

Royal Hawaiian Hotel & Sheraton Waikiki Master Plan Improvements

Draft Environmental Assessment

Prepared For:

Kyoya
Hotels & Resorts,
LP

Prepared By:



August 2007

Draft Environmental Assessment

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Master Plan Improvements**

Prepared for:

Kyo-ya Hotels & Resorts, LP

Prepared by:

**Wilson Okamoto Corporation
Engineers and Planners
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826**

August 2007

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LIST OF EXHIBITS AND APPENDICES

EXHIBIT A	List of Owners for Tax Map Key 2-6-2:26
EXHIBIT B	Correspondence with State Historic Preservation Division and the Oahu Island Burial Council
APPENDIX A	Sheraton / Royal Hawaiian Hotel Tree Survey, Prepared by Steve Nimz and Associates, L.L.C., February 18, 2007 Map of Tree Survey, Prepared by Walters Kimura Motoda Landscape Architect, March 14, 2007
APPENDIX B	Archaeological Literature Review and Field Check for Improvements to the Royal Hawaiian and Sheraton Hotels, Waikiki, Kona District, Oahu, TMK 1-2-6-002:005, 006, 026, Prepared by Cultural Surveys Hawaii, Inc., April 2007

PREFACE

This Draft Environmental Assessment (EA) / Anticipated Finding of No Significant Impact (FONSI) has been prepared pursuant to Chapter 343, Hawaii Revised Statutes (HRS), and Title 11, Chapter 200, Hawaii Administrative Rules (HAR), Department of Health, State of Hawaii, as well as Chapter 25, Revised Ordinances of Honolulu. Proposed is an applicant action by Kyo-ya Hotels & Resorts, LP to renovate the existing Royal Hawaiian Hotel and Sheraton Waikiki Hotel in Waikiki, Oahu. Compliance with the provisions of Chapter 343, HRS is required because of the project's location within the "Waikiki Special District" and construction within the Shoreline Setback. The accepting agency is the City and County of Honolulu Department of Planning and Permitting (DPP), in conjunction with the processing of a Special Management Area (SMA) Use Permit, Shoreline Setback Variance, and Waikiki Special District Minor Permit required for the proposed action.

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SUMMARY

Applicant:	Kyo-ya Hotels & Resorts, LP
Approving Agency:	City and County of Honolulu Department of Planning and Permitting
Project Location:	Waikiki, Oahu, Hawaii
Tax Map Keys and Recorded Fee Owner:	2-6-2: 5 (10.3 Acres) Kyo-ya Hotels & Resorts LP BP Bishop Trust Estate 2-6-2: 6 (3.5 Acres) Kyo-ya Hotels & Resorts LP 2-6-2: 26 (0.9 Acres) See Exhibit A
Area:	14.7 acres
Existing Uses:	Two hotels, appurtenant resort retail and commercial uses, parking.
State Land Use Classification:	Urban
Development Plan Land Use Map Designation:	Resort
County Zoning Designation:	Resort Mixed Use Precinct
Proposed Action:	Renovation of two existing resort hotels consisting of exterior improvements to: <ul style="list-style-type: none">• Visitor arrival and registration areas;• On-site vehicular and pedestrian circulation;• Pool, garden and recreation areas; and,• Lateral public shoreline accesses. Reconfiguration of ground level interior areas including lobby, restaurant, and retail uses in both the Royal Hawaiian Hotel

and Sheraton Waikiki, which will eliminate a total of 38 guest units. A new kitchen grease interceptor will be installed in the existing basement adjacent to the current Sheraton Waikiki loading dock.

The improvements are proposed to enhance the visitor arrival experience, including conveying a greater Hawaiian sense of place pursuant to the City's Waikiki Special District Guidelines, facilitate vehicular and pedestrian circulation and wayfinding, provide visual linkages, and ease public shoreline access.

Impacts:

No significant impacts are anticipated with the construction and operation of the proposed improvements. While the possibility for uncovering human burial remains within the project site is high, the proposed improvements were designed to minimize disturbance of previously undisturbed soils. The State Historic Preservation Division (SHPD), Kamehameha Schools, and the Office of Hawaiian Affairs (OHA) have been consulted, and a presentation was made before the Oahu Island Burial Council (OIBC) on June 13, 2007. Consultation with potential lineal and cultural descendants, as well as interested Hawaiian organizations will also be pursued. Such consultation is intended to determine appropriate mitigation of cultural impacts associated with any discovery of human burial remains as well as enhance the Hawaiian Sense of Place.

**Anticipated
Determination:**

Finding of No Significant Impact

**Parties Consulted
During
Pre-Assessment:**

Federal Agencies

U.S. Department of the Army, Engineering Division

U.S. Department of Agriculture – Natural Resources
Conservation Service

State of Hawaii

Department of Land and Natural Resources (DLNR)

State Historic Preservation Division

Land Division

Department of Business, Economic Development and
Tourism (DBEDT)

**Parties Consulted
During Pre-Assessment**

(continued):

Department of Business, Economic Development and
Tourism (DBEDT)

Office of Planning

Land Use Commission

Department of Health (DOH)

Environmental Planning Office

Office of Environmental Quality Control

Environmental Management Division

Office of Hawaiian Affairs

Oahu Island Burial Council

City and County of Honolulu

Department of Planning and Permitting

Department of Transportation Services

Department of Parks and Recreation

Fire Department

Police Department

Office of Waikiki Development

Waikiki Neighborhood Board (No. 9)

Land Owners

Kamehameha Schools

Mark A. Robinson Trust

Adjacent Property Owners

Kamehameha Schools

Queen Emma Foundation

Neighboring Uses

Halekulani Hotel / Parc Hotel

Imperial Waikiki Resort

Outrigger LAX, L.P.

Royal Hawaiian Shopping Center

Organizations/Individuals and Presentation Attendees

Council Chair Barbara Marshall (3rd District)

Councilmember Charles Djou (4th District)

Councilmember Rodney Tam (6th District)

Hawaii Hotel and Lodging Association

Hawaii Visitors and Convention Bureau

Lineal and Cultural Descendents

Marsha Weinert (State Tourism Liaison)

**Parties Consulted
During Pre-Assessment
(continued):**

National Association of Industrial and Office Properties
Oahu Visitors Bureau
Oahu Island Burial Council
Outdoor Circle
Representative Tom Brower (23rd District)
Senator Gordon Trimble (12th District)
SMG Hawaii Convention Center
Surfrider Foundation
Waikiki Beach Boys
Waikiki Beach Concessionaires
Waikiki Business Improvement District Association
Waikiki Improvement Association
Waikiki Neighborhood Board

**Parties to be
Consulted During
the Draft EA:**

State of Hawaii
Department of Health (DOH)
 Environmental Health Administration
 Noise, Radiation and Indoor Air Quality Branch
 Environmental Management Division
 Clean Air Branch
 Clean Water Branch
 Office of Environmental Quality Control
Department of Business, Economic Development and
Tourism (DBEDT)
 Office of Planning
 Energy, Resources & Technology Division
Department of Hawaiian Homelands
Department of Land and Natural Resources (DLNR)
 State Historic Preservation Division
 Land Division
 Division of State Parks
 Division of Forestry and Wildlife
 Engineering Division
Department of Transportation
Office of Hawaiian Affairs
U.H. Environmental Center
Hawaii State Library (Waikiki-Kapahulu Branch)

City and County of Honolulu
Board of Water Supply
Customer Services Department

**Parties to be
Consulted During
the Draft EA
(continued):**

Department of Design and Construction
Department of Emergency Management
Department of Emergency Services
Department of Environmental Services
Department of Facilities Maintenance
Department of Parks and Recreation
Department of Planning and Permitting
 Land Use Permits Division
 Planning Division
 Site Development Division
Department of Transportation Services
Fire Department
Mayor's Office
Municipal Reference and Records Center
Office of Economic Development – Waikiki
Office of Waikiki Development
Police Department
Waikiki Neighborhood Board (No. 9)

Elected Officials

Council Chair Barbara Marshall (3rd District)
Councilmember Charles Djou (4th District)
Councilmember Rodney Tam (6th District)
Representative Thomas Brower (23rd District)
Representative Scott Nishimoto (21st District)
Senator Gordon Trimble (12th District)

Land Owners

Kamehameha Schools
Mark A. Robinson Trust

Adjacent Property Owners

Kamehameha Schools
Queen Emma Foundation

Neighboring Uses

Halekulani Hotel / Parc Hotel
Imperial Waikiki Resort
Outrigger LAX, L.P.
Royal Hawaiian Shopping Center

**Parties to be
Consulted During
the Draft EA
(continued):**

Individuals/Organizations

Construction Industry Legislative Organization
Hawaii Hotel and Lodging Association
Hawaii Visitors and Convention Bureau
Historic Hawaii Foundation
Lineal and Cultural Descendents
Marsha Weinert (State Tourism Liaison)
Oahu Island Burial Council
Oahu Visitors Bureau
Outdoor Circle
Sierra Club
Surfrider Foundation
Waikiki Business Improvement District
Waikiki Hawaiian Civic Club
Waikiki Improvement Association

1. SETTING AND PROJECT DESCRIPTION

1.1. Project Background and Location

Kyo-ya Hotels & Resorts, LP (Kyo-ya) is proposing to renovate the existing Royal Hawaiian Hotel and Sheraton Waikiki Hotel in Waikiki. The project lies immediately makai of the Royal Hawaiian Shopping Center, which is located on the makai side of Kalakaua Avenue as shown in Figure 1. The project site encompasses approximately 14.7 acres of land area and is identified by TMK's 2-6-002: 005, 006, and 026 (see Figure 2). Surrounding uses in proximity to the project site as well as existing on-site uses are shown in Figures 3 and 4, respectively. Various photographs of existing on-site conditions are provided herein.

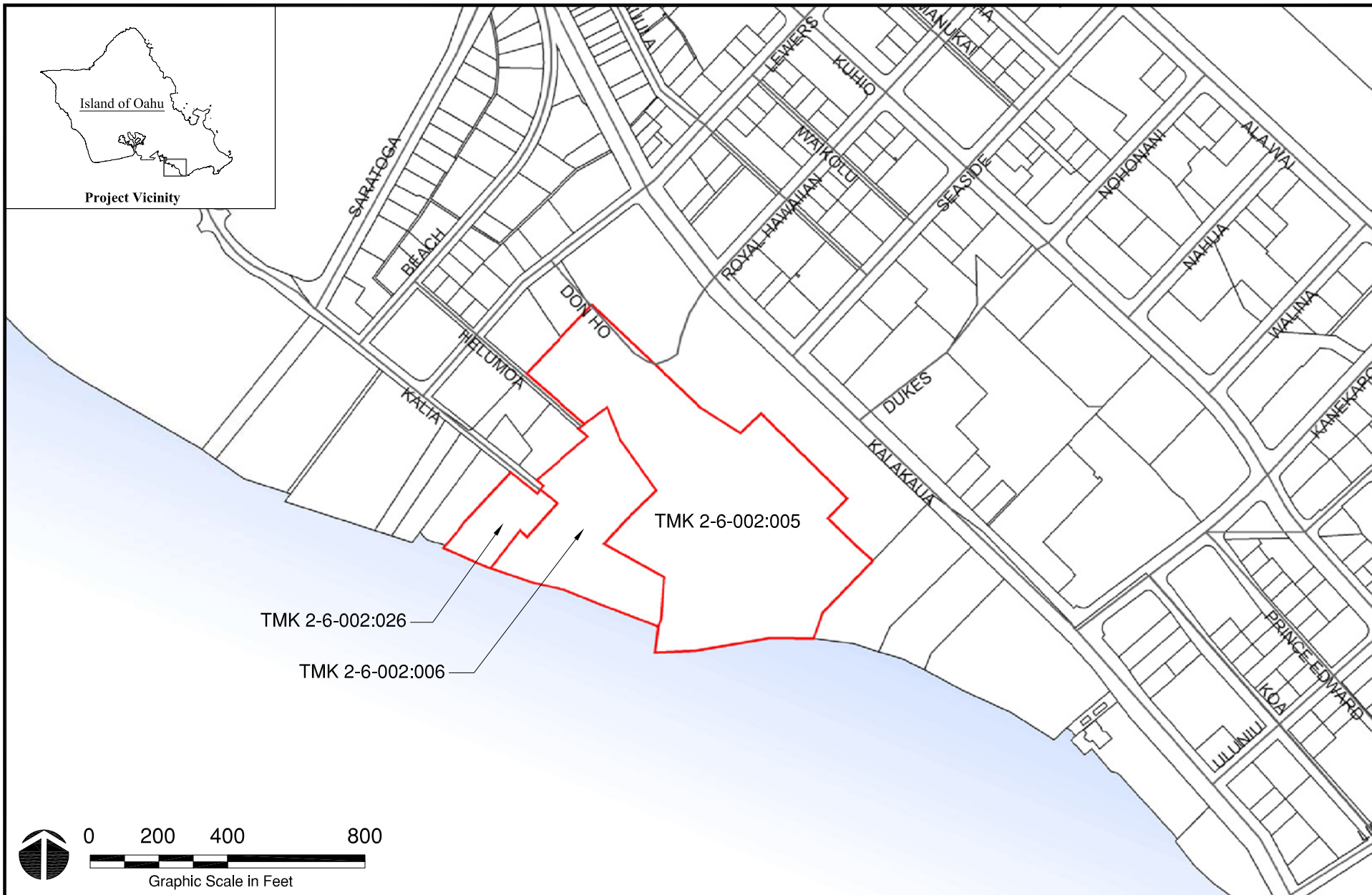
1.2. Project Description

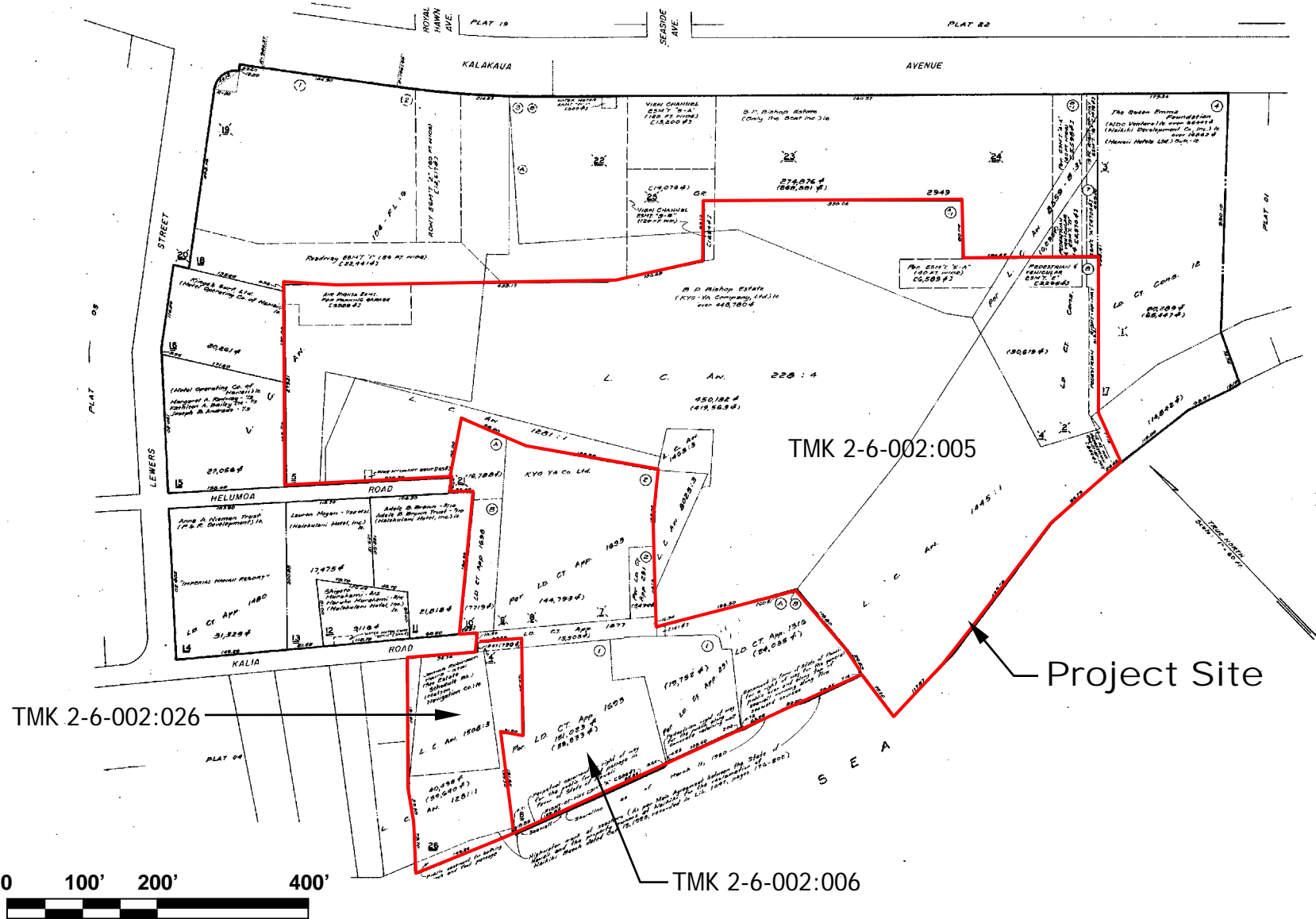
In conjunction with a master plan to comprehensively improve internal traffic circulation, upgrade hotel amenities and enhance the overall visual character and Hawaiian Sense of Place for both, the Royal Hawaiian Hotel and the Sheraton Waikiki, Kyo-ya is proposing various improvements to both properties as illustrated in Figure 5. No net increase in floor area, density and building height or reduction in open space is proposed. In total, 38 guest rooms will be eliminated through interior modifications, 32 rooms in the Sheraton Waikiki and six rooms in the Royal Hawaiian Hotel, and includes the creation of the proposed porte-cochere and the relocation of the front desk and bell service of both hotels. The project design team sought to minimize impacts to potential archaeological and cultural features, including human burial remains, by the use of fill and constructing in areas that are known to be culturally less sensitive, such as in modern fill overlying native soils.

The following improvements are proposed to the Royal Hawaiian Hotel and Sheraton Waikiki.

A. “The Royal Grounds Arrival” Area

- For decades the Royal Hawaiian Hotel has been hidden behind the Royal Hawaiian Shopping Center. The recent improvements at the Royal Hawaiian Shopping Center provides an opportunity for Kyo-ya to create a visual corridor from Kalakaua Avenue to the majestic Royal Hawaiian Hotel by renovating the Manor Wing, which faces the circular driveway that will serve the Sheraton Waikiki's new porte-cochere and the driveway leading to the proposed Royal Hawaiian Hotel porte-cochere. These improvements are intended to enhance the Hawaiian sense of place and first impression upon arrival to the resort properties for both the Kama'aina resident and the visitor. This includes illustrating the story of Helumoa on portions of the porte-cochere facade.





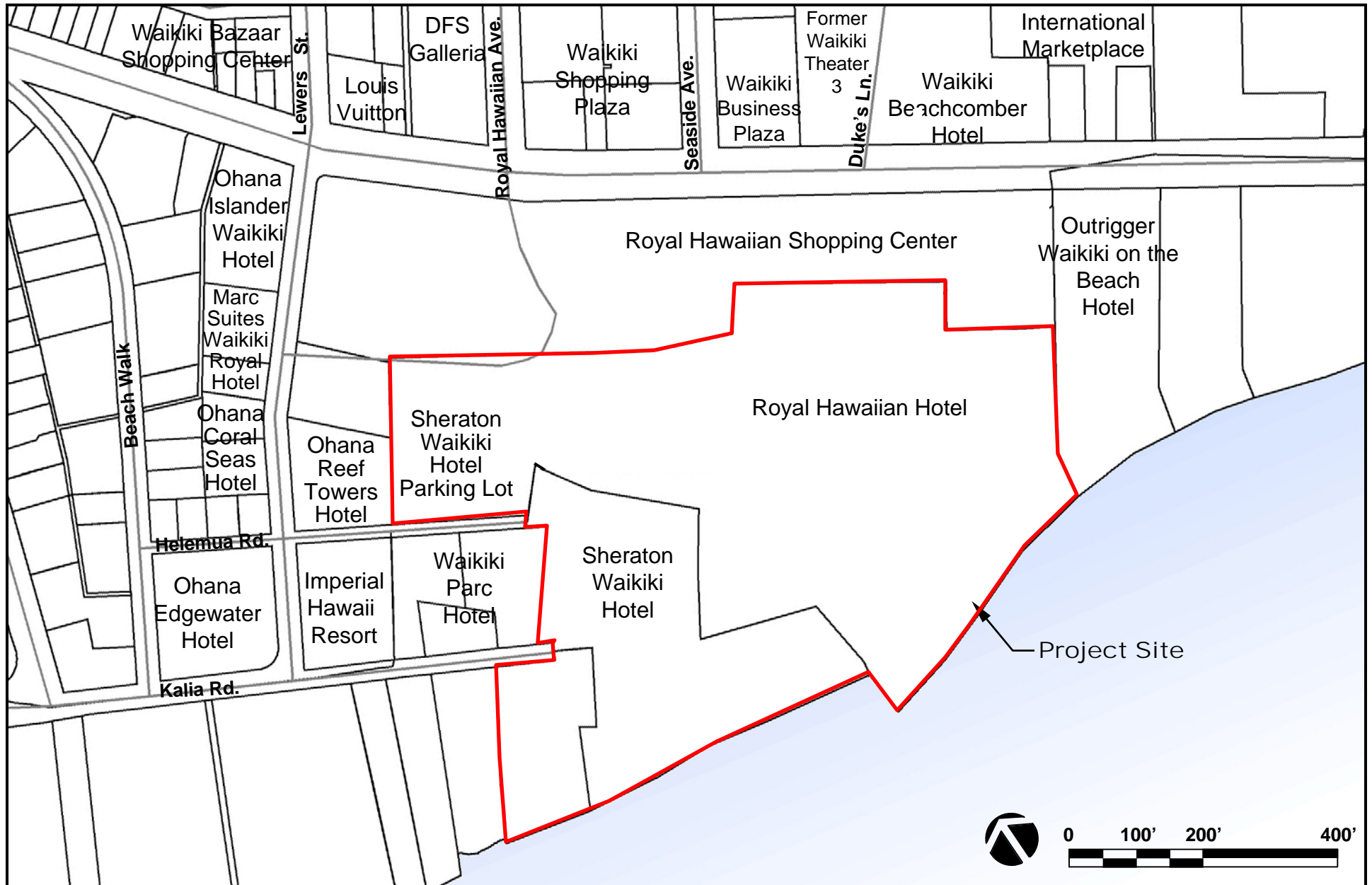
WILSON OKAMOTO
CORPORATION
ENGINEERS - PLANNERS

ROYAL HAWAIIAN HOTEL AND SHERATON WAIKIKI MASTER PLAN IMPROVEMENTS

TAX MAP KEY 2-6-002:005, 006, AND 026

FIGURE

2

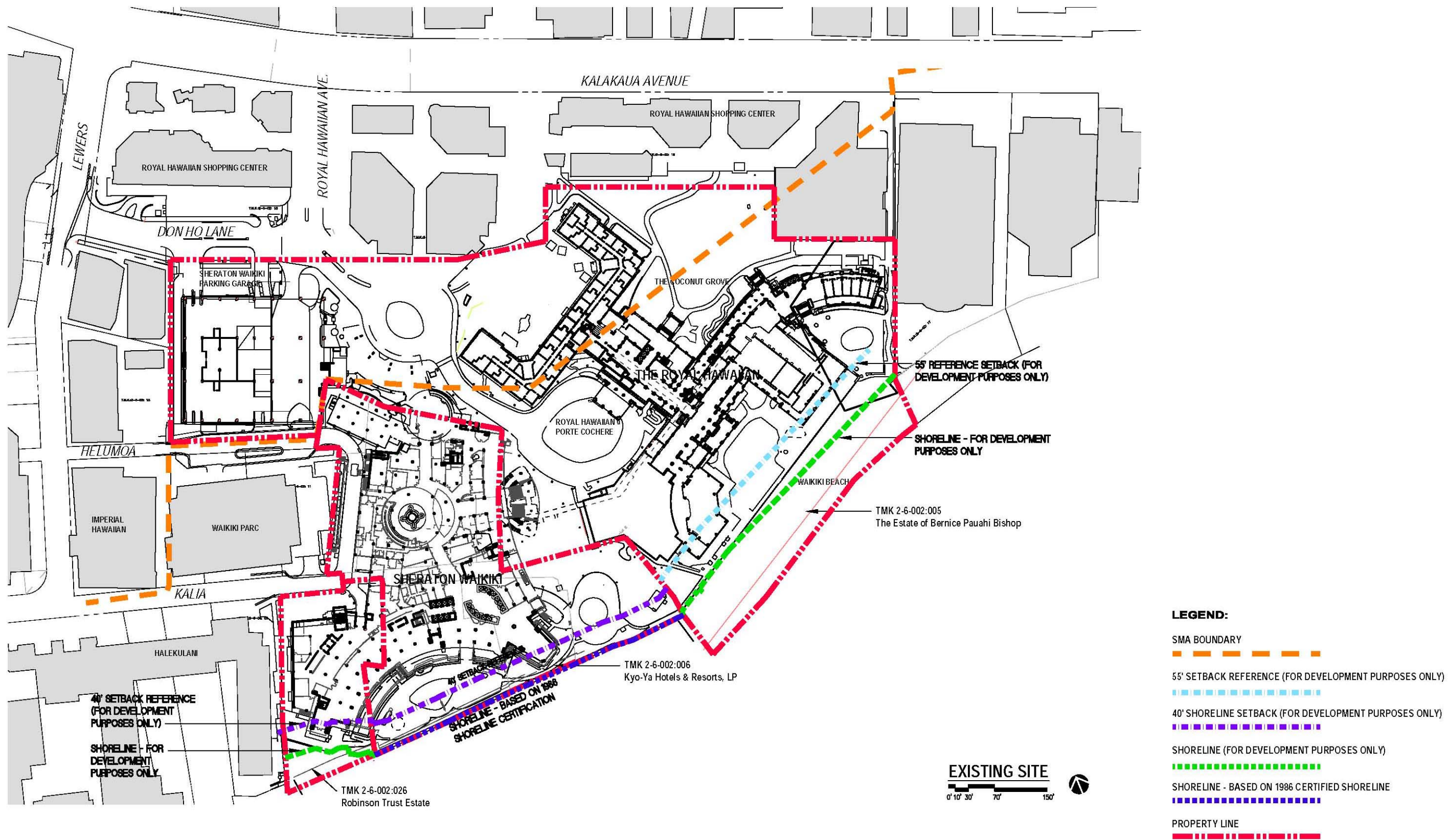


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CORPORATION
ENGINEERS - PLANNERS

ROYAL HAWAIIAN HOTEL AND SHERATON WAIKIKI MASTER PLAN IMPROVEMENTS

Surrounding Uses Map

FIGURE
3



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Existing circular driveway serving the Sheraton Waikiki porte-cochere and the Royal Hawaiian Hotel entrance.



Royal Hawaiian Hotel driveway leading to the existing porte-cochere.



Existing Sheraton Waikiki beachside pool.



Existing public access walkway fronting the Sheraton Waikiki.



Existing northern courtyard of the Royal Hawaiian Hotel will be replaced by the new porte-cochere.



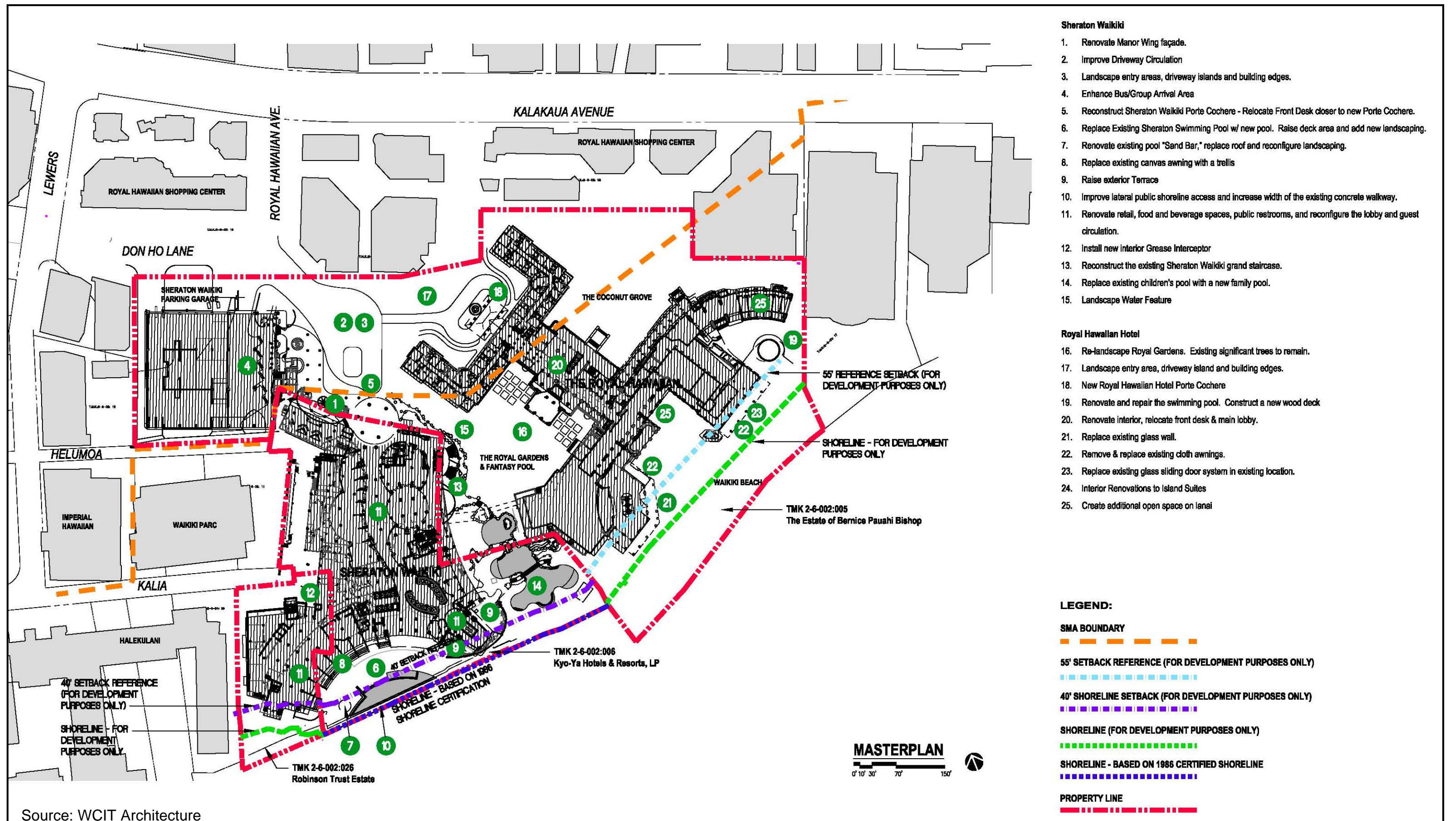
Existing children's pool at the Sheraton Waikiki will be replaced by the Royal Gardens and Resort Fantasy Pool.



Royal Hawaiian Hotel pool to be repaired.



Courtyard of Manor Wing to be covered to accommodate the reconfigured driveway and new porte-cochere.



Source: WCIT Architecture

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- The front desk of the Sheraton Waikiki will be moved closer to the new porte-cochere to serve arriving guests. It will occupy the second floor of the existing Manor Wing, which will be at the same level as the new porte-cochere. Within the Manor Wing, 16 existing guest rooms on the second floor will be eliminated. The third floor of the Manor Wing along with 16 additional guest rooms will also be demolished to create a double floor ceiling space over the front desk area.
- The driveways will be realigned to facilitate wayfinding, improve pedestrian and vehicular circulation and improve pedestrian safety. The circular driveway fronting the Sheraton Waikiki will be reconfigured, creating a longer drop-off/pick-up zone closer to the existing entrance of the Sheraton Waikiki and will be achieved by covering the existing ground floor courtyard of the Manor Wing. The existing tour bus (group arrival) staging area will be remarked to reverse the one-way flow, such that entry will be from Helumoa Street with an exit via Don Ho Lane to Lewers Street or Royal Hawaiian Avenue to Kalakaua Avenue. The driveway leading to the Royal Hawaiian Hotel will be realigned to serve a relocated porte-cochere, which will be moved from the southwest side of the hotel to the north side. This relocation will improve the pedestrian and vehicular circulation within the site and return the makai portion of the property to pedestrian-only use, existing fire lane will maintain. Vehicular traffic will be confined to the mauka portion of the property.
- The entry areas, driveway islands and building edges will be re-landscaped.

B. The Sheraton Waikiki

- The existing beachside pool, which does not handle the current visitor/guest capacity of the Sheraton Waikiki Hotel, will be demolished and the entire deck area will be raised approximately three feet. A new, larger, four-foot deep “vanishing edge” pool will be constructed as a replacement to enhance the ocean experience from the hotel and improve the ability to serve the hotel guests. The width of the existing concrete public walkway along the makai edge of the pool will be increased from the present three feet, six inches to between six and seven feet onto existing resort property to provide greater ease of public access along the shoreline. The existing pool bar will also be renovated, including replacing the roof. The pool deck area will be re-landscaped.
- The existing canvas awnings located near the Sheraton Waikiki pool have deteriorated and will be replaced with covered trellis that will not increase floor area.

- Other hotel renovations will be confined to interior areas on the ground level, including renovating the retail and food and beverage spaces, public restrooms and reconfiguring the lobby and guest circulation.
- A new kitchen grease interceptor will be installed in the existing basement adjacent to the current Sheraton Waikiki loading dock. The new grease interceptor is required by the State Department of Health to meet current standards for commercial kitchen wastewater discharges into the municipal wastewater collection system.
- The adjoining lawn area on either side of the Esprit Lounge will be elevated to provide outdoor seating with umbrellas.

C. The Royal Gardens and Resort Fantasy Pool (between the Royal Hawaiian Hotel and the Sheraton Waikiki)

- The existing Royal Hawaiian Hotel porte-cochere area will be landscaped as the Royal Gardens, which includes an open lawn and garden area. A footpath, leading into the Royal Gardens, will replace the existing driveway and will be designed to provide access for emergency firefighting vehicles. Existing large trees will be incorporated in the landscaping.
- The existing Sheraton Waikiki grand staircase will be removed and replaced to complement the Royal Gardens and to open ocean views from the “Royal Grounds” arrival area. A new landscaped water feature will be constructed in this area.
- The existing children’s pool will be expanded to become a “family pool” with multiple shallow pools connected by flowing water slides.

D. The Royal Hawaiian Hotel

- The existing driveway, motor court and porte-cochere functions will be relocated from the southwest side of the building to the north side to improve pedestrian and vehicular access and pedestrian safety for arriving guests. The new porte-cochere structure will be an interpretive reflection of the historic period associated with the Royal Hawaiian Hotel. Existing large trees will be incorporated, where possible. A new Landscape Plan will complement the new motor court and porte-cochere.
- The existing Royal Hawaiian Hotel swimming pool will be reconstructed to be shallower, with a different shape of similar size, and elevated 18 inches. The

deck around the existing pool is deteriorating and is difficult to maintain as it is lower than the adjoining beach, causing sand to spill onto the deck. Renovation of the existing deck by overlaying a wooden covering approximately 18 inches above the existing deck, which will also serve as preventative maintenance, will match the floor level of the adjoining Surf Room, improving ADA accessibility. Additional landscaping will be planted around the pool area.

- The interior ground floor of the Royal Hawaiian Hotel will be reconfigured to connect the relocated porte-cochere to the main lobby. This will eliminate six guest rooms in the existing Mezzanine Level. The interior floor area will further be reconfigured and renovated, including the Monarch Room, Surf Room, and the elimination of the Lurline Room. Six existing ground floor rooms mauka of the swimming pool will be renovated. The existing cloth awnings on the makai faces of the Monarch Room and Surf Room have deteriorated and will be repaired by replacing them with awnings of similar coverage that will not increase floor area, and which is reminiscent of those fronting the original structure.
- Existing outdoor treatment pavilions located in the northern courtyard will be removed.
- Repair, maintenance, and superficial upgrading of counters, walls, and lighting of the Mai Tai Bar will be completed.

1.3. Schedule, Phasing and Construction Costs

In general, scheduling and phasing of the various proposed improvements will be based on obtaining required permit and approvals, in particular, the Special Management Area (SMA) and Shoreline Setback Variance (SSV), both of which are related to the designated shoreline. The shoreline depicted on the project plans at the Royal Hawaiian Hotel and the Ewa end of the Sheraton Waikiki property is recommended by, and under discussion with the State of Hawaii. It is for "development purposes only" and lies well mauka of the previous shoreline certification. It is shown simply for the development purposes being considered in this assessment only. Consequently, the environmental review is more inclusive of what is considered within the shoreline setback.

In the first phase, interior improvements as well as exterior repair and maintenance type work can proceed after required building permits are obtained. These are typically exempt from requirements for environmental assessment, SMA Use Permit, SSV and Waikiki Special District (WSD) Permits. In the second phase, work outside of the SMA could proceed after the environmental assessment process, and obtaining WSD-minor and building permits. Proposed improvements outside of the SMA include constructing the new porte-cochere on the north side of the Royal Hawaiian Hotel, and improvements to the driveway area fronting the Sheraton Waikiki. The third phase will include proposed improvements within the SMA and new construction within the

shoreline setback, including the new resort pool, reconstruction of the Sheraton Waikiki pool, and the proposed exterior terrace adjacent to the Esprit Lounge. It is anticipated that construction of all improvements will be completed by Summer of 2009. The estimated construction cost of all phases is \$49 million.

2. DESCRIPTION OF THE EXISTING ENVIRONMENT, PROJECT IMPACTS AND MITIGATION MEASURES

The following is a description of the existing environment, assessment of potential project impacts and proposed mitigation measures.

2.1. Climate

The climate of the Honolulu area is typical of the leeward coastal lowlands of Oahu. The area is characterized by abundant sunshine, persistent tradewinds, relatively constant temperatures, moderate humidity, and infrequent severe storms.

Northeasterly tradewinds prevail throughout the year although their frequency varies from more than 50 percent during the summer months to 90 percent in January. The average annual wind velocity is approximately 10 miles per hour.

The mean temperature measured at Honolulu International Airport ranges from 70 degrees Fahrenheit (°F) in the winter to 84°F in the summer. The temperatures in the Waikiki project area may be slightly higher due to localized urban heating effects. The average annual precipitation in the vicinity of the project site is approximately 24 inches, with most of the rainfall occurring between November and April. Relative humidity ranges between 56 and 72 percent.

Impacts

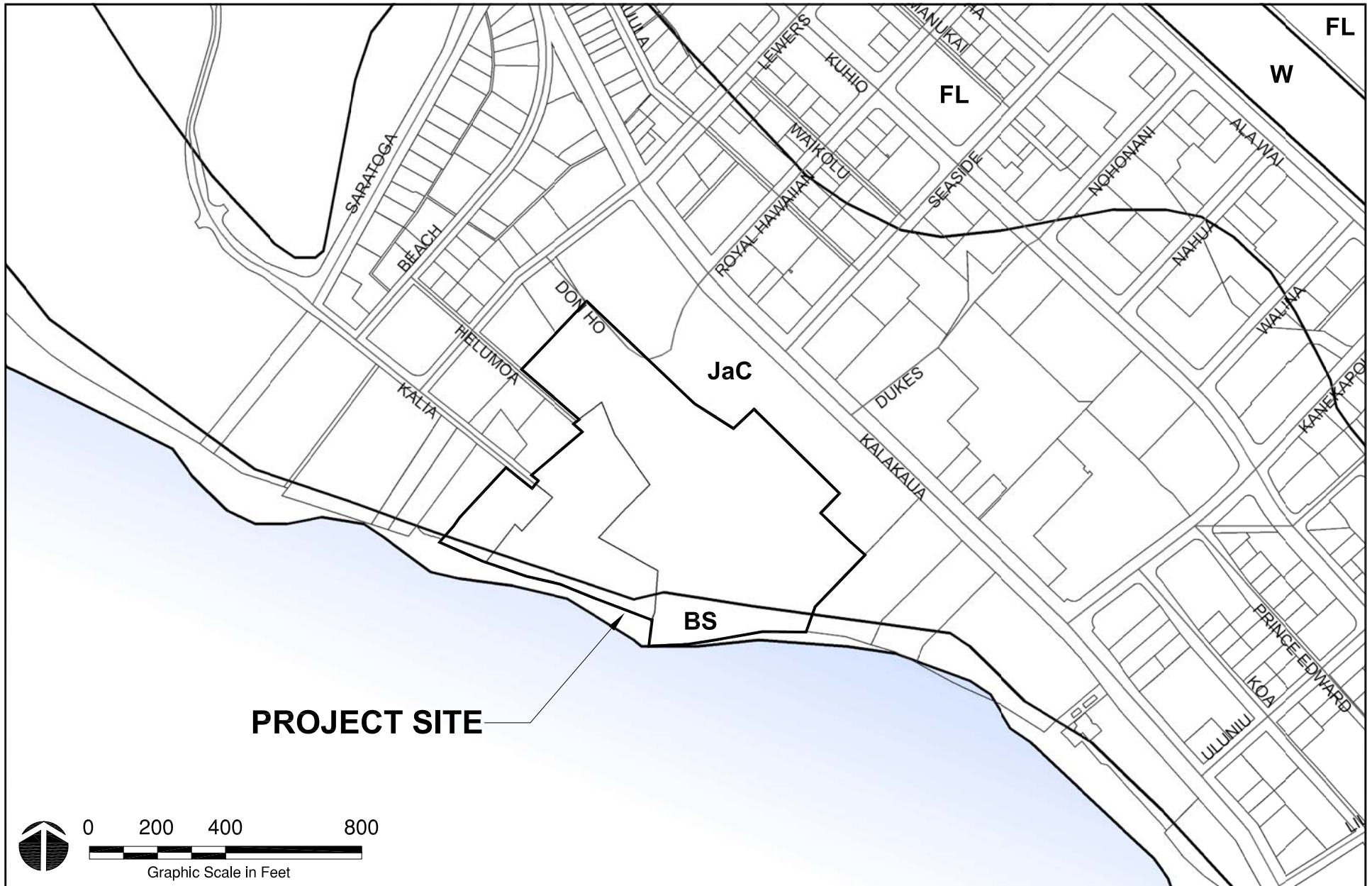
The proposed project will not affect regional climate conditions.

2.2. Topography and Soils

Topography: The project site fronts the shoreline and is relatively flat with elevations ranging from zero to approximately eleven feet above mean sea level (msl).

Soils: According to the U.S. Department of Agriculture Soil Conservation Service, the majority of soils underlying the project site are classified as Jaucas sand (JaC) (See Figure 6). A representative profile of this soil type is single grain, pale brown to very pale brown, sandy, and more than 60 inches deep. The slope range of this soil is 0 to 15 percent, but in most places the slope does not exceed 7 percent. Permeability is rapid, and runoff is very slow to slow, and the hazard of water erosion is slight. Large portions of the project, including much of the built-over and landscaped areas are likely composed of imported soils.

The shoreline reaches of the project site are classified as Beaches (BS), which consist of highly permeable sandy, gravelly, or cobbly areas. A representative profile of this soil type consists mainly of light-colored sands derived from coral and seashells or dark colorations derived from basalt and andesite. BS soils have no value for farming. Where accessible and free of cobblestones and stones, they are highly suitable for recreational uses and resort development.



Impacts and Mitigation Measures

While great effort was taken to minimize ground disturbance, various components of the proposed project will involve excavating, filling, and grading portions of the project site. These activities will not significantly alter the topography of the project site with the exception of: (1) Raising the area on the north side of the Royal Hawaiian Hotel for the relocated porte-cochere and motor court; (2) Raising a portion of the driveway area fronting the Sheraton Waikiki Hotel and covering the courtyard fronting the Manor Wing; and (3) Raising the Sheraton Waikiki beachside pool and pool deck area. These areas will not generally require excavation to deeper levels and, instead, will be filled to accommodate the higher elevations of the new hotel features. Proposed excavation elsewhere on-site will be limited to the superficial removal and replacement of existing pavement, sidewalks, landscaping and utility lines. Excavations as deep as four feet will be required for the water features fronting the Sheraton Waikiki, along the eastern (Diamond Head) side of the Sheraton, as well as the Resort Fantasy Pool located between the Royal Hawaiian and Sheraton Waikiki hotels. A portion of the new pool area was previously excavated, however, to accommodate the existing children's pool.

The area of soil disturbance within the project site will be greater than one-acre, thus, a National Pollutant Discharge Elimination System (NPDES) Notice of Intent (NOI) for Discharges Associated with Construction Storm Water Activities will be required from the State of Hawaii Department of Health (DOH). Storm runoff from the project site during site preparation will be controlled in compliance with the City and County of Honolulu's "Rules Relating to Storm Drainage Standards". Typical mitigation measures will include appropriately stockpiling materials on-site to prevent runoff and establishing landscaping as early as possible on completed areas. These measures, in combination with those required pursuant to the NPDES NOI will mitigate the potential for siltation and erosion.

2.3. Hydrology

Oahu's south central coast, geographically referred to as the Honolulu Plain, is underlain by a broad elevated coral reef that has been partly covered by alluvium carried down from the mountains. Lava flows of the Honolulu Volcanic Series are interbedded with these reef deposits which were formed when the sea level was higher than it is now. The same interbedding of coral and alluvial deposits that play an important role in Oahu's geology also influenced the hydrological character of Oahu's leeward coastline. The interface between upper sedimentary layers and the underlying basalt constitutes a zone of low permeability known as caprock. This caprock extends along the coastline at about 800 to 900 feet below sea level, forming an impervious zone that impedes the seaward movement of potable water from the basaltic aquifers.

There is no natural surface water within the project site. The nearest surface water body is the shoreline south (makai) of the project site.

According to the State Commission on Water Resource Management there are no registered potable water wells in the Waikiki area.

The City and County of Honolulu Board of Water Supply Pass/No Pass line delineates the boundary of the potable water aquifer. The project site falls within areas makai of the line, which suggests that activities on the project site will not impact potable groundwater resources.

Impacts and Mitigation Measures

In the short-term, construction of the water features fronting and along the eastern (Diamond Head) side of the Sheraton Waikiki, and the Resort Fantasy Pool located between the Royal Hawaiian and Sheraton Waikiki hotels will require excavating up to four feet below existing ground level. A portion of the new pool will be at the location of the existing children's pool.

Because the water table will be encountered at shallow depths below existing grade, temporary dewatering may be required. If discharges are anticipated as a result of dewatering activities, a NPDES NOI for Discharges Associated with Construction Activity Dewatering will be obtained from the DOH. Additionally, disposal of the dewatering effluent into the municipal storm drain system will require a permit from the City and County of Honolulu Department of Planning and Permitting.

Soil runoff from excavations will be controlled in compliance with City and County of Honolulu grading permit requirements. Typical mitigation measures include removing excess excavated materials, appropriately stockpiling materials to be used for backfill and constructing over exposed soils as early as possible.

2.4. Flood Hazard

According to the Flood Insurance Rate Map (FIRM), Number I 5003C0370F effective September 30, 2004, prepared by the Federal Emergency Management Agency (FEMA), the project site lies within three flood hazard designations (see Figure 7). Approximately half of the project site is designated Zone AO, Special Flood Hazard Areas Inundated by 100-year Flood, with an average flood depth determined at one to three feet. The mauka portions of the project site are located within this designation. A portion of the Royal Hawaiian Hotel and its existing porte-cochere are located within Zone A Special Flood Hazard Areas Inundated by 100-year Flood, with no base flood elevation determined. The southern (makai) band of the project site is designated Zone AE, Special Flood Hazard Areas Inundated by 100-year Flood, with a base flood elevation determined from six to seven feet.

Impacts and Mitigation Measures

The ground floor elevation of the Royal Hawaiian Hotel new porte-cochere will be approximately four feet higher than the existing grade, thus elevating the proposed grade to approximately nine feet. In addition, the makai frontage area of the Sheraton Waikiki will be elevated to accommodate the proposed dining terrace and raised pool deck. No lowering of interior floor elevation is proposed. All renovations will comply with City flood ordinances.

2.5. Flora and Fauna

A Tree Survey was conducted by a certified arborist (Steve Nimz and Associates, LLC) in February 2007 to inventory the major trees and plants on the project site, determine their size and condition, and recommend their disposition within the proposed project. Approximately 730 plants were inventoried, comprising numerous species of introduced, native Hawaiian, and Polynesian-introduced trees, palms, shrubs, and groundcovers. Although there are some notable trees, none are recognized as “exceptional trees” by the City and County of Honolulu. No threatened or endangered plant species are known to exist on the subject property. Table 1 summarizes the survey findings, while the survey in its entirety is included as Appendix A.

Faunal species may include rats and mice that are common to urban environments. Avifaunal species identified at the project site include those common to urban areas such as the barred dove, mynah, sparrow, Brazilian cardinal, and finches. No federally protected, threatened or endangered species of animals are known to inhabit the project area.

Impacts and Mitigation Measures

A landscape design plan will be prepared to support applications for a Special Management Area (SMA) Use Permit and Waikiki Special District (WSD) Minor Permit. The concept for the landscape design plan is to enhance the Hawaiian sense of place through the use of native Hawaiian plants, Polynesian-introduced, and exotic plants that have come to represent Hawaii.

Mature trees and palms will be retained or relocated within the project site when feasible. Notably, the existing Monkeypod Trees and Indian Banyans at the current Royal Hawaiian Hotel porte-cochere will be protected in place, and will be featured in the landscape design of the new Royal Gardens. A certified arborist will be retained to assist in the relocation of mature trees and the pruning of existing trees determined to remain on-site. Where necessary, Coconut Palms with brown trunk heights less than 40 feet will be relocated. It is anticipated that Coconut Palms showing stress, such as trunk damage, poor bases, thin trunks, trunk narrowing, and penciling will be removed. The remaining landscaping will be removed during construction and replaced with new landscaped areas.

Table 1
Summary of Tree survey

1. African Tulip (<i>Spathodea campanulata</i>)	26. Hong Kong Orchid (<i>Bauhinia x blakeana</i>)
2. Areca Palm (<i>Dyopsis lutescens</i>)	27. Indian Banyan (<i>Ficus benghalensis</i>)
3. Australian Tree Fern (<i>Cyathea cooperi</i>)	28. Kentia Palm (<i>Howea species</i>)
4. Autograph (<i>Clusia rosea</i>)	29. King Palm (<i>Archontophoenix alexandrae</i>)
5. Banana (<i>Musa species</i>) (P *)	30. Kukui (<i>Aleurites moluccana</i>) (P)
6. Caribbee Royal Palm (<i>Roystonea oleracea</i>)	31. Lechoso (<i>Stemadenia litoralis</i>)
7. Chinese Banyan (<i>Ficus microcarpa</i>)	32. MacArthur Palm (<i>Ptychosperma macarthurii</i>)
8. Chinese Fan Palm (<i>Livistona chinensis</i>)	33. Manila Palm (<i>Veitchia merrillii</i>)
9. Chinese Lantern (<i>Abutilon x hybridum</i>)	34. Monkeypod (<i>Samanea saman</i>)
10. Citrus (<i>Citrus sp.</i>)	35. Montgomery Palm (<i>Veitchia montgomeryana</i>)
11. Coconut Palm (<i>Cocos nucifera</i>) (P)	36. Mountain Apple (<i>Syzygium malaccense</i>) (P)
12. Common Coral (<i>Erythrina crista-galli</i>)	37. Plumeria (common) (<i>Plumeria x rubra</i>)
13. Croton (<i>Codiaeum variegatum</i>)	38. Podocarpus (Common) (<i>Podocarpus macrophyllus</i>)
14. Cuban Royal Palm (<i>Roystonea regia</i>)	39. Pride-of-Barbados (<i>Caesalpinia pulcherrima</i>)
15. Date Palm (male) (<i>Phoenix dactylifera</i>)	40. Queen Palm (<i>Syagrus romanzoffianum</i>)
16. Dracaena Fig (<i>Ficus microcarpa</i>)	41. Rainbow Shower (<i>Cassia javanica x fistula</i>)
17. Dwarf Date Palm (<i>Phoenix roebelenii</i>)	42. Royal Poincianna (<i>Delonix regia</i>)
18. False Olive (<i>Elaeodendron orientale</i>)	43. Satinleaf (<i>Chrysophyllum oliviforme</i>)
19. Fan Palm (<i>Coccothrinax</i>)	44. Schefflera (<i>Schefflera actinophylla</i>)
20. Fan Palm (<i>Prichardia species</i>) (E *)	45. Seagrape (<i>Coccoloba uvifera</i>)
21. Giant White Bird of Paradise (<i>Strelitzia nicolai</i>)	46. Singapore Plumeria (<i>Plumeria obtuse</i>)
22. Great Crepe Myrtle (<i>Lagerstroemia speciosa</i>)	47. Soapberry (Not Available) (E)
23. Hala (<i>Pandanus tectorius</i>) (I)	48. Tahitian Gardenia (<i>Gardenia taitensis</i>)
24. Hau (<i>Hibiscus tiliaceus</i>) (P)	49. Traveler's Palm (<i>Ravenala madagascariensis</i>)
25. Hawaiian Tree Fern (<i>Cibotium glaucum</i>) (E)	50. Variegated Rubber Tree (<i>Ficus elastica</i> , var.)
* Depends on species (I) Indigenous (E) Endemic (P) Polynesian Introduced	
Source: Steve Nimz and Associates, LLC. February 18, 2007	

No adverse impacts on fauna are anticipated. Site preparation will remove existing plant species that provide a small habitat for various bird, mammal and insect species that commonly occur in sub-tropical urban environments. When

landscaping for the proposed project is established, however, many of these displaced species are anticipated to return.

2.6. Noise

Ambient noise levels along Kalakaua Avenue in the vicinity of the project site are relatively high because it is at the heart of urban resort activity in Waikiki. In addition, noise from busy commercial establishments offering dining, entertainment, and shopping opportunities are also part of Waikiki's urban resort ambiance. Mostly during the day, noisier vehicles such as delivery trucks, tour buses, and refuse haulers converge to service the high-density resort core, as do responding emergency vehicles with sirens, at all hours of the day and night. Building equipment such as air conditioners, commercial kitchen and parking structure exhaust systems, and elevators are stationary noise sources, while portable blowers, mowers, trimmers and other power tools are used for property maintenance. Construction noise is also common in Waikiki as economic opportunities fuel investment in public infrastructure and amenities, as well as private improvements and redevelopment.

Impacts and Mitigation Measures

During the construction phase of the proposed project, typical construction noises will be audible in the area. However, noise from construction activities must comply with DOH noise regulations (Chapter 11-46 Community Noise Control, Hawaii Administrative Rules) as specified for construction-related activities.

If the proposed construction activity occurs while other nearby construction projects are also on-going, there may be a cumulative effect on the character of ambient noise. People in the vicinity may have a heightened awareness of construction activities occurring in the area. Some people could perceive this as a greater nuisance, even though noise generated at each construction site may be within limits of compliance.

Traffic associated with the proposed project is not anticipated to increase since no net increase in traffic will be attributable to the proposed improvements. The proposed improvements will not increase net floor area or parking capacity. The proposed elimination of 38 guest rooms within the project site will marginally reduce traffic attributed to those rooms.

2.7. Air Quality

Air quality in the vicinity of the project site is primarily affected by vehicular emissions generated along surrounding streets. Among the various air pollutants for which State and National standards have been established, carbon monoxide level is the primary concern in areas near heavy traffic flow. The federal standard for carbon monoxide is a maximum of 40 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for 1-hour samples and 10 $\mu\text{g}/\text{m}^3$ for 8-hour samples. State of Hawaii regulations, which are more stringent, limit carbon

monoxide to 10 µg/m³ for 1-hour samples and 5 µg/m³ for 8-hour samples. According to the DOH Clean Air Branch, the Waikiki Air Monitoring Station on Kalakaua Avenue reported that carbon monoxide levels have not exceeded State or Federal standards in the past several years.

Impacts and Mitigation Measures

The proposed project will have short-term construction-related impacts on air quality, including the generation of dust and the emissions from construction vehicles and equipment and from the vehicles of commuting construction workers. The construction contractor is responsible for complying with State Department of Health, Administrative Rules, Section 11-60-11.1 regarding air pollution control, specifically Section 11-60.1-33, regarding fugitive dust and the prohibition of visible dust emissions at property boundaries.

Mitigation measures to address short-term impacts to air quality include:

- Minimizing the movement of construction vehicles during peak traffic periods and,
- Controlling the generation of fugitive dust through frequent watering of exposed areas and constructing or planting landscaping over exposed soils as soon as possible.

In the long-term, it is not anticipated that traffic associated with the proposed project will adversely affect air quality since there is no anticipated increase in traffic attributable to the project in the vicinity of the project site.

2.8. Archaeological, Historic, and Cultural Resources

2.8.1. Archaeological Resources

According to the Archaeological Literature Review and Field Check for improvements to the Royal Hawaiian and Sheraton Hotel (Appendix B), the historic records indicate that the entire project area is culturally, historically and archaeologically significant. The following summarizes historic and cultural information regarding possible cultural resources, including human burial remains that may be associated with the project site (Diacritical markings for Hawaiian terms and names are used in this section. References to citations, on-site locations and appendices refer to those contained in the Archaeological Literature Review and field check (Appendix B)):

- The common place name for this area "Helumoa" is translated as "chicken scratch" with the provided explanation that "Chickens scratched to find maggots in the victim's body" in reference to the remains of human sacrifices at the Helumoa Heiau (Pukui et al. 1974:44). There are no known maps showing the precise location of Helumoa Heiau. Thomas Thrum (1906:44) relates that it was a "place of sacrifice" going back at least as far as A.D. 1610. Later Thomas

Thrum (1927:34) would note: "This temple was long ago demolished, not a stone being left to mark the site, which was doubtlessly near, if not *the* [italics in original] actual spot now graced by the new Royal Hawaiian Hotel". The historic information would suggest that the Helumoa Heiau may be located between the Southwest Royal Hawaiian Hotel and the South Sheraton proposed areas of work.

- Assertions that the royal residence of the ruling chiefs Kahekili and Kahahana, before him, and perhaps previous O'ahu ruling chiefs were located between the Royal Hawaiian Shopping Center and the Royal Hawaiian Hotel (ʻĪʻĪ 1959:17; Kanahale 1995:134).
- Fornander's account of "The Story of Kahahana" provides the detail that (circa 1785) the massive invasion force of the Maui chief Kahekili was encamped at ʻĀpuakēhau, where they were organizing and preparing to march inland. It was there at ʻĀpuakēhau that the O'ahu forces first attacked "the Maui troops collected at the *heiau*". There "a fight commenced to which Hawaiian legends record no parallel". (Fornander 1919 Volume VI, part 2; page 289).
- ʻĪʻĪ provides more specific data in his supportive testimony for LCA 228 awarded to Kaleiheana in 1847 declaring that "Kamehameha himself lived on this land". [between the Royal Hawaiian Shopping Center and the Royal Hawaiian Hotel] (Appendix A-2).
- ʻĪʻĪ comments in supportive testimony for LCA 228 awarded to Kaleiheana in 1847 that relatively high status attendants of Kamehameha I ("Their work was taking care of the house and preparing the food. These people were in constant contact with the chiefs and were close to each and every chief") continued to live on the property when Kamehameha I died. (ʻĪʻĪ, Appendix A-2)
- Kanahale (1995:99) writes of an "'ulu maika course that was part of the royal sports complex of Kahuamokomoko in Helumoa" and states that: "When excavations for the Royal Hawaiian Hotel were made in the early 1920s many 'ulu maika discs were found", indicating the prospect for further finds in the general vicinity.
- Land Commission Awards indicate a pattern of relatively dense and high status habitation within the project area.
- Reference in the October 1923 records of the Bernice Pauahi Bishop Museum that "...five individuals from Helumoa, Waikīkī, O'ahu were collected by Kenneth P. Emory. Museum information indicates they were victims of the 1853 smallpox epidemic..." (Federal Register January 28, 1998 Volume 63, Number 18). Given that the Royal Hawaiian was not opened until February 1, 1927, it is not clear that these remains were from construction of the Royal Hawaiian. Regardless the Helumoa remains could not have been recovered from very far away. The rationales for Emory's association of the remains with the smallpox epidemic are not known at this time. Because of the nature of the disease, small pox burial grounds could include many sets of remains indicating the prospect for further finds in the general vicinity.

- Reference in the 1970 records of the Bernice Pauahi Bishop Museum that: "...eight individuals from Waikīkī...[donated] by the Sheraton Hawai'i Corp...recovered during excavations for tank construction...". This would appear to relate to the original work at the Sheraton Waikiki that was completed in 1971.
- The understanding that several sets of remains were discovered during the prior re-development of the Royal Hawaiian Shopping Center (perhaps c. 1979) (personal communication from Ms. Lurline Salvadore formerly of the Kamehameha Schools' staff).
- The apparent discovery of human remains c. 1993 (personal communication from Mr. David Lee) during work on a sewer line in the basement of the accounting department of the Sheraton Waikiki just northwest of the South Sheraton area of proposed work indicating a heightened possibility of finds in this area. It is believed these remains were relocated to the Southwest Royal Hawaiian area of proposed work.
- This discovery of human remains still remains in the North Royal Hawaiian Hotel proposed area of work (SIHP # 50-80-14-5937) identified in April 2001 during excavations associated with the construction of the Abhasa Spa at the Royal Hawaiian Hotel (Elmore et al. 2001). The Elmore et al. (2001:9) study relates an anecdotal account of additional remains "in a nearby location".
- The substantial history of archaeological work in Waikīkī has indicated a relatively high density of burials within beach sand and Jaucas sand deposits such as the soils found within the entire project area. Much of Waikīkī was formerly quite low-lying, at or close to the water table. Lands that were slightly higher, such as the present project area were preferentially chosen for interment of the dead.

Impacts and Mitigation Measures

In view of the historic documents and the obvious cultural significance of the area, there will be extremely close and on-going coordination with the State Historic Preservation Division (SHPD), Oahu Island Burial Council (OIBC), Office of Hawaiian Affairs (OHA), and other concerned parties (especially those individuals and families who have been recognized by SHPD as being cultural or lineal descendants for other Waikiki projects).

The following summarizes potential impacts and mitigation measures addressing archeological and cultural resources:

- An archaeological inventory survey plan has been submitted to SHPD for approval (see Exhibit B). On-going coordination will be maintained with SHPD, OIBC, OHA, and other interested parties regarding the archaeological inventory survey prior to construction and on-site archaeological monitoring will be provided during construction activities.
- SHPD will determine appropriate mitigation of impacts on historic properties based on perceptions of the nature, location and extent of project-related impacts into relatively undisturbed strata that may hold

intact cultural resources. Clearly, large portions of the proposed areas of potential ground disturbance have very thick fill layers that effectively protect any underlying historic properties from shallow intrusions.

- It is understood that a pedestrian tunnel connecting the Sheraton Waikiki and Royal Hawaiian Hotel (running roughly NW/SE across the "Southwest Royal Hawaiian Hotel" area near the grand staircase) was effectively constructed on grade and then backfilled over with the backfill close to 8-feet (2.47 m) thick. The observed height of the "South Sheraton" area above the beach immediately to the south is also commensurate with the understanding that the existing "South Sheraton" pool is constructed within a thick fill deposit.
- Documentation of the thickness of fill deposits may go far in addressing SHPD's concerns for the possible impacts on historic properties. This would appear to be possible through examination of the results of planned geotechnical testing. The geotechnical monitoring plan has been submitted to SHPD for approval because of the potential cultural deposits that may be encountered (see Exhibit B). A compendium of data on the location and thickness of fill deposits will be compiled as an aid for the SHPD's determination of appropriate mitigation (if any).
- To the extent that subsurface impacts into relatively undisturbed sediments can be minimized, the extent of finds will be minimized. One approach is through the importation of fill and having much of the work within these clean fill deposits. Another approach is to bundle utilities within narrow corridors, if feasible. Another approach is to minimize the area of foundation footing within relatively undisturbed sediments.
- Traditional Hawaiian burials were typically quite shallow-in the nature of 1.5 to 3.5 feet below the original ground surface. The one in-situ burial (SIHP # 50-80-14-5937) reported in the proposed areas of work is reported at a depth of two feet (51 to 62 cm; Elmore et al. 2001:8) below ground surface. Thus, efforts to avoid impacts to human remains or other historic properties by minimizing depth of excavation will have little impact if the excavation exceeds a foot or so into natural sediments. It is our understanding that in the vicinity of SIHP # 50-80-14-5937, substantial importation of fill is indicated. Capping native sediments with fill deposits and running conduits and placing foundation footings within the fill deposits would effectively avoid potential adverse impacts to historic properties as may be present.
- If the nature and extent of most or all of the subsurface impacts is to be within fill layer already present or within imported fill then there is a good argument for no further archaeological work in those areas or, if any work is to be required, for an archaeological monitoring program. If subsurface impacts in one or more areas are to be spotty (as in the case of small excavations for landscaping with trees and shrubs) or largely linear (as in

the case of narrow utility corridors) there may be an argument for addressing the impacts within an archaeological monitoring program.

2.8.2. Historic Resources

The Royal Hawaiian Hotel is over fifty years old and is listed in the City's "Waikiki Special District Guidelines" among "structures, sites and landmarks" identified by the Department of Land and Natural Resources (DLNR) as "having scenic, cultural, historic or architectural significance" and "may possess qualities which make them eligible for listing on the register of historic places". The Royal Hawaiian Hotel is not listed on either the National or State Register of Historic Places.

Impacts and Mitigation Measures

The proposed improvements to the Royal Hawaiian Hotel, including the relocation of the porte-cochere, pool renovation, interior renovations and exterior repair of the awnings were presented at a meeting with the State Historic Preservation Division on March 30, 2007 (see Exhibit B). It was explained that while the proposed improvements are not specifically intended to restore the building to its original form, they will be consistent with the historic character of the building. Moreover, some of the previous interior modifications that detract from that historic character will be removed. The Waikiki Special District minor permit application required for the proposed improvements at the Royal Hawaiian Hotel will be submitted by the City's Department of Planning and Permitting to DLNR for review and comment.

2.8.3. Cultural Resources

The area including and surrounding the project site has undergone extensive urbanization and development over the years, with the construction of the existing hotel facilities, infrastructure, and Royal Hawaiian Shopping Center. Accordingly, the traditional and cultural practices that are traditionally found in rural or less developed areas (for example traditional and customary gathering rights, religious practices, etc.) are virtually non-existent. There are no surface archaeological sites or known sacred sites within the project site. With regard to any potential traditional fishing and gathering resources associated with the ocean fronting the project site, public access to ocean resources will continue to be available along the shoreline. It should be noted, however, that a modern revival of traditional cultural practices is featured at various venues within both resort properties, primarily for the purpose of entertainment, but also for cultural education and interpretation, including hula, chants, and rituals.

Impacts and Mitigation Measures

The proposed renovations are not anticipated to adversely impact cultural practices within the project site. While the possibility for uncovering human burial remains within the project site is high, the proposed action was designed to minimize disturbance of previously undisturbed soils. A presentation was made

to OIBC on June 13, 2007 (see Exhibit B). Consultation with SHPD and OIBC will continue throughout the process. Consultation with potential lineal and cultural descendants, as well as interested Hawaiian organizations will also be pursued. Such consultation is intended to determine appropriate mitigation of cultural impacts associated with any discover of human burial remains. A mutually acceptable location for re-interment will be agreed upon with Kamehameha School. The proposed widening of the public walkway along the shoreline fronting the Sheraton Waikiki Hotel will improve public access to ocean resources fronting the project site.

Great effort has been taken by the Project Design Team to minimize impacts to the potential discovery of human burial remains by constructing on previously imported fill and minimizing excavation other than what is necessary for public health, safety and welfare (i.e. the grease trap interceptor).

There will be a concerted effort to re-establish some of the traditional cultural practices, including story telling, traditional crafts, traditional plants (including some of the original coconut trees from the site), and traditional arts and dance into the visitor experience.

2.9. Views

None of the streets or locations in the immediate vicinity of the project site are identified as significant public view corridors in the Waikiki Special District (WSD) guidelines pursuant to Section 7.80-3(a) of the Land Use Ordinance.

Impacts and Mitigation Measures

The proposed renovations are intended to improve the visual character of the Royal Hawaiian and Sheraton Waikiki hotel properties to convey a Hawaiian sense of place consistent with the WSD guidelines.

2.10. Socio-Economic Characteristics

Population and Housing: The 2000 Census reported the population of Oahu at 876,156. According to a demographic profile of various Oahu neighborhoods prepared by the City's Department of Planning and Permitting (2000 Census data), Neighborhood Area 9, Waikiki, had a population of 19,720. Compared with Oahu as a whole, the Waikiki population is generally older; has a racial mix with proportionately more Whites and fewer Asians and Native Hawaiian or Pacific Islanders. There is a much lower proportion of family households and an even lower proportion of households with children under 18. Proportionately, homeownership rates are lower, and vacancy rates are greater (See Table 2).

Economy: The Waikiki Neighborhood Area 9 is comprised of six census tracts including 18.01, 18.02, 19.01, 19.02, 20.1, and 20.2. According to the 2000 Census data, the median household income for Waikiki Neighborhood Area 9, ranges from \$25,865 to

**TABLE 2
DEMOGRAPHIC CHARACTERISTICS: 2000**

Subject	Neighborhood Area #9		Oahu	
	Number	Percent	Number	Percent
Total population	19,720	100	876,156	100
AGE				
Under 5 Years	688	3.5	56,849	6.5
5 – 17 years	1,187	6.0	151,909	17.3
18 – 64 years	14,222	72.1	549,661	62.7
65 years and over	3,623	18.4	117,737	13.4
Median age (years)	42.2	--	35.7	--
RACE (alone or in combination with other races)				
White	10,005	50.7	308,838	35.2
Black or African American	605	3.1	29,764	3.4
American Indian and Alaska Native	292	1.5	15,921	1.8
Asian	8,876	45.0	539,384	61.6
Native Hawaiian and other Pacific Islander	1,725	8.7	189,292	21.6
Other	534	2.7	32,003	3.7
HOUSEHOLD (BY TYPE)				
Total Households	11,397	100	286,450	100
Family households (families)	4,087	35.9	205,672	71.8
With own children under 18 years	1,167	10.2	91,022	31.8
Married-couple family	3,129	27.5	156,195	54.5
With own children under 18 years	777	6.8	70,442	24.6
Female householder, no husband present	643	5.6	35,138	12.3
With own children under 18 years	293	2.6	15,235	5.3
Non – families	7,310	64.1	80,778	28.2
Living with non-relatives	1,475	12.9	18,815	6.6
Living alone and 65 years and over	1,503	13.2	20,021	7.0
Average persons per household	1.72	--	2.95	--
HOUSING OCCUPANCY AND TENURE				
Total Housing Units	18,370	100	315,988	100
Occupied units	11,397	62.0	286,450	90.7
By owner	3,819	20.8	156,290	49.5
By renter	7,578	41.3	130,160	41.2
Vacant units	6,973	38.0	29,538	9.3
Available housing vacancy rate (%)	23.1		4.9	--
Homeownership rate (%)	33.5		54.6	--

Source: 2000 Census SF1 File, City & County of Honolulu, Department of Planning & Permitting, Planning Division

\$37,018, which is significantly lower than the median household income of \$51,914 for Oahu.

Impacts and Mitigation Measures

Population and Housing: No impacts on the population and the housing inventory in Waikiki are anticipated to result from the proposed action, as it does not involve residential uses.

Economy: In the short term, an estimated expenditure of \$84 million during the anticipated 18-month construction period will confer some positive benefits to the local economy. This would include generating indirect sales of approximately \$80.6 million, for a total expenditure and sales of approximately \$164.6 million. An annual average of approximately 406 construction jobs and 552 support jobs would also be created, with average annual total earnings of \$34.2 million during the construction period. State and County Tax revenue associated with construction expenditures would be approximately \$9.5 million over the construction period.

2.11. Public Services

2.11.1 Police Services

Waikiki is located within the Honolulu Police Department's District 6, and is patrolled by officers stationed at the substation located on Kuhio Beach. In addition, several volunteer citizens groups, including the Waikiki Citizens Patrol and Aloha Patrol, regularly walk around Waikiki during some evenings, offering advice and directions to tourists and directing police attention as needed.

Impacts and Mitigation Measures

In the short-term, construction-related impacts such as dust emissions, noise, and traffic will likely increase demand for police services in the vicinity of the project site. In the long-term, the proposed project will continue as an existing resort use with no anticipated change in the level of demand for police services.

The proposed internal roadway improvements will increase queuing capacity within the project site for buses and other vehicles and improve wayfinding to facilitate traffic flow. This is anticipated to reduce the potential for queuing along driveways from impacting adjacent streets, and improve pedestrian safety.

2.11.2 Fire Services

Waikiki is located within the Honolulu Fire Department's (HFD) Battalion Two. It is served by the Waikiki and McCully Fire Stations located on Kapahulu Avenue and Date

Street, respectively. The former is equipped with a fire engine and ladder truck, while the latter is equipped with a fire engine.

Impacts and Mitigation Measures

To the extent that the proposed renovations are required to comply with current building codes for fire protection and the vehicular circulation renovations will improve access for fire trucks, the proposed action will positively impact demand for fire protection services. The Honolulu Fire Department will be consulted regarding fire protection requirements during the design phase of the proposed renovations. In addition, the HFD's Fire Communications Center will be notified regarding any interruption of the existing fire hydrant system during construction

2.11.3 Medical Services

The proposed project site is less than five miles from four of the state's major hospitals: Straub Hospital, Queen's Hospital, Kapiolani Hospital for Women and Children, and the Kaiser Permanente Honolulu Clinic. These hospitals offer a full range of emergency and acute-care services. Physicians' offices are also located throughout the Honolulu area. Within Waikiki, Queen's Hospital operates a walk-in clinic at the Hilton Hawaiian Village, less than one mile west (Ewa) of the project site.

Impacts and Mitigation Measures

No significant impacts to medical services are anticipated as the proposed project will continue as an existing resort use.

2.12. Public Educational Services

The project is located in the State Department of Education's Honolulu District, and is serviced by Ala Wai Elementary School, Washington Middle School, and Kaimuki High School.

Impacts and Mitigation Measures

No impacts on public educational services are anticipated as the proposed project involves no residential uses.

2.13. Recreation

Various public recreational opportunities are provided throughout Waikiki. These include Waikiki, De Russy, Sans Souci Beach, and Queens Surf beaches, Kapiolani Park, Ala Wai Golf Course, Ala Wai Field and Golf Course, Ala Wai Canal, and Ala Wai Boat Harbor. Public beach accesses are located adjacent to the Diamond Head and Ewa boundary of the project site. Public access is available along the shoreline fronting the project site. In the area fronting the Sheraton Waikiki, a walkway atop a concrete seawall provides access during high tide when waves reach the seawall.

Impacts and Mitigation Measures

No impacts on the demand for recreational opportunities are anticipated because the proposed project involves a reduction of 38 guest rooms. The existing public beach access will not be impacted by the proposed renovation. The proposed widening of the existing public walkway along the Sheraton Waikiki shorefront will improve lateral public beach access.

2.14. Traffic

Access to the Royal Hawaiian Hotel and Sheraton Waikiki is provided through Royal Hawaiian Avenue and Don Ho Lane. An existing gated access to the Sheraton Waikiki Parking Garage is also provided through Helumoa Road. Service access for back-of-house operations at the Sheraton Waikiki is provided via Kalia Road and Helumoa Road.

Traffic on Kalakaua Avenue and Lewers Street operates fairly well during the peak hours of traffic and are impacted by high visitor pedestrian traffic crossing the intersections.

The tour bus terminal on the first floor of the Sheraton Waikiki Parking Garage, utilizes the same entrance as guest vehicles from Don Ho Lane. The buses exit onto Helumoa Road. Occasionally, the buses queue from the bus terminal area onto Royal Hawaiian Avenue between Don Ho Lane and Kalakaua Avenue due to congestion in the bus terminal area. In addition, there are times in the morning when the buses queue on Royal Hawaiian Avenue fronting the Duty Free Shops mauka of Kalakaua Avenue. The congestion outside of the bus terminal area on Don Ho Lane and Royal Hawaiian Avenue affects access to the Sheraton Waikiki's and Royal Hawaiian Hotel's porte-cochere, the Sheraton's parking garage, the Royal Hawaiian Shopping Center's parking garage, Kalakaua Avenue and Lewers Street. In addition, large vehicles create additional blind spots for pedestrians attempting to cross Royal Hawaiian Avenue and Don Ho Lane.

Impacts and Mitigation Measures

The proposed renovations at the Sheraton Waikiki and Royal Hawaiian Hotels will eliminate a total of 38 guest rooms. Therefore, no significant additional new trips on the public roadways surrounding the hotels and will be generated.

The relocation of the Royal Hawaiian Hotel porte-cochere will reduce and better define the conflict points, thereby improving pedestrian and vehicular safety near the Sheraton Waikiki porte-cochere. The increase in vehicular queuing capacity fronting the Sheraton Waikiki porte-cochere and the relocation of the Royal Hawaiian Hotel porte-cochere will improve traffic operations at the Royal Hawaiian Avenue/Don Ho Lane intersection and reduce the potential of queue spill-back onto public roadways.

Reversing the direction of flow for the bus terminal in the Sheraton Waikiki parking garage will reduce the potential for congestion that causes buses to queue onto Don Ho Lane and Royal Hawaiian Avenue. Instead, buses will queue within the service lane between Helumoa Road and Kalia Road away from the pedestrians and other vehicular traffic. In addition, the buses will queue on Sheraton Waikiki property, as opposed to public roadways. Reversing the flow of the buses will not result in a significant traffic impact on the public roadways surrounding the Sheraton Waikiki and Royal Hawaiian Hotels since the buses currently utilize these roadways in the opposite direction.

2.15. Utilities

2.15.1 Storm Drainage System

The storm drainage systems of the Royal Hawaiian and Sheraton Waikiki Hotels are not connected to any municipal system. Rainfall runoff within the hotel properties is dissipated into on-site seepage pits, leaching fields, percolation beds, or injection wells. With the exception of periods of high tide compounded with heavy and extended rainfall periods, when temporary and localized ponding may occur, the hotel property does not experience any drainage problems.

Impacts and Mitigation Measures

No significant impacts on the municipal drainage systems serving the project site are anticipated. The proposed renovation will not significantly increase the net area of impervious surface. Modification of drainage patterns and facilities within the project site will direct, detain and facilitate percolation of drainage to minimize impacts on municipal drainage systems.

2.15.2 Sanitary Sewer System

Wastewater services for the Royal Hawaiian and Sheraton Waikiki Hotels are integrated and shared. These systems include 6- and 8-inch sewer lines in Kalia Road, and a 15-inch sewer line in Helumoa Road on the west side of the Sheraton Waikiki. Both the Kalia Road and Helumoa Road sewer lines are connected to the municipal sewer lines in Lewers Street, which include two parallel 15-inch sewer lines between Helumoa Road and Kalakaua Avenue, and an 8- and a 10-inch sewer line between Helumoa Road and Kalia Road.

Impacts and Mitigation Measures

Based on wastewater computations prepared by the City, a portion of the 15-inch sewer line between Kalakaua Avenue and Helumoa Road, and a segment of the 6-inch sewer line in Helumoa Road would be surcharged or its capacity would be theoretically exceeded based on parameters specified in the model. Nevertheless, no upgrades or improvements to the existing system are anticipated to be required because the proposed action will not increase in sewage flow quantities.

2.15.3 Water System

The Royal Hawaiian Hotel receives water from a private water system identified as “Public Water System No. 330.” The system is classified as a Nontransient Noncommunity Water System and is owned by Kyo-ya Co., Inc. The system serves the Princess Kaiulani Hotel, the Sheraton Moana Hotel and the Royal Hawaiian Hotel. The private system serves approximately 2,830 people and has three services connections.

Water supply for the Sheraton Waikiki is provided by the Honolulu Board of Water Supply (BWS). Fronting the Royal Hawaiian Shopping Center along Kalakaua Avenue, the BWS water system includes an 8-inch water line located on the makai or ocean side the street. There is an abandoned 6-inch waterline in Kalakaua Avenue.

BWS records indicate the following meters servicing the Sheraton Waikiki:

- Two 6-inch turbine meters located along Helumoa Street
- 6-inch compound meter located along Kalakaua Avenue
- 6-inch detector check meter located at Kalakaua Avenue

Impacts and Mitigation Measures

Engineering personnel indicate that in times of high demand and heavy usage, the upper floors experience some pressure problems, which require the use of the hotel booster system. Hotel engineering personnel have mentioned that the utilities of the Sheraton Waikiki and the Royal Hawaiian Hotel are integrated and could be shared. If required, the Sheraton Waikiki Hotel water system could be supplemented by drawing from the private water system supplying the Royal Hawaiian Hotel.

3. RELATIONSHIP TO LAND USE PLANS, POLICIES AND CONTROLS

This section discusses State and City and County of Honolulu land use plans, policies and controls relating to the proposed project.

3.1. State Land Use District

The Hawaii Land Use Law, contained in Chapter 205, Hawaii Revised Statutes, classifies all land in the State into four land use districts: Urban, Agricultural, Conservation, and Rural. The project site is designated within the Urban District which includes “lands characterized by city-like concentrations of people, structures, streets, urban level of services and other related land uses.” The proposed project is consistent with the Urban classification (see Figure 8).

3.2. City and County of Honolulu

3.2.1 Primary Urban Center Development Plan

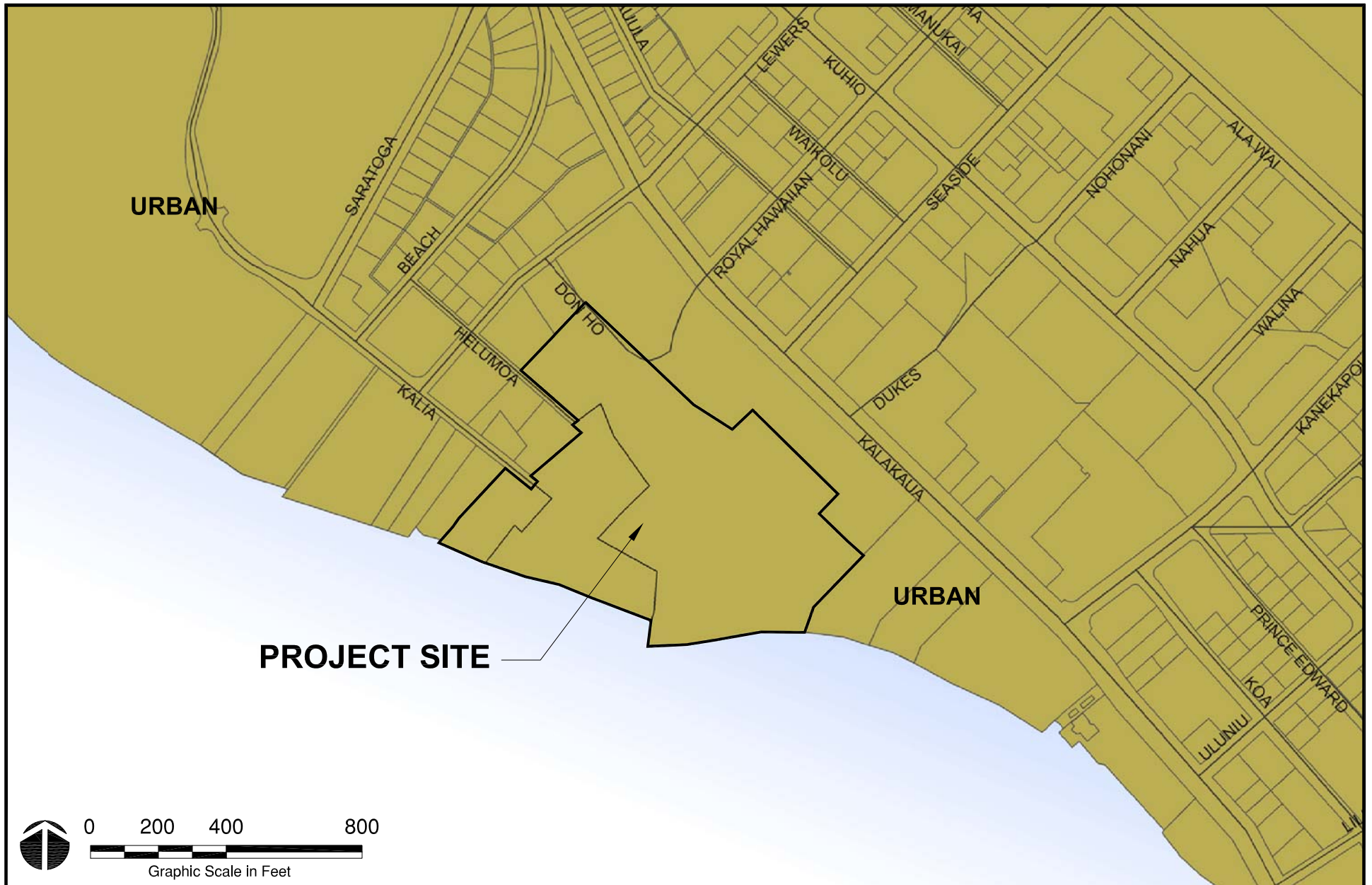
On June 21, 2004, the City & County of Honolulu’s Primary Urban Center (PUC) Development Plan went into effect. The Plan is one of eight regional plans covering the Island of Oahu. As mandated by the City Charter, the plans set forth City policy to guide zoning, land use, and public investment in manner that is consistent with and supports the General Plan of the City & County of Honolulu.

The PUC Development Plan Land Use Map designates the project site “Resort”. This designation is a mixed-use designation that is consistent with the resort and commercial uses at the Royal Hawaiian Hotel and Sheraton Waikiki:

“Resort consists primarily of resort hotels, timeshares, and other apartments used as temporary visitor units (TVUs); and supporting commercial uses, such as shops, restaurants, and entertainment. This designation only applies to the Waikiki, Marina, Hobron, and Ft. DeRussy neighborhoods”.

3.2.2 Waikiki Livable Community Project

The Waikiki Livable Community Project (WLCP) is a planning study prepared by the City and County of Honolulu Department of Transportation Services through a grant from the Federal Highway Administration’s Transportation and Community and System Preservation Pilot Program and federal funding from the Oahu Metropolitan Planning Organization. The WLCP takes a broad view of the diverse needs that the transportation system in this bustling urban resort and residential community serves, with the goal of improving its uniquely “Hawaiian-sense” of livability. This sense of livability draws from concepts contained in George Kanahale’s 1994 watershed book *Restoring Hawaiianness to Waikiki*, in which Kanahale called for Waikiki to become a “community of Aloha.” In particular, the WLCP recognized that this sense of livability is experienced daily and most directly by the thousands of visitors, residents, and workers, who, as pedestrians walk along Waikiki’s streets and sidewalks. Hence, it adopted a



“Pedestrian First” policy advocated by a joint City-State task force report to the Legislature entitled “Recapturing the Magic of Waikiki” (December, 1999). The WLCP pursued a community-based effort to solicit comprehensive input on the issues, options, and opportunities for creating and achieving a shared vision of a more livable Waikiki and charting a new course toward that vision. These are documented in the Livability and Mobility Report.

The Royal Hawaiian Hotel and Sheraton Waikiki properties do not have frontages along major streets such as Kalakaua Avenue or Lewers Street. The properties, however, abut existing public shoreline accesses along the Diamond Head and Ewa boundary and front the shoreline, along which the public has access. The proposed improvements include widening the existing concrete walkway atop an existing seawall to six feet onto the resort property to improve public access along the portion of shoreline fronting the Sheraton Waikiki. In this area, the beach is very narrow and at higher tides, waves wash over the beach to the existing seawall. Widening the walkway is consistent with the WLCP’s “Pedestrian First” concept for Recreational Pedestrian Routes in Waikiki. The proposed walkway also supports the concept of a public-private partnership in creating pedestrian routes in Waikiki.

3.2.3 Special Management Area

The majority of the project site lies within the boundary of the City and County of Honolulu’s Special Management Area (SMA) (see Figure 9). Proposed improvements within the SMA, are subject to SMA permit requirements pursuant to Section 205A, HRS, and Chapter 25 Revised Ordinances of Honolulu.

Of the proposed improvements, those that are typically exempt from an SMA Use Permit are interior improvements and repair and maintenance. Proposed improvements outside of the SMA are not subject to SMA Use Permit requirements. These include constructing the new porte-cochere on the north side of the Royal Hawaiian Hotel, and improvements to the driveway area fronting the Sheraton Waikiki.

The objectives, policies and SMA guidelines, as set forth in *Chapter 205A, Hawaii Revised Statutes*, are intended to ensure that adequate shoreline access is provided, public recreation and wildlife preserves are reserved, and that minimum adverse effects to water, visual and natural resources are assured. The project’s consistency with the Coastal Zone Management Program is discussed below.

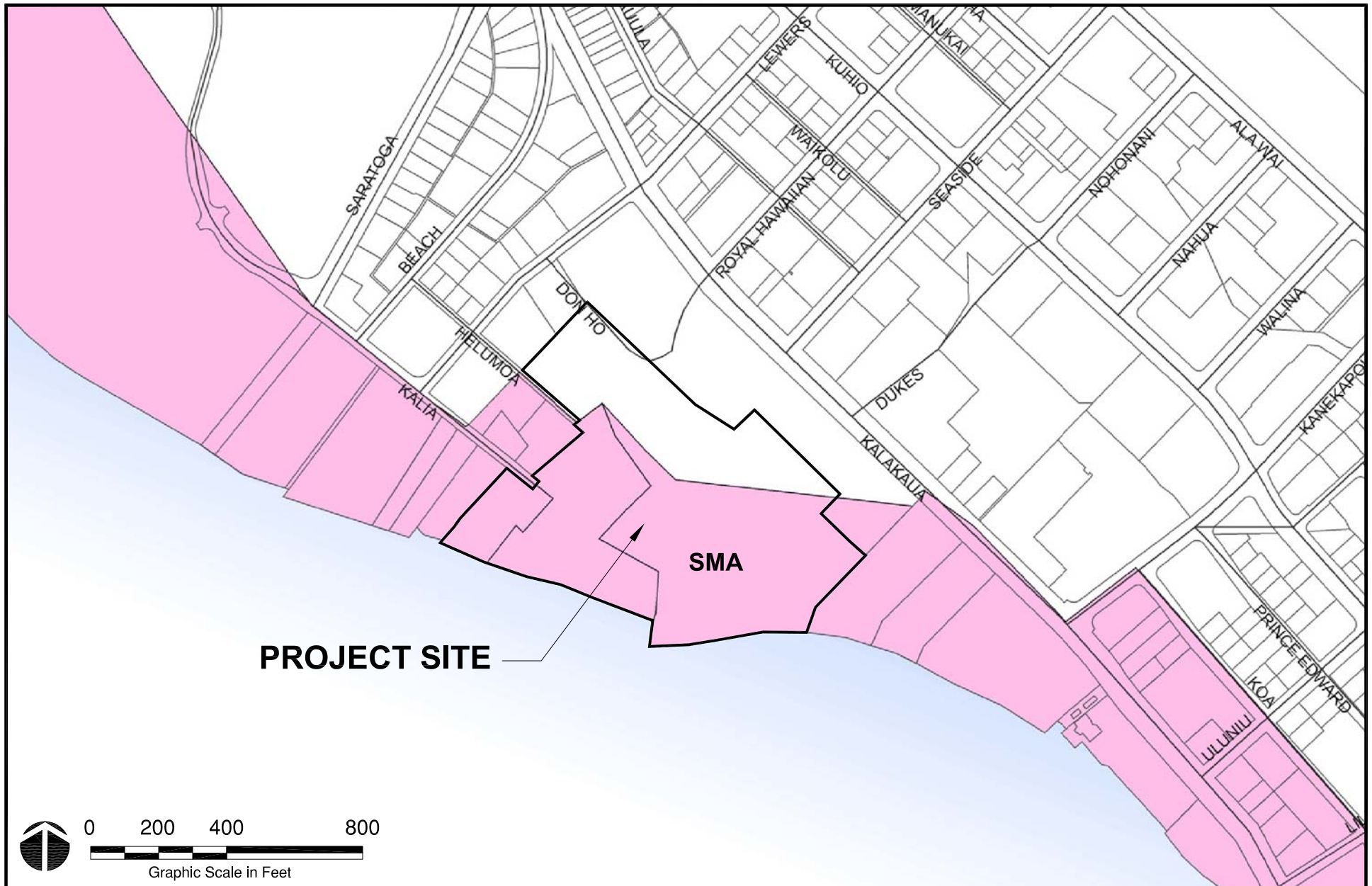
(1) Recreational Resources

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies

- (A) *Improve coordination and funding of coastal recreational planning and management; and*



0 200 400 800

Graphic Scale in Feet



WILSON OKAMOTO
CORPORATION
ENGINEERS • PLANNERS

ROYAL HAWAIIAN HOTEL AND SHERATON WAIKIKI MASTER PLAN IMPROVEMENTS

SPECIAL MANAGEMENT AREA

FIGURE

9

- (B) *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*
- (i) *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
 - (ii) *Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;*
 - (iii) *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
 - (iv) *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
 - (v) *Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*
 - (vi) *Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters.*
 - (vii) *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*
 - (viii) *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of Section 46-6, HRS.*

Comment: Development of the proposed project is anticipated to have a beneficial impact on coastal recreational opportunities by widening an existing concrete walkway fronting the Sheraton Waikiki that provides alongshore public access during higher tides. The project will have no adverse effect on access to recreational resources and construction and operation of the facility will have no adverse effect on the quality of public recreational opportunities.

(2) Historic Resources

Objective:

Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

- (A) *Identify and analyze significant archaeological resources;*
- (B) *Maximize information retention through preservation of remains and artifacts or salvage operations; and*
- (C) *Support state goals for protection, restoration, interpretation, and display of historic resources.*

Comment: The proposed project has been designed to minimize potential impacts on archaeological, historic, and cultural resources as discussed in Section 2.8.

(3) Scenic and Open Space Resources

Objective:

Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

- (A) *Identify valued scenic resources in the coastal zone management area;*
- (B) *Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;*
- (C) *Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and*
- (D) *Encourage those developments which are not coastal dependent to locate in inland areas.*

Comment: The proposed project will have no significant impact on open space or scenic resources. None of the streets or locations in the immediate vicinity of the project site are identified as significant public view corridors in the Waikiki Special District (WSD) guidelines pursuant to Section 7.80-3(a) of the Land Use Ordinance. The proposed renovations are intended to improve the visual character of the Royal Hawaiian and Sheraton Waikiki Hotels to convey a Hawaiian sense of place consistent with the WSD guidelines.

(4) Coastal Ecosystems

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

- (A) *Improve the technical basis for natural resource management;*
- (B) *Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;*
- (C) *Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and*
- (D) *Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.*

Comment: There is the potential for storm water discharge to impact the marine environment both during the short-term construction period, when site preparation will be required. Project construction is anticipated to disturb the more than one-acre of the project site. As such, a National Pollutant Discharge Elimination System (NPDES) Permit will be required from the State of Hawaii Department of Health (DOH). A Best Management Practices (BMP) Plan, which will include measures to mitigate potential water quality impacts, will be submitted to the DOH in conjunction with the NPDES application. BMP measures will include such practices as phased grading, soil stabilization using sheets or fabric, vegetative controls, and proper vehicle maintenance. In the long-term, the project will not significantly adversely impact the nearby coastal ecosystems.

(5) Economic Uses

Objective:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

- (A) *Concentrate coastal dependent development in appropriate areas;*
- (B) *Ensure that coastal dependent developments such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and*

- (C) *Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:*
- (i) *Use of presently designated locations is not feasible;*
 - (ii) *Adverse environmental effects are minimized; and*
 - (iii) *The development is important to the State's economy.*

Comment: In the short term, an estimated expenditure of approximately \$49 million during the anticipated 24-month construction period will confer some positive benefits to the local economy. This would include generating indirect sales of approximately \$48.0 million, for a total expenditure and sales of approximately \$97.0 million. An annual average of approximately 152 construction jobs and 206 support jobs would also be created, with average annual total earnings of \$14.5 million during the construction period. State and County Tax revenue associated with construction expenditures would be approximately \$5.0 million over the construction period.

The existing resort use is considered a coastal dependent development within Waikiki, where such resort use are appropriately concentrated under existing land use planning and zoning ordinances.

(6) Coastal Hazards

Objectives:

Reduce hazard to life and property from tsunامي, storm waves, stream flooding, erosion, subsidence and pollution.

Policies

- (A) *Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;*
- (B) *Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards;*
- (C) *Ensure that developments comply with requirements of the Federal Flood Insurance Program;*
- (D) *Prevent coastal flooding from inland projects; and*
- (E) *Develop a coastal point and nonpoint source pollution control program.*

Comment: The proposed improvements will comply with City flood ordinances, as discussed in Section 2.4, Flood Hazard.

Managing Development

Objective:

Improve the development review process, communication and public participation in the management of coastal resource and hazards.

Policies:

- (A) *Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;*
- (B) *Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and*
- (C) *Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.*

Comment: Government agencies, organizations and the general public have been notified of the proposed project and given an opportunity to comment on the project through the environmental review process. The SMA Use Permit process will provide additional opportunities for agency and public input.

(8) Public Participation

Objective:

Stimulate public awareness, education, and participation in coastal management.

Policies:

- (A) *Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;*
- (B) *Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal-related issues, developments, and government activities; and*
- (C) *Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.*

Comment: This EA will be circulated to various government agencies, organizations, and individuals. The public participation objective will also be addressed during the processing of the SMA Use Permit, which will include public notification as well as a public hearing.

(9) Beach Protection

Objective:

Protect beaches for public use and recreation.

Policies:

- (A) *Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;*
- (B) *Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and*
- (C) *Minimize the construction of public erosion-protection structures seaward of the shoreline.*

Comment: The proposed improvements do not involve the construction of new shoreline erosion-protection structures. An existing seawall is located along the shoreline fronting the Sheraton Waikiki. A concrete walkway atop the seawall provides public access along the shoreline during high tides, when waves reach the seawall. Development of the proposed project is anticipated to have a beneficial impact on coastal recreational opportunities by widening the existing concrete walkway.

(10) Marine Resources

Objective:

Implement the State's ocean resources management plan.

Policies:

- (A) *Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;*
- (B) *Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*
- (C) *Coordinate the management of marine and coastal resources and activities management to improve effectiveness and efficiency;*
- (D) *Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*
- (E) *Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and*

- (F) *Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Comment: The proposed action reflects an overall conservation ethic and practice of stewardship in the protection, use and development of coastal resources that are ecologically and environmentally sound and economically beneficial. This is discussed in comments to previous SMA policies regarding: (1) Recreational Resources; (2) Historic Resources; (3) Scenic Resources; (4) Coastal Ecosystem; (5) Economic Resources; and, (6) Beach Erosion.

3.2.4 Land Use Ordinance, Waikiki Special District

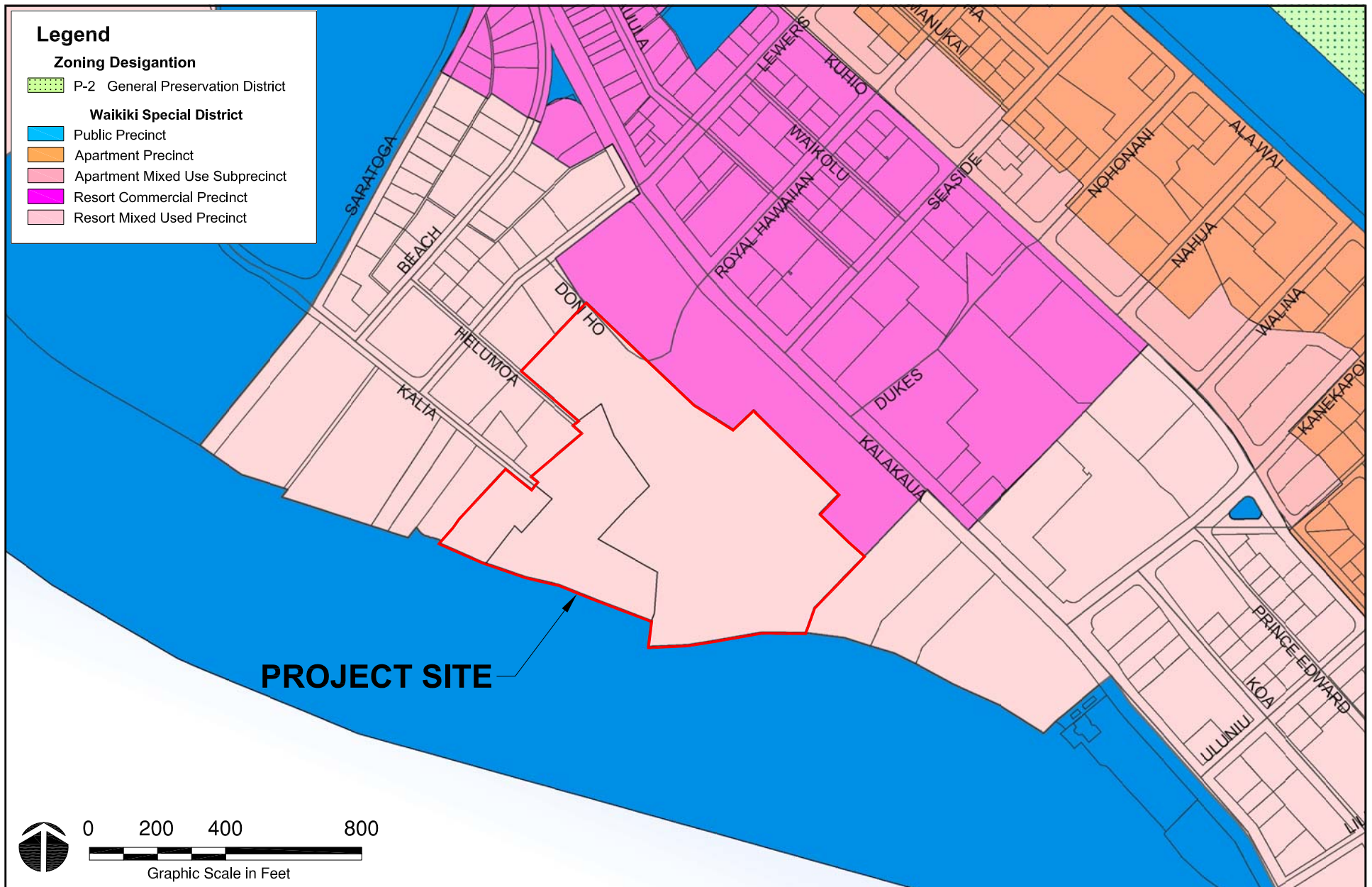
The project site is located within the Waikiki Special District (WSD), which provides unique zoning precincts with associated land use and design standards that are generally more stringent than those applicable to the rest of Oahu. The District was established in 1976 to preserve and enhance the character of Waikiki, and to maintain a balance in Waikiki's mix of resort, commercial, residential, and recreational uses. In February 1996, the City Planning Department published the "Waikiki Planning and Program Guide" to provide an overview of recent efforts toward the continued improvement and enhancement of Waikiki. Among its recommendations were amendments to the WSD to promote renovation, replacement, and enhancement in the resort districts and to promote a Hawaiian sense of place and preserve views and unique Hawaiian features.

The project site lies within the WSD's Resort/Commercial Precinct (see Figure 10). The proposed project revitalizes an existing resort use, which is a "Permitted Principal Use" within that precinct. Since both the Royal Hawaiian Hotel and Sheraton Waikiki were developed prior to the creation of the WSD, however, they are non-conforming with regard to various WSD design standards such as density, height setbacks, and shoreline setbacks. None of the proposed improvements will increase the degree of non-conformity. Moreover, the proposed improvements are intended to incorporate features that will revitalize the existing resort to convey a greater Hawaiian sense of place consistent with the WSD design guidelines. Approval of a WSD Minor Permit(s) will be required to implement the proposed improvements.

3.2.5 Shoreline Setback Variance

Pursuant to Part 2 of DPP's Shoreline Rules and Regulations, Chapter 17, Relating to Shoreline Setbacks and the SMA, shoreline setback variances may be granted for "structures and activities" within the shoreline setback area, which is measured forty feet inland of the certified shoreline. The shoreline depicted on the project plans at the Royal Hawaiian Hotel and the Ewa end of the Sheraton Waikiki property is recommended by, and under discussion with the State of Hawaii. It is for "development purposes only" and lies well mauka of the previous shoreline certification. It is shown simply for the development purposes being considered in this assessment only.

Consequently, the environmental review is more inclusive of what is considered within the shoreline setback. Interior improvements are not considered structures while repair of non-conforming structures are considered “minor structures” that are not subject to the variance requirements. Of the proposed improvements, those that are subject to the shoreline setback variance include the seaward portion of the resort fantasy pool, the Sheraton Waikiki pool and deck reconstruction, and proposed elevated exterior terrace adjacent to the Esprit Lounge.



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4. ANTICIPATED DETERMINATION OF FONSI

A. Applicant

Kyo-ya Hotels & Resorts, LP

B. Accepting Authority

City and County of Honolulu, Department of Planning and Permitting

C. Description of the Proposed Action

Renovation of two existing resort hotels consisting of exterior improvements to:

- Visitor arrival and registration areas;
- On-site vehicular and pedestrian circulation;
- Pool, garden and recreation areas; and,
- Lateral public shoreline accesses.

Reconfiguration of ground level interior areas including lobby, restaurant, and retail uses in both the Royal Hawaiian Hotel and Sheraton Waikiki, which will eliminate a total of 38 guest units. A new kitchen grease interceptor will be installed in the existing basement adjacent to the current Sheraton Waikiki loading dock.

The improvements are proposed to enhance the visitor arrival experience, including conveying a greater Hawaiian sense of place pursuant to the City's Waikiki Special District Guidelines, facilitate vehicular and pedestrian circulation and wayfinding, provide visual linkages, and ease public shoreline access.

D. Determination and Reasons Supporting Determination

Potential impacts of the proposed project have been evaluated in accordance with the significance criteria of Section 11-200-12 of the Department of Health's Administrative Rules. In general, the proposed project will not:

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

The project will renovate existing resort properties and will not involve an irrevocable commitment to or loss or destruction of any natural or cultural resources. Appropriate measures will be taken to mitigate any impacts on existing trees, particularly coconut palms, which have a cultural association with the project site. An archaeological inventory survey will be conducted pursuant to an SHPD-approved archaeological inventory survey plan. On going coordination will be maintained with SHPD, OIBC, OHA, and other interested parties regarding the archaeological inventory survey prior to construction and on-site archaeological monitoring will be provided during construction activities. Archaeological monitoring during any excavation into native soils not overlain by prior construction fill material will assure that any cultural materials encountered,

including human burials are appropriately treated. This will include stopping work and reporting inadvertent finds to the SHPD. In the case of any human burials encountered, further consultation will be pursued with the Oahu Island Burial Council.

(2) *Curtail the range of beneficial uses of the environment*

The proposed project will not curtail the beneficial uses of the environment. The proposed project involves the renovation of an existing use that is consistent with State and County land use plans policies and controls.

(3) *Conflict with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders*

The proposed project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii. As presented in this EA, the project's potential temporary adverse impacts are associated only with short-term construction-related activities and can be mitigated through adherence to standard construction mitigation practices.

(4) *Substantially affect the economic or social welfare of the community or state*

The proposed project would provide short-term economic benefits in the form of construction jobs, and promote the long-term economic viability. The proposed project would also positively impact the social welfare of the region by enhancing an existing resort complex and the economic vibrance of Waikiki as a whole, consistent with the intent of the Waikiki Special District.

(5) *Substantially affect public health*

No impacts to the public's health and welfare are anticipated. The proposed installation of a kitchen grease interceptor pursuant to State DOH requirements will have a potential positive impact on public health and welfare.

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

The proposed project will not involve substantial secondary impacts, as it will essentially continue an existing resort use.

(7) *Involve a substantial degradation of environmental quality*

Construction activities associated with the proposed project are anticipated to result in short-term impacts to noise levels, air quality, water quality, and traffic in the immediate project vicinity. With the incorporation of mitigation measures during the construction period, the project will not result in long-term degradation to the environmental quality.

- (8) *Individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions*

No cumulative effects are anticipated, inasmuch as the proposed project involves the continuation of an existing resort use consistent with land use plans, policies, and controls.

- (9) *Substantially affect a rare, threatened, or endangered species, or its habitat*

There are no known rare, threatened or endangered species of flora or fauna or associated habitat identified on the project site.

- (10) *Detrimentially affect air or water quality or ambient noise levels*

Operation of construction equipment would temporarily elevate ambient noise and concentrations of exhaust emissions in the immediate vicinity of the project site. Operation of the proposed project will not significantly impact air or water quality or ambient noise levels in the vicinity over the long-term.

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

The proposed improvements will comply with City flood ordinances. No lowering of existing ground floor levels are proposed.

- (12) *Substantially affect scenic vistas and view planes identified in county or state plans or studies*

The proposed project is intended to enhance the aesthetic character of an existing resort use complex consistent with the intent of the Waikiki Special District. None of the streets or locations in the vicinity of the project site are identified as major public view corridors.

- (13) *Require substantial energy consumption.*

Construction and operation of the project will not require substantial increases in energy consumption.

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5. ALTERNATIVES TO THE PROPOSED ACTION

5.1 No Action Alternative

The no action alternative will forego implementation of the proposed improvement and will not achieve the objectives of renovating the Royal Hawaiian Hotel and Sheraton Waikiki resort properties. The objectives include: conveying a Hawaiian “sense of place” in the royal grounds arrival area for the benefit of guest and the general public, which can access this area. The proposed driveway improvements and modification of the tour bus (group arrival staging) area also have the potential to facilitate traffic flow and increase queueing within the project site. This will reduce the potential for queueing vehicles onto nearby streets. The proposed widening of the existing walkway along the shoreline fronting the Sheraton Waikiki is intended to improve lateral shoreline access for the general public. The other proposed improvements are intended to enhance the experience of the resort’s guest, providing a better impression of Waikiki as a premier resort travel destination.

5.2 Alternative Design

In developing the proposed project, Kyo-ya invited several Hawaii architectural firms to submit and present their alternative ideas and concept for renovating the Royal Hawaiian Hotel and Sheraton Waikiki Hotel resort properties. The ideas ranged from more aggressive demolition of structures such as the Manor Wing and developing new buildings to superficial changes in landscaping and building façade improvements. The basic concept of the proposed project was selected by Kyo-ya and further refined in consultation with the project architect.

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6. PERMITS AND APPROVALS

The following is a list of permits and approvals, which may be required prior to construction of the proposed project:

6.1 State of Hawaii

Department of Health

- Noise Variance Permit
- National Pollutant Discharge Elimination System (NPDES) Notice of Intent for Construction Stormwater Activity
- NPDES Notice of Intent For Construction Dewatering Activity
- NPDES Notice of Intent For Hydrotesting Activity

Disabilities Communication and Access Board (DCAB)

- Review pursuant to the Americans with Disabilities Act Accessibility Guidelines (ADAAG)

6.2 City and County of Honolulu

Department of Planning and Permitting

- Special Management Area Use Permit / Shoreline Setback Variance
- Waikiki Special District Minor Permit
- Grading Permit
- Excavation Permit
- Building Permit
- Electrical Permit
- Plumbing Permit
- Sidewalk/Driveway Work Permit

Department of Transportation Services

- Street Usage Permit

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7. CONSULTATION

7.1 Parties Consulted During the Pre-EA Consultation Period

The following agencies and organizations were consulted during the pre-assessment consultation period of the Draft EA, and include presentations made to various organizations and potentially affected parties. Fifteen parties formally provided written comments. All written comments are reproduced herein.

Federal Agencies

- U.S. Department of the Army, Engineering Division
- U.S. Department of Agriculture – Natural Resources Conservation Service

State of Hawaii

- Department of Land and Natural Resources (DLNR)
 - State Historic Preservation Division
 - Land Division
- Department of Business, Economic Development and Tourism (DBEDT)
 - Office of Planning
 - Land Use Commission
- Department of Health (DOH)
 - Environmental Planning Office
 - Office of Environmental Quality Control
 - Environmental Management Division
- Office of Hawaiian Affairs
- Oahu Island Burial Council

City and County of Honolulu

- Department of Planning and Permitting
- Department of Transportation Services
- Department of Parks and Recreation
- Fire Department
- Police Department
- Office of Waikiki Development
- Waikiki Neighborhood Board (No. 9)

Land Owners

- Kamehameha Schools
- Mark A. Robinson Trust

Adjacent Property Owners

- Kamehameha Schools
- Queen Emma Foundation

Neighboring Uses

Halekulani Hotel / Parc Hotel
Imperial Waikiki Resort
Outrigger LAX, L.P.
Royal Hawaiian Shopping Center

Organizations/Individuals and Presentation Attendees

Council Chair Barbara Marshall (3rd District)
Councilmember Charles Djou (4th District)
Councilmember Rodney Tam (6th District)
Hawaii Hotel and Lodging Association
Hawaii Visitors and Convention Bureau
Lineal and Cultural Descendents
Marsha Weinert (State Tourism Liaison)
National Association of Industrial and Office Properties
Oahu Visitors Bureau
Oahu Island Burial Council
Outdoor Circle
Representative Tom Brower (23rd District)
Senator Gordon Trimble (12th District)
SMG Hawaii Convention Center
Surfrider Foundation
Waikiki Beach Boys
Waikiki Beach Concessionaires
Waikiki Business Improvement District Association
Waikiki Improvement Association
Waikiki Neighborhood Board

7.2 Parties to be Consulted During the Draft EA Review Period

The following agencies and interested parties will be consulted during the Draft EA review period.

State of Hawaii

- Department of Health (DOH)
 - Environmental Health Administration
 - Noise, Radiation and Indoor Air Quality Branch
 - Environmental Management Division
 - Clean Air Branch
 - Clean Water Branch
 - Office of Environmental Quality Control
- Department of Business, Economic Development and Tourism (DBEDT)
 - Office of Planning
 - Energy, Resources & Technology Division
- Department of Hawaiian Homelands
- Department of Land and Natural Resources (DLNR)
 - State Historic Preservation Division
 - Land Division
 - Division of State Parks
 - Division of Forestry and Wildlife
 - Engineering Division
- Department of Transportation
- Office of Hawaiian Affairs
- U.H. Environmental Center
- Hawaii State Library (Waikiki-Kapahulu Branch)

City and County of Honolulu

- Board of Water Supply
- Customer Services Department
- Department of Design and Construction
- Department of Emergency Management
- Department of Emergency Services
- Department of Environmental Services
- Department of Facilities Maintenance
- Department of Parks and Recreation
- Department of Planning and Permitting
 - Land Use Permits Division
 - Planning Division
 - Site Development Division
- Department of Transportation Services
- Fire Department
- Mayor's Office
- Municipal Reference and Records Center

Office of Economic Development – Waikiki
Office of Waikiki Development
Police Department
Waikiki Neighborhood Board (No. 9)

Elected Officials

Council Chair Barbara Marshall (3rd District)
Councilmember Charles Djou (4th District)
Councilmember Rodney Tam (6th District)
Representative Thomas Brower (23rd District)
Representative Scott Nishimoto (21st District)
Senator Gordon Trimble (12th District)

Land Owners

Kamehameha Schools
Mark A. Robinson Trust

Adjacent Property Owners

Kamehameha Schools
Queen Emma Foundation

Neighboring Uses

Halekulani Hotel / Parc Hotel
Imperial Waikiki Resort
Outrigger LAX, L.P.
Royal Hawaiian Shopping Center

Individuals/Organizations

Construction Industry Legislative Organization
Hawaii Hotel and Lodging Association
Hawaii Visitors and Convention Bureau
Historic Hawaii Foundation
Lineal and Cultural Descendents
Marsha Weinert (State Tourism Liaison)
Oahu Island Burial Council
Oahu Visitors Bureau
Outdoor Circle
Sierra Club
Surfrider Foundation
Waikiki Business Improvement District
Waikiki Hawaiian Civic Club
Waikiki Improvement Association

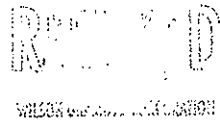


DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 223
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF: CEPOH-EC-T

December 11, 2006

Civil Works Technical Branch



Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Matsukawa:

Thank you for the opportunity to review and comment on the Pre-Assessment Consultation for a Draft Environmental Assessment for the Royal Hawaiian Hotel and Sheraton Waikiki Master Plan Project, Honolulu, Oahu (Tax Map Keys: 2-6-2: 5 and 6). According to the Flood Insurance Rate Map (FIRM), Panel No. 15003C0370, dated November 20, 2000, the parcels are located in the following flood hazard zones:

- a. Zone AO. Areas inundated by the 100-year flood where the base flood elevation is 2 feet above existing ground.
- b. Zone AE. Areas inundated by the 100-year flood and subject to both stream and tsunami flooding. The base flood elevation for this area is 6 feet above mean sea level. The 6-foot flood level is in the floodplain of Manoa Stream.
- c. Zone A. Areas inundated by the 100-year flood where base flood elevations and flood hazard factors have not been determined. My staff will calculate the base flood elevation for this area upon request for a fee of \$105. I have enclosed the request form for your use. Once payment has been received, we can provide the information to you within 2 to 5 working days.

-2-

The document has been forwarded to our Regulatory Branch to determine Department of the Army permit requirements. They will respond to your office under separate cover. Should you require additional information, please contact Ms. Jessie Dobinchick of my staff at (808) 438-8876.

Sincerely,


James Pennaz, P.E.
Chief, Civil Works Technical Branch

Enclosures

(Customer to fill out #1-4; 6a & 6b; 8)

FLOOD PLAIN MANAGEMENT SERVICES CHECKLIST

1. Customer's Name: _____
2. Agency or Firm: _____
3. Mailing Address: _____

4. Phone Number: _____ Fax Number: _____

DESCRIPTION OF WORK

5. Reproduction Services (non-site specific):

- ☐ Provide photocopies of readily available data (i.e., Flood Insurance Rate Maps [FIRMs], Flood Plain Regulations, Pamphlets, or other requested information as indicated below).

☐ Other: _____

6. Site Specific Flood Hazard Analysis:

a. Site Address: _____

b. Tax Map Key (TMK): _____

c. Following Services to be provided to customer:

- ☒ Locate site using TMK maps
- ☒ Reduce/enlarge TMK map to FIRM scale
- ☒ Locate site on appropriate FIRM and provide a copy
- ☒ Describe flood zone designations
- ☒ Provide approximate flood elevations in undetermined Zone A coastal areas

7. By my signature, I reaffirm my request and agree to provide the attached payment in the amount of \$ 105.00 for the services checked in the above listing. Please make check payable to: FAO-USAED, HONOLULU and provide to:

U.S. Army Corps of Engineers, Honolulu District
ATTN: Ms. Jessie Dobinchick/CEPOH-EC-T
Building 223
Fort Shafter, HI 96858-5440

8. _____
Signature of Requester Date

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

CITY AND COUNTY
OF HONOLULU,
HAWAII

PANEL 370 OF 395

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:
COMMUNITY

HONOLULU
CITY AND COUNTY OF

NUMBER PANEL SUFFIX

1500301 0370 E

MAP NUMBER
150030370 E

EFFECTIVE MAP:
NOVEMBER 20, 2000



Federal Emergency Management Agency

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A No base flood elevation determined.
- ZONE AE Base flood elevations determined.
- ZONE AH Flood depths of 1 to 3 feet usually areas of ponding; base flood elevations determined.
- ZONE AO Flood depths of 1 to 3 feet usually sheet flow on sloping terrain; average depths determined; free areas of flood for flooding velocities also determined.
- ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V Coastal flood with velocity hazard (wave action); base flood elevations determined.
- ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X Areas determined to be outside 500-year floodplain.
- ZONE D Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

- Identified 1983
- Identified 1970
- Other Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Delineating Special Flood Hazard Zones, and Boundary Delineating Areas of Different Coastal Base Flood Elevations within Special Flood Hazard Zones
- Base Flood Elevation Line; Elevation in Feet. See Map Index for Elevation Datum.
- Cross Section Line
- Base Flood Elevation in Feet Within Uniform Velocity Zone. See Map Index for Elevation Datum.
- Elevation Reference Mark
- Flow Mile

513
(EL 987)
RM7
M2

NOTES

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly those that may be sources of small scale, or all significant features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFE's, and for any information on floodway delineations prior to use of this map for property purchase or construction purposes.

Areas of Special Flood Hazard (100-year flood) include Zones A, AE, AH, A99, AO, AE, A99, V, VE and V-VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show at 1/20 inch.

Coastal base flood elevations apply only landward of 0.0 MVD, and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

This map may incorporate approximate boundaries of Coastal Barrier Resource System Units and for Otherwise Protected Areas established under the Coastal Barrier Improvement Act of 1990 (P.L. 101-581).

For community map revision history prior to countywide mapping, see Section 6.0 of the Flood Insurance Study Report.

For adjoining map panels and base map source see separately printed Map Index.

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF

COUNTYWIDE FLOOD INSURANCE RATE MAP.

NOVEMBER 20, 2000

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE DATE shown on this map to determine when actual rates apply to structures in zones where elevations or depths have been established. To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 636-6620.



APPROXIMATE SCALE IN FEET

1000 0 1000



March 27, 2007

Mr. James Pennaz, P.E., Chief
Civil Works Technical Branch
Department of the Army
U.S. Army Engineer District, Honolulu
Building 223
Fort Shafter, Hawaii 96858-5440

Attention: Ms. Jessie Dobinchick

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Mr. Pennaz:

Thank you for your letter dated December 11, 2006 commenting on the subject project. We appreciate your confirmation of the flood zone designations for the project parcels as well as the information on base flood calculations.

We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

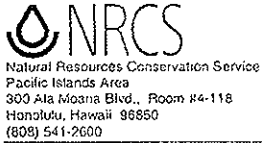
Sincerely,

A handwritten signature in dark ink, appearing to read "Greg Dickens", is written over a horizontal line.

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and
Permitting
Mr. Wayne Goo, WCIT

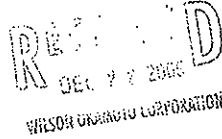
SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 ~ Fax: (808) 923-0892



EM

December 20, 2006

Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826



Subject: Pre-Assessment Consultation for DEA for Royal Hawaiian Hotel/Sheraton Waikiki
Master Plan TMK: 2-6-002:05 & 06

Dear Mr. Matsukawa,

We have reviewed the above mentioned document and have no comment at this time.

Thank you for the opportunity to comment.

Sincerely,

LAWRENCE T. YAMAMOTO
Director
Pacific Islands Area

WILSON
OKAMOTO
CORPORATION



ENGINEERS
PLANNERS
1907 S. BERETANIA ST
SUITE 400
HONOLULU, HI 96826
PH. (808) 946-2277
FAX. (808) 946-2253

7595-01
December 7, 2006

Mr. Kenneth Kaneshiro, State Conservationist
Natural Resources Conservation Service
PO Box 50004
Honolulu, HI 96850

Subject: Pre-Assessment Consultation
Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002: 05 & 06

Dear Mr. Kaneshiro:

On behalf of the applicant, Kyo-ya Company, Ltd., Wilson Okamoto Corporation is preparing a Draft EA for various proposed improvements at the Royal Hawaiian Hotel and the Sheraton Waikiki.

Pursuant to Chapter 343, Hawaii Revised Statutes and Chapter 200 of Title 11, Department of Health Administrative Rules, an EA is required due to the location of the project site in Waikiki.

As part of the Draft EA pre-assessment consultation process, we are soliciting your comments on the proposed Royal Hawaiian Hotel/Sheraton Waikiki Master Plan improvements. A project summary sheet and a location map for the project site are enclosed for your information. Please submit your written comments to:

Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, HI 96826

Attention: Earl Matsukawa, Project Manager

We would appreciate your written comments by December 26, 2006. Comments may also be faxed to our office at (808) 946-2253.

Should you have any questions, please call me at (808) 946-2277.

Sincerely,

Earl Matsukawa, Project Manager

Enclosures

cc: Wayne Goo, WCIT

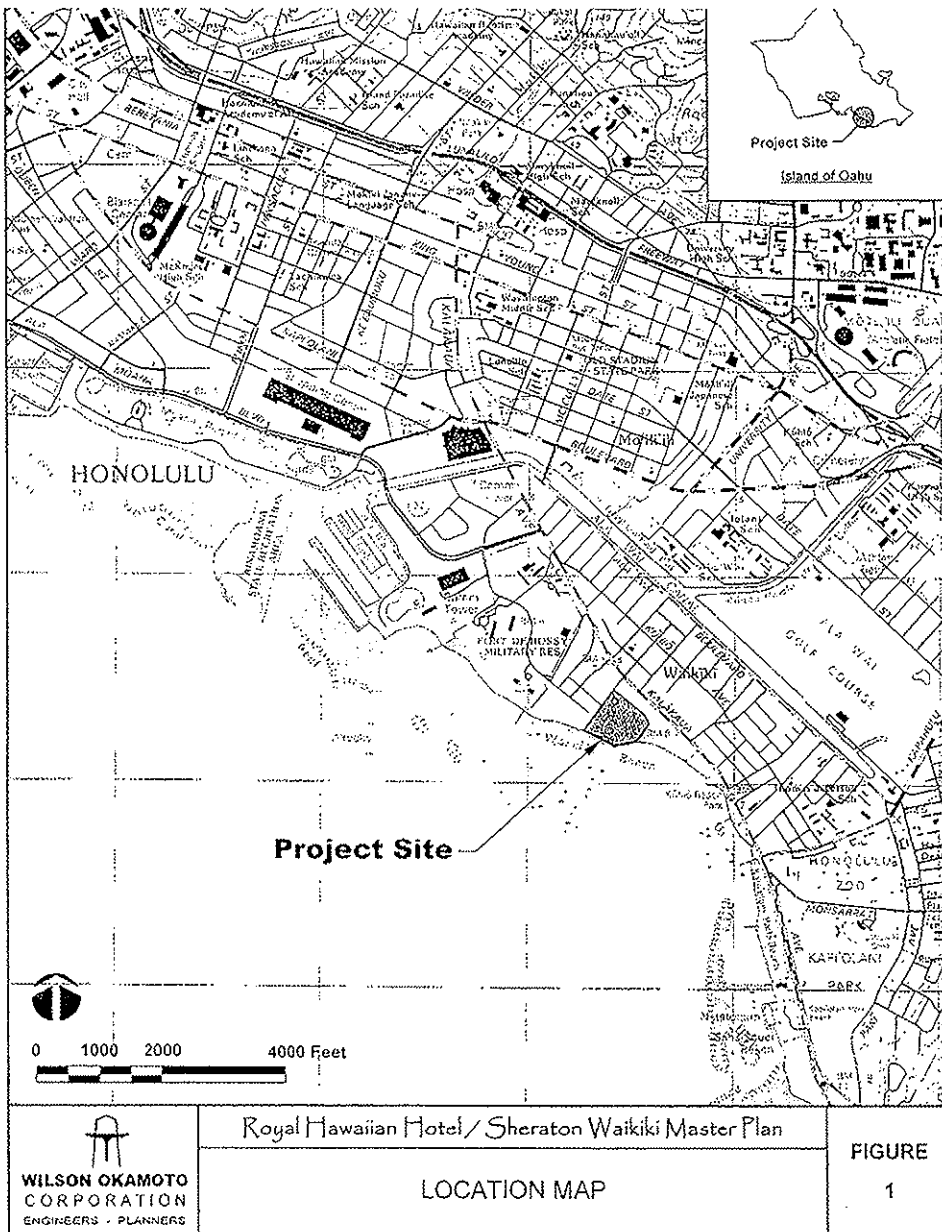
**PROJECT SUMMARY
ROYAL HAWAIIAN HOTEL / SHERATON WAIKIKI
MASTER PLAN IMPROVEMENTS**

In conjunction with a master plan to comprehensively improve internal traffic circulation, upgrade hotel amenities and the enhance the overall visual character of both the Royal Hawaiian Hotel and the Sheraton Waikiki, Kyo-ya Company, Ltd. is proposing various improvements to both properties, including:

- Renovating the façade on the existing parking structure facing the Royal Hawaiian Hotel;
- Renovating the façade of the Manor Wing;
- Realigning the driveways and reconstructing the Sheraton Waikiki porte cochere to facilitate wayfinding and increase vehicle queuing areas on-site;
- Relocating the Royal Hawaiian Hotel porte cochere;
- Reconstructing the Sheraton Waikiki entry area adjoining the porte cochere;
- Reconstructing the Sheraton Waikiki grand stairway to open ocean views; and
- Reconstructing the Royal Hawaiian pool and expanding the two existing Sheraton Waikiki swimming pools and associated deck areas, structures and landscaping. One of the pools to be reconstructed would also include widening an existing walkway providing improved lateral public access along the shoreline fronting the Sheraton Waikiki.

Other improvements include interior renovations and repair and maintenance work that would be exempt from EA requirements, including:

- Renovating the ground level of the Sheraton Waikiki, including the lobby, check-in, retail areas, restaurants and circulation;
- Renovating the interior of the Manor Wing;
- Renovating the ground level interior of the Royal Hawaiian Hotel, including accommodating the relocated porte cochere and Monarch Room; and
- Replacing awnings of the Royal Hawaiian Hotel, including the Monarch Room and Surf Room awnings.



UNITED STATES DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

The project site is located in the Waikiki Special District and is designated Resort Mixed-Use. Most of the project site also lies within the City & County of Honolulu Special Management Area (SMA) and is subject to the requirements of the SMA Use Permit. A portion of the proposed swimming pool renovation and public lateral shoreline walkway is located within the 40-foot shoreline setback and will require a Shoreline Setback Variance.

No significant impacts are anticipated with the construction and operation of the proposed improvements. An archaeological survey will be prepared for inclusion in the Draft EA.

HAWAII INTERDISCIPLINARY REVIEW CONTROL FORM

Review of: Pre-Assignment of DEA for Royal Hawaiian Hotel / Sheraton Waikiki Master Plan
(Name of Document)

* Review Leader: _____ Date Distributed: 12/7/06

Comments to be returned to Review Leader by: 12/19/06

	Reviewer	Initials	Date Comments Returned
_____	Deputy State Conservationist	_____	_____
_____	State Conservation Engineer	_____	_____
_____	State Soil Scientist	_____	_____
_____	State Resource Conservationist	_____	_____
_____	State Biologist	_____	_____
_____	Public Affairs Specialist	_____	_____
_____	Design Engineer	_____	_____
_____	Civil Engineer	_____	_____
_____	Plant Materials Specialist	_____	_____
<u>✓</u>	D.C. <u>Michael Whitt</u>	<u>MW</u>	<u>12/18/06</u>
_____	_____	_____	_____
_____	_____	_____	_____

Comments: No Comment

*Review Leader will indicate staff member(s) requested to review and concur in this document.



March 27, 2007

Mr. Lawrence T. Yamamoto, Director
Natural Resources Conservation Service
Pacific Islands Area
300 Ala Moana Blvd., Room #4-118
Honolulu, HI 96850

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Mr. Yamamoto:

Thank you for your letter dated December 20, 2006 indicating that you have no comment on the subject project. We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

A handwritten signature in dark ink, appearing to read "G. Dickens".

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and
Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 ~ Fax: (808) 923-0892

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

PETER Y. YOUNG
CHAIRMAN
BOARD OF LAND AND NATURAL RESOURCES
CHAIRMAN OF WATER RESOURCES MANAGEMENT
ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND
DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER
AQUATIC RESOURCES
DIVISION AND DEPARTMENTAL
BUREAU OF CONSERVATION
CONSERVATION OF WATER RESOURCES MANAGEMENT
CONSERVATION AND COASTAL ZONES
CONSERVATION
TERRITORY AND WILDLIFE
EDUCATION AND RECREATION
KAIKOLA, ISLAND RESERVE, LUNARISLAND
LAND
STATE PARKS

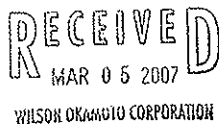


Kuri'walu

March 27, 2007

February 28, 2007

Mr. Earl Matsukawa
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, HI 96826



LOG NO: 2007.4189
DOC NO: 0702amj16
Archaeology

Dear Mr. Matsukawa:

**SUBJECT: Chapter 6E-42 Historic Preservation Review -
Pre-Assessment Consultation, Draft Environmental Assessment for Royal Hawaiian
Hotel / Sheraton Waikiki Master Plan
Waikiki Ahupua'a, Kona District, Island of O'ahu
TMK: (1) 2-6-002:005 & 006**

Thank you for the opportunity to review the aforementioned document, which we received on December 12, 2006. We apologize for the delay in responding. The proposed undertaking consists of various improvements to the Royal Hawaiian Hotel and the Sheraton Waikiki.

According to your letter memo, the project will include ground disturbance (subsurface excavation). Because of its location in the heart of Waikiki—where numerous historic and pre-Contact historic properties have been documented in subsurface contexts—we do not concur with your initial assessment that “no significant impacts are anticipated with the construction...of the proposed improvements.” There is actually a relatively good chance of encountering burials, in particular, during this project.

We understand from your documents that an archaeological inventory survey will be completed in advance of the proposed improvements. Provided it is not too late, we recommend an archaeological inventory *plan* be prepared in advance of the archaeological survey, per §13-284, HAR.

Please contact Mr. Adam Johnson (O'ahu Assistant Archaeologist) at (808) 692-8015 if you have any questions or concerns regarding this letter.

Aloha,

Melanie Chinen, Administrator
State Historic Preservation Division

amj:

Ms. Melanie Chinen
Administrator
State Historic Preservation Division
601 Kamokila Boulevard, Room 555
Kapolei, Hawaii 96707

Dear Ms. Chinen:

**Subject: Chapter 6E-42 Historic Preservation Review
Pre-Assessment Consultation, Draft Environmental Assessment for Royal
Hawaiian Hotel/Sheraton Waikiki Master Plan
Waikiki Ahupua'a, Kona District, Island of O'ahu
TMK: (1) 2-6-002:005 & 006**

Thank you for your February 28, 2007 letter regarding the above mentioned project. The owner and applicant, Kyo-ya Company, LLC (Kyo-ya) has recently engaged the cultural consultation services of Kuri'walu to assist them in this project. After a thorough review of the project proposal and given the sensitive nature of Waikiki, Kyo-ya concurs with your recommendation that an archaeological inventory survey plan covering the areas of ground disturbance be prepared in advance of the archaeological inventory survey.

Accordingly, we would like to schedule a meeting with you and your staff at your earliest convenience to discuss the various archaeological and cultural issues that may be involved in this project. We will also be seeking early consultation with interested parties, including the Office of Hawaiian Affairs, Hui Mālama I Nā Kūpuna and potential lineal and cultural descendants that have already been recognized by the State Historic Preservation for the various Waikiki projects.

We look forward to working with you and your office on this project. Please feel free to contact me at 539-3582 or Dawn Chang at 539-3583 if you have any questions or concerns regarding this project.

Sincerely,

LANI MA'A LAPILIO

c: Mr. Greg Dickens, Kyo-ya

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
DEC 28 2006
WILSON OKAMOTO CORPORATION

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
CHAIRPERSON ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

AGENCY RESOURCES
BOATING AND CREEP PREVENTION
WILDLIFE ENVIRONMENTAL
MANAGEMENT
WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCE MANAGEMENT
LAND
HONOLULU AND WILDLIFE
HISTORIC PRESERVATION
KAIKULAE BEACH RECREATION COMMISSION
LAND
STATE PARKS

Kyoya
Management Company, LTD.

March 27, 2007

REF:OCCL:TM

Correspondence: OA 07-132

Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826

DEC 26 2006

Dear Mr. Matsukawa,

SUBJECT: Pre-Assessment Consultation for the Draft Environmental Assessment for the Royal Hawaiian Hotel/Sheraton Waikiki Master Plan, Waikiki, island of Oahu, vicinity of (1) 2-6-002: xxx

The Office of Conservation and Coastal Lands (OCCL) has reviewed the subject correspondence and we support your effort to improve lateral access. We note a portion of the proposal would include widening an existing walkway providing improved lateral public access along the shoreline fronting the Sheraton Waikiki. We note this portion is a right of way perpetual easement for the public in favor of the State of Hawaii. We further note that beach nourishment would also improve access.

Should you have any questions regarding this correspondence please contact Tiger Mills of the Office of Conservation and Coastal Lands at 587-0382.

Sincerely,

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

C: Chairperson
ODLO
City & County of Honolulu, DPP

Mr. Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Mr. Lemmo:

Thank you for your letter dated December 26, 2006 (Ref: OCCL:TM, Correspondence: OA 07-132) commenting on the subject project. We acknowledge that the existing walkway along the shoreline fronting the Sheraton Waikiki is currently a public right-of-way easement in favor of the State of Hawaii. The intent of the proposed widened walkway is to improve public access along the shoreline. Therefore, the Applicant will pursue dedication of the proposed walkway widening with your department. The Applicant would welcome State-sponsored beach nourishment proposals fronting the project site.

We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 - Fax: (808) 923-0892

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4185
E-mail: eeqc@hawaii.gov

GENEVIEVE SALMONSON
DIRECTOR

Kyoya
Management Company, LTD.

March 27, 2007

December 26, 2006

Mr. Earl Matsukawa
Wilson Okamoto
1907 S. Beretania St #400
Honolulu, HI 96826

RECEIVED
DEC 27 2006
WILSON OKAMOTO CORPORATION

Subject: Pre-Assessment for Draft Environmental Assessment for Royal Hawaiian
Hotel/Sheraton Waikiki Master Plan

Dear Mr. Matsukawa;

We have received your letter dated December 7, 2006 for the Royal Hawaiian Hotel
and Sheraton Waikiki Master Plan.

At this time, we have no comments. We will review the documents and will offer any
comment if need. Thank you for the opportunity to review your request and should you
have any questions, please feel free to call our office at 586-4185.

Sincerely,

Genevieve Salmonson
Genevieve Salmonson
Director

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Ms. Salmonson:

Thank you for your letter dated December 26, 2006 indicating that you have
no comment on the subject project. We appreciate your interest and
participation in the pre-assessment consultation phase of the EA. Your letter,
together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and
Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2355 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 - Fax: (808) 923-0892

PHONE (808) 594-1868




FAX (808) 594-1865

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

Earl Matsukawa
Project Manager
December 26, 2006
Page 2

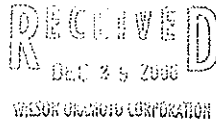
Thank you for the opportunity to comment, and we look forward to the opportunity to review the forthcoming Draft Environmental Assessment. If you have further questions, please contact Jesse York, Policy Advocate – Native Rights, at (808) 594-0239 or jessey@oha.org.

Sincerely,


for Clyde W. Nāmu'o
Administrator

HRD06/2842

December 26, 2006



Earl Matsukawa
Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, HI 96826

RE: Pre-Assessment Consultation, Draft Environmental Assessment for Royal Hawaiian Hotel/Sheraton Waikiki Master Plan, O'ahu, TMKs: 2-6-002:005 & 006

Dear Earl Matsukawa,

The Office of Hawaiian Affairs (OHA) is in receipt of your December 7, 2006, request for comments on the above-referenced project, which would include various proposed improvements to the exterior, amenities and internal traffic circulation of both the Royal Hawaiian Hotel and the Sheraton Waikiki. OHA offers the following comments.

According to the submitted documents, there will be some subsurface disturbance (excavation) associated with the proposed undertaking. Given the location of the project area, we do not share your initial assessment that "[n]o significant impacts are anticipated with the construction...of the proposed improvements." Rather, we believe there is a moderate to high possibility of encountering historically-significant deposits, including burials, which are common in and around the project area. We therefore recommend that an archaeological inventory plan be prepared in advance of the archaeological survey.

OHA further requests your assurances that if this project goes forward, should iwi kūpuna or Native Hawaiian cultural or traditional deposits be found during ground disturbance, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.



Kuiwahu

March 27, 2007

Mr. Clyde Namu'o
Administrator
Office of Hawaiian Affairs
711 Kapiolani Blvd, Suite 500
Honolulu, Hawai'i 96813

Aloha Mr. Namu'o:

Subject: Pre-Assessment Consultation, Draft Environmental Assessment for Royal
Hawaiian Hotel/Sheraton Waikiki Master Plan, O'ahu,
TMKs: 2-6-002:005 & 006

Thank you for your December 26, 2006 letter regarding the above mentioned project. The owner and applicant, Kyo-ya Company, LLC (Kyo-ya) has recently engaged the cultural consultation services of Kuiwahu to assist them in this project. After a thorough review of the project proposal and given the sensitive nature of Waikiki, Kyo-ya concurs with your recommendation that an archaeological inventory survey plan in the areas of ground disturbance be prepared in advance of the archaeological inventory survey.

We will be coordinating directly with the State Historic Preservation Division (SHIPD) on the various archaeological and cultural issues involved in this project. We will also be seeking early consultation with interested parties, including the O'ahu Island Burial Council and potential local and cultural descendants that have already been recognized by the SHIPD for the various Waikiki projects.

Furthermore, you have our assurances that as construction commences on the project, with respect to any iwi kupuna or Hawaiian cultural or traditional deposits that may be encountered, the state burial laws will be followed. As required, the Office of Hawaiian Affairs will be notified in case of any discoveries.

Please feel free to contact me at 539-3582 or Dawn Chang at 539-3583 if you have any questions or concerns regarding this project.

Sincerely,

LANI MA'A LAPILIO

cc: Mr. Greg Dickens, Kyo-ya



STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
P.O. Box 2359
Honolulu, Hawaii 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

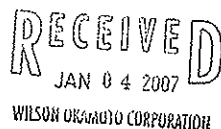
ANTHONY J.H. CHING
EXECUTIVE OFFICER



March 27, 2007

January 2, 2007

Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826



Dear Mr. Matsukawa:

Subject: Pre-Assessment Consultation
Draft Environmental Assessment for Royal Hawaiian Hotel/Sheraton Waikiki
Master Plan
Tax Map Key Nos.: 2-6-002:005 & 006

We have reviewed the project summary forwarded by your correspondence dated December 7, 2006, for the proposed Royal Hawaiian Hotel/Sheraton Waikiki Master Plan improvements.

Based upon review of the subject application, we have the following comments:

1. We confirm that the subject parcels are located within the State Land Use Urban District.
2. Pursuant to §205-5, Hawaii's Revised Statutes, and given the location, scope, and nature of the proposed activity, we have no further comments to offer at this time.

Thank you for the opportunity to comment on the proposed action. Please feel free to contact Max Rogers of my office at 587-3822 if you have any questions or need clarification.

Sincerely,

ANTHONY J. H. CHING
Executive Officer

Mr. Anthony J. H. Ching, Executive Officer
Department of Business, Economic Development & Tourism
Land Use Commission
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804-2359

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Mr. Ching:

Thank you for your letter dated January 2, 2007 confirming that the project site lies within the State Land Use Urban District and indicating that you have no further comment on the subject project. We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 ~ Fax: (808) 923-4892

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET - HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 - INTERNET: www.honoluluups.org

DUFF HANSEN
MAYOR



BOISSE P. CORREA
CHIEF

GLEN R. KAJIYAMA
PAUL O. PUTTILU
DEPUTY CHIEFS

OUR REFERENCE BS-DK

December 20, 2006

RECEIVED
DEC 26 2006

WILSON OKAMOTO CORPORATION

Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Matsukawa:

This is in response to your letter of December 7, 2006, regarding the Pre-Assessment Consultation, Draft Environmental Assessment, for the Royal Hawaiian Hotel/Sheraton Waikiki Master Plan.

This project should have no significant impact on the facilities or operations of the Honolulu Police Department.

If there are any questions, please call Major Marie McCauley of District 6 at 529-3361 or Mr. Brandon Stone of the Executive Office at 529-3644.

Sincerely,

BOISSE P. CORREA
Chief of Police

By

John P. Kerr
AL ASSISTANT CHIEF
FOR:
JOHN P. KERR
Assistant Chief of Police
Support Services Bureau

Kyoja
Management Company, LTD.

March 27, 2007

Mr. Boisse P. Correa, Chief
Police Department
City and County of Honolulu
801 South Beretania Street
Honolulu, HI 96813

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Chief Correa:

Thank you for your letter dated December 20, 2006 (Reference BS-DK) stating that the subject project should have no significant impact on the facilities or operations of your Department. We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickhens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and
Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakou Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 - Fax: (808) 923-0592

HONOLULU FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU
636 SOUTH STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 723-7133 • FAX: (808) 723-7111 • INTERNET: www.honolulu.gov

RECEIVED
JAN 03 2007
WILSON OKAMOTO CORPORATION



KENNETH G. SILVA
FIRE CHIEF

ALVIN K. YONOTA
DEPUTY FIRE CHIEF

December 22, 2006

Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Matsukawa:

Subject: Preassessment Consultation
Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key: 2-6-002: 005 and 006

In response to your letter dated December 7, 2006, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) reviewed the material you provided and has no objections to the master plan.

The proposed improvements will not adversely impact services provided by the HFD.

Please note that our new address is:

Honolulu Fire Department
636 South Street
Honolulu, Hawaii 96813-5007

Should you have any questions, please call Acting Assistant Chief Lloyd Rogers of Support Services at 723-7151.

Sincerely,

KENNETH G. SILVA
Fire Chief

KGS/SK:j

Kyoya
Management Company, LTD.

March 27, 2007

Mr. Kenneth G. Silva, Chief
Fire Department
City and County of Honolulu
635 South Street
Honolulu, HI 96813

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Chief Silva:

Thank you for your letter dated December 22, 2006 stating that you have no objections to the subject master plan and that the project should not adversely impact the services provided by your Department. We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 - Fax: (808) 923-0892

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

KAPOLEI HALE • 1000 ULUOHIA STREET, SUITE 309 • KAPOLEI, HAWAII 96707
TELEPHONE: (808) 692-5561 • FAX: (808) 692-5121 • INTERNET: www.honolulu.gov

MUFU HANNEMANN
MAYOR

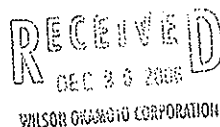


LESTER K.C. CHANG
DIRECTOR

DANA TAKAHARA-DIAS
DEPUTY DIRECTOR

December 22, 2006

Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 S. Beretania St., Suite 400
Honolulu, Hawaii 96826



Dear Mr. Matsukawa:

Subject: Pre-Assessment Consultation
Draft Environmental Assessment
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key: 2-6-002: 05 & 06

Thank you for the opportunity to review and comment at the Pre-Consultation stage of the Draft Environmental Assessment, relating to the proposed improvements at the Royal Hawaiian and Sheraton Waikiki Hotels.

The Department of Parks and Recreation has no comment and as the proposed improvements will not impact any program or facility of this department, you are invited to remove us as a solicited party to the balance of the EIS process.

Should you have any questions, please contact Mr. John Reid, Planner, at 692-5454.

Sincerely,

LESTER K. C. CHANG
Director

LKCC:mk
(186217)

Kyoya
Management Company, LTD.

March 27, 2007

Mr. Lester K. C. Chang, Director
Department of Parks and Recreation
City and County of Honolulu
Kapolei Hale
1000 Uluohia Street, Suite 309
Kapolei, HI 96707

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Mr. Chang:

Thank you for your letter dated December 22, 2006 stating that you have no comment on the subject project and that the project will not impact the programs or facilities of your Department. We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and Permitting
Mr. Wayne Goo, WCIT

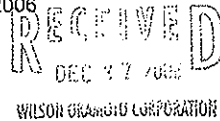
SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 - Fax: (808) 923-0892

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 528-4632 • FAX: (808) 527-6743
DEPT. INTERNET: www.honolulu.gov/dpp • INTERNET: www.honolulu.gov



December 26, 2006



HENRY ENG, FAICP
DIRECTOR

DAVID N. TANOUÉ
DEPUTY DIRECTOR

2006/ELOG-3151

Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Matsukawa:

Subject: Pre-Assessment Comments
Draft Environmental Assessment
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-2: 5 and 6

This is in response to your request for comments (letter DPP date-stamped December 8, 2006) on the proposed Royal Hawaiian Hotel/Sheraton Waikiki Master Plan improvements.

Based on your project summary and without any detailed plans, we have the following comments:

1. A portion of the project site is located within the Special Management Area and is subject to the provisions of Chapter 25, Revised Ordinance of Honolulu. A major Special Management Area Use permit will be required if development within the Special Management Area exceeds \$125,000;
2. A major or minor Waikiki Special District permit will be required;
3. Your Draft Environmental Assessment should include:
 - a. A site plan showing the Special Management Area, 40-foot shoreline setback line, Waikiki Special District 100-foot shoreline setback line and building envelope, and flood hazard districts. A dated certified shoreline survey should delineate the 40-foot shoreline setback line;

Mr. Earl Matsukawa, Project Manager
December 26, 2006
Page 2

- b. Existing plans/elevations and proposed plans/elevations of the improvements;
- c. Existing and proposed floor areas, building areas and open space calculations, if applicable;
- d. Existing and proposed landscape plans;
- e. Proposed façade improvements and porte cochere designs;
- f. Pre-assessment comments of the proposal from the State Historic Preservation Division, Architecture Branch; and
- g. Information and plans required in the attached "Content Guide for Preparing an Environmental Assessment."

Thank you for the opportunity to comment on your proposal. If you have any questions, please contact Joyce Shoji of our Urban Design Branch at 527-5354.

Very truly yours,


Henry Eng, FAICP, Director
Department of Planning and Permitting

HE:cs

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CONTENT GUIDE for Preparing an ENVIRONMENTAL ASSESSMENT Required
with an Application for a Special Management Area Use Permit (SMP)
Chapter 25, Revised Ordinances of Honolulu, as amended

This document is provided only as a guide for preparation of an Environmental Assessment. For procedural requirements, see Administrative Rules of the Department of Health, Chapter 200 of Title 11, "Environmental Impact Statement Rules," Sections 10, 11 and 12.

I. GENERAL INFORMATION

- A. Applicant: Name; Mailing Address; Phone Number.
- B. Recorded Fee Owner: Name; Mailing Address; Phone Number.
- C. Agent (if any): Name; Mailing Address; Phone Number.
- D. Tax Map Key: Zone, Section, Plat, and Parcel(s).
- E. Lot Area: Acreage or square footage.
- F. Agencies Consulted in Making Assessment: Indicate Federal, State, and/or County agencies consulted. Attach a copy of correspondence(s).

II. DESCRIPTION OF THE PROPOSED ACTION

A. General Description:

- 1. Brief narrative description of proposed project;
- 2. Relation of parcel to Special Management Area (i.e., entirely within, partially);
- 3. Location map (1" = 1000' scale preferred); and
- 4. Land use approvals granted and/or approvals required.

B. Technical Characteristics:

- 1. Use characteristics;
- 2. Physical characteristics - layout drawing showing property lines, lot size, elevations, existing structures;
- 3. Construction characteristics including demolition, removal, or modification of existing structures, clearing, grubbing, grading, filling, new structure height and design;
- 4. Utility requirements (water, electricity, gas, etc.);
- 5. Liquid waste disposal (municipal sewer system, septic tanks, or injection wells);
- 6. Solid waste disposal (includes refuse);
- 7. Access to site, and
- 8. Other pertinent information.

C. Economic and Social Characteristics:

- 1. Estimated cost and time phasing of construction; and (2) Other pertinent information.

D. Environmental Characteristics:

- 1. Soils;
- 2. Topography (indicate relationship to major topographic features such as mountains, headlands, valleys, streams, channels, springs, marshes, etc.);
- 3. Surface runoff, drainage, and erosion hazard;
- 4. Federal FIRM Zone, LUO Flood Hazard District, other geological hazards; and
- 5. Other information pertinent to the Special Management Area.

III. AFFECTED ENVIRONMENT

- A. A brief description of subject site in relation to surrounding area and the description of surrounding area. (Include considerations and information on existing land uses; General Plan and Development Plan land use designations; zoning; and unique features.)
- B. Project site in relation to publicly owned or used beaches, parks and recreation areas; rare, threatened, or endangered species and their habitats; wildlife and wildlife preserves; wetlands, lagoons, tidal lands and submerged lands; fisheries and fishing grounds; other coastal/natural resources.
- C. Relation to historic, cultural, and archaeological resources.
- D. Coastal views from surrounding public viewpoints and from the nearest coastal highway across the site to the ocean or to coastal landform.
- E. Quality of receiving waters and ground water (including potable water) resources. Describe effects on the groundwater recharge cycle within the groundwater control area, show existing and proposed well locations with pumping estimates. Describe effects on receiving waters--streams and ocean waters.
- F. Include suitable and adequate location and site maps. For document imaging purposes, a maximum size of 11" x 17" is preferred, but in no case should plans exceed 24" x 36". (Dated aerial, low-oblique, or

ground-level photographs should be used whenever location and site maps are not sufficient to adequately describe the project).

IV. PROJECT IMPACTS

Identify impacts of the project relative to the Coastal Zone Management objectives and policies (Section 205A-2, HRS) and the Special Management Area guidelines (Section 25-3.2, ROH).

V. MITIGATION MEASURES

Indicate proposed mitigation measures, if any.

SPECIAL MANAGEMENT AREA USE PERMIT

APPLICATION CHECK LIST

1.	Pre-Application meeting w/DPP (optional)	
2.	Written Information (see Content Guide)	
3.	Master Application Form	
4.	Drawings/plans	
	Easements	
	Slope	
	Property lines	
	Streets	
	Off-street parking areas	
	Yards (front, rear, and side)	
	Location of existing structures	
	SMA boundary (if not entirely in SMA)	
	Flood hazard boundaries (if applicable)	
	New building/structure elevations and sections	
	Grading plan with existing and finished contours/spot elevations	
5.	Certified Shoreline Survey (if applicable)	
6.	Fees	
7.	Utilities - Water, wastewater disposal	

*Note: This list is intended as a general reference for applicants. Please refer to the attached permit instruction sheets for complete application requirements.

The adequacy/completeness of application submittals for acceptance will be determined by the DPP within 10 working days of submittal.



March 27, 2007

Mr. Henry Eng, FAICP, Director
Department of Planning and Permitting
City and County of Honolulu
650 South Beretania Street, 7th Floor
Honolulu, HI 96813

Attention: Ms. Joyce Shoji

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Mr. Eng:

Thank you for your letter dated December 26, 2006 (Reference: 2006/ELOG-3151) commenting on the subject project. The following responses are provided in the respective order of your comments:

1. We acknowledge that a portion of the project site is located with the Special Management Area (SMA) and any improvements within this area will be subject to Chapter 25, ROH. This subject will be addressed in the forthcoming Draft Environmental Assessment (DEA).
2. The DEA will address the permit requirements for the project, including the Waikiki Special District (WSD) permit.
3. With regard to the content of the DEA:
 - a. Figures showing the SMA, 40-foot shoreline setback, and WSD 100-foot shoreline setback line will be provided in the DEA. In addition, the DEA will discuss the relationship of the proposed action relative to the WSD shoreline setback building envelope. The 40-foot shoreline setback and 100-foot WSD shoreline setback will be based on a current shoreline survey which will be submitted for certification. The certified survey will be submitted in support of the SMA application.

SHERATON WAIKIKI HOTEL, Second Floor
2225 Kalanianaʻahele Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 ~ Fax: (808) 923-0892

March 27, 2007

- b. Plans of existing conditions and proposed improvements will be included in the DEA. Elevations of existing conditions and proposed improvements, however, will be submitted as required in support of the SMA and WSD permit applications.
- c. The DEA will discuss proposed changes, if any, in floor areas, building areas and open space. Calculations will be provided as required in support of the WSD permit application.
- d. Existing and proposed landscape plans will be provided as required in support of the WSD permit application.
- e. Drawings of the proposed façade improvements and porte cochere designs are being developed and will be provided as required in support of the WSD permit application.
- f. The State Historic Preservation Division was included in Pre-Assessment consultation. A meeting is scheduled with SHPD on March 30.
- g. Please be apprised that the DEA will comply with the requirements of Chapter 343, Hawaii Revised Statutes, which should also meet the requirements of Chapter 25, Revised Ordinances of Honolulu

We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, city and County of Honolulu, Dept. of Planning
and Permitting
Mr. Wayne Goo, WCIT

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-2305 • Fax: (808) 523-4730 • Internet: www.honolulu.gov

MUR HANNEMANN
MAYOR



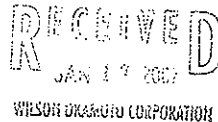
MELVIN N. KAKU
DIRECTOR

RICHARD F. TORRES
DEPUTY DIRECTOR

January 13, 2007

TP12/06-185933R

Mr. Earl Matsukawa, Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826



Dear Mr. Matsukawa:

Subject: Royal Hawaiian Hotel/Sheraton Waikiki Master Plan

Thank you for your December 7, 2006 letter, requesting our pre-assessment comments on the subject project. We have the following comments for your consideration as you prepare the draft environmental assessment (EA):

1. The project's traffic impacts, both short- and long-term, on the surrounding City streets and proposed mitigation measures should be discussed.
2. The area neighborhood board, as well as community residents, businesses, emergency personnel, bus personnel, etc., should be kept apprised of the details of the proposed project and the impacts the project may have on the adjoining local street network area.

Should you have any questions regarding these comments, please contact Ms. Faith Miyamoto of the Transportation Planning Division at 768-8350.

Sincerely,

MELVIN N. KAKU
Director

Kyoja
Management Company, LTD.

March 27, 2007

Mr. Melvin N. Kaku, Director
Department of Transportation
City and County of Honolulu
650 South Beretania Street, 3rd Floor
Honolulu, HI 96813

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Mr. Kaku:

Thank you for your letter dated January 13, 2007 (Reference: TP12/06-185933R) commenting on the subject project. The forthcoming Draft Environmental Assessment (DEA) will discuss short- and long-term traffic impacts together with appropriate mitigation measures. We will be presenting the project to the Waikiki Neighborhood Board and the Applicant will provide updates as the project proceeds.

We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 • Fax: (808) 921-0592



CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII 96813-3085 / TELEPHONE 547-7000

Charles K. Djou
Councilmember, District IV
Chair, Zoning Committee
Phone: (808) 547-7004 / Facsimile: (808) 523-4220
Email: cdjou@honolulu.gov

January 25, 2007

Mr. Greg Dickhens
Executive Vice President, Senior Advisor
Kyo-ya Management Company, Ltd.
2255 Kalakaua Avenue
Honolulu, Hawaii 96815

RE: Pre-Assessment Consultation, Draft Environmental Assessment for the Royal
Hawaiian Hotel/Sheraton Waikiki Hotel Master Plan
TMK 2-6-002:005 and 006

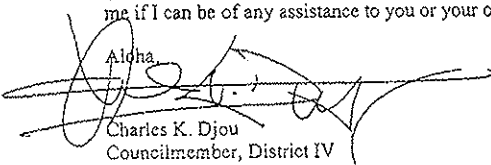
Dear Mr. Dickhens:

Thank you for the opportunity to comment relating to Kyo-ya's proposed master plan for the improvements to the exterior, amenities and internal traffic circulation for the Royal Hawaiian Hotel and the Sheraton Waikiki Hotel.

I commend Kyo-ya for initiating these improvements that will benefit Waikiki and the State of Hawaii. Waikiki is a significant contributor to our economy in providing good employment opportunities for our residents and is the "economic engine" for the State of Hawaii. This project, involving the improvements to the stately Royal Hawaiian Hotel and the Sheraton Waikiki, will complement the overall upgrade plans for Waikiki.

I look forward to receiving a copy of the completed Draft Environmental Assessment (DEA) to the Department of Planning and Permitting. Please do not hesitate to contact me if I can be of any assistance to you or your organization at City Hall. Best wishes!

Aloha,


Charles K. Djou
Councilmember, District IV

CKD:smm



March 27, 2007

Councilmember Charles K. Djou
Honolulu City Council
City and County of Honolulu
Honolulu, HI 96813

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Councilmember Djou:

Thank you for your letter dated January 25, 2007 supporting the subject master plan improvements. The Applicant shares your goal for enhancing the project and the overall character of Waikiki. We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,



Greg Dickhens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and
Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 - Fax: (808) 923-0892



THE OUTDOOR CIRCLE

BOARD OF DIRECTORS EXECUTIVE COMMITTEE

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North Shore (Oahu)
 me Kaya
North Shore (Oahu)
 uson Bright Spangler
Waipahoehoe (Oahu)
 in Reardon
Waipahoehoe (Hawaii)
 ictor Obrastoff
Waipahoehoe (Hawaii)

December 12, 2006

Mr. Earl Matsukawa, Project Manager
 Wilson Okamoto Corporation
 1907 S. Beretania St. Ste 400
 Honolulu, HI 96826

Aloha Mr. Matsukawa:

Thank you for the opportunity to provide initial comments on the proposed improvements at the Royal Hawaiian Hotel/Sheraton Waikiki.

Our concerns relate to the health and safety of the historic grove of Coconut trees that has long been considered one of the treasures of Waikiki. It is unclear from the information you provided whether the trees are in the path of the proposed project.

If any of these historic Coconut trees or their roots are directly impacted and require removal, we ask that you pledge to exceed the requirements for such activity in the Special Design District and that two palms be replanted for every tree that must be removed. For any trees that are in close proximity to construction related work, we ask that proper tree protection measures be undertaken under the supervision of a certified arborist. These measures should all be addressed in the draft Environmental Assessment.

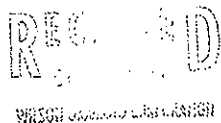
Please advise our organization of the extent to which these trees might be impacted by the proposed project prior to the time when work actually begins.

We appreciate your understanding and cooperation in protecting these valuable resources.

Mahalo.

Bob Loy
 Director of Environmental Programs

Cc: Henry Eng



March 27, 2007

Mr. Bob Loy
 Director of Environmental Programs
 The Outdoor Circle
 1314 South King Street, Suite 306
 Honolulu, HI 96814

Subject: Draft Environmental Assessment for
 Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
 Tax Map Key 2-6-002:05 & 06
 Waikiki, Hawaii

Dear Mr. Loy:

Thank you for your follow-up letter dated December 12, 2006 commenting on the subject project. As stewards of the historic grove of coconut trees on the project site, the Applicant shares your concerns for their continued health and protection. Indeed the coconut trees are an integral part of the Royal Hawaiian Hotel character. The Draft Environmental Assessment will discuss the impacts of the proposed project on the coconut trees and appropriate mitigation measures. The Applicant will continue to consult with The Outdoor Circle as the project proceeds.

We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

Greg Dickhens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and
 Permitting
 Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
 2255 Kalanianaʻa Avenue, Honolulu, Hawaii 96815
 Phone: (808) 931-8600 ~ Fax: (808) 931-0892



KAMEHAMEHA SCHOOLS

January 12, 2007

cc: Ernest Nishizaki
Greg Dickhens
Paul Quintiliani

Mr. Earl Matsukawa
Wilson Okamoto & Associates
1907 S. Beretania St., Suite 400
Honolulu, HI 96826

Re: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002: 05 & 06

Dear Mr. Matsukawa:

This letter is submitted as a follow-up to our letter dated December 20, 2006 regarding Kyo-ya Company LLC's plans to redevelop the Royal Resorts on lands adjacent to our site at the Royal Hawaiian Shopping Center. Both the Royal Hawaiian Hotel and KS' Royal Hawaiian Shopping Center are situated on lands owned by the Trust in an area known as Helumoa.

As mentioned in the previous letter, both Kamehameha Schools and Kyo-ya have maintained a close dialogue with each other, especially over the past three years to discuss our plans, provide uniformity in landscaping, propose boundary transitions and coordinate development of our respective properties. We continue to strongly believe that it is in our mutual best interest to share our plans and communicate as good neighbors.

Further, even beyond our relationship as good neighbors, Kyo-ya has been our lessee under the ground lease for the Royal Hawaiian Hotel and the parking garage of the Sheraton Waikiki Hotel for over 30 years. This provides for covenants and an established contractual relationship between our two companies.

While we do have some areas of on-going discussion with Kyo-ya to which they have been very receptive, we believe that our joint collaborative efforts, coupled with our historical business and contractual relationships, provide a platform for establishing common ground to ensure that whatever is done at Helumoa is in Waikiki's and our joint best interest.

Very truly yours,

KAMEHAMEHA SCHOOLS

A handwritten signature in cursive script, reading "Susan W. F. Todani".

Susan W. F. Todani, CRE
Director - Development and Planning

567 South King Street, Honolulu, Hawaii 96813-2036 Telephone (808) 521-6700

Founded and Endowed by the Legacy of Princess Bernice Pauahi Bishop



March 27, 2007

Ms. Susan W. F. Todani, CRE
Director -- Development and Planning
Kamehameha Schools
567 South King Street
Honolulu, HI 96813-3036

Subject: Draft Environmental Assessment for
Royal Hawaiian Hotel/Sheraton Waikiki Master Plan
Tax Map Key 2-6-002:05 & 06
Waikiki, Hawaii

Dear Ms. Todani:

Thank you for your follow-up letter dated January 12, 2007 commenting on the subject project. We look forward to continuing our dialog to discuss plans for providing compatible landscaping and boundary transitions in coordination with the development of our respective properties. We concur with your believe that it is in our mutual best interest to share our plans and communicate as good neighbors.

We appreciate your interest and participation in the pre-assessment consultation phase of the EA. Your letter, together with this response, will be reproduced in the forthcoming Draft EA.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Dickens".

Greg Dickens, Executive Vice President and Senior Advisor

cc: Mr. Geri Ung, City and County of Honolulu, Dept. of Planning and
Permitting
Mr. Wayne Goo, WCIT

SHERATON WAIKIKI HOTEL, Second Floor
2255 Kalakaua Avenue, Honolulu, Hawaii 96815
Phone: (808) 931-8600 ~ Fax: (808) 923-0892



**WAIKIKI
BUSINESS
IMPROVEMENT
DISTRICT**

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& Sheraton Moana Surfrider
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Erik M. Brown, Immediate Past Chair
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Barry Chen
Sheraton at Waikiki
Lee Changyong
Kos Gallery, Inc.
Victor Kimura
Kosasa Company Ltd.
Robert Kimura
WYH Corporation
Michael Kiley
King Kalia Plaza and
21st Kalia Avenue
Gentry Marshall
HFS Gallery
Tara Natus
International Marketplace and
Waikiki Town Center
Shawn Shindachaka
Edith Weston House
Jesse Simon
Meyer's West
Zach Yarnum
Waikiki Beach Marriott Resort
Michael Widong
Hilton Executive Village
Ward Horton and Spri
Ann Chung
Office of Mayor Mufi Hannemann
City and County of Honolulu
Communications Center
Hawaii City Council
Mayor Shane McIndoe
Honolulu Police Department
Lawrence Higo
Honolulu Dept. of Public
Safety
Pamela Kubota
Honolulu Dept. of Budget
and Fiscal Services
Robert Fisher
Waikiki Neighborhood Board

January 31, 2007

Mr. Greg Dickhens
Executive Vice President
Senior Advisor
Kyo-ya Management Company, Ltd.
2255 Kalakaua Avenue
Honolulu, Hawaii 96815

RE: Pre-Assessment Consultation, Draft Environmental Assessment for
the Royal Hawaiian Hotel/Sheraton Waikiki Hotel Master Plan
TMK 2-6-002:005 and 006

Dear Mr. Dickhens:

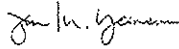
Thank you for the opportunity to comment on the proposed master plan for
improvements to the exterior, amenities and internal traffic circulation of the
Royal Hawaiian Hotel and the Sheraton Waikiki Hotel.

Kyo-ya Management Company, Ltd. is to be commended for initiating
improvements to these landmark Waikiki properties which will complement
ongoing efforts by other property owners to upgrade tourism facilities in the
heart of Waikiki. Such improvements will help ensure that Waikiki remains a
premier visitor destination area, and continues to be a key contributor to the
economic vitality of Oahu, and the State of Hawaii.

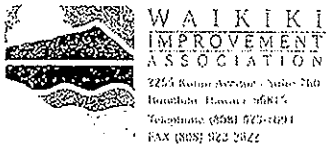
I look forward to receiving a copy of the completed Draft Environmental
Assessment (DEA) submitted to the City and County of Honolulu
Department of Planning and Permitting. Please advise if I may be of any
assistance during the review and comment process for the DEA.

Sincerely,

WAIKIKI BUSINESS IMPROVEMENT DISTRICT ASSOCIATION


Jan M. Yamane
Executive Director

c: Paul Kosasa, Chair, WBIDA Board of Directors



Enhancing Waikiki since 1967

Mr. Greg Dickhens
Executive Vice President
Kyo-ya Company Limited
2255 Kalakaua Avenue
Honolulu, HI 96815

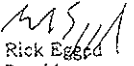
Dear Mr. Dickhens,

Allow me to express the appreciation of the Waikiki Improvement Association (WIA) for Kyo-ya's presentation to the board of directors on February 22nd. Our board members are extremely interested in Kyo-ya's plans to renovate the Royal Hawaiian Hotel and the Sheraton Waikiki. Mr. Robert Iopa of WCIT Architecture, chief architect for the project, did an excellent job of presenting the plans.

We learned from Mr. Iopa that the renovations are part of a master plan to improve internal traffic circulation, upgrade hotel amenities and enhance the overall visual character of both the Royal Hawaiian Hotel and the Sheraton Waikiki. He described the project's four major areas: the "Royal Grounds" arrival area, the Sheraton Waikiki, the Royal Gardens and Pool, and the Royal Hawaiian Hotel. Mr. Iopa provided specific details of the renovations planned for each of these areas.

At the conclusion of Mr. Iopa's presentation, the board of directors voted unanimously to support the project in concept. We believe the planned renovations will create a new sense of excitement and welcome linking the Sheraton Waikiki and the Royal Hawaiian to the revitalized Waikiki, and look forward to the day when those plans are realized.

Sincerely,


Rick Eggen
President
Waikiki Improvement Association

Government | Kamehameha | Business | Visitors | Kids World | Seniors World | On-Line Services | Economic Development

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Printable version (copy and paste into browser):

http://www.honolulu.gov/nco/nb9/07/09_2007_04Min.PDF

WAIKIKI NEIGHBORHOOD BOARD

MINUTES OF REGULAR MEETING

APRIL 10, 2007

WAIKIKI COMMUNITY CENTER

CALL TO ORDER: The meeting was called to order by Chair Finley at 7:02 p.m.

MEMBERS PRESENT: Jo-Ann Adams, Leslie Among, Ray Gruntz, Jim Poole, Mary Simpson, Carol Sword, Jeff Apaka, Louis Erteschik, Robert Finley, Walt Flood, Bert Benevento, David Chen, Jeff Merz, Mike Peters.

MEMBERS ABSENT: Kevin McDonald, Jack Myers, Norman Duncan.

VACANT SEATS: None.

GUESTS: Lori Wingard and Anna Marie Preston (Councilmember Charles Djou's Office), Councilmember Charles Djou, Teri Lam (WCP), Jan Bappe, Cindy McMillen (Communications Pacific), Emily Reed, Grace, Jenny Kaya (Representative Scott Nishimoto's Office), Donald Wigger, Major R. Macadangdang, Capt. D. Chun, Sgt. LaMontain (HFD-Waikiki Station), Capt. Ryan Young (HFD-Waikiki Station), Joan Naguwa (Waikiki Community Center), Rick Egged (Waikiki Improvement Association), Marsha Weiner (Governor's Office), Senator Gordon Trimble, Kristi Sue Ako (Senator Trimble's Office), Laura Millman (WRA), Corey Dillman, Mary J., Daisy Murai, Anne Stevens, J. Presti (CCG), Gary Omori, A. Smith, Kathy Watanabe, Lisa Gollin, Helen Carroll, G. Phillips, Joe Lopreski, Keith Rollman (Mayor's Office), Representative Tom Brower, Rob Iopa (WCIT Architecture), Ernest Nishizaki, Executive Vice President (Kyo-ya), Greg Dickhen (Executive Vice President - Kyo-ya), Rob Iopa, President (WCIT Architecture), Barry Fukunaga (State Department of Transportation), Dean Chu (Neighborhood Commission Office staff).

ESTABLISH A QUORUM: A quorum was present.

TREASURER'S REPORT: Chun reported for the month of March 2007, the Operating and Publicity Account balance was \$2136.63, and the Refreshment Account balance was \$120.00.

CHAIR'S ANNOUNCEMENTS: Chair Finley announced the following:

1. Due to the length of the agenda, speakers were reminded to keep remarks brief.
2. He has heard from members McDonald and Duncan that they would not be able to attend tonight's meeting.

CITY AGENCIES:

HONOLULU FIRE DEPARTMENT -- Capt. Young reported the following:

1. Statistics for last month included: 7 structure, 2 rubbish fires, 10 activated alarms, 107

WAMEA BAY ROCK FALL - The State has done, and is updating a study on rock fall hazards statewide. Due to last year's earthquake on the Big Island, a project there has been reprioritized.

At the Waimea Bay site, a 24-hour contraflow is in operation, temporary fencing will be installed in two weeks, then both lanes of the highway will be open to traffic. Work on a guardrail project on Kamehameha Highway in Kaaawa has been temporarily suspended to minimize traffic impacts in the area.

ALA MOANA BOULEVARD RESURFACING -- The resurfacing of Ala Moana Boulevard has begun.

PEDESTRIAN SAFETY - TATE DEPARTMENT OF TRANSPORTATION (DOT) - Hawaii ranks fourth in the nation per capita in pedestrian fatalities according to 2005 statistics. This year there has been an increase in fatal pedestrian accidents, with half of them involving persons over age 55. Statistics show Waikiki has nine percent of pedestrian accidents in Honolulu, and two fatal accidents between 2003 -- 05.

Addressing safety includes: a) a Five E's program, engineering, enforcement, education, emergency medical service and everyone else, a collaborative system, b) the Walk Wise Kupuna program, c) strategic highway safety plan, c) work by the State Bicycle/Pedestrian Coordinator, d) new laws clarifying drivers yielding to pedestrians, e) reminding pedestrians to not enter a crosswalk if the don't cross light has begun flashing, f) evaluation of crosswalks and bus stop locations, g) use of LED -- light emitting diode traffic signal lights which are brighter than conventional lights, h) countdown crosswalk signal lights, i) new signs with flashing lights than warn of pedestrian crossings ahead, and j) flashing roadway lights at crosswalks.

Questions, answers and comments followed:

1. Apaka suggested, and it was noted that bilingual educational brochures are being developed.
2. Regarding bus stops, Fukunaga noted bus stops are under the jurisdiction of the City Department of Transportation Services, and DOT does coordinate with them.
3. Apaka noted street lane markings are hard to see in the rain, and the use of new products that improve visibility is being considered.
4. Other new products include new types of signs that are light by vehicle lights.
5. More enforcement was suggested to improve safety.
6. In response to Stevens, work is being done on the AARP study of crosswalk safety conditions at various intersections.

Fukunaga was thanked for attending the meeting.

---> **ROYAL HAWAIIAN HOTEL/SHERATON WAIKIKI** - Gene Dickhens and Rob Iopa provided a brief historical background on the Royal Grounds and current plans to open up the makai view of the Royal Hawaiian Hotel from Kalakaua Avenue, and ocean views from the hotels. Plans include relocation of the motor court of the Sheraton which will improve the view of the Royal Hawaiian which is currently obscured by previous development. The Royal Hawaiian includes development of the amphitheater between the hotel and the shopping center, a new entry, improvements to the Monarch Room, and expansion of the pool area.

Flood moved and Apaka seconded that the Board supports these projects. Discussion followed:

1. Gruntz supported the project.
2. In response to Merz, some façade modifications to the hotels' parking garage are planned to improve its look.
3. In response to Apaka, renovations are being made to the hotels' rooms and public areas.

The motion carried unanimously.

Among left the meeting at this time, Benevento left earlier in the meeting.

ELECTED OFFICIALS, CONTINUED:

REPRESENTATIVE TOM BROWER – Representative Brower distributed his monthly report and highlighted the following:

1. Today they passed approximately 141 bills, a list of some of them was included in his report.
2. He is serving on the Finance, Economic Development and Business Concerns, and the Agriculture committees.
3. He came to the Board's February meeting, but the meeting had already adjourned early due to a medical emergency at the meeting by the time he had arrived.

Questions, answers and comments followed:

1. In response to Gruntz, he noted that he opposed a bill for toll roads.
2. In response to Sword, he noted that bottle bill legislation to include larger sized drink containers is progressing. Additional discussion with Sword followed the meeting.
3. In response to a resident, he believes Kahuku Hospital did receive an emergency appropriation to continue to operate.
4. Regarding the No Child Left Behind law, the State has not received federal funds to help meet its requirements, and the Department of Education is trying to amend its budget to meet the requirements.

COMMITTEE REPORTS: No reports.

APPROVAL OF MINUTES FOR THE MARCH 13, 2007 REGULAR MEETING – The following addition was made:

Page 1, under Announcements, item number 3, to read "Sword noted the passing of Ben Kama, former Executive Secretary of the Neighborhood Commission, and commended the work he did."

The minutes were approved as corrected. Gruntz opposed.

CHAIR'S REPORT: No report.

ANNOUNCEMENTS: None.

ADJOURNMENT: The meeting was adjourned at 9:40 p.m.

Submitted by,

Dean Chu
Neighborhood Assistant

Thursday, April 26, 2007

EXHIBIT A

List Of Owners For
Tax Map Key 2-6-2:26



EXHIBIT "A"

WENDY BRANDT JOHNSON,
Trustee of that certain unrecorded
Wendy Brandt Johnson Declaration of Trust
dated December 16, 1987,
a Short Form of which is recorded in Liber 21484 at Page 769,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.009039215 interest,

SUSAN BRANDT,
Trustee of that certain unrecorded
Susan Brandt Declaration of Trust
dated December 16, 1987,
a Short Form of which is recorded in Liber 21484 at Page 741,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.009039215 interest,

REX BRANDT,
Trustee of that certain unrecorded
Rex Brandt Declaration of Trust
dated December 16, 1987,
a Short Form of which is recorded in Liber 21484 at Page 756,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.009039215 interest,

EDITH BETSY LEE,
Trustee under Declaration of Trust
dated October 1, 1991,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.028238235 interest,

HARVEY PARTICK LEE,
Trustee under Declaration of Trust
dated October 1, 1991,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.028238235 interest,

DIANA WORTHINGTON KRIEG and
JAN KRIEG,
Trustees of the Diana and Jan Krieg 1993 Trust
dated May 7, 1993,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.0159289567 interest,

CYNTHIA BANNING WORTHINGTON,
wife of James Gilbert Cliff,
as to an undivided 0.0159289567 interest,

WILLIAM JOHN WORTHINGTON and
DE NIECE WALLACE WORTHINGTON,
Trustees of the William John Wallace Worthington Revocable Trust
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.0159289566 interest,

MARY ELIZABETH SMART REYNOLDS,
wife of Arthur McKinley Reynolds, III,
as to an undivided 0.013155795 interest,

LIVING DESERT RESERVE,
a California non-profit corporation,
as to an undivided 0.013155795 interest,

THE HEIRS AND DEVISEES OF PAMELA GARWOOD,
as to an undivided 0.026311600 interest,

SAMUEL A. KUHN and
EDWIN R. KUHN,
Successor Trustees of The Paloma J. Kuhn Hawaiian Trust
dated February 22, 1990, executed by
Paloma Jaeger Kuhn, as Trustor,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.005423525 interest,

CYNTHIA N. ANAMIZU,
Trustee of the Cynthia N. Anamizu Revocable Trust
dated September 21, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00436405335 interest,

CAROLE ANAMIZU,
Trustee of the Carole Anamizu Revocable Trust
dated September 21, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00436405335 interest,

LOUISE S. HO,
Trustee of the Louise S. Ho-McWayne Revocable Living Trust
dated November 9, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.0174562133 interest,

JAYNE H. ABE,
Trustee of the Jayne H. Abe Revocable Trust
dated November 6, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00218202668 interest,

CALVIN K. ABE,
Trustee of The Calvin K. Abe Revocable Trust
dated November 6, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00218202667 interest,

CLYDE T. ANAMIZU,
Trustee under that certain unrecorded Living Trust
dated May 23, 2001,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00436405335 interest,

REVONDALEI YUKA BORGERDING,
wife of Jeffry John Borgerding,
as to an undivided 0.00872810665 interest,

JOHN ANTHONY FUJITO SAKURAI,
husband of Laurene Mamokuipoaloha Sakurai,
as to an undivided 0.00872810665 interest,

LUCILLE ELAINE ROBINSON,
as to an undivided 0.002150000 interest,

DAVID N. ROBINSON,
Trustee of the David N. Robinson Trust
U.T.A. restated January 12, 2005,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.007964478 interest,

JANET L. ROBINSON,
Trustee of the Nancy A. Robinson Living Trust
dated May 30, 1997,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.007964478 interest,

MICHAEL A. ROBINSON,
Trustee of the Michael A. Robinson Living Trust
dated April 7, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.007964479 interest,

J.L.P. ROBINSON LIMITED PARTNERSHIP,
a registered Hawaii limited partnership,
as to an undivided 0.192962490 interest,

WILLIAM RHETT TABER,
ALLAN ZAWTOCKI, and
WILLIAM W. PATY,
Trustees under the Will and of the Estate of
Mark Alexander Robinson, deceased in Trust,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.390361675 interest,

WILLIAM RHETT TABER,
ALLAN ZAWTOCKI, and
WILLIAM W. PATY,
Trustees under that certain Deed of Trust executed by
Mark Alexander Robinson and Mary Kapuahaulani Hart Robinson,
husband and wife, as Settlers,
dated July 30, 1953,
filed as Land Court Document No. 151326,
recorded in Liber 2720 at Page 352,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.14883606 interest,
as Fee Owner

EXHIBIT B

Correspondence with State Historic Preservation Division
and the Oahu Island Burial Council





April 24, 2007

Ms. Melanie A. Chinen, Administrator
State Historic Preservation Division
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

Dear Ms. Chinen:

Subject: Royal Hawaiian and Sheraton Hotels
Waikiki, Kona, Oahu, TMK: (1) 2-6-002: 005, 006, & 026

Thank you for providing the Kyo-ya Consulting Team an opportunity to brief you and your staff about the proposed improvements at the Royal Hawaiian and Sheraton Waikīkī Hotels on April 9, 2007. The purpose of the meeting was to provide State Historic Preservation Division (SHPD) an overview of the proposed improvements and begin early coordination on addressing the various cultural, historical and archaeological issues that may be involved in the proposed project. Kyo-ya is committed to proactively gaining information during the planning stage that can assist in minimizing disturbance to cultural and historical features, including human burial remains. Undoubtedly, there is agreement that the project site is culturally and historically very significant and great care must be taken to conduct all activities in a respectful and culturally sensitive manner.

Accordingly, we discussed specifically the following:

- Kyo-ya's decision to do an archaeological inventory survey plan as recommended by both SHPD and the Office of Hawaiian Affairs in their responses to the early consultation on the draft environmental assessment for the project, and that we would be submitting that document for SHPD review before the end of April;
- Kyo-ya will be submitting for SHPD's review and approval an Archaeological Monitoring Plan for Geotechnical Testing for the Project. The Geotechnical testing will provide useful information about the project site, including areas that may have been extensively filled in previous construction activities to assist in developing applicable engineering studies. This report is a priority as it will provide critical information during the construction design stage and SHPD's timely review and approval of this report is greatly appreciated;

Ms. Melanie Chinen

April 24, 2007

Page Two

- Like other projects Ku'iwalu is involved in, we will be initiating early consultation with the Office of Hawaiian Affairs, Hui Malama I Na Kupuna, and potential lineal and cultural descendants who have been recognized in other Waikiki projects seeking their comments on the project; and
- Finally, we would like to do an initial informational presentation to the Oahu Island Burial Council at their May 9, 2007 meeting. We would greatly appreciate being placed on the agenda and would ask for your confirmation once the agenda has been set.

On behalf of Kyo-ya, we would like to extend our appreciation for your anticipated cooperation in timely reviewing the various documents that may be submitted to your office for review and approval. As always, your assistance has been greatly appreciated. Should you have any questions, please do not hesitate to contact me or Lani.

Very truly yours,

A handwritten signature in black ink, appearing to read 'DAWN N.S. CHANG', with a long horizontal line extending to the right.

DAWN N.S. CHANG
Principal

c: Mr. Greg Dickhens, Kyo-ya
Mr. Mark Taylor, Kyo-ya
Mr. Earl Matsukawa, Wilson Okamoto
Mr. Rob Iopa, WCIT Architecture
Mr. David Shideler, Cultural Surveys Hawaii
Ms. Rhona McFarlane, Rider Hunt Levett & Bailey



2007. 2122

Date: June 18, 2007
RECEIVED
HISTORIC PRES. DIV.
DEPT. OF LAND &
NATURAL RESOURCES
2007 JUN 20 A 9:46

**Submittal Sheet for Historic
Preservation Review Filing Fees**
State Historic Preservation Division
601 Kamokila Blvd., #555, Kapolei, Hawai'i 96707

Agency/Firm (Requesting Review): Cultural Surveys Hawai'i, Inc.

Contact: David W. Shideler
Phone: 262-9972 Fax: 262-4950 E-Mail: dshideler@culturalsurveys.co
Address: P. O. Box 1114 Kailua Hawaii 96734

Title of Report/Plan: Archaeological Inventory Survey Plan for Improvements to the Royal Hawaiian and
Sheraton Hotels, Waikiki, Kona District, Oahu

Island: Oahu District: Kona Ahupua'a: Waikiki
TMK [(1) 1-1-001:001]: [1] 2-6-002: 005, 006 & 026

Submitted Plan/Report Fee & Type: (All reports or plans submitted to the SHPD for review shall be accompanied by the appropriate fee in accordance with HAR §13-275-4 and §284-4).

X	Indicate here (X) if report is a re-submittal (no fee charged)
\$50	Archaeological Assessment
\$150	Archaeological Inventory Survey Plan
\$450	Archaeological, Architectural or Ethnographic Survey Report
\$150	Preservation Plan
\$25	Monitoring Plan
\$150	Archaeological Data Recovery Plan
\$250	Burial Treatment Plan
\$100	Archaeological Monitoring Report, if resources reported
\$450	Archaeological Data Recovery Report
\$450	Ethnographic Documentation Report
\$25	Burial Disinterment Report
\$50	Osteological Analysis Report

Make check payable to "Hawai'i Historic Preservation Special Fund." A service charge of \$15 will be assessed on all dishonored checks pursuant to HRS §40-35.5" A copy of this form will be mailed or faxed back to you and will serve as your receipt.

Fee Total: \$ 0

For Office Use Only:

Date Received: JUN 20 2007	Receipt No.: Payment Method: Cash \$ -0- Check: Check No.: Receipt Issued by: Treasury Deposit Receipt No:
Log. No.: 2007. 2122	

2007.2121

Date: June 18, 2007



Submittal Sheet for Historic Preservation Review Filing Fees

State Historic Preservation Division
601 Kamokila Blvd., #555, Kapolei, Hawai'i 96707

Agency/Firm (Requesting Review): Cultural Surveys Hawai'i, Inc.

Contact: David W. Shideler

Phone: 262-9972

Fax: 262-4950

E-Mail: dshideler@culturalsurveys.com

Address: P. O. Box 1114 Kailua-Hawaii 96734

Title of Report/Plan: Archaeological Monitoring Plan for Geotechnical Testing at the Royal Hawaiian and Sheraton Hotels, Waikiki, Kona District, Oahu

Island: Oahu District: Kona Ahupua'a: Waikiki
TMK [(1) 1-1-001:001]: [1] 2-6-002: 005, 006 & 026

Submitted Plan/Report Fee & Type: (All reports or plans submitted to the SHPD for review shall be accompanied by the appropriate fee in accordance with HAR §13-275-4 and §284-4).

X	Indicate here (X) if report is a re-submittal (no fee charged)
<input type="checkbox"/>	\$50 Archaeological Assessment
<input type="checkbox"/>	\$150 Archaeological Inventory Survey Plan
<input type="checkbox"/>	\$450 Archaeological, Architectural or Ethnographic Survey Report
<input type="checkbox"/>	\$150 Preservation Plan
<input type="checkbox"/>	\$25 Monitoring Plan
<input type="checkbox"/>	\$150 Archaeological Data Recovery Plan
<input type="checkbox"/>	\$250 Burial Treatment Plan
<input type="checkbox"/>	\$100 Archaeological Monitoring Report, if resources reported
<input type="checkbox"/>	\$450 Archaeological Data Recovery Report
<input type="checkbox"/>	\$450 Ethnographic Documentation Report
<input type="checkbox"/>	\$25 Burial Disinterment Report
<input type="checkbox"/>	\$50 Osteological Analysis Report

Make check payable to "Hawai'i Historic Preservation Special Fund." A service charge of \$15 will be assessed on all dishonored checks pursuant to HRS §40-35.5. A copy of this form will be mailed or faxed back to you and will serve as your receipt.

Fee Total: \$ 0

For Office Use Only:

Date Received: JUN 20 2007	Receipt No.: Payment Method: Cash \$ -0- Check: Check No.: Receipt Issued by: Treasury Deposit Receipt No:
Log. No.: 2007.2121	

RECEIVED
HISTORIC PRES. DIV.
U.S. OF I. AND
NATURAL RESOURCES
2007 JUN 20 A 9:46

June 20, 2007

Mr. Jace McQuivey, Chair
O'ahu Island Burial Council
c/o State Historic Preservation Division
Kakuhihewa Building
601 Kamokila Boulevard, Suite 555
Kapolei, Hawai'i 96707

Dear Chair McQuivey and Members of the O'ahu Island Burial Council,

On behalf of Kyo-ya Hotels & Resorts, LP, dba The Sheraton Waikiki and the Royal Hawaiian Hotels, mahalo nui loa for the opportunity to brief you on the proposed improvements to the Royal Hawaiian/Sheraton Waikiki Hotels at your June 13, 2007 meeting.

We appreciate your guidance and recommendations during the early stages of this project. As suggested, we will be following up with Kamehameha Schools to identify potential re-interment site areas for the skull currently in the custody of the State Historic Preservation Division (SHPD) as well as any future burials that may be found on site. We also appreciate the opportunity to provide information and coordinate directly with Ms. Kehaulani Kruse, Kona district representative, regarding burial matters that do not require official Council action.

We are very much aware of the historic and cultural significance of the project area and are sensitive to concerns regarding ground disturbing activities. Accordingly, we have submitted an archaeological inventory survey plan and geo-tech testing and monitoring plan and are coordinating the review and approval for this effort with SHPD.

As you know, we have published a statewide notice in the Star Bulletin, Advertiser and Ka Wai Ola, seeking potential claimants so that we can begin meaningful discussions with those claiming ancestral connections to the project area, as well as other interested parties, including Native Hawaiian organizations.

Again, mahalo nui loa for your time and we look forward to working with you on this project. If you have any questions, please feel free to contact me at 539-3582. Malama pono kakou.

'O au iho nō,

A handwritten signature in black ink, appearing to read "Lani Ma'A Lapilio".

LANI MA'A LAPILIO
Ku'iwalu

c: Ms. Melanie Chinen
Administrator, SHPD
Ms. Kehaulani Kruse
Mr. Greg Dickens, Kyo-ya

APPENDIX A



Sheraton / Royal Hawaiian Hotel Tree Survey
Prepared by Steve Nimz and Associates, L.L.C.
February 18, 2007

Map of Tree Survey
Prepared by Walters Kimura Motoda Landscape Architects
March 14, 2007

Sheraton / Royal Hawaiian Hotel

Tree Survey

RECEIVED

FEB 20 2007

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Action			Comments
						Transplant	Remain	Remove	
12001	Chinese Banyan	Ficus microcarpa	28	60	G	X			
002	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	20	G	X	X		
003	Manila Palm	Veitchia merrillii	6	G	X	X			
004	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	20	G	X	X		
005	Hawaiian Tree Fern	Cibotium glaucum	8	3	G	X	X		
006	Podocarpus(common)	Podocarpus macrophyllus	2	15	G	X		X	These trees require better light and
007	Podocarpus(common)	Podocarpus macrophyllus	2	12	G	X		X	should be transplanted and restructured
008	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	4.5	G	X	X		
009	Hawaiian Tree Fern	Cibotium glaucum	8	2.5	G	X	X		45*lean
010	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	6	G	X	X		
011	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	6	F		X	X	
012	Podocarpus(common)	Podocarpus macrophyllus	2.5	20	G	X		X	
013	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	25	G	X	X		
014	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	25	G		X	X	
015	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	22	G	X	X		
016	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	6	G	X	X		
017	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	5	G	X	X		
018	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	18	G	X	X		
019	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	16	G	X	X		
020	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	11	G	X	X		
021	Fan Palm	Coccothrinax		9	G	X	X		
022	Fan Palm	Coccothrinax		6	G	X	X		
023	Manila Palm	Veitchia merrillii		21	G	X	X		
024	Manila Palm	Veitchia merrillii		26	G	X	X		
025	Manila Palm	Veitchia merrillii		24	F		X	X	Some Trunk Damage
026	Podocarpus(common)	Podocarpus macrophyllus	2.5	12	F	X		X	Topped
027	Podocarpus(common)	Podocarpus macrophyllus	3	10	F	X	X		
12028	Areca Palm	Dypsis lutescens	1 Stlk	14	F		X		

Sheraton / Royal Hawaiian Hotel

Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
12029	Podocarpus(common)	Podocarpus macrophyllus	2.5	12	F	X	X		Topped
030	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	18	G	X	X		
031	Indian Banyan	Ficus benghalensis	70	70	G	X	X		
032	Wine Palm(Fishtail)	Caryota urens		25	G	X	X		Caryota Urens
033	Areca Palm	Dypsis lutescens	2 Stlk.	20	P		X		
034	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	9	G				
035	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	8	G	X	X		
036	Manila Palm	Veitchia merrillii		15	P		X		Sm. Cavity, severe penciling
037	Manila Palm	Veitchia merrillii		17	P		X		Hourglassing
038	Montgomery Palm	Veitchia montgomeryana		7	G	X	X		
039	Monkeypod	Samanea saman	73	83	G		X		
040	Montgomery	Veitchia montgomeryana		27	G	X	X		
041	Montgomery	Veitchia montgomeryana		26	G	X	X		Paired with #12169
042	Coconut Palm	Cocos nucifera		30	G	X	X		
043	Coconut Palm	Cocos nucifera		25	G	X	X		
044	Coconut Palm	Cocos nucifera		22	G	X	X		
045	Coconut Palm	Cocos nucifera		30	G	X	X		
046	Fan Palm	Livistona species		4	G	X	X		
047	Coconut Palm	Cocos nucifera		22	G	X	X		
048	Giant Bird of Paradise	Strelitzia nicolai	5 Stlk.	11	G	X	X		
049	Coconut Palm	Cocos nucifera		20	G	X	X		
050	Banana	Musa species	3 Stlk.	9	G		X		
051	Giant Bird of Paradise	Strelitzia nicolai	5Stlk.	12	G	X	X		
052	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	28	G		X		Near Sprinkler Valves
053	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	28	G	X	X		
054	MacArthur Palm	Ptychosperma macarthurii	3Stlk.	18	G		X		Near Sprinkler Valves
12055	Indeterminant								
12056	Indeterminant								

Sheraton / Royal Hawaiian Hotel

Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
057	MacArthur Palm	Ptychosperma macarthurii	11 Stlk.	25	G	X	X	
058	Indeterminant							
059	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	31	G	X	X	
060	Indeterminant							
061	Giant Bird of Paradise	Strelitzia nicolai	2 Stlk.	11	G	X	X	
062	Giant Bird of Paradise	Strelitzia nicolai	2 Stlk.	12	G	X	X	
063	Fan Palm	Prichardia species		3.5	G	X	X	Finely divided, 4'-5' leaves
064	Fan Palm	Prichardia species		1.5	G	X	X	Corsely divided, 3.5-4' leaves
065	Coconut Palm	Cocos nucifera		24	G	X	X	
066	Singapore Plumeria	Plumeria obtusa	8	12	G	X	X	
067	Coconut Palm	Cocos nucifera		22	G	X	X	
068	Banana	Musa species	4 Stlk.	10	G	X	X	
069	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	20-25	F	X	X	
070	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	20-25	F	X	X	
071	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	20-25	F	X	X	
072	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	20-25	F	X	X	
073	Plumeria (common)	Plumeria x rubra	6	18	G	X	X	
074	Coconut Palm	Cocos nucifera		19	G	X	X	
075	Montgomery Palm	Veitchia montgomeryana		22	G	X	X	
076	Coconut Palm	Cocos nucifera		18	G	X	X	
077	Coconut Palm	Cocos nucifera		24	G	X	X	
078	Coconut Palm	Cocos nucifera		19	G	X	X	
079	Coconut Palm	Cocos nucifera		73	G	X	X	
080	Coconut Palm	Cocos nucifera		28	G	X	X	
081	Coconut Palm	Cocos nucifera		114	G	X	X	
12082	Coconut Palm	Cocos nucifera		77	G	X	X	
12083	Coconut Palm	Cocos nucifera		74	G	X	X	
084	Singapore Plumeria	Plumeria obtusa	14	24	G	X	X	

Sheraton / Royal Hawaiian Hotel

Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
085	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	25	G	X	X	
086	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	25	F		X	
087	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	25	G	X		
088	Plumeria (common)	Plumeria x rubra	7 in. 6 in.	16	G	X	X	Two trunks, one crown
089	Coconut Palm	Cocos nucifera		75	G	X	X	
090	Coconut Palm	Cocos nucifera		65	G	X	X	
091	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	25	G		X	
092	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	25	G	X		
093	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	25	G	X		
094	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	25	G	X	X	
095	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	25	G	X	X	
096	MacArthur Palm	Ptychosperma macarthurii	10 Stlk.	25	G	X		
097	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	20	G	X	X	
098	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	25	F	X	X	
099	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	25	P	X	X	
100	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	25	F	X	X	
101	Plumeria (common)	Plumeria x rubra	8	12	F	X	X	Topped, poor specimen
102	Montgomery Palm	Veitchia montgomeryana		4	G	X		
103	Coconut Palm	Cocos nucifera		50	G	X	X	
104	Plumeria (common)	Plumeria x rubra	4	9	F		X	Poor specimen
105	Coconut Palm	Cocos nucifera		55	G	X	X	
106	Plumeria (common)	Plumeria x rubra	4	10	F	X	X	Poor specimen
107	MacArthur Palm	Ptychosperma macarthurii	10 Stlk.	25	G	X		
108	MacArthur Palm	Ptychosperma macarthurii	9 Stlk.	25	G	X		
12109	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	25	G	X		
12110	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	25	G	X		
111	MacArthur Palm	Ptychosperma macarthurii	8 Stlk.	25	G	X		
112	MacArthur Palm	Ptychosperma macarthurii	9 Stlk.	25	G	X		

Sheraton / Royal Hawaiian Hotel

Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
113	MacArthur Palm	Ptychosperma macarthurii	7 Stlk.	25	G	X	X		
114	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	25	F	X	X		
115	Does not exist								
116	Does not exist								
117	MacArthur Palm	Ptychosperma macarthurii	Stlk.	25	F		X		
118	MacArthur Palm	Ptychosperma macarthurii	Stlk.	25	G	X	X		
119	MacArthur Palm	Ptychosperma macarthurii	Stlk.	25	G	X	X		
120	Outside limit of work								
121	Outside limit of work								
122	Outside limit of work								
123	Outside limit of work								
124	Podocarpus(common)	Podocarpus macrophyllus	2.5, 1	11	P/G	X	X		Top of larger trunk is dead
125	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	8	F	X	X		
126	Manila Palm	Veitchia merrillii		8	P		X		Cavity, Trunk Damage
127	Montgomery Palm	Veitchia montgomeryana	1 Stlk.	18	P		X		
128	Montgomery Palm	Veitchia montgomeryana	1 Stlk.	13	F		X		
129	Kukui	Aleurites moluccana	17	44	F	X	X		
130	Kentia Palm	Howea species		1	G	X	X		
131	Kentia Palm	Howea species		5	X	X			
132	Manila Palm	Veitchia merrillii		10	F	X	X		Small cavity
133	Areca Palm	Dypsis lutescens		10	F		X		
134	Kukui	Aleurites moluccana	11	42	F	X	X		
135	Caribbee Royal Palm	Roystonea oleracea		27	G	X	X		
12136	Caribbee Royal Palm	Roystonea oleracea		15	G	X	X		
12137	Caribbee Royal Palm	Roystonea oleracea		60	F	X	X		
138	Wine Palm(Fishtail)	Caryota urens		27	G	X	X		Caryota Urens
139	Podocarpus(common)	Podocarpus macrophyllus	3.5	15	G	X	X		
140	Podocarpus(common)	Podocarpus macrophyllus	3.5	12	G	X	X		

Sheraton / Royal Hawaiian Hotel

Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
141	Podocarpus (common)	Podocarpus macrophyllus	4	12	G	X	X		
142	Hawaiian Tree Fern	Cibotium glaucum	4	1.5	F	X	X		
143	Hawaiian Tree Fern	Cibotium glaucum	6	2.5	G	X	X		
144	Hawaiian Tree Fern	Cibotium glaucum	5	1.5	G	X	X		
145	MacArthur Palm	Ptychosperma macarthurii	3	7	F	X	X		
146	Satinleaf	Chrysophyllum oliviforme	11	24	F	X	X		Topped
147	Coconut Palm	Cocos nucifera		97	G	X	X		
148	Podocarpus (common)	Podocarpus macrophyllus	3	14	G	X	X		
149	Podocarpus (common)	Podocarpus macrophyllus	2.5	15	G	X	X		
150	Podocarpus (common)	Podocarpus macrophyllus	3	9	G	X	X		Topped
151	Coconut Palm	Cocos nucifera		82	G	X	X		
152	Coconut Palm	Cocos nucifera		86	G	X	X		
153	Unidentified		5	17	G	X	X		Similar to False Olive
154	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	6	G	X	X		
155	Coconut Palm	Cocos nucifera		104	G	X	X		
156	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	8	G	X	X		
157	Coconut Palm	Cocos nucifera		101	G	X	X		
158	Coconut Palm	Cocos nucifera		107	P		X		Trunk split at base
159	Coconut Palm	Cocos nucifera		53	P		X		Root system undermined
160	False Olive	Elaeodendron orientale	10	44	G	X	X		
161	False Olive	Elaeodendron orientale	11	40	G	X	X		
162	Coconut Palm	Cocos nucifera		76	F		X		Poor base
12163	Coconut Palm	Cocos nucifera		80	F		X		Dangerous angle through Banyan
12164	Coconut Palm	Cocos nucifera		92	G		X		
165	Plumeria (common)	Plumeria x rubra	6	11	F		X		Topped, poor specimen
166	Coconut Palm	Cocos nucifera		72	G		X		Vertical split at base
167	Plumeria (common)	Plumeria x rubra	7.5, 8.5	12	F		X		Topped, poor specimen
168	Plumeria (common)	Plumeria x rubra	9	25	G	X	X		

Sheraton / Royal Hawaiian Hotel

Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
169	Montgomery Palm	Veitchia montgomeryana	25	G	X	X			Paired with #12041
170	Giant Bird of Paradise	Strelitzia nicolai	10 Stlk.	G		X	X		
171	Fan Palm	Prichardia species	1	G	X	X			
172	Manila Palm	Veitchia merrillii	40	G		X	X		
173	King Palm	Archontophoenix alexandrae	50	G		X	X		
174	King Palm	Archontophoenix alexandrae	54	G		X	X		Palms #12173-176 - planted in cluster
175	King Palm	Archontophoenix alexandrae	29	G		X	X		
176	King Palm	Archontophoenix alexandrae	52	G		X	X		
177	King Palm	Archontophoenix alexandrae	54	G		X	X		
178	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	G		X	X		
179	MacArthur Palm	Ptychosperma macarthurii	7 Stlk.	F		X	X		
180	Plumeria (common)	Plumeria x rubra	4	F			X		Poor specimen
181	Plumeria (common)	Plumeria x rubra	3 in., 6 in.	F			X		Poor specimen
182	Coconut Palm	Cocos nucifera	37	G		X	X		
183	MacArthur Palm	Ptychosperma macarthurii	1st	F		X	X		
184	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	F		X	X		
185	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	F		X	X		
186	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	G	X	X	X		
187	Areca Palm	Dypsis lutescens	8 Stlk.	F-P		X	X		Apparent nutrient deficiencies
188	Areca Palm	Dypsis lutescens	10 Stlk.	F		X	X		
189	Pride-of-Barbados	Caesalpinia pulcherrima	3.5	G	X	X			Topped at 2 ft.
12190	Areca Palm	Dypsis lutescens	5 Stlk.	G	X	X	X		
12191	Areca Palm	Dypsis lutescens	8 Stlk.	G	X	X	X		
192	Areca Palm	Dypsis lutescens	5 Stlk.	F		X	X		
193	Areca Palm	Dypsis lutescens	12 Stlk.	G	X	X	X		
194	Coconut Palm	Cocos nucifera	50	F		X	X		
195	Areca Palm	Dypsis lutescens	14 Stlk.	F		X	X		
196	Areca Palm	Dypsis lutescens	11 Stlk.	G		X	X		

Sheraton / Royal Hawaiian Hotel

Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
197	Areca Palm	Dypsis lutescens	2 Stk.	24	G	X	X	
198	Areca Palm	Dypsis lutescens	7 Stk.	20	G	X	X	
199	MacArthur Palm	Ptychosperma macarthurii	3 Stk.	24	G	X	X	
200	MacArthur Palm	Ptychosperma macarthurii	2 Stk.	22	G	X	X	
201	Coconut Palm	Cocos nucifera		51	G	X	X	Moderate Hourglass
202	Coconut Palm	Cocos nucifera		49	G	X	X	
203	Coconut Palm	Cocos nucifera		50	G	X	X	Moderate Hourglass
204	Coconut Palm	Cocos nucifera		40	G	X	X	Slight hourglass, mech. damage at 3 1/2-4'
205	Coconut Palm	Cocos nucifera		30	F	X	X	Penciling
206	Coconut Palm	Cocos nucifera		38	G	X	X	
207	Coconut Palm	Cocos nucifera		41	G	X	X	Thin, slight chlorotic fronds, slight penciling
208	MacArthur Palm	Ptychosperma macarthurii	2 Stk.	20	F-P	X	X	1st cavity at base
209	MacArthur Palm	Ptychosperma macarthurii	7 Stk.	15	F	X	X	
210	Cuban Royal Palm	Roystonea regia		14	G	X	X	
211	Cuban Royal Palm	Roystonea regia		19	G	X	X	
212	Coconut Palm	Cocos nucifera		61	P	X	X	3 leaf crown, poss. borers, ext. mech. trunk damage
213	Coconut Palm	Cocos nucifera		66	F	X	X	Sm. Crown, mech. Trunk damage to root initiation zone
214	Coconut Palm	Cocos nucifera		41	G	X	X	
215	Coconut Palm	Cocos nucifera		31	F	X	X	
216	Coconut Palm	Cocos nucifera		45	G	X	X	
12217	Coconut Palm	Cocos nucifera		52	F-P	X	X	Sm. crown, moderate -severe penciling
12218	Coconut Palm	Cocos nucifera		56	F-G	X	X	Mod. hourglass, Mech. Damage at base, slight penciling
219	Coconut Palm	Cocos nucifera		53	G	X	X	
220	MacArthur Palm	Ptychosperma macarthurii	12 Stk.	24	G	X	X	
221	Coconut Palm	Cocos nucifera		55	F-G	X	X	Sm. deep cavities in lower 6' of trunk
222	Giant Bird of Paradise	Strelitzia nicolai	9 Stk.	3	G	X	X	Giant Bird of Paradise
223	Banana	Musa species	5 Stk.	8	G	X	X	
224	Giant Bird of Paradise	Strelitzia nicolai	11 Stk.	8	G	X	X	Giant Bird of Paradise

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Tree Survey

Tree #	Common Name	Botanical Name	2 Stlk.	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
225	Banana	Musa species		5	G	X	X	X		
226	Tahitian Gardenia	Gardenia taitensis	7	14	G		X	X		
227	Tahitian Gardenia	Gardenia taitensis	4.5	16	G		X	X		
228	Tahitian Gardenia	Gardenia taitensis	10	15	G		X	X		Cavity at base
229	Coconut Palm	Cocos nucifera		58	G		X	X		
230	Montgomery Palm	Veitchia montgomeryana		18	G		X	X		
231	Montgomery Palm	Veitchia montgomeryana		16	G		X	X		
232	Coconut Palm	Cocos nucifera		33	F-P		X	X		Sm. Crown, mod. Penciling, vertical splits at 10-12'
233	Coconut Palm	Cocos nucifera		32	F		X	X		Mod. Penciling, sl. Hourglass, sm. Crown
234	Coconut Palm	Cocos nucifera		42	F-G		X	X		Mod. Penciling, mech. damage near base
235	Seagrape	Coccoloba uvifera	20	18	G	X	X	X		
236	Seagrape	Coccoloba uvifera	15	19	G	X	X	X		
237	Seagrape	Coccoloba uvifera	21	19	G	X	X	X		
238	Coconut Palm	Cocos nucifera		21	G	X	X	X		Machete wounds, vertical split @ 10'
239	Coconut Palm	Cocos nucifera		23	G	X	X	X		
240	Coconut Palm	Cocos nucifera		18	G	X	X	X		
241	Fan Palm	Prichardia species		19	G		X	X		
242	Singapore Plumeria	Plumeria obtusa	7	10	G	X	X	X		2" deep cavitt @ 3 -1/2
243	Singapore Plumeria	Plumeria obtusa	8	11	G	X	X	X		Whitefly infestation
12244	Common Plumeria	Plumeria acuminata x rubra	5	10	G	X	X	X		
12245	Coconut Palm	Cocos nucifera		21	G	X	X	X		
246	Coconut Palm	Cocos nucifera		22	G	X	X	X		Moderate Hourglass
247	Coconut Palm	Cocos nucifera		45	G		X	X		
248	Common Plumeria	Plumeria acuminata x rubra	7/12	18	G	X	X	X		
249	Seagrape	Coccoloba uvifera	13	23	G		X	X		
250	Hau	Hibiscus tiliaceus	21	28	G		X	X		
251	Hau	Hibiscus tiliaceus	25	28	G		X	X		
252	Hau	Hibiscus tiliaceus	17	28	G		X	X		

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
253	Schefflera	Shefflera actinophylla	13	17	G	X	X	Roots cracking sidewalk
254	Schefflera	Shefflera actinophylla	28	21	G	X	X	Lg. cavities
255	Fan Palm	Prichardia species		3	G	X	X	Commemorative Tree
256	Common Plumeria	Plumeria acuminata x rubra	7	13	G	X	X	
257	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	10	G	X	X	
258	Autograph	Clusia rosea	12	20	G	X	X	
259	Fan Palm	Prichardia species		24	G	X	X	
260	Singapore Plumeria	Plumeria obtusa	8	20	G	X	X	
261	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	3.5	G	X	X	
262	Fan Palm	Prichardia species		1	G	X	X	
263	Indian Banyan	Ficus benghalensis	80	51	G	X	X	
264	Indian Banyan	Ficus benghalensis	68	45	G	X	X	
265	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	4	G	X	X	
266	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	8	G	X	X	
267	Caribbee Royal Palm	Roystonea oleracea		5.5	G	X	X	
268	Singapore Plumeria	Plumeria obtusa	3	7	F	X	X	No direct sunlight
269	Giant Bird of Paradise	Strelitzia nicolai	9 Stlk.	7	G	X	X	
270	Manila Palm	Veitchia merrillii	2 Stlk.	4	G	X	X	
12271	Giant Bird of Paradise	Strelitzia nicolai	10 Stlk.	9	G	X	X	3 large masses
12272	Monkeypod	Samanea saman	52	64	G	X	X	
273	Monkeypod	Samanea saman	58	64	G	X	X	
274	Montgomery Palm	Veitchia montgomeryana		22	G	X	X	wound @ 3'
275	Montgomery Palm	Veitchia montgomeryana		20	G	X	X	Grouped together
276	Montgomery Palm	Veitchia montgomeryana		7	G	X	X	
277	Montgomery Palm	Veitchia montgomeryana		11	G	X	X	
278	Montgomery Palm	Veitchia montgomeryana		15	G	X	X	
279	Montgomery Palm	Veitchia montgomeryana		21	G	X	X	Grouped together
280	Montgomery Palm	Veitchia montgomeryana		7	G	X	X	

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
281	Montgomery Palm	Veitchia montgomeryana	25	P		X	X	Extensive Rot Near Base
282	Montgomery Palm	Veitchia montgomeryana	14	G	X	X	X	
283	Montgomery Palm	Veitchia montgomeryana	20	G	X	X	X	
284	MacArthur Palm	Ptychosperma macarthurii	25	G		X	X	
285	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	G		X	X	
286	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	G		X	X	
287	Montgomery Palm	Veitchia montgomeryana	20	G		X	X	Grouped together
288	Montgomery Palm	Veitchia montgomeryana	23	G		X	X	
289	Montgomery Palm	Veitchia montgomeryana	12	G	X	X	X	
290	Montgomery Palm	Veitchia montgomeryana	20	P		X	X	Pencil; grouped together
291	Montgomery Palm	Veitchia montgomeryana	20	G	X	X	X	
292	Montgomery Palm	Veitchia montgomeryana	20	F		X	X	Mech. Damage near base
293	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	G	X	X	X	
294	Montgomery Palm	Veitchia montgomeryana	15	G	X	X	X	Grouped together
295	Montgomery Palm	Veitchia montgomeryana	16	G	X	X	X	
296	Montgomery Palm	Veitchia montgomeryana	18	G	X	X	X	
297	Montgomery Palm	Veitchia montgomeryana	18	P		X	X	Pencil; sm. Cavities & restricted root space
12298	Montgomery Palm	Veitchia montgomeryana	17	G		X	X	
12299	Fan Palm	Prichardia species	28	F		X	X	Grouped together with #297
300	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	G		X	X	
301	Wine Palm(Fishtail)	Caryota urens	23	G	X	X	X	
302	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	G	X	X	X	
303	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	G	X	X	X	
304	Montgomery Palm	Veitchia montgomeryana	23	F		X	X	
305	Montgomery Palm	Veitchia montgomeryana	20	G	X	X	X	Grouped together with #12307
306	Montgomery Palm	Veitchia montgomeryana	23	F	X	X	X	
307	Montgomery Palm	Veitchia montgomeryana	9	P		X	X	Lg. cavity at base
308	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	G		X	X	

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
309	Indian Banyan	Ficus benghalensis	60	72	F	X	X		DBH does not include large aerial roots
310	Traveler's Palm	Ravenala madagascariensis	3 Stlk.	16	G	X	X		
311	Fan Palm	Prichardia species		23	G	X	X		
312	Areca Palm	Dypsis lutescens	6 Stlk.	12	G	X	X		
313	Montgomery Palm	Veitchia montgomeryana		24	G	X	X		
314	Montgomery Palm	Veitchia montgomeryana		32	G	X	X		Grouped together
315	Caribbee Royal Palm	Roystonea oleracea		63	G	X	X		
316	Montgomery Palm	Veitchia montgomeryana		34	G	X	X		
317	Montgomery Palm	Veitchia montgomeryana		36	G	X	X		
318	Montgomery Palm	Veitchia montgomeryana		8	G	X	X		
319	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	35	G	X	X		
320	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	30	G	X	X		
321	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	30	G	X	X		
322	King Palm	Archontophoenix alexandrae		68	G	X	X		
323	King Palm	Archontophoenix alexandrae		74	G	X	X		
324	King Palm	Archontophoenix alexandrae		72	G	X	X		
12325	Montgomery Palm	Veitchia montgomeryana		34	G	X	X		
12326	Montgomery Palm	Veitchia montgomeryana		32	G	X	X		
327	MacArthur Palm	Ptychosperma macarthurii	8 Stlk.	30	G	X	X		
328	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	37	G	X	X		
329	Montgomery Palm	Veitchia montgomeryana		4	G	X	X		
330	Areca Palm	Dypsis lutescens	4 Stlk.	15	G	X	X		
331	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	28	G	X	X		
332	Areca Palm	Dypsis lutescens	4 Stlk.	13	G	X	X		
333	Areca Palm	Dypsis lutescens	4 Stlk.	22	G	X	X		
334	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	33	G	X	X		
335	Areca Palm	Dypsis lutescens	6 Stlk.	24	G	X	X		
336	Areca Palm	Dypsis lutescens	2 Stlk.	11	P	X	X		

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
337	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	30	G	X	X		
338	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	30	G	X	X		
339	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	30	G	X	X		
340	Areca Palm	Dypsis lutescens	4 Stlk.	20	F	X	X		
341	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	31	G	X	X		
342	Areca Palm	Dypsis lutescens	7 Stlk.	21	G	X	X		
343	Areca Palm	Dypsis lutescens	9 Stlk.	24	G	X	X		
344	Fan Palm	Prichardia species		24	G	X	X		
345	Fan Palm	Prichardia species		27	G	X	X		
346	Fan Palm	Prichardia species		21	G	X	X		
347	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	12	G	X	X		
348	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	20	G	X	X		
349	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	12	G	X	X		
350	Areca Palm	Dypsis lutescens	4 Stlk.	11	G	X	X		
351	Chinese Fan Palm	Livistona chinensis		23	G	X	X		
12352	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	19	G	X	X		
12353	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	19	G	X	X		
354	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	15	G	X	X		
355	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	22	G	X	X		
356	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	28	P	X	X		
357	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	27	F	X	X		
358	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	30	F-G	X	X		
359	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	30	F	X	X		
360	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	30	G	X	X		
361	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	30	G	X	X		
362	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	27	G	X	X		
363	Fan Palm	Prichardia species		58	G	X	X		
364	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	18	G	X	X		

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
365	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	30	G	X	X		
366	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	33	G	X	X		
367	MacArthur Palm	Ptychosperma macarthurii	10 Stlk.	30	G	X	X		
368	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	22	G	X	X		
369	Queen Palm	Syagrus romanzoffianum	39	G		X	X		
370	Giant Bird of Paradise	Strelitzia nicolai	6 Stlk.	8	G	X	X		
371	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	26	G	X	X		
372	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	21	F	X	X		
373	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	20	G	X	X		
374	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	28	F	X	X		
375	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	31	F-P	X	X		
376	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	30	P	X	X		
377	Areca Palm	Dypsis lutescens	6 Stlk.	18	G	X	X		
378	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	24	F	X	X		
12379	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	26	F-P	X	X		
12380	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	30	G/P	X	X		One stalk necrotic
12381	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	30	F-P	X	X		
12382	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	15	F-G	X	X		
383	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	33	F	X	X		
384	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	35	F	X	X		
385	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	27	G	X	X		
386	MacArthur Palm	Ptychosperma macarthurii	1 Stlk.	35	P		X		
387	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	40	F-G	X	X		
388	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	27	G	X	X		
389	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	27	G	X	X		
390	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	33	P		X		
391	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	29	F-P	X	X		
392	Fan Palm	Prichardia species	46	G		X			

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
393	MacArthur Palm	Ptychosperma macarthurii	9 Stlk.	29	G	X	X	
394	Soapberry	Pink/Purp. New leaves Blackberry clusters at branch tip	5	21	G	X		
395	Areca Palm	Dypsis lutescens	2 Stlk.	4	G	X	X	
396	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	45	F-P	X	X	
397	Areca Palm	Dypsis lutescens	5 Stlk.	5	G	X	X	
398	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	33	G	X	X	
399	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	25	G	X	X	
400	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	24	G	X	X	
401	Schefflera	Schefflera actinophylla	19	32	G	X	X	Previously topped
402	Montgomery Palm	Veitchia montgomeryana		30	G	X	X	
403	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	29	G	X	X	
404	King Palm	Archontophoenix alexandrae		55	G	X	X	
405	Schefflera	Schefflera actinophylla	19	31	G	X	X	
406	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	27	F	X	X	
407	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	43	G	X	X	
408	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	40	G	X	X	
409	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	36	G	X	X	
410	MacArthur Palm	Ptychosperma macarthurii	7 Stlk.	25	G	X	X	
411	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	21	G	X	X	
412	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	26	G	X	X	
413	Wine Palm(Fishtail)	Caryota urens		14	G	X		
414	MacArthur Palm	Ptychosperma macarthurii	9 Stlk.	30	G	X	X	
415	Montgomery Palm	Veitchia montgomeryana		23	G	X	X	
416	Montgomery Palm	Veitchia montgomeryana		7	G	X		
417	Schefflera	Schefflera actinophylla	23	29	G	X	X	
418	Montgomery Palm	Veitchia montgomeryana		8	G	X		
419	Montgomery Palm	Veitchia montgomeryana		8	F	X		
420	Montgomery Palm	Veitchia montgomeryana		7	P		X	Poorly rooted, penciling, wound

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Tree Survey

Tree #	Common Name		Botanical Name		DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
421	Montgomery Palm		Veitchia montgomeryana		7	G	X	X			
422	Montgomery Palm		Veitchia montgomeryana		7	G	X	X			
423	MacArthur Palm		Ptychosperma macarthurii	1 Stlk.	26	G		X	X		
424	MacArthur Palm		Ptychosperma macarthurii	2 Stlk.	27	G		X	X		
425	Schefflera		Schefflera actinophylla	8/12	26	G		X	X		
426	Schefflera		Schefflera actinophylla	20/13	24	G		X	X		
427	Schefflera		Schefflera actinophylla	15	22	G		X	X		
428	Schefflera		Schefflera actinophylla	4	13	P		X	X		A tall stub
429	Schefflera		Schefflera actinophylla	13	20	G		X	X		
430	Schefflera		Schefflera actinophylla	19	20	G		X	X		
431	Schefflera		Schefflera actinophylla	16	17	G		X	X		
432	Areca Palm		Dypsis lutescens	25 Stlk	34	G		X	X		
433	African Tulip		Spathodea campanulata	35	40	G		X	X		
434	Soapberry			1.5/3	18	F		X	X		
435	Schefflera		Schefflera actinophylla	26	31	G		X	X		
436	MacArthur Palm		Ptychosperma macarthurii	5 Stlk.	25	F		X	X		
437	Croton		Codiaeum variegatum	4.5	15	F	X	X			Tree Form
438	Soapberry			7	25	F		X	X		
439	Soapberry			4.5/6.5	25	F		X	X		
440	Schefflera		Schefflera actinophylla	39	34	G		X	X		
441	Coconut Palm		Cocos nucifera		40	P			X		Mechanical damage @ 4 Severe Hourglass
442	Coconut Palm		Cocos nucifera		57	F		X	X		Moderate Mechanical damage @ 4 Severe Hourglass
443	Coconut Palm		Cocos nucifera		26	F		X	X		Moderate Mechanical damage @ 4 Severe Hourglass
444	MacArthur Palm		Ptychosperma macarthurii	2 Stlk.	8	G	X	X			
445	MacArthur Palm		Ptychosperma macarthurii	7 Stlk.	18	G	X	X			
446	Coconut Palm		Cocos nucifera		1/2	G	X	X			
447	Coconut Palm		Cocos nucifera		1	G	X	X			
448	MacArthur Palm		Ptychosperma macarthurii	9 Stlk.	26	G		X	X		

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
449	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	22	G	X	X		
450	Royal Poincianna	Delonix regia	12	15	G	X	X		
451	Chinese Fan Palm	Livistona chinensis		12	G	X	X		
452	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	49	G	X	X		
453	Rainbow Shower	Cassia javanica x fistula	28	50	G	X	X		
454	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	25	G	X	X		
455	King Palm	Archontophoenix alexandrae		49	G	X	X		
456	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	29	F	X	X		
457	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	29	F-G	X	X		
458	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	37	G	X	X		
459	Schefflera	Schefflera actinophylla	21	39	G	X	X		
460	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	22	F-G	X	X		
461	Coconut Palm	Cocos nucifera		62	G	X	X		
462	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	37	F-P	X	X		
463	MacArthur Palm	Ptychosperma macarthurii	8 Stlk.	31	G	X	X		
464	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	31	G	X	X		
465	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	38	F	X	X		
466	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	41	F-G	X	X		
467	Coconut Palm	Cocos nucifera		49	F	X	X		
468	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	49	F-G	X	X		gradual pencil, small crown
469	Coconut Palm	Cocos nucifera		50	G	X	X		
470	MacArthur Palm	Ptychosperma macarthurii	14 Stlk.	44	G	X	X		
471	African Tulip	Spathodea campanulata	34	70	F	X	X		
472	Coconut Palm	Cocos nucifera		66	G	X	X		
473	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	31	G	X	X		
474	Montgomery Palm	Veitchia montgomeryana		10	G	X	X		
475	MacArthur Palm	Ptychosperma macarthurii	7 Stlk.	35	G	X	X		
476	Schefflera	Schefflera actinophylla	14	12	P		X		Tall Stump

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
477	Coconut Palm	Cocos nucifera	43	F		X	X	Poor taper
478	Coconut Palm	Cocos nucifera	37	F		X	X	
479	Chinese Banyan	Ficus microcarpa	13	G		X	X	
480	Coconut Palm	Cocos nucifera	53	F-G		X	X	
481	Rainbow Shower	Cassia javanica x fistula	37	G		X		
482	Great Crepe Myrtle	Lagerstroemia speciosa	6	F		X	X	One sided, poor root system, sandpapery leaves
483	Coconut Palm	Cocos nucifera	74	G		X	X	
484	Coconut Palm	Cocos nucifera	55	G		X	X	
485	Schefflera	Schefflera actinophylla	7	F-G		X	X	
486	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	G		X	X	
487	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	G		X	X	
488	Mountain Apple	Syzygium malaccense	4	G	X	X		Some chlorosis
489	MacArthur Palm	Ptychosperma macarthurii	7 Stlk.	F		X	X	
490	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	G		X	X	
491	Chinese Lantern	Abutilon x hybridum	4	F	X	X		Previously topped @ 12 ft.
492	Caribbee Royal Palm	Roystonea oleracea	36	G		X	X	
493	MacArthur Palm	Ptychosperma macarthurii	17 Stlk.	G		X	X	
494	MacArthur Palm	Ptychosperma macarthurii	8 Stlk.	G		X	X	
495	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	G		X	X	
496	Caribbee Royal Palm	Roystonea oleracea	66	G		X	X	
497	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	G		X	X	
498	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	G		X	X	
499	MacArthur Palm	Ptychosperma macarthurii	11 Stlk.	G		X	X	One tall dead stalk, should be removed
500	Cuban Royal Palm	Roystonea regia	54	G		X		Odd bend @ 40'
501	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	F-G		X	X	
502	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	G		X	X	
503	MacArthur Palm	Ptychosperma macarthurii	7 Stlk.	G		X	X	
504	Traveler's Palm	Ravenala madagascariensis	8	G		X	X	

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
505	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	5 G		X	X	
506	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	19 G	X	X		
507	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	18 G		X	X	
508	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	15 G		X	X	
509	Coconut Palm	Cocos nucifera		38 G	X	X		Moderate Hourglass
510	Coconut Palm	Cocos nucifera		46 F-P			X	Severe hourglass
511	Royal Poincianna	Delonix regia	17	20 G	X	X		
512	Coconut Palm	Cocos nucifera		42 F		X	X	Severe hourglass
513	Fan Palm	Prichardia species		27 G	X	X		
514	Australian Tree Fern	Cyathea cooperi		13 F	X	X		
515	Australian Tree Fern	Cyathea cooperi		13 F-G	X	X		
516	Coconut Palm	Cocos nucifera		48 G		X	X	Moderate Hourglass
517	Australian Tree Fern	Cyathea cooperi		10 G		X	X	
518	Australian Tree Fern	Cyathea cooperi		6 G		X	X	
519	Coconut Palm	Cocos nucifera		47 F-G		X	X	Moderate Hourglass, crown rather small
520	Australian Tree Fern	Cyathea cooperi		5 G	X	X		
521	Australian Tree Fern	Cyathea cooperi		5 G	X	X		
522	Australian Tree Fern	Cyathea cooperi		7 G	X	X		
523	Coconut Palm	Cocos nucifera		40 G		X		Moderate Hourglass
524	Fan Palm	Prichardia species		23 G	X	X		
525	Australian Tree Fern	Cyathea cooperi		5 G	X	X		
526	Australian Tree Fern	Cyathea cooperi		5 G	X	X		
527	Australian Tree Fern	Cyathea cooperi		5 G	X	X		
528	Coconut Palm	Cocos nucifera		35 P			X	Severe hourglass, thin trunk, poor root zone, sinsent
529	Fan Palm	Prichardia species		25 G	X	X		
530	MacArthur Palm	Ptychosperma macarthurii	3 Stlk.	24 F		X	X	
531	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	22 F		X	X	
532	Areca Palm	Dypsis lutescens	3 Stlk.	12 G	X	X		

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
533	Areca Palm	Dypsis lutescens	3 Stlk.	8 G	X	X		
534	Areca Palm	Dypsis lutescens	1 Stlk.	9 F		X	X	
535	Areca Palm	Dypsis lutescens	3 Stlk.	11 G	X	X		
536	Areca Palm	Dypsis lutescens	2 Stlk.	10 G	X	X		
537	Areca Palm	Dypsis lutescens	4 Stlk.	8 G	X	X		
538	Areca Palm	Dypsis lutescens	2 Stlk.	24 G		X	X	
539	Areca Palm	Dypsis lutescens	2 Stlk.	19 G		X	X	
540	MacArthur Palm	Ptychosperma macarthurii		19 G		X	X	
541	MacArthur Palm	Ptychosperma macarthurii		21 G		X	X	
542	Tahitian Gardenia	Gardenia taitensis	4	14 G	X	X		Tree Form
543	Tahitian Gardenia	Gardenia taitensis	4	14 G	X	X		Tree Form
544	Tahitian Gardenia	Gardenia taitensis	2	14 G	X	X		Tree Form
545	Tahitian Gardenia	Gardenia taitensis	4	14 G	X	X		Tree Form
546	Coconut Palm	Cocos nucifera		63 G		X	X	Moderate Hourglass, mech. Damage @ 18 ft.
547	Tahitian Gardenia	Gardenia taitensis	5	15 G	X	X		Tree Form
548	Tahitian Gardenia	Gardenia taitensis	4	15 F	X	X		Tree Form
549	Tahitian Gardenia	Gardenia taitensis	4	15 G	X	X		Tree Form
550	Tahitian Gardenia	Gardenia taitensis	2	13 F-P		X		
551	Areca Palm	Dypsis lutescens	25 Stlk.	20 G		X	X	
552	Areca Palm	Dypsis lutescens	13 Stlk.	22 G	X	X		
553	Areca Palm	Dypsis lutescens	10 Stlk.	23 F-G		X	X	
554	Areca Palm	Dypsis lutescens	10 Stlk.	23 G	X	X		
555	Areca Palm	Dypsis lutescens	10 Stlk.	21 G		X	X	
556	Coconut Palm	Cocos nucifera		58 F		X	X	Moderate/severe hourglass
557	Tahitian Gardenia	Gardenia taitensis	3	12 G	X	X		Tree Form
558	Tahitian Gardenia	Gardenia taitensis	2	11 F			X	Tree Form
559	Tahitian Gardenia	Gardenia taitensis	2	11 F			X	Tree Form
560	Tahitian Gardenia	Gardenia taitensis	4	12 G	X	X		Tree Form

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
561	Tahitian Gardenia	Gardenia taitensis	2/2	12	G	X		Tree Form
562	Tahitian Gardenia	Gardenia taitensis	3	11	F		X	Tree Form
563	Tahitian Gardenia	Gardenia taitensis	3	12	G	X		Tree Form
564	Lechoso	Stemadenia litoralis	3	10	F-G	X		Tree Form
565	Singapore Plumeria	Plumeria obtusa	7	18	F	X		Heavy white-fly infestation, 30 degree lean
566	Singapore Plumeria	Plumeria obtusa	7	20	G	X		
567	Coconut Palm	Cocos nucifera			G	X	X	Moderate hourglass
568	Common Plumeria	Plumeria acuminata x rubra	13	20	G	X		
569	MacArthur Palm	Ptychosperma macarthurii	15 Stlk.	15	G	X	X	
570	Coconut Palm	Cocos nucifera		29	F-P	X	X	5 cavities, 4-10 ft. moderate hourglass at bend @ 14'
571	Lechoso	Stemadenia litoralis	4	14	F	X	X	Chlorotic, previously topped @ 12'
572	Lechoso	Stemadenia litoralis	5	22	F	X		Chlorotic, previously topped @ 12'
573	Lechoso	Stemadenia litoralis	4.5	25	F	X	X	Chlorotic, previously topped @ 12'
574	Lechoso	Stemadenia litoralis	6	25	F	X		
575	Chinese Fan Palm	Livistona chinensis	5	5	G	X		
576	Chinese Fan Palm	Livistona chinensis		3	G	X		
577	Podocarpus(common)	Podocarpus macrophyllus	5.5	22	G	X	X	
578	Traveler's Palm	Ravenala madagascariensis		2.5	G	X		
579	Schefflera	Schefflera actinophylla	6.5	23	F	X	X	cavity @ 3'
580	Schefflera	Schefflera actinophylla	26	25	F	X	X	not hazardous, hollow at base
581	Singapore Plumeria	Plumeria obtusa	12	31	F-G	X	X	25 degree lean, White-fly infestation
582	Lechoso	Stemadenia litoralis	6	17	G	X		
583	Lechoso	Stemadenia litoralis	5	16	G	X		
584	Lechoso	Stemadenia litoralis	4	16	G	X	X	
585	Schefflera	Schefflera actinophylla	13	24	G	X	X	
586	Lechoso	Stemadenia litoralis	6.5	24	G	X		
587	Lechoso	Stemadenia litoralis	7	23	G	X		
588	African Tulip	Spathodea campanulata	31	43	G	X	X	some dark rot at base due to sprinkler over-watering

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
589	Lechoso	Stemadenia littoralis	6	18	G	X	X		
590	Schefflera	Schefflera actinophylla	12/14	23	G	X	X		
591	Australian Tree Fern	Cyathea cooperi		6	G	X	X		
592	Australian Tree Fern	Cyathea cooperi		3	G	X	X		
593	Australian Tree Fern	Cyathea cooperi		4	G	X	X		
594	Australian Tree Fern	Cyathea cooperi		7	G	X	X		
595	Australian Tree Fern	Cyathea cooperi		5	G	X	X		
596	Coconut Palm	Cocos nucifera		40	F-G	X	X		slight-moderate hourglass
597	Coconut Palm	Cocos nucifera		40	F	X	X		moderate hourglass
598	Coconut Palm	Cocos nucifera		40	F-P		X		severe hourglass
599	Montgomery Palm	Veitchia montgomeryana		17	G	X	X		
600	Montgomery Palm	Veitchia montgomeryana		19	G	X	X		
601	Montgomery Palm	Veitchia montgomeryana		19	G	X	X		
602	Montgomery Palm	Veitchia montgomeryana		19	G	X	X		
603	Montgomery Palm	Veitchia montgomeryana		18	G	X	X		
604	Montgomery Palm	Veitchia montgomeryana		17	G	X	X		
605	Montgomery Palm	Veitchia montgomeryana		20	G	X	X		
606	Montgomery Palm	Veitchia montgomeryana		17	G	X	X		
607	Montgomery Palm	Veitchia montgomeryana		16	G	X	X		
608	Montgomery Palm	Veitchia montgomeryana		16	G	X	X		
609	Montgomery Palm	Veitchia montgomeryana		16	G	X	X		
610	Manila Palm	Veitchia merrillii		12	G	X	X		
611	Coconut Palm	Cocos nucifera		37	F	X	X		moderate-severe hourglass
612	Schefflera	Schefflera actinophylla	23	26	G	X	X		
613	Schefflera	Schefflera actinophylla	21	26	G	X	X		
614	Giant White Bird of Paradise	Strelitzia nicolai	4 Stlk.	13	G	X	X		
615	Coconut Palm	Cocos nucifera		37	F	X	X		moderate-severe hourglass
616	Coconut Palm	Cocos nucifera		32	P		X		severe hourglass

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
617	Common Plumeria	Plumeria acuminata x rubra	8	27	G	X	X		
618	Areca Palm	Dypsis lutescens	9 Stlk.	22	G	X	X		
619	Areca Palm	Dypsis lutescens	10 Stlk.	21	G	X	X		
620	Areca Palm	Dypsis lutescens	13 Stlk.	23	G	X	X		
621	Montgomery Palm	Veitchia montgomeryana		20	G	X	X		
622	Montgomery Palm	Veitchia montgomeryana		20	G	X	X		
623	Montgomery Palm	Veitchia montgomeryana		21	G	X	X		
624	Montgomery Palm	Veitchia montgomeryana		21	G	X	X		
625	Montgomery Palm	Veitchia montgomeryana		3	G	X	X		
626	Coconut Palm	Cocos nucifera		27	G	X	X		
627	Coconut Palm	Cocos nucifera		43	G	X	X		
628	Singapore Plumeria	Plumeria obtusa	5	17	G	X	X		
629	Hong Kong Orchid	Bauhinia x blakeana	24	31	F-G	X	X		previously topped @ 17 ft.
630	MacArthur Palm	Ptychosperma macarthurii	12 Stlk.	12	G	X	X		
631	Singapore Plumeria	Plumeria obtusa	10	17	G	X	X		
632	Dracaena Fig	Ficus microcarpa	6/5/6	16	G	X	X		
633	Common Plumeria	Plumeria acuminata x rubra	14	15	G	X	X		
634	Coconut Palm	Cocos nucifera		42	F-G	X	X		moderate-severe hourglass
635	Common Plumeria	Plumeria acuminata x rubra	6.5/5	15	G	X	X		
636	Common Coral	Erythrina crista-galli	18	15	G	X	X		previously topped
637	Coconut Palm	Cocos nucifera		26	G	X	X		
638	Coconut Palm	Cocos nucifera		17	G	X	X		
639	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	7	G	X	X		
640	MacArthur Palm	Ptychosperma macarthurii	6 Stlk.	9	G	X	X		
641	MacArthur Palm	Ptychosperma macarthurii	11 Stlk.	23	F	X	X		
642	Dwarf Date Palm	Phoenix roebelenii		6	G	X	X		
643	Singapore Plumeria	Plumeria obtusa	9	19	G	X	X		
644	Schefflera	Schefflera actinophylla	12	21	G	X	X		

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
645	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	23	G	X	X		
646	Singapore Plumeria	Plumeria obtusa	19	20	G	X	X		
647	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	4.5	G	X	X		
648	Giant White Bird of Paradise	Strelitzia nicolai	11 Stlk.	8	G	X	X		
649	Coconut Palm	Cocos nucifera		17	F	X	X		mechanical damage
650	Seagrape	Coccoloba uvifera	23	20	G	X	X		
651	Hala	Pandanus tectorius	5	22	G	X	X		
652	Date Palm (male)	Phoenix dactylifera		18	G	X	X		
653	Coconut Palm	Cocos nucifera		12	G	X	X		
654	Date Palm (male)	Phoenix dactylifera		16	G	X	X		
655	Coconut Palm	Cocos nucifera		14	G	X	X		Two slight hourglasses
656	Fan Palm	Prichardia species		2	G	X	X		
657	Singapore Plumeria	Plumeria obtusa	13	22	F-G	X	X		some salt damage
658	Schefflera	Schefflera actinophylla	18	24	G	X	X		
659	MacArthur Palm	Ptychosperma macarthurii	2 Stlk.	14	F-G	X	X		
660	MacArthur Palm	Ptychosperma macarthurii	14 Stlk.	20	G	X	X		
661	MacArthur Palm	Ptychosperma macarthurii	9 Stlk.	23	G	X	X		
662	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	20	G	X	X		
663	Montgomery Palm	Veitchia montgomeryana		9	G	X	X		
664	Montgomery Palm	Veitchia montgomeryana		15	G	X	X		
665	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	10	G	X	X		
666	MacArthur Palm	Ptychosperma macarthurii	5 Stlk.	10	G	X	X		
667	MacArthur Palm	Ptychosperma macarthurii	4 Stlk.	4.5	G	X	X		
668	Coconut Palm	Cocos nucifera		32	G	X	X		slight hourglass
669	Coconut Palm	Cocos nucifera		28	G	X	X		slight hourglass
670	Coconut Palm	Cocos nucifera		49	F-P	X	X		severe hourglass
671	Coconut Palm	Cocos nucifera		37	F	X	X		moderate hourglass
672	Coconut Palm	Cocos nucifera		37	F	X	X		moderate hourglass

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remove	Comments:
673	Coconut Palm	Cocos nucifera	46	G		X	X	slight hourglass
674	Coconut Palm	Cocos nucifera	40	G		X	X	slight hourglass, bend @ 25 ft.
675	Coconut Palm	Cocos nucifera	29	G		X	X	
676	Coconut Palm	Cocos nucifera	42	G		X	X	
677	Coconut Palm	Cocos nucifera	37	G		X	X	
678	Coconut Palm	Cocos nucifera	35	G		X	X	
679	Coconut Palm	Cocos nucifera	39	P		X	X	severe hourglass
680	Coconut Palm	Cocos nucifera	31	F		X	X	moderate hourglass
681	Hala	Pandanus tectorius	9	G		X	X	
682	Seagrape	Coccoloba uvifera	10	G		X	X	
683	Hau	Hibiscus tiliaceus	19	G		X	X	
684	Seagrape	Coccoloba uvifera	21	G		X	X	breaking planter
685	Coconut Palm	Cocos nucifera	47	P		X	X	no new leaves possibly sincescent
686	Hau	Hibiscus tiliaceus	8	G		X	X	
687	Hau	Hibiscus tiliaceus	11	G		X	X	multiple trunks, buried in sand
688	Hau	Hibiscus tiliaceus	20	G		X	X	
689	Areca Palm	Dypsis lutescens	7 Stlk.	F		X	X	salt damage
690	Giant White Bird of Paradise	Strelitzia nicolai	7 Stlk.	G		X	X	
691	Common Plumeria	Plumeria acuminata x rubra	3.5	F		X	X	
692	Common Plumeria	Plumeria acuminata x rubra	3	F		X	X	
693	Manila Palm	Veitchia merrillii		F		X	X	
694	Montgomery Palm	Veitchia montgomeryana		F		X	X	mechanical damage, root zone damage
695	Montgomery Palm	Veitchia montgomeryana		G		X	X	some mechanical damage
696	Montgomery Palm	Veitchia montgomeryana		G	X	X	X	
697	Variegated Rubber Tree	Ficus elastica, var.	11	G		X	X	Ficus Elastica, var.
698	Schefflera	Schefflera actinophylla	7.5	F		X	X	cavities
699	Schefflera	Schefflera actinophylla	4.5	F		X	X	cavities
700	Schefflera	Schefflera actinophylla	15	F		X	X	cavities

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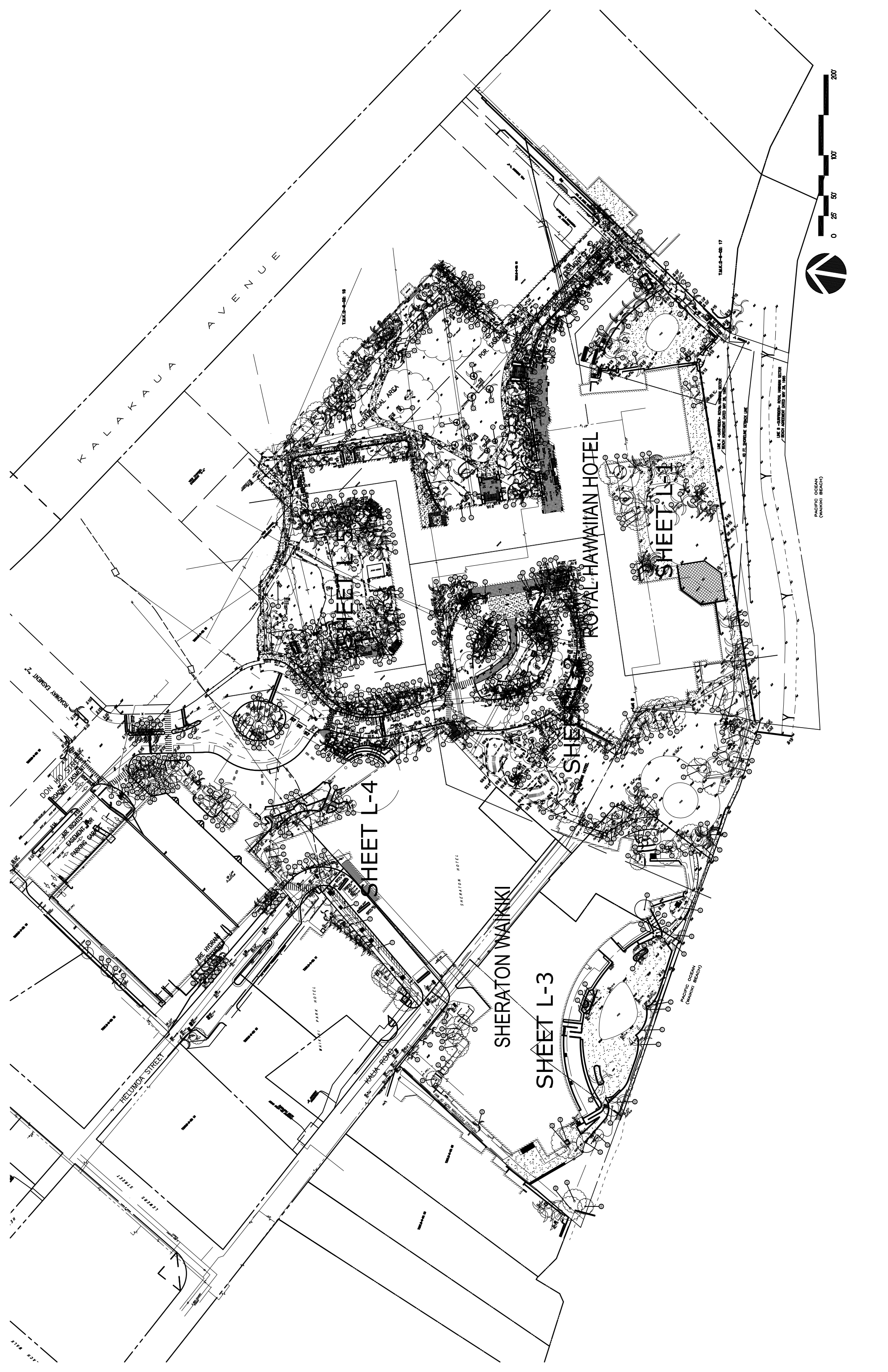
Tree Survey

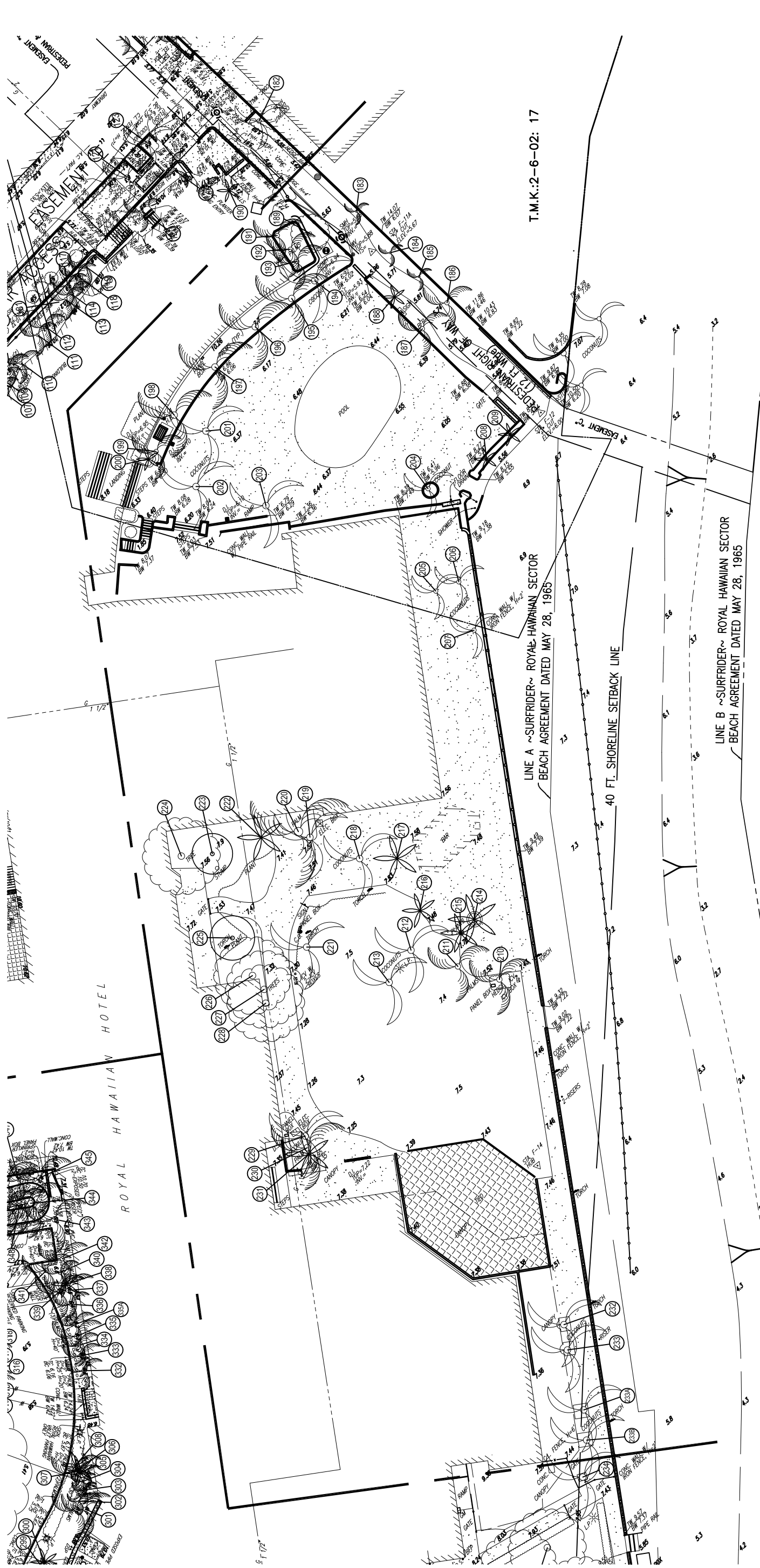
Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
701	Schefflera	Schefflera actinophylla	6	20	F	X	X		mechanical damage
702	Montgomery Palm	Veitchia montgomeryana		20	G	X	X		
703	Montgomery Palm	Veitchia montgomeryana		20	G	X	X		
704	Montgomery Palm	Veitchia montgomeryana		14	G	X	X		
705	Areca Palm	Dypsis lutescens	8 Stlk.	17	G	X	X		
706	Traveler's Palm	Ravenala madagascariensis		8	G	X	X		
707	Areca Palm	Dypsis lutescens	11 Stlk.	17	G	X	X		
708	Areca Palm	Dypsis lutescens	4 Stlk.	7	P		X		
709	Traveler's Palm	Ravenala madagascariensis		10	G	X	X		
710	Areca Palm	Dypsis lutescens	1 Stlk.	13	F	X	X		
711	Areca Palm	Dypsis lutescens	1 Stlk.	8	F-P		X		
712	Areca Palm	Dypsis lutescens	1 Stlk.	13	P		X		
713	Giant White Bird of Paradise	Strelitzia nicolai	5 Stlk.	15	G	X	X		
714	Areca Palm	Dypsis lutescens	4 Stlk.	14	G	X	X		
715	Areca Palm	Dypsis lutescens	3 Stlk.	19	G	X	X		
716	Areca Palm	Dypsis lutescens	4 Stlk.	20	G	X	X		
717	Areca Palm	Dypsis lutescens	6 Stlk.	26	G	X	X		
718	Areca Palm	Dypsis lutescens	3 Stlk.	22	G	X	X		
719	Areca Palm	Dypsis lutescens	3 Stlk.	19	G	X	X		
720	Areca Palm	Dypsis lutescens	7 Stlk.	14	G	X	X		
721	Areca Palm	Dypsis lutescens	5 Stlk.	17	F-G	X	X		
722	Date Palm	Phoenix dactylifera		27	G	X	X		
723	Areca Palm	Dypsis lutescens	3 Stlk.	15	G	X	X		
724	Areca Palm	Dypsis lutescens	6 Stlk.	27	G	X	X		
725	Areca Palm	Dypsis lutescens	10 Stlk.	21	F	X	X		wind whipped
726	Citrus	Citrus sp.	2/5	23	G	X	X		
727	Areca Palm	Dypsis lutescens	2 Stlk.	25	G	X	X		
728	Citrus	Citrus sp.	2/5	25	G	X	X		

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Tree Survey

Tree #	Common Name	Botanical Name	DBH (in.)	Ht. (ft.)	Condition	Transplant	Remain	Remove	Comments:
729	Citrus	Citrus sp.	2	9	G		X		
730	Citrus	Citrus sp.	4	18	G	X	X		
731									
732									
733									

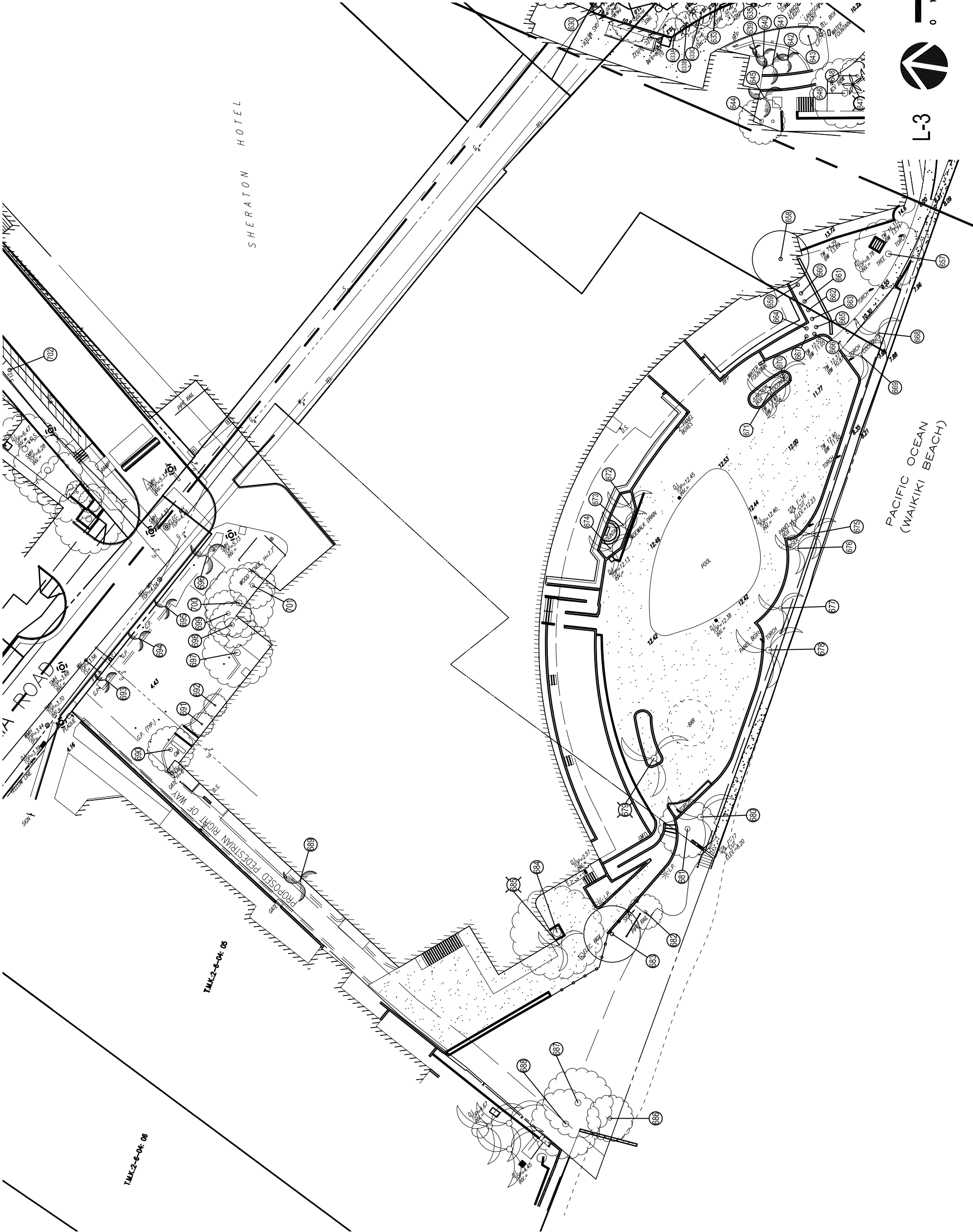






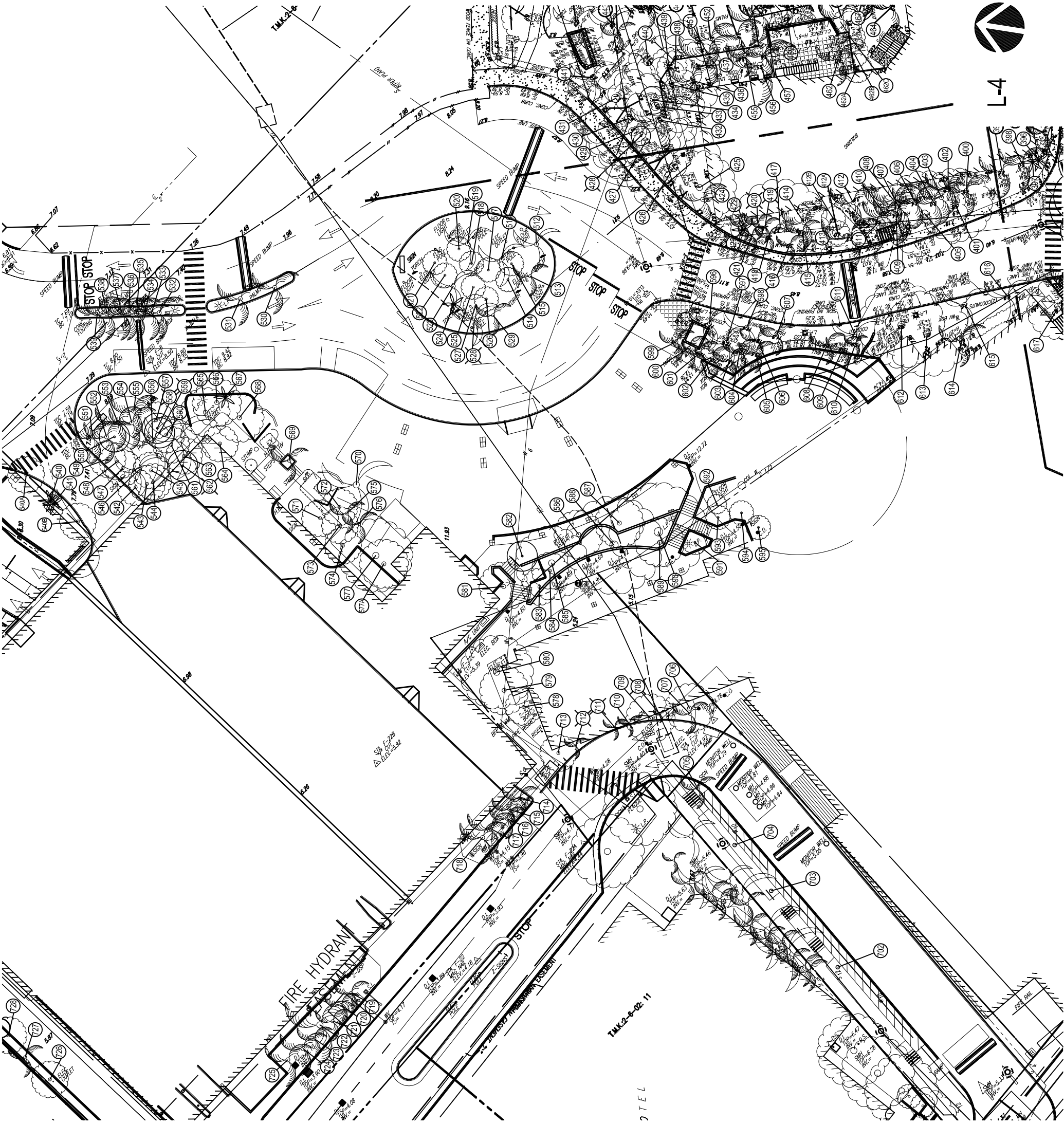
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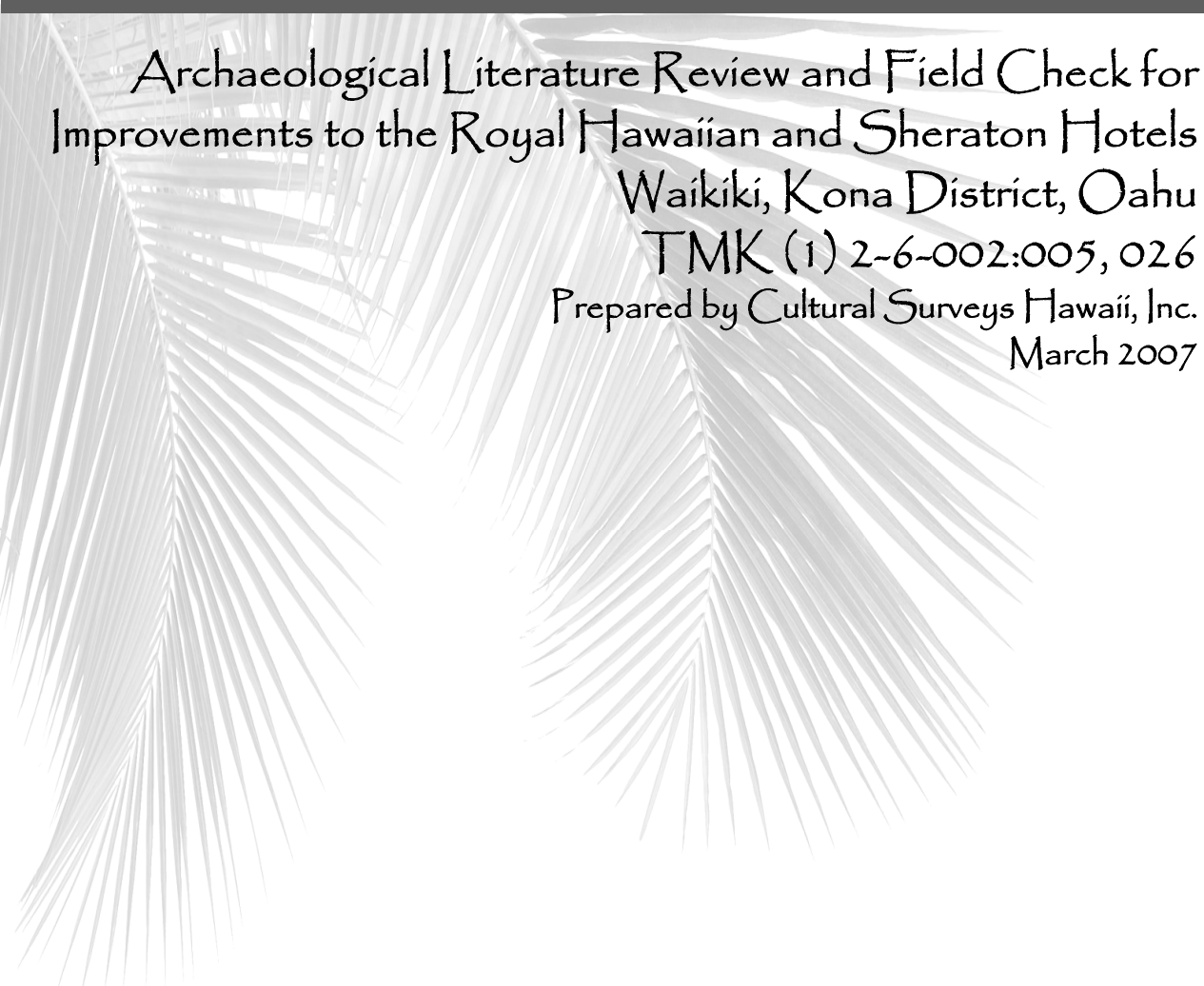




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APPENDIX B



Archaeological Literature Review and Field Check for
Improvements to the Royal Hawaiian and Sheraton Hotels
Waikiki, Kona District, Oahu
TMK (1) 2-6-002:005, 026
Prepared by Cultural Surveys Hawaii, Inc.
March 2007

**Archaeological Literature Review and Field Check for
Improvements to the Royal Hawaiian and Sheraton Hotels
Waikīkī, Kona District, O'ahu
TMK: [1] 2-6-002:005, 006, & 026**

**Prepared for
Wilson Okamoto Corporation**

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**Cultural Surveys Hawai'i, Inc.
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Management Summary

Reference	Archaeological Literature Review and Field Check for Improvements to the Royal Hawaiian and Sheraton Hotels Waikīkī, Kona District, O'ahu TMK: [1] 2-6-002:005, 006, & 026
Date	April 2007
Project Number (s)	CSH project code WAIKI 13
Investigation Permit Number	Cultural Surveys Hawai'i undertook this project under archaeological permit # 07-19.
Project Location	This study focuses on the lands of the adjacent Royal Hawaiian Hotel and Sheraton Waikiki Hotel in central Waikīkī on the south shore of O'ahu
Tax Map Keys and Recorded Fee Owner	TMK [1] 2-6-2: 5 (10.3 Acres) Kyo-ya Hotels & Resorts LP BP Bishop Trust Estate TMK [1] 2-6-2: 6 (3.5 Acres) Kyo-ya Hotels & Resorts LP TMK [1] 2-6-2: 26 (0.9 Acres) See Exhibit A (at end of report)
Agencies	This study was prepared to guide decision-making in advance of the proposed renovation work and to be a basis for consultation with the State Historic Preservation Division and/or other entities.
Project Description	Work in five specific areas has the potential to impact archaeological deposits and/or human remains. These are referred to in this study as the North, South and West Sheraton and East and Southwest Royal Haewaaian Hotel areas
Project Acreage	The area of the Royal Hawaiian Hotel and Sheraton Waikiki resorts is understood as approximately 601,205 square feet
Area of Potential Effect (APE) and Survey Acreage	The Area of Potential Effect is understood as the five areas in which the renovation project may impact cultural deposits
Fieldwork Effort	Approximately 2 days were spent in the fieldwork effort, no subsurface testing was carried out
Number of Historic Properties Identified	The Royal Hawaiian Hotel is not listed on the State or National Registers of Historic Places. The only formal site is Site # 50-80-14-5937 a human burial on the grounds of the Royal Hawaiian Hotel
Effect Recommendation	The proposed renovation work has the potential to adversely impact pre-contact and early historic archaeological deposits and/or burials

Mitigation Recommendation	<p>It is recommended that :</p> <ol style="list-style-type: none">1) A geotechnical testing program be used as an opportunity to determine and document the thickness of fill deposits2) An archaeological monitoring program attend geotechnical testing. This would begin with preparation of a monitoring plan to be submitted to the SHPD for review.3) An archaeological inventory survey be carried out to further clarify the nature and extent of likely subsurface impacts of undisturbed deposits. This would begin with an archaeological inventory survey plan to be submitted to the SHPD for review.4) An archaeological monitoring program of on-site monitoring for all subsurface excavations be instituted for the project.5) Consultation continue with the State Historic Preservation Division, the Office of Hawaiian Affairs and the O'ahu Island Burial Council.
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Section 1 Introduction

1.1 Project Background

Cultural Surveys Hawai'i, Inc. was contacted on August 18, 2006 regarding providing archaeological services in support of proposed renovations at the Sheraton Waikiki and Royal Hawaiian Hotel resorts in central coastal Waikiki, O'ahu, Hawai'i (Figures 1 to 3). Potential ground disturbance is anticipated to occur in five areas adjacent to the resorts on the north, south and east sides of the Sheraton and on the east and southwest sides of the Royal Hawaiian Hotel (Figure 4).

1.2 Scope of Work

The Scope of Work as explained in our proposal dated August 18, 2006 (accepted November 22, 2006) is as follows:

1. Historical research to include study of archival sources, historic maps, Land Commission Awards and previous archaeological reports to construct a history of land use and to determine if archaeological sites have been recorded on or near this property.
2. Field inspection of the project area to identify any surface archaeological features and to investigate and assess the potential for impact to such sites. This assessment will identify any sensitive areas that may require further investigation or mitigation before the project proceeds.
3. Preparation of a report to include the results of the historical research and the fieldwork with an assessment of archaeological potential based on that research, with recommendations for further archaeological work, if appropriate. It will also provide mitigation recommendations if there are archaeologically sensitive areas that need to be taken into consideration.

1.3 Natural Setting

The project area is flat and averages 2 to 3 meters above mean sea level. The average rainfall in this coastal area of Waikiki is between 20-30 inches per year, with temperatures ranging from 60 to 85 degrees Fahrenheit (Armstrong 1973:56). Northeasterly trade winds prevail throughout the year, although their frequency varies from more than 90% during the summer months to 50% in January; the average annual wind velocity is approximately 10 miles per hour (Okamoto 1998:2-1).

Although the area has been graded the natural soil deposit is Jaucus sand (JaC), and Beaches (BS) (Figure 5), calcareous soils developed in wind and water deposited sand from coral and seashells (Foote et al. 1972).

A major feature of the immediate project area until it was filled in c. 1922 was the outlet of 'Āpuakēhau Stream (see historic maps in Figures 8, 12, 15 & 16) and historic photos Figures 11, 13, 14 & 17). This stream formed a lagoonal backwater (*muliwai*) just back from the coast. It appears that the configuration of the stream mouth changed significantly shortly before it was

filled in. Maps from 1881 (see Figure 8) and 1893 (see Figure 12) appear to show the *muliwai* entering the sea where the east side of the Royal Hawaiian Hotel is today but by 1919 (see Figures 13, 15 & 16) the stream appears to have been shortened to enter the sea further to the east between the present Moana and Royal Hawaiian Hotels.

The project lands were famous as the locus of the Helumoa coconut grove (see Figures 6 and 7) said to have been planted by the ruling chief Kākuhihewa and to have included nearly 10,000 palm trees (Hibbard and Franzen 1986:4 & 5). It is popularly understood that a portion of the Helumoa grove "still stands on the Royal Hawaiian Hotel grounds today. (Hibbard and Franzen 1986:7). Generally, vegetation in the Waikīkī area today includes mainly introduced exotics, such as Banyan, MacArthur Palm, Brassaia, Coconut, Plumeria, Money, Alexander Palm, Manila Palm, Date Palm, Fern, Monkey Pod, Tulip Wood, and Opiuma trees and a variety of grasses.

1.4 Built Environment

The Royal Hawaiian Hotel was formally opened on February 1 1927 and with a maximum height of 150 feet was the tallest privately owned building in the Territory at that time (Hibbard and Franzen 1986:99).

The thirty-one story Sheraton Waikiki was completed in 1971 and with 1,904 rooms was the largest resort hotel in the world at that time (Hibbard and Franzen 1986:165).

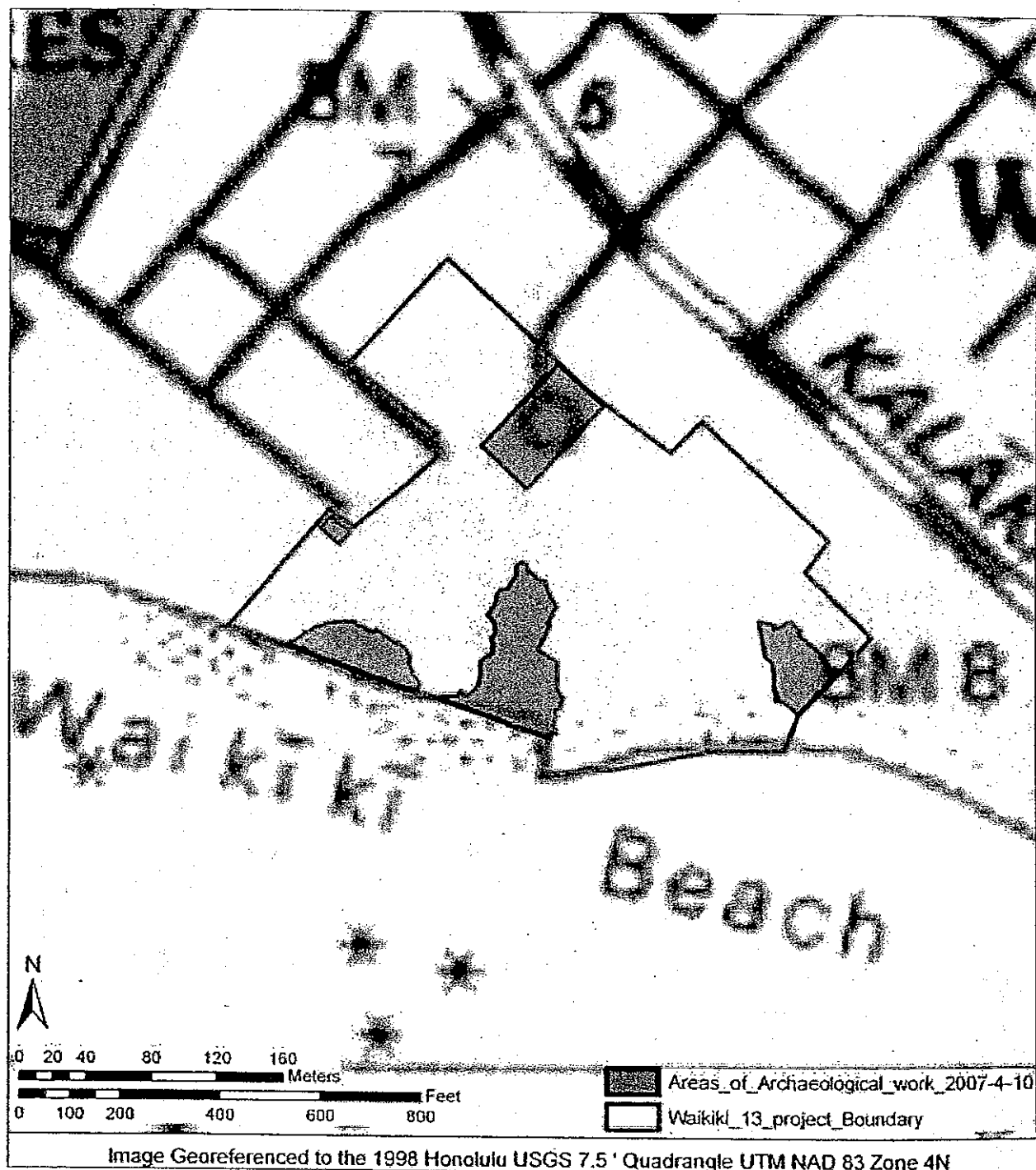


Figure 1. Portion of USGS Topographic Map, Honolulu Quad, with overlay of SW/RHH property and areas of work that may impact subsurface cultural deposits

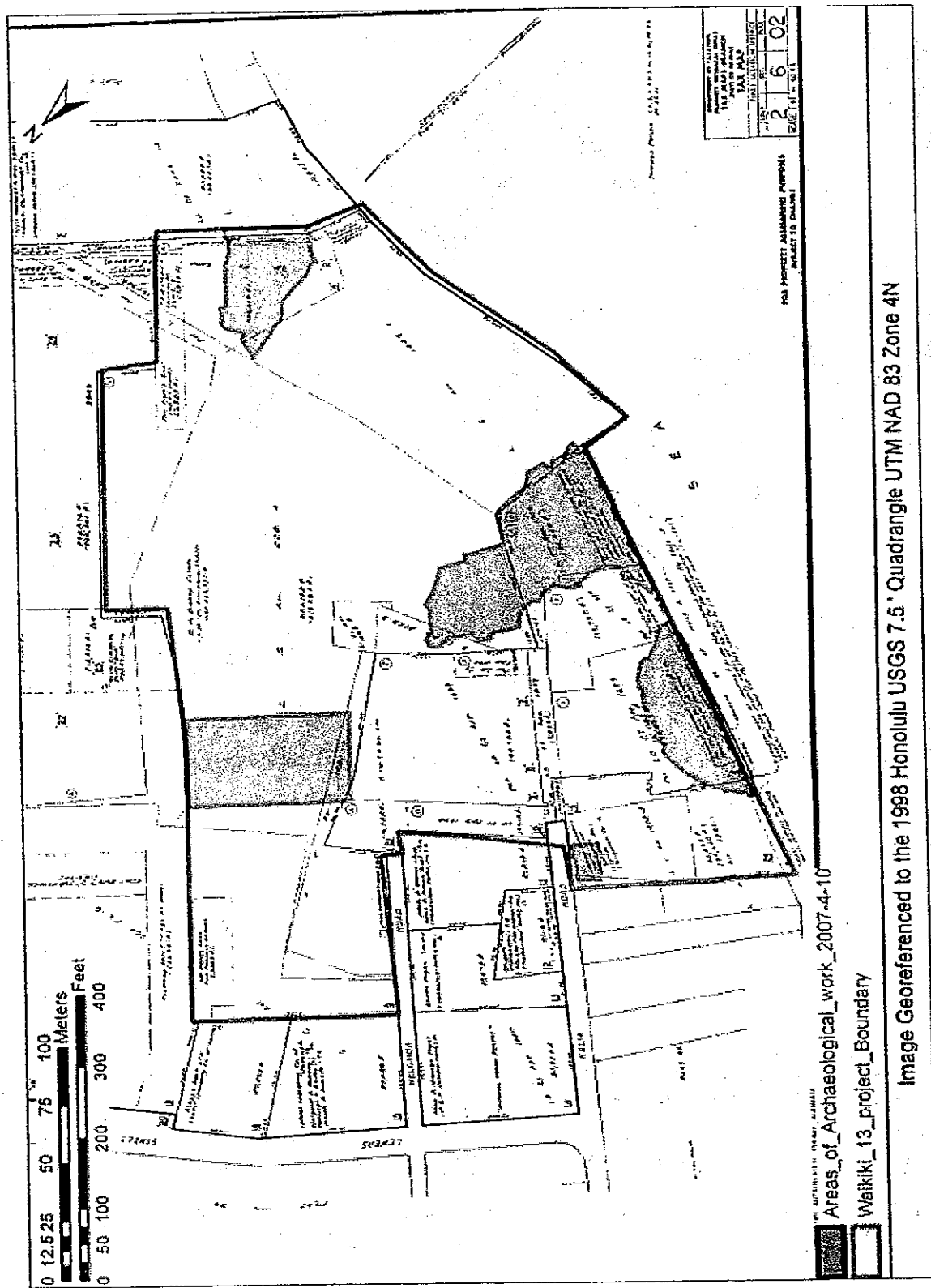


Figure 2. Tax map (2-6-02) with overlay of SW/RHH property and areas of work that may impact subsurface cultural deposits

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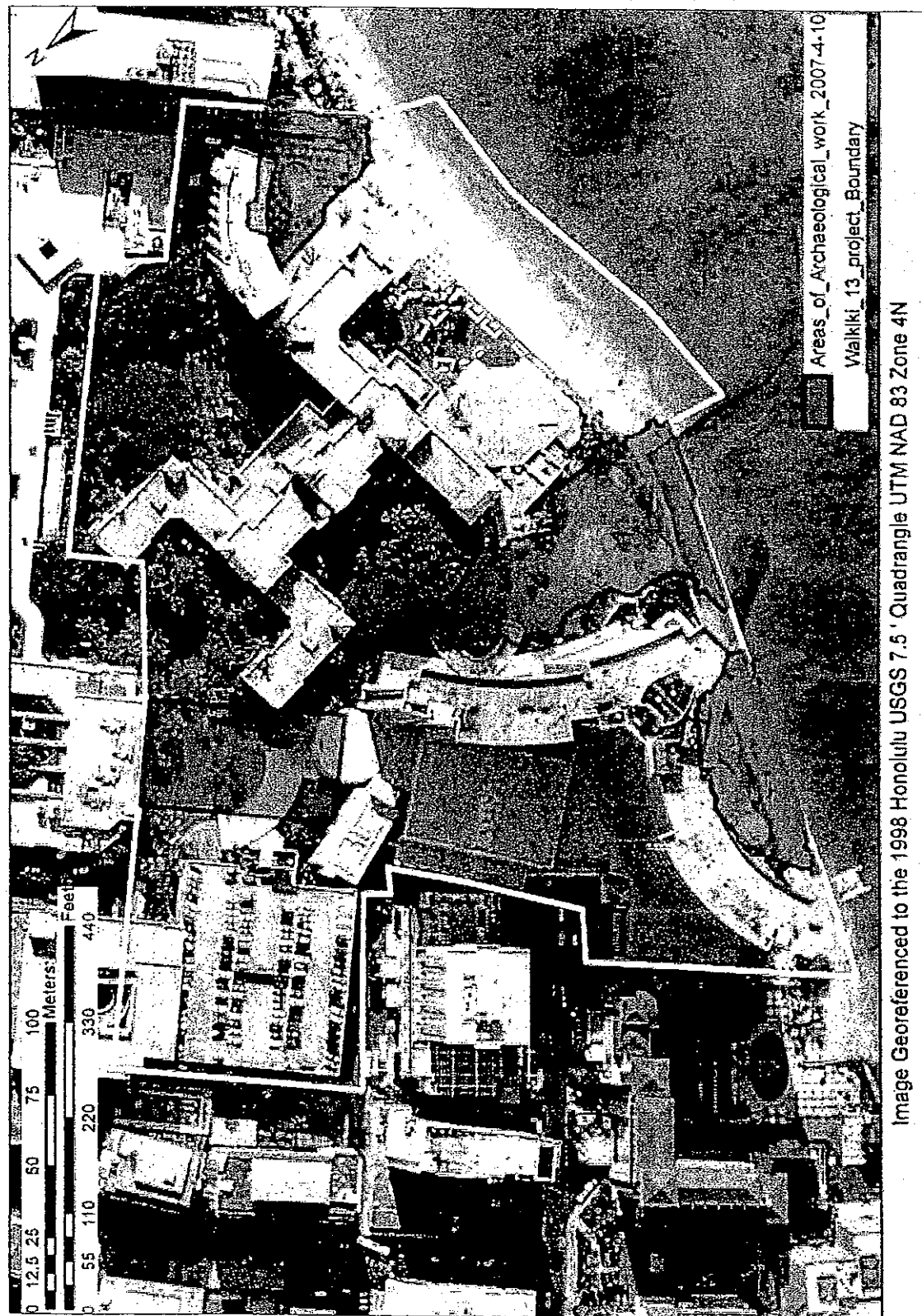


Figure 3. Aerial photograph with overlay of SW/RHH property and areas of work that may impact subsurface cultural deposits

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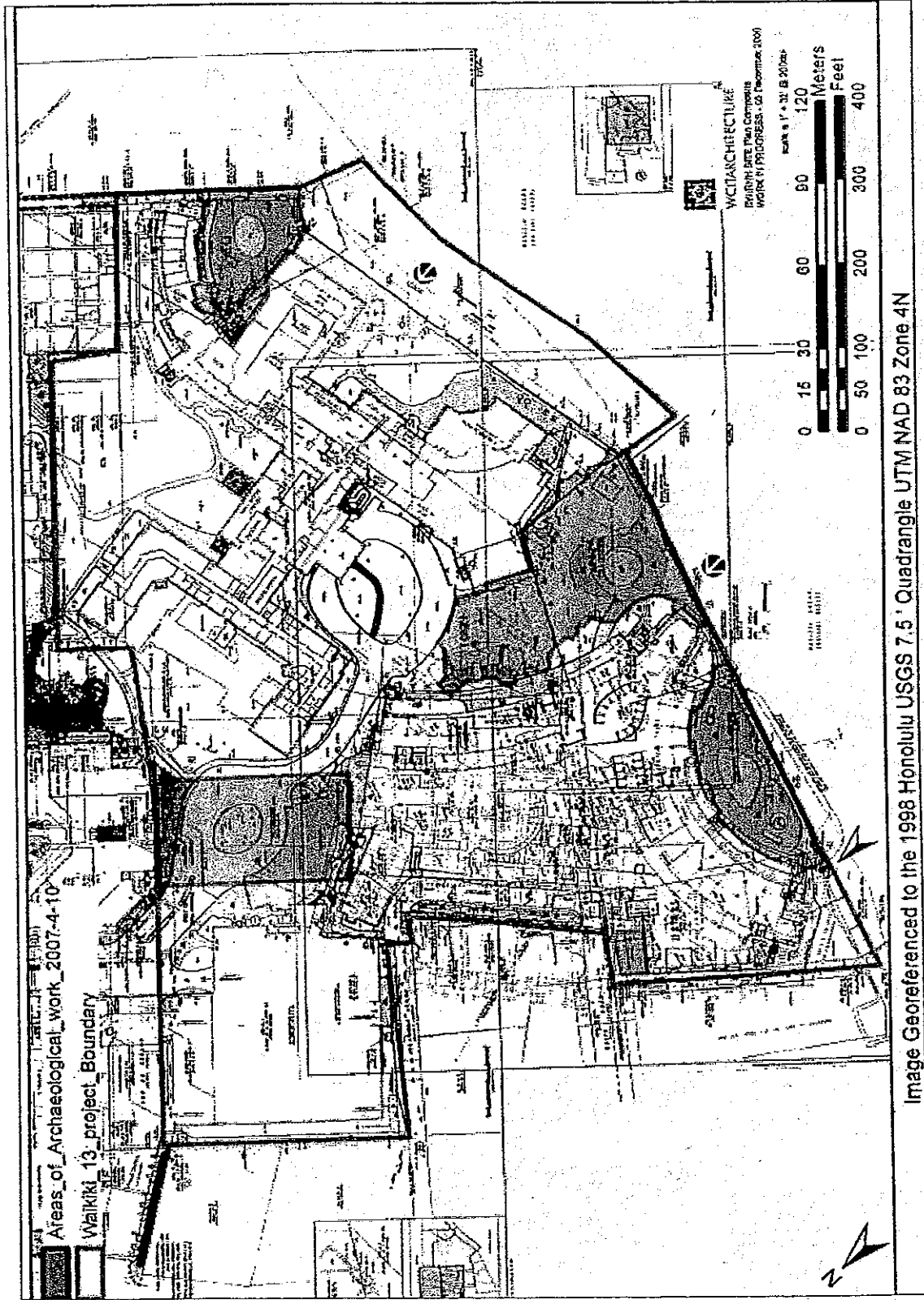


Figure 4. Site Plan showing SW/RHH property and areas of work that may involve disturbance of natural sand deposits

Archaeological Literature Review and Field Check for Improvements to the Royal Hawaiian and Sleraton Hotels, Waikiki, O'ahu

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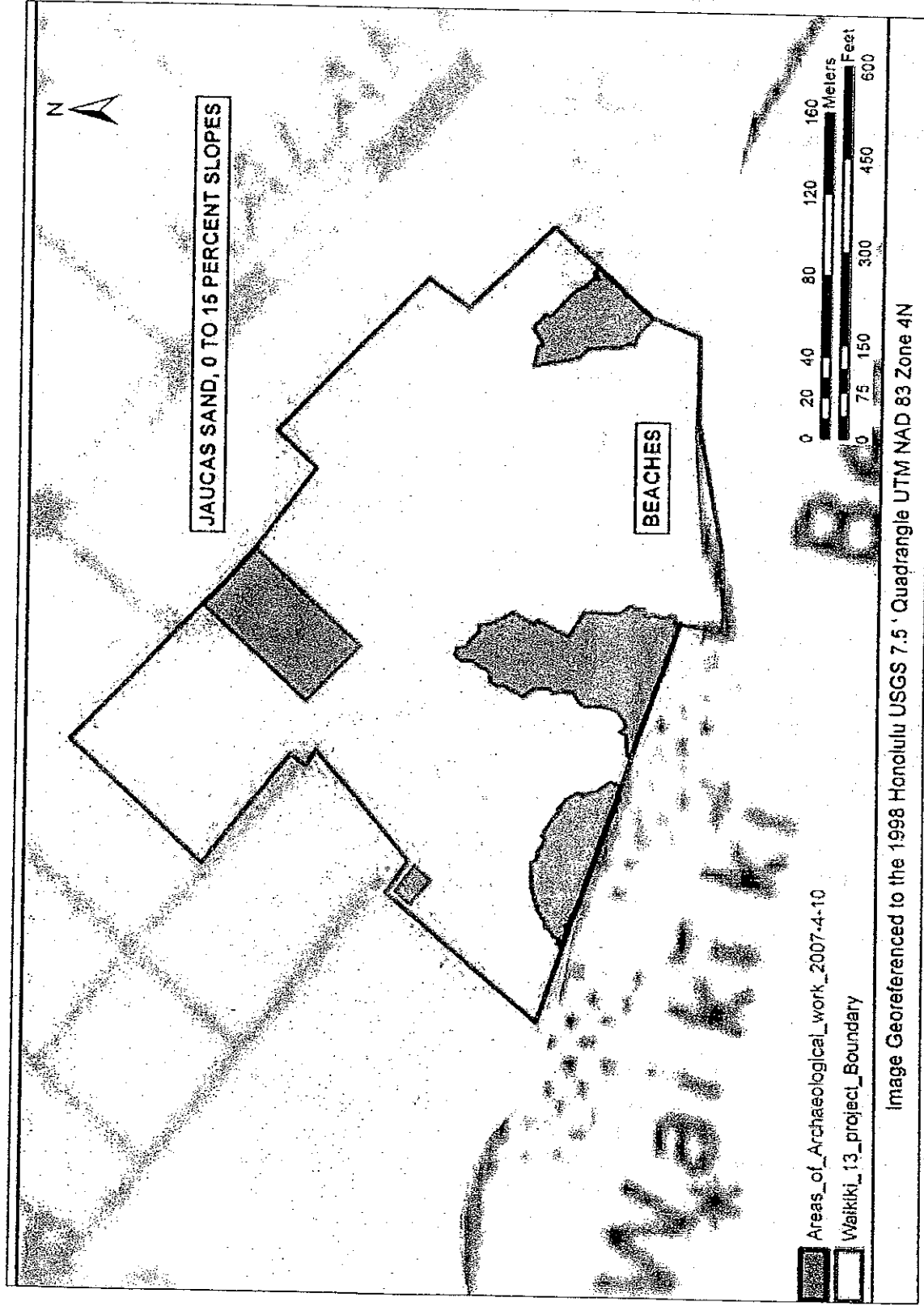


Figure 5. Soils map for project area

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TMK[1] 2-6-002:005, 006, & 026

Section 2 Historical Background

2.1 Pre-Contact to Early 1800's

By the time of the arrival of Europeans in the Hawaiian Islands during the late eighteenth century, Waikīkī had long been a center of population and political power on O'ahu. Kanahele (1995:134) notes the continuity in the royal residences and provides the following account:

The royal residences were generally located in the same areas that all of Waikīkī's ancient chiefs had located their residences for hundreds of years. Kamehameha V's residence, for example, was at Helumoa where Kamehameha I's *kauhale*, or residence, was, as was Kahekili's and Kahahana's before him. His cottage stood on the site now occupied by the Royal Hawaiian Hotel; some identify the exact site as the hotel's present *lū'au* grounds (between the rear or *mauka* side of the hotel and the *makai* side of the Royal Hawaiian Shopping Center)

Kanahele (1995:134-1345) goes on to explain that: "Three features were common to royal locations in Waikīkī. They were situated 1) near the beach, 2) next to a stream or 'Auwai (canal) and 3) among a grove of cocoanut or *kou* trees." This account fits Helumoa particularly well with its famous cocoanut grove (Figures 6 & 7). It may well be that the immediate vicinity of the present Royal Hawaiian Hotel was a center of the royal court of O'ahu for centuries - as Kanahele indicates.

According to Martha Beckwith (1940), by the end of the fourteenth century Waikīkī had become "the ruling seat of the chiefs of Oahu." The preeminence of Waikīkī continued into the eighteenth century and is betokened by Kamehameha's decision to reside there upon wresting control of O'ahu by defeating the island's chief, Kalanikūpule. Following his conquest of O'ahu in 1795 it is understood that Kamehameha I set up court at Pua'ali'ili'i "an area in Waikīkī that included all of Helumoa and 'Āpuakēhau" (Hibbard and Franzen 1986:2). This is understood as the lands of the present Royal Hawaiian Hotel extending to the east as far as the present Moana Hotel. (Hibbard and Franzen 1986:3). The 19th-century Hawaiian historian John Papa 'Ī'ī (1959:17), himself a member of the *ali'i* (chiefly class), described the king's Waikīkī residence:

Kamehameha's houses were at Puaaliilii, *makai* of the old road, and extended as far as the west side of the sands of 'Āpuakehau. Within it was Helumoa where Ka'ahumanu mā went to while away the time. The king built a stone house there, enclosed by a fence . . . ('Ī'ī 1959:17).

'Ī'ī further noted that the "place had long been a residence of chiefs. It is said that it had been Kekuapoi's home, through her husband Kahahana, since the time of Kahekili" ('Ī'ī 1959:17). 'Ī'ī provides more specific data in his supportive testimony for LCA 228 awarded to Kaleiheana in 1847 declaring that "Kamehameha himself lived on this land." (Appendix A-2). The land referred to is basically a strip running just *mauka* of the Royal Hawaiian Hotel and just *makai* of the Royal Hawaiian Shopping Center - as Kanahele asserts above.

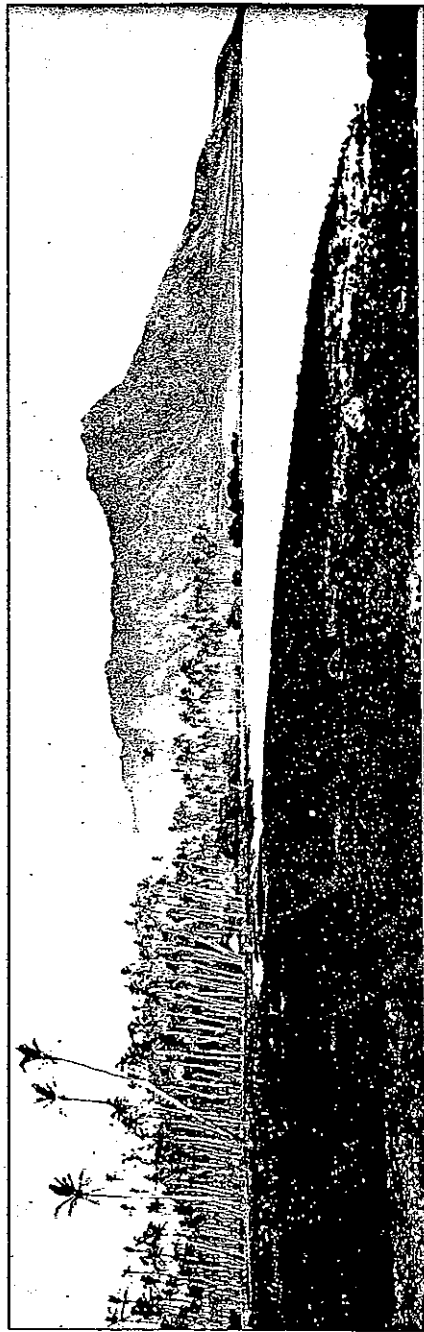


Figure 6. View of Helumoa Coconut grove c. 1870s (Royal Hawaiian Hotel location), view to east (adapted from Hibbard and Franzen 1986:4)

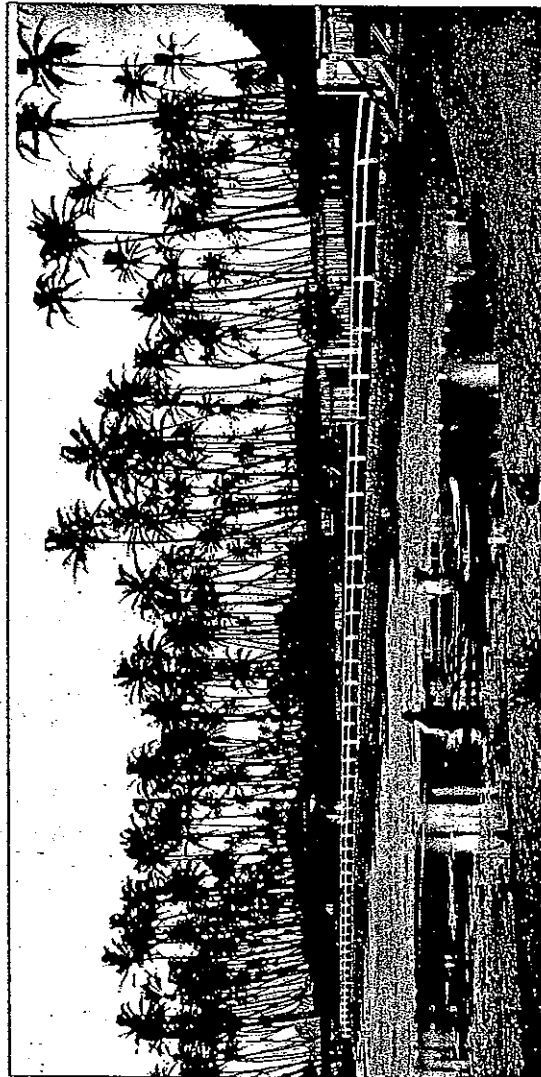


Figure 7. View of the 'Āpuakēhau Stream *muliwai* or lagoonal backwater c. 1880s, Helumoa grove in background, view to west, believed to be a view *mauka* of the present Kalākaua Avenue (adapted from Hibbard and Franzen 1986:4)

Archaeological Literature Review and Field Check for Improvements to the Royal Hawaiian and Sheraton Hotels, Waikīkī, O'ahu

TMK[1] 2-6-002:005, 006, & 026

Chiefly residences, however, were only one element of a complex of features — that characterized Waikiki up to pre-contact times. Beginning in the fifteenth century, a vast system of irrigated taro fields was constructed, extending across the littoral plain from Waikiki to lower Manoa and Palolo valleys. This field system — an impressive feat of engineering the design of which is traditionally attributed to the chief Kalamakua — took advantage of streams descending from Makiki, Manoa and Palolo valleys which also provided ample fresh water for the Hawaiians living in the *ahupua'a*. Water was also available from springs in nearby Mō'ili'ili and Punahou. Closer to the Waikiki shoreline, coconut groves and fishponds dotted the landscape. A sizeable population developed amidst this Hawaiian-engineered abundance. Captain George Vancouver (1798:161-164), arriving at "Whytete" in 1792, captured something of this profusion in his journals:

On shores, the villages appeared numerous, large, and in good repair, and the surrounding country pleasantly interspersed with deep, though not extensive valleys; which, with the plains near the sea-side, presented a high degree of cultivation and fertility.

[Our] guides led us to the northward through the village, to an exceedingly well-made causeway, about twelve feet broad, with a ditch on each side.

This opened our view to a spacious plain, which, in the immediate vicinity of the village, had the appearance of the open common fields in England; but, on advancing, the major part appeared to be divided into fields of irregular shape and figure, which were separated from each other by low stone walls, and were in a very high state of cultivation. These several portions of land were planted with the eddo or taro root, in different stages of inundation; none being perfectly dry, and some from three to six or seven inches under water. The causeway led us near a mile from the beach, at the end of which was the water we were in quest of. It was a rivulet five or six feet wide, and about two or three feet deep, well banked up, and nearly motionless; some small rills only, finding a passage through the dams that checked the sluggish stream, by which a constant supply was afforded to the taro plantations.

[We] found the plain in a high state of cultivation, mostly under immediate crops of taro; and abounding with a variety of wild fowl, chiefly of the duck kind . . . The sides of the hills, which were at some distance, seemed rocky and barren; the intermediate valleys, which were all inhabited, produced some large trees, and made a pleasing appearance. The plain, however, if we may judge from the labour bestowed on their cultivation, seemed to afford the principal proportion of the different vegetable productions on which the inhabitants depend for their subsistence.

Further details of the exuberant life that must have characterized the Hawaiians use of the lands that included the *ahupua'a* of Waikiki are given by Archibald Menzies (1920:23-24), a naturalist accompanying Vancouver's expedition:

The verge of the shore was planted with a large grove of cocoanut palms, affording a delightful shade to the scattered habitations of the natives. Some of those near the beach were raised a few feet from the ground upon a kind of stage, so as to admit the surf to wash underneath them. We pursued a pleasing path back to the plantation, which was nearly level and very extensive, and laid out with great neatness into little fields planted with taro, yams, sweet potatoes and the cloth plant. These, in many cases, were divided by little banks on which grew the sugar cane and a species of *Draecena* without the aid of much cultivation, and the whole was watered in a most ingenious manner by dividing the general stream into little aqueducts leading in various directions so as to be able to supply the most distant fields at pleasure, and the soil seemed to repay the labour and industry of these people by the luxuriancy of its productions. Here and there we met with ponds of considerable size, and besides being well stocked with fish, they swarmed with waterfowl of various kinds such as ducks, coots, water hens, bitterns, plovers and curlews.

However, the traditional Hawaiian focus on Waikīkī as a center of chiefly and agricultural activities on southeastern O'ahu was soon to change – disrupted by the same Euro-American contact which produced the first documentation (including the records cited above) of that traditional life. The *ahupua'a* of Honolulu – with the only sheltered harbor on O'ahu – became the center for trade with visiting foreign vessels, drawing increasing numbers of Hawaiians away from their traditional environments. Kamehameha himself moved his residence from Waikīkī to the coast near Honolulu harbor, likely in order to maintain his control of the lucrative trade in sandalwood that had developed. By 1828, the missionary Levi Chamberlain(1957:26), describing a journey into Waikīkī, would note:

Our path led us along the borders of extensive plats of marshy ground, having raised banks on one or more sides, and which were once filled with water, and replenished abundantly with esculent fish; but now overgrown with tall rushes waving in the wind. The land all around for several miles has the appearance of having once been under cultivation. I entered into conversation with the natives respecting this present neglected state. They ascribed it to the decrease of population. (Chamberlain 1957:26)

Tragically, the depopulation of Waikīkī was not simply a result of the attractions of Honolulu (where, by the 1820's, the population was estimated at 6,000 to 7,000) but also of the European diseases that had devastating effects upon the Hawaiians.

2.2 Mid-Nineteenth Century and the Māhele

The depopulation of Waikīkī, however, was not total and the *ahupua'a* continued to sustain Hawaiians living traditionally into the mid-19th century. The Organic Acts of 1845 and 1846 initiated the process of the Māhele (the division of Hawaiian lands) which introduced private property into Hawaiian society. In 1848, the crown (Hawaiian government) and the *ali'i* (royalty) received their land titles. Subsequently in the Māhele, Land Commission Awards (LCAs) for *kuleana* parcels were awarded to commoners and others who could prove residency on and use of the parcels they claimed. Land Commission Award records document awardees

continuing to maintain fishponds and irrigated and dry land agricultural plots, though on a greatly reduced scale than had been previously possible with adequate manpower.

The Sheraton Waikiki/Royal Hawaiian Hotel project area was a patchwork of thirteen Land Commission Awards circa 1850. The Land Commission Award (LCA) documentation is provided in detail in Appendix A of this study and is summarized in Table 1 below. The location of many of these LCAs are shown on the 1881 Bishop map (Figure 8) and subsequent Land Court Application documents (Figures 9 & 10).

It appears that many of the LCAS were primarily residential and were awarded to loyal retainers of the Kamehameha dynasty. In 1847 John 'Ī'i stated in testimony regarding LCA 228 granted to Kaleiheana:

. . . I have seen this land and these names which are written in this claim document are the attendants of Kameameha I [sic. Kamehameha the Great]. Their work was taking care of the house and preparing the food. These people were in constant contact with the chiefs and were close to each and every chief. When Kamehameha I died, they continued to live on the property and when the chief returned from Hawaii Kaleiheana went to live there. These people have lived there since Kamehameha II to Kaahumanu's reign, and to the year 1846 when Kuluwailehua had raised objections. (John 'Ī'i's testimony regarding LCA 228 granted to Kaleiheana; see Appendix page A-5)

It is further stated that Kamehameha I lived on this land until his death and subsequently the land has been the resting place for the chiefs down to Kamehameha V. Many of the recipients of the LCAs indicated they were either "under" some adjacent party or had other parties "under" them on their land suggesting a continuity of high status parties in the mid-1800s.

Table 1. Land Commission Awards in Project Lands

LCA #	Claimant	Traditional Name	General Location	Comments
104 FL	Kekuanaoa	Kapuni	NW Sheraton	House site, also claimed 2 <i>lo'i</i> , 5 fish ponds and 1 <i>muliwai</i> elsewhere at Waikiki.
228	Kalaiheana Kaleiheana	Helumoa	N Sheraton N Royal HH	Claims cocoanut grove at Helumoa with stream called Apukokohau adjacent, six with own houses living under claimant
822	Okuu	Helumoa	S end of Sheraton	House lot claim with an adobie fence and five houses; Kupanihi, Kini & Ku are house owners

LCA #	Claimant	Traditional Names	General Location	Comments
1281	Kuluwailehua	References to Kamoku, Kamokuakahi & Kamoku elua [Kamoku 1 & 2] – these appear to be variants of the more common “Keomuku”	Central Sheraton	Difficult to differentiate between 5 Waikīkī land claims
1379	Kapule II	Keaumoku [understood as a variant of “Keomuku”]	S Sheraton	House lot claim with a large house, a little house and a fence
1385	Kaelemakule	Keomuku	S Sheraton	House lot claim
1445	Kanemakua	Helumoa [sic. “Helumoa”]	Central Royal HH	House lot claim with 7 (variously 8) houses claimant owns 2 – seemingly other residents under the claimant are Kahanaumaikai, Kalaauli, Kaaia, Kahui & Ku
1463	Wahahe'e	Helumoa		House lot claim with 1 house & a fence
1508	Kaho'ouluulu	Pahupahuapua'a	SW Sheraton	House lot claim partly fenced
1511	Kanae	Keonuku [understood as a variant of “Keomuku”]	S Sheraton	House lot claim
1782	Kahope	Helumoa	SW Royal HH	House lot claim is bounded: <i>Mauka</i> by the cocoanuts of Helumoa, <i>Kekaha</i> by the <i>pāhale</i> belonging to Kanemakua, <i>Makai</i> by the sea shore, Honolulu by the <i>pāhale</i> of Okuu
2126	Keaho (Keoho)	Kuweluwelu, Keomukukai	S Sheraton	2 <i>puepue</i> , a <i>kula</i> and <i>pāhale</i> in one piece
8023	Aua	Keomuku	Central Sheraton	House lot claim bounded <i>mauka</i> by <i>loko</i> of Helumoa of 'Ī'Ī and <i>mauka</i> by the <i>kula</i> nui of Helumoa.

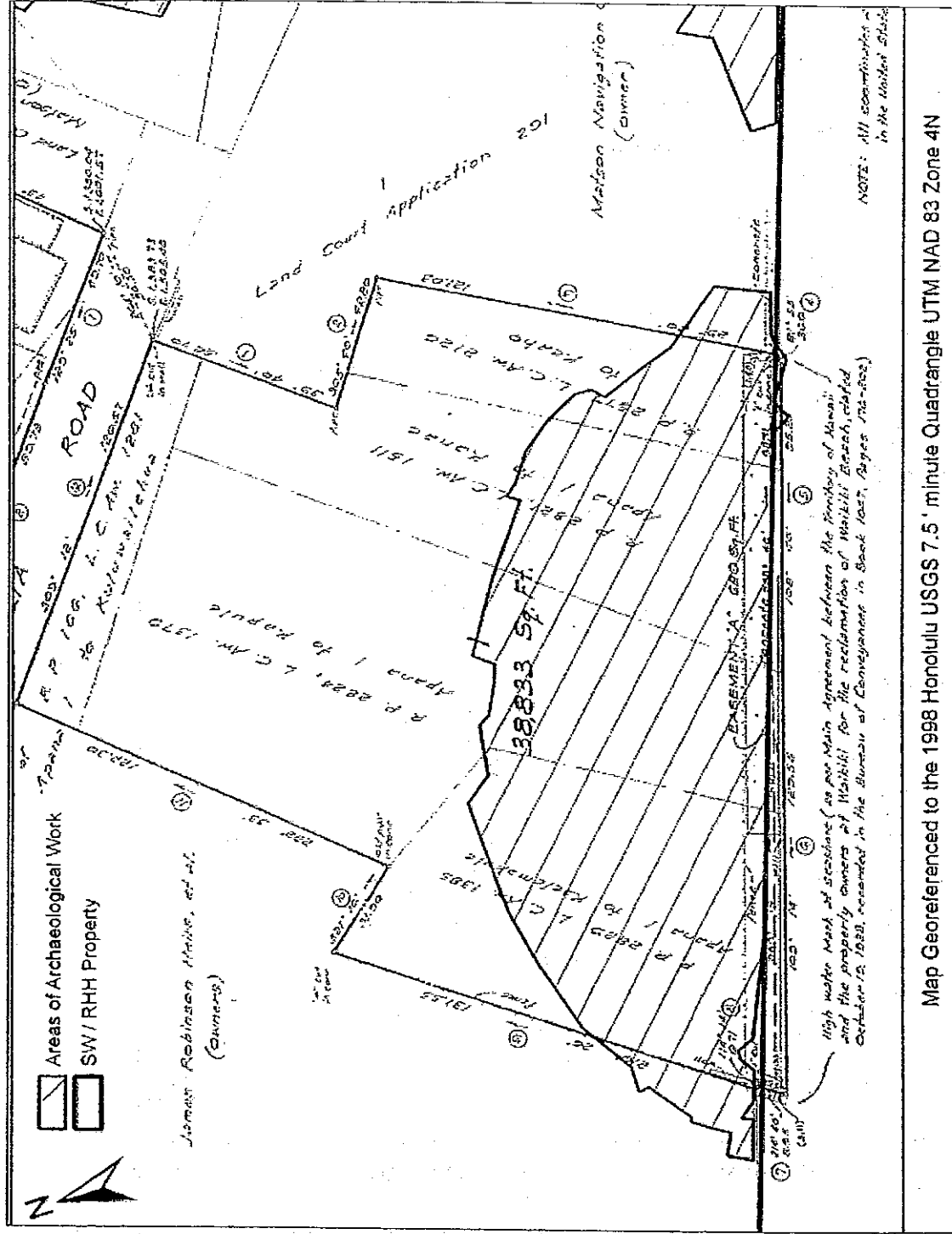


Figure 9. Portion of Land Court Application map 1693 showing relationship of South Sheraton project area to LCAs

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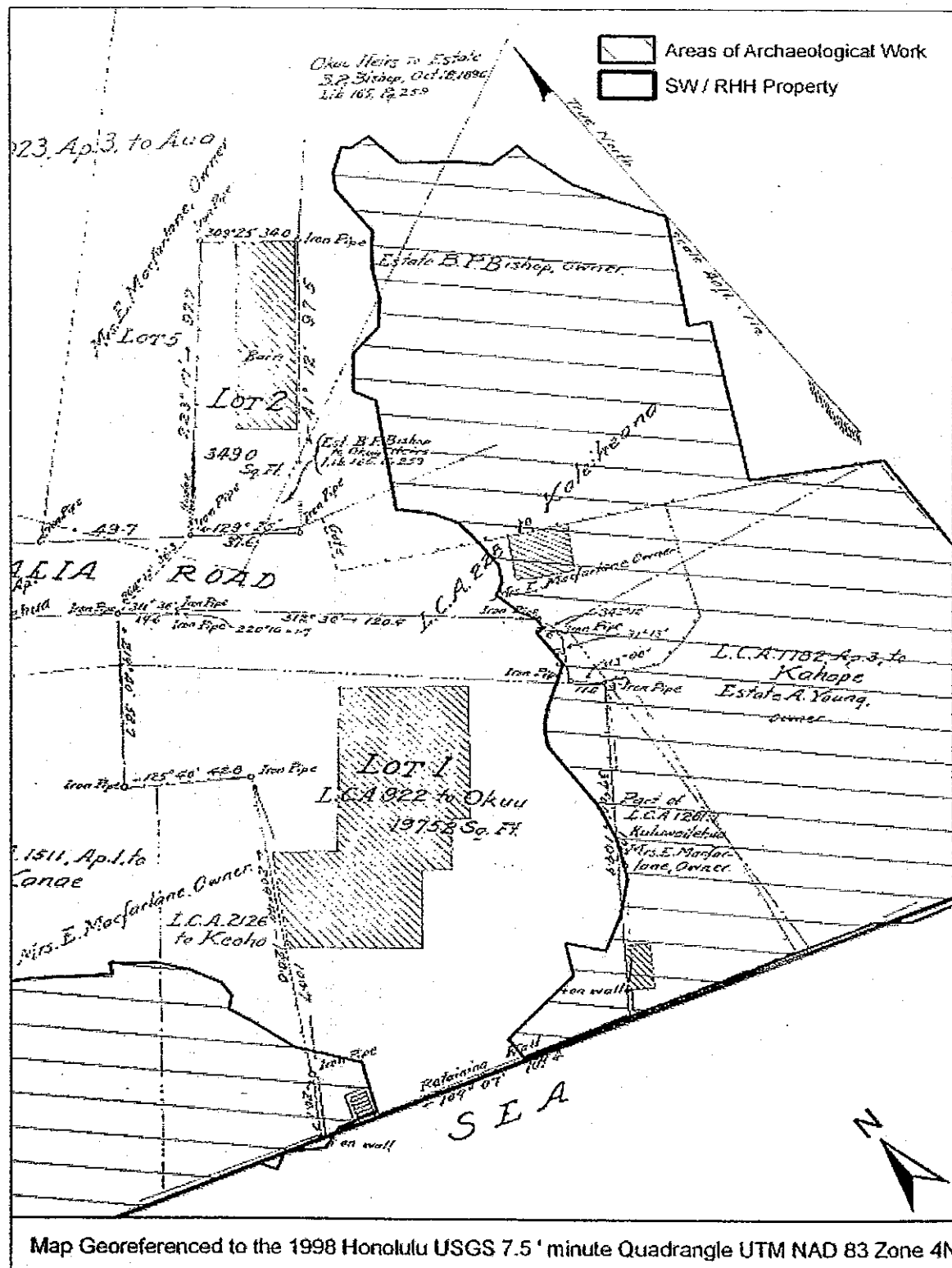


Figure 10. Portion of Land Court Application map 291 showing relationship of South Sheraton and Southwest Royal Hawaiian project areas to LCAs

2.3 Mid to Late 1800s

The most notable establishment in the present project area in the late 1800s was "King Kamehameha V's grass thatched cottage [that] was located among the famous 10,000 cocoanut trees of Helumoa" (Grant, Hymer 2000). Helumoa ("Resting Place") became the King's Park and Grove (Figure 11):

The most notable grass hut in Hawaii Nei . . . is the structure erected at Waikiki by Kamehameha V, who used it as his seaside bungalow . . . often (assembling) his cabinet meetings there and transacting much of his official business beneath the thatched roof . . . [There] in the early 1820's, Liholiho (Kamehameha II), son of the conqueror, waged his battles with the bottle; the substantial grass house with its outbuildings, surrounded by an extensive royal cocoanut grove served as a beach hideaway" (E. B. Scott, 1968).

Kamehameha V, better known as Prince Lot, died in 1872. Through a succession of inheritance after his death, the land on which he rested on the shores of Waikiki, were left to



Figure 11. Kamehameha V's house on the beach of Waikiki (E. B. Scott, 1968)

Princess Ruth Ke'elikōlani, who passed away in March of 1883, and ultimately it was given to Princess Bernice Pauahi Bishop: "the last direct descendant of Kamehameha I and sole heir to the crown lands" (Kamehameha Schools 2001). An 1893 map by W.A. Wall indicates the landowner was then Charles R. Bishop, Princess Bernice Pauahi Bishops husband (Figure 12). The Bishops built a large seaside residence with a big veranda on the seaward side that appears to have been in the inland portion of the present Southwest Royal Hawaiian Hotel study area (see Figure 12).

As the 19th century progressed, Waikīkī was becoming a popular site among foreigners – mostly American – who had settled on O'ahu. An 1865 article in the *Pacific Commercial Advertiser* mentioned a small community that had developed along the beach. The area continued to be popular with the *ali'i* – the Hawaiian royalty – and several notables had residences there. A visitor to O'ahu in 1873 described Waikīkī as "a hamlet of plain cottages, whither the people of Honolulu go to revel in bathing clothes, mosquitoes, and solitude, at odd times of the year" (Bliss 1873).

Other developments during the second half of the 19th century a prelude of changes that would dramatically alter the landscape of Waikīkī during the 20th century – include the improvement of the road connecting Waikīkī to Honolulu (the route of the present Kalākaua Ave.), the building of a tram line between the two areas, and the opening of Kapi'olani Park on June 11, 1877. Traditional land-uses in Waikīkī were abandoned or modified. By the end of the 19th century most of the fishponds that had previously proliferated had been neglected and allowed to deteriorate. The remaining taro fields were planted in rice to supply the growing numbers of immigrant laborers imported from China and Japan, and for shipment to the west coast of the United States.

As the sugar industry throughout the Hawaiian kingdom expanded in the second half of the 19th century, the need for increased numbers of field laborers prompted passage of contract labor laws. In 1852, the first Chinese contract laborers arrived in the islands. Contracts were for five years, and pay was \$3 a month plus room and board. Upon completion of their contracts, a number of the immigrants remained in the islands, many becoming merchants or rice farmers. As was happening in other locales, in the 1880's, groups of Chinese began leasing and buying (from the Hawaiians of Waikīkī) former taro lands for conversion to rice farming. The taro lands' availability throughout the islands in the late 1800's reflected the declining demand for taro as the native Hawaiian population diminished.

The Hawaiian Islands were well positioned for rice cultivation. A market for rice in California had developed as increasing numbers of Chinese laborers immigrated there since the mid-19th century. Similarly, as Chinese immigration to the islands also accelerated, a domestic market opened. By 1892, Waikīkī had 542 acres planted in rice, representing almost 12% of the total 4,659 acres planted in rice on O'ahu. Most of the former taro *lo'i* converted to rice fields were located *mauka* of the present Ala Wai Boulevard (Figure 13).

A particularly well known gathering place, the Waikiki Villa also known as the Hawaiian Annex with four apartments for overnight guests was built circa 1890 at the present location of the Sheraton Waikiki and was one of the first Waikīkī enterprises to rent rooms (Figure 14).



Figure 12. 1893 W.A. Wall map with overlay of SW/RHH property and areas of work

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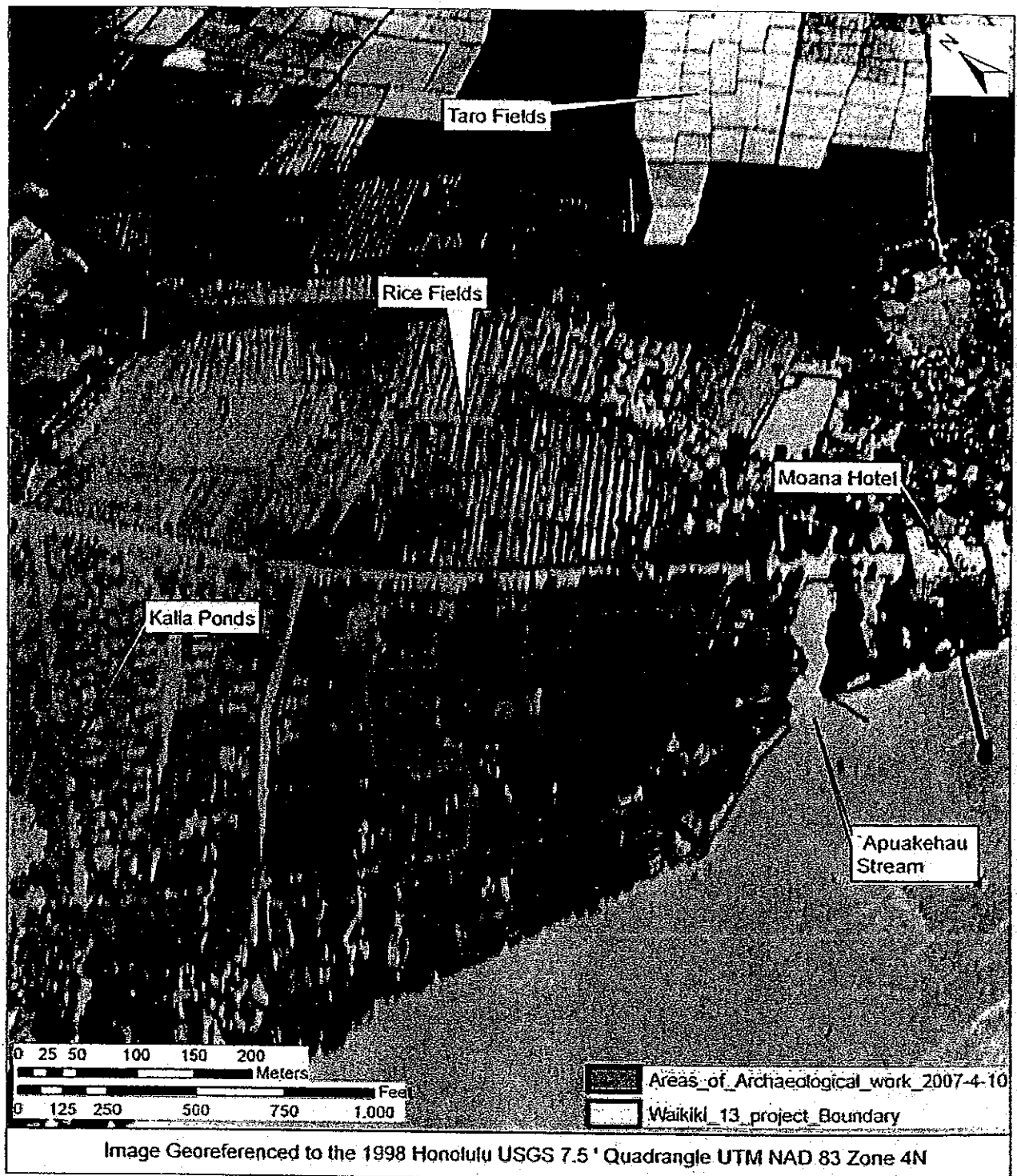


Figure 13. Aerial Photograph of Waikiki Before the Completion of the Ala Wai Drainage Canal (Hawai'i State Archives)

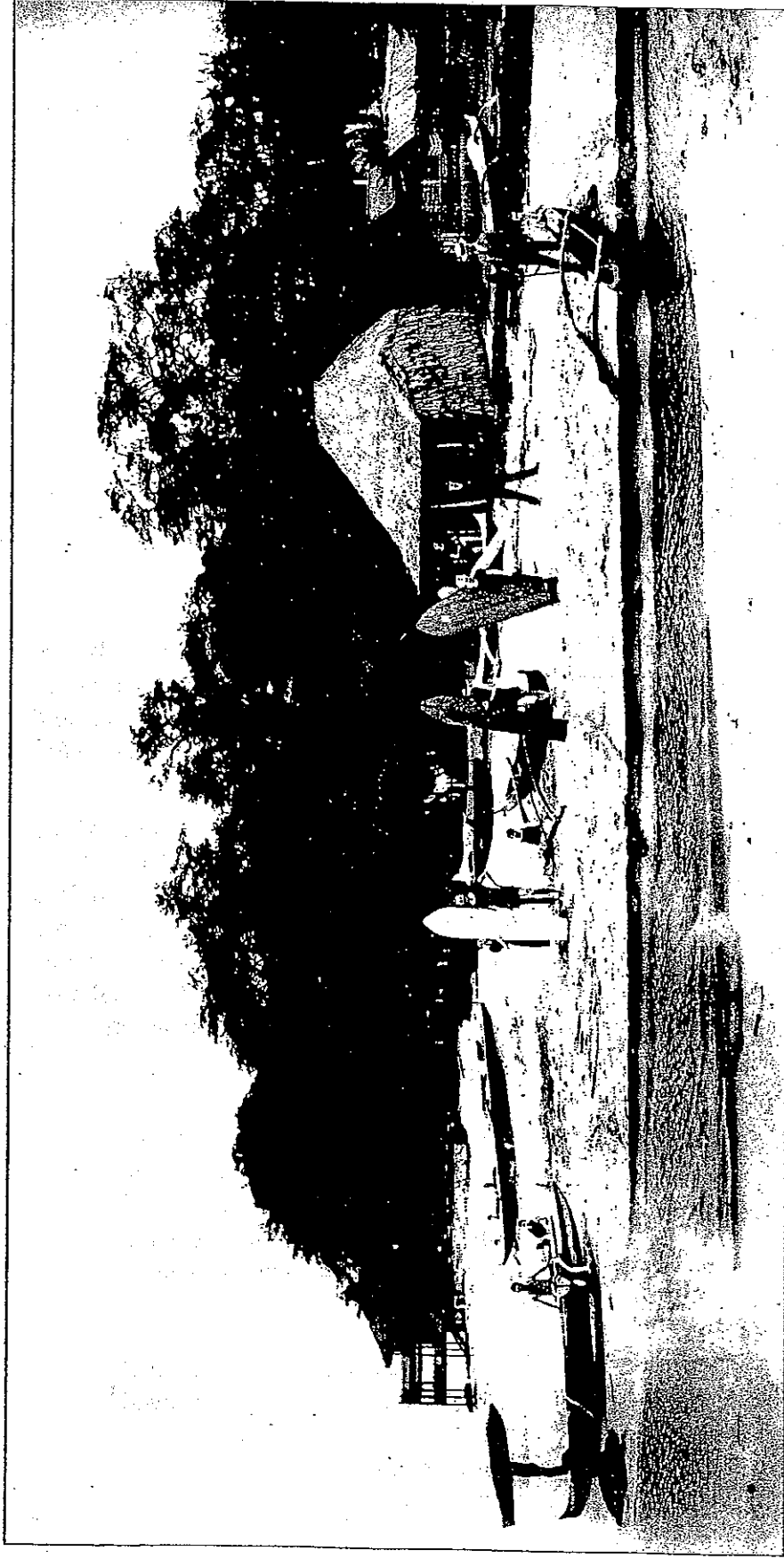


Figure 14. View of 'Āpuakēhau Stream *muliwai* or lagoonal backwater, circa 1909, the former Waikiki Villa or Hawaiian Annex (renamed the Honolulu Seaside in 1906) at extreme left, the "quaint" thatched houses of the Outrigger Canoe Club (former location) were not traditional habitations but had been imported from the defunct Kaimukī zoo (adapted from Hibbard and Franzen 1986:76)

2.4 1900 to 1920

During the first decade of the 20th century, the U.S. War Department acquired more than 70 acres in the Kālia portion of Waikīkī for the establishment of a military reservation called Fort DeRussy, named in honor of Brig. Gen. R.E. DeRussy of the Army Corps of Engineers.

On 12 November 1908, a detachment of the 1st Battalion of Engineers from Fort Mason, California, occupied the new post...

Between 1909 and 1911 the engineers were primarily occupied with mapping the island of O'ahu. At DeRussy other activities also had to be attended to - especially the filling of a portion of the fishponds which covered most of the Fort. This task fell to the Quartermaster Corps, and they accomplished it through the use of an hydraulic dredger which pumped fill from the ocean continuously for nearly a year in order to build up an area on which permanent structures could be built. Thus the Army began the transformation of Waikīkī from wetlands to solid ground, [Hibbard and Franzen 1986:79].

All the fishponds were filled by 1928.

The Honolulu Seaside Hotel was opened in 1906 by George W. Macfarlane surrounded by ten acres of algarroba and cocoanut palms incorporating the former Hawaiian Annex bathhouse (Hibbard and Franzen 1986:62). In the mid 1920's the old Seaside Hotel, bathhouses and cottages were leveled to make way for the new Royal Hawaiian Hotel which opened on February 1, 1927 (see Figure 19).

A fire insurance map of 1914 (Figure 15) shows that there were five areas in Waikīkī where residential and commercial structures were concentrated in the early 20th century. These areas were located: 1) clustered at Saratoga Road and Lewers Road; 2) near the intersection of Ena Road and Kalākaua Avenue; 3) *makai* of Kālia Road on the east side of Ft. DeRussy; 4) clustered around the Moana Hotel on Kalākaua Avenue; and 5) in Kapahulu on the 'Ewa side of Makee Road (the present Kapahulu Avenue). The fire insurance map also reveals the relative isolation of Waikīkī, in the early 20th century, from the encroaching grid of modern Honolulu streets.

The Outrigger Canoe club web site offers the following history:

In May, 1908, the Outrigger Canoe Club came into being on an acre and a half of choice beachfront land located between the Moana and Seaside Hotels (site of the present Royal Hawaiian Hotel) leased from the Estate of Queen Emma for \$10 per year. On the land was a lagoon formed by 'Āpuakehau Stream which carried the waters of Mānoa, Pālolo and Makiki Streams into the ocean where some of the best surfing locations in the Islands could be found.

The first Clubhouse consisted of two grass houses purchased from a defunct Kaimuki zoo and transported to the grounds by Club members on a borrowed truck. One was used for storage of outrigger canoes; the other for dressing rooms. The broad lānais of both structures were used for social activities. Not long after, a grass-roofed pavilion was built over the lagoon for dances and larger social

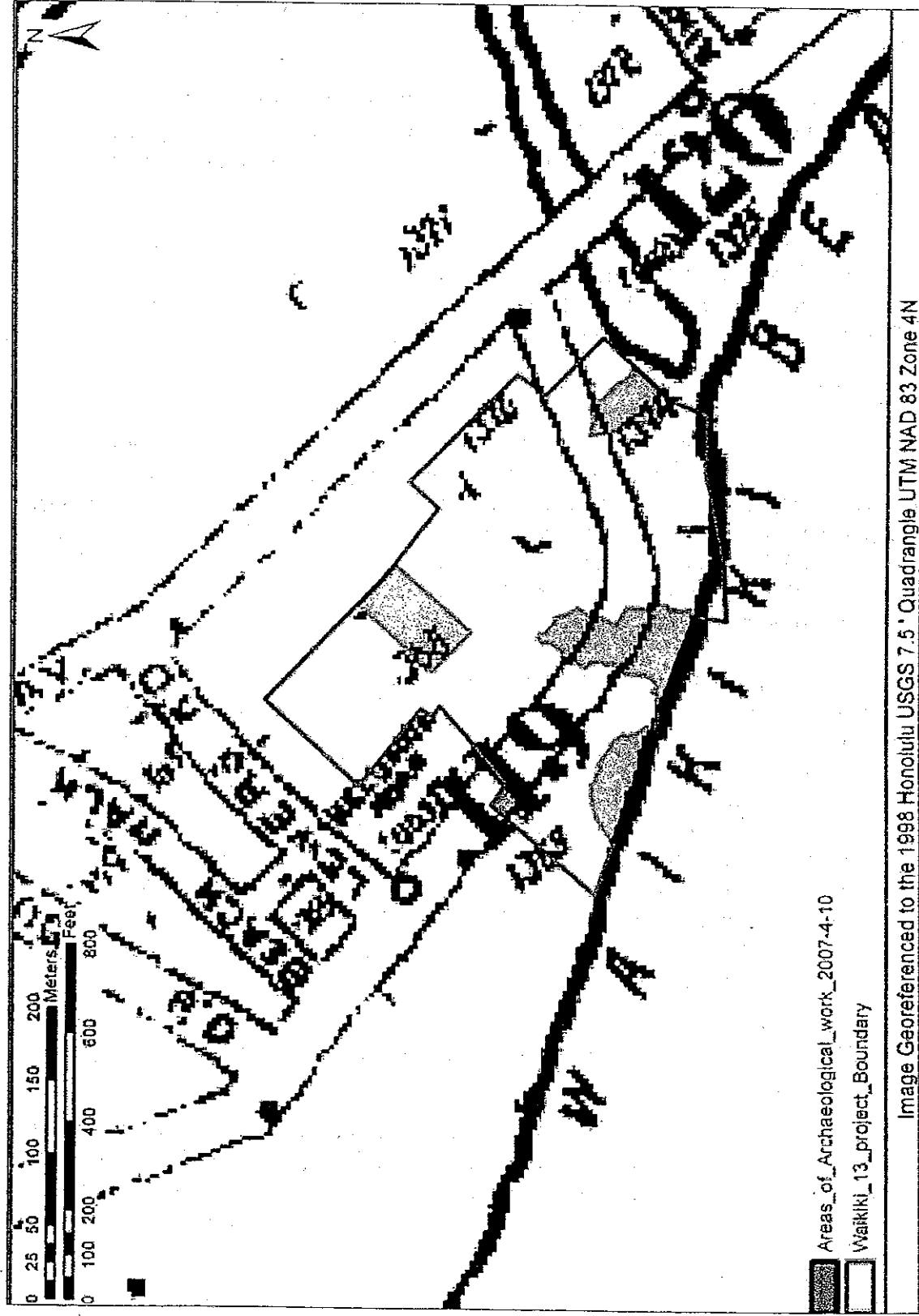


Figure 15. Portion of 1914 Sanborn Fire Insurance Map of Waikiki

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functions and a *hau* terrace became a family gathering place. After a fire in 1914 destroyed the roof of the pavilion, the Club was rebuilt and the Hau Terrace enlarged.

Over the years, the clubhouse fell into disrepair until finally the termite eaten and dilapidated buildings were condemned by the Board of Health. ...Eventually the money was raised, the old buildings demolished, and the third Outrigger Canoe Club, designed by Vladimir Ossipoff, was erected in 1941. ...

The Club's favorable lease with Queen Emma Estate, renewed many times over the years, expired in 1963. A portion of the Elks Club property at Diamond Head was leased and a state of the art building was constructed. Also designed by Ossipoff, it opened in time for the 1963 Christmas Open House.

2.5 1920's to 1930's

During the 1920's, the Waikīkī landscape would be transformed when the construction of the Ala Wai Drainage Canal, begun in 1921 and completed in 1928, resulted in the draining and filling in of the remaining ponds and irrigated fields of Waikīkī. The *muliwai* or lagoonal backwater of 'Āpuakēhau Stream that reached the sea between the present Royal Hawaiian and Moana Hotels was filled in between 1919 and 1927 (Figures 16 to 18). The filling in of 'Āpuakēhau Stream and the excavating of the Ala Wai canal were elements of a plan to urbanize Waikīkī and the surrounding districts:

The [Honolulu city] planning commission began by submitting street layout plans for a Waikīkī reclamation district. In January 1922 a Waikīkī improvement commission resubmitted these plans to the board of supervisors, which, in turn, approved them a year later. From this grew a wider plan that eventually reached the Kapahulu, Mō'ili'ili, and McCully districts, as well as lower Makiki and Mānoa. The standard plan for new neighborhoods, with allowances for local terrain, was to be that of a grid, with 80-foot-wide streets crossing 70-foot-wide avenues at right angles so as to leave blocks of house lots about 260 by 620 feet. Allowing for a 10-foot-wide sidewalk and a 10-foot right-of-way [alley] down the center of each block, there would be twenty house lots, each about 60 by 120 feet, in each block [Johnson 1991:311]

The Royal Hawaiian Hotel (Figure 19) was formally opened on February 1 1927 and with a maximum height of 150 feet was the tallest privately owned building in the Territory at that time (Hibbard and Franzen 1986:99).

During the course of the Ala Wai Canal's construction, the banana patches and ponds between the canal and the *mauka* side of Kalākaua Avenue were filled and the present grid of streets was laid out. These newly created land tracts spurred a rush to development in the 1930's. An article in the Honolulu Star-Bulletin in 1938 extolled the area's progress:

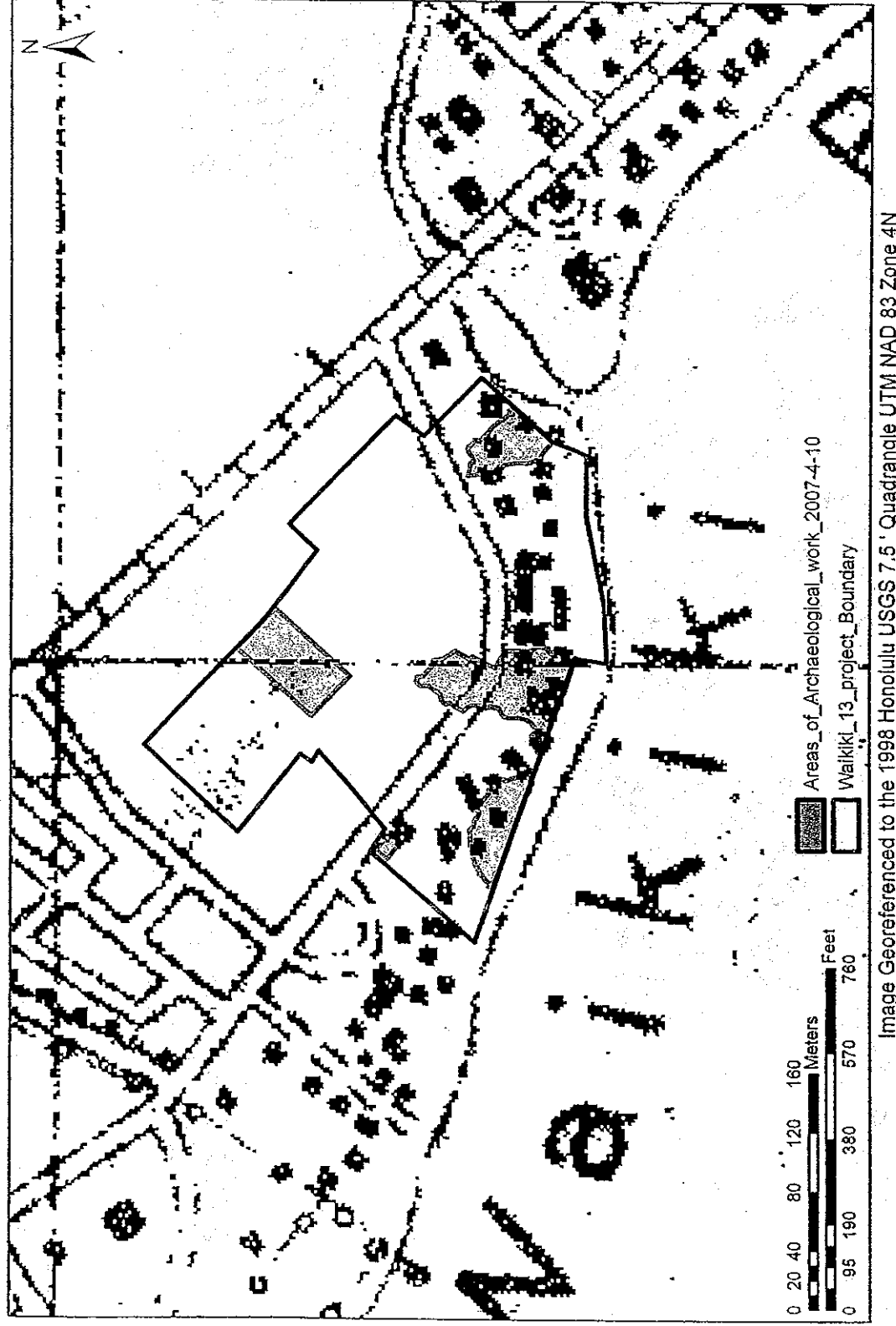


Figure 16. 1919 Fire control map with overlay of SW/RHH property and areas of work

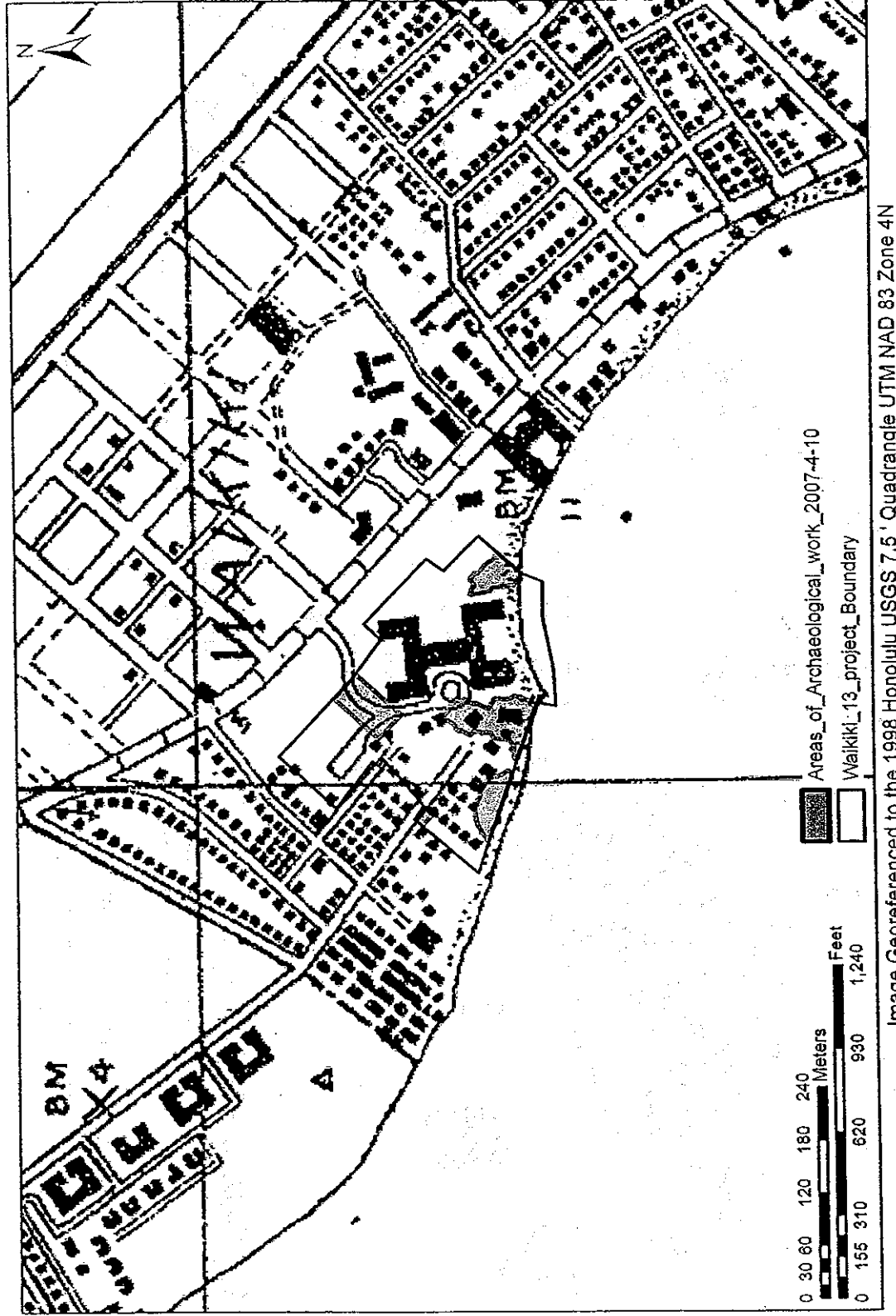


Figure 18. 1927 U.S. Geological Survey map with overlay of SW/RHH property and areas of work

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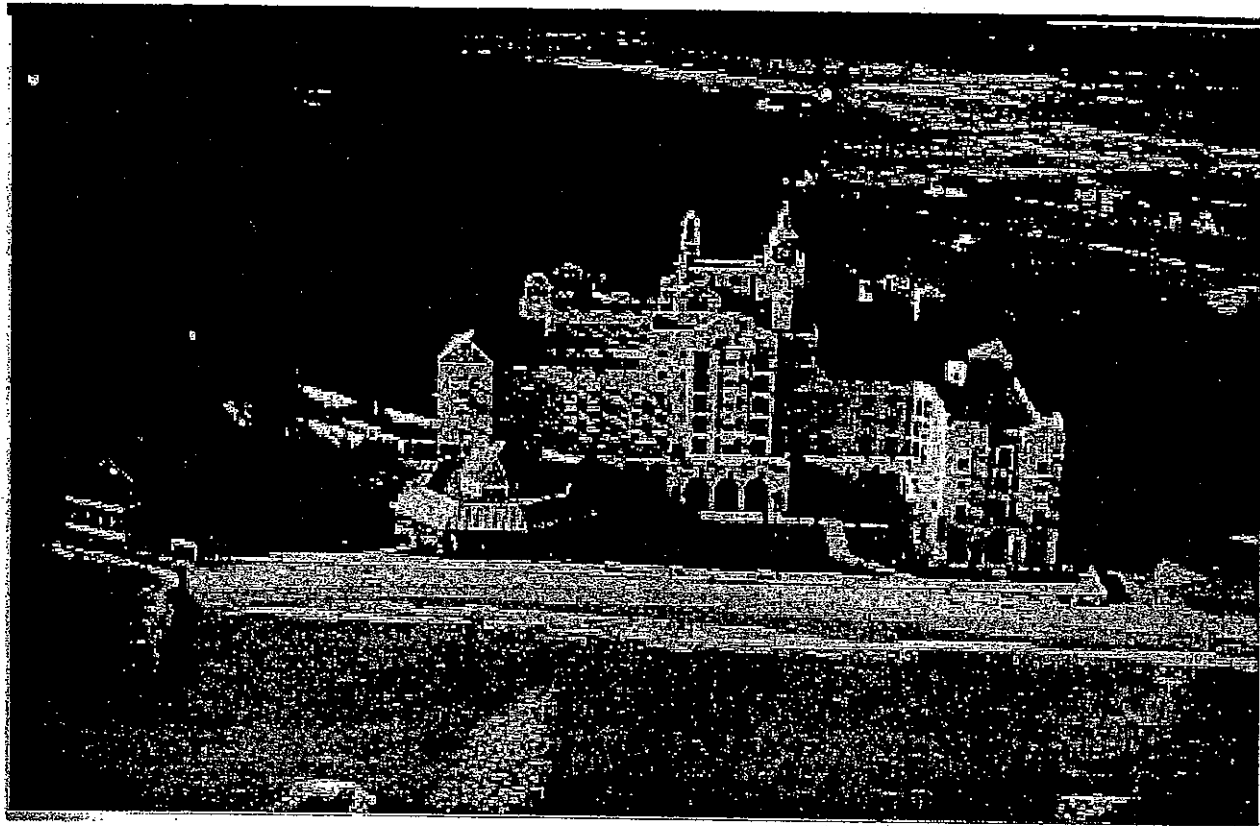


Figure 19. 1929 aerial photo of Royal Hawaiian Hotel (E. B. Scott, 1968)

The expansion of apartment and private residence construction is no secret. Examination of building permits will show that more projects have been completed during the past year, and more are now underway in this area, than in any other section of the territory.

These developments are being made by island residents who have recognized the fact that Waikiki presents the unparalleled possibility for safe investment with excellent return. (Newton 1938: 10)

The writer speculated that the "future of Waikiki is assured."

2.6 1940's

The entrance of the United States into World War II following the Japanese bombing of Pearl Harbor on December 7, 1941 put on hold plans for the development of Waikiki as a tourist destination. Until the war's end in 1945, the tourist trade was non-existent "...since the Navy controlled travel to and from Hawai'i and did not allow pleasure trips" (Brown 1989: 141). For the duration of the war, Waikiki was transformed into a recreation area for military personnel.

It was not the same Waikīkī as before the war, though; barbed wire barricades now lined its sands, and there were other changes too. Fort DeRussy became a huge recreation center, with a dance hall called Maluhia that attracted thousands of men at a time. The Moana Hotel continued to function, but many other establishments and private homes in the area were taken over by the military. [Brown 1989:141]

Nearing the war's end, concerns began arising over the future of Waikīkī. An article in the Honolulu Advertiser of July 16, 1945 decried "honky-tonks" that had sprung up in Waikīkī during the course of the war, and asked: "Can anyone look at present-day Kalākaua Ave. – lined with makeshift curio shops, noisy 'recreation' centers, eyesores that pass under the name of lunchrooms and miscellany of 'joints' – and hope that Waikīkī can stage a comeback [as a tourist destination]?"

2.7 Later Decades

By the mid-1950's there were more than fifty hotels and apartments from the Kālia area to the Diamond Head end of Kapi'olani Park. The Waikīkī population, by the mid-1950's, was not limited to transient tourists but included 11,000 permanent residents living in 4,000 single dwellings and apartments in stucco or frame buildings. A fire insurance map dating to 1951 indicates that, up to that time, no buildings were located between the Royal Hawaiian Hotel and Kalākaua Avenue. By the late 1950s, a row of retail shops had been constructed along Kalākaua Avenue. In the late 1970s, these shops were demolished and the present Royal Hawaiian Shopping Center was constructed on the present project area parcel.

The lands west of the Royal Hawaiian Hotel remained relatively undeveloped (Figure 20). The thirty-one story Sheraton Waikiki was completed in 1971 and with 1,904 rooms was the largest resort hotel in the world at that time (Hibbard and Franzen 1986:165).

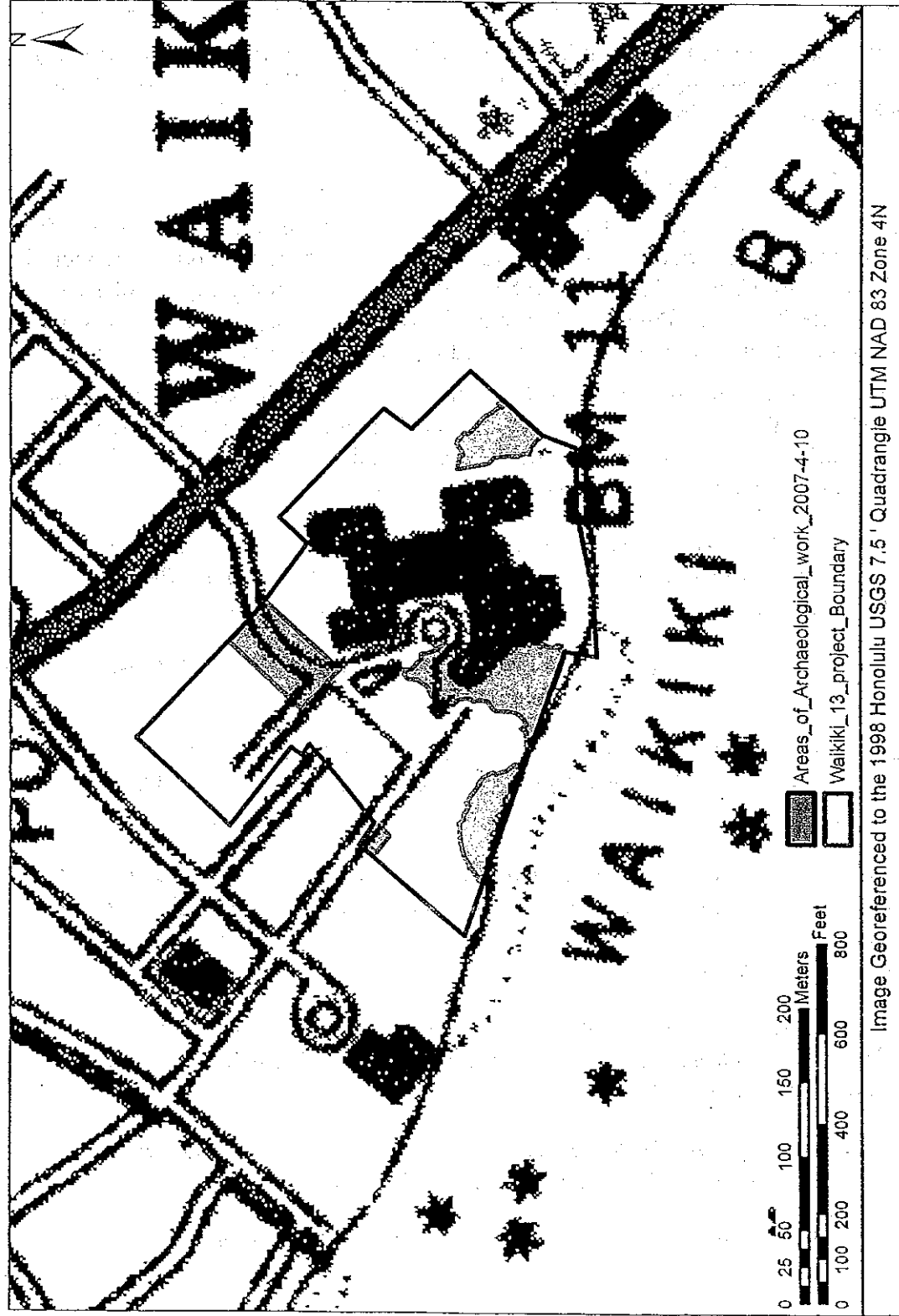


Figure 20. 1953 USGS map with overlay of SW/HH property and areas of work

Section 3 Data Pertaining to Human Burials in Waikīkī from Traditional Sources

Death at Waikīkī is documented in a number of traditional accounts including accounts of human sacrifice, accounts of fighting in Waikīkī in the wars of Kahekili and Kamehameha and from mid-nineteenth century Land Commission Award records.

3.1 Accounts of Human Sacrifice at Waikīkī

Hawaiian authors in the nineteenth and twentieth centuries have emphasized that victims for sacrifice were "criminals", "wrongdoers," or "individuals who had broken tabu, or rendered themselves obnoxious to the chiefs" (Kanahale 1986:116). Another major category of human sacrifice victims were the "*kauwā*." Pukui (Pukui and Elbert, 1971: 128) translates *kauwā* as "Untouchable, outcast, pariah: a cast which lived apart and was drawn on for sacrificial victims."

Waikīkī was famous for the drowning of *kauwā* with the same formulaic phrase '*Moe mālie i ke kai o ko haku*' ('Lie still in the waters of your superior') used for *kauwā* drowning at Kawailumaluma'i, Kewalo and Kualoa. An account of sacrificial drowning of *kauwā* at Waikīkī appeared in the Hawaiian language Newspaper *Ka Loea Kālai'āina*:

A penei na'e i kauwā loa [sic. "loa'a"] ai. Aia a mana'o ke Ali'i Nui (Mō'i) e 'au'au kai i Waikīkī Eia ka nīnau a ke Ali'i Nui i ke ali'i ma lalo iho ona, "Pehea āu mau wahi lepo kanu o Pu'u Ku'ua? 'A'ole paha he mau wahi pōhuli?"

Eia ka pane a ke ali'i ma lalo iho ona, "He Pōhuli nō. 'O ke kauoha ia akula nō ia e ki'i.

'Oiai ko kāne me ka wahine e nanea ana me nā keiki, a hiki 'ana ke ki'i i mau keiki. 'O ke kū a'ela nō ia o ka makuakāne a lawe 'ana i kāna mau keiki a hiki i Waikīkī.

Aia ho'i a hiki i ka wā a ke Ali'i e hele ai i ka 'au'au kai, a laila, hoouna 'ia mai ke kahu e ki'i mai i ua keiki a lawe aku ia ma kahi pāpa'u o ke kai, ma kahi a ke Ali'i nui e hele kū 'ana, a laila kau nā lima o ka Mō'i i luna o kahi keiki a me kahi keiki, ma nā 'ā'i o nā keiki a pa'a ai.

'O ka hua 'ōlelo ma ka waha o ke Ali'i nui e 'ōlelo ai, "'A'ole pau ku'u loa! 'A'ole pau ku'u loa!" 'Oiai 'o ia e 'au ana me ka pa'a nō o nā lima i nā keiki a hiki i ka umauma ke kai o ke ali'i.

Ua lana a'ela nā keiki i luna o ka 'ilikai, aia ke alo i lalo. Eia ho'i ka 'ōlelo a ka makuakāne ma kula aku nei, "Moe mālie i ke kai o ko Haku," a pēlā aku.

'O ke kai o Waikīkī ke kai i 'ōlelo 'ia he kai humaluma'i kanaka o ka lua, aia i Kualoa.

Translation:

When the ruling chief wished to go to Waikīkī for sea bathing he asked the chief just below him in rank, "How are my planting places at Pu'u Ku'ua, [a place in the Wai'anae Range famous as a kauwā residence and place of mixed caste] have they not produced young suckers?" The chief next to him answered, "There are some suckers," and sent someone for them. When the men, women and children least expected it, the messenger came to get some of the children. The father stood up and took his sons to Waikīkī.

Then, when the ruling chief went sea bathing, he sent an attendant to get the boys and take them to a shallow place where the ruling chief would come. Then the ruler placed a hand on each of the boys, holding them by the necks. The words he uttered were, "My height has not been reached! My height has not been reached!" He advanced and held onto the boys until the sea was up to his chest. The boys floated on the water face down. The father on shore called out, "Lie still in the sea of your Lord," and so on.

The Sea of Waikīkī is said to have been used to kill men in and the other place is Kualoa.

No specific location at Waikīkī is indicated as the sacrificial site.

Regrettably much uncertainty also remains regarding the exact location of the four Waikīkī *heiau* associated with human sacrifice. Papa'ena'ena, certainly the most famous, was located at the foot of Diamond Head crater in the environs of the present Hawai'i School for Girls. Papa'ena'ena Heiau is traditionally associated with Kamehameha I who was said to have visited the *heiau* before setting off to battle for Ni'ihau and Kaua'i in 1804. Five years later, according to John Papa 'Ī'i, Kamehameha placed at Papa'ena'ena the remains of an adulterer - "all prepared in the customary manner of that time" ('Ī'i 1959:50-51). This would have been one of the last human sacrifices in the kingdom.

Regarding the death of the famous prophet Ka'ōpūlupulu by Kahahana, Thrum writes: "After a while the body of the priest was placed on a double canoe and brought to Waikīkī and placed high in the cocoanut trees at Kukaeunahi [sic, Kukaunahi?] the place of the temple, for several ten-day periods (*he mau anahulu*) without decomposition and falling off of the flesh to the sands of Waikīkī." [Note: Kahahana's place of residence at Waikīkī was Ulukou, the present site of the Moana Hotel which was built in 1901. The closest and most likely *heiau* would appear to be the Helumoa Heiau formerly located on or very near the grounds of the Royal Hawaiian Hotel.

Numerous accounts of human sacrifice (or near sacrifice) at Waikīkī have a mythopoeic quality for which the historical basis is uncertain.

The *heiau* associated with sacrifice are listed below in Table 2.

Table 2. Sites Associated With Human Sacrifice in Waikīkī

Place Name	Location	Grounds for believing associated with human sacrifice	Source
Papaenaena Heiau (Le'ahi)	Waikīkī in the vicinity of La Pietra and the Hawai'i School for Girls	" <i>Heiau po 'okanaka</i> "	Thrum 1906:44
Kapua Heiau	Waikīkī in the vicinity of the Natatorium	" <i>Heiau po 'okanaka</i> ", place of sacrifice of Kaolohaka	Thrum 1906:44
Helumoa Heiau	'Āpuakēhau Waikīkī at or near the Royal Hawaiian Hotel	<i>Heiau po 'okanaka</i> , the place of sacrifice of Kauhi Kama" the defeated <i>mō'ī</i> of Maui in his raid on O'ahu about 1610, in the reign of Kaihikapu	Thrum 1906:44
Shallow sea of Waikīkī	Waikīkī location uncertain	Account of <i>kauwā</i> drowning	<i>Ka Loea Kalaiaina</i> , 7/8/1899
Kūpalaha Heiau	Waikīkī in the vicinity of the zoo entrance	Account of near sacrifice of Kapo'i there	Kamakau 1991:23

Of particular concern for the present project is Helumoa Heiau which is unfortunately not well documented in the literature. We know of no maps showing the location of Helumoa Heiau. Thomas Thrum (1906:44) relates that it was a "place of sacrifice" going back at least as far as A.D. 1610. The Maui chief Kauhiakama was said to have been sacrificed by the O'ahu chief Ka'ihikapu there (Hibbard and Franzen 1986:5). Later Thomas Thrum (1927:34) would note: "This temple was long ago demolished, not a stone being left to mark the site, which was doubtlessly near, if not *the* [italics in original] actual spot now graced by the new Royal Hawaiian Hotel." Additional data supporting this site as a major place of human sacrifice is provided in Pukui et al.'s (1974:44) comments regarding the origin and meaning of the place name "Helumoa". They write: "Old land division near the Royal Hawaiian Hotel at Helu-moa Street, Waikīkī, and site of a *heiau* where Ka-hahana was sacrificed. Lit. chicken scratch. (Chickens scratched to find maggots in the victim's body.)" We conclude the former location of the *heiau* was quite close to the Royal Hawaiian Hotel. The prominent point just on the Sheraton side of the Royal Hawaiian Hotel in the vicinity of the southeast corner of the Southwest Royal Hawaiian Hotel proposed work area (see Figure 25) appears likely for its commanding position and view planes.

3.2 Accounts of Battles at Waikīkī

3.2.1 Kahekili's Invasion of O'ahu Circa 1783

In 1867, Samuel M. Kamakau wrote the following account of the invasion of the island of O'ahu by the Maui ruling chief, Kahekili:

I ka pae 'ana o Kahekili a me nā 'au wa'a kaua o nā li'i o Maui, ma Waikīkī, e noho ana nō ka Mō'i Kahahana ma Kawānanakoa, ma Nu'uanu, ma uka o Honolulu. I ka lohe 'ana o Kahahana, ua hiki mai 'o Kahekili me nā 'au wa'a i lako i nā mea kaua. Ua piha ho'i mai Ka'alāwai a hiki i Kawehewehe ka pa'a i nā wa'a kaua o Kahekili mai Maui, Moloka'i a me Lāna'i mai, no laila, maka'u honua 'ēwale ihola nō 'o Kahahana, a ho'ākoakoa a'ela i kona po'e ali'i a me nā koa . . . 'ewalu ko lākou nui i hele i ke kaua. Ua komo loa kēia po'e 'ewalu i loko o 'Āpuakēhau, i laila kahi i kaua ai me ke koa launa 'ole, a ua ho'opuni 'ia mai lākou a puni e nā koa o Maui, a laila, wāhi a'ela k'ia po'e 'ewalu i loko o ka puoko o ke kaua, a nahā a'ela ka po'e i ho'opuni ai iā lākou nei. I ko lākou luli 'ana a'e na'e e ho'i mai, ua piha loa 'o mua i nā koa, 'a'ohe wahi ka'awale o Kawehewehe, e hiolo ana nā pololā e like me nā paka ua, akā, 'a'ohe na'e he wahi mea a pō'ino 'o kēia po'e 'ahi kananā, akā, 'o kēlā po'e koa o Maui ua pau i ka make. I ka hiki 'ana i kuāuna o Punalu'u, e iho mai ai i Luahinewai, e hiki mai ai i nā niu a Kuakuaaka . . . 'Ekolu ho'ouka kaua 'ana o nā 'ao'ao 'elua, a ua make like nō.

I ka malama o Ianuari 1, o ka A. D. 1783, ua 'ākoakoa nā ali'i a me nā pūkaua, nā pū'ali a me nā koa o Kahekili, a māhele 'ia ihola 'elua po'e kaua. Māhele 1. 'O Kahekili ka pūkaua. Māhele 2. 'O Hūeu ka pūkaua. 'O kā Hū'eu po'e kaua, ma uka o Kānelāau a me Kapapakōlea, ma uka o Pūowaina. 'O ka māhele mua, ma luna o Hekili a hiki i Kahēhuna a me 'Auwaiolimu. 'O Kaheiki ke kahua kaua . . . Lilo ihola ke aupuni o O'ahu a me Moloka'i . . . (Kū'oko'a, 3/30/1867)

Kahahana, [ruling chief of O'ahu] who was then living at Kawānanakoa in Nu'uanu, back of Honolulu, was filled with consternation when he heard that Kahekili had come with a fleet of war canoes that reached from Ka'alāwai to Kawehewehe, and he rallied his warriors about him [but] eight of the warriors . . . went to 'Āpuakēhau and fought against the whole host, and when they found themselves surrounded by the Maui warriors they broke through the front lines, only to find their way of retreat bristling with more warriors and no way to turn in all of Kawehewehe. Spears fell upon them like rain, but it was they who slew the warriors of Maui. At the border of Punalu'u, on the way down to Luahinewai and the coconut grove of Kuakuaaka [there was fighting] . . . Three times both sides attacked, and three times both were defeated. In January 1783, a decisive battle was fought with Kaheiki as the battlefield. Kahekili's forces were divided into two companies, one under Hū'eu's leadership stationed at Kānelā'au and Kapapakōlea back of Pūowaina and the other under his own command stationed

from above Hekili to Kahēhuna and 'Auwaiolimu..... thus O'ahu and Molokai were taken . . . (Kamakau 1961:135-137)

The account makes reference to fighting at "Kawehewehe." Kawehewehe is understood as the name of the beach on the 'Ewa side of the Royal Hawaiian Hotel (adjacent to Helumoa), just east of the Halekūlani Hotel, Waikīkī. The sick were bathed here as treatment. The patient might wear a seaweed (*limu kala*) lei and leave it in the water as a request that his sins be forgiven hence the origin of the name (Lit., the removal Pukui et al. 1974:99).

Fornander's (1919 Volume VI, part 2; page 289) account of "The Story of Kahahana" provides the detail that the army of the Maui chief Kahekili was encamped at 'Āpuakēhau, where they were organizing and preparing to march inland, and it was there the O'ahu forces first attacked "the Maui troops collected at the *heiau*." There "a fight commenced to which Hawaiian legends record no parallel". (Fornander 1919 Volume VI, part 2; page 289) A reconstruction of Kamakau's account of Kahekili's attack (Figure 21) definitely suggests battle casualties in Waikīkī although most of these likely occurred just northwest of the present project area. Intense fighting and mortality are indicated in the immediate vicinity of the Royal Hawaiian and Sheraton Waikiki resorts.

3.2.2 Account of the Invasion of Kamehameha Circa 1795

In 1867, Samuel M. Kamakau wrote the following account of the invasion of the island of O'ahu by the ruling chief, Kamehameha:

Holo akula ho'i ka 'au wa'a kaua o Kamehameha a pae i Waikīkī, a ua pani 'ia mai Wai'alae a Waikīkī e nā 'au wa'a kaua o Kamehameha.

'O Kalanikūpule ho'i a me kona mau ali'i, e noho ana lākou ma Nu'uanu, Kanoneakapueo, Kahapa'akai, Luakaha, Kawānakoā, Kaukahōkū, Kapaeli, Kaumuohena a me Pū'iwa nā kahua kaua. (Kū'oko'a, 6/8/1867)

Translation

Kamehameha's war fleet sailed to Waikīkī where it landed and the beaches from Wai'alae to Waikīkī were covered with the war canoes of Kamehameha.

Kalanikūpule and his chiefs were stationed at Nu'uanu, Kanoneakapueo, Kahapa'akai, Luakaha, Kawānakoā, Kaukahōkū, Kapaeli, Kaumuohena a me Pū'iwa, the battlefields (where the main fighting took place).

This account emphasizes that the main fighting started in the uplands but fighting at Waikīkī is probable.

Another historical account depicting the famous battle of Nu'uanu in which Kamehameha I unifies the islands, is given in *He Buke 'Oia'I'o Kū'auhau Ali'i*, page 131. The "Battle of Nu'uanu" chant was examined in the hopes it would provide clues to where fighting occurred and possible burials as a result of the battle.

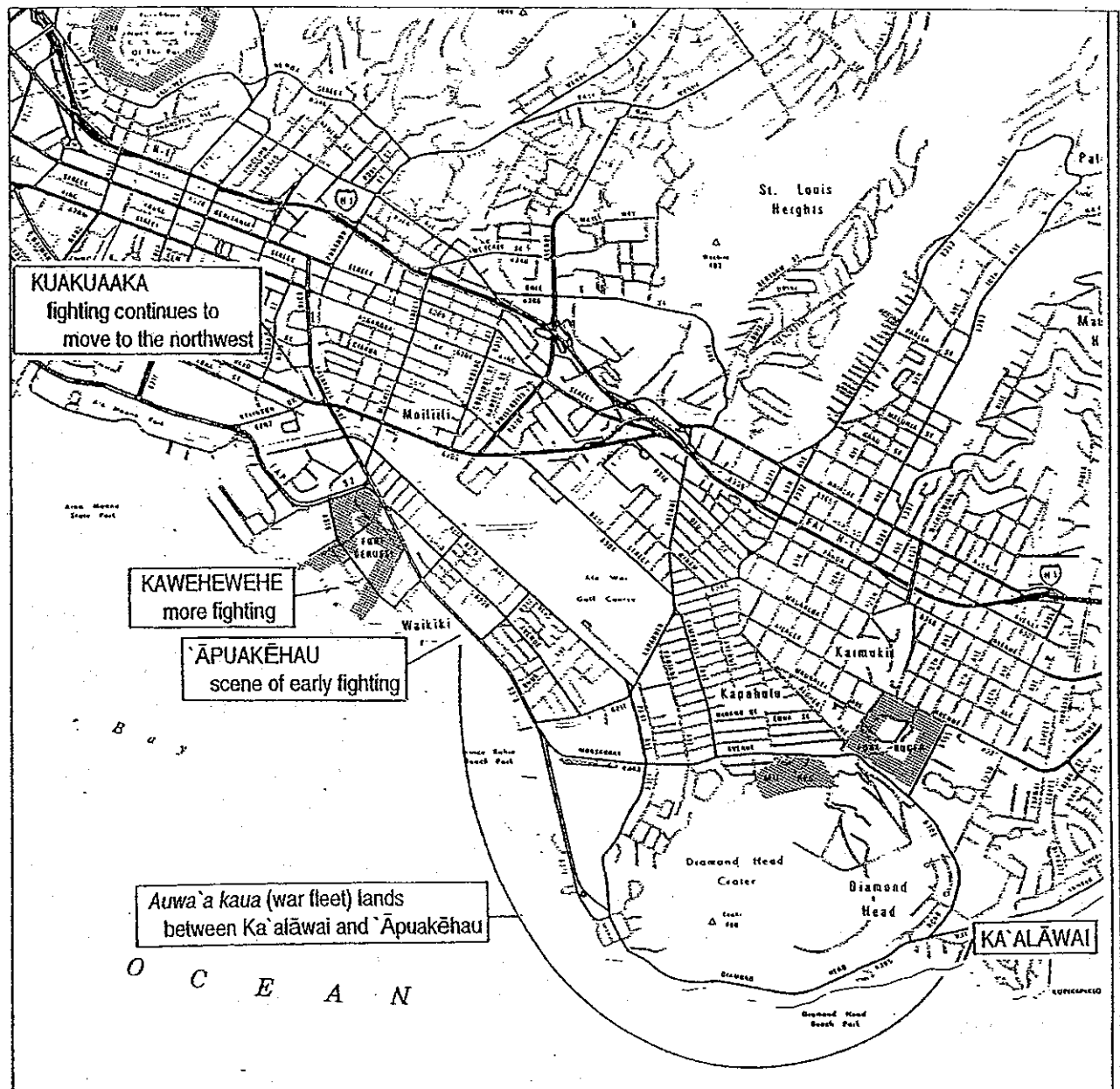


Figure 21. Reconstruction of Kahekili's Invasion of O'ahu Circa 1783

The chant is prefaced by the following explanation: [This is] "A chant of the battle of Nu'uaniu waged by Kamehameha the Great in the month of April, 1795. Composed by Kala'ikūahulu and transcribed by G. M. Keola, Dec. 15, 1880.

Kala'ikūahulu, was a skilled orator, genealogist and kahuna (priest) during the time of Kamehameha. He was also selected to be a member of Kamehameha's advisory counsel (Kamakau 1992:173, 175). Samuel Kamakau (1992:394), noted historian, writes "Kala'ikūahulu was the composer who glorified the names of the chiefs of Hawai'i in chant."

A very brief analysis of the chant is provided here. The chant is divided into two parts, Māhele 1 and Māhele 2. The chant basically sets up the sequence of the Nu'uaniu Battle and gives a vivid description of the intensity of the fighting that occurred. Part 2 of the chant basically chronicles the story from the time Kamehameha's war fleet leaves the shores of Moloka'i (after its conquest), crosses the Moloka'i Channel and enters the *papa* (reef flats) off of O'ahu. From the chant, we know that Lopakapū, Kamehameha's cannon is on board one of the canoes, as well as his war god, Kūka'ilimoku. Poetic references are made to Kamehameha, comparing him to the long, sharp spines of the wana, the *nohu* — a poisonous fish, the *palani* known for its sharp barb which snags and the *kōkala kū* — the porcupine fish whose body is covered with long spines that inflict pain. In the chant, Kamehameha is declared the victor even before he has landed on the sands of Kākuhihewa, at Hononunu (the site of the War Memorial) in Waikīkī.

From the locations of the place names listed in the chant, it seems that indeed, as Kamakau wrote (*Kū'oko'a*, 6/8/1867), the coastline was covered with Kamehameha's war fleet from Wai'ālae Bay to Waikīkī and on to Kou (Honolulu Harbor). Very quickly, the battle moves out of Waikīkī toward Kou (downtown Honolulu) and up toward Pūowaina (Punchbowl). Kamehameha splits his troops into two divisions. One moving up toward Pūowaina and Nu'uaniu and the other going through Makiki and coming around the back side of Pūowaina. The chant creates a vivid picture of the intensity and fierceness of the fighting which occurred. A description is given of the general populace fleeing wildly through the taro fields in Makiki. The battle intensifies at Kānelā'au on the east slopes of Punchbowl, where Kalanikūpule's forces are trapped and surrounded. Kamehameha has the advantage of his canon, Lopaka, commanded by Hū'eo (Isaac Davis). The O'ahu battalions are forced to flee. Some, escape the heat of the battle and try to make their way back toward Waikīkī, probably in a last ditch effort to escape via canoe, while others flee toward 'Ewa. However, the majority of the forces head toward Nu'uaniu and the *pali* with Kamehameha's men in fast pursuit.

Line 94 of the chant is perplexing in that it makes mention of "numerous [people] being killed at Kuamo'o" (*make lehulehu i Kuamo'o*). It is not clear whether this is a reference to Kuamo'o, O'ahu, Kuamo'o on Hawai'i or possibly an obscure reference to a different Kuamo'o location in close proximity to the place names mentioned in the chant. The locality of Kuamo'o on O'ahu is spoken of by Kamakau in relation to the 1794 battle of Kuki'iahu, between Ka'eokūlani of Maui and Kalanikūpule of O'ahu. Mention is made of "The heights of Kuamo'o, Kalauao, and Aiea" and that Ka'eo's men were "cut off . . . between Kalauao and Kuamo'o" (Kamakau 1992:169). This Kuamo'o is clearly the one located in the 'Ewa District, far outside the boundaries where the Nu'uaniu battle took place. The famous battle of Kuamo'o at Kailua, Kona took place in 1819, after Kamehameha's death, over the upheaval of the *'ai kapu* (the

religious taboo system). It seems odd that a chant written to commemorate Kamehameha and the Nu'uanu battle would make reference to a battle which occurred 24 years later and after the death of Kamehameha. It is even more odd to find a reference to either of the Kuamo'o battles within the sequence of Waikiki place names given. The chant is clearly recounting the various place names in their order along the coast of Waikiki. Regardless, both known Kuamo'o locations are nowhere near the vicinity of Waikiki or the Punchbowl-Nu'uanu areas. The present day Kuamo'o Street in Waikiki, situated between Kūhiō Avenue and Ala Wai Boulevard, is said to have been named for Mary Kuamo'o Ka'oana'ena, the sister of Kekuaoakalani who was killed at the Kuamo'o battle of 1819 (PN:119).

Line 144 once again mentions the place name Kuamo'o and is prefaced by the preceding line: "The people of O'ahu ask, who is this facing us? Who is the warrior at Kuamo'o?" The chant seems to be referring to a specific place name within the area of the battle zone but, this cannot be for certain. Research into place names and 19th century maps did not reveal any additional information regarding another "Kuamo'o location" on O'ahu.

In summary, the main reason for studying this Nu'uanu Battle chant was to get an idea of where the fighting occurred and to determine areas of density for possible burials related to this particular war. From the chant, it is clear that the battle moved out of Waikiki proper very quickly. Granted, there were skirmishes along the way, but the main fighting and loss of life occurred near the eastern slopes of Punchbowl and ended at Nu'uanu Pali.

3.3 Land Commission Award Testimony

There are approximately 14,500 records associated with Land Commission Award (LCA) claims during the Māhele of 1847-1853. Of these records, 428 are for claims awarded and unawarded in Waikiki. Among these 428 claims there is only one mention of a graveyard or burial place and it is in claim 613 (to Kuluwailehua) which is not awarded. This appears to be completely different than Kuluwailehua's claim for LCA 1281 within the present project lands. The land is described in a deed transfer of November 21, 1841 from Kalua to Kuluwailehua as "my house site" and it is "a separate place and is a burial ground." In this same document (*Native Testimony* 384-385 volume 2; probably 1848 or 1849) the boundaries given as "Mainunu's lot on the Waikiki side; Chapel St, *mauka*; Kauwaina's lot, 'Ewa; and Kaupena's lot, *makai*." In an earlier document (July 1, 1847) for claim 613 the boundaries are given as: "North, house lot of Kauwaina; east, Church Street and the lot of Mainunu; south, house lots of Mainunu and Hakau; west, house lot of Kaupena" (Native Register, 299-300 volume 2).

Kuluwailehua is awarded the land under No. 637, which does not mention the burial ground. Kuluwailehua holds many awarded claims in Waikiki, as well as others on O'ahu and other islands (Māhele database 1998, waihona.com). It is uncertain at this point where the reported burial ground is located. Possibly "Church Street" was adjacent to the church shown on nineteenth century maps northwest of the present Ka'iulani Avenue, well away from the present project area.

3.4 Analysis

Our present evaluation of the Waikīkī burials is much more mundane than battle deaths or human sacrifices - namely that the vast majority of the deceased were the common people of Waikīkī. Withington (1953:16), probably referring to the 'oku'u plague [circa 1804], says: "A few years of peace settled over the Islands. Kamehameha and other warring chiefs took this opportunity to re-establish their forces, which had been greatly reduced through war and disease. A terrible epidemic of measles had attacked the people of the islands. It is claimed that more than three hundred bodies were carried out to sea from Waikīkī in one day" (Bowen 1961:38). While many of the Waikīkī burials likely accumulated slowly over centuries other burials probably relate to such early and repaid depopulation by introduced diseases.

Rank seems to have had profound influences on places available for disposal. A king's body, or those of his attendants, could be placed within the district of the king's authority. Many geographical features were available. Fewer were available to lesser chiefs and their attendants, who were presumably limited to their own districts. The number of geographical features available for disposal seems to have decreased as rank decreased. Disposal for members of an extended family living in an *'ili* was restricted to those geographical features located within the land unit, whether broken lava flats, lava tubes, earth plains, or sand dunes (Bowen 1961:21).

Bowen (1961:21) notes that most Hawaiians in the pre-contact period belonged to the *maka'āinana* or commoner class and their bones were usually buried in no other area than their particular *'ili* (land division within an *ahupua'a*); this particular practice is reflected in a Hawaiian term for one's natal locality - *kulāiwi* meaning "plain of one's bones" (Cleghorn 1987:41).

Burials are commonly reported from clean, consolidated sand deposits and beach burial was clearly a common method of interment practiced by Hawaiians (Cleghorn 1987:42). One of the earliest references to Hawaiian burial customs was made by Urey Lisiansky (1814:122), who visited Hawai'i in June, 1804. He notes: "The poor are buried anywhere along the beach . . ."

Commenting on the nature of burial areas and body positions used in burial, Ellis (1827:361-363) says: "The common people committed their dead to the earth in a most singular manner." The body was flexed, bound with cord, wrapped in a coarse mat, and buried one or two days after death. Graves were ". . . either simply pits dug in the earth, or large enclosures . . . Occasionally they buried their dead in sequestered places at a short distance from their habitations, but frequently in their gardens and sometimes in their houses. Their graves were not deep and the bodies were usually placed in them in a sitting posture" (Bowen 1961:142). Ellis picks up on an important point that has been noted by archaeologists that the probability of burials within or in very close proximity to Land Commission Award house lot claims is significantly greater than is typical away from such house lot claims. This indicates a heightened probability of burials in portions of the present study area particularly the South Sheraton and Southwest Royal Hawaiian proposed areas of work.

Regarding the Castle burials, at the east end of Waikīkī, Bowen goes on to say: "Concerning the circumstances of burial, Emerson says: 'From the absence of fractures and marks of violence in the bones I have examined, such as might have been caused in battle, I am inclined to think that the site where they were found was at one time a Hawaiian cemetery.'" (1961: 149) Indeed it

seems likely that the remains thus far documented including those within the present project area relate to common mortuary practices.

Section 4 Previous Archaeological Research

The *ahupua'a* of Waikīkī, in the centuries before the arrival of Europeans, was an intensely utilized area, with abundant natural and cultivated resources, that supported a large population. In the nineteenth and early twentieth centuries, after a period of depopulation, Waikīkī was reanimated by Hawaiians and foreigners residing there, and by farmers continuing to work the irrigated field system, which had been converted from taro to rice. Farming continued up to the first decades of the twentieth century until the Ala Wai Canal drained the remaining ponds and irrigated fields. Remnants of the pre-contact and historical occupation of Waikīkī have been discovered and recorded in archaeological reports, usually in connection with construction activities related to urban development, or infrastructural improvements. These discoveries, which have occurred throughout Waikīkī, have included many human burials, traditional Hawaiian and historic, as well as pre-contact Hawaiian and historic cultural deposits. A list of projects conducted in the Waikīkī area is presented in Table 3. A supplementary listing of burial finds from Waikīkī that ended up in the osteological collections of the Bernice Pauahi Bishop Museum is presented in Table 4. A discussion of projects focusing on burials (Figure 22) follows.

N.B. Emerson reported on the uncovering of human burials during the summer of 1901 on the property of James B. Castle - site of the present Elks Club - in Waikīkī during excavations for the laying of sewer pipes (Emerson 1902:18-20). Emerson noted:

The soil was white coral sand mixed with coarse coral debris and sea-shells together with a slight admixture of red earth and perhaps an occasional trace of charcoal. The ground had been trenched to a depth of five or six feet, at about which level a large number of human bones were met with, mostly placed in separate groups apart from each other, as if each group formed the bones of a single skeleton. Many of the skulls and larger bones had been removed by the workmen before my arrival, especially the more perfect ones [Emerson 1902:18].

Emerson's report on the find describes the remains of at least four individuals, all presumed to be Hawaiian. Associated burial goods were also exposed during excavation; these included "a number of conical beads of whale-teeth such as the Hawaiians formerly made" and "a number of round glass beads of large size". The glass beads "can be assigned with certainty to some date subsequent to the arrival of the white man" (Emerson 1902:19). Also located with the beads was "a small sized *niho-palaoa*, such as was generally appropriated to the use of the chiefs" which had been "carved from the tooth of the sperm-whale" and which was "evidently of great age" (Emerson 1902:19).

In the 1920s and 30s the first systematic archaeological survey of O'ahu was conducted by J. C. McAllister (1933). He recorded four *heiau* (temples), three of which were located at the *mauka* reaches of Waikīkī *Ahupua'a* in lower Mānoa Valley. The fourth *heiau* - Papa'ena'ena - was located at the foot of Diamond Head crater in the environs of the present Hawai'i School for Girls. Papa'ena'ena Heiau is traditionally associated with Kamehameha I, who was said to have visited the *heiau* before setting off to battle for Ni'ihau and Kaua'i in 1804. Five years later,

Table 3. Previous Archaeological Investigations in Waikīkī Ahupua'a

Reference	Type of Investigation	General Location	Findings
Emerson 1902	Burial recovery account	Present Elks Club	At least four individuals, all presumed to be Hawaiian and associated burial goods
McAllister 1933	Island-wide survey	All of O'ahu	Waikīkī listed as Site 60.
1963 Bishop Museum (cited in Neller 1984)	Bishop Museum burial recovery	2431 Prince Edward Street	Two + individuals from a construction trench
<i>Honolulu Star-Bulletin</i> ; 1963; Yost 1971	Burial recovery account	Present Outrigger Canoe Club	27 Burials
1964 Bishop Museum Site Files	Burial recovery account	Fronting the Surfrider Hotel	4 burials?
1976 Bishop Museum Site Files	Burial recovery account	Hale Koa Hotel	Six burials
Nakamura 1979	History Graduate Thesis	Waikīkī	History of Waikīkī with focus on the radical changes in land use that occurred in the early 20th century.
Neller 1980	Monitoring Report	Kālia Burial Site: Hilton Hawaiian Village	Brief field inspection: partial recovery of 3 historic Hawaiian burials, trash pit from 1890's, no prehistoric Hawaiian sites.
Bishop Museum 1981	Testing, Excavations, & Monitoring	Halekulani Hotel	Intact cultural deposits found.
Neller 1981	Reconnaissance Survey	Halekulani Hotel	Limited background research on area
Acson 1983	Historical Research	'Ewa to Diamond Head	Nine walks through Waikīkī, photos, maps and historical info.
Davis 1984	Archaeological and Historical Investigation	Halekulani Hotel	48 historic and prehistoric features excavated with six human burials reported.
Neller 1984	Informal Narrative Report	Paoakalani Street	Recovery of seven human skeletons at construction site

Reference	Type of Investigation	General Location	Findings
Center for Oral History 1985	Oral Histories, Volumes I-IV	Waikiki	Oral Histories of Waikiki, 1900-1985, Volumes I-IV
1985 IARII(Beardsley and Kaschko 1997)	Archaeological monitoring and data recovery	Pacific Beach Hotel Office Annex	2 burials and cultural deposits
Griffin 1987	Burial Recovery Report	Along Kalakaua Ave. near corner of Kai'ulani St.	Bones removed and bagged by construction crew, burial found in makai wall of gas pipe excavation.
SHPD 1987	Burial, Recovery Report	Kalakaua Ave. and Ka'iulani Street	From excavation adjacent to Moana Hotel (site -9901).
Bath & Kawachi 1989	Burial, Recovery Report	Ala Wai golf Course	2 burials
Davis 1989	Reconnaissance Survey & Historical Research	Fort DeRussy	Fishponds and other features are buried in this area. Sites -4573 thru -4577 are fishponds, 4570 is a remnant cultural deposit.
Riford 1989	Background Literature Search	TMK: 2-6-014:039	List of literature pertaining to Waikiki area.
Rosendahl 1989	Inventory Survey, Prelim. Report	Fort DeRussy	Historic artifacts, no human remains
Athens 1990	Letter	TMK: 2-6-023:025	Letter to SHPD listing human remains at IARII lab from Pacific Beach Hotel, and Barbers Point Generating Station.
Hurst 1990	Historical Literature Search	Waikikian Hotel	Background and planning document. No fieldwork was done.
Chigioji 1991	Assessment	2 parcels, TMK 2-6-24:65-68 and 80-83, TMK 2-6-24:34-40 & 42-45	Formerly a corner of the 'Ainahau estate; remainder of parcels, former 'auwai, kalo and rice fields; test excavations and specific sampling strategy recommended.
Davis 1991	Monitoring Report	Fort DeRussy	See also Davis 1989. Subsurface features and material remains date to early post-contact times (c. 1780s to 1790s) through the mid-19th century.

Reference	Type of Investigation	General Location	Findings
Kennedy 1991	Monitoring Report	TMK: 2-6-022:014 IMAX theatre location	Pollen and bulk-sediment ^{14}C samples from ponded sediments were recovered. The three ^{14}C dates and pollen sequence were inverted.
SHPD 1991	Public Inquiry	TMK: 2-6-024:036	Bones were determined to be non-human and part of the extensive fill material present
Simons et al. 1991	Interim Field Study, Monitoring & Data Recovery	Moana Hotel Area	8 burials, preliminary osteological analysis indicates pre-contact type; pre- and post artifactual material recovered.
Hurlbett 1992	Monitoring Report	TMK: 2-6-008:001	Site -2870 (3 burials) found by Neller in 1980. This report is on testing and monitoring in same area.
Pietrusewsky 1992a	PA Report	Moana Hotel	Right half of human mandible found by hotel guest.
Pietrusewsky 1992b	PA Report	Lili'uokalani Gardens Site, Hamohamo	Human Remains from the Lili'uokalani Gardens Site, Hamohamo, Waikiki, O'ahu
Rosendahl 1992	Monitoring Report	Hilton Hawaiian Village	Identified 12 historic refuse pits, 3 historic to modern trenches.
Streck 1992	Memorandum for Record	Fort DeRussy	Human burial discovery (believed to be late prehistoric Hawaiian) during data recovery excavations, May, 20, 1992.
Cleghorn 1993	Inadvertent Discovery of Human Remains	Waikiki Aquarium	Remains of one human individual, mandible identified.
Dagher 1993	Inadvertent Discovery of Human Remains	Waikiki Aquarium	Human remains of at least one person identified, excavation recommended.
Dega & Kennedy 1993	Inadvertent Discovery of Remains	Waikiki Aquarium	Discovery of unidentified bone fragments, all remains turned over to SHPD.

Reference	Type of Investigation	General Location	Findings
Hammatt & Chiogioji 1993	Archaeological Assessment	16-Acre Portion of the Ala Wai Golf Course	Not associated with any know surface archaeological site, however prehistoric and early historic occupation layers associated with <i>lo'i</i> system remain intact below modern fill. Specific sampling strategy and potential burial testing recommended.
Carlson et al. 1994	Report of Human Remains	Realignment of Kālia Road, Fort DeRussy	Approximately 40 human burials (the majority were recovered in a large communal burial feature& a cultural enriched layer that contained postholes.
Maly et al. 1994	Archaeological and Historical Assessment Study	Convention Center Project Area	Recommend subsurface testing to determine presence or absence of cultural deposits and features.
McMahon 1994	SHPD Burial Report	Intersection of Kalākaua and Kuamo'o Streets	Inadvertent Burial Discovery: misc. bones uncovered in back dirt pile during construction. Follow up by CSH.
Hammatt & Shideler 1995	Sub-surface Inventory Surface	Hawai'i Convention Center Site, 1777 Kalākaua Ave.	No further work recommended.
Jourdane 1995	Inadvertent Discovery of Human Remains	Paoakalani Avenue	Human skeletal remains discovered in planted strip between street and sidewalk fronting hotel.
Simons et al. 1995	Data Recovery Excavations	Fort DeRussy	Historic and prehistoric artifacts, and midden materials collected from 7 occupation layers. 6 prehistoric cultural features recorded: 'auwai bunds and channels, fishpond walls and sediments, a possible <i>lo'i</i> , and hearths.
Cleghorn 1996	Inventory Survey	TMK: 2-6-016:23, 25, 26, 28, 61, 69	7 backhoe trenches excavated, no sites located.
Grant 1996	Historical Reference	Waikīkī	Historical information about Waikīkī prior to 1900.
Hammatt & Shideler 1996	Data Recovery	Hawai'i Convention Center Site	No clear evidence that Kuwili Pond sediments present in project area; no further work recommended.
McDermott et al. 1996	Inventory Survey	'Āinahau Estate	Buried remnants of 'auwai and <i>lo'i</i> and human burial found. ¹⁴ C dates

Reference	Type of Investigation	General Location	Findings
Denham et al. 1997	Data Recovery Report	Fort DeRussy	Excavations conducted at fishponds, ¹⁴ C dates mid-17th C.
Denham & Pantaleo 1997	Monitoring and Excavations Report	Fort DeRussy	Final Report does not include SHPD recommendations. 10 subsurface features and 9 burial locations found. ¹⁴ C dates
Beardsley & Kaschko 1997	Monitoring and Data Recovery Report	Pacific Beach Hotel Office Annex	Traditional Hawaiian cultural deposits and 2 human burials. 3 ¹⁴ C dates
Hammatt & Chiogioji. 1998	Assessment	King Kalākaua Plaza Phase II	No surface archaeological sites, documented human burials, presence of subsurface cultural deposits (both of pre-contact Hawaiian and historic provenance).
Hammatt & McDermott 1999	Burial Disinterment Plan and Report	Kalākaua Avenue	Two human burials found
Perzinski et al. 1999	Monitoring Report	Along Ala Wai Blvd., Kalākaua Ave., Ala Moana Blvd., & 'Ena Rd.	Two human burials found (1 preceding monitoring); pockets of undisturbed layers still exist. Burial #2 previously disturbed.
Rosendahl 1999	Interim Report: Inventory Survey	Fort DeRussy	This area is part of the old shoreline.
Hammatt & Chiogioji 2000	Archaeological Assessment	Honolulu Zoo Parcel	Majority of zoo parcel unlikely to yield significant cultural deposits. However, strong possibility of significant subsurface cultural deposits in the SW portion. Monitoring is recommended in this area.
LeSuer et al. 2000	Inventory Survey	King Kalākaua Plaza Phase II	Site -5796 has been adversely affected by land alteration of the project area. Site -4970, has been adequately documented.
Perzinski et al. 2000	Burial Findings	Kalākaua Ave. between Kai'ulani & Monsarrat Avenues	44 sets of human remains; 37 disinterred, 7 left in place; believed to be Native Hawaiian, interred prior to 1820.

Reference	Type of Investigation	General Location	Findings
Cleghorn 2001 a & b	Mitigation	Burger King Construction Site	Concerning three incidents of uncovered human remains while locating a buried sewer-line for the ABC's store.
Corbin 2001	Inventory Survey	Hilton Waikikian Property	No arch. sites were found during excavations of the area
Elmore & Kennedy 2001	Burial Report	Royal Hawaiian Hotel	Human remains found during trench excavations for conduit. The in situ remains were left in place, while the disturbed remains were re-interred with the others.
McGuire & Hammatt 2001	Cultural Assessment for Waikiki Beach Walk Project	Along Lewers St., Beach Walk, Kalia Rd. & Saratoga Rd.	Primary cultural concern identified as inadvertent burial discovery. Cultural monitoring recommended for all subsurface work within project area.
Perzinski & Hammatt 2001a	Monitoring Report	Kapi'olani Bandstand	A charcoal layer was observed, concentrated on the SW side of the bandstand; recovered indigenous basalt lamp with a handle, from the SE end of the bandstand.
Perzinski & Hammatt 2001b	Monitoring Report	Kapi'olani Park	No cultural layer, artifacts, midden or human burials were encountered during the excavations.
Perzinski & Hammatt 2001c	Monitoring Report	Kalākaua Avenue from the Natatorium to Poni Mo'i Road	No cultural layer, artifacts, midden or human burials were encountered during the excavations.
Rosendahl 2001	Assessment Study	Outrigger Beach Walk	Assessment of previous archaeology and historical literature.
Winieski & Hammatt 2001	Monitoring Report	TMK: 1-2-6-025:000	There is a possibility that Hawaiian or Historic materials as well as human burials may still be present within the project area.
Borthwick et al. 2002	Inventory Survey	71,000 sq. ft. parcel, TMK: 2-6-016:002	No burials were found during testing; absence of dry jaucas sand deposits indicate that burial finds are unlikely in project area.
Bush et al. 2002	Monitoring Report	Kalākaua Avenue, between Ala Moana Blvd. and Kapahulu Ave.	Encountered 4 human burials, probably pre-contact Native Hawaiians; several historic trash pits; entire pig within an <i>imu</i> pit (estimated date, A.D. 1641-1671); gleyed muck associated with former ponds.

Reference	Type of Investigation	General Location	Findings
Calis 2002	Monitoring Report	Lemon Road	No historic deposits, major previous disturbance
Elmore & Kennedy 2002	Monitoring Report	Fort DeRussy	No findings.
Mann & Hammatt 2002	Monitoring Report	Lili'uokalani Avenue and Uluniu Avenue	5 burial finds of 6 individuals; two historic trash pits.
Putzi & Cleghorn 2002	Monitoring Report	Hilton Hawaiian Village	No findings during monitoring of trench excavations for sewer connections.
Winieski, Perzinski, Shideler et al. 2002	Monitoring Report	Kalākaua Ave. between Ka'iulani and Monsarrat Avenues.	44 human burials encountered, 37 disinterred; buried habitation layer identified, with traditional Hawaiian artifacts, midden, firepits, & charcoal; fragment of light gauge rail, remnant of Honolulu Transit trolley system, observed; low energy alluvial sediments associated with the now channelized muliwai Kukaunahi also observed.
Winieski, Perzinski, Souza et al. 2002	Monitoring Report	Kūhiō Beach	Skeletal remains of 10 individuals, six disinterred, only 2 in situ. 4 indigenous artifacts, none in situ. Discontinuous cultural layer, historic seawall.
Bush et al. 2003	Monitoring Report	International Marketplace	Historic trash found.
Tome & Dega 2003	Monitoring Report	Waikīkī Marriot	One isolated not in situ possible human bone fragment found. Recommends monitoring during future work.
Tulchin & Hammatt 2003	Archaeological & Cultural Impact Assessment	2284 Kalākaua Ave.	Notes possibility of burials in the project area; recommends an inventory survey with subsurface testing.
Chiogioji, et al. 2004	Archaeological Inventory Survey	Tusitala Vista Elderly Apartment	SIHP sites -6682, -6705, -6706, and -6707 including human remains, remnants of the Ainahau Estate and agricultural sites
Freeman et al. 2005	Archaeological Inventory Survey	Hobron Lane	Four sites identified during subsurface testing; 1 disturbed burial; 1 coffin burial with two individuals; 1 cultural deposit; and, 1 fishpond sediment

Reference	Type of Investigation	General Location	Findings
O'Hare, Shideler & Hammatt 2005	Archaeological Inventory Survey	Kaio'o Drive	Site 50-80-14-6848, a pre-contact firepit radiocarbon dated to AD 1470-1660, was recorded.
O'Leary, et al. 2005	Archaeological Inventory Survey	1-Acre Parcel, 2284 Kalākaua Avenue (former Waikiki 3 Theater)	1 burial encountered
O'Leary, et al. 2005	Archaeological Assessment	0.5-Acre Royal Kāhili Condo	No significant finds
Bell, and McDermott 2006	Archaeological Inventory Survey	Allure Waikīkī Development (former Wave Waikiki location),	2 human burials and a cultural deposit
Hammatt, and Shideler 2006a	Archaeological Assessment	Two Parcels at the Corner of Kūhiō and Kapahulu Avenues	No significant finds, study area abuts former Ku'ekaunahi Stream (now overlain by Kapahulu Avenue)
Hammatt, and Shideler 2006b	Archaeological Assessment	0.015-Acre Parcel at the Corner of Kūhiō and Kapahulu TMK: 2-6-027:052	No significant finds, study area abuts former Ku'ekaunahi Stream (now overlain by Kapahulu Avenue)

Table 4. References to Burial finds in Waikīkī from the Bishop Museum NAGPRA Inventory

Date	Account	Source
1913	...two individuals from Waikīkī...	FR* page 1; BPBM records indicate this was ID No OA0002 & 0003 from the Sacred Hearts Convent, Waikīkī
1916	...one individual from Waikīkī...	FR* page 2; BPBM records indicate this was ID No OA009 a "sand burial"
1917	"from unknown location in Waikiki"	BPBM records indicate this was ID No OA0012 (no details)
1923	...one individual from the 'Āinahau district, Waikīkī...	FR* page 2; BPBM records indicate this was ID No OA0018 "found by Hawaiian Dredging Company by dredge Kewalo"
1923	...five individuals from Helumoa, Waikīkī, O'ahu were collected by Kenneth P. Emory. Museum information indicates they were victims of the 1853 smallpox epidemic...	FR* page 2; BPBM records indicate this was ID Nos OA0019 – OA0023 logged in on October 1923
1926	...one individual from Waikīkī...found during house construction	FR* page 3; BPBM records indicate this was ID No OA0087 from a residence in Waikīkī
1927	...one individual from Waikīkī...	FR* page 3
1950	3207 Noela Drive "Found at rear of donor's property during excavation"	BPBM records indicate this was ID No OA0211 and OA0212
1955	...two individuals from Waikīkī...	FR* page 7; BPBM records indicate this was ID No OA 0315 discovered at the Reef Hotel Waikiki
1957	...nine individuals from Waikīkī...	FR* page 8; BPBM records indicate this was ID Nos OA0391 to OA0402 from Dad Center located along Kalākaua Avenue
1961	...one individual from Waikīkī...	FR* page 8; BPBM records indicate this was ID No OA0419 from 331 Saratoga Avenue
1962	...one individual from Waikīkī...	FR* page 9; BPBM records indicate this was ID No OA0421 "from sand burial near Reef Hotel"
1963	...five individuals from Waikīkī...	FR* page 9; BPBM records indicate this was ID No OA0424 "found on Edgewater Drive near Reef Hotel" [it would be atypical for the BPBM to assign one ID No. to 5 burials]

Date	Account	Source
1963	...96 individuals from Waikiki...[donated by Bowen]	FR* page 9; BPBM records indicate this was ID Nos OA0425 to OA0455 "from Old Outrigger Canoe Club Premises" Note: Bishop Museum records from 1963 specify the finds donated by Robert N. Bowen on January 22, 1963 were from "the <u>Old</u> Outrigger Canoe Club Premises" However the 1/24/63 <i>Honolulu Advertiser</i> article concerns burial finds at the present club location by the Elk's Club.
1964	...four individuals from Waikiki...	FR* page 9; BPBM records indicate this was ID No OA0464 "from site on beach in front of old Outrigger Canoe Club" [it would be atypical for the BPBM to assign one ID No. to 4 burials]
1965	"Human remains collected from San Souci Beach, Waikiki"	BPBM records indicate this was ID No OA0633
1966	Two accessions from 2431 Prince Edward Street	BPBM records indicate this was ID No OA0462 & OA0467 from 'ewa side of lot <i>makai</i> of Prince Edward Street
1967	...one individual from Waikiki...	FR* page 11; BPBM records indicate this was ID No OA0516 from the "Tahiti by Six" at the International Market Place
1970	...eight individuals from Waikiki...[donated] by the Sheraton Hawai'i Corp....recovered during excavations for tank construction...	FR* page 11; BPBM records indicate this was ID No OA0522 on Sheraton Hawai'i Corp Property logged in on 3/6/1970
1981	...eight individuals from Waikiki...[donated] by Bertell Davis	FR* page 12; BPBM records indicate this was ID Nos OA0565 to OA0571 "from unknown location in Waikiki; also OA0572 "recovered through archaeological excavation at the Halekulani hotel, Waikiki
1996	...one individual from Waikiki...aquired during the early 1900s	FR* page 14

FR* = Federal Register January 28, 1998 (Volume 63, Number 18)

according to John Papa 'Ī'i, Kamehameha placed at Papa'ena'ena the remains of an adulterer - "all prepared in the customary manner of that time" ('Ī'i 1959:50-51).

In 1963, two human skulls and other human remains were discovered in a construction trench at 2431 Prince Edward St. (Bishop Museum site Oa-A4-23, cited in Neller 1984).

Multiple burials were encountered in 1963 during excavation for the construction of the present Outrigger Canoe Club at the Diamond Head end of Kalākaua Avenue. As reported in a newspaper article on Jan. 24, 1963:

The Outrigger Canoe Club yesterday dedicated its new site [on land adjacent to and leased from the Elks Club], an ancient Hawaiian burial ground in Waikīkī. . .

Robert Bowen of the Bishop Museum has been working closely with Ernest Souza, Hawaiian Dredging superintendent, on the removal of skeletons unearthed on the site, between the Colony Surf and the Elks Club. . . .

Most of the bodies were buried in the traditional hoolewa position, with the legs bound tightly against the chest.

One of the skeletons, Bowen said, shows evidence of a successful amputation of the lower forearm, indicating that the Hawaiians knew this kind of operation before the arrival of Europeans.

The ages of the skeletons ranged from children to 40-year-old men and women. The average life span of the Hawaiians at the time was about 32 years (*Honolulu Star-Bulletin*; Jan. 24, 1963: 1A).

A total of 27 burials were encountered according to Yost (1971: 28). Apparently, no formal archaeological report on the burials was produced.

BPBM records show thirtyone accessions of human remains (ID Nos OA0425 to OA0455) donated by Robert N. Bowen on January 22, 1963 stating that they were all from "the Old Outrigger Canoe Club Premises" which suggests the former location by the Royal Hawaiian Hotel. However the 1/24/63 *Honolulu Advertiser* article concerns burial finds at the present club location by the Elk's Club. The *Federal Register* of January 28, 1998 (Volume 63, Number 18 page 4281) asserts that: "In 1963, human remains representing 96 individuals from Waikiki O'ahu were collected and donated to the Bishop Museum by Robert N. Bowen. There is a mystery here. The *Honolulu Star-Bulletin* and Yost accounts speak only of mass burials at the present Outrigger Canoe Club Premises (by the Elks Club) while the Bishop Museum records speak only of mass burials at the old Outrigger Canoe Club Premises (by the Royal Hawaiian) and the Federal Register provides no location data within Waikiki but gives a significantly greater number of individuals (96) than suggested in the Yost history of the Outrigger (which specifies 27 burials). Given the close relationships of the dates of the report of Bowen's work on multiple burials at the present Outrigger Canoe Club (Jan. 24, 1963) and the date of accession of remains at Bishop Museum (Jan. 22, 1963), and noting that there is no account in the Bishop museum records of remains from the "new: Outrigger Canoe Club location. it appears most

likely to us that all of the burials reported were actually from the present "new" Outrigger Canoe Club location. This remains uncertain.

In 1964, sand dune burials, a traditional Hawaiian mortuary practice, were revealed as beach sand eroded fronting the Surfrider Hotel (Bishop Museum Site Files).

In 1976, during construction of the Hale Koa Hotel, adjacent to the Hilton Hawaiian Village Hotel, six burials were unearthed, five of apparent prehistoric or early historic age, and one of more recent date (Bishop Museum Site Files).

In 1980, three burials were exposed at the Hilton Hawaiian Village during construction of the hotel's Tapa Tower. Earl Neller of the (then named) State Historic Preservation Program was called in upon discovery of the burials and conducted fieldwork limited to three brief inspection of the project area. Neller's (1980) report noted:

The bones from three Hawaiian burials were partially recovered; one belonged to a young adult male, on a young adult female, and one was represented by a single bone. An old map showed that rapid shoreline accretion had occurred in the area during the 1800s, and that the beach in the construction area was not very old. It is possible the burials date back to the smallpox epidemic of 1853. It is likely that burials will continue to be found in the area. It is also possible that early Hawaiian sites exist farther inland, beneath Mō'ili'ili, adjacent to where the shoreline would have been 1000 years ago [Neller 1980:5].

Neller also documented the presence of trash pits, including one from the 1890s that contained "a large percentage of luxury items, including porcelain tablewares imported from China, Japan, the United States, and Europe" (Neller 1980:5). He further notes:

It is suspected that other important historic archaeological sites exist in the highly developed concrete jungle of Waikīkī, with discrete, dateable trash deposits related to the different ethnic and social groups that occupied Waikīkī over the last 200 years [Neller 1980:5].

Between December 1981 and February 1982, archaeologists from the Bishop Museum led by Bertell Davis conducted a program of excavations and monitoring during construction of the new Halekūlani Hotel (Davis 1984). Six human burials were recovered along with "animal burials [and] cultural refuse from prehistoric Hawaiian firepits, and a large collection of bottles, ceramics, and other materials from trash pits and privies dating to the late 19th century" (Davis 1984:i). Age analysis of volcanic glass recovered from the site led Davis to conclude: "For the first time we can now empirically date . . . settlement in Waikīkī to no later than the mid-1600s" (Neller 1980:5). Just as significant to Davis was the collection of historic era material at the Halekūlani site; he states:

[The] Halekūlani excavations clearly demonstrate...that there is a definite need to consider historic-period archaeology as a legitimate avenue of inquiry in Hawaiian research. Furthermore, archaeology in the urban context can yield results every bit as significant as in less developed areas. Development in the 19th and early 20th centuries clearly has not destroyed all archaeological resources in

Waikīkī, Honolulu, or in any of the other urbanized areas of Hawai'i [Neller 1980:5].

In 1983, at the Lili'uokalani Gardens condominium construction site, seven traditional Hawaiian burials were recovered (Neller 1984). This had been the site of a bungalow owned by Queen Lili'uokalani at the end of the nineteenth century. In addition to the burials, the site contained plentiful historic artifacts, and a pre-historic cultural layer pre-dating the burials.

In 1985, International Archaeological Research Institute, Inc. performed archaeological monitoring and data recovery at the Pacific Beach Hotel Office Annex (Beardsley and Kaschko 1997). Two traditional Hawaiian burials were discovered and removed. Intact buried traditional Hawaiian cultural deposits, including a late pre-contact habitation layer, contained pits, firepits, post molds, artifacts, and food debris. The artifacts included basalt and volcanic glass flakes and cores, a basalt adze and adze fragments, worked pearl shells, a coral file and abraders, and a pearl shell fishhook fragment. Additionally, a late nineteenth century trash pit was discovered, which contained a variety of ceramics, bottles, and other materials.

During 1985 and 1986, archaeologists from Paul H. Rosendahl, Ph.D. Inc. conducted archaeological monitoring at the site of the Mechanical Loop Project at the Hilton Hawaiian Village, Waikīkī. Much of this project area was disturbed by historic and modern construction and modification. Fifteen subsurface features were uncovered during the monitoring, all of which were determined to be historic trash pits or trenches. The dating of these features was based on dating the artifactual material they contained. All 15 features are thought to post-date 1881 based on this artifact analysis. The three partial burials reported by Neller (1980) were found within this project area (see above). No further burials were encountered during the PHRI field work (Hurlbett et. al. 1992).

In 1987, a human burial was discovered and removed at the intersection of Kalākaua Avenue and Ka'iulani Street during excavations for a gas pipe fronting the Moana Hotel (Griffin 1987).

In 1988, the Moana Hotel Historical Rehabilitation Project (Simons et. al. 1991) encountered human remains that amounted to at least 17 individuals. Based on stratigraphic association these burials were interred over time as the land form at the site changed. The sediment surrounding these burials yielded traditional midden and artifact assemblages. The burials and human remains were found in the Banyan Court and beneath the hotel itself.

In 1989, skeletal remains were unearthed on the grounds of the Ala Wai Golf Course during digging of an electrical line trench for a new sprinkler system. The trench had exposed a pit containing two burials (Bath and Kawachi 1989: 2). The report suggests that one of the burials may have been disturbed earlier during grading for the Territorial Fair Grounds. The osteological analysis included in the report concludes that both sets of remains "appear ancient." (Bath and Kawachi 1989: 2)

Davis' (1989, 1991) excavation and monitoring work at Fort DeRussy documented substantial subsurface archaeological deposits, prehistoric, historic, and modern. These deposits included buried fishpond sediments, 'auwai [irrigation ditch] sediments, midden and artifact enriched sediments, structural remains such as post holes and fire pits, historic trash pits, and a human burial. Davis' (1991) report documents human activity in the Fort DeRussy beachfront area from the sixteenth century to the present.

The work at Fort DeRussy continued in 1992 when BioSystems researchers built upon Davis' work (Simons et al. 1995). BioSystems research documents the development and expansion of the fishpond and 'auwai system in this area. The 'auwai system was entered on the State Inventory of Historic Places (SIHP) as State Site 50-80-14-4970. As indicated on the 1881 map by S. E. Bishop discussed above, this 'auwai enters the Fort DeRussy grounds through the present project area). Remains of the fishpond and 'auwai deposits, as well as habitation deposits, were documented below modern fill deposits. This research, along with that of Davis (1991), clearly demonstrates that historical document research can be an effective guide to locating late prehistoric/early historic subsurface deposits, even amidst the development of Waikiki.

In 1992, Hurlbett et al. (1992) conducted additional monitoring and testing in this same area as Neller (1980). The state site -2870 was given to the three burials first found by Neller. Additional subsurface features, postdating 1881, were found during trenching operations.

The realignment of Kalia Road at Fort DeRussy in 1993 uncovered approximately 40 human burials. A large majority of these remains were recovered in a large communal burial feature (Carlson et. al. 1994). The monitoring and excavations associated with this realignment uncovered a cultural enriched layer that contained postholes.

In 1993, during construction activities at the Waikiki Aquarium, directly adjacent to the present project area, fragmentary human remains were discovered scattered in a back dirt pile, although no burial pit was identified (Dega and Kennedy 1993).

On April 28, 1994, an inadvertent burial discovery was made during excavation for a water line at the intersection of Kalakaua Avenue and Kuamo'o Street (just mauka of Fort. DeRussy). These remains represented a single individual (McMahon 1994).

In 1995, the remains of one individual were discovered in situ during construction activities on Paoakalani Street, fronting the Waikiki Sunset Hotel (Jourdan 1995).

In 1996, Pacific Legacy, Inc. conducted an archaeological inventory survey of the block bounded by Kalakaua Avenue, Kūhiō Avenue, 'Olohana Street, and Kālainmoku Street (Cleghorn 1996). The survey included excavation of seven backhoe trenches. The subsurface testing indicated that

... this area was extremely wet and probably marshy. This type of environment was not conducive for traditional economic practices. ... The current project area appears to have been unused because it was too wet and marshy. Several peat deposits, containing the preserved remains of organic plant materials were discovered and sampled. These deposits have the potential to add to our knowledge of the paleoenvironment of the area [Cleghorn 1996:15].

The report concluded that no further archaeological investigations of the parcel were warranted since "no potentially significant traditional sites or deposits were found", but cautioned of the "possibility, however remote in this instance, that human burials may be encountered during large scale excavations" (Cleghorn 1996:15).

In 1996, a traditional Hawaiian burial was discovered and left in place during test excavations on two lots at Lili'uokalani Avenue and Tusitala Street (McDermott et al. 1996). Indigenous Hawaiian artifacts and historic artifacts were also found within the project area.

In 1997, during archaeological monitoring by CSH for the Waikiki Force Main Replacement project, scattered human bones were encountered on 'Ōhūa Street (Winieski and Hammiatt 2000). These included the proximal end and mid-shaft of a human tibia, a patella, and the distal end and mid-shaft of a femur. These remains occurred within a coralline sand matrix that had been heavily disturbed by previous construction, and by the on-going construction project. No precise location for the original burial site was identified.

In April 1999, two human burials were inadvertently encountered near the intersection of Ena Road and Kalākāua Avenue during excavation activities for the first phase of the Waikiki Anti-Crime Lighting Improvements Project (Perzinski et al. 1999). These discoveries were the closest to the current project area on the *makai* side of Kalākāua Avenue.

From July 1999 to October 2000, four sets of human remains were inadvertently encountered during excavation activities relating to the Waikiki Anti-Crime Street Lighting Improvement project along portions of Kalākāua Avenue (Bush et al. 2002). The first burial was encountered on Kalākāua Avenue, just before Dukes Lane and assigned State Site 50-80-14-5864. The burial was left in place however, and the light post was repositioned. The second burial was encountered at the intersection of Kalākāua Avenue and Ka'iulani Avenue. Earlier, during archaeological monitoring for the water mains project, two burials were encountered in the immediate area of the second burial find; they were assigned state site 50-80-14-5856 features A and B. Due to the close proximity to the previously encountered burials, the second burial was assigned the same State Site 50-80-14-5856, and designated feature C. Burials 3 and 4 were recovered at the intersection of Kalākāua Avenue and Kealohilani, near an area of concentrated burials assigned State Site 50-80-14-5860 during monitoring for the water mains project. Consequently, burials 3 and 4 were also assigned State Site 50-80-14-5860, features U and V. In addition to human remains, pre-contact deposits, historic and modern rubbish concentrations, and pond sediments were also encountered.

From November, 1999, to May, 2000, 44 human burials, with associated cultural deposits, were encountered during excavation for a waterline project on Kalākāua Avenue between the Ka'iulani and 'Ōhūa Avenues (Winieski et al. 2002a). Except for previously disturbed partial burials in fill, the bulk of the burials were encountered within a coralline sand matrix. Additionally, a major cultural layer was found and documented.

From January 2000, to October 2000, 10 human burials were encountered during archaeological monitoring of the Kūhiō Beach Extension/Kalākāua Promenade project (Winieski et al. 2002b). Six of these were located within a coralline sand matrix. The four others were partial and previously disturbed within fill. Additionally, a major cultural layer was found and documented, apparently part of the same major cultural layer associated with the waterline project between Ka'iulani and 'Ōhūa Avenues.

On May 2nd and June 14th, 2001, two in situ and two previously disturbed human burials were encountered at the site of a new Burger King (Cleghorn 2001a) and an adjoining ABC Store (Cleghorn 2001b). The finds were located at the intersection of 'Ōhūa Street and Kalākāua

Avenue (Cleghorn 2001a and 2001b). Because of their proximity to five burials encountered during the Kalākaua 16" Water Main Installation (Winieski et al. 2002a), they were included in the previously assigned State Site 50-80-14-5861. Three of these burials were recovered, and one was left in place. Volcanic glass fragments were found in association with one of the burials. A cultural layer was also observed which contained moderate to heavy concentrations of charcoal and fragments of volcanic glass. Historic era artifacts, including a bottle fragment, plastic and glass buttons, a ceramic fragment, and metal fragments were also encountered within fill materials.

In 2001 and 2002, CSH (Mann and Hammatt 2002) performed archaeological monitoring for the installation of 8- and 12-inch water mains on Uluniu Avenue and Lili'uokalani Avenue. During the course of monitoring, five burials finds, consisting of six individuals, were recorded within the project area. Four burial finds were recorded on Uluniu Avenue; three of these inadvertent finds were found in fill sediment. Due to the nature of the three burial finds in fill, it was concluded that no State Site number(s) be assigned to these three previously disturbed burials. The only primary in situ burial encountered on Uluniu Avenue was assigned State Site #50-80-14-6369. The fifth burial, consisting of two individuals in fill material, was recorded from Lili'uokalani Avenue. Since three burials had been found in the immediate vicinity during a previous project (Winieski et al. 2002b) and had been assigned to Site #50-80-14-5859, the two new individuals were recorded as Feature H of this previously recorded site.

In 2004, Cultural Surveys Hawai'i conducted an archaeological inventory survey and cultural impact evaluation for the Ala Wai Gateway project site (Freeman et al. 2005). The project site comprised TMK 2-6-011:001, 002, 004, 32, 37, and 40, which are bounded by Ala Wai and Ala Moana boulevards, Hobron Lane, and Līpe'epe'e Street. Four historic properties were documented in the survey including human remains a cultural layer and a fishpond remnant.

In 2005 Cultural Surveys Hawai'i conducted an archaeological inventory survey of a 72,135 square foot (1.67 acre) project area on Kaio'o Drive (TMK: [1] 2-6-012: 37, 38, 39, 40, 41, 42, 43, 44, 55, 56, 57) (O'Hare et al. 2005). One Site 50-80-14-6848, a pre-contact firepit radiocarbon dated to AD 1470-1660, was recorded.

In summary, past archaeological research, from the beginning of the twentieth century to the present has produced evidence that traditional Hawaiian cultural deposits, historic trash deposits, and, most notably, human burials, do exist throughout the breadth of the Waikīkī area.

Burials reported from outside the present project area but in the immediate vicinity include: 4 individuals "from site on beach in front of old Outrigger Canoe Club" *Federal Register* January 28, 1998 Volume 63, Number 18 page 9; BPBM records indicate this was ID No OA0464), 8 sets of human remains from Moana Hotel renovations (Simons et al. 1991), human remains from near the International Market Place (Bishop Museum records for 1967, Bush et al. 2003), and human remains at the former Waikiki 3 Theater location (O'Leary, et al. 2005).

Three areas of very high densities of burials have been previously reported from Waikīkī: in 1963 from the present Outrigger Canoe Club (apparently 96 burials – but see discussions above), in 1993 in a large communal burial feature uncovered during the realignment of Kālia Road at Fort DeRussy (approximately 40 human burials, Carlson et. al. 1994) and during a Kalākaua Avenue water line project near the intersection with Kealohilani Avenue (18 burials; Perzinski et

al. 2000). It seems probable that additional areas with a high density of burials will be encountered in the future.

4.1 The Present Project Area

4.1.1 Finds During the Construction of the Royal Hawaiian Hotel 1923

It is widely assumed that at the time of the construction of the Royal Hawaiian Hotel that many human burials and other archaeological finds were encountered. Kanahele (1995:99) writes of an "*ulu maika* course was part of the royal sports complex of Kahuamokomoko in Helumoa" and states that: "When excavations for the Royal Hawaiian Hotel were made in the early 1920s many '*ulu maika* discs were found."

It seems highly probable that the "five individuals from Helumoa, Waikīkī, O'ahu" that were collected by Kenneth P. Emory of the Bishop Museum in October of 1923 and reported as "victims of the 1853 smallpox epidemic" came from construction related to the Royal Hawaiian Hotel. (*Federal Register* January 28, 1998 Volume 63, Number 18 page 2; BPBM records indicate this was ID Nos OA0019 – OA0023)

4.1.2 Finds During the Construction of the Sheraton 1970

It seems highly probable that "...eight individuals from Waikīkī...[donated] by the Sheraton Hawai'i Corp.... recovered during excavations for tank construction... in March 1970 were indeed associated with the initial construction of the hotel (*Federal Register* January 28, 1998 Volume 63, Number 18 page 11; BPBM records indicate this was ID No OA0522 found on Sheraton Hawai'i Corp Property logged in on 3/6/1970)

4.1.3 Discovery of Human Remains at the Sheraton Waikiki Basement (Accounting Department) C. 1993

Consultation with various parties confirms a previous discovery of human remains in the southeast corner of the Sheraton Waikiki building, c. 1993, during work on a sewer line in the basement of the accounting department. The discovery of human remains is understood as involving only one human female forearm. It appears that the bone was found within approximately 6" of the sewer pipe and had been disturbed during initial construction of the Sheraton. We understand the bone was re-interred on the east side of the Sheraton Waikiki building near the Grand Staircase and that a prominent reddish colored basalt boulder marker observed present there denotes the re-interment location.

4.1.4 Elmore and Kennedy 2001 Burial

In April 2001 human remains were inadvertently disturbed during excavations associated with the construction of a spa at the Royal Hawaiian Hotel (Elmore and Kennedy 2001; Figures 23 & 24). Archaeological Consultants of the Pacific, Inc was responsible for the documentation of the remainder of the burial and carrying out the instruction of DLNR/ SHPD. The burial and place it was encountered was assigned State Site # 50-80-14-5937. The burial was encountered on the North side of the hotel in the spa garden. The disturbed remains were wrapped in muslin cloth and placed with the in-situ remains and reburied. The burial was recorded as a post contact burial

based on artefacts associated with it. The associated artefacts included one shell button found in-situ and three more shell buttons found in the disturbed material. A single drilled dogtooth was also found during excavation but could not be positively associated with the burial site.

The Elmore and Kennedy (2001:9) study relates:

One of the landscaping employees reported having encountered human remains in a nearby location twenty years ago while digging a hole to plant a tree. He indicated that upon encountering the remains, he dug the hole much deeper, and placed the remains at the base of the pit before planting the tree. The tree is no longer extant, though its roots could be seen at the time of the current [2001] investigation.

No further information has been identified regarding these additional remains "in a nearby location". As a generalization, there is a higher likelihood of additional burials in the vicinity of post-contact burials (as in the case of Site 50-80-14-5937) than in the vicinity of pre-contact burials.

4.1.5 Recent Royal Hawaiian Hotel Vicinity Finds

A recent OHA letter (Nāmu'o September 15, 2004) has noted that subsequent to that discovery a human skull was turned in to the Burial Sites Program of the State Historic Preservation Division by an anonymous donor. The OHA letter (Nāmu'o September 15, 2004) recommended that the question of the provenience of these *iwi* should be pursued. To address this directive, Cultural Surveys Hawai'i researched the prior holdings of human remains in Bishop Museum osteological catalogs and met (on 2/17/05) with Ms. Lurline Salvadore formerly of the Kamehameha Schools' staff and a former representative to the O'ahu Island Burial Council. Ms. Salvadore did confirm that it was also her understanding that several sets of remains discovered during the prior re-development of the Royal Hawaiian Shopping Center (perhaps c. 1979) were indeed re-interred in the Hali'a Aloha Kūpuna re-interment facility constructed near the entrance to the Honolulu Zoo. Study of Bishop Museum records, however, did not reveal any accession numbers relating to this location and time frame. Thus the history of previous discoveries of human remains within the area remains something of a mystery.

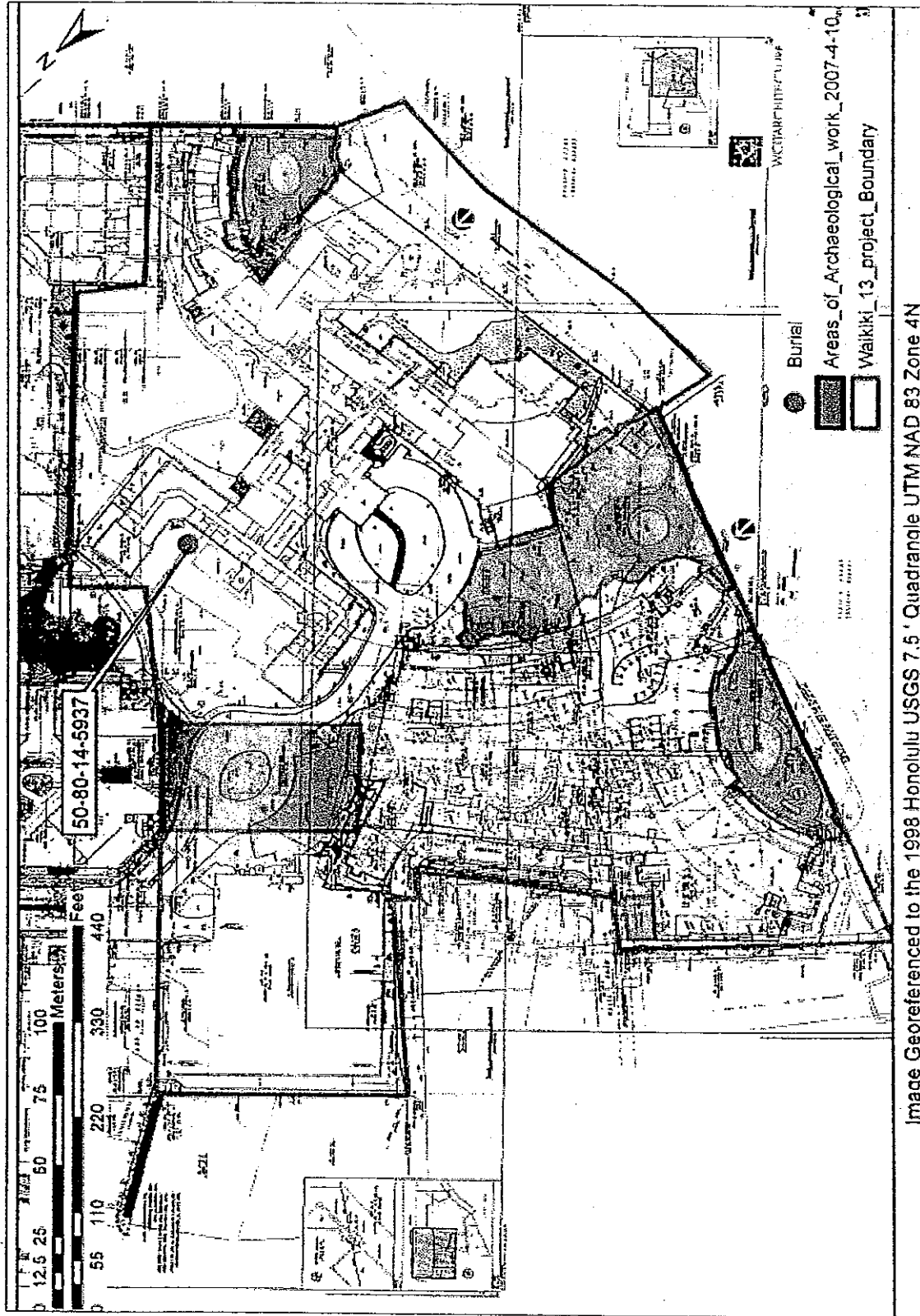


Figure 23. Site plan showing the approximate location of SIHP # 50-80-14-5937 (human remains) within the SW/RHH property

Archaeological Literature Review and Field Check for Improvements to the Royal Hawaiian and Sheraton Hotels, Waikiki, Oahu

TMK[1] 2-6-002:005, 006, & 026

Section 5 Results of Fieldwork

Jon Tulchin, B.A., assisted project director David Shideler M.A., with the field effort, which required 2 person-days to complete. Fieldwork took place on December 28th 2006 under the general supervision of Hallett H. Hammatt, Ph.D. (principal investigator).

Fieldwork for this project consisted of a field inspection of all proposed areas of work within the SW/RHH property. For the purposes of this fieldwork, the proposed areas of work were divided into five sections: East Royal Hawaiian Hotel, Southwest Royal Hawaiian Hotel, North Sheraton, South Sheraton and West Sheraton (Grease Interceptor) (Figure 25).

Each of the five areas of work was inspected for the purpose of further evaluating the potential for subsurface finds and for a preliminary evaluation of constraints to potential subsurface testing locations in the event that there may need to be consideration of subsurface testing.

5.1 Survey Findings

5.1.1 East Royal Hawaiian Hotel Area

The East Royal Hawaiian Hotel area of work was photographed and inspected for insights into land use and potential subsurface testing locations and constraints. This area consisted of a swimming pool and associated stone-lined flooring for chairs and tables (Figures 25, 26 & 27). No indications of subsurface deposits were observed. Any subsurface testing in this area would require the disturbance of the stone-paved flooring that covers the entire area of work, excluding the pool. This area is understood to have been in the immediate vicinity of the *muliwai* of 'Āpuakhau Stream and it is anticipated that vagaries in the configuration of the stream mouth would have washed away any cultural deposits.

5.1.2 Southwest Royal Hawaiian Hotel Area

The Southwest Royal Hawaiian Hotel area of work was photographed and inspected for insights into land use and potential subsurface testing locations and constraints. This area consisted of a swimming pool and a large manicured lawn (Figures 25, 28 & 29). No indications of subsurface deposits were observed.

This is understood as the locus of Land Commission Awards (LCA) 1782 to Kahope and LCA 228 to Kaleiheana (see Figure 10) with many houses located in the immediate vicinity circa 1846 and probably for some time before that. The Helumoa Heiau may have been located close by.

Potential subsurface testing in this area could be within the lawn, as this would cause minimal disturbance to hotel operations in the surrounding area.

Subsequent to the initial field inspection it was ascertained that certain human remains previously discovered under the Sheraton Waikiki accounting department floor may have been relocated to this area. An anomalous, large, notably reddish, basalt boulder was observed

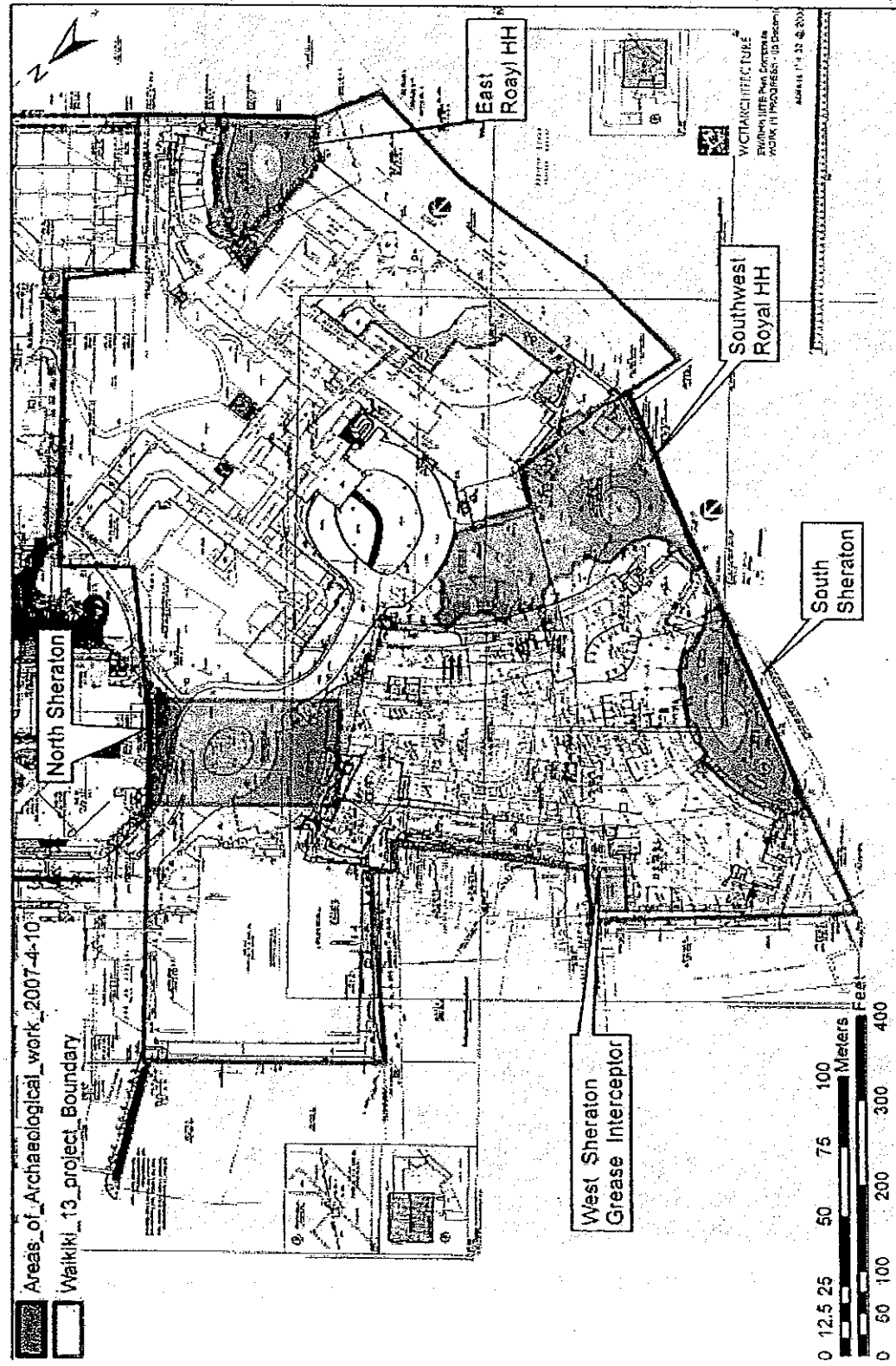


Image Georeferenced to the 1998 Honolulu USGS 7.5' Quadrangle UTM NAD 83 Zone 4N

Figure 25. Site plan showing the five proposed areas of work, within the SW/RHH property, field inspected by Cultural Surveys Hawai'i

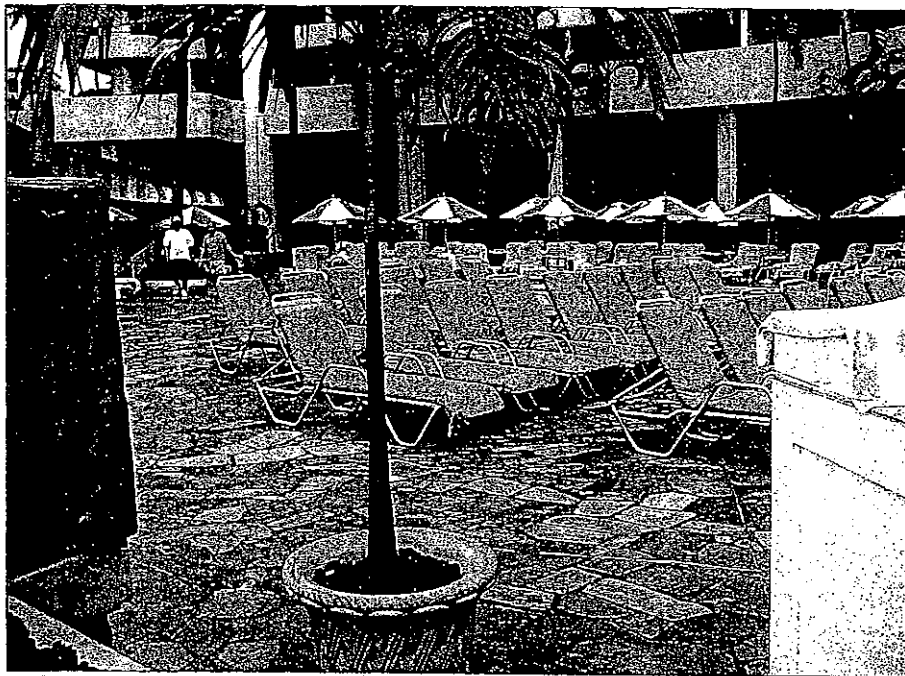


Figure 26. Photograph of East Royal Hawaiian Hotel area of work, showing swimming pool, view to northwest



Figure 27. Photograph of East Royal Hawaiian Hotel area of work, showing swimming pool, view to east/southeast

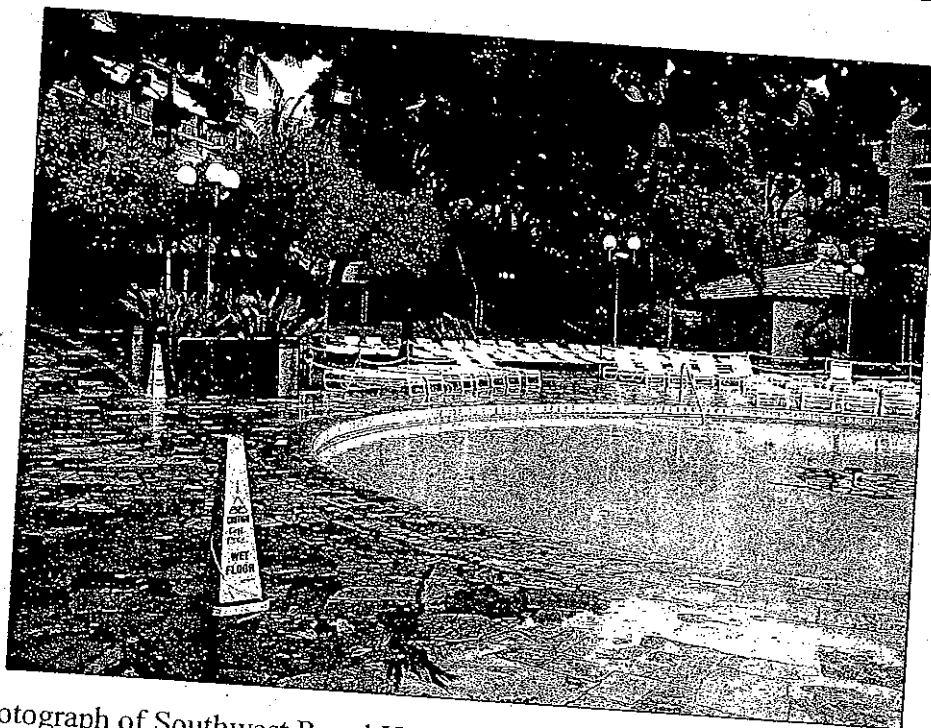


Figure 28. Photograph of Southwest Royal Hawaiian Hotel area of work, showing swimming pool (reddish boulder noted in text was to the left of the banyan tree), view to north,



Figure 29. Photograph of Southwest Royal Hawaiian Hotel area of work, showing lawn, view to south/southwest

between the Grand staircase of the Sheraton Waikiki and the large banyan tree in an area of landscaping. While we are not certain this seems very likely as a re-interment location marker.

5.1.3 North Sheraton Area

The North Sheraton area of work was photographed and inspected for insights into land use and potential subsurface testing locations and constraints. This area consisted primarily of asphalt-paved roads, a portion of the Sheraton Waikiki reception area, and a small circular landscaped median (Figures 25, 30 & 31). No indications of subsurface deposits were observed.

This area is understood to have been part of Land Commission Award 228 to Kalaiheana (Kaleiheana), that has been suggested to have included certain royal residences (see Figure 8).

The small circular landscaped median is the only location where potential subsurface testing would cause minimal disturbance to hotel operations in the immediate area.

5.1.4 South Sheraton Area

The South Sheraton area of work was photographed and inspected for insights into land use and potential subsurface testing locations and constraints. This area consisted of a swimming pool and associated stone paving for chairs and tables, and a small wedge of manicured lawn (Figures 25, 32 & 33). No indications of subsurface deposits were observed.

This is understood as the location of several land commission awards (see Figures 8 to 10) including portions of LCA 822 (depicted as 922) to Okuu, of LCA 1379 to Kapule II, LCA 1385 to Kaelemakule, LCA 1511 to Kanae and LCA 2126 to Keaho (Keoho). Many permanent residences are believed to have been located here circa 1850 and perhaps for quite some time previously.

The small wedge of lawn, located east of the pool, is the only location where potential subsurface testing would cause minimal disturbance to hotel operations.

5.1.5 West Sheraton (Grease Interceptor)

The grease interceptor is to be located on the west side of the Sheraton Waikiki in a service road parking area (Figures 25 & 34). This is understood as the location of Land Commission Award 1508 to Kaho'ouluulu (see Figure 8). Potential subsurface testing in this area would cause minimal disturbance to hotel operations.



Figure 30. Photograph of North Sheraton area of work, showing paved roads and , view to west/southwest

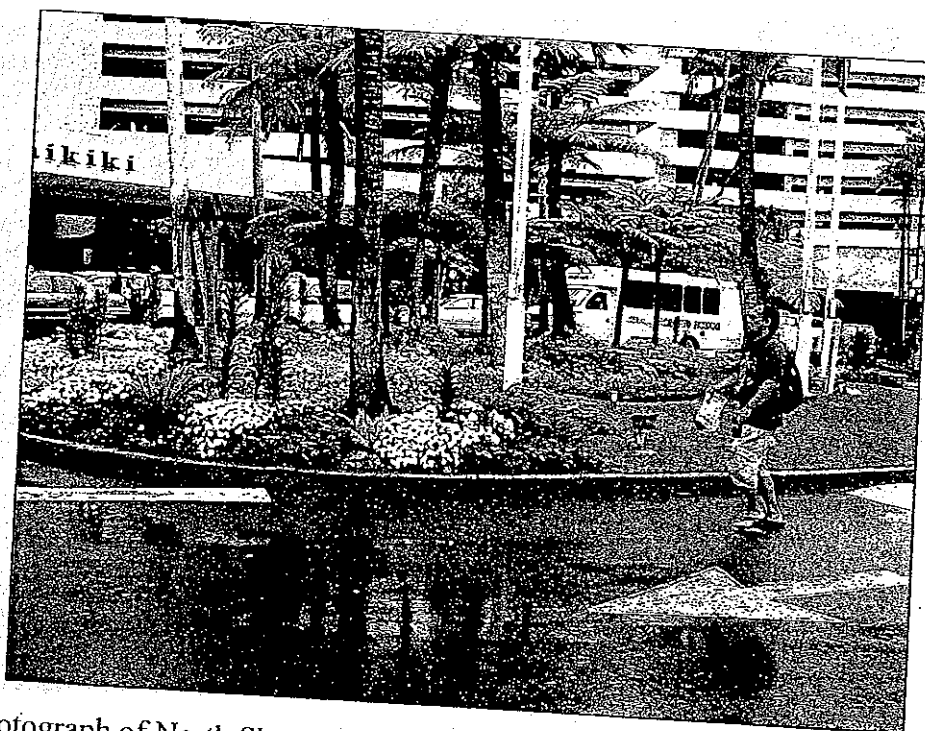


Figure 31. Photograph of North Sheraton area of work, showing landscaped median, view to northwest



Figure 32. Photograph of South Sheraton area of work, showing swimming pool, view to east



Figure 33. Photograph of South Sheraton area of work, showing small wedge of manicured lawn, view to west

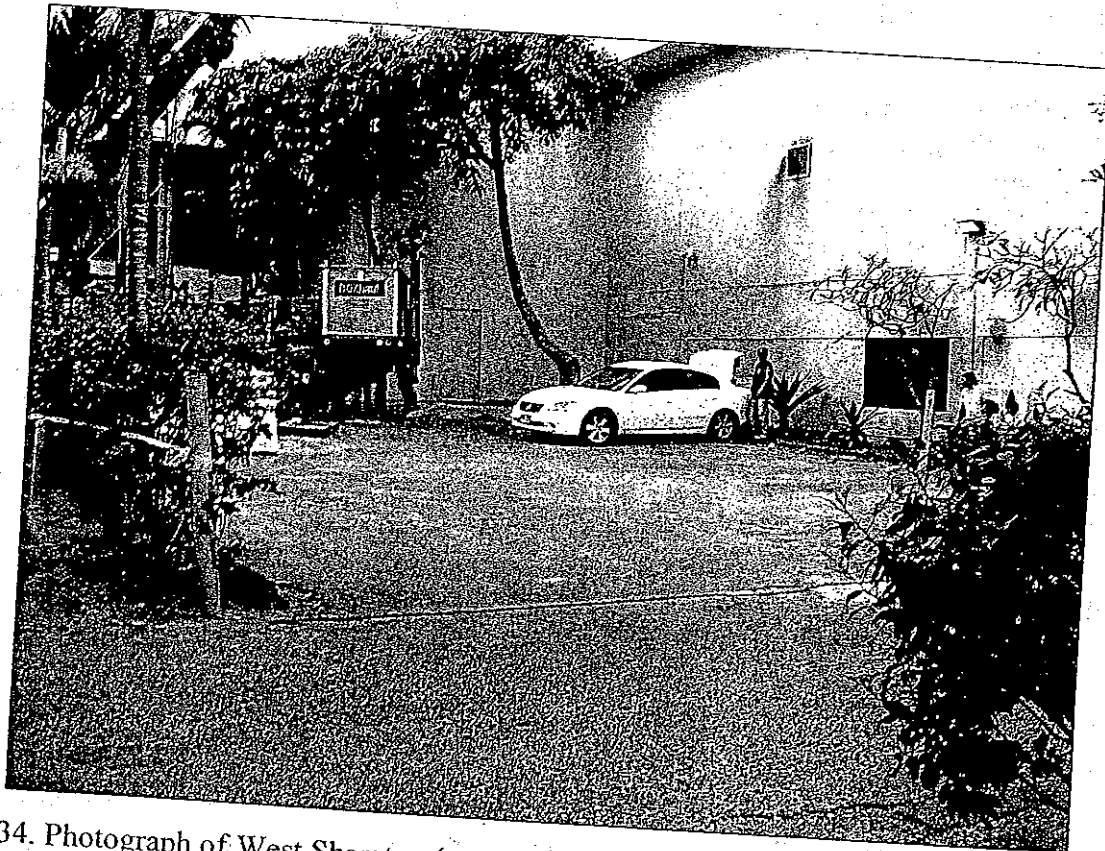


Figure 34. Photograph of West Sheraton (grease interceptor) area of work

Section 6 Summary and Interpretation

6.1 Summary of Findings

This study has served to highlight a dozen or more concerns for possible cultural resources within the five proposed areas of work. Indications of possible cultural resources identified in the historic record include the following:

- The common place name for this area "Helumoa" is translated as "chicken scratch" with the provided explanation that "Chickens scratched to find maggots in the victim's body" in reference to the remains of human sacrifices at the Helumoa Heiau (Pukui et al. 1974:44). We know of no maps showing the precise location of Helumoa Heiau. Thomas Thrum (1906:44) relates that it was a "place of sacrifice" going back at least as far as A.D. 1610. Later Thomas Thrum (1927:34) would note: "This temple was long ago demolished, not a stone being left to mark the site, which was doubtlessly near, if not *the* [italics in original] actual spot now graced by the new Royal Hawaiian Hotel." It seems most likely to us that the Helumoa Heiau was located on the prominent point between the Southwest Royal Hawaiian Hotel and South Sheraton proposed areas of work. This suggests a heightened probability of human remains in all the proposed areas of work but in particular in the Southwest Royal Hawaiian Hotel and South Sheraton proposed areas of work.
- Assertions that the royal residence of the ruling chiefs Kahekili and Kahahana before him, and perhaps previous O'ahu ruling chiefs were located between the Royal Hawaiian Shopping Center and the Royal Hawaiian Hotel. ('I'i 1959:17; Kanahale 1995:134). This area includes the North Sheraton proposed area of work.
- Fornander's (1919 Volume VI, part 2; page 289) account of "The Story of Kahahana" provides the detail that (circa 1785) the massive invasion force of the Maui chief Kahekili was encamped at 'Āpuakēhau, where they were organizing and preparing to march inland. Furthermore, it was there at 'Āpuakēhau that the O'ahu forces first attacked "the Maui troops collected at the *heiau*." There "a fight commenced to which Hawaiian legends record no parallel". (Fornander 1919 Volume VI, part 2; page 289). It appears clear that the fighting referred to began in close proximity to Helumoa Heiau. It seems most likely to us that the Helumoa Heiau was located on the prominent point between the Southwest Royal Hawaiian Hotel and South Sheraton proposed areas of work. This suggests a heightened probability of human remains in all the proposed areas of work but in particular in the Southwest Royal Hawaiian Hotel and South Sheraton proposed areas of work.
- 'I'i provides more specific data in his supportive testimony for LCA 228 awarded to Kaleiheana in 1847 declaring that "Kamehameha himself lived on this land." [between the Royal Hawaiian Shopping Center and the Royal Hawaiian Hotel] (Appendix A-2). This LCA 228 area includes the North Sheraton proposed area of work.
- 'I'i comments in his supportive testimony for LCA 228 awarded to Kaleiheana in 1847 that relatively high status attendants of Kamehameha I ("Their work was taking

care of the house and preparing the food. These people were in constant contact with the chiefs and were close to each and every chief") continued to live on the property when Kamehameha I died. (T'i, Appendix A-2)

- Kanahele (1995:99) writes of an "*ulu maika* course that was part of the royal sports complex of Kahuamokomoko in Helumoa" and states that: "When excavations for the Royal Hawaiian Hotel were made in the early 1920s many *ulu maika* discs were found." indicating the prospect for further finds in the general vicinity.
- Land Commission Awards (summarized in Table 1) indicate a pattern of relatively dense, relatively high status habitation within the project area lands particularly in the Southwest Royal Hawaiian Hotel and South Sheraton proposed areas of work but also in the North Sheraton and West Sheraton (grease interceptor) proposed areas of work
- Reference in the October 1923 records of the Bernice Pauahi Bishop Museum that "...five individuals from Helumoa, Waikiki, O'ahu were collected by Kenneth P. Emory. Museum information indicates they were victims of the 1853 smallpox epidemic..." (Federal Register January 28, 1998 Volume 63, Number 18). Given that the Royal Hawaiian was not opened until February 1 1927 it is not clear to us that these remains were from construction of the Royal Hawaiian. Regardless the Helumoa remains could not have been recovered from very far away. The rationale for Emory's association of the remains with the smallpox epidemic are not known to us at this time. Because of the nature of the disease small pox burial grounds could include many sets of remains indicating the prospect for further finds in the general vicinity.
- Reference in the 1970 records of the Bernice Pauahi Bishop Museum that: "...eight individuals from Waikiki...[donated] by the Sheraton Hawai'i Corp....recovered during excavations for tank construction...". This would appear to relate to the original work at the Sheraton Waikiki that was completed in 1971. This suggests a heightened concern for the north Sheraton and south Sheraton proposed areas of work but also indicates the prospect for further finds in the general vicinity.
- The understanding that several sets of remains were discovered during the prior redevelopment of the Royal Hawaiian Shopping Center (perhaps c. 1979) (personal communication from Ms. Lurline Salvadore formerly of the Kamehameha Schools' staff).
- The apparent discovery of human remains c. 1993 (personal communication from Mr. David Lee) during work on a sewer line in the basement of the accounting department of the Sheraton Waikiki just northwest of the South Sheraton area of proposed work indicating a heightened probability of finds in this area. We believe these remains were relocated to the Southwest Royal Hawaiian area of proposed work.
- This discovery of human remains (that still remain in place in the North Royal Hawaiian Hotel proposed area of work (SIHP # 50-80-14-5937) in April 2001 during excavations associated with the construction of the Abhasa Spa at the Royal Hawaiian Hotel (Elmore et al. 2001). The Elmore et al. (2001:9) study relates an anecdotal account of additional remains "in a nearby location". As a generalization, there is a

higher likelihood of additional burials in the vicinity of post-contact burials (as in the case of Site 50-80-14-5937) than in the vicinity of pre-contact burials.

- The substantial history of archaeological work in Waikīkī has indicated a relatively high density of burials within Beach sand and Jaucas sand deposits such as constitute the soils in the entire project area. Much of Waikīkī was formerly quite low-lying, at or close to the water table. Lands that were slightly higher, such as the present project area were preferentially chosen for interment of the dead.

6.2 Suggested Import of Findings

In view of the twelve points enumerated above it seems that close co-ordination with the State Historic Preservation Division and other concerned parties is appropriate. The present study amounts to a good faith effort to compile evidence of the likelihood of historic properties underlying the areas of potential ground disturbance.

The presence of possible historic properties does not however mean that the project related ground disturbance will encounter any. The probability of encountering historic properties is, as a sweeping generalization, directly related to the extent of disturbance of intact cultural deposits.

6.3 Recommended Course of Action

6.3.1 Determination of Thickness of Fill Deposits

The State Historic Preservation Division will determine appropriate mitigation of impacts on historic properties based on perceptions of the nature, location and extent of project related impacts into relatively undisturbed strata that may hold intact cultural resources. Clearly large portions of the proposed areas of potential ground disturbance have very thick fill layers that effectively protect any underlying historic properties from shallow intrusions.

It is understood that a pedestrian tunnel connecting the Sheraton Waikiki and Royal Hawaiian Hotel (running roughly NW/SE across the "Southwest Royal Hawaiian Hotel" area near the grand staircase) was effectively constructed on grade and then backfilled over with the backfill close to 8-feet (2.47 m) thick. The observed height of the "South Sheraton" area above the beach immediately to the south is also commensurate with the understanding that the existing "South Sheraton" pool is constructed within a thick fill deposit.

Documentation of the thickness of fill deposits may go far in addressing State Historic Preservation Division's concerns for the possible impacts on historic properties. This would appear to be possible through examination of the results of geotechnical testing. We understand that the project team is presently pursuing this course of action. We recommend that a compendium of data on the location and thickness of fill deposits be compiled as an aid for the State Historic Preservation Division's determination of appropriate mitigation (if any).

6.3.2 Consideration of Minimization of Subsurface Disturbance of Undisturbed Sediments in the Renovation Work

To the extent that subsurface impacts into relatively undisturbed sediments can be minimized the extent of finds will be minimized. One obvious approach is through the importation of fill

and having much of the work within these clean fill deposits. Another approach is to bundle utilities within narrow corridors if feasible. Another approach is to minimize the area of foundation footing within relatively undisturbed sediments.

Traditional Hawaiian burials were typically quite shallow – in the nature of 1.5 to 3.5 feet below the original ground surface. The one in-situ burial (SIHP # 50-80-14-5937) reported in the proposed areas of work is reported at a depth of two feet (51 to 62 cm; Elmore and Kennedy 2001:8) below ground surface. Thus efforts to avoid impacts to human remains or other historic properties by minimizing depth of excavation will have little impact if the excavation exceeds a foot or so into natural sediments. It is our understanding that in the vicinity of SIHP # 50-80-14-5937 that substantial importation of fill is indicated. Capping native sediments with fill deposits and running conduits and placing foundation footings within the fill deposits would effectively avoid potential adverse impacts to historic properties as may be present. We understand renovation planning has taken this into consideration.

6.3.3 Clarification of the Nature and Extent of Subsurface Impacts in the Proposed Renovation Work

The determination of the appropriate actions to address potential impacts to cultural resources in the renovation project is really dependent on two things: 1) the anticipated nature and extent of the cultural resources and 2) the anticipated nature and extent of the subsurface impacts. A good faith effort has been made within the present study to address point 1.

If the nature and extent of most or all of the subsurface impacts is to be within fill layers already present, or within fill to be imported as part of the renovation project, then there is a good argument for no further archaeological work in those areas or, if any work is to be required, for an archaeological monitoring program. If subsurface impacts in one or more areas are to be spotty (as in the case of small excavations for landscaping with trees and shrubs) or largely linear (as in the case of narrow utility corridors) there may be an argument for addressing the impacts within an archaeological monitoring program.

6.3.4 Archaeological Monitoring Programs

We understand that a program of geotechnical testing is indicated. We recommend an archaeological monitoring program (monitoring plan, on-site monitoring, report) attend this testing that has the potential to encounter cultural deposits. We also recommend that an archaeological monitoring program attend the renovation construction.

6.3.5 Archaeological Inventory Survey

We recommend an archaeological inventory survey be conducted to begin with an archaeological inventory survey plan to be prepared for the review and approval of the State Historic Preservation Division. This archaeological inventory survey should focus on those areas in which renovation work has the potential to impact subsurface deposits.

6.3.6 Consultation

We recommend consultation with the State Historic Preservation Division, O'ahu Island Burial Council and Kamehameha Schools. We recommend consideration of being pro-active regarding any other anticipated impacts into possibly undisturbed sediments.

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Appendix A Land Commission Awards

A-1 LCA 104 F.L., Kekuanaoa

Kekuanaoa, Haliimaile, 3 December 1851 N.R. 765-766v3

The Honorable William L. Lee, Greetings: I hereby present my claim in some 'Ilis in Honolulu and in Waikiki in the lands of the Fort which I am caring for. Here are the names:

[Following discussion of Honolulu 'Ili lands omitted]

Here are my claims at Waikiki:

2 lo'i at Kalia, 'Ili in Waikiki.

5 fish ponds at Kalia in Waikiki.

1 muliwai of Piinaio, in Waikiki.

Those are my claims which I have thought of. There is one cocoanut grove. Makalii, also at Kalia. That is what I state to you. Farewell to you. M. KEKUANA OA

N.T. 390v10 No. 104 F.L. M. Kekuanaoa (from page 320) for. 17 August 1854, Victoria Kamamalu L. Kukoa, sworn, I have seen his house site in Kapuni, Waikiki, Kona, Oahu.

Mauka, Road

Waialae, Hamohamo boundary

Makai, beach

Honolulu, a meeting house.

This place was received from Kinau in 1839. She had received it from her mother.

Mahuka, sworn, the statements above are correct and I have seen his other claims. 2 ponds named Paweo, also Kaipuni, Pau, Kaihikapu, Manolepa and Kaohai in Waikiki, Kona, Oahu.

He had received the land from Kinau in 1839. She had received it from Kaahumanu in 1832. No objections.

[Award 104 F.L.; R.P. 4492 (Kaihikapu Puuiki)& 4493; Kalia Waikiki Kona; 1 ap.; 1.49 Acs; Kuhimana Honolulu Kona; 1 ap.; 2 Acs; no R.P. ; Kamanolepa Waikiki Kona; 1 ap.; 2.06 Acs; R.P. 4492; Kapuni Waikiki Kona; 1 ap.; 31 Acs; R.P. 4492; Uluniu Waikiki Kona; 1 ap.; 31 Acs; R.P. 4493; Uluniu Waikiki Kona; 1 ap.; 71.7 Acs]

A-2 LCA 228 , Kalaiheana

[Kalaiheana], li, claimant F.R. 150v1

No. 228 1 document in Native Register, page 1, volume 2

N.R. 1-3v2 No. 228, [Kalaiheana], John li for Kalaiheana

Greetings to the Commissioners whom the Moi has appointed to quiet land titles: I, the undersigned hereby state that Kalaiheana's land, called Kanewai, is at Waikiki. It has some leles in Manoa - Keapuapu, Holoawalu /Kaloalu in N.T./, Pakui, and the lele of Pahoa at Waikiki; and the sea of Kahala. That was the land of Keeaumoku at Waikiki, adjoining the north side of Kalaepohaku. This land became his upon the victory of Kamehameha I at the Battle of Nuuanu, also Waialua, as was the custom of granting land to chiefs at that time. When the peleleu /fleet of large canoes/ came, the land passed from Keeaumoku to Papa and Kalaiheana, and all the leles were also conveyed. From thence came this acquisition and there was no deterrent until the year 1841. For the first time, an edge of Kahala as taken for Waialae. And in the year 1846 another portion was taken for Kalaepohaku, in the month of May, or perhaps June. The witnesses are Keheana and Eleele. This is ended.

Also, there is the cocoanut grove of Heleumoa at Waikiki. It is said that perhaps two years after /the Battle of/ Nuuanu, it went to some of us, to Kalaiheana, from Kamehameha I. No one objected until the year 1846, in the month of May or June, when it as taken for the first time. The witnesses are Kapuakaona and Ku.

Since Kalaiheana has chosen me has his representative, therefore I am making this request to you, the Land Commissioners.

I am, your servant,

John li

To: W. R., J. R., Y. K., K, Royal School, August 14, 1846

F.T. 162-163v1

Claim No. 228, John li, attorney, Kalaiheana, claimant, August 30 [1847]

Ku testified on oath, He knows the land in this case. It is at Waititi, its name is Helumoa. It is cocoa nut land. Witness knows the boundaries.

Kalaukau is the name of the land, east

Keamoku that on the North

On the West is the old road leading from Honolulu

On the South is a stream called Apukokohau.

Claimant holds the land from Kamehameha I who gave it to Kaileo, he gave it to Papa, he willed it when he died to Keawikalohi, and he gave it to the claimant.

No person has claimed the land from the first-named person down until 1846. It came into claimant's hands in tie time of Rihoriho. Kuluwilehua is the counter claimant.

John Ii, testified on oath, that he knows the place, and that the persons already named were those who were living under Kamehameha, who had particular care of his household property and were known by the chiefs as such. Kamehameha himself lived on this land; & when he died, he left them in possession.

The chiefs went with Kamehameha to Hawaii & were there when he died, but their families remained. When Rihoriho came to the government he allowed them to remain.

After Kamehameha's death, the chiefs returned. Rihoriho fixed his residence on the same spot. So it has been through the reign of Kamehameha II & Kaahumanu, and has been left all along in possession of this class of people. Those living on the land are under claimant; six in number with own houses.

Kuluwailehua, stated that he founds his claim on his mother, a regular claim from Kamehameha, Rihoriho, Kaahumanu &c, through his mother's ancestors to himself. In 1842 he was living under Kekuanaoa, then the land became Kekuanaoa's and witness lived on it. It became Kekuanaoa's from Kekauluohi who had it from the King. In 1842 and 1843 this land was returned to witness and he lived under the King on it.

Witness relies on 7 Sec. 3 Chapter of laws of 1839, page 27. There are two divisions of this land; one of cocoa nut trees & the other of kalo. The former piece has been taken off and constitutes the claim of Kalaiheana, and ought to be returned, according to the law cited. It was one land formerly, but Kamehameha I divided it, and gave it to Kalaiheana's ancestors.

Note. In another clause of those laws cited, the one referred to is restricted in its operation to the space of 6 months from the time of enactment.

The Board voted unanimously a freehold less than allodial to Kalaiheana for the part claimed and occupied by him and rejected the counter claim of Kuluwailehua.

Resumed page 164

F.T. 164-165v1

Claim No. 228, John Ii for Kalaiheana from page 162. September 1847

Claim No. 2 under 228. Eleele testified on oath that he knows the place which is at Waikiki. Kanawai is its name. It borders on the sea, which enters part of it.

On South & East is land of Kalaipohaku

On Northeast & North is land of Waihi

From Northwest & West round is Piliamo

On West Keokapu has land.

This land belonged to Keaumoku, father of Kaahumanu. The land was taken in possession by him under Kamehameha I when the last battle was fought in Nuuanu. Another land at Waialua was also given him at the same time. When Kaumoku obtained it was in 1804. Claimant is his descendant. At that time it extended farther in the sea than now. The family has been in constant possession ever since & have never lived away from it since 1804. Witness is not related to the family.

Kaeana, testified on oath, that he knows the land & confirmed the general deposition of the former witness. He stated that Keapuapu, Pakui, Koloahu, Kaiokahala, Komolipo, Papaa were all living on the land or outside of it, and are members of the family, and live under claimant.

A freehold title less than allodial was voted by the Board to Kalaiheana.

N.T. 268v2 No. 228, John li [for Kalaiheana], Honolulu, August 30, 1847

Ku, sworn by the Word of God and stated. I have seen the property of Kalaiheana named Helumoa, it is a cocoanut grove and the boundaries are Keonuku on the right, Kaluaohau on the east, the river Apuakohau on the south and the old road to Honolulu here is on the west side. Kailio had received his interest from Kamehameha I; from Kailio to Papa; Papa to Keawekalohe and from Keawekalohe to Kalaiheana. Kalaiheana has lived there from the long ago to the year 1846 when Kuluwailehua had objected to him.

John li, sworn by the Word of God and stated, I have seen this land and these names which are written in this claim document are the attendants of Kamehameha I. Their work was taking care of the house and preparing the food. These people were in constant contact with the chiefs and were close to each and every chief. When Kamehameha I died, they continued to live on the property and when the chief returned from Hawaii Kalaiheana went to live there. These people have lived there since Kamehameha II to Kaahumanu's reign, and to the year 1846 when Kuluwailehua had raised objections.

See page 271

Kuluwailehua's statement of objection to Kalaiheana. The interest to this land is for my parents who had lived (there) from Kamehameha I to Kaahumanu's reign. When my parents died in the year 1842, the land was taken by M. Kekuanaoa and I lived under him. Kekuanaoa had received his interest from Kekauluohi and Kekauluohi had received her interest from the king. In the year 1843 the land had become mine thro' the king and when I had looked (read) the Kuluwailehua's statement concerning borders, I realized that a border of my land had become Kalaiheana's property so I took that cocoanut grove because that is a border for Pahoa.

N.T. 271v2

No. 228, John li, [for Kalaiheana], From page 267

Eleele, sworn by the Word of God and stated, I have seen this land Kanewai by name in Waikiki, also the taro and the sea of Kahala. The boundaries are Waihi from the north to the east, Kalaepohaku on the east and the south sides and Palimoo and Kiokapu on the west side. That land is for Keeumoku I. He is the father of Kaahumanu and Keeumoku had received that land at the time of the battle of Nuuanu. Waihi at Waialua is another land. During the expansion, this land was given to Kalaiheana in the year 1804 and he has lived there since that time to this, no one has objected.

Kaheana, sworn by the Word of God and stated, I have seen this land, as has been mentioned by Eleele; however, there are other lands which I have seen (1) Keapuapu, (2) Kaloalu, (3) Kamoolepo of "Pakui." Kahala is the sea of these lands and the sea [name]. These are leles' for Kanewai and living there is through Keeumoku.

Pahoa, Kahala and Panewai are outside of the boundaries of Pahoa Ie. The land Pahoa is on the east, Nanaikola and Kamoku are on the west side. During the expansion these lands were taken by Kalaiheana but Pahoa was acquired by Keopulani through Kamehameha and in the year 1835, that land was returned again to Kalaiheana.

[Award 228; R.P. 7722; Pahoa Waikiki; 1 ap.; 1.11 Acs; no R.P.; Kanewai Manoa Kona; 1 ap.; 66.59 Acs; R.P. 8823; Helumoa Waikiki Kona; 3 ap.; 4.93 Acs; R.P. 7720; Kanewai Manoa Kona, 27 Acs 115 Anana 19 Kapuai; R.P. 7721; Kanewai Kahala Kona; 1 ap.; 173 Acs 54 lq[?] fathoms]

A-3 LCA 822, Okuu

No. 922, Okuu, Helumoa, Waikiki, Honolulu, Oahu, October 1847
N.R. 536v2

To the President of the Land Commissioners, William L. Lee, and J. H. Smith, Z. Kaauwai, John Ii. N. Namauu, being the commissioners to weigh the truth of the claims, in accordance with your directions, therefore, I hereby petition for the house lot claim at Helumoa in Waikiki. It was agreed by us that I would petition to you, the com-missioners who strip off the claims which are invalid and select the right claims when you know the truth, as in my claim of which I am telling you correctly. The circumference outside of this house is 104 fathoms 4 feet 9 inches. There are witnesses there who will testify truthfully as to my claim to you, the ones who act justly and correctly.

I am, with thanks, your obedient servant.

OKUU

F.T. 262v2

Claim 922, Okuu, April 3 [1848]

Kupanihi, sworn, I know this place. It is a house lot in Waititi, bounded:

Ewa by Kukiiuhi's

Mauka by John Ii's

Waititi by Nu'u's and Hope's

Makai by the sea.

It has an adobie fence and five houses, one belonging to Ku, one to myself, 1 to Kini and two to claimant, who got the place from Kamaukoli, who had it from Kaahumanu in whose time Okuu came by it (about 1822). I know of no other person claimant it but him.

Kini, sworn, and confirmed all the previous particulars.

N.T. 602,604v2

No. 922, Okuu, wahine, 922 [note: no page 603]

Kupanihi, sworn and stated, "I have seen house lot which is at Waikiki. Thus, the boundaries are:

Kalaiheana's land, towa-rd the mountain

Nu's land and Kahope's lot, Waikiki and

the beach is toward the sea.

This place has a mud enclosure and there are five houses in there. Three of us are house owners. One house is mine, another is for Kini and the other is for Ku. Okuu had received this from Kamaukoli who had his interest from Kaahumanu, but Kamaukoli is the interest for life there. This land had been for Okuu's older brother and upon his death, Okuu had inherited it. I have not known that anyone has objected."

Kini, sworn and stated, "I have seen this place. Everything about it is just as Kupanihi has related here."

[Award 922; R.P. 4463; Helumoa Waikiki Kona; 1 ap.; .32 Ac.]

A-4 LCA 1281, Kuluwailehua

Kuluwailehua, Honolulu, 6 December 1847

N.R. 54v3

To the Land Commissioners, Greetings: I hereby tell you of my claims at Waikiki in the 'ili of Kamoku, which was from the Mo'i; I live there under his protection, and the ko'eles and po'alimas, and the genuine land* and the cocoanut grove and the fishery and the benefits of the land are mine under the Mo'i.

My own claims are a house lot and three lo'i which are my very own, from my makuahine.

I also tell you of Kamoku Two, the 'ili of William Lunalilo which I have. The po'ailimas and the ko'eles are for William Lunalilo. I hold it as was the custom of the makuas.

Here is my own claim, for a house lot and five lo'i which is held by my kaikuahine who is over me, but I have the administration of it, this was the own property of our makuakane; three are her own and two are mine, a total of five lo'i.

There is also a claim for a small single lo'i in Kuilei; this single claim is held by me.

These are my claims which I tell you of.

Farewell to you all, L. KULUWAILEHUA

/*Translator's note: refers to land long developed and held under a konohiki./

F.T. 458v2

Cl. 1281, Kuluwailehua, September 4, 1848

[margin note: See Native Register page 242, volume III] [should say Native Testimony]

Kahiaweawa, sworn, I know these lands. They are an ili in Waititi called Kamokuakahi, Oahu. Claimant presented a paper from the Minister of Finance showing the land Kamoku was set aside to claimant in the division of lands, stating there were 8 natives & Hoaaina) living on the land as his tenants, whose names are: 1. Kahiawaawa; 2. Anee; 3. Malo; 4. Keaka; 5. Haole; 6. Kaeina; 7. Kalione; 8. Kahiamoe; 9. Kawelohoalii, 10, Kaua.

These men are not counter claimants and claimant says he dos not wish to disturb the rights of these tenants.

2. Claimant has 5 kalo patches and a house lot in Kamoku elua which is Kanaina's or William Lunalilo's land (Postponed till 6th Instant)

3. I know the kalo patch claimant has in "Kuilai. It is bounded:

By Hao's land Mauka

Waimanalo by Namekanu's

Makai by a small road

Waititi by an auwai and the land of Kaaha.

Claimant had this land from Maka in 1847. Maka received it from Kealoaloa in 1831 and held it in peace until he gave it to Kuluwailehua, who now owns and cultivates it.

Ana, sworn, Knew these lands and confirmed the previous testimony.

N.T. 242-234v3

No. 1281, Kuluwailehua, September 4, 1848

Kahiaweawe, sworn and stated, "I have seen this land named Kamoku. It is an ili land in Waikiki and there are five patches and a house on Kamoku II.

Here is the number of people who are all living there, for they do have interest: 1) myself, 2) Anee, 3) Malo, 4) Keaka, 5) Haole, 6) Kaina, 7) Kalaeone, 8) Kahiamoe, 9) Kawelohelii, 10) Kaua. This is a division of Kuluwailehua from the King. To page 738

Kamaku is for Samuel Kuluwailehua. It is an ili at Waikiki in Kona, Oahu. This distribution is good and I am approving it. The land which is mentioned in writing above is for S. Kuluwailehua. It has been approved and may be taken to the land officers who quiet titles. (Signed) Kamehameha 3 Royal Residence January 31, 1848

I am announcing that this is a certified copy from the Book of Land Distribution. Office of the Minister of Interior, G. M. Robertson, Secretary

September 4, 1848

2. Parcel - This claim has been postponed to Wednesday. These are the patches and house lot at Kamoku II.

3. One patch is at Kuilei in Waikiki.

Hao's land is mauka

Nameakami's land, Waimanalo

a small street, makai

Kaaha's land, Honolulu.

Kuluwailehua's land is from Maka given in the year 1847. Maka had received this land in 1831 from Keolaloa. It had been acquired without cost because Kuluwailehua is Maka's nephew.

Anee, sworn and stated, "I have seen this land just as Kahiaweawe had seen it; no one had objected to Kuluwailehua."

N.T. 738v3

No. 1281, Samuel Kuluwailehua, from page 242

Land Division from the king of the ahupuaa land, county and island, Kamoku ili in Waikiki, Kona, Oahu.

This is to certify this grant; it is good. The land written above is for S. Kuluwailehua. It has been approved and it may be presented before the land commissioners.

Signed, Kamehameha

Royal Palace, January 31, 1848

This is a certified copy from the Award Book, W. Goodale
N.T. 738-739v3

No. 1281, S. Kuluwailehua

February 23, 1851, from page 242, No. 1281, S. Kuluwailehua

Kahiaweawe, sworn, I have see Kuluwailehua's parcels of land at Kamoku I in Waikiki - 5 parcels of land, Keomuku and Pau.

1 cocoanut grove and Keomuku sea; the boundaries are:

Mauka, land of Kekuanaoa

Waikiki, land of Keohokalole named Hamohamo

Makai, the surf's breaking point

Ewa, land of Kekuanaoa.

3 patches; the boundaries are:

Mauka, land of Haumea

Waialae, land of John Young, called Pahoa

Makai, land of M. Kekuanaoa

Ewa, land of C. Kanaina.

6 patches and a pasture, and the boudnaries are:

Mauka, land of Uma

Waialae, land of M. Kekuanaoa, Pahupahuapuaa

Makai, land of Kekuanaoa Kalia

Ewa, land.

House lot and 13 taro patches:

Mauka, Kalia stream

Waialae, land of Kekuanaoa named Waiaka

Makai, land of Kekuanaoa Ewa, land of C. Kanaina.

1 taro patch at Pa'u:

Mauka, land of M. Kekuanaoa

Waikiki and Makai, land of C. Kanaina

Ewa, land of Kekuanaoa by the stream.

Kanekoa, Kuluwailehu's mother, had given him these sections of land in 1840 and she had received this land from Keopulani during the time of Kamehameha I where she has lived to

1848, at which time King Kamehameha III gave her a grant by the Mahele. No one had objected. The natives have retained their interests.

[Award 1281; R.P. 166; Kamoku Waikiki (Ap. 1); 1 ap.; 6.35 Acs; R.P. 7428; Waikiki Kona; (Ap. 2); 1 ap.; .92 Ac.; R.P. 403; Kamoku 2 Waikiki Kona; 2 ap.; 15.89 Acs; Land Patent 8102; Waikiki Kona; (Ap. 3); 1 ap.; 4.55 Acs]

A-5 LCA 1379 Kapule II**N.R. 93v3**

To the Land Commissioners, Greetings: s: I, the undersigned, hereby tell of my claim for two lo'i at Auaukai, two rows /of taro/* at Hohe, one irrigation ditch, the pond named Kalokomoo, also a house lot at Keomuku in Waikiki, Island of Oahu.

KAPULE X

Residence: Keomuku

/*A communal taro patch at Waikiki./

F.T. 507v2

No. 1379, Kapule II, September 29, 1848

Wailehua, sworn, This land is in the ili of Auaukai, Waititi, claimant has a house lot in the next ili of Keaumoku, of several pieces.

1. House lot:

Mauka is Auwa's land

Waialae, Oku's

Makai, Kaelemakule's

Honolulu, Government land (nahelehele).

It is fenced and claimant has 1 large and 1 small house on it.

2. Two kalo patches.

Mauka is Keohokalele's, Waialae and Makai also

Honoluu, Peleuli's.

3. Part of a kalo patch:

Mauka is a large kalo patch of many owners

Waialae, Paku's

Makai, Keohokalole's

Honolulu, Kaluahinenui's.

Claimant had this land from Kamaukole, lord of it in Kaahumanu 1 time, and has ever since held it without dispute. He does poalima work. Kamaukole is his konohiki.

N.T. 315v3

No. 1379, Kapule II, September 29, 1848

Wailehua, sworn, I have seen his place in the ili of Auaukai in Waikiki. The house lot is at Keomuku

1. 1 house lot:

Mauka is Ana's land

Waialae, Okuu's place

Makai, Kaelemakule's place

Honolulu, a government land.

There is a large house, one little house, there is a fence.

2. 2 taro patches:

Mauka, Waialae and Makai is Keohokalole's land

Honolulu, Peleuli's land.

3. 2 rows of taro:

Mauka for people

Waialae, Paka's land

Makai, Keohoka Iole's place

Honolulu here, Kaluahinenui's place.

Kapule II had received his land from Kamaukoli at the time of Kaahumanu I and he has lived peacefully to the present time; no one has objected. He had gone to do Friday detail regularly. Kamaukoli was his konohiki.

[Award 1379; R.P. 2824; Auaukai Waikiki Kona; 2 ap.; .25 Ac.]

A-6 LCA 1385, Kaelemakule**N.R. 94-95v3**

To the Land Commissioners, Greetings and the peace of God: I, the undersigned, hereby tell of my claim for one *lo 'i* at Auaukai, one row at Hohe /of taro/, also a house lot at Keomuku in Waikiki, Island of Oahu

KAELEMAKULE

Residence: Keomuku

F.T. 8v3-4

Cl. 1385, Kaelemakule, October 9, 1848

Kokomo, sworn, This place is in Auaukai, Waititi. It is kalo land, consisting of

1. House lot, fenced and claimant owns one house on it, bounded:

Mauka by Kapule's land, Waialae also

Makai by sea

Honolulu by Kuapaiea's.

2. One kalo patch:

Mauka is Kapule's

Waialae is Nuuanu's

Makai is Nui

Honolulu is Opupahoa's.

One row of kalo in a large patch, which is bounded as a whole: Mauka by Palupalu

Waialae by Paku's (teacher)

Makai by Kukealii'eau's

Honolulu by Kanai's (land).

Claimant had these lots from Kamaukule [Kamaukoli?] in time of Kaahumanu I. Kamaukule was and is konohiki under Kekuanaoa, who owns the land and has been held undisputed to the present time.

N.T. 327-328v3

No. 1385, Kaelemakule, From pg. 142, Vol. X, October 9, 1848

Kokomo, sworn, I have seen his place at Auaukai in Waikiki of 1 taro patch and 1 row of taro.

1. 1 house lot:

Mauka is Kapule's place, also Waialae

Makai, the sea;
Honolulu, Kuapaia's place.

2. 1 taro patch:
Mauka is Kapule's place
Waialae, Nuuanu's place
Makai, Nu's place
Honolulu, Opupahoa's place.

1 row of taro in the big patch:
Mauka is Palupalu's place
Waialae, Paku's place
Makai, Kultiiaiu's place
Honolulu, Kanae's pasture.

Kamaukoli had given him his land at the time of Kaahumanu I. Kamaukoli is the konohiki under Kekuanaoa and he has always lived there to this time; no one has objected. Postponed until Kamaukoli shall come also.

N.T. 142v10

No. 1385, Kaelemakule (from page 327, volume 3), Claim Settlement Building, 16 April 1852

Objection by konohiki, Kamehameha III

Kelemakule, sworn, I have been in error in the filing of my single row claim in the koele patch of the konohiki called "Hohe" in Waikiki, Oahu. I hereby reject my interest in that patch. It shall be fore the konohiki forever without opposition and I shall live under the konohiki similarly to the old ways of this land.

[Award 1385; R.P. 2829; Auaukai Waikiki Kona; 1 ap.; .17 Ac.]

A-7 LCA 1445 , Kanemakua**Kanemakua, Waikiki, Oahu, December 9, 1847N.R. 114v3**

Greetings to the Land Commissioners: I hereby tell of my land claim for my five lo'i in Mooiki in Waikiki. I got these places in the time of Kamehameha and have held them under the konohiki with no objections from anyone.

I have also two other lo'i at Mookahi in Waikiki which I got in the time of Kaahumanu I and which I have held peacefully with no objections.

I also have a house lot at Waikiki which I got in the time of Kamehameha II and have held peacefully with no objections. There are seven houses there which are mine alone. Also, I have three irrigation ditches.

KANEMAKUA X

F.T. 39-40v3

CL 1445, Kanemakua, December 11, 1848

No. 1, Ku, sworn, I know this place. It is in Waititi in the ili of Mooiki, consisting of kalo land having 4 patches and 1 house of claimants.

It is bounded:

Mauka by Kamakahonu's

Waialae by Kauhao's land (konohiki)

Makai by Kahanaumaikai's

Honolulu lby Paki's.

Claimant had this lot from Kamakahonu in time of Boki as a gift from his chief, and he has lived there and cultivated the land ever since without any dispute, there has never been any counter claimant to this time.

No. 2. Second land is in Mookai, consisting of 2 patches standing apart.

1st is bounded by Kaniho's land Mauka

Waialae by Paki's

Makai by Laimakahi's

Honolulu by Aumea's.

2d patch, Kaniho's is mauka

Paki's is Waialae

Keaweikini's is makai

Aumoe is Honolulu.

Claimant has these two patches from Kailiuli in time of Kaahumanu. He was konohiki, now dead, and has held them like the others to the present time undisputed, and cultivated them.

No. 3. House lot, situated in Helamoa, Waititi and bounded:

Mauka by Kekuanaoa's land

Waialae by an arm of the sea

Makai, the sea

Honolulu by Kaluahinenui's.

There are 8 houses on it. Claimant owns two; Kahanaumaikai, one; Kalaauli, one; Kaaia, one; Kahui, two; and I own two. These all live under claimant and he under Kalaiheana. They came under permission of claimant who lives on it.

Claimant had this land from Kalaiheana in time of Boki and has lived there in peace to the present time. The land is fenced. Three streams are included in the preceding bounds given, which are separately mentioned in the claim.

Kaanana, sworn, stated he knew the above testimony to be true.

Kalanikua, said this land had been surveyed by John Richardson and after by himself as part of Kalaiheana's claim.

Kalaiheana's testimony wanting. See page 427.

F.T. 427v3

No. 1445, Kanemakua, February 23, 1853, from page 39

Counter Susan (Naki)

Kalaiheana, sworn, says he knows the house lot of claimant in "Helamoa," Waikiki. It belonged to witness from the time of Kamehameha I until he gave it to claimant about the year 1825. I never gave any part of that place to Kahue. Kanemakua has held the land in question ever since.

N.T. 362-363v3

No. 1445, Kanemakua, October 11, 1848

Ku, sworn, I have seen his place at Mooiki ili land in Waikiki. There are four patches and Ku's own house which has not been enclosed.

1. 4 taro patches:

Mauka is Kamakahonu

Waialae, Kauhao's place

Makai, Kahanaumaikai

Honolulu, Paki's land.

Kaiakoili had given Ku this interest at the time of Poki, while he /Ku/ was living as a servant and he has continued to live there to the present time with no objections from anyone.

2. 1 taro patch is at Mookahi in Waikiki in two sections.

Mauka is Kaniho's land

Waialae, Paki's land

Makai, Kalimakuhi's land

Honolulu, Haumea's place.

3. 1 taro patch:

Mauka is Kaniho's land

Waialae, Paki's land

Makai, Keaweileikini's place

Honolulu, Haumea's place.

Ku had received this interest from Kailiuli during the time of Kaahumanu. Kailiuli had been a konohiki and is now dead. Ku has lived there to the present; no one has objected.

4. 1 house lot at Helumoa in Waikiki where:

Mauka is Kekuanaoa's place

Waialae, a river

Makai, the sea

Honolulu, Kaluahinenui's place.

Kaluahinenui has 2 houses, Kahanaumaikai 1, Kailiuli 1, Kaia 1, Kahue 2, and Ku, 2 houses and all of these People live under Kanemakua because this is his place received from Kalaiheana during the time of Poki and he has lived there to the present; no one has objected. This place has been completely enclosed around the property.

Kaanaana, sworn, Our testimonies are similar.

Postponed until Kalaiheana can be heard.

[Award 1445; R.P. 2560; Helumoa Waikiki Kona; 1 ap.; 1.6 Acs; Kamooiki Waikiki Kona; 1 ap.; .75 Ac.; Kamookahi Waikiki Kona; 2 ap.; .43 Ac.]

A-8 LCA 1463, Wahahee**No. 1463, Wahahee, Waikiki, Oahu, December 9, 1847****N.R. 121v3**

Greetings to the Land Commissioners: I hereby tell of my land claim at Kaluakau in Waikiki. I have two lo'i there. I also have a house claim at Waikiki with one house there. —

I got this place in the time of Kamehameha I and hare held it peace-fully with no objections. I have three other lo'is at Nukuaula in Waikiki which were given me by Nalawehe in the year 1846 which I have held in peace with no objections.

WAHAHEE X**F.T. 54-55v3****Cl. 1463, Wahahee, December 18, 1848**

Opio, sworn, I know this land. It is in Waititi, district of Kaluakau and Kanukuaua, consisting of kalo land kula, and a house lot in Helumoa.

House lot, claimant has one household. It is fenced.

Mauka is Kekuanaoa's,

Waialae also

Makai, Kuluwailehua's

Honolulu, Kekuanaoa.

2. Kaluakau two kalo patches:

Mauka is Male's

Waialae, Palupalu's

Makai, Kekuhuna's

Honolulu is Kanapuni's.

3. Kanukuaua, One kalo patch and auwai:

Mauka is Kuahuia's

Waialae, Kawai's-

Makai is Nahoo's

Honolulu, Haeo's.

4. One kalo patch.

Mauka is Haeo's

Waialae, Kaaipua's

Makai is Government kalo patch

Honolulu is Naoho's.

Claimant had the house lot No. 1 from Kulaiheana in time of Kaahumanu I and has ever since lived in it without any dispute. He had No. 2 kalo patch from Pakanaka same time as No. 1, and has held it in peace also.

He had No. 3 and 4 from Nalaweha, konohiki, about 1845 and has never been disturbed in the right.

Kahiuka, sworn, and confirmed the above testimony.

Nalaweha wanted.

N.T. 377-378v3

No. 1463, Wahahee, December 18, 1848.

Opio, sworn, I have seen his place at Kaluaokau with 2 patches; Kanukuaua in Waikiki, 2 patches and 1 ditch; Helumoa, 1 house lot and these places are all in Waikiki.

1. 1 house-lot with one house and there is a fence.

Mauka and Waialae is Kekuanaoa

Makai, Kuluwailehua

Honolulu, Kekuanaoa.

2. 2 patches at Kaluaokau where:

Mauka is Male

Waialae, Palupalu

Makai, Kekahuna

Honolulu, Kanapuni.

3. 1 patch, 1 ditch at Kanukuaua:

Mauka is Kuahina

Waialae, Kawai

Makai, Naohi

Honolulu, Haaheo.

4. 1 patch at Kanukuaua:

Mauka is Haaheo

Waialae, Kaaipuaa

Makai, a government patch

Honolulu, Naoho.

Kalaiheana had given Wahahee the house lot during the time of Kaahumanu I, which is Section I and he has lived there since that time to the present; no one has objected.

Pakanaka had given section II at the time of Kaahumanu I and he /Wahahee/ has always lived there without any objections.

Sections III and IV are from Nalaweha at the time M. Kekuanaoa was touring on Oahu here probably in the year 1846 and life has always been the same to the present time without any objections. Kahiuka, sworn, Our testimonies are similar /the hearing for/ sections 3 and 4 have been postponed till Nalaweha is available.

[Award 1463; R.P. 715; Helumoa Waikiki Kona; 1 ap.; .14 Ac.; R.P. 4247; Kanukuaula Waikiki Kona; 2 ap.; .97 Ac.]

A-9 LCA 1508 Kahoouluulu**No. 1508, Kahoouluulu****N.R. 139v3**

To the Land Commissioners, Greetings: I hereby tell you of my land claim for one lo'i, one kula, one section of irrigation ditch and one house lot, in the 'ili of Pahupahuapuaa in Waikiki, Island of Oahu. That is that I am telling you.

KAHOOUULUULU X

Keawamuku at Waikiki, December 4, 1847

F.T. 68v3

Cl. 1508, Kahoouhuluhulu, December 27, 1848

Wailehua, This land is in Pahupahuapuaa in Waititi, consisting of kalo & kula and a house lot in Waititi kai.

1. House lot in Waititi kai:

Mauka, Popoki

Waialae, Kapule

Makai Kaina

Honolulu, Kauhau.

Claimant has 1 house, partly fenced.

2. Kalo, 2 patches:

Mauka, Kaleiwakalei

Waialae, my land

Makai, Kamaukole

Honolulu, Kukuapoi.

3. Kula and a kalo stream, in part.

Mauka is Kukui

Waialae, Keohokalole

Makai, Kaleimakalii

Honolulu, Kekuanaoa.

Kaahumanu I gave all this [these] lots to Claimant, who now holds them under me as agent for Victoria.

N.T. 394v3

No. 1508, Kahoouluulu

Wailehua, sworn, I have seen Kahoouluulu's land at Pahupahuapua in Waikiki

1. House lot:

Mauka is Opoki's lot

Waialae, Kapule's lot

Makai, Kaena's lot

Honolulu, Kaauhau.

There is a house and a fence.

2. Two patches at Pahupahuapua:

Mauka is Kaleimakalii's lot

Waialae, my land

Makai, Kamaukoli's land

Honolulu, Kekuapoi's place.

3. Pasture and a ditch:

Mauka is Kukue's land

Waialae, Keohokalole's place

Makai, Kaleimakalii's lot

Honolulu, Kekuanaoa's place.

I had given Kahoouluulu land at the time of Kaahumanu, now it is under Kamamalu.

[Award 1508; R.P. 5945; Pahupahupuaa Waikiki Kona; 3 ap.; 1.13 Acs]

A-10 LCA No. 1511, Kanae

N.R. 140v3

To the Land Commissioners, Greetings: I, the undersigned, hereby tell of my land claim for one row of /taro/ hllls, in the lo'i of Hohe in Waikiki, one irrigation ditch in the 'ili of Kanukuaua, one small kula, one house lot, one pond; that is what I have to tell you.

KANAE X

Keawamuku at Waikiki, December 4, 1847

F.T. 69v3

Cl. 1511, Kanae, December 27, 1848

Kamanonui, sworn, I know these lands, all in Waititi, consisting of:

1 House lot near the sea, 1 house and fenced:

Mauka is Auwa's

Waialae, Keoho

Makai, sea

Honolulu, Kapule.

2. Hog pond, unknown.

3. Kula land in Hohe:

Mauka is Panelua

Waialae, Paku

Makai, Kauiki

Honolulu, Kaluahinenui.

5. One line of kalo in a general kalo patch, is included in No. 3.

Kaahumanu gave these lots to claimant and he has held them undisputed to the present time.
Kekuanaoa is konohiki.

Kauiki, sworn, confirmed the testimony as above.

N.T. 395-396v3

No. 1511, Kanae, From page 142, Vol. 10

Kamanonui, sworn, I have seen Kanae's land at Hohe, the stream in Waikiki and the house lot at Keonuku.

One house has been enclosed.
Mauka is Ana's place
Waialae, Keoho's place
Makai, the sea
Honolulu, Kapule's place.

Witnesses for the ponds have failed to be present.

There is also a pasture at Hohe.
Mauka is Paelua's place
Waialae, Pehu's place
Makai, Kauiki's place
Honolulu, Kiluahinenui's place.

This is from Kaahumanu to Kekuanaoa and to Kamamalu at this time.

Kauiki, sworn, I have seen Kanae's land just as Kamananui has stated here.

N.T. 142v10

No. 1511, Kanae (from page 395, Volume 3) Claims Building, 16 April 1852

Objections by konohiki, Kamehameha III.

Kanae, sworn, I have been in error in the filing of my single row claim in the koele patch of the konohiki called "Hohe" in Waikiki. Oahu. I hereby reject my interest in that patch. It shall be fore the konohiki forever without opposition and I shall live under the konohiki similarly to the old ways of this land.

[Award 1511; R.P. 2821; Kanukuaula Waikiki Kona; 2 ap.; 1.59 Acs]

A-11 LCA 1782 Kahope

No. 1782, Kahope
N.R. 252v3

To the Land Commissioners, Greetings: I hereby state my claim for one small lo'i and one section of irrigation ditch, at the 'ili of Niukukahi in Waikiki. This is my claim to you.

I am, with thanks.

KAHOPE X, his mark

Waikiki, Oahu, 16 December 1847

F.T. 491v14

No. 1782, Kahope, claimant

Kanemakua, sworn say, the portion of the claim of Kahope is Apana hale in Helumoa, Waikiki, Oahu.

It is bounded:

Mauka by the cocoanuts of Helumoa

Kekaha by the pahale belonging to me

Makai by the sea shore

Honolulu by the pahale of Okuu.

Claimant received the house lot from Kaahumanu in the time of Kaumualii and has held the same in undisputed possession ever since.

Kaia, sworn says, the above testimony is true & is also his own.

N.T. 512v3

No. 1782, Kahope, October 30, 1849

Kauhao, sworn, I have seen his place at Niukukahi in Waikiki - 1 section.

1 taro patch

Mauka, Kahehi

Waialae, Kaiahopuwale

Makai, Koa

Honolulu, Kaia.

I had given him his land in the year 1843 and he has lived comfortably to the present time; no one has objected.

[Award 1782; R.P. 4249; Helumoa Waikiki Kona; 1 ap.; .31 Ac.; Kanuikukahi Waikiki Kona; 1 ap.; .2 Ac.]

A-12 LCA 2126 Keoho (Keaho)

No. 2126, Keoho, Waikiki, Oahu, December 23, 1847
N.R. 365v3

Greetings to the Land Commissioners: I hereby state my claim for land consisting of a house lot, a pond, two rows of taro, a section of irri-gation ditch and some hills of taro /or sweet potato/, which are on the stream /side/ of Kalia. I got this place in the time of Kaahumanu I and have held them in peace, with no objections. There is also a kula at Kawelulua.

KEOHO X

F.T. 483v14

No. 2126, Keaho, claimant

Makapo, sworn say, the land of claimants contains 2 puepue, a kula & pahale in one piece in the ili of Kuwelulua, Waikiki & is bounded:

Mauka by land of Kalawaia
Kekaha by the ili of Hamohamo
Makai by land of Nahuna
Honolulu by a loi Kahuelua.

Claimant received the land from Kaahumanu & has held the same in quiet until the present time.

Aua, sworn says the above testimony is true & is also his own.

[Award 2126; R.P. 2577; Keomukukai Waikiki Kona; 1 ap.; .71 Ac.]

A-13 LCA 8023 Aua

No. 8023, Aua, Waikiki, 12 February 1848

N.R. 478v5

The Esteemed Land Commissioners, Hale Kauila, Honolulu, Oahu. Greetings to you all: I, the one whose name is below, hereby state my claim for land, in the 'Ili of Auaukai in the Ahupua'a of Waikiki. One lo'i is in Kalia 'Ili, One pauku of taro is in the stream water course and there is another pauku of stream. There is one row of taro in Hohe, and another pauku also in Hohe. There is one house lot, one kula planted in sweet potatoes and gourd.

These claims which have been explained above were from Kamaukoli, given in the time when Kaahumanu I was living, when Kaahumanu and Kamehameha III returned from the circuit of Hawaii. I am, respectfully,

AUA

F.T. 475v14

No. 8023, Aua, claimant

Kuine, sworn say, he knows the land of Aua. It consists of 3 pieces.

Apana 1. A loi in Auaukai, Waikiki, Oahu is bounded:

Mauka by the land of Ohuu

Kekaha by the land of Maukoli

Makai by the land of Manamana

Honolulu by the land of Oahuu.

Apana 2. A kahawai & kula in Kalia, Waikiki. It is bounded:

Mauka by the land of Kalamanamana

Kekaha by the land of Kualulua a kahawai

Makai by the land of Hamohamo no konohiki

Honolulu by the land of Kaia in Kalia.

Apana 3. A house lot yard in Keomuku, Waikiki, bounded:

Mauka by the loko of Helumoa of Ii

Kekaha by the kula nui of Helumoa

Makai by the house lot of Kapule

Honolulu by the house lot of Puepue.

Claimant received the land from his father-in-law, Kamaukoli in the time of Kaahumanu & has held the same in quiet ever since.

Kahonu, sworn, confirms the above as true, his [and] also his own.

[Award 8023; R.P. 5943; Auaukai Waikiki Kona; 1 ap.; .05 Ac.; Kalia Waikiki Kona; 2 ap.; .64 Ac.; Keomuku Waikiki Kona; 1 ap.; 1 Ac. 1.18 chains]

EXHIBIT "A"

WENDY BRANDT JOHNSON,
Trustee of that certain unrecorded
Wendy Brandt Johnson Declaration of Trust
dated December 16, 1987,
a Short Form of which is recorded in Liber 21484 at Page 769,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.009039215 interest,

SUSAN BRANDT,
Trustee of that certain unrecorded
Susan Brandt Declaration of Trust
dated December 16, 1987,
a Short Form of which is recorded in Liber 21484 at Page 741,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.009039215 interest,

REX BRANDT,
Trustee of that certain unrecorded
Rex Brandt Declaration of Trust
dated December 16, 1987,
a Short Form of which is recorded in Liber 21484 at Page 756,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.009039215 interest,

EDITH BETSY LEE,
Trustee under Declaration of Trust
dated October 1, 1991,
with powers to sell, mortgage, lease, etc.,

as to an undivided 0.028238235 interest,

HARVEY PARTICK LEE,

Trustee under Declaration of Trust

dated October 1, 1991,

with powers to sell, mortgage, lease, etc.,

as to an undivided 0.028238235 interest,

DIANA WORTHINGTON KRIEG and

JAN KRIEG,

Trustees of the Diana and Jan Krieg 1993 Trust

dated May 7, 1993,

with powers to sell, mortgage, lease, etc.,

as to an undivided 0.0159289567 interest,

CYNTHIA BANNING WORTHINGTON,

wife of James Gilbert Cliff,

as to an undivided 0.0159289567 interest,

WILLIAM JOHN WORTHINGTON and

DE NIECE WALLACE WORTHINGTON,

Trustees of the William John Wallace Worthington Revocable Trust

with powers to sell, mortgage, lease, etc.,

as to an undivided 0.0159289566 interest,

MARY ELIZABETH SMART REYNOLDS,

wife of Arthur McKinley Reynolds, III,

as to an undivided 0.013155795 interest,

LIVING DESERT RESERVE,

a California non-profit corporation,

as to an undivided 0.013155795 interest,

THE HEIRS AND DEVISEES OF PAMELA GARWOOD,

as to an undivided 0.026311600 interest,

SAMUEL A. KUHN and

EDWIN R. KUHN,

Successor Trustees of The Paloma J. Kuhn Hawaiian Trust

dated February 22, 1990, executed by

Paloma Jaeger Kuhn, as Trustor,

with powers to sell, mortgage, lease, etc.,

as to an undivided 0.005423525 interest,

CYNTHIA N. ANAMIZU,

Trustee of the Cynthia N. Anamizu Revocable Trust

dated September 21, 1999,

with powers to sell, mortgage, lease, etc.,

as to an undivided 0.00436405335 interest,

CAROLE ANAMIZU,

Trustee of the Carole Anamizu Revocable Trust

dated September 21, 1999,

with powers to sell, mortgage, lease, etc.,

as to an undivided 0.00436405335 interest,

LOUISE S. HO,

Trustee of the Louise S. Ho-McWayne Revocable Living Trust

dated November 9, 1999,

with powers to sell, mortgage, lease, etc.,

as to an undivided 0.0174562133 interest,

JAYNE H. ABE,
Trustee of the Jayne H. Abe Revocable Trust
dated November 6, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00218202668 interest,

CALVIN K. ABE,
Trustee of The Calvin K. Abe Revocable Trust
dated November 6, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00218202667 interest,

CLYDE T. ANAMIZU,
Trustee under that certain unrecorded Living Trust
dated May 23, 2001,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.00436405335 interest,

REVONDALEI YUKA BORGERDING,
wife of Jeffry John Borgerding,
as to an undivided 0.00872810665 interest,

JOHN ANTHONY FUJITO SAKURAI,
husband of Laurene Mamokuipoaloha Sakurai,
as to an undivided 0.00872810665 interest,

LUCILLE ELAINE ROBINSON,
as to an undivided 0.002150000 interest,

DAVID N. ROBINSON,
Trustee of the David N. Robinson Trust
U.T.A. restated January 12, 2005,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.007964478 interest,

JANET L. ROBINSON,
Trustee of the Nancy A. Robinson Living Trust
dated May 30, 1997,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.007964478 interest,

MICHAEL A. ROBINSON,
Trustee of the Michael A. Robinson Living Trust
dated April 7, 1999,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.007964479 interest,
J.L.P. ROBINSON LIMITED PARTNERSHIP,
a registered Hawaii limited partnership,
as to an undivided 0.192962490 interest,

WILLIAM RHETT TABER,
ALLAN ZAWTOCKI, and
WILLIAM W. PATY,
Trustees under the Will and of the Estate of
Mark Alexander Robinson, deceased in Trust,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.390361675 interest,

WILLIAM RHETT TABER,
ALLAN ZAWTOCKI, and
WILLIAM W. PATY,
Trustees under that certain Deed of Trust executed by
Mark Alexander Robinson and Mary Kapuahaulani Hart Robinson,
husband and wife, as Settlers,
dated July 30, 1953,
filed as Land Court Document No. 151326,
recorded in Liber 2720 at Page 352,
with powers to sell, mortgage, lease, etc.,
as to an undivided 0.14883606 interest,
as Fee Owner

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

PHYSICAL CHEMISTRY

LECTURE NOTES

BY

PROFESSOR

JOHN

DOUGLAS

AND

ASSISTANT PROFESSOR

JOHN

DOUGLAS

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