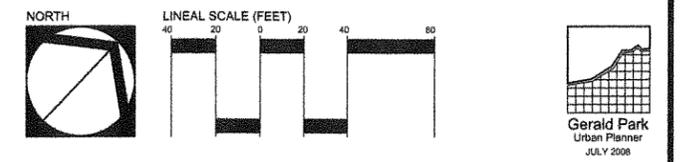


Table 1. List of Improvements and Cost Estimate

Project	Description of Project	Paid By	Date of Construction	Estimated Construction Cost
Reconstruction of Playcourts	Reconstruct Two (2) Basketball Courts Reconstruct Two (2) Tennis Courts Reconstruct One (1) Volleyball Court Chain Link Fence and Gates Accessible Walkways Accessible Drinking Fountains Retaining Walls Grading Drainage Improvements Adjustments to Irrigation System Electrical Systems, Playcourt Lighting Landscape Improvements Grassing	City and County of Honolulu	2009-2010 (est.)	\$ 1,600,000.00
Construction of Site Improvements	Replace Play Equipment and Apparatus Accessible Walkways Accessible Parking Stall Improvements Bicycle Rack Grading Adjustments to Irrigation System Landscaping	City and County of Honolulu	TBD	\$ 250,000.00
Construction of Ballfield Improvements	Replace Softball Backstops (2) Accessible Dugouts (4) Chain Link Fence and Gates Accessible Walkways Accessible Drinking Fountains Accessible Picnic Table(s) Adjustments to Irrigation System Grading Grassing	City and County of Honolulu	TBD	\$ 650,000.00
Construction of Parking Lot Lighting System	New Parking Lot Lighting System	City and County of Honolulu	TBD	\$ 200,000.00
Construction of New Volleyball Court	One (1) Volleyball Court Lighting System for Volleyball Court Accessible Walkways Grading Adjustments to Irrigation System	City and County of Honolulu	TBD	\$ 250,000.00

TBD: To Be Determined at a Later Time
 Source: Park Engineering, 2007

A. Existing Use

A master plan for the Park was prepared in 1973 and the first facilities constructed soon thereafter. Since that time, recreation improvements have been constructed in various phases. Existing park facilities include a comfort station, covered pavilion, 2 lighted basketball courts, 2 lighted tennis courts, a lighted volleyball court, 2 softball fields/1 soccer field, picnic tables, children's play apparatus, and 21 parking stalls (Department of Parks and Recreation, 1997). Picnic tables are placed in tree-shaded areas of the Park along Kamehameha Highway. A plan view of the Park and existing facilities is shown in Figure 4.

Sunset Beach Neighborhood Park serves as a public recreation facility for families living in this part of the North Shore. Although there is no community center or recreation building on the premises, the Department of Parks and Recreation offers a variety of recreation programs including organized sports (flag football, volleyball, and basketball), arts and crafts classes, and summer fun. The 6-week long summer fun program attracts between 75-100 children annually. Excluding sport activities, recreation programs are conducted under the covered pavilion.

Recreation facilities also are used by community organizations for activities such as softball and soccer.

The Department of Parks and Recreation maintains the comfort station and collects and disposes of refuse on a daily basis. Solid waste is hauled to the Kawaihoa Refuse Transfer Station for disposal. The lawn area typically is mowed once a week.

B. Climate

Rainfall along this section of the North Shore averages 44 inches annually with half of all rainfall occurring during the winter months. Temperatures are indicative of Hawaii's semi-tropical climate with temperatures averaging 80^o F (and occasionally reaching into the low 90's during the summer months) with lows in the mid 60-70^oF for most of the year.

C. Topography

The rectangular shaped lot is relatively flat with a slight fall from mauka (east) to makai (west) along its entire length. Ground elevation stands at about 26 feet above mean sea level along the eastern boundary (at the toe of the slope separating the Park from Sunset Beach Elementary School) to about 20 feet along the chain link fence along the western boundary a distance of about 300 feet.

In profile, the site was cut from a slope and graded to create a flat surface for the court and field sports. Beyond the chain link fence on the western edge of the Park, the terrain slopes down about 4 feet to Kamehameha Highway. The top of the slope on the eastern edge of the Park is at about elevation 30 feet.

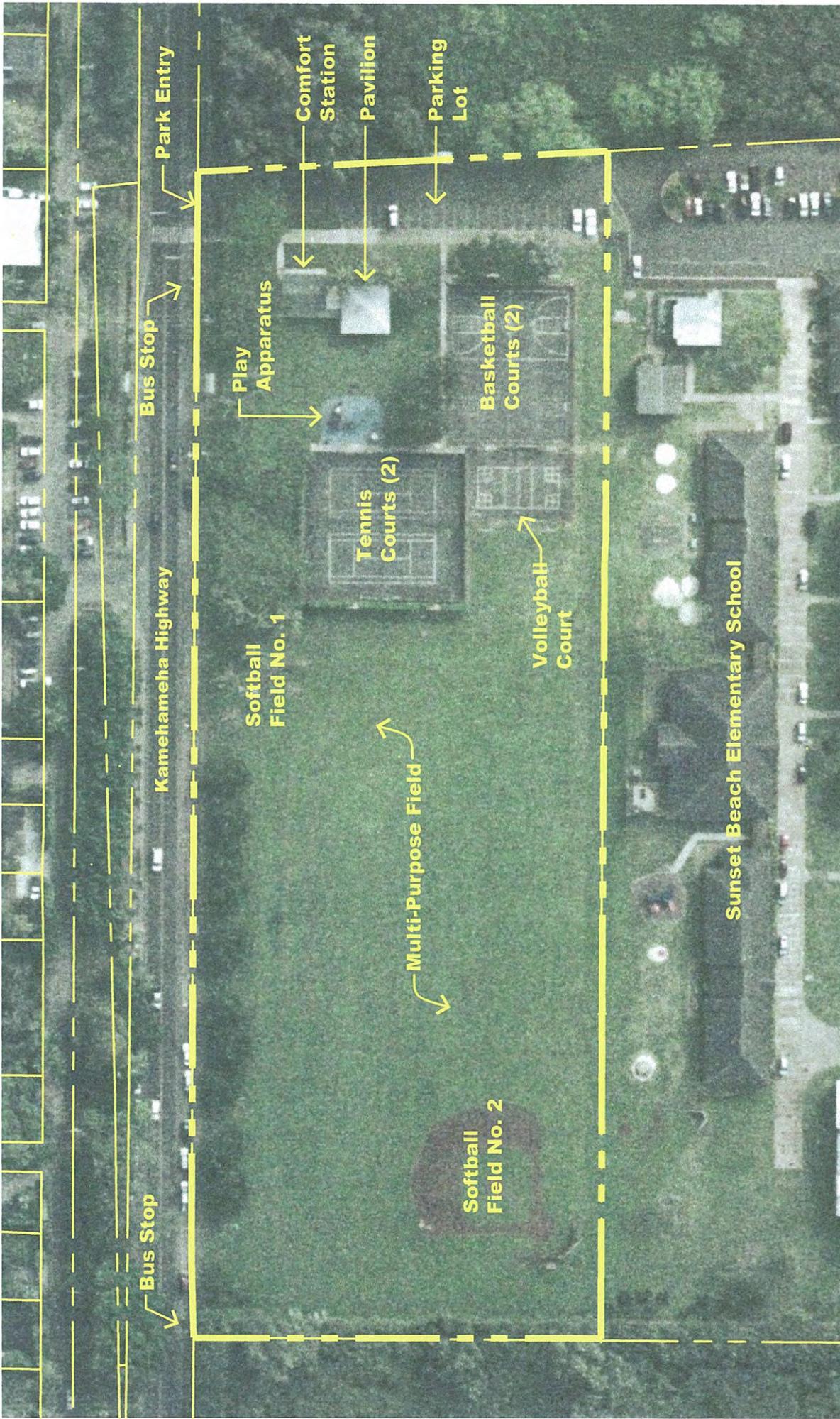
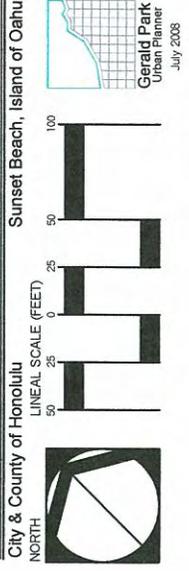
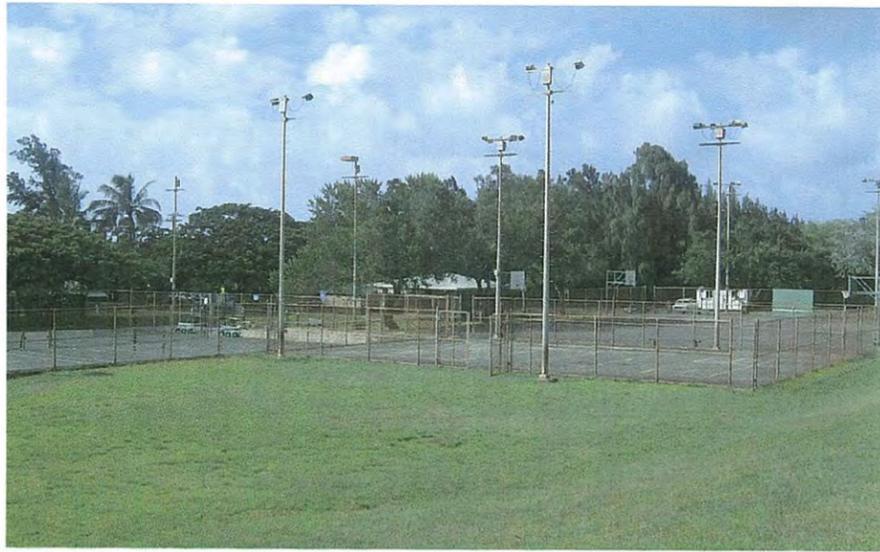


Figure 4
Existing Facilities
Sunset Beach Neighborhood Park





Photograph 1.



Photograph 4.

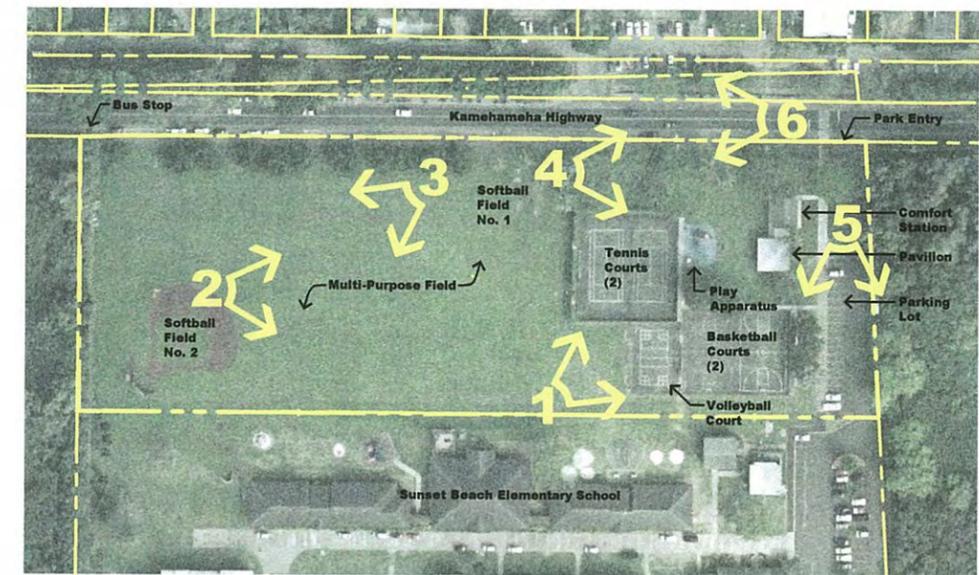


Photo Key Map



Photograph 2.



Photograph 5.

Photograph 1. View of Court Facilities.

Photograph 2. View of Softball Field No. 1.

Photograph 3. View of Softball Field No. 2.

Photograph 4. Shaded Area *Makai* of the Tennis Courts.

Photograph 5. *Mauka* Facing View of the Parking Lot.

Photograph 6. Kamehameha Highway Looking Southwest.



Photograph 3.



Photograph 6.

Site Photographs
Sunset Beach Neighborhood Park

City & County of Honolulu
Sunset Beach, Island of Oahu

NORTH

LINEAL SCALE (FEET)
100 50 0 50 100 200

Gerald Park
Urban Planner
July 2008

D. Soils and Land Type

The Soil Conservation Service (1972) soil map for the area identifies a single soil type--- Waialua Silty Clay, 0-3 percent slope (WkA)---over the property. This soil is found on smooth coastal plains. The soil is moderately permeable, runoff is slow, and the erosion hazard slight. Waialua silty clay is used for sugarcane, truck crops, and pasture.

E. Flood Hazard and Drainage

The Park is designated Zone X on the Flood Insurance Rate Map for the area (See Figure 5). Zone X is defined as "Areas of 0.2% Annual Chance Flood with Average Depths of Less than 1 foot or with Drainage Areas less than 1 Square Mile (Federal Emergency Management Agency, 2004)."

Sunset Beach Neighborhood Park is located outside of the delineated coastal flood zone (Zone VE).

F. Water Resources

1. Streams

The lower reach of Pakulena Stream, an intermittent stream, flows east to west above Sunset Beach Elementary School (Refer to Figure 1). Above the school property and approximately 200 feet from the southern corner of the school, the stream meanders in a westerly direction within an undefined watercourse towards Kamehameha Highway. Water passes under Kamehameha Highway through two box culverts. The discharge point is near Banzai Rock Support Park about 0.8 miles to the west of the Park.

Pakulena Stream is identified as a significant North Shore gulch and stream in the North Shore *Sustainable Communities Plan* (1999).

2. Wetlands

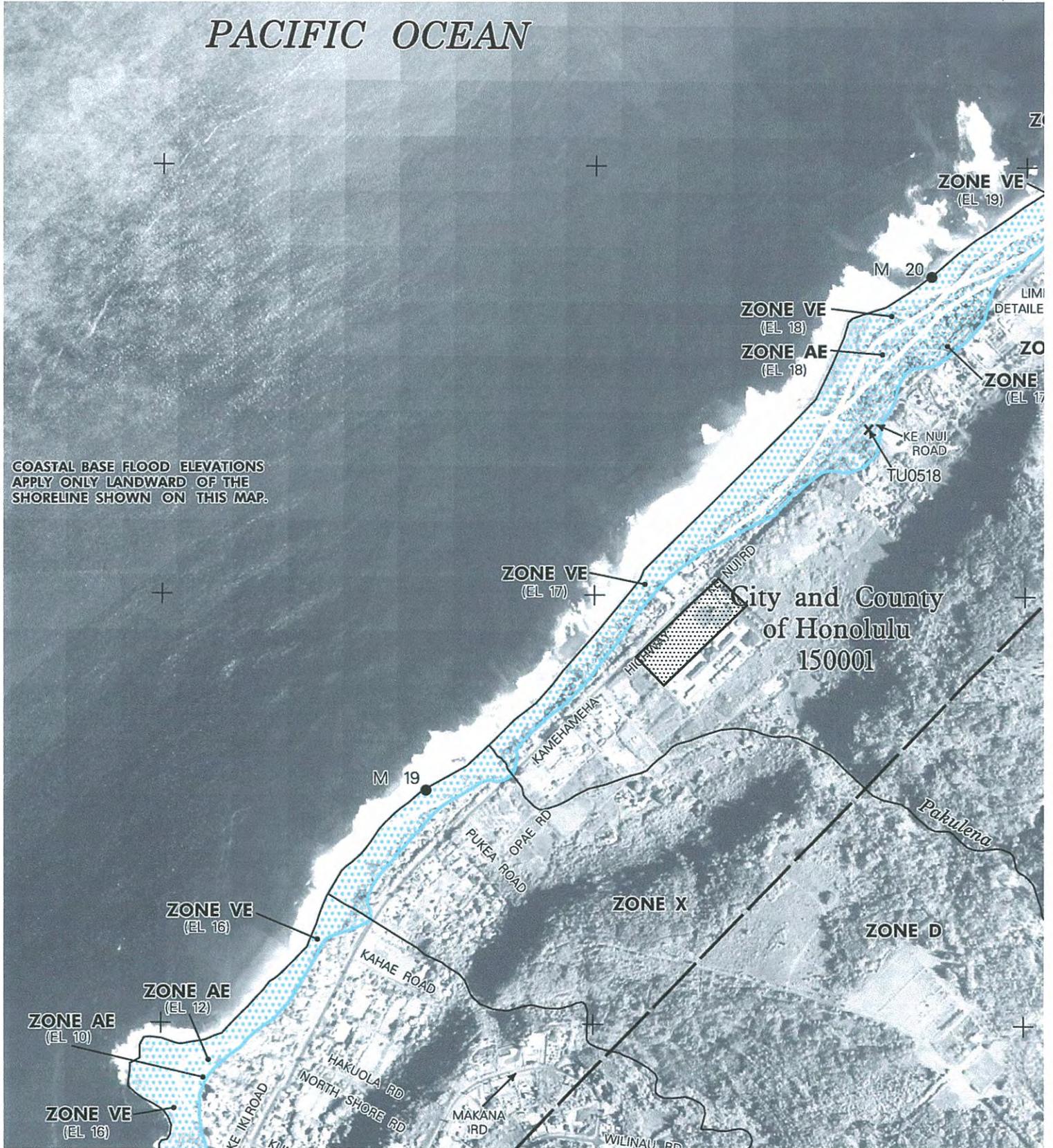
There are no wetlands on the property. The nearest identified wetlands are the Waimea Wetland and Estuary at Waimea Bay about 2.5 miles to the southwest and Kalou Marsh at Waialeale about 2.3 miles to the northeast.

3. Groundwater

Based on aquifer classification records (Mink and Lau, 1990), the coastal area generally between Waialeale and Waialeale *makai* of the base of the Koolau Mountain is situated over the Kawailoa aquifer system of the North aquifer sector (See Table 2). Two basal aquifers--- one atop the other---underlie Sunset Beach Neighborhood Park and the coastal area. A basal, unconfined sedimentary aquifer rests atop a confined basal aquifer formed in flank lava. Both aquifers are currently used but not for drinking. The upper aquifer is low in salinity (versus moderate salinity for the lower), highly vulnerable to contamination (versus low vulnerability to contamination for the lower), and considered replaceable (versus irreplaceable for the lower).

PACIFIC OCEAN

COASTAL BASE FLOOD ELEVATIONS
APPLY ONLY LANDWARD OF THE
SHORELINE SHOWN ON THIS MAP.

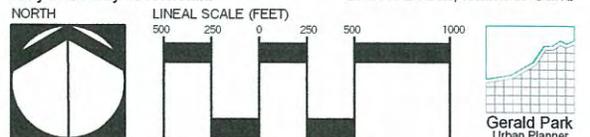


Legend

-  Special Flood Hazard Zone Subject to Inundated by the 1% Annual Chance Flood
-  Zone AE Base Flood Elevation Determined.
-  Zone VE Coastal Flood Zone with Velocity Hazard (Wave Action); Base Flood Elevations Determined.
-  Zone X Areas of 0.2% Annual Chance Flood with Average Depths of Less than 1 foot or with Drainage Areas less than 1 Square Mile.
-  Zone D Areas in Which Flood Hazards are Undetermined, but Possible.

Figure 5
Flood Insurance Rate Map
Sunset Beach Neighborhood Park

City & County of Honolulu Sunset Beach, Island of Oahu



Source: Federal Emergency Management Agency
Flood Insurance Rate Map
Map Number 15003C0020F
Date: Sept. 30, 2004.

Table 2. Aquifer Classification System

Aquifer Code	30403116	30403121
Island Code	3 - Oahu	3 - Oahu
Aquifer Sector	04 - North	02 - North
Aquifer system	03 - Kawaihoa	04 - Kawaihoa
Aquifer Type, hydrogeology	1 - Basal	1 - Basal
Aquifer Condition	1 - Unconfined	2 - Confined
Aquifer Type, geology	6 - Sedimentary	1 - Flank
Status Code	12211	12313
Developmental Stage	1 - Currently Used	1 - Currently Used
Utility	2 - Neither	2 - Neither
Salinity (in mg/L Cl ⁻)	2 - Low (250-1000)	3 - Moderate (1000-5000)
Uniqueness	1 - Replaceable	1 - Irreplaceable
Vulnerability to Contamination	1 - High	3 - Low

Source: Mink and Lau, 1990.

G. Flora

Sunset Beach Neighborhood Park was constructed in 1973 with additions and improvements made over time to the present. Initial grubbing and grading removed all existent vegetation on the site and new landscape plantings were introduced. Trees planted at that time (and over the intervening 35 years) and still flourishing today include monkey pod, jatropa, silver buttonwood, and autograph. Coconut, oleander, and croton add a tropical, coastal feeling to the landscape. Ironwood, kiawe, and koa haole grow on untended land to the north and south. A Norfolk pine grows behind the backstop at Softball Field No. 2.

Bermuda and St. Augustine grass cover the open field. Wedelia is planted intermittently on the slope between the Park and Sunset Beach Elementary School and in planting strips along the parking lot.

H. Fauna

Wildlife was not observed at the time of the field inspection. Mammals recorded at Sunset Elementary School include domestic cats, dogs, and rodents (Towill, 2006) all of which may browse the Park.

Common mynah, barred dove, and rice bird were seen perched in trees and flying overhead. Feral chicken were observed strutting in the parking lot.

I. Archaeological Features

Surface archaeological features, artifacts, or cultural deposits were not observed on the property.

J. Cultural Features

In the absence of archaeological features or deposits, there is a low probability that cultural practices are associated with the Park.

K. Land Use Controls

The property is designated Urban on the State Land Use District map for the area, general planned Rural, designated Rural on the North Shore *Sustainable* Communities Plan Land Use Map, and zoned P-2 General Preservation.

The Rural designation applies to this section of the North Shore generally between Waimea Bay on the south and Sunset Beach on the north. The rural community is delineated by a Rural Community Boundary "to define, protect, and contain communities in which the General Plan designates "rural" and which exhibit the physical characteristics of rural lifestyles ...where appropriate, this boundary also contains open space elements, the preservation of which is essential to the character of the rural community being defined. . . They may include lands designated "park," "agriculture," preservation," or areas with development related hazards such as steep slopes or unstable soils (Department of Planning and Permitting, 1999)."

Sunset Beach Neighborhood Park is not "symbolized" on the North Shore Public Infrastructure Map (PIM) (December 2000). A park "symbol" will not have to be added to the PIM since the improvements costs are estimated to be less than \$3 million.

The Park is defined as a "public use". Public uses and structures are a permitted use in the P-2 zoning district (Land Use Ordinance, Table 21.3, Social and Civic Service).

The Park is within the County delineated Special Management Area and a Special Management Area Use Permit will be required for the improvements described in this environmental assessment (See Figure 6).

The Coastal View Study (1987) does not identify significant stationary or continuous coastal views, important coastal land form, and important open space and landscape areas associated with Sunset Beach Neighborhood Park. Intermittent coastal views are available from Kamehameha Highway fronting the Park and the Study considers the Koolau Mountain bluffs (behind of and overlooking the Park and School) as important coastal land form.

The North Shore Sustainable Communities Plan (1999) lists scenic views throughout the region. Scenic views in the area of Sunset Beach Neighborhood Park include:

- Intermittent makai views from Kamehameha Highway between Kawailoa and Sunset Beach
- Stationary views from beach parks and access areas from Kawialoa to Waialeale Beach Park
- Mauka views of the Koolau Mountains and Pali along Kamehameha Highway from Haleiwa to Waialeale.
- Panoramic views of the coast from Pupukea Heights.

L. Public Facilities

Kamehameha Highway, a two-lane undivided state highway, passes to the northwest of Sunset Beach Neighborhood Park. Its 24-foot wide paved surface lies within a 50-foot right-of-way fronting the Park. The *mauka* side road shoulder is partially improved with a 6-foot

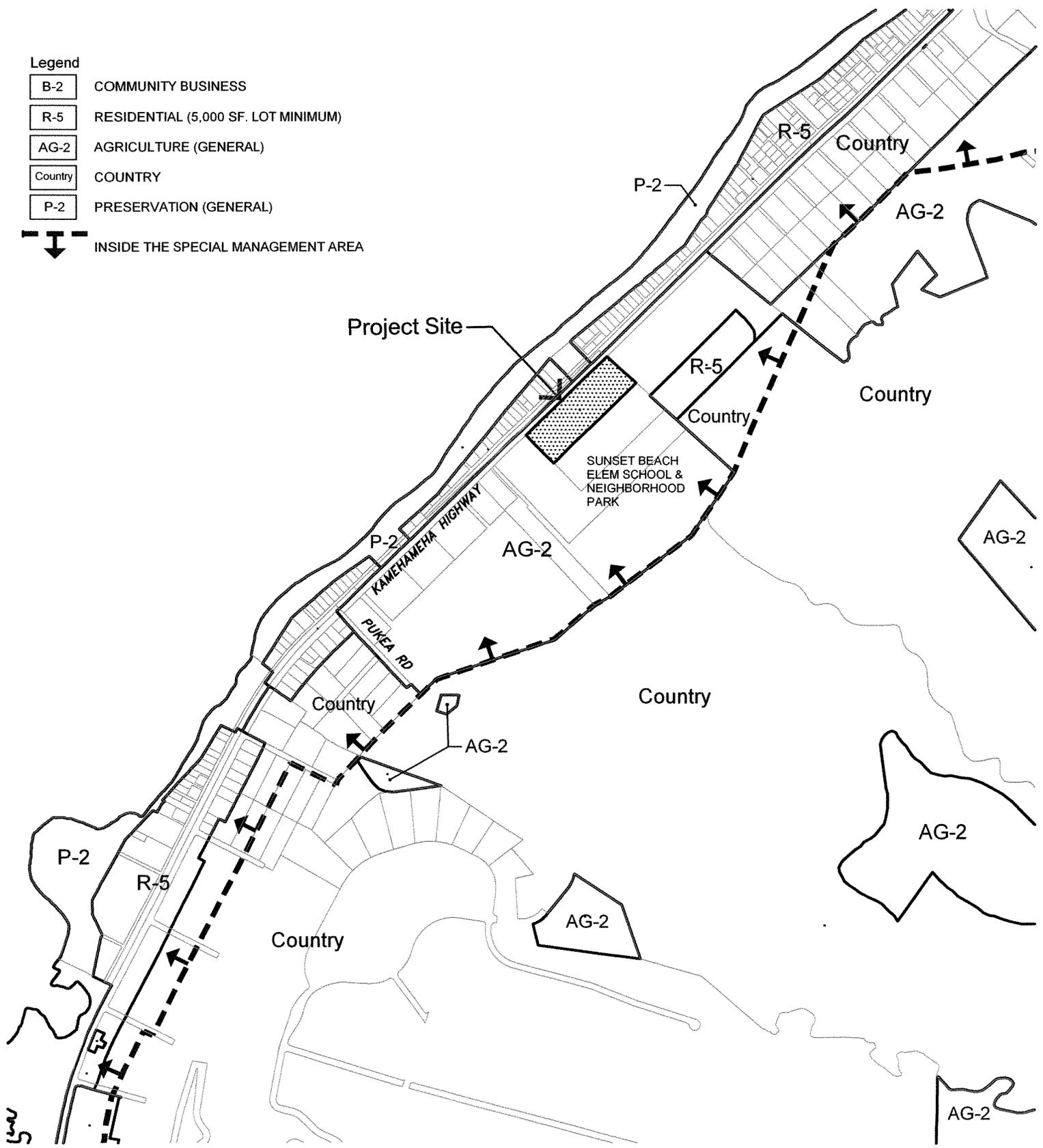
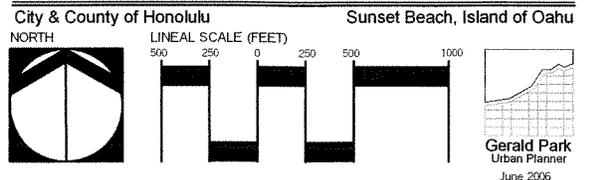


Figure 6
Zoning & Special Management Area
Sunset Beach Neighborhood Park



wide grassed shoulder, 4-foot wide concrete swale, and 5-foot wide asphalt concrete surfaced road shoulder.

A bicycle route is located on the *makai* side of Kamehameha Highway.

Bus stops in the Kahuku direction are located on Kamehameha Highway at both ends of the Park. A bus stop in the Haleiwa direction is located opposite the driveway to the Park fronting Ehukai Beach Park.

On-street parking is allowed on both sides of Kamehameha Highway except for areas immediately adjoining the bus stops. People are known to park along the highway to gain ready access to park facilities near the highway or when the existing parking lot and the parking lot at Ehukai Beach Park is full.

A 25 mile per hour speed limit is posted for the section of Kamehameha Highway fronting Sunset Beach Neighborhood Park and Sunset Beach Elementary School. The speed limit is 35 miles per hour on either side of the Park.

A 16-inch Board of Water Supply water line is located within Kamehameha Highway. Water service to the Park is provided through an 8-inch line feeding a 3" compound water meter. Within the Park, domestic and irrigation water lines of varying size branch off the 3" meter and associated valve assemblies. Water use is estimated at 1,000 gallons per day based on estimated wastewater flow from the comfort station and water usage at the drinking fountains and hose bibs.

Approximately 32,000 gallons per day is used for irrigation based on an application rate of ¼ inches over 205,000 square feet.

There is no municipal sewerage system serving the project area. Domestic wastewater from the comfort station flows into a septic tank and absorption beds located in the grass area between the comfort station and the existing tennis courts. Wastewater flow is estimated at 750 gallons per day.

Sunset Beach Elementary School has a permit to use the Park during recess and free play.

Hawaiian Electric Company, Hawaiian Telcom, and Oceanic Cable power, telephone, and CATV systems respectively are strung on aerial distribution lines on the *mauka* side of Kamehameha Highway.

M. Parks

Most of the public parks between Waimea Bay and Waialeale Beach Park are beach parks. The City's four major beach parks in this area---Waimea Bay, Pupukea, Ehukai, and Sunset Beach---total about 78 acres of shoreline and back beach areas for public recreation and convenience facilities (Department of Planning and Permitting, 1999).

Ehukai Beach Park is located across Kamehameha Highway from Sunset Beach Neighborhood Park.

A City and County of Honolulu skateboard facility has been constructed at Banzai Rock Support Park about 0.8 miles west of Sunset Beach Neighborhood Park.

Sunset Beach Neighborhood Park is the only community-based park with facilities for field and court sports in this section of the North Shore.

N. Protective Services

Fire protection originates from the Sunset Beach Fire Station on Kamehameha Highway about 1.5 miles south of the Park. If required, the fire apparatus stationed at either the Kahuku or Haleiwa Fire Stations can be summoned for back up. Fire hydrants are located on the *makai* side of Kamehameha Highway across from the Park.

The North Shore is part of the Honolulu Police Department's District 2. District 2 includes all the North Shore communities between Waialua and Sunset Beach and the Central Oahu communities of Kunia, Mililani, Wahiawa, Poamoho, and Whitmore Village. Police service in the district originates from the Wahiawa Police Station; there is no police substation on the North Shore. The district is regularly patrolled by officers in police vehicles.

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

3

A. Assessment Process

The scope of the project was discussed with staff of the Facilities Division, Department of Design and Construction and the consulting engineer. State and County agencies were contacted for information relative to their jurisdiction, expertise, and areas of concern. Time was spent in the field noting site conditions and conditions in the vicinity of Sunset Beach Neighborhood Park. From the discussions and field investigations, existing conditions and features that could be affected by or affect the project were identified. These influencing conditions are:

- Sunset Beach Neighborhood Park has been a public park since 1973;
- The Park is not located in a flood hazard area;
- There are no recorded historic features on the property;
- There are no rare, threatened, or endangered flora on the property;
- The site is free of geological and hydrological hazards;
- There are no wetlands on the premises;
- The Park separates Sunset Beach Elementary School from Kamehameha Highway;
- Public facilities are adequate to serve the proposed improvements.

B. Short-term Impacts

1. Air Quality

Construction activities will temporarily affect air quality. Grubbing, grading, trenching, stockpiling, backfilling and other soil moving activities will raise fugitive dust at construction sites which can settle in adjoining areas. The general contractor will employ on-site dust control measures to prevent the work site and construction equipment and activities from becoming significant dust generators. Control measures shall comply with Chapter 60.1, Air Pollution Control, Title 11, Department of Health, State of Hawaii (and revisions thereto).

Most construction equipment and vehicles are diesel powered and emit exhaust emissions typically high in nitrogen dioxide and low in carbon monoxide. The Federal and State nitrogen dioxide standard ---100mg/m³ per annum---which is an annual standard, is not likely to be exceeded during construction. Carbon dioxide emissions should be less than that generated by automobile traffic on adjoining streets. Aldehyde odors from diesel equipment may be detected but should be dispersed by the prevailing winds.

2. Noise

Like fugitive dust, construction noise cannot be avoided. The Park is bounded by Kamehameha Highway, educational, and agricultural uses. Schools are considered noise sensitive areas and construction noise will be audible in these areas. Exposure to noise will vary by construction phase, the duration of each phase, and the type of equipment used during the different phases. After demolition and site work are completed, reductions in

sound levels, frequency, and duration can be expected during actual construction of the play courts, softball field backstops, and accessible walkways.

Construction sounds may be audible at residential areas across Kamehameha Highway. Construction noise, however, should be “masked” by the sounds of passing traffic. In addition, the physical separation of the individual construction sites at the Park from the residential areas (approximately 200+ feet) will aid in noise attenuation.

Permanent and temporary classroom buildings at Sunset Elementary School overlook Sunset Beach Neighborhood Park. Permanent classrooms and the library nearest the Park are about 200+ feet from the court facilities and softball fields. These buildings have sealed windows and cement masonry unit walls facing the Park which can effectively aid in noise mitigation and minimize disturbing classroom instruction.

Portable buildings are made of wood and ventilated by manually operated wood shutters. Wood is a poor material for attenuating noise and outside noises including construction sounds can disturb classroom activities in these structures. One portable building is about 75 feet from the court facilities and noise from reconstruction of these facilities will be audible in this building. As a mitigating measure, the start of construction can be scheduled during the summer and demolition work done when school is not in session. The latter stages of construction to include paving the courts, installing accessory facilities such as fencing, basketball backboards, tennis nets, light fixtures, and walkways are not significant noise generating activities and can be performed when school is in session. All construction activities will comply with Chapter 46, Noise Control for Oahu and Chapter 42, Vehicular Noise Control for Oahu, Title 11, Administrative Rules, Department of Health.

Work will be scheduled between the hours of 8:00 AM to 3:30 PM Mondays through Fridays. Scheduling demolition work when school is not in session should be considered as a mitigating measure. The contractor will also ensure that construction equipment with motors is properly equipped with mufflers in good operating condition. The contractor will regularly communicate with the school administration of work to be performed and the working hours.

3. Erosion

Site work will expose soil thus creating opportunities for erosion (fugitive dust and suspended sediment in runoff). Grading will be performed in accordance with the erosion control ordinance of the City and County of Honolulu, and Department of Planning and Permitting approved grading plans.

The preliminary earthwork quantity for the reconstruction of the play courts is approximately 2,000 cubic yards of fill and 100 cubic yards of excavation. Best Management Practices (BMPS) for erosion and drainage control during construction will be incorporated into grading plans. Grading work for all improvements will exceed one acre thus a NPDES General Permit Authorizing Discharges of Storm Water Associated with Construction Activity will be required from the State Department of Health.

4. Archaeological Features

The unearthing of archaeological features is not anticipated. However, should excavation unearth subsurface archaeological sites, artifacts, cultural deposits, or burials work in the immediate area will cease and historic authorities notified for proper disposition of the finds.

5. Flora

Adverse effects on flora are not anticipated. Trees and hedges to be demolished will be replaced as determined by DPR. Some grass areas will be removed for construction of the enlarged tennis court area (where the volleyball court is not located), accessible walkways, the new softball backstops, and line fencing.

6. Traffic

Construction work is not proposed in the Kamehameha Highway right-of-way thus there should be no effect on vehicle circulation near the Park. During construction of the improvements, construction vehicles will be scheduled to minimize impacts on local traffic. Construction material off-loading should occur on-site and not within the highway right-of-way.

7. Park Facilities

Recreation facilities will be closed to public use during construction of the improvements. The tennis courts, basketball courts, volleyball court, and play apparatus will be closed first. Individual play and league use of the courts will be suspended for one year. This impact cannot be avoided.

There is one basketball court and one volleyball court at Pupukea Beach Park for public use. There are no court facilities at Kahuku District Park.

The remaining improvements will be phased as funding is made available. The City can thus provide adequate lead time and notice of the anticipated closures of facilities to be worked on.

C. Long-term Impacts

1. Recreation

No major change to the type and number of recreation facilities is proposed. There is, however, an option for adding a second volleyball court in lieu of a new children's play apparatus. The proposed improvements and upgraded facilities such as accessible walkways and new lighting should enhance the Park as a place for public recreation. The proposed improvements are part of an on-going effort by the city to upgrade public recreation facilities island-wide. In conjunction with the upgrading of existing recreation facilities, the city is also planning or has constructed new recreation facilities on the North Shore (for example, a skateboard facility at Banzai Rock Support Park) to meet the recreational needs of residents and visitors.

2. Use Impacts

Recreational sounds will be audible in adjoining areas at all times when the Park is being actively used. These impacts are unavoidable as they are to be expected from users enjoying a desired and well-used recreation facility.

The operating hours of the Park will coincide with the operating hours of similar recreation facilities operated and maintained by the Department of Parks and Recreation, City and County of Honolulu.

Officers of the Honolulu Police Department would have the primary responsibility of routinely patrolling the park and removing violators of park rules and city ordinances.

3. Drainage

The proposed improvements are not expected to increase significantly or have adverse impacts on existing drainage conditions within the Park. On-site drainage patterns will be maintained to the extent practical. Similar to the existing courts, runoff from the new court areas will sheet flow towards the ball field and Kamehameha Highway. Runoff from the field areas will not change and continue to sheet flow towards Kamehameha Highway.

Estimates of storm water discharge for the area affected by the play courts and ballfield improvements have not yet been calculated. Estimates will be provided with the application for a NPDES Permit.

4. Public Facilities

a. Circulation and Parking

The proposed improvements will not increase local traffic in the vicinity of the Park.

No change in the number of parking stalls is proposed so there should be no impact on parking facilities. The installation of new lighting in the parking lot should provide improved illumination for users.

b. Water

Water is available and adequate to serve the domestic and irrigation requirements for the Park.

c. Wastewater

The existing wastewater disposal system is adequate to accommodate park users.

5. Land Use Controls

The proposed improvements should not affect existing land use controls for the Park. Public uses are a permitted use in the P-2 zoning district and the improvements are in compliance with the development standards for the district.

The Department of Design and Construction will request a waiver to the height limit of the zoning district (25 feet) to allow the 39-foot high light fixtures for the basketball and volleyball courts.

A waiver also will be requested to the off-street parking requirement. Currently 21 off-street parking stalls are provided whereas 46 parking stalls are required.

D. Impacts to Special Management Area Resources

1. Recreation

Sunset Beach Neighborhood Park is not located on a beach or shoreline. Thus, there are no opportunities for shoreline recreation associated with the park. Owing to its inland location, there is no lateral access or public access to or along the shoreline.

2. Scenic and Open Space

The proposed improvements should not adversely affect coastal scenic and open space resources along Kamehameha Highway or mauka facing views from the highway. The Coastal View Study Maps (Exhibit No. 7) for the North Shore (Department of Land Utilization, 1987) did not identify any significant stationary views mauka of Kamehameha Highway in the vicinity of the Park. The Study, however, cites the foothills and upland bluff areas further mauka of the Park as important coastal landforms.

To emphasize the importance of mauka views along the North Shore, the North Shore *Sustainable* Communities Plan identifies "Mauka views of the Koolau Mountains and Pali along Kamehameha Highway from Haleiwa to Waialeale" as an important scenic resource. The proposed improvements are of similar scale and height as the existing improvements and are essentially replacing what recreation facilities now exist. Since the existing improvements do not adversely affects mauka views of the Koolau Mountains, then the proposed improvements should have the same non-effect. A height waiver will be sought to allow some light fixtures to exceed the height limit of the zoning district (25 feet) by up to 14 feet. The taller light fixtures will not obstruct mauka views of the Koolau Mountains.

3. Coastal Ecosystems

The project is not proposed in an area of open waters, potential fisheries and fishing grounds, and wildlife habitats. There are no wetlands, perennial streams, lakes, or other bodies of water comprising coastal ecosystems on the premises.

Park improvements are not proposed along the shoreline thus there should be no effect on beach processes.

Runoff from the Park will continue to sheet flow towards Kamehameha Highway.

4. Coastal Hazards

The Park is located outside of the 100-year flood hazard area and coastal high hazard area delineated for this section of the North Shore.

5. Historic Resources

There are no historic resources at the Park.

6. Economic Development

Although Sunset Beach Neighborhood Park is located in the Special Management Area, it is not a coastal dependent development.

7. Managing Development and 8. Public Participation

A Major Special Management Area ("SMA") Permit is required for the proposed improvements. The Department of Planning and Permitting ("DPP"), City and County of Honolulu, will schedule a public hearing as part of the SMA review process. Notice of the public hearing will be published in a local daily newspaper. Adjoining property will be notified by mail as to the time and place of the hearing.

The Honolulu City Council approves SMA permits. The application for SMA Permit and DPP recommendation will be presented to the Honolulu City Council and the City Council Zoning Committee. The Zoning Committee can also schedule a public hearing if warranted. Honolulu City Council hearing procedures provide ample opportunity for the public to comment on the SMA Permit application.

9. Beach Protection

The proposed improvements are not located on a beach or shoreline.

10. Marine Resources

The improvements are not proposed on the shoreline thus there should be no impact on marine resources.

A. No Action

A “No Action” alternative would preclude the occurrence of all impacts, short and long term, beneficial and adverse described in this Assessment. The No Action alternative would forego the construction recreation opportunities as proposed in the Sunset Beach Neighborhood Park Site Development Plan.

B. Site Development Plan Alternatives

Three alternative site plans were considered.

Alternative 1 (Figure 7) proposed two tennis courts, two volleyball courts, and two basketball courts. No change to the locations of the existing facilities was proposed. This alternative added a second volleyball court adjacent to the existing and a slight enlargement of the court area to accommodate two courts. The volleyball courts would be laid out in an east-west orientation.

Alternative 2 (Figure 8) proposed two tennis courts, one volleyball court, and two basketball courts. The tennis and volleyball court locations were switched with the tennis court moving mauka of the volleyball court. The area of the existing volleyball court would be enlarged to accommodate the two tennis courts. The tennis courts would be oriented east-west and the volleyball court north-south.

Alternative 3 (Figure 9) proposed two tennis courts, two volleyball courts, and two basketball courts. All facility locations would be switched as follows: existing volleyball court for two tennis courts; existing tennis courts for two basketball courts; and existing basketball courts for two tennis courts. The area of the volleyball court would be enlarged to accommodate the two basketball courts and all facilities would be oriented north to south.

The Site Development Plan shown in Figure 3 was selected because of the preferred court orientation, the option of constructing a second volleyball court (only one volleyball court is needed at this time), and the proposed grading improvements between the comfort station and pavilion will contribute to positive drainage in this area.

In assessing the impacts of the site development plan alternatives, it is concluded that the alternatives would not result in environmental impacts significantly different than that disclosed in this environmental assessment.

PROJECT DATA AND DEVELOPMENT REQUIREMENTS:

SUNSET BEACH NEIGHBORHOOD PARK
 59-350 KAMEHAMEHA HIGHWAY
 HALEIWA, HAWAII 96712
 TMK: 5-9-005: 070
 AREA: 6.00 ACRES
 FLOOD ZONE: X
 HEIGHT LIMIT: 25- FEET
 SPECIAL MANAGEMENT AREA: YES
 SPECIAL DISTRICT: NONE
 STATE LAND USE: URBAN
 ZONING (LUO): P-2 GENERAL PRESERVATION DISTRICT
 EXISTING USE: PUBLIC OUTDOOR RECREATIONAL FACILITY

MAXIMUM ALLOWABLE BUILDING AREA AT 5%
 = 13,068 SQ. FT.

BUILDING AREA TABLE:

FACILITY	AREA, S.F.	PERCENT, %
COMFORT STATION	790	
PAVILION	680	
DUGOUTS (4 TOTAL)	776	
TOTAL	2,246	0.86

PARKING STALL REQUIREMENTS:

FACILITY	REQUIRED NO. OF STALLS	TOTAL NO. OF STALLS
COMFORT STATION	NONE	0
PAVILION (680 S.F.)	1 STALL PER 200 S.F.	4
PLAYCOURTS (2) BASKETBALL (2) VOLLEYBALL (2) TENNIS	3 STALLS PER COURT	18
BALLFIELDS (2) SOFTBALL	12 STALLS PER FIELD	24
PLAY APPARATUS	NONE	0
TOTAL		46*

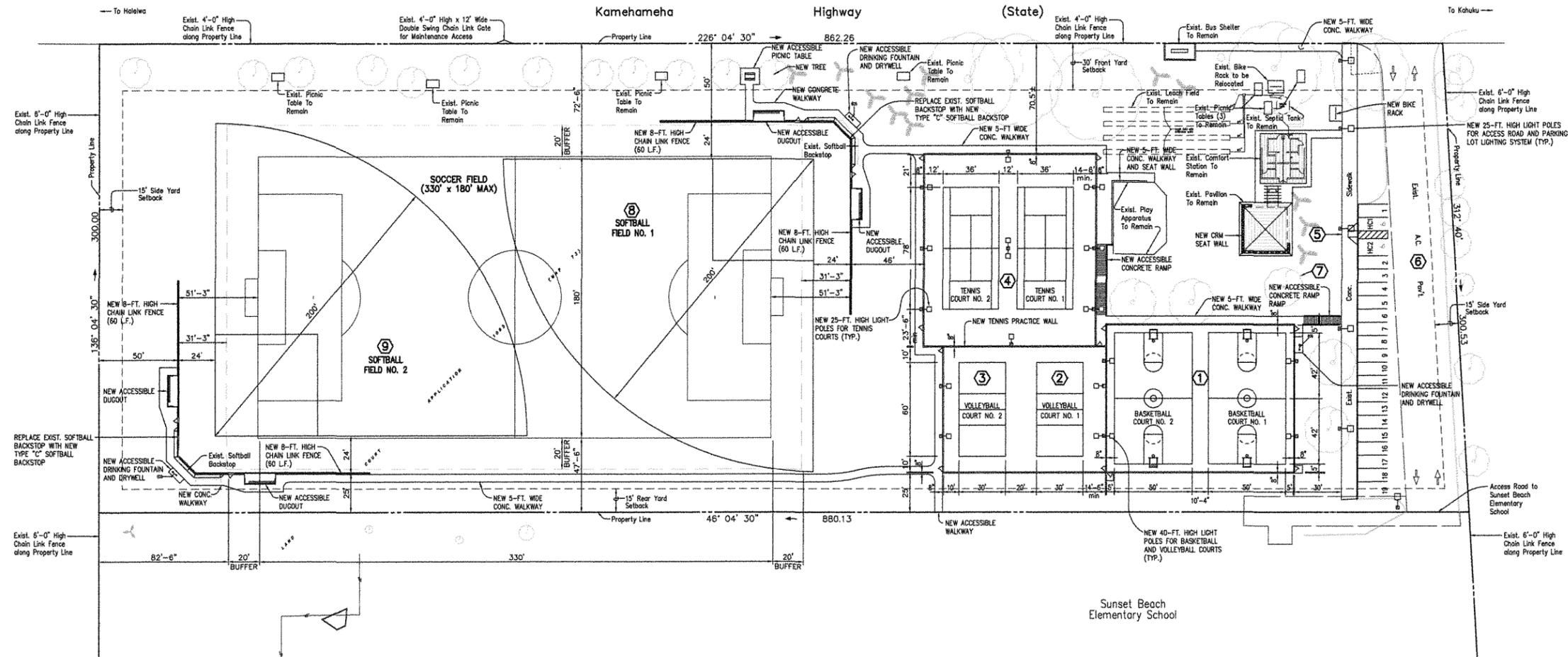
EXISTING PARKING STALLS PROVIDED:

PARKING STALL	TOTAL
STANDARD: OFF-STREET (WITHIN PARK) ON-STREET (ALONG KAMEHAMEHA HIGHWAY)	19 27 46
STANDARD ACCESSIBLE (WITHIN PARK)	1
VAN ACCESSIBLE (WITHIN PARK)	1
TOTAL	48

*THE TOTAL NUMBER OF PARKING STALLS REQUIRED INCLUDES ACCESSIBLE PARKING STALLS.

ACCESSIBLE PARKING STALL REQUIREMENTS:

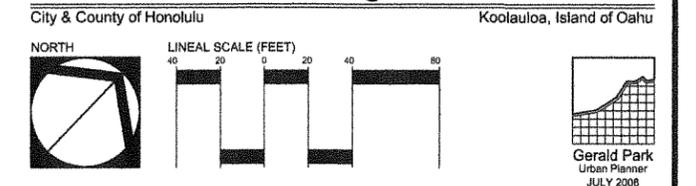
ACCESSIBLE PARKING STALL	TOTAL
STANDARD ACCESSIBLE	1
VAN ACCESSIBLE	1
TOTAL	2



PROPOSED MASTER PLAN IMPROVEMENTS:

- ① RECONSTRUCT TWO (2) BASKETBALL COURTS INCLUDING ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, BACKSTOPS, LIGHTING SYSTEM AND ACCESSORIES.
- ② RECONSTRUCT ONE (1) VOLLEYBALL COURT INCLUDING ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- ③ CONSTRUCT NEW VOLLEYBALL COURT NO. 2 INCLUDING ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- ④ RECONSTRUCT TWO (2) TENNIS COURTS INCLUDING GRADE ADJUSTMENT WALLS, TENNIS PRACTICE WALL, ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- ⑤ RECONSTRUCT 10- FEET WIDE CONCRETE WALKWAY AND CURB RAMP AS REQUIRED TO PROVIDE AN ACCESSIBLE ROUTE FROM THE ACCESSIBLE PARKING STALLS TO THE COMFORT STATION, PAVILION, PLAYCOURTS AND BALLFIELDS.
- ⑥ RECONSTRUCT ASPHALT CONCRETE PARKING LOT AND DRIVEWAY AS REQUIRED TO PROVIDE ACCESSIBLE PARKING STALLS. INSTALL NEW PARKING LOT LIGHTING SYSTEM.
- ⑦ REMOVE EXISTING SILVER BUTTWOOD TREES ADJACENT TO BASKETBALL COURTS (5 TOTAL) AS REQUIRED FOR CONSTRUCTION OF IMPROVEMENTS AND REPLACE WITH NEW TREES.
- ⑧ SOFTBALL FIELD NO. 1 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, PICNIC TABLE, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING
- ⑨ SOFTBALL FIELD NO. 2 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING

Figure 7
 Site Development Plan - Alternative No. 1
 Sunset Beach Neighborhood Park



PROJECT DATA AND DEVELOPMENT REQUIREMENTS:

SUNSET BEACH NEIGHBORHOOD PARK
 59-350 KAMEHAMEHA HIGHWAY
 HALEIWA, HAWAII 96712
 TMK: 5-9-005: 070
 AREA: 6.00 ACRES
 FLOOD ZONE: X
 HEIGHT LIMIT: 25- FEET
 SPECIAL MANAGEMENT AREA: YES
 SPECIAL DISTRICT: NONE
 STATE LAND USE: URBAN
 ZONING (LUO): P-2 GENERAL PRESERVATION DISTRICT
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TOTAL	2,246	0.86

PARKING STALL REQUIREMENTS:

FACILITY	REQUIRED NO. OF STALLS	TOTAL NO. OF STALLS
COMFORT STATION	NONE	0
PAVILION (680 S.F.)	1 STALL PER 200 S.F.	4
PLAYCOURTS (2) BASKETBALL (1) VOLLEYBALL (2) TENNIS	3 STALLS PER COURT	15
BALLFIELDS (2) SOFTBALL	PER FIELD	24
PLAY APPARATUS	NONE	0
TOTAL		43*

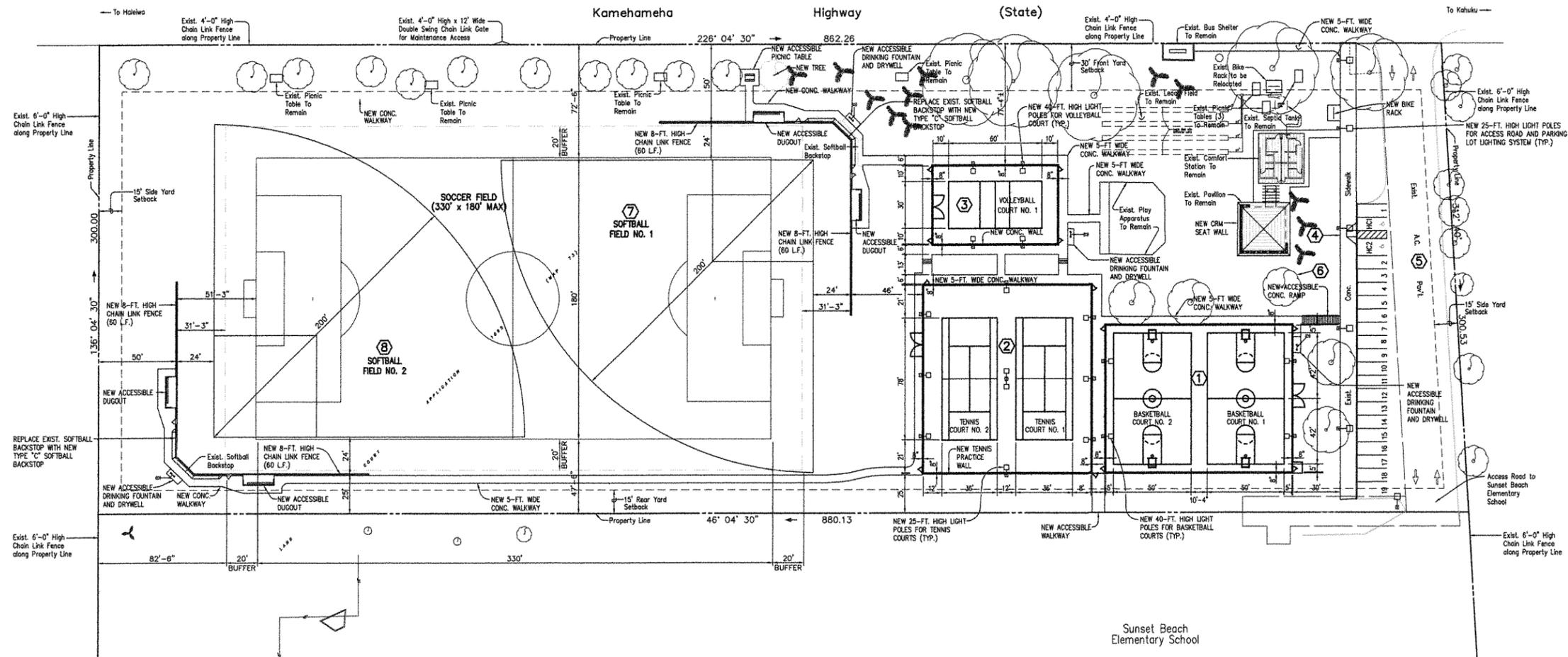
EXISTING PARKING STALLS PROVIDED:

PARKING STALL	TOTAL
STANDARD: OFF-STREET (WITHIN PARK) ON-STREET (ALONG KAMEHAMEHA HIGHWAY)	19 27 46
STANDARD ACCESSIBLE (WITHIN PARK)	1
VAN ACCESSIBLE (WITHIN PARK)	1
TOTAL	48

*THE TOTAL NUMBER OF PARKING STALLS REQUIRED INCLUDES ACCESSIBLE PARKING STALLS.

ACCESSIBLE PARKING STALL REQUIREMENTS:

ACCESSIBLE PARKING STALL	TOTAL
STANDARD ACCESSIBLE	1
VAN ACCESSIBLE	1
TOTAL	2

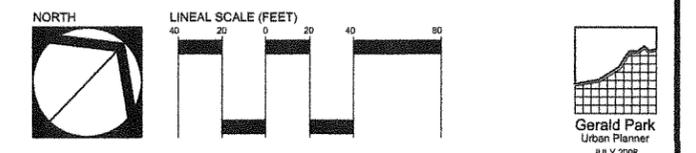


PROPOSED MASTER PLAN IMPROVEMENTS:

- 1 RECONSTRUCT TWO (2) BASKETBALL COURTS INCLUDING ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, BACKSTOPS, LIGHTING SYSTEM AND ACCESSORIES.
- 2 RECONSTRUCT TWO (2) TENNIS COURTS INCLUDING ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- 3 RECONSTRUCT ONE (1) VOLLEYBALL COURT INCLUDING GRADE ADJUSTMENT WALL, ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- 4 RECONSTRUCT 10- FEET WIDE CONCRETE WALKWAY AND CURB RAMP AS REQUIRED TO PROVIDE AN ACCESSIBLE ROUTE FROM THE ACCESSIBLE PARKING STALLS TO THE COMFORT STATION, PAVILION, PLAYCOURTS AND BALLFIELDS.
- 5 RECONSTRUCT ASPHALT CONCRETE PARKING LOT AND DRIVEWAY AS REQUIRED TO PROVIDE ACCESSIBLE PARKING STALLS. INSTALL NEW PARKING LOT LIGHTING SYSTEM.
- 6 REMOVE EXISTING SILVER BUTTWOOD TREES ADJACENT TO BASKETBALL COURTS (5 TOTAL) AS REQUIRED FOR CONSTRUCTION OF IMPROVEMENTS AND REPLACE WITH NEW TREES.
- 7 SOFTBALL FIELD NO. 1 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, PICNIC TABLE, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING
- 8 SOFTBALL FIELD NO. 2 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING

Figure 8
 Site Development Plan - Alternative No. 2
 Sunset Beach Neighborhood Park

City & County of Honolulu Koolauloa, Island of Oahu



Gerald Park
 Urban Planner
 JULY 2008

PROJECT DATA AND DEVELOPMENT REQUIREMENTS:

SUNSET BEACH NEIGHBORHOOD PARK
 59-350 KAMEHAMEHA HIGHWAY
 HALEIWA, HAWAII 96712
 TMK: 5-9-005: 070
 AREA: 6.00 ACRES
 FLOOD ZONE: X
 HEIGHT LIMIT: 25- FEET
 SPECIAL MANAGEMENT AREA: YES
 SPECIAL DISTRICT: NONE
 STATE LAND USE: URBAN
 ZONING (LUO): P-2 GENERAL PRESERVATION DISTRICT
 EXISTING USE: PUBLIC OUTDOOR RECREATIONAL FACILITY

MAXIMUM ALLOWABLE BUILDING AREA AT 5%
 = 13,068 SQ. FT.

BUILDING AREA TABLE:

FACILITY	AREA, S.F.	PERCENT, %
COMFORT STATION	790	
PAVILION	680	
DUGOUTS (4 TOTAL)	776	
TOTAL	2,246	0.86

PARKING STALL REQUIREMENTS:

FACILITY	REQUIRED NO. OF STALLS	TOTAL NO. OF STALLS
COMFORT STATION	NONE	0
PAVILION (680 S.F.)	1 STALL PER 200 S.F.	4
PLAYCOURTS (2) BASKETBALL (2) VOLLEYBALL (2) TENNIS	3 STALLS PER COURT	18
BALLFIELDS (2) SOFTBALL	12 STALLS PER FIELD	24
PLAY APPARATUS	NONE	0
TOTAL		46*

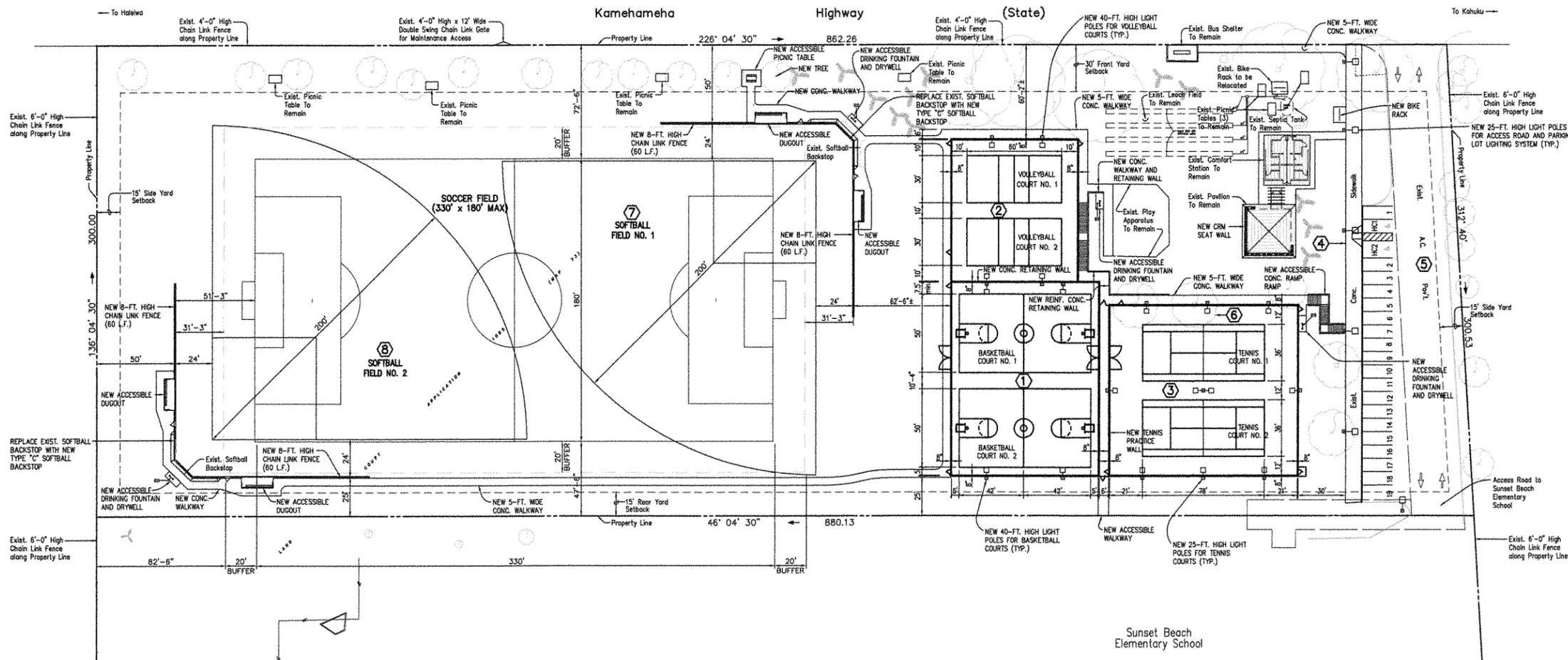
EXISTING PARKING STALLS PROVIDED:

PARKING STALL	TOTAL
STANDARD:	
OFF-STREET (WITHIN PARK)	19
ON-STREET (ALONG KAMEHAMEHA HIGHWAY)	27
TOTAL	46
STANDARD ACCESSIBLE (WITHIN PARK)	1
VAN ACCESSIBLE (WITHIN PARK)	1
TOTAL	48

*THE TOTAL NUMBER OF PARKING STALLS REQUIRED INCLUDES ACCESSIBLE PARKING STALLS.

ACCESSIBLE PARKING STALL REQUIREMENTS:

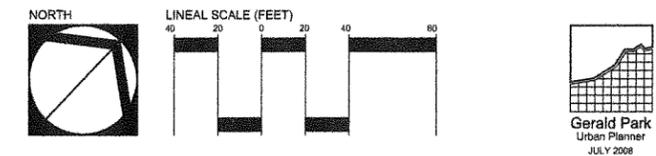
ACCESSIBLE PARKING STALL	TOTAL
STANDARD ACCESSIBLE	1
VAN ACCESSIBLE	1
TOTAL	2



PROPOSED MASTER PLAN IMPROVEMENTS:

- ① RECONSTRUCT TWO (2) BASKETBALL COURTS INCLUDING ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, BACKSTOPS, LIGHTING SYSTEM AND ACCESSORIES.
- ② CONSTRUCT TWO (2) VOLLEYBALL COURT INCLUDING GRADE ADJUSTMENT WALL, ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- ③ RECONSTRUCT TWO (2) TENNIS COURTS INCLUDING GRADE ADJUSTMENT WALLS, ASPHALT CONCRETE SURFACE, CONCRETE CURBS, 10- FEET HIGH CHAIN FENCE, GATES, NET POSTS, LIGHTING SYSTEM AND ACCESSORIES.
- ④ RECONSTRUCT 10- FEET WIDE CONCRETE WALKWAY AND CURB RAMP AS REQUIRED TO PROVIDE AN ACCESSIBLE ROUTE FROM THE ACCESSIBLE PARKING STALLS TO THE COMFORT STATION, PAVILION, PLAYCOURTS AND BALLFIELDS.
- ⑤ RECONSTRUCT ASPHALT CONCRETE PARKING LOT AND DRIVEWAY AS REQUIRED TO PROVIDE ACCESSIBLE PARKING STALLS. INSTALL NEW PARKING LOT LIGHTING SYSTEM.
- ⑥ REMOVE EXISTING SILVER BUTTONWOOD TREES ADJACENT TO BASKETBALL COURTS (5 TOTAL) AS REQUIRED FOR CONSTRUCTION OF IMPROVEMENTS AND REPLACE WITH NEW TREES.
- ⑦ SOFTBALL FIELD NO. 1 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, PICNIC TABLE, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING
- ⑧ SOFTBALL FIELD NO. 2 - REPLACE (1) EXISTING SOFTBALL BACKSTOP WITH NEW TYPE "C" SOFTBALL BACKSTOP (23' HEIGHT), INCLUDING (2) ACCESSIBLE DUGOUTS, ACCESSIBLE DRINKING FOUNTAIN, CONCRETE WALKWAYS AND 8' HIGH CHAIN LINK FENCE LINE FENCING

Figure 9
 Site Development Plan - Alternative 3
 Sunset Beach Neighborhood Park
 City & County of Honolulu Koolauloa, Island of Oahu



City and County of Honolulu

Board of Water Supply
Department of Facility Maintenance
Department of Environmental Service
Department of Planning and Permitting
Department of Parks and Recreation
Police Department

State of Hawaii

Department of Education
Department of Land and Natural Resources
 Historic Preservation Division
Department of Health
 Office of Environmental Quality Control
Department of Transportation

Other

Hawaiian Electric Company
Hawaiian Telcom
North Shore Neighborhood Board No. 27
Councilmember Donovan Dela Cruz
The Honorable Robert Bunda
The Honorable Michael Magaoay
Kahuku Public Library (Placement)

Permits and approvals required for the project and approving authorities are listed below. Additional permits and approvals may be required pending final construction plans.

City and County of Honolulu

Honolulu City Council

Special Management Area Permit

Department of Planning and Permitting

Grading Permit

Building Permit for Building, Electrical, Plumbing, Sidewalk/Driveway and Demolition Work Waiver (Zoning Height and Off-street Parking)

State of Hawaii

Department of Health

NPDES General Permits (Discharges Associated with Construction Activities)

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;

No natural or cultural resources are found at the Park.

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

The project will not curtail the range of beneficial uses of the environment. Sunset Beach Neighborhood has been developed as a public park since the mid-1970s.

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.

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

The proposed project will not initiate population changes in the area or effects on public facilities.

7) Involves a substantial degradation of environmental quality;

Environmental quality will not be substantially degraded as a result of the project.

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

The project is not the precursor for a larger action. It is, however, part of on-going capital improvement programs to improve existing parks and recreation opportunities for residents of and visitors to the City and County of Honolulu.

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

Field investigations revealed that there is no rare, threatened or endangered flora on the premises.

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

Ambient air quality will be affected during construction by fugitive dust and combustion emissions but can be controlled by measures stipulated in this Assessment. Construction noise will be audible in areas adjoining the Park but should diminish when demolition and associated site work activities are completed. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health.

Demolition of the play courts will be performed when school is not in session to minimize noise disruption to classroom instruction.

11) Affects an environmentally sensitive area such as a flood plain, tsunami zone, erosion prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

Sunset Beach Neighborhood Park is not located in an environmentally sensitive area.

The open space areas will serve a drainage function by allowing runoff to continue to sheetflow in the direction of Kamehameha Highway.

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

The proposed improvements will not significantly affect scenic vistas identified in county plans for the area. Public views of the shoreline from the roadway nearest the coastline will not be affected because the improvements are located on the *mauka* side of Kamehameha Highway. The proposed improvements will not adversely affect *mauka* views towards the Koolau Mountain Range from the highway.

13) Requires substantial energy consumption.

Substantial energy consumption is not anticipated. The use of high-efficiency luminaires will aid in reducing energy consumption and cost.

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