

December 15, 2005

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

RECEIVED
705 DEC 16 09:23
OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Dear Ms. Salmonson:

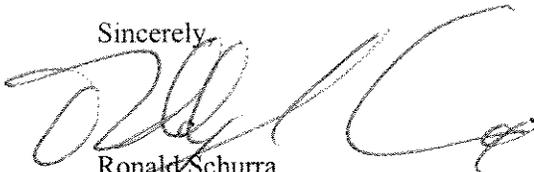
**Subject: FONSI and Final Environmental Assessment
Hilo Medical Center Parking Lot Expansion, TMK (3rd) 2-3-32:01**

Hilo Medical Center, a State of Hawaii agency, has reviewed the comments received during the 30-day comment period of the Draft EA that began on October 23, 2005, and has determined that the project will not have significant impacts. Please publish the Finding of No Significant Impact (FONSI) determination in the next available edition of the *OEQC Environmental Notice*. Attached please find the following items:

- Four (4) copies of the Final Environmental Assessment
- A completed OEQC Environmental Notice Publication Form
- A distribution list for the Final Environmental Assessment
- A hardcopy of the project summary (a version has been e-mailed to your office)
- A sample "Dear Participant" letter for the Final Environmental Assessment

If you have any questions, please call me at (808) 974-4743, or consultant Ron Terry at (808) 982-5831.

Sincerely,



Ronald Schurra
East Hawaii Region CEO

Encl.

- c. Ron Terry, Geometrician Associates, LLC (w/o encl.)
Julie-Beth Ako, Director of Clinical Support Services (w/o encl.)
Warren Okabayashi, Institution Facilities Superintendent (w/o encl.)

2006-01-08 HA FEA HILO MED CENTER PARKING LOT EXPANSION

JAN - 8 2006
FILE COPY

**FINAL ENVIRONMENTAL ASSESSMENT
HILO MEDICAL CENTER PARKING LOT
EXPANSION**

TMK (3rd): 2-3-032:01 (por.)
Pi`ihonua, South Hilo District, Hawai`i Island, State of Hawai`i

December 2005

Prepared for:

Hilo Medical Center
1190 Waianuenu Avenue
Hilo, Hawai`i 96720

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

05 DEC 16 A9:23

RECEIVED

FINAL ENVIRONMENTAL ASSESSMENT
HILO MEDICAL CENTER PARKING LOT EXPANSION

TMK (3rd) 2-3-032:01 (por.)
Pi'ihonua, South Hilo District, Island of Hawai'i, State of Hawai'i

**PROPOSING/
APPROVING AGENCY:**

Hilo Medical Center
Hawaii Health Systems Corporation
1190 Waiianuenue Avenue
Hilo, Hawai'i 96720

CONSULTANT:

Geometrician Associates LLC
HC 2 Box 9575
Keaau, Hawai'i 96749

CLASS OF ACTION:

Use of State Land and State funds

This document is prepared pursuant to:

The Hawai'i Environmental Protection Act,
Chapter 343, Hawai'i Revised Statutes (HRS), and
Title 11, Chapter 200, Hawai'i Department of Health Administrative Rules (HAR).

TABLE OF CONTENTS

SUMMARY		2
PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED AND E.A. PROCESS		3
1.1 Project Description and Location		3
1.2 Purpose and Need		3
1.3 Related Projects		4
1.4 Summary of Regulatory Requirements		4
1.5 Public Involvement and Agency Coordination		5
PART 2: ALTERNATIVES		6
2.1 No Action		6
2.2 Alternative Locations and Strategies		6
PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION		7
3.1 Physical and Biological Environment		7
3.1.1 Geology, Soils and Geologic Hazard		7
3.1.2 Drainage, Water Features and Water Quality.....		8
3.1.3 Air Quality, Noise and Scenic Resources.....		9
3.1.4 Flora, Fauna, and Ecosystems		10
3.1.5 Hazardous Substances, Toxic Waste, and Hazardous Conditions		13
3.2 Socioeconomic and Cultural		13
3.2.1 Socioeconomic Characteristics.....		13
3.2.2 Cultural Setting		14
3.2.3 Archaeology and Historic Sites.....		17
3.3 Infrastructure		18
3.3.1 Utilities		18
3.3.2 Roadways		18
3.4 Secondary and Cumulative Impacts.....		19
3.5 Required Permits and Approvals.....		19
3.6 Consistency With Government Plans and Policies.....		20
3.6.1 Hawai'i State Plan		20
3.6.2 Hawai'i County General Plan and Zoning		20
3.6.3 Hawai'i State Land Use Law.....		21
PART 4: DETERMINATION.....		21
PART 5: FINDINGS AND REASONS.....		21
REFERENCES		23
LIST OF TABLES		
TABLE 1A Project Site Plant Species List		11
TABLE 2 Selected Socioeconomic Characteristics		14
APPENDIX 1	FIGURES	
	1. PROJECT AREA USGS MAP	
	2. PROJECT AREA TMK MAP	
	3. SITE PLAN	
	4. PROJECT SITE PHOTOGRAPHS	
	5. FLOOD ZONE MAP	
APPENDIX 2	Letter Report on Archaeological and Cultural Resources	
APPENDIX 3	Comments in Response to Pre-Consultation	
APPENDIX 4	Comments in Response to the Draft EA and Responses (Final EA only)	

**SUMMARY OF THE PROPOSED ACTION
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Hilo Medical Center (HMC) plans to add to its existing employee and visitor parking area on the south side of Waianuenue Avenue by expanding and improving parking facilities for 450-520 cars on approximately 8 acres of unencumbered State land. The expansion would primarily serve HMC visitors and employees, but would also function as overflow parking for adjacent medical facilities. The project will be accomplished in several phases, with Phase I consisting of unpaved (gravel) parking surface; later phases will involve incremental paving, until the entire parking lot is eventually paved. The parking lot design also includes median strips, overhead lighting, and landscaped buffer zones for adjacent properties. Parking expansion is needed because existing parking facilities are undersized and substandard; both visitor and employee use is expected to increase over the next few decades; and construction of adjacent medical facilities will displace areas currently used for HMC parking.

The proposed project will not increase the volume of vehicular users and will improve access and safety for parkers and pedestrians. The contractor will be required to develop a traffic control plan during the design phase to minimize congestion and maintain access to adjacent properties during construction. The contractor will obtain an NPDES permit and develop and implement a Storm Water Pollution Prevention Plan (SWPPP) to contain sediment and storm water runoff during construction. Furthermore, construction equipment will be kept in good working condition, and significant fuel leaks or spills, if they occur, will be properly cleaned up and disposed of at an approved site. The area will be landscaped to preserve and enhance the visual quality of the area. Archaeological and cultural surveys have determined that no significant historic sites or cultural resources are present on this former candeland; if archaeological resources are encountered during land-altering activities associated with construction, work in the immediate area of the discovery will be halted and the State Historic Preservation Division will be contacted.

Sensitive receptors to noise exist and the contractor will be required to consult with the Department of Health, and, if appropriate, obtain a permit per Title 11, Chapter 46, HAR (Community Noise Control) prior to construction, which may include various mitigation measures.

**PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED
AND ENVIRONMENTAL ASSESSMENT PROCESS**

1.1 Project Description and Location

Hilo Medical Center (HMC) plans to add to its existing employee and visitor parking area on the south side of Waianuenue Avenue by expanding and improving parking facilities on about 8 acres of unencumbered State land (Figures 1-3). The expansion would primarily serve HMC visitors and employees, but would also function as overflow parking for the new State Veterans Home and the possible expansion of the Hawai'i Pacific Oncology Center. The additional area will accommodate 450-520 parking spaces, as illustrated in the Site Plan (Fig. 3). The project will be accomplished in several phases, with Phase I consisting of an unpaved (gravel) parking surface; later phases will involve incremental paving, until the entire parking lot is eventually paved. The timeframe for the project is as-yet undetermined, but design is expected to begin within two months of the issuance of the FONSI. The parking lot design also includes median strips, overhead lighting, and landscaped buffer zones for adjacent properties. Access to the parking lot will be via two driveways opposite the entrances to the State Veterans Home on Waianuenue Avenue, which is under construction. Access to the remaining portion of the 39.171-acre State parcel, for which there are no current development plans, will be provided via the main parking lane. It should be noted that the Site Plan is conceptual in nature and may be altered somewhat during final design. HRS 103-D 408 requires use of recycled glass in paving materials whenever and wherever possible in public building projects, and contractors will be made aware of this requirement.

1.2 Purpose and Need

Parking at Hilo Medical Center currently takes place within a 1.857-acre paved parking lot (TMK 2-2-32:09) and an informal parking area (the "gravel" parking lot) on a portion of the property that is the subject of this EA. In 1982 this area was designated as temporary parking (for a period of no longer than five years) but has been in continuous use since then. A request to the State for expansion was granted in 1993, and parking area here now totals several acres. Although the gravel parking lot provides an important service for HMC, it has poor drainage, no lighting, substandard road access, and inadequate pedestrian crossing facilities. There are also various small parking areas surrounding existing buildings on the north side of Waianuenue Avenue.

Parking expansion is needed for several reasons:

- Existing parking facilities are inadequate and substandard for the present use;
- Both visitor and employee use is expected to increase over the next few decades; and
- Construction and use of new facilities such as the State Veterans Home will further reduce the number of currently available spaces.

The parking expansion is urgently needed, as construction of the State Veterans Home has begun, precluding any use of the old hospital site for parking. The expanded parking would promote public health and safety by improving access to medical services for the East Hawai'i community. The Hilo Medical Center is the most important medical facility on the island, and therefore it is prudent to adopt a proactive strategy to provide it adequate infrastructure.

1.3 Related Projects

The former Hilo Hospital, just makai of the current Hilo Medical Center, has been demolished to make way for the State Veterans Home. The 95-bed care home will be Hawai'i's first military veterans home. The U.S. Veterans Administration will provide 65 percent of the construction costs for the \$28 million facility, slated to open in late 2006 or early 2007. The State Veterans Home contains required onsite parking, but the proposed parking lot will have the added benefit of providing overflow parking, which may be useful for especially busy days such as ceremonies honoring veterans.

1.4 Summary of Regulatory Requirements

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai'i Revised Statutes (HRS). This law, along with its implementing regulations, Title 11, Chapter 200, of the Hawai'i Administrative Rules (HAR), is the basis for the environmental impact process in the State of Hawai'i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. Part 4 of this document states the anticipated finding that no significant impacts are expected to occur; Part 5 lists each criterion and presents the preliminary findings for each made by the Hilo Medical Center, the proposing entity. If, after considering comments to the Draft EA, the proposing agency concludes that, as anticipated, no significant impacts would be expected to occur, then the agency will issue a Finding of No Significant Impact (FONSI), and the action will be permitted to occur. If the agency concludes that significant impacts are expected to occur as a result of the proposed action, then an Environmental Impact Statement (EIS) will be prepared.

1.5 Public Involvement and Agency Coordination

The following agencies and organizations were consulted in development of the environmental assessment.

State:

Department of Land and Natural Resources, Director
Department of Land and Natural Resources, Historic Preservation Division

County:

Planning Department

Public Works Department
Police Department
County Council

Organizations and Individuals

ARC of Hilo
Kaiser Foundation Health Plan, Inc.
Hospice of Hilo
Mr. & Mrs. Richard Henderson
Dr. Wanda Meurs
Hale Anuenu
Pi'ihonua Houselots Community Association

Copies of communications received during preconsultation are contained in Appendix 4. Project consultants shared information about the project at a meeting of the Pi'ihonua Houselots Community Association on December 11, 2004. Appendix 4 contains written comments on the Draft EA and the responses to these comments. Various places in the EA have been modified to reflect input received in the comment letters; additional or modified non-procedural text is denoted by double underlines, as in this paragraph.

PART 2: ALTERNATIVES

2.1 No Action

Under the No Action Alternative, the parking lot expansion would not occur. Parking for visitors and employees of the Hilo Medical Center would remain insufficient and substandard. With future increased use of the Hilo Medical Center and expansion of associated facilities, there would be a continual degradation in the ease of access, the safety of parking and pedestrian crossing, and the security and safety of those using the parking lot.

2.2 Alternative Locations and Strategies

During early phases of project planning, Hilo Medical Center officials examined the area and determined that expansion of the existing parking lot site would provide the best overall location for the required function, being directly across Waianuenue Avenue from the Medical Center and adjacent to the existing parking lot. As there do not appear to be any environmental or other disadvantages associated with the proposed site, and no other vacant land is available nearby, no alternative sites have been advanced for study in the Environmental Assessment. The proposed site also has the advantage of being State property and will thus be available to the Hilo Medical Center for negligible or no cost, and acquisition will therefore not impose a financial burden on the public.

Alternative strategies, such as requiring or encouraging (through parking fees) employees, contractors or visitors to utilize public transit have been found to have merit in reducing parking need for medical facilities in urban areas. Bus routes in Hilo, however, cover only a fraction of the town and outlying areas, and they have relatively infrequent schedules. For the foreseeable future, the public transit system in Hilo will not adequately serve Hilo Medical Center. In any case, use of this area for a parking lot does not foreclose its use for other State purposes if at some future time there is less need for parking in this area.

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Basic Geographic Setting

The property upon which the new parking area would be constructed is referred to throughout this EA as the *project site*. The term *project area* is used to describe the Hilo Medical Center campus, associated facilities, and surrounding areas.

The proposed project site is located at approximately 480 feet in elevation on Waianuenue Avenue, across the street from the main buildings of Hilo Medical Center and adjacent to the existing paved parking lot (see Figs. 1-3). The vegetation of this area has been extensively modified by agriculture, and most of the project site is vegetated with non-native grasses, shrubs and trees. The remainder of the gravel- and soil-covered project site is currently used as an employee parking lot.

The average maximum daily temperature in the project area is approximately 75 degrees F., with an average minimum of 65 degrees, and annual rainfall averages approximately 200 inches (U.H. Hilo-Geography 1998:57). Adjacent land is primarily utilized by medical facilities, including the long-term care facility Hale Anuenue and the Hawaii Pacific Oncology Center. Directly across Waianuenue Avenue from the proposed project area is site of the former Hilo Hospital, which has been demolished for redevelopment of the site as the State Veterans Home long-term care facility, expected to open by January 2006. Land adjacent to the rear (i.e., south) of the property is presently used as pasture or is vacant, vegetated land.

3.1 Physical Environment

3.1.1 Geology, Soils and Geologic Hazards

Environmental Setting

Geologically, Pi'ihonua is located on the lower flank of Mauna Loa near Wailuku Stream (commonly called the Wailuku River). The surface consists of weathered ash soils on Pleistocene-era (greater than 10,000 years old) lava flows from Mauna Loa. The project site soil is classified by the National Resources Conservation Service (formerly Soil Conservation Service) as Hilo silty clay loam, which forms on layers of volcanic ash. Permeability is rapid, runoff moderate, and erosion hazard slight to moderate (U.S. Soil Conservation Service 1973).

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. Volcanic hazard as assessed by the United States Geological Survey in this area of Hilo is 3 on a scale of ascending risk 9 to 1 (Heliker 1990:23). The high hazard risk is based on the fact Mauna Loa is presently an active volcano. Volcanic hazard zone 3 areas have had 1-5% of land area covered by lava or ash flows since the year 1800, and are at lower risk than zone 2 areas because

of their greater distances from recently active vents and/or because the local topography makes it less likely that flows will cover these areas.

In terms of seismic risk, the entire Island of Hawai'i is rated Zone 4 Seismic Probability Rating (*Uniform Building Code, 1997 Edition, Figure 16-2*). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built. The project site does not appear to be subject to subsidence, landslides or other forms of mass wasting.

Impacts and Mitigation Measures

In general, geologic conditions impose no constraints on the proposed action, and the proposed parking lot expansion is not imprudent to implement.

3.1.2 Drainage, Water Features and Water Quality

Existing Environment

The Pi'ihonua district has a number of surface water bodies, including Wailuku Stream, which is located about 0.2 miles north of the project site. A small gulch containing a transient stream is found to the rear (i.e., south) of the project site. A small perennial tributary stream also flows about 0.2 miles south of the project site and merges with Wailuku Stream near Carvalho Park at the intersection of Kaumana Drive and Waianuenue Avenue. Additionally, a number of artesian springs are found approximately 0.2 miles south of the project site. Although some minor seeps are present just south of the project site, no streams or springs appear to be present on the site itself.

The *Hawai'i Stream Assessment* (Hawai'i State CWRM 1990) inventoried streams statewide (including over a hundred on the Hilo/Hamakua coast) for their water quality/supply, habitat, cultural and recreational resource value. Streams are ranked in various resources categories. Of particular importance are the *Candidate Streams for Protection*, which meet the criteria for either diversity of outstanding resources or "blue-ribbon resources." Four such streams are present on the Hamakua/Hilo coast: Waikoloa, Kolekole, Honoli'i, and Wailuku Streams. Wailuku Stream is listed as a candidate for both its scenic and recreational characteristics.

No stream poses a flooding hazard to the project site. The Flood Insurance Rate Map (FIRM) 880C (9/16/88) shows that most of the parking lot is within Zone X, outside of the 500-year flood plain, with the southern extremity within Flood Zone A (Figure 5). A parking lot is an acceptable and legal use within a floodplain, but there are regulations concerning emplacing fill.

Impacts and Mitigation Measure

Because of the scale of the proposed project and the environmental setting, the potential for impacts to water quality exist. In order to minimize the potential for sedimentation and erosion,

the contractor shall perform all earthwork and grading in conformance with Chapter 10, Erosion and Sediment Control, Hawai'i County Code. Because the project will disturb more than one acre, an NPDES permit must be obtained by the contractor before the project commences. This permit requires the completion of a Storm Water Pollution Prevention Plan (SWPPP). In order to properly manage storm water runoff, the SWPPP will describe the emplacement of a number of best management practices (BMPs) for the project. These BMPs may include, but will not be limited to, the following:

- Minimization of soil loss and erosion by revegetation and stabilization of slopes and disturbed areas of soil, possibly using hydromulch, geotextiles, or binding substances, as soon as possible after working;
- Minimization of sediment loss by emplacement of structural controls possibly including silt fences, gravel bags, sediment ponds, check dams, and other barriers in order to retard and prevent the loss of sediment from the site;
- Minimizing disturbance of soil during periods of heavy rain;
- Phasing of the project in order to disturb a minimum necessary area of soil at a particular time;
- Application of protective covers to soil and material stockpiles;
- Construction and use of a stabilized construction vehicle entrance, with designated vehicle wash area that discharges to a sediment pond;
- Washing of vehicles in the designated wash area before they egress the project site;
- Use of drip pans beneath vehicles not in use in order to trap vehicle fluids;
- Routine maintenance of BMPs by adequately trained personnel;
- Coordination of storm water BMPs and wind erosion BMPs whenever possible; and
- Significant leaks or spills, if they occur, shall be properly cleaned up and disposed of at an approved site.

Both the unpaved (temporary) and paved parking areas will include engineered drainage, in conformance with applicable regulations, that will promote infiltration of storm water runoff and will therefore serve to both protect and improve area surface water quality in the long-term, and also will prevent storm water runoff from leaving the site. The Hawai'i County Department of Public Works will be consulted during design and all applicable regulations concerning the floodplain will be adhered to.

3.1.3 Air Quality, Noise, and Scenic Resources

Environmental Setting

Air pollution in East Hawai'i is minimal, and is mainly derived from volcanic emissions of sulfur dioxide, which convert into particulate sulfate and produce a volcanic haze (vog) that occasionally blankets the district. Persistent tradewinds keep the project area free of vog for most of the year.

Noise at the project site is low and derived mainly from motor vehicles, residential and road maintenance activities. HMC and associated facilities are sensitive receptors to noise.

The project area contains several sites that are considered significant for their scenic character in the Hawai'i County General Plan, including both Rainbow Falls and Kaimukanaka Falls located makai of Hilo Medical Center and Boiling Pots, mauka of the project site. The project site is not visible from these sites or lookouts for these sites, and is at a sufficient distance so that it will not affect the character or visual quality of these resources.

Impacts and Mitigation Measures

There may be short-term impacts to air quality and noise levels during construction. Due to the sensitive nature of nearby facilities, particular care should be taken to minimize these short-term impacts. During dry periods the potential for fugitive dust emissions exists due to disturbance of soil. Adherence to best management practices (BMPs), including, but not limited to, covering stockpile materials and routine watering of bare, disturbed soil and fill/stockpile materials during dry periods may minimize this potential.

Development would entail limited excavation, grading, blasting, compressors, vehicle and equipment engine operation, and construction of new infrastructure. These activities would generate noise exceeding 95 decibels at times, impacting nearby sensitive noise receptors. In cases where construction noise is expected to exceed the Department of Health's (DOH) "maximum permissible" property-line noise levels, contractors would obtain a permit per Title 11, Chapter 46, HAR (Community Noise Control) prior to construction. DOH would review the proposed activity, location, equipment, project purpose, and timetable in order to decide upon conditions and mitigation measures, such as restriction of equipment type, maintenance requirements, restricted hours, and portable noise barriers.

Removal of existing non-native trees and vegetation would be required in order to site the project on the property. Final parking lot design is expected to include a landscaping plan that will incorporate both planted areas and retention of naturally occurring vegetation, as generally indicated in Figure 3. The removal of existing trees would not substantially affect the scenic character of the project area. No important viewplanes or scenic sites recognized in the Hawai'i County General Plan would be affected. HRS 103-D-4-7 requires use of native Hawaiian flora wherever possible in public building projects, and the landscape plan will include this.

3.1.3 Flora, Fauna and Ecosystems

Existing Environment

The natural vegetation of this part of Hilo was most likely lowland rain forest dominated by 'ohi'a (*Metrosideros polymorpha*) and koa (*Acacia koa*) (Gagne and Cuddihy 1990). These original

Table 1: Project Site Plant Species List

Scientific Name	Family	Common Name	Life Form	Status*
DICOTS				
Mangifera indica	Anacardiaceae	Mango	Tree	A
Centella asiatica	Apiaceae	Asiatic Pennywort	Herb	A
Schefflera actinophylla	Araliaceae	Octopus Tree	Tree	A
Bidens pilosa	Asteraceae	Beggar's Tick	Herb	A
Emilia sonchifolia	Asteraceae	Hairy Horseweed	Herb	A
Pluchea symphytifolia	Asteraceae	Fleabane	Shrub	A
Synedrella nodiflora	Asteraceae	Synedrella	Herb	A
Wedelia trilobata	Asteraceae	Wedelia	Herb	A
Begonia sp.	Begoniaceae	Begonia	Herb	A
Spathodea campanulata	Bignoniaceae	African Tulip	Tree	A
Buddleia asiatica	Buddleiaceae	Buddeia	Shrub	A
Hippobroma longiflora	Campanulaceae	Star-of-Bethlehem	Herb	A
Sambucus mexicana	Caprifoliaceae	Mexican Elder	Shrub	A
Drymaria cordata	Caryophyllaceae	Pipili	Herb	A
Silene gallica	Caryophyllaceae	Catchfly	Herb	A
Clusia rosea	Clusiaceae	Autograph Tree	Tree	A
Ipomea alba	Convolvulaceae	Moon Flower	Vine	A
Ipomea sp.	Convolvulaceae	Morning Glory	Vine	A
Chamaesyce hirta	Euphorbiaceae	Spurge	Herb	A
Macaranga mappia	Euphorbiaceae	Bingabing	Shrub	A
Manihot esculenta	Euphorbiaceae	Cassava	Shrub	A
Phyllanthus debilis	Euphorbiaceae	Niruri	Herb	A
Paraserianthes falcataria	Fabaceae	Albizia	Tree	A
Desmodium incanum	Fabaceae	Spanish Clover	Herb	A
Desmodium triflorum	Fabaceae	None	Herb	A
Mimosa pudica	Fabaceae	Sleeping Grass	Herb	A
Prunella vulgaris	Lamiaceae	Self-heal	Herb	A
Dissotis rotundifolia	Melastomataceae	Dissotis	Herb	A
Melastoma candidum	Melastomataceae	Melastoma	Shrub	A
Ficus microcarpa	Moraceae	Banyan	Tree	A
Ardisia elliptica	Myrsinaceae	Shoebuttan Ardisia	Tree	A
Eucalyptus deglupta	Myrtaceae	Painted Gum	Tree	A
Eucalyptus robusta	Myrtaceae	Swamp Mahogany	Tree	A
Psidium cattleianum	Myrtaceae	Waiawi	Tree	A
Psidium guajava	Myrtaceae	Guava	Tree	A
Ludwigia octovalis	Onagraceae	Primrose Willow	Herb	A
Oxalis corymbosa	Oxalidaceae	Wood-Sorrel	Herb	A
Rubus rosifolius	Rosaceae	Thimbleberry	Herb	A
Paederia scandens	Rubiaceae	Maile Pilau	Vine	A
Filicium decipiens	Sapindaceae	Fern Tree	Tree	A
Melochia umbellata	Sterculiaceae	Melochia	Tree	A
Trema orientalis	Ulmaceae	Gunpowder Tree	Tree	A
Citharexylum spinosum	Verbenaceae	Fiddlewood	Tree	A
Stachytarpheta jamaicensis	Verbenaceae	Stachytarpheta	Herb	A

Table 1, cont'd				
Scientific Name	Family	Common Name	Life Form	Status*
MONOCOTS				
<i>Cordyline fruticosa</i>	Agavaceae	Ki	Shrub	A
<i>Alocasia macrorrhiza</i>	Araceae	Ape	Herb	A
<i>Dieffenbachia</i> sp.	Araceae	Dumbcane	Shrub	A
<i>Philodendron</i> sp.	Araceae	Philodendron	Vine	A
<i>Scindapsus aureus</i>	Araceae	Taro Vine	Vine	A
<i>Syngonium</i> sp.	Araceae	Syngonium	Vine	A
<i>Archontophoenix alexandrae</i>	Arecaceae	Alexandra Palm	Tree	A
<i>Commelina diffusa</i>	Commelinaceae	Honohono	Herb	A
<i>Cyperus halpan</i>	Cyperaceae	Sedge	Herb	A
<i>Cyperus</i> af. <i>laevigatus</i>	Cyperaceae	Sedge	Herb	I
<i>Kyllinga brevifolia</i>	Cyperaceae	Sedge	Herb	A
<i>Pycreus polystachyos</i>	Cyperaceae	Sedge	Herb	A
<i>Musa</i> sp.	Musaceae	Banana	Shrub	A
<i>Arundina graminifolia</i>	Orchidaceae	Bamboo Orchid	Herb	A
<i>Andropogon virginicus</i>	Poaceae	Broomsedge	Herb	A
<i>Brachiaria mutica</i>	Poaceae	California grass	Herb	A
<i>Coix lachryma-jobi</i>	Poaceae	Job's Tears	Herb	A
<i>Digitaria violascens</i>	Poaceae	Smooth Crabgrass	Herb	A
<i>Digitaria</i> sp.	Poaceae	Crabgrass	Herb	A
<i>Melinis minutiflora</i>	Poaceae	Molasses Grass	Herb	A
<i>Panicum maximum</i>	Poaceae	Guinea Grass	Herb	A
<i>Panicum repens</i>	Poaceae	Wainaku Grass	Herb	A
<i>Paspalum conjugatum</i>	Poaceae	Hilo Grass	Herb	A
<i>Saccharum officinarum</i>	Poaceae	Sugar Cane	Herb	A
<i>Sacciolepis indica</i>	Poaceae	Glenwood Grass	Herb	A
<i>Schizachyrium condensatum</i>	Poaceae	None	Herb	A
<i>Setaria palmifolia</i>	Poaceae	Palm Grass	Herb	A
<i>Hedychium flavescens</i>	Zingiberaceae	Yellow Ginger	Herb	A
FERNS AND FERN ALLIES				
<i>Diplazium esculentum</i>	Athyriaceae	Paca	Herb	A
<i>Blechnum appendiculatum</i>	Blechnaceae	Blechnum	Herb	A
<i>Nephrolepis exaltata</i>	Nephrolepidaceae	Sword Fern	Herb	I
<i>Phelbodium aureum</i>	Polypodiaceae	Laua'e Haole	Herb	A
<i>Lepisorus thunbergianus</i>	Polypodiaceae	Pakahakaha	Herb	I
<i>Phymatosorus grossus</i>	Polypodiaceae	Maile Scented Fern	Herb	A
<i>Adiantum raddianum</i>	Pteridaceae	Common Maidenhair	Herb	A
<i>Lygodium japonicum</i>	Schizaeaceae	Japanese Climbing Fern	Herb	A
<i>Christella dentata</i>	Thelypteridaceae	Downy Wood Fern	Herb	A

A = alien, E = endemic, I = indigenous, End = Federal and State listed Endangered Species

communities, however, have been destroyed or heavily degraded by sugarcane cultivation, cattle grazing, and clearing for farms and residences, and the vegetation of the project area is now either managed vegetation (i.e., farms, pasture or landscaped grounds) or adventive "communities" of various alien weeds. A walk-through biological survey of the project site was performed in October 2004. Table 1 is a list of plant species detected.

No listed, candidate or proposed endangered plant species were found or would be expected to be found on the project site. In terms of conservation value, no botanical resources requiring special protection are present.

Hawaiian Hawks (*Buteo solitarius*) and Hawaiian hoary bats (*Lasiurus cinereus semotus*) are often seen in the area. Both are listed endangered species, and both are commonly observed in many parts of East Hawai'i.

Impacts and Mitigation Measures

Because of the lack of native ecosystems, or threatened or endangered plant species, no adverse impacts to botanical resources would occur as a result of clearing and improvements. The soil retention and erosion preventing function of vegetation will be replaced with proper structural measures, as specified in the Storm Water Pollution Prevention Plan discussed in Section 3.1.2.

Although the native trees favored by Hawaiian Hawks for nesting are not present in the alien vegetation on the project site, there is at least some possibility that clearing could affect a nesting pair of hawks on this or nearby land. If disturbed while sitting on eggs, or caring for young, adult birds may abandon the nest, thus putting their eggs or young at grave risk of harm or death. To reduce the potential for interactions between clearing and grubbing activity and nesting Hawaiian Hawks, it is recommended that such activities not take place during the breeding season, which extends from March through July. If this is unavoidable, it is recommended that audio playback nesting activity surveys be conducted by a qualified ornithologist using currently approved protocols within the areas slated for clearing, prior to the commencement of such activities. If nesting activity is detected, consultation with the U. S. Fish & Wildlife Service will be required.

The principal potential impact that the project poses to the endangered Hawaiian hoary bat is during the clearing and grubbing of the site. Female bats while caring for their young are extremely vulnerable to disturbance. While carrying young and feeding them the adult bats are under immense stress and move relatively slowly. If a lactating bat carrying young were to be roosting in vegetation that was removed during clearing and grubbing operations it is possible that she would not be able to flee the vegetation as it was being cleared. To reduce the potential for interactions between clearing and grubbing activity and Hawaiian hoary bats, it is recommended that clearing and grubbing not be undertaken during the period that bats are caring for young, which occurs between the months of June and August.

3.1.5 Hazardous Substances, Toxic Waste, and Hazardous Conditions

Based upon prior and present use of the project site, no hazardous substances, toxic wastes, or hazardous conditions are expected to be present on the site.

3.2 Socioeconomic and Cultural

3.2.1 Socioeconomic Characteristics

The project would primarily affect and benefit the district of South Hilo, although the project area facilities are a resource to the entire County. Table 2 provides information on the socioeconomic characteristics of Hilo along with those of Hawai'i County as a whole for comparison, from the 2000 U.S. Census of Population.

Impacts

The proposed project would benefit public health by enhancing access to quality health care in the area and would have no negative impacts.

Table 2
Selected Socioeconomic Characteristics

CHARACTERISTIC	ISLAND OF HAWAII	SOUTH HILO
Total Population	148,677	36,836
Percent Caucasian	31.5	15.8
Percent Asian	26.7	39.6
Percent Hawaiian	9.7	13.3
Percent Two or More Races	28.4	26.5
Median Age (Years)	38.6	38.0
Percent Under 18 Years	26.1	25.8
Percent Over 65 Years	13.5	15.8
Percent Households with Children	21.3	37.8
Average Household Size	2.75	2.85
Percent Housing Vacant	15.5	9.6

Source: U.S. Bureau of the Census. May 2001. *Profiles of General Demographic Characteristics, 2000*, *Census of Population and Housing, Hawai'i*. (U.S. Census Bureau Web Page).

3.2.2 Cultural Setting

Existing Environment

A letter report providing cultural and archaeological information for the project site, including its context in the ahupua'a of Pi'ihonua, was written by Rechtman Consulting, Inc. It is attached as Appendix 2 and summarized in this and the next section, which also includes information from other sources.

The purpose of the study was to document the presence of any historic properties or traditional cultural properties that might exist within the project area, assess the significance of any such resources, and provide a statement of impact to any such resources as a result of the proposed construction of the parking lot. The study used historic maps and documents, archaeological summaries of the area, and field investigation. This information provided a context for the search for potential historic or traditional cultural properties.

The earliest historical knowledge of Hilo comes from legends written by Kamakau (1961) of a 16th century chief 'Umi-a-Liloa (son of Liloa), who at that time ruled the entire island of Hawai'i. Descendants of Umi and his sister-wife were referred to as "Kona" chiefs, controlling Ka'ū, Kona, and Kohala, while descendants of Umi and his Maui wife were "Hilo" chiefs, controlling Hāmākua, Hilo, and Puna (Kelly 1981:1). According to Kamakau (1961), both sides fought over control of the island, desiring access to resources such as feathers, *māmaki* tapa, and canoes on the Hilo side, and *wauke* tapa, and warm lands and waters on the Kona side (c.f. Kelly 1981:3).

Sometime near the end of the 16th century or early in the 17th century, the lands of Hilo were divided into *ahupua'a*, which till today retain their original names (Kelly 1981:3). These include the *ahupua'a* of Pu'u'eo, Pi'ihonua, Punahoa, Pōnohawai, Kūkūau and Waiākea. The design of these land divisions was such that residents could have access to all that they needed to live, with ocean resources at the coast, and agricultural and forest resources in the interior. However, only Pi'ihonua and Waiākea provided access to the full range of resources stretching from the sea up to 6,000 feet along the slopes of Mauna Kea (Kelly 1981:5).

Historical accounts (McEldowney 1979) place the current study area in a zone of agricultural productivity. As Isabella Bird recorded upon arriving in Hilo in 1873:

"Above Hilo, broad lands sweeping up cloudwards, with their sugar cane, *kalo*, melons, pine-apples, and banana groves suggest the boundless liberality of Nature"
(Bird 1964:38).

Handy and Handy (1972) also describe the general region as an agricultural area:

"On the lava strewn plain of Waiakea and on the slopes between Waiakea and Wailuku River, dry taro was formerly planted wherever there was enough soil.

There were forest plantations in Panaewa and in all the lower fern-forest zone above Hilo town along the course of the Wailuku River” (Handy and Handy 1972:539).

Maly (1996) refers to a 1922 article from the Hawaiian Language newspaper, *Ka Nupepa Kū'oku'a*, where planting on *pāhoehoe* lava flats is described:

“There are *pāhoehoe* lava beds walled in by the ancestors in which sweet potatoes and sugar cane were planted and they are still growing today. Not only one or two but several times forty (*mau ka'au*) of them. The house sites are still there, not one or two but several times four hundred in the woods of the Panaewa. Our indigenous bananas are growing wild, these were planted by the hands of our ancestors” (Maly 1996:A-2).

Pi'ihonua Ahupua'a

As part of an archaeological assessment study, Maly (1996) conducted historical research for the lands of Wainaku, Pōnohawai, Waiākea, and Pi'ihonua. He discusses the significance of the use of the Hawaiian word *wai* in the place names: Pōnohawai, Waiākea, Wainaku, and Wailuku (River). According to Maly, the word *wai* (water) has strong metaphorical associations with the Hawaiian concept of wealth (*waiwai*), stressing its cultural importance (Maly 1996:A-2). In this context, the importance of Hilo can be better understood, with its copious streams that fed taro pondfields and its numerous fishponds. Maly refers to the origins of the names Waiākea and Pi'ihonua in the Hawaiian legend of Ka'ao Ho'onuiua Pu'uwai no Ka-Miki. Pi'ihonua literally translates to: “Ascending Earth,” and the *ahupua'a* is named for Pi'ihonua-a-ka-lani, the brother of Waiākea and Pana'ewa, and the father of the chiefesses 'Ohele and Waiānuenue (Maly 1996:A-4).

Pi'ihonua along with Punahoa and Waiākea were held by Kamehameha I until the time of his death in 1819, at which time his holdings, including Pi'ihonua, were passed down to his son, Liholiho. Kelly (1981) speculates that Pi'ihonua may have been given to Chief Kalaeokekio by Kauikeaouli or Boki in 1828. Pi'ihonua was surrendered at the time of the *Māhele* and classified as Crown Land (Kelly 1981); no *kuleana* claims were registered for lands in the vicinity of the current subject property (Maly 1996). Following the *Māhele*, the population of Hilo grew and the scattered upland habitations gave way to sugar cultivation (McEldowney 1979:37). At the turn of the century, there were remnants of *heiau* and at least one intact *heiau* within Pi'ihonua. Thrum (1907) describes a *heiau* named Kaipālaloa that had been destroyed and another called Papio, which was purportedly for bird catchers and canoe builders. Stokes (1991) reported another *heiau* in Pi'ihonua called Pinao that was once located near the intersection of Waiānuenue and Ululani Streets (Maly 1996).

Beginning in the late 1880s Pi'ihonua was home to the Hawaii Mill Company, built on the Alenaio Stream (Kelly 1981). By 1905, according to Thrum (1923) the Hawaii Mill Company had 10 miles of cane flumes and produced twenty-five tons of sugar per day. In 1920 Hawaii Mill Company was taken over by the Hilo Sugar Company (Kelly 1981). Commercial sugar

production lasted in Pi'ihonua until the mid twentieth century, at which time many of the fields were converted to pasturage associated with cattle ranching.

The subject property has been extensively disturbed by mechanized sugar cane agriculture. As discussed in the next section, no significant archaeological remains reflecting cultural history or supporting cultural values appear to be present. Furthermore, no caves, springs, pu'u, native forest groves, gathering resources or other natural features are present on or near the project site. The vegetation is highly disturbed and does not contain the quality and quantity of resources that would be important for native gathering.

Impacts and Mitigation Measures

As part of the current study an effort was made to obtain information about any potential traditional cultural properties and associated practices that might be present, or have taken place in upper Pi'ihonua Ahupua'a. The Office of Hawaiian Affairs (East Hawai'i) and the Hilo Hawaiian Civic Club were contacted but had no information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating current use of the area for traditional and customary practices.

As no resources or practices of a potential traditional cultural nature (i.e., landform, vegetation, etc.) appear to be present on or near the project site, and there is no evidence of any traditional gathering uses or other cultural practices, the proposed construction and maintenance of the parking lot would not appear to impact any culturally valued resources or cultural practices.

3.2.3 Archaeology and Historic Sites

Existing Environment

A letter report providing cultural and archaeological information for the project site, including its context in the ahupua'a of Pi'ihonua, was written by Rechtman Consulting, Inc. It is attached as Appendix 2 and summarized in this and the previous section.

Several archaeological studies of various portions of this particular State property have been conducted over the years as part of site suitability analyses for proposed activities. Basically, the entire property has been surveyed and no significant historic sites have been identified on the project site. On October 18, 2004, a team of archaeologists conducted an intensive on-foot survey of the project area and determined that no archaeological resources or other historic properties were present.

Impacts and Mitigation Measures

In a letter of October 4, 2005 (see end of App. 2), the State Historic Preservation Division concurred that the proposed action would have no effect on historic properties.

In the unlikely event that archaeological resources are encountered during future development activities within the current study area, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawai'i Administrative Rules 13§13-275-12.

3.3 Infrastructure

3.3.1 Utilities

Existing Facilities and Services

Electrical power to the project site is supplied by Hawai'i Electric Light Company (HELCO), a privately owned utility company regulated by the State Public Utilities Commission, via their island-wide distribution network.

Telephone service is available, but not required, for the project. No wastewater system is available or necessary for the project.

Impacts and Mitigation Measures

The proposed action would require electricity for parking lot lighting but would not have any substantial impact on existing electrical facilities or HELCO's ability to provide electricity. Appropriate coordination with HELCO will be conducted during the design and construction of the improvements. No other utilities will be affected in any way.

3.3.2 Roadways

Existing Facilities

Waiuanue Avenue, which provides access to the existing parking areas (see Figs. 1-3), is a relatively narrow two-lane facility with only intermittent shoulders, maintained by the County of Hawai'i. A pedestrian crosswalk with a signal and warning lights is present at the entrance to the existing paved parking lot, but no crossing facility is present at the gravel parking lot.

Impacts and Mitigation Measures

Access to the parking lot will be via two driveways opposite the entrances to the State Veterans Home on Waiuanue Avenue. The parking lot will connect with the existing paved lot via an interior lane. Final design and consultation with the Hawai'i County Planning Department will determine which road and shoulder improvements will be required near the driveways.

In the short-term, construction will cause traffic congestion. However, as little of this work will require obstruction of traffic on Waiuanue Avenue, impacts on traffic will be minimal. Furthermore, the contractor will be required to develop a traffic control plan during the design phase of the project that will outline the steps necessary to minimize congestion and maintain access to adjacent properties at all times during construction, with particular attention to access for emergency vehicles. This traffic control plan will also, through coordination with Hilo

Medical Center, devise measures to manage temporary parking for employees parking displaced by the construction activities.

Long-term, the project will have positive impacts to public and employee safety and access to medical care. Because the proposed project will only serve to improve the quality of existing parking and will not, by itself, increase vehicular users, it will have no expected negative traffic impacts. Presently, the gravel parking lot has no pedestrian walkway or crosswalk. The project will improve the situation for pedestrians crossing the street from the parking lots by including a crosswalk near the new parking lot entrance, and also a pedestrian walkway along Waianuenue Avenue that will channel pedestrians to the presently existing crosswalk.

Hawai'i State Land Division access to remaining State land behind (south) of the parking lot will be maintained through an easement across the parking lot.

3.4 Secondary and Cumulative Impacts

The proposed project will not involve any long-term secondary impacts, such as population changes or effects on public facilities, because it simply enables Hilo Medical Center to provide greater access to health care. Although the parking lot project will combine with other construction projects in this area (discussed below) to provide some short-term construction jobs, these would almost certainly be filled by local residents and would not induce in-migration.

Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. There is a potential for short-term cumulative impact from the combined effects of construction of this parking lot and the construction of the State Veterans Home. In particular, noise, traffic, air quality and erosion/sedimentation could be affected. These effects can be mitigated, however, through proper adherence to noise permits, traffic control plans, and BMPs for the Storm Water Pollution Prevention Plan. Permits are expected to take both projects into account, as there has been and will continue to be close coordination of the two projects.

Another project, the Hawai'i County Department of Water Supply's replacement of Pi'ihonua Reservoir No. 2, about a mile mauka of the project site, may also involve traffic congestion and detours on Waianuenue Avenue for short periods during construction during 2006. It is unlikely, although possible, that the traffic disruption for all three projects will coincide. It is important that project managers share schedules and consider coordination if conflicts occur. To this end, all relevant agencies have been informed of the other agencies' projects during this EA process.

3.5 Required Permits and Approvals

Hawai'i County Building Division Approval
Hawai'i County Planning Department Plan Approval
Hawai'i County Department of Public Works Grubbing and Grading Permits
Hawai'i State Department of Health National Pollutant Discharge Elimination System Permit
Hawai'i State Department of Health Underground Injection Control Permit

3.6 Consistency With Government Plans and Policies

3.6.1 Hawai'i State Plan

Adopted in 1978 and last revised in 1991 (Hawai'i Revised Statutes, Chapter 226, as amended), the Plan establishes a set of themes, goals, objectives and policies that are meant to guide the State's long-run growth and development activities. The three themes that express the basic purpose of the *Hawai'i State Plan* are individual and family self-sufficiency, social and economic mobility and community or social well-being. The proposed project would promote these goals by assisting Hilo Medical Center to provide access to high-quality health care, of benefit Hawai'i County and the Hilo community.

3.6.2 Hawai'i County General Plan and Zoning

The *General Plan* for the County of Hawai'i is a policy document expressing the broad goals and policies for the long-range development of the Island of Hawai'i. The plan was adopted by ordinance in 1989. The *General Plan* itself is organized into thirteen elements, with policies, objectives, standards, and principles for each. There are also discussions of the specific applicability of each element to the nine judicial districts comprising the County of Hawai'i. Most relevant to the proposed project are the following Standard and Course of Action:

J. Public Facilities (1): Health and Sanitation

Hospitals should be on sites capable of handling moderate expansion of facilities. Quiet surroundings, convenient and adequate access, and compatibility with adjoining uses shall be required.

Courses of Action: South Hilo: Public Facilities: Health and Sanitation:

1. Improvement and expansion of hospital facilities shall be undertaken as the need arises.

Discussion: The proposed project satisfies relevant standards and courses of action related to Public Health and Sanitation Facilities in Hawai'i County and the South Hilo District.

The *Hawai'i County General Plan Land Use Pattern Allocation Guide (LUPAG)*. The LUPAG map component of the *General Plan* is a graphic representation of the Plan's goals, policies, and standards as well as of the physical relationship between land uses. It also establishes the basic urban and non-urban form for areas within the planned public and cultural facilities, public utilities and safety features, and transportation corridors. The project site is classified as Low Density Urban in the LUPAG. The proposed project is consistent with this designation.

Hawai'i County Zoning. The project site is zoned residential (RS-10) by the County. According to the County Planning Department (letter of 11/9/04, in App. 3), the Zoning Code allows for public uses that fulfill a government function within this zone, and the proposed expansion is a permitted use, providing that Plan Approval for additional improvements is granted by the Director. The property is not situated within the County's Special Management Area (SMA).

3.6.3 Hawai'i State Land Use Law

All land in the State of Hawai'i is classified into one of four land use categories – Urban, Rural, Agricultural, or Conservation – by the State Land Use Commission, pursuant to Chapter 205, HRS. The property is in the State Land Use Urban District. The proposed use is consistent with this State Land Use designation.

PART 4: DETERMINATION

Hilo Medical Center officials have reviewed the Draft EA and comments letters, and have determined that the proposed project will not significantly alter the environment, as impacts will be minimal, and that an Environmental Impact Statement is not warranted. HMC is thus issuing a Finding of No Significant Impact (FONSI).

PART 5: FINDINGS AND REASONS

Chapter 11-200-12, Hawai'i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

1. *The proposed project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* No valuable natural or cultural resources would be committed or lost.
2. *The proposed project will not curtail the range of beneficial uses of the environment.* No restriction of beneficial uses would occur.
3. *The proposed project will not conflict with the State's long-term environmental policies.* The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The project is minor, environmentally beneficial, and fulfills aspects of these policies calling for an improved social environment. It is thus consistent with all elements of the State's long-term environmental policies.
4. *The proposed project will not substantially affect the economic or social welfare of the community or State.* The project would improve the social welfare of the community and State by improving access to health care and the improvement of health care facilities.
5. *The proposed project does not substantially affect public health in any detrimental way.* The project would affect public health and safety in only beneficial ways by improving access to health care and by assisting the improvement of health care facilities.

6. *The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.* No secondary effects are expected to result from the proposed action, which would simply allow for more visitor and employee parking at the Hilo Medical Center and nearby medical facilities.

7. *The proposed project will not involve a substantial degradation of environmental quality.* The project is minor and environmentally benign, and would thus not contribute to environmental degradation.

8. *The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.* The project site supports overwhelmingly alien vegetation. Impacts to rare, threatened or endangered species of flora or fauna will not occur.

9. *The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.* Construction of the new State Veterans Home has at least some potential to interact in such a way as to produce cumulative impacts to noise, traffic, air quality and erosion/sedimentation. These can all be reduced to negligible levels through proper adherence to permit conditions and coordination of permits, which is expected because of the close coordination of the two projects.

10. *The proposed project will not detrimentally affect air or water quality or ambient noise levels.* No adverse effects on these resources would occur. Mitigation of construction-phase impacts will preserve water quality and there may be an overall improvement in water quality. Ambient noise impacts due to construction will be temporary and restricted to daytime hours.

11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.* Although the project is located in an area with volcanic and seismic risk, the entire Island of Hawai'i shares this risk, and the project is not imprudent to construct.

12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.* No scenic vistas and viewplanes will be adversely affected by the project.

13. *The project will not require substantial energy consumption.* The construction and operation of the facility would require minimal consumption of energy. No adverse effects would be expected.

For the reasons above, the proposed Action will not have any significant effect in the context of Chapter 343, Hawai'i Revised Statutes and section 11-200-12 of the State Administrative Rules.

REFERENCES

- Bird, I. 1964. *Six Months in the Sandwich Islands*. University of Hawai'i Press, Honolulu.
- Gagne, W., and L. Cuddihy. 1990. "Vegetation," pp. 45-114 in W.L. Wagner, D.R. Herbst, and S.H. Sohmer, eds., *Manual of the Flowering Plants of Hawai'i*. 2 vols. Honolulu: University of Hawai'i Press.
- Handy, E.S.C., and E. Handy. 1972. *Native Planters in Old Hawai'i*. B.P. Bishop Museum Bulletin 233. Bishop Museum Press, Honolulu. (With M.K. Pukui)
- Hawai'i, County of. Annual Report Fiscal Year 2002-2003, pg. 7.
- Hawai'i County Planning Department. 1989. *The General Plan, County of Hawai'i*. Hilo.
- Hawai'i County Research and Development Department. Var. years. *Hawai'i County Data Book*. Hilo.
- Hawai'i State Commission on Water Resources Management (CWRM). 1990. *Draft Hawai'i Stream Assessment: A Preliminary Appraisal of Hawai'i's Stream Resources*. Prep. for CWRM by Hawai'i Cooperative Park Service Unit. Honolulu: National Park Service.
- Heliker, C. 1990. *Volcanic and Seismic Hazards on the Island of Hawai'i*. Washington: U.S. GPO.
- Kamakau, S. 1961. *Ruling Chiefs of Hawaii*. Honolulu: The Kamehameha Schools Press.
- Kelly, M. 1981. "Archaeological and Historical Studies for the Alenaio Stream Flood Damage Reduction Study, Hilo Hawai'i. Report 1. Background History." Department of Anthropology, B.P. Bishop Museum, Honolulu. Prepared for U.S. Army Engineer District, Pacific Ocean.
- Kelly, M. and S. Athens. 1982. "Archaeological and Historical Studies for the Alenaio Stream Flood Damage Reduction Study, Hilo Hawai'i." Department of Anthropology, B.P. Bishop Museum, Honolulu. Prepared for U.S. Army Engineer District, Pacific Ocean Division.
- Maly, K. 1996. Appendix In: "Archaeological Assessment Study Hilo Judiciary Complex Project, Lands of Wainaku, Pōnohawai, Pi'ihonua, and Waiākea, South Hilo District, Island of Hawai'i (TMK: 2-6-15:1,2; 2-6-16:2; 2-4-49:18,19; 2-2-15:33; 2-4-1:12)." Paul H. Rosendahl, Inc., Hilo. PHRI Report 1721-061496. Prepared for State of Hawai'i, Honolulu.
- McEldowney, H. 1979. "Archaeological and Historical Literature Search and Research Design: Lava Flow Control Study, Hilo Hawai'i." Manuscript on file, Department of Land and Natural Resources-State Historic Preservation Division.
- Sinoto, A. 1978. "Archaeological Reconnaissance Survey of Proposed Kaumana Springs Wilderness Park. Hilo, Island of Hawaii." Dept. of Anthropology, B.P. Bishop Museum, Honolulu. Prepared for Division of Parks and Recreation County of Hawaii, Hilo Hawaii.
- Spear, R. 1992. "An Archaeological Inventory Survey for the H.C.E.O.C. Project, Hilo. Island of Hawai'i (TMK: 2-3-32:1B)." Scientific Consulting Services, Inc., Kaneohe. Prepared for Neil Erickson, AIA.
- Stokes, J., and T. Dye. 1991. "Heiau of the Island of Hawai'i." *Bishop Museum Bulletin in Anthropology* 2. Bishop Museum Press, Honolulu.

- Thrum, T. 1907. Tales from the Temples. *Hawaiian Almanac and Annual for 1908*, pp. 48-58.
- _____. 1923. *Hawaiian Almanac and Annual for 1924*. Honolulu.
- U.S. Dept. of Commerce, Economics and Statistics Administration, Bureau of the Census, 2001, <http://factfinder.census.gov/>.
- U.S. Soil Conservation Service. 1973. *Soil Survey of Island of Hawai'i, State of Hawai'i*. Washington: U.S.D.A. Soil Conservation Service.
- University of Hawai'i at Hilo, Dept. of Geography. 1998. *Atlas of Hawai'i*. 3rd ed. Honolulu: University of Hawai'i Press.
- University of Hawai'i at Manoa, Dept. of Geography. 1983. *Atlas of Hawai'i*. 2nd ed. Honolulu: University of Hawai'i Press.
- U.S. Fish and Wildlife Service (USFWS). 2000. *Threatened and endangered plants in Hawai'i*. Washington: GPO.
- Walker, A., and P. Rosendahl. 1996. "Archaeological Assessment Study Hilo Judiciary Complex Project, Lands of Wainaku, Pōhohawai, Pi'ihonua, and Waiākea, South Hilo District, Island of Hawai'i (TMK: 2-6-15:1,2; 2-6-16:2; 2-4-49:18,19; 2-2-15:33; 2-4-1:12)." Paul H. Rosendahl, Inc., Hilo. PHRI Report 1721-061496. Prepared for State of Hawai'i, Honolulu.
- Walters, Kimura, and Associates, Inc. 1976. "Environmental Assessment for Kaumana Springs Wilderness Park." Prepared for the County of Hawaii.
- Wickler, S. 1990. "Archaeological Subsurface Test Excavations for Alenaio Stream Flood Damage Reduction Measures, Hilo, Island of Hawai'i." Report Prepared for U.S. Army Corps of Engineers, Pacific Ocean Division. IARI, Inc., Honolulu.
- Wickler, S. and J. Ward. 1992. "Archaeological and Paleoenvironmental Investigations, Alenaio Stream Flood Control Project, Hilo, Hawai'i Island." Report prepared for U.S. Army Corps of Engineers, Pacific Ocean Division, Ft. Shafter, Hawai'i, IARI, Inc., Honolulu.
- Wolfe, E.W., and J. Morris. 1996. *Geologic Map of the Island of Hawai'i*. USGS Misc. Investigations Series Map i-2524-A. Washington, D.C.: U.S. Geological Survey.
- Wolforth, T. 1999. "Data Recovery for the Housing Facility at the Hawai'i Community Correctional Center: Investigation into the Network of Ditches in the Hāla'i Region of Hilo. Land of Pi'ihonua, South Hilo District, Island of Hawai'i (TMK:3-2-3-23:Por.5)." Prepared for Architects Hawaii Ltd., Honolulu.

APPENDIX 1

FIGURES

Index to Figures

- 1. PROJECT AREA USGS MAP**
- 2. PROJECT AREA TMK MAP**
- 3. SITE PLAN**
- 4. PROJECT SITE PHOTOGRAPHS**
- 5. FLOOD ZONE**

Figure 1
Project Location

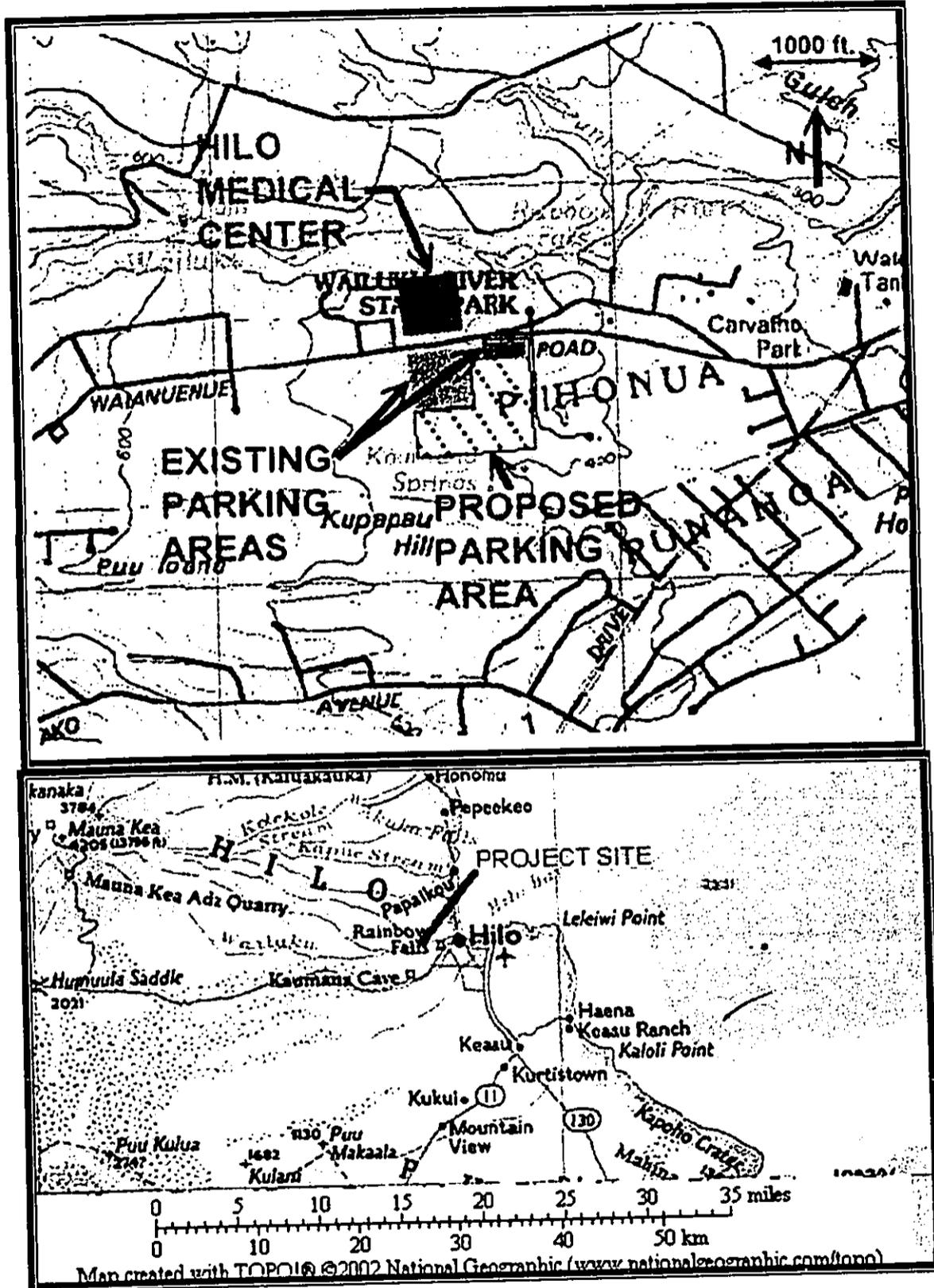
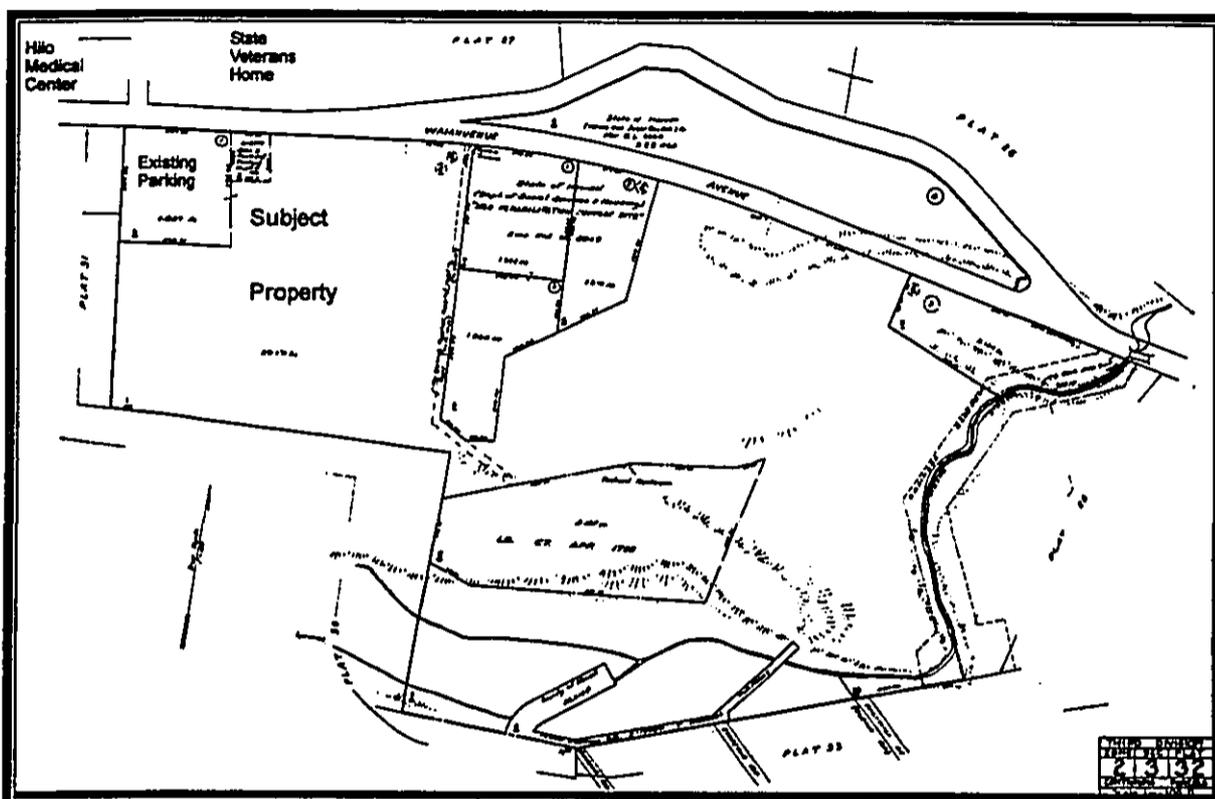
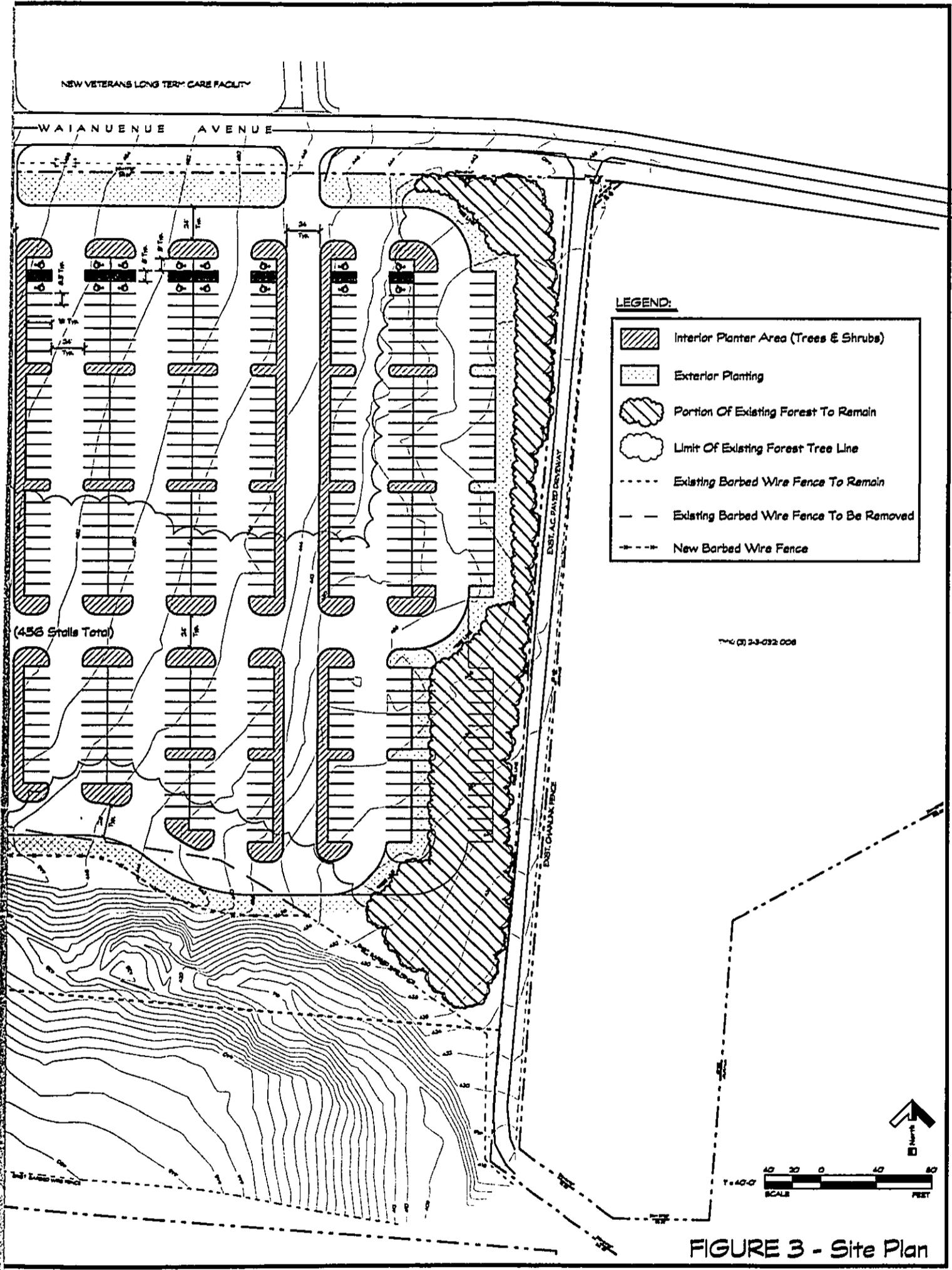


Figure 2
TMK Map



NEW VETERANS LONG TERM CARE FACILITY

WAIANUENUE AVENUE



LEGEND:

-  Interior Planter Area (Trees & Shrubs)
-  Exterior Planting
-  Portion Of Existing Forest To Remain
-  Limit Of Existing Forest Tree Line
-  Existing Barbed Wire Fence To Remain
-  Existing Barbed Wire Fence To Be Removed
-  New Barbed Wire Fence

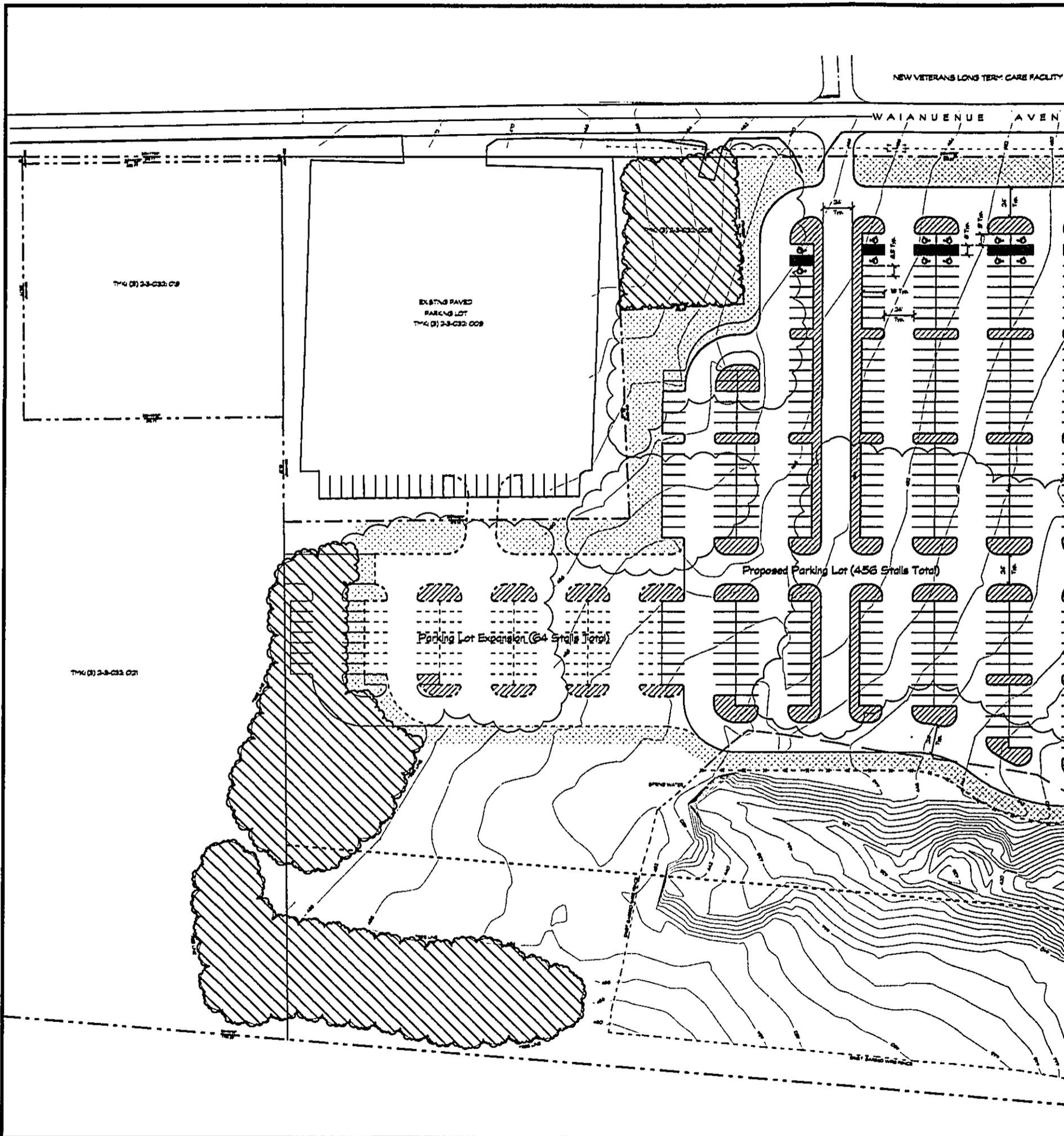
(456 Stalls Total)

TM 40-01 23-032 008



FIGURE 3 - Site Plan

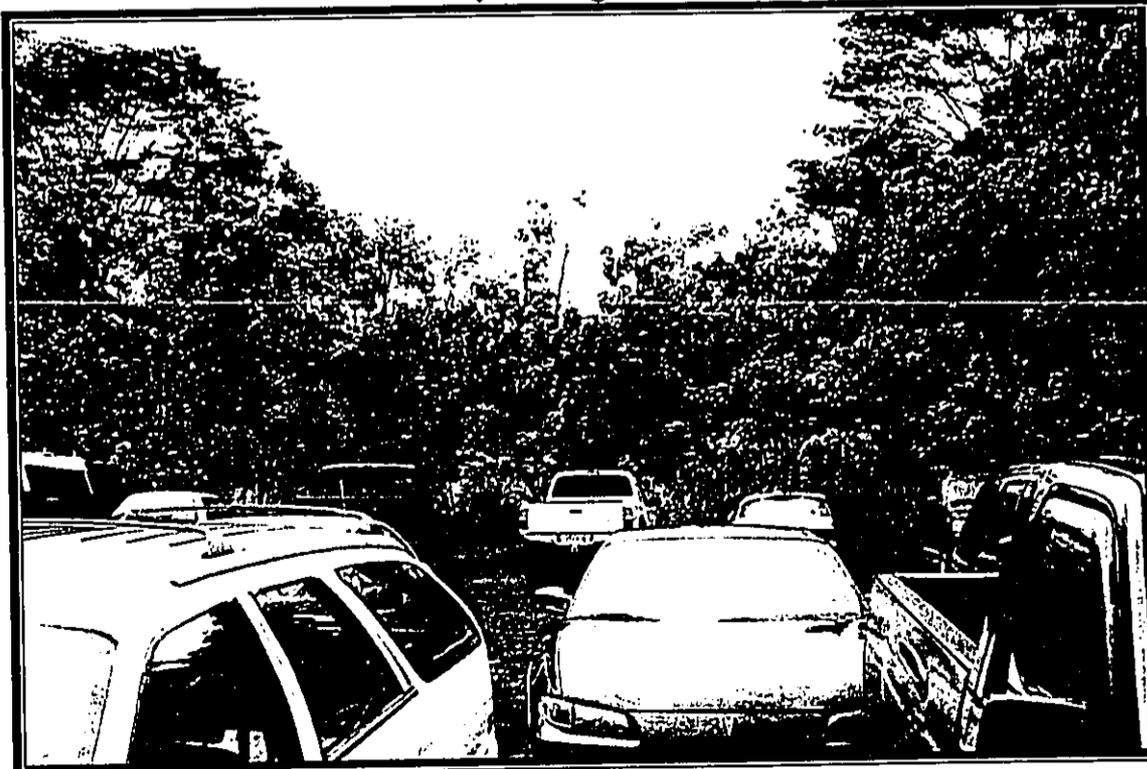
WAIANUENUE AVENUE



**Figure 4
Project Site Photographs**



Existing Paved Parking, Expansion Area Behind ↑
↓ Existing Gravel Parking, Expansion Area Behind



**Figure 5
Flood Zone**



APPENDIX 2

Letter Report on Archaeological and Cultural Resources

RECHTMAN CONSULTING, LLC

HC 1 Box 4149 Kea'au, Hawai'i 96749-9710
phone: (808) 966-7636 fax: (808) 443-0065
e-mail: bob@rechtmanconsulting.com
ARCHAEOLOGICAL, CULTURAL, AND HISTORICAL STUDIES

October, 26, 2004

RC-0271

MaryAnne Maigret
Assistant Hawai'i Island Archaeologist
DLNR-SHPD
74-383 Kealakehe Parkway
Kailua-Kona, HI 96740

Dear MaryAnne:

On behalf of Ron Terry, Ph.D., Rechtman Consulting, LLC has prepared this request for determination of "no historic properties affected" associated with the proposed expansion of the Hilo Hospital facility on approximately 4 acres in Pi'ihonua Ahupua'a (being a portion of TMK:3-2-3-32:1), South Hilo District, Island of Hawai'i (Figure 1). The current project area is located along the southern edge of Waiānuenu Avenue across from the Hilo Hospital and adjacent to a paved hospital parking area (Figures 2 and 3). Several previous archaeological studies have been conducted in the vicinity of the current project area. One study included the current project area (Walker and Rosendahl 1996).

In 1996, Paul H. Rosendahl Ph.D., Inc. (PHRI) (Walker and Rosendahl 1996) conducted an archaeological assessment study, as part of an assessment of seven proposed locations for the Hilo Judiciary Complex (Sites A-G), of TMK:3-2-3-32:1 (Site F), which included the current study parcel (see Figure 2). Based on the assumption that the 42.3 acres had likely been impacted by Historic sugarcane cultivation, PHRI surveyed only 11% (approximately 4.6 acres) of the property (a large portion of the current project area was included in the 4.6 acres). PHRI recorded no sites within the area that they surveyed.

In 1992, Scientific Consulting Services (SCS) conducted an inventory survey (Spear 1992) of a 12-acre parcel that, like the current project area, was also a portion of TMK:3-2-3-32:1 (see Figure 2) and was included in the later Walker and Rosendahl (1996) survey. Spear (1992) identified two Historic-era stacked stone walls on the 12-acre parcel. He concluded that one of the walls was likely associated with cattle ranching, and that other may have been used for water control and erosion prevention associated with sugarcane cultivation or cattle ranching (1992:11).

In 1978, Aki Sinoto conducted an archaeological reconnaissance survey of a 117-acre parcel located to the south of the current project area for a proposed Kaumana Springs Wilderness Park. Sinoto (1978) identified six major clusters of features that included stone terraces, alignments, walls, mounds, cairns, platforms, enclosures, 'auwai, and stone reinforced stream banks (Sinoto 1978:2,3). He concluded that the sites contained remnant features from Precontact Hawaiian agriculture and habitation, but added that some of the walls appeared to be more recent origins and may have been associated with ranching. He suggested that the area represented a single continuous site (SHPD Site 50-10-34-18696). Sinoto also posited that the paucity of sites in the surrounding areas (including the current project area) was due to

later mechanized agricultural activities. Sinoto suggested that the sites should remain and be incorporated into the park development "for public interpretation" (1978:4). A recent conversation with the Hawai'i County Parks and Recreation Department (9/13/04) confirmed that the area was never developed into a wilderness park.

In 2004, Rechtman Consulting, LLC (Rechtman 2004) conducted an archaeological inventory survey and limited cultural assessment of a parcel located along the southern edge of Waiānuenue Avenue (TMK:3-2-3-30:5 por.) that was a portion of the area that had been previously surveyed by Sinoto (1978). Rechtman (2004) recorded two archaeological sites (SIHP Site 24267 and 24268), both Historic stone wall remnants, within this project area.

Other important archaeological sites reported in the general vicinity of the current project area include Historic Period structures such as the Old Hilo Hospital (SHPD Site 7450), a Portuguese oven (SIHP Site 7482), and the Hilo County Jail (SIHP Site 7457) (Spear 1992). Also, Thrum (1907) describes a *heiau* named Kaipālaloa that had been destroyed and another called Papio, which was purportedly for bird catchers and canoe builders. Stokes (Stokes and Dye 1991) reported another *heiau* in Pi'ihonua called Pinao that was once located near the intersection of Waiānuenue and Ululani Streets (Maly 1996).

The earliest historical knowledge of Hilo comes from legends written by Kamakau (1961) of a 16th century chief 'Umi-a-Liloa (son of Liloa) who at that time ruled the entire island of Hawai'i. Descendants of Umi and his sister-wife were referred to as "Kona" chiefs, controlling Ka'ū, Kona, and Kohala, while descendants of Umi and his Maui wife were "Hilo" chiefs, controlling Hāmākua, Hilo, and Puna (Kelly 1981:1). According to Kamakau (1961) both sides fought over control of the island, desiring access to resources such as feathers, *māmaki* tapa, and canoes on the Hilo side; and *wauke* tapa, and warm lands and waters on the Kona side (c.f. Kelly 1981:3).

Sometime near the end of the 16th century or early in the 17th century, the lands of Hilo were divided into *ahupua'a* that today retain their original names (Kelly 1981:3). These include the *ahupua'a* of Pu'u'eo, Pi'ihonua, Punahoa, Pōnohawai, Kūkūau and Waiākea. The design of these land divisions was that residents could have access to all that they needed to live, with ocean resources at the coast, and agricultural and forest resources in the interior. However, only Pi'ihonua and Waiākea provided access to the full range of resources stretching from the sea up to 6,000 feet along the slopes of Mauna Kea (Kelly 1981:5). The current project area is located within Pi'ihonua Ahupua'a. Pi'ihonua literally translates as: "Ascending Earth," and the *ahupua'a* is named for Pi'ihonua-a-ka-lani, the brother of Waiākea and Pana'ewa, and the father of the chiefesses 'Ohele and Waiānuenue (Maly 1996:A-4).

Pi'ihonua along with Punahoa and Waiākea were held by Kamehameha I until the time of his death in 1819, at which time his holdings, including Pi'ihonua were passed down to his son, Liholiho. Kelly (1981) speculates that Pi'ihonua may have been given to Chief Kalaeokekio by Kauikeaouli or Boki in 1828. Pi'ihonua was surrendered at the time of the *Māhele* and classified as Crown Land (Kelly 1981); and no *kuleana* claims were registered for lands in the vicinity of the current subject property (Maly 1996). Following the *Māhele*, the population of Hilo grew and the scattered upland habitations gave way to sugar cultivation (McEldowney 1979:37).

Beginning in the late 1880s Pi'ihonua was home to the Hawaii Mill Company, built on the Alenaio Stream (Kelly 1981). By 1905, according to Thrum (1923) the Hawaii Mill Company had 10 miles of cane flumes and produced twenty-five tons of sugar per day. In 1920 Hawaii Mill Company was taken over by the Hilo Sugar Company (Kelly 1981). Commercial sugar production lasted in Pi'ihonua until the mid twentieth century, at which time many of the fields were converted to pasturage associated with cattle ranching.

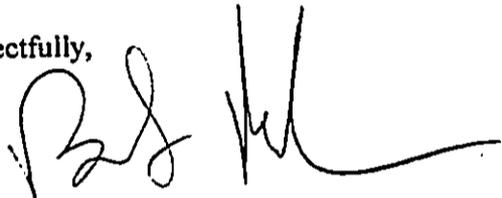
The current project area is located approximately 450 feet above sea level and is a combination of open land and disturbed forest (see Figure 3). A dirt parking lot is located along Waiānuenue Avenue within the current project area (see Figure 2 and Figure 4). Vegetation in the study area ranges from thick

to fairly open grassland. A variety of exotic trees, including palm (*Archontophoenix alexandrae*), guava (*Psidium guajava*), waiawi (*Psidium cattleianum*), mango (*Mangifera indica*), and swamp mahogany (*Eucalyptus robusta*) with an under story of various non-native grasses, vines, shrubs and ornamentals (Figures 5 and 6). The existing vegetation pattern indicates that the study property has undergone substantial alteration in the past including, but not limited to, mechanized clearing and earth moving.

On October 18, 2004 J. David Nelson, B.A., Christopher S. Hand, B.A., Oliver M. Bautista, B.A. and Michael E. Rivera, B.A. under the direction of Robert B. Rechtman, Ph.D. conducted an intensive on-foot archaeological survey of the entire project area. A thorough examination of the surface of the project area revealed no archaeological resources. And given the history of land use on the property coupled with the results of nearby archaeological studies, the likelihood of subsurface resources is extremely remote. Based on these negative findings, on behalf of our client, we are requesting that DLNR-SHPD issue a written determination of "no historic properties affected" in accordance with HAR 13§13-284-5(b)1.

Should you require further information, or wish to visit the parcel, please contact me directly.

Respectfully,



Bob Rechtman, Ph.D.
Principal Archaeologist

References Cited

- Kamakau, S.
1961 *Ruling Chiefs of Hawaii*. Honolulu: The Kamehameha Schools Press.
- Kelly, M.
1981 Archaeological and Historical Studies for the Alenaio Stream Flood Damage Reduction Study, Hilo Hawai'i. Report 1. Background History. Department of Anthropology, B.P. Bishop Museum, Honolulu. Prepared for U.S. Army Engineer District, Pacific Ocean.
- Maly, K.
1996 Appendix In: Archaeological Assessment Study Hilo Judiciary Complex Project, Lands of Wainaku, Pōnohawai, Pi'ihonua, and Waiākea, South Hilo District, Island of Hawai'i (TMK: 2-6-15:1,2; 2-6-16:2; 2-4-49:18,19; 2-2-15:33; 2-4-1:12). Paul H. Rosendahl, Inc., Hilo. PHRI Report 1721-061496. Prepared for State of Hawai'i, Honolulu.
- McEldowney, H.
1979 Archaeological and Historical Literature Search and Research Design: Lava Flow Control Study, Hilo Hawai'i. Manuscript on file, Department of Land and Natural Resources-State Historic Preservation Division.
- Rechtman, R.
2004 Archaeological Inventory Survey and Limited Cultural Assessment for a Proposed Department of Water Supply Reservoir TMK:3-2-3-30:5 (por.), Pi'ihonua Ahupua'a, South Hilo District, Island of Hawai'i. Rechtman Consulting Report RC-0273. Prepared for Ron Terry, Geometrician, Kea'au, HI.
- Sinoto, A.
1978 Archaeological Reconnaissance Survey of Proposed Kaumana Springs Wilderness Park. Hilo, Island of Hawaii. Dept. of Anthropology, B.P. Bishop Museum, Honolulu. Prepared for Division of Parks and Recreation County of Hawaii, Hilo Hawaii.
- Spear, R.
1992 An Archaeological Inventory Survey for the H.C.E.O.C. Project, Hilo. Island of Hawai'i (TMK: 2-3-32:1B). Scientific Consulting Services, Inc., Kaneohe. Prepared for Neil Erickson, AIA.
- Stokes, J., and T. Dye
1991 Heiau of the Island of Hawai'i. *Bishop Museum Bulletin in Anthropology* 2. Bishop Museum Press, Honolulu.
- Thrum, T.
1907 Tales from the Temples. *Hawaiian Almanac and Annual for 1908*, pp. 48-78.
1923 *Hawaiian Almanac and Annual for 1924*. Honolulu.
- Walker, A., and P. Rosendahl
1996 Archaeological Assessment Study Hilo Judiciary Complex Project, Lands of Wainaku, Pōnohawai, Pi'ihonua, and Waiākea, South Hilo District, Island of Hawai'i (TMK: 2-6-15:1,2; 2-6-16:2; 2-4-49:18,19; 2-2-15:33; 2-4-1:12). Paul H. Rosendahl, Inc., Hilo. PHRI Report 1721-061496. Prepared for State of Hawai'i, Honolulu.

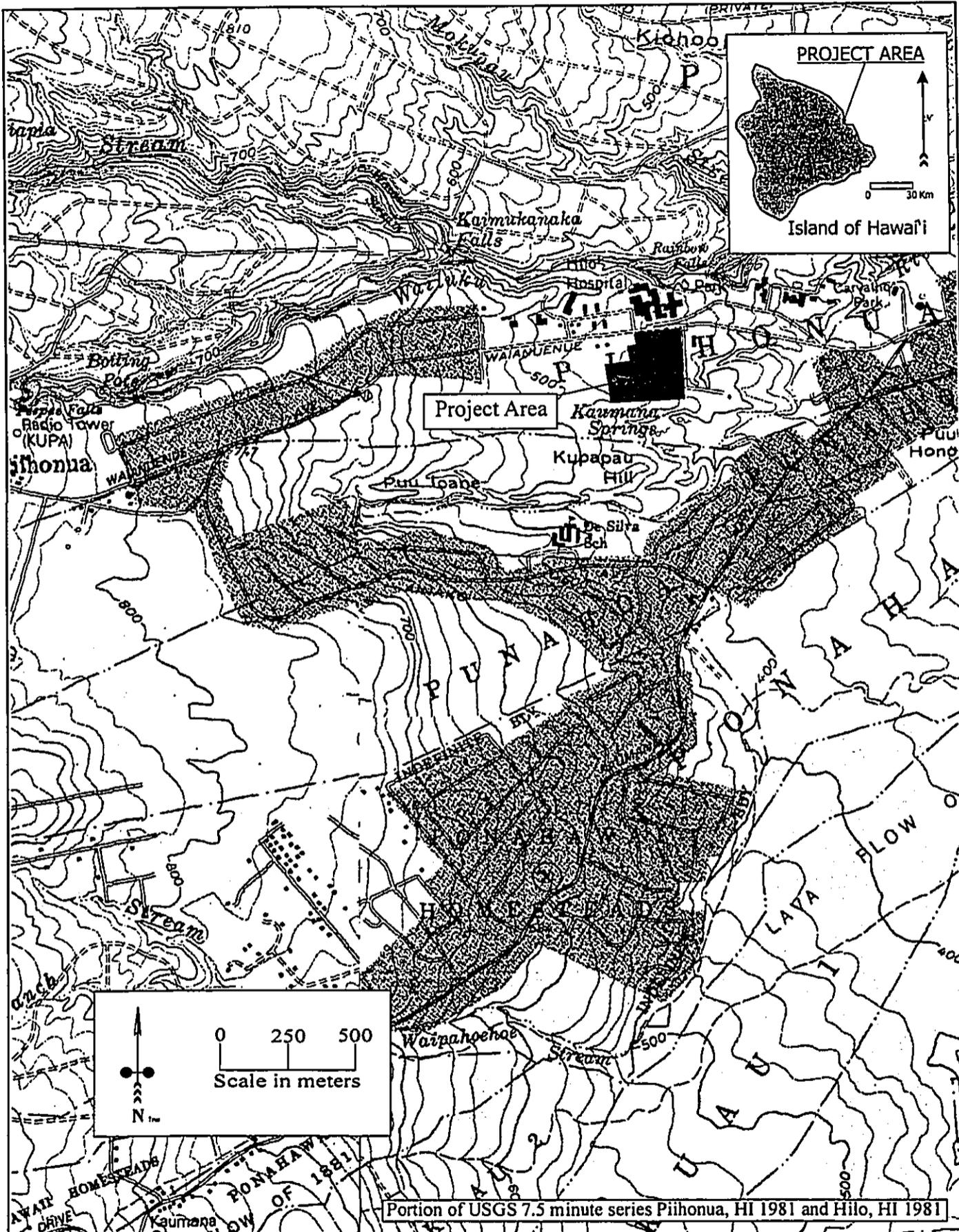


Figure 1. Project area location.

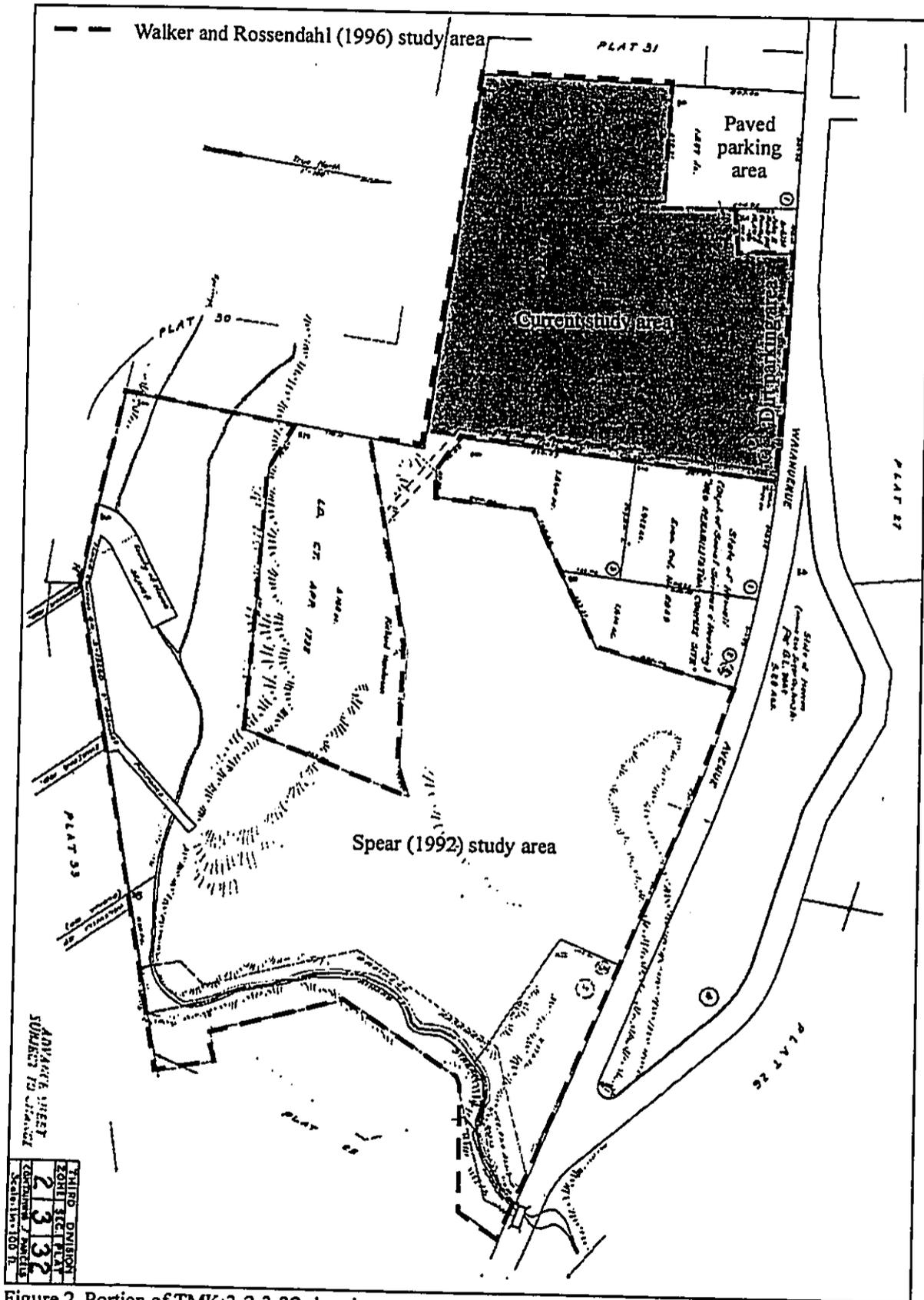


Figure 2. Portion of TMK:3-2-3-32 showing current study area and nearby previous study areas.

DOCUMENT CAPTURED AS RECEIVED

RC-0271

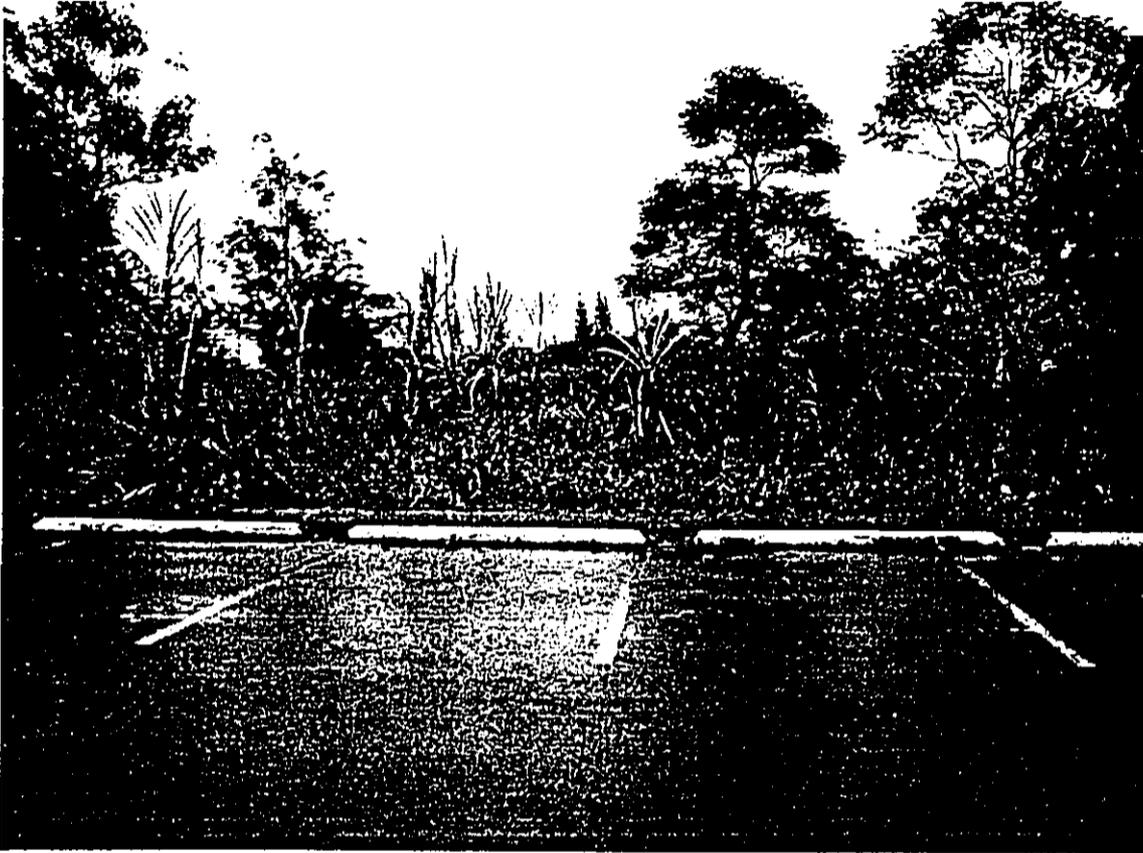


Figure 3. View to east of current project area from the paved parking area.

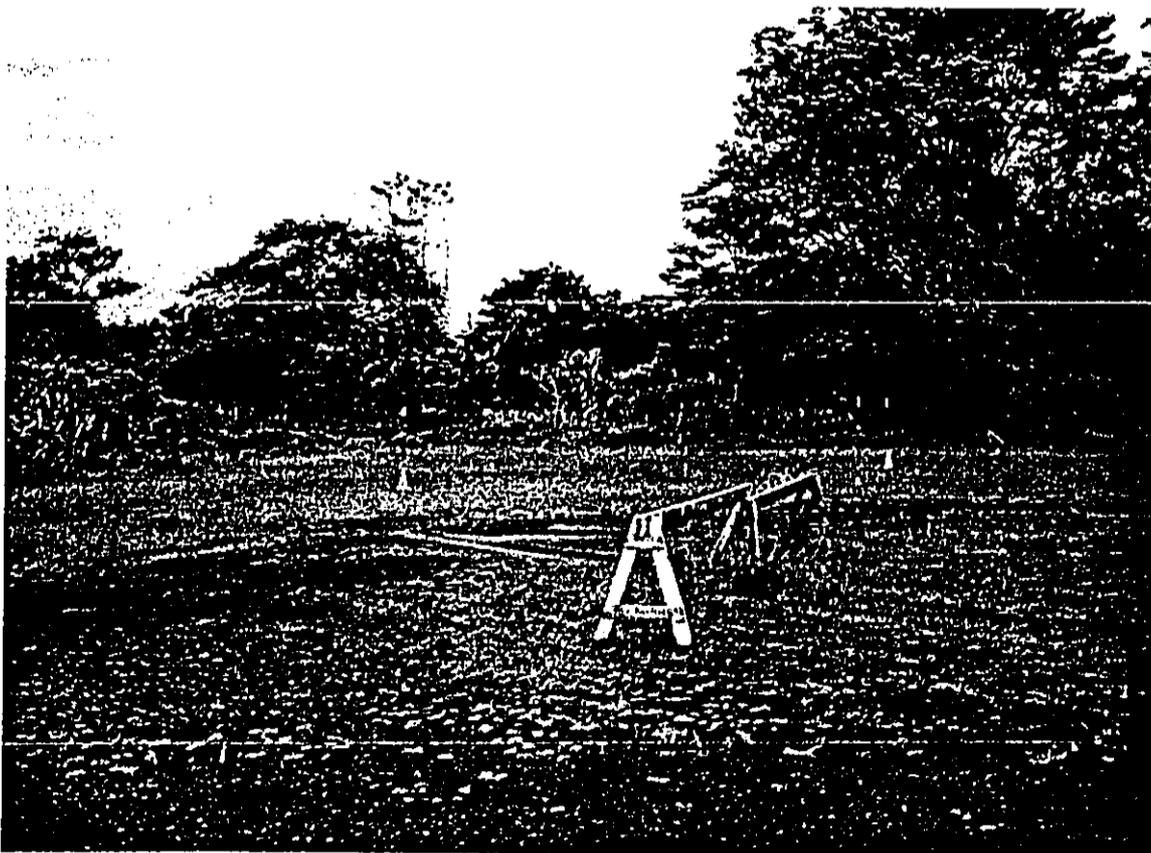


Figure 4. View to southeast of the current project area from the dirt parking area.

DOCUMENT CAPTURED AS RECEIVED

RC-0271



Figure 5. Typical project area vegetation, view to southeast.

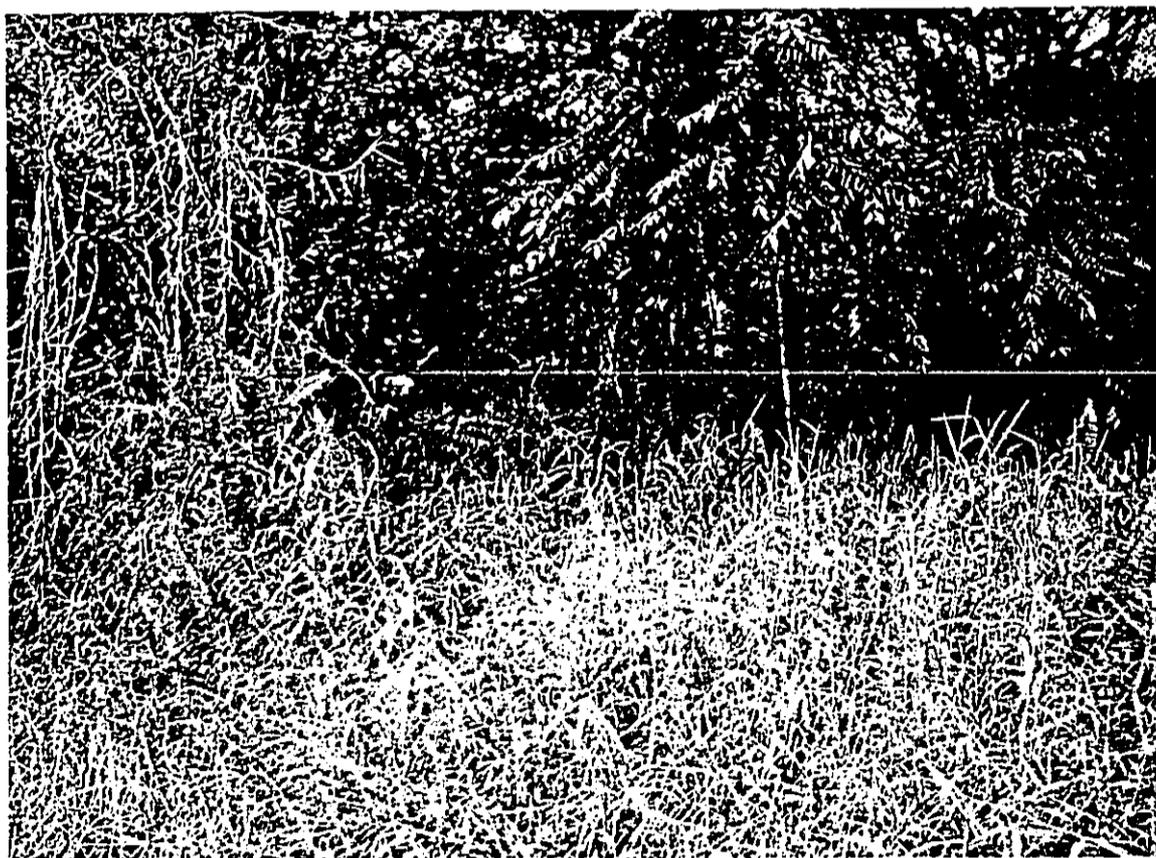


Figure 6. Typical project area vegetation, view to south.

Bob Rechtman

809 966-7636

P. 1

Oct-04-2005 05:27pm

From-STATE Historic Preservation

805 892 8020

T-700 P.001/001 F-830

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

DEPARTMENT OF LAND AND NATURAL RESOURCES
COORDINATION WATER RESOURCES MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONSERVATION
COMMISSION FOR WATER RESOURCE MANAGEMENT
CONSERVATION AND RESTORATION
CONSERVATION AND RESTORATION
ENFORCEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
HAWAIIAN ISLAND RESOURCES COMMISSION
LAND
STATE PARKS

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

Applicant/Agency: Bob Rechtman, Ph.D., PI
Rechtman Consulting, LLC
Address: HC Box 4149
Kea'au, Hawai'i 96749-0710

LOG NO: 2005.2138
DOC NO: 0510DB03

SUBJECT: Chapter 6E-42 Historic Preservation Review -
Proposed Expansion of the Hilo Hospital Facility

Ahupua'a: Pt'ihonua
District, Island: South Hilo, Hawai'i
TMK: (3)2-3-32:1

1. We believe there are no historic properties present, because:
- a) intensive cultivation has altered the land
 - b) residential development/urbanization has altered the land
 - c) previous grubbing/grading has altered the land
 - d) an acceptable archaeological assessment or inventory survey found no historic properties
 - e) other

2. This project has already gone through the historic preservation review process, and mitigation has been completed .

Thus, we believe that "no historic properties will be affected" by this undertaking

In the unlikely event that historic sites, including human skeletal remains, are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Office needs to be contacted immediately at (808) 327-3690.

Staff:

Date: October 4, 2005

David Lawrence Brown
Branch Chief Archaeologist
(808) 692-8025

DB: jen

APPENDIX 3

COMMENTS IN RESPONSE TO PRE-CONSULTATION

Harry Kim
Mayor



Bruce C. McClure
Director

Ronald K. Takahashi
Deputy Director

County of Hawaii
DEPARTMENT OF PUBLIC WORKS
Aupuni Center
101 Pauahi Street, Suite 7 · Hilo, Hawaii 96720-4224
(808) 961-8321 · Fax (808) 961-8630

November 19, 2004

Mr. Ron Terry
Geometrician Associates, Inc.
HC 2 Box 9575
Keaau, Hawaii 96749

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
Hilo Medical Center Parking Expansion
TMK: 2-3-32: 001 (por.)

We have reviewed the subject project as described in your letter dated October 18, 2004 and have the following comments.

All development-generated runoff shall be disposed of on site and shall not be directed toward any adjacent properties. A drainage study shall be prepared and the recommended drainage system shall be constructed meeting the approval of the Department of Public Works.

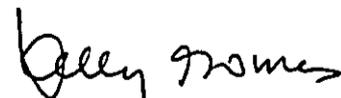
All earthwork activity, including grading and grubbing, shall conform to Chapter 10, Erosion and Sedimentation Control, of the Hawaii County Code.

A portion of the subject parcel is located within Flood Zone A as designated on the Flood Insurance Rate Map (FIRM) by the Federal Emergency Management Agency (FEMA). Flood Zone A is the Special Flood Hazard Area inundated by the 100-year flood where no base flood elevations are determined. Any construction within the designated flood zone shall conform to the requirements of Chapter 27, Flood Control, of the Hawaii County Code.

The subject project shall meet the requirements of the Americans with Disabilities Act (ADA).

A copy of the completed environmental assessment will not be necessary.

Questions may be referred to Mr. Kelly Gomes of the Engineering Division at 961-8327.


for GALEN M. KUBA, Division Chief
Engineering Division

KG

Harry Kim
Mayor



Christopher J. Yuen
Director

Roy R. Takemoto
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-3043
(808) 961-8288 • Fax (808) 961-8742

November 9, 2004

Mr. Ron Terry
Geometrician Associates, LLC
HC2 Box 9575
Keaau, Hawaii 96749

Dear Mr. Terry:

Subject: Pre-Consultation for Draft Environmental Assessment
Project: Hilo Medical Center Parking Expansion
Tax Map Key: 2-3-032:001 (por.)

This is in response to your letter, dated October 18, 2004, in which you requested our comments on any special environmental conditions or impacts related to the proposed development.

We understand that the proposed development includes the acquisition of approximately 4.57 acres of the subject 39.171-acre parcel, which is owned by the State of Hawaii. The property is zoned Single-Family Residential (RS-10) by the County of Hawaii and is situated in the State Land Use Urban district. The subject land area is designated for low density urban uses under the General Plan Land Use Pattern Allocation Guide Map. A hospital and its accessory uses, including the hospital parking lot, is a use consistent with this designation.

According to Planning Department records Final Plan Approval was granted on November 19, 1979 for a 200-stall paved "temporary parking facility" to be constructed on a portion of TMK 2-3-32:001 (now TMK 2-3-32:009) for the Hilo Hospital Acute Care Facility. However, our records do not indicate a specific duration for the use of this "temporary parking facility." This parking lot site was subsequently subdivided (SUB 4504) out of Parcel 1 on August 5, 1980.

Our records further show that an approximately 2 acre portion of TMK 2-3-32:001 was designated as a temporary parking lot by Hilo Hospital and acknowledged by a Planning Department letter dated February 9, 1982. According to Hilo Hospital letter dated February 4, 1982, use of this temporary gravel parking area was supposed to cease within 5 years. However, the Planning Department offered no objection to a State Land Disposition submitted in response to a December 29, 1993 request from Hilo Hospital for an expansion of the existing gravel parking area.

Hawai'i County is an equal opportunity provider and employer

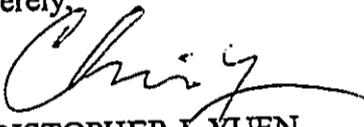
Ron Terry
Geometrician Associates, LLC
Page 2
November 9, 2004

The Zoning Code lists public uses and structures, as permitted under section 25-4-11 among the permitted uses in the RS zoning district provided that the Planning Director has issued Plan Approval for such use. Pursuant to §25-1-5(b)(86) of the Zoning Code, a public use, public building and public structure means a use conducted by or a structure or building owned or managed by the federal government, the State of Hawaii or the County of Hawaii to fulfill a governmental function, activity or service for public benefit and in accordance with public policy. Hilo Medical Center is owned and operated by Hawaii Health Systems Corporation, a public benefit agency of the State of Hawaii is provided under §323F, Hawaii Revised Statutes.

In view of the above, the proposed expansion of the Hilo Medical Center parking facilities on the subject property is a permitted use, provided that Plan Approval for the additional improvements is granted by the Planning Director.

Please provide this office with a copy of the EA upon its publication. Should you have questions, please feel welcome to contact Larry Brown or Esther Imamura of my staff at 961-8288.

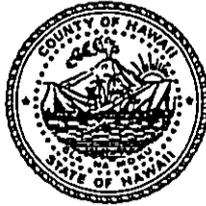
Sincerely,


CHRISTOPHER J. YUEN
Planning Director

LMB:cd

P:\WPWIN60\Larry\EA-EIS Comments\Geometrician2-3-32-1HMCParkingLot Pre-cmnts.doc

Harry Kim
Mayor



Lawrence K. Mahuna
Police Chief

Harry S. Kubojiri
Deputy Police Chief

County of Hawaii

POLICE DEPARTMENT

349 Kapiolani Street • Hilo, Hawaii 96720-3998
(808) 935-3311 • Fax (808) 961-8869

November 9, 2004

Mr. Ron Terry
Geometrician Associates, LLC
HC 2 Box 9575
Keaau, Hawaii 96749

Dear Mr. Terry:

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR HILO MEDICAL CENTER PARKING EXPANSION, ISLAND OF HAWAI'I, TMK (ERD) 2-3-32:01 (POR.)

Additional parking for the Hilo Medical Center is needed and still more parking may be required as future expansion and growth of medical facilities become a reality.

Traffic is heaviest during the morning and afternoon hours as employees travel to/from the area. Please consider road improvements to lessen future traffic problems.

We have received occasional complaints about the traffic from residents who live above the Hilo Medical Center.

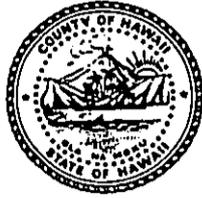
Thank you for allowing us the opportunity to comment.

Serving with Aloha,


LAWRENCE K. MAHUNA
POLICE CHIEF

JNS:lli

Harry Kim
Mayor



Barbara Bell
Director

Nelson Ho
Deputy Director

County of Hawaii
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
25 Aupuni Street, Room 210 • Hilo, Hawai'i 96720-4252
(808) 961-8083 • Fax (808) 961-8086
cohdem@interpac.net

October 21, 2004

Mr. Ron Terry
Geometrician Associates, LLC
HC 2, Box 9575
Keaau, HI 96749

SUBJECT: Environmental Assessment for Hilo Medical Center Parking Expansion, Island of
Hawai'i, TMK (3rd) 2-3-32:01 (por.)

Dear Mr. Terry,

As directed in your October 18, 2004 letter to the Hawai'i County Council, we are requesting a copy of the completed EA.

Thank you for your attention to this request.

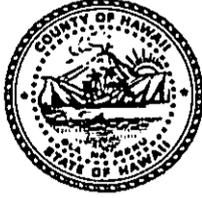
A handwritten signature in cursive script, appearing to read "Barbara Bell".

Barbara Bell
DIRECTOR

APPENDIX 4

COMMENTS TO DRAFT EA AND RESPONSES

Harry Kim
Mayor



Barbara Bell
Director

Nelson Ho
Deputy Director

County of Hawaii
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
25 Aupuni Street, Room 210 • Hilo, Hawai'i 96720-4252
(808) 961-8083 • Fax (808) 961-8086
http://co.hawaii.hi.us/directory/dir_envmng.htm

November 3, 2005

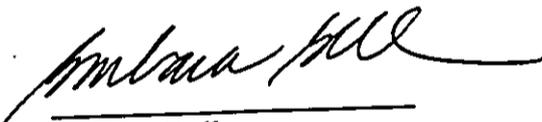
Mr. Ron Terry
Geometrician Associates
HC 2, Box 9575
Keaau, HI 96749

SUBJECT: Draft Environmental Assessment
Project: Hilo Medical Center Parking Lot Expansion
South Hilo
TMK:2-3-32:01

The Department of Environmental Management offers the following comments on the subject DEA.

Technical Services Section advises there is existing County sewer line on Waiuanue Avenue.

Thank you for allowing us to comment on this project.


Barbara Bell
DIRECTOR

cc: TSS

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 982-5831 fax: (808) 966-7593 HC 2 Box 9575 Kea'au Hawai'i 96749
ronterry@verizon.net

December 1, 2005

Barbara Bell, Director
Hawaii County Department of Environmental Management
25 Aupuni Street, Room 210
Hilo HI 96720

Dear Ms. Bell:

**Subject: Hilo Medical Center Parking Lot Expansion
Environmental Assessment**

Thank you for your comment letter dated November 3, 2005, on the Draft EA, in which you stated that there is an existing County sewer line on Waiianuenue Avenue. Design and construction contractors will be made aware of this line.

Again, thank you for your comment. If you have any questions about the project, please contact me at 982-5831 or Julie-Beth Ako of Hilo Medical Center at 974-4743.

Sincerely,

Ron Terry, Principal
Geometrician Associates

Harry Kim
Mayor



Lawrence K. Mahuna
Police Chief

Harry S. Kubojiri
Deputy Police Chief

County of Hawaii
POLICE DEPARTMENT

349 Kapiolani Street • Hilo, Hawaii 96720-3998
(808) 935-3311 • Fax (808) 961-8869

November 7, 2005

Mr. Ron Terry
Consultant
Geometrician Associates
HC 2 Box 9575
Keaau, HI 96749

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
HILO MEDICAL CENTER – HAWAII HEALTH SYSTEMS
CORPORATION; 1190 WAIANUENUE AVENUE, HILO, HI 96720
TAX MAP KEY NUMBER: (3rd): 2-3-32:01

Staff, upon reviewing the provided documents and visiting the proposed site,
does not anticipate any significant impact to traffic and/or public safety concerns.

Thank you for allowing us the opportunity to comment.

Sincerely,


DEREK D. PACHECO
MAJOR
AREA I OPERATIONS

LW/lli

cc: Director, Office of Environmental Quality Control
Julie-Beth Ako, Hilo Medical Center

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 982-5831 fax: (808) 966-7593 HC 2 Box 9575 Kea'au Hawai'i 96749
ronterry@verizon.net

December 1, 2005

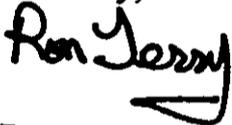
Derek D. Pacheco, Major
Area I Operations
Hawai'i County Police Department
349 Kapiolani Street
Hilo HI 96720

Dear Major Pacheco:

**Subject: Hilo Medical Center Parking Lot Expansion
Environmental Assessment**

Thank you for your comment letter dated November 7, 2005, on the Draft EA, in which you stated that you did not anticipate any significant impact to traffic or public safety concerns. We appreciate your review of the document. If you have any further questions about the project, please contact me at 982-5831 or Julie-Beth Ako of Hilo Medical Center at 974-4743.

Sincerely,



Ron Terry, Principal
Geometrician Associates

LINDA LINGLE
GOVERNOR OF HAWAII



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186
E-mail: oeqc@health.state.hi.us

Ronald Schurra
Hilo Medical Center
1190 Waiānueānue Avenue
Hilo, Hawaii 96720

Attn: Julie-Beth Ako

Dear Mr Schurra:

Draft Environmental Assessment (EA) for **Hilo Medical Center Parking Lot**

We have the following comments to offer:

Blasting: Blasting is mentioned in section 3.1.3 as part of the project development. This can be highly disturbing to those nearby in terms of noise and possibly vibration. If it is selected indicate in the final EA how you will advise nearby residents of the upcoming disruption and consult the Noise, Radiation & Indoor Air Quality Branch of the Department of Health, which has oversight over construction noise issues.

Paving and landscaping: Hawaii Revised Statutes 103D-407 requires the use of recycled glass in paving materials whenever possible, and HRS 103D-408 requires the use of native Hawaiian flora whenever and wherever possible. In the final EA indicate if you will follow these requirements.

Timeframe: What are the anticipated start and end dates of this project?

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

Sincerely,

Genevieve Salmonson
GENEVIEVE SALMONSON
Director

c: Ron Terry

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 982-5831 fax: (808) 966-7593 HC 2 Box 9575 Kea'au Hawai'i 96749
ronterry@verizon.net

December 1, 2005

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

Dear Ms. Salmonson:

**Subject: Hilo Medical Center Parking Lot Expansion
Environmental Assessment**

Thank you for your comment letter faxed on November 8, 2005, on the Draft EA. As the consultant for the project, I offer the following response to your specific comments:

1. *Blasting.* We do not anticipate any blasting for the project. The mention of blasting was used as an example of the type of construction activities that may produce noise. We are sorry for any confusion.
2. *Paving and Landscaping.* The Final EA has been amended to include reference to these requirements, and contractors will be made aware of them.
3. *Timeframe.* The timeframe for the project is as-yet undetermined, but design is expected to occur within two months of the issuance of the FONSI. This information has been added to the Final EA.

Again, thank you for your comment. If you have any questions about the project, please contact me at 982-5831 or Julie-Beth Ako of Hilo Medical Center at 974-4743.

Sincerely,



Ron Terry, Principal
Geometrician Associates

PHONE (808) 594-1888

FAX (808) 594-1865



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

HRD05/2110

November 17, 2005

Ron Terry
Geometrician Associates
HC 2 Box 9575
Keaau, HI 96749

RE: Draft Environmental Assessment for the Proposed Expansion of the Hilo Medical Center Parking Lot, Hilo, Hawai'i Island, TMK (3) 2-3-32: 01.

Dear Mr. Terry,

The Office of Hawaiian Affairs (OHA) is in receipt of your October 24, 2005 request for comment on the above listed proposed project, TMK (3) 2-3-32: 01. OHA offers the following comments:

Our office has no comment specific to the Draft Environmental Assessment. Thank you for your continued correspondence, our staff looks forward to reviewing the Final Environmental Assessment.

OHA further requests your assurances that if the project goes forward, should iwi 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.

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Jesse Yorck at (808) 594-0239 or jessey@oha.org.

'O wau iho nō

A handwritten signature in black ink, appearing to read "Clyde W. Nāmu'o".
Clyde W. Nāmu'o
Administrator

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

Julie-Beth Ako
Hilo Medical Center- Hawai'i Health Systems Corporation
1190 Waianuenue Avenue
Hilo, HI 96720

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 982-5831 fax: (808) 966-7593 HC 2 Box 9575 Kea'au Hawai'i 96749
ronterry@verizon.net

December 1, 2005

Clyde Namu'o, Administrator
Office of Hawaiian Affairs
711 Kapiolani Blvd., Suite 1250
Honolulu HI 96813

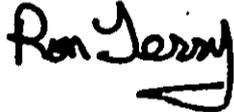
Dear Mr. Namu'o:

**Subject: Hilo Medical Center Parking Lot Expansion
Environmental Assessment**

Thank you for your comment letter dated November 17, 2005, in which you stated that you had no comment specific to the Draft EA. Be assured that project officials and contractors will be made aware that should iwi or Hawaiian cultural or traditional deposits are found during ground disturbance, work will cease, and appropriate agencies will be contacted pursuant to applicable laws and regulations.

Again, thank you for your comment. If you have any questions about the project, please contact me at 982-5831 or Julie-Beth Ako of Hilo Medical Center at 974-4743.

Sincerely,



Ron Terry, Principal
Geometrician Associates

LINDA LINGLE
GOVERNOR OF HAWAII



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

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

In reply, please refer to:
EPO-05-105

November 18, 2005

Mr. Ron Terry
Geometrician Associates
HC 2 Box 9575
Keaau, Hawaii 96749

Dear Mr. Terry:

SUBJECT: Draft Environmental Assessment for Hilo Medical Center Parking Lot Expansion at Pihonua, South Hilo District, Island of Hawaii, Hawaii
TMK: 2-3-032:01

Thank you for allowing us to review and comment on the subject document. The document was routed to the various branches of the Environmental Health Administration. We have the following Environmental Planning Office comments.

Environmental Planning Office

Please note that some of the following issues may not apply to your particular proposed project or requested action. Should you have any questions about the applicability of the listed concerns or the particular environmental programs administered by our office, please feel free to contact us.

To facilitate TMDL development and implementation, and to assist with our assessment of the potential impact of proposed actions upon water quality, pollutant loading, and biological resources in receiving waters, we suggest that environmental review documents, permit applications, and related submittals include the following standard information and analyses.

Please note that these comments are also listed on our website:
www.state.hi.us/health/environmental/env-planning/landuse/landuse.html. We suggest that you also review other Standard Comments on this website.

Waterbody type and class

1. Identify the waterbody type and class, as defined in Hawaii Administrative Rules Chapter 11-54 (<http://www.state.hi.us/health/about/rules/11-54.pdf>), of all potentially affected water bodies. Potentially affected water bodies means those in which proposed project activity would take place and any others that could receive water discharged by the

Mr. Terry
November 18, 2005
Page 2

proposed project activity or water flowing down from the proposed site. These waterbodies can be presented as a chain of receiving waters whose top link is the project site upslope and whose bottom link is in Pacific Ocean "oceanic waters," with all receiving waters named according to conventions established by Chapter 11-54 and the *List of Impaired Waters in Hawaii Prepared under Clean Water Act § 303(d)*. For example, a recent project proposed for Nuhelewai Stream, Oahu (a tributary of Kapalama Canal) might potentially affect Nuhelewai Stream, Kapalama Canal, Honolulu Harbor and Shore Areas, and the Pacific Ocean.

Existing water quality management actions

2. Identify any existing National Pollutant Discharge Elimination System (NPDES) permits and related connection permits (issued by permittees) that will govern the management of water that runs off or is discharged from the proposed project site or facility. Please include NPDES and other permit numbers; names of permittees, permitted facilities, and receiving waters (including waterbody type and class as in 1. above); diagrams showing drainage/discharge pathways and outfall locations; and note any permit conditions that may specifically apply to the proposed project.
3. Identify any planning documents, groups, and projects that include specific prescriptions for water quality management at the proposed project site and in the potentially affected waterbodies. Please note those prescriptions that may specifically apply to the proposed project.

Pending water quality management actions

4. Identify all potentially affected water bodies that appear on the current *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)* including the listed waterbody, geographic scope of listing, and pollutant(s) (See Table 5 at <http://www.hawaii.gov/health/environmental/env-planning/wqm/303dpcfinal.pdf>).
5. If the proposed project involves potentially affected water bodies that appear on the current *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)*, identify and quantify expected changes in the following site and watershed conditions and characteristics
 - surface permeability
 - hydrologic response of surface (timing, magnitude, and pathways)
 - receiving water hydrology
 - runoff and discharge constituents
 - pollutant concentrations and loads in receiving waters
 - aquatic habitat quality and the integrity of aquatic biota

Mr. Terry
November 18, 2005
Page 3

Where TMDLs are already established they include pollutant load allocations for the surrounding lands and point source discharges. In these cases, we suggest that the submittal specify how the proposed project would contribute to achieving the applicable load reductions.

Where TMDLs are yet to be established and implemented, a first step in achieving TMDL objectives is to prevent any project-related increases in pollutant loads. This is generally accomplished through the proper application of suitable best management practices in all phases of the project and adherence to any applicable ordinances, standards, and permit conditions. In these cases we suggest that the submittal specify how the proposed project would contribute to reducing the polluted discharge and runoff entering the receiving waters, including plans for additional pollutant load reduction practices in future management of the surrounding lands and drainage/discharge systems.

Proposed Action and Alternatives Considered

We suggest that each submittal identify and analyze potential project impacts at a watershed scale by considering the potential contribution of the proposed project to cumulative, multi-project watershed effects on hydrology, water quality, and aquatic and riparian ecosystems.

We also suggest that each submittal broadly evaluate project alternatives by identifying more than one engineering solution for proposed projects. In particular, we suggest the consideration of "alternative," "soft," and "green" engineering solutions for channel modifications that would provide a more environmentally friendly and aesthetically pleasing channel environment and minimize the destruction of natural landscapes.

If there are any questions about these comments please contact Jiakai Liu with the Environmental Planning Office at 586-4346.

Sincerely,



HAROLD LAO, ACTING MANAGER
Environmental Planning Office

c: EPO

geometrician

ASSOCIATES, LLC

integrating geographic science and planning

phone: (808) 982-5831 fax: (808) 966-7593 HC 2 Box 9575 Kea'au Hawai'i 96749
ronterry@verizon.net

December 1, 2005

Harold Lao, Acting Manager
Environmental Planning Office
Hawaii State Department of Health
P.O. Box 3378
Honolulu HI 96801-3378

Dear Mr. Lao:

**Subject: Hilo Medical Center Parking Lot Expansion
Environmental Assessment**

Thank you for your comment letter dated November 18, 2005, on the Draft EA. As the consultant for the project, I offer the following response to your specific comments:

1. *Affected waterbodies.* Most of your comments relate to analytical or mitigative actions related to affected waterbodies. The proposed project will include onsite drainage facilities, will reduce total runoff from the property, and will not affect any waterbodies. No stream channels are involved or will be modified.

2. *NPDES Permit Nos., etc.* The request for this information is premature; although an NPDES is expected and is discussed in the EA, project design is in its conceptual phase only.

Again, thank you for your comment. If you have any questions about the project, please contact me at 982-5831 or Julie-Beth Ako of Hilo Medical Center at 974-4743.

Sincerely,



Ron Terry, Principal
Geometrician Associates

The Arc of Hilo

Improving the Lives of People with Disabilities Since 1954

1099 Waiānue Avenue
Hilo, Hawaii 96720
Phone: (808) 933-8334
Fax: (808) 961-0148
www.hiloarc.org

September 27, 2005

Ron Schurra
Chief Executive Officer
Hilo Medical Center
1099 Waiānue Avenue
Hilo, Hawaii 96720

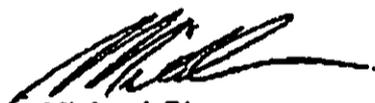
Dear *Stf. Ron*:

Last week's rain storm demonstrated the large volume of run off from the future Hospital parking area coming either across Henderson road or through two existing culverts passing under Henderson Road. This pointed out to us that The Arc of Hilo should be stating our concern about this potential flooding problem during the planning and engineering phase of the extended hospital parking lot development.

As you are aware, The Arc plans to relocate its greenhouses to the back acreage paralleling Henderson Road. This is where the major flooding and drainage occurs during heavy rains. We are sure that you have considered this issue and have already "engineered" dry wells or other forms of drainage to reroute the runoff from your property or parking area.

Please let us know if we can supply any further information concerning this issue.

Sincerely,



Michael Gleason
President & CEO

HILO MEDICAL CENTER
ADMINISTRATION OFFICE
RECEIVED

2005 OCT 3 PM 1 35

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 982-5831 fax: (808) 966-7593 HC 2 Box 9575 Kea'au Hawai'i 96749
ronterry@verizon.net

December 1, 2005

Michael Gleason, President and CEO
The Arc of Hilo
1099 Waiuanue Avenue
Hilo HI 96720

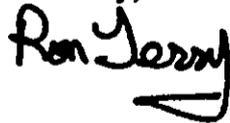
Dear Mr. Gleason:

**Subject: Hilo Medical Center Parking Lot Expansion
Environmental Assessment**

Thank you for your comment letter dated September 27, 2005, on the project, which commented on existing drainage problems and potential drainage impacts. The EA for the project included information on this subject. Specifically, both the unpaved (temporary) and paved parking areas will include engineered drainage, in conformance with applicable regulations, that will promote infiltration of storm water runoff and will therefore serve to both protect and improve area surface water quality in the long-term, and will also reduce the amount of storm water runoff leaving the site. The Hawai'i County Department of Public Works will be consulted during design and all applicable regulations concerning the floodplain will be adhered to. Hilo Medical Center welcomes your input during the engineering and construction phases of the project, and they will instruct their engineers to contact you.

Again, thank you for your comment. If you have any further questions about the project, please contact me at 982-5831 or Julie-Beth Ako of Hilo Medical Center at 974-4743.

Sincerely,



Ron Terry, Principal
Geometrician Associates