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SEP 23 2011

William P. Kenoi
Mayor

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Director

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County of Hawai`i

DEPARTMENT OF PARKS AND RECREATION

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OFC. OF ENVIRONMENTAL QUALITY CONTROL

August 29, 2011

Mr. Gary Hooser, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

Dear Mr. Hooser:

Subject: **Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI)**
***Ke Ala Kahawai o Waimea,* Waimea Trails and Greenways**
Waimea, South Kohala District, Hawai'i Island
Various TMKs

The County of Hawai'i Department of Parks and Recreation (DPR) proposes a 4 to 5+ mile long, multi-use path following the Waikōloa Stream in Waimea, on the Island of Hawai'i. *Ke Ala Kahawai o Waimea*, or "the stream trail of Waimea," will be paved, vary from 10 to 12 feet in width, and be ADA-accessible for most of its length. The project will provide an alternative transportation facility connecting residences, businesses and schools, and enhance opportunities to exercise and enjoy nature.

Based on the analysis in this Final EA and the comments received during the Draft EA comment period, we have made a Finding of No Significant Impact (FONSI) in accordance with State of Hawai'i HRS Chapter 343. The Final EA was also prepared in accordance with the National Environmental Policy Act (NEPA).

Please publish notice of availability in the September 23, 2011 OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form, one hard copy of the Final EA, and one pdf copy on CD. Please call Mr. James Komata, Park Planner at (808) 961-8311 if you have any questions.

Sincerely,

Fo

Robert A. Fitzgerald
Director

County of Hawai'i is an Equal Opportunity Provider and Employer.

OEQC Publication Form
The Environmental Notice

Instructions to Applicant or Agency:

1. Fill out this Publication Form and email to: oeqc@doh.hawaii.gov
2. Send one (1) pdf and one (1) hardcopy of the EA / EIS to OEQC

Name of Project:	*Ke Ala Kahawai o Waimea* ("the stream trail of Waimea") Waimea Trails and Greenways
Applicable Law:	HRS Chapter 343 and National Environmental Policy Act (NEPA)
Type of Document:	Final Environmental Assessment/Finding of No Significant Impact
Island:	Hawai'i
District:	South Kohala District
TMK:	Various
Permits Required:	*For stream crossings*--Department of the Army permit, Stream Channel Alteration Permit, Section 401 WQC, NPDES
Name of Applicant or Proposing Agency:	County of Hawai'i Department of Parks and Recreation
Address	101 Pauahi Street, Suite 6
City, State, Zip	Hilo, HI 96720
Contact and Phone	James Komata, Park Planner, phone (808) 961-8311
Approving Agency:	County of Hawai'I
Address	Department of Parks and Recreation
City, State, Zip	101 Pauahi Street, Suite 6
Contact and Phone	Hilo, HI 96720 James Komata, Park Planner, phone (808) 961-8311
Consultant	Kimura International, Inc.
Address	1600 Kapiolani Boulevard, Suite 1610
City, State, Zip	Honolulu, Hawaii 96814
Contact and Phone	Leslie Kurisaki, phone (808) 944-8848

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Project Summary: Summary of the direct, indirect, secondary, and cumulative impacts of the proposed action (less than 200 words).

The County of Hawai'i Department of Parks and Recreation (DPR) proposes a 4.8-mile long, multi-use path following the meandering path of Waikōloa Stream in Waimea, on the Island of Hawai'i. *Ke Ala Kahawai o Waimea*, or "the stream trail of Waimea," will be paved, vary from 10 to 12 feet in width, and be ADA-accessible for most of its length. The purpose of the project is to provide an alternative transportation facility connecting residences, businesses and schools. The path will provide a safe route for pedestrians, bicyclists and other non-motorized modes of transportation, and enhance opportunities to exercise and enjoy nature. A separate equestrian trail could also be developed in the western-most section of the project corridor.

The idea for a greenway trail was initiated by the community over 15 years ago, and now has widespread support among Waimea residents, elected officials, and government agencies. The trail has been officially endorsed in several County and State planning documents.

Ke Ala Kahawai o Waimea will extend from Church Row in Waimea Town and head west alongside Waikōloa Stream, terminating at a future County park site on Kawaihae Road. Easements have already been secured from public and private landowners for most of the 4.8-mile route. Project impacts include construction-period dust and noise. There are up to 10 stream crossings along the route with bridges or culverts to be constructed. Permits and approvals will be required from the Department of the Army and State of Hawai'i for in-stream work. There will be no adverse impacts to water quality or stream biota. No threatened or endangered plants or animals will be adversely impacted by the project. Archaeological

field inspections have confirmed that due to past urbanization, there are no remaining historic properties along most of the route. However, the western-most section of the trail still contains agriculture and habitation sites from the pre and post-contact eras. Archaeological inventory surveys will be performed as appropriate as the trail segments are planned and developed, and appropriate mitigation will be identified.







Waimea Trails and Greenways

Ke Ala Kahawai o Waimea

("The Stream Trail of Waimea")

Final Environmental Assessment



September 2011

County of Hawaii
Department of Parks and Recreation

Ke Ala Kahawai o Waimea, Waimea Trails and Greenways
South Kohala District, Island of Hawai'i, Hawai'i

Final Environmental Assessment

Submitted Pursuant to
42 U.S.C. 4332 (2) (c) and 49 U.S.C. 303
and
Chapter 343, Hawai'i Revised Statutes

by the
U.S. Department of Transportation
Federal Highway Administration
and
State of Hawai'i
Department of Transportation
and
County of Hawai'i
Department of Parks and Recreation

8-17-11
Date of Approval

Robert Fitzgerald, Director
County of Hawai'i
Department Parks and Recreation

AUG 23 2011
Date of Approval

Glenn Okimoto, Director
State of Hawai'i
Department of Transportation

8-24-11
Date of Approval

Abraham Wong, Division Administrator
Federal Highway Administration
U.S. Department of Transportation

The following persons may be contacted for additional information concerning this document:

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Kapolei, HI 96707
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Pat V. Phung, P.E.
Federal Highway Administration
Hawai'i Division
300 Ala Moana Blvd., Rm 3-306
Honolulu, HI 96850-3306
(808) 541-2305

This Final Environmental Assessment documents the environmental evaluation of *Ke Ala Kahawai o Waimea* ("the stream trail of Waimea") a proposed 4.8-mile long, multi-use path following the meandering path of Waikōloa Stream in Waimea, on the Island of Hawai'i. The multi-use path will be paved, vary from 10 to 12 feet in width, and be ADA-accessible for most of its length. The purpose of the project is to provide an alternative transportation facility connecting residences, businesses and schools. The path will be accessible to pedestrians, bicyclists and other non-motorized modes of transportation, and enhance opportunities for exercise and enjoyment of the natural environment. With mitigation measures, the proposed project is not expected to result in any significant adverse impacts.

Comments on this EA are due by November 6, 2011 and should be sent to Mr. Abraham Wong of the Federal Highway Administration (see address above).







Waimea Trails and Greenways

Ke Ala Kahawai o Waimea

("The Stream Trail of Waimea")

Final Environmental Assessment

September 2011

County of Hawaii
Department of Parks and Recreation

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AECOS, Inc., Eric B. Guinther, Reginald David, Derral Herbst

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Appendix D Section 7, Endangered Species Act Consultation
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Appendix E Literature Review and Field Inspection for the Waimea Trails and Greenways Project, Lālāmilo, ‘Ouli, Mamoualoa, Lanikepu, Keoniki, Waiaka, Kauniho, Waikōloa, Waiauia, Haleaha Ahuapua‘a, South Kohala District, Cultural Surveys Hawai‘i, October 2010

Appendix F Other Archaeological Studies
- Final Archaeological Inventory Survey for the Waimea Trails and Greenway Project, Lalamilo Ahupua‘a, South Kohala District, Hawaii Island. Prepared for Gerald Park Urban Planner, Cultural Surveys Hawai‘i, August 2009
- SHPD letter dated September 8, 2009 regarding Archaeological Inventory Survey
- An Archaeological Assessment of Proposed Waimea Trails and Greenways Project within the Lālāmilo and Waikōloa Ahupua‘a, December 2002
- Cultural Impact Assessment for the Proposed Waimea Trails and Greenway Project, Waimea, South Kohala District, Island of Hawai‘i, December 2003

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LIST OF ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
AIS	archaeological inventory survey
ALISH	Agricultural Lands of Importance to Hawai‘i
BFE	base flood elevation
BMP	Best Management Practices
CDP	Community Development Plan
CEQ	Council on Environmental Quality
CIA	Cultural Impact Assessment
CPTED	crime prevention through environmental design
CTAHR	College of Tropical Agriculture and Human Resources
CWA	Clean Water Act
CZM	Coastal Zone Management
DA	Department of the Army
DCAB	Disability Communication Access Board
DHHL	Department of Hawaiian Home Lands
DLNR	Department of Land & Natural Resources
DPR	Department of Parks and Recreation
EA	Environmental Assessment
EMS	Emergency Medical Services
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HDOH	State of Hawai‘i Department of Health
HELCO	Hawaiian Electric Light Company
HPA	Hawai‘i Preparatory Academy
HRS	Hawai‘i Revised Statutes
HELCO	Hawaii Electric Light Company
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
LUPAG	Land Use Pattern Allocation Guide
MEC	munitions and explosives of concern
MSL	mean sea level
MUTCD	Manual of Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLAA	not likely to adversely affect
NWS	National Weather Service
OEQC	Office of Environmental Quality Control
OHA	Office of Hawaiian Affairs

OHWM	ordinary high water mark
PATH	People's Advocacy for Trails Hawai'i
PCS	public charter school
SCORP	State Comprehensive Outdoor Recreation Plan
SHPD	State Historic Preservation Division
SKCDP	South Kohala Community Development Plan
SMA	Special Management Area
TMK	tax map key
UH	University of Hawai'i
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
UXO	unexploded ordnance
WTG	Waimea Trails and Greenways

Project Summary

Item	Description
Project Name	*Ke Ala Kahawai O Waimea ("the stream trail of Waimea")*, Waimea Trails and Greenways
Proposing Agency	County of Hawai'i, Department of Parks and Recreation (DPR)
Approving Agency	County of Hawai'i, Department of Parks and Recreation (DPR)
Determination	Finding of No Significant Impact (FONSI)
Location	Waimea, South Kohala District, Island of Hawai'i
Tax Map Keys	Various (see Appendix A)
Existing Uses	Urban mixed use, undeveloped pasture, recreation, agriculture
Landowner	State of Hawai'i (UH CTAHR and DHHL), County of Hawai'i, Parker Ranch, and other smaller landowners
Need for Project	The project addresses several needs: • Alternative, non-vehicular transportation options for Waimea residents and visitors • Improved safety for pedestrians, bicyclists, and others using non-motorized modes of transportation • Connectivity between residences, businesses and schools • Enhanced access to and enjoyment of natural and scenic areas • Increased opportunities for recreation and physical fitness
Project Description	Construct a 4.8-mile long, multi-use path following the meandering path of Waikōloa Stream, and extending from Church Row in Waimea town to a future County park on Kawaihae Road, across the Kamuela View Estates Subdivision. The path will be paved, vary from 10 to 12 feet in width, and be ADA-accessible for most of its length. The project also includes an option for a separate, equestrian trail in the area west of the County refuse transfer station. An equestrian trail head and horse trailer parking could be constructed on State-owned land adjacent to the transfer station.
Flood Insurance Rate Map	Some areas along Waikōloa Stream designated Zone A (100-yr. flooding, no base flood elevation) and Zone AE (100-yr. flooding, base flood elevation determined). Most of project corridor within Zone X (areas outside the 500-yr. floodplain).
State Land Use	Urban and Agriculture
Zoning	CV-7.5, Village Commercial (minimum 7,500 sq. ft lot) A-1a, Agricultural (minimum bldg. site 1 acre) A-5a, Agricultural (minimum bldg. site 5 acres)
Special Management Area (SMA)	No

1 INTRODUCTION

The County of Hawai‘i, Department of Parks and Recreation (DPR), in collaboration with the Waimea Trails and Greenways Committee of the Waimea Preservation Association, proposes to construct a multi-use path through the town of Waimea, District of South Kohala, Island of Hawai‘i. *Ke Ala Kahawai O Waimea*, or “the stream trail of Waimea” would be a multi-use bicycle and pedestrian path approximately 4.8 miles through Waimea, following the meandering path of Waikōloa Stream.

This Environmental Assessment (EA) for *Ke Ala Kahawai O Waimea* has been prepared in accordance with the National Environmental Policy Act (NEPA) and the State of Hawai‘i Chapter 343 HRS. This document supersedes an earlier Chapter 343 HRS EA for Waimea Trails and Greenways completed for the project in February 2004.

1.1 PROPOSED ACTION

The proposed action is the construction of a 4.8-mile long, multi-use path following Waikōloa Stream, and extending from a Church Row in Waimea Town to a future County park on Kawaihae Road, across from the Kamuela View Estates subdivision (Figure 1). The proposed path alignment was selected after an evaluation of alternatives, which included segments located on the Kohala or north side of Kawaihae Road. The alternatives were evaluated and dismissed in favor of the proposed alignment. All of the alternatives considered are discussed in Chapter 3, Alternatives Analysis.

The proposed path will begin at Church Row in Waimea Town, and follow Waikōloa Stream west through town, and then through agricultural and grazing lands, past the County refuse transfer station, past the site of the Department of Hawaiian Home Land’s future Lālāmilo subdivision, then north toward Kawaihae Road, crossing Keanu‘i‘omanō Stream. The western end of the path terminates at a vacant, 8-acre parcel located across Kawaihae Road from the Kamuela View Estates subdivision. The land was donated to the County by Waimea resident Henry Clark, and is planned for a future park. The proposed trail will be paved and accessible to pedestrians, bicyclists, and other non-motorized vehicles, and vary from 10 to 12 feet in width. The intent is to have the path comply with Americans with Disabilities Act (ADA) guidelines for outdoor areas for the majority of its length. In areas where it is technically infeasible to achieve ADA compliance, signage will be installed and alternative access points will be identified.

Development of the trail may be implemented by the DPR or through joint efforts with other County, State or Federal agencies, or community groups. Because of its length, the trail will be constructed in increments. The first increment, which is currently in design, encompasses the area between Lindsey Road and Kahawai Street. This segment was selected as the first increment because there have been recent community efforts to clear brush and lay wood chips, and it is already used as an informal trail. This Increment 1 also links commercial and employment destinations near Lindsey Road, the Waimea Nature Park, several residential communities, and several schools. Moreover, easements for this first increment have already been secured. Design and construction costs for the first increment have been estimated at $5.8 million. Future path

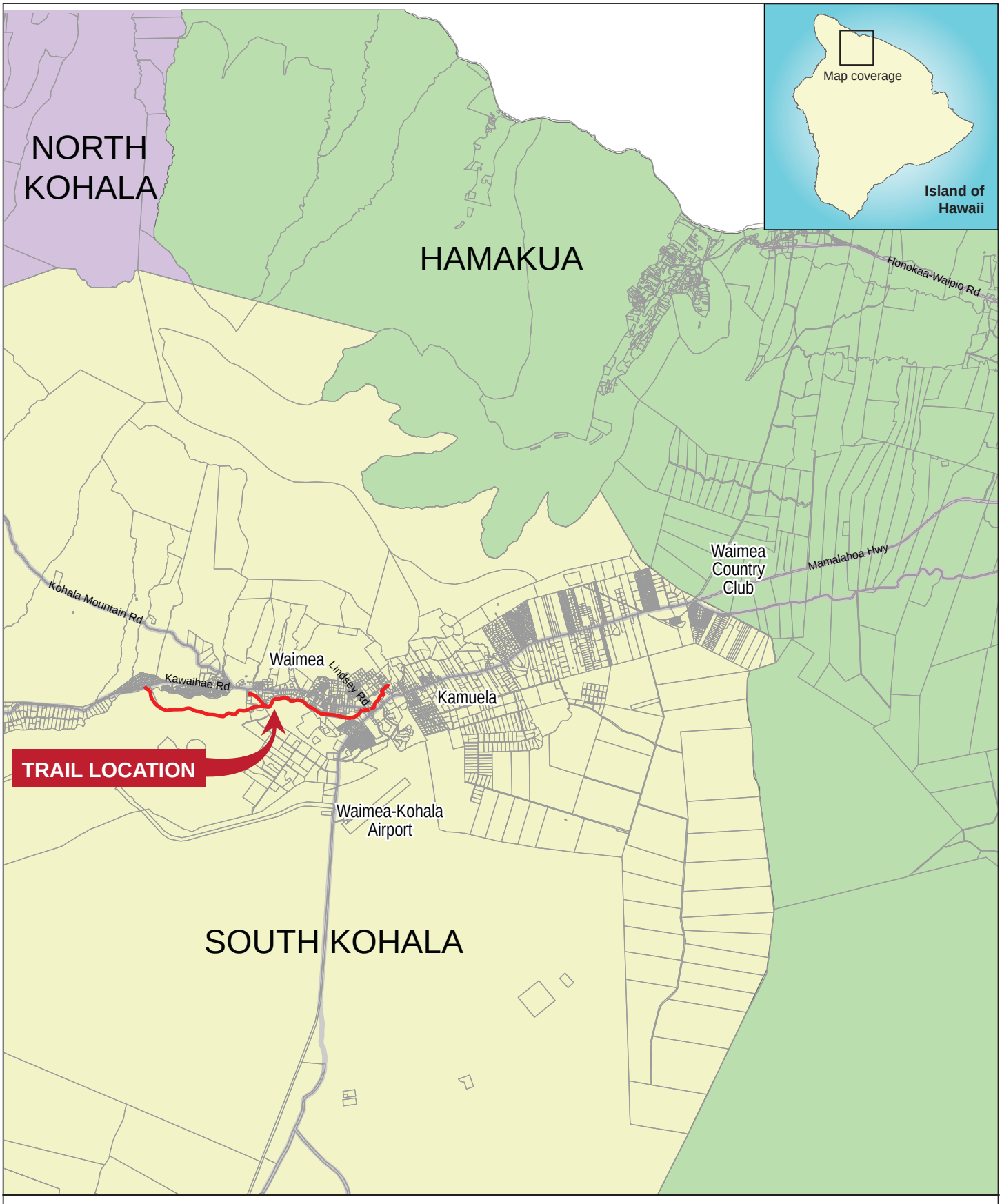


Figure 1
LOCATION MAP
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

increments will be developed as funding becomes available and as required easements are secured. It is estimated that the entire trail, including the first increment, will cost upward of $18 million to design and construct.

The proposed project also includes an option for a separate, dedicated equestrian trail in the area west of the County refuse transfer station. The equestrian trail would roughly parallel, but be physically separated from the main path. If an equestrian trail were built, a trail head and horse trailer parking could be constructed on State-owned land adjacent to the transfer station. From this point, the equestrian trail would head west on State land, where there is sufficient land for it to be safely separated from the main path. This area is currently being leased by the State to rancher Harold "Freddy" Rice. Therefore, both the multi-use path and any future equestrian path would need some type of sub-lease agreement with Mr. Rice. The equestrian trail could eventually connect to other future trails developed by Parker Ranch.

1.2 ENVIRONMENTAL PERMITS AND APPROVALS

The following is a summary of environmental approvals and consultations that are or may be required for construction of the trail. Chapter 5 includes a more detailed discussion of the project's consistency with Federal, State and local land use plans, policies and controls.

Table 1-1: Environmental Permits and Approvals

Approval/Consultation	Agency	Status
Federal		
National Environmental Policy Act, Environmental Assessment and Finding of No Significant Impact (FONSI)	Federal Highway Administration	**Completed** by publication of this Final Environmental Assessment and FONSI.
Section 106, National Historic Preservation Act consultation	Department of Land and Natural Resources, State Historic Preservation Division	**Completed.** See letter from FHWA to DLNR SHPD dated May 18, 2011 requesting concurrence with determination of "no adverse effect."
Section 7, Endangered Species Act consultation	U.S. Fish and Wildlife Service (USFWS)	**Completed**. See letter from USFWS to FHWA dated December 20, 2010 concurring that project is not likely to adversely affect Blackburn's sphinx moth. Concurred that project not likely to adversely affect Hawaiian hoary bat provided that avoidance measures taken (i.e., woody vegetation taller than 15 ft not be cleared between May 15 and August 15).
Department of the Army Permit, Section 10 Rivers & Harbors Act/Section 404 Clean Water Act	Department of the Army, U.S. Army Corps of Engineers, Honolulu District, Regulatory Branch	*To be obtained for stream crossings and improvements within navigable waters for each increment as needed.*

Approval/Consultation	Agency	Status
State of Hawai'i		
HRS Chapter 343 Environmental Assessment and Finding of No Significant Impact (FONSI)	County of Hawai'i, Department of Parks and Recreation	**Completed** by publication of this Final Environmental Assessment and FONSI.
HRS Chapter 6E-8 Historic Preservation review	Department of Land and Natural Resources, State Historic Preservation Division	**Completed** per Memorandum from DLNR SHPD dated June 16, 2010, LOG NO: 2010.1049, DOC NO: 1006MD04 Archeology (Chapter 9, Pre Assessment Consultation letters). Preservation plan requested in September 2009 (for site in Increment 1) must be prepared prior to ground-altering construction. Archaeological inventory surveys required for future increments as they are proposed.
Coastal Zone Management (CZM) Consistency Determination	Dept. of Business, Economic Development and Tourism, Hawai'i CZM Office	*To be completed in conjunction with Department of the Army Section 404 permit (see above) for each increment as needed.*
Stream Channel Alteration Permit (SCAP)	DLNR Commission on Water Resource Management	*To be obtained for stream crossings as needed for each increment as needed.*
Section 401, Water Quality Certification	Department of Health, Clean Water Branch	*To be obtained for stream crossings as needed for each increment as needed.*
National Pollutant Discharge Elimination System Permit (NPDES) for discharges of wastewater, including stormwater runoff	Department of Health, Clean Water Branch	*To be obtained as needed for construction activity for each increment as needed.*
Disability Communication Access Board (DCAB)	Department of Health	*Plans to be reviewed for each increment as needed.*
County of Hawai'i		
Hawai'i County Code Chapter 27, Floodplain Management *(for streamside areas within floodplain)*	Department of Public Works	*Review to be conducted as needed for each increment as needed.*
Various Building and grading permits	County of Hawai'i	*To be obtained as needed for each increment as needed.*

1.3 FEDERAL TRANSPORTATION ENHANCEMENT (TE) FUNDING

It is Hawai‘i County’s intent to leverage federal money to construct *Ke Ala Kahawai o Waimea*, in particular federal Transportation Enhancement (TE) funds. These funds are identified in the current federal transportation legislation *(Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, aka “SAFETEA-LU”)* and earmarked, through the State's competitive grant cycle, specifically for activities that “help expand transportation choices,” and “enhance the transportation experience.” There are twelve TE activities potentially eligible for funding:

1. Provision of facilities for pedestrians and bicycles.
2. Provision of safety and educational activities for pedestrians and bicyclists.
3. Acquisition of scenic easements and scenic or historic sites.
4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities).
5. Landscaping and other scenic beautification.
6. Historic preservation.
7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals).
8. Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrians or bicycle trails).
9. Control and removal of outdoor advertising.
10. Archaeological planning and research.
11. Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.
12. Establishment of transportation museums.

The Federal Highway Administration (FHWA) Hawai‘i Division confirmed that in April 2011, there was approximately $16 million in TE funds available for eligible projects in Hawai‘i (Source: FHWA W97A report as of April 30, 2011). They have also indicated that over the past several years, FHWA has allocated to the State of Hawaii $3.7 million a year for TE projects. The County of Kaua‘i has utilized TE funds for a six-mile long segment of multi-use path in the Kapa‘a area. They were able to use the assessed value of privately-donated land as its 20% local match. As a final note, multiple projects covering all four counties have utilized TE funds for eligible TE efforts.

1.4 COMMITTED MITIGATION MEASURES

The following table summarizes the environmental mitigation measures for the Preferred Alternative, *Ke Ala Kahawai o Waimea*, which the County of Hawai‘i has committed to implementing. These mitigations are discussed in Chapter 4 of this Final EA.

Table 1-2
Preferred Alternative-*Ke Ala Kahawai o Waimea*
Committed Mitigation Measures

Potential Impacts/Concerns	Reference	Mitigation Measures	Timing of Implementation
PHYSICAL ENVIRONMENT			
Appropriate Trail Characteristics and Design			
Trail width--Trail will be too narrow to accommodate multiple users, causing conflicts and safety issues. Or the trail will be so wide it will look like a "paved highway."	FEA Section 3.2.4, p. 3-13	Trail will be minimum 10-ft wide to accommodate two-way, multi-modal transportation and provide greater use flexibility. Trail may be widened if needed for user safety. Sensitivity to environmental and aesthetic issues will be maintained during design.	All increments during design and construction
A concrete trail could have a stark and unnatural appearance which is visually incompatible with the natural surroundings. The trail may not fit in with the rural character of the Waimea area.	FEA Section 3.2.4, p. 3-15	Trail will be constructed of concrete for its long-term durability, relative ease of maintenance and safety considerations, but will be stained/colored an earth-tone to mitigate potential visual impact.	All increments during design and construction
Sections of Increment 1 trail alignment (near near Carter Center and Lalamilo Research Station) are badly eroded due to recent flooding and unstable stream banks could undermine the trail.	FEA Section 3.3, p. 3-20	Retaining walls will be used in limited area to restore and stabilize eroded stream bank and provide support for the trail.	Increment 1 design and construction
Sections of Increment 1 alignment are near the floodway and vulnerable to flood damage.	FEA Section 3.3, p. 3-20	Keep trail alignment out of the floodway and away from adjacent subdivision. Retaining walls will be used to allow trail construction in a steeper area outside floodway, and reduce required earthwork.	Increment 1 design and construction
Confusing, cluttered, or non-existent signage along the trail.	FEA Section 3.2.4, p. 3-22	County will develop comprehensive signage program for *Ke Ala Kahawai o Waimea* following FHWA's Manual on Uniform Traffic Control Devices (MUTCD).	Signage standards for entire path developed prior to completion of Increment 1. Signage installed as increments are completed.
Adjacent Land Uses			
Potential adverse impact to adjacent agricultural operations (e.g., Lalamilo Research Station, Robb Farm) due to increased visual exposure and proximity to public areas. Potential for increased theft of farm produce and equipment. Potential impact if dogs (pets) on the trail get into cultivated areas or destroy or soil farm products.	FEA Section 4.2.1, pp 4-19 to 4-20; FEA Section 4.2.3, p. 4-29	Trail will be located on opposite (north) side of Waikoloa Stream across Lalamilo Research Station.	Increment 1 design
		Trail will be located on opposite (north) side of stream across Robb Farm.	Increment 2 design
Potential adverse impacts to adjacent ranching operations and/or leaseholders (e.g., State-lessee Freddy Rice, Parker Ranch) due to creation of the trail or trespassing by people or dogs.	FEA Section 4.2.1, p. 4-29	Trail to remain within negotiated easement area on Parker Ranch land. County will negotiate with State leaseholder of land next to the landfill to allow the County to construct its trailhead on that site. During trail operation, signage reminding trail users to stay off private property and to keep dogs on-leash and under owner's control.	Increment 2 design, All increments during operation
	FEA Section 4.2.1, p. 4-29	For State-owned land subleased to rancher Freddy Rice, further discussion needed (between County, State, lessee) when this section of trail developed. May need to execute sub-lease agreement and resolve potential liability issues, etc.	Increment 3/4

Potential Impacts/Concerns	Reference	Mitigation Measures	Timing of Implementation
Potential adverse impacts to adjacent residential areas (e.g., Sandalwood, Waimea Hale apartments, DHHL Lalamilo subdivision, etc.).	FEA Section 4.2.1; Section 4.2.7, p.4-41; Section 4.6.2, p. 4-48	No motorized vehicles allowed on trail except for emergency and maintenance vehicles. Design will incorporate appropriate considerations to prevent unauthorized entry of motor vehicles while preserving safe use by bicycles. Signage posted to remind users of trail etiquette and to stay off private property. Trail rest areas will be located away from residential areas. Construction limited to daytime and week days. Adjacent residents to be provided advance notice of construction schedule.	All increments during design, construction and operation.
	FEA Section 4.2.1, p. 4-19	Trail sited on opposite side of Waikoloa Stream from Sandalwood and DHHL Lalamilo subdivisions.	Sandalwood-Increment 2 Lalamilo-Increment 3/4
	FEA Section 4.2.7, pp 4-41 to 4-42	Trail is located within agricultural-zoned lands. Trail noise will be lower in volume and intensity than typical agriculture activities that are allowed under County zoning regulations. Noise from trail use will meet all County and State noise standards.	All increments
Potential adverse impacts to residents living on signed shared roadways (Kahawai Street, Opelo Road) due to use of street as trail access road.	FEA Section 4.6.2, p. 4-87	County to conduct further discussion and coordination with residents and landowner Parker Ranch to explore potential mitigation. Possible mitigation includes: 1) limiting or restricting street parking on access roads, 2) limit street access to pedestrians and bicyclists, 3) extend Kahawai Street closer to trail to provide vehicle turn around area.	Increment 2 design
Potential adverse impacts on other noise-sensitive land uses during trail construction.	FEA Section 4.2.7, p. 4-42	Noise sensitive land uses adjacent to the trail will be given advance notice of trail construction. Construction noise will be temporary . Trail passes behind Kanu o ka Aina Public Charter School. School will be relocating to permanent facility within a few years.	Notice provided prior to Increment 1 construction. Noise mitigation during construction.
Geology and Topography			
Erosion, runoff due to trail improvements, removal of vegetation	FEA Section 4.2.2 p. 4-21	All earthwork and grading conform to County Code; no change to existing drainage patterns, all runoff disposed on site and not directed toward adjacent properties. Any net increase in runoff will be addressed in the design.	All increments, during construction
Soils and Agriculture			
Loss of or adverse impacts to agricultural land	FEA Section 4.2.3 p. 4-29	Trail route avoids Prime Agricultural Land and actively cultivated areas. Segment through Lalamilo Research Station located within previously negotiated easement on north side of Waikoloa Stream.	Increment 1 and 2
Erosion due to vegetation removal and site work.	FEA Section 4.2.3, p. 4-29; Section 4.2.6, p. 4-40	Buffer maintained between stream and trail to the extent possible. Trees removed along stream bank limited to those that are dead, unhealthy, or pose a danger to trail users. Cleared areas revegetated as quickly as possible. Native vegetation planted to replace removed trees. Terraced retaining walls where needed. Compliance with County, State and federal regulations. Use of best management practices during construction.	All increments, during design and construction

Potential Impacts/Concerns	Reference	Mitigation Measures	Timing of Implementation
Air Quality			
Dust and equipment emissions during construction.	FEA Section 4.2.4, pp 4-31 to 4-32	Standard dust control measures such as dust screens, water sprinkling, revegetation or paving as soon as possible. Path will be paved.	All increments, during construction
Natural Hazards/Flood			
Increase in flood hazard due to construction or improvements within designated flood prone areas.	FEA Section 4.2.5, p. 4-33	Bridges and other structures in flood zone will be designed to result in "no net rise" in base flood elevation (i.e., no effect on flood zone). Project will comply with provisions of County Code Chapter 27, Floodplain Management.	All increments, during construction
	FEA Section 4.2.5, p. 4-33	Removal of large trees and brush will reduce debris in the stream, a major cause of stream blockage and past flooding.	Increment 1, during construction and operation
	FEA Section 4.2.5, p. 4-33	Presence of the trail will facilitate community efforts to keep stream bed free of debris.	Increment 1 operation
Water Resources/Stream Impacts			
Loss of vegetation in riparian area	FEA Section 4.2.6 p. 4-40	Replacement of removed vegetation with more appropriate native species.	All increments, during and after construction
Human exposure to infectious organisms in stream water, public health risks	FEA Section 4.2.6 p. 4-40	Posted signs to discourage users from swimming. If dogs allowed on trail, owners required to pick up waste. Doggie waste bags provided at trail access points.	All increments, following construction and during operation
Reduced water quality due to erosion, construction near or within stream.	FEA Section 4.2.6 p. 4-40	Stream culverts designed and constructed to allow continued migration of aquatic fauna. Water quality monitoring during construction of bridges and culverts, as required by Department of the Army and State DOH permits.	All increments, during design and construction
	FEA Section 4.2.6 p. 4-40	Presence of trail and greater access to stream will facilitate efforts to monitor stream water quality and watershed management.	All increments during operation
Noise			
Noise from trail use will adversely impact surrounding residential areas.	FEA Section 4.2.7 pp 4-41 to 4-43	Prohibit motorized vehicles except for mobility devices, maintenance and emergency vehicles.	Rules for entire path developed prior to completion of Increment 1
	FEA Section 4.2.7 pp 4-41 to 4-43	Trail to remain within negotiated easement area. Trail located across stream from agricultural subdivisions (Sandalwood, DHHL Lalamilo) which provides noise buffer. Landscaping provided along trail as appropriate. Rest areas located away from noise sensitive areas.	All increments, during design
	FEA Section 4.2.7 pp 4-41 to 4-43	Install signage reminding trail users about trail etiquette and rules.	Signage standards for entire path developed prior to completion of Increment 1. Signage installed as increments are completed.
	FEA Section 4.2.7 pp 4-41 to 4-43	Future trail parking (future County parks near Refuse Transfer station and Clark property) sited away from noise sensitive areas.	Increments 2 and 3/4, or as future parks are designed

Potential Impacts/Concerns	Reference	Mitigation Measures	Timing of Implementation
During construction of the trail, noise will adversely impact nearby residents.	FEA Section 4.2.7 pp 4-41 to 4-43	Mufflered and appropriately maintained equipment, equipment staging away from noise sensitive areas. Compliance with conditions of DOH noise permits. Residents and surrounding land uses provided advance notice of construction.	All increments, during construction
Unexploded Ordnance (UXO)			
Public hazard due to danger of unexploded ordnance from former Waikoloa Maneuver Area.	FEA Section 4.2.8 p. 4-44	Multi-use path limited to areas that have been cleared of UXO by Army Corps of Engineers.	All increments, during design
	FEA Section 4.2.8 p. 4-44	Signage advising trail users not to swim or wade in Waikoloa Stream, which was not surveyed or cleared of ordnance by Army.	All increments, following construction and during operation
BIOLOGICAL ENVIRONMENT			
Threatened and Endangered Species			
Impacts to threatened or endangered plants, birds, or stream fauna.	FEA Section 4.3.2, p. 4-55	No threatened or endangered plants within project area. All birds within project area (except Pacific Golden Plover) are introduced species. No suitable nesting habitat in or near project area for endangered Hawaiian Petrel or threatened Newell's shearwater. No threatened or endangered stream fauna found during surveys of Waikoloa and Keaniomano Streams. No Blackburn's sphinx moth or its host plants identified.	No action required
Bridge or culvert structures could adversely affect migration of amphidromous stream fauna, i.e., native 'o'opu which use stream channels to access upper reaches of Waikoloa and Keanuiomano Streams.	FEA Section 4.3.1 p. 4-48	If culverts in stream are required, should have unlined bottom surfaces or a surface that is completely flush with natural streambed to avoid blocking upstream faunal migrations.	All increments, during design and construction of bridges and culverts
Adverse impact to endangered Hawaiian hoary bats that may roosts in trees and dense vegetation.	FEA Section 4.3.3, p. 4-56	Hawaiian hoary bat not detected during biological surveys in 2000 and 2010. Per letter from USFWS dated December 20, 2010, no removal of trees larger than 15 feet in height during bat breeding season, May 15 to August 15.	All increments during construction and operation
Potential impact to overflying Hawaiian petrels and Newell's shearwaters.	FEA Section 4.3.3, pp 4-55 to 4-57	No lights proposed on trail. If night time construction activity or equipment maintenance is proposed, all lights will be shielded. If large flood/work lights used, lights will be pointed directly toward ground.	All increments, during construction
Removal of Mature Trees, Increment 1			
Large trees alongside trail pose safety risk to trail users by falling limbs and branches.	FEA Section 4.3.2, pp 4-52 to 4-53	Tree Risk Assessment conducted for Increment 1. Arborist identified trees that are sick or damaged or present safety risk to trail users and neighboring properties. These will be removed, and replaced with native vegetation.	Increment 1, design and construction
Removal of mature trees results in a loss of shade and windbreaks, aesthetic impact, loss of "heritage trees," increased soil erosion.	FEA Section 4.3.2, pp 4-52 to 4-53	Only trees that were identified by arborist as being dead, damaged, or a hazard to trail users will be removed. One-for-one replacement with native trees, though not necessarily of the same size.	Increment 1, design and construction
	FEA Section 4.3.2, pp 4-52 to 4-53	Continued coordination with Waimea Outdoor Circle regarding removal of trees in Increment 1.	Increment 1, design and construction

Potential Impacts/Concerns	Reference	Mitigation Measures	Timing of Implementation
Removal of mature trees on stream bank may cause instability in stream bank.	FEA Section 4.3.2, pp 4-52 to 4-53	Most of trees identified for removal are not immediately adjacent to stream. If mature trees on stream bank are removed, they will be cut above ground with stumps remaining to provide continued stability and erosion control.	Increment 1 design
SOCIO-ECONOMIC ENVIRONMENT			
Trail Maintenance			
High ongoing trail maintenance requirements.	FEA Section 4.4.2, pp 4-62 to 4-63	Use of concrete surface which is more durable and requires less ongoing maintenance.	All increments, during design
Lack of or poor ongoing trail maintenance.	FEA Section 4.4.2, pp 4-62 to 4-63	Establish partnership between County DPR and WTG Committee to assume trail stewardship. WTG responsible for routine, day-to-day maintenance. County responsible for remedial maintenance, repair, replacing major components, flood damage, etc.	All increments. Long-term operation and maintenance plan to be developed before opening of Increment 1.
	FEA Section 4.4.2, pp 4-62 to 4-63	Develop long-term operation and maintenance plan jointly by WTG Committee and County. Plan to identify and assign responsibility for routine and remedial maintenance tasks, operational issues, user safety, rules and policies for trail use.	All increments. Long-term operation and maintenance plan to be developed before opening of Increment 1.
Vandalism and Crime			
The presence of the trail creates opportunities for crime, vandalism, littering.	FEA Section 4.4.2 p. 4-66	Implement Crime Prevention through Environmental Design (CPTED) concepts including maximizing trail visibility to provide natural surveillance, provide clear zone at least 10 feet on either side of path, trim vegetation to improve public visibility, access control such as fences, signage, etc. to keep trail users off private property.	All increments during construction.
	FEA Section 4.4.2 p. 4-66	Public education, posted signage with trail rules and etiquette.	All increments, during design, construction, and operation.
	FEA Section 4.4.2 p. 4-66	High levels of trail use combined with watchful neighbors will provide more "eyes on the trail" and discourage undesirable behavior.	All increments during operation.
	FEA Section 4.4.2 p. 4-66	Regular maintenance of the trail, provide trash receptacles at trail access points.	All increments, during operation.
Decline in Property Values			
Presence of the trail near private homes will result in a decrease in residential property values.	FEA Section 4.4.2 pp 4-63 to 4-66	Extensive literature review of previous studies shows that presence of bike path/trail either increases property values or has no effect. Decline in property values as a result of the path is not anticipated.	No action required
Emergency Response			
Difficulty in providing emergency response service to trail users.	FEA Section 4.7.1 and 4.7.2	Placement of location markers along trail to assist emergency responders.	All increments, during design and construction.
		Provide adequate room alongside trail for emergency vehicle access, if needed.	All increments, during design and construction.
		WTG Committee and community to work with local law enforcement to develop emergency reporting and response protocol.	All increments during operation.

Potential Impacts/Concerns	Reference	Mitigation Measures	Timing of Implementation
County Liability Issues			
Construction and use of the trail creates liability concerns and expense for the County.	FEA Section 4.4.2, p. 4-67	Hawaii Recreational Use Statute, Chapter 520, HRS limits public and private landowner liability for lands open to public for recreation. State and County is self-insured against tort claims arising from bicycle and other accidents.	All increments during operation.
	FEA Section 4.4.2, p. 4-67	Design and construct path in accordance with recognized guidelines and standards.	All increments, during design and construction.
	FEA Section 4.4.2, p. 4-67	Risk management strategies during design and development (develop list of potential hazards,…expand	All increments, during design and construction.
	FEA Section 4.4.2, p. 4-67	Conduct inspections and monitor trail conditions, adhere to maintenance standards, keep written records.	All increments, during design and construction.
	FEA Section 4.4.2, p. 4-67	Appropriate signage, e.g., warning users of hazardous conditions, remind users to stay off private property, etc.	All increments, during design and construction.
Archaeological, Historic and Cultural Resources			
Construction of the trail will adversely impact sensitive cultural resources.	FEA Section 4.4.3 p. 4-71	Conduct archaeological inventory survey for each trail Increment as proposed.	All increments, prior to design.
	FEA Section 4.4.3 p. 4-71	Complete and implement preservation plan for ford crossing feature in Increment 1, as requested by SHPD in letter dated September 8, 2009.	Prior to construction of Increment 1.
Visual Impacts			
Stark, unnatural appearance of a concrete trail	FEA Section 4.4.4, p. 4-78	Utilize earth-tone colored concrete, meander trail path, follow natural topography to the extent possible.	All increments, during design and construction
TRAFFIC AND TRANSPORTATION			
Traffic Hazards on Roadways			
Danger to pedestrians and bicyclists when accessing trail from areas north of Kawaihae Road.	FEA Section 4.6.2, p. 4-86	County, State and community to continue working to address ongoing traffic safety issues along Kawaihae Road, including improving sidewalks and crossings,.	Ongoing independent of this project.
Traffic hazard to school children near Lindsey Road and Kawaihae Road intersection. Temptation for children to shortcut to school across Mamalahoa Highway near Carter Center.	FEA Section 4.6.2, p. 4-87	School crossing guards alerted to these potential safety hazards when school children begin to use the trail to commute to and from school.	Increment 1 operation.
Signed Shared Access Roads			
Increased vehicle, pedestrian and bicycle traffic on signed shared access roads.	FEA Section 4.6.2, p. 4-87	Minor roadway and sidewalk improvements as needed on County-owned roads. County to work with landowner Parker Ranch to develop mitigations for Kahawai Street which is owned by Parker Ranch.	All increments, as signed shared access roads are designed and constructed.

Potential Impacts/Concerns	Reference	Mitigation Measures	Timing of Implementation
Trail User Conflicts			
Potential for unsafe conditions or conflicts between various trail users traveling by different modes of transport and at different speeds. Potential for conflicts between trail users and cars.	FEA Section 4.6.2, p. 4-88	Design Characteristics--minimum 10-foot trail width to accommodate greater usability and safe two-way traffic; meandering path to slow speeds, etc.	All increments, as signed shared access roads are designed and constructed.
	FEA Section 4.6.2, p. 4-88	Education, signage reminding users of trail rules and user etiquette.	All increments. Overall signage plan to be developed before opening of Increment 1.
	FEA Section 4.6.2, p. 4-88	Trail signage to provide information on trail use, physical conditions, and accessibility.	All increments. Overall signage plan to be developed before opening of Increment 1.
	FEA Section 4.6.2, p. 4-88	At entry road to Waimea Nature Park, install gate, fencing, speed bumps and concrete apron extending into park approximately 25 feet.	Increment 1, during design and construction.
	FEA Section 4.6.2, p. 4-88	Appropriate trail signage with information on trail use and physical conditions. Signage to follow FHWA's Manual on Uniform Traffic Control Devices (MUTCD).	Signage standards for entire path developed prior to completion of Increment 1. Signage installed as increments are completed.

2 PURPOSE AND NEED FOR ACTION

2.1 PROJECT HISTORY

It Started with an Idea

For many years, the Waimea community has discussed the idea for a greenway trail through Waimea that would link residences, businesses, and schools. In 1994, the Waimea Main Street initiated community meetings to discuss what the community would like to accomplish. Among the major issues raised was the need to increase the walkability of the town and to provide access to hiking trails and green areas. Subsequently, the "Waimea Trails and Greenways" (WTG) Committee (a sub-committee of the Waimea Main Street Design Committee) was formed to actively pursue the greenway concept. The WTG Committee was headed by local architect, Clemson Lam.

In late 1994, the WTG Committee held a number of community meetings where residents discussed their goals and concerns, and explored a number of potential routes. The participant's main goal was to develop a safe transportation route linking where people live, work, shop and go to school. This concept was distilled into a linear trail route through town. The logical place for this trail was alongside Waikōloa Stream, which runs right through the middle of town. In September, 1994, Waimea Main Street submitted a proposal to the Hawai'i County Council for this trail concept, and in January 1995, the Council approved seed money to secure federal ISTEA (Intermodal Surface Transportation Efficiency Act) dollars for this transportation enhancement.

Meetings with Landowners along the Route

The WTG Committee began meeting with major landowners and residents along the trail route to obtain their support and to make them aware of the trail effort. In September 1996, the project was placed on the State Transportation Implementation plan (STIP) list, which enabled the project to be eligible for federal matching funds.

During this period, community groups such as Parker School and the Waimea Rotary Club joined with WTG volunteers to clear sections of the path on Parker School lands. These cleared sections of the path soon reverted back to an overgrown condition because the trail was isolated and did not go anywhere.

Consultant Team Hired in 1997

A Request for Proposals (RFP) went out in September 1996 and by May 1997 a consultant was selected by the County to begin formal trail mapping, surveying, and design. The consultant team, headed by Landscape Architect Kaz Shigezawa, included a civil engineer, planners, ADA-accessibility consultant and surveyor. The team began surveying the trail corridor and established the trail route in the various sections. Part of the consultant's task was to secure the

necessary easements and rights-of-way from landowners along the route. Negotiations were held with the State of Hawai‘i, UH College of Tropical Agriculture and Human Resources (CTHAR), Parker Ranch, the Catholic Church, BP Partners (Carter Center) and private landowner Keoki Magoon.

In late 1999, Waimea resident Henry Clark donated an 8-acre site on Kawaihae Road to the County, to be used for the future WTG path and trail head. This parcel, located across the Kamuela View Estates subdivision, was identified for a future park, and would serve as the western terminus of the greenway trail.

Because a couple of the major landowners did not want to include equestrian use on the trail, a search for alternative routes for equestrian use was begun. Discussions were held with the Lālāmilo Farmers regarding possible use of an 80-foot right of way owned by the State that bordered the Lālāmilo Farm Lots. The farmers vehemently protested that the dust would endanger their operations and came out to protest in force during public hearings. At that point, the committee dropped active pursuit of an equestrian route.

In 2003, an Environmental Assessment (EA) was initiated for a multi-use trail running from Church Row on the west to the “Clark property” near Kohala View Estates, following the meandering course of Waikōloa Stream. The EA also mentioned a possible equestrian trail in the area west of the County Refuse Transfer Station, which would be on State-owned land. The EA, which complied with State of Hawai‘i Chapter 343 HRS environmental regulations, was completed in February 2004, and a Finding of No Significant Impact (FONSI) issued by the County.

Continuing Landowner Negotiations, 2004 to 2007

The effort to secure land for the project received a boost in late 2004, when the State Board of Land and Natural Resources approved a transfer of a lease of state land for the project. This allowed portions of a 17.6-acre parcel adjacent to the County Refuse Transfer Station to be used for parking and access to the trail project. The BLNR also granted the county several easements to allow construction of the trail across portions of state land, including the UH Lālāmilo Research Station.

Between December 2004 and 2007, easements were finalized between the County Refuse Transfer Station and Lindsey Road--a total distance of 2 miles. This enabled the Waimea Trails and Greenways Committee to organize a community work day in September 2008 where over 130 community members participated in a four-hour trail building effort. This community effort resulted in the first 1/2 mile of wood chip trail to be open to the public.

Over the years, easements and agreements have been finalized between the County, BP Partners, Keoki Magoon, the Catholic Church, and Parker Ranch. There has been some land consolidation and resubdivision, and the gifting of land to the County by BP Partners. Currently, land easements have been secured for the entire Increment 1 section between Lindsey Road and Kahawai Street.

A New Design Consultant is Hired

By the end of 2007, preliminary designs were in progress but at the end of 2007, Kaz Shigezawa, the prime consultant for the project, retired. Mr. Shigezawa and his team had been on the job for 10 years. The WTG Committee met with Mayor Harry Kim to discuss this dilemma, and in February 2008, the County hired Imata and Associates to complete design of Increment 1, between Lindsey Road and Kahawai Street. The WTG Committee informally named the proposed trail *Ke Ala Kahawai o Waimea*, "the stream trail of Waimea."

At the same time, the County and WTG committee continued to explore potential funding sources for Increment 1 construction, as well as design of the remaining increments of the trail. During consultation with the Federal Highway Administration (FHWA), one of the major funding sources for trails and greenways projects, it became clear that a prerequisite for federal funding would be an EA that complied with the provisions of the National Environmental Policy Act (NEPA). The FHWA indicated that although the DPR's 2004 EA complied with the State's environmental law, it did not fully meet NEPA requirements. Therefore, federal funding could not be sought until a NEPA EA was completed and approved. At that point, the County, in consultation with the WTG Committee, agreed to prepare a new EA that complied with both NEPA and Chapter 343 HRS environmental regulations, under the Imata and Associates contract. This current EA is that document.

Although representing a short-term setback for the project, compliance with NEPA environmental requirements will open up a range of potential funding sources for construction of the multi-use path, increasing the likelihood that the trail will become a reality.

2.2 PROJECT PURPOSE AND NEED

The purpose of the proposed *Ke Ala Kahawai O Waimea*, the stream trail of Waimea, is to create a greenway corridor alongside Waikōloa Stream which will provide an accessible, non-motorized vehicle pathway between residences, businesses, and schools. A "greenway" is generally defined as a corridor of undeveloped land that is reserved for recreational use or environmental preservation. The trail will provide residents with an alternative transportation facility connecting nearby destinations, and provide opportunities to exercise and enjoy nature, enhancing both physical and mental health.

The proposed project addresses several needs:

- Alternative, non-vehicular transportation options for Waimea residents and visitors
- Improved safety for pedestrians, bicyclists, and others using non-motorized modes of transportation
- Connectivity between residences, businesses and schools
- Enhanced access to and enjoyment of natural and scenic areas
- Increased opportunities for recreation and physical fitness

2.2.1 Alternative, Non-vehicular Transportation Options

As a non-vehicular transportation link open to pedestrians, bicyclists and other non-motorized transport, the trail will alleviate the problems of traffic congestion and parking, and reduce the use of fossil fuels. Much of the driving within and around Waimea Town involves short trips to school, shopping, and other errands under five miles, and many within one or two miles distance. Despite the relative proximity of major destinations, there are few viable options to driving for most people. The need for many short vehicle trips creates congestion around schools and shopping centers, and temporary parking shortages during certain peak periods.



The Waimea Traffic Circulation Study (2007) confirmed that much of the current traffic congestion is caused by trips within Waimea. In addition to congestion occurring on major roadway corridors (Kawaihae Road and Mamalahoa Highway), the study emphasized the need for non-vehicular transportation options.

The study suggested a potential bicycle and pedestrian network that *"utilizes existing and proposed roadways as the backbone of a bicycle pedestrian network and augments this backbone through the use of the Waimea Trails and Greenways project paths."*

Ke Ala Kahawai O Waimea will be a vital component in a future bicycle and pedestrian network desired by the community. The proposed path will be accessible and usable by all age groups, and those who possess a range of skill levels. The multi-use trail can be used by adults, children, the elderly and the physically disabled, who cannot or chose not to drive. It will provide families with the option of allowing children to walk to and from school safely. Overall, the trail will provide Waimea residents with more choice and flexibility in their transportation decisions to support their daily activities.

2.2.2 Improved Safety for Pedestrians, Bicyclists, and Other Non-Motorized Transportation

Currently, pedestrians, joggers, and bicyclists use shoulders on the sides of the roads or sidewalks where available. Sidewalks are available within the central part of town near the convergence of Kawaihae Road and Lindsey Road and Mamalahoa Highway, where pedestrian activity is the highest. However, outside the commercial center, safe, usable sidewalks are absent

throughout most of the trail corridor. Most of Mamalahoa Highway and Kawaihae Road outside the town center have no sidewalks.

Kawaihae Harbor is a major commercial freight harbor serving the entire island. All freight bound for Hilo is trucked through Waimea, increasing safety concerns for road side activities.



Bicycle commuters ride along busy Kawaihae Road and Mamalahoa Highway, sharing the road with fast moving vehicles. There are no designated bike lanes or signage indicating that the roads are shared roadways. Waimea has few safe areas for children or novice bicyclists to ride. Non-vehicle paths and routes are not easily accessible, disjointed, and fail to provide a continuous ride.

The paved, ADA-compliant path will provide a safe route which is separated from traffic, and can be used by less mobile, less physically active residents, including persons with disabilities, seniors, young children, and parents with strollers.

The need for more bicycle facilities and more pedestrian facilities are specifically mentioned in the Waimea Traffic Circulation Study (2007).

2.2.3 Connectivity Between Residences, Businesses and Schools

In order to be most useful as a transportation alternative, the multi-use trail must link major destination points. The preferred alignment, which follows Waikōloa Stream, is accessible from surrounding residential subdivisions, and passes adjacent to the Department of Hawaiian Home Land's future Lālāmilo project, planned for over 400 homestead lots. The preferred alignment passes in close proximity to major employment and commercial centers, including the W.M. Keck Observatory, KTA Waimea Center, Parker Ranch Shopping Center, and Carter Center. Other destinations that are on the trail route include the Waimea Nature Park, Waimea Public Library, Waimea Civic Center and North Hawai'i Community Hospital. By connecting these destinations, the trail will provide a commuting alternative for employees and greater access for patrons of these businesses and services.

The preferred trail alignment along Waikōloa Stream can safely be used by students to walk to and from school. The People's Advocacy for Trails Hawai'i (PATH) is the State's lead agency for the federally-funded, Safe Routes to School (SRTS) programs. PATH has been working with Waimea Elementary School since 2006 with the goal of increasing the safety for all modes of

transportation to school—walking, bicycling, driving and busing. SRTS efforts in Waimea have focused on improving car drop off areas, pedestrian awareness, and a "mini-walking school bus" where children walk together from a drop-off point on school property to the classroom. The creation of the proposed path is consistent with the SRTS strategy to provide students with safe routes and to encourage walking and bicycling to school.



In addition to Waimea Elementary and Middle Schools, other schools along the proposed route include Parker School, Kanu O Ka ʻĀina Learning Center, and Montessori School. Hawaiʻi Preparatory Academy's campus is located on the Kohala or north side of Kawaihae Road, and not along the main path. Access to and from HPA is possible via a designated access road through the future County park, near the refuse transfer station.

2.2.4 Enhanced Access to Natural and Scenic Areas

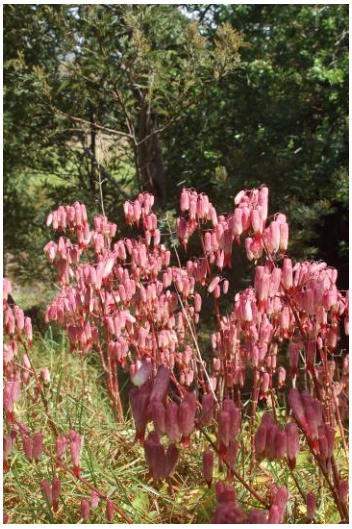
Despite Waimea's stunning natural and scenic beauty and mild climate, there currently are few publicly-accessible walking and hiking trails, or open space areas for passive enjoyment of nature. *Ke Ala Kahawai o Waimea* will offer a place for people to connect with their natural surroundings and enjoy the outdoors. Its path closely follows the route of Waikōloa Stream, which although is not continuously flowing, provides a scenic green corridor which is all but invisible from the main roadways.





In exploring their outdoor environment, it is sometimes difficult for members of the public to determine where the public lands are, or where they can go without trespassing onto private property. For example, staff at the UH Lālāmilo Research Station have indicated that people often short-cut through their property, crossing through actively cultivated areas. The trail will indicate a clear travel way. Areas of private property will be clearly delineated. Having a defined pathway will also reduce potential adverse impacts on the natural environment, by directing pedestrians and bicyclists to a designated route.





The trail will provide opportunities for education and cultural enhancement, as it will pass near historic WWII remnants, ancient Hawaiian pathways and ‘auwai systems, and structures from Waimea’s ranching past. Interpretive displays or signage at various points of interest can be developed.

Within the trail corridor, there will be areas where native vegetation and native trees can be replanted, enhancing the natural and cultural environment as well as reducing stream side erosion.

In the long term, the trail could also be extended toward the coast, or linked to mauka hiking and riding areas such as the Waipio overlook or the North Kohala coast via the Kohala Mountain, providing even greater connectivity and recreational opportunities.

2.2.5 Opportunities for Recreation and Physical Fitness

Evidence has shown that people will exercise more when opportunities to do so are presented. The trail will be in close proximity to places where people live and work, encouraging more physical activity in their daily routines.



The streamside trail will create a dedicated open space corridor where people can walk, jog, or safely ride bicycles. The health benefits of regular physical activity are well-documented, and numerous studies have shown that communities where people cycle and walk more in daily life have less obesity and diabetes than communities where people rely on cars (Honolulu Star Advertiser, September 23, 2010). Potential benefits include increased psychological well being, maintaining healthy weight, and reducing the risk of developing cardiovascular disease, obesity, diabetes, arthritis, and certain forms of cancer. The importance of outdoor play and access to the natural environment for children is also well documented.

The trail will provide an outdoor gathering place where people can meet and interact with friends and neighbors. Overall, the opportunity to enjoy open space and experience the natural environment can contribute to mental and physical well being, enhance the quality of life, and make Waimea a more desirable place to live.



(Photos on this page courtesy of Leningrad Elarionoff)

3 ALTERNATIVES ANALYSIS

3.1 INTRODUCTION

This Final EA has been prepared in accordance with both State of Hawai‘i Chapter 343 HRS and National Environmental Policy Act (NEPA) environmental requirements. NEPA requires that project alternatives be identified and studied in order to find a transportation solution that protects environmental and community resources. In its implementing regulations (40 CFR 1502.14), the Council on Environmental Quality (CEQ) requires that agencies:

a. Rigorously explore and objectively evaluate all reasonable alternatives and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

b. Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

c. Include reasonable alternatives not within the jurisdiction of the lead agency.

d. Include the alternative of no action.

e. Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

f. Include appropriate mitigation measures not already included in the proposed action or alternatives.

The CEQ has indicated that the analysis of alternatives represents “the heart” of the environmental analysis. The purpose of this chapter is to present and evaluate project alternatives, in compliance with NEPA and its implementing regulations.

3.2 ALTERNATIVES CONSIDERED

The following project alternatives, shown on Figure 2, were considered and are discussed in more detail below:

- No Action
- Bike Lanes Along Kawaihae Road and Mamalahoa Highway
- Alternative Trail Alignments
- Preferred Alternative: Multi-Use Path following Waikōloa Stream

3.2.1 No Action

NEPA guidelines require that a No Action or "no build" option be considered in the environmental analysis. The purpose is to provide a baseline against which the other alternatives can be compared.

The No Action alternative maintains the status quo. Under this alternative, no bike or pedestrian improvements, paths, trails or recreation areas would be constructed. Available transportation options would continue to be driving or biking on existing roads, and walking on existing sidewalks and paths. The existing stream trail, which has been cleared of vegetation by community efforts, would continue to be used as an informal route. However, because the existing trail does not meet Americans with Disabilities Act (ADA) or federal (e.g., Federal Highway Administration) standards, public funds for maintenance or improvement would not be available. The No Action alternative would not involve any expenditure of public funds, although ongoing, self-help efforts by the community could continue. The no action alternative would not meet the project purpose and need to provide alternative transportation options, improve pedestrian and bicycle safety, increase connectivity, and enhance scenic and recreational areas.

3.2.2 Bike Lanes Along Kawaihae Road and Mamalahoa Highway

This alternative would attempt to improve non-vehicular transportation options by providing designated bike lanes on Kawaihae Road and Mamalahoa Highway through Waimea Town. Bike lanes are designated and marked lanes on the roadway, reserved for exclusive use by bicyclists. The lanes are typically five feet wide, and marked with a standard bike lane symbol, but not physically separated from the road (see photo at left).



The State of Hawai'i Department of Transportation's Bike Plan Hawai'i (September 2003), the State's bicycling master plan, designates Kawaihae Road through Waimea Town and Mamalahoa Highway as proposed "signed shared roadways." Signed shared roadways are roads that have been identified by signage as preferred bike routes. A signed shared roadway may include paved shoulders or wide outside lanes, but not a separate, marked bike lane.

Mauka Trail Alternatives

Kamuela View Estates

TRAIL HEAD

Former Clark Property

Kawaihae Rd

Mohua St

Ohina St

Pupuhi St

Hawaii Preparatory Academy

Kohala Mountain Rd

Lankepo Rd

Waiapa St

Lalamilo Houselots Subdivision

Lalamilo Houselots Subdivision

Ulukani St

Alaheo St

Waikoloa Stream

Hawaiian Homes Future Lalamilo Subdivision

200'

State of Hawaii

Separate Equestrian Trail west of Refuse Transfer Station

S Kohala Distribution Rd

Hawaii Electric Light Co

State Public Works Base Yard

Future County Park

County Refuse Transfer Station

Equestrian Trail Head

Private Owner

Kamala Rd

Lalamilo Farm Lots Equestrian Trail

Lalamilo Farm Rd

Parker Ranch

Puopelu Richard Smart

Parker Historical Houses Rd

Bike Lanes along Kawaihae Road and Mamalahoa Highway

Ko Uka Lane

Ko Uka Pl

E Ko Uka Pl

W Ko Uka Pl

Ko Uka View

Sandalwood at Waimea Subdivision

Waikoloa Stream

Kahawai Street

Pau Opelu Rd

Kanu O Ka Aina Charter School

Opelo Rd

Montessori School

UH CTAHR Lalamilo Research Station

Waimea Hale/ Hawaii District Housing

Komokahau Rd

Puuki Pl

Lalamilo Rd

Uhiohi Rd

Kuula Way

Hokuula St

Spencer Rd

Hokuula Rd

Kapiolani Rd

Lindsey Rd

Waimea Park

Parker School

St. James Center

Waimea Nature Park

Parker School

KTA Waimea Center

TRAIL HEAD

Church Row

W.M. Keck Observatory

N. Hawaii Comm. Hospital

Highway

Parker Ranch Shopping Center

Park

Mamalahoa

Waimea School

Library Gym

Pukalani Rd

Kaahuaiki Rd

Kaahuaiki Pl

Kaahuaiki Rd

Kaahuaiki Pl

Preferred Alternative:
Ke Ala Kahawai o Waimea
("The Stream Trail of Waimea")

Alternative Alignments through Lalamilo Research Station

LEGEND

- Shared Use Path
- Optional Segments
- Signed Shared Roadway
- Alternatives
- Stream Crossing

NORTH

0 600 1200 1800

SCALE IN FEET

Figure 2
ALTERNATIVES CONSIDERED
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

Designated bike lanes are an alternative to signed shared roadways. One challenge compared to providing signed shared roadways is that adding bike lanes would require road widening, which in some areas may require land acquisition. There are current plans to widen certain segments of Mamalahoa Highway in the area near Church Row and the State of Hawai‘i Department of Education has proposed roadway improvements around Waimea Elementary and Middle Schools. These improvements were recommended as short-range actions in the Waimea Traffic Circulation Study. However, the study cites the limited roadway width in most areas of Kawaihae Road and Mamalahoa Highway, which makes the addition of bike lanes difficult to implement.

Bike lanes would improve conditions for bicyclists using Mamalahoa Highway and Kawaihae Road. They provide an alternative, non-vehicular transportation option, and improve connectivity between residences, businesses and schools. Bike lanes would not, however, meet other project objectives of enhancing access to natural and scenic areas or increasing opportunities for recreation. Bike lanes would do little for pedestrians and less experienced bicyclists, particularly young children. By contrast, the proposed multi-use trail would meet all the identified needs of the project, and be accessible to a range of users, ages and abilities.

In summary, construction of bike lanes on Kawaihae Road and Mamalahoa Highway would improve transportation conditions for a specific target group (bicycle commuters). However, it does not fully meet the project’s purpose and need, as it does little to improve pedestrian access, provide safe routes to schools, or increase transportation options for a range of users. It does not enhance recreational opportunities or access to natural and scenic areas, which will be accomplished through construction of *Ke Ala Kahawai o Waimea*.

Rather than constructing dedicated bike lanes, it is recommended that the Bike Plan Hawai‘i recommendation for signed shared roadways be implemented on Mamalahoa Highway and Kawaihae Road. These roadway improvements are still needed, and are compatible with the proposed *Ke Ala Kahawai o Waimea.*

3.2.3 Alternative Trail Alignments and Segments

“Mauka Alternatives”

The “mauka” trail alternatives shown on Figure 2 are located north of Kawaihae Road, toward the Kohala Mountains. These alternatives were originally identified by the WTG Committee members in the 1990’s, as a possible way to link the mauka residential areas with Hawai‘i Preparatory Academy (HPA) without crossing the highway. The mauka alternatives are shown starting at Kahawai Street on the east, and running west to Kohala Mountain Road, then continuing west to Kamuela View Estates, where they would rejoin Kawaihae Road. At the time these mauka routes were initially considered, the Pako and Ohia Ku subdivisions across Kohala Mountain Road from HPA had not been built, and much of the route was open and undeveloped. Today, these mauka alignments would pass directly through private subdivisions, requiring easements from individual landowners or land condemnation, both costly and politically

unpalatable options. However, these mauka alignments were dismissed by early trail proponents years ago in favor of the Waikoloa Stream route.

During the Draft EA early consultation period, there were extremely strong objections to the mauka alternatives, particularly by residents of Pako and Ohia Ku subdivisions. Concerns focused on the taking of private property, loss of privacy, noise, and feared reductions in property values. Other concerns raised about the mauka alignments included the hilly terrain that would be difficult to walk and bike, the presence of steep slopes and gulches that could be an "attractive nuisance" and pose a danger to children, and the presence of flood-prone streams along the route. It was also noted that these mauka segments would require trail users to cross busy Kawaihae Road to reach major destinations in Waimea Town or connect to the stream side alignment, presenting a traffic safety issue. The traffic safety issue was also raised by the State Department of Transportation in its early consultation letter. Letters and correspondence received during the early consultation are included in Chapter 9 of this Environmental Assessment.

The environmental analysis conducted for this EA confirmed these conditions as well as other potential challenges. An updated archaeological literature review and field inspection (Cultural Surveys Hawai'i, Inc. 2010) indicated that these areas north of Kawaihae Road include known historic resources that would likely require archaeological inventory surveys prior to trail development. Another environmental issue requiring resolution is the potential for unexploded ordnance (UXO) or munitions and explosives of concern (MEC) along these alternative routes. According to the U.S. Army Corps of Engineers, the lands north of Kawaihae Road are also part of the former Waikōloa Maneuver training area, used extensively during WWII, including for live fire practice. Although much of the land around Waimea, including the preferred alignment, has been surveyed and cleared of MEC, none of the areas north of Kawaihae Road were investigated. Although the potential of encountering MEC may be slight, there have been documented cases where ordnance was found, literally, in someone's back yard. The development of a County-owned, public use trail within the Waikōloa Maneuver area will require assurances that the area is free of MEC. At this time, it is unknown when the Army would have the funds to complete the survey and clearance of these lands. This situation makes the timetable for trail construction very uncertain.

Based on the environmental analysis as well as community input received during the EA early consultation period, all of the "mauka alternatives" located north of Kawaihae Road were determined to be infeasible and/or undesirable. This Alternative Analysis recommends that all of these mauka trail alignments be eliminated from further consideration, now and at any time in the future.

As a final note, Bike Plan Hawai'i (2003) also shows some "Waimea Greenway" alternatives north of Mamalahoa Highway, located east of the Church Row. These segments are outside the current *Ke Ala Kahawai o Waimea* project area, and are not being addressed in this Environmental Assessment. However, they remain as proposals in the State's bicycle master plan, and may still be considered as future trail extensions.

South Side of Waikoloa Stream through CTAHR Lālāmilo Research Station

This is an alternative segment to the proposed Waikoloa Stream route in the area adjacent to the University of Hawai‘i College of Tropical Agriculture and Human Resources (CTAHR) Lālāmilo Research Station. As it passes by the Lālāmilo Research Station, the trail alignment follows the northern parcel boundary, north of Waikoloa Stream. An easement along the northern parcel boundary has been granted to the County by CTAHR.

One alternative considered during the preparation of the EA was to place the path on the south side of Waikoloa Stream through the Lālāmilo Research Station, from the Waimea Nature Park to the Parker Ranch property. A benefit of this alignment would be that it would avoid a stream crossing immediately west of the Waimea Nature Park, and the trail could remain alongside the stream rather than pass between the Kanu o ka ‘Āina School and residential apartment buildings. However, CTAHR staff indicated that this alignment would have an adverse impact on Lālāmilo Research Station operations. The 30-foot wide trail easement would encroach into cultivatable farm areas, and create a non-contiguous piece of land north of the stream which would be difficult to farm. In addition, CTAHR is concerned about a trail passing directly through an actively cultivated area, increasing the risk of theft and pilfering of high value crops. In order for the trail to remain on the south side of the stream through this area, a six-foot high fence would need to be constructed along the entire length.

After consideration of these factors, it was decided that the trail should be located on the north side of Waikoloa Stream through the CTAHR Lālāmilo Research Station.

Lālāmilo Farm Lots Equestrian Trail

Another alternative that was considered in the past was an equestrian trail segment within an 80-foot road easement on the eastern boundary of the Lālāmilo Farm Lots. The equestrian trail head would begin at the future County park next to the County Refuse Transfer Station. Although the WTG Committee wanted to accommodate horses along the main path, major landowners along the route objected to having horses mixed with pedestrians and bicyclists. As a result, the WTG Committee suggested a separate equestrian trail within an 80-foot right of way for a State-proposed bypass road. The bypass road would border the Lālāmilo Farm Lots, and eventually connect to Mamalahoa Highway. However, possibility of an equestrian trail received vehement objections by Lālāmilo farmers, who testified during public hearings that the resulting dust would endanger their operations. Other concerns were about public access through actively cultivated areas, the potential for theft and vandalism, and possible food safety issues. The proposal for an equestrian trail along the future State bypass road was dropped from further consideration.

3.2.4 Preferred Alternative: Ke Ala Kahawai o Waimea ("The Stream Trail of Waimea")

The preferred alternative is the construction of a multi-use trail which follows the meandering path of Waikōloa Stream, as shown in Figure 3. *Ke Ala Kahawai o Waimea* ("The Stream Trail of Waimea") extends approximately 4.8 miles, starting near Church Row on the east and heading west along Waikōloa Stream, through urban and agricultural lands, and ending at the former Clark property on Kawaihae Road across the Kamuela View Estates. The trail route is mostly on the Kona or south side of the stream. However, in those areas where there are land use conflicts or insufficient space on the Kona side, the trail will cross over to the Kohala or north side of the stream.

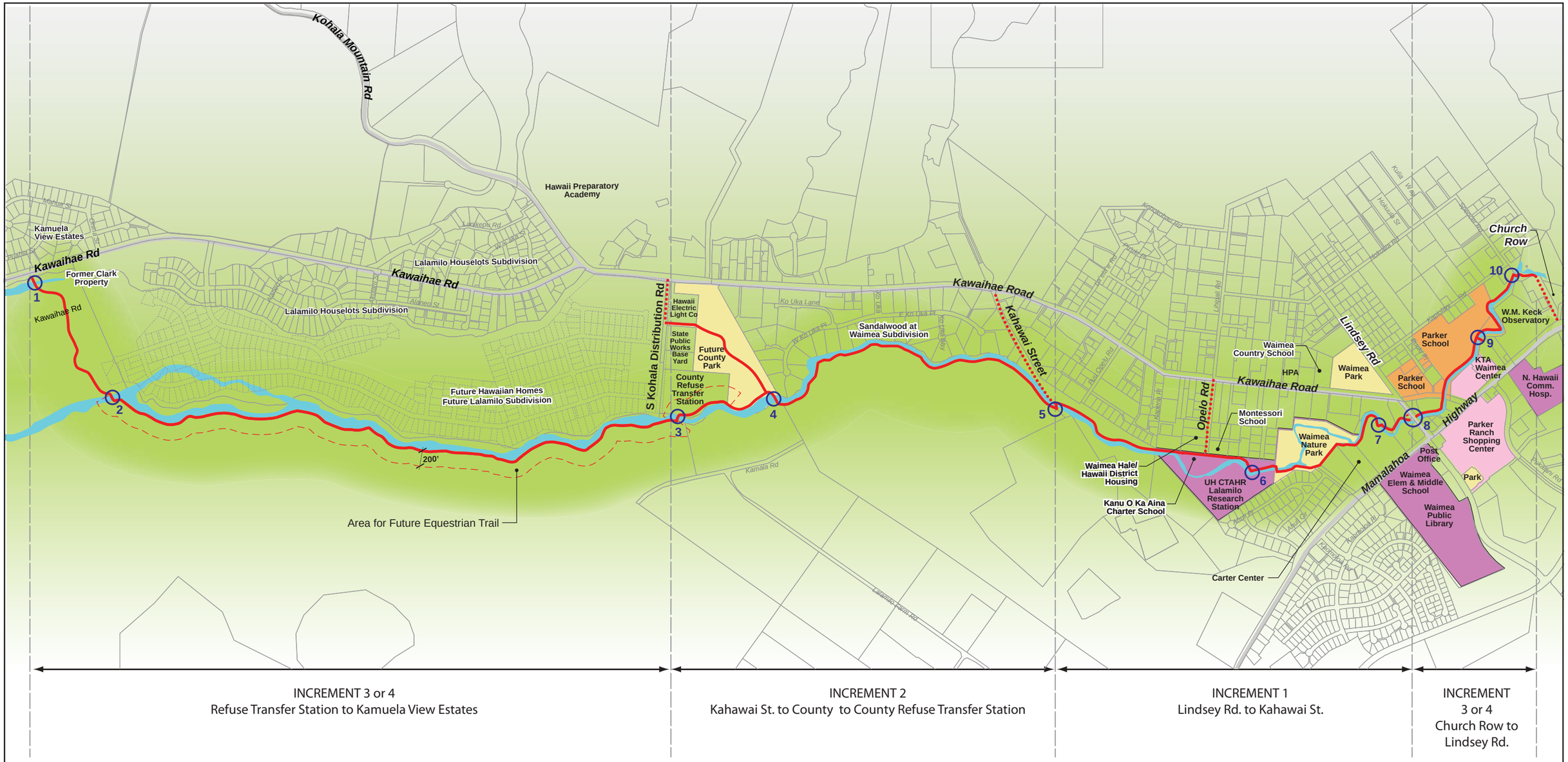
This alignment was identified by the WTG Committee after outreach with the community and extensive negotiations with both public and private landowners along the route. Land easements have been secured for the entire two-mile section between Lindsey Road and the County Refuse Transfer Station, which is planned as the first trail increment. Easements for the remaining segments are still being finalized. *Ke Ala Kahawai o Waimea* enjoys a high level of community support and this alignment has been incorporated and endorsed in a number of public planning documents, including the South Kohala Community Development Plan (2008), the Waimea Traffic Circulation Study (2007), and Bike Plan Hawai'i (2003). Each of these planning documents has gone through months of public reviews and hearings, with extensive opportunity for public review and comment. The accepted documents reflect the policy and planning objectives of the County/State governments and presumably the vision and the desires of the community.

Trail Alignment

The trail alignment is described in detail in Chapter 4. The route is briefly outlined below, starting on the far eastern end and moving west.

Church Row to Lindsey Road

This 0.6 mile segment is the eastern most section of *Ke Ala Kahawai o Waimea*. It starts at the end of Church Road next to Waikōloa Stream, and follows the stream west, behind churches, commercial buildings, the W.M Keck Observatory, Parker School, and KTA Waimea Center. The trail is proposed on the north or Kohala side of Waikōloa Stream to Lindsey Road. One option for crossing Lindsey Road is for the trail to end, with users directed back to street level to cross Lindsey Road at the Mamalahoa Highway signal. After crossing the street, path users could then veer off the sidewalk and back onto the stream side path.



LEGEND

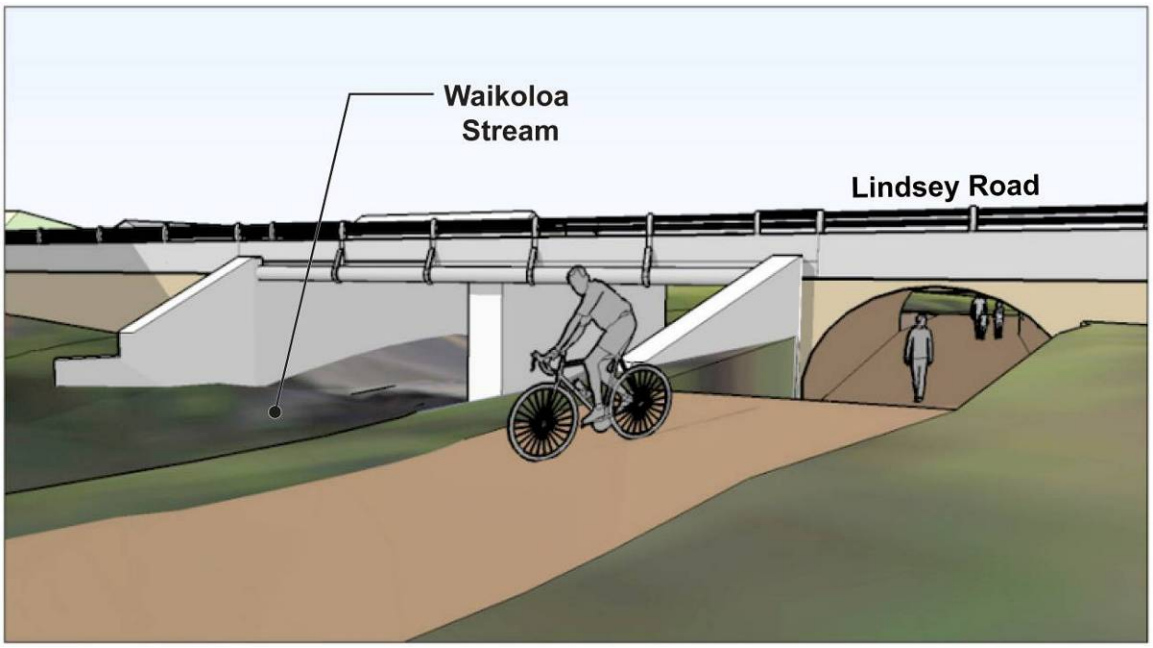
- Shared Use Path
- Signed Shared Roadway
- 1 Stream Crossing

NORTH

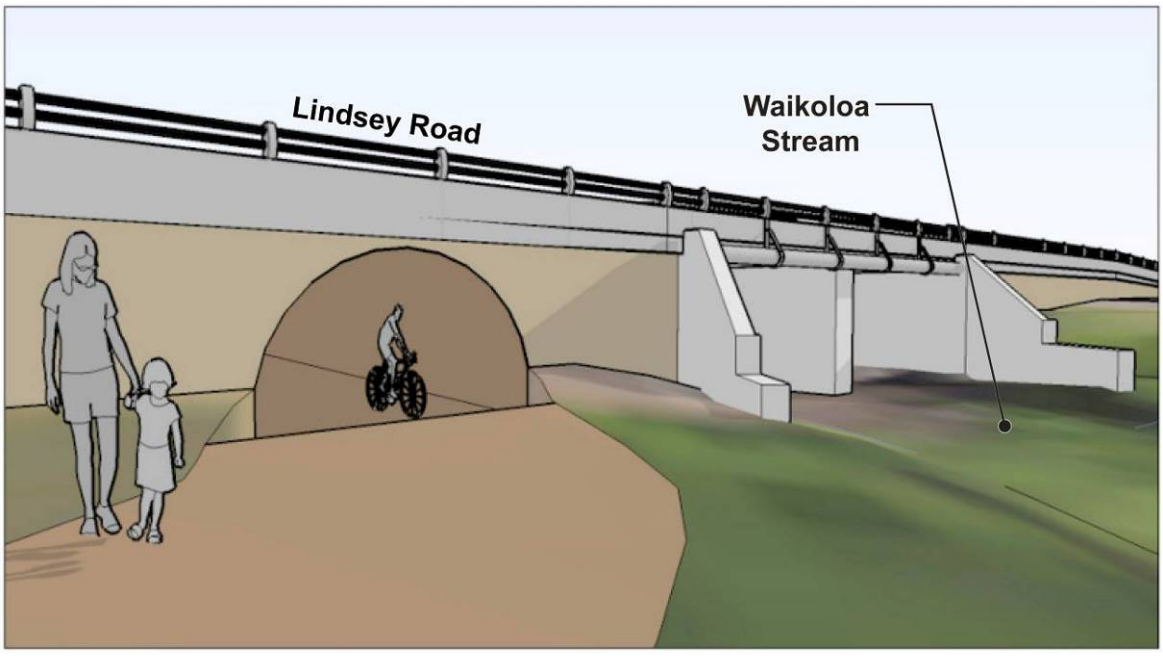
0 300 600 1200
SCALE IN FEET

Figure 3
PREFERRED ALTERNATIVE: *Ke Ala Kahawai o Waimea*
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

A long-term option is for the trail to cross under Lindsey Road, at the same elevation as the stream, which passes under the road in a culvert. The advantage to this option is that users could continue directly on the path, without stopping or having to use the street level crossing. However, it would require reconstructing the Lindsey Road bridge to accommodate the trail, either within the existing stream culvert or creating a separate underpass. The images below show what a separate under pass could look like.



Conceptual design of a separate bike/pedestrian crossing under Lindsey Road, looking southwest.



Conceptual design of a separate bike/pedestrian crossing under Lindsey Road, looking northeast.

Lindsey Road to Kahawai Street

This approximately 1.0-mile segment of the path, between Lindsey Road and Kahawai Street, is designated as Increment 1 of the project. In this segment, the path is located mostly on the north side of the stream. Just before the Carter Center, the trail crosses to the Kona or south side of the stream. At the Waimea Nature Park, the stream veers north into the park, but the proposed trail will continue straight, following an old WWII-era road formerly used for Camp Tarawa.

Just beyond the Waimea Nature Park, the path and stream converge. The path will cross from the south to the north side of the stream at the University of Hawai‘i’s College of Tropical Agriculture and Human Resources (CTAHR) Lālāmilo Research Station. An alternative alignment with the trail remaining on the south side of the stream through the CTAHR property was explored. This was preferred to avoid the cost of bridge construction. However, CTAHR staff expressed concern about the loss of its agricultural land, as well as security issues associated with a public trail right next to actively cultivated fields. In addition, easements for the north side of the stream had already been secured, when the Department of Land and Natural Resources (DLNR) granted the County an easement in 2004. Changing the alignment to the south or Kona side of the stream would also require modification of this easement. Therefore, the decision was made to build the path on the north side of the stream, following the northern boundary of the Lālāmilo Research Station property.

Kahawai Street to County Refuse Transfer Station

This segment of *Ke Ala Kahawai o Waimea* is 1.4 miles in length. At Kahawai Street, the trail crosses back to the Kona or south side of Waikōloa Stream, onto pasture lands owned by Parker Ranch. Trail easements from Parker Ranch have been obtained for this entire section. The land on the opposite (north) side of the stream is occupied by the Sandalwood subdivision.

Immediately west of the Sandalwood subdivision, the path will cross back to the north side of the stream, onto County land adjacent to the Waimea Refuse Transfer Station. This 17.6-acre vacant parcel is designated as a future park, and a portion will be used for parking and trail access. The trail will follow the stream past the adjacent refuse transfer station. Just before South Kohala Distribution Road, the path will again cross the stream, back to the south side.

County Refuse Transfer Station to “Clark Property” (Kamuela View Estates)

The western-most section of the trail extends from South Kohala Distribution Road, through open, State-owned property to the former Clark property on Kawaihae Road, a distance of 1.8 miles. For most of this segment, the trail remains on the south side of Waikōloa Stream. Land on the opposite side of the stream is planned for a Department of Hawaiian Home Land’s subdivision.

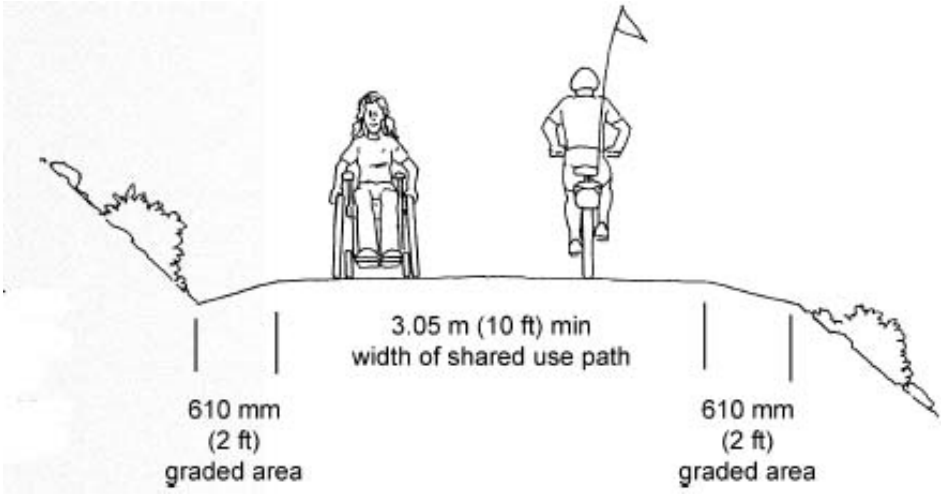
At a point directly south of the Kamuela View Estates subdivision, the trail crosses the stream and heads north toward Kawaihae Road, where it terminates at the 8-acre “Clark Property.” This

site on Kawaihae Road is directly across the Kamuela View Estates subdivision, and was donated to the County by Waimea resident Henry Clark in 1999. The property is intended to be used as a park and trail head for *Ke Ala Kahawai o Waimea.*

Technical Characteristics

Trail Width

Ke Ala Kahawai o Waimea right-of-way varies in width depending on the segment in which the trail is located. However, the path itself will be paved and typically 10 feet wide. A minimum ten-foot width allows for greater usability and the two-way movement of a variety of users, including bicyclists, walkers, joggers, baby strollers, and skaters.



Source: FHWA

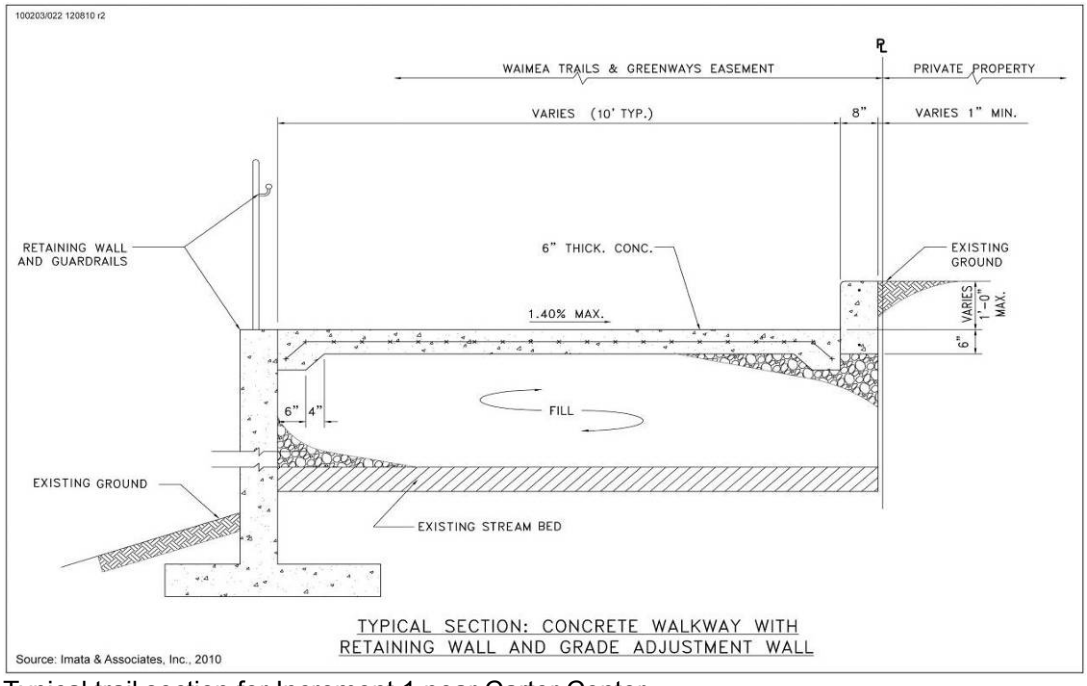
The FHWA Guidebook on Trail Development, Chapter 14, Shared Use Path Design, emphasizes that the width of a shared-use path not only affects pedestrian usability but also determines the types of users who can use the path. It notes that shared-use paths should be designed to accommodate high-speed users in both directions and recommends a minimum 10-foot width, as well as graded areas at least two-feet on either side. Shared use paths with heavy volumes of users can be 12 to 14 feet in width.

It is not anticipated that there will be the heavy trail volume or fast-moving traffic to require a 12 to 14-foot wide path, but ten feet is generally accepted as the minimum width for a multi-use path and is recommended for *Ke Ala Kahawai o Waimea*.



Ten-foot wide multi-use path on Kaua'i allows for a variety of users in both directions.





Typical trail section for Increment 1 near Carter Center.

Trail Surface

The County requires that the path comply with Americans with Disabilities Act (ADA) accessibility guidelines for outdoor areas. This will make the trail accessible to a range of users including pedestrians, bicyclists, young children, seniors, and people with disabilities or limited mobility. According to FHWA guidelines, the path could be constructed of concrete, asphalt, or other materials such as crushed rock, or soils mixed with stabilizing agents, provided it meets ADA requirements. While these other materials may provide a more rustic or "natural" appearance, the disadvantage is that these surfaces are generally less durable than concrete and will require more frequent repair or replacement.

In most areas, the path will be built of poured-in-place concrete which is longer lasting and will withstand temperature changes, and provide a safe and stable surface for users. Concrete will require the least amount of long-term maintenance and therefore have lower maintenance costs.



A comparison of annual maintenance costs was prepared by the Parks and Recreation Department in Columbia, Missouri, as part on an ongoing City Trail Master Plan. The analysis showed that concrete had the lowest annual maintenance cost despite a higher initial cost. Although the actual dollar costs for construction in Waimea will be different than Columbia, the *relative* maintenance costs of concrete, asphalt and gravel trails will likely be similar.

The following photographs and captions are from a Columbia, Missouri Parks and Recreation Department presentation on maintenance issues associated with gravel, asphalt and concrete path surfaces.

Gravel Trails



(Below) Ongoing maintenance of gravel trail requires removing mud deposits after floods.



(Below Left) Gravel build-up in natural areas after flooding. Columbia Parks Department replaces about 179 tons of gravel that washes into the adjacent creeks after every major storm event, averaging over 1,000 tons of gravel each year.

(Below Right) Damage to gravel trail after flooding





(Right) Dirty surfaces after rain events is hard on clothes and bikes



Photos from: *Choosing the Right Trail Surface*, Columbia, MO Parks and Recreation

Asphalt Trails



Cracks appearing in first year even though trail was built with 11" of gravel base.



Concrete work (near benches) was done at same time as the cracking asphalt.

Concrete Trails





Concrete provides a high quality surface for wheeled activities.

Photos from: *Choosing the Right Trail Surface*, Columbia, MO Parks and Recreation



15-year old concrete trail in perfect shape; Oakland Park, Missouri.

Photo from: *Choosing the Right Trail Surface,* Columbia, MO Parks and Recreation

There have been concerns raised about concrete having an "unnatural" appearance. In order to mitigate these concerns, earth-tone colored concrete can be used. In addition, various textured (i.e., "broom" or "burlap drag") surfaces can be added for visual interest. Pervious concrete may also be an option for sections of the path which have poor drainage or are subject to erosion, although higher cost is a negative factor.

Although concrete is the County's material of choice, in certain areas such as a future equestrian trail, alternative materials such as compacted earth, crushed gravel, or grass may be more suitable.

The table below compares the pros and cons of gravel, asphalt and concrete surfaces. Many of the pros and cons for gravel also apply to other materials such as soil, wood chips, crushed rock, or composites.



(Right) Colored concrete was used on the majority of Kauaʻi's coastal multi-use path.



(Left) Asphalt was used in limited areas of Kauaʻi's path to reduce costs.

Trail Surface Pros and Cons

	PROS	CONS
GRAVEL	• Considered by some to be more natural looking. • Good for flat areas out of flood plains. • Softer on joints (running). • Cheaper initial installation cost. 	• High ongoing maintenance costs. • Difficult to maintain consistent surface quality. • Environmental damage caused by gravel erosion. • More difficult to use in winter due to soft, wet and dirty conditions. • Gravel migrates on steep trail slopes. • Difficult to ride bikes on steep slopes and in loose gravel. • Difficult to remove silt deposits after heavy rains. • A dirty surface during and many days after rains. • Very difficult to meet ADA surface standards. • Less stability for running and walking in loose gravel.
ASPHALT	• Best initial surface (smooth, no cracks) • Slightly cheaper than concrete in initial cost 	• Edges crack with vegetation. If you want a 10' wide trail, you have to install a 12/wide asphalt trail. • Constant maintenance of crack filling and sealing with our clay soils. • Must be completely overlayed approximately every 8-10 years. • Little structural strength to span over soil problems below. • Requires greater initial excavation (harming trees) to provide the required rock base depth. • Impervious surface.
CONCRETE	• Best ADA surface long term • Best longevity. Should last 20+ years. • Best consistency of surface. Does not wash or break apart. • Does not wash in flood areas or on steep slopes. • Steel in concrete keeps it from deflecting preventing tripping hazards or barriers for wheel chairs. • Cleaner surface during and after rains. Keeps commuters clean as well as less wear and tear on bikes. • Does not require gravel base rock so impact on trees is less than asphalt. • Avoids gravel in creeks and natural areas every time it rains.	• More expensive (initial installation) • Harder on joints (running). • Less natural looking than gravel. • Impervious surface. 

Source: *Choosing the Right Trail Surface*, Park Services Division, Parks and Recreation Department, Columbia, MO

Grade

Grade (slope) is defined as the slope parallel to the direction of travel and is calculated by dividing the vertical change in elevation by the horizontal distance covered (i.e., rise over run). For example, a trail that gains 2 feet in elevation over 40 feet of horizontal distance has a grade of 5 percent. The multi-use path will be designed with minimal grade of less than 5%, so that handrails will not be required. Cross slope, or the side-to-side slope of the trail, will be less than 2% along the entire path.

Due to existing topography and natural constraints, limited segments of the path or access roads may not be fully ADA compatible. Signage will be installed to inform users that these sections are not ADA compliant.

Rest areas on the side of the trail will be provided at various scenic or shady areas. In Increment 1, There are three rest areas proposed: near the Lindsey Road bridge, near Sta. 30+00 after the first box culvert, and near Sta. 06+25 near Pu‘u Opelu Road. In Increment 1, water fountains will be provided at the rest stops where water lines are available. The rest areas will have benches, trash receptacles, and be paved to provide a place for bicycles, strollers, and wheelchairs to park off the main path.

Retaining walls will be required in two areas of Increment 1 where the stream bank is badly eroded. In one area, debris in the stream caused a diversion resulted in severe erosion along the trail easement. In the area behind the Carter Center, the stream overflowed at a sharp bend, jumped its bank and veered into the Nature Park. Retaining walls are needed in both these areas to prevent further erosion which could destabilize and damage the paved trail.

Retaining walls may be required in future increments to protect the trail from stream erosion or because the path needs to be cut into an existing hillside.

ADA Accessibility

The federal Architectural and Transportation Barriers Compliance Board (Access Board) is currently developing accessibility guidelines for shared use paths such as *Ke Ala Kahawai o Waimea.* Shared use paths are defined as designed for both transportation and recreation purposes and are used by pedestrians, bicyclists, skaters, and other users. The guidelines will include technical provisions for making newly constructed and altered shared use paths covered by the Americans with Disabilities Act of 1990 (ADA) and the Architectural Barriers Act of 1968 (ABA) accessible to persons with disabilities.

Guidance is also found in the current American Association of State Highway and Transportation Officials (AASHTO) *Guide to the Development of Bicycle Facilities* (1999). This guide is currently being updated, and the *Draft AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities* (February 2010) should also be consulted.

SOME WORDS ABOUT ACCESSIBILITY

From the U.S. Dept. of Transportation, Federal Highway Administration (FHWA)



Access to sidewalks and trails must not be denied to people with disabilities. Unfortunately, accessibility is often seen as a "you have to," rather than a desirable component of the planning, project development, design, and construction processes. This attitude is limiting and does not consider the many human and economic benefits that accessible environments bring to a community. When the environment meets the needs of the most vulnerable users, the system is better for everyone. In addition to people with disabilities, many other people benefit from accessible sidewalks and trails.

For example:

- Pedestrians have an easier time pushing or pulling shopping carts, luggage, and other wheeled devices;
- All pedestrians are able to choose trail experiences that best suit their needs, skill level, and desired experience;
- Parents are able to more easily push children in strollers on sidewalks and trails with accessible surfaces;
- Young children can use curb ramps when riding their bicycles;
- Children, parents, and school systems benefit from sidewalk networks with visible pedestrian crossings and other safety features;
- Children learn independence by having a safer place to travel;
- A good system of sidewalks may allow older pedestrians who no longer drive to walk to services and socialize in their community, while offering a continued independent lifestyle;
- Businesses can load and unload goods more easily;
- Wide sidewalks can be gathering places in neighborhoods and business districts, and offer space for families and friends to walk and socialize together;







- Wide sidewalks in business communities offer an opportunity for trees, landscaping, and other amenities that create an inviting place for customers to shop and do business; and
- Well-maintained sidewalks and trails encourage exercise and provide the benefits of a healthy lifestyle.

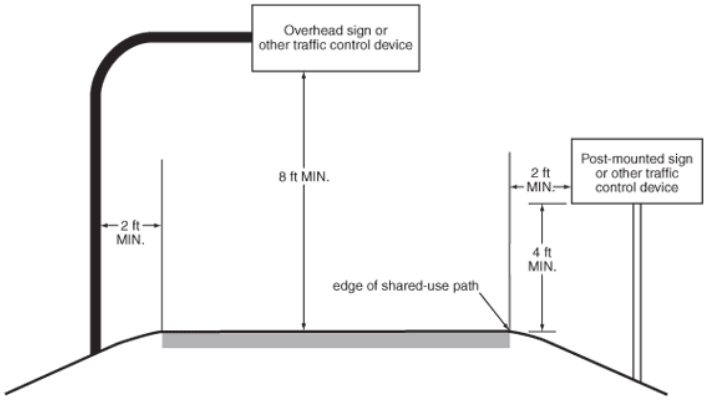


Source: U.S. Department of Transportation, Federal Highway Administration (FHWA) Guidebook

Signage

A comprehensive signage program will be developed for the proposed trail. The *Manual on Uniform Traffic Control Devices (MUTCD)*, published by the Federal Highway Administration (FHWA) is a national standard, intended to ensure that signing is consistent throughout the US. The latest version of the MUTCD (2009) sets national standards for roadway and shared-use path signage. States will be required to adopt the latest version of the MUTCD as their legal standard for traffic control devices within two years.

Figure 9B-1. Sign Placement on Shared-Use Paths



Source: USDOT FHWA, Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition, Part 9, Traffic Controls for Bicycle Facilities

The 2009 MUTCD identifies a standard trail crossing sign which is used on a roadway to provide warning to motorists of a shared-use path crossing. The sign indicates that the path is used by both bicyclists and pedestrians.



The placement of reference location signs along the linear trail is recommended to help police, fire and emergency medical personnel respond promptly to any reported incidents.







Signs may be placed on the trail to provide information about trail use, physical conditions and accessibility. It is important that signs are provided in an easy to understood format with limited text and graphics that are understood by all users. The photo above from Kaua'i's path shows a signed warning about a steep grade on a beach access segment. This is the only section of the trail that does not meet ADA accessibility criteria.

Other types of signs that may be used on the trail include trail maps, interpretive signs at points of historic or cultural interest, adopt-a-trail signs, and posted trail rules and etiquette.



Trail Access and Parking

The multi-use path would be accessible via existing roads that would be designated as "signed shared roadways." Entry points would be at the future County park, the area near the County Refuse Transfer Station, Kahawai Street, Opelo Road, the Waimea Nature Park, Carter Center, Lindsey Road, and Church Row.

Future parking lots will be constructed on the Clark Property at the far western end of the trail, and at the future County Park adjacent to the refuse transfer station. No other designated parking lots are planned. Recreational users can park near the Waimea Nature Park, Waimea Park or other areas within Waimea town, and access the trail on foot. School children walking to school may be "dropped off" by parents somewhere along the route. Most trail users are expected to be Waimea residents, and many will not require vehicle parking.

Although the trail will be accessible from designated points along its length, major landowners along the path such as Parker Ranch and the University of Hawai'i CTAHR have requested fencing to prevent unauthorized entry into actively used pasture or agricultural areas.

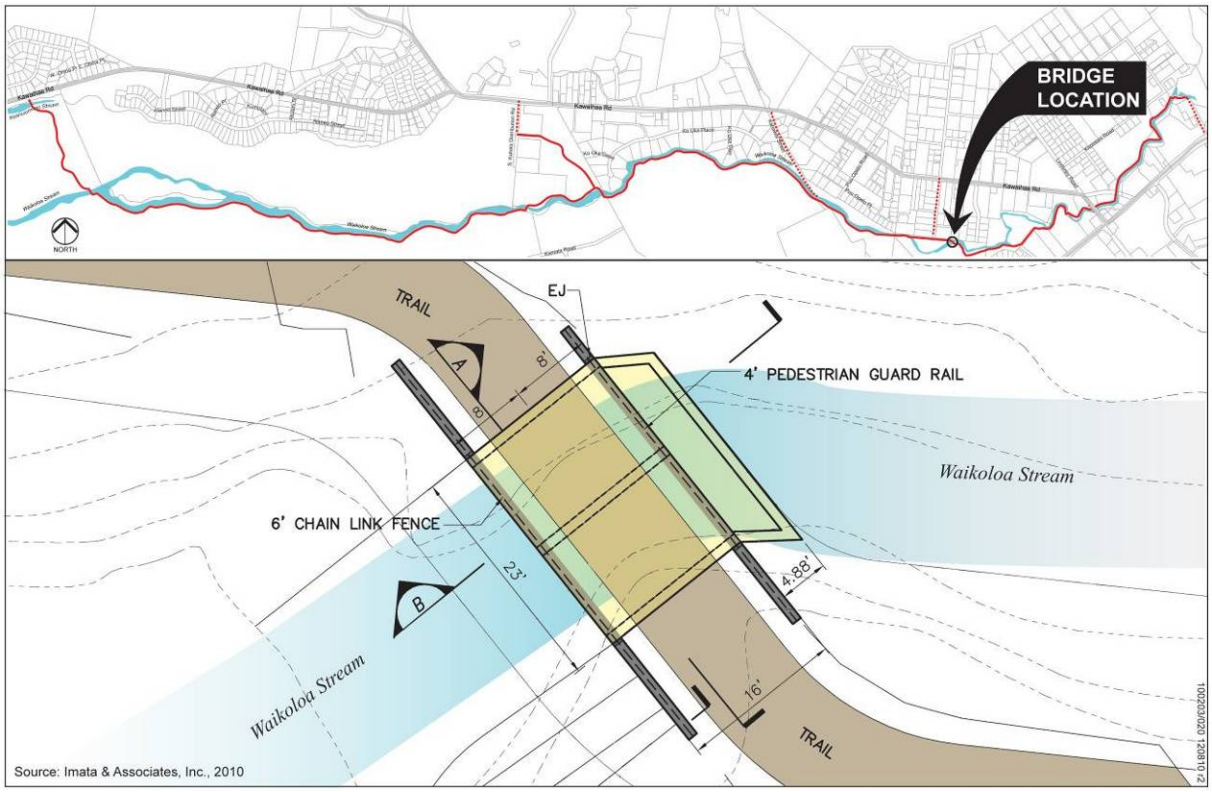
There have been some concerns raised by residents who live on the designated access roads, such as Kahawai Street which is a privately-owned road (Parker Ranch). Concerns include increased vehicle traffic, loss of privacy and trespassing, including cars turning around in private driveways. One mitigation is to prohibit street parking on Kahawai Street and/or designate the road for bike/pedestrian access only. That is, cars will not be allowed to "drop off" trail users on Kahawai Street, but would need to do so on Kawaihae Road. A disadvantage is that residents would also be prohibited from parking on the street. Another suggestion is to move the access gate at the end of Kahawai Street some 50 feet toward the stream, onto Parker Ranch property. This would allow creation of a vehicle turn-around area, and could also provide space for trash receptacles and trail maintenance.

Stream Crossing Alternatives

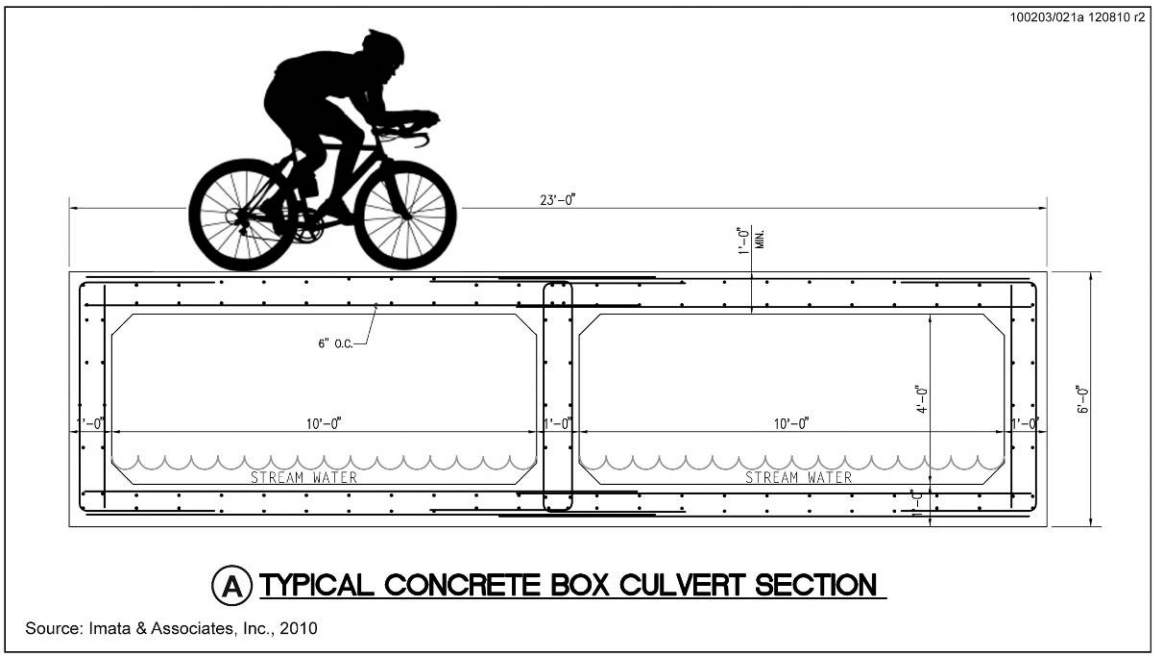
Ke Ala Kahawai o Waimea will cross Waikōloa Stream in nine places, and Keanuiomano Stream in one place. Although this number of stream crossings is far from ideal, the final route was largely driven by the need to minimize disruption to adjacent land uses, and to stay within areas where landowners were willing to grant easements. For example, in the segment through the Lālāmilo Research Station, the County was unable to secure an easement to continue the trail along the southern side of the stream. Therefore, the trail crosses back and forth over the stream to avoid the Lālāmilo Research Station fields. Likewise, in the segment near the County refuse transfer station, the trail crosses over to the north side of the stream to avoid privately-owned farm land on the south side.

At each of these crossings, a decision will be made about what type of crossing structure is most appropriate. However, all crossings will comply with State, County and federal regulations

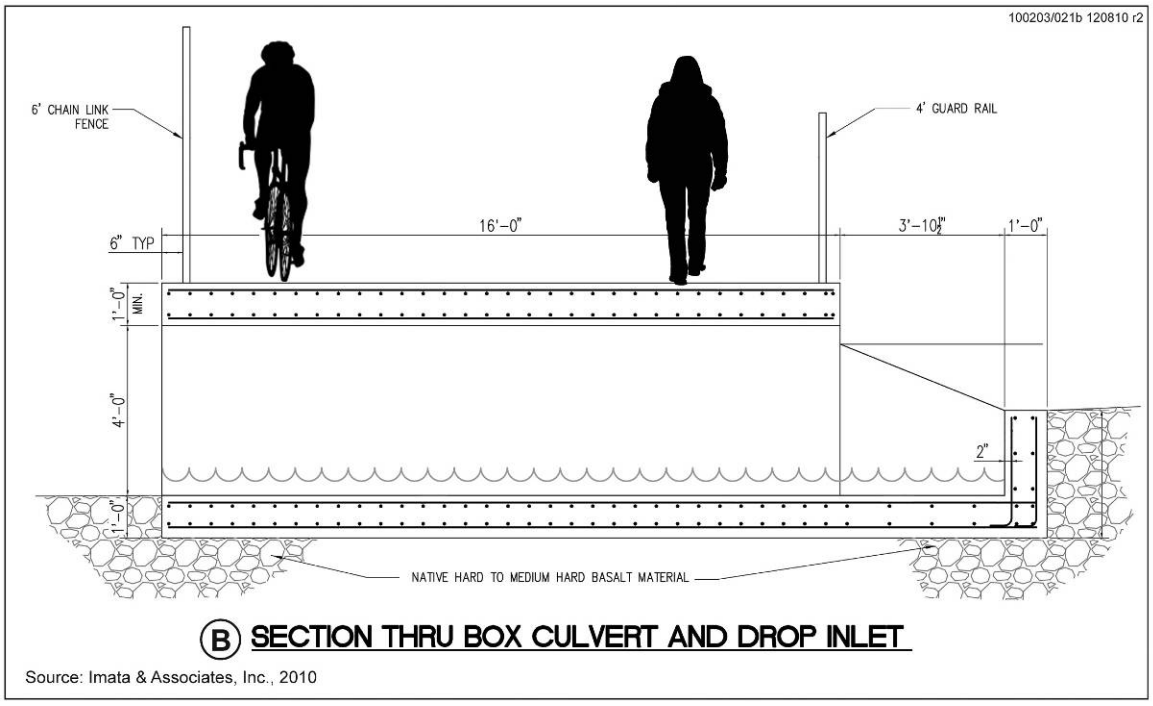
pertaining to flood conditions and drainage. In Increment 1, low water crossings in the form of cast-in-place box culverts were selected. A site plan showing a bridge in Increment 1 and sections of the box culverts are shown in the illustrations below.



Source: Imata & Associates, Inc., 2010



Source: Imata & Associates, Inc., 2010



Because the path must accommodate both pedestrians and bicycles and be ADA-compliant, the crossing structures must meet minimum width, slope and accessibility criteria. A simple ford crossing, such as the one that exists in Waikōloa Stream near Kahawai Street, would be far less expensive to construct than a culvert or bridge. However, a ford crossing would need to meet federal accessibility criteria in order to be federally funded. In addition, the hydrology would need to comply with flood and stream flow guidelines.

Equestrian Trail

The preferred alternative includes an equestrian trail in the area west of the County refuse transfer station. As noted above, a future equestrian trail was considered from the beginning of the original Waimea Trails and Greenways project. Although the WTG Committee initially considered incorporating equestrian use as part of the multi-use path, during land negotiations, the Parker Ranch Trustees were adamant that equestrian use be taken out of the mix, citing safety concerns. Their granting of easements across their land was contingent upon equestrian use being eliminated from areas where bicycles and pedestrians were present, citing the potential for serious accidents. The Waimea Outdoor Circle echoed these concerns, saying they would not allow horses in the Waimea Nature Park. The current land easements that the County has negotiated preclude equestrian use east of the County refuse station. Therefore, the only possible section of the route for equestrian use would be the western-most segments which are on State and County lands. The State-owned land west of the refuse transfer station is leased to rancher Harold "Freddy" Rice, and any use of this area for an equestrian trail will require a sub-lease from Mr. Rice.

Location of Equestrian Trail

The current project includes the option for a separate, dedicated equestrian trail in the area west of the County refuse transfer station, as shown on Figure 3. State-owned land adjacent to the County Transfer station was identified for use as a trail head, and could accommodate horse trailer parking. Figure 3 shows a 200+ foot wide easement in the area west of the equestrian trail head, which can accommodate both the main multi-use path and a separate horse trail. The equestrian trail would terminate where the main path crosses Waikōloa Stream.

The equestrian trail, like the main path, would need to cross over to the Kona or south side of Waikōloa Stream at the County Refuse Transfer Station. This stream crossing could either be shared with the main path, or a separate equestrian crossing could be built. If a shared crossing is proposed, it is recommended that bicyclists be required to dismount, to avoid spooking the horses.

A future equestrian trail could also link up with the Parker Ranch trail system that would start at Paniolo Park (Parker Ranch Rodeo Arena). At this time, there is no land committed to an equestrian trail between the County Transfer Station and Paniolo Park. However, a network of equestrian trails has continued to be discussed within the equestrian community, and future linkages with *Ke Ala Kahawai O Waimea* could be explored and developed.

Equestrian Trail Characteristics

Unlike the main multi-use path, the horse trail will not be paved, but will likely be comprised of soil, crushed rock, or some type of aggregate which is both durable and low maintenance. The existing terrain in this area of the project corridor is very rocky, and the large rocks would need to be removed prior to developing a horse trail. Because the terrain area is fairly level and rainfall levels are low, trail erosion is not expected to be a major concern. Nonetheless, the engineering design of the equestrian trail should minimize erosion by use of stream bank strengthening and stabilizing techniques; for example, use of ground cover, geotextiles, gabions, etc.

There are no national standards regarding the width of equestrian trails, but single track (i.e., “one way”) trails can vary from 1.5 to 8 feet. Double-track (i.e., two-way) treads are often 5 to 6 feet wide, providing ample clearance for passing. The appropriate trail width can be determined in consultation with the prospective users if and when the equestrian trail is planned.

3.3 SELECTION OF PREFERRED ALTERNATIVE

All of the alternatives discussed in this Alternatives Analysis chapter were considered, but the preferred alternative, for a multi-use path following Waikōloa Stream, is the County of Hawai‘i’s preferred option.

One of the primary criteria for evaluating alternatives is to what extent they meet the project's purpose and need. There are several stated purpose and need objectives, including: 1) providing alternative non-vehicular transportation options; 2) improving safety for pedestrians, bicyclists and non-motorized transport; 3) providing connectivity between major destination points; 4) enhancing access to and enjoyment of natural and scenic areas; and 5) increasing recreation and fitness opportunities. The proposed *Ke Ala Kahawai o Waimea* meets all of these objectives.

The preferred alternative also offers the greatest feasibility and buildability. Easements from adjacent landowners have already been obtained for all of Increment 1, and most of the remainder of the route. Negotiations with landowners have been ongoing for many years. By contrast, many of the homeowners who would be impacted by the mauka alternatives have expressed extremely strong objections to these routes. It is almost certain that obtaining easements for these options would take years, if at all. The alternative to construct bike lanes would also require land condemnation in some areas to sufficiently widen major roadways.

There are physical and engineering challenges associated with all of the alternatives. Steeper, streamside areas in Increment 1 of the preferred alternative will require retaining walls. Bridges or culverts are required for several stream crossings. The dismissed alternatives would likewise present their own physical challenges. Mauka alternatives located north of Kawaihae Highway include steep areas and flood prone sections. Access to Waimea town from a mauka trail would require crossing busy Kawaihae Road, which presents safety concerns for trail users, and could have traffic impacts. These routes would also require expensive and time consuming surveys for possible unexploded ordnance associated with the former Waikōloa Maneuver Area. Although these would be conducted by the Army, these areas are not currently scheduled for surveying, and it is uncertain when funding would be available. Other alternatives, such as constructing bike lanes on Kawaihae Road and Mamalahoa Highway would require road widening. This may have adverse impacts on landowners, commercial areas and disrupt traffic during construction.

The preferred Waikōloa Stream trail has a high level of support. Dozens of community volunteers have spent hours clearing portions of the trail, and there is enthusiasm and community pride for this project. *Ke Ala Kahawai o Waimea* has the support of many community organizations, including the Waimea Trails and Greenways, People's Advocacy for Trails Hawai‘i (PATH), and the Waimea Outdoor Circle. Agreements for this alignment are already in place with public and private landowners along the route, including the University of Hawai‘i, Parker Ranch, the Catholic Church, and BP Partners. The stream trail is being proposed by the County of Hawai‘i Department of Parks and Recreation, and has the endorsement of the Mayor's Office. It has been incorporated into a number of accepted planning documents, including the South Kohala Community Development Plan, the Waimea Circulation Plan, and Bike Plan Hawai‘i.

Ke Ala Kahawai o Waimea, the stream trail of Waimea, was found to be superior to the other alternatives discussed in this Alternatives Analysis in meeting the project's purpose and need. *Ke Ala Kahawai o Waimea* is the preferred alternative, and will be the subject of this Environmental Assessment.

All other alternatives discussed in this Alternatives Analysis are being dismissed from further consideration. However, as required by the National Environmental Policy Act (NEPA), the environmental analysis in Chapter 4 includes a short discussion of the impact of the (now dismissed) alternatives.

Table 3-1: Comparison of Alternatives

Screening Criteria	No Action	Bike Lanes Along Kawaihae Rd and Mamalahoa Hwy	Alternative Trail Alignments and Segments	Preferred Alternative: *Ke Ala Kahawai o Waimea*
Project Purpose & Need				
Accommodates a range of users (pedestrians, bicyclists, joggers, equestrians)?	No	Accommodates more experienced bicyclists but not pedestrians, joggers, or less experienced bikers and children.	Mauka alternative could accommodate a range of users. Areas with hilly terrain could be less accessible to some users.	**Yes**
Provides non-vehicular transportation option?	No	**Yes,** but for bicyclists only.	**Yes**	**Yes**
Links major destination points in Waimea?	No	**Yes.** Links major destinations points along Kawaihae Road and Mamalahoa Highway.	Mauka alternative links residential areas to HPA. Limited connection to other schools or commercial areas south of Kawaihae Road.	**Yes**
Safe and accessible for all users (including children, seniors, handicapped)?	No	No. Improves safety of existing roads for bicyclists only.	No. Steep and hilly areas not fully accessible.	**Yes**
Provides recreational and open space amenity for community?	No	No	Limited. Mauka segments provide a recreational resource, but location limits primary users to mauka residents.	**Yes**

Screening Criteria	No Action	Bike Lanes Along Kawaihae Rd and Mamalahoa Hwy	Alternative Trail Alignments and Segments	Preferred Alternative: *Ke Ala Kahawai o Waimea*
Feasibility/Buildability				
Physical conditions, land availability	Not applicable	Roadway ROW is very limited, may not be wide enough for dedicated bike lanes. Road widening (and condemnation) likely required.	Mauka segments are hilly and in close proximity to private residences. Would require easements and/or land acquisition from many private residential owners north of Kawaihae Road.	Stream side location. Easements have been obtained for all of Increment 1. Easements for subsequent increments are being negotiated.
Topography, slope	Not applicable	Roadway topography and slope are suitable for bike lanes.	Hilly and steep topography in some mauka areas.	Relatively level topography except for some steeper areas close to stream which require grading.
Stream crossings	Not applicable	No stream crossings or bridges required.	Potential stream crossings.	Ten stream crossings in order to remain on public or private land where easements have been obtained.
Physical Environment				
Construction-period impacts	Not applicable	Major traffic impacts if roadway widening is required. Construction will impact main roadways.	Could result in severe disruption and inconvenience to adjacent homeowners along mauka trail alignment.	Noise and dust impacts to Sandalwood subdivision, Hale Waimea housing, and Kanu o ka ʻĀina PCS.

Screening Criteria	No Action	Bike Lanes Along Kawaihae Rd and Mamalahoa Hwy	Alternative Trail Alignments and Segments	Preferred Alternative: *Ke Ala Kahawai o Waimea*
Flood hazard	No change to existing conditions. Waikoloa Stream prone to debris build up and occasional flooding.	Some areas of Kawaihae Road and Mamalahoa Highway are within flood hazard areas. Construction of bike lanes would have no impact.	Sections may be within stream floodway and flood prone areas. Improvements must result in no net rise in base flood elevation.	Sections are within stream floodway and flood prone areas. No net rise in base flood elevation allowed. Trail will improve stream access and may facilitate debris clearing.
Erosion	No impact.	No impact, best management practices during construction would be employed.	Potential for erosion in some steep areas for mauka alternative. Mitigated by appropriate trail design and BMPs during construction.	Potential for erosion in some steep areas near stream and where trees and vegetation are removed. Mitigated by appropriate trail design and BMPs during construction. Native vegetation will be planted where trees are removed.
Noise and Air Quality	No impact.	Some minor construction period impacts during road widening.	Construction period impacts to surrounding subdivision residents.	Construction period impacts to adjacent and nearby residents and Kanu o ka ʻĀina School.
Stream Water quality	No impact.	No impact	Potential for adverse impact at stream crossings. BMPs required during construction.	Potential for adverse impact at stream crossings. BMPs required during construction. Improved access to stream may facilitate ongoing water quality monitoring done by others.

Screening Criteria	No Action	Bike Lanes Along Kawaihae Rd and Mamalahoa Hwy	Alternative Trail Alignments and Segments	Preferred Alternative: *Ke Ala Kahawai o Waimea*
Traffic	No impact to existing traffic conditions. Will do nothing to alleviate existing in-town congestion or to reduce short-distance vehicle trips.	Will improve bicycling conditions along Kawaihae Rd. and Mamalahoa Hwy. During construction, short-term traffic impacts traffic at major intersections especially where road widening is required.	Mauka segments would encourage more walking and bike commuting by HPA students and staff. Potential traffic safety concerns along Kohala Mountain Road and where the trail would meet/cross Kawaihae Road (Kahawai Street and Ohina Street).	Will provide an alternative transportation option, reducing short-distance vehicle trips and possibly alleviating congestion around Waimea Elementary and Middle School. Minimal traffic impacts during construction, as path is separated from major roadways.
Unexploded Ordnance (UXO) Hazards	No UXO clearance has been conducted for stream areas.	No impact	No UXO clearance has been conducted north of Kawaihae Road by Army. Survey and clearance activities need to be completed.	Majority of trail alignment has been cleared of UXO, except areas within stream bed. Signage needed to keep users out of stream.
Natural Environment				
Terrestrial Flora/Fauna	No impact	No impact. Improvements are within existing roadway ROW.	No threatened or endangered species impacted.	No threatened or endangered species impacted. Removal of large non-native trees required near Waimea Nature Park. Limit tree cutting during bat breeding season.

Screening Criteria	No Action	Bike Lanes Along Kawaihae Rd and Mamalahoa Hwy	Alternative Trail Alignments and Segments	Preferred Alternative: *Ke Ala Kahawai o Waimea*
Stream biology	No impact	No impact	Potential impact at stream crossings. Culverts should be designed to allow continued migration of amphidromous species.	Potential impact at stream crossings. Culverts should be designed to allow continued migration of amphidromous species.
Socio-Economic Environment				
Impact on adjacent landowners (residential, commercial)	No impact	Roadway widening likely needed to accommodate bike lane, with possible impact on existing commercial properties on Kawaihae Rd and Mamalahoa Hwy. Temporary traffic impacts on Waimea Town traffic and access during construction.	Mauka alternatives traverse existing subdivisions, requiring easements or land condemnation. Mauka homeowners have concerns about trespassing, noise and security if trail was constructed. Equestrian segment next to Lālāmilo Farmlots would have had adverse impact on farming operations.	Some construction period noise and dust. Trespassing and security concerns expressed by some Sandalwood residents. Presence of stream will provide natural noise and physical barrier between trail and Sandalwood. Fencing separating trail from CTAHR and Parker Ranch lands should minimize impact on ongoing pasture and agriculture use.
Historic and cultural resources	No impact	No impact	Possible impact to known historic sites. Inventory surveys recommended if this alternative were selected.	Inventory surveys recommended when final alignment is determined. Inventory survey completed for Increment 1 found no adverse impact with recommended mitigation.

Screening Criteria	No Action	Bike Lanes Along Kawaihae Rd and Mamalahoa Hwy	Alternative Trail Alignments and Segments	Preferred Alternative: *Ke Ala Kahawai o Waimea*
Other Issues				
Has widespread public support?	Continuation of the status quo (no action) is not likely to generate active opposition, but is not an option with a high level of support.	Unknown. There is high level of support for creation of signed-shared roadways on Kawaihae Road and Mamalahoa Highway, as this was recommended in Bike Plan Hawai'i. It is not known how much support there would be for bike lanes (as compared to signed shared roadways). However, bike lanes may require roadway widening and commercial disruption in some areas.	No. Mauka routes have high level of opposition by subdivision homeowners. Option to stay on south side of the stream through Lālāmilo Research Station is not favored by CTAHR. Former option for equestrian trail through Lālāmilo Farmlots had high level of opposition by farmers.	**Yes.** This alternative has high level of public support and has been promoted by the WTG Committee since 1994. Project and preferred alignment is endorsed by South Kohala CDP, Waimea Traffic Circulation Study and Bike Plan Hawai'i.
Is consistent with Public Plans and Policies?	N/A	No. Bike Plan Hawai'i, State Bicycling Master plan, recommended signed shared roadways—not bike lanes--on Kawaihae and Mamalahoa.	No. Mauka trail alignments are not included in any public plans, with the exception of some segments east of Church Row which are included in Bike Plan Hawai'i. These trail segments are beyond the current project area.	**Yes.** This route for a trail and greenway has been endorsed by a number of public planning documents including South Kohala CDP and Waimea Traffic Circulation Study.

4 AFFECTED ENVIRONMENT, IMPACTS AND MITIGATION

4.1 INTRODUCTION

This chapter describes the existing environment, potential project impacts and proposed mitigation. This chapter is organized by resource area, and is generally divided into: 1) physical environment, 2) biological environment, 3) socio-economic environment, 4) utilities and infrastructure, 5) traffic, and 6) public services and facilities.

The discussion of environmental impacts includes both direct and indirect impacts. Direct impacts are those caused by the action and occur at the same place and time. Indirect effects may occur later in time or farther in distance, but are still reasonably foreseeable. The analysis in this chapter also identifies possible cumulative environmental impacts. Cumulative impacts are defined as the results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

This section also addresses the environmental impacts of the other project alternatives discussed in Chapter 2.

4.2 PHYSICAL ENVIRONMENT

4.2.1 Existing Land Use

Existing Conditions

The project corridor is separated into four segments, running east to west. Each segment is differentiated by its unique physical characteristics, land use, and land ownership. Construction of the multi-use path will be phased by segment, starting with Increment 1, the segment between Lindsey Road and Kahawai Street. Figure 4 shows the location of the trail segments, and major landowners and existing land uses along the route.

Ke Ala Kahawai o Waimea **Segments**

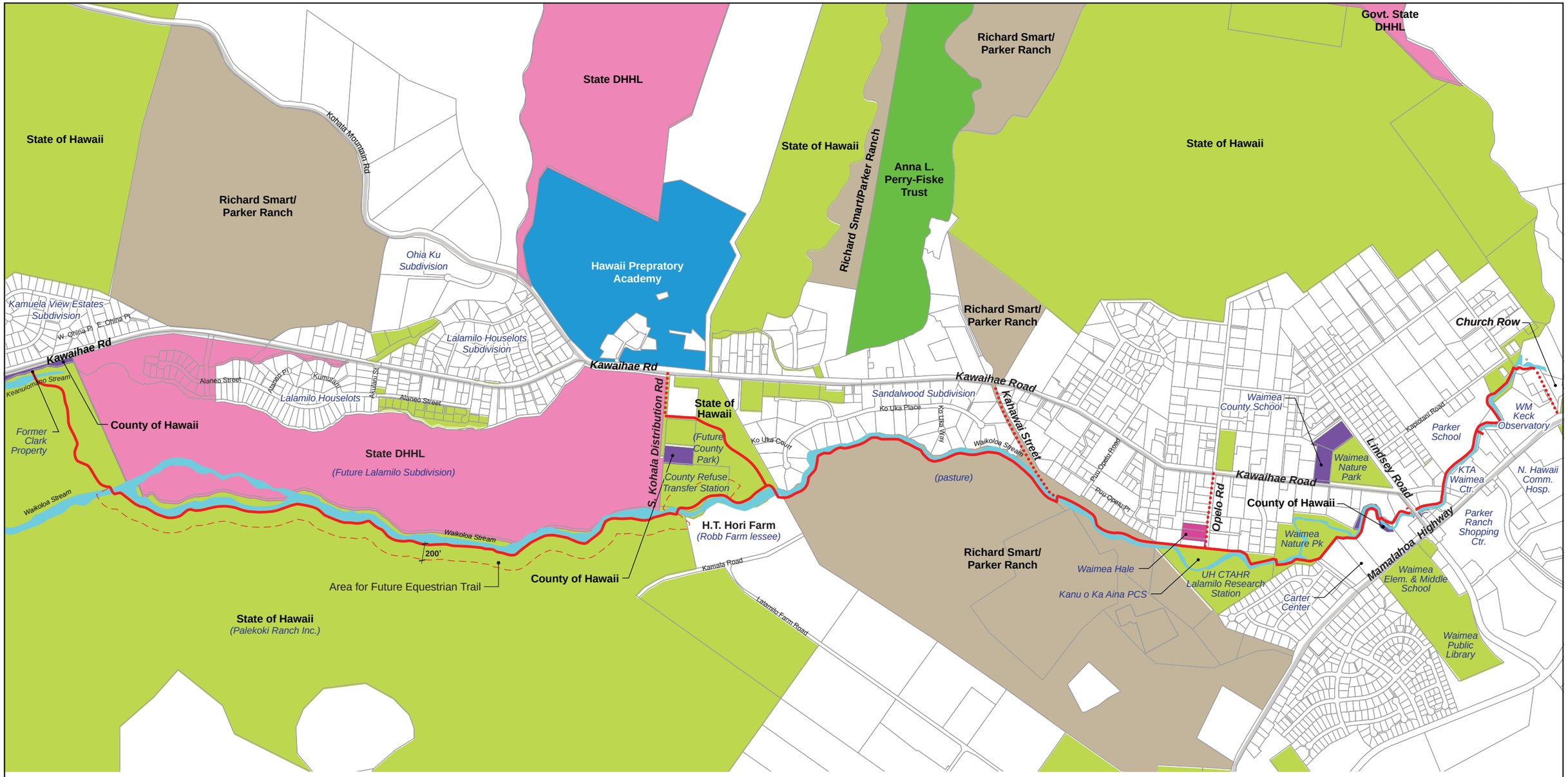
Trail Segment *(east to west)*	Phasing Increment	Approx. Length	Landowner	Land Use/Physical Conditions
Church Row to Lindsey Road	3 or 4	0.6 mile	Various	Commercial, urbanized area
Lindsey Road to Kahawai Street	1	1.0 miles	Various	Residential, commercial, agriculture and pasture
Kahawai Street to Waimea Refuse Transfer Station *(South Kohala Distribution Road)*	2	1.4 miles	Parker Ranch, County of Hawai'i	Residential, Pasture, Refuse station
Refuse Transfer Station to "Clark Property" *(across Kamuela View Estates)*	3 or 4	1.8 miles	State of Hawai'i	Undeveloped Dryland
TOTAL		4.8 miles		

Church Row to Lindsey Road

The eastern end of the trail starts near Church Row in Waimea Town, and extends 0.6 miles along the Waikōloa Stream to Lindsey Road. Church Road will be designated as a signed shared roadway, and will provide access to the path from Mamalahoa Highway. The multi-use path will start at the end of Church Road next to Waikōloa Stream, and head west (left) following the stream. In this first segment, it will pass through land occupied by some of Waimea's main commercial and institutional uses, including the Catholic Church, W.M Keck Observatory, Parker School, and KTA Waimea Center.



Church Road will be designated as a signed shared roadway providing access to the path from Mamalahoa Highway.



LANDOWNERS

- State of Hawaii
- Department of Hawaiian Home Lands (DHHL)
- County of Hawaii
- State Hawaii Housing Authority (HHA)
- Richard Smart/Parker Ranch
- Hawaii Prepratory Academy
- Anna L. Perry-Fiske Trust
- Other Private Owner

LEGEND

- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200

SCALE IN FEET

Figure 4
EXISTING LAND USES AND OWNERSHIP
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment



Stream side areas west of Church Row.



The bank of Waikōloa Stream behind the KTA Waimea Center (left) is narrow, and the path will be on the opposite (north) side of the stream, on land owned by Parker School.



Lindsey Road bridge, looking east. In the long term, the multi-use path could cross Lindsey Road in a separate underpass.

Lindsey Road to Kahawai Street (Increment 1)

This 1.0-mile segment of the multi-use path has been identified as Increment 1, or the first section of the project to be constructed. The path passes behind the Carter Center professional building, St. James Center, on the edge of the Waimea Nature Park.



Path passes behind the Carter Professional Center.



In this segment, community volunteers have cleared brush and debris, removed trash and laid wood chips to create a usable walking path. (Photos courtesy of Waimea Trails & Greenways)



The existing path approaching the Waimea Nature Park through a Eucalyptus grove.









The path will pass along the boundary of the Waimea Nature Park, along an old road dating from WWI when it was used by the military as the Camp Tarawa training camp. The County was granted an easement for the multi-use path through this area.



The existing path along the stream in this area is lush and shady and is enjoyed by many in the community

West of the Waimea Nature Park, the stream crosses through property owned by the University of Hawai‘i’s (UH) College of Tropical Agriculture and Human Resources (CTAHR) Lālāmilo Research Station. The stream banks through this section are steeper and rocky, and densely vegetated. Unlike the area near the Nature Park, there is no clear or defined pathway at present.



Steeper areas near the stream may require some grading.



UH's Lālāmilo Research Station is located near Opelo Road.





A small wooden bridge at Opelo Road on the Lālāmilo Research Station property. In this area, the path would be located on the north side of the stream, north of the Kanu o ka 'Āina PCS (shown in background).

Just before Opelo Road, the multi-use path will cross over to the north side of the stream, and then follow the northern boundary of the Research Station property, between the Kanu o ka ʻĀina New Century Public Charter School (PCS) and the Waimea Hale apartments.

The Kanu o ka ʻĀina PCS campus on Opelo Road includes students from Grades 2 through Grade 5. Students in Grades 6 through 12 are housed at another campus in Puʻukapu in Waimea. It is anticipated that the Opelo Road campus will relocate to Puʻukapu within the next one to two years. As currently designed, Increment 1 of the trail will not displace any of the permanent buildings at the school. However, some of the portable buildings, containers, and sheds encroach on the trail easement and may need to be relocated if the school is still there. A leach field may also be encroaching on the easement and may need to be relocated. The existing fence will be relocated to separate the path from the school.



The path will follow the Lālāmilo Research Station's northern boundary, threading through a narrow corridor between the Kanu o ka ʻĀina PCS and the Waimea Hale apartments. No permanent school buildings will be displaced.

Opelo Road will be designated as a signed shared roadway providing access to the trail from Kawaihae Road. Currently, there are two locked gates at the end of Opelo Road where the CTAHR Lālāmilo property begins. The pedestrian gate shown in the photo above may need to be relocated when the trail is built.

The section of the proposed trail between Opelo Road and Kahawai Street has been partially cleared by volunteers to provide temporary access until a path can be constructed. Additional community work days are planned to continue clearing brush within this segment.







(Photos courtesy of Leningrad Elarionoff)



Kahawai Street, a private road owned by Parker Ranch, would be a designated trail access. Options to mitigate impacts to residents include prohibiting street parking, extending the road to create a vehicle turn-around, or limiting path access to bikes and pedestrians only. Further coordination with Parker Ranch is required.

Source: Google Maps



The path will cross back to the south side of the stream near this existing ford crossing at Kahawai Street.

Kahawai Street to Waimea Refuse Transfer Station (South Kohala Distribution Road)

This section of *Ke Ala Kahawai o Waimea* extends 1.4 miles from Kahawai Street, at the eastern end of the Sandalwood Subdivision, to South Kohala Distribution Road at the Waimea Refuse Transfer Station. In this area, the trail runs along the south side of the stream on pasture land owned by Parker Ranch. Easements have been negotiated with Parker Ranch. The Sandalwood subdivision is located on the north side of the stream through this area.

The terrain and vegetation through in this section of the project corridor can be characterized as open pasture land. The path will be constructed within a 30-foot corridor adjacent to the stream, but outside the stream floodway.



Homes in the Sandalwood subdivision are located on the opposite (north) side of Waikōloa Stream



Pasture land owned by Parker Ranch. In this section, the path will be located within a 30-foot easement adjacent to the stream (at right).



Approaching the Waimea Refuse Transfer Station.

As the path moves west toward the County's Waimea Transfer Station, a 17.6 acre State-owned parcel on the north side of the stream has been designated as a future County park. The park will include parking and provide access to the trail. The area may also serve as a trailhead for an equestrian trail, including horse trailer parking.

In this area, the path will again cross over from the south to the north side of the stream, in order to remain on public (County) property. The land on the south side of the stream is owned by H.T. Hori Farm, and leased to Robb Farm. An easement from Parker Ranch is still needed in this area

to allow the trail to cross the stream. The path will cross back over to the south side of the stream past the Robb Farm area.

Waimea Refuse Transfer Station to "Clark Property"

This western-most segment of the trail extends about 1.8 miles from South Kohala Distribution Road following Waikōloa Stream on lands owned by the State of Hawai'i and leased to Waimea rancher Harold "Freddy" Rice. The physical landscape undergoes a noticeable change from open pasture land (east of the transfer station) to a drier, rocky and windswept terrain to the west. Sparse vegetation can be found lining the stream, but surrounding areas offer only patchy areas of weedy grass and shrubs. Winds are frequently gusty through this area and the lack of vegetation contributes to a desolate and wind blown environment. The dry conditions have been exacerbated by the ongoing drought. This area offers views of the Kohala Mountains in the distance.

Through most of this segment, the path is located on the south or Kona side of Waikōloa Stream, within the ranching lands leased to Mr. Rice. During a recent meeting in February 2011, Mr. Rice indicated that he is not opposed to the trail. However, a major concern was potential liability due to public access onto his leased land. He indicated that he would need blanket liability in the event that a trail user is injured or trespasses onto his ranch land. His other concern was to ensure that his lease would not be revoked in the interest of public benefit. These concerns need to be addressed through some type of sub-lease agreement with Mr. Rice, in addition to an easement from the State. The State lands on the north side of the stream are planned for the Department of Hawaiian Homeland's Lālāmilo subdivision.

Over the past century, these lands have been used for cattle ranching, and prior to that, by the U.S. military as part of the Waikōloa training range. In pre-contact times, the area was inhabited by Hawaiians and used for agriculture, as evidenced by historic properties that have been identified in the vicinity including '*auwai* (irrigation ditches), agricultural fields and house sites. A Cultural Impact Assessment conducted for the project did not identify any present-day cultural practices of any kind (Cultural Surveys, Hawai'i, Inc., 2003).



Terrain west of the refuse transfer station is dry and windswept, with sparse vegetation. Views toward the Kohala Mountains are unobstructed.



Land in the foreground on north side of Waikōloa Stream are planned for DHHL's Lālāmilo subdivision. *Ke Ala Kahawai o Waimea* would be on the opposite (south) side of Waikōloa Stream.



Route of the multi-use path on the south side of Waikōloa Stream.



The path will cross Waikōloa Stream and head north toward Kamuela View Estates subdivision. The western terminus of the path is an 8-acre parcel on Kawaihae Road donated by Waimea resident Henry Clark.

After following the stream for about 1-1/2 miles, the path crosses Waikōloa Stream and heads north toward Kawaihae Road on State-owned land. Closer to Kawaihae Road, the path will cross Keanuiomano Stream, and terminate at the former "Clark Property," an eight-acre site

across the Kamuela View Estates subdivision. This parcel has been designated as a future County park, and will include trail parking.



Kawaihae Road near the former Clark property (at left).

Source: Google Maps

Project Impacts and Mitigation

The trail crosses public and privately-owned land. Land acquisition or easements will be required for the entire trail corridor. To date, property owners in the first increment, between Lindsey Road and Kahawai Street, have either donated land to the County of Hawai‘i or granted easements for the trail in favor of the County.

Preliminary plans for the entire 4.8-mile path shows 10 stream crossing locations, where the trail crosses from one side of the stream to the other. The stream crossings are needed in several areas to avoid encroaching on private property and to keep the path on public land or areas where easements have been secured. During the design phase for each segment, further analysis will determine whether the crossings will be constructed as in-stream culverts or bridges.

The path will not have an adverse effect on land uses through the developed portions of Waimea Town, and will be compatible with the current use of the corridor as an unpaved walking and jogging path and access route to the Waimea Nature Park.

During the Draft EA comment period, concerns were raised by the Waimea Outdoor Circle and others about potential environmental impacts in the vicinity of the Waimea Nature Park. A major concern included the number of mature trees that would be removed to accommodate the trail. This issue is discussed in Section 4.3.2, Botanical Resources. The trees that will be removed are all non-native, and only those that are in the direct path of the trail or pose a safety hazard to trail

users will be removed. The County will provide a one-for-one replacement with native species more appropriate for the environment.

There will not be any adverse impact to the CTAHR Lālāmilo Research Station or its activities, as the path will cross over to the north side of the stream, away from actively cultivated lands. During trail planning, the possibility of keeping the trail on the south side of the stream at the Lālāmilo Research Station was investigated. This route would have provided more level terrain, required less grading, and eliminated two stream crossings. However, CTAHR personnel confirmed their preference that the trail be located across the stream, along the station's northern property boundary. They were concerned that a route on the south side of the stream would bifurcate their fields, resulting in the loss of usable agriculture land and disruption to operations. Other concerns were the increased potential for trespassing, theft and vandalism. Because easements have already been obtained from the State for access along the Lālāmilo Research Station's northern property boundary, the decision was made to stay with this route.

At Opelo Road, the path will thread through a narrow corridor between the Kanu o ka ʻĀina Public Charter School (PCS) and a public housing apartment buildings. Other than construction period noise and dust, there will not be adverse impacts on either. The school will be relocating to a permanent facility within a few years. The completed path will provide a walkable route from these apartments to the Waimea Elementary and Middle Schools and into town, and provide a recreational and open space resource.

Kahawai Street is shown on the plan as a signed shared roadway that would provide public access to the trail. This privately-owned road is part of a larger Parker Land Trust parcel, and Parker has granted the homeowners access and utility easements. The County has already secured an easement from Parker Ranch for trail access through a portion of this same parcel, and the easement would need to be modified to include Kahawai Street.

Kahawai Street is a very narrow, local road with no sidewalk or shoulders, and identifying it as a trail access point will increase the number of people using this route. In order to avoid adverse impacts to residents, signage should be installed to remind trail users that street parking is prohibited, to stay off private property, and to show common courtesy to residents. Another option is to limit trail access on Kahawai to pedestrians and bicycles only; i.e., no vehicle drop-offs will be allowed.

At Kahawai Street, the path will cross back to the south side of the stream and remain on Parker Ranch land in order to avoid the Sandalwood, an agricultural subdivision located on agriculturally-zoned land. The path will be visible from the backyards of the Sandalwood lots, and will alter their existing view of open pasture land. However, use of the path will generate noise levels below other activities that are allowed on agriculture land, and will not have an adverse noise impact. Moreover, the stream will provide a physical buffer between the path and the Sandalwood subdivision. The path will not adversely impact Parker Ranch's existing pasture

or ranching activities in this area. On the Parker Ranch lands, the trail will be within a 30-foot easement adjacent to the top of the slope down to the stream.

As the path reaches the County property at the western end of the Sandalwood subdivision, it will cross to the north side of the stream, to avoid the Robb Farm. Beyond (i.e., west of) the refuse transfer station, the path crosses back to the south side of Waikōloa Stream, as it passes the lands proposed for the Department of Hawaiian Homelands (DHHL) Lālāmilo homesteads.

The presence of the multi-use path will be an asset for residents of DHHL's Lālāmilo homestead, and will provide a transportation alternative and a recreational and open space resource. In an early consultation letter dated June 14, 2010 (Chapter 9), DHHL indicated they are excited about this trail and greenways project becoming a reality, and that the project will provide recreational opportunities and commuting alternatives to Waimea Town for future Hawaiian Home Lands lessees. With the close proximity of the path to their Lālāmilo project, DHHL noted that they had a few concerns with increased access, potential crime and loitering near residential lots. The stream will provide a natural buffer between the path and the residential area. DHHL will need to provide access to the trail from their development through bridges, culverts or ford crossings. These access points can be sited, designed and constructed to address the department's needs and concerns.

Impacts of Other Alternatives

The alternative for bike lanes on Kawaihae Road and Mamalahoa Highway could require road widening and disrupt existing commercial uses, particularly within central Waimea Town. The "mauka alternatives" that were discussed in the Alternatives Analysis (Chapter 3) would pass entirely through privately-owned lands, owned by a few large owners (Hawai'i Preparatory Academy, Richard Smart) and many individual homeowners residing in the Ohia Ku and Pako subdivisions. Larger landowners would likely see the trail as providing direct benefits to their students or employees, and easements could probably be negotiated. However, individual homeowners are likely to see the trail as having an adverse effect, and the mauka alternatives would raise strong objections, as evidenced by the letters received during the EA early consultation. Obtaining easements for a mauka trail would be extremely difficult, and any attempt at land condemnation is likely to result in legal challenges. Overall, the time and resources required to pursue any of the mauka alternatives would be prohibitive, making the mauka alternatives both impractical and economically infeasible.

4.2.2 Geology and Topography

Existing Conditions

The project area is situated in the Waimea Saddle region between the Kohala Mountains and Mauna Kea volcano at elevations between 2,000-3,000 feet above sea level. Elevations

throughout the project corridor range from about 2,100 feet above mean sea level on the east near Church Row, to about 2,700 feet at the far western end of the trail.

Project Impacts and Mitigation

Site work required for construction of the trail will entail clearing and grubbing vegetation, removal of mature trees, grading the trail, stockpiling excavated material, and hauling debris to approved disposal sites.

While most of the path route is fairly level, some areas in Increment 1 will require grading and construction of retaining walls where the stream banks have eroded or are not stable enough to support the trail.

All earthwork and grading will conform to Chapter 10, Erosion and Sediment Control, of the Hawai'i County Code. Care will be taken to not change existing drainage patterns. All development generated runoff shall be disposed on site and not be directed toward any adjacent properties.

Impacts of Other Alternatives

Mauka alternative segments are generally on steeper terrain than the preferred alignment, and would have required more grading and site work, retaining walls, and ramps to ensure compliance with the Americans with Disabilities Act (ADA). The alternative to construct bike lanes along existing roads would have minimal impact on topography because work would take place within or adjacent to existing roadway rights-of-way.

4.2.3 Soils and Agriculture

Existing Conditions

Soil Conservation Survey

According to the soil map prepared by the U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey of the Island of Hawai'i, State of Hawai'i* (1972), the soils in the project area include (Figure 5):

Waimea very fine sandy loam, 6 to 12 percent (WMC). The majority of the soil in the project area along the proposed trail is Waimea very sandy loam (WMC). This soil is well-drained, very fine sandy loam that formed in volcanic ash. The soil has moderate to rapid permeability, runoff is slow and the erosion hazard slight. In places, the surface is extremely stony with basalt lava found at a depth of 42 inches.

Kikoni very fine sandy loam (Kfa). Very small areas of this soil type are found in the vicinity of Church Row and the small community park at the eastern end of the trail. Kikoni soil is well-drained, very fine sandy loam that formed in volcanic ash. The soil is moderately permeable, runoff is slow and the erosion hazard slight to moderate.

Land Study Bureau Detailed Land Classification

The University of Hawai'i's Land Study Bureau *Detailed Land Classification Report for the Island of Hawai'i* (1972) uses a five-class system for rating agricultural productivity of land. The system uses the letters A, B, C, D and E, with "A" representing the most suitable, highly productive land type and "E" the least suitable land with low productivity.

As shown in Figure 6, the entire project corridor from the Lālāmilo Research Station westward is comprised of agricultural designated lands, most of it rated "C" or "fair suitability" for soil-based forms of agriculture. In the developed part of Waimea town at the eastern end of the trail, the LSB designated the land "N" for not classified. These areas are designated for urban rather than agricultural use.

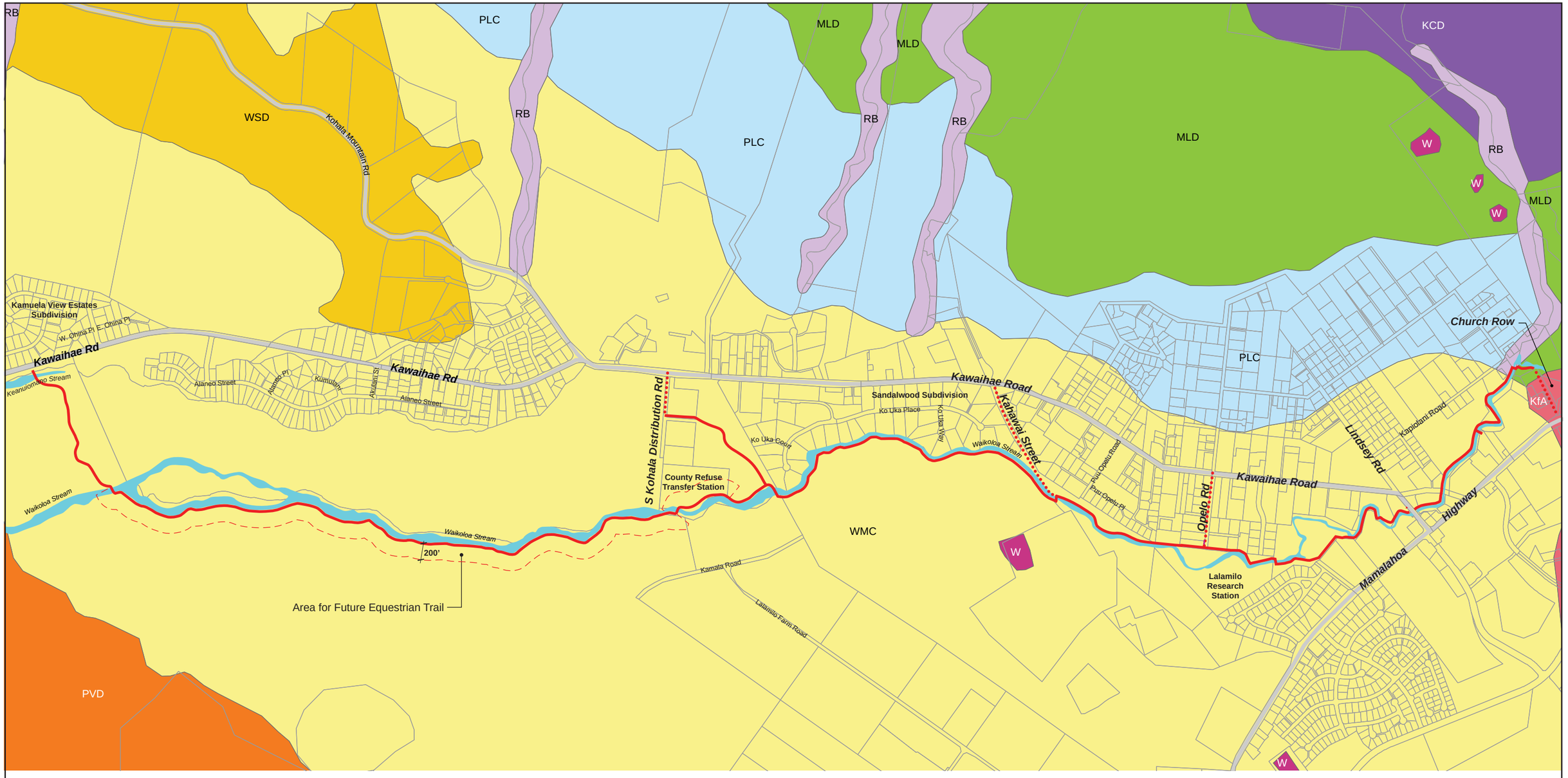
There are lands rated "B" or suitable for agriculture in the project corridor, on the Kona or south side of Waikōloa Stream near the County Refuse Transfer Station. This is the Robb Farm and Lālāmilo Farm Lots area. In this area, the proposed trail will be located on the north side of the stream, on land rated "C," and will not impact the higher productivity, B-rated areas.

Agricultural Lands of Importance to the State of Hawai'i (ALISH) Designations

The State Department of Agriculture's *Agricultural Lands of Importance to Hawai'i (ALISH)* system rates land for its agricultural suitability. The ALISH system identifies three categories of agricultural lands—Prime Agricultural Lands, Unique Agricultural Lands, and Other Important Agricultural Lands.

As shown in Figure 7, most of the land along the trail corridor west of the Lālāmilo Research Station is rated as "Other Important Agricultural Land." These are lands that are considered important to agriculture, yet with properties (e.g., seasonable wetness or susceptibility to drought, erodibility, etc.) that exclude them from the other two classifications.

The Robb Farm area is designated as "Prime Agricultural Land, as is the Lālāmilo Research Station and Parker Ranch lands immediately to the west. In these sections, the trail will be located across the stream, on lands that are not Prime.



LEGEND

KCD	Kahua silty clay loam, 6 to 20% slopes	PLC	Palapalai silt loam, 6 to 20% slopesz	W	Water >40 acres
KfA	Kikoni very fine sandy loam, 0 to 3% slopes	PVD	Puu Pa extremely stony very fine sandy loam, 6 to 20% slopes	WMC	Waimea very fine sandy loam, 6 to 20% slopes
MLD	Maile silt loam, 6 to 20% slopes	RB	Rough broken land	WSD	Waimea extremely stony very fine sandy loam, 12 to 20% slopes

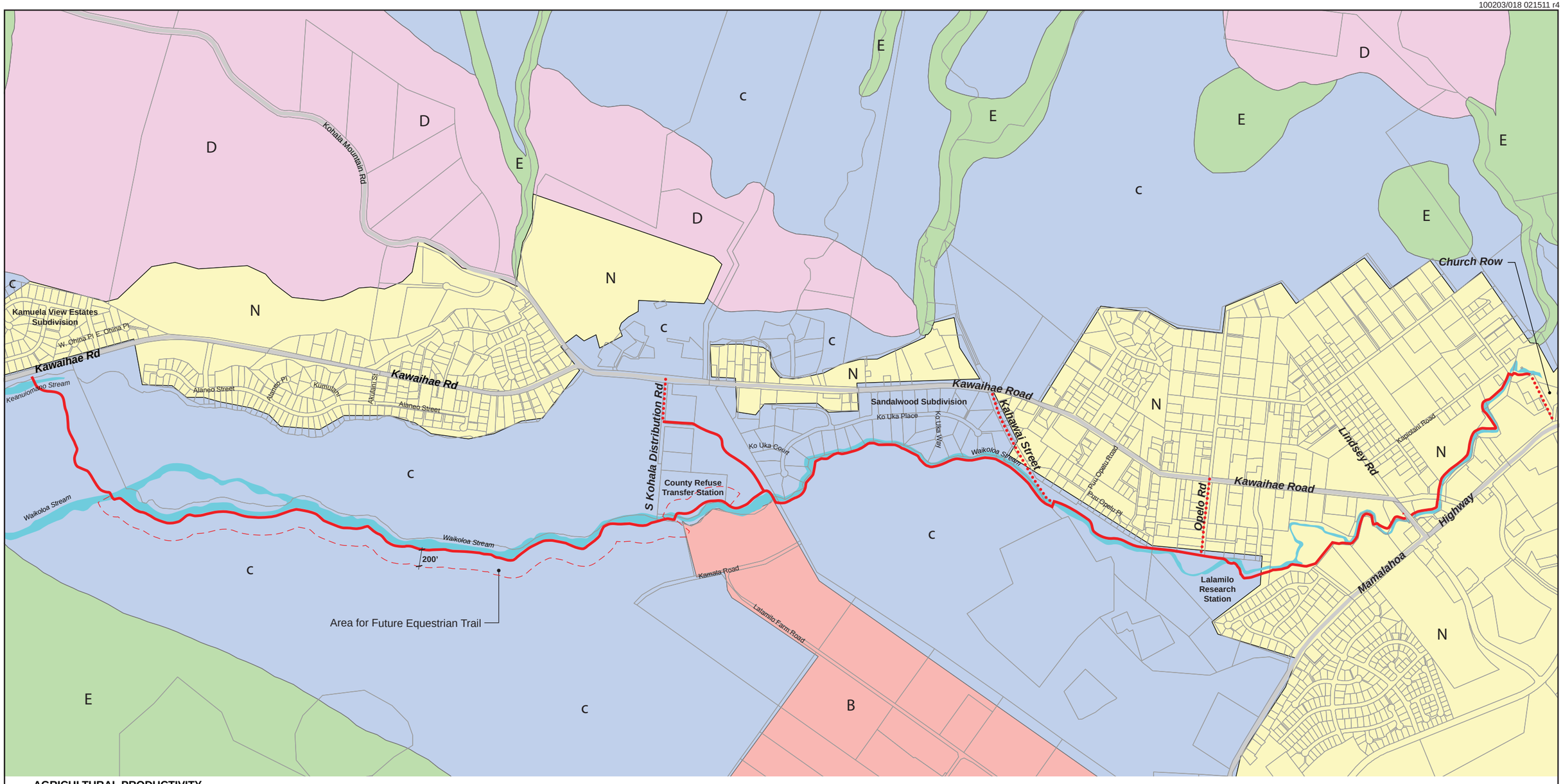
LEGEND

- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200
SCALE IN FEET

Figure 5
SOILS
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment



AGRICULTURAL PRODUCTIVITY

- A — Highest Productivity
- B
- C
- D
- E — Lowest Productivity

N — Not Classified

LEGEND

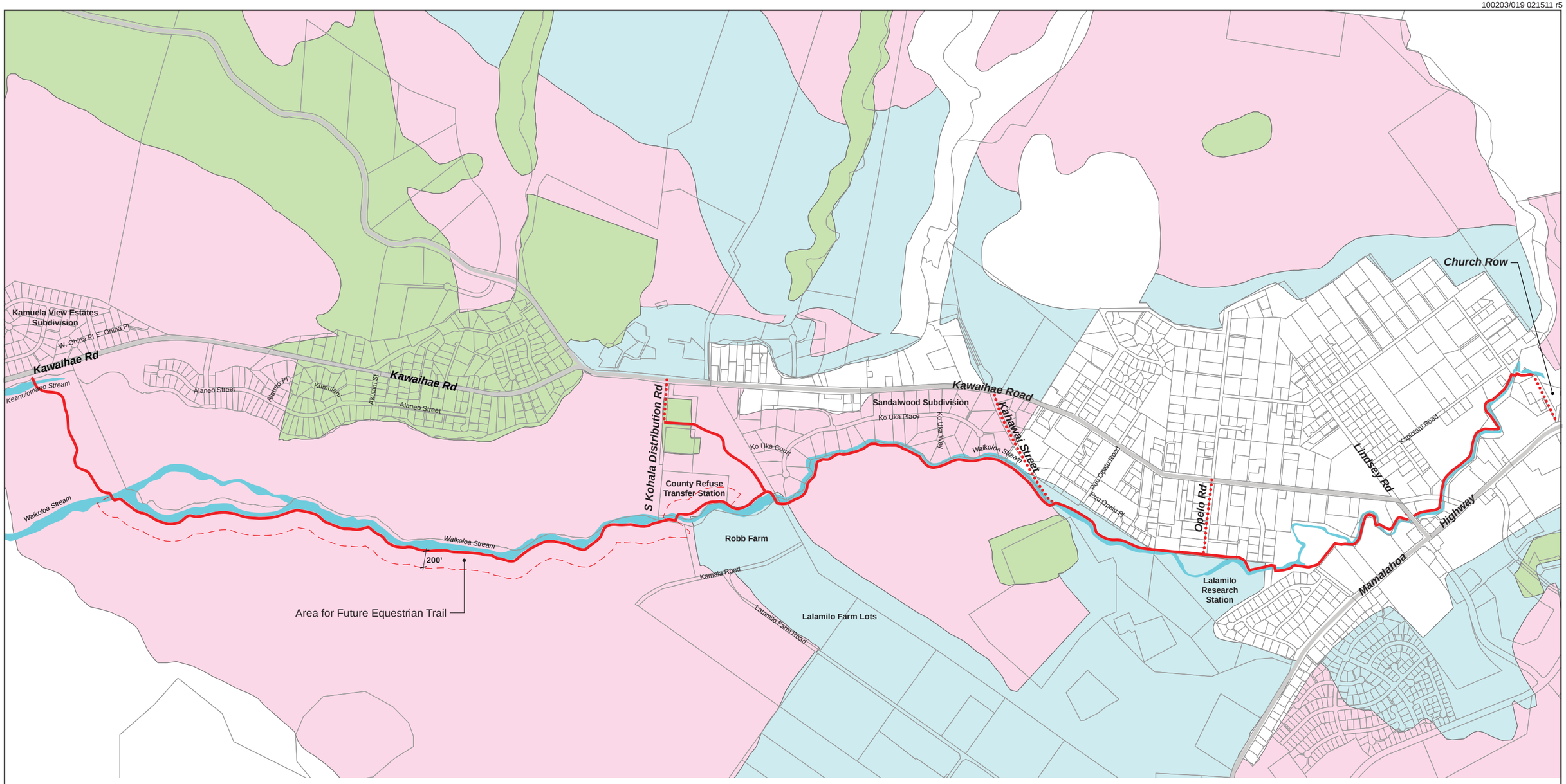
- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200

SCALE IN FEET

Figure 6
LAND STUDY BUREAU (LSB) DETAILED LAND CLASSIFICATION
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment



LEGEND

- Unclassified
- Prime Land
- Unique Land
- Other important agricultural land

LEGEND

- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200

SCALE IN FEET

Figure 7
AGRICULTURAL LANDS OF IMPORTANCE TO THE STATE OF HAWAIʻI (ALISH)
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

Project Impacts and Mitigation

The entire project corridor between the Lālāmilo Research Station and the Clark property is zoned by the County for agriculture. Actively cultivated areas in the vicinity of the project include the CTAHR Lālāmilo Research Station, the land leased by the Robb Farm, and the Lālāmilo Farm Lots. There will not be an adverse impact to any of these agricultural areas. In the segments at the Lālāmilo Station and the Robb Farm, the path will cross over to the north side of the stream to avoid these actively cultivated lands. The trail will not go anywhere near the Lālāmilo Farm Lots.

The construction of the trail will require vegetation removal, including large, non-native trees in Increment 1, excavation and site work, stirring up dust and increasing the potential for localized erosion. The removal of mature trees adjacent to the stream has the potential to destabilize the stream bank and increase erosion. The majority of the trees removed for the trail will not be immediately adjacent to the stream. The trail will be located within the easement, but designed to maintain a buffer between the stream and the paved trail as much as possible. Trees along the stream bank that are removed will be those that are dead, unhealthy, or in such a precarious position that they are considered dangerous to trail users. Those trees should be cut above ground with their stumps remaining to maintain ground stability. Native vegetation will be planted to replace the removed trees. This will allow the new vegetation and adjoining trees to enlarge their root base and provide the embankment stabilizing function once provided by the cut trees.

More intensive site work, grading, shoring and construction of retaining walls will be required in sections of Increment 1, where the stream bank is narrow and steep. The terraced retaining walls are needed to provide a flat corridor for the path and shoulders on a steep hillside.

During construction, the construction contractor will employ best management practices (BMP), including proper secondary containment structures around the work area to prevent stormwater runoff into the stream. Cleared areas will be revegetated as quickly as possible with native vegetation. Stockpiling of construction materials will be restricted and all construction debris will be disposed off-site and recycled to the extent feasible. Rainwater accumulated will be naturally evaporated or infiltrated into the ground.

Any impact of construction activities on soils will be mitigated by measures outlined in the applicable County, State and federal regulations.

Impacts of Other Alternatives

Under a No Action alternative, there would be no impacts to soils or agriculture operations. The mauka alternatives located north of Kawaihae Road would not impact ongoing agricultural operations, although limited sections pass through areas actively used as pasture land. Retaining walls and site work would be required in steeper mauka areas, and like the preferred alternative, there would be temporary disturbance to soils during construction.

The alternative for bike lanes on Kawaihae Road and Mamalahoa Highway is unlikely to have an adverse impact on soils or agricultural operations as improvements will take place within an existing urbanized corridor.

The mauka alternatives would likely have had more serious construction-period impacts, particularly dust and noise, because of their proximity to existing residential areas, including Lālāmilo Houselots, Ohia Ku subdivision, and Kamuela View Estates.

A former proposal for an equestrian trail along a new bypass road through the Lālāmilo Farm Lots would have had an adverse effect on farming operations, and was vehemently opposed by area farmers. Like the mauka alternatives, this proposal is no longer being considered.

4.2.4 Climate and Air Quality

Existing Conditions

Climate

The climate in Waimea is normally cool, moist and windy. Temperatures usually range between 60 to 70 degrees Fahrenheit, with mean maximums between 70-80 degrees and mean minimums in the upper 40 degree range. Mean annual rainfall ranges from 20 to 30 inches per year, and rainfall is fairly evenly distributed throughout the year. Winds are dominated by northeasterly trades.

Currently, the South Kohala district, as much of the State, is in the midst of a severe, long-term drought that began in early 2008. According to the National Weather Service (NWS), the South Kohala District is experiencing "exceptional drought" conditions or category D4, the most severe category on the U.S. Drought Monitor Map. A NWS meteorologist called the past wet season, from October 2009 through April 2010 as “the driest year in 30 years, not just for the Big Island but for the Hawaiian Islands” (West Hawai‘i Today, June 6, 2010).

In November 2010, the NWS released a statement that drought conditions in South Kohala were showing some improvement but expected to continue for the foreseeable future.

The dry conditions have had a severe affect on agriculture and livestock throughout Hawai‘i Island. In a June 2010 statement, Kevin Kodama, NWS hydrologist, wrote that the drought has *"significantly affected a wide range of agricultural products including coffee, avocados, rambutan, bananas, macadamia nuts, loquat and jabotica…and caused very poor condition for livestock in the South Kohala area, requiring significant amounts of supplemental feed…as pastures have been insufficient to support the herds. Old and sick cattle have been dying."* (ibid).

The consequences of the ongoing drought on the flora and fauna in the project corridor were documented by AECOS, Inc. Their findings are discussed in Section 4.3 below. The dry conditions have also raised concerns about brush fires, especially for the Kohala and Ka'u districts.

Air Quality

Existing Conditions

An air quality study was conducted by B.D. Neal & Associates in 2002 for the Department of Hawaiian Homeland's Lālāmilo project, which is adjacent to the western half of *Ke Ala Kahawai o Waimea*. The following information is from that study.

The 2002 air quality study noted that the climate of Waimea is very much affected by the elevation of the site and by nearby mountains. Waimea is situated in the gap between Mauna Kea and the Kohala Mountains, and as such, is fairly windy. Winds are often gusty during the day and wind direction is predominantly from the east. Except for periodic volcanic emissions (vog), and possibly occasionally localized impacts from traffic, the air quality of the project area is believed to be relatively good. There is no air quality monitoring data from the Department of Health for the Waimea area, but the limited air quality data for other areas of the island suggest that despite the vog, concentrations are well within State and federal air quality standards.

Industrial sources of air pollution along the trail corridor include generating units at Hawai'i Electric Light Company's (HELCO) Waimea Generating Station and the Waimea Solid Waste Transfer Station, both of which are in the central area of the trail corridor. Air emission from the HELCO generating units consist mostly of sulfur dioxide and oxides of nitrogen. Emissions from the transfer station consist mainly of potential odor nuisance. The former landfill occasionally emits odors.

Kawaihae Road (Highway 19) is the main vehicle thoroughfare through Waimea, and a source of motor vehicle emissions. Levels of emissions are relatively light, and the study noted that prevailing winds tend to carry emissions away from the project area. Agricultural activity in the area consists mainly of pasturing cattle and horses and crop farming at the UH CTAHR property, which is situated along the trail route, and the Lālāmilo Farmlots to the south. The 2002 study noted that air quality impacts associated with farming activities are limited to fugitive dust during limited times.

Project Impacts and Mitigation

Site work during construction of the multi-use path will entail clearing and grubbing vegetation, tree removal in certain areas, grading the trail to rough elevation, stockpiling excavated material, and hauling debris to approved disposal sites. Construction machinery will be needed for the construction of retaining walls and stream culverts. Site work is a persistent source of fugitive

dust, and also involves exhaust generated by construction equipment and machinery. The greatest potential for dust impacts on surrounding uses is the segment between Church Row and the Lālāmilo Research Station; the area across the Sandalwood subdivision; and just west of Opelo Road, where the trail squeezes between the Kanu o ka ʻĀina PCS and the Hale Waimea apartments. Standard dust control measures such as dust screens and watering sprinkling will be implemented as needed. Transported or stored soils will be covered. Areas graded will be vegetated or paved as soon as possible to reduce dust.

There will be no long-term air quality impacts resulting from the proposed multi-use path, including sections that may include an equestrian trail. The multi-use path will be paved and use of the path will not generate dust. If an equestrian trail is developed, appropriate surface materials will be selected which produce minimal dust and are compatible with the terrain and natural environment.

Impacts of Other Alternatives

All the alternative trail alignments would have temporary, construction period air quality impacts similar to the proposed alternative. The alternatives mauka of Kawaihae Road are in close proximity to existing residential subdivisions. Construction of these segments would have had greater adverse impact than the preferred alignment along Waikōloa Stream, which does not directly abut any private residential lots.

4.2.5 Natural Hazards

Existing Conditions

Flood Hazard

The Federal Emergency Management Agency's Flood insurance rate maps (FIRM) for Waimea indicate that flooding is a potential hazard caused by overtopping of Waikōloa Stream. The study limits for flooding includes most land on both sides of Waikōloa Stream between the County refuse transfer station on the west and Church Row on the east. The FIRM (1988) identifies flood areas along the stream as "special flood hazards areas inundated by 100-year flood." As shown in Figure 8, the FIRM designates these flood areas as Zone AE (area inundated by 100-year flood, base flood elevations determined) or Zone A (inundated by 100-year flood, no base flood elevations). Sections of the path, between Church Row and Opelo Road, and near the Sandalwood Subdivision are within Flood Zone A or AE, representing a hazard area with a 1% annual chance of flood.

In March 2004, Waikoloa Stream overtopped its banks causing damage in the Waimea Nature Park and flooding businesses, homes and streets within Waimea. This flood was preceded by intense rain, and was due in part to the existing physical conditions of the stream (sharp stream bends and generally inadequate flow-carrying capacity) as well as stream blockages caused by

fallen tree branches and debris. The blockage caused the stream to overflow its banks and flow through the main street through town. In the aftermath, community volunteers spent days clearing the stream blockage before getting assistance from personnel from the Army's Pohakuloa Training area to finish the job. Since then, community volunteers have tried to regularly inspect the stream and keep it free of fallen debris.

The entire project corridor west of and including the County Refuse Station is designated as Zone X, areas outside the 100 and 500-year floodplains. No special flood hazard areas have been designated for the area as they are currently outside the effective FIRM study limits. As shown in the Figure, areas surrounding Keanu'i'omanō Stream are also located in Zone A.

The County requires that new construction and substantial improvements in the AE zones comply with Chapter 27, Flood Plain Management of the Hawai'i County Code, the regulations pertaining to flood hazard areas. The regulations require that there be no rise in base flood elevation (BFE) as a result of the improvements.

Volcanic Hazard

Volcanic hazards on the island of Hawai'i are designated by the location and frequency of past eruptions. Hazard area are designated by letters from A through F with A being areas of least risk and F areas of highest risk (U.S. Department of the Interior/Geological Survey, 1976). Waimea is located between areas A and B. Area A is Kohala Volcano where no volcanic activity has occurred for about 60,000 years. Area B consists of the lower flanks of Mauna Kea. No eruptions have occurred in this area during the last 10,000 years.

Project Impacts and Mitigation

Figure 8 shows flood prone areas in relation to the preferred trail alignment. Proposed improvements in the AE zone have the potential to create an obstruction or cause a rise in the BFE. Where possible, the path will remain outside the designated flood zone. Improvements located within identified flood prone areas will be designed and constructed to avoid a rise in base flood elevation.

The preferred alignment shows 10 stream crossings throughout the trail route. Stream crossings will require construction of bridge or culvert structures which have the potential to alter stream flow and affect base flood elevations. The eastern-most segment of the trail, from Church Row to Lindsey Road, has two (2) stream crossings, both within or adjacent to designated floodways. In Increment 1, from Lindsey Road to Kahawai Street, there are two box culvert stream crossings within the Waikōloa Stream floodway. Two other locations near the stream will have retaining walls, but not stream crossings.

The bridges and retaining walls included in the design of the proposed project will not interfere with stream flow. The trail, including stream crossings, will be designed to allow the passage

(either through the crossing structure or over the crossing structure) of up to the 100-year flood with no increase in flood water elevation. This is a requirement of the County of Hawai‘i’s Floodplain Management program directed by Chapter 27 of the Hawai‘i County Code. Any increase in impervious area due to the concrete trail would be offset by installation of appropriate drainage structures to ensure there is no increase in runoff from the site. In summary, the project will be “runoff neutral,” and neutral in terms of impacting flood damage along the stream. This means that potential flood damage would remain the same with or without the project.

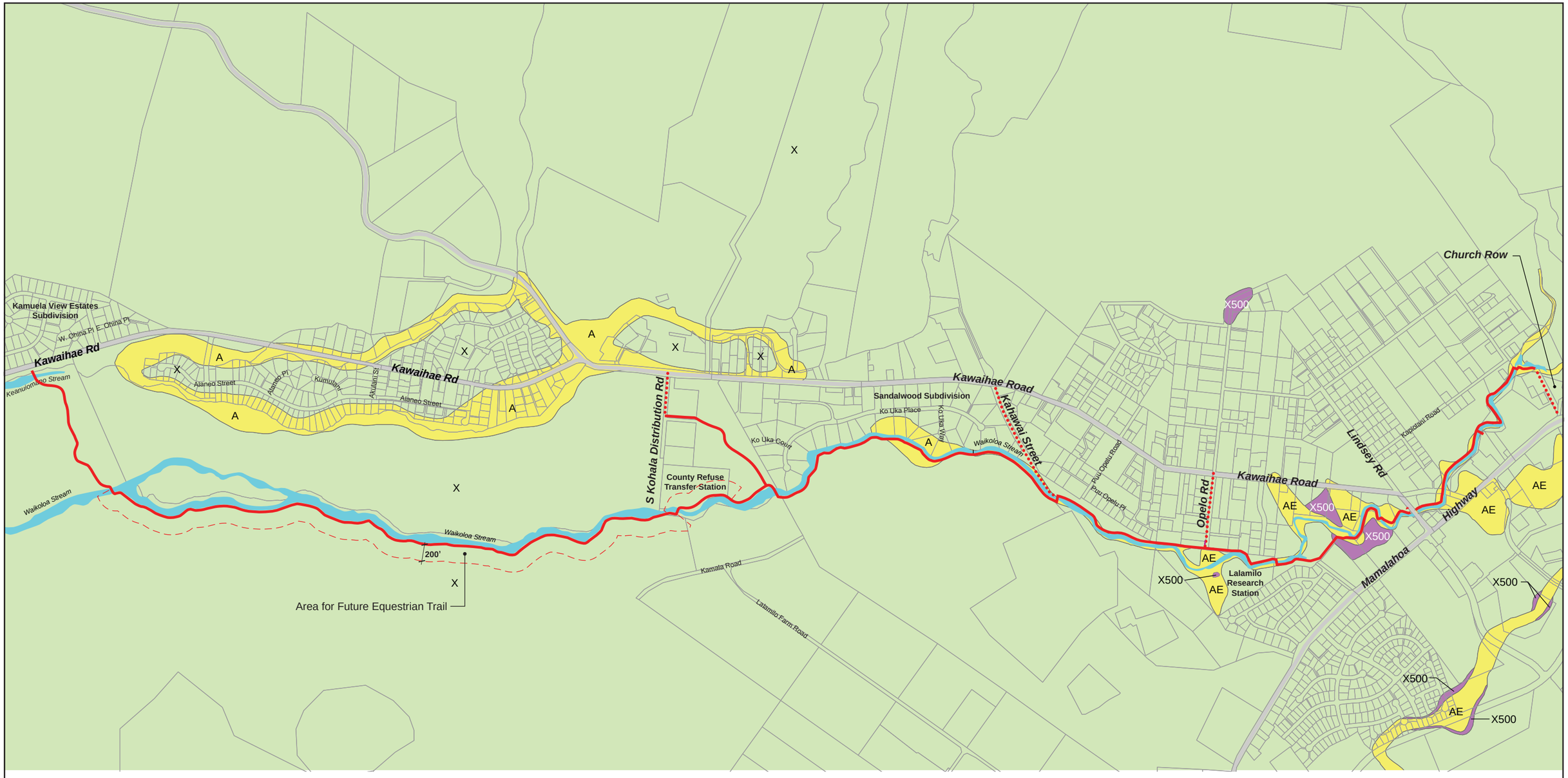
The entire project corridor west of the Waimea Transfer Station is designated by the FIRM as Zone X, outside the 500-year floodplain. There are two proposed stream crossings on the County property at the Waimea Transfer Station. West of the Transfer Station, there are two more stream crossings, one across Waikōloa Stream and one across Keanu‘i‘omanō Stream near Kawaihae Road. All proposed stream crossings will be designed to avoid a net rise in the stream flow.

As an alternative to a concrete or steel river crossing structures, wooden bridges designed to “break away” during major flood events could be a less expensive alternative. Since major flood events occur infrequently, replacing wooden bridge components would be more cost effective, provided the bridge abutments are not damaged. Furthermore, wooden bridges would be in character with the trail’s rustic, natural setting.









LEGEND

AE	Area inundated by 100-year flooding, BFE determined	X	Outside 100-year and 500-year floodplains
A	Area inundated by 100-year flooding, not BFE established	X500	500-year Floodplain (0.2% annual chance flood hazard)

LEGEND

- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200
SCALE IN FEET

Figure 8
FLOOD INSURANCE RATE MAP (FIRM)
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

The project will comply with requirements of Hawai‘i County Code Chapter 27, Flood Plain Management. The regulations require that there be no rise in base flood elevation (BFE) as a result of the structures, and improvements. Bridge or culvert structures, and all sections of the path within Zone AE will require a variance from the County, and a civil (hydraulic) engineer must show that the improvements will not cause an increase in the BFE.

Volcanic hazard is always present to some degree, but not something that requires project mitigation.

Impacts of Other Alternatives

The bike lane alternative will not impact designated flood zones. The mauka alternatives involve some path areas within Zone AE, and as such, have impacts and mitigation similar to the proposed alternative. If the mauka alternatives were selected, sections would have been within the Keanu‘i‘omanō Stream floodplain and would have required mitigation and no net rise in the base flood elevation.

4.2.6 Water Resources

Existing Conditions

Wai‘ula‘ula Watershed

The project area is located within the Wai‘ula‘ula watershed, which encompasses nearly 32,000 acres from the slopes of Kohala Mountain flowing down into inner Kawaihae Bay, including the entire town of Waimea. The primary streams in the watershed are Waikōloa and Keanu‘i‘omanō Streams, which originate in State lands at about 4,000-ft. elevation and flow relatively parallel to one another until they join at the 1,440-ft. elevation, below the project area. These two streams are perennial in their upper reaches and intermittent at lower elevations. Currently, stream water from the upper reaches of Waikōloa and Kohakohau streams is diverted into reservoirs to provide the drinking water for Waimea town.

According to the Mauna Kea Soil and Water Conservation District (MKSWCD), there is currently very little water quality data for this watershed, but water quality is generally thought to be good.

There has been tremendous population growth in the South Kohala District over the past 20 years, much of it within the Wai‘ula‘ula watershed area. According to the MKSWCD, increased residential and urban development threatens riparian habitat by altering vegetation patterns and increasing the potential for flooding. It also threatens stream and ocean water quality by increasing the potential for polluted runoff, and changing natural freshwater flows as a result of legal and illegal diversions. The increase in impervious surfaces within streams may also impede inland migration by native *o‘opu*. Agricultural operations may also contribute to polluted runoff,

primarily in the form of excessive loss of sediments, chemicals, and nutrients (MKSWCD, 2010. http://www.maunakeaswcd.org/Projects.html).

Through its Waiʻulaʻula Watershed Management Project, the MKSWCD is working with community stakeholders to develop a watershed management plan, to educate the community on pollution prevention within the watershed, and to develop a water quality monitoring program. The proposed stream trail will provide access to a living laboratory, providing a venue where local school children can learn how to monitor water quality, stream erosion, etc.

Hawaiʻi Stream Assessment

The Hawaiʻi Stream Assessment (Hawaiʻi Cooperative Park Service Unit, 1990) lists Waikōloa Stream (state code No. 8-5-03) as a perennial stream in which the flow is interrupted (i.e., not flowing year round at lower elevations). The description of "Waikōloa" in the Hawaiʻi Stream Assessment appears to include both Waikōloa and Keanuʻiomanō Streams within the Waiʻuluʻula watershed (AECOS, Inc. 2010).

The Hawaiʻi Stream Assessment rates Hawaiian perennial streams on a number of characteristics using a four-point scale. Waikōloa Stream is rated "L" for limited (lowest ranking) under aquatic resources, based on various reports providing biotic information for the stream. It is ranked "O" or outstanding for cultural resources. It is not ranked for either recreational or riparian resources. The stream is also indicated as having a palustrine wetland associated with it, but the location of this wetland is not indicated. No wetlands of any consequence or wetlands different from wet areas within the stream banks were observed during field surveys conducted by AECOS, Inc.

The "limited" aquatic resources ranking is based upon various reports providing limited information about the biota in Waikōloa Stream. The lack of rating for riparian resources is due to the fact that none of the stream flows through native forest and that wild pig is potentially a problem species (detrimental animal) in this environment. Waikōloa Stream is not given a recreational resources score in the Hawaiʻi Stream Assessment because it presently has few opportunities for camping, hiking, fishing, etc. However, creation of a streamside, multi-use path could significantly alter the relationship between residents and visitors to this local water resource (ibid).

Waikōloa Stream Hydrology

Although Waikōloa Stream is listed as a perennial stream in the Hawaiʻi Stream Assessment, its flow characteristics are complex. Within the project area, the stream is interrupted, consisting of isolated pools that link together during rainy periods to form a more continuous aquatic feature. There are ample outcrops of bedrock that accumulate pooled water, and some large pools may be seep or spring fed. Even during periods when water is flowing within the stream bed in the project area, it is not often that this flow continues as surface flow all the way to the ocean. Freshet flows of such a magnitude occur very infrequently.

Further complicating the situation, at least as observed during the AECOS surveys conducted in 2000, was a leaking pipe located near Pu‘u Opelu Road. This pipe appeared to be used for moving irrigation water from storage reservoirs upslope on Kohala Mountain to Parker Ranch lands southeast of the stream, and used for intermittent periods each day. Water leaking from this pipe in 2000 was sufficient to establish flow much of the way to the lower end of the proposed Trails and Greenways corridor near South Kohala Estates subdivision (AECOS 2010).

Waikōloa Stream Water Quality

Water quality data for Waikōloa Stream was collected in 2000 by AECOS, Inc. as part of the original 2004 Environmental Assessment for the Waimea Trails and Greenways. These results were summarized in a Natural Resources Assessment Update Report by AECOS, Inc. (November 2010) (Appendix B). The data was intended primarily for use in characterizing aquatic habitats encountered. These measurements, limited in both spatial and temporal coverage, were not intended to serve as a baseline of stream water quality, but to contribute to such an effort.

Water within Waikōloa Stream at the time of the 2000 field surveys consisted of either standing, isolated pools or flowing water clearly arising from a leak in a transmission pipe across the stream—the origin of this water was not investigated. Water samples were collected from Keanui‘i‘omano Stream under the Route 19 highway bridge (Waiaka Bridge) on two separate occasions.

Based on the limited sampling conducted, water quality appeared to be of exceptional quality, close to or within the normal range for streams with minimal anthropogenic influences. Turbidity is very slightly elevated, as is the total nitrogen (TN). These standards are least often met with streams in the State of Hawai‘i. All other values are below the respective water quality standards (AECOS, Inc. 2010).

The State of Hawai‘i Department of Health (HDOH) has listed Waikōloa Stream as impaired in its 2006 Hawai‘i Water Quality Monitoring and Assessment Report. However, no data is provided as to why it is considered impaired or what parameters in the State water quality standards (e.g., enterococci, Total N, NO_3+NO_2, Total P, turbidity, and TSS) are not being met. Waikōloa Stream is listed as a “Category 3” waterbody, meaning that “there is [sic] insufficient available data and/or information to make a use support determinations [sic].” Waikōloa Stream has not been assigned a Total Maximum Daily Load (TMDL) priority code. Until a TMDL is prepared and approved, certain parameters as determined by HDOH may need to be included in an applicable monitoring and assessment program (AMAP) designed to monitor impacts on water quality of Waikōloa Stream during construction (ibid).

Project Impacts and Mitigation

The creation of a streamside trail and greenway will have an overall positive impact on the Waiʻulaʻula watershed area, and is compatible with ongoing efforts for watershed management. Trails and greenways can provide more than a recreation amenity, and are widely used for both floodplain management and watershed protection. This is especially important along riparian areas, lands that are in contact with rivers and streams. The project can be an important component of a riparian zone improvement and preservation effort. Although some non-native vegetation will be removed to construct the trail, there is the opportunity to replace it with native or more appropriate vegetation, enhancing the riparian zone.



If there are concerns about trail users being exposed to leptospirosis or other infectious organisms in stream water, signs should be placed along the trail to discourage swimming. If dogs are allowed on the trail, dog owners should be reminded to pick up their waste to avoid polluting stream water. Doggie waste bags can also be provided at major trail access points.

The path will cross Waikōloa Stream a number of times throughout the corridor. Construction of bridges or culverts within the stream and/or construction in areas close to the stream have the potential to adversely impact water quality and structures in the stream could impede the migration of native, amphidromous stream animals.

During construction, best management practices should be employed to prevent soil erosion into the stream channel that would eventually make its way to the ocean and potentially impact coral bottom areas. If any work needs to be done in or around the stream channel, it is recommended that this be conducted during the drier months when the stream is not flowing and runoff from construction areas would be minimal. During in-water construction (e.g., bridges, culverts) the HDOH will likely require water quality monitoring to ensure that there are no adverse impacts to water quality.

Stream culverts should be designed and constructed with the bottom of the structure completely flush with the natural streambed to avoid blocking faunal migrations. These mitigations are discussed further in Section 4.3.1 below.

Impacts of Other Alternatives

The alternative for bike lanes on Kawaihae Road and Mamalahoa Highway would have no impact on water resources. Mauka alternatives would have impacts similar to the proposed action, but to varying degrees, and construction impacts can be mitigated through best management practices. Mauka routes would not require Waikōloa Stream crossings but would likely involve one or more crossings of other stream tributaries.

4.2.7 Noise

Existing Conditions

Noise levels and noise sources in the project corridor vary by location, and are generally higher on the eastern end of the trail, which pass through Waimea Town. In this area, the trail runs adjacent to schools, commercial areas, office buildings and parks, and the sounds of human activity and automobiles, while still relatively low, are ever present in the background. The areas where the path intersects Kawaihae Road and Lindsey Road, have moderate levels of traffic noise typical of an urbanized environment. Further west near the CTAHR Lālāmilo Research Station, ambient noise is due to trucks and machinery associated with agricultural operations, children at the nearby schools, and local traffic on Opelo Road. Noise levels are lower in the segment that runs adjacent to the Sandalwood Subdivision and Parker Ranch pasture lands. Ambient noise is higher around the County refuse transfer station, due to the high volume of truck and vehicle traffic and machinery in this light industrial area. Man-made noise drops significantly as the trail moves west of the transfer station and passes through acres of dry, open land on both sides of the stream. In this area, the dominant noise is the sound of gusty winds whipping through the barren landscape. Once the DHHL's Lālāmilo subdivision is developed on the north side of Waikōloa Stream, buildings and landscaping will provide windbreaks, reducing the audible wind gusts. Ambient sounds will then be dominated by human activity and cars, similar to other residential and commercial areas of Waimea. The western end of the trail is across from Kamuela View Estates, and here, vehicular traffic on Kawaihae Road is the dominant source of noise.

Project Impacts and Mitigation

The development of the trail will bring walkers, joggers, bicyclists, and possibly rollerblade users and skateboarders through the corridor, slightly increasing ambient noise levels. Motorized vehicles will be prohibited, except for occasional maintenance vehicles or if needed, emergency vehicles. Path users will tend to be individuals or in very small groups, and although talking and socializing is expected, users will typically be moving along, rather than congregating or gathering. Noise levels will be similar to that on a public sidewalk, absent the sound of cars and traffic. There will likely be more human activity near the trail access points at Church Row, Lindsey Road, Opelo Road, Kahawai Street, the future County Park, and the western path terminus near Kawaihae Road. These areas will be where most users will access the trail, mount their bicycles, stop to rest, or park their vehicles. In the future, designated parking for the path will be provided at the two County parks—at the western terminus near Kawaihae Road and next to the transfer station. The transfer station park could also accommodate horse trailer parking, if a separate equestrian path is developed in the future. While the future park property is adjacent to several residential lots in the Sandalwood Subdivision, the parking areas can be sited closer to the transfer station, away from these noise sensitive areas.

The increase in activity and number of people using the trail will have a nominal impact on noise levels throughout the project corridor. The eastern-most areas of the route through the town center is already subject to moderate levels of human activity and traffic noise.

West of the Lālāmilo Research Station, the trail is located entirely on agriculturally zoned land (Zone A-1a). Even residential uses within this area (e.g., near Pu‘u Opelu Road. Sandalwood, future DHHL Lālāmilo subdivision) are considered “agricultural and very low density agriculturally-based residential use” (Hawai‘i County Code §25-5-70). According to the Hawai‘i County Code (§25-5-72), uses permitted on agricultural lands include: agricultural parks, agricultural products processing, crop production, game and fish propagation, livestock production, and wind energy facilities--all of which could generate noise from tractors, delivery trucks, and other farm-related equipment and operations. By comparison, noise generated by trail users through normal conversation or non-motorized vehicles such as bicycles or rollerblades are unlikely to approach the noise levels of legally-permitted activities on these agricultural lands.

The potential for noise impacts on residential areas can also be mitigated through selection of the alignment within the negotiated easement and landscaping. In the sections adjacent to the Sandalwood and future Lālāmilo subdivisions, the path will be located on the south side of Waikōloa Stream, across from the residential developments. The stream and terrain will provide a natural noise buffer. Rest areas will be sited away from residential areas. If necessary, signs can be installed in these areas reminding users about path etiquette and courtesy for neighbors. A more proactive option is a public service campaign to disseminate this message.

Construction Noise

During construction of the trail, noise will be generated by vegetation clearing, grading, excavation, and other activities. Noise levels of diesel powered construction equipment typically range from 80 to 90 dB at 50 feet distance. Construction noise will be audible at all locations along the trail at one time or another, but exposure will vary in volume, frequency, and duration, as work proceeds along the linear route. Areas near stream crossings will generally experience more construction noise for a longer duration, since bridges or stream crossings will need to be built. Construction will be limited to daytime hours only.

Adverse impacts from construction noise are not expected to be in the “public health and welfare” category due to the temporary nature of the work and administrative controls regulating the work. Impacts will be limited to the temporary degradation of the acoustic environment in the immediate vicinity of the project site.

The State Department of Health currently regulates construction noise under a permit system (HAR 11-46, Community Noise Control). Under current procedures, noisy construction activities are restricted to hours between 7:00 AM and 6:00 PM, Monday through Friday, excluding certain holidays, and 9:00 AM and 6:00 PM on Saturdays. Construction is not permitted on Sundays. Construction activities during the evening and night time hours are not planned.

The use of quieted portable engine generators and diesel equipment may be specified for use on this project. Equipment staging areas will be located away from noise sensitive properties to the extent feasible. The construction contractor will be responsible for obtaining and complying with noise permits obtained from the State Department of Health.

Impacts of Other Alternatives

The bike lane alternative would not have long-term noise impacts, as these improvements would occur on existing roads. During construction, there could be temporary noise impacts on adjacent landowners.

The alternative alignments located on the Kohala side of Kawaihae Road would have had a slightly greater potential to impact residential areas, as these alignments pass closer to residential areas than the preferred alignment. Unlike the preferred alternative, there is no stream or natural buffer separating the path from the residential lots. Therefore, noise impacts from trail users on adjacent residents could be greater than with the preferred option. During construction, the mauka alternative would generate similar construction noise as the preferred alternative. In all cases, construction period noise would be temporary.

4.2.8 Unexploded Ordnance

Existing Conditions

The project area is within the former Waikōloa Maneuver Area, which encompasses approximately 91,000 acres in the South Kohala district of the Big Island. The Waikōloa Maneuver Area was acquired by the U.S. Navy through a licensing agreement with Parker Ranch in 1943, and used as a World War II military training camp and live fire range. The training area extends from the ocean to the Pohakuloa Training Area, and from Waimea to Waikōloa.

During this time, Camp Tawara (originally named Camp Waimea) was established in Waimea, and served as a home base for 19,000 Marines and sailors on their way to and from the war in the Pacific. Department of Defense activities at the Waikōloa Maneuver area and in Waimea terminated in 1946, following the end of the war.

Over the years, the Department of the Army has conducted several sweeps of the former Waikōloa Maneuver area to check for and clear unexploded ordnance (UXO). The first sweep occurred in 1946 and was focused mainly on impact areas used for artillery and bombing practice. In 1954, two Parker Ranch employees were killed and three injured when a mortar round exploded, prompting another clearing operation. An ordnance disposal team from Fort Shafter and Hickam Air Force Base searched 1,100 acres, and identified and disposed of thousands of munitions. More recent clearing efforts have focused on the areas around Waikōloa

Village, Ouli and Waimea. The Army has identified the Waikōloa Maneuver Area as a high priority area for ordnance removal.

Over the past seven years, a total of $82 million has been spent on the clean up effort, and more than 2,100 munitions or explosives items and 260 tons of military debris were removed. Most recently, in September 2009, the USACE awarded a 5-year, $70 million contract to a Hawai'i-based firm to remove munitions and explosives of concern (MEC) from Department of Hawaiian Home Lands and Parker Ranch lands. The total clean up of the former Waikōloa Maneuver Area is expected to cost more than $600 million (Hawaii247.com).

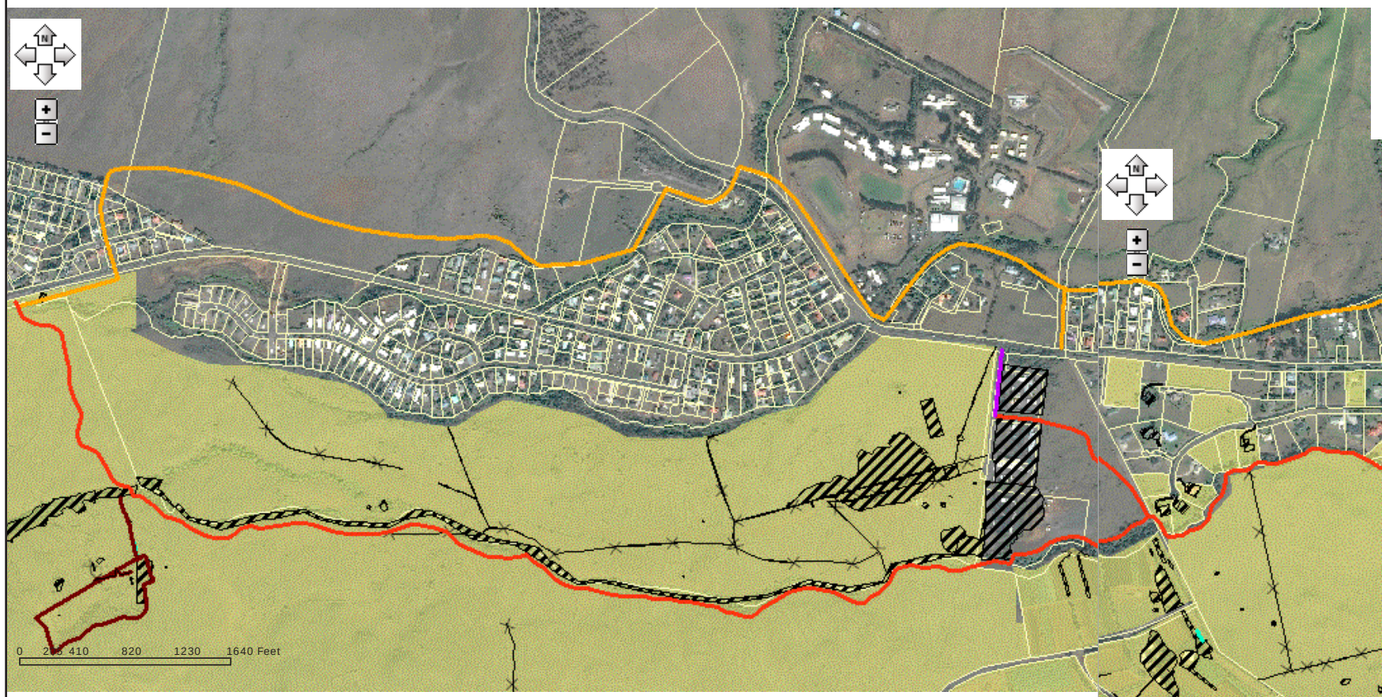
Project Impacts and Mitigation

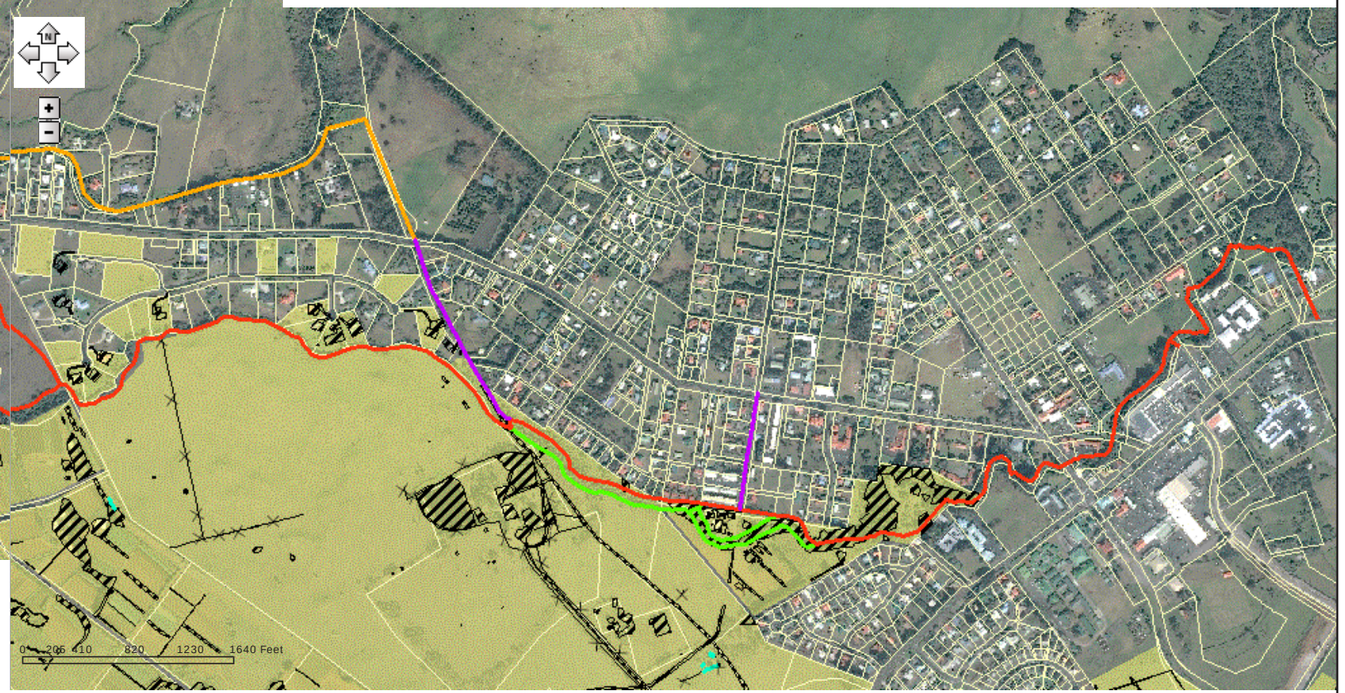
During the EA early consultation period, the USACE confirmed that the Army and its contractors have completed surface and subsurface removal of MEC on the majority of the project corridor. The USACE overlaid the map of the preferred alignment on the areas where they have removed MEC, and the result is shown in Figure 9.

The areas shaded in gold represent where the Army has completed subsurface removal of MEC. The hatched areas ("exception areas") are places where the Army was not able to access because of terrain, road paving, building slabs, wire fences, and other physical obstructions. Areas where landowners refused to give permission for access are also shown as hatched exception areas. During the EA early consultation, the Army emphasized that areas within Waikōloa Stream were considered "exception areas" and were not surveyed or cleared. As such, they recommended that the proposed path include appropriate signage to discourage wading or swimming in the stream.

Impacts of Other Alternatives

According to the USACE, the land surrounding the mauka alignments are also within the Waikōloa Maneuver area, but as shown in Figure 9, they have not been surveyed or cleared of MEC. These areas were included in the surface clearance conducted in the 1940's and 1950's, but these efforts did not include subsurface detection as is routinely conducted today. The USACE has indicated that it has responded to situations where MEC was discovered literally in someone's backyard. Although the federal government intends to complete surface and subsurface testing for the entire Waikōloa Maneuver Area, there are no immediate plans to survey lands north of Kawaihae Road. If any of the mauka alignments had been selected, MEC clearance would be a precondition for development. It is unknown when the Army would have or allocate funding for the necessary clearance activity. This is another reason supporting the EA's dismissal of the mauka alternatives as unfeasible.





LEGEND

- Areas where Army has completed removal of munitions & explosives of concern (MEC)
- Exception Areas (Army has not removed MEC)
- Shared Use Path
- Alternatives Considered and Dismissed

Source: U.S. Army Corps of Engineers, 2010

NORTH

0 300 600 1200
SCALE IN FEET

Figure 9
UXO REMOVAL AREAS
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

4.3 BIOLOGICAL ENVIRONMENT

An updated natural resources assessment for the project was completed in November 2010 by AECOS, Inc. (see Appendix B). The report presented the results of field surveys conducted in May 2000 and repeated in September 2010. The purpose of the survey was to assess the presence of sensitive biota and habitat along the preferred alignment, which follows Waikōloa Stream.

The focus of the report is on sensitive biological resources associated with Waikōloa Stream and riparian habitats. Sensitive biota is defined as species listed (or candidate species) as threatened or endangered by the federal government or by State administrative rules, or species comprising a community of native plants and animals regarded as special and worthy of preservation (AECOS, Inc., 2010).

4.3.1 Stream Biota

Existing Conditions

AECOS, Inc. noted that although flowing water of good volume was present in Waikōloa Stream at times during their 2000 field survey, flow was limited to a stream segment below a water transmission pipe to a point just downstream of the County landfill. Below Waimea Town, Waikōloa Stream becomes increasingly dry during all but major storm flows (freshets). They also noted that the stream bed was clogged with sediment and vegetation at the downstream end, before it joins Keanu‘i‘omanaō Stream.

A December 2001 survey of Waikōloa and Keanu‘i‘omanō Streams was conducted for the DHHL Lālāmilo project, at the western end of the *Ke Ala Kahawai O Waimea* project corridor. That study surveyed stream areas up into Waimea Town, encompassing all of the current project area. This survey emphasized aquatic insect sampling, and at the time, both streams were described as “fully flowing.”

The AECOS study notes given the intermittent nature of the flowing water, the aquatic macrofauna of the Waikōloa Stream system within the project area is rather sparse. A significant portion of the stream fauna observed during the surveys was aquatic insects. Adult dragonflies, both green darner (*Anax junius*) and globe skimmer (*Pantala flavescens*) were regularly encountered flying along the stream bed. A native Megalagrion damselfly (*M. blackburni*) was encountered during the 2000 survey along Waikōloa Stream in the project area.

Both the 2000 and 2001 surveys sampled for damselflies, which is of particular interest, because two endemic Hawaiian species are now listed as endangered by the U.S. Fish and Wildlife Service. A number of other species are also being considered for listing. The two species of Megalagrion listed as endangered are the Flying Earwig Hawaiian Dameselfly (*M. nesiotes*) and Pacific Hawaiian Damselfly (*M. pacificum*). The first has not been seen on Hawai‘i Island for over 80 years. Adults appear not to associate with streams, so the trail would likely have no

impact on this species. The second endangered Megalagrion, the Pacific Hawaiian Damselfly, is believed to be extirpated from the Island of Hawai‘i. In addition, the preferred habitat of this species is not present in the project area.

Other aquatic biota identified during the surveys includes aquatic snails, flatworms, and leeches. No fish of any kind were observed in the project area, although both guppies (*Poecilia reticulata*) and mosquitofish (*Gambusia affinis*) are reported from the streams here.

No federally listed threatened or endangered species of aquatic animals were found in or around the Waikōloa or Keanu‘i‘omanō Stream areas during either the 2000 or 2001 surveys. However, surveys conducted by the Department of Land and Natural Resources, Division of Aquatic Resources (DLNR-DAR) notes that the endemic goby, *‘o‘opu ‘alamo ‘o* (*Lentipes concolor*) use these stream channels to access the permanently flowing, upper reaches of Waikōloa and Keanu‘i‘omanō Streams. Apparently, *‘o‘opu ‘alamo‘o* has been found in several permanent spring-fed pools downstream in Keanu‘i‘omanō Stream in or near the project area (AECOS 2010). The USFWS has designated the goby as a “species of concern.”

Project Impacts and Mitigation

The project would have up to ten stream crossings over Waikōloa Stream, and one crossing over Keanu‘i‘omanō Stream. Bridges or culverts will be constructed at these crossings. The AECOS, Inc. study notes that the proposed project should have no adverse impact on stream fauna, but stated that in all cases, minimizing structures within the streams would be environmentally preferable.

Because native amphidromous animals, particularly the endemic *‘o‘opu ‘alamo‘o*, use the stream channels to access upper Waikōloa Stream, efforts should be made to minimize impact to the channels. If culverts are required at the crossings, they should either have unlined bottom surfaces (i.e., natural stream bed left exposed) or a surface that is completely flush with the natural streambed to avoid blocking upstream faunal migrations (AECOS, Inc. 2010).

During construction, efforts should be made to minimize impact on water quality. An early consultation letter dated June 18, 2010 from the USFWS (see Chapter 9) recommended the following measures to minimize degradation of water quality:

- Turbidity and siltation from project-related work should be minimized and contained to within the vicinity of the site through the appropriate use of effective silt containment devices and curtailment of work during rain weather conditions.
- All project-related materials and equipment (dredges, barges, backhoes, etc.) to be placed in the water should be cleaned of pollutants prior to use.
- No project related materials (fill, revetment rock, pipe, etc.) should be stockpiled in the water (stream channels, wetlands, etc.).

- All debris removed from the aquatic environment should be disposed of at an approved upland or ocean dumping site.
- No contamination (trash or debris disposal, non-native species introductions, attraction of non-native pests, etc.) of adjacent aquatic environments (stream channels, wetlands, etc.) should result from project-related activities. This should be accomplished by implementing a litter-control plan and developing a Hazard Analysis and Critical Control Point Plan to prevent attraction and introduction of non-native species.
- Fueling of project-related vehicles and equipment should take place away from the water and a contingency plan to control petroleum products accidentally spilled during the project shall be developed.
- Any under-layer fills used in the project should be protected from erosion with stones (or core-loc units) as soon after placement as practicable.
- Any soil exposed near water as part of the project will be protected from erosion (with plastic sheeting, filter fabric, etc.) after exposure and stabilized as soon as practicable (with native or non-invasive vegetation matting, hydroseeding, etc.).

Impacts of Other Alternatives

The alternative for bike lanes on Kawaihae Road and Mamalahoa Highway would take place within an existing roadway right-of-way, and would not have an adverse impact on stream biota. The mauka alignments would cross Keanu‘i‘omano Stream. As discussed above for the preferred alignment, adverse impacts could be avoided by minimizing the size of bridges or culverts within the stream. Best management practices during construction would also be recommended.

4.3.2 Botanical Resources

Existing Conditions

The original botanical survey consisted of a walk-through survey conducted in May 2000 within a narrow buffer zone within about 10 feet on either side of the trail alignment. Observations were recorded and a species list prepared. Most of the same route was traversed in the 2010 update, with the previous species list used as a checklist. Conditions were much drier in 2010 than in 2000, particularly in the pasture land west of town, and therefore many of the plants recorded in 2000 were not observed in 2010.

Vegetation Classification and Characterization

The most recent and complete classification of Hawaiian plant communities is that by Gagne and Cuddihy (1999). Their classification scheme includes only those communities that the authors considered “natural,” that is, plant communities that are not harvested nor maintained as monocultures of cultivated species (such as those found in plantations, pastures, orchards or croplands); as well as those that have been altered or destroyed by development. The latter communities are often designated as “Anthropogenic” or “Alien” communities, as they are man-

induced and consist of exotic or alien species, sometimes intermixed with a scattering of native plants.

Following the Gagne/Cuddihy classification scheme, the vegetation within the entire *Ke Ala Kahawai O Waimea* corridor falls within the Anthropogenic or Alien Vegetation community category. Within this category, the project area can be delineated into three sub-types:

- Pasture
- Riparian
- Urban

Pasture. The eastern end of this grassland habitat has a dense ground cover consisting primarily of Kikuyu grass (*Pennisetum clandestinum*) with occasional weedy herbs intermixed. The composition of the vegetation gradually changes until, at the western end of the proposed project site, it consists of a sparse growth of ʻakia (*Wikstroemia plucherrima*), lantana (*Lantana camara*), fountain grass (*Pennisetum setaceum*), purslane (*Portulaca tetraphyllum*) and other shrubs, grasses and forms that favor a dry, sparsely vegetated habitat. As a consequence of low rainfall over a period of several years, many of the herbaceous species recorded during the 2000 surveys were not seen in 2010.

Riparian. This vegetation association includes the plants that live in and beside the stream. This study combined both aquatic and riparian vegetation. The aquatic vegetation of Waikōloa Stream is severely diminished, comprising a few individuals of such species as the sedges ʻ*akaʻakai* or great bulrush (*Schoenoplectus lacustris* spp. *validus*) and umbrella plant or ʻ*ahuʻawa haole* (*Cyperus involucratus*); water smartweed (*Persicaria punctata*), *kamole* or primrose willow (*Ludwigia octovalvis*), and a moss.

The riparian vegetation is much better developed, especially at the eastern end of the project corridor, and is dominated by species such as wandering Jew (*Tradescantia fluminensis*), yellow ginger or ʻ*awapuhi melemele* (*Hedychium flavescens*), Christmas berry (*Schinus terebinthifolius*), wattle (*Acadia parramattensis*), mock orange (*Philadelphus inodorus* var. *gradiflorus*), swamp mahogany (*Eucalyptus robusta*), and garden nasturtium (*Tropaeolum majus*).

Urban. This vegetation comprises the vegetables, flowers, lawn grasses and ornamental trees and shrubs used to landscape houses, public buildings, parks, and streets; along with the weeds that normally grow in these inhabited areas. Some native plants have been used to landscape part of the main street through town, and extensive plantings of native plants have been made at Ulu Laʻau (Waimea Nature) Park. Only the species located close to the proposed trail have been included in the AECOS Inc. species list.

A recent survey of trees along the proposed path was completed (Kraus, 2009). These trees have been added to the AECOS flora listing.

Botanical Survey

The vascular flora within the project limits comprises a mix of native and introduced species of trees, shrubs, grasses and forbs consisting of 175 taxa in 62 families. Twelve of the 175 taxa (7%) are considered native (4 endemic, 8 indigenous), but are common, widely distributed species. The remaining 163 taxa (93%) are naturalized, non-native species, including three that probably were brought to the islands by the early Polynesian emigrants and have since become naturalized. The AECOS study in Appendix B includes the complete list of plants observed during the 2000 and 2010 surveys.

Endemic species identified within the project corridor include a sword fern, *ho'i'o* (*Diplazium sandwichianum)*, *wiliwili* (*Erythrina sandwicensis)*, *pua kala* and *'akia*. Indigenous species identified include the lace fern *pala 'a (Odontosoria chinensis); Cyperus polystachyos* Rottb., a member of the sedge family; *'aka'akai* or great bulrush; *koali,* in the morning-glory family*;* false mallow; 'ilima (*Sida fallax* Walp.); *popolo* or glossy nightshade (*Solanum americanum* Mill.), and 'uhaloa (*Waltheria indica).*

The vast majority of trees within the project area were eucalyptus (*E. robusta and E. saligna*) and black wattle (*Acacia mearnsii*), both non-native species. None of the trees in the project corridor are, or could be considered candidates for the County's exceptional tree program.

Tree Risk Assessment, Kraus 2009

The large non-native trees within Increment 1 of the project corridor were examined during a Tree Risk Assessment prepared by consulting arborist, Michael M. Kraus, ASCA of Tree Works, Inc. (see Appendix C) The purpose of the report was *to "assess the risk posed by these trees to the trail, to users of the trail, and to neighboring properties. This report also addresses the impact the construction of the trail will have on the trees"* (Kraus, 2009).

The tree risk assessment covered the area between Lindsey Road and Kahawai Street, which includes some heavily wooded areas, particularly between the Waimea Nature Park and Lindsey Road. The arborist conducted a field review and assessment of 498 large trees within the trail corridor that pose a potential risk to the trail, its users and neighboring properties. Management recommendations were included for all trees that were determined to pose a significant risk. The trail site is a narrow strip of land, and many of the 357 trees recommended for removal stand in or very close to the proposed trail. Kraus noted that the size and shape of the trail and the size of the trees determines that "all of the large trees on the site pose a potential risk to the trail" (ibid).

The study notes that many of the large trees have grown asymmetrically, have unstable trunks and roots, and show evidence of decay. Many of the trees show signs of past limb failure and *Robusta eucalyptus*, one of the most common large trees in Increment 1, is notorious for dropping large limbs. The study provided an evaluation of each tree and the parts that are likely

to fail so they can be removed or treated to reduce risk to trail users. Kraus emphasizes that extent to which the recommendations are followed is a County management decision. He concludes:

> *"The management recommendations made for the individual trees are just that; they are recommendations. If the trail is to be built where and as it is designed, several hundred trees will have to be removed. For the trees that remain on the site after the trail is built some risk will remain. Some level of risk will always be present when people live among trees. The decision of how much risk is tolerable remains with the owner and manager of the trail."*

Project Impacts and Mitigation

Overall, the Natural Resources Assessment (AECOS, Inc. 2010) concluded that the vegetation within the project corridor is neither pristine nor unique and is not considered worthy of preservation. None of the trees on the site are, or could be considered candidates for the County exceptional tree program. The large, non-native eucalyptus and black wattle trees in Increment 1 were examined by arborist Michael Kraus and have no particular botanical value, nor do they enjoy statutory protection. The construction of the path will not have an adverse impact on botanical resources, and will not impact any threatened or endangered species or their habitat. The proposed path will not impact the native trees and shrubs that have been planted within the Waimea Nature Park.

The Tree Risk Assessment conducted for Increment 1 was intended to address potential hazards associated with large trees along the path, and the County's potential legal liability. The study identified approximately 357 trees within or very close to the proposed route that pose some degree of risk to trail users or surrounding property, and were recommended for removal.

Kraus (2009) recommended removal of trees determined to be unstable, unhealthy, or which pose a potential danger to trail users due to the possibility of falling limbs and branches. Maintaining trail safety should be a top priority for the County. At the same time, trees provide benefits and amenities such as shade, cooling, windbreaks, and overall aesthetics which could greatly enhance the trail. These benefits should be considered and weighed when removal of any large, healthy trees along the path route is considered. Only trees directly in the path alignment or which pose a danger to trail users will be removed. Slightly altering the alignment, meandering, or dividing the path to avoid healthy trees are also design options.

During the Draft EA comment period, the Waimea Outdoor Circle and others raised concerns about the removal of a large number of trees in the Waimea Nature Park area. In a letter dated February 16, 2011 (see Chapter 7), the Waimea Outdoor Circle asked for "mitigation plans to give back the greenery and shade that will be caused by the removal of so many trees and/or reconsider the need for such a large scale removal." They noted that the eucalyptus trees, though not native, were planted near streams during the Great Depression to keep areas from being

swampy and to provide wind breaks. The Waimea Outdoor Circle also expressed concern about the impact of large scale tree removal on the Waimea Nature Park, Carter Professional Center, Canada France Hawai'i Telescope Headquarters, and Ahuli Subdivision.

To discuss these concerns, the County, the Increment 1 design consultant, and representatives of Waimea Trails and Greenways Committee met with representatives of the Waimea Outdoor Circle on June 15, 2011. The group walked the trail alignment in the vicinity of the Waimea Nature Park and identified areas where trees would be removed. The County clarified that trees outside the trail easement that are listed in the Kraus report would not necessarily be removed by this project. The County clarified that only those trees that are dead, damaged, or that present a hazard to trail users would be removed. In some areas, such as behind the Carter Center, the easement area is limited and the removal of trees could not be avoided. As mitigation, all trees removed will be replaced one-for-one, though not necessarily with trees of the same size. It is recommended that to the extent possible, non-native trees be replaced with native species which are appropriate for the environment.

Another Draft EA comment related to vegetation removal was that the trees immediately adjacent to the stream provide a role in stabilizing the stream bank. Concerns were raised over the impact of removing these stabilizing trees. However, most of the trees removed for the path will not be immediately adjacent to the stream. If mature trees along the embankment are removed, they should be cut above ground with their stumps remaining to provide continued stability and erosion control.

Impacts of Other Alternatives

The No Action alternatives would have no impact on botanical resources. Dedicated bike lanes on Kawaihae Road and Mamalahoa Highway would require removal of some roadside vegetation. Other alternative alignments would require removal of existing trees and vegetation, most of it typical urban and pasture vegetation as characterized above. None of the alternatives would adversely impact threatened or endangered species.

4.3.3 Terrestrial Fauna

Existing Conditions

The original avian and mammalian surveys were conducted in May 2000. Seventeen avian count stations were placed along the length of the proposed corridor and one alternative alignment. Most of the same route was traversed in 2010, with some additional areas, including the mauka alternatives. Conditions were much drier than in 2000, particularly in the pasture land west of town.

Avian Survey

During the original 2000 survey, a total of 400 individual birds of 18 species representing 11 separate families were detected during station counts. An additional three species of wild turkey (*Meleagris gallopavo*), Barn Owl (*Tyto alba*), and Northern Mockingbird (*Mimus polyglottos*) were recorded as incidental observations while transiting between count stations. All birds detected are alien to the Hawaiian Islands.

During the 2000 survey, two species, House Finch (*Carpodacus mexicanus*) and Sky Lark (*Alauda a. arvensis*) represented more than 50% of the total number of birds detected. The House Finch was the most common species, accounting for 24% of the total individual birds recorded.

Given the very dry habitat conditions in 2010, bird numbers and diversity were significantly lower than during the earlier survey. During the latest survey, only 117 individual birds representing 16 separate species were recorded. The House Finch was again the most frequently recorded species, representing slightly more than 27% of the total number of birds recorded.

The AECOS report notes that the findings of the surveys are consistent with at least five other avian surveys conducted on various portions of the project area, as well as other surveys in the South Kohala District.

All but one of the avian species recorded during both the 2000 and 2010 surveys are considered to be alien to the Hawaiian Islands. The single native species recorded was the Pacific Golden-Plover (*Pluvialis fulva*), an indigenous, migratory shorebird that nests in the high Arctic during the late spring and summer and returns to Hawai‘i to spend the fall and winter.

Mammalian Survey

During the original 2000 survey, six mammalian species were detected within the survey corridor. Domestic dogs (*Canis f. familiaris*) were heard or seen at every avian count station sampled. The near ubiquitous small Indian mongoose (*Herpestes a. auropunctatus*) and cat (*Felis catus*) were seen within Waimea town but were not seen within the pasture areas south of Puu Opelu Road. Numerous domestic cattle (*Bos taurus*) were encountered within the pasture areas along the corridor. Two groups of goats (*Capra h. hircus*) were seen staked beside the upper corridor in separate locations.

Scat and tracks of domestic dog, small Indian mongoose, cat, domestic cattle, and horse (*Equus c. callabus*) were encountered along the bulk of the proposed main corridor. Additionally, several skeletal remains of dog, domestic cattle and European house mice (*Mus musculus domesticus*)were encountered.

During the most recent 2010 survey, only one live cow, three live horses and several feral goats were observed. Also encountered were 17 dead cows, one dead horse, and one dead mongoose, which graphically demonstrate the severity of the ongoing drought conditions.

The AECOS, Inc. report notes that the findings of the surveys are consistent with at least five other mammalian surveys conducted on various portions of the project area, as well as other surveys in the South Kohala District.

Just as the extreme drought has resulted in the loss of cover, feeding resources, and water for avian species, these same conditions have radically altered the habitat for terrestrial mammals. Currently, there is very little vegetation on the site to sustain anything but the hardiest of feral ungulates.

Threatened and Endangered Species

No currently listed or proposed threatened or endangered species or their habitats were identified within the project area.

Although not detected during the surveys, it is possible that the small numbers of the endangered endemic Hawaiian Petrel (*Pterodroma sandwichensis*) and the threatened Newell's Shearwater (*Puffinus auricularis newelli*) overfly the project site between April and December. The primary cause of mortality in both these pelagic bird species is thought to be predation by alien mammalian species at the nesting colonies. Collision with man-made structures is the second most significant cause of mortality. Nocturnally flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting, causing collision with manmade structures. No suitable nesting habitat occurs within or close to the proposed project site for either of these pelagic seabird species.

Comments from U.S. Fish and Wildlife Service

Chapter 9 includes two letters from the Department of the Interior U.S. Fish and Wildlife Service (USFWS). The first letter, dated August 28, 2009 to the County Department of Parks and Recreation was sent in response to a request for a "species list" for Increment 1 of the proposed project. Increment 1 is the approximately one mile segment of the trail between Lindsey Road on the east and Kahawai Street on the west. The second letter, dated June 18, 2010, was sent during the EA early consultation period.

Both letters note that based on the information in USFWS files and data compiled by the Hawai'i Biodiversity and Mapping Program and the Hawai'i GAP program, the federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) and Blackburn's sphinx moth (*Manduca blackburni*) may occur in the project area. Blackburn's sphinx moth larvae feed upon non-native tree tobacco (*Nicotiana glauca*) and other non-native host plants. The USFWS indicated that

from the information they have on hand, they cannot ascertain whether there are host plants at the proposed project site.

The endangered Hawaiian hoary bat was not detected during biological surveys conducted in 2000 and in 2010 by AECOS, Inc. Neither the Blackburn's sphinx moth nor the host tree tobacco was identified during the either of the surveys. Because the tree tobacco is fairly drought tolerant, it would have been observed during at least one of the surveys if it were present. The biologists have concluded that neither tree tobacco nor other non-native plants presently known to have potential to support Blackburn's sphinx moth larvae (USFWS, 2005) presently occur in the area where vegetation will be removed. Therefore, the Blackburn's sphinx moth will not be harmed by the project.

Project Impacts and Mitigation

The biological assessments have concluded that given the nature of the highly disturbed, alien dominated grasslands within the project corridor, the construction and operation of *Ke Ala Kahawai O Waimea* will not result in significant impact to native avian or mammalian species within the project area. From a native avian and mammalian perspective, there is nothing special or unique about this site, and current conditions do not support any protected avian and mammalian species (AECOS, Inc. 2010). There will be no impact on the Blackburn's sphinx moth.

Although the Hawaiian hoary bat was not observed, bats migrate throughout the year and there is a possibility that they may roost in the trees and dense vegetation within the corridor. It is recommended that removal of any trees larger than 15 feet in height avoided during the bat breeding season, between May 15 and August 15.

The primary potential impact that this project poses to Hawaiian Petrels and Newell's Shearwaters is the possibility that these birds will be downed after becoming disoriented by lighting associated with the project. Outdoor lighting could pose a threat to these nocturnally flying seabirds if:

- during construction, if nighttime construction activities are conducted
- street lights and other outdoor lighting may be necessary or desirable following build-out of the project.

In order to mitigate these potential impacts, if night time construction activity or equipment maintenance is proposed, all associated lights should be shielded. If large flood/work lights are used, they should be placed on poles that are high enough to allow the lights to be pointed directly towards the ground.

No lighting is currently proposed for the path. However, it is possible that future decisions will be made to light certain segments or areas, such as the parking lots to be located at two future

County parks. If lights are installed in conjunction with the project, it is recommended that the lights be shielded. This measure would serve the dual purpose of minimizing the threat of disorientation and downing of Hawaiian Petrels and Newell's Shearwaters, while at the same time complying with Hawai'i County Code §14-50 et seq. which requires the shielding of exterior lights to lower ambient glare on astronomical observatories atop Mauna Kea.

Impacts of Other Alternatives

None of the project alternatives would have an impact on threatened or endangered species or their habitats.

Section 7, Endangered Species Act Consultation

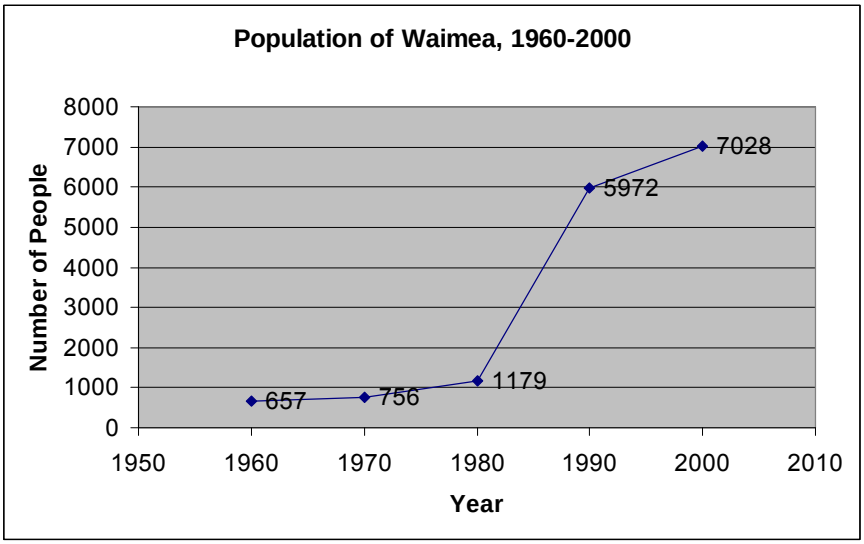
The Federal Highway Administration (FHWA), in cooperation with the County of Hawai'i, has determined that the project is "not likely to adversely affect (NLAA)" any listed threatened or endangered species, in accordance with Section 7 of the Endangered Species Act (ESA). There is no federally designated critical habitat within the project area. A letter was sent to the U.S. Fish and Wildlife Service on November 19, 2010 seeking concurrence with this determination (Appendix D).

In a letter dated December 20, 2010 (see Appendix D), the Fish and Wildlife Service concurred with the FHWA's determination that the project may affect, but is not likely to adversely affect, the Blackburn's sphinx moth. Potential impacts to the Hawaiian hoary bat will be minimized by avoiding clearing woody vegetation taller than 15 feet high between May 15 and August 15. Based on this avoidance and measure, the USFWS concurred with the determination that the project may affect, but is not likely to adversely affect the Hawaiian hoary bat. The letter stated that unless the project description changes or new information reveals that affected listed species are affected in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected, no further action pursuant to Section 7 of the ESA is necessary.

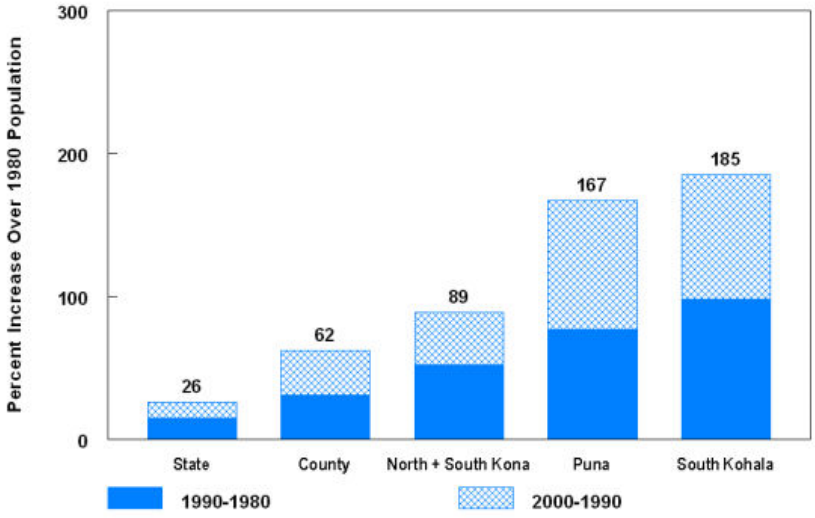
4.4 SOCIO-ECONOMIC ENVIRONMENT

4.4.1 Existing Conditions

The chart below shows population growth in Waimea Town between 1960 and 2000. As shown in the chart, the town experienced dramatic increases in population growth between 1990 and 2000. The bar charts from the South Kohala Community Development Plan, show the population's percentage increase from 1990 to 2000. In this 20 year period, the population in South Kohala increased 185%, compared to a 62% increase County-wide.



Resident Population Growth



Source: Waimea Community Development Plan website, http://www.waimeaplan.org/

2010 U.S. Census data for Census Tract 217.02 which encompasses much of Waimea, indicates 9,540 persons, a 34% increase from 7,116 persons in 2000.

4.4.2 Project Impacts and Mitigation

Social Impacts

Ke Ala Kahawai o Waimea will not alter population growth trends or affect demographics. However, the project represents a positive response to the population growth that Waimea has experienced over the last 30 years, by providing non-vehicular transportation options and new recreational opportunities, which are highly desired by the community.

Surveys and small group meetings held as part of the South Kohala Community Development Plan (CDP) update in 2006, found a consistently high level of support for more walking, biking and horse paths, providing more transportation choices, and providing healthy recreation opportunities. The trails and greenways project is identified and endorsed in the South Kohala Community Development Plan, the Waimea Traffic Circulation Study, and Bike Plan Hawai‘i. The State Comprehensive Outdoor Recreation Plan (SCORP) also mentions the desire *for "more safe and continuous pathways for biking, walking, and jogging that connect communities. Paths set apart from roadways provide safe places for children to walk, run, skate, ride their bikes, and play. Paths also significantly reduce pedestrian and bicycle conflicts with motor vehicles."* (SCORP 2008, p. 112).

A study conducted for the Waimea CDP Committee in December 2005 identified various issues of concern and interest to Waimea residents. This study was conducted by Nino Walker, a graduate student at the University of California at Berkeley, and consisted of 45 personal interviews and a survey of 148 respondents. One of the survey questions asked, *"If you could make only three changes to Waimea to make a better place to live/work/do business what would they be?"* The top answer to this question was to "fix traffic" (84% of respondents) and the second was to "improve non-vehicular options" (40% of respondents). Of those who wanted to improve non-vehicular options, 39% specifically said to "make it more walkable" and 20% said "make it bike friendlier." Another question in the Walker survey asked*, "What land use changes, transportation improvements or other factors would allow you to use your car less frequently?"* The most frequent response was "make the town bike friendly" (47%) and the second was "more trails" (30%). The project will provide a non-vehicular option to help address community concerns about traffic.

In addition to the individuals who will use the trail as a transportation alternative, there will be many who utilize it for recreation, exercise, and socialization. The importance of these "non-transportation" priorities are also supported by the Walker study, which found the three main reasons people chose to live in Waimea are the sense of community (43%), the environment and landscape (42%) and the climate (60%).

Safe Routes to School

School-aged children are expected to be among the primary beneficiaries and users of the multi-use trail. According to 2000 U.S. Census Data, 32.4% of the population in the Waimea CDP was of school age, age 19 and under. Numerous studies have shown that a child's connection with nature and outdoor play time is essential for their development.

The project directly supports the federal Safe Routes to School (SRTS) initiative, which seeks to encourage children to walk and bicycle to school safely in communities throughout the country. SRTS programs use a variety of strategies to help make routes safer for children to walk and bicycle to school and to encourage more children to walk and bike.

The People's Advocacy for Trails Hawai'i (PATH) has been the State's lead agency for the SRTS program. Since 2006, PATH has been working with Waimea Elementary School with the goal of increasing the safety for all modes of transportation to and from school. In March 2005, a *Safe Routes to School* study for Waikoloa and Waimea found that while 12% of Waimea students live close enough to school to walk or bike, only 5 percent walk or bike to school and 9 percent walk or bike home. A survey of Waimea parents found that the main reason they chose to drive their children over other alternatives was "Safety" (mentioned by 51% of respondents). When students were surveyed, 19% said they would like to get to school by bike, and 7% would like to walk (both higher numbers than are able to do so now). The study concluded that *"if bike paths were available, particularly if there were safe crossings of Highways 19 and 190, many more could get to school under their own power…Many barriers exist, but it appears that progress toward healthier and safer alternative to every parent driving their children to school is possible…*".

The creation of *Ke Ala Kahawai o Waimea* will provide a safe alternative to driving for students attending Waimea Elementary and Middle Schools, Parker School, and Kanu o ka 'Āina PCS, all of which are accessible from the path. During the Draft EA comment period, this was reaffirmed by both the principal and the community liaison of Waimea Middle Public Conversion Charter School (PCCS). In letter sent during the Draft EA comment period, Principal John Colson stated that *"a safe trail would offer my students the opportunity to walk or ride their bike to and from school"* and noted that it would also benefit both campuses of HPA, Waimea Country School and Waimea Elementary School. Ms. Patti Cook, the Waimea Middle PCCS Community Liaison noted the presence of high population, low income housing areas within a mile of their school, including Noelani Apartments and several low-to-moderate rental apartments. She noted that nearly 100 children live in Noelani's public housing apartments, most of whom attend Waimea Elementary and Middle schools. Ms. Cook explained that these children must walk to school along the edge of a very congested highway where there is virtually no curb and sidewalks, or their families—who are already struggling financially—must drive them to and from school out of concern for their safety. She concluded that the proposed trail would immediately improve the safety of these children and reduce peak hour traffic congestion.

The path is less likely to be used by students commuting to and from Hawai‘i Preparatory Academy (HPA), as the school’s main campus is located north of Kawaihae Road, and trail users would have to depart from the path and walk or bike along Kawaihae Road, then head up Kohala Mountain Road to the campus. Improvements on Kawaihae Road such as the Bike Plan Hawai‘i recommendation for signed-shared roadway designation, paved shoulders, sidewalks, and signalized crossings could improve the connection between HPA and the path.

Visitor Population

The creation of a trail could also have a positive impact on the local visitor community. The County of Hawai‘i Department of Research and Development provided an EA early consultation letter in support of the project (Chapter 9). The department’s Tourism Specialist provided the following comment:

> *“I am in favor of the proposed project as (1) we have supported the Waimea Outdoor Circle in its development of interpretive for Ulu La‘au and the proposed project would run along that property; and (2) we support the Waimea Cherry Blossom Festival and the proposed project would allow people a safe, pedestrian and bicycle friendly alternative to driving to access all of the components of that event, which are spread throughout the town.”*

Estimated Project Cost

The construction of the multi-use path will involve the expenditure of public funds by the County and possibly various federal agencies. It is estimated that Increment 1 of the trail, the segment between Lindsey Road and Kahawai Street, would cost approximately $5.8 million to design and construct. The segment between Church Row and Lindsey Road was estimated at about $3 million, and the area from Kahawai Street to the western end could be just over $10 million. These numbers represent order of magnitude estimates, and in total, the cost of design and construction would likely exceed $18 million.

Actual construction costs for the Kapa‘a to Kealia segment of the County of Kaua‘i’s multi-use path were obtained from the design-build contractor. This 4.1-mile segment consisted of a ten-foot wide path and was completed and opened to the public in 2009. This segment had a total construction cost of $13.2 million, or $61 per square foot for path itself. This cost did not include construction of a concrete bridge over Kapa‘a Stream. The bridge was 150 feet in length, and cost $1.2 million, or over $600 per square foot. For comparison, costs for wooden bridges were obtained from a company called Nature Bridges in Tallahassee, Florida (http://www.naturebridges.com/). Current prices were quoted as $300+ per square foot; Hawai‘i prices will likely be higher.

Cost estimates for future segments of the Kaua‘i multi-use path were obtained from two separate consultants currently under contract with the County of Kaua‘i. These cost estimates were

prepared in anticipation of the upcoming County bidding process, and do not represent actual construction costs. The estimates for the different path segments varied greatly due to particular site conditions and requirements, such as the need for concrete barrier walls, extensive grading, retaining walls, and varying path type (e.g., at grade path, boardwalk, etc.). The estimates ranged from $163 to $255 per square foot.

Further consultation with an experienced cost estimator from a large, local construction company with experience in road construction on Hawai‘i Island confirmed the difficulty in coming up with a general “rule of thumb” or estimated square foot cost in the absence of detailed plans and specifications. This individual noted that any meaningful or accurate cost estimate will require detailed plans for that path segment, since there are so many unknown conditions and variables that could influence construction cost.

In addition to initial construction costs, ongoing maintenance and management of the path will involve public and private expenditures and resources. The construction of the trail will create another public facility requiring County maintenance dollars. The County proposes to minimize this fiscal impact by proper trail design and by utilizing materials (e.g., concrete surface) which are durable and require minimal maintenance. The County is also partnering with the Waimea Trails and Greenways Committee to develop a trail maintenance and management plan which will rely on community volunteers to provide day-to-day upkeep and monitoring.

Trail Maintenance and Management

Ongoing maintenance, operation and stewardship of *Ke Ala Kahawai o Waimea* will be essential to its long-term success. The WTG Committee will partner with the County Department of Parks and Recreation (DPR) to assume primary stewardship of the trail’s long-term care and oversight. The path will require both “routine” and “remedial” maintenance throughout its life. Routine maintenance includes the day-to-day tasks of litter pick-up, removal of trash and debris, weed and dust control, and trimming vegetation. The WTG Committee will organize periodic community work days as well as organize “adopt a section of the trail” opportunities for the business community, organizations, and individuals similar to the highway adoption program. The WTG Committee can also play a role as a liaison between trail users and the County DPR, and can work with local law enforcement to develop an emergency reporting and response protocol.

The County of Hawai‘i will have primary responsibility for remedial maintenance throughout the life of the multi-use path. This includes repairing, replacing or restoring major components on a regular basis as well as correcting defects or damage due to erosion, flood, or other natural events. Typical maintenance activities will include repair of cracks or potholes, repaving, installing or replacing signage, erosion control, or bridge/culvert repair.

For Increment 1, a decision was made to utilize concrete rather than asphalt paving because of its durability and relatively low maintenance costs. However, periodic repair and maintenance of the trail will need to be incorporated into the County's capital improvement plan and budget.

A long-term operation and maintenance plan for the trail should be developed jointly by the WTG Committee and the County. The plan should identify and assign responsibility for the routine and remedial maintenance tasks. The maintenance plan should address operational issues such as user safety, rules, policies for trail use, and other issues associated with ongoing stewardship of this resource. Amenities added to the trail to promote public convenience, such as rest rooms, drinking fountains, and trash receptacles should be carefully considered before being installed, and responsibility for their maintenance identified upfront.

Employment and Income

The construction of *Ke Ala Kahawai O Waimea* has potential impacts in construction-related employment and income. The project will support a number of engineers and construction workers, and building materials and supplies will come from within the State. This is more likely to sustain existing employment and income levels than to create new jobs. However, it is the County's intent to seek the majority of project funding from federal sources. As such, the wages paid to workers, payments to suppliers, and the subsequent expenditures could have a large cumulative effect on the local economy.

The presence of the trail is also likely to enhance Waimea's appeal as a visitor destination, providing an accessible outdoor recreation amenity. There could also be increased potential for business opportunities, such as bicycle or skate sales and rentals, and the sale of refreshments. On the other hand, other jurisdictions, such as the County of Kaua'i, has imposed restrictions on commercial activities on or near their bike and pedestrian paths.

The County will need to maintain the path, and additional personnel may be required in the Department of Parks and Recreation for this task. Two future County parks are proposed along the path, one near the refuse transfer station and one on Kawaihae Road, across the Kamuela View Estates. A budget allocation will be needed to support the workers and their equipment, adding to the project's long-term fiscal impact.

Property Values

Concerns have been raised by some homeowners along the path that the proposed project might reduce the value of adjacent properties. This issue is often raised when a community considers building a shared use path or trail. One of the most comprehensive studies on this issue was conducted in 2006 by the University of Delaware for the Delaware Center for Transportation and the State of Delaware Department of Transportation . The study, entitled *"Project Report for Property Value/Desirability Effects of Bike Paths Adjacent to Residential Areas"* consisted of two parts. Part One was a literature review of a number of other studies of trails and property

values. Part Two was an examination of the impact of bicycle paths on property values using data specific to Delaware. The findings of both Parts One and Two are summarized below.

The Part One literature review examined and summarized a number of previous studies of multi-use trails conducted in other parts of the country. The report notes that while some bike and pedestrian path initiatives have been encouraged and facilitated by local communities, other communities have encountered resistance where residents fear that the introduction of a path or trail will lead to a decrease in property values or increase in crime. A literature review was undertaken to identify previous studies on the issue. Specifically, the following studies were examined:

- Metro Denver, Colorado (1995)
- Burke-Gilman Trail, Seattle
- National Association of Reversionary Property Owners
- Omaha, Nebraska
- Portland, OR
- Vancouver, BC
- Monmouth County (Hudson Trail)
- Bush Creek Trail, Santa Rosa, CA
- National Park Service (3 trails--rural Heritage Trail, Iowa; St. Marks, Florida; Lafayette/Moraga, CA)
- Marion County

As well a Rails-to-Trails Conservancy survey of 372 trails from 38 states.

The following quote is from the conclusion of the literature review, Summary Opinion of Research Review (p. 11):

> *The majority of studies indicate that the presence of a bike path/trail either increases property values and ease of sale slightly or has no effect. Studies have shown that neighbors of many bike paths/trails feel that the quality of life in their neighborhood has been improved, that the trails were a good use of open space, and in the case of abandoned railways were an improvement from before the trails went in…*
>
> *There are some who say the properties [sic] values of those bordering/abutting trails are negatively affected by the presence of trails and there are a couple of studies that indicate that trails have a negative effect on property value and quality of life. There is a distinction between being "near" the trails and "on/abutting" the trail, and some argue that previous studies did not focus exclusively on those on the trail but rather nearby (like within a few blocks away). The most opposition to trail development comes from those who will border a trail, who are concerned with potential decreased privacy, safety, and property values. …From a policy standpoint when faced with concern over new bike path projects the answer would seem to be that bike paths have no effect on*

> *housing values or a very small to insignificant effect, usually positive, and there are other determining factors such as the design and maintenance plan."*

http://www.railstotrails.org/ourwork/trailbuilding/toolbox/informationsummaries/opposition_adjacents.html

Regarding concerns about crime, the study concluded that the types of problems most associated with trails are *"litter, illegal motor vehicle use, and disruptive noise. Crime on bike and pedestrian trails is minimal and must be considered in perspective with risks associated with other activities. The amount of crime present in and around recreation facilities is often very correlated with the amount of crime in the neighboring area."*

The study emphasized the importance of good planning, stating:

> *The development of a trail must have a clear plan for maintenance and addressing issues. A poorly planned facility can cause problems, as much as a well planned one can improve the quality of life in a neighborhood and make an area a more desirable place to live. Perhaps the most relevant comment is from the National Parks Service in reference to parks and greenways: "Increases in property values depend upon the ability of developers, planners and greenway proponents to successfully integrate neighborhood development and open space. Designing greenways to minimize potential homeowner-park user conflicts can help avoid a decrease in property values of immediately adjacent properties." (p. 12)*

Part Two of the Delaware study examined the effect of paths on property prices using data specific to Delaware. A model was developed that considered the year the housing was built, number of stories, number of bedrooms, and acreage of property, as well as sales price. The analysis indicates that the impact of proximity to a bike path on property prices is positive, controlling for the number of bedrooms, years since sale, acres, land, buildings, total number of rooms, total assessment. The properties within 50 meters of the bike paths show a positive significance of at least $8,800 and even higher when controlled for specific variables. That is, a bicycle path would be expected to slightly increase property values by about $8,800. (p. 23).

On the issue of crime, the study notes that crime happens in most types of land use, and with any recreational facility, the level of crime is typically correlated with the level of crime in the surrounding area and the design of the facility.

> *A well-managed recreation facility is more likely to be a better neighboring land use than an abandoned property. This study concludes that crime on bike paths is minimal and must be considered in perspective with risks associated with other activities. The way to minimize crime on trails is to ensure that users exercise property safety precautions, keep the trail well maintained, and boost trail use (p. 23).*

Based on the Delaware findings, which are based on a number of studies of numerous other trails, it is unlikely that the proposed *Ke Ala Kahawai O Waimea* will have a negative impact on property values of adjacent homes. The presence of the trail may even have a positive effect on values in the surrounding community.

A proper operation and maintenance program, developed jointly by the WTG Committee and the County, will be key to ensuring the trail is well-maintained, attractive, and safe, as well as an asset to the community.

Vandalism and Crime

Another concern raised by some homeowners along the path is the potential increase in vandalism and crime. Here again, the experience of hundreds of other trails around the country have shown that these fears are largely unfounded, and proven strategies exist to minimize undesirable activity (see discussion of University of Delaware study above).

"Crime prevention through environmental design" (CPTED) is a phrase described by C. Ray Jeffreys in his 1971 book of the same title. Jeffreys defines CPTED as the "proper design and effective use of the built environment that can lead to a reduction in the fear and the incidence of crime, and an improvement in the quality of life."

During the Draft EA comment period, Captain James Sanborn of the South Kohala Police Station was contacted regarding any concerns about the proposed trail. Captain Sanborn stated that he is a proponent of the CPTED approach, and therefore he would be most concerned with trail design issues such as visibility, natural surveillance, lighting, placement of vegetation/foliage, etc. (Personal communication with Captain James Sanborn, April 14, 2011).

The major design principles of CPTED can and will be incorporated into *Ke Ala Kahawai o Waimea.* For example, visibility of the trail from surrounding businesses and homes coupled with high use of the trail by law abiding citizens provides natural surveillance, discouraging undesirable behavior. Although sometimes neighbors will suggest that a greenway path be hidden from view, this is counterproductive from a safety perspective. Likewise, thick brush or solid fencing can restrict natural surveillance while providing places for law breakers to hide. Evidence from other trail projects show that maintaining a clear zone of at least ten feet on either side of the path is a good safety measure, as is trimming surrounding vegetation to improve public visibility of the trail. Regular maintenance of the path by the Waimea Trails and Greenways Committee and the County will reinforce that the path is actively monitored.

Various means of access control ways to define territory can be used to distinguish public and private spaces. For example, along the access roads, signage will be included to direct trail users to the path. Vegetation, landscaping, sidewalks, or low-scale wooden fencing might be considered on these roads to keep trail users off private property. In some segments of the path where easements have already been granted, landowners have requested that fencing be installed

to keep trail users out of pasture or cultivated areas. In other areas, such as along the Sandalwood subdivision, the stream itself provides a natural buffer, defining the location of public and private lands. Bollards placed in the path near the signed shared access roads are an option to keep unauthorized vehicles off the path without fencing.

Waimea residents have cited anecdotally one incident involving a property crime where the perpetrator escaped on foot via the existing trail, before jumping into a getaway car. The use of public access ways during commitment of a crime is always a possibility. However, there is little evidence that the improvement of the trail increases the likelihood of crime. As an example, the County of Kaua‘i has not had any reported criminal activity directly related to the two initial segments of its multi-use path since the first section of the trail opened in 2007. That trail has received rave reviews from both residents and visitors, and enjoys high levels of use year round. Future increments are currently being planned.

Secondary and Cumulative Impacts

- Provides alternative transportation which contributes to an overall reduction in traffic
- Provides health benefits; potential reduction in medical and public health costs
- Provides a facility which could enhance sense of community
- Adds another parks and recreation facility requiring money to maintain. Mitigation includes utilizing volunteer community maintenance

Liability Issues

A County-owned multi-use path which will be used for transportation and recreation by a wide range of users raises a host of concerns about liability. As the owner of the trail, the County of Hawai‘i may worry about users being injured. Private landowners along the path, including those who have granted use easements, may be concerned about users wandering off the path onto their land, and injuring themselves or causing property damage.

Hawai‘i’s Recreational Use Statute, Chapter 520, Hawai‘i Revised Statutes (HRS), substantially limits public and private landowner liability. The intent of this law is to protect landowners who open their land to the public for recreation free of charge. Private landowners who have land adjacent to paths are also protected by trespassing laws. Adjacent landowners generally are not at risk as long as they do not engage in “willful and wanton misconduct” against trespassers, such as recklessly or intentionally creating a hazard.

Chapter 520, HRS, is not applicable to public lands. In general, the State and Counties “self-insure” against tort claims arising from bicycle or other accidents.

While concerns about liability are understandable, real world experience with thousands of miles of paths and trails nationwide have shown that liability exposure can be minimized through appropriate legal protection and proper trail design, maintenance and management.

Recommended Risk Management Strategies. Bike Plan Hawai'i (2003) lists several useful risk management strategies that can be adopted during design, construction, and operation of the path. These include:

During design and development:

- Develop a list of potential hazards
- Design and locate the path such that dangerous locations are avoided
- Develop a list of permitted path uses and the risks associated with each
- Make it clear that users are not invited onto the adjoining land. This can be accomplished through signs, landscaping, or fencing
- If a hazardous condition exists and cannot be mitigated, signs should be developed to warn users of the hazard
- Identify applicable laws
- Design and construct the pathway in accordance with recognized guidelines

After the path is open for use:

- Conduct regular inspections and monitor conditions
- Document the results of the inspections and correct hazards in a timely fashion
- Adhere to maintenance standards and keep written records
- Maintain a plan for handling medical emergencies

Source: Bike Plan Hawai'i, 2003. Taken from Rail-Trails and Liability: A primer on Trail-related Liability Issues and Risk Management Techniques by Hugh Morris, Rails-to-Trails Conservancy, September 2004

4.4.3 Archaeological, Historic, and Cultural Resources

Archaeological Resources

A number of archaeological studies have been completed for the project area over the past several years, the most recent, a Literature Review and Field Inspection for the project done in 2010 (Appendix E).

This Environmental Assessment also incorporates several previous studies, including an earlier archaeological literature review and field inspection completed in 2002 as part of the 2004 Environmental Assessment (see Appendix F). That study noted that there are few historic properties in the developed areas east of the Refuse Transfer Station, but noted some agriculture and habitation complexes in the western most sections. The archaeologists recommended that

inventory-level surveys be conducted for the entire route, once a staked alignment is determined. The surveys should focus on the area west of the Refuse Transfer Station.

A companion Cultural Impact Assessment (CIA) was completed by Cultural Surveys Hawai‘i in 2003 to support the 2002 literature review and field inspection. The CIA was prepared to comply with the State of Hawai‘i’s environmental review law, Chapter 343, HRS, and evaluated the project’s potential impact to cultural resources. The CIA focused on the eastern end of the proposed trail, because the western portion had recently been covered in a CIA conducted by the Department of Hawaiian Homelands (DHHL) for its Lālāmilo project. Neither CIA identified any present day cultural practices in the project corridor.

As Increment 1 of the trail proceeded in its design, an Archaeological Inventory Survey (AIS) was completed by Cultural Surveys Hawai‘i in 2009 for this first segment. The AIS covered the area between Lindsey Road and Kahawai Street, and identified three historic properties including a concrete ford or bridge, a remnant road and an earthen ditch. The AIS recommended preparation of a preservation/interpretive plan for the ford crossing, and this recommendation was concurred upon by the State Historic Preservation Division in a letter dated September 8, 2009. The interpretive plan will be completed prior to construction of Increment 1.

The most recent Literature Review and Field Inspection was conducted in 2010 for the entire project corridor, including the mauka alternatives (which have since been dismissed from consideration), the shared signed roadways (which will provide trail access), and the future equestrian trail. This document was intended to support the project’s historic preservation compliance, including Section 106 of the National Historic Preservation Act. It is included as Appendix E.

2002 Literature Review and Field Inspection

Findings

In 2000, Cultural Surveys Hawai‘i (Kikiloi et al.) conducted a literature review and field inspection of approximately 6 miles for the (then) proposed Waimea Trails and Greenways project. The study consisted of a pedestrian inspection of the proposed route, which roughly follows the current *Ke Ala Kahawai o Waimea* route. The inspected area was separated into five sections, based mainly on terrain type, degree of urbanization, and potential for cultural resources.

Section 1 encompassed the western most section of the corridor, between the Kamuela View Estates to the County Refuse Transfer Station. This section is what has been referred to as the Lālāmilo Field Complex, a subset of the Waimea agricultural system (Clark 1987). Additionally, Section 1 is, at least in part, within the “Lālāmilo Kuleana and Ranch District” (State site 50-10-05-2292) (Barrerra and Kelly 1974). The types of sites and features include *‘auwai* (irrigation ditches), agricultural fields, and house sites, both pre and post-contact. Certain *‘auwai* sections, a

wall segment, and a number of fields are in the vicinity of the trail corridor. No house sites appear to be within the trail corridor.

Section 2 referred to the section between the Refuse Transfer Station and the eastern end of the Sandalwood subdivision. The corridor is on the southern side of Waikōloa Stream for the Sandalwood subdivision portion, then shifts to the northern side near the old landfill and existing transfer station. No historic properties were observed in Section 2. The study noted the presence of an old concrete ford at the conjunction of Sections 2 and 3. The ford was associated with an old asphalt roadway extending from Kawaihae Road to Pu‘u ‘Opelu, the former Parker Ranch Headquarters and residence of Richard Smart, now a museum open to the public. The roadway and associated stream crossing are presumably older than 50 years old, and thus can be considered historic properties. The ford crossing will remain intact and a new, ADA-compliant crossing will be built roughly parallel to it.

The section of the path adjoining the Sandalwood Subdivision is pasture type land that is separated from actual pasture by a new fence line. No historic features were observed on either side of the fence line.

The portion of Section 2 that is State land just east of the existing transfer station, has been extensively altered by bulldozing and old landfill activities. The trail corridor follows a bulldozed path between Waikōloa Stream and the “mountain of trash” of the old landfill. No historic properties were observed.

Section 3 referred to the area from the east end of Sandalwood Subdivision to Waiki‘i Road. The study noted that the area has been altered by the development of the residential uses and no archaeological resources were observed.

Section 4 was the area between Waiki‘i Village Road and the Lindsey Road bridge. This section is dominated by a stand of large Eucalyptus trees, and here Waikōloa Stream makes a few sharp bends or meanders. Remnant structures related to a pipeline crossing and possibly a concrete ford were observed in this segment. The large concrete slab remnant had an imprinted date of “1942” suggesting a World War II association. The pipe remnant structures are short, faced, ramp-like structures with the faced vertical side facing the stream. Construction type is similar to a crossing observed in Segment 5, consisting of basalt boulders and concrete.

Section 5 was the area between Lindsey Road and the eastern trail terminus at Church Row. This section has been altered extensively by modern urbanization. Two historic structures were observed within Section 5; a stacked stone wall behind the Keck offices and a remnant of a basalt boulder and concrete stream crossing. The boulder wall is typical of many dry masonry stone walls in the Waimea area, and presently serves as the stream side property boundary for the Keck office complex. The remnant boulder and concrete stream crossing appears to be an old narrow roadway and/or for an old pipeline. The old stream crossing is situated behind a row of stores some 200 feet east of the Lindsey Road bridge.

The eastern terminus of the trail is in close proximity to Imi'ola Church and associated cemetery. The church is on the State and National Register of Historic Places, State Site #50-10-06-7151.

Recommendations
Based on the 2002 field observations, the archaeologists noted that Sections 2 through 5 above (i.e., all sections except the western-most area) have been urbanized to such an extent that no surface historic properties exist, except for concrete and boulder stream crossing structures. Only the western-most segment (Section 1) west of the County Refuse Transfer Station, has been altered little during modern urbanization. As such, this section contains site complexes associated with agriculture and habitation from pre and post-contact eras.

Based on the background surveys and field inspection, Cultural Surveys Hawai'i recommended an inventory-level survey for the entire route, once a staked alignment is determined. The focus of the inventory survey should be in the area west of the County Refuse Transfer Station. This will allow sites to be accurately located in relation to the alignment.

2009 Archaeological Inventory Survey for Increment 1

In August 2009, Cultural Surveys Hawai'i conducted an Archaeological Inventory Survey (AIS) for the first increment of the WTG trail, between Lindsey Road and Kahawai Street. This area consists of 8.96 acres, and covered approximately 1.1 miles of the trail, roughly corresponding to Sections 3 and 4 in the Cultural Surveys Hawai'i 2002 study. A copy of the Archaeological Inventory Survey is found in Appendix F.

A complete pedestrian survey identified a total of three historic properties consisting of four features within or adjacent to Increment 1. These historic properties included a collapsed and severely damaged concrete ford or bridge, a remnant portion of a paved road, an earthen ditch segment, and an intact concrete ford and roadway. All three historic properties will potentially be affected by Increment 1 of the proposed WTG trail.

The table below summarizes the site characteristics and the SHPD's recommended mitigation to reduce any potential adverse effect on these historic properties.

Table 4-1: Increment 1 Historic Properties

SIHP #	Description	Significance Criteria	Effect and Recommended Mitigation
50-10-06-26871	WWII-era infrastructure associated with Camp Tawara		
	Feature A: collapsed ford or bridge with etched date of July 1942	Hawai'i Register Criteria A and D	No adverse effect. Recommended for preservation through avoidance and protection. SHPD requests preservation/interpretive plan be developed for review and approval involving interpretive monument

SIHP #	Description	Significance Criteria	Effect and Recommended Mitigation
			with signage.
	Feature B: remnant portion of roadway	Hawai'i Register Criteria A and D	No further work recommended. Sufficient information obtained from current survey.
50-10-06-26872	early post-contact irrigation ditch (Akona's *'auwai*)	Hawai'i Register Criterion D	No effect. Preservation through avoidance and protection. Should required ADA improvements affect ditch, contact SHPD to discuss mitigation efforts.
50-10-06-26873	historic-era concrete ford and associated roadway	Hawai'i Register Criterion D	No further work recommended. Sufficient information obtained from current survey.

Source: Cultural Surveys Hawai'i, 2009

The SHPD has reviewed and approved the Archeological Inventory Survey and in a September 8, 2009 letter (Appendix F) recommended that because Feature A of SIHP 26871, a ford crossing, lies in the path of the trail's stream crossing, a preservation/interpretive plan should be developed. The plan should involve using the signature portion of the ford to create an interpretive monument with interpretive signage.

In a letter dated June 16, 2010 during the current EA early consultation period (see Chapter 9), the SHPD indicated that they are awaiting the preservation plan requested in September 2009. They recommended that no ground–altering construction begin until this plan has been reviewed and accepted by SHPD. The County will prepare the preservation plan after completion of the Final EA. The preservation/interpretive plan will be submitted to SHPD for their review and approval prior to construction of Increment 1.

Inventory-level surveys of the future trail increments (Increments 2, 3 and 4) will be completed as needed, as these increments are funded and developed.

2010 Literature Review and Field Inspection

The purpose of the 2010 Literature Review and Field Inspection by Cultural Surveys Hawai'i (Appendix E) was to confirm the presence and density of archaeological sites within the project corridor, and to summarize the findings of the previous studies in the project corridor. In addition to addressing the preferred trail corridor, the 2010 field inspection looked at the "mauka alternatives" and the signed shared roadways (Opelo Road, Kahawai Street, and South Kohala Distribution Road), none of which were included in the 2002 study[4]. The portions of the project

[4] The signed shared roadways will be used to access *Ke Ala Kahawai o Waimea*, and as such, are part of the project area covered under this EA. The mauka alternatives were also examined during the 2010 field survey. Although they have since been dismissed from consideration, federal NEPA guidelines require that the environmental impact of *all* alternatives considered be discussed in the EA.

area that were inspected during the previous 2002 literature review and field inspection were not revisited during the 2010 field work.

Findings

The findings of the 2010 field inspection were largely as expected when compared to land use and previous archaeological studies. A total of 14 pre and post-contact historic properties were identified: seven previously identified historic properties or historic property concentrations, and seven newly identified historic properties. Only one of the newly identified properties was near *Ke Ala Kahawai o Waimea*; the other six were located near the mauka alternatives[5]. The newly identified site near the proposed trail consists of an L-shaped alignment in a field adjacent to the Waimea Transfer Station. It consists of small boulders stacked 1-2 courses high, and although it could be a possible terrace, based on the level of disturbance in the surrounding area, is more likely the result of bulldozer push.

Previous archaeological research suggests that pre-contact land use associated with the Waimea agricultural field system was located largely within the current project area and surroundings. Historic and modern development, beginning in the mid 19th century, have impacted or completely destroyed many pre-contact historic properties within and near the project area.

Recommendations

Previous archaeological studies have shown a high density of historic properties within the preferred alignment corridor. Both of the previous studies--the 2002 literature review and field inspection (Kikiloi et al. 2002) and the AIS for Increment 1--were conducted by Cultural Surveys Hawai'i. Based on the background studies and field inspection, Cultural Surveys Hawai'i recommends an inventory-level survey for the entire chosen alignment, including the proposed location for the possible equestrian trail. No further work is required for Increment 1 since an AIS has already been completed.

Cultural Impact Assessment

Chapter 343, HRS, Hawai'i's environmental impact law, requires that a cultural impact assessment be completed in order to determine the significance of a proposed project. This requirement became law through Act 50 of the State Legislature in 2000, and requires that information be provided relating to the practices and beliefs of a particular cultural or ethnic group or groups.

A Cultural Impact Assessment (CIA) for the proposed Waimea Trails and Greenways Project was conducted in December 2003 by Cultural Surveys Hawai'i, to support the 2002 literature review and field inspection. It is included in Appendix F. The 2003 CIA focused on the eastern end of the proposed trail, because the western portion had recently been covered in another CIA

[5] The findings and impact of the mauka alternatives are described at the end Section 4.4.3.

conducted by the Department of Hawaiian Homelands (DHHL) for its Lālāmilo project. The findings of the DHHL study are summarized below. As a result, the 2003 CIA focused only on the portion of the trail between the Sandalwood subdivision and Church Row, and did not reexamine the area already covered for the DHHL project.

The scope of the CIA included an examination of historical documents and existing archaeological information, community consultations, and a report summarizing the information gathered relating to traditional cultural practices and land use.

CIA for Department of Hawaiian Homelands Lālāmilo Subdivision

The CIA for the DHHL's proposed Lālāmilo project was conducted in 2002 (Haun & Associates 2002). The Lālāmilo development encompasses 249 acres and is located on the mauka side of Waikōloa Stream, between the Kamuela View Estates and the County refuse transfer station. The CIA covered approximately 266 acres west of the County transfer station, an area which includes the western portion of the WTG trail. This CIA documented numerous historic properties. With regard to cultural practices, the Haun assessment concluded:

> *"This cultural impact assessment did not identify any present-day cultural practices nor did it identify anyone who currently uses the project area for cultural practices of any kind. Past cultural practices identified were related to agricultural practices and the utilization of the ancient 'auwai or ditch system which traversed much of the Lālāmilo area. The project area is part of the larger Lālāmilo field system evidenced by remnant 'auwai and dryland terraces. Hawaiian burial practices (pre-contact and historic) were conducted in the project area as evidenced by the presence of burials and grave sites."*

2003 Waimea Trails and Greenways CIA

The 2003 CIA conducted for the Waimea Trails and Greenways project examined historical documents, reviewed existing archaeological information, including the 2002 DHHL CIA, and conducted community consultations with persons knowledgeable about the historic and traditional practices in the project area and region. Four individuals were formally interviewed.

Based on the background studies, the CIA concluded that much of the project area has been urbanized to such an extent that no surface historic properties exist, except for concrete and boulder stream crossing structures. However, the area west of the country transfer station has been altered far less than the urban core of Waimea, and contains complexes associated with agriculture and habitation sites from the pre-and post-contact eras. In this area, the trail corridor intersects with a number of features such as *'auwai* and field walls. There are includes a wide array of site types, including house sites and documented burial sites.

Within Waimea Town, there are church (i.e., Imi'ola) and family cemeteries (i.e., Spencer family), but no specific documentation was found regarding *'iwi* in the project area. The CIA did not identify any cultural practitioners or ongoing cultural practices within the project area.

Community members consulted expressed some concerns regarding the project corridor. Respondents commented that the stream should be kept clear of any brush to reduce overflow during a high volume period. Second, the safety and security of residents living along the trail was also a concern. However, all interviewees expressed the opinion that the trail was a good community-based project.

The construction of the trail would not have an impact on cultural practices, and the CIA stated that no formal cultural impact mitigations are recommended. These findings were consistent with the DHHL's 2002 study, which did not identify any present-day cultural practices in their study area. However, CIA informants wanted the consultation process to continue through the build-out of the project.

The 2003 CIA conducted for the Waimea Trails and Greenways project noted that despite decades of cattle ranching and associated activities, traditional Hawaiian artifacts, cultural layers, and burials may still be present in the area west of the Country transfer station. It also recommended the inclusion of some interpretive themes for the proposed trail corridor. Themes referenced by the informants included history, legend, and how the environment has changed water resources of the Waimea area.

Project Impacts and Mitigation

The project will implement the recommended mitigation identified in the archaeological studies referenced above. An archaeological inventory survey will be completed for each project increment, as a staked alignment is determined.

An inventory survey was completed for Increment 1 in 2009. The SHPD has reviewed and approved the inventory survey, and requested a preservation/interpretative plan be developed for Feature A, a ford crossing. The interpretive plan will be completed after the Final EA is completed, prior to construction of Increment 1, and will be submitted to SHPD for approval.

Inventory-level surveys of the future trail increments (Increments 2, 3 and 4) will be completed as needed, as these increments are funded and developed.

With this mitigation, the project will have no adverse impact on cultural or historic resources.

Section 106, National Historic Preservation Act (NHPA) Consultation

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties. Federal agencies are

responsible for initiating Section 106 review between itself, the State Historic Preservation Officer, and those who have an interest in historic properties, including native Hawaiian organizations.

The Federal Highway Administration has concluded the Section 106 consultation process for *Ke Ala Kahawai o Waimea*. Documentation of the Section 106 consultation is in Appendix G. Initial consultation letters were sent to the State Historic Preservation Division and interested agencies and native Hawaiian organizations requesting input regarding any issues of historic properties with religious or cultural significance. The letter also requested names of other individuals or organizations that should be contacted as part of the Section 106 process.
Only one comment letter was received, from the Office of Hawaiian Affairs (OHA) and dated January 21, 2011. In this letter (Appendix G), the OHA indicated that it believed the preliminary Area of Potential Effect (APE) was appropriate. They expressed specific concerns relative to the western increment of the path, and cited two previous archaeological investigations. OHA also recommended consultation with several groups and individuals.

The Federal Highway Administration subsequently made a NHPA Section 106 finding of "no adverse impact" and requested the written concurrence of the State Historic Preservation Division in a letter dated May 18, 2011. The letter indicated that if FHWA did not hear from the SHPD within 30 days, it would proceed with this determination. No written response from the SHPD was received.

Impacts of Other Alternatives

The No Action and Bike Lanes alternatives will not have an adverse impact on historic or cultural resources. The 2010 field survey conducted by Cultural Surveys Hawai'i investigated historic properties in the vicinity of the mauka alternative, which has since been dismissed from consideration. The study confirmed that there are a number of historic sites in the area, including enclosures, walls, burial mounds, agricultural terraces and a trail segment. Six new sites that had not been previously identified were found near the mauka alignment, including a several large rock enclosures, walls, terraces and platforms. The study also noted that other archaeological surveys conducted previously in the area identified numerous sites north of the mauka alternative alignment.

The 2010 study found six newly identified properties along the mauka alternative alignment. These historic properties are both pre-contact and historic in age and represent agricultural, habitation and boundary function. Most of the observed historic properties were not directly within the mauka alignment corridor, but it is likely that they would have been impacted by the alternative.

The 2010 Literature Review and Field Inspection noted that at least two of the previously identified historic properties near the mauka alignment have been recommended for preservation—a burial mounds and permanent habitation. Preservation measures have already

been undertaken for a large enclosure. Two concrete fords or bridges have also been recommended for preservation by avoidance. If the mauka alternative had been selected, an archaeological inventory survey would have been required, and mitigation measures implemented to avoid harm to these properties.

As far as cultural impact, the mauka alternatives would not impact any cultural practices and no mitigation would be needed.

In summary, the alternatives analysis conducted for this EA has determined that the mauka alternatives are infeasible, and has dismissed them from further consideration. As such, no additional archaeological work associated with the mauka alternatives is required.

4.4.4 Visual Resources

Existing Conditions

The visual environment along the trail corridor varies dramatically as one moves from east to west. On the far eastern end of the project corridor near Church Row, the visual environment reflects an urbanized town, with low rise structures, roads, and landscaping, and green rolling hills in the background. The area around Lindsey Road in the center of Waimea Town is dominated by commercial buildings, cars, roads, and utility poles. As the path moves further west toward the Waimea Nature Park, it passes through a stand of large Eucalyptus trees, and the visual environment is shady and cool, enclosed by the surrounding trees and shrubs and views of the stream alongside the path. Some of the low scale commercial and office buildings are visible just beyond the trees. Past the nature park, the vegetation along the trail path becomes less dense, but is still dominated by heavy, overgrown shrubbery with the Lālāmilo Research Station's agricultural fields and pasture lands on the south side.

Further west near the Sandalwood Subdivision, the trail passes through Parker Ranch lands. The views on the mauka side, across the stream are of the one and two-story homes on large agricultural lots which border the stream, with the rising Kohala mountains in the backdrop. On the south side, the view is of vast, open pasture land. In this area, the trail will be within a 30-foot corridor from the top of the stream bank. The pasture lands are delineated by strands of barbed wire fencing supported on wooden posts, often made from gnarled tree trunks and branches.

At the refuse transfer station, the visual environment changes abruptly, with little vegetation and land altered extensively by bulldozing and landfill activities. This is clearly an area dominated by intensive industrial activity. West of the transfer station, the landscape alters dramatically, becoming noticeably barren and dry, with little sign of human activity. The surroundings are moonscape-like, comprised of vast, parched, red dirt lands, strewn with rocks and boulders. Even adjacent to the stream, vegetation is sparse and limited to scrub and grass, with a few hardy trees. This area contrasts sharply with the comparatively lush environment at the far eastern end

of the trail. The western terminus of the trail is across the Kamuela View Estates subdivision on Kawaihae Road.

Project Impact and Mitigation

Visual simulations of the proposed trail are shown on the following pages, to illustrate what the trail could look like. Before (existing) and after (with trail) conditions are depicted. Despite the varying physical landscape and visual environment throughout the path corridor, the improvements will not have an adverse visual impact anywhere along the route. The path will modify the visual environment by providing a man-made path that will have a more developed or urbanized appearance than currently exists. The presence of walkers, joggers, and bicyclists will alter the visual environment. However, the number of trail users will be distributed along the route, so that the visual impact of people and activity in any one area will be minimized.

Concerns over the stark appearance of a paved path can be mitigated by using earth-tone colored concrete, as well as meandering the path where possible. The path will follow the natural topography, and will not obstruct significant view planes or public views. The intent of the project is to create a safe and convenient way for the public to enjoy the natural environment, and every effort will be made to blend it into the natural landscape.

The visual experience for path users will vary from the urbanized areas of Waimea Town past residential, commercial, agricultural and pasture areas. The microclimates will range from lush, shady, and forested sections to breezy pasture lands, to drier, more barren terrain on the west end of the project corridor.

Once the DHHL's Lālāmilo residential area is developed, the visual environment of the western-most section of the path will be dramatically altered. The current desolation of the existing landscape will be replaced by a developed residential community, with homes, roads, and landscaping. The construction of the subdivision will have a more significant visual impact than the creation of the trail, but the path will be complimentary to and visually compatible with the future community. The lands south of the trail, which comprise the Lālāmilo Field Complex, are expected to remain undeveloped.

Visual Simulations of *Ke Ala Kahawai o Waimea*

Near CTAHR Lālāmilo Research Station



Before



After

Near Kanu o ka ʻAina PCS



Before

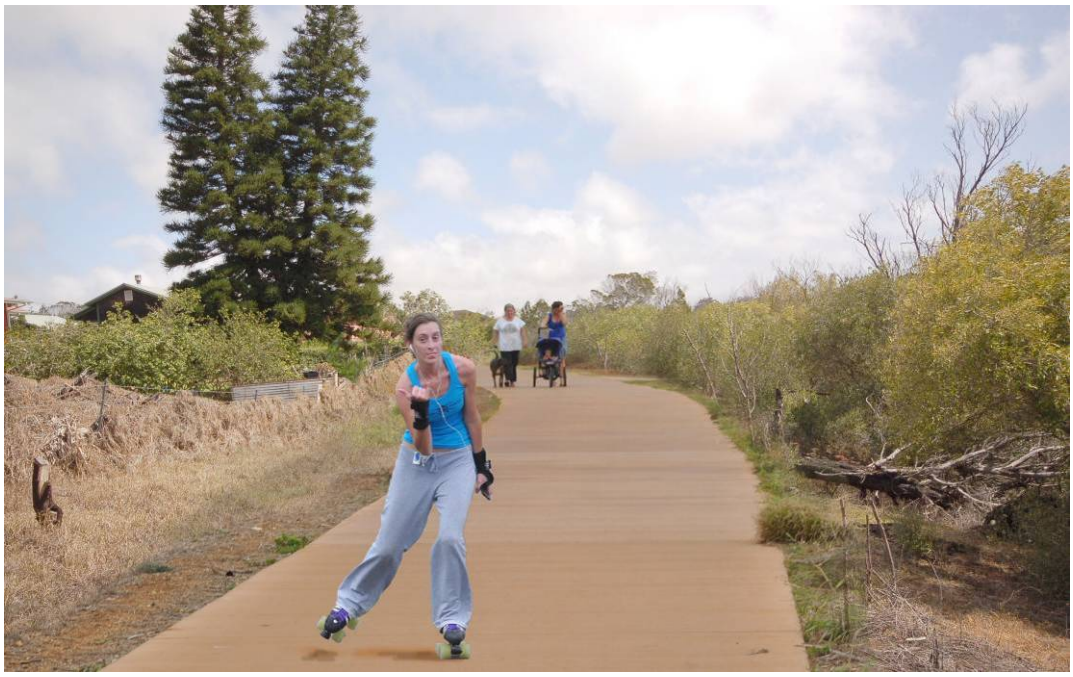


After

West of Opelo Road



Before



After

Across from future DHHL Lālāmilo subdivision



Before



After

(Note: simulation does not show the future DHHL Lālāmilo subdivision proposed on the opposite side of Waikoloa Stream. Land on the trail-side of the stream will remain undeveloped)

Impacts of Other Alternatives

The No Action alternative would have no visual impact. The provision of bike lanes on Kawaihae Road and Mamalahoa Highway would have a nominal impact on visual resources within these existing roadway corridors.

Given their proximity to several existing residential subdivisions, the mauka alternatives would have a more noticeable visual impact. Although the mauka alternatives would not have obstructed public views or important view sheds, these segments would have a significant visual impact for many adjacent homeowners. Whereas the preferred alignment utilizes Waikōloa Stream as a buffer between the path and existing residential areas, there is no similar natural buffer in many of the mauka segments. Residents of the surrounding subdivisions north of Kawaihae Road would have serious concerns regarding the proximity of the trail, the perceived loss of privacy, and visual impacts, as expressed during the EA early consultation period. Solutions such as fencing between the path and the homes could reduce security concerns, but would result in added visual intrusion for the homeowners.

Overall, the mauka alternatives would likely have greater visual and aesthetic impacts to adjacent homeowners compared to the preferred Waikōloa Stream alignment.

4.5 UTILITIES AND INFRASTRUCTURE

Existing Conditions

Major water, electrical, communication and wastewater lines are located within the streets or within roadway rights-of-way. There are no utility lines within the trail corridor, but there are two electrical lines that cross over the trail between Opelo Road and Kahawai Street and one guy wire anchor.

It is required that all projects mitigate the increase in runoff due to an increase in impervious surfaces. Shallow drywells and interconnected inlets will be placed along the path to collect the runoff due to the increased impervious area. General grading patterns will not be altered. Grading of the site will comply with County grading ordinances.

Potable water is provided by the County Department of Water Supply by surface water diverted from Waikōloa and Kohakohau Streams. Potable water is distributed to customers in the Waimea service area through a network of 12-, 8-, 6-, and 4-inch pipelines.

Waimea does not have a municipal wastewater treatment facility. All of Waimea is on individual wastewater systems consisting of cesspools or septic tank leachfield systems, with the exception of some Parker Ranch lands. Parker Ranch owns and operates the only wastewater treatment plant in the Waimea area, located several miles south of Waimea Town (DHHL, 2002).

The County of Hawai‘i does not provide solid waste collection services. About 50 percent of waste generated is hauled by private companies, and the remainder is self-hauled to the County transfer station, which is located along the path route. Refuse from residential areas is compacted for transport to the Pu‘uanahulu Landfill in North Kona (ibid).

Electrical service is provided to Waimea by Hawai‘i Electric Light Company (HELCO). A HELCO baseyard and electrical generating plant is located near the County Refuse Transfers Station, on South Kohala Distribution Road. Telephone service is provided by Sandwich Isles Communications.

Project Impacts and Mitigation

The project will not have an impact on utility demand. There will be no lighting or other utility service along the proposed path. However, lighting will be provided at future County parks near the refuse transfer station and the Clark property. The parks will include parking areas and function as trail heads. If comfort stations are provided at these parks, water and wastewater infrastructure will also be needed. For Increment 1, water fountains will be provided at rest areas where water lines are in close proximity. In an early consultation letter, the County Department of Water Supply stated that should proposed improvements require water service, estimated maximum daily water usage calculations should be submitted for review and approval.

In Increment 1, there is the possibility that an existing leach field next to the Kanu o ka ‘Āina PCS will need to be relocated. Any existing utilities that are impacted during construction of the path or its associated facilities will be replaced.

The South Kohala Distribution Road will be a signed, shared use trail access road. This road provides primary access to the County’s refuse transfer station and HELCO and State baseyards. There will be an increase in the number of vehicles, pedestrians and bicycles using this road, but the anticipated increase will not adversely impact transfer station or utility operations. The long-term plan is for the trail access route to pass between the HELCO and State baseyards, and continue through the future County park to a parking area near the trail head.

There will likely be trash receptacles at various locations along the trail route, particularly at the shared roadway access points. If dogs are allowed on the trail, doggie waste bags could be provided for free, as is done at a similar multi-use trail on Kaua‘i.

Project Impacts and Mitigation

Impacts of Other Alternatives

Like the preferred alternative, the mauka alternatives that have been dismissed would not have included include lighting or other utility improvements.

4.6 TRAFFIC AND TRANSPORTATION

4.6.1 Existing Conditions

Major regional roadways through Waimea Town include Kawaihae Road and Mamalahoa Highway. Kawaihae Road is a rural arterial roadway providing east-west access through Waimea Town to the coastal areas of North Kohala. It is a two-lane, undivided roadway with a speed limit of 35 mile per hour in most segments. Toward the center of town, Kawaihae Road becomes Lindsey Road. There is a signalized intersection where Kawaihae Road meets Mamalahoa Highway.

In South Kohala outside of Waimea Town, Mamalahoa Highway generally runs parallel to Queen Kaahumanu Highway. In this area, Mamalahoa Highway is a two-lane undivided roadway with a speed limit of 50 mph. Once Mamalahoa Highway intersects Kawaihae Road/Lindsey Road, its speed limit decreases to 35 mph. Between Lindsey Road to North Hawai‘i Community Hospital, Mamalahoa Highway is a four-lane divided road with a landscaped median.

Lindsey Road runs north-south, providing access to Parker School, Waimea Park, and residential areas to the north. It intersects with Kawaihae Road at an unsignalized stop-controlled intersection, where Kawaihae Road merges with and turns into Lindsey Road. Lindsey Road intersects Mamalahoa Highway at a signalized intersection near the Parker Ranch Shopping Center. Existing local roads off Kawaihae Road will serve as public access points to the proposed path. These include Opelo Road and Kahawai Street, and South Kohala Distribution Road which also leads to the HELCO and State baseyards and the County refuse transfer station.

Waimea Traffic Circulation Study

The Waimea Traffic Circulation Study was completed in December 2007 by PB Americas, Inc. for the County of Hawai‘i Department of Planning. The purpose of the study was to identify innovative ways of addressing traffic congestion, while maintaining the special character of Waimea Town. The study noted that a major traffic issue is ongoing congestion at the Lindsey Road/Mamalahoa Highway intersection, which has been documented for over 25 years. A key reason is that all traffic passing through the Waimea area must travel through this intersection. To address this problem, there are a number of proposals for bypass roads to direct regional traffic around Waimea.

On the other hand, much of the existing congestion is caused by traffic originating in or destined for Waimea. Therefore, in addition to the regional bypass roads, traffic planners are focusing on providing alternative routes closer to the town core, including a Kawaihae Road-Mamalahoa Highway connector and the Parker Ranch connector road. These internal connectors would provide alternate routes for travel to and from Waimea and intra-Waimea trips, most of which are oriented around the commercial center.

Other transportation concerns listed in the in the Waimea Traffic Circulation study include congestion in the vicinity of Waimea Elementary and Middle Schools, need for more transit service, the need for more bicycle facilities, and the need for more pedestrian facilities.

4.6.2 Project Impacts and Mitigation

The multi-use path directly supports the findings and recommendations of the 2007 Waimea Traffic Circulation Study. That study concluded that improving bicycle and pedestrian facilities in Waimea was an important component in improving overall traffic circulation. In addition to implementing the Bike Plan Hawai'i recommendation for shared bike routes on Kawaihae Road and Mamalahoa Highway, the study recommends implementation of the Waimea Trails and Greenways project. Another recommendation was the provision of more pedestrian facilities, especially outside the commercial center. On page 52 of the study, pedestrian and bicycle improvements were recommended as "short-range actions" to address the current traffic issues in Waimea Town:

> *It was stated frequently by the community that a solid system that provide bicyclists and pedestrians with mobility within Waimea would be desirable. Figure 33 illustrates a potential bicycle and pedestrian network that would provide this mobility. The plan utilizes existing and proposed roadways as the backbone of a bicycle-pedestrian network and augments this backbone through the use of the Waimea Trails and Greenways project paths. It is recommended that bicycle and pedestrian facilities be part of all future roadway construction projects.*

The "Figure 33" referenced in the document shows the proposed pedestrian and bike network, and includes the *Ke Ala Kahawai O Waimea* preferred path alignment.

Kawaihae Road Access

Safe pedestrian access to town from areas north of Kawaihae Road is an ongoing traffic safety issue that will continue to need to be addressed. The lack of sidewalks on Kawaihae Road has been noted in a number of documents, including the Waimea Traffic Circulation study, as well as by several individuals during the Draft EA comment period. The provision of safe pedestrian ways and crossings remains a challenge. The creation of a trail along Waikoloa Stream may result in greater numbers of school children, pedestrians and bicyclists traveling on or crossing Kawaihae Road in order to access the trail. Roadway improvements such as sidewalks, wider shoulders or signalized crossings will become even more important to facilitate safe access along Kawaihae Road.

School Traffic Near Lindsey Road Intersections

Use of the trail by children to commute to and from school will increase the number of pedestrians and bicyclists near the intersections of Lindsey Road with Kawaihae Road and Mamalahoa Highway, as children walk to Parker School, Waimea Elementary and Waimea Middle Schools. The use of school crossing guards in these areas immediately before and after school will be very important for traffic safety. In addition, crossing guards for the Waimea Elementary School should be on the look out for children who may be tempted to "short cut" from the trail through the Carter Center property and jaywalk across Mamalahoa Highway to the school.

Impacts on Signed Shared Access Roads

There will be increased car, pedestrian and bicycle traffic on the local roads identified as signed trail access roads; specifically Church Road, Lindsey Road, Opelo Road, Kahawai Street, and the South Kohala Distribution Road. There will be signage on these roads indicating they are access routes to the trail. The impact of the increased traffic will be most pronounced on the smaller residential streets with low traffic volumes, specifically Opelo Road and Kahawai Street. Minor roadway or sidewalk improvements may be needed to keep trail users off private property. Concerns raised about Kahawai Street during the Draft EA comment period include vehicles turning around in private driveways, street parking on the narrow road, trespassing, and loss of privacy.

According to the County Bureau of Land Conveyances, Kahawai Street is not a public roadway, but is owned by Parker Land Trust, which has granted access and utility easements to each of the landowners on Kahawai Street.

A suggested mitigation is to prohibit parking on Kahawai Street in order to minimize congestion and adverse impacts to residents. A similar option is to clearly identify Kahawai Street as a private road for public bike/pedestrian access only. On-street parking will not be allowed and non-residents will be discouraged from entering Kahawai Street to "drop off" trail users. If trail users need to be dropped off, this can be done on Kawaihae Road. The downside with these options is that residents and their guests will also be prohibited from parking on the street.

Another suggestion was to relocate the existing access gate at the end of Kahawai Street another 50 feet or so closer to the trail, to provide a vehicle turn around area. This would resolve the existing problem of cars turning around in a private driveway at the end of the street. This option would require an agreement and modified easement from Parker Ranch. Because Kahawai Street is owned by Parker Ranch, any of the proposed mitigations above will need to be discussed with Parker Ranch and implemented with their consent.

Trail User Conflicts

With any multi-use trail, there is always the possibility of use conflicts. The potential for pedestrian and bicycle/skateboard conflicts on the trail need to be avoided through education, as well as signage reminding users of trail etiquette. Basic rules for the use of multi-use trails include being aware of and courteous of other trail users, staying to the right of the trail (except when passing), slowing down at corners, traveling at a reasonable speed, and yielding to other users when entering or crossing the trail. Public education, posting signs, and self-policing is the approach that is used on most multi-use trails in Hawai'i and around the country. Control of speeds can also be managed through trail design, for example, by meandering the path.

The trail will be off limits to motorized vehicles, with the exception of mobility devices (e.g., electric wheelchairs) for genuinely disabled persons, and maintenance and emergency vehicles as needed. This is similar to the policy for Kaua'*i's Ke ala Hele Makalae* path. On that path, moto-scooters, motorcycles, mopeds, powered bicycles, Segways and quads are not allowed. If dogs are allowed on the trail, signage will be needed to remind owners to keep their dogs on-leash at all times.

During the Draft EA comment period, the Waimea Outdoor Circle raised safety concerns for the entry road near the Waimea Nature Park, where cars and trail users could meet. At a follow up meeting with the Waimea Outdoor Circle, the County agreed to install a gate, fencing, speed bumps and a concrete apron (integral with the trail) to extend into the park approximately 25 feet.

Signage on the trail will follow the FHWA's *Manual on Uniform Traffic Control Devices (MUTCD)*, which provides national standards for roadway and shared use path signs. Signage will provide trail users with easily understandable information on trail use and physical conditions to facilitate safe use. Signage was discussed previously in Chapter 3 of this EA.

Construction Period Impacts

There will be no adverse traffic impacts during construction of the various path segments. The path construction occurs well away from major streets and roadways. However, as the path is built out, construction vehicles and equipment may temporarily require access from some of the local roads branching off Kawaihae Road, such as Opelo Road, Pu'u Opelu Road, or Kahawai Street. Because of the linear nature of the project, construction of the path will move along to other areas, and therefore inconvenience to local traffic will be short-lived. Once the trail is built, parking on these local roads will not be allowed. Posted signs will convey this message.

4.6.3 Impacts of Other Alternatives

The State of Hawai‘i Department of Transportation indicated in a June 2, 2010 EA early consultation letter that given the location of the preferred alternative, it did not anticipate any significant adverse impacts to its transportation facilities. However, the HDOT noted that the optional segments and alternative paths “may impact DOT highways facilities, Kawaihae Road and Kohala Mountain Road.” As stated previously, safe pedestrian access on Kawaihae Road remains an ongoing challenge.

The alternative providing bike lanes on Kawaihae Road and Mamalahoa Highway would improve bicycling conditions. Improved pedestrian safety would still be needed. The mauka alternatives would intersect with Kawaihae Road at two points, including Kahawai Street and Ohina Street in the Kamuela View Estates. West of Ohina Street, the mauka alternative would run parallel to Kawaihae Road to the Clark property. The mauka alternatives showed a trail segment running along Kohala Mountain Road in front of Hawai‘i Preparatory Academy. In order for all these mauka alternatives to connect to major destinations within Waimea Town or to path segments along Waikōloa Stream, the alignments would need to cross Kawaihae Road. The outstanding pedestrian safety issues on Kawaihae Road provides further justification for the dismissal of the mauka segments in favor of the stream trail. Roadway and sidewalk improvements to connect HPA to the preferred stream trail should still be pursued.

4.7 PUBLIC SERVICES AND FACILITIES

4.7.1 Police

Waimea is within the Hawai‘i County Police Department’s South Kohala District, which has a station in the Waimea Civic Center, located on Kamamalu Street to the south of Church Row. The South Kohala District encompasses a 688-square mile area including Waimea, Kawaihae, Puāko and Waikoloa. A total of 33 sworn officers work in the District. At any one time, four officers and one rank will be on duty; two officers patrolling the upper beat (including Waimea) and two officers patrolling the lower beat. The Police Department would be responsible for responding to calls regarding security and crime along the trail. (Personal communication with Captain James Sanborn, April 14, 2011).

As more people use the path, there will likely be occasional calls to police for surveillance, enforcement and possible intervention, as is the case for any public area. Despite the concerns of some homeowners along the path route, there is considerable evidence that such paths do not attract or increase crime. A comprehensive study was conducted by the Rails-to-Trails Conservancy in cooperation with the National Park Service (1998). The study examined the extent of criminal activity on 372 trails across the country. The study concluded by stating:

> *Rail-trails are not crime-free. No place on earth can make that claim. However, when compared to the communities in which they exist, compared to highways and parking*

> *lots, and compared to many other public and private places, rail-trails have an excellent public safety record. (p. 14).*

When asked if he had any concerns about the trail, Captain Sanborn said he is a proponent of the Crime Prevention Through Environmental Design (CPTED) approach (see discussion in Section 4.4), and therefore he would be most concerned with design issues such as visibility, natural surveillance, lighting, placement of vegetation/foliage, etc. (ibid).

Bicycle-mounted police officers would facilitate police patrol and response along the trail. Captain Sanborn stated that he is trying to reinstate the police bike patrols which have been used in the past. He indicated that bike patrol training was recently scheduled, but then postponed, and Captain Sanborn was unsure when it would resume.
An active and involved community will also contribute to public safety along the trail, reducing the need for police services. As noted previously, a trail that is designed to be highly visible, combined with the consistent presence of legitimate users will deter unwanted or illegal activity. Keeping the path clean and well-maintained will increase a sense of community ownership and reduce incidents of litter, graffiti and vandalism. Public information and education, voluntary patrols, and alert neighbors who report suspicious activity will all contribute to the safety and success of the path.

4.7.2 Fire and Emergency Medical Services

Waimea is served by the Hawai‘i County Fire Department’s Waimea Station No. 9, located in Waimea Town. The station is an engine company with one engine, a tanker and a medic unit. Backup support is provided by Engine Company No. 14 in South Kohala, which has one engine, one ladder truck, one tanker, a medic unit, helicopter, and fuel truck. Back-up support is provided by the Honoka‘a Station which has an engine, medic unit, and a brush truck. At any one time, there are five to six firefighters on duty.

Emergency services are provided by the North Hawai‘i Community Hospital, a 39 bed, full service acute care facility. The hospital is located in downtown Waimea, across from the Keck Observatory Headquarters.

The construction of a multi-use path will not significantly increase demand for fire or emergency services. Captain John Whitman of the Waimea Fire Station has said his primary concern for the trail would be accessibility for emergency personnel. He said that access along the length of the trail by a four-wheel drive vehicle would be desirable, but does not have to be continuous. Access points connecting to the trail at various areas would make response and transport easier and therefore more beneficial to the public. Captain Whitman recommended trail markers no more than ¼ mile apart were recommended as reference points for emergency response. (Personal communication with Capt. John Whitman, April 28, 2011 and May 5, 2011).

The path will be closed to motorized vehicles, but will be able to accommodate emergency vehicles if necessary. In many instances, it may be more efficient for police or medical personnel to access the trail via the designated signed shared roadways, park their vehicles and walk the short distance to the incident area. This would be similar to the procedures for emergency access at other public recreation areas, such as a public beach or a hiking trail

Captain Whitman noted that the Fire Department has rescue/medical helicopter stationed within five minute airtime from town. Identification of potential landing sites would facilitate response to any emergencies along the trail.

As far as fire prevention, Captain Whitman stated that dead and dry underbrush should be kept to a minimum. Once the trail is in use, debris from trail maintenance should not be stored in large, hard to extinguish piles and preferably hauled out (ibid).

Impacts of Other Alternatives

None of the project alternatives would significantly increase the need for police, fire, or emergency services. Bike lanes on Mamalahoa Highway and Kawaihae Road will affect road configuration. The mauka alternatives would increase the number of pedestrians and bicyclists crossing Kawaihae Road to access the center of town, which could increase traffic safety concerns.

4.7.3 Schools

Existing Conditions

Public schools in Waimea include Waimea Elementary and Waimea Middle School (Grades K-8), both located on Mamalahoa Highway near the intersection of Lindsey Road, in the center of town. The Kanu o ka ʻĀina New Century Public Charter School (PCS) is located on Opelo Road near the trail corridor. Kanu o ka ʻĀina PCS is a Hawaiian-focused, bi-lingual public charter school established in 2000. It serves 220 students in grades K-12. The Opelo Road campus accommodates grades Junior K through 5, while grades 6 to 12 are located at a new campus on DHHL land in Puʻukapu in Waimea. The school has plans to eventually relocate the Junior K through 5th grade to the Puʻukapu campus, but capital improvement funds are still needed, and the timetable for this move is uncertain.

Private schools in Waimea include Hawaiʻi Preparatory Academy (HPA), Parker School, and Waimea Country School. Hawaiʻi Preparatory Academy serves students from kindergarten through grade 12 on two separate campuses. The Upper School is located mauka of Kawaihae Road at its intersection with Kohala Mountain Road. The Lower and Middle Schools are located in Waimea town. The school has boarding facilities for students in grades six through 12.

Parker School is located near the intersection of Kawaihae Road and Lindsey Road, and includes grades K through 12. Waimea Country School includes grades K through 6 at a campus at St. James' Circle. There is also a Montessori Pre-School near the trail route near Opelo Road.

Project Impacts and Mitigation

One of the reasons for construction of *Ke Ala Kahawai O Waimea* is to provide Waimea students with options to walk or bike to school. The project's consistency with the federal Safe Routes to School initiative was discussed previously in Chapter 2. The proposed alignment along Waikōloa Stream passes in close proximity to public and private schools in Waimea. Students from Waimea Elementary and Middle Schools and Parker School would access the trail near Lindsey Road. The trail passes Kanu o ka ʻĀina PCS. The project is compatible with the federal Safe Routes to School initiative, as discussed previously in Section 4.4. HPA's Upper School campus is less accessible to the trail, as it is located north of Kawaihae Road, requiring pedestrians or bicyclists to use Kohala Mountain Road and Kawaihae Road.

The State of Hawaiʻi Department of Education was contacted during the EA early consultation period, and had no comments (see Chapter 9).

Impacts of Other Alternatives

The alternative for bike lanes on Kawaihae Road and Mamalahoa Highway could provide commuting options for Waimea students, though primarily middle and high school students would be more likely to use them than younger, elementary school students. The mauka alternatives located north of Kawaihae Road were originally intended to link HPA's main campus on Kohala Mountain Road with the surrounding residential areas to the east and west. Although these segments could provide a direct biking or walking route to HPA, it is uncertain how many HPA students live in the surrounding subdivisions and would take advantage of such a path. If a mauka alternative had been seriously considered, further investigation would have been needed to determine whether anticipated use would justify its construction. The mauka alternatives would provide little benefit to students attending other schools in Waimea, and did little to provide alternative transportation options for Waimea students.

4.7.4 Parks and Recreation

Existing Conditions

County parks in the project vicinity include Waimea Public Park and Waimea Civic Center Park near Church Row, and Waimea Park at the corner of Lindsey Road and Kawaihae Road. Other recreation facilities include Thelma Parker Gym is located on Mamalahoa Highway adjacent to Waimea Elementary and Middle School.

The Waimea Outdoor Circle is in the process of developing a 10-acre Waimea Nature Park, also known as Ulu La'au, or "garden of trees." The park is on the west side of Lindsey Road, behind the Carter Professional Building.

Project Impacts and Mitigation

The proposed trail along Waikōloa Stream will provide a continuous greenway linking existing and proposed parks and public recreation areas within Waimea. It will increase access to existing parks, and expand public open space available for recreation and passive enjoyment. The trail will reduce the need to drive to parks, and give people another option for walking or biking. Overall, the project will be an open space and recreational resource that will provide immense community benefit.

The project includes two new public parks along *Ke Ala Kahawai O Waimea*. The property to the east of the County refuse transfer station has been designated for a future County Park, including vehicle parking and possibly a trail head for a separate equestrian trail. A second County park is proposed across the Kamuela View Estates, on the eight-acre former "Clark property." This park would also include trail parking and serve as the western terminus of the path.

Impacts of Other Alternatives

The provision of bike lanes on Kawaihae Road and Mamalahoa Highway would not have a direct impact on parks, but would improve non-vehicular access to and from public parks. Moreover, bike lanes would be available for use by recreational riders. The mauka alternatives would provide a multi-use path, but would not have provided the same level of recreational benefit as the preferred alignment, because there would be no direct connection with existing and future parks and recreation areas.

5 LAND USE PLANS, POLICIES AND CONTROLS

5.1 FEDERAL

5.1.1 National Environmental Policy Act (NEPA)

The project may utilize federal funds and therefore, this Environmental Assessment addresses provisions of the National Environmental Policy Act (NEPA) of 1969 as amended, and the regulation of the Council on Environmental Quality (CEQ), 40 CFR parts 1500 through 1508.

5.1.2 U.S. Department of Transportation and Federal Highway Administration Policy Statement on Bicycle and Pedestrian Accommodations

The U.S. Department of Transportation (DOT) and the Federal Highway Administration (FHWA) issued the following Policy Statement on Bicycle and Pedestrian Accommodation (signed March 11, 2010 and announced March 15, 2010):

> *The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.*

The DOT calls for transportation agencies to plan, fund, and implement improvements to their walking and bicycling networks, including linkages to transit. In addition, DOT encourages transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate. Transportation programs and facilities should accommodate people of all ages and abilities, including people too young to drive, people who cannot drive, and people who choose not to drive.

Further information and discussion of this federal policy statement can be found at the DOT website, http://www.dot.gov/affairs/2010/bicycle-ped.html.

5.1.3 Section 10, Rivers and Harbors Act and Section 404 and 401, Clean Water Act

Department of the Army Permit

Section 10 of the Rivers and Harbors Act of 1899 requires regulated activities conducted below the "ordinary high water mark" (OHWM) of waters of the United States be approved and permitted by the U.S. Army Corps of Engineers (USACE). Waters of the U.S. encompass all surface waters such as navigable waters, their tributaries and streams, and wetland areas. Section 404 of the Clean Water Act requires a permit from the USACE for excavation and/or discharge of dredged or fill material into these waters.

The preferred trail alignment includes up to nine crossings over Waikōloa Stream and one crossing over Keanu'i'omanō Stream. A bridge or other crossing structure will be required for most of these areas, requiring a Department of the Army permit. Typical regulated activities include the placement or removal of structures, dredging, filling, or excavation below the OHWM. Other trail improvements such as placement of rocks or boulders in the stream may also need a permit.

During design of each trail segment, consultation with the Department of the Army Corps of Engineers will be conducted to confirm whether proposed stream crossing(s) or other in-water work is subject to regulation. If applicable, a Department of the Army permit/letter of permission will be obtained.

The first increment of the trail, which is currently under design, includes two stream crossings and two areas where retaining walls are designed to protect the path from stream erosion. It is anticipated that a DA Permit in accordance with Section 404 will be required for these areas. Coordination with the USACE will be conducted and a Section 404 permit obtained.

Section 401 Water Quality Certification

Section 401 of the Clean Water Act requires that a certification be obtained prior to any activity involving placement of discharge or fill into waters of the U.S. If a Section 404 permit is required from the USACE, a Section 401 Water Quality Certification (WQC) is required from the State of Hawai'i Department of Health, Clean Water Branch. The certification ensures that the project complies with State and federal water quality standards and other clean water requirements. Construction of bridges across Waikōloa Stream, including the stream crossings proposed in Increment 1, are expected to require a Department of Army Section 404 permit, and therefore a Section 401WQC from the State Department of Health.

5.1.4 Section 106, National Historic Preservation Act

Project Background

As discussed in Chapter 4, a number of archaeological and historic surveys have been completed within the APE. These include a literature review and field inspection of the entire alignment conducted in 2000, an inventory survey of the approximately one-mile Increment 1 conducted in 2009, and an updated literature review and field inspection in 2010.

The 2002 literature review and field inspection found that most of the project area has been so urbanized that no surface historic properties exist, except for concrete and boulder stream crossing structures. The western-most section of the project area contains agriculture and habitation sites from the pre- and post-contact eras. The study recommended that an inventory survey investigation of the final, staked alignment be conducted.

The 2009 archaeological inventory survey was limited to Increment 1, which is approximately 1.1 miles in length, and located between Kahawai Street and Lindsey Road. The inventory survey identified three historic properties consisting of four features. A collapsed ford and paved road were WWII-era constructions associated with Camp Tarawa. A remnant of a mid-19th century sugar cane irrigation ditch was also identified. Both the collapsed ford and irrigation ditch would not be adversely affected by Increment 1, but were recommended for preservation in the form of avoidance and protection. The County is working with the SHPD to develop a preservation plan. No further work was recommended for the other historic properties.

The 2010 updated literature review and field inspection confirmed the findings of the earlier 2002 study, and reiterated the earlier recommendation for an archaeological inventory survey as the various increments of the trail are implemented and a staked alignment is available. This will ensure that historic properties are accurately located in relation to the alignment. No further work is recommended for Increment 1, where an inventory survey has already been completed.

Section 106, National Historic Preservation Act Consultation

The NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. The Federal Highway Administration (FHWA), in cooperation with the County of Hawai‘i, has conducted consultation in accordance with Section 106 and the Advisory Council on Historic Preservation (ACHP) regulations for Protection of Historic Properties (36 CFR Part 800). The FHWA has determined that the undertaking will have “no adverse effect” on historic properties in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA). Correspondence documenting the Section 106 consultation is found in Appendix G.

The Area of Potential Effect (APE) for the undertaking includes the entire 4.8 mile trail corridor following Waikōloa Stream, plus the roads identified as signed shared roadways that will provide

access to the path. The APE also includes the area (west of the transfer station) that could include a future equestrian trail.

Consulted parties were informed about the archaeological and historic surveys that have been conducted to date, findings and recommendations. Consulted parties were asked for input on other historic or cultural resources that they were aware of, and the names of other organizations or individuals who should be consulted as part of the Section 106 process.

During the consultation process, only one letter was received, from the Office of Hawaiian Affairs (OHA), dated January 21, 2011. The OHA indicated that they believe the preliminary APE determination is appropriate at this time. The letter stated that OHA believes that unmarked burials may be encountered during undertaking activities along the length of the path and seeks assurance that applicable laws will be implemented should burials be inadvertently discovered. They indicated they had specific concerns relative to the western increment of the path, where the APE widens to accommodate the proposed trail, and cited archaeological investigations conducted by the Bishop Museum for the proposed Mudlane-Waimea-Kawaihae road corridor and more recently, a study for the Department of Hawaiian Home Land residential subdivision at Lālāmilo. The OHA also recommended consultation with several groups and individuals, and noted there are certain individuals who may be especially concerned with the area where the path is proposed to terminate at its western end.

In a letter dated May 18, 2011, the FHWA requested the State Historic Preservation Division's (SHPD) written concurrence with its Section 106 determination of "no adverse effect" on historic properties. The FHWA stated that if they did not hear from the SHPD within 30 days, they would proceed with this determination.

5.1.5 Section 7, Endangered Species Act

Project Background

As discussed in Chapter 4, the natural resources assessment surveys conducted in 2000 and updated in 2010 found no threatened or endangered flora, fauna or aquatic biota within the project area. The watershed within and around the project area has been heavily disturbed by grazing and development for over 150 years. Aquatic habitats and biota in this area remain relatively pristine, albeit intermittent (AECOS, Inc. 2010). Measures are recommended to minimize impacts to the stream channels because native, amphidromous stream animals, particularly the endemic goby, a species of concern, may use the stream channel to access the upper reaches of Waikōloa Stream. Best management practices during construction are recommended to prevent soil erosion, and work in and around the stream channel is recommended during drier months.

The AECOS, Inc. study noted that it is possible that small numbers of the endangered endemic Hawaiian Petrel and the threatened Newell's Shearwater overfly the project site between April

and December. Neither of these birds were detected during the field survey. If night time construction activity, or street or parking lot lighting is proposed, all lights should be shielded to prevent adverse impacts to these nocturnally flying birds.

In 2009, a species list was requested from the U.S. Fish and Wildlife Service (USFWS) for Increment 1 of the project, the segment between Lindsey Road and Kahawai Street. The USFWS provided a species list for Increment 1 in a letter dated August 28, 2009. The USFWS was contacted again in 2010 during the EA pre-assessment consultation, and responded in a letter dated June 18, 2010 (see Chapter 9). In both letters, the USFWS noted that the federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) and the Blackburn's sphinx moth (*Manduca blackburni*) may occur in the project vicinity. If vegetation clearing is proposed during the Hawaiian hoary bat pupping season (July through September), biological surveys were recommended to determine if bats are present. Neither the Blackburn's sphinx moth nor its preferred host plants, the non-native tree tobacco (*Nicotiana glauca*), were identified during the AECOS, Inc. field surveys.

Section 7, Endangered Species Act Consultation

Section 7 of the Endangered Species Act of 1973 (ESA) requires federal agencies to ensure that that any action they authorize, fund, or carry out is "not likely to adversely affect" (NLAA) a listed species or designated critical habitat. The FHWA has determined that the proposed project is not likely to adversely affect any botanical, avian, or mammalian species currently listed or proposed for listing under either the federal or State of Hawai'i endangered species statutes. In addition, there is no federally designated critical habitat within the project area.

The USFWS concurred with this NLAA determination in a letter dated December 20, 2010 (Appendix D). Based on the biological surveys for this project which found no likely suitable habitat for Blackburn's sphinx moth larvae, the USFWS concurred with the determination that the project may affect, but is not likely to adversely affect, the Blackburn's sphinx moth.

The USFWS noted that clearing vegetation and fencing are project activities with a potential adverse impact on the Hawaiian hoary bat. Potential adverse effects can be avoided or minimized by not clearing vegetation between May 15 and August 15, which is the pupping season when bats are at greatest risk. Given this avoidance measure, the USFWS concurs with the determination that the project may affect, but is not likely to adversely affect the Hawaiian hoary bat.

The USFWS indicated that unless the project description changes or new information reveals that the project may affected listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the project, no further action pursuant to Section 7 of the ESA is necessary.

5.1.6 E.O. 12898, Environmental Justice

Under Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, (1994):

> ***"Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."***

NEPA procedures require that each federal agency analyze the environmental effects, including human health, economic and social effects, of federal actions, including effects on minority and low income communities. Agencies are required to identify potential effects and mitigation measures in consultation with affected communities.



Multi-use path will pass between the Kanu o ka ʻĀina PCS (left) and the Waimea Hale apartments (right).

Within the project corridor, there are low-income and minority populations residing in the County's Waimea Hale and State's Noelani I and II housing projects on Opelo Road. A temporary campus of the Kanu o ka ʻĀina Public Charter School (PCS) is located along the path near Opelo Road. The school is a Hawaiian-focused, bi-lingual public charter school and a large proportion of its students are native Hawaiian. In the area near Opelo Road, the proposed path will pass directly between the Waimea Hale building's parking lot and the Kanu o ka ʻĀina campus. The school has plans to relocate to a permanent campus in Waimea within the next two years. However, there is a possibility that the school will still be there when trail construction occurs. No permanent school buildings will be displaced, but there will be noise and dust during construction.

The path will also pass directly by the DHHL's proposed Lālāmilo subdivision, located west of the County refuse transfer station. This Hawaiian homestead area is on the north side of

Waikōloa Stream, and the path will be on the south side. Access across the stream will need to be provided by the DHHL when their project is built.

A public meeting on the project was held on March 24, 2010 at the Waimea Middle School to provide information about the project and the upcoming Environmental Assessment. Notice of the meeting was sent to County, State and federal agencies, including the DHHL and the State public housing authority. Mailed notices were sent to community organizations, large landowners, churches, and various print and on-line media, and notice of the meeting was published in the West Hawai‘i Today newspaper. WTG Committee members assisted the County by posting notices in town and passing our flyers to residents, who were told to inform their friends and neighbors. The meeting was attended by over 50 individuals from the community.

During the EA early consultation period, government agencies, identified stakeholders, and all individuals who had attended the March 24, 2010 public meeting were again notified. The project has received wide publicity over the years, and the proposed path along the stream has been endorsed in a number of public planning documents. The DHHL, in an early consultation letter, indicated that it was excited that this trail system and greenways project was becoming a reality, as it would provide recreational opportunities and commuting alternatives for future DHHL lessees. They did indicate some concern with the potential for crime and loitering near their residential lots, and requested that the trail be properly managed and maintained.

Overall, the trail will not have significant or disproportionate health or environmental effects on these minority and/or low income populations. The availability of an alternative transportation route and recreational amenity is a benefit to all these groups. Given that native Hawaiians are at a disproportionately high risk for health-related problems including obesity, diabetes and coronary heart disease, an accessible path that encourages walking, bicycling, and a healthy lifestyle is a positive benefit.

The construction period noise and dust will affect the nearby public housing residents and possibly the Kanu o ka ‘Āina PCS, if the school has not yet relocated. The noise and dust will be an inconvenience, but will not pose a health hazard and will be temporary and short term. No construction will occur at night or on weekends when most residents are at home. The DHHL Lālāmilo subdivision is not yet built, and it is not known when the areas closest to the proposed trail will be constructed. Further coordination with DHHL should be conducted as this section of the trail is planned in order to minimize potential disruption to any nearby residents.

5.2 STATE OF HAWAI'I

5.2.1 Hawai'i State Plan

The 1996 Hawai'i State Plan (Chapter 226, HRS) is the umbrella document in the statewide planning system. It serves as a written guide for the future long-range development of the state by describing a desired future for the residents of Hawai'i and providing a set of goals, objectives, and policies that are intended to shape the general direction of public and private development.

Transportation objectives established in the Hawai'i State Plan include the following. They are consistent with and would be implemented through the proposed action:

Objective:

Section 226-17(a)(1) An integrated multi-modal transportation system that services statewide needs and promote the efficient, economic, safe, and convenient movement of people and goods

Policies:

Section 226-17(b)(1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development

Section 226-17(b)(11) Encourage safe and convenient use of low-cost, energy-efficient, nonpolluting means of transportation

The proposed project is also in conformance with the State Plan objectives and policies for socio-cultural advancement--leisure.

Objective:

Section 226-23(a) Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic and recreational needs for present and future generations.

Policies:

Section 226-23(b)(2) Provide a wide range of activities and facilities to fulfill the cultural, artistic and recreational needs of all diverse and special groups effectively and efficiently

Section 226-23(b)(3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance

Section 226-23(b)(4) Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved

Section 226-23(b)(5) Ensure opportunities for everyone to use and enjoy Hawai'i's recreational resources

Section 226-23(b)(7) Provide adequate and accessible physical fitness programs to promote the physical and mental well-being of Hawai'i's people

Section 226-23(b)(10) Assure adequate access to significant natural and cultural resources in public ownership

5.2.2 State Land Use Classification

The State Land Use Commission, pursuant to Chapter 205 and 205A, HRS and Chapter 15-15, Hawai'i Administrative Rules, is empowered to classify all lands in the State into one of four land use districts: urban, rural, agricultural and conservation. As shown in Figure 10, the majority of the trail is within the State Agricultural District. Limited sections on the eastern end within the core of Waimea town, are in the Urban District.

The proposed trail is a type of open area recreational use that is generally permitted within the Agricultural District, as delineated in Chapter 205, HRS.

5.2.3 Bike Plan Hawai'i

Bike Plan Hawai'i is the statewide bicycle master plan prepared periodically by the State Department of Transportation. The latest update was completed in September 2003. The proposed project is identified in Bike Plan Hawai'i as a "Priority Level I" project, recommended for completion within ten years. The project is described in Bike Plan Hawai'i (p. 5-20) as follows:

> *One of the proposals with broad appeal because of its separation from busy highways and consideration of children's needs is Waimea Greenways and Trails. This decade-long initiative is now in the design stage with funding though the TEA-21 Transportation Enhancement program. The long-term plan is for a network of paths that provide routes for non-motorized circulation within and adjacent to the town. The initial phase of the project is focusing on an alignment close to Waikōloa Stream that will provide "back door" access to schools and businesses along Kawaihae Rod and Mamalahoa Highway. Another segment is associated with development of the Ulu Laau Nature Park.*

5.2.4 State Comprehensive Outdoor Recreation Plan

The Department of Land and Natural Resources updates the State Comprehensive Outdoor Recreation Plan (SCORP) as part of a requirement to qualify for federal grants of outdoor recreation project. The most recent update was completed in April 2009. SCORP provides technical guidance to various government agencies and private entities that plan, develop, and manage outdoor recreation resources in the state. The planning process involves focus group meetings with representatives of various outdoor recreation users groups and a series of public information meetings, and resident surveys.

The project is consistent with the latest SCORP (April 2009), which included the following statements supporting the need for bicycling and pedestrian paths (pp. 111-112):

> *Bicycling, both on-road and off-road, has increased in popularity as a means of alternative transportation, and for fitness and recreation. Increased interest in bicycling and continued interest in jogging has raised awareness about the lack or shortage of bike- and pedestrian-ways in many communities…SCORP participants expressed a need for the establishment of more safe and continuous pathways for biking, walking, and jogging that connect communities. Paths set apart from roadways provide safe places for children to walk, run, skate, ride their bikes, and play. Paths also significantly reduce pedestrian and bicycle conflicts with motor vehicles.*

The proposed project directly addresses the need for safe, off-road paths for bicycling and walking which connect communities, as envisioned by the SCORP.

5.2.5 Act 233, State Greenways and Trail System

House Bill 1405 was signed into law by Governor Neil Abercrombie on July 12, 2011 as Act 233, and requires the State Office of Planning to establish a statewide system of greenways, open spaces and trails, as the first step in implementing smart growth in the islands.

The bill requires the following:

- Coordination with the Department of Transportation and the Department of Land and Natural Resources in its efforts to develop a plan for a statewide system of greenways and trails.
- Seeking input from the counties regarding: (a) The establishment of a system of greenways and trails for each county; (b) The areas in each county that may be appropriate to designate as a greenway or trail; and (c) The various impediments to establishing a system of greenways and trails in each county.
- Investigation and exploration of other jurisdictions that have established and implemented a system of greenways and trails.

Kamuela View Estates Subdivision
W. Ohina Pl
E. Ohina Pl
Kawaihae Rd
Keanuiomano Stream
Alaneo Street
Alaneo Pl
Kumulani
Akulani St
Kawaihae Rd
Alaneo Street
Waikoloa Stream
Waikoloa Stream
200'
Area for Future Equestrian Trail
S Kohala Distribution Rd
County Refuse Transfer Station
Kawaihae Road
Sandalwood Subdivision
Ko Uka Place
Ko Uka Way
Ko Uka Court
Waikoloa Stream
Kahaiwai Street
Puu Opelu Road
Puu Opelu Pl
Opelo Rd
Kamala Road
Lalamilo Farm Road
Lalamilo Research Station
Church Row
Kapolani Road
Lindsey Rd
Highway
Mamalahoa
A
U
C

LEGEND

- A — Agriculture District
- U — Urban District
- C — Conservation District

LEGEND

- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200
SCALE IN FEET

Figure 10
STATE LAND USE
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

- Investigation and consideration, in consultation with the DOT, the use of transportation enhancement funds to establish and implement a statewide system of greenways and trails.
- Establishing a timeline for implementing a statewide system of greenways and trails.

The Office of Planning is required to provide a written report to the State Legislature documenting the above findings and recommendations, including any proposed legislation no later than 20 days prior to the convening of the next Legislative session, which is December 29, 2011.

The Office of Planning is currently preparing an inventory of projects, plans and activities related to greenways and trails in the State, with the assistance of community stakeholders. The Office of Planning is expected to complete its report to the Legislature as required by the end of 2011.

5.3 COUNTY OF HAWAI'I

5.3.1 County General Plan

The Hawai'i County General Plan, February 2005, is a long range comprehensive policy document whose purpose is to guide the future development of the County. The General Plan is organized into elements ranging from Economics to Natural Resources to Land Uses. Recreation is one element of the General Plan, addressed in Chapter 12. A profile and recommended courses of action are discussed for the various districts on the island.

Two specific recommendations for recreation in South Kohala (Section 12.5.6.2) directly support the proposed project:

> Course of Action (j): *Develop trail systems linking residential areas to Waimea's urban center.*
>
> Course of Action (l): *Encourage development of Waimea Trails & Greenways and Waimea Nature Park (Ulu Laau).*

Land Use Pattern Allocation Guide (LUPAG)

The General Plan's Land Use Pattern Allocation Guide (LUPAG) controls long-term land use patterns in the County. As shown in Figure 11, the areas along the proposed trail route are designated Low Density Urban (ldu), Medium Density Urban (mdu), Urban Expansion (ue), and Important Agricultural Lands (ial).

5.3.2 South Kohala Community Development Plan

The South Kohala Community Development Plan (SKCDP) (2008) is intended to be the forum for translating South Kohala's community input into **Policies** and **Action Plans** that shape the future land use of the district and translate broad General Plan statements into specific actions.

The County Planning Department, in an early consultation letter dated June 14, 2020 (see Chapter 9), stated that, "*The South Kohala Community Development Plan (SKCDP) strongly advocates for the development of the Ke Ala Kahawai O Waimea as well as supporting the shared path concept that includes considering equestrian use along the path where appropriate".*

The following discussion highlights the sections of the SKCDP, including the Waimea Town Plan, that are directly in support of the current project.

District-Wide Policies

Traffic and transportation have been identified as a major district-wide priority issue for South Kohala. The project is consistent with the following district-wide General Policy and sub-policies (p. 49):

General Policy 2: Provide for the Transportation and Circulation Needs of the South Kohala Community and for Commuters to/from South Kohala.

> **2.2 Establish bicycle, pedestrian, and equestrian travel ways to link up the communities within the District…while also establishing alternative travel ways within the individual communities.** Also, establish public trails to various cultural locations and other sites of interest, where a significant level of visitation is appropriate and does not pose a threat to the resource, as identified by the community.

Waimea Town Plan

The Waimea Town Plan is one of four specific area plans included in the SKCDP, and is presented in Chapter 4 of the document. The Waimea Town Plan includes many strategies and an action program directly in support of the Waimea Trails and Greenways project, and specifically, the preferred alignment following Waikōloa Stream (Figure 12).

The "Waimea Trails and Greenways" is listed on Table 4.1, Current and Future Development (p. 58) and described as follows in the Waimea Town Plan (p. 62):

> *Waimea Tails and Greenways creates a corridor through Waimea town along Waikōloa Stream consisting of trails and greenways. The project is intended to encourage alternative forms of circulation other than by car for trips within Waimea Town by providing accessible pathways to connect residential areas with schools and commercial*

areas. The trail will extend along Waikōloa Stream from the South Kohala View Estates on the west and travel northeast, through the Waimea Nature Park to the State land north of Church Row. The project will also consist of a 17-acre trail head, picnic area, and parking area located on the State land near the Waimea Solid Waste Transfer Station. The first phase of the project, in the vicinity of the Waimea Nature Park, has been completed and is open to the public. The project will be federally funded.

The Waimea Town Plan includes five overall policies and strategies for land use in Waimea Town, addressing preserving Waimea's sense of place, responsible growth, environmental stewardship, affordable housing, and circulation and transportation improvements. **Policy 5, Timely Implementation of Needed Transportation and Circulation Improvements**, includes several strategies that directly support the proposed project, as well as the importance of equestrian trails. The strategy and applicable excerpts from the Waimea Town Plan are listed below:

Strategy 5.1, Plan, design and construct walkways and bikeways within the existing rights of way of the main Waimea roads: Kawaihae Road and Mamalahoa Highway
Except for sidewalks for a few blocks within the center of Waimea Town, there are no walkways or bikeways along the major roads that could be used by pedestrians and bicyclists, including children walking to and from school. Constructing safe bikeways and walkways along Mamalahoa Highway and Kawaihae Road would provide people with alternatives to travel by car, and would thus potentially alleviate to some degree the peak hour traffic jams that now characterize Waimea.

There is a need for both "higher speed" bike lanes for the "expert" recreational or commuter bicyclists, as well as walkway/bikeway shared paths that are separated from the roadway, and that are safe for children and elders. The Waimea Town Plan section of the South Kohala CDP provides a detailed ***Action Program*** *for the planning, design, and construction of these walkways and bikeways.* (p. 73).

Strategy 5.2, Support the implementation of the Waimea Trails and Greenways project
Plans for the Waimea Trails and Greenways project have been developed over a period of some 13 years. The first phase of the project, about ½ [sic] *miles in length, from Lindsey Road to the beginning of the Sandalwood subdivision, has recently been completed. This multi-purpose path is planned to eventually extend to the vicinity of "Church Row." This stream-side trail will be an important complement to the planned walkway/bikeway system that the CDP proposes along the main roadways. It is recommended that the Waimea Trails and Greenways project also be considered for equestrian use. The County should continue to support this important community project through funding and technical assistance* (p. 73).

Strategy 5.3, Plan, design and construct a system of equestrian trails for Waimea
There has been considerable discussion in recent years about the need and desirability of equestrian trails in the Waimea area…Community leaders need to work with Parker Ranch and other landowners to develop a system of equestrian trails that will be compatible with existing and future residential, commercial and institutional land uses…The establishment of safe equestrian trails in and around Waimea Town is an important program that can connect Waimea present and future to its special paniolo past (p. 73).

5.3.3 Waimea Traffic Circulation Study

The Waimea Traffic Circulation Study (2007) found that much of the current traffic congestion is caused by trips either within Waimea or originating or terminating within Waimea. To address this traffic, the study recommended improving internal connector roads, enhancing intra-Waimea transit, and improving pedestrian and bicycle paths within Waimea. In addition to roadway improvements, the study notes that *a "solid system that provides bicyclists and pedestrians with mobility within Waimea would be desirable"* (p. 53).

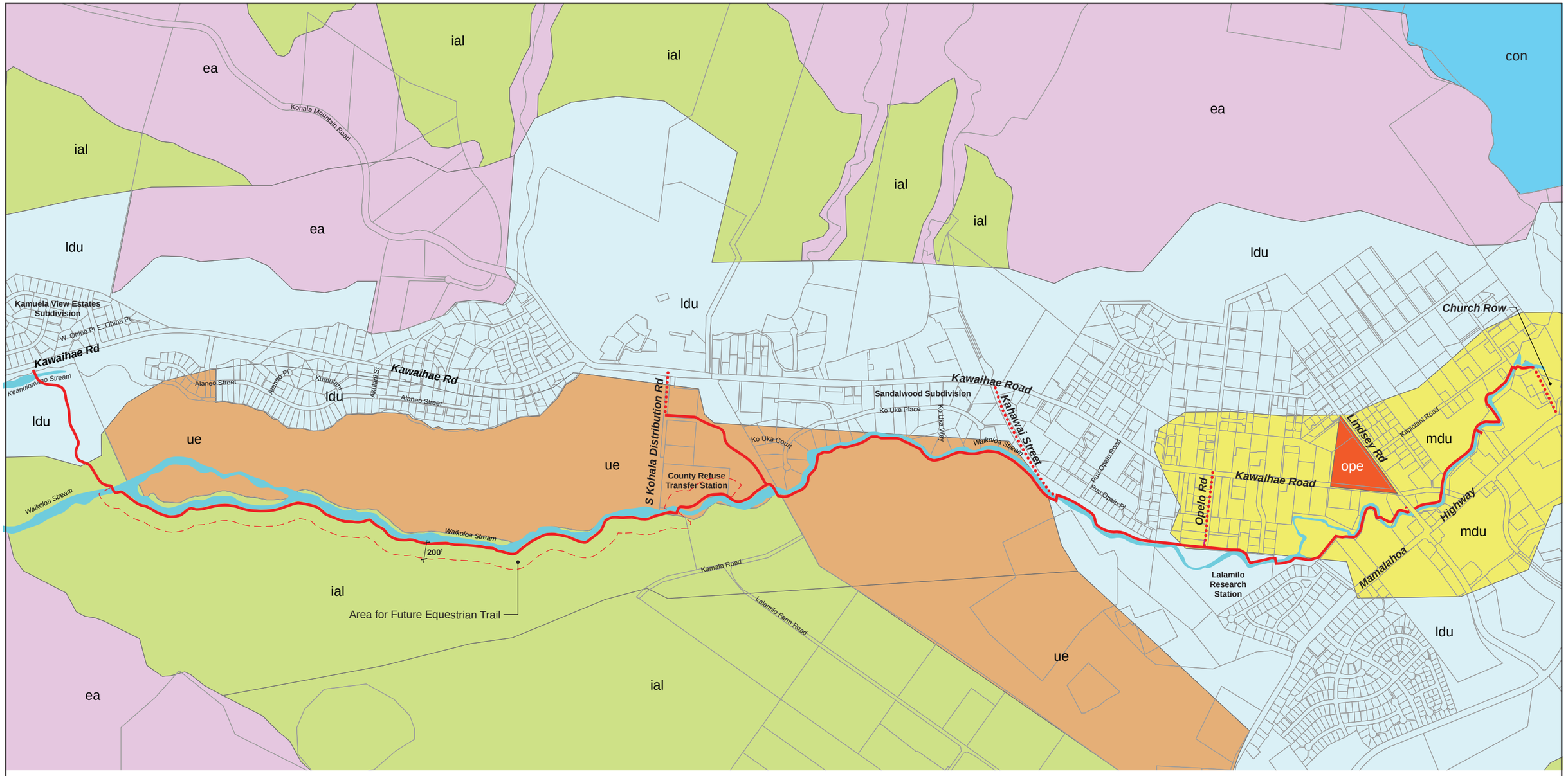
A potential bicycle and pedestrian network was illustrated in the Waimea Traffic Circulation Plan, and included *Ke Ala Kahawai o Waimea*. The report notes that the circulation plan *"…utilizes existing and proposed roadways as the backbone of a bicycle-pedestrian network and augments this backbone through the use of the Waimea Trails and Greenways project paths."*

The proposed *Ke Ala Kahawai O Waimea* is identified as an important component of an overall strategy to alleviate traffic congestion and at the same time preserve Waimea's unique and historical character as it grows and transitions into a larger community.

5.3.4 County Zoning

The Hawai'i County Code, Chapter 25, Zoning Code, is its zoning ordinance, which regulates land use in a manner that will encourage orderly development in accordance with adopted land use policies.

The majority of the 4.8–mile meandering corridor passes through land that is zoned Agriculture (A-5a and A-1a). On its eastern end, closer to the center of town, the trail passes through areas zoned Commercial (CV-7.5). Very short segments of the trail pass through areas zoned Residential (RS-10) and Open. The trail is considered a public use and structure, and therefore is an allowable use in the respective zoning districts. Figure 13 shows the zoning designations along the trail corridor. No zoning change is required for implementation of the path.



LEGEND

con	Conservation	ldu	Low Density Urban	ue	Urban Expansion
ea	Extensive Agriculture	ope	Open Area		
ial	Important Agriculture Lands	mdu	Medium Density Urban		

LEGEND

- Shared Use Path
- Signed Shared Roadway

Source: Hawaii County General Plan, 2005

NORTH

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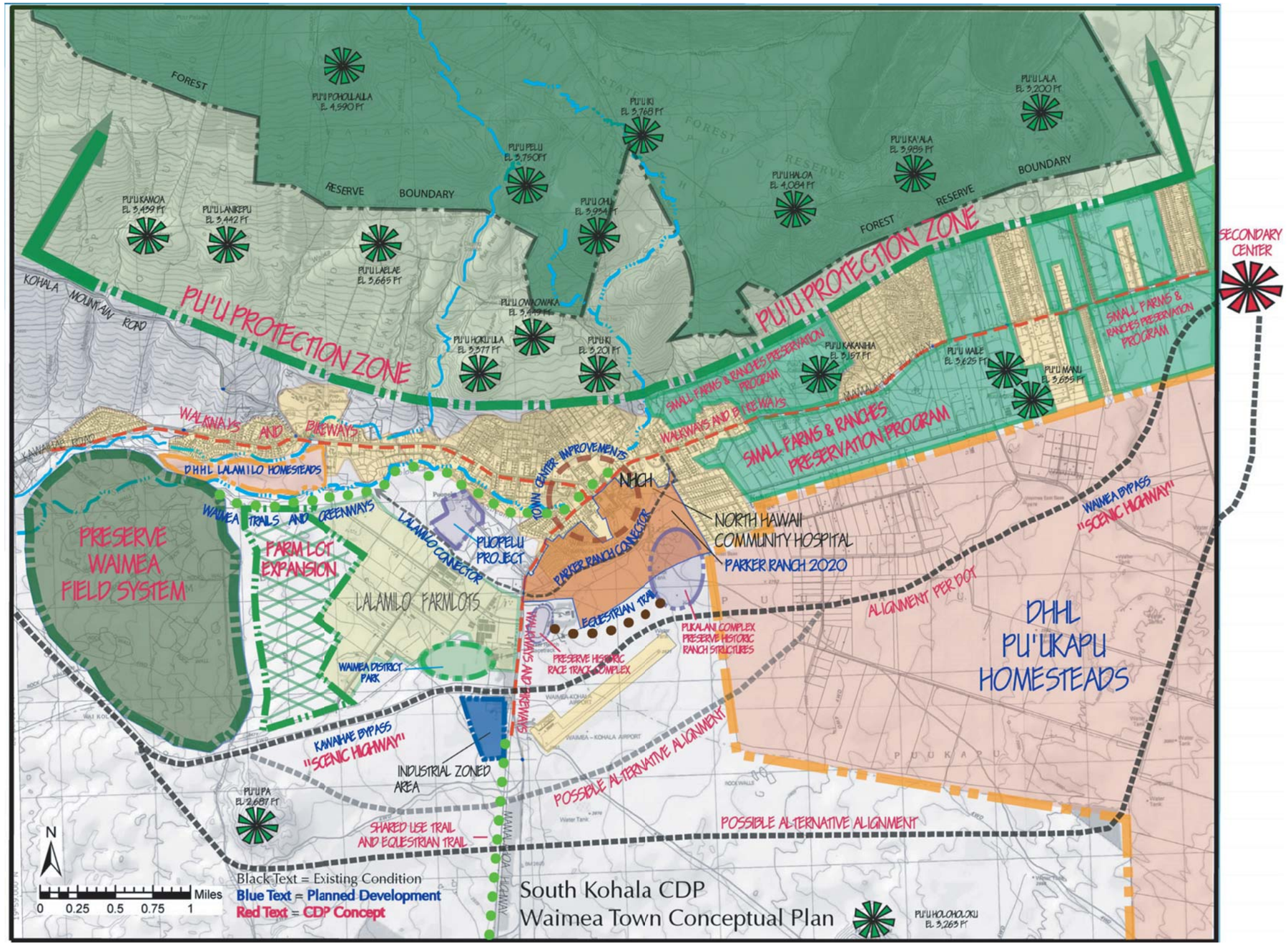
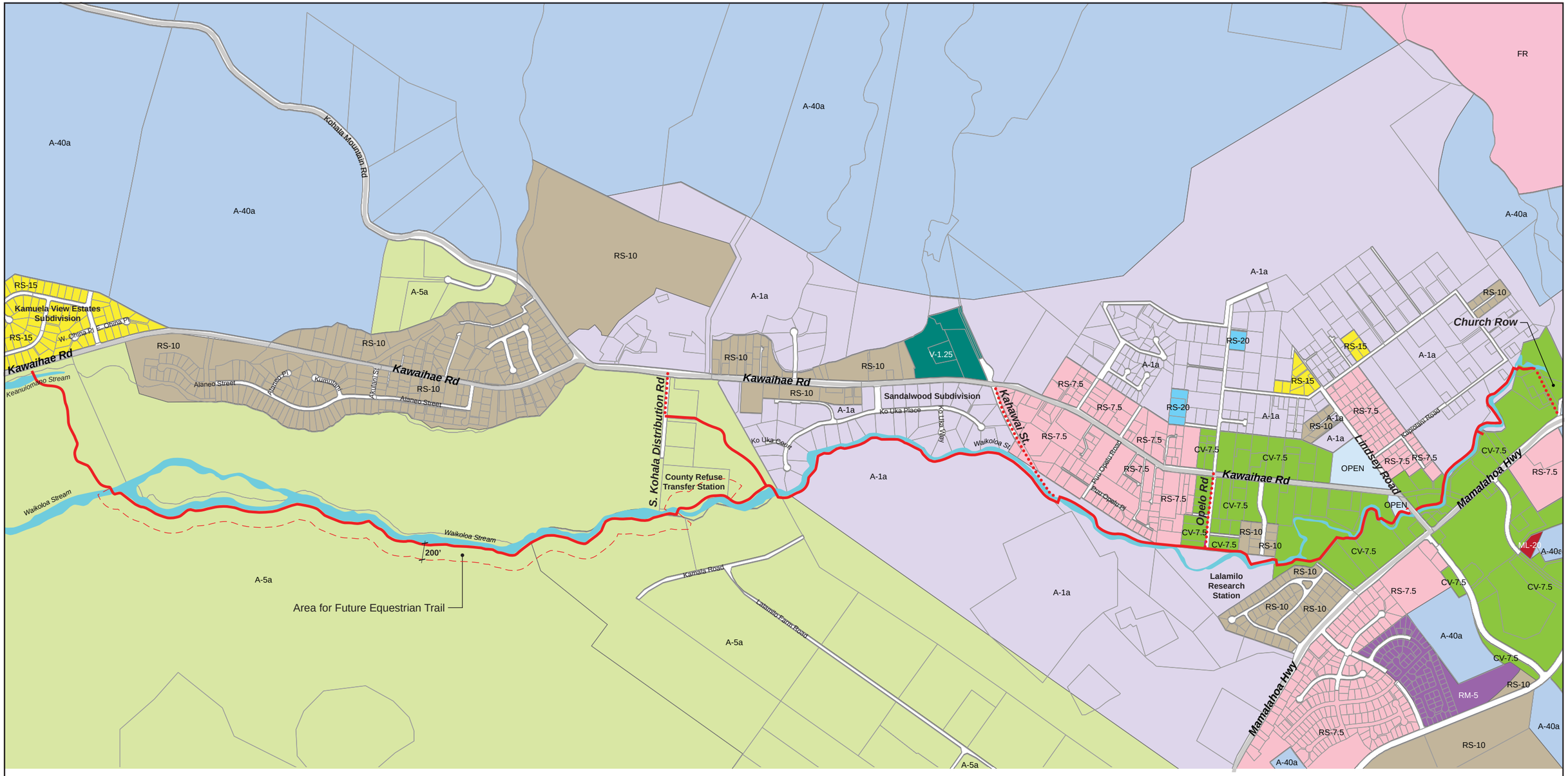
SCALE IN FEET

Figure 11
COUNTY GENERAL PLAN
LAND USE PATTERN ALLOCATION GUIDE (LUPAG)
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment



Source: South Kohala Community Development Plan, Final, November 2008.

Figure 12
SOUTH KOHALA CDP, WAIMEA TOWN CONCEPTUAL PLAN
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment



LEGEND

CV-7.5	Village Commercial (minimum 7,500 sq. ft.)
A-1a	Agricultural (min. building site 1 ac.)
A-5a	Agricultural (min. building site 5 ac.)
RS-10	Single-Family Residential District (min. building site 10,000 sq. ft.)

LEGEND

- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200
SCALE IN FEET

Figure 13
ZONING
Ke Ala Kahawai o Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

5.4 OTHER CONSIDERATIONS

5.4.1 Unavoidable Adverse Effects

During construction of the various trail segments, there will be noise and dust impacts to adjacent land users. These temporary impacts are unavoidable. However, all these impacts can be mitigated to an extent that they would not be significant. Best management practices will mitigate dust and control constructed related runoff. Noisy activities will be limited to specific times, and comply with all State, County and federal regulations.

5.4.2 Energy Requirements and Conservation Potential of Various Alternatives and Mitigation Measures

Energy consumption will be required for construction activities, including grading and site work, construction of the path and bridges to cross the stream. However, a multi-use path that provides a viable, non-vehicular transportation alternative has enormous conservation potential. In the long term, the path will reduce the number of short-distance vehicle trips that are required within Waimea, possibly reducing traffic congestion and the total use of fossil fuels.

The creation of a dedicated greenway also conserves open space for public enjoyment for future generations.

5.4.3 Relationship of Short-Term uses and Long-Term Productivity

The short-term improvements, i.e., construction of the stream trail, will convert natural, undeveloped land to a transportation and recreation use. In the long term, the path will be a positive beneficial and productive use of the land because of its extensive socio-economic benefits. The project will not degrade the environment, and in fact will have positive environmental effects by protecting and preserving riparian areas, and promoting appreciation for the natural environment. By providing a non-vehicular transportation alternative, the trail has the potential to reduce the use of fossil fuels associated with short-distance car trips. Long-term productivity and public health will also be enhanced because the trail will encourage walking, bicycling and an active, outdoor lifestyle.

5.4.4 Irretrievable and Irreversible Resource Commitments

Resources that are committed irreversibly or irretrievably are those that cannot be recovered if the project is implemented. The proposed project will involve two types of resources: 1) general industrial resources including capital, labor, fuels and construction equipment; and 2) project-specific resources such as natural resources and land at the affected site. General industrial resources will be spent during project construction and for long-term operation and maintenance of the trail. Currently undeveloped land which is unused or used as pasture or open space, will be committed for the multi-use trail.

6 DETERMINATION

Based on the analysis conducted in this document and the comments received during the public comment period, the proposed project will not have significant, social, economic, cultural or environmental impacts. Consequently, the County of Hawai‘i Department of Parks and Recreation is making a finding of no significant impact (FONSI) in accordance with Chapter 343, Hawai‘i Revised Statutes, and pursuant to the provisions of Subchapter 6 of the Chapter 200, Title 11, Hawai‘i Administrative Rules of the Department of Health.

The Federal Highway Administration will issue a separate FONSI in accordance with the National Environmental Policy Act (NEPA) after the Final EA period of availability.

7 FINDINGS AND REASONS SUPPORTING THE DETERMINATION

The potential effects of the proposed project were evaluated based on the significance criteria in the Hawai‘i Administrative Rules, Section 11-200-12. Based on this evaluation, this EA has found that the potential for impacts associated with the proposed action will not be significant. Potential negative environmental impacts will be temporary and/or can be sufficiently mitigated to reduce their impact.

The following is a summary the State of Hawai‘i significance criteria for evaluating potential environmental effects of the proposed action.

SIGNIFICANCE CRITERIA

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources;

The proposed project will not adversely impact natural or cultural resources. No threatened or endangered species or their habitats were identified within the project area. It is possible that endangered endemic seabirds overfly the area between April and December. No path lighting is proposed, although it is possible that future parking areas will include lighting. If future lighting is proposed, lights will be shielded to avoid adverse impact to nocturnally flying birds.

Construction of Increment 1 may result in the removal of approximately 357 trees which are either within the trail corridor or pose a potential hazard to trail users. These trees are all non-native species and were determined to have no particular botanical value or statutory protection. Trees that are removed will be replaced with native vegetation.

The 4.8-mile path will have up to ten stream crossings over Waikōloa Stream, and one crossing over Keanu‘i‘omanō Stream. Bridges or culverts will be constructed at the crossings. Construction within these stream channels will be minimized in order to minimize potential impacts to the native, endemic goby or *‘o‘opu ‘alamo‘o*, which may migrate to the stream’s upper reaches. Culverts will either have unlined bottom surfaces or a surface that is completely flush with the natural streambed to avoid blocking upstream migrations. During construction, efforts will be made to minimize impact on water quality through use of best management practices.

The project area has been the subject of several archaeological studies, including an inventory survey for the first trail increment, currently being planned. The County is developing a preservation plan for a WWII-era remnant property in conjunction with the SHPD, as recommended by the survey and approved by the SHPD. Inventory surveys for subsequent increments of the path will be completed as they are planned and a staked alignment is available.

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

The project will not curtail the range of beneficial uses of the environment. The project corridor is currently undeveloped and much of it is overgrown and not easily accessible. The multi-use path will provide an accessible transportation alternative, create new opportunities for recreation and fitness activities, and enhance access to the natural environment. The creation of a public greenway corridor will enhance the range of beneficial uses of the environment.

3. Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed project is consistent with the environmental policies established in Chapter 344, HRS, which seeks to "*encourage productive and enjoyable harmony between people and their environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological system and natural resources important to the people of Hawai'i."* (HRS §344-1)

The proposed path is consistent with the Chapter 344 policy of conserving natural resources by… *"Establishing communities which provide a sense of identify, wise use of land, efficient transportation, and aesthetic and social satisfaction in harmony with the natural environment which is uniquely Hawaiian…"*

The master plan recommendations are consistent with and promote the following Chapter 344 guidelines:

Parks, Recreation and Open Space

(A) Establish, preserve and maintain scenic, historic, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses.

(C) Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people.

Transportation

(A) Encourage transportation systems in harmony with the lifestyle of the people and environment of the State.

(B) Adopt guidelines to alleviate environmental degradation caused by motor vehicles.

Community Life and Housing

(A) Foster lifestyles compatible with the environment; preserve the variety of lifestyles traditional to Hawai'i through the design and maintenance of neighborhoods which reflect the culture and mores of the community.

(B) Develop communities which provide a sense of identify and social satisfaction in harmony with the environment and provide internal opportunities for shopping, employment, education and recreation.
(C) Encourage the reduction of environmental pollution which may degrade a community.
(D) Recognize community appearances as major economic and aesthetic assets of the counties and the State; encourage green belts, plantings and landscape plans and designs in urban areas; and preserve and promote mountain-to-ocean vistas.

Citizen participation.

(C) Provide for expanding citizen participation in the decision making process so it continually embraces more citizens and more issues.

4. Substantially affects the economic or social welfare of the community or state;

The proposed project will provide a needed transportation and recreation facility and is expected to have a very positive effect on the economic and social welfare of the Waimea community. Short-term negative impacts to immediately adjacent areas are associated with construction noise and dust. These impacts will be temporary. After the project is completed, some residents or businesses along designated access roads may experience inconveniences because of new activities or street patterns in their neighborhoods. These impacts can be mitigated by prohibiting on-street parking or through improvements that keep trail users off private property. Other residents and businesses may find that the path has created new opportunities for outdoor enjoyment or business growth.

The project will provide school children with the option to walk or bike to school. The path will provide residents with a transportation alternative that could reduce dependence on the automobile. It will also provide opportunities for exercise, recreation and social interaction with neighbors. This will have a long-term positive impact on the community.

Concerns about negative effects on property values or an increase in crime are not supported by the evidence. Numerous studies of trails throughout the country show that there is more likely to be an increase or no effect on adjacent property values. No increase in crime is anticipated as a result of the trail. With proper planning and maintenance, the trail is expected to be an economic and social asset to the community.

5. Substantially affects public health;

The proposed path is anticipated to have a beneficial effect on public health. Numerous studies have focused attention on the growing problem of obesity and a sedentary lifestyle on public health. Many studies have also shown the importance of spending time outdoors in the natural environment on mental health, for both children and adults. The path will provide a free and easily accessible resource where all residents can walk, bike and enjoy the natural environment,

contributing greatly to physical, emotional and spiritual well being. Long-term, indirect benefits could include reduced medical and health care costs for individuals in the community.

Construction-related impact to air quality and noise will be temporary, and far outweighed by the project's long-term health benefits.

6. Involves secondary impacts such as population changes or effects on public facilities;

The project will not cause secondary impacts such as population changes or effects on public facilities. Census data shows that the population in Waimea has grown substantially over the past 30 years, and is expected to continue to grow, with or without the project. The creation of the trail represents a positive response to this population growth, as it will provide a transportation alternative that could reduce existing traffic congestion. The proposed multi-use path will be an amenity for the community that will enhance the quality of life and make the living environment more attractive. There may be some opportunities for businesses, particularly on the eastern end of the corridor, to tap into the path's market potential, as has occurred in other places. However, the project itself will not induce population changes or business growth.

The path will connect various public facilities such as parks, schools, library, commercial areas and employment centers. By providing residents with more convenient access to these facilities and enabling people to safely reach these destinations by alternative means, there may be increased use of these facilities. The relationship between the path and public facilities is viewed as having positive synergy.

7. Involves a substantial degradation of environmental quality;

The path will not substantially degrade environmental quality. By design and function, the path is intended to provide access while minimizing harm to the surrounding environment. The bike/pedestrian corridor will define a travel corridor that helps to contain and manage human impacts in the surrounding area. Construction-period impacts related to noise and air quality will be temporary and short-term, and will be minimized or mitigated to avoid environmental degradation. Best management practices will be employed during construction to prevent soil erosion.

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

The proposed project does not have a cumulative effect on the environment or involve a commitment for larger action. However, the project is directly supported in the South Kohala CDP and the Waimea Traffic Circulation Study, and as such, is part of a larger, long-term strategy for reducing traffic congestion and improving the quality of life in the region. These strategies have been developed and endorsed by the County government and the citizens of the South Kohala region.

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

No rare, threatened or endangered species or their habitats were identified in the project corridor. The construction and use of the path will not affect any rare, threatened or endangered species.

No lights are proposed along the path, but there may be lighting at two County parks proposed along the route. Trail parking will be located at these parks. If there is lighting at these parks/parking areas, it will comply with County lighting regulations intended to minimize adverse impact to seabirds and nocturnal migrant species, including the Newell's shearwater.

10. Detrimentally affects air or water quality or ambient noise levels;

The project will result in short-term construction period increases in fugitive dust and noise. Dust and noise impacts are unavoidable, and will be mitigated by compliance with applicable State and County regulations. Once the path is completed, there will be some increase in noise compared to existing conditions, due to the increased number of people in the area. However, noise levels will not be significant, as the path is separated from most existing and proposed residential areas by the stream. No motorized vehicles will be allowed, with the exception of mobility devices, maintenance vehicles, and emergency vehicles as needed. Moreover, bicyclists and pedestrians on the path will typically be "moving along" the trail rather than congregating at any one area.

There will be construction within the stream areas where bridges or culverts will be built. Best management practices will be employed during in-stream construction to minimize water quality impacts.

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

The project will not adversely any environmentally sensitive areas. Some areas near the stream are designated flood plains. The main path will remain outside the designated flood way area. Where the path is located within a flood prone area and at proposed stream crossings, the structures will be designed to avoid a net rise in flood elevation. The requirements of Hawai'i County Code Chapter27, Flood Plain Management will be followed, to ensure that there is no rise in base flood elevation and adverse impact to the flood plain due to these improvements.

12. Substantially affects scenic vistas and viewplanes identified in county or state plans or studies; or

The project will not impact scenic vistas or viewplanes identified in county or state plans or studies. The project will not adversely impact public view corridors. Rather, it will reestablish a public view corridor that was lost by the development of the Sandalwood subdivision, and create a scenic vista for people traveling on foot or by bicycle. The path will be low scale and does not

include construction of large structures. Some individuals living along the stream may perceive the presence of the path to be an unwanted intrusion into their private view plane. This is an unavoidable trade-off, and the County has determined that the advantage of enhancing public access to scenic areas outweighs an individual's right to exclusive enjoyment of that same view.

13. Requires substantial energy consumption.

Although lighting is not proposed along the path, some areas, such as the future parks or parking areas, may be lighted for certain periods of time. Energy consumption will be minimal.

Fuel will be consumed by construction vehicles and equipment, but this is not expected to be extraordinary. To the extent that trips taken on the path replace travel by motor vehicles, the project will help to reduce the consumption of non-renewable, fossil fuel.

CONCLUSION

In accordance with the provisions set forth in Chapter 343 HRS and the significance criteria in Section 11-200-12 of Title 11, Chapter 200, Hawai'i Administrative Rules, this assessment has determined that the project will not have significant adverse impacts. Anticipated impacts related to construction activities will be mitigated through use of best management practices (BMP) during construction. Adequate mitigation has been identified for other potential impacts. The County of Hawai'i intends to file a Finding of No Significant Impact (FONSI) with the State Office of Environmental Quality Control.

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9 PERSONS AND AGENCIES INVOLVED IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT

9.1 LIST OF PREPARERS

This Environmental Assessment was prepared for the County of Hawai‘i Department of Parks and Recreation. The following individuals were involved in the preparation of the EA.

Name	Contribution/Specialization
County of Hawai‘i, Mayor’s Office	
Bobby Command	Executive Assistant, Office of the Mayor
County of Hawai‘i, Department of Parks and Recreation	
Robert Fitzgerald	Director, Dept. of Parks & Recreation
James Komata, Park Planner	Project Manager
Imata and Associates, Inc.	Prime Consultant
David Imata	Principal in Charge
Jonathan Oba	
Kimura International, Inc.	Environmental Assessment
Glenn T. Kimura	Principal in Charge
Leslie Kurisaki	EA Primary Author
Amy Yamakawa	Graphic Design
Bonnie Grubb	Planner
Cultural Surveys Hawai‘i	Archaeology, Cultural Impact Assessment
Hal Hammatt, Ph.D	
Michelle F. Pammer	
Doug Borthwick	
AECOS, Inc.	Botanical, Avifauna and Mammalian Surveys, Stream Biota
Eric Guinther	
Snookie Mello	
Derral Herbst	
Reginald E. David, Rana Biological Services	
Waimea Trails and Greenways Committee	
Clemson Lam	
Leningrad Elarionoff	

9.2 PRE-ASSESSMENT CONSULTATION

A pre-assessment consultation was conducted in August and September 2010 prior to preparation of the Draft EA. The purpose of the pre-assessment consultation is to consult with agencies, organizations and individuals with technical expertise, or an interest or will be affected by the proposed project. This process is part of the scoping process for the Draft EA. Comments and input received during this period is used to identify environmental issues and concerns to be addressed in the Draft EA, which in turn will undergo a 30-day public comment period.

As part of the early consultation process, the following agencies and organizations were sent pre-assessment letters. Notices were also sent to individuals who attended an initial public information meeting held on March 24, 2010, and others who were recommended or who requested information on the project. The organizations and individuals were encouraged to distribute the information to their members, friends and neighbors.

Federal

U.S. Army Corps of Engineers
- Civil Works Technical Branch
- Regulatory Branch

U.S. Fish and Wildlife Service
U.S. Department of the Interior, National Park Service
- Ala Kahakai National Historic Trail

State

Department of Agriculture
Department of Land and Natural Resources
- Historic Preservation Division
- Land Division

Department of Health
- Environmental Health
- Disability and Communication Access Board

Hawai‘i Housing Finance and Development Corporation
Mauna Kea Soil and Water Conservation District
Office of Hawaiian Affairs
Department of Business, Economic Development and Tourism
Department of Education
- Waimea Elementary School
- Waimea Middle School

Thelma Parker Memorial Library
Department of Transportation
University of Hawai‘i College of Tropical Agriculture and Human Resources (CTAHR)
- Lālāmilo Research Station

- Plant and Environmental Protection Services

County of Hawai‘i

Office of the Mayor
Civil Defense
Department of Water Supply
Department of Environmental Management
Fire Department
Police Department
Department of Parks and Recreation
Department of Planning
Department of Public Works
Councilman Pete Hoffmann, District 9, North & South Kohala

Utilities

Hawaiian Electric Company, Inc.
Hawaiian Telcom
Oceanic Time Warner Cable

Media

West Hawai‘i Today
Hawai‘i 24-7
Kona Web
Sherry Bracken

Businesses, Organizations and Individuals*

Canada France Hawai‘i Telescope
Waimea Country Day School
Waimea Community Montessori School
Kanu O Ka ‘Aina PCS
Small World Pre School
PATH Hawai‘i
Parker School
Parker Ranch
Hawai‘i Preparatory Academy
North Hawai‘i Community Hospital
Rotary Club of North Hawai‘i
Lions Club
Waimea Country Lodge
Tutu’s House
Sandalwood Community Association
Waimea Community Education

Waimea Hawaiian Homesteaders Association
Waimea Hawaiian Civic Club (c/o Mabel Tolentino)
E Mau Na Ala Hele
Waimea Trails and Greenways (c/o Clem Lam)
Imiloa Congregational Church
First Baptist Church of Waimea
New Hope Christian Fellowship
Church of Jesus Christ of Latter Day Saints
Annunciation Catholic Church
Kamuela Honpa Hongwanji Mission of Hawai‘i
St. James Episcopal Church
New Beginnings Assembly of God
Imiola Congregational Church
Waimea Outdoor Circle (c/o Carol Hendricks)
South Kohala Traffic Safety Committee (c/o Mike Price)
South Kohala Community Development Action Plan Committee (c/o Mike Fisher)
Lālāmilo Farm Lots (c/o Chris Robb)
Waimea Preservation Association (c/o Bill Sanborn)
Paniolo Preservation Society (c/o Billy Bergin)
W.M Keck Observatory (c/o Peggy Kamisato)

*(*Note: The following individuals attended an initial public meeting on the project or were referred by others. All were encouraged to forward the early consultation information to other interested persons.)*

Thuy and Mike Fujimoto
Roger Harris
Roger Hirako
Judy Ellis
Tana Hillier
Steve Bess
Sandie Ednie
Judy Folk
Paul Johnston
Walter L. Puhi
Clarence Ching
Freddy Rice
Pat Provalenko
Mel Macy
Fran Tabor
James Bell
Bob Hunter

9.2.1 Comments Received During Pre-Assessment Consultation

During the early consultation period, a number of comment letters and e-mails were received. Table 9-1 below summarizes the comments. Copies of the written comments are included at the end of this chapter.

Ke Ala Kahawai o Waimea
Waimea Trails and Greenways
EA Early Consultation Comments

Agency/Affiliation	Name	Date	EA Early Consultation Comments
Federal			
U.S. Fish and Wildlife Service, Pacific Islands Fish & Wildlife Office	Loyal Mehrhoff, Field Supervisor	letter dated 6/18/2010	Potential issues to be addressed in DEA include presence of Hawaiian hoary bats, endangered Blackburn's sphinx moth, water quality issues. Recommend mitigation measures be incorporated into project to minimize impacts to Waikoloa Stream. *(Note: USFWS also sent "Species List" for Phase I, letter to County DPR dated August 28, 2009).*
U.S. Army Corps of Engineers, Honolulu Engineer District	Gary Shirakata, Program & Project Manager	email 5/24/2010	Project within formerly used defense site (FUDS) Waikoloa maneuver area. USACE has performed surface and subsurface removal of munitions and explosives of concern (MEC) on majority of area but there are areas where MEC may still be present. Appropriate precautions should be taken.
State of Hawaii			
Department of Education	Kathryn Maytayoshi, Interim Superintendent	letter dated 6/1/2010	DOE has no comment regarding this project.
Department of Hawaiian Home Lands	Kaulana H.R. Park, Chairman	letter dated 6/14/2010	DHHL owns approximately 12,198 acres in Waimea including 11,948 ac in Pu 'ukapu and 250 acres in Lalamilo. Property is adjacent to the proposed project. DHHL is excited that this project is becoming a reality; will provide recreational opportunities and commuting alternatives Hawaiian Home land lessees. Waikoloa Stream is former UXO site, there is a DHHL lands UXO clean up report, please reference in EA. Some concern with increased access, potential crime, loitering near residential lots; be sure trail is properly managed and maintained. Consult with Waimea Homestead Association, Inc. and Kanu o Ka Aina Charter School which have programs that may be affected by project. Contact DHHL Land Management Division if use of Hawaiian home lands is required.
Department of Health, Clean Water Branch	Alec Wong, P.E., Branch Chief	letter dated 6/16/2010	Projects impacting State waters must meet water quality criteria and antidegradation policy; NPDES permit may be required for discharge of wastewater or storm water runoff. May need NPDES individual permit for other discharge. All discharges related to construction or operations must comply with State's Water Quality Standards.
Department of Land & Natural Resources, Land Division	Morris M. Atta, Acting Administrator	letter dated 6/14/2010	Other than comments (below) from Division of Forestry & Wildlife, Land Division, Division of State Parks, Office of Conservation & Coastal Lands, DLNR has no other comments.
			Division of Forestry & Wildlife--no comments
			Office of Conservation & Coastal Lands--no comments. Not in Conservation District.
			Land Division, Hawaii District-no comments
			Division of State Parks--no comments
	Charlene Unoki, Assistant Administrator	letter dated 6/21/2010	Division of Aquatic Resources--no objections, no comments
			DLNR State Historic Preservation Division--Chapter 6E-8 Historic Preservation Review-archaeological site are present within project area. Arch inventory survey has been prepared and has been accepted as final. Preservation plan requested in September 2009 has not yet been received. Recommend no ground altering construction begin until this plan has been reviewed and accepted by SHPD.
Department of Transportation	Brennon T. Morioka, Director of Transportation	letter dated 6/2/2010	Given location of shared use path, DOT does not anticipate any significant adverse impacts to its transportation facilities. However, optional segments and alternative paths may impact DOT highways, Kawaihae Road and Kohala Mountain Road. DEA should assess impacts to State highway facilities and address issues such as access improvements, interaction of project-generated traffic, foot & non-motorized traffic w/vehicle traffic and safety controls. Provide 4 copies of DEA.
Department of Land & Natural Resources, State Historic Preservation Division	Nancy McMahon, Deputy SHPO/State Archaeologist and Historic Preservation Manager	letter dated 6/16/2010	Archaeological sites are present within the project area. An archaeological inventory survey has been prepared *(Yucha, Shideler, and Hammatt 2009*) and we have accepted it as final (*Log No. 2009.3316, Doc No. 0909MD12*) However, the preservation plan we requested in September 2009 has not yet been received by our office. We recommend no ground-altering construction begin until this plan has been reviewed and accepted by SHPD.
Hawaii County			
Dept. of Environmental Management	Lono A. Tyson, Director	letter dated 5/20/2010	No comments to offer on project.
Hawaii Fire Department	Darryl Oliveira, Fire Chief	letter dated 6/1/2010	No comment to offer at this time.
Police Department	Henry J. Tavares, Jr., Assistant Chief, Area II Operations	letter dated 5/24/2010	No comments at this time. We may have comments upon review of Draft EA.
Planning Department	B.J. Leithead-Todd, Director	letter dated 6/14/2010	South Kohala Community Development Plan (SKCDP) advocates for development of path and establishing bicycle/pedestrian/equestrian travel ways.
Planning Department	B.J. Leithead-Todd, Director	letter dated 8/24/2010	For your information, we have attached the Planning Department's comments on the project, which largely refer to the South Kohala Community Development Plan (CDP). For more information about the CDP, please go to the CDP web site at: http://www.hcrc.info/community-planning/south-kohala-cdp/.

Table 9-1

Ke Ala Kahawai o Waimea
Waimea Trails and Greenways
EA Early Consultation Comments

Agency/Affiliation	Name	Date	EA Early Consultation Comments
Department of Public Works, Engineering Division	Galen M. Kuba, Division Chief	letter dated 6/9/2010	Large portion of trail follows and crosses Waikoloa Stream. Portions of project lie within special flood hazard areas. Project must comply w/requirements of Hawaii County Code Chapter 27, Floodplain Management. Flood studies and map changes applications to FEMA may be required prior to and following alterations of a special flood hazard area. Grading & watercourse alterations are subject to DPW approval.
Department of Research and Development	Randall Kurohara, Director	letter dated 6/18/2010	Comments from their Tourism specialist in favor or project which would allow people a safe, pedestrian and bicycle friendly alternative to driving.
Department of Water Supply	Milton D. Pavao, Manager	letter dated 6/16/2010	Should proposed use require water service, Dept. would request estimated maximum daily water usage calculations for review and approval. If meter is installed, backflow prevention assembly installed within 5 ft on private property.
Community			
Comments below listed in order in which they were received			
Waimea resident	Margaret Willie	email 5/23/2010	See attachments sent via e-mail. Suggestions: 1) County Park by Transfer Station: map should show Lalamilo road reservation; referred to as key in General Plan. 2) Parker Ranch section from Kahawai St. to Opelo Research Station: she's negotiating with Parker Ranch to eliminate fencing requirement on Kohala side of stream; 3) where current plan proposes to cut many eucalyptus trees along stream, think there should be alternate route to provide ADA access and keep trail along stream narrow. 4) Paniolo/Waimea Inn problem area: suggest putting in second route to cross stream from Parker School pperty to KTA rear parking lot. Still encourage pushing for access across Paniolo Inn area.Map should show alternative running mapping suggestions
Sandalwood resident	Bill Brilhante	email 5/24/2010	Registering opposition to this project through Sandalwood subdivision. Oppose having trails through areas that should be left as is. Taking away private property rights.
Certified Management, Inc.	Brenda LeClair Account Executive	email 5/24/2010	Concerns from Sandalwood at Waimea subdivision residents: 1) area where park is supposed to be built used to be dump. Years ago, fire stated from rubbish, had to monitored for a few days, 2) pedestrian bridge needed over creek; creek goes downhill and is fast moving, 3) what kind of security in place to safeguard subdivision and prevent incursions from trail users?
	Brodie Callender	5/24/2010 and 5/25/2010	Interested to find out more about park between Sandalwood and dump that's highlighted in map. Trail concept and park wonderful. Has county scrapped proposed "connector road" slated for this same location? Have heard unofficially they probably won't build road. What info led to believe land between Sandalwood and transfer station coud be park land? Wonderful to see a park, but what info do you have to support that concept?
Sandalwood residents	Mike & Thuy Fujimoto	email 5/25/2010	Trail will be right in front of our house and increase level of noise, security risk, decrease privacy. Trails will have negative impact on our quality of life and adversely impact property value.
North Kohala homeowner	Carol Williams	email 5/28/2010	Wonderful project and terrific idea. Need more places to walk and bike safely. Exercise good for all; asset to the community.
Pako subdivision Resident, 885-3521	Pamela Cushnie	email 6/1/2010	Trying to get more info re "alternative" path. Heard about alternative currently drawn on confidential map and not released publically. Would like to know more about plan and request for input.
	Pamela Cushnie	letter dated 6/29/2010 and letter to Bobby Command dated 6/29/2010	Who proposed and who researched alternative orange path? What findings wer eused to support consideration of this alternative? What groups/individuals were on [early consultation] distribution list? What other alternatives are being (or have been) considered?
resident, 65-1508 Kawaihae Rd.	Jan and Jerry Parks	email 6/3/2010	Live along alternate route. Opposed to having trail through property and people walking on lower portion of trail.
Kamuela View Estates residents	Roy and Eunice Saito	email 6/4/2010	Prefer original proposal (Church Row to opposite Kamuela View Estates) over alternate (which ends in Kamuela View Estates) for these reasons: 1) safer for trail users, alternate requires crossing busy highway; 2) lower impact on homeowners. Alternative route enters Kamuela View Estates, which is not designed to accommodate trail parking; 3) minimizes tresspassing and maintenance issues. Alternate has potential for irresponsible hikers to litter and encroach on private property. No sanitation facilities, 4) more suitable in terms of aesthetics, since it follows Waikoloa STream.
Waimea resident	Margaret Cox	email 6/8/2010	Original alignment appears to be most logical and safest. Alternatives are dangerous.
DHHL homesteader	Miki Brand	email 6/8/2010	Not pleased. Rather see a bike lane or safer wide shoulders along existing main road. Plan curtails beneficial use of ag lands. Keep Waimea country!
Waimea resident	Marc Kassis	email 6/8/2010	Strongly support WTG project. Both primary and alternative paths would be wonderful addition to community.
Waimea resident	Jim Lyke	email 6/8/2010	Supportive of WTG project. Welcome safe alternaties to walking.
Ohia Ku Homeowners Association, c/o Kurt & LaDonna Shively, P.O. Box 2233, Kamuela, HI 96743 *[letter and petition from Ohia Ku Homeowners signed by those listed below. Copies of signed petition included in same package noted with* * *]*	Kurt & LaDonna Shiveley	letters dated 6/9/2010	See attached letters from homeowners. Ohia Ku is a private subdivision on southwest side of Kohala Mountain Road, opposite HPA. Opposed to alternate route which appears to intersect Ohia Ku subdivision. Waste of taxpayer's money to move forward with EA that includes this proposed alternative as a viable option. Ask that this option be dropped.
Ohia Ku Homeowners Association	Roberta Barlow		

Table 9-1

Ke Ala Kahawai o Waimea
Waimea Trails and Greenways
EA Early Consultation Comments

Agency/Affiliation	Name	Date	EA Early Consultation Comments
Ohia Ku Homeowners Association	Drew & Michelle Medieros		
Ohia Ku Homeowners Association	Dr. John & Bev Dawson		
*	Alcy D. Johnson		
*	William B. Burke, Jr.		
*	C.R. Budge		
*	Lorina Torres		
*	Bernadina K. Sylva		
*	Brittney Harbottle		
*	Harrison & Lynne Heen		
Kamuela View Estates resident	Elizabeth Bryson	letter dated 6/3/2010	See attached letter with photos. Have lived in Kamuela View Estates since 1986. Concerns regarding alternative path. Where are path users going to park their cars? Ohina Street is main thoroughfare, and access to Kawaihae is already difficult. Skeptical that pathway will encourage people to walk. HPA is only employer along entire alternative. Connection shown from shared use path (red) to alternative infeasible. There are many dangerous gulches in backdrop. Fire hazard in area. No trees or wildlife to be seen. Ohina St-Akulani Street juncture floods.
Waimea resident	Katherine S. Erger and Steve N. Erger	letter dated 6/3/2010	Signed form letter dated 6/3/2010 objecting to alternate route--safety, incline, private property crossings, stream flooding. Do not want alternative alignment to be considered a viable option. Keep original trail as planned. Extremely high liability problems with alternate.
Waimea resident	Tom Hickey, Lauren Hickey	letter dated 6/3/2010	Signed form letter dated 6/3/2010 objecting to alternate route--safety, incline, private property crossings, stream flooding. Do not want alternative alignment to be considered a viable option.
Waimea resident	Darlene Turner	letter dated 6/3/2010	Signed form letter dated 6/3/2010 objecting to alternate route--safety, incline, private property crossings, stream flooding. Do not want alternative alignment to be considered a viable option. Used to live along the path from White Sands to Magic Sands beach. Noise, drunkeness, litter, law enforcement issues were horrible. Do not build path close to our homes; have a right to quiet enjoyment.
Waimea resident	David W. Lowney	letter dated 6/3/2010	Signed form letter dated 6/3/2010 objecting to alternate route--safety, incline, private property crossings, stream flooding. Do not want alternative alignment to be considered a viable option.
Ohia Ku subdivision residents	John and Bev Dawson	letter dated 6/9/2010	Surprised to see map with alternative alignment that crosses Kawaihae Road. Residents not notified. Objecting to alternative for safety reasons and intersect Ohia Ku subdivision. Unsafe and impractical because route must cross busy Kawaihae Road and cross back over Kohala Mountain Rd. at another point. Kohala Mountain Rd. is narrow, high speeds, poor visibility. Request a better alternative be found that is safer and less impact on private property.
Chief of Staff, Kona Community Hospital	Edwin P. Herd, MD	email 6/10/2010	Supportive of WTG project. Provides safe route for walking, biking, running. Can be part of solution to epidemic of childhood obesity.
	Garry Dean	email 6/10/2010	Supportive of WTG project along Waikoloa Stream. Will provide safe route for walking, bicycling and running.
	Dan Sabo	email 6/10/2010	Supportive of WTG project.
	Toni Blair	email 6/11/2010	Supportive of WTG project.
	Dr. Michelle Suber	email 6/11/2010	Supportive of WTG project.
resident and avid road cyclist	Krista Pearson	email 6/11/2010	Supportive of WTG project.
Waimea resident	Clemson Lam	email 6/11/2010	Supportive of WTG project.
Waimea resident	Kevin Cavanagh	email 6/11/2010	Supportive of WTG project
Waimea resident	Lori Eldredge	email 6/11/2010	Supportive of WTG project
Waimea resident	Judy Ann Williams	email 6/11/2010	Supportive of WTG project
Waimea resdient and avid hiker	Kathleen Johnson	email 6/11/2010	Supportive of WTG project
north Kohala resident	Kimberly Lepold	email 6/11/2010	Supportive of WTG project
	Kristin Delgado	email 6/11/2010	Supportive of WTG project
Waimea resident	Arrow Factory	email 6/11/2010	Trail is a great addition to Waimea. Some suggestions/concerns: 1) who will "police" the trail? Currently problem with loose dogs on trail; safety issue, dogs should be leashed; 2) Nature Park has "open" hours; will the trail be open all the time? How will this affect the neighborhoods along route? Should be maximum distance from houses to minimize impact on residential areas; 3) would it be possible to extend trail past church row? Old Government Road continues through nice walking areas, government roads with public access, should incorporate these paths now.
Kamuela View Estates residents	Tim & Billie Kiernan	email 6/11/2010	Supportive of project. His family has been looking forward to safe way to get to town other than running along busy road. Directly impacted by project as it is literally in our backyard and we are 100% in support.
Waimea resident	Kelly Hoyle	email 6/12/2010	In support of this project. Havea 2 small children who love to walk and ride bikes to school.
Hilo resident	Douglas Zang	email 6/12/2010	In support of project.
	Kendra Wilson	email 6/12/2010	In support of project.

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Ke Ala Kahawai o Waimea
Waimea Trails and Greenways
EA Early Consultation Comments

Agency/Affiliation	Name	Date	EA Early Consultation Comments
	Ann Peterson	email 6/12/2010	Have written numerous letters of support for this project over past 14 years and wonder why folks aren't convinced this is cirtical project, potential economic engine, provide safe place to build healthy lifestyles, investment in cleaner energy future. Why isn't this project already built? Some believe trail will open them up to crime but this has been proven untrue (reference articles provided).
Complex Area Business Manager, Dept. of Education, Honoka'a-Kealakehe-Kohala-Konawaena Complex	Scott Jeffrey	email 6/12/2010	In support of project. Can provide much needed safe route for students. With bus rates rising and congestion near schools increasing, a safe alternative would be welcome.
Waikoloa resident	Dan Berman	email 6/12/2010	In support of project.
Waimea residents	Hal Ward, Mary Ann Ward	letter dated 6/12/2010	Totally against alternate route shown on map. Putting trail on mauka side of town takes it away from majority of population. Alternate trail shares space with busy highways. Sections on private property make it difficult to obtain access. Waiauia Stream floods during heavy rains. Privacy and liability issues.
Waimea resident	Robyn Hafner	email 6/13/2010	In support of project.
Waimea resident	Terry Ladwig	email 6/13/2010	In support of project. Paths unite communities by making personal contact more likely by experiences users share out of doors.
Waimea resident	Laura Monahan	email 6/14/2010	Oppose project until we have further info and hopefully town meeting to discuss how families will be benefited and impacted.
	Brian Burau	email 6/14/2010	In support of project.
	Bob Hunter	email 6/14/2010	In support of project.
	Randy Campbell	email 6/14/2010	In support of project.
Kamuela View Estates residents	Julia Simmons	email 6/14/2010	We desperately need this trail to reduce traffic and provide safe route to school.
Kamuela View Estates residents	Rich Matsuda	email 6/14/2010	In support of project. Have lived in areas on mainland which had similar trails and added to positive quality of life. Rather than being negative influence on property value, boosted value. Although there has been sentiment that trail will "urbanize" Waimea, I feel it will do the opposite by promoting walking and biking instead of just vehicles.
Waimea resident	Hien Tran	email 6/14/2010	In support of project.
Waimea resident	Gregory Wirth	email 6/14/2010	In support of project. Should be highest priority for community. My family w/3 young chidren would regularly use and enjoy path. Have witnessed beneficial effect of Pere Marquette "rail trail" in his hometown in Michigan which has become vital route and during visit to Boulder, CO.
W.M. Keck Observatory	Colette Tyau	email 6/14/2010	In support of project.
Waimea resident	Peggi Kamisato	email 6/14/2010	In support of project.
Waimea resident	Joan Campbell	email 6/14/2010	In support of project. Our family would regularly use and enjoy path, believe community benefits outweigh concerns about impact on local enviornment. Adding bike line to existing roads not suitable substitute.
Waimea Outdoor Circle	Carol Hendricks	letter dated 6/14/2010	Outdoor Circle was first supporters of the trail concept; Ulu La'au (Waimea Nature Park) is a key location on the trail. Need to study and mitigate effect of removing 357 mature trees. Look at wandering trail instead of straight line. Historic road preservation (Camp Tarawa to Waimea Town Rd through park). Retain as many old growth eucalyptus trees as possible. Care is needed to protect banks of Waikoloa Stream.
Hawaii Horse Council	Nancy McIver	letter dated 5/29/2010	
Lanikepu Gulch area residents	signed by 6 residents	petition received 6/15/2010	We commend idea of pathway. However, we chose and pay to live in Lanikepu Gulch area because of privacy. Fervently oppose the trail going through Ohiaku, Wai'aka and Lanikepu areas.
Waimea resident	James Phillips	letter dated 6/3/2010	Concern with orange (alternative) trail and lack of access to detailed information. Winding roadways with no shoulders, difficulty incrossing highway, safety. Steep path along Wai 'au'ia Stream. Liability concerns crossing private property. Wai'au'ia Stream (much of orange path) known for quick changes in water flow, flood concerns. Brush fires, vandalism, loss of privacy are also concerns. Do not want alternatives to be considered as viable options. Would like Wai'au'ia Stream route dropped from list of possible paths. Not good alternative route.
Jacaranda Inn, Waimea's Historic Ranch Estate	Mary Ellen Revana	letter dated 6/5/2010	Portion of path directly behind property changes in elevation due to waterfall from above creating the stream. Cliffs are steep and dangerous, waterfall and pond dangerous. No way to safely police this strem and pond. To place a path here to draw chidlren would be gross negligence. Do not support alternative alignment and request taht Wai'au'ia Stream route be dropped from list of possible paths.
Sandalwood resident	Fran Tabor	email 6/21/2010 and letter dated July 10, 2010 to Mayor Billy Kenoi	Concerned with segment next to my residential property. Behind property, Waikoloa Stream forms major gulch with steep embankments and topography. Riparian buffer zone acts as buffer between Lalamilo farm and my home. Riparian areas should be preserved. Concern with flood issues, stream crossings, riparian buffers. Sandalwood residential properties extend to middle of stream. Liability concerns, vandalism, noise, safety.
	Fran Tabor	email 6/28/2010	There are habitats of sensitive bird species that live and nest in grasslands/scrub adjacent to Waikoloa Stream on north side. Consider this in EA and look at alternative routes outside the riparian zone.
	Fran Tabor	email to Pete Hoffman dated 9/6/2010	

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Ke Ala Kahawai o Waimea
Waimea Trails and Greenways
EA Early Consultation Comments

Agency/Affiliation	Name	Date	EA Early Consultation Comments
daughter of Kamuela View Estates resident	Liza Michaelson	email 6/19/2010	Her mother recently moved to Waimea. Only disappointment is lack of walking paths. Liza lives in San Juan Islands and is member of Trails Committee there. Based on her experience, once path is built, there will be increasing use. Path will provide much needed corridor for non-motorized transport. Go Waimea Trails & Greenways!
Anna Perry-Fiske Charitable Trust	Stephen G. Bess, Co-trustee	email 6/14/2010	Waimea community has been supportive of Waikoloa Stream trail. Trustees of Anna Perry-Fiske trust believe that alternative trail running through its property would be in error. Topography through our property can't accommodate trail. Use of Anna Ranch dictated by trust document that does not provide for dedication of alternative trail.
Waimea resident	Tom Beach	letter to Clem Lam, WTG dated 7/14/2010	I am an advocate for trees, concern for oldest and largest eucalyptus trees along stream near town. Remaining small forest is the green heart of Waimea, providing homes to birds, shade, wind and sound breaks. Small wild spot that we must preserve. Implore you not to destroy them in the name of expediency and progress.I love and value these remaining trees.
Hale Kea Farms (Waimea resident)	William T. White, III	letter dated 6/8/2010	Upset about recent map showing orange alternative routes. Several sections along alternative with narrow, winding roadways and no shoulders (Kohala Mt Rd). Steep inclline difficult to walk, limited sight sections. Crossing private property creates liability issues for homeowenrs. Wai'au'ia Stream known for quick changes in water flow; where would path be to avoid flooding and debris? Concerns over dangers to users and damage to surrounding property. Army has advised landowners not to disturb banks of stream because of erosion. Erosion has caused human bones to be exposed. Wai'au'ia Stream route not good choice as alternative. Concern over arbitrary taking/use/condemnaton of private property.
Waimea resident	Pamela Cushnie	letter dated 6/3/2010	A. Concerns over release of public information about orange alternatives. B. General comments/concerns-narrow winding sections along mauka alternatives difficult to be ADA compliant, dangers to users and pedestrians, liability and insurance issues for homeowners,quick changes in watre flow at Wai 'au 'ia Stream, flood inundation, stream erosion, privacy issues, burial site disturance, lack of transparency in information dissemination, wasted taxpayer money. C. Personal comments-I do not want orange alternative alignment considered as a viable option; would like Wai 'au 'ia Stream route to be immediately dropped.
Waimea resident	Cindy Yarawamai	letter dated 6/3/2010	comments similar to above.

9.3 DRAFT EA COMMENTS

Notice of the Draft Environmental Assessment for *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways (January 2011) was published in the January 23, 2011 edition of the Office of Environmental Quality Control (OEQC) The Environmental Notice, commencing a 30-day public comment period which ended on February 21, 2011.

The Draft EA was sent to the agencies and organizations listed below, and hard copies were made available for general public review at six libraries (Thelma Parker, Kailua-Kona, North Kohala, Hilo, and Hawai‘i State Library). The Draft EA could also be accessed and downloaded from the Office of Environmental Quality Control web site. A public information meeting on the Draft EA was held on Wednesday, February 9, 2011 at the Waimea Middle School. The meeting was attended by more than 90 individuals.

Federal

U.S. Army Corps of Engineers
- Civil Works Technical Branch
- Regulatory Branch

U.S. Fish and Wildlife Service
U.S. Department of the Interior, National Park Service
- Ala Kahakai National Historic Trail

State

Department of Agriculture
Department of Land and Natural Resources
- Historic Preservation Division
- Land Division

Department of Health
- Environmental Health
- Disability and Communication Access Board

Hawai‘i Public Housing Authority
Mauna Kea Soil and Water Conservation District
Office of Hawaiian Affairs
Department of Business, Economic Development and Tourism
Department of Education
Department of Transportation
University of Hawai‘i College of Tropical Agriculture and Human Resources (CTAHR)
- Lālāmilo Research Station
- Plant and Environmental Protection Services

County of Hawai‘i

Office of the Mayor
Civil Defense
Department of Water Supply
Department of Environmental Management
Fire Department
Police Department
Department of Parks and Recreation
Department of Planning
Department of Public Works

Utilities

Hawaiian Electric Company, Inc.
Hawaiian Telcom

Public Officials

Representative Cindy Evans, 7th Representative District
Senator Malama Solomon, 1st Senatorial District
Councilman Pete Hoffmann, District 9, North & South Kohala

Organizations and Adjacent Landowners

Canada France Hawai‘i Telescope
Hawaii Preparatory Academy
Parker Ranch, Inc.
Parker School
Kanu o Ka ‘Aina Learning Center
Mr. Keoki Magoon
W.M. Keck Observatory
PATH Hawai‘i
West Hawai‘i Today
Hawai‘i Tribune Herald

9.3.1 Draft EA Comments Received

Table 9-2 on the following pages summarizes the comments received during the Draft EA comment period. The table is divided into three categories: 1) government agencies, 2) organizations, and 3) individuals.

During the Draft EA comment period, comments were received from a total of 15 government agencies, 4 organizations, and 59 community individuals. The letters are reprinted at the end of this chapter. Comments from the community individuals came via U.S. mail and e-mail. Written response letters were sent to all government agencies and organizations, as well as individuals who commented via standard mail and/or provided a U.S. mail address. Individuals who commented via e-mail and did not provide a standard mailing address received an e-mailed acknowledgement.

Agency/Affiliation	Name	Date	Comments	Action/Response
Federal				
Department of The Army, Regulatory Branch	George P. Young, P.E., Chief	letter dated 01/24/2011	Keanuiomano Stream and Waikoloa Stream have been determined to be waters of the U.S., subject to Corps jurisdiction. Discharge of fil material waterward of OHWM will require a DA permit prior to construction. Discourage use of rock structures to stabilize eroding stream banks. Evaluate possible bank stabilization alternatives that avoid and minimize impacts to aquatic environment. If rock must be used, EA should explain those specific conditions and how unavoidable impacts to aquatic resource function and services will be mitigated. Request a jurisdictional determination and obtain necessary DA permits for aquatic resources.	See attached response letter. DA permit will be obtained for activitie affecting navigable waters. Bank stabilization alternatives will be investigated. Jurisdictional determination will be requested with or prior to submittal of completed DA permit application. Information on proposed Best Management Practice to be included.
State of Hawaii				
Department of Education	Kathryn S. Matayoshi	letter dated 02/08/2011	No comment regarding this project.	See attached response letter. No action required.
Office of Environmental Quality Control	Rebecca Alakai, Senior Planner	letter dated 02/10/2011	DEA only mentions first construction increment. Estimated timeline for completion would be helpful in FEA. Address secondary and cumulative impacts. State if tree planting plan proposed, indigenous plants preferred.	See attached response letter. FEA will provide timeline info and address secondary and cumulative impacts. Removed trees and vegetation will be replaced with native plants.
Waimea Middle Public Conversion Charter School (PCCS)	John R. Colson, CEEO/Principal	letter dated 02/16/2011	Support development of the WTG project. A safe trail offers students opportunity to walk or ride bikes to and from school providing increased wellness and safety. Would benefit both campuses of HPA, Wamiea County School, and Waimea Elementary School.	See attached respone letter. No action required.
Office of Hawaiian Affairs	Clyde Namu`o, Chief Executive Officer	letter dated 02/17/2011	OHA is generally supportive. Concur with proposal that native species be used to replace any non-native trees or vegetation removed during project activities. Concerned with possible impacts on cultural and historic sites, but confident that concerns will be addressed. Concur with "finding of no significant impact."	See attached response letter. No action required.
Office of Hawaiian Affairs	Clyde Namu`o, Chief Executive Officer	Section 106 Consultation Response letter dated 01/21/2011	This Section 106 consultation is for overall undertaking (all increments). Area of potential effect is entire 4.5 mile alignment. Unmarked burials may be encountered along entire length of the path. Specific concerns in the western increment of the path. Archaeological investigations conducted by the Bishop Museum for the proposed Mudlane-Waimea-Kawaihae road corridor ca. 1983 and a more recent study conducted for DHHL residential subdivision in Lalalmilo hav identified numerous historic properties and sites including burials. Recommend consultation with Waimea Hawaiian Civic Club, Kanu O Ka 'Aina School, Parker Ranch, and Leningrad Elarionoff. Some individuals may be concerned with the area where the path is proposed to terminate at its western end generally know as "Lihu'e".	See Appendix G for Section 106 documentation. Section 106 consultation being conducted for entire project corridor. Studies noted have been considered. Contacts suggested have been consulted.
Waimea Middle PCCS	Patti Cook, Community Liaison	letter dated 02/21/2011	Path will provide needed connectivity and route for children to and from public schools, including several high-population, low income areas. Trail will immediately improve safety of children and reduce peak hour traffic congestion, provide valuable opportunities for exercise. Creating trail is highly desirable and will become significant community asset. Still design issues, but am confident they can be resolved. Request careful consideration of trees; urge effort be made to save healthy trees.	See attached response letter. Effort will be made to retain existing healthy trees that are not within path route or pose a danger to users.
Department of Transportation	Glenn Okimoto, Director of Transportation	letter dated 03/08/2011	State's highway facility, Kawaihae Road, will be impacted. The DOT Highways Division is concluding review of project and DOT will provide additional comments as necessary at completion of this review.	See attached response letter. Comments noted.
Hawaii County				
Department of Environmental Management	Frank J. DeMarco, P.E.	letter dated 02/02/2011	no comments	See attached response letter. No action required.
Hawaii Fire Department	Darryl Oliveira, Fire Chief	letter dated 02/07/2011 e-mail dated 5/5/2011	We recommend and request at a minimum, access for our ambulance and off-road vehicles. *(Note: see follow-up e-mail from Capt. John Whitman, dated 5/5/2011)*	See attached response letter. See FEA for dsicussion of follow-up consultation with Capt. John Whitman.
Police Department	Henry J. Tavares Jr., Assistant Chief, Area II Operations	letter dated 02/14/2011	No comments at this time. *(Note: See e-mail regarding follow-up phone con with Capt. James Sanborn, 4/14/2011).*	See attached response letter. See FEA for discussion of follow-up consultation with Capt. James Sanborn.
Department of Public Works-Traffic Division	Kiran Emler	Memo dated 2/9/2011, revised 02/17/2011	Follow guidelines in Part 9 of Manual of Uniform Traffic Control Devices. Install lighting at street connections/trailheads if adjoining subdivision is lit. Minor roadway or sidewalk improvements should include on-street parking facilities and signs to indicate location of trail access. Designate exclusive use of bike lanes by bicyclists only if sufficient shoulder or sidewalk for pedestrians. Add something regarding cost of project.	See attached response letter. Project will follow MUTCD guidelines, Part 9, Traffic Controls for Bicycle Facilities. See FEA for discussion and illustration of typical signage.

Agency/Affiliation	Name	Date	Comments	Action/Response
Department of Public Works	Warren H.W. Lee, P.E., Director	letter dated 02/16/2011	The trail should be designed to maximize pedestrian access for the purpose of minimizing vehicular conflicts with pedestrians on County streets. Trail connections and improvements to County roads conform to Chapter 22, Streets and Sidewalks, of the Hawaii County Code. A permit for work within the County Right-Of-Way is required. Signs are required at roadway intersections in accordance with the 2009 Manual on Uniform Traffic Control Devices, Part 9. Lighting should be provided at trailheads and roadway intersections in areas with existing street lights. Consider roadside improvements for on-street parking facilities. Provide signs to mark trailhead locations. Plan review by the Disability and Communications Access Board is required. Project required to comply with Hawaii County Code Chapter 27, Floodplain Management. Studies and submittals of map change applications to FEMA may be required.Grading and watercourse alterations subject to DPW approval. Make various edits as noted to Flood Hazards discussion. Earthwork and grading shall conform to Chapter 10, Erosion and Sediment control, of Hawaii C If drywells used, UIC permit may be required from State DOH.	See attached response letter. Trail improvements will comply with applicable County Codes cited. Required permits will be obtained. Plans will be reviewed by DCAB. Requested edits made to FEA.
Office of the Mayor	Billy Kenoi, Mayor	letter dated 02/17/2011	no comments	See attached response letter. No action required.
Department of Water Supply	Milton D. Pavao, Manager-Chief Engineer	letter dated 02/23/2011	If water service required, request exact locations of water service and estimated maximum daily water usage calculations. If a meter is installed, a reduced pressure type backflow prevention assembly must be installed within five feet of the meter on private property.	See attached response letter. Project will comply with all requirements.

Organization	Name	Date	Comments	Action/Response
PATH Hawaii	Jeff McDevitt, President	email dated 02/12/2011	I would like to give my support to the WTG effort. The Kauai trail experience shows that no County tax dollars need be spent for the Waimea trail.	See attached response letter. No action required.
Waimea Outdoor Circle	Mary M. Kitchen, WOC President Carol Hendricks, Waimea Nature Park Chair	letter dated 02/16/2011	Ulu La`au, the Waimea Nature Park, is a project of the Waimea Outdoor Circle. Ke Ala Kahawai O Waimea will come through Ulu La`au. Have reviewed Mike Kraus Tree Risk Assessment of 498 trees from Lindsey Road to Opelo Road. We counted 119 dead or damaged trees and understand they need to removed, however believe that 357 trees recommended for removal is excessive. In the FEA please provide mitigation plans to give back the greenery and shade that will be caused by the removal of so many trees and/or reconsider the need for such a large scale removal. Trees were planted near streams to keep areas from being swampy and in town as windbreaks. Large scale tree removal will affect Waimea Nature Park, Carter Professional Center, Canada France Hawaii Telescope Headquarters, and Ahuli Subdivision. Mike Kraus says that these trees have a life span of 130 years if cared for, that leaves them 50 more years of life. Can saving some of the trees be mitigated by moving the 10' trail to curve within the 30' easement? Why was Ahuli Subdivision not mentioned in the DEA? How can wind damage to property now protected by mature trees be mitigated? How large will plants need to be to replace old growth trees? How many trees will be planted? Provide information on how project will affect endangered Kamehameha Butterfly habitat and entrance of Ulu La 'au Park intersection with trail and County road. How will motorized vehicles be kept off trail?	See attached response letter. Follow-up meeting between County and Waimea Outdoor Circle held on June 15, 2011 to discuss issues of concern. Only trees that are within path alignment or present a hazard to trail users will be removed. Removed trees will be replaced one for one, though not necessarily matching in size. Native vegetation will be used. WOC will review landscape plans for Increment 1. At Ulu La'au Nature Park entry, County will install a gate, fencing, speed bump and concrete apron extending into park approximately 25 feet. Concrete to be stained an earth-tone. Signage to be included requiring dogs to be on leash and no motorized vehicles. See FEA for further discussion of these issues.
South Kohala Traffic Safety Committee	Mike Price, Chair	letter dated 02/19/2011	1. Coordination with Hawaii County Transit Administrator Tom Brown is necessary to design bus stops and turn outs to provide bus connections to trail entry points. 2. Additional multi-modal connectivity needed with adequate vehicle parking within walking distance of entry points. 3. There is no data to support that "most trail users are expected to be Waimea residents and many will not require a vehicle parking lot." Provide adequate vehicle parking lots within walking distance of the entry points in compliance with ADA requirements. 4. The DEA seems incomplete without data or projections regarding the number of expected Trail users. Please provide us the supporting detail. 5. How will safe access for mauka Waimea residents in Kamuela Views and other mauka subdivisions of Kawaihae Road be provided to safely access the preferred trail alignment? 6. HDOT requested that DEA assess impacts to state highway facilities. Where are these assessments and recommended traffic safety mitigations? 7. Implement traffic calming techniques and consider design speed. Please incorporate a speed control plan. 8. Mitigate traffic queuing at trail entry points and the impact to emergency response vehicles. 9. Better explantation of TE funding source should be included in EA. 10. Provide value cost engineering for long and short term maintenance costs, rest station costs 11. Comments on February 9, 2011 Draft EA presentation. If the goal was to build community consensus the opposite was accomplished. 12. Lack of data, projections, and supporting facts regarding statements in the DEA was evident to attendees at community meeting. More facts, budget cost analysis, and data supporting the trail along with consideration of community concerns is needed.	See attached response letter. Coordination with Transit Administrator will occur. Parking will be provided at two future parks along trail. Most trail users will be Waimea residents and can use existing street and public parking. User projections provided in FEA. Safe accrss across and along Kawaihae Road is an ongoing traffic safety issue needing attention. Potential user conflicts addressed through signage and user education. See FEA for expanded discussion on TE funding. See FEA for comparative cost information from similar Hawai'i projects.
Waimea Community Association	Sherman Warner	letter dated 02/21/2011	The Waimea Community Association would like to reaffirm its support for this process.	See attached resonse letter.

Name	Date	Comments	Notes
Community Individuals			
Letters and e-mails are listed in the order in which they were received. Acknowledging e-mail sent to all those who commented via e-mail. Mailed response sent to all who commented via standard U.S. mail or provided a mailing address.			
Stafford Clarry	emails dated 2/3/2011	(Provided historical information on Waikoloa Stream and Waimea)	also see e-mail dated 2/21/2011 providing Draft EA comments. See attached response letter.
Cynthia L. Morse, CPA	email dated 02/04/2011	I support the WTG project. Cities that offer easy access to green spaces, encourage bicycle riding, and limit development have notably happier residents than other communities.	
Freddy Rice, FR Cattle Company	email dated 02/10/2011	We have a long term lease that the trail will go through. No one form your office has ever contacted us to see what needs to happen to protect our cattle herd and the people on the trail as they go through our ranch.	Subsequent meeting between County, WTG Committee and Freddy Rice on 3/4/2011 to discuss concerns.
	email dated 2/11/2011	Area through state lands is in my pasture lease with State; I'm not allowed to give permission for people to enter for public use. Issue of secure fences and liability. Should contact DHHL. Have lost over 60 head of cattle from dogs. Plastic bags from the dump are a problem. Must consider disease aspect of horses on trail. Believe we can resolve these issues fairly easily; no one is trespassing on my lease until they are resolved.	
Leningrad Elarionoff	email dated 02/10/2011	In reference to the Eucalyptus Robusta trees, on three occasions I witnessed the death of people killed from the falling branches. It is too soon in the planning stage to conclude that a break away bridge would better server the purpose of stream crossings as compared to box culverts or span bridges. If approved and completed, the Ke Ala Kahawai O Waimea will forever protect and preserve that sliver of land along the Waikoloa Stream that affords a view of Mauna Kea and Mauna Loa for all to enjoy. With the goal to keep Waimea clean, green, and beautiful, Ke Ala Kahawai O Waimea can be an extension of the Nature Park.	
Kiyoshi Najita, English Dept. Chair	email dated 02/11/2011	Writing in support of the proposed trail in Waimea. As a teacher at Parker School, have led students participating in Trails and Greenways projects. Support development and expansion of trail. Any avenue for reducing auto traffic and encouraging more people to encounter one another in a healthy, outdoor setting must be encouraged. Trail would attract tourists interested in exploring natural spaces and then lingering to shop and dine.	
Phyllis Tarail	email dated 02/11/2011	My husband and I walk on this trail every day and we are excited about the prospect of having a beautiful, longer walk along the Waikoloa stream available to us.	
James Bell	email dated 02/11/2011	Please add this email to the draft EA showing my support for the trail. I believe that it has many supporters in Waimea. Please do all you can to make this a good project.	
Kristin Delgado	email dated 02/11/2011	I fully understand and support the WTG project.	
Mark Modeen	email dated 02/11/2011 with attachment	I am in support of this project. Please review the attached "Myths and Reality" for a more accurate picture of the issues surrounding this project. (4 page attachment provided).	
Derrick Salmon	email dated 02/11/2011	I am completely supportive of the trail and its development. Please back this community-led effort to add a trail that will reduce on-road traffic, increase pedestrian and cycle safety, and proved a picturesque path through Waimea that will greatly enhance the natural experience so many of us value in living and working here.	
Gary West	email dated 02/11/2011	I am in support of the WTG.	
Carl Lam	email dated 02/11/2011	I completely support the WTG project. Having a green trail promotes a healthy lifestyle and will also provide a place for people to run and exercise without being side by side with a 10" lifted turbo diesel truck.	
Clemson Lam	letter dated 02/11/2011	I support the WTG project. As a Waimea resident, I know that the only places one can walk or ride a bicycle are along roadways. A separate transportation corridor would give a large number of people a chance to enjoy the beautiful environment of Waimea without the noise and pollution of automobiles, trucks, power lines and pavement. The trails location next to the stream would make this asset of Waimea accessible to the public. Bringing available federal money into our depressed construction industry would provide many local jobs. Once built, the trail would draw users in the growing eco tourism industry and support local businesses.	
Peggi Kamisato	email dated 02/11/2011	I live adjacent to the preferred trail alignment of Ke Ala Kahawai O Waimea. I support the development of a paved path. The path will provide an alternate route to my workplace one mile away. I've worked on the trail committee since 1995. I am hopeful this EA will finally meet the requirements of funding agencies so we may move forward the trail.	
Leningrad Elarionoff	email dated 02/11/2011	I am member of both Waimea Outdoor Circle and WTG and actively involved with both. One concern of WOC may be perceived impact of concrete path on Waimea Nature Park. Suggest that team meet with the WOC and look into possibility of softening presence of concrete trail in vicinity of Nature Park. Softening effect may be conducive to preserving the section of old Camp Tarara road. If a less durable trail surface be used to border the Nature Park, a plus will be that access for maintenance purposes will be less difficult.	

Name	Date	Comments	Notes
Jon Jokiel	email dated 02/12/2011	The Waimea trail will be used by the community to enjoy. We've got to get people out of their cars and this is the perfect way for them to exercise and get places without a car.	
David L. Kopra	email dated 02/13/2011	Express my whole hearted support for the WTG project. Trail will proved a safe, natural park setting for our youth and all of us to walk, run, and ride our way to a healthy, environmentally conscious lifestyle, as well commute thorough our daily lives.	
Randy Campbell, WM Keck Astronomer and Waimea County School Trustee	email dated 02/14/2011	Waimea needs this trail. Kids currently walk along the highway within a few feet of heavy traffic. Benefits include: reduction of traffic, improved recreation, green spce protection, quality of life, real estate value, use by locals and visitors. Support expanding the trail per current plan and will actively work to develop it and maintain it.	
Alex Woodbury	letter dated 02/13/2011 and email dated 02/14/2011	I fully support the WTG project. Trail has provided many with alternative to riding in car or risking our necks on the road. Studies demonstrate that communities that have trails and parks have happier reisdents. Would like to see my taxes go to these types of project. Makes our town better and is a much needed alternative transportation route.	
Janet Lam	email dated 02/14/2011	People of Waimea are united in their concern for well-being of the natural beauty of this unique town. Urge county to focus on many benefits of this project. Constructing trail will give people new opportunities to enjoy the rural natural setting and insure proper maintenance and care of the long neglected stream. Eucalyptus trees were planted in 1930's as part of federal WPA project. With natural lifespan of 120 years, can expect to be losing these trees at an increasing rate whether a trail is built or not. Would be wise to plan for future by planting trees now that are appropriate to the nature of a small town. Support the twelve foot wide trail. When I walk every morning with a friend, we easily span six feet walking side by side. If a bicycle were to pass us, the rider could move around us. Two baby strollers would need eight feet to walk side by side. It would be shortsighted to build a narrow trail as a permanent installation.	
Miles Mason	email dated 02/15/2011	I support of the stream trail project in Waimea. The lack of community parks, trails, bike paths, and outdoor physical fitness equipment such as sport courts, horizontal bars, parallel bars, and the like in this town is unacceptable in this day and age.	
Keawe Liu	email dated 02/15/2011	I voice my strong support for the construction of a bike/walking/emergency access trail through Waimea town. Waimea has inadequate roadways, with tiny and dangerous shoulders. There are nearly no alternate routes for emergency facility access if one of the main roadways were to be blocked. Our roadways, combined with the lack of safe routes for bicycles and pedestrians should be a major concern for the County. Bring our town into the 21st century with smart planning for non-motorized transportation.	
Matthew Pearce	letter dated 02/15/2011	I express my support for the proposed WTG project along Waikoloa Stream through Waimea.	
John B. Ray	letter dated 02/15/2011	I support the WTG project. I would encourage the adoption of more flexible surface standards to lessen impacts on existing trees, neighbors, etc.	
Thomas K. Sing	letter dated 02/16/2011	I strongly support the WTG to proceed as an area for the Waimea community to have a safe walking place.	
Deborah L. Chang	letter dated 02/16/2011	Future generations will thank us for our foresight while we enjoy the pathway in our wheelchairs. As Waimea grows to accommodate more residents and places of school and work, this greenway will only increase in value as a linear park. The concerns people express about the cost of the greenway underscore the need for a more comprehensive explanation of funding alternatives and methods in the FEA. Removal of decaying and hazardous trees is prudent, as is replanting.	
Avi Okin	email dated 02/17/2011	I support the WTG in your best alignment.	
Tanya Everts	email dated 02/18/2011	I am an elementary school teacher at Parker School and would like to take a moment to state how important I feel a trail through Waimea would be. I'm willing to bet that as a family we would ride to work/school at least 50% of the time. What important values that could teach children today. It could teach them to conserve nonrenewable resources, and help them to develop healthy lifestyle habits.	

Name	Date	Comments	Notes
Fran L. Tabor	letter dated 02/17/2011 and email dated 02/18/2011	The DEA fails to or inadequately addresses the following concerns: p2 - The statement on community support is anecdotal at best. A valid independent statistical study would have to be done of the larger Waimea Community. p3 - no reference to the extensive flood history of less than the 100 year ranking in Waimea p5 - no discussion of earthquake impact on flooding of the Waikoloa Stream p8 - no analysis, evaluation, or discussion of breakaway bridges p10 - Non porous construction materials contribute to runoff. The use of concrete as a path material is unacceptable in a flood area. p12 - neglects to mention anything related to either Federal or State government decrees as they relate to buffer zones, watershed protection, stream side management p14 - does not address toxins and bacteria in the Waikoloa Stream p16 - no acoustical study to evaluate noise or security issues p21 - at the DEA meeting on 02.09.11, the Hawaii County Police stood up and said that they do not have resources to patrol the path p23 - no discussion of crop safety and other challenges associated with farming such as gunshots and rifle fire p27 - Hawaii County uses herbicides/pesticides in landscape maintenance, poisons will enter stream p28 - the Lalamilo Farms lots needs an effective buffer zone of around 800' - 1000' p33 - the study assessing property values is outdated and updated information is available and should be p36 - the use of barbed wire fencing on the trail is unacceptable due to safety concerns p40 - no discussion of car parking p41 - no one has visited my residential site to inspect and evaluate the stream path	see attached response letter
Natlee Oshiro	letter dated 02/18/2011	I am a resident on Kahawai Street, my property is located at the end of the street, the only turn around spot. Concern with wear and tear on my driveway. Who will enforce signage and no parking? I don't want to support this project with my hard earned money; lots of other thinks that would be more beneficial to more of our community.I do not want Kahawai Street to be a connector road as Opelo Road and I want to preserve the sprit of my grandparents as well as my parents as they spent so many years at the end of this street all alone.	see attached response letter
Stanley Oshiro	letter dated 02/17/2011	I live on Kahawai Street, grew up on Hamakua Coast and always enjoyed going through Waimea's farms and open pasture. I am not in favor of path. Would hate to see people in pastures instead of cattle and horses. People ignore "no tresspassing" sign at Parker Ranch gate at the end of Kahawai Street. I can't imagine strangers walking on this road at all hours as clearly signs don't mean anything.	see attached response letter
Ava Williams and Scott Elliott	email dated 02/18/2011	We voice our strong support for the proposed trail in Waimea. Our only link from one side of town to another is a very busy highway the is unsafe for pedestrian and bicycle traffic. The Nature Park is a wonderful starting point with the short trails that surround it. Everyone will rally to protect the homeowners and be respectful of their property rights.	
Dawn Velasquez	email dated 02/18/2011	I want to add my voice to those that support the 16 year old WTG project.	
Kerry Kamisato	email dated 02/18/2011	I live adjacent to the proposed route of the trail, it will be right behind me. I feel that the trail will be a great benefit to the entire community of Waimea. I live in Waimea for beautiful scenery and open space, not because of roadways and traffic. Waimea has grown and continues to grow in population, and growth will fuel the need for a trail to provide a safe open space and route for the community. Need to protect our right to enjoy beauty of Waimea, should not be limited to those who have the keys to gated areas, the view or the money. Trail will protect this right for the generations to come.	
Michael C. Whelan	email dated 02/18/2011	I support the proposed trail for Waimea. Not only will such a trail provide for our present community needs in offering an open space for families, as well as a safe route for our school children, it will also set aside a valuable open area for future generations.	
Julia Simmons	email dated 02/18/2011	I enthusiastically support the trail. I think that each of the concerns of the opposition were addressed satisfactorily. It will keep a greenway through the heart of Waimea as our area becomes more and more urbanized.	
Deborah Spencer	email dated 02/18/2011	I wish to lend my support for the WTG project.	
Scott and Paula Cairns	email dated 02/18/2011	The WTG trail is an important and valuable project for our community and Island. A well planned pathway system ties into well-designed safe streets, allowing people of all ages to travel and play.	
Dr. Earl E. Bakken	email dated 02/18/2011 and letter dated 02/18/2011	I support the DEA for the Ke Ala Kahawai O Waimea. We have a great opportunity for promoting bicycle commuting. Not only would this project encourage independence from oil as fuel, it will bring jobs to our local economy, and will ultimately promote better health for our Hawaii Island people.	
Ellen Cordeiro	email dated 02/18/2011	I support the trail.	
Carmine DiPronio	letter date 02/18/2011	How many residents will use the path? Why doesn't the DEA have any statistics to show these numbers? How many residents have to use this trail to qualify it as a commuter path rather than a recreational path? Is this a cost effective way to benefit a chosen few? Why aren't our County officials working on essential projects to benefit all Hawaii County residents instead of wasting our tax dollars and human resources on a concrete path for only a chosen few?	see attached response letter

Name	Date	Comments	Notes
Pamela Cushnie	letter dated 02/18/2011	Why does the path need to be 10' wide? There are conflicting written statements for projected costs and length of the trail. Does the entire path need to be ADA accessible to receive federal funds or only portions? It is fiscally responsible reporting to show how much tax payer money has already been spent on this project. Would you please cite survey results for the DEA statement "there is a high level of support of the project within the community?" A map of the trail showing residents with concerns might be very enlightening to the County. The DEA mentions two specific subdivisions as being strongly against the trail but does not mention individuals with concerns. Would you cite survey results for the statement "positive impact on the local visitor industry?" Could you please identify areas providing adequate parking for tour buses and cars and corresponding results from a traffic mitigation study? I believe you asked The Waimea Board of Water Department to move their fence back to accommodate for parking for the trail at the the corner of Kawaihae Rd. near Merriman's Restaurant. The South Kohala Traffic Safety Committee acknowledged this dangerous intersection by having the County place "no parking" markers along the highway. Be more specific about the 10' clearing on either side of the path. Will this routinely involve the use of plant poison or done by mechanical means? Would these machines pose a fire concern? How does fire department access the path? Would you cite survey results for the expected use of the trail by residents? In Chapter 4, page 58, paragraph 3, there is an unfinished sentence "It is also recommended that the WTC...." Many of your cited documents were very old sources. A more thorough process should have been put in place for distribution of important information. Please permanently take the mauka path off of any project plans.	see attached response letter
Kurt Shively	letter dated 02/18/2011	The DEA states "these alternatives were originally identified by the WTG committee members in the early 1990's. This statement is false. I believe the alternative alignment was not considered until seeking federal funds. We would like proof showing the documents of the mauka alternative proposed trail that you claim were made in the 1990's. We are requesting you show the alternative alignment separate, not together. According to the SKCD Plan 2020 the expansion of the town is headed south of the new Parker Ranch connector road. Why haven't you considered building the proposed trail in this location before development begins? The DEA discusses the Waimea Traffic Circulation Study. You turn its comments around and make it sound like it is all about bike trails. This study was to address traffic congestion at Lindsey Rd., Mamalahoa Hwy. intersection. Work together to build a new road from Kawaihae Hwy. to the vicinity of the Waimea Airport with a bike path alongside it to alleviate the traffic congestion not waste the money on a concrete bike path for a special interest group. Any money allocated for Hawaii County should be targeted for a new bypass, not a bike/walk trail.	see attached response letter
LaDonna Shively	letter dated 02/18/2011	I am writing to share my disapproval of the concrete path proposed by the WTG committee. Please hold additional forums with the citizens of Waimea. It is unthinkable that beautiful heritage trees will be sacrificed for yards of concrete. Why does the DEA claim there is "widespread support for this project?" Where are your statistics to show you actually spoke to the residents of Waimea? I also object to the expense. This is a rural community of less than 14,000 people. We can not justify spending this kind of money for a chosen few. It is well know that Hawaii County uses pesticides to control their landscape maintenance. Why doesn't the DEA address these poisons entering the stream. Why doesn't your DEA address natural accidents and arson fires that are well known over the past five years around South Kohala? The DEA does not address the full negative impact on residents adjacent to the trail, nor traffic congestion that will undoubtedly result from people parking at trail access points. With cutbacks how can the county assure us that it will adequately patrol this trail in the years to come? Barbed wire fences are inappropriate for the path. They are know to cause injury. State and County parks are shut down at night because of homeless, vandalism, drinking, fighting. Who is going to provide security? County and WTG are putting responsibility of policing a public path on the backs of homeowners.	see attached response letter
Tania Howard, Managing Partner, Maile Charters	letter dated 02/19/2011	I support the vital Greenways path system in development in Waimea. It would allow parents to walk their children to school in an enjoyable manner, with the underpass under Kawaihae Road providing a safer crossing alternative for certain school routes. Homes that directly border a Greenways path are valued at $40,000 higher than those that do not.	

Name	Date	Comments	Notes
Margaret Wille	memo dated 2/19/2011 transmitted via email dated 02/20/2011	Although I have significant issues with current design, I am very supportive of ovreall proposed trail plan. In general, width of the walk should be keep to a minimum, no more than 8' wide. Permeable design materials are preferable. If the trail corridor passes through eucalyptus trees, design mitigation measures should be required so that removal of any healthy trees is minimal. Although not native species, trees have historic and enviornmental value. Flooding potential of this stream will be greatly increased if more than a minimal number of these trees are removed. These trees are also important as a windbreak. The Waimea Design Plan specifically mentions the importance of preserving clusters of trees. If variances from the usual trail requirements are not possible then should consider taking abutting land to provide a trail corridor that does not go through the midst of these trees bordering the stream. Suggest reduction in immediate scope to reduce estimated price, e.g., trail should not be built to go under Lindsey Rd. bridge. Easterly end of the trail is very important in terms of potential use as an alternative to vehicular traffic for persons bringing children to Parker School. Construction of this portion of the stream should not be delayed. Design plans around Lindsey Road are unrealistic. County's current plans do not include rebuilding entire bridge; under bridge path will not be part of bridge replacement At the Lindsey Bridge location there can be narrow side paths rather than construction an under bridge passageway. Will also avoid need for eminent domain; property owners here are adamant against the trail following the stream to the bridge. In the area around Opelo Rd. to Kahawai St., I negotiated with Parker Ranch to give an additional area on the south side of the stream for the WTG easement. I believe locating trail on south side is preferable given the slopes of the ground and the preference to keep the path away from residences.	see attached response letter
Marius Ellis and Susan B. Hunt	email dated 02/20/2011	My husband and I support the WTG Project.	
Colette Tyau	email dated 2/20/2011	Family and I wholeheartedly support project. We need safe walking, biking, hiking and running paths for our ohana. Attached find statements from my children Ethan Tyau (age 9) and AriaMarie Tyau (age 8).	
Nancy Alvord, Realtor Broker, Lava Rock Realty	letter and email dated 02/21/2011	I am a property owner on Kahawai St. in Waimea and I understand that a trail entry location is planned for the end of my street for the WTG project. I am in complete support of this project! These trails are a wonderful addition to the community and I feel the positives definitely outweigh the negatives.	
George Ainge	email dated 02/21/2011	I am a strong supporter of the Trails project. The number of bikers and pedestrians have grown exponentially. Having this trail will allow these groups to get away from this busy roadway. I frequently see drivers taking chances along the Kawaihae Road and I have witnessed several close calls with bikers and school children walking to the multiple schools along this corridor. In this high tech age there are many effective methods that can be used to make the trail safe; video surveillance could work very nicely and deter a large percentage of the crime. We could also have a "Blue light" security system along the length of the trail, similar to the systems that are used on almost every college campus in the country. Having solar powered call boxes/alarms and possibly video camera units spread out along the trail would be expensive but well worth it. I think it will be extremely important to work with police officials who are in positions of authority and responsibility instead of only relying on testimony of police officers with a limited scope and perspective like the one who was present at the meeting. If the school children of Waimea Middle and Elementary school use this trail there will be a great temptation for them to leave the trail behind the Carter Professional Center and cut through their parking lot and then cross the highway to school where there is no crosswalk.	
Pamela, Victor, Susannah, and Sofia Jensen	email dated 02/21/2011	By providing a safe location to hike, walk, and bicycle away from car and truck traffic, the trail would contribute to the health and welfare of our neighbors while giving us a safe alternative to driving. Please register the unconditional support of our family for this project.	
Stafford Clarry	email dated 02/21/2011	More work needs to be done on elaborating how this project will enhance the quality of life for Waimea. More attention and effort need to be paid to articulating the demographic groups, with projected numbers, of those who would use the trail. Trail width and other specification that address "welcoming" various user groups need to be considered and articulated. Programs to actively encourage usage also need to be considered and articulated in the EA. Project would be strengthened if it is demonstrated to be part of a larger, longer-term trail vision to enhance the quality of life of most, if not all, citizens of Waimea. At the community meeting, passionate words were spoken against urbanization that the trail would supposedly accelerate. This needs to be squarely addressed and not brushed aside. Demonstrate in the EA how the Waimea Trail fits the Waimea Community Development Plan. The number of trail access points mentioned in the EA appear to be far too few to maximize/optimize usage. More access points need to be inserted into the design. Select a trail color that compliments, not confronts, the natural surroundings. HPA Village Campus should also be mentioned in section 2.2.3 along with the other schools. Strong objection was voiced against mentioning the mauka alternatives in the EA. What is the purpose of including them? There must be other cultural features that the Trail could highlight, in addition to becoming an ethno-botanical walk. While the 2004 flood was passionately highlighted as a deficiency in the EA, the apparently well-known cause of the flood (debris-plugged streambed) was not mentioned in the same breath. The process of constructing and using the trail begin soonest possible in order to stimulate additional support for latter stages.	

Name	Date	Comments	Notes
Kevin Wiesmann	email dated 02/21/2011	As a resident of Sandalwood and a local physician I see the project only bringing benefits to Waimea and its people. May this email serve as my support for the project.	
Mike Dohoho	letter dated 02/21/2011	This represents my strong support for the WTG project. The WTG is essential infrastructure for our community in its ongoing development as the third urban center of Hawaii Island. This would be the first step in diversifying our transportation options in a time when they need it the most. We need bike lanes throughout community. There are valid concerns to be heard. These are fears, and not the basis to abandon a project, but the starting point for discussion, mitigation, development, and good planning. We cannot afford NOT to have this trail. To those who have shared their fears, let's work together on them; if we just quit, then fear wins. Let aloha prevail.	
Sherman Warner	email dated 02/21/2011	I heartily support the WTG multi-use path. Much of the path's route is now inaccessible and "hidden" in the center of our town; by creating a public space, winding along the banks of Waikoloa Stream, Ke Ala Kahawai O Waimea will become an invaluable community asset. Trees are an important asset to our community and it is hoped that every effort will be made to save	
Riley Smith, P.E.	email dated 02/21/2011	I am in favor of the WTG project. I am an owner of a residential lot in Kamuela View Estates. The project will end about 500' from my home. It will benefit our subdivision, as well as greater Waimea community. The amount of cash required to be provided by the County of Hawaii is likely to be minimal.	
Michelle Taira Medeiros	Memo dated 2/21/2011 transmitted via email dated 02/22/2011	The failure of the DEA to include the negative impacts identified by residents leads me to conclude that the DEA is not rigorous nor objective. Why hasn't the DEA more rigorously addressed the impact of noise, traffic, and social dynamic of this project? Why isn't the estimated resident and visitor usage quantified? Why isn't the loss of peace, serenity, and privacy by; the added concern for trespass and theft to; and noise disturbances affecting these residents identified as a negative social impact? Where is the DEA analysis of traffic and traffic safety impacts due to visitor usage? What percentage of the school-aged children are expected to use the trail to get to school and back? Is the number of residents who will use the trail significant relative to the total population of Waimea? Is the estimated cost to purchase easements or other legal access to private properties included in the estimated $18 million dollar project cost? The use of the Burke-Gilman trail study is not a valid comparison. Why doesn't the DEA forego this comparison and identify a more appropriate comparison? If skateboarding will not be permitted, how will that prohibition be enforced? If this path becomes part of the training plan for athletes such Ironman competitors, I foresee serious conflicts between pedestrians and high speed bicyclists. The proposed project will not "eliminate" the need to drive to parks. Do the planners expect visitors to walk or bike to the project along the roads the DEA claims are unsafe? The streamside area is already an open space corridor and is already accessible through the Waimea Nature Park Ulu La`au. Why was the bicycling master plan not included as an alternative in the DEA?	see attached response letter
Drew Medeiros	Memo dated 2/21/2011 transmitted via email dated 02/22/2011	If a retaining wall is constructed to prevent the stream from eroding the bank near path, what is the long term affect of this restriction to the up stream and down stream course, flooding, and bank stability? Recent history has shown that 30 year flooding events have resulted in serious property damage. How will restricting the natural flow of the stream change the stream over flow during 30 year flooding events? Why hasn't the DEA accounted for the negative impact on natural beauty due to constructed elements such as retaining walls and bridges? There may some day be structures on both sides of the stream. How will the "open space" of the project be different from the open space of Kawaihae Road? Where is the evidence to support the statement "Ke Ala Kahawai O Waimea enjoys widespread community support?" This DEA does not meet the standard of objectivity set by the Council on Environmental Quality.	see attached response letter

Name	Date	Comments	Notes
Donald O. Cox, PhD, P.E.	letter dated 02/21/2011	Enclosed is a 27-page document titled "Questions and Comments Regarding the Draft EA for the Waimea Trails and Greenways Project" which are my comments and questions regarding the DEA that should be addressed before the EA is considered final. I discuss a few of the major areas below, and list specific issues and concerns in the enclosure. It is quite apparent that the primary reason for the Project as currently conceived is to meet requirements for Federal funding. The WTG Project is not a natural "trail" or "path"; it is a concrete road that will scar the natural beauty of the Waikōloa Stream and surrounding area. The number of people that can, let alone will, use it as an "alternative transportation facility" is limited, especially when compared to the number of citizens in the County, State or Country that will be asked to pay for the Project. Concerning the "Mauka Alternative:" I was told by Mr. Clemson Lam (during 6.19.10 WTG meeting) that this alternative was developed during a 3.23.10 community meeting. It was not considered in the 2004 EA the County paid for, and I have yet to see any documentation showing it was considered previously. Where is the transparency that is suppose to exist with our County government? While the "Mauka Alternative" is rejected in the DEA, its inclusion has raised the concerns of those whose property would be affected by a path located as proposed by this alternative. Many worry, "What is to keep the County or other agency from raising the "Mauka Alternative" again in the future?" There are better, more important, "alternative transportation facilities" that should be considered in lieu of the WTG Project. There is much discussion in the DEA about community participation in workdays to build a wood-chipped path along the same easements where the concrete road is proposed to pass. Why not let the community continue to build this type of path along the WTG Project alignment? The DEA reads as if it was written as a public relations document promoting the WTG Project, not as an impartial, unbiased analysis of the environmental impact this Project will have. There is much opinion without supporting fact or documentation. Statements in the EA should be supported by fact rather than be mere speculation and opinion.	see attached response letter
Rick Gmirkin and Nancy Erger	email dated 02/21/2011	We support the preferred alternative for the proposed WTG as described in the DEA. I certainly hope the FEA will address any community concerns and the trail will be approved to move forward.	
Mike Varney	email dated 02/24/2011	My wife and I purchased our home along Waikoloa stream. We have had the pleasure of enjoying the beauty of this property and what is has to offer. Our kids have grown up playing in the pasture by the stream. We hope to someday share this with the rest of the Waimea community. Our family fully supports this trail along Waikoloa stream had hope it becomes a reality.	

Pre-Assessment Consultation Comments

United States Department of the Interior

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

RECEIVED JUN 23 2010

In Reply Refer To:
2010-TA-0310

JUN 18 2010

Mr. Glen T. Kimura
Kimura International
1600 Kapiololani Boulevard, Suite 1610
Honolulu, Hawaii 96814

Subject: Early Consultation Technical Assistance for the Waimea Tails and Greenways Ke Ala Kahakai O Waimea Shared-Use Path Waimea, Hawaii

Dear Mr. Kimura:

We received your letter on May 18, 2010, requesting early coordination on a proposed 4.5 mile shared-use path that extends through Waimea, on the island of Hawaii. The path generally follows the meandering Waikoloa Stream that passes through urban areas and agricultural lands.

Based on information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program, and the Hawaii GAP Program, the federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) and the Blackburn's sphinx moth (*Manduca blackburni*) may occur in the project vicinity. We offer the following recommendations as potential issues to be reviewed and addressed in the Draft Environmental Assessment (DEA).

Hawaiian hoary bats roost in both exotic and native woody vegetation and leave their young unattended in "nursery" trees and shrubs when they forage. If trees or shrubs suitable for bat roosting are cleared during the bat breeding season (April to August), there is a risk that young bats could inadvertently be harmed or killed. To minimize impacts to the endangered Hawaiian hoary bat, woody plants greater than 15 feet tall should not be removed or trimmed during the bat birthing and pup rearing season (April 15 through August 15).

The endangered Blackburn's sphinx moth (*Manduca blackburni*) may occur in the project area. Blackburn's sphinx moth larvae feed upon nonnative tree tobacco (*Nicotiana glauca*) and other non-native host plants including *Nicotiana tabacum* (commercial tobacco), *Solanum melongena* (eggplant), *Lycopersicon esculentum* (tomato), and possibly *Datura stramonium* (Jimson weed). The full range of the taxa that Blackburn's sphinx moth larvae may feed on is not known. Larvae of a close relative of Blackburn's sphinx moth, *Manduca sexta,* are known to feed on a wide variety of taxa in the Solanaceae family including: *Capsicum* (sweet and chili pepper), *Cestrum* (ornamental plants), *Cymphomandra* (tomatillo), *Datura* (jimson weed, loco weed), *Lycium* (ornamental plants used for Chinese herbal medicines), *Lycopersicum* (tomato), *Petunia* (petunia), *Physalis* (tomatillo

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and ground cherry), *Solandra* (ornamental vines) and *Solanum* (potato, eggplant, christmas cherry, nightshade). From the information we have on hand, we cannot ascertain whether there are host plants at the proposed project site. As this area is within the historical range for Blackburn's sphinx moth and because the proposed project site likely has favorable conditions for its host plants, we recommend that you survey the site for the presence of Blackburn's sphinx moth and its host plants. If either are found, we recommend that you contact our office for further assistance.

We note that your project will be in close proximity to the Waikoloa Stream. To minimize the degradation of water quality, we recommend the following measures be incorporated into the project.

1. Turbidity and siltation from project-related work should be minimized and contained to within the vicinity of the site through the appropriate use of effective silt containment devices and the curtailment of work during weather conditions.
2. All project-related materials and equipment (dredges, barges, backhoes, *etc.*) to be placed in the water should be cleaned of pollutants prior to use.
3. No project-related materials (fill, revetment rock, pipe, *etc.*) should be stockpiled in the water (stream channels, wetlands, *etc.*).
4. All debris removed from the aquatic environment should be disposed of at an approved upland or ocean dumping site.
5. No contamination (trash or debris disposal, non-native species introductions attraction of non-native pests, *etc.*) of adjacent aquatic environments (stream channels, wetlands, *etc.*) should result from project-related activities. This should be accomplished by implementing a litter-control plan and developing a Hazard Analysis and Critical Control Point Plan (HACCP – see http://www.haccp-nrm.org/Wizard/default.asp) to prevent attraction and introduction of non-native species.
6. Fueling of project-related vehicles and equipment should take place away from the water and a contingency plan to control petroleum products accidentally spilled during the project shall be developed. Absorbent pads and containment booms should be stored on-site, if appropriate, to facilitate the clean-up of accidental petroleum releases.
7. Any under-layer fills used in the project should be protected from erosion with stones (or core-loc units) as soon after placement as practicable.
8. Any soil exposed near water as part of the project should be protected from erosion (with plastic sheeting, filter fabric, *etc.*) after exposure and stabilized as soon as practicable (with native or non-invasive vegetation matting, hydroseeding, *etc.*).

If you have any questions regarding this letter, please contact Dr. Jeff Zimpfer, Fish and Wildlife Biologist, Consultation and Technical Assistance Program (phone: 808-792-9431; email: jeff_zimpfer@fws.gov).

Sincerely,

for Loyal Mehrhoff
Field Supervisor

Leslie Kurisaki

From: Shirakata, Gary N POH [Gary.N.Shirakata@usace.army.mil]
Sent: Monday, May 24, 2010 1:44 PM
To: Leslie Kurisaki
Subject: RE: Waimea Trails and Greenways

Hi Leslie,

I received a letter from Glenn Kimura soliciting early input from our agency. Subject project appears to be within the formerly used defense site (FUDS) know as the former Waikoloa maneuver area. The US Army Corps of Engineers and its contractors have performed surface and subsurface removal of munitions and explosives of concern (MEC) on the majority of the project area but there are areas that work has not been performed. MEC may be present on the proposed path and appropriate precautions should be taken. Please feel free to contact me if you have any questions.

Gary N. Shirakata
USACE - Honolulu Engineer District
Program & Project Manager
Wk: (808) 438-0772
Cell: (808) 266-0581
Fax (808) 438-7801
gary.n.shirakata@.usace.army.mil

The information contained in this e-mail message and/or the document transmitted is privileged and confidential and is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any examination, use, dissemination, distribution or copying of this communication is strictly prohibited and may constitute a violation of law. If you have received this communication in error, please immediately notify this office by telephone (808-438-0772), and delete this e-mail from your computer system.

-----Original Message-----
From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Wednesday, May 12, 2010 4:39 PM
To: Shirakata, Gary N POH
Subject: RE: Waimea Trails and Greenways

Thanks.

-----Original Message-----
From: Shirakata, Gary N POH [mailto:Gary.N.Shirakata@usace.army.mil]
Sent: Wednesday, May 12, 2010 4:33 PM
To: Leslie Kurisaki
Subject: RE: Waimea Trails and Greenways

Building 252
Fort Shafter, HI 96858

-----Original Message-----
From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Wednesday, May 12, 2010 4:32 PM
To: Shirakata, Gary N POH

Subject: RE: Waimea Trails and Greenways

Dear Gary,

We're sending out an Early Consultation letter for the Draft EA for Waimea Trails and Greenways. I'd like to include you on our mailing list. Could you please send me your mailing address?

Thank you,

Leslie

Leslie Kurisaki

Kimura International, Inc.

1600 Kapiolani Blvd., Suite 1610

Honolulu, Hawaii 96814

Phone (808) 944-8848

Fax (808) 941-8999

From: Glenn Kimura [mailto:glennk@kimurainternational.com]
Sent: Tuesday, December 08, 2009 5:19 PM
To: gary.n.shirakata@usace.army.mil
Cc: 'Leslie Kurisaki'
Subject: FW: Waimea Trails and Greenways

Gary,

Thanks for your assistance. Attached are maps showing the preferred alignment (pink) and alternatives (yellow and blue). Other map shows landowners from whom easements have been obtained. Note, maps have been provided from other sources so I really can't answer any detailed questions regarding them.

Glenn

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAR 3099

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

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LAND DIVISION
2010 JUN 15 P 3:11
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

May 19, 2010

RECEIVED
MAY 19 2010
AQUATIC RESOURCES

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Hawaii District
x Historic Preservation

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation for an Environmental Assessment for Waimea Trails and Greenways
LOCATION: Island of Hawaii
APPLICANT: Kimura International on behalf of the County of Hawaii, Department of Parks & Recreation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by June 11, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

(✓) We have no objections.
( ) We have no comments.
( ) Comments are attached.

Signed: W Walker
Date: 30 May 2010

LINDA LINGLE
GOVERNOR

XXXXXXXXXXXXXXXXXX
PATRICIA HAMAMOTO
XXXXXXXXXXXXXXX
SUPERINTENDENT

KATHRYN S. MATAYOSHI
INTERIM SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI'I 96804

OFFICE OF THE SUPERINTENDENT

RECEIVED JUN 02 2010

June 1, 2010

Mr. Glenn T. Kimura, President
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawai`i 96814

Dear Mr. Kimura:

Subject: Early Consultation, Waimea Trails and Greenways Shared Use Path
Ke Ala Kahakai O Waimea, Waimea, Hawaii

The Department of Education (DOE) has reviewed the early consultation request for the proposed Ke Ala Kahakai O Waimea project.

The DOE has no comment regarding this project.

Thank you for the opportunity to provide comments. If you have any questions, please call Jeremy Kwock of the Facilities Development Branch at 377-8301.

Very truly yours,

Kathryn S. Matayoshi
Interim Superintendent

KSM:jmb

c: Randolph Moore, Assistant Superintendent, OSFSS
Art Souza, CAS, Honokaa/Kealakehe/Kohala/Konawaena Complex Areas

LINDA LINGLE
GOVERNOR
STATE OF HAWAI'I

KAULANA H. R. PARK
CHAIRMAN
HAWAIIAN HOMES COMMISSION

ANITA S. WONG
DEPUTY TO THE CHAIRMAN

ROBERT J. HALL
EXECUTIVE ASSISTANT

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS
P.O. BOX 1879
HONOLULU, HAWAI'I 96805

RECEIVED JUN 15 2010

June 14, 2010

Mr. Glenn T. Kimura, President
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814

Subject: Waimea Trails and Greenways
Ke Ala Kahakai O Waimea
Shared Use Path
Environmental Assessment—Early Consultation

Aloha Mr. Kimura,

Thank you for the opportunity to provide pre-assessment comments prior to the Draft Environmental Assessment (DEA) for the Waimea Trails and Greenways project, *Ke Ala Kahakai O Waimea* in Waimea, Hawai'i. The Department of Hawaiian Home Lands (DHHL) owns approximately 12,198 acres in Waimea region that includes 11,948 acres in Pu'ukapu and 250 acres in Lālāmilo. The DHHL's property is adjacent to the proposed project.

As adjacent landowners, engaging in our own planning process, it is our responsibility to participate and plan appropriately for the larger region. In addition, it is our priority to ensure that DHHL's plans are as consistent as possible with other plans in the area.

Please consider the following comments on your proposed project:

1. We are excited that this trail system and greenways project is becoming a reality in this region. This project will provide recreational opportunities as well as commuting alternatives to Waimea Town for future Hawaiian Home Lands lessees.

2. The DHHL has developed various plans and collected information and data for this region. You may want to refer to the following documents for information relating to our lands and the region:
   a. Lālāmilo-Pu'ukapu Regional Plan (December 2008)
   http://hawaii.gov/dhhl/publications/regional-plans

b. Hawai'i Island Plan (May 2002)
http://hawaii.gov/dhhl/publications/island-plans
c. Final EIS for Lālāmilo Residential Lots and Industrial Uses
http://oegc.doh.hawaii.gov

3. Waikoloa Stream along the DHHL lands is a former UXO site. There are various reports done, including a DHHL lands UXO cleanup report, for this area. We have a copy of our reports if you need to access them, but please reference these documents in your EA.

4. With the close proximity of this project to our future Lālāmilo homesteads we do have a few concerns with increased access, potential crime, and loitering near our residential lots.

5. With any trail or road development, please be sure that the trail is properly managed and maintained.

6. Please consult with the Waimea Homestead Association Inc. and Kanu o Ka 'Āina Charter School who may have programs that will be directly affected by the proposed project.

7. If use of Hawaiian home lands is required for the project, please contact our Land Management Division at 620-9450 to request use and access.

We thank you for the opportunity to comment on the project. We will continue, as an adjacent landowner, to do what we can to assist in your planning efforts. If you have any questions, please contact Kaleo Manuel at our Planning Office at 620-9485.

Aloha and mahalo,

Kaulana H.R. Park, Chairman
Department of Hawaiian Home Lands

Enclosures
cc: Waimea Homestead Association
Kanu o Ka 'Āina Charter School

LINDA LINGLE
GOVERNOR OF HAWAII

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

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

In reply, please refer to:
EMD / CWB

06043PJF.10

June 16, 2010

RECEIVED JUN 17 2010

Mr. Glenn T. Kimura
President
Kimura International Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814

Dear Mr. Kimura:

SUBJECT: Envirmentental Assessment (EA) - Early Consultation for Waimea Trails and Greenways Ke Ala Kahakai O Waimea Shared Use Path Waimea, Island of Hawaii, Hawaii

The Department of Health, Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project.

Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at: http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for an NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

   a. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.

   b. Construction dewatering effluent.

   You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

3. For types of wastewater not listed in Item No. 2 above or wastewater discharging into Class 1 or Class AA waters, you may need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage is required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

06043PJF.10

If you have any questions, please visit our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at 586-4309.

Sincerely,

ALEC WONG, P.E., CHIEF
Clean Water Branch

JF:ml

c: DOH-EPO #I-3187 [via email only]

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

June 14, 2010

RECEIVED JUN 17 2010

Kimura International, Inc.
1600 Kapiolani Blvd Suite 1610
Honolulu, Hawaii 96814

Attention: Mr. Glenn T. Kimura, President

Ladies and Gentlemen:

Subject: Early Consultation for an Environmental Assessment for Waimea Trails and Greenways

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Division of Forestry & Wildlife, Land Division-Hawaii, Division of State Parks, Office of Conservation & Coastal Lands, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Morris M. Atta
Acting Administrator

→ Na Ala Hele

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

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RECEIVED JUN 17 2010

May 19, 2010

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LAND DIVISION
2010 JUN -3 P 12:02
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__ Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Hawaii District
x Historic Preservation

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation for an Environmental Assessment for Waimea Trails and Greenways
LOCATION: Island of Hawaii
APPLICANT: Kimura International on behalf of the County of Hawaii, Department of Parks & Recreation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by June 11, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(X) We have no comments.
( ) Comments are attached.

Signed: Paul J. Conry
Date: JUN - 2 2010

PAUL J. CONRY, ADMINISTRATOR
DIVISION OF FORESTRY AND WILDLIFE

HA-2010-243

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED
OFFICE OF CONSERVATION
& COASTAL LANDS
2010 MAY 20 A 10:29

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LAND DIVISION
2010 MAY 26 A 10:22
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 19, 2010

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Hawaii District
x Historic Preservation

RECEIVED JUN 17 2010

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation for an Environmental Assessment for Waimea Trails and Greenways
LOCATION: Island of Hawaii
APPLICANT: Kimura International on behalf of the County of Hawaii, Department of Parks & Recreation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by June 11, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(X) We have no comments. Not in Conservation District
( ) Comments are attached.

Signed: _____
Date: 5-26-10

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

2010 MAY 21 P 12:12

RECEIVED
LAND DIVISION

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 19, 2010

RECEIVED JUN 17 2010

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Hawaii District
x Historic Preservation

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation for an Environmental Assessment for Waimea Trails and Greenways
LOCATION: Island of Hawaii
APPLICANT: Kimura International on behalf of the County of Hawaii, Department of Parks & Recreation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by June 11, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed:
Date: 5.26.10

54063

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED
STATE PARKS DIV

10 MAY 20 A10 :47

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

DEPT OF LAND & NATURAL RESOURCES

2010 JUN -1 A 11: 19

DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

RECEIVED
LAND DIVISION

May 19, 2010

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Hawaii District
x Historic Preservation

RECEIVED JUN 17 2010

FROM: Charlene Unoki, Assistant Administrator
SUBJECT: Early Consultation for an Environmental Assessment for Waimea Trails and Greenways
LOCATION: Island of Hawaii
APPLICANT: Kimura International on behalf of the County of Hawaii, Department of Parks & Recreation

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by June 11, 2010.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed:
Date: 5/27/10

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

June 21, 2010

RECEIVED JUN 23 2010

Kimura International, Inc.
1600 Kapiolani Blvd Suite 1610
Honolulu, Hawaii 96814

Attention: Mr. Glenn T. Kimura, President

Ladies and Gentlemen:

Subject: Early Consultation for an Environmental Assessment for Waimea Trails and Greenways

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to Division of Aquatic Resources and Historic Preservation for their review and comment.

The Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Charlene Unoki

Charlene Unoki
Assistant Administrator

LINDA LINGLE
GOVERNOR

BRENNON T. MORIOKA
DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI
JIRO A. SUMADA

IN REPLY REFER TO:

STP 8.0118

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

June 2, 2010

RECEIVED JUN 09 2010

Mr. Glenn T. Kimura
President
Kimura International Inc.
1600 Kapiolani Boulevard, Suite 1610
Honolulu, Hawaii 96814

Dear Mr. Kimura:

Subject: Waimea Trails and Greenways Share Use Path
Draft Environmental Assessment (DEA) – Early Consultation (EC)

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project, which proposes to pave the 4.5 mile path which follows the course of the Wailoloa Stream. The shared use path begins at a future County park (former Clark property) opposite the South Kohala View Estates subdivision and ends at Church Row in Waimea Town on the east.

1. Given the location of the shared use path, DOT does not anticiapte any significant, adverse impacts to its transportation facilties.

2. However, the optional segments and alternative paths may impact DOT highways facilities, Kawaihae Road and Kohala Mountain Road. The DEA should assess the impacts to State highway facilities and address issues such as, but not limited to, access improvements, interaction of project generated traffic, foot and non-motorized traffic with vehicle traffic and traffic safety controls measure.

DOT appreciates the opportunity to provide comments. Please provide four (4) copies of the DEA when it is available. If there are any questions, please contact Mr. David Shimokawa of the DOT Statewide Transportation Planning Office at telephone number (808) 587-2356.

Very truly yours,

BRENNON T. MORIOKA, Ph.D., P.E.
Director of Transportation

LINDA LINGLE
GOVERNOR OF HAWAII

RECEIVED
LAND DIVISION

2010 JUN 21 P 1:50

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

June 16, 2010

LOG NO: 2010.1049
DOC NO: 1006MD04
Archaeology

MEMORANDUM

TO: Charlene Unoki, Assistant Administrator
DLNR Land Division

RECEIVED JUN 23 2010

FROM: Nancy McMahon, Deputy SHPO/State Archaeologist and Historic Preservation Manager
State Historic Preservation Division Nancy A. McMahon

SUBJECT: **Chapter 6E-8 Historic Preservation Review –**
Early Consultation for an Environmental Assessment for Waimea Trails and Greenways Project
Lalamilo Ahupua'a, South Kohala District, Island of Hawai'i
TMK: (all, por.) (3) 6-5-003:004, 005, 007 & 044 and 6-6-003:006 & 013

Thank you for the opportunity to comment on the aforementioned project, which we received on May 21, 2010. We apologize for the delay in our reply.

Archaeological sites are present within the project area. An archaeological inventory survey has been prepared (*Yucha, Shideler and Hammatt 2009*) and we have accepted it as final (*Log No. 2009.3316, Doc No. 0909MD12*). However, the preservation plan we requested in September 2009 has not yet been received by our office. We recommend no ground-altering construction begin until this plan has been reviewed and accepted by SHPD.

If you have questions about this letter please contact Morgan Davis at (808) 933-7650 or email morgan.e.davis@hawaii.gov.

William P. Kenoi
Mayor

William T. Takaba
Managing Director

Lono A. Tyson
Director

Ivan M. Torigoe
Deputy Director

County of Hawai'i

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

RECEIVED MAY 24 2010

May 20, 2010

Mr. Glenn T. Kimura
President
KIMURA INTERNATIONAL, INC.
1600 Kapi'olani Blvd, Suite 1610
Honolulu, HI 96814

RE: Waimea Trails and Greenways
Ke Ala Kahakai O Waimea
Shared Use Path
EA – Early Consultation

Dear Mr. Kimura,

We have no comments to offer on the subject project.

Thank you for allowing us to review and comment on this project.

Best Regards and Aloha,

Lono A. Tyson
DIRECTOR

12630R

William P. Kenoi
Mayor

Darryl J. Oliveira
Fire Chief

Glen P. I. Honda
Deputy Fire Chief

County of Hawai'i
HAWAI'I FIRE DEPARTMENT
25 Aupuni Street • Suite 2501 • Hilo, Hawai'i 96720
(808) 932-2900 • Fax (808) 932-2928

RECEIVED JUN 1 0 2010

June 1, 2010

Mr. Glenn T. Kimura
Kimura International Inc.
1600 Kapiolani Boulevard
Suite 1610
Honolulu, Hawai'i 96814

SUBJECT: ENVIRONMENTAL ASSESSMENT-EARLY CONSULTATION
WAIMEA TRAILS AND GREENWAYS

We have no comments to offer at this time in reference to the above-mentioned Early consultation Environmental Assessment.

DARRYL OLIVEIRA
Fire Chief

RP:lpc

Hawai'i County is an Equal Opportunity Provider and Employer.

William P. Kenoi
Mayor

Harry S. Kubojiri
Police Chief

Paul K. Ferreira
Deputy Police Chief

County of Hawai'i

POLICE DEPARTMENT
349 Kapi'olani Street • Hilo, Hawai'i 96720-3998
(808) 935-3311 • Fax (808) 961-2389

RECEIVED JUN 01 2010

May 24, 2010

Mr. Glenn T. Kimura
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura:

SUBJECT: WAIMEA TRAILS AND GREENWAYS
KE ALA KAHAKAI O WAIMEA
SHARED USE PATH
ENVIRONMENTAL ASSESSMENT—EARLY CONSULTATION

This responds to your request for comments on the above-referenced project. We have no comments at this time; however, we may have comments or concerns to offer upon review of the Draft Environmental Assessment.

Should you have any questions, you may contact Captain James Sanborn, South Kohala District Commander, at 887-3080.

Sincerely,

HENRY J. TAVARES JR.
ASSISTANT CHIEF
AREA II OPERATIONS

JNS:dmv
RS100212

William P. Kenoi
Mayor

BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

County of Hawaii

PLANNING DEPARTMENT
Aupuni Center • 101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720
Phone (808) 961-8288 • Fax (808) 961-8742

RECEIVED JUN 18 2010

June 14, 2010

Glenn T. Kimura, President
Kimura International, Inc.,
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814

Dear Mr. Kimura:

Environmental Assessment
Request for Preliminary Comment
Waimea Trails and Greenways Project – *Ke Ala Kahakai O Waimea*
Shared Use Path

This is to acknowledge receipt of your letter dated May 17, 2010, requesting preliminary comments for the Environmental Assessment (EA) being prepared for the Waimea Trails and Greenways project, *Ke Ala Kahakai O Waimea*. The South Kohala Community Development Plan (SKCDP) strongly advocates for the development of the *Ke Ala Kahakai O Waimea* as well as supporting the shared path concept that includes considering equestrian use along the path where appropriate.

We offer the following preliminary comments in support of the *Ke Ala Kahakai O Waimea* shared use path.

Traffic and transportation has been identified as priority issues in the SKCDP. The following language is contained in General Policy 2 (page 49), of the District-wide policy section: "Provide for the transportation and circulation needs of the South Kohala community and for the commuters to/from South Kohala.

Sub Policy 2.2 (page 49) of General Policy two supports establishing "bicycle, pedestrian, and equestrian travel ways to link up the communities within the District (Waikoloa Village, Waimea, Puako, Kawaihae, and the resort nodes) while also establishing alternative travel ways within the individual communities. Also, establish public trails to various cultural locations and other sites of interest, where a significant level of visitation is appropriate and does not pose a threat to the resource, as identified by the community." See Appendix H of the SKCDP for list of suggested alternative travel ways and trails.

The *Ke Ala Kahakai O Waimea* is listed and described as a current and future road project in table 4.1 on page 58 and the final paragraph on page 62 of the SKCDP.

Strategy 5.2 (page 73) of the Waimea Town Plan of the SKCDP supports the Waimea Trails and Greenways project and contains the following language: "Plans for the Waimea Trails and Greenways project have been developed over a period of some 13 years. The first phase of the project, about ½ miles in length, from Lindsey Road to the beginning of the Sandalwood subdivision, has recently been completed. This multi-purpose path is planned to eventually extend to the vicinity of "Church Row." This stream-side trail will be an important complement to the planned walkway/bikeway system that the CDP proposes along the main roadways. It is recommended that the Waimea Trails and Greenways Project also be considered for equestrian use. The County should continue to support this important community project through funding and technical assistance."

Please review Strategy 5.3 (page 73) of the Waimea Town Plan of the SKCDP in order to identify possible opportunities to provide equestrian access along the *Ke Ala Kahakai O Waimea*.

Please review Appendix G (page G-1 thru G-4) for illustrative cross-sections for several "typical existing conditions" for both Mamalahoa Highway and Kawaihae Road, followed by "conceptual walkway and bikeway" cross-sections that illustrate possible widths and locations for permanent walkways and bikeways along these roads.

Please review Strategy 4.1 (page 87), which describes the Action Program for the walkways and bikeways for Waimea, which can be helpful in providing information regarding planning, design, and construction.

Thank you for the opportunity to provide comment on the proposed project. Should you have questions, please contact Allen A. Salavea of our Kona office at 327-3510.

Sincerely,

BJ LEITHEAD TODD
Planning Director

AAS: aas
P:\wpwin60\AAS\Ministerial\EA - EIS\Response Ltr Waimea Trails and Greenways Preliminary Comments - June 2010.doc

cc: Office of Environmental Quality Control
235 South Beretania Street, Suite702
Honolulu HI 96813

Glenn T. Kimura, President
Kimura International, Inc.,
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814

SKCDP Action Committee

Planning Department, Kona

William P. Kenoi
Mayor

BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

County of Hawaii

PLANNING DEPARTMENT

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

August 24, 2010

RECEIVED AUG 26 2010

Ms. Pamela Cushnie
P.O. Box 1632
Kamuela, HI 96743

Mr. and Mrs. Kurt Shively
P.O. Box 2233
Kamuela, HI 96743

Dear Ms. Cushnie and Mr. and Mrs. Shively:

Request for Early Consultation
Environmental Assessment, Waimea Trails and Greenways Project

Thank you for your June 28, 2010 letter regarding the subject project. We apologize for the delay in responding.

As this is the early consultation period preceding the completion of the Environmental Assessment (EA), it was perfectly appropriate for you to share your concerns with the consultant and the Department of Parks and Recreation. The consultant can now appropriately consider your perspective when finalizing the EA and soliciting public comment, and the Department of Parks and Recreation can consider the draft EA and future public engagement in light of your concerns.

For your information, we have attached the Planning Department's comments on the project, which largely refer to the South Kohala Community Development Plan (CDP). For more information about the CDP, please go to the CDP web site at: http://www.hcrc.info/community-planning/south-kohala-cdp/.

Ms. Pamela Cushnie
P.O. Box 1632
Kamuela, HI 96743

Mr. and Mrs. Kurt Shively
P.O. Box 2233
Kamuela, HI 96743

When it becomes available, we encourage you to review the draft EA and provide additional comments.

Should you have further questions about the project, please contact the Department of Parks and Recreation. For questions about the S. Kohala CDP, please contact Allen A. Salavea of our Kona office at 327-3510.

Sincerely,

BJ LEITHEAD TODD
Planning Director

RW:cs
P:\wpwin60\P:\wpwin60\RWhitmore\EA-EIS\Cushnie & Shively re Waimea Trails & Greenways EA pre-consult.081910.doc

cc (w/ copy of Cushnie/Shively letter and cor-10-063243):

Mr. Glenn T. Kimura, President
Kimura International, Inc.,
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Mr. James Komata, Parks and Recreation Department

Mr. Bobby Command, Mayor's Office

Planning Department, Kona

PLANNING DEPARTMENT
COUNTY OF HAWAII

2010 JUL -6 PM 2:44

June 28, 2010

Dear Director of Planning Department B.J. Leithead Todd,

We are a life-long residents of Hawaii, and voters from District 9, Waimea. On May 14 a letter and a map were distributed by Kimura International to a very small section of island residents, requesting preliminary public comments for an Environmental Assessment being done on the Waimea Trails and Greenways Shared Use Path. Their NEPA Map of May 7th clearly shows a newly proposed orange alternative pathway. See attached.

Unfortunately, no resident along the proposed alternative pathway seems to have been provided with the letter or the map. We were shown the documents only because a concerned friend, a board member, was given the letter and map and was told they were "confidential". She realized they impacted all the residents along the Wai'au'ia Stream, and gave us a copy.

The newspaper release by Kimura does not offer any place to access the map. Again, a brief mention of "exploring several alternative alignments" was made, but no details were provided. Those of us most impacted by the orange alternative route apparently were not on the distribution list and had no other way to access this public information. (Maps were not available on the Waimea Trails website, and Mr. Command and Mr. Komata seemed surprised that it had even been released to the public.) We personally have talked with 40 streamside residents, and none had ever seen the letter or map.

We have asked Kimura International specifically for their distribution list and documentation of any preliminary research they did to identify Wai'au'ia Stream as a viable alternative pathway. Those of us who live along the stream know it has many serious limitations and it would not make a good multi-use commuter path. Many residents are upset and have written to Kimura to voice their concerns about the path crossing private lands, etc. We have enclosed copies of our letters to Kimura as an example of some of the concerns being raised. All the recent comment letters should be compiled by Kimura as part of the EA process.

SCANNED
JUL 07 2010
By 064728

We have been in contact with Bobby Command and James Komata, and both have been very helpful, but the original notification process was flawed and has left many people out of the information loop. There has been no real transparency in the way Kimura presented their request for public input. (It would have been very easy to mail information to residents along the stream, as Goodfellow Brothers does to announce their road construction projects.)

County money is being spent to fund this EA. To be told that this information was originally labeled "confidential" at a closed private-sector board meeting (not a County meeting), and to have no other apparent access to the specific details makes us question their compliance to HRS Chapter 343.

We are hoping that you and your commission are aware of Kimura International's call for early consultation and have been working with the County to independently determine if this alternative path is actually feasible. We personally would like the path along Wai'au'ia Stream to be dropped from County consideration, before more good money is spent on a poorly chosen "possible" alternative.

Please let us know if we can provide you with more information. We would be happy to share the responses from Kimura International with your director.

Sincerely,

Pam Cushnie

Pamela Cushnie
P.O. Box 1632 (65-1242 Pako Place)
Kamuela, HI 96743

Kurt Shively
LaDonna Shively

LaDonna and Kurt Shively
P.O. Box 2233
Kamuela, Hi 96743

William P. Kenoi
Mayor

BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

County of Hawaii

PLANNING DEPARTMENT
Aupuni Center • 101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720
Phone (808) 961-8288 • Fax (808) 961-8742

June 14, 2010

Glenn T. Kimura, President
Kimura International, Inc.,
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814

Dear Mr. Kimura:

Environmental Assessment
Request for Preliminary Comment
Waimea Trails and Greenways Project – *Ke Ala Kahakai O Waimea*
Shared Use Path

This is to acknowledge receipt of your letter dated May 17, 2010, requesting preliminary comments for the Environmental Assessment (EA) being prepared for the Waimea Trails and Greenways project, *Ke Ala Kahakai O Waimea*. The South Kohala Community Development Plan (SKCDP) strongly advocates for the development of the *Ke Ala Kahakai O Waimea* as well as supporting the shared path concept that includes considering equestrian use along the path where appropriate.

We offer the following preliminary comments in support of the *Ke Ala Kahakai O Waimea* shared use path.

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COR-10-063243

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Please review Strategy 5.3 (page 73) of the Waimea Town Plan of the SKCDP in order to identify possible opportunities to provide equestrian access along the *Ke Ala Kahakai O Waimea*.

Please review Appendix G (page G-1 thru G-4) for illustrative cross-sections for several "typical existing conditions" for both Mamalahoa Highway and Kawaihae Road, followed by "conceptual walkway and bikeway" cross-sections that illustrate possible widths and locations for permanent walkways and bikeways along these roads.

KIMURA INTERNATIONAL INC.

PLAN... ...ENT

MAY 17 PM 3:32

May 17, 2010

Ms. Bobby Jean Leithead-Todd
County of Hawaii
Planning Department
Aupuni Ctr, 101 Pauahi St., Suite 3
Hilo, HI 96720

Dear Ms. Leithead-Todd:

Subject: **Waimea Trails and Greenways**
Ke Ala Kahakai O Waimea
Shared Use Path
Environmental Assessment--Early Consultation

The County of Hawaii Department of Parks and Recreation is preparing an Environmental Assessment (EA) for the Waimea Trails and Greenways project, *Ke Ala Kahakai O Waimea* in Waimea, Hawaii, and is conducting early consultation to solicit input from you or your agency. The EA is being prepared in accordance with both State of Hawai'i Chapter 343, HRS and the National Environmental Policy Act (NEPA) environmental guidelines and requirements.

The *Ke Ala Kahakai O Waimea* will be a shared use path extending 4.5 miles through Waimea. The shared use path begins at a future County park (former Clark property) opposite the South Kohala View Estates subdivision on the west, and will end at Church Row in Waimea Town on the east. The shared use path generally follows the meandering course of the Waikoloa Stream through urban and agricultural lands. The proposed path will be paved, 10 to 12 feet in width and accessible to pedestrians, bicyclists, and other non-motorized vehicles. The path will seek to comply with Americans with Disabilities Act (ADA) guidelines for outdoor areas for the majority of its length. A major objective of the shared use path is to provide an alternative form of transportation that will link major destination points including residential areas, schools, office and commercial areas, and recreational areas.

The EA will explore several alternative alignments and possible signed shared roadways that would make up the shared use path system. A copy of the Draft EA will be sent to your agency for review in the next few months. You will also have an opportunity to comment at that time.

Please send any preliminary comments to Kimura International, Inc. by June 14, 2010. If you have questions, please feel free to call me or Leslie Kurisaki at 944-8848. Thank you for your interest in this project.

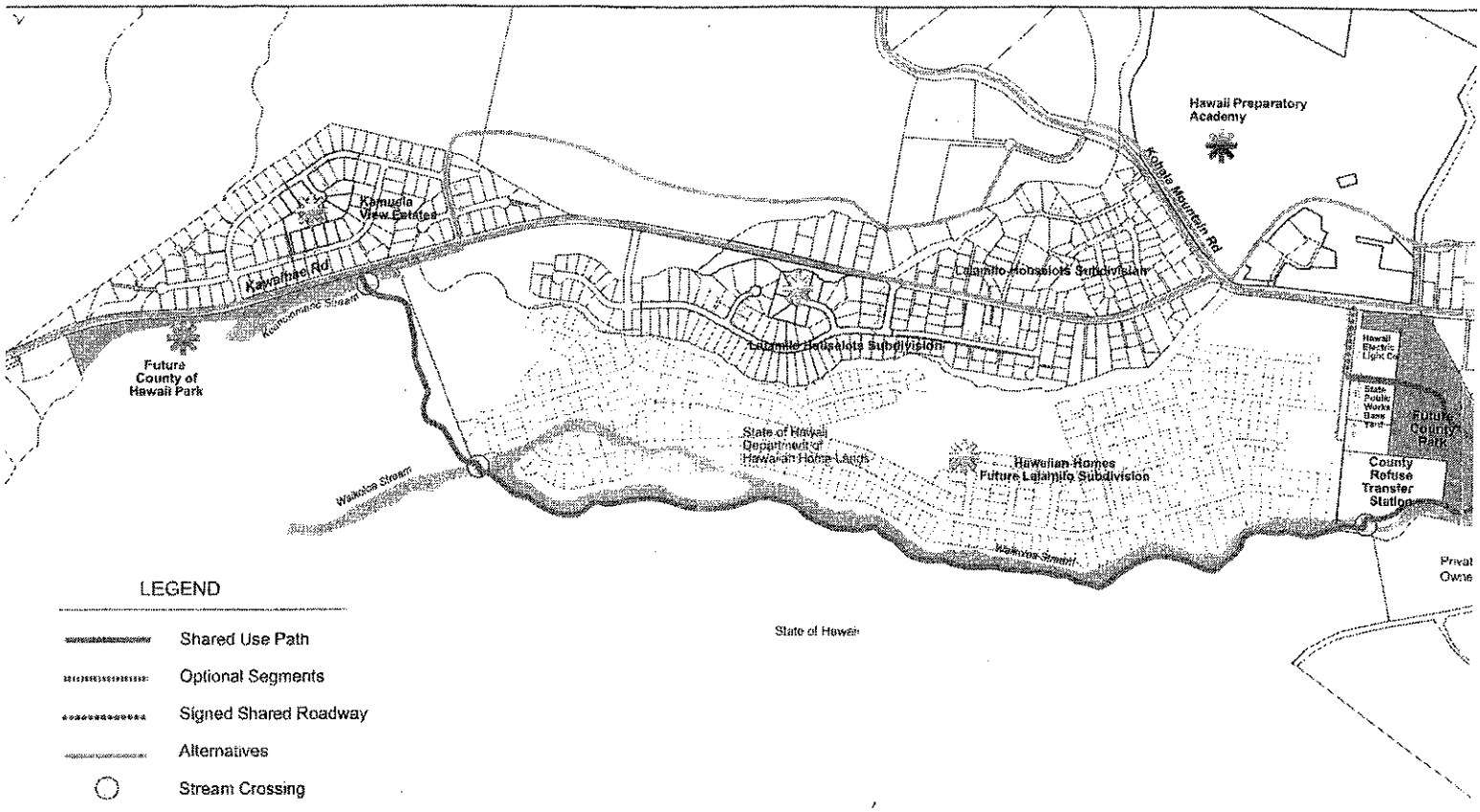
Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President
Enclosures

063243

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 • Fax: 808 941-8999



May 7, 2010

600 1200 1800

Scale in Feet

NORTH

William P. Kenoi
Mayor

William T. Takaba
Managing Director

Warren H. W. Lee
Director

County of Hawai'i
DEPARTMENT OF PUBLIC WORKS
Aupuni Center
101 Pauahi Street, Suite 7 · Hilo, Hawai'i 96720-4224
(808) 961-8321 · Fax (808) 961-8630
www.co.hawaii.hi.us

June 9, 2010

RECEIVED JUN 16 2010

Glenn T. Kimura, President
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Subject: Waimea Trails and Greenways
Ke Ala Kahakai O Waimea
Shared Use Path
Environmental Assessment –Early Consultation

We received your Early Consultation letter dated May 17, 2010 and have the following comments:

A large portion of the proposed trail follows and crosses Waikoloa Stream. Portions of the project lie within areas designated as special flood hazard areas on the Flood Insurance Rate Maps or areas that are in the process of inclusion as special flood hazard areas. The proposed project will be required to comply with requirements of Hawaii County Code Chapter 27, Flooplain Management. Flood studies and submittals of map change applications to FEMA may be required prior to and following alterations of a special flood hazard area. Grading and watercourse alterations are subject to approval of the Department of Public Works under Chapters 10 and 27 of Hawaii County Code and the Hawaii County Storm Drainage Standards.

If you have any questions, please contact Kiran Emler of our Kona office at 327-3530 or Frank Demarco of the Hilo office at 961-8042.

Galen M. Kuba, Division Chief
Engineering Division

KE

c: ENG HILO; Atten: Frank Demarco

County of Hawai'i is an Equal Opportunity Provider and Employer.

William P. Kenoi
Mayor

Randall M. Kurohara
Director

Laverne R. Omori
Deputy Director

County of Hawaii

DEPARTMENT OF RESEARCH AND DEVELOPMENT

25 Aupuni Street, Room 1301 • Hilo, Hawaii 96720-4252
(808) 961-8366 • Fax (808) 935-1205
E-mail: chresdev@co.hawaii.hi.us

June 18, 2010

Glenn T. Kimura
Kimura International, Inc.
1600 Kapiolani Blvd., Ste. 1610
Honolulu, Hawai`i 96814

RE: Waimea Trails and Greenways – Ke Ala Kahakai O Waimea
EA – Early Consultation

Dear Mr. Kimura,

Thank you for the opportunity to provide your firm with preliminary comments regarding the above environmental assessment to be done on the Ke Ala Kahakai O Waimea project; one that we believe will benefit the community of Waimea and visitors alike.

Here at the County of Hawai`i Department of Research and Development, we have a Tourism specialist, Ms. Stephanie Donoho, who has been involved in numerous projects in the Waimea district and that of North Kohala, those of which follow along the route referenced. Ms. Donoho has provided the following statement for your use in your assessment.

"I am in favor of the proposed project as (1) we have supported the Waimea Outdoor Circle in its development of interpretive signage for Ulu La`au, and the proposed project would run along that property; and (2) we support the Waimea Cherry Blossom Festival and the proposed project would allow people a safe, pedestrian and bicycle friendly alternative to driving to access all of the components of that even, which are spread throughout the town."

Should you need further information or have additional questions or concerns, please feel free to contact me directly.

Mahalo and Aloha,

RANDALL M. KUROHARA
Director

Hawai'i County is an Equal Opportunity Provider and Employer

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

June 16, 2010

RECEIVED JUN 17 2010

Mr. Glenn T. Kimura
Kimura International Inc.
1600 Kapiolani Blvd. Suite 1610
Honolulu, HI 96814

PRE-ENVIRONMENTAL ASSESSMENT CONSULTATION
WAIMEA TRAILS AND GREENWAYS – KE ALA KAHAKAI O WAIMEA

This is in response to your Pre-Environmental Assessment Consultation letter of May 17, 2010.

Should the proposed use require water service, the Department would request estimated maximum daily water usage calculations, prepared by a professional engineer licensed in the State of Hawai'i, for review and approval.

If a meter is installed, a reduced pressure type backflow prevention assembly must be installed within five feet of the meter on private property. The installation of the backflow prevention assembly must be inspected and approved by the Department before commencement of water service.

Should there be any questions, please contact Mr. Ryan Quitoriano of our Water Resources and Planning Branch at 961-8070, extension 256.

Sincerely yours,

Milton D. Pavao, P.E.
Manager

RQ:dfg

Leslie Kurisaki

From: Fowler, Margaret - Kamuela, HI [margaret.fowler@hi.nacdnet.net]
Sent: Wednesday, March 17, 2010 2:17 PM
To: 'lkurisaki@kimurainternational.com'
Subject: Waimea Trails and Greenways

Aloha,

I called the project coordinator and she was not in, when I hear from her I should be able to give you some more details. The land we have proposed our project on is directly behind the Waimea Shopping Center, behind and on the Kona side of KTA. What we have proposed is a stream bank stabilization and restoration project, so if I understand Trails and Greenways plan they are proposing a paved trail next to the stream. If it is not too close to Waikoloa Stream it will not affect our project at all. Anyway we will keep in touch and go from there. Thank you for returning my call.

Mahalo,

Margaret Fowler, Mauna Kea Soil & Water Conservation District

Leslie Kurisaki

From: Clemson Lam, Architect [c.lam4@hawaiiantel.net]
Sent: Tuesday, March 30, 2010 2:34 PM
To: Chris Robb
Cc: Glenn Kimura; Leslie Kurisaki; Bobby Command
Subject: Chris Robb comments

Thanks Chris for that feed back. This is important that the consultant hear from you about this issue and I will forward it to him. He is required by the rules of the NEPA EA to look at alternative routes and to evaluate them. Your input will be a heavy weight in the final decision. The exercise that we went through on Wednesday night was to help him (who knows not much about our community) to get information from people who do.

Clem Lam

Clem,
I was a liitle shocked at last weeks meeting regarding this trail EA. Why was the community allowed to pick our route of choice? I saw at least two tables with the route right thru my farm . This is not an option, regardless of what Margaret Wylle and her group thinks the farm lots are not available, for trails, roads or what ever. I don't know if you are aware of the food safety regs coming into play , eg a trail user is walking their dog ,it chases birds in my fields ,it craps on my crops, i am quaranteened, or sued if someone gets sick. Who will be responsible? You guys, the county, the individual who owns the dog? The lalamilo farmers just want to do our thing without outsiders dictating our every move. Or jeopordizing our future, we are part of a sustainable Big Island. Just stay out of our Kuleana

Aloha , Chris--- On **Mon, 3/22/10, Clemson Lam, Architect <c.lam4@hawaiiantel.net>** wrote:

From: Clemson Lam, Architect <c.lam4@hawaiiantel.net>
Subject: Re: Waimea Trails
To: "Chris Robb" <crobb50@yahoo.com>
Date: Monday, March 22, 2010, 6:40 PM

Thanks Chris

Clem,
Another EA? Clem aren't there any rich people in Waimea who can underwrite this project? I understand that with a federal grant you have to have a trail wide enough for an ambulance? How absurd, this community has plenty of ultra rich people , pass the hat!
i hear some of those richie's down the coast would love to help but they havn't a clue where to go. They are the recipients of the stimulus, not the common man , hit em up!
i will try to be there. I did see your missed call, i set this new fax machine up wrong i guess, will get it squared away..

Chris

--- On **Mon, 3/22/10, Clemson Lam, Architect <c.lam4@hawaiiantel.net>** wrote:

From: Clemson Lam, Architect <c.lam4@hawaiiantel.net>
Subject: Waimea Trails
To: "Chris Robb" <CROBB50@yahoo.com>
Date: Monday, March 22, 2010, 5:54 PM

Hi Chris,

Tried calling over the week end but just got a fax tone. I wanted to make you aware of a meeting this Wednesday by the consultant who is doing the EA for the trail - that's right Another EA - this time a federal level one.

Clem Lam

Leslie Kurisaki

From: Bob Hunter [robert.m.hunter@hawaiiantel.net]
Sent: Thursday, March 25, 2010 12:39 PM
To: lkurisaki@kimurainternational.com
Cc: bcommand@co.hawaii.hi.us; 'Clemson Lam, Architect'; 'Komata, James'; 'Sherman Warner'; 'Hoffmann, Pete'
Subject: WT&G EA
Attachments: south-kohala-cdp-trail-ideas.pdf; bike-and-pedestrian-improvement-projects-from-Waimea-final-traffic-circulation-study-report-2Apr2008[1].pdf; lalamilo_kuleana_label.jpg

Glenn and Leslie,

Congratulations on the successful public meeting. Please let me know what the link to the webpage containing your presentation is and I will post it on the WCA website.

Attached are portions of documents and below are links that you might find useful. Hopefully, they will put your project into the "big picture" of other pedestrian and bike paths envisioned for our community.

I will put a CD of large files (presentations, photos, etc.) in the mail to you. Bobby, Clem and James, please give me your mailing address if you would like a copy. Feel free to use them in any way you wish.

http://www.hcrc.info/community-planning/south-kohala-cdp pedestrian, bike and horse trails are a major focus of the South Kohala CDP; it calls for complete streets that accommodate all forms of transportation (see attached pages for trail ideas)

http://www.waimeaplan.org/documents/Waimea-final-report-2Apr2008.pdf the Waimea Traffic Circulation Study sets out pedestrian and bike paths (see attached pages)

http://landscape.ced.berkeley.edu/~nino/report.html Nino Walker's report and especially his boards contains lots of trail ideas; they also show where large increased in homes will occur in our community

http://waimeaplan.org/ this website was created to facilitate the CDP process and has not been updated lately; particularly relevant pages are:

http://waimeaplan.org/issues/trails/index.html

http://waimeaplan.org/issues/roadways/index.html

http://waimeaplan.org/issues/roadways/town_center_connectors.html

http://waimeaplan.org/issues/roadways/lalamilo_connector.html

http://waimeaplan.org/issues/parks/index.html

http://waimeatown.org/?page_id=296 this web page has a link to a presentation that describes the proposed district/regional park; it also contains links to local attractions that could be trail destinations

http://uakoko.org this web site contains stories about our landscape that could be used on kiosks along the trail

http://olapa.org - this is the website of an open space and trails advocacy group

http://www.pathhi.org/?page_id=196 I understand that PATH has received a grant to research how Old Government Rd (now called Pu'ukapu Trail?) might be integrated into our community trail network; it extends from the end of WT&G at Church Row east to the DHHL hall.

Thanks for doing such great work.

Aloha,

Robert M. (Bob) Hunter, Ph.D., P.E.
65-1116 Hokuula Rd.
P.O. Box 2709
Kamuela, HI 96743
cel 406-581-2234
fax 866-740-4144 toll free
bob@webpatent.com
www.webpatent.com

Leslie Kurisaki

From: Margaret Wille [margaretwille@mac.com]
Sent: Sunday, May 23, 2010 1:33 PM
To: Leslie Kurisaki
Subject: Trails and Greenways public input

Attachments: TGW notes to Kimura Intern..doc; ATT00043.txt; ROAD RESERV.jpg; ATT00046.txt; Parker School.Signed Agreement.pdf


TGW notes to mura Intern..do


ATT00043.txt (105 B)


ROAD :SERV.jpg (92 K


ATT00046.txt (480 B)


Parker l.Signed Agreen

Leslie. CAn you give me a rough outline of the time points at which the public can comment? Are you requesting comments about the map alternatives that you have shown on this plan -- AT THIS TIME? I don' t have a copy of the letter you sent to CLem. Perhaps that letter explains.

Regards, Margaret Wille

For what its worth here are my comments --

Leslie

Don't have much time – so the following may be a bit sketchy... let me know if you don't understand something here.

What exactly is the progression of public input on the draft Waimea trails and Greenways plan..

For your information, I mention some ways I would correct or add on to your current draft

1. County Park by Transfer Station: The map should show the Lalamilo road reservation on this lot (and as well as the parker Ranch "cattle corridor" . The lalamilo road reservation then runs up the north side of the Lalamilo farm lots. That road reservation has not been extinquished. I filed an appeal on this. This Lalmilo roadway corridor is referred to as key in the General Plan. (Both the Public Works Dept and the Planning Department opposed removing the road reservation)

If for some reason this road never happens I want to work to make it a trail at least.

I can send more info if you want.

I think your map should show an alternative route for the trail running right along the sandalwood side of this county area and not only crossing in the middle of the county lot and exiting between helco and public works.

I assume there will be a parking area here and links to Hele on and Waimea Shuttle buses and other alternative transport—bike racks etc.

2. Parker Ranch section of the easement from Kahawai St to Opelo Research station.

Revising the fence requirement here is one of three options that I am negotiating on with parker Ranch. I do not know if Parker Ranch will agree to this Trails and Greenways option – but I will know that within a week. [to eliminate the fencing requirement that is supposed to go on the north –Kohala side – of the stream. I asked that Parker Ranch put it on their side of the stream.]

3. Where the current plan proposes to cut many of the eucalyptus trees along the stream, I think there should be an alternate route (or second route) – that provides for the ADA traffic to go out to a sidewalk along the road, and keep the trail along the stream very narrow – even if bikes must be walked. So the alternative here would be having the one wide path that requires taking out a significant number of these (environmentally important/esthetically important) trees, and the other alternative is a narrow trail through the trees, with an second route available for the ADA or wider trail traffic that would thereafter rejoin the trail. Clem mentioned this possibility once years ago.

4. The Paniolo/WAimea Inn problem area.

I suggest putting in a second route that would cross the stream from the Parker School property on to the KTA rear parking lot. This would bring the trail out to the highway and one would cross the main intersection at the street light – as you now have anyway.

Eventually it would be good if both of these options were available.

I encourage pedestrian access from the KTA shopping center parking lot because it would provide reasonable access to Parker School from Mamalohoa drop off point (and is safe because so visible there) .

I still encourage pushing for access across the Paniolo Inn area.

5. While on the South Kohala CDP steering committee I strongly pushed for trails around Waimea and around South Kohala – you will see such a reference if you are familiar with the CDP.

I am interested in also having a trail on the Kohala side of the Kawaihae road (some day)... so I was interested in your proposed alignment over there.

THANKS FOR ALL OF YOUR WORK.

Margaret Wille

Whereas the Hawaii County Planning Commission requested Parker School seek "consensus" with Community concerns relating to its proposed campus expansion and enrollment increase, Parker School (hereafter PS) agrees to the following conditions, which conditions shall be included in the Amended Use Permit:

1. Waikoloa Stream Trail. Parker School agrees to transfer to Hawaii County a permanent public easement along the full length of its property on the westerly side of Waikoloa stream for use as a trail/pathway (hereafter Waikoloa Stream Trail), for non-vehicular uses, at no cost to the County. PS agrees for this easement to be at least 30 feet wide, not including the streambed and stream bank, except at the narrowest point by the Pu'uki Road property where the easement may be narrowed to 15 feet, to the extent this decreased width is necessary to provide adequate room for the PS campus trail. The exact location of the easement shall be determined by the County in consultation with Parker School, taking into account environmental and design factors such as the location of the floodplain, significant vegetation along the stream bank, reasonable stream crossing locations to link with the other segments of the proposed Trail, and so as to minimize the need for stream bank hardening. This public easement will not include public access across PS's Lindsey Road parking lot to Lindsey Road, unless agreed to by PS. Upon request of the County, PS shall submit to the County a signed easement deed containing the easement description for a non-vehicular public easement and metes and bounds survey consistent with the above terms, and shall make the easement deed available to the public.

2. Seeking Access Points onto Waikoloa Stream Trail. PS agrees to participate with PATH and other community organizations, and with neighboring property owners, to locate access points to the Waikoloa Trail easement corridor in order to provide public access to this Trail from Mamalahoa Highway and Lindsey Road, e.g. across from Church Row, across Paniolo Inn property, and across the adjoining KTA parcel located on Mamalahoa Highway. Also at no cost to the County, PS agrees to provide additional public easement corridors for non-vehicular uses, of a similar width, across and on the east side of the stream to accommodate future access points to connecting segments of this Waikoloa Stream Trail.

3. Enrollment Limitation. PS agrees to limit enrollment in the portion of the campus within the use permit area (elementary and middle) to 300 students, and agrees the combined limit for the entire PS campus shall be 450 students.

4. Gym Size Limitation. PS agrees to limit the proposed school gymnasium to a

CS MW.

250-seat capacity. PS agrees to limit outside use of this the gym and the playing fields to weekends, and holidays, and after 6 p.m, unless arrangements are made to accommodate traffic elsewhere (i.e. satellite parking) or by way of arranged bus services, with the exception of minimal additional traffic if prior to 6 p.m. If any after school activity or activities in the use permit area includes persons other than PS students, and may result in 15 or more vehicles arrivals prior to 6 p.m., satellite parking is always required. Community use of the gymnasium will be limited to organized sports up to three times a week (on weekdays: only between 5:00 p.m. and 9:00 p.m.).

5. Traffic Mitigation and Pedestrian Safety Requirement. Prior to increasing its current enrollment capacity, PS shall take such measures as necessary to ensure that as a result of increased enrollment in the use permit area, there is no substantial increase in traffic congestion above current conditions on the roads adjacent to the campus and that there is adequate provision made for safe pedestrian access onto campus, including by way of the following conditions:

a.) Bus shelter: PS agrees to provide funds for a complete Hele-On bus shelter to be located on the north side Kawaihae Road be in a location and at a time specified by the Mass Transit Agency and/or Department of Public Works (PW).

b.) Raised pedestrian crosswalk(s): PS agrees to replace the existing crosswalk across Lindsey Road with one possibly two, six-foot wide raised crosswalk at a location to be determined by PW. PS agrees to pay for the cross walk(s) according to specifications directed by the County. The raised crosswalk(s) shall also be marked for maximum visibility by vehicular traffic as directed by PW, at no cost to the county. Parker School agrees to construct the raised crosswalk(s) before or concurrently with the Lindsey/Kapiolani Road sidewalk construction described in 5.d. Alternatively, to expedite completion of these crosswalks, if agreed to by PS and Public Works, PS shall pay the County the cost of two raised crosswalks (up to the amount of $10,000.) so that the County can undertake this construction as soon as possible.

c. Sidewalk entrances onto PS campus: PS agrees that pedestrian entrances onto PS campus shall be separate from vehicular driveway entrances including at the following locations: pedestrian access from the Lindsey Road sidewalk adjacent to the Lindsey Road PS parking lot; pedestrian access from future Kapiolani Road sidewalk to the proposed Middle school building and the Kapiolani Road campus generally, which sidewalk shall be located northerly of the existing Kapiolani Road PS driveway entrance; and a separate pedestrian access way at the north end of the campus (near the existing warehouse and driveway entrance).

d.) Sidewalks on adjacent streets: PS agrees to construct sidewalks with curbs and gutters on the east side of Lindsey Road to Kapiolani Road and around the corner at Kapiolani and on Kapiolani Road, at no cost to the County. The

CS MW.

sidewalk on Kapiolani Road shall extend from Lindsey Road to a point north of a campus sidewalk entrance to be constructed between the present PS driveway and the private home at 65-1145 Kapiolani Road. The PS property boundary beyond that northerly sidewalk entrance shall be blocked from campus access, such as by way of a 5-foot plus high landscaping hedge. Unless required by the County, the sidewalks along Kapiolani need not be of customary width if a narrower width is reasonable and avoids relocating telephone polls and/or minimizes removal of landscaping along the abutting private properties. The road improvements shall be carried out meeting with the approval of PW at no cost to the County, including for pavement widening, concrete curbs, gutter, and sidewalk construction.

e.) Northend Campus Access: PS agrees to provide an on-campus sidewalk entrance for pedestrians and bicycles from the north end of campus that is separate from any vehicular entrance. However so long as PS does not use the warehouse/storage building at the north end of campus for classroom use, PS is not required to provide a sidewalk on Kapiolani adjacent to this PS property boundary.

f.) Relocate Lindsey Road pick-up/drop-off location: As determined by PW, PS agrees to relocate the Lindsey Road pick-up/drop-off zone an additional distance form the intersection with Kawaihae Road so there is no interference with traffic turning onto Lindsey Road and no interference with turning traffic on to Kapiolani, and no queuing of traffic in the traffic lane, and in a manner to avoid interference with private driveways. PS also agrees to provide the cost to re stripe the road consistent with the revised drop off area.

g) Active traffic management: PS agrees to active manage the Lindsey Road drop off zone during morning drop off and afternoon pick-up periods in a manner designed to prevent congested traffic on this road, prevent queuing of vehicles, and to provide for the safe passage of pedestrians and cyclists. PS agrees to provide for a corresponding pedestrian entrance onto campus as well as to comply with any restrictions required by PW related to this condition. PS also agrees to implement active traffic management measures to direct traffic and facilitate parking during special events, such as by hiring special duty officers or parking attendants. PS agrees to begin active traffic management within 6 months of approval of this use permit application.

h.) Safe access onto Lindsey Road: PS agrees to work with PW to improve the safe entrance and exit from its Lindsey Road parking lot, including by providing pedestrian access locations separate from the vehicular driveway and by providing signage to deter use of the driveway for pedestrian access. PS agrees to implement these proposed changes, for access into and out of the PS campus, within 6 months of approval of this use permit application. Parker School agrees to not increase the capacity of the Lindsey Road parking lot.

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i.) On-campus pick-up/drop-off for Kapiolani Street traffic: PS agrees to take affirmative steps to require on campus pick-up/drop-off for all Kapiolani Road campus traffic and to take affirmative steps to deter PS vehicular traffic from traveling north beyond the Kapiolani campus driveway.

j. Mitigation of Impacts To Pu'uki Road. PS agrees to take affirmative steps to deter pick-up/drop-off on and parking along Pu'uki Road and Kapiolani Road.

k) Street signage: As determined by PW, Parker School agrees to posting speed limit and "No Parking" signs on Kapiolani Road along the PS property boundary north as far as the block of private homes at 65-1145 Kapiolani.

l.) Street lighting: To the extent not already in place, install street lighting along the south side of Kapiolani and install any signage directed by PW.

m.) Recessed security gates: Any vehicular security gate(s) at County road approaches shall be recessed a minimum distance of 20 feet exclusive of gate swing from the County right of way, meeting the approval of PW.

n.) Ped-Bike Plan: PS agrees to create a pedestrian/bike path plan for access to and on the campus, including designation of access points from the surrounding sidewalks and the Waikoloa Stream trail. This ped-bike plan shall be drafted in consultation with PATH (People's Advocacy for Trails Hawai'i), and shall include a study identifying the number of students and faculty within walking/biking distance and include ways PS can encourage routine walking to school or in combination with use of the County bus systems. In drafting this plan, PS will identify necessary sidewalks, crosswalks, and bike lanes required to provide safe pedestrian and bicycle use. PS also agrees to provide bike shelters and bike racks at key locations (e.g. at the elementary, middle, and high school campus locations) in order to provide for bicycle traffic. PS also agrees to work actively to provide for more safe trails for pedestrians and bicycles around Waimea generally.

o.) Traffic Management Plan to Reduce PS Traffic Congestion: In addition to the Ped-Bike plan, prior to any increases in enrollment, PS agrees to implement a traffic management plan to reduce vehicular traffic including continuing staggered school start times, facilitating carpooling, and actively promoting use of the County bus system. As part of this plan, PS agrees to continue to support County and State traffic circulation projects that would reduce traffic congestion in the area of Parker School, as well as agrees to explore consideration of a round-about at the intersection of Lindsey and Kawaihae Roads and the Parker School driveway entrance and exit. PS also agrees to work with the state, county, community organizations, and other Waimea schools to address common traffic issues, and to seek grants and/or other assistance to optimize the availability of alternatives to single-family drop-off/pick-up during peak traffic periods.

M.M.C.S

p.) Parent education: Within 6 months of approval of this use permit application, PS agrees to engage in parent and staff re-education to encourage walking students to school, carpooling, and using the public bus systems, to effectively limit single-family automobile traffic. PS's parent education program will also address the conditions contained in this permit, as well as general consideration of non-PS road and park traffic such as ways to prevent blocking of private driveway entrances in the vicinity of PS.

q.) Supplemental traffic accommodation measures: To counter foreseeable additional traffic from the proposed enrollment increases at the elementary and middle school facilities, PS also agrees to provide effective incentives to its PS population (student, staff, parents, and guests) in order to maximize use of alternative modes of reaching the campus (e.g. walk, carpool, bus, bike) and to provide satellite drop off/pick up locations from which PS will provide PS bus service and/or a "walking bus" program to the campus.

6. Plan Approval for buildings and facilities. Plan approval shall be required when any proposed or existing building is to be constructed or remodeled within the use permit area. At such time as a plan approval application is submitted for construction of the gym and/or the middle school building, sufficient on site parking shall be required to accommodate all school vehicles. Additional parking, above the minimum required in the Zoning Code may be required by the Planning Director during plan approval to achieve this result. Plan approval criteria shall include consistency with the Waimea Design Plan and the South Kohala Community Development Plan concerning building design criteria and will include environmentally sensitive design features, such as light-colored roofs. Particular consideration shall be given to minimize visual and noise impacts on neighboring properties, including during construction. In the event that additional plan approval is not required for construction of the outdoor playing fields and accessory structures, landscaping buffers shall be constructed to create a "noise buffer" for adjacent neighboring properties. A copy of the Plan approval application shall be made available to the public, and neighboring property owners shall be notified and consulted in order to minimize visual and noise impacts.

7. Additional Traffic Study Required: As part of the Plan Approval for the proposed new Middle School and the Gym, PS shall submit a revised traffic study (TIAR) or equivalent Traffic Management Plan along with a traffic management plan, in a form determined by PW. The required traffic study shall be based on the traffic circulation conditions and improvements that exist or are anticipated within the next year, and taking into account improvements and traffic related programs to be implemented by PS within the coming year. The traffic study shall consider the impact of the adult education program (or educational use of the "warehouse", or any other school or community program) to the extent those programs operate on campus prior to 6 p.m. Mondays through Fridays. Regardless of the format used in any future traffic study, to determine whether there has been significant increase in traffic congestion, changes in traffic

MW CS

congestion shall be determined with reference to the current base line traffic level of service as represented in the traffic study submitted by PS to the Planning Department as part of its Use Permit application.

8. Annual report. PS shall submit an annual report to the Planning Department detailing compliance with the above conditions until the fifth year following completion of both the proposed gym and middle school.

. That report shall include:

a.) any new traffic mitigation efforts undertaken by PS or in partnership with community organizations and/or the County;

b.) PS efforts to preserve 'Waimea's "sense of place", including preservation of the natural areas and mature trees along Waikoloa stream;

c.) PS efforts relating to emergency preparedness and community resilience;

d.) PS efforts relating to environmental stewardship and sustainability – including as relates to:

1 incorporates water conservation measures;

2. avoids adverse impact to the quality of ground water and coastal waters;

3. incorporates LEED standards for buildings;

4. ensures compliance with outdoor lighting requirements to minimize light pollution;

5. supports water quality monitoring as needed;

6. incorporates measures to reduce likelihood of flooding, run-off and erosion;

7. incorporates alternative energy measures;

8. incorporates concepts of sustainability, including:

1. respect for the culture, character, beauty and history of Waimea;

2. takes into account environmental, social, and economic concerns;

3. respects the needs of future generations;

4. supports policies that promote food sustainability (e.g. includes landscaping of projects with fruit trees or other types of plants that provide food).

Leslie Kurisaki

From: Bill Brilhante [bill@brilhantellc.com]
Sent: Monday, May 24, 2010 9:22 AM
To: brenda@certifiedhawaii.com
Cc: lkurisaki@kimurainternational.com
Subject: Re: FW: Waimea Trails & Greenways-Consultation for Environmental Assessment

Aloha,

I am hereby registering my opposition to this trails and greenway project through the Sandalwood Subdivision.

There are numerous public lands and trails available for this type of use and I strongly oppose having trails go through areas which i feel should be left as-is. I bought in this area because of the privacy and security of being in a somewhat restricted area.

I have three grand-daughters between the ages of 4 thru 11 and one of our primary concerns was to keep the children safe from pass through traffic. This is why people buy in cul-de-sacs and private roads - for the security of access and minimal traffic concerns.

To open up a trail to the general public in private areas is taking away private property rights.

I am totally opposed to this project.

Aloha,

Bill Brilhante

On May 21, 2010, **Brenda LeClair** <brenda@certifiedhawaii.com> wrote:

> Brenda L. LeClair, CMCA®
>
> **Account Executive**
>
> CERTIFIED MANAGEMENT, INC., AAMC
> An **Associa®** Company
> 75-169 Hualalai Road
> Kailua Kona, HI 96740
> (808) 443-5984
> FAX #: (808) 326-2486
> www.brenda@certifiedhawaii.com
>
> **Associa®** - the Nation's Leader in Community Association Management

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From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Friday, May 21, 2010 8:16 AM
To: 'Leslie Kurisaki'
Subject: Waimea Trails & Greenways-Consultation for Environmental Assessment

Aloha, Friends,

The County Department of Parks and Recreation is preparing an Environmental Assessment (EA) for the Waimea Trails and Greenways project, *Ke Ala Kahawai O Waimea,* and is conducting early consultation. The purpose of the early consultation is to solicit input from agencies and individuals regarding potential environmental issues or other concerns that should be addressed in the EA.

We are attached the Early Consultation letter that has been sent out, as well as a map showing the project area. The map may be printed at 11"x17".

Please send preliminary comments to us via mail or e-mail by June 14, 2010.

Thank you,

Leslie

Leslie Kurisaki

Kimura International, Inc.

1600 Kapiolani Blvd., Suite 1610

Honolulu, Hawaii 96814

Phone (808) 944-8848

Leslie Kurisaki

From: Brenda LeClair [brenda@certifiedhawaii.com]
Sent: Monday, May 24, 2010 10:09 AM
To: 'Leslie Kurisaki'
Subject: RE: Waimea Trails & Greenways-Consultation for Environmental Assessment

Aloha Leslie,

Some of the homeowners of Sandalwood at Waimea subdivision called me with a couple of concerns that they have about the trail.

1. The land where the park is supposed to be build and where the trail will cross used to be a dump. A number of years ago a fire started below ground from combustion of the rubbish in the dump. The fire department had to monitor the fire for a few days before it was deemed to be out.
2. There will need to be a pedestrian bridge over the creek. The creek actually goes downhill in this area and is very fast moving. Has the bridge hasn't been fully studied and the will the cost of building it been fully realized?
3. What kind of security will be in place to safe guard the subdivision and prevent incursions by people using the trail.

Brenda L. LeClair, CMCA®
Account Executive
CERTIFIED MANAGEMENT, INC., AAMC
An **Associa®** Company
75-169 Hualalai Road
Kailua Kona, HI 96740
(808) 443-5984
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Associa® - the Nation's Leader in Community Association Management
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From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Friday, May 21, 2010 8:16 AM
To: 'Leslie Kurisaki'
Subject: Waimea Trails & Greenways-Consultation for Environmental Assessment

Aloha, Friends,

The County Department of Parks and Recreation is preparing an Environmental Assessment (EA) for the Waimea Trails and Greenways project, *Ke Ala Kahawai O Waimea,* and is conducting early consultation. The purpose of the early consultation is to solicit input from agencies and individuals regarding potential environmental issues or other concerns that should be addressed in the EA.

Leslie Kurisaki

From: Brodie Callender [brodiec@hawaii.rr.com]
Sent: Monday, May 24, 2010 3:28 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails & Greenways

Leslie – I am interested to find out more about the park between Sandalwood and the dump that's highlighted in your map. The entire trail concept is wonderful and having a park in that location is also a terrific plan. It sounds like the county has completely scrapped the proposed "connector road" that was slated for this same location? Is that true? If you're not sure please let me know who would be the best person to speak with about this....

Thanks,

Brodie

Glenn-Rec'd. this comment. I'm not familiar w/ what she's talking about. How do you want to respond? (not a rush, but just through you may be able to provide a quick answer)

I think she is referring to the lands behind the county refuse/ HEA site –

Future county park Don't know status, we need to find out in the EA

Leslie Kurisaki

From: Brodie Callender [brodiec@hawaii.rr.com]
Sent: Tuesday, May 25, 2010 5:21 PM
To: 'Leslie Kurisaki'
Subject: RE: Waimea Trails & Greenways

I did some other checking around and from what I understand the county has not officially come out and said in writing that they are not going to do a connector road in this location but all indications say that they aren't going to do the road.. just too difficult... too many issues... The community is pushing the county to formally state...as fact...that they will not do any connector road at this location....

What information did you guys have that led you to believe that the land between the Sandalwood development and the Waimea transfer station could be park land? Be wonderful to see it be a park but what info do you have to support that concept?

Thanks very much for your time.

Brodie

From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Tuesday, May 25, 2010 4:47 PM
To: 'Brodie Callender'
Subject: RE: Waimea Trails & Greenways

Hi Brodie,

I checked with Glenn Kimura, and he said we're not sure of the status of the land you refer to. We will look into this further and address in the Draft EA. Thanks for your comment.

Leslie

Leslie Kurisaki
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814
Phone (808) 944-8848
Fax (808) 941-8999

From: Brodie Callender [mailto:brodiec@hawaii.rr.com]
Sent: Monday, May 24, 2010 3:28 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails & Greenways

Leslie – I am interested to find out more about the park between Sandalwood and the dump that's highlighted in your map. The entire trail concept is wonderful and having a park in that location is also a terrific plan. It sounds like the county has completely scrapped the proposed "connector road" that was slated for this same location? Is that true? If you're not sure please let me know who would be the best person to speak with about this....

Thanks,

Brodie

Leslie Kurisaki

From: Thuy Fujimoto [fujimoto@hawaiiantel.net]

Sent: Tuesday, May 25, 2010 5:00 PM

To: 'Leslie Kurisaki'; Michael.Fujimoto@hpmhawaii.com

Subject: to Leslie Kurisaki from Mike and Thuy Fujimoto : our concerns RE: Waimea Trails & Greenways-Consultation for Environmental Assessment

Leslie,

Thank you for the information. As previously communicated, we, as owners on one of the homes bordering the stream in the Sandalwood Subdivision, have the following concerns:

1. The Waimea Trails and Greenways will be right in front of our house and significantly increase the level of noise and security risk to us and decrease our privacy. Privacy, security and quietness were the main reasons why chose our existing home in the Sandalwood Subdivision and had to pay a very high premium for these features.
2. Because of the above, the existence of these trails will have a very significant negative impact our quality of life and may adversely impact our property value.

We would appreciate your response and solutions to the above concerns. Please consider this email our formal comment regarding this project. Thank you and we look forward to hearing from you.

Mike and Thuy Fujimoto (Sandalwood Subdivision)
66-1453 Ko Uka Place
Kamuela, Hi 96743

From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Friday, May 21, 2010 8:16 AM
To: 'Leslie Kurisaki'
Subject: Waimea Trails & Greenways-Consultation for Environmental Assessment

Aloha, Friends,

The County Department of Parks and Recreation is preparing an Environmental Assessment (EA) for the Waimea Trails and Greenways project, *Ke Ala Kahawai O Waimea,* and is conducting early consultation. The purpose of the early consultation is to solicit input from agencies and individuals regarding potential environmental issues or other concerns that should be addressed in the EA.

We are attached the Early Consultation letter that has been sent out, as well as a map showing the project area. The map may be printed at 11"x17".

Please send preliminary comments to us via mail or e-mail by June 14, 2010.

Thank you,
Leslie

Leslie Kurisaki
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814
Phone (808) 944-8848
Fax (808) 941-8999

Leslie Kurisaki

From: Thuy Fujimoto [fujimoto@hawaiiantel.net]
Sent: Monday, April 05, 2010 5:12 PM
To: 'Clemson Lam, Architect'; 'Glenn Kimura'; 'Leslie Kurisaki'; 'Bobby Command'; 'James Komata'; Michael.Fujimoto@hpmhawaii.com
Cc: 'Brenda LeClair'; 'Cheryl Langton'
Subject: [SPAM] RE: to Brenda LeClair, Clem Lam and Cheryl Langton : concerns re Waimea Trails and Greenways

Thank you, Clem, for your prompt response. We look forward to receiving the consultant and the county's response to our concerns. Mike and Thuy Fujimoto.

From: Clemson Lam, Architect [mailto:c.lam4@hawaiiantel.net]
Sent: Monday, April 05, 2010 4:36 PM
To: Glenn Kimura; Leslie Kurisaki; Bobby Command; James Komata
Cc: Thuy Fujimoto; 'Brenda LeClair'; Cheryl Langton
Subject: Re: to Brenda LeClair, Clem Lam and Cheryl Langton : concerns re Waimea Trails and Greenways

Hi Thuy and Mike,

Thank you for sending me your concerns. I will forward them to the consultant who is doing the environmental assessment so they can address your concerns.

In an informal way, however, I would like to offer my opinion of the research that our committee has produced from the years of working on this trail and hearing from others who have lived through trails coming to their community and adjacent to their homes. There have been quite a few case studies of this.
The loss of privacy may be an issue depending on your actual proximity to the trail. Trail users are normally traveling at a pace that does not allow them to much time to intrude. Barriers such as fences or plantings to screen your private areas may need to be incorporated into your landscaping much as you have done to screen yourself from adjacent neighbors or the entry access road.

I don't think there will be an increase in security risks. The trail is on the other side of the stream from the houses in Sandalwood and the more people who use the trail (and there will be more people living in Waimea as years go by) the more it will be self policing. An example of this is the Catholic Church in town – they welcomed the trail going behind their church because once it was cleared, the people who were sneaking back there no longer felt comfortable with people walking by and being so visible.

I don't think there should be any increase in noise. There will be no motorized vehicles allowed. I hope that people using the trail will not be talking so loudly that they will disturb the neighbors – it would be similar to people walking along the road in Sandalwood.

Again, these are my opinions and not necessarily the opinions of the County or the consultant.

I thank you for asking the questions.

Aloha,

Clem Lam

Brenda, Clem and Cheryl,
As homeowners at Sandalwood, our main concerns are as follows:

1. Loss of privacy
2. Increase in security risks
3. Significant increase in level of noise

We would be interested in how the above issues are addressed. Thank you and we look forward to hearing from you. Mike and Thuy Fujimoto

-----Original Message-----
From: Brenda LeClair [mailto:brenda@certifiedhawaii.com]
Sent: Friday, March 19, 2010 10:52 AM
To: Balbi Brooks (balbi_brooks@yahoo.com); Bill Maloney (bill@isleincentives.com); Cheryl Langton (clangton@hawaii.rr.com); Curtis Tyler (jct3kona@hawaii.rr.com); Elizabeth T Rice babs (123@hawaii.rr.com); Fran Tabor (frantabor@kp.org); George & Jaroleen Caspell (george@caspbell.cor); Gregory & Lynne Taylor (gregtaylormd@earthlink.net); Hugh & Judy Petersen (hgpsurf@hawaii.rr.com); James & Monique Allison (jallison@maryl.com); Kurt & Kate Nielsen (kurt@islandhomecapital.com); M/M Timothy Bennett (sunshine@mydestiny.net); Marcia Ann Burns (hibar3491@hawaii.rr.com); Michael & Thuy Fujimoto (fujimoto@hawaiiantel.net); Patrice Moynahan (bgm@hawaii.rr.com); Richard & Andrea Brklacich (brkconst@aol.com); Robert & Nancy Donigan (robert.donigan@hawaiiantel.net); Roger Harris (rharris@dtnhawaii.net); Steve Garon (garonzzz@aol.com); Wallace & Julie Kojima (kojimaw002@hawaii.rr.com); William & Dawn Aiona (kamakidawn@hawaii.rr.com); William & Paula Weathersby (weathersby@nexusgrp.com); William & Sandra Price (sandraprice@centurytel.net); William Brilhante (bill@brilhantellc.com)
Subject: FW: Waimea Trails and Greenways

-----Original Message-----
From: Cheryl Langton [mailto:clangton@hawaii.rr.com]
Sent: Friday, March 19, 2010 10:38 AM
To: Brenda LeClair
Subject: Waimea Trails and Greenways

Hi Brenda,

Could you please forward this on to our homeowners. Clem has worked very hard for years on this project and I wanted to give everyone in Sandalwood an opportunity to express their support and concerns.

Thank you,

Cheryl

Leslie Kurisaki

From: Carol Williams [carol@photographywest.com]
Sent: Friday, May 28, 2010 2:48 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea trail

I just wanted to weigh in and say this is a wonderful project and terrific idea.

We need more places to walk and ride bikes safely, off the highway. Exercise is good for all ages and it will be a real asset to the community.

Thanks.

Carol Williams
North Kohala Homeowner

Leslie Kurisaki

From: Pamela Cushnie [pamcushnie@yahoo.com]
Sent: Tuesday, June 15, 2010 7:37 AM
To: Leslie Kurisaki
Subject: RE: reply from Pam Cushnie

Hi, and thank you for your prompt reply!

I can only imagine the number of projects you need to take care of, so don't worry about me at all. The apparent limited release of the map, the fact that the orange route was completely new to those of us living along Wai'au'ia Stream, and the concern that the planners seem to have no other realistic alternate routes got everyone in a tizzy.

Unfortunately, we are also getting slightly different versions of events from the 3 major players here...so it's best if everything is in writing. It's not the EPA process that worries us... it's the uncertainty of whom to trust for information.

Rumors of a circular route connecting the pink and orange path, land condemnation, stories of problems from other mainland pathways, etc. are all very worrisome. Different versions of ADA compliance levels, responsibility for path maintenance and supervision, the "care and planning" that went into the selection of the (highly unfeasible ...my opinion) orange alternative, and the very limited distribution list all make residents questions the legality, the time, the motives, and the public money already spent on this.

The appearance of the orange path, seemingly drawn on a map without any previous research or public notification, makes everyone worried that this will just be pushed through with Federal funds. Or that we will have to endure 15 years of "fact gathering and public testimony", leaving the orange option up in the air for decades of discussion.

Many residents would like to have this orange alternative dismissed as unfeasible as quickly as possible. I'm sure you're receiving comments from them.
Please let me know when that decision is made so we can go back to supporting the pink Sandalwood/Parker Ranch path.

(FYI: I might suggest that, in the future, when Mr. Kimura signs a letter for public distribution, he also types his name and title under his signature. I had no idea who had written the letter.)

Aloha, Pam Cushnie

--- On **Mon, 6/14/10, Leslie Kurisaki** ***<lkurisaki@kimurainternational.com>*** wrote:

> From: Leslie Kurisaki <lkurisaki@kimurainternational.com>
> Subject: RE: request for information from Pam Cushnie
> To: "'Pamela Cushnie'" <pamcushnie@yahoo.com>
> Date: Monday, June 14, 2010, 11:38 AM
>
> Hi Pamela,

Sorry for only getting back to you today…it's my first day back in the office after vacation. I understand that you spoke to Bobby Command about this, but I'd like to explain the process again. The map you refer to is not a "confidential map"—it is the map that was distributed during the early consultation process, and we are asking everyone (!) interested to provide comment. Please feel free to pass the map and the information to as many people as you can.

The federal environmental process (per the National Environmental Policy Act, or NEPA) requires that all alternatives be considered in the Environmental Assessment (EA). This is why the map shows various alternative routes—we are seeking public input on the options. If one or more alternatives have shortcomings, please point them out! This information will help us evaluate and compare the various alternatives, and discuss their impacts in the EA document. It will also help the County select a final alignment.

I hope this clarifies things. If you have questions, please e-mail or call.

Aloha,

Leslie

Leslie Kurisaki

Kimura International, Inc.

1600 Kapiolani Blvd., Suite 1610

Honolulu, Hawaii 96814

Phone (808) 944-8848

Fax (808) 941-8999

From: Pamela Cushnie [mailto:pamcushnie@yahoo.com]
Sent: Tuesday, June 01, 2010 12:58 PM
To: lkurisaki@kimurainternational.com
Subject: request for information from Pam Cushnie

Hello Leslie,

I am trying to get more information re: the "alternative" trailways path recently proposed for the Waimea Trailways plan. The alternative I have heard about is currently just drawn on a confidential map, and has not been released publically. As one of many homeowners impacted by this alternative path, I would like to know much more about the plan and your request for public input.

I spoke with Nancy this morning, and understand you are on vacation until 6/14, which is also your deadline for public input on the EA. I am trying to gather more information in the meantime from Parks and Rec. and Clem Lam, but we are concerned about this lack of access to information about the "alternate" route.

If you are reading your office email, could you please explain to me how we are to respond if we don't know all the details. I will forward any information from you to the other participants.

Many thanks for your assistance. Pamela Cushnie 885-3521 Big Island

Leslie Kurisaki

From: ross fulmer [rfulmer@hawaiiantel.net]
Sent: Wednesday, June 02, 2010 3:31 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails path

Ms. Kurisaki, I keep hearing that the path is going to be 10 to 12 feet wide and paved. Is this necessary for a path? It sounds more like a road at that width. Is there a decent map of the route on line? I know people at the Nature Park are freaked that the state wants to remove a great number of trees so emergency vehicles can use the path. Is this true?
Thank you for your time. Ross Fulmer

Leslie Kurisaki

From: Jan Parks [janparks@mac.com]
Sent: Thursday, June 03, 2010 4:27 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails

Leslie -- Our property in Waimea is included in the alternate route for the trail. We would be opposed to having the trail run through our property and have people walking on the lower portion of our parcel. We believe it would be a liability to us and we would have people wandering up our hill, etc.

Thank you

Jan and Jerry Parks 65-1508 Kawaihae Road Kamuela Hawaii

Sent via email
6/4/2010

June 4, 2010
To : Kimura International, Inc.
From : Eunice and Roy Saito
P. O. Box 233
Kamuela, HI 96743
Residence: 62-2016 Mahua St.
Kamuela View Estates
Kamuela, HI 96743
Re : Waimea Trails and Greenways Project

Please consider these comments in your environmental assessment for the trails project Ke Ala Kahawai O Waimea. It is our understanding that the proposed route for the project stretches from Church Row to opposite Kamuela View Estates. We were just made aware that an alternate route of the path has been proposed. The latter option ends in our subdivision, Kamuela View Estates.

We prefer the **original proposal** for these reasons:

1) It appears to be safer for trail users. From what we can determine, the alternative route will require hikers to cross the busy highway at points that will probably not have any traffic signals.
2) It appears to have a lower impact on homeowners, since it skirts residential areas. One end point of the alternate route enters Kamuela View Estates, directly impacting residents. Our subdivision is not designed to accommodate increased parking by trail users.
3) It seems to minimize trespassing and maintenance issues, compared to the alternative. In the alternate route, trail users may start or end their hike in Kamuela View Estates. There is the potential of irresponsible hikers encroaching on private property and littering. There are no public sanitation facilities in the subdivision, so there is the additional risk of health issues.
4) It is a more suitable route in terms of natural aesthetics, since it generally follows the path of Waikoloa Stream.

We hope our comments sound valid to your group. Thank you for considering our input.

Leslie Kurisaki

From: Coxmaggie@aol.com
Sent: Tuesday, June 08, 2010 8:23 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails & Greenways Project

Aloha,
I am writing in regards to your request for comments regarding the proposal of an alternate route for the "Waimea Trail". The original plan for the trail to be from Church Road and then along the South/East side of Kawaihae Road down to S. Kohala View Estates still appears to be the most logical and safest route.

The proposed alternate route of crossing Kawaihae Rd at the Rodeo and then again past the y intersection up on Kohala Mtn Road are both extremely dangerous choices. Even crossing as one pedestrian is a difficult task due to both being blind curves.

My suggestion would be to enlarge the Kawaihae Rd shoulder to accommodate a bike/walking path along that stretch of highway.

Thank you for your time in considering my comments.

Sincerely,
Margaret Cox

Leslie Kurisaki

From: Miki Brand [mbrand@keck.hawaii.edu]
Sent: Tuesday, June 08, 2010 4:32 PM
To: LKurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways ?

I am not pleased with what I hear is planned for my town of Kamuela, in Waimea.
I would rather see a bike lane or safer wider shoulders along the existing main road.
I agree that this plan curtails the beneficial uses of the agricultural lands it will condemn for recreational purposes for the noisy few.

Let's stop paving Paradise … Keep Waimea country!
Miki Brand (DHHL homesteader)

Leslie Kurisaki

From: Marc Kassis [mkassis@keck.hawaii.edu]
Sent: Tuesday, June 08, 2010 4:53 PM
To: LKurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways

Dear Ms. Kurisaki

I strongly support the proposed Waimea Trails and Greenways project. Both the primary and the alternative paths described in the plan would be a wonderful addition to our Waimea community.

When the path is completed, my family and I will use the path to bike and walk to town. I will use the path to commute to work, and I know others in my neighborhood will as well. The trail is long overdue for this community as it provides a safe alternative to walking, biking, and running along the main roads of Waimea. I look forward to the path's completion.

Regards,
Marc Kassis

Leslie Kurisaki

From: Jim Lyke [jlyke@keck.hawaii.edu]
Sent: Wednesday, June 09, 2010 3:44 PM
To: LKurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways EA -- early consultation

Dear Ms. Kurisaki,

I want to express my support for the proposed Waimea Trails and Greenways project. As a frequent pedestrian and runner in Waimea, I welcome safe alternatives to walking along the road and hope these trails will encourage parents to allow their children to walk to school. I encourage the Department of Parks and Recreation to ensure safe walking access to all Waimea schools.

Perhaps after the proposed trail has shown its benefits, we can extend the mixed use trail East to Lakeland.

Thank you,

Jim Lyke jlyke@keck.hawaii.edu
W. M. Keck Observatory (ph.) (808) 881-3673
65-1120 Mamalahoa Hwy (fax) (808) 881-3897
Kamuela, HI 96743

RECEIVED JUN 11 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814
Attn: Leslie Kurisaki

From: Ohia Ku Homeowners Association
Ohia Ku Place
Kamuela, HI 96743

Date: June 9, 2010

RE: Waimea Trails and Greenways Project

Ohia Ku Homeowners Association is a private subdivision consisting of 5 - 5 acre parcels . We, the undersigned owners and residents of Ohia Ku, are opposed to the proposed alternate route for the Waimea Trails and Greenways project, Ke Ala Kahawai O Waimea, which appears to intersect Ohia Ku subdivision. We are opposed to any public trails or roads going through or on any property including all roads and easements in our subdivision. We strongly feel that it is a waste of taxpayers' money and your time to move forward with an EA that includes this proposed alternative route as a viable option. We do not intend to allow a public route pass through our private subdivision and ask that this option be dropped.

Sincerely,

Kurt & LaDonna Shively
P.O. Box 2233 (62-1725 Ohia Ku Place)
Kamuela, HI 96743

Roberta Barlow
P.O. Box 6808 (62-1726 Ohia Ku Place)
Kamuela, HI 96743

Drew & Michelle Medeiros
P.O. Box 2183 (62-1748 Ohia Ku Place)
Kamuela, HI 96743

Dr. John & Bev Dawson
P.O. Box 627
Kamuela, HI 96743

3-14-04



To: Kimura International, Inc.
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814
Attn: Leslie Kurisaki

From: Kurt & LaDonna Shively
P.O. Box 2233 (62-1725 Ohia Ku Place)
Kamuela, HI 96743

Date: June 9, 2010

RE: Waimea Trails and Greenways Project

We do not want the May7th Alternative Alignment to be considered as a viable option. We would like Ohia Ku Subdivision to be dropped from your list as a possible path and we have noted several reasons in this letter.

It is unreasonable to consider an alternate plan that includes crossing the highway in three different locations. Our roadways through Waimea are congested and having pedestrians and bicyclists crossing at these proposed sites would increase the congestion and jeopardize the safety of anyone using the roads and path. Wai'ua'ia river (see attached photo) is not a good choice as an alternative route. Putting a path along the river can be extremely dangerous. Part of this alternate route will be way too steep and strenuous of a path for the average Waimea resident. Why would this option even be considered? We feel that no further taxpayer money should be spent researching this option.

We don't support the original proposed path. From the town side of Sandalwood all the way down to South Kohala View Estates the original path does not require entering into private subdivisions (such as Sandalwood and Hawaiian Homes).

On the alternate plan you have the trail entering into three different subdivisions. The three subdivisions you have included in this alternate plan are likely to become congested with trail users trying to park their cars in the subdivisions to enter a certain leg of the proposed trail. The residents who paid hundreds of thousands of dollars to live in these subdivisions that are near the proposed trail should not have to sacrifice their privacy or their private properties for a path. It is called invasion of privacy and trespassing.

There are several signed shared roadway sections (see Kohala Mountain Road section). A call to the county official Bobby Command was very helpful, and he took the time to explain the consultation process. I mentioned to Bobby Command that crossing the highway at Ohia Ku subdivision would be very dangerous due to the fact our subdivision is coming off of a blind curve in both directions, up and down. The Kohala Mountain Road is very steep and the traffic travels way above the posted

speed limits.

If we were to allow (even with legal easements) the general public to walk through our private subdivision and across our property we would have to pay for greater house/theft/fire and liability coverage. Once you open a trail to the general public some will leave the trail and explore other areas close to the trail. Smokers cause fires and the terrain from Ohia Ku to Kamuela View Estates is an extreme fire hazard area.

This is Hawaii, not the mainland and if certain people insist they need a trail to walk or ride on then maybe they need to go and live in a city that can accommodate their needs. Why in the world would anyone want to ruin the privacy of the long time residents here for a few residents that keep pushing for WTC?

Also, why not just provide a path along the side of Kawaihae road; this would be a much quicker route for people needing to get into town for work, as well as a more practical route because it would not interfere with the entitled privacy of residences. We have thousands of cyclists riding on the Queen K Highway. Why does the WTC think this path needs to involve riding or walking on private lands? The state and county should be responsible for the general public, not private landowners.

Although you may be asking only for general public input, it places those of us living along your newly designated route at a disadvantage, not knowing that we are now personally involved in the new route. The sudden appearance of the orange trail adds a huge new dimension to your request for public comments. We are upset that every homeowner that owns property or lives near the proposed trail was not notified about this alternate trail, nor was this information made available to the public.

Some other concerns and issues we have are: pedestrian safety, ADA compliance, disturbance of the stream banks, higher insurance costs, privacy issues, noise, lack of law enforcement, cleanup of litter, burial site disturbance, brush fires, loose dogs running on the path necessitating new fencing along path boundaries, liability with parking issues, supervision and maintenance of the path, lack of transparency in disseminating information, and wasted taxpayer money.

We do not and will not support your inappropriate option as a possible alternative path. Please find another alternative route.

Sincerely,

Kurt and LaDonna Shively
62-1725 Ohia Ku Place
Kamuela, HI 96743

RECEIVED JUN 11 2010

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

Re: Waimea Trails and Greenways project, and your request for early consultation comments

I feel strongly that the limited release to only a segment of the population is not in the spirit of transparency. I would ask you to determine who was in charge of the map of May 7th, if it is a public document paid for with taxpayer money, in what ways was it made available to the general, and why the map had such a limited release.

Although you may be asking only for general public input, it places those of us along your newly designated route at a disadvantage, not knowing that we are now personally involved in the new route. The Trail and Greenways committee has been gathering input for about 15 years, so the sudden appearance of the orange trail adds a huge new dimension to your request for public comments. I am upset that we were not given the courtesy of access to the detailed information that other community members were given.

There are several " signed shared roadway" sections along the proposed alternate route that have narrow, winding roadways with no shoulders (see Kohala Mountain Road section). How will people with special needs cross the highway at the entrance to ____ subdivision? How will people walk along the gulch or narrow highway sections safely?

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Thank you for your attention.

6/4/10 Sincerely, Alay D. Johnson ALCY D. JOHNSON
Signature printed name

Waimea resident X
Land owner along stream X Yes ____ No
Phone number 885-4355

6/4/10 C R Budge C.R. BUDGE

Waimea resident
Land owner along stream ✓ yes ____ no
Phone # 885 4172

6/4/10 Corina Torres — Corina Torres

Waimea Resident yes
Land owner along stream X yes ___ no
Phone Number 885-2705

6/4/10 Bernadine K Sylva — Bernadine K Sylva

Waimea Resident yes
Land owner yes
Phone Number 885-2705

6/4/10 Brittney Harbottle — Brittney Harbottle

Waimea Resident yes
Landowner ___
Phone Number 885-2705

6/4/10 [signature]

Waimea Resident Harrison & Lynn Heen [signature]
Landowner yes
Phone Number 885-4914

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention. Please stop spending our money foolishly! JS

Sincerely,

Jason Shively
Signature

Jason Shively
printed name

Waimea resident Yes

Land owner along stream ∝ Yes ____ No

Phone number 936-7600

address: 62-1725 Ohiaku Place
Kamuela, Hawaii 96743

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely, Shannon Shively

Signature

Shannon Shively

printed name

Waimea resident Yes

Land owner along stream X Yes ____ No

Phone number 415-717-1826

address: 62-1725 Ohia Ku Place
Kamuela, HI 96743

I agree with all of the above comments. We live in a private subdivision and paid lots of money to live here for that reason. I do not want to have to worry about my belongings getting stolen if there will be people trespassing in my subdivision, due to the alternate trail that you are proposing.

RECEIVED JUN 11 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814
Attn: Leslie Kurisaki

From: Kurt & LaDonna Shively
P.O. Box 2233 (62-1725 Ohia Ku Place)
Kamuela, HI 96743

Date: June 9, 2010

RE: Waimea Trails and Greenways Project

We do not want the May7th Alternative Alignment to be considered as a viable option. We would like Ohia Ku Subdivision to be dropped from your list as a possible path and we have noted several reasons in this letter.

It is unreasonable to consider an alternate plan that includes crossing the highway in three different locations. Our roadways through Waimea are congested and having pedestrians and bicyclists crossing at these proposed sites would increase the congestion and jeopardize the safety of anyone using the roads and path. Wai'ua'ia river (see attached photo) is not a good choice as an alternative route. Putting a path along the river can be extremely dangerous. Part of this alternate route will be way too steep and strenuous of a path for the average Waimea resident. Why would this option even be considered? We feel that no further taxpayer money should be spent researching this option.

L.S. K.S. Don't

- We support the original proposed path. From the town side of Sandalwood all the way down to South Kohala View Estates the original path does not require entering into private subdivisions (such as Sandalwood and Hawaiian Homes).

On the alternate plan you have the trail entering into three different subdivisions. The three subdivisions you have included in this alternate plan are likely to become congested with trail users trying to park their cars in the subdivisions to enter a certain leg of the proposed trail. The residents who paid hundreds of thousands of dollars to live in these subdivisions that are near the proposed trail should not have to sacrifice their privacy or their private properties for a path. It is called invasion of privacy and trespassing.

There are several signed shared roadway sections (see Kohala Mountain Road section). A call to the county official Bobby Command was very helpful, and he took the time to explain the consultation process. I mentioned to Bobby Command that crossing the highway at Ohia Ku subdivision would be very dangerous due to the fact our subdivision is coming off of a blind curve in both directions, up and down. The Kohala Mountain Road is very steep and the traffic travels way above the posted

speed limits.

If we were to allow (even with legal easements) the general public to walk through our private subdivision and across our property we would have to pay for greater house/theft/fire and liability coverage. Once you open a trail to the general public some will leave the trail and explore other areas close to the trail. Smokers cause fires and the terrain from Ohia Ku to Kamuela View Estates is an extreme fire hazard area.

This is Hawaii, not the mainland and if certain people insist they need a trail to walk or ride on then maybe they need to go and live in a city that can accommodate their needs. Why in the world would anyone want to ruin the privacy of the long time residents here for a few residents that keep pushing for WTC?

Also, why not just provide a path along the side of Kawaihae road; this would be a much quicker route for people needing to get into town for work, as well as a more practical route because it would not interfere with the entitled privacy of residences. We have thousands of cyclists riding on the Queen K Highway. Why does the WTC think this path needs to involve riding or walking on private lands? The state and county should be responsible for the general public, not private landowners.

Although you may be asking only for general public input, it places those of us living along your newly designated route at a disadvantage, not knowing that we are now personally involved in the new route. The sudden appearance of the orange trail adds a huge new dimension to your request for public comments. We are upset that every homeowner that owns property or lives near the proposed trail was not notified about this alternate trail, nor was this information made available to the public.

Some other concerns and issues we have are: pedestrian safety, ADA compliance, disturbance of the stream banks, higher insurance costs, privacy issues, noise, lack of law enforcement, cleanup of litter, burial site disturbance, brush fires, loose dogs running on the path necessitating new fencing along path boundaries, liability with parking issues, supervision and maintenance of the path, lack of transparency in disseminating information, and wasted taxpayer money.

We do not and will not support your inappropriate option as a possible alternative path. Please find another alternative route.

Sincerely, Kurt Shively
LaDonna Shively

Kurt and LaDonna Shively
62-1725 Ohia Ku Place
Kamuela, HI 96743

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely,

Roberta Barlow ROBERTA BARLOW
Signature printed name

Waimea resident ✓
Land owner along stream ___ Yes ___ No
Phone number 885 7653

address:

PO Box 6808

I agree with everything in letter!

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely,

6/5/10 W. A. Johnson — Signature

ALCY D. JOHNSON — printed name

Waimea resident YES

Land owner along stream X Yes ____ No

Phone number 885-4355

address
P.O. Box 157
Kamuela, Hi. 96743

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely,

William B. Burke Jr — William B. Burke JR

Signature — printed name

Waimea resident ✓

Land owner along stream ___Yes ___No

Phone number 331-3104

address; - I've noticed many survey's that never go anywhere and we pay for it.

B.B.

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely,

C R Budge
Signature

C.R. BUDGE
printed name

Waimea resident ✓

Land owner along stream ✓ Yes ____ No

Phone number 885-4472

65-15-46 A Kawaihae Rd
Kamuela, Hi. 96743

P.O. Box 1156
Kamuela, HI. 96743
June 10, 2009

Glenn T. Kimura, President
Kimura International Inc.
1600 Kapiolani Blvd.
Suite 1610
Honolulu, HI. 96814

RECEIVED JUN 1 2 2010

Dear Mr. Kimura,

I am writing to express my concerns regarding the alternative path for the town of Waimea's Trails and Greenways.

I have lived in Kamuela View Estates subdivision since 1986 and our home was the second one built in the community, so I feel I have my finger on the pulse of this community.

I have enclosed some pictures to illustrate my point. I have also produced a "DVD" but will have to send it to you at a later date.

First: Where are people, who want to use this, going to park their cars? On Ohina Street? In front of residences? Ohina is the main thoroughfare for the entire settlement. We have enough difficulty gaining access to Kawaihae Road and this endeavor will only magnify the traffic problem.

Note: Are you aware that Kawaihae Road, the main connection, is the one of the most heavily trafficked and deadly in terms of accidents in the state?

In addition, I take the free shuttle bus to work (in town) at least three days a week. Do you know how many people from my community ride the bus during peek work hours? Zero. Zip. Nada. I am skeptical that a pathway will encourage people to walk to work. Besides, to what businesses or commercial interests are you referring for a connection point ? As far as I can tell, HPA is the only employer along the entire alternative path.

Second. The map indicates some type of 'connection' from the 'shared use path' and the alternate route on Ohina. How do you propose to do this? Are we to run at break-neck speed, dodging traffic with families in tow? Park on Kawaihae Road?

Third. There are many gulches in the back drop. Last year a child fell to his death while exploring them. How will you prevent families/children from doing more of the same?

Fourth. Last year the county paid $475,000 due to fires in South Kohala. We have been in a draught for 3 years. If you look at the pictures I've enclosed, all it takes is one careless act, and we will not only lose our homes, but also our entire fragile ecosystem.

By the way, is this considered a 'nature path?' If so, what kind of 'nature' are you thinking of because there are no trees or wildlife to be seen.

Fifth. Approximately a half mile up the road from Ohina St. is Akulani St.
It is at this juncture that the stream diverts and when heavy flows occur, the water runs rampant and floods not only the road, but also the homes located in this subdivision. Granted, this has not occurred with regularity of late, but our county has been complacent in remembering the damage, especially if one notes the overgrown brush in the stream. Now I ask you, if the county can't manage to take care of this tiny portion of our stream bed, how can it take care of a pathway? Are you entrusting the citizens of the town to maintain its garbage and trash?
If so, good luck! You need to take a drive down Kawaihae Harbor and take note of the 'adopt- a- highway' litter lining our roads.

As an aside, I would also encourage you to talk with Big Island county (former) Mayor Harry Kim. Many years ago, while attending a Parker Ranch '2020' town meeting, Harry forewarned everyone in attendance, that building or changing the natural water paths along the Kohala Mountains, is flirting with disaster.
He said, (and I'm almost quoting verbatim) : "Noone should ever build houses or change the natural structural re-engineer on the mountainsides of Waimea."

Sincerely,
Elizabeth P. Bryson

Elizabeth P. Bryson
62-1984 E. Ohina Pl.
Kamuela, HI. 96743



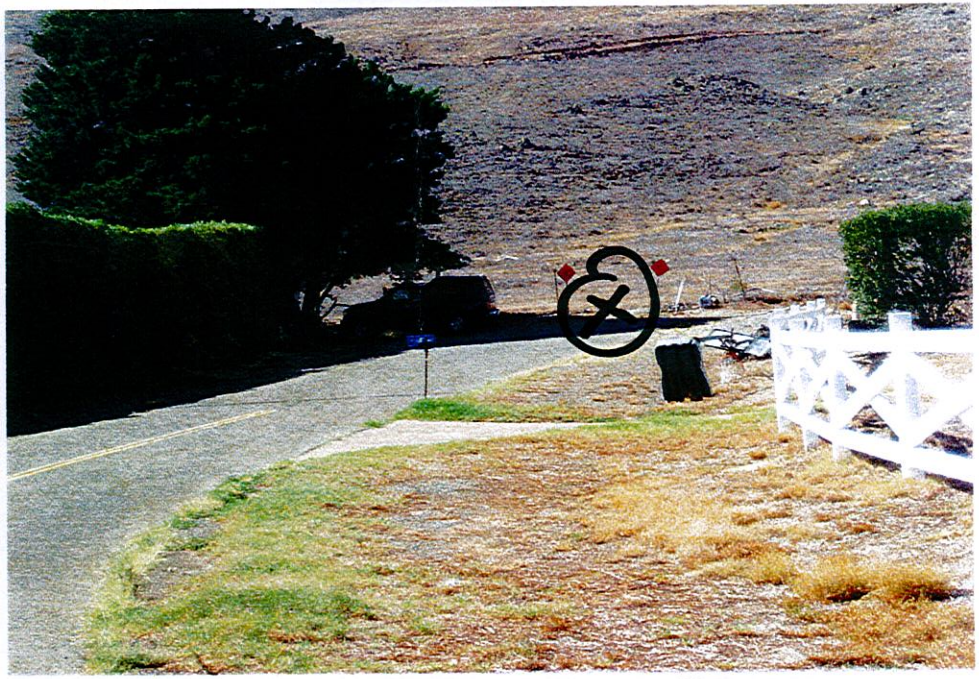
OHINA ST.



PATHWAY?



VIEW FROM E. OHINA → OHINA



PATHWAY WOULD END BETWEEN 2 HOMES on a main St.

View from across St ⇒ OHINA



GULCHES





Kawaihae RD ⇒ OHINA,
A DEADLY TURN

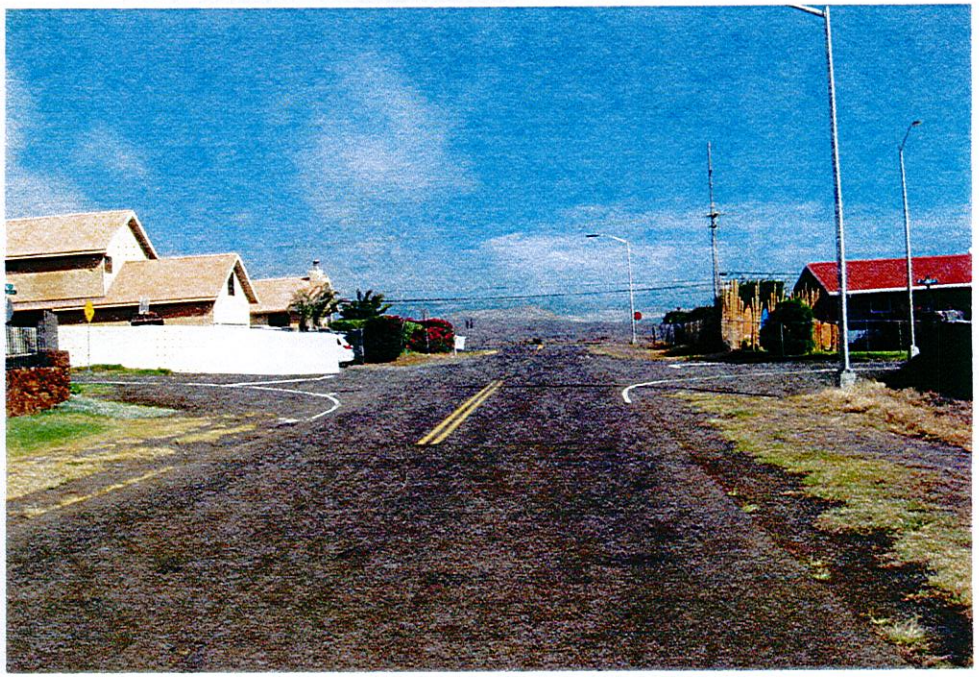


ALONG THE Kawaihae RD.
Shoulder

Severe dryness is a factor



View on ohina to Kawaihae





1 carless light and we could lose everything

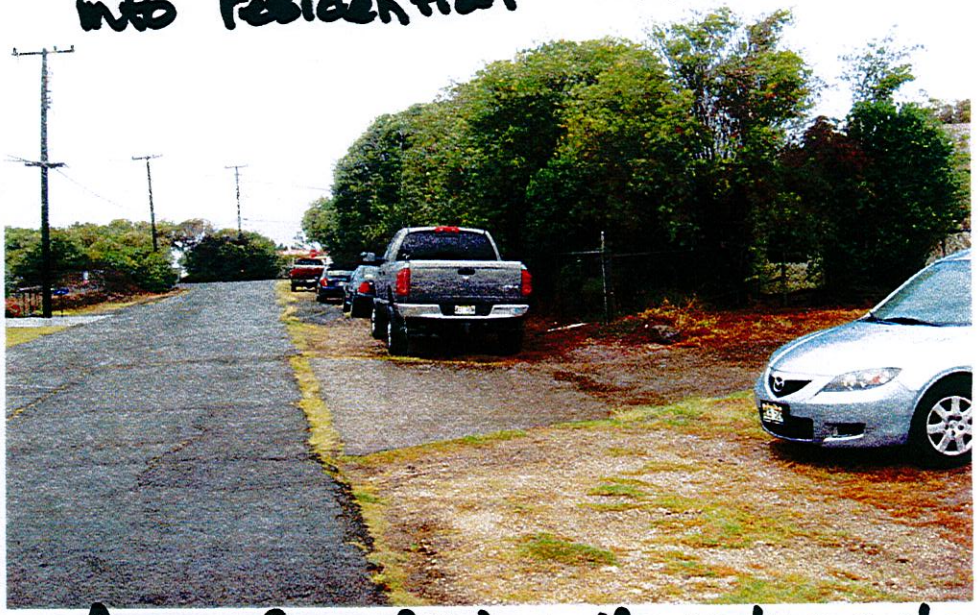


Another view showing residences

Tree growing in stream



The water, with no place to go, finds its way along this street, into residential homes.



overgrowth



Across from Akolani, the water rushes



June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

RECEIVED JUN 11 2010

Re: Waimea Trails and Greenways project, and your request for early consultation comments

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Thank you for your attention.

Sincerely, [signature] [printed name]

Signature printed name

Waimea resident_____
Land owner along stream____Yes ____No
Phone number _____

address

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely, Katherine S. Erger — Signature

Katherine S. Erger — printed name

Waimea resident yes

Land owner along stream ___Yes ✓No

Phone number _____

address

66-1674 Wai'aka St.

PO Box 2534

Kamuela, HI. 96743

June 3, 2010

RECEIVED JUN 11 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely, Steve N. Erger
Signature

STEVE N. Erger
printed name

Waimea resident Yes
Land owner along stream ___ Yes X No
Phone number 990 1003

address P.O. Box 2534
Kamuela HI
96743

66-1674 Wai'aka St.
Kamuela HI 96743

Keep the original trail as planned - Extremely high liability problems lurk on alternate paths! The main thing you need to visualize, is a pathway away from housing, highways, etc. is one most people will enjoy using: the original trail path designated -

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

RECEIVED JUN 12 2010

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Thank you for your attention.

Sincerely,

Signature

Tom Hickey
printed name

Waimea resident YES
Land owner along stream ___ Yes ✓ No
Phone number 938-3300

address: 65-1602 Kawaihae Rd.
Kamuela, Hi. 96743

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

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Thank you for your attention.

Sincerely, [signature] Signature

Lauren Hickey printed name

6/7/10

yes Waimea resident 65-1602 Kawaihae Rd address

Land owner along stream ___ Yes ✓ No

Phone number 640-6162

* Along with the items I agree to listed above, I would like to bring others to attention. One of the privileges we enjoy as waimea residents, is the opportunity to care for and house animals both big and small. Both of the homes I live in here in Waimea are pet friendly; one dogs, one horses. In either case my animals would be exponentially effected by paserbys. My horses are skittish, my dogs are territorial. Putting a trail near my animals would —

not only cause distress to my pets, but may even frighten trail users, as we live in areas not usually "trespassed" by RANDOM individuals, and our animals may act accordingly. While our pets will cause no harm, they will bark incessantly (sp?) to alert us of "intruders". Not exactly pleasant.

June 3, 2010

Please see page 2 along with highlighted items.

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

RECEIVED JUN 14 2010

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Should this go to public hearing?

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Wai'ua'ia Stream is not a good choice as an alternative route. No further taxpayer money should be spent researching this option.

Other concerns are: brush fires during drought conditions; loose dogs running along the trail, necessitating new fencing along path boundaries; possible vandalism issues; loss of privacy on small lots; cost of regular maintenance of the pathway for litter, graffiti, and broken glass; cost and responsibility for path repairs; cost to the County of Hawaii to monitor the safety and condition of the path; liability costs incurred by the County; and concerns about additional demands on our law enforcement officers and how they will monitor activity on the path.

Thank you for your attention.

Sincerely,

Darlene Turner — DARLENE TURNER

Signature — printed name

Waimea resident YES 66-1678 Waiaka St.

Land owner along stream ___ Yes X No

Phone number 808-936-5355

* I used to live along the path from White Sands Sub. to Magic Sands beach. The noise, drunkeness, litter, law enforcement issues along the path were horrible! Please do NOT do this close to our homes. I have a right for quiet enjoyment

June 3, 2010

RECEIVED JUN 14 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

Re: Waimea Trails and Greenways project, and your request for early consultation comments

I feel strongly that the limited release to only a segment of the population is not in the spirit of transparency. I would ask you to determine who was in charge of the map of May 7th, if it is a public document paid for with taxpayer money, in what ways was it made available to the general, and why the map had such a limited release.

Although you may be asking only for general public input, it places those of us along your newly designated route at a disadvantage, not knowing that we are now personally involved in the new route. The Trail and Greenways committee has been gathering input for about 15 years, so the sudden appearance of the orange trail adds a huge new dimension to your request for public comments. I am upset that we were not given the courtesy of access to the detailed information that other community members were given.

There are several " signed shared roadway" sections along the proposed alternate route that have narrow, winding roadways with no shoulders (see Kohala Mountain Road section). How will people with special needs cross the highway at the entrance to ____ subdivision? How will people walk along the gulch or narrow highway sections safely?

The incline in the path along Wai'au'ia Stream has changes in elevation of perhaps 30 vertical feet over short distances. What will people, looking for an efficient alternative to driving, think about walking along such a steep pathway? Will young children, parents walking with youngsters, the elderly, bicyclists travelling at faster speeds, and horseback riders be safe within these limited sight sections?

Any increase in the general public crossing private property creates liability insurance that some individuals may not be able to financially afford. If we were to allow (even with legal easements) the general public to walk along this portion of Wai'au'ia stream, we would be liable for any injuries and damages. With greater exposure to people walking across my property I would have to pay for greater house/ theft/ fire and liability coverage. (I believe it is impossible to get glass breakage coverage.)

The Wai'au'ia Stream (much of the proposed orange pathway) is known for quick changes in water flow. We have had sudden height increases of approximately 15 feet in a matter of minutes when it rains in the mountains. Where would you safely put a 10 foot wide path so it is not impacted by this seasonal flooding, shifting boulders and floating debris? Would the pathway be closed to pedestrians well before flooding presented any danger to those using it? Would land owners be compensated for erosion and damage to their property and houses?

The Flood Innundation setbacks seem to be very accurate predictors of flooding impact. If the proposed pathway (10-12 feet wide) is to be built along the stream, and the river covers land up to 80 feet away from the historical streambed, where would you build such a path? In some instances you'll be right next to a house.

The Army Corps of Engineers has advised land owners not to disturb the banks of the stream, because the flooding causes erosion and re-alignment of the winding stream. Large boulders, heavy debris, and uprooted plants are all moved downstream by the water. Erosion has apparently caused human bones to be exposed when the stream impacted ancient family burial plots. Will the Burial Council be consulted before any soil is disturbed?

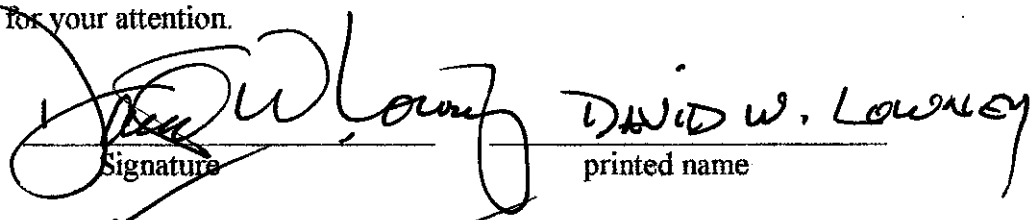
I do not want the May 7th Alternative Alignment to be considered as a viable option. I would like Wai'au'ia Stream route to be dropped from your list of possible paths.

Wai'ua'ia Stream is not a good choice as an alternative route. No further taxpayer money should be spent researching this option.

Other concerns are: brush fires during drought conditions; loose dogs running along the trail, necessitating new fencing along path boundaries; possible vandalism issues; loss of privacy on small lots; cost of regular maintenance of the pathway for litter, graffiti, and broken glass; cost and responsibility for path repairs; cost to the County of Hawaii to monitor the safety and condition of the path; liability costs incurred by the County; and concerns about additional demands on our law enforcement officers and how they will monitor activity on the path.

Thank you for your attention.

Sincerely,



[signature] DAVID W. LOWNEY

Signature printed name

Waimea resident ✓

Land owner along stream ___ Yes ✓ No

Phone number 808-936-5355

June 9, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814

RECEIVED JUN 12 2010

Re: Waimea Trails and Greenways Project
Ke Ala Kahawai O Waimea

Attn: Leslie Kurisaki

A few days ago, we were showed a map of the proposed shared use path with an alternative alignment that crosses Kawaihae Road in a couple of areas. We were surprised that this alternative route could be proposed without the residents whose properties might be impacted by this alternative route being personally notified of this possibility.

Having been made aware of this alternative route, we are objecting to it for safety reasons and because this pathway appears on the map to intersect our property or at least our subdivision (Ohia Ku) that is located on Kohala Mountain Road. This proposed route is unsafe and impractical because users will have to cross the busy Kawaihae Road at one point and then cross back over Kohala Mountain Road at another point. Kawaihae Road is busy at most times and crossing this road by path users will be very dangerous not only for the path users, but also for vehicles that may have to stop suddenly for path users crossing the road. The Kohala Mountain Road is narrow, visibility is sometimes poor, and vehicles tend to speed in both directions in the area that will need to have a crossing.

We are not exactly sure where the path goes through after crossing Kohala Mountain Road, but it does appear to cut through the boundary between our property and our neighbor's. We are concerned about liability; fences would have to be put up to discourage trespassing; and we are concerned about the impact on our privacy.

While we support the general idea of a path that goes from one end of town to the other, we feel that no further action should be taken to promote this particular alternative route as a viable option. We request that a better alternative route be found that is safer and would have less impact on private property. Thank you for your consideration of our concerns.

Sincerely,

John and Bev Dawson
P.O. Box 627
Kamuela, HI 9674
808-885-4311

Leslie Kurisaki

From: Eddie HERD [db4eddie@msn.com]
Sent: Thursday, June 10, 2010 7:49 PM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenway Project

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki,

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

As you know, we are all in a fight against the growing epidemic of childhood obesity. Having access to safe routes to walk or bike for our children can be a big part of the solution to this epidemic. Your support for this project and others like it across our wonderful state is greatly appreciated

Mahalo,

Edwin P. Herd, MD
Chief of Staff, Kona Community Hospital

The New Busy is not the old busy. Search, chat and e-mail from your inbox. Get started.

Leslie Kurisaki

From: Garry & Tanya Dean [gtdean@hawaii.rr.com]
Sent: Thursday, June 10, 2010 8:15 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea trails and Greenways

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Garry Dean

Leslie Kurisaki

From: DanSabo [dsabo@hualalai.org]
Sent: Thursday, June 10, 2010 8:25 PM
To: lkurisaki@kimurainternational.com
Subject: Support for Waimea Trail

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Dan Sabo
Kailua-Kona, HI

Leslie Kurisaki

From: Toni Blair [joepowder@sbcglobal.net]
Sent: Friday, June 11, 2010 3:33 AM
To: lkurisaki@kimurainternational.com; gkimura@kimurainternational.com
Subject: Waimea Trail and Greenway

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Toni Blair
Kona, Hawaii

Leslie Kurisaki

From: Michelle Suber [michellesuber@mac.com]
Sent: Friday, June 11, 2010 7:09 AM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenways

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as a way for students to get to school safely.

Mahalo,
Dr. Michelle Suber

Nancy Nishikawa

From: Nancy Nishikawa [nnishikawa@kimurainternational.com]
Sent: Friday, June 11, 2010 2:30 PM
To: 'Krista Pearson'
Subject: RE: Undelivered Mail Returned to Sender/Waimea Trail and Greenway Project

Aloha Krista,

I have received your e-mailed message. Thank you for taking the time to provide comments on the Waimea Trails and Greenways project. Your input will be used in the planning process and help ensure a thorough review of potential impacts.

Nancy

Nancy Nishikawa
Kimura International, Inc.
1600 Kapiolani Boulevard, Suite 1610
Honolulu, HI 96814
Ph. (808) 944-8848
Fax (808) 941-8999

-----Original Message-----
From: Krista Pearson [mailto:kpearson@harbornet.com]
Sent: Friday, June 11, 2010 7:41 AM
To: nnishikawa@kimurainternational.com
Subject: FW: Undelivered Mail Returned to Sender/Waimea Trail and Greenway Project

Good Morning,

I attempted to send a message to Mr. Glenn Kimura in support of the Waimea Trail and Greenway Project. However, the e-mail address supplied by PATH on Big Island is undeliverable according to my web server. I found your e-mail address on an automated reply from Ms. Leslie Kurisaki.

I would very much appreciate the forwarding of my message to Mr. Kimura.

Thank you for your assistance,
Krista Pearson
Kailua-Kona

-----Original Message-----
From: Mail Delivery System [mailto:MAILER-DAEMON@omta0111.mta.everyone.net]
Sent: Friday, June 11, 2010 7:31 AM
To: kpearson@harbornet.com
Subject: Undelivered Mail Returned to Sender

This is the mail system at host omta0111.mta.everyone.net.

I'm sorry to have to inform you that your message could not be delivered to one or more recipients. It's attached below.

For further assistance, please send mail to <postmaster>

If you do so, please include this problem report. You can delete your own text from the attached returned message.

The mail system

<gkimura@kimurainternational.com>: host smtp.xenpost.com[64.65.116.31] said:
550 5.7.1 Unable to deliver to <gkimura@kimurainternational.com> (in reply

Nancy Nishikawa

From: Krista Pearson [kpearson@harbornet.com]

Sent: Friday, June 11, 2010 7:32 AM

To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com

Subject: Waimea Trail and Greenway Project - Big Island

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki,

I enthusiastically support the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This proposed multi-use trail will provide a safe route for walking, bicycling and running through Waimea, as well as a safe way for students walk/cycle to school.

We often conduct business in Waimea and take time to use the present dirt path along Waikoloa Stream. Additionally, we are avid road cyclists, and look forward to the day that Big Island has a network of interconnecting multi-use trails circling the Island. The Waimea Trail is another positive step towards this goal. The present few cycling/multi-use paths on the Big Island are heavily used by local people and visitors alike.

I look forward to the approval and completion of this significant addition to the livability of Big Island.

Mahalo,

Krista Pearson
Kailua-Kona, Hawaii Island

Leslie Kurisaki

From: Clemson Lam, Architect [c.lam4@hawaiiantel.net]
Sent: Friday, June 11, 2010 8:10 AM
To: lkurisaki@kimurainternational.com
Subject: WST&G

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as a way for students to get to school safely.

Mahalo,

Clemson Lam

Leslie Kurisaki

From: Kevin [babbleon@hawaii.rr.com]
Sent: Friday, June 11, 2010 9:46 AM
To: gkimura@kimurainternational.com
Cc: lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenway Project

Dear Mr. Kimura and Ms. Kurisaki,

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as a way for students to get to school safely. As a runner, I very much believe this trail in necessary for Waimea.

Mahalo,

Kevin Cavanagh
Waimea, HI

Leslie Kurisaki

From: Lori Eldridge [leldridge@fivemountains.org]

Sent: Friday, June 11, 2010 10:03 AM

To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as a way for students to get to school safely.

Safe and healthy activities are crucial to the well being of our families and our community!

Mahalo,

Lori Eldridge

Leslie Kurisaki

From: Judy Ann Williams [judyann_williams@hotmail.com]

Sent: Friday, June 11, 2010 12:51 PM

To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Live Aloha,

Judy Ann Williams
Tim Kale
William Adams

Hotmail has tools for the New Busy. Search, chat and e-mail from your inbox. Learn more.

Nancy Nishikawa

From: Nancy Nishikawa [nnishikawa@kimurainternational.com]
Sent: Friday, June 11, 2010 2:31 PM
To: 'KATHLEEN JOHNSON'
Subject: RE: Waimea Trails and Greenways Project ~ Ke Ala Kahawai O Waimea

Aloha Kathleen,

I have received your e-mailed message and will be sure it gets to Leslie and Glenn. Thank you for taking the time to provide comments on the Waimea Trails and Greenways project. Your input will be used in the planning process and help ensure a thorough review of potential impacts.

Nancy

Nancy Nishikawa
Kimura International, Inc.
1600 Kapiolani Boulevard, Suite 1610
Honolulu, HI 96814
Ph. (808) 944-8848
Fax (808) 941-8999

From: KATHLEEN JOHNSON [mailto:savantb2@yahoo.com]
Sent: Friday, June 11, 2010 1:14 PM
To: nnishikawa@kimurainternational.com
Subject: Waimea Trails and Greenways Project ~ Ke Ala Kahawai O Waimea

Dear Ms. Nishikawa,
Please pass the following onto Mr. Kimura and Ms. Kurisaki -

As an avid hiker, I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely. It will help people connect/reconnect to our beautiful aina and give them an appreciation that will help encourage them to protect it.

Mahalo,

Kathleen Johnson
Kailua-Kona

Leslie Kurisaki

From: Roots Skate [skate4roots@yahoo.com]
Sent: Friday, June 11, 2010 2:12 PM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways
Attachments: PATH for Waimea.doc

Happy Aloha Friday,

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Kimberly Lepold
From North Kohala

Roots Advocates for Youth

see our webpage at Fivemountains.org/NHFDC/ROOTS
E-MAIL skate4roots@yahoo.com
or write to:
PO Box 946
Kapa'au Hawaii
96755

"If your city doesn't have a skatepark...it IS a skatepark!"

cell 808- 895-2909
home 808- 889-0503
please visit us @Roots Skatepark on Facebook
or **myspace.com/skate4roots**

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Kimberly Lepold
From North Kohala

Leslie Kurisaki

From: Kristin Delgado [alohadelgado@hawaiiantel.net]
Sent: Friday, June 11, 2010 3:19 PM
To: lkurisaki@kimurainternational.com
Subject: Support for Waimea Trail and Greenway Project

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Kristin Delgado
Waimea resident, born and raised.

Leslie Kurisaki

From: arrow factory [arrowfact001@hawaii.rr.com]
Sent: Friday, June 11, 2010 6:04 PM
To: lkurisaki@kimurainternational.com
Subject: WAIMEA TRAIL

HI.. FIRST OFF I THINK THE TRAIL IS A GREAT ADDITION TO WAIMEA. I DO HOWEVER HAVE A FEW SUGGESTIONS/CONCERNS ABOUT THE TRAIL.

1. WHO WILL "POLICE" THE TRAIL? RIGHT NOW I FEEL THERE IS A PROBLEM WITH THE AMOUNT ON PEOPLE WALKING WITH THEIR DOGS LOOSE ON THE TRAIL. I HAVE KIDS AND DON'T WANT DOGS COMING UP TO US WHILE WE WALK ON THE TRAIL. IT IS THE VIEW OF THE DOG OWNERS THAT THEIR DOGS ARE FRIENDLY, HOWEVER I WOULD FEEL MUCH SAFER IF THEIR DOGS WERE ON LEASHES. THERE IS A LEASH LAW IN HAWAII AND THIS SHOULD BE ENFORCED ON THE TRAIL.
2. THE NATURE PARK HAS HOURS WHICH THEY ARE "OPEN". WILL THE TRAIL BE OPEN ALL THE TIME? HOW WILL THIS EFFECT THE NEIGHBORHOODS WHICH THE TRAIL PASSES? EVEN WITH HOURS OF OPERATION PEOPLE WILL STILL TRAVEL ON THE TRAIL AT ALL HOURS. I REALIZE THE TRAIL HAS TO BE SET BACK A CERTAIN DISTANCE FROM THE STREAM FOR SAFETY. HOWEVER WHERE POSSIBLE I FEEL IT ALSO SHOULD BE THE MAXIMUM DISTANCE AWAY FROM NEIGHBORING HOUSES TO MINIMIZE THE IMPACT ON RESIDENTIAL AREAS. I FEEL THAT THE TRAIL SHOULD GIVE PEOPLE THEIR PRIVACY WHERE EVER POSSIBLE AND ALL ALTERNATE ROUTES SHOULD BE CONSIDERED.
3. WOULD IT BE POSSIBLE TO EXTEND THE TRAIL PASS CHURCH ROW. THE OLD GOVERNMENT ROAD CONTINUES THROUGH SOME NICE WALKING AREAS. THESE ARE GOVERNMENT ROADS WITH PUBLIC ACCESS, WE INCORPORATE THESE EXISTING PATHS NOW? IF WE WAIT THERE WILL BE MORE DEVELOPMENT AND MORE OPPOSITION. THESE PATHS WOULD REQUIRE VERY LITTLE CLEARING TO MAKE THEM ACCESSIBLE.

THANKS FOR YOUR TIME

Leslie Kurisaki

From: Timothy Kiernan [packandstore@gmail.com]
Sent: Friday, June 11, 2010 6:44 PM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenway Project Support

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely. My family lives in Kamuela View Estates and have been looking forward to a safe way to get to town other than running along the busy road with the fast moving traffic. We are directly impacted by this project as it is literally in our back yard and are 100% in support.

Mahalo,

Name
Tim and Billie Kiernan

Leslie Kurisaki

From: Kelly Hoyle [the.coconut@hotmail.com]
Sent: Saturday, June 12, 2010 7:11 AM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea TRail and Greenway project

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki;

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea.
I live in Waimea and would appreciate all that you can do for this project. I have 2 small children who love to walk and ride bikes instead of driving to school. Please help us

Mahalo for your support of this project,

Kelly Hoyle

Hotmail has tools for the New Busy. Search, chat and e-mail from your inbox. Learn more.

Leslie Kurisaki

From: Douglas Zang [dougzang@gmail.com]
Sent: Saturday, June 12, 2010 7:24 AM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: I support the Waimea Trails and Greenways Project

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Douglas Zang
Hilo, HI

Leslie Kurisaki

From: kendra wilson [kbud311@hotmail.com]

Sent: Saturday, June 12, 2010 9:14 AM

To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com

Subject: Ke Ala Kahawai O Waimea path support!!!

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,
Kendra Wilson

The New Busy think 9 to 5 is a cute idea. Combine multiple calendars with Hotmail. Get busy.

Leslie Kurisaki

From: Ann C. Peterson [anncinzi@gmail.com]
Sent: Saturday, June 12, 2010 9:45 AM
To: Leslie Kurisaki; glennk@kimurainternational.com
Cc: laura@pathhawaii.org
Subject: Waimea Trails and Greenways

Aloha Glenn and Leslie,

I'm looking back in my files seeing the numerous letters of support I've written for this project over the past 14 years, and I have to wonder (scream), "Why?"

Why...

- aren't folks already convinced that this is a critical project to connect neighborhoods with schools and shops
- isn't this project seen as the potential economic engine that it is
- can't we provide a safe place for folks to build heathy lifestyles (and address the obesity epidemic)
- are folks happy with sitting in congested traffic when a beautiful alternative exists
- isn't this seen as an investment in a cleaner energy future

and most of all...

- why isn't this project already build?

Sadly, I know too well, that some folks will just never get it. They believe that the trail will open them up to some kind of crime. But this myth has been repeatedly proven untrue. In fact, the more people out meeting each other face-to-face, rather than behind tons of steel and glass on wheels, the safer communities become -- and a greater 'sense of place' is felt. Here's one study to reference http://findarticles.com/p/articles/mi_m1145/is_8_35/ai_65132250/, but we only have to look to Old Walua Road Bike and Pedestrian Scenic Route, in Kailua-Kona which was opened 14 years ago, to see the actual impact and success of multi-use trails on this island. This pathway is in use from sun up to sun down, there is no liter along its route, neighbors who had never met have become friends, it has become a selling feature for houses that abut the trail, events and fundraisers are held there, along with so many other benefits. Shall we compare this with the crime and liter that occurs along our roadways and yet never seems to be an issue when they are built?

I feel for the Waimea community members who have worked on this project for SO long, only to see yet another stumbling block.

Please, please, get this trail built.

Respectfully yours,
Ann C. Peterson
808-987-0185

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Bike Path Phobia: Selling Skeptics On Urban Greenway Bike Path Safety

Parks & Recreation, August, 2000 by Tod Schneider

Do bike paths cause crime? While enthusiasts may laugh at the suggestion, others fear dire consequences if underdeveloped areas become public trails. Urban greenway supporters may cross swords with adamant opponents in vitriolic public meetings or expensive court cases. One community fought this battle on both fronts for years.

Do greenway bike paths kill? Some people think so. 1999 marked the end of a protracted dispute over completion of a world-class urban trail in Eugene, Oregon. The bruising and expensive battle pitted a pro-bicycle faction against hostile private property owners. The city was accused of callous disregard for the safety of school children. The private property owners were labeled elitist obstructionists. Lawyers on both sides made out like bandits. The rest of us picked up the tab.

The bike path follows the Willamette River on both banks, with four pedestrian bridges linking the two sides. Although most of the path has been in place and widely used for years, there remains an unbuilt segment. A short stretch of the latter, unfortunately, runs along the riverbank behind a private high school, which has greatly enjoyed its solitude. The school fought the bike path zealously and on any fronts possible. One premise, attending to the public's fear of school-related homicides, asserted that the path would somehow generate violent crime, putting their school at great risk.

Other communities may run into similar arguments. It's not unusual for citizens to conclude that bike paths are inherently unsafe based on a flurry of path-specific incidents enhanced by alarmist media coverage. Perhaps your community can benefit from knowing in advance the cogent arguments and recommendations we wish we had presented earlier and more effectively:

1. Our greenway trail area covers 222 acres. That's the equivalent of a 7.7 by 7.7 square-block

area. If you compare statistics for crime reported on the bike paths to crime reported in other areas of comparable size, it's clear that crime is generally lower on the bike path when examined based on raw geography.

2. However, crime rates are generally based on the rate of crime per 100,000 people, not on geographic area. How does this apply to a bike path? If you can orchestrate an accurate traffic count on a bike path you may be able to generate a crime rate figure, although this gets a little tricky. Crime statistics are often based on a residential population, such as the number of people who live in a city based on census data, a far more stable number than is likely to be found in non-residential settings where nobody stays more than a few minutes. Bike path "population" is different. It might be more comparable to another high-mobility area based on similar tabulations, such as by counting pedestrians and bicyclists. For example, if we can determine that 10,000 people walk past city hall, 2,000 people pass a major bike path intersection, and 6,000 people pass alongside an inner-city park monthly, these might present opportunities to develop comparable statistics: the number of violent crimes reported within a 400 foot radius, adjusted per 100,000 people. Police departments can often help generate some or all of this data to help determine crime rates.

Paradoxically, if ten people use the path, and a serious crime occurs there, the crime rate will be very high. If, on the other hand, one thousand people use the same exact path and the same crime occurs there, the crime rate will be one hundred fold lower. In other words, the more users and less crime the better the statistics. This goes beyond skewed data--if there is a constant legitimate presence, meaning that there are good people on the path at all times, then criminals will often find this an uncomfortable location for illegitimate activity. They'll look elsewhere for victims--specifically where individuals are more isolated.

An important statistic to look at is the number of injury vehicle accidents in your community. Bicycles and pedestrians on paths that are separated from car traffic are unlikely to be hit by cars. When the injury rate on such paths is compared to the number of people in your community who are injured or killed by cars at other locations, it should be clear that many lives would have been saved if people had an alternative to motorized transportation or to sharing the road with motor vehicles. Traffic fatalities, accounting for 41,967 deaths nationwide in 1997, are the leading cause of death for people aged 5-32, and are the leading explanation for deaths on-the-job. Out of that 1997 total, 5,307 victims were pedestrians and 813 were bicyclists--all of whom had encounters with motor vehicles and all of whom presumably would be alive today if they had been separated from vehicle traffic.

Medical miracles skew the picture, saving the lives of thousands who never would have recovered from similar injuries a few decades ago. Many people survive horrendous accidents but must contend with permanently debilitating injuries: 3,399,000 people were injured in traffic accidents in 1997.

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Leslie Kurisaki

From: Scott_Jeffrey/HAWAIIDO/HIDOE@notes.k12.hi.us
Sent: Saturday, June 12, 2010 11:52 AM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenway project

Aloha Mr. Kimura and Ms Kurisaki,

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project can provide a much-needed safe route for walking, bicycling and running through Waimea as well as a better way for students to get to school safely in a healthful manner. With bus rates rising and congestion increasing near the Waimea schools, a safe alternative would be welcome to all.

Mahalo,
Scott Jeffrey

Complex Area Business Manager
Honoka'a-Kealakehe-Kohala-Konawaena Complex Area
Department of Education, State of Hawaii
75-147 Hualalai Road
Kailua-Kona, HI 96740
Tel: 808-327-4991
FAX: 808-327-4994
Cell: 808-937-2304
Scott_Jeffrey@notes.k12.hi.us

Leslie Kurisaki

From: Dan Berman [danb@pacificmkt.com]

Sent: Saturday, June 12, 2010 5:45 PM

To: lkurisaki@kimurainternational.com

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Dan Berman
Waikoloa, Hi

Saturday, June 12, 2010

RECEIVED JUN 14 2010

65-1234 Pako Place

Kamuela HI, 96743

Kimura International, Inc.

1600 Kapiolani Blvd., Suite 1610

Honolulu, HI 96814

Subject: Waimea Trails and Greenways

Ke Ala Kahawai O Waimea

Environmental Assessment – Early Consultation

Dear Sirs,

In regard to your letter of May 14, 2010 and a map of May7,2010, titled Waimea Trails and Greenways Environmental assessment, we would like to say that we are totally against the proposed alternate route of the Waimea Trail.

Putting the trail on the mauka side of town takes it away from the population majority and also away from the direction in which the town will grow in the future.

There are several places where the trail will actually share space with several busy highways. This is against the idea of the trail which is to be a safe place away from highways.

Sections of the alternate route are on private property which could make it difficult to obtain access. Our property edges on the Waiouia stream which floods during heavy rains. There are two double lane well constructed bridges over the stream, and it would be necessary to go over, under or around these bridges. In the last flooding three years ago the water went over one bridge and caused damage to the surrounding area. Also we are not interested in having the trail go over our property for privacy and liability reasons.

Sincerely, Hal Ward

Hal Ward

Mary Ann Ward

Mary Ann Ward

CC: Clem Lam

Leslie Kurisaki

From: Robyn Hafner [spitfire689@hotmail.com]

Sent: Sunday, June 13, 2010 3:30 PM

To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com

Subject: Support for the Waimea Trails and Greenways Project

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as a way for students to get to school safely.

Mahalo,

Robyn Hafner
Waimea

The New Busy think 9 to 5 is a cute idea. Combine multiple calendars with Hotmail. Get busy.

Leslie Kurisaki

From: Terry Ladwig [writeus@hawaiiantel.net]
Sent: Sunday, June 13, 2010 7:29 PM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: support for Waimea Trail and Greenway project

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely. Additionally, paths unite communities by making personal contact more likely and by the experiences path users share out of doors.

Mahalo for your work on this project,

Terry Ladwig
Waimea

Leslie Kurisaki

From: Laura Monahan [monahan@aloha.net]
Sent: Monday, June 14, 2010 7:24 AM
To: LKurisaki@KimuraInternational.com
Cc: Laura Monahan
Subject: Waimea Trails and Greenway Alternate Paved Path

Attachments: ProposedPavedTrails.pdf; May7KimuraInt'l.pdf

ProposedPavedTrails.pdf (615 K. May7KimuraInt'l.pdf (492 KB)

Leslie Kurisaki
LKurisaki@KimuraInternational.com
Kimura International, Inc.
1600 Kapiolani Boulevard., Suite 1610
Honolulu, Hawai`i 96814

RE: Waimea Trails and Greenways
Environmental Assessment -- Early Counsultation

Dear Ms. Kurisaki

I oppose the proposed Waimea Trails and Greenways project and the alternative paved path described in your May 14 letter until we have further information from you and hopefully a town meeting to discuss how families will be benefited and impacted.

Sincerely,

Dave and Laura Monahan

Dave and Laura Monahan , 66-1670 Kohala Mt. Rd., Kamuela, Hawaii 96743
(808) 989-5959 / monahan@aloha.net

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Leslie Kurisaki

From: Brian Burau [bburau@gmail.com]
Sent: Monday, June 14, 2010 7:32 AM
To: lkurisaki@kimurainternational.com; gkimura@kimurainternational.com
Subject: Waimea Trail and Greenway project

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Mahalo,

Brian Burau
Kamuela, HI

Leslie Kurisaki

From: Bob Hunter [robert.m.hunter@hawaiiantel.net]
Sent: Monday, June 14, 2010 8:15 AM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways Project ~ Ke Ala Kahawai O Waimea

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trails and Greenways project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as a way for students to get to school safely.

Mahalo,

Robert M. (Bob) Hunter, Ph.D., P.E.
65-1116 Hokuula Rd.
P.O. Box 2709
Kamuela, HI 96743
cel 406-581-2234
fax 866-740-4144 toll free
bob@webpatent.com
www.webpatent.com

Leslie Kurisaki

From: Randy Campbell [randyc@keck.hawaii.edu]
Sent: Monday, June 14, 2010 9:24 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail

Aloha Ms. Kurisaki,

I write in support of the Waimea Trail and greenway project.

The trail would be a great addition to Waimea for many reasons. As residents, my family and I would use it constantly and it would raise our quality of life, provide recreation and transportation alternatives, while helping to offset traffic problems in town. I can't think of anything that would benefit the residents of Waimea more than this simple trail following the stream through town.

Sincerely,
Randy Campbell

Waiaka Street resident.

Leslie Kurisaki

From: Terri Lum [tlclum@hotmail.com]
Sent: Monday, June 14, 2010 7:34 PM
To: Leslie Kurisaki
Subject: FW: PATH Action Alert: Speak Up for the Waimea Trails & Greenways

Hi Les -
I just happened to read this email and noticed the letters of support are supposed to be addressed to you! Hope all is well with you and your family - what are your kids up to for the summer? Have you heard anything more about the possible reunion? My daughter has a student leadership program in mid -July so I will probably come over that weekend. Maybe we'll have a chance to visit.

Take care and yes, I support this project! terri

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Leslie Kurisaki

From: Julia Simmons [jsimmons@keck.hawaii.edu]
Sent: Monday, June 14, 2010 11:13 AM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenway

Aloha,

We desperately need this trail along the Waikoloa Stream. It will help reduce traffic in the mornings by giving children a safe route to walk or bike to school. I will not allow my child to walk or ride on the highways. In fact, I won't do it myself since it is so unsafe. But this trail would make it very fun and safe to walk into town.

Thank you,

Julia Simmons

Kamuela View Estates

Waimea, HI

Leslie Kurisaki

From: Rich Matsuda [rmatsuda@keck.hawaii.edu]

Sent: Monday, June 14, 2010 11:35 AM

To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com

Subject: Waimea Trail and Greenway Feedback

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea.

I've lived in other areas on the mainland which had similar walking and biking trails and it added very positively to the quality of life, providing a safe and pleasant area for exercise and recreation. Rather than being a negative influence on the value of property adjacent to the trail, it actually boosted value. Also, there has been sentiment expressed that the trail will "urbanize" Waimea. I actually feel that it will do the opposite by promoting walking and biking as opposed to just vehicle traffic.

Currently, I occasionally walk from Waimea town to Kamuela View estates, where I live, for exercise and having cars and trucks whiz by just a few feet away is not a safe feeling. I would use the trail for biking into town, but do not dare currently as I don't feel there is enough of a safe shoulder.

As far as paving the path, I think that makes sense from a maintenance point of view, and if it's done right, I don't think it will look as bad as some folks think.

Mahalo,
Rich Matsuda
Waimea Resident

Leslie Kurisaki

From: hdtee1@gmail.com
Sent: Monday, June 14, 2010 11:45 AM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenway

Dear Mr. Kimura and Ms. Kurisaki -

I support the Waimea Trail and Greenway project along the Waikoloa Stream through Waimea. I look forward to using it in the near future.

Thank you,
Hien Tran

Leslie Kurisaki

From: Hien Tran [htran@keck.hawaii.edu]
Sent: Monday, June 14, 2010 11:43 AM
To: gkimura@kimurainternational.com
Cc: lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenway

Dear Mr. Kimura and Ms. Kurisaki -

I support the Waimea Trail and Greenway project along the Waikoloa Stream through Waimea. I look forward to using it in the near future.

Thank you,
Hien Tran

Leslie Kurisaki

From: Gregory Wirth [gregory.wirth@gmail.com]
Sent: Monday, June 14, 2010 9:09 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways Environmental Assessment -- Early Counsultation

Dear Ms. Kurisaki,

I write to voice my strong support for the Waimea Trails and Greenways project. I believe that the proposed path will prove to be an outstanding benefit to Waimea and should be the very highest priority project for our community, bar none.

While blessed with weather that allows walking and cycling practically every day of the year, Waimea lacks even a single safe public route for pedestrians and cyclists to enjoy a walk or a bike ride away from car traffic. For me and my family with 3 young children, this lack is a serious detriment to the quality of life in this otherwise highly livable community. Having a paved path winding along the stream would provide an essential safe route between downtown Waimea and the outlying residential areas, encouraging more people to exercise and enjoy the outdoors. Our family would regularly use and enjoy such a path, and I believe that the strength of the benefits to the community would certainly outweigh concerns about the trail's impact on the local environment. Adding a bike line to existing roads would in no way be a suitable substitute for the proposed trail, which fully separates the cyclists and pedestrians from vehicular traffic.

I have witnessed firsthand the strongly beneficial effect that a adding a linear park can have on a community. In my hometown in Michigan, the Pere Marquette "rail trail" similar to the proposed Waimea Trails and Greenways project was built almost 20 years ago and has become a vital route for non-vehicular traffic and recreation. It is enjoyed by cyclists, joggers, walkers, and inline skaters, just as the envisioned Waimea Trails and Greenways will be as well.
Similarly, I recently visited Boulder, Colorado, where cycling and pedestrian trails wind through the city and provide a well-used and much-enjoyed route for recreation and commuting. Based on the strong support of these trails in their local communities, I strongly believe that adding the proposed path in Waimea will provide similar, substantial, positive benefits to Waimea and its residents.

Sincerely,

Gregory D. Wirth

--
Gregory D. Wirth
Email: gregory.wirth@gmail.com
Phone: 808.217.2605
Web: http://www2.keck.hawaii.edu/realpublic/inst/people/wirth/

Leslie Kurisaki

From: Colette Tyau [ctyau@keck.hawaii.edu]
Sent: Monday, June 14, 2010 12:14 PM
To: gkimura@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: SUPPORT FOR THE WAIMEA TRAILS AND GREENWAYS PROJECT

Glenn Kimura, Principal
Leslie Kurisaki, Project Manager
Kimura International
600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

Dear Mr. Kimura and Ms. Kurisaki -

I wish to express my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. This project will provide a safe route for walking, bicycling and running through Waimea as well as away for students to get to school safely.

Thank you for your time.
Colette Tyau
Kamuela, HI

Colette Tyau
W. M. Keck Observatory
65-1120 Mamalahoa Hwy.
Kamuela, HI 96743
Ph: (808) 881-3538
Fax: (808) 881-3535

Leslie Kurisaki

From: Peggi K [peggik@gmail.com]
Sent: Monday, June 14, 2010 11:44 AM
To: glennk@kimurainternational.com; lkurisaki@kimurainternational.com
Subject: Support stream route for WT&G

Dear Mr. Kimura and Ms. Kurisaki -

Please note my support for the Waimea Trail and Greenway project along the Waikoloa Stream through the heart of Waimea. I am a homeowner bordering the preferred stream route at 65-1108 Puu Opelu Lane. This project will begin to fill the huge void that exists for safe routes through Waimea. Walking or biking along the roadway is not safe. I will use the trail to walk to work and as healthy recreation.

Mahalo,
Peggi Kamisato

P.O. Box 2279
Kamuela, Hawaii 96743

808-885-6042 home

Leslie Kurisaki

From: Joan Campbell [jcampbell@keck.hawaii.edu]
Sent: Monday, June 14, 2010 1:05 PM
To: lkurisaki@kimurainternational.com; gkimura@kimurainternational.com
Subject: Waimea Trails and Greenways Environmental Assessment -- Early Counsultation

Dear Ms. Kurisaki,

I write to voice my strong support for the Waimea Trails and Greenways project. I believe that the proposed path will prove to be an outstanding benefit to Waimea and should be the very highest priority project for our community, bar none.

While blessed with weather that allows walking and cycling practically every day of the year, Waimea lacks even a single safe public route for pedestrians and cyclists to enjoy a walk or a bike ride away from car traffic. For me and my family with 2 young adults, this lack is a serious detriment to the quality of life in this otherwise highly livable community. Having a paved path winding along the stream would provide an essential safe route between downtown Waimea and the outlying residential areas, encouraging more people to exercise and enjoy the outdoors. Our family would regularly use and enjoy such a path, and I believe that the strength of the benefits to the community would certainly outweigh concerns about the trail's impact on the local environment. Adding a bike line to existing roads would in no way be a suitable substitute for the proposed trail, which fully separates the cyclists and pedestrians from vehicular traffic.

Such a train would make it possible for my family as well as many of our neighbors to commute to/from town via bike or on foot.

Sincerely,

Joan Campbell

Joan Campbell, MPH
Advancement
jcampbell@keck.hawaii.edu

W.M. Keck Observatory Office
65-1120 Mamalahoa Hwy
Kamuela, HI 96743

main: 808.885.7887
ph: 808.881.3854
fax: 808.885.4464

From: Pamela Cushnie [mailto:pamcushnie@yahoo.com]
Sent: Tuesday, June 01, 2010 12:58 PM
To: lkurisaki@kimurainternational.com
Subject: request for information from Pam Cushnie

Hello Leslie,

I am trying to get more information re: the "alternative" trailways path recently proposed for the Waimea Trailways plan. The alternative I have heard about is currently just drawn on a confidential map, and has not been released publically. As one of many homeowners impacted by this alternative path, I would like to know much more about the plan and your request for public input.

I spoke with Nancy this morning, and understand you are on vacation until 6/14, which is also your deadline for public input on the EA. I am trying to gather more information in the meantime from Parks and Rec. and Clem Lam, but we are concerned about this lack of access to information about the "alternate" route.

If you are reading your office email, could you please explain to me how we are to respond if we don't know all the details. I will forward any information from you to the other participants.

Many thanks for your assistance. Pamela Cushnie 885-3521 Big Island

Leslie Kurisaki

From: Pamela Cushnie [pamcushnie@yahoo.com]
Sent: Tuesday, June 15, 2010 7:37 AM
To: Leslie Kurisaki
Subject: RE: reply from Pam Cushnie

Hi, and thank you for your prompt reply!

I can only imagine the number of projects you need to take care of, so don't worry about me at all. The apparent limited release of the map, the fact that the orange route was completely new to those of us living along Wai'au'ia Stream, and the concern that the planners seem to have no other realistic alternate routes got everyone in a tizzy.

Unfortunately, we are also getting slightly different versions of events from the 3 major players here...so it's best if everything is in writing. It's not the EPA process that worries us... it's the uncertainty of whom to trust for information.

Rumors of a circular route connecting the pink and orange path, land condemnation, stories of problems from other mainland pathways, etc. are all very worrisome. Different versions of ADA compliance levels, responsibility for path maintenance and supervision, the "care and planning" that went into the selection of the (highly unfeasible ...my opinion) orange alternative, and the very limited distribution list all make residents questions the legality, the time, the motives, and the public money already spent on this.

The appearance of the orange path, seemingly drawn on a map without any previous research or public notification, makes everyone worried that this will just be pushed through with Federal funds. Or that we will have to endure 15 years of "fact gathering and public testimony", leaving the orange option up in the air for decades of discussion.

Many residents would like to have this orange alternative dismissed as unfeasible as quickly as possible. I'm sure you're receiving comments from them.
Please let me know when that decision is made so we can go back to supporting the pink Sandalwood/Parker Ranch path.

(FYI: I might suggest that, in the future, when Mr. Kimura signs a letter for public distribution, he also types his name and title under his signature. I had no idea who had written the letter.)

Aloha, Pam Cushnie

--- On **Mon, 6/14/10, Leslie Kurisaki** ***<lkurisaki@kimurainternational.com>*** wrote:

> From: Leslie Kurisaki <lkurisaki@kimurainternational.com>
> Subject: RE: request for information from Pam Cushnie
> To: "'Pamela Cushnie'" <pamcushnie@yahoo.com>
> Date: Monday, June 14, 2010, 11:38 AM
>
> Hi Pamela,

Sorry for only getting back to you today…it's my first day back in the office after vacation. I understand that you spoke to Bobby Command about this, but I'd like to explain the process again. The map you refer to is not a "confidential map"—it is the map that was distributed during the early consultation process, and we are asking everyone (!) interested to provide comment. Please feel free to pass the map and the information to as many people as you can.

The federal environmental process (per the National Environmental Policy Act, or NEPA) requires that all alternatives be considered in the Environmental Assessment (EA). This is why the map shows various alternative routes—we are seeking public input on the options. If one or more alternatives have shortcomings, please point them out! This information will help us evaluate and compare the various alternatives, and discuss their impacts in the EA document. It will also help the County select a final alignment.

I hope this clarifies things. If you have questions, please e-mail or call.

Aloha,

Leslie

Leslie Kurisaki

Kimura International, Inc.

1600 Kapiolani Blvd., Suite 1610

Honolulu, Hawaii 96814

Phone (808) 944-8848

Fax (808) 941-8999

FAX TRANSMITTAL FORM

Date 6/14/10

CAROL HENDRICKS
From: Pete Hendricks (808)885-4453 (phone & fax number)

To: KIMURA INTERNATIONAL INC.

FAX: 808 941 - 8999

Subject: WAIMEA TRAILS AND GREENWAYS
KE ALA KAHAWAI O WAIMEA

Remarks: EARLY CONSULTATION

P. O. Box 6144, Kamuela, Hawai'i 96743
Telephone 808-443-4482

June 14, 2010

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KE ALA KAHAWAI – WAIMEA TRAILS AND GREENWAYS

I'm Carol Hendricks representing Waimea Outdoor Circle with 200 members. The Outdoor Circle has 3000 members statewide. I am the chair of Ulu La'au, the Waimea Nature Park.

We were the first supporters of the trail concept and are a key location on the trail.

There is a need to include the following items for study and mitigation.

1. What will be the effect of removing 357 mature trees? (Mike Kraus Tree Risk Assessment)

- **Wind damage to surrounding homes and business.**
- **Eucalyptus Robusta was planted to keep stream areas dryer, soaking up swamps.**
- **Fine alluvial soil will erode faster without large tree roots.**
- **Habitat for birds and wildlife will be destroyed.**
- **Waimea will lose a big part of its sense of place.**

2. The concept of a trail wandering from side to side within the 30 ft. easement, instead of a straight line.

- Leaving more of the mature trees to keep and hold stream banks, offer shade to trail users, **and contribute to the environment.**
- **Using an alternate trail surface in sensitive areas such as near large trees. (crushed rock – rolled, etc.)**

3. Historic road preservation. World War II Camp Tarawa to Waimea Town road through the park.

We would like to retain as many of the old growth trees as possible. Out of 357 scheduled for removal, 119 are dead, damaged or in poor condition. We have no problem with these trees being removed. 238 trees could possibly be saved by trail realignment within the 30 ft. easement or by using a less damaging surface than concrete. We are also concerned that a low bidder will be chosen for tree trimming and the trees will be butchered.

These Eucalyptus heritage trees contribute to our Waimea sense of place. According to arborist, Mike Kraus, their life span is 130 years if cared for properly.

4. Care is needed to protect the banks of Waikoloa Stream, recognized by the State for its diversity and cultural resources. Recent preliminary surveys of the Waikoloa/Wai'ula'ula stream system also found all five species of native stream fishes , known in Hawaiian as o'opu : Lentipes concolor, Sicyopterus, Awaous guamensis, Stenogobius hawaiiensis, and Eleotris sanwicensis. (DLNR, pers.comm.) The Hawaii Stream Assessment (State of Hawaii Commission on Water Resources Management 1990) Classifies this stream as "intermittent," with year round flows in the lower elevations.

- **Areas of the trail pass through flood zones. Periodically we have experienced flood episodes in the Nature Park. (4 in 10 years) This requires responsible riparian management.**

We would like to ask how these concerns can be mitigated

Sincerely,

President, Waimea Outdoor Circle Carol Hendrich **Waimea Nature Park Chair**

"Keeping Hawaii clean, green and beautiful"

Hawaii Horse Council

www.hawaiihorsecouncil.com
hawaiihorsecouncil@gmail.com
P.O. Box 964
Keaau, HI 96749
Ph. 808 987-9064 FAX 808 982-6444

May 29, 2010

Aloha,

The Hawaii Horse Council has just been established, and we are just getting up to speed.

We appreciate all the time and effort that has gone into the inception of the Ke Ala Kahawai O Kamuela trail.

Because horses and horseback riding are such a big part of the magic of Kamuela, it is fervently hoped that this trail will be available to equestrians, as well. All we need is a grassy verge on the side, and we will not ride on the paved portions of the trail. This trail is a wonderful idea, and a benefit for people who want to stay off the busy highway.

It is ironic that the cowboy tradition, the very thing which brought people to Kamuela, is suffering because of the pressures brought about by the increase in population.

Yours very truly,

Nancy McIver

RECEIVED JUN 15 2010

TO: Leslie Kurisaki
Kimura International, Inc.

RE: Your May 14, 2010 Request for Comments: Waimea Trails & Greenways

We commend the idea to create a pathway. However, we chose and pay to live in the Lanikepu Gulch area because of the privacy here. To invade this privacy subjecting our parked vehicles to be at risk, strangers to help themselves to our garden hoses, subject our land to be littered and defecated upon, and mostly passers by gawking as we lounge in our yard is unacceptable.

We fervently oppose the Trail going through Ohiaku, Wai'aka and Lanikepu areas.

June 3, 2010

RECEIVED JUN 15 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

Re: Waimea Trails and Greenways project, and your request for early consultation comments

I feel strongly that the limited release to only a segment of the population is not in the spirit of transparency. I would ask you to determine who was in charge of the map of May 7th, if it is a public document paid for with taxpayer money, in what ways was it made available to the general, and why the map had such a limited release.

Although you may be asking only for general public input, it places those of us along your newly designated route at a disadvantage, not knowing that we are now personally involved in the new route. The Trail and Greenways committee has been gathering input for about 15 years, so the sudden appearance of the orange trail adds a huge new dimension to your request for public comments. I am upset that we were not given the courtesy of access to the detailed information that other community members were given.

There are several " signed shared roadway" sections along the proposed alternate route that have narrow, winding roadways with no shoulders (see Kohala Mountain Road section). How will people with special needs cross the highway at the entrance to ____ subdivision? How will people walk along the gulch or narrow highway sections safely?

The incline in the path along Wai'au'ia Stream has changes in elevation of perhaps 30 vertical feet over short distances. What will people, looking for an efficient alternative to driving, think about walking along such a steep pathway? Will young children, parents walking with youngsters, the elderly, bicyclists travelling at faster speeds, and horseback riders be safe within these limited sight sections?

Any increase in the general public crossing private property creates liability insurance that some individuals may not be able to financially afford. If we were to allow (even with legal easements) the general public to walk along this portion of Wai'au'ia stream, we would be liable for any injuries and damages. With greater exposure to people walking across my property I would have to pay for greater house/ theft/ fire and liability coverage. (I believe it is impossible to get glass breakage coverage.)

The Wai'au'ia Stream (much of the proposed orange pathway) is known for quick changes in water flow. We have had sudden height increases of approximately 15 feet in a matter of minutes when it rains in the mountains. Where would you safely put a 10 foot wide path so it is not impacted by this seasonal flooding, shifting boulders and floating debris? Would the pathway be closed to pedestrians well before flooding presented any danger to those using it? Would land owners be compensated for erosion and damage to their property and houses?

The Flood Innundation setbacks seem to be very accurate predictors of flooding impact. If the proposed pathway (10-12 feet wide) is to be built along the stream, and the river covers land up to 80 feet away from the historical streambed, where would you build such a path? In some instances you'll be right next to a house.

The Army Corps of Engineers has advised land owners not to disturb the banks of the stream, because the flooding causes erosion and re-alignment of the winding stream. Large boulders, heavy debris, and uprooted plants are all moved downstream by the water. Erosion has apparently caused human bones to be exposed when the stream impacted ancient family burial plots. Will the Burial Council be consulted before any soil is disturbed?

I do not want the May 7th Alternative Alignment to be considered as a viable option. I would like Wai'au'ia Stream route to be dropped from your list of possible paths.

Wai'ua'ia Stream is not a good choice as an alternative route. No further taxpayer money should be spent researching this option.

Other concerns are: brush fires during drought conditions; loose dogs running along the trail, necessitating new fencing along path boundaries; possible vandalism issues; loss of privacy on small lots; cost of regular maintenance of the pathway for litter, graffiti, and broken glass; cost and responsibility for path repairs; cost to the County of Hawaii to monitor the safety and condition of the path; liability costs incurred by the County; and concerns about additional demands on our law enforcement officers and how they will monitor activity on the path.

Thank you for your attention.

Sincerely, _____ James Phillips
Signature printed name

Waimea resident 40 yrs
Land owner along stream ✓ Yes ____ No
Phone number 885-4811

Homeowner prop. Value drop!
Safety issues!

The Jacaranda Inn
Waimea's Historic Ranch Estate

June 5th 2010

RECEIVED JUN 15 2010

To: Kimura International, inc.
1600 Kapiolani, Suite 1610
Honolulu, HI 96814
Attn: Leslie Kurisaki

Re: Waimea Trails and Greenways project, and your request for early consultation comments.

I just received The Waimea Trails and Greenways Shared Use path Environmental Assessment- Early Consultation outline.

I will share below my environmental and personal concerns.

The portion of the considered path directly behind my property changes in elevation due to the waterfall that is fed from up above creating the stream. The cliffs are steep and dangerous. Just in my time here owners on all three sides have had to discourage children from going to the water fall and pond. The depth of the water can change without much notice. In the mid 90's a boy passed our home on a street above Merriman's Restaurant. A couple hours later the ENT's were at the back of my business, The Jacaranda Inn, taking the boys lifeless body from the pond. There would be virtual no way to safely police this stream and pond. To place a path here to draw children to this area would be nothing less then gross negligence.

I could not support the Alternative Alignment project proposed as a viable option due to it's high liability. I make a request that the Wai'au'ia Stream route be dropped from your list of possible paths.

Thank you for your consideration.

Mary Ellen Revana

Mary Ellen Revana office 808-885-8813 or cel 808-557-5068

Leslie Kurisaki

From: Fran Tabor [drfrantabor@gmail.com]
Sent: Monday, June 21, 2010 8:15 AM
To: Leslie Kurisaki
Subject: Ke Ala Kahawai O Waimea: My Comments

Dear Leslie, Thank you for accepting my comments. I was out of the country from May 14 until mid-June. In addition to my memo dated February 8, 2010, I would like to emphasize some points and add others. I am a member of the Hawaii County CDP Action Committee, but I am expressing my opinions here as a concerned resident, not a member of this committee.

I am particularly concerned about the segment of the path next to my residential property, located at 66-1568 W. Ko Uko Place, Kamuela. Behind this property, the Waikoloa Stream forms a major gulch with significant uneven, steep embankments and huge boulders. There is also a steep drop off (waterfall) in Waikoloa Stream topography at this location. Surrounding this area is a riparian buffer zone with many mature trees, filled with Hawaiian birds. This riparian buffer zone acts as a buffer between Chris Robb's Lalamilo farm and my home.

My comments are as follows:

1. Under the Clean Water Act, Wild Rivers, and the Hawaii State Watershed Protection and Management Program, riparian buffer zones (called Streamside Management Zones under Hawaii regulations) are mandated. The width of these zones on each side of the stream is dependent on the soil type and percent of the slope of the embankment. I expect that riparian buffer zones to be preserved and maintained in accordance with State and Federal Regulations.

2. Trees are expected to be planted in riparian buffer zones under federal best management practices. Trees are not to be destroyed under these regulations. Trees, particularly, Eucalyptus Robusta, provide protection of stream embankments against erosion, slow down water during flash flooding, and provide other benefits.

3. Bridges crossing streams are to be kept to a minimum under federal regulations. Bridges are expected to cross only at ninety degree angles and where the stream channel is most narrow and has a firm, rocky banks. This does not describe the location adjacent to my home. Crossing the Stream at the location adjacent to my home would be the most expensive and dangerous location for a bridge.

4. The Waikoloa Stream is part of a flood management and watershed protection area. I would expect all federal and state laws and regulations to be complied with into order to protect this watershed and not destroy it. The Waikoloa Stream floods periodically. The most recent time was in 2004 in which there was a 30 year flood. This flash flood over a several day period flooded several homes in Sandalwood. If trees/riparian buffer zones are destroyed when the path is built, and homes and businesses are flooded, who is going to indemnify them? Will lawsuits against Hawaii County result?

5. Laws such as the Wilderness Act, the Wild and Scenic Rivers Act, the National Environmental Policy Act, FEMA, and the Federal Water Pollution Control Act (Clean Water Act) and others have jurisdiction here.

6. Hawaiian birds habitat the riparian buffer zone adjacent to my property. Some of these rarely seen

birds include the Kalij Pheasant, the Saffron Finch, the Frankolin, the Grouse, a couple of species of Cardinals and others. These species have a right that their habitat not be destroyed.

7. The way Sandalwood residential properties are titled is to the middle of the Waikoloa Stream. Several homeowners are concerned about liability. Who is going to indemnify them against accidents in the stream on their side of the property line?

8. Vandalism is a concern of several Sandalwood property owners. The Nature Park has been vandalized twice (that I am aware of) and perhaps more.

9. A path exceeding 10 feet is unnecessary. The standard is 10 feet. The path, in my opinion, should not exceed ten feet and needs to be located outside the riparian buffer zone.

10. The gulch adjacent to my home acts as an echo chamber for noise. I am concerned that the peaceful nature of this area will be lost. This will diminish my enjoyment of my home and could very well lead to a loss of my property value. I am very concerned about this. I believe a path can be found that does not impact my home with two paths directly adjacent to my home as shown on the map. I believe that another, more suitable site can be found.

11. I am very concerned about safety of children deciding to play in the gulch adjacent to my home. A bridge and large rocks/boulders and a drop off invite boys (particularly) to play "fort" or take other chances in the terrain. There have already been instances where boys were playing in this dangerous gulch, fortunately with no injuries.

12. The argument that a full size ambulance needs to traverse the proposed path is false. ATV mini-ambulances are widely used in the U.S. mainland along bike and hiking paths. These vehicles can traverse a path of 8 feet. Both Kona and Hilo have these vehicles. Waimea does not. I proposed to the Waimea Traffic and Safety Committee that we secure one.

In Summary,

I would recommend that Ke Ala Kahawai O Waimea be no more than 10 feet and be located father inland away from the Waikoloa Stream on the south side of the Stream. This would preserve riparian buffer zones and better protect Sandalwood homes. Parker Ranch and any Lalalmilo Farms affected would be able to secure conservation easements under Federal Law and receive tax benefits.

I would recommend that another location be found for the bridge crossing of the Stream adjacent to my home. There are channel locations are are narrower with even embankments with no drop offs or gulch topography.

I would expect that all relevant federal and state laws and regulations be complied with.

I think that an indemnification scheme has to be worked out to protect homes and businesses against flooding due to degradation of the watershed and against vandalism.

Thank you again for invitation for comments. I invite anyone from your firm or anyone else to visit my property to see first hand the issues of concern. My phone number is (808) 885-5864.

Fran L. Tabor

P.O. Box 2045
Kamuela, HI 96743

August 17, 2010

RECEIVED AUG 18 2010

Mr. Robert A. Fitzgerald
Director, Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720

Re: Waimea Trails and Greenways
Ke Ala Kahawai O Waimea
Letter to Hawaii County Mayor: Issues to be Considered and Addressed

Dear Bob:

Although I am a member of the CDP Action Committee, I am sending this letter to you as a private resident, not as a member of the Action Committee.

I met Warren Lee at the most recent STIP meeting in Waimea. I gave him a copy of the enclosed letter I am forwarding to you. I am also forwarding a copy to Leslie Kurisaki at Kimura International.

There are many issues associated with the proposed primary route of Ke Ala Kahawai O Waimea. I have identified many of these in the attached letter.

I would like to be clear that I am not opposed to the concept of Waimea trails and bike paths. However, I am a proponent of doing the job properly and with sensitivity for and compliance with federal and state laws and regulations regarding the environment. I have other concerns as well.

In the attached letter, I have proposed a route that is farther south toward Kona from the Waikoloa Stream. I have also proposed a bridge crossing over this Stream that is more environmentally sound at a lower cost at or near the Waimea transfer station.

When the EA is completed and released by Kimura International, I am hopeful that there will be further dialogue to establish the most environmentally friendly and cost effective route for Ke Ala Kahawai O Waimea. Sense of Place depends on it.

Respectfully submitted,

Fran L Tabor

Fran L. Tabor

cc: Leslie Kurisaki, Kimura International

P.O. Box 2045
Kamuela, HI 96743

July 10, 2010

Mr. Billy Kenoi, Mayor Hawaii County
25 Aupuni Street
County Building
Hilo, HI 96720

RE: Ke Ala Kahawai O Waimea, Trails and Greenways

Dear Honorable Mayor Kenoi:

Although I am a member of the CDP Action Committee for South Kohala, I am writing to you as a long-time and concerned resident of Waimea. I am expressing my own opinions as a private citizen, not a a member of the CDP Action Committee.

I am not opposed to this proposed bicycle path (I am using the word "bicycle" although the path is multi-use). However, I am very concerned about major issues about the location and environmental impact of the proposed path of Ke Ala Kahawai O Waimea along the Waikoloa Stream.

My comments are:

1. The Wailoloa Stream forms a major gulch with significantly sized boulders, uneven and steep embankments. There is a major dangerous drop off in topography between Chris Robb's Lalamilo Farm and The makai (southwest) side of Sandalwood. This location is a noted buffer zone that the Hawaii Department of Agriculture has mandated. As it is, **the Waikoloa Stream is considered by the EPA as an "impaired river".**
2. Under the U.S. Clean Water Act , Wild Rivers Act, FEMA and the Hawaii Watershed and Management Program, riparian buffer zones (called Streamside Management Zones under Hawaii regulations) are mandated. The width of these zones on each side of the stream is dependent on the soil type and percent of slope of the embankment. I believe that riparian buffer zone along the Waikoloa Stream needs to be identified and protected.
3. Trees are expected to be planted, not destroyed, in riparian buffer zones under Best Management Practices. It is my understanding that there is a plan to destroy over 350 trees to make way for Ke Ala Kahawai O Waimea. These trees, particularly Eucalyptus Robusta, were planted by the U.S. Army Corps of Engineers to provide flood management, soil erosion protection, and watershed protection.
4. Bridges crossing streams are to be kept to a minimum under federal regulations. Bridges are expected to cross streams only at a ninety degree angle and where the stream is narrow and has a firm, rocky embankment. The proposed path of Ke Ala Kahawai O Waimea is planned to cross the Waikoloa Stream on the makai side of Sandalwood which is the widest, most dangerous, most expensive location one could choose.
5. The Waikoloa Stream is part of a flood management and watershed protection area. I would expect that all Federal and State laws and regulations will be complied with. In 2004, there was a 30-year flood that impacted a number of homes and commercial buildings. If trees and riparian buffer zones are destroyed, the damage to property would expect to increase significantly. If trees/riparian buffer zones are destroyed to make way for the bicycle path, and homes and businesses are damaged or destroyed as a result, who is going to indemnify them?

Will lawsuits against Hawaii County result?

6. Laws such as the Wilderness Act, the Wild and Scenic Rivers Act, the National Environmental Policy Act (EPA) and the Federal Water Pollution Control Act (Clean Water Act) and others have jurisdiction here.
7. Numerous bird species inhabit and nest in the grasslands/scrub surrounding the Waikoloa Stream. These sensitive species are subject to regulation by the U.S. Fish and Wildlife Service and the corresponding State department.
8. Property titles are involved. Sandalwood property owners own to the middle of the Waikoloa Stream. Several owners are concerned about liability. Who is going to indemnify these property owners against an accident in the stream on their side of the property line?
9. A path in excess of 10 feet is unnecessary. The standard published by the U.S. Department of Transportation is 8-10 feet. Full size ambulances are inappropriate for bike paths (they kill people, especially children). Mini ATV ambulances are what is called for. They require less than 10 feet and are all terrain, calling in question the need for a concrete path. Both Kona and Hilo have ATV mini-ambulances. Waimea does not.
10. Noise is a concern. The land adjacent to Sandalwood is rural pastureland and the gulch. These act as echo chambers for sound. Excessive noise, along with litter, and other nuisance factors could result in lowered property values for those adjacent to the Stream.
11. The safety of children playing in the Stream is a concern. A bridge with a large gulch with large boulders is an invitation for children, particularly boys, to play. There have already been several instances of boys playing among the boulders near the drop off. Fortunately, there were no injuries.
12. Vandalism is a concern. The Waimea Nature Park, along the bicycle path route, has been vandalized twice (that I am aware of).
13. Who is going to patrol this path? On the mainland, police on bicycles are common. Does the County have the funds to patrol the path?
14. Fire danger is an important risk. The grasslands/scrub along Parker Ranch, the former Parker Ranch cattle easement, and the area adjacent to HELCO and the Transfer Station are high risk fire areas? Is the County going to irrigate these areas to prevent fires? Who is going to cut the grasslands to mitigate fire danger?

In Summary:

I speak as a private, long-time resident of Waimea, NOT as member of the CDP Action Committee. I would recommend the following be seriously considered and acted upon . . . that Ke Ala Kahawai:

1. Be no more than 10 feet wide and made of a non-concrete material.
2. Be located outside the riparian buffer zone to be determined by State and Federal regulations.
3. Select a different bridge crossing away from the makai (southwest) border of Sandalwood outside the gulch area.
4. Comply with all Federal and State laws and regulations that have jurisdiction.
5. An indemnification scheme be worked out to protect commercial and residential properties against flooding, vandalism, etc.
6. That irrigation sprinklers be installed in grassland/scrub drought affected areas to prevent fire.
7. That benches, rubbish bins, recycling bins be installed along the path to reduce the amount of rubbish that finds its way into the Waikoloa Stream.
8. That some sort of police bicycle patrol be started to patrol the path.
9. That one ATV mini-ambulance be purchased to use on the path (and elsewhere). I proposed to the Traffic Safety Committee that perhaps a Sayre Grant could be used..
10. That Hawaii County assist Parker Ranch and others to secure Conservation Easements along the

the route of the path to receive tax benefits for land donations.

I would like to propose an alternative route for Ke Ala Kahawai O Waimea that addresses my concerns. I would highly recommend that the path be placed outside the to be determined riparian buffer zone along the Waikoloa Stream. I understand from Chris Robb that he and the owner of his farm have given an easement for the path. Taking this into account, I would like to propose an alternative that mitigates many of the concerns. My suggested alternative is shown on the attached map by the green line.

I would like to summarize by saying that I am in no way opposed to Ke Ala Kahawai O Waimea. I believe that a bicycle path through Waimea is an excellent idea. However, I would like to see any bicycle path be built properly, in accordance with Federal and State laws and regulations so that no property owner or path user is injured or harmed unnecessarily due to faulty/negligent path design. I would finally request that no action is taken that unnecessarily destroys the aina, in all its many and varied aspects.

Respectfully submitted,

/Fran L Tabor

Fran L. Tabor

CC: Councilman Pete Hoffmann
Mr. Bobby Command
Ms. Cindy Evans
Mr. Dwight Takamine

Leslie Kurisaki

From: Fran Tabor [drfrantabor@gmail.com]
Sent: Monday, June 28, 2010 6:58 AM
To: Leslie Kurisaki
Subject: New Information Concerning Ke Ala Kahawai O Waimea

Hi Leslie, I would like to share with you some information I just learned regarding the proposed bike path through the grasslands/scrub adjacent to the Waikoloa Stream across from the Lalamilo Farms on the north side of the Stream.

I have just learned that there are habitats of numerous bird species of a sensitive nature that live and nest in the grasslands/scrub adjacent to the Waikoloa Stream on the north side. I also just learned that all sensitive species are subject to regulation by the U.S. Fish and Wildlife Service.

I would urge Kimura International to consider this information in their EA and to look seriously at alternative routes for the bike path outiside the riparian zone that do not endanger the aina, in all of its many and varied aspects.

Respectfully submitted,

Fran L. Tabor

Leslie Kurisaki

From: Fran Tabor [drfrantabor@gmail.com]
Sent: Tuesday, September 07, 2010 5:49 AM
To: lkurisaki@kimurainternational.com
Subject: Fwd: Ke Ala Kahawai O Waimea, Waimea Trails and Greenways

Aloha Leslie, My original e-mail to you failed. I am resending it to you. I hope you receive it. Mahalo.

Fran

---------- Forwarded message ----------
From: **Fran Tabor** <drfrantabor@gmail.com>
Date: Mon, Sep 6, 2010 at 6:35 PM
Subject: Ke Ala Kahawai O Waimea, Waimea Trails and Greenways
To: phoffmann@co.hawaii.hi.us
Cc: lkurisaki@kimurakinternational.com

Aloha Pete, I would like to alert you to an incident that happened this evening between 5:00 pm and 5:45 pm this evening.

I was sitting on my lanai during this time period when I started hearing rifle shots coming from the Lalamilo Farm Lots. It sounded as though it was coming from an area at or near Chris Robb's farm. There were shots being fired every few minutes. This happens on a regular basis - - perhaps a farmer is hunting pigs. I don't know. **While the shots were still being fired, at about 5:40 pm or so, a teenager emerged from the trees between Chris Robb's farm and the Parker Ranch pasture on the Kona side adjacent to the Waikoloa Stream. He had a dog with him and was wearing a back pack (he may have been camping among the trees).** He was within earshot of me so I yelled to him that a rifle was being fired and to get out the area immediately. He replied that he heard the shots and "it scared him". I told him to hurry and leave the area. After he left, the rifle shots stopped immediately.

Pete, please, please please select another route for the Waimea Trails and Greenways, Ke Ala Kahawai O Waimea. The route along the Waikoloa Stream has lots of issues. This is just another one. I would hate to see someone seriously injured or killed on the bike path along the stream and adjacent to the farm lots.

Thanks for listening.

Fran

Leslie Kurisaki

From: lizamichaelson@gmail.com on behalf of Liza Michaelson [liza@rockisland.com]
Sent: Saturday, June 19, 2010 12:44 PM
To: lkurisaki@kimurainternational.com
Subject: Ke Ala Kahawai O Waimea
Attachments: IMG_9528.JPG

Dear Leslie,
My mother recently moved to Waimea, and it is clearly a lovely place to call home with much history...
The only note of dissaapointment is the lack of walking paths, and the fact thta she cant walk inot waimea without a steady stream of fast loud traffic flying by.
I live on an island, too, and here I am a member of the San Juan Island Trails Committee.
My mother sent me a newspaper clipping from June 3, 2010 describing your proposed foot and bicylce path. I am thrilled because it seems to run exactly where it will make a big difference in her daily life.

She lives on Puahia, down in Kamuela View Estates. I am not exactly sure of where this path is planned, but if it runs from Waimea Town to South Kohala View Estates..I think it is the answer to our prayers!!!

Since there is truly no safe shoulder along that stretch of road this path will provide a very much needed corridor for non motorized transport.

In my experience even when there is not s huge public outcry of need for a walking/ bicycling path, you will find that soon after it goes in there will be an ever increasing stream of use, from cyclists to strollers, joggers, locals with groceries, kids on bikes to school, etc.

Go Waimea Trails and Greenways!!! Great choice of places to put your focus!!

I send you a big applause and hope the planning process is smooth and successful!

Aloha, Liza Michaelson

ps attached photo is of a public footpath at Cattle Point Lighthouse on San Juan island

--
Liza Michaelson
Sunny Knoll Guest Suite
PO Box 2835
Friday Harbor, WA 98250

phone: (360) 378-3875 home
(360) 388-5587 iphone

Leslie Kurisaki

From: Glenn Kimura [glennk@kimurainternational.com]
Sent: Tuesday, June 22, 2010 4:33 PM
To: 'Leslie Kurisaki'
Subject: FW: Ke Ala Kahawai O Waimea

From: lawbess@aol.com [mailto:lawbess@aol.com]
Sent: Monday, June 14, 2010 12:33 PM
To: glennk@kimurainternational.com
Cc: l.kurisaki@kimurainternational.com; jwa143@aol.com; rhast@lava.net
Subject: Ke Ala Kahawai O Waimea

Dear Mr.
Kimura,
June 13, 2010

This is in response to your letter dated May 14, 2010 requesting our comments to an investigation of an alternative alignment to the Ke Ala Kahawai trail that runs along Waikoloa Stream. As you are aware, the Waimea community, through numerous community meetings over the years, have expressed their full support for the Waikoloa Stream trail. The topography of the Waikoloa Stream trail has been found to be most conducive to a 10 to 12 foot wide trail that is accessible to pedestrians, bicyclists and other non-motorized vehicles. In light of the Waimea community's efforts to anchor the Waikoloa stream trail with two public parks and its exhaustive research as to the best alternative transportation pathway that links residential areas, schools, office and commercial areas and recreational areas, the trustees of Anna Perry-Fiske Charitable Trust believe that pursuing the alternative trail running through its property would be in error.

The map attached to your May 14th letter is insufficient to accurately determine the proposed alignment of the alternative trail running through our property. Does the proposed alternative trail run along Waiauia (also referred to as Kohakuhau) stream as we surmise? If so, the topography of both sides of the river running through our property (north and south) cannot accommodate an alternative 10 to 12 foot trail that will allow pedestrians, bicyclists and pedestrian uses without engaging in substantial (and costly) improvements.

Lastly, please be advised that the uses of Anna Ranch property are dictated by a trust document established by the late Anna Lindsey Perry-Fiske. The trust document does not provide for the dedication of the proposed alternative trail. Thank you for the opportunity to comment on your proposed alternative to the Waikoloa stream trail. We look forward to a speedy approval of the environmental assessment for the Waikoloa stream trail.

Aloha,

Stephen G. Bess, Co-trustee
Anna Perry-Fiske Charitable Trust

July 14, 2010

Dear Clem,

For many years now you have been the main advocate for a bike trail from your home to the center of town. It is coming to fruition.

You have some obstacles still to overcome no doubt.

In essence I am for such a trail for people and bikes to use.

I am an advocate for trees. In particular, I advocate for the old and largest trees in the center of town. The eucalyptus trees along the stream are my main concern in your effort to extend the trail into town.
Straight trails are probably preferred by most people. The object of most travelers is to get from one place to the other in the shortest amount of time and distance.
However, the trees stand in the way of a trail that is straight.

Those trees are older than we are, Clem. They are survivors of many storms and droughts and floods and whatever has been thrown at them over the last 80 to 100 years. They can not survive the attack of humans if we take a chain saw to them again.
Most of the forest that was there is gone now. Made into chips. Not much of a legacy for our posterity.

The remaining small forest is the green heart of Waimea. When they are gone we will have just another humdrum squat little village with lots of lights and noise and very little wild bird life. They provide homes to lots of birds. They provide shade to indigenous undergrowth species. They provide a wind break to homes in the Ahuli Park Subdivision. They provide a sound barrier also. They absorb sound and dust and water. They give respite to people from the hustle and bustle of work and life.
They create white sound of wind in leaves that sounds much like water.
They talk with grunts and groans and squeaks and squeals. They are alive and they deserve to stay that way.
Who are we, who are just passing through, to destroy them for our convenience of a few seconds of shortened travel time? It is arrogance and hubris. They provide fuel for heaters and stoves. With

The nature park is no longer natural. It is on a least and they chop away every weekend with chain saws. They chip up the residue of the trees they take down.
Wildness has a place in Waimea and in our lives. People who live on concrete and asphalt tend to forget who they are and where they came from. We are erect animals with big brains that have wandered farther and farther from their origins and are not better for it.

It is a small wild spot in the center of Waimea that we should/must preserve. The trees are the living heart of that wildness.

I implore you not to destroy them in the name of expediency and progress. Generations to come will thank us for saving these wild things. If they are destroyed, the next generation of people will not remember them but they will feel their absence in their ennui and discontent. They will not know why each day is drab and lifeless. They will go on with their lives and adapt to the way things are.
But they will be less human for the loss of these trees.

Believe me, I have seen what living completely separate from nature does to humans. So have you. Planted street trees are not the same. I once lived in a forest in Mendocino County, California. I know what I felt like there. It was a joy to arise in the morning. I worked in the US Forestry. I built trails in the forest. In the wilderness. I have seen the look people from the city get when they encounter real wilderness. They smile. They feel inner peace and joy.

This tiny slice of nature we have here in Waimea is valuable, Clem. It speaks to people with an ancient voice we all recognize if we listen.

I have heard some people say that these trees should be cut down and replaced with lesser trees that are not so tall and do not drop limbs etc. They call them stupid trees. I ask you, who is the more stupid...the tree with no brain or the man who fails to use his?

As you can see, I value and love these remaining trees. I feel it would be a crime against our people and their children to remove them from our present and future.
I pray that you leave them be.

Aloha, Tom Beach

Tom Beach

HALE HK KEA FARMS

A DIVISION OF BLANCO INVESTMENTS & LAND, LTD.

June 8, 2010

RECEIVED JUN 09 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

Re: Waimea Trails and Greenways project, and your request for early consultation comments

I feel strongly that the limited release to only a segment of the population is not in the spirit of transparency. I would ask you to determine who was in charge of the map of May 7th, if it is a public document paid for with taxpayer money, in what ways was it made available to the general, and why the map had such a limited release.

Although you may be asking only for general public input, it places those of us along your newly designated route at a disadvantage, not knowing that we are now personally involved in the new route. The Trail and Greenways committee has been gathering input for about 15 years, so the sudden appearance of the orange trail adds a huge new dimension to your request for public comments. I am upset that we were not given the courtesy of access to the detailed information that other community members were given.

There are several " signed shared roadway" sections along the proposed alternate route that have narrow, winding roadways with no shoulders (see Kohala Mountain Road section). How will people, with special needs, cross the highway at the entrance to my subdivision? How will people walk along the gulch or narrow highway sections safely?

The incline in the path along Wai'au'ia Stream has changes in elevation of perhaps 30 vertical feet over short distances. What will people, looking for an efficient

P.O. BOX 1537 • KAMUELA, HAWAII 96743 • TEL: (808) 885-7053 • FAX: (808) 885-4716

alternative to driving, think about walking along such a steep pathway? Will young children, parents walking with youngsters, the elderly, bicyclists travelling at faster speeds, and horseback riders be safe within these limited sight sections?

Any increase in the general public crossing private property creates liability insurance that some individuals may not be able to financially afford. If we were to allow (even with legal easements) the general public to walk along this portion of Wai'au'ia stream, we would be liable for any injuries and damages. With greater exposure to people walking across my property I would have to pay for greater house/ theft/ fire and liability coverage. (I believe it is impossible to get glass breakage coverage.)

The Wai'au'ia Stream (much of the proposed orange pathway) is known for quick changes in water flow. We have had sudden height increases of approximately 15 feet in a matter of minutes when it rains in the mountains. Where would you safely put a 10 foot wide path so it is not impacted by this seasonal flooding, shifting boulders and floating debris? Would the pathway be closed to pedestrians well before flooding presented any danger to those using it? Would land owners be compensated for erosion and damage to their property and houses?

The Flood Innundation setbacks seem to be very accurate predictors of flooding impact. If the proposed pathway (10-12 feet wide) is to be built along the stream, and the river covers land up to 80 feet away from the historical streambed, where would you build such a path? In some instances you'll be right next to a house.

The Army Corps of Engineers has advised land owners not to disturb the banks of the stream, because the flooding causes erosion and re-alignment of the winding stream. Large boulders, heavy debris, and uprooted plants are all moved downstream by the water. Erosion has apparently caused human bones to be exposed when the stream impacted ancient family burial plots. Will the Burial Council be consulted before any soil is disturbed?

I do not want the May 7th Alternative Alignment to be considered as a viable option. I would like Wai'au'ia Stream route to be dropped from your list of possible paths.

Wai'ua'ia Stream is not a good choice as an alternative route. No further taxpayer money should be spent researching this option.

pathway for litter, graffiti, and broken glass; cost and responsibility for path repairs; cost to the County of Hawaii to monitor the safety and condition of the path; liability costs incurred by the County; and concerns about additional demands on our law enforcement officers and how they will monitor activity on the path. Have you conducted an environmental impact study as required by law?

Finally, how is it that any agency can arbitrarily take, use, or inversely condemn private property without any authority or a proper hearing?

I would be most interested in your comments on all of the above.

Thank you for your attention.

Sincerely,

William T. White III

William T. White, III

Waimea resident: 65-1410 Kawaihae Road

Land owner along stream: _X_Yes ____No
TMKs: 6-5-006-001
6-5-006-016
6-5-006-017
6-5-006-018
6-5-001-002
6-5-001-052

Phone number: (808) 885-7053
e-mail: hkfarms@hawaii.rr.com

cc: Pam Cushnie
Steve Hurwitz
Charles Campbell

Leslie Kurisaki

From: Glenn Kimura [glennk@kimurainternational.com]
Sent: Tuesday, June 22, 2010 1:24 PM
To: 'Leslie Kurisaki'
Subject: FW: Waimea Trails and Greenways

See below

From: HOELIKE@aol.com [mailto:HOELIKE@aol.com]
Sent: Tuesday, June 15, 2010 9:34 PM
To: glennk@kimurainternational.com
Subject: Re: Waimea Trails and Greenways

Glenn,

This is a e mail that has been circulating in Waimea. Should it be included in the EIS?

Leningrad

From: Drew Medeiros
Sent: Tuesday, June 08, 2010 4:14 PM
To: bulletin
Subject: 10-12 foot wide PAVED path/road through Waimea pastures.

Aloha~
Voicing your opinion on this matter before June 14 is crucial. Your way of life, your environment, your view planes, and your tax dollars are all at stake. The County believes that there are few opponents to this plan. If you are opposed, now is an important time to say so.
Mahalo for your time ~ Michelle Taira Medeiros

****

You may have already heard about the Waimea Trails and Greenways plan to provide an alternative means of getting to the middle of Waimea from the Kawaihae side of Waimea.

Did you know that there is a plan in motion to make this "trail" a paved path?
(That's what the paved path will look like if it is implemented.)
A 10 to 12 foot wide paved path is not a Greenway. It's a road.

But, if the project had been named "Waimea Trails and Blackway", would it have gotten as much support?

It might not be planned for your backyard, but it still poses a significant impact to your environment, the rural nature of Waimea, and perhaps people you know and care about. Maybe you agree with one of the following points. If so, *please make your opinion known* by June 14. (Making your opinion known is easy. I've included the e-mailing address and snail mailing address, and started a letter for your convenience.)

The County of Hawaii Department of Parks and Recreation is preparing an Environmental Assessment

(EA) for the Waimea Trails and Greenways project. The County's consultant, Kimura International, is requesting public comments to be included in the draft EA.

http://www.westhawaiitoday.com/articles/2010/05/28/local//local04.txt
"The plan is to create a 10- to 12-foot-wide paved path pedestrians, bicyclists and other non-motorized vehicles may use."
"The environmental assessment will include alternative alignments."

In the past, there has been considerable support for this project.
But this project has morphed. It includes paving, and an alternative alignment.

Did you know there is at least one alternative that would require the adverse posession (i.e. condemnation) of private lands owned (with mortgages) by at least 25 hard working people just like you? Some of these people have lived on the land for multiple generations; they're the ones who built this town. Others moved to this town because they liked its peaceful, rural qualities.

Maybe you object to the plan for the paved trail/road for the following reasons:

significantly impacts natural and cultural resources (paving along the streams will require grading and disturb existing plants nd streamside stability; the alternative alignment would illegally demolish archaeological sites such as a Hawaiian irrigation ditch [auwai]).

curtails the beneficial uses of the agricultural lands it will condemn for recreational purposes

substantially erodes the rural nature of Waimea (10 to 12 foot wide PAVED path cutting through private lands, that's urbanization)

Would you use the paved trail as a way to bike or walk to town for work? Would you let your kid walk to school on the trail?
The Waimea Trails and Greenway's project supporters think YOU will.
If you won't use it to get to work or let your kids walk to school, please speak up.
If Waimea's weather and topography makes it unlikely that you'd ride your bike to work, please speak up.
If you'd only use the trail for recreation, do you think that recreation is a good reason to take private lands away from people who worked hard to build homes in rural setting? If so, speak up. Please.
If you'd rather see a bike lane or safer wider shoulder along the existing road, speak up.

The original trail and the alternative will detrimentally affect ambient noise levels of those land owners who did not expect a trail to show up in their back yard. Imagine dogs, people talking, skate boarders, walking behind your house in addition to in front of your house.

While the trail, paved or not, could contribute to the health of the community, if used, there are already opportunities and facilities to meet these needs. Building a trail will not significantly improve the communities health.

The trail is expected to comply with the Americans with Disability Act. This means a wider easement than 10 to 12 feet will be required to accomodate the required slopes/grade for wheel chair access. A wider easement means substantial loss of land by some private land owners, people you know who worked hard for their place in a RURAL community. If we wanted paved roads through pastures, we would have moved elsewhere.

If you object to the implementation of the 10-12 foot wide paved "trail and greenway" for any of the above mentioned reasons, or reasons of your own, please let your voice be heard by June 14.
If the project had been named "Waimea Trails and Blackway", would it have been as appealing.

You can e-mail your response to

Leslie Kurisaki
Kimura International Inc.
LKurisaki@kimurainternational.com

(OR mail to 1600 Kapiolani Boulevard, Honolulu, Hawaii 96814)

For questions about the project, call Bobby Command, Office of the Mayor at 327-3602

To help you get your e-mail or letter started please feel free to use the following:
****
Insert your mailing address
Date (before June 14)

Leslie Kurisaki
LKurisaki@KimuraInternational.com
Kimura International, Inc.
1600 Kapiolani Boulevard., Suite 1610
Honolulu, Hawai`i 96814

RE: Waimea Trails and Greenways
Environmental Assessment -- Early Counsultation

Dear Ms. Kurisaki

I oppose the proposed Waimea Trails and Greenways project and the alternative path described in your May 14 regarding the subject because it will have a significant adverse impact.

Insert your own description of significant adverse impact and/or add words from above.

Sincerely,

Your name

P.O. Box 2183
Kamuela, HI 96743
July 9, 2010

RECEIVED
JUL 12 2010
County of Hawaii
Finance Department
Property Management Division

Commissioners of the
COUNTY OF HAWAI'I
Department of Finance
Public Access, Open Space and Natural Resources Preservation Commission
25 Aupuni St
Hilo, HI 96720

Aloha Commissioners~

While the Public Access, Open Space and Natural Resources Preservation Commission (Commission) accepts suggestions for sites or projects to improve upon public access, open space, and natural resources preservation, *I am writing to suggest a County project which should not be pursued.* I am also writing to request the Commission's assitance in advising the Mayor of an inappropriate use of County funds.

The County of Hawai'i (County), Department of Parks and Recreation has hired a contractor, Kimura International Inc. (Kimura), to prepare an Environmental Assessment (EA) to consider the impacts of creating a 10- to 12-foot-wide paved path through a portion of Waimea. The EA must include alternative paths. One of the alternative paths is the point of my concern.

The alternative path that has been identified in preliminary communications from Kimura is situated on private properties which include my own. None of the property owners on the alternative path were contacted by the County or Kimura prior to or after the alternative path was publicly identified.

While proponents of this project have informed me that the alternative path alignment was disclosed at a public meeting in Waimea, implying I had the opportunity to be informed earlier or object sooner, I am sure that the public process should have involved me before the wider public knew, and not after. A former member of the Commission informed me that the consideration of the alternative path should have included a discussion with me and other private property owners before a public disclosure. ***The County's process for obtaining public access has been ignored.*** I should not have to attend every public meeting for the rest of my life to protect my property.

Furthermore, the EA is being prepared in compliance with the National Environmental Policy Act (NEPA). NEPA requires the consideration of "the environmental impacts of their proposed actions and **reasonable alternatives** to those actions." The identification of an alternative path on private lands is **not** a reasonable alternative especially when those landowners are expressly opposed to the path.

For these reasons, the Mayor should be informed that the use of County funds to prepare an EA that identifies an unreasonable alternative path is a misuse County funds.

I would like the opportunity to discuss this matter with the Commission at the next available opportunity. Please reply to me by phone, e-mail, or mail:

990-9148
cchellez@gmail.com
P.O. Box 2183
Kamuela, Hawai'i 96743

Mahalo for your consideration of this matter~

Michelle Medeiros

June 3, 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

RECEIVED JUN 09 2010

From: Pamela Cushnie
P.O. Box 1632 (65-1242 Pako Place)
Kamuela, HI 96743

Re: Waimea Trails and Greenways project, and your request for early consultation comments

I have separated my comments into 3 parts: **A**. my concerns over the release of public information, **B**. my general concerns regarding the Alternative Alignment, (see attached Map of May 7th) and **C**. my personal comments.

A. My first notification of the actual Alternative Alignment was when a friend called to say she had seen a "confidential" map at a Board meeting, and noticed my house was along the orange line showing a proposed alternate route. She had been told to keep the information confidential, and she felt this included the NEPA map. When I tried to research this map via the Greenways website, there were no pages available.

Earlier newspaper articles in West Hawaii Today only mentioned that alternate alignments were being explored, but gave no source for further information about them, such as other websites. As a community member, I found it impossible to access the NEPA map using any other source, so I had to prevail upon my friend to show me the map and the letter from Kimura International.

Calls to Kimura International were generally helpful but not specifically informative, as the lead person is not available until June 14, the day of the deadline, and no one else had the information. Calls to County officials James Komata and Bobby Command were very helpful and they both took time to explain the early consultation process. They were unable to explain the source of the map and why there was such a very limited release of information.

My understanding from them was that general comments were being solicited from the public, and that the purpose was not to focus on any of the pathways, so therefore the map was not really necessary for public input. I feel strongly that the limited release to only a segment of the population is not in the spirit of transparency. I would ask you to determine who was in charge of the NEPA map, if it is a public document paid for with taxpayer money, in what ways was it made available to the general, and why the map had such a limited release.

Although you may be asking only for general public input, it puts those of us along your newly designated route at a disadvantage, not knowing that we are now personally involved in the new route. The Trail and Greenways committee has been gathering input for about 15 years, so the sudden appearance of the orange trail adds a huge new dimension to your request for public comments. I am upset that we were not given the courtesy of access to the detailed information that other community members were given. I have personally spoken with about 20 residents who have property fronting the alternative trail, and none of them had heard of the new alternative route.

B. General comments:

My understanding is that the trail needs to be ADA compliant in all sections in order to meet Federal guidelines and receive Federal money. Following are some topographical concerns:

There are several " signed shared roadway" sections along the proposed alternate route that are currently narrow, winding roadways with no shoulders (see Kohala Mountain Road section). How will people with special needs cross the highway at the entrance to ____ subdivision? How will people walk along the gulch or narrow highway sections safely?

The incline in the path along Wai'au'ia Stream has changes in elevation of perhaps 30 vertical feet over short distances. What will people, looking for an efficient alternative to driving, think about walking such a steep pathway? Will young children, parents walking with youngsters, the elderly, bicyclists travelling at faster speeds, and horseback riders be safe within these limited sight sections?

Crossing private property, private roads and bridges creates liability issues that some individuals may not be able to financially afford. In my Pako Place subdivision we pay a large yearly insurance premium based on maintaining "zero" public access through our private street. If we were to allow (even with legal easements) the general public to walk along this portion of Wai'au'ia stream, cross Pako Place street, and use the bridge, we would definitely be liable for any injuries and damages.

Because some of the property is owned jointly by our Pako Homeowners Association, all HOA members would have to share in the increased rates, even if we did not live along the stream/pathway. We would legally be required to report any change in public access to the common property and would have to pay for greater coverage. Wouldn't the same be true where the path crosses other private lands?

The Wai'au'ia Stream (orange pathway) is known for quick changes in water flow. We have had sudden height increases of approximately 15 feet in a matter of minutes when it rains in the mountains. The bridge at the base of the Parks/ Gil Smart estate has had water flowing over top of it and debris accumulating in heavy rains. Our part of the stream can have rushing water expand horizontally as far as 80

feet from its regular bed during seasonal rains. Where could you put a 10 foot wide path so pedestrian safety would not be impacted by this seasonal flooding, shifting boulders and floating debris? Would the pathway be closed to pedestrians well before flooding presented any danger to those using it? Would land owners be compensated for erosion and damage to their property and houses?

The Flood Innundation setbacks (delineated by the County or State?) seem to be very accurate. If the proposed pathway (10-12 feet wide) is to be built along the stream, and the river impacts land up to 80 feet away from the streambed, where would you build such a path? In some areas, you'll be putting the pathway under front porches, where water has occasionally risen. Who will maintain the integrity of the pathway, and check it regularly? Who will monitor correct pedestrian activity on the path, especially if the path is located close to homes?

Years ago we were cautioned by the Army Corps of Engineers not to disturb the banks of the stream, because flooding outside the rocky streambed causes erosion and re-alignment of the winding stream. Large boulders, heavy debris, and uprooted plants are all moved downstream by the water. Erosion has apparently caused human bones to be exposed in another part of the stream (in the old Wai'aka compound across from the entrance to the Transfer Station), as the water has moved into ancient family burial plots. Will the Burial Council be consulted before any soil is disturbed?

C. Personal comments: I do not want the May 7th Alternative Alignment to be considered as a viable option. I would like Wai'au'ia Stream route to be immediately dropped from your list of possible options. Just because the Trail and Greenways project has decided they want to walk along a river does not mean that Wai'ua'ia Stream is a good choice as an alternative route. Even if the application for Federal money requires a viable alternate to be offered in the Greenways proposal, it does not mean that further taxpayer money should be spent researching an obviously inappropriate option for the next 15 years.

Pedestrian safety, ADA compliance, disturbance of the stream banks, higher insurance costs, privacy issues, cleanup of litter, burial site disturbance, lack of transparency in disseminating information, and wasted taxpayer money are just some of the issues that I am concerned about. Other landowners have comments specific to their areas, and I will support their concerns about brush fires during drought conditions, loose dogs running along the trail necessitating new fencing along path boundaries, liability with parking issues, loss of privacy on small lots, stream realignment during floods, supervision and maintenance of the trail, cost of repairs, etc. These are additional concerns that warrant your consideration.

Thank you for your attention.
Sincerely,

Pamela Cushnie

Pamela Cushnie

June 3, 2010

RECEIVED JUN 09 2010

To: Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI. 96814
Attn: Leslie Kurisaki

Re: Waimea Trails and Greenways project, and your request for early consultation comments

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Any increase in the general public crossing private property creates liability insurance that some individuals may not be able to financially afford. If we were to allow (even with legal easements) the general public to walk along this portion of Wai'au'ia stream, we would be liable for any injuries and damages. With greater exposure to people walking across my property I would have to pay for greater house/ theft/ fire and liability coverage. (I believe it is impossible to get glass breakage coverage.)

The Wai'au'ia Stream (much of the proposed orange pathway) is known for quick changes in water flow. We have had sudden height increases of approximately 15 feet in a matter of minutes when it rains in the mountains. Where would you safely put a 10 foot wide path so it is not impacted by this seasonal flooding, shifting boulders and floating debris? Would the pathway be closed to pedestrians well before flooding presented any danger to those using it? Would land owners be compensated for erosion and damage to their property and houses?

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I do not want the May 7th Alternative Alignment to be considered as a viable option. I would like Wai'au'ia Stream route to be dropped from your list of possible paths.

Wai'ua'ia Stream is not a good choice as an alternative route. No further taxpayer money should be spent researching this option.

Other concerns are: brush fires during drought conditions; loose dogs running along the trail, necessitating new fencing along path boundaries; possible vandalism issues; loss of privacy on small lots; cost of regular maintenance of the pathway for litter, graffiti, and broken glass; cost and responsibility for path repairs; cost to the County of Hawaii to monitor the safety and condition of the path; liability costs incurred by the County; and concerns about additional demands on our law enforcement officers and how they will monitor activity on the path.

Thank you for your attention.

Sincerely,

Signature

Cindy Yarawanda
printed name

Waimea resident YES
Land owner along stream ✓ Yes ____ No
Phone number 808/885/0399

PLANNING DEPARTMENT
COUNTY OF HAWAII

2010 JUL -6 PM 2:44

June 28, 2010

Dear Director of Planning Department B.J. Leithead Todd,

We are a life-long residents of Hawaii, and voters from District 9, Waimea. On May 14 a letter and a map were distributed by Kimura International to a very small section of island residents, requesting preliminary public comments for an Environmental Assessment being done on the Waimea Trails and Greenways Shared Use Path. Their NEPA Map of May 7th clearly shows a newly proposed orange alternative pathway. See attached.

Unfortunately, no resident along the proposed alternative pathway seems to have been provided with the letter or the map. We were shown the documents only because a concerned friend, a board member, was given the letter and map and was told they were "confidential". She realized they impacted all the residents along the Wai'au'ia Stream, and gave us a copy.

The newspaper release by Kimura does not offer any place to access the map. Again, a brief mention of "exploring several alternative alignments" was made, but no details were provided. Those of us most impacted by the orange alternative route apparently were not on the distribution list and had no other way to access this public information. (Maps were not available on the Waimea Trails website, and Mr. Command and Mr. Komata seemed surprised that it had even been released to the public.) We personally have talked with 40 streamside residents, and none had ever seen the letter or map.

We have asked Kimura International specifically for their distribution list and documentation of any preliminary research they did to identify Wai'au'ia Stream as a viable alternative pathway. Those of us who live along the stream know it has many serious limitations and it would not make a good multi-use commuter path. Many residents are upset and have written to Kimura to voice their concerns about the path crossing private lands, etc. We have enclosed copies of our letters to Kimura as an example of some of the concerns being raised. All the recent comment letters should be compiled by Kimura as part of the EA process.

SCANNED
JUL 07 2010
By 064728

We have been in contact with Bobby Command and James Komata, and both have been very helpful, but the original notification process was flawed and has left many people out of the information loop. There has been no real transparency in the way Kimura presented their request for public input. (It would have been very easy to mail information to residents along the stream, as Goodfellow Brothers does to announce their road construction projects.)

County money is being spent to fund this EA. To be told that this information was originally labeled "confidential" at a closed private-sector board meeting (not a County meeting), and to have no other apparent access to the specific details makes us question their compliance to HRS Chapter 343.

We are hoping that you and your commission are aware of Kimura International's call for early consultation and have been working with the County to independently determine if this alternative path is actually feasible. We personally would like the path along Wai'au'ia Stream to be dropped from County consideration, before more good money is spent on a poorly chosen "possible" alternative.

Please let us know if we can provide you with more information. We would be happy to share the responses from Kimura International with your director.

Sincerely,

Pam Cushnie

Pamela Cushnie
P.O. Box 1632 (65-1242 Pako Place)
Kamuela, HI 96743

Kurt Shively
LaDonna Shively

LaDonna and Kurt Shively
P.O. Box 2233
Kamuela, Hi 96743

June 28, 2010

Dear Commissioner Mr. Searle Green,

We are a life-long residents of Hawaii, and voters from District 9, Waimea. On May 14 a letter and a map were distributed by Kimura International to a very small section of island residents, requesting preliminary public comments for an Environmental Assessment being done on the Waimea Trails and Greenways Shared Use Path. Their NEPA Map of May 7th clearly shows a newly proposed orange alternative pathway. See attached.

Unfortunately, no resident along the proposed alternative pathway seems to have been provided with the letter or the map. We were shown the documents only because a concerned friend, a board member, was given the letter and map and was told they were "confidential". She realized they impacted all the residents along the Wai'au'ia Stream, and gave us a copy.

The newspaper release by Kimura does not offer any place to access the map. Again, a brief mention of "exploring several alternative alignments" was made, but no details were provided. Those of us most impacted by the orange alternative route apparently were not on the distribution list and had no other way to access this public information. (Maps were not available on the Waimea Trails website, and Mr. Command and Mr. Komata seemed surprised that it had even been released to the public.) We personally have talked with 40 streamside residents, and none had ever seen the letter or map.

We have asked Kimura International specifically for their distribution list and documentation of any preliminary research they did to identify Wai'au'ia Stream as a viable alternative pathway. Those of us who live along the stream know it has many serious limitations and it would not make a good multi-use commuter path. Many residents are upset and have written to Kimura to voice their concerns about the path crossing private lands, etc. We have enclosed copies of our letters to Kimura as an example of some of the concerns being raised. All the recent comment letters should be compiled by Kimura as part of the EA process.

We have been in contact with Bobby Command and James Komata, and both have been very helpful, but the original notification process was flawed and has left many people out of the information loop. There has been no real transparency in the way Kimura presented their request for public input. (It would have been very easy to mail information to residents along the stream, as Goodfellow Brothers does to announce their road construction projects.)

County money is being spent to fund this EA. To be told that this information was originally labeled "confidential" at a closed private-sector board meeting (not a County meeting), and to have no other apparent access to the specific details makes us question their compliance to HRS Chapter 343.

We are hoping that you and your commission are aware of Kimura International's call for early consultation and have been working with the County to independently determine if this alternative path is actually feasible. We personally would like the path along Wai'au'ia Stream to be dropped from County consideration, before more good money is spent on a poorly chosen "possible" alternative.

Please let us know if we can provide you with more information. We would be happy to share the responses from Kimura International with your commission.

Sincerely,

Pamela Cushnie
P.O. Box 1632 (65-1242 Pako Place)
Kamuela, HI 96743

LaDonna and Kurt Shively
P.O. Box 2233
Kamuela, Hi 96743

Leslie Kurisaki

From: Reginald David [rdavid@ilhawaii.net]
Sent: Tuesday, July 20, 2010 10:06 AM
To: Leslie Kurisaki
Cc: 'Eric Guinther'
Subject: Re: Waimea Trails and Greenways - tree input

Leslie,

The trees in question are all alien species - I don't know how old they are but I highly doubt they are a hundred years old (Ric?). The vegetation in the area is all but totally non-native, the result of agricultural clearing and other anthropogenic modifications to the native habitats. Eucalyptus, ficus, shinus and other large trees currently in the area, grow easily and relatively rapidly.

Reg.

Reginald David
Rana Biological Consulting, Inc.
P. O. Box 1371
Kailua, Kona, Hawaii 96745-1371

329-9141 Phone
937-0124 Cell
rdavid@ilhawaii.net
Please consider the environment before printing this email.

On Jul 20, 2010, at 8:42 AM, Leslie Kurisaki wrote:

> Ric and Reggie,
> FYI, input from a community resident.
>
> Leslie
>
> -----Original Message-----
> From: Clemson Lam, Architect [mailto:c.lam4@hawaiiantel.net]
> Sent: Monday, July 19, 2010 4:35 PM
> To: Leslie Kurisaki; Glenn Kimura
> Cc: Bobby Command; James Komata
> Subject: WT&G - tree input
>
> Hi Leslie,
>
> I got this letter last week put into my door at work. I do not have a
> contact number for Tom Beach but will try to get one next time I see him.
>
> Clem Lam
>
> <Beach 1349.jpg><Beach 2347.jpg>

Draft EA Comments

Agencies

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

REPLY TO
ATTENTION OF:

January 24, 2011

Regulatory Branch

File Number: **POH-2011-00030**

County of Hawaii
Department of Parks and Recreation
Attention: James Komata
101 Pauahi Street, Suite 6
Hilo, Hawaii 96720

RECEIVED JAN 27 2011

PERMIT REQUIRED

Dear Mr. Komata:

This is in response to your letter dated January 20, 2011 requesting Department of the Army (DA) review and comment on the Draft Environmental Assessment (DEA) for the proposed Ke Ala Kahawai of Waimea-Waimea Trails and Greenways project in Waimea, South Kohala District, Hawaii Island, Hawaii. We have assigned the project the reference number **POH-2011-00030**. Please cite the reference number in any future correspondence concerning this project.

We completed our review of the submitted document pursuant to Section 10 of the Rivers and Harbors Act of 1899 (Section 10) and Section 404 of the Clean Water Act (Section 404) and have determined that the submitted documents, accurately identify waters of the U.S. under the regulatory jurisdiction of U.S. Army Corps of Engineers (Corps).

Section 10 requires that a DA permit be obtained from the Corps prior to undertaking any construction, dredging, or other activity occurring in, over, or under or affecting navigable waters of the U.S. For tidal waters, the shoreward limit of the Corps' jurisdiction extends to the Mean High Water Mark. **Section 404** requires that a DA permit be obtained for the **discharge (placement) of dredged and/or fill material into waters of the U.S., including wetlands**. For tidally influenced waters, in the absence of adjacent wetlands, the shoreward limit of the Corps' jurisdiction extends to the High Tide Line, which in Hawai'i may be approximated by reference to the Mean Higher High Water Mark. For non-tidal waters, the lateral limits of the Corps' jurisdiction extend to the Ordinary High Water Mark or the approved delineated boundary of any adjacent wetlands.

The Keanuiomano Stream and the Waikoloa Stream have been previously determined to be waters of the U.S., subject to Corps jurisdiction. Therefore the discharge of fill material waterward of the OHWM of these water bodies **will require a DA permit** prior to construction. The documents submitted in the DEA identify nine stream crossings over Waikoloa Stream and one stream crossing over Keanuiomano Stream. As the construction plans for these stream crossings have not yet been finalized, we are unable to determine at which location(s) a DA permit will be required.

The DEA describes possible construction of retaining walls for bank stabilization of the Waikoloa Stream. Please be advised that in general, the Corps discourages the use of rock or rock-only structures to stabilize eroding stream banks as they can often exacerbate erosion upstream and downstream of the project site, increase erosion of the substrate and/or stream velocity, reduce habitat complexity, and have other adverse impacts. We encourage you to evaluate possible bank stabilization alternatives that avoid and minimize impacts to the aquatic environment. These alternative methods include, but are not limited to, the use of bioengineering, biotechnical design, root wads, large woody debris, and native plantings. If rock must be used due to site conditions, the EA should explain those specific conditions and how any unavoidable impacts to aquatic resource function and services will be mitigated.

It is the sole responsibility of the landowner to request a jurisdictional determination and to obtain the necessary permits from this office for any aquatic resources on his or her property. We advise the landowner submit a request for an approved jurisdictional determination either in concurrence with or prior to submittal of a completed DA Permit application and associated drawings that meet our drawing recommendations found at *http://www.poh.usace.army.mil/EC-R/EC-R.htm* to the Corps upon development of construction plans for the stream crossings and bank stabilizations. In addition, supporting information submitted with the permit application should include sufficient information concerning the scope of work, including the use of Best Management Practices, i.e. silt fences and sandbag berms within the vicinity and in close proximity to potentially regulated bodies of water. The Corps will at that time review the application to ensure it complies with all necessary federal laws and regulations. Be advised, if the fill results in either temporary or permanent loss of waters of the U.S. and/or associated function, your client may be required to provide compensatory mitigation for any unavoidable impacts to the aquatic environment.

Thank you for contacting us regarding this project and providing us with the opportunity to comment. Should you have any questions, please contact Ms. Jessie Pa'ahana at *808.438.9258* or via email at *Jessie.K.Paahana@usace.army.mil*. You are encouraged to provide comments on your experience with the Honolulu District Regulatory Branch by accessing our web-based customer survey form at *http://www.per2.nwp.usace.army.mil/survey.html*.

Sincerely,

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

Copy furnished:
Kimura International, Inc., Attention: Leslie Kurisaki, 1600 Kapiolani Boulevard, Suite 1610, Honolulu, Hawaii 96814

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. George P. Young, P.E.
Chief, Regulatory Branch
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96858-5440

Dear Mr. Young:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii
File No. POH-2011-00030

Thank you for your Draft EA comment letter to Mr. James Komata of the County of Hawai'i Department of Parks and Recreation (DPR) dated January 24, 2011. We acknowledge your comment that a DA permit will be required prior to construction for work below the OHWM within Keanuiomano Stream and Waikoloa Stream.

We understand that your office has previously been contacted by Imata and Associates, Inc., the County's design consultant working on Increment 1 of the trail, between Lindsey Road and Kahawai Street. This segment has three (3) stream crossings and two (2) retaining walls for bank stabilization of Waikoloa Stream. Imata and Associates will resume contact with your office and submit a DA permit application when the design for the stream crossings is more fully developed and the Environmental Assessment is complete. As recommended in your letter, the County will also submit a request for jurisdictional determination in concurrence with or prior to submittal of the DA permit application. The submitted DA permit application will include information on the scope of work and proposed Best Management Practices.

Thank you again for your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

NEIL ABERCROMBIE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

OFFICE OF THE SUPERINTENDENT

RECEIVED FEB 11 2011

February 8, 2011

Mr. James Komata, Park Planner
County of Hawai`i
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, Hawai`i 96720

Dear Mr. Komata:

Subject: Draft Environmental Assessment (EA), Waimea Trails and Greenways Shared Use Path, Ke Ala Kahawai O Waimea, Waimea, Hawaii

The Department of Education (DOE) has reviewed the Draft EA for the proposed Ke Ala Kahawai O Waimea project.

The DOE has no comment regarding this project.

Thank you for the opportunity to provide comments. If you have any questions, please call Jeremy Kwock of the Facilities Development Branch at (808) 377-8301.

Very truly yours,

Kathryn S. Matayoshi
Superintendent

KSM:jmb

c: Randolph Moore, Asst. Supt., OSFSS
Art Souza, CAS, Honokaa/Kealakehe/Kohala/Konawaena Complex Areas
✓Leslie Kurisaki, Kimura International, Inc.

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Kathryn Matayoshi, Superintendent
State of Hawai‘i
Department of Education
P.O. Box 2360
Honolulu, Hawai‘i 96804

Dear Ms. Matayoshi:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata of the County of Hawai‘i Department of Parks and Recreation (DPR) dated February 8, 2011. We note you have no comments regarding the project.

Thank you for taking the time to review the Draft EA. If you have future comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

GARY L. HOOSER
INTERIM DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET, SUITE 702
HONOLULU, HI 96813

Director	
Dep Dir	
Planner	
Accounting	
Personnel	

February 10, 2011

Robert A. Fitzgerald, Director
County of Hawaii, Dept of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720

Subject: Waimea Trails and Greenway, Draft Environmental Assessment, Waimea, Hawai'i

Dear Mr. Fitzgerald,

Thank you for the opportunity to comment on the subject Draft Environmental Assessment (DEA). The Office of Environmental Quality Control (OEQC) offers the following comments:

The goals for this plan is alternative non-motorized transportation, enhanced access to and the enjoyment of natural and scenic areas, and recreation, among others. While these issues are key to this plan, the DEA only mentions the first construction increment. An estimated timeline for completion would be helpful in the final environmental assessment.

Also, secondary and cumulative impacts of the DEA and those of the surrounding community should be addressed. For example, please state how many stalls are available in the proposed parking lot, and if overflow parking is available in nearby subdivisions, what impact if any would this have on homeowners, street capacity and safety.

You identified 357 trees that may need to be cut because of proximity to the path or safety. If one of the stated goals is the enjoyment of natural and scenic areas, please state if a tree planting plan is proposed to address the scenic beauty goals including general urban bird habitat and erosion control after the trees are cut down. Please note that indigenous plants are preferable.

If you have any questions, please call Rebecca Alakai at 586-4185.

Sincerely,

Rebecca Alakai

Rebecca Alakai
Senior Planner

cc: Leslie Kurisaki, Kimura International, Inc.,
1600 Kapiolani Boulevard, Suite 1610 Honolulu, HI 96814

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Gary Hooser, Director
State of Hawai‘i
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai‘i 96813

Dear Mr. Hooser:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for the Draft EA comment letter to Mr. Robert Fitzgerald, County of Hawai‘i Department of Parks and Recreation sent by Ms. Rebecca Alakai and dated February 10, 2011. We offer the following responses to this letter.

Estimated Timeline for Completion
The letter requests that the EA provide an estimated timeline for completion for the entire trail project. Other than Increment 1, between Lindsey Road and Kahawai Street, none of the subsequent increments have been funded. An estimated timeline depends on a number of unknown factors, including when all easements can be secured, coordination with affected landowners, and when federal and local funding is available. As a rough estimate, we would guess that completion of Increment 1 (between Lindsey Road and Kahawai Street) will occur within the next three years, and that completion of all four increments could take anywhere from fifteen to twenty years. The completion of the two County parks along the trail route will depend on future funding availability.

Secondary and Cumulative Impacts
Secondary and cumulative impacts will be discussed in the DEA, including impact on nearby subdivisions. The proposed parking lots will be constructed as part of the future County parks near the County Refuse Transfer Station and the Clark property. The exact number of parking stalls at these parks will be determined when the parks are planned.

Removal of 357 Trees
The EA states that a Tree Risk Assessment conducted by arborist Mike Kraus identified up to 357 non-native trees that may need to be removed. The exact number to be removed will be determined during the design phase. Only trees within the proposed pathway or that pose a hazard to trail users due to falling limbs and branches will be removed. All of the trees proposed for removal are non-native species, and will be replaced with native vegetation.

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

The County, its Increment 1 design consultant and representatives of the Waimea Trails and Greenways Committee recently met with the Waimea Outdoor Circle to discuss the removal of trees and other design issues. The group walked the trail alignment near the Waimea Nature Park, identified trees likely to be removed, and ways to mitigate potential impacts. The County has agreed to replace removed trees one-for-one, although not necessarily with a tree of the same size.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

Cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

WAIMEA MIDDLE, PCCS
67-1229 MAMALAHOA HIGHWAY
KAMUELA, HAWAII 96743
PHONE: (808) 887-6090
FAX: (808) 887-6087

RECEIVED FEB 16 2011

County of Hawaii
Department of Parks and Recreation
101 Pauahi St., Suite 6
Hilo, Hawaii 96720

Attn: Mr. James Komata; Park Planner

As the Principal of Waimea Middle Public Conversion Charter School I write to support the development of the Waimea Trails and Gateway project connecting South Kohala with the center of our community.

A safe trail would offer my students the opportunity to walk or ride their bike to and from school providing increased wellness and safety. Further, with each student walking or bike riding is one less car in our congested center of town during morning and afternoon pickup times.

The impact of the trail is not just my school but would benefit both campuses of HPA, Waimea Country School, as well as, Waimea Elementary School. The impact on safety and decrease of traffic congestion are the obvious benefits. Improved wellness of our youth and community at large makes this project a "no brainer."

Should you have any questions, please contact me at 887-6090 as I am committed to doing what it takes to make this happen.

Sincerely,

John R. Colson
CEEO/Principal

Cc: Kimura International ATTN: Leslie Kurisaki

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. John R. Colson, CEEO/Principal
Waimea Middle Public Conversion Charter School
67-1229 Mamalahoa Highway
Kamuela, Hawai‘i 96743

Dear Mr. Colson:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter to Mr. James Komata of the County of Hawai‘i Department of Parks and Recreation (DPR) expressing your support for the proposed trail, and noting how it will benefit Waimea Middle PCCS and other schools in the community.

We appreciate your taking the time to review the Draft EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

PHONE (808) 594-1888 FAX (808) 594-1865

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

HRD11/5496B

February 17, 2011

James Komata, Park Planner
County of Hawai'i-Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, Hawai'i 96720

RE: Draft Environmental Assessment
Ke Ala Kahawai o Waimea Project
Waimea, Island of Hawai'i

Aloha e James Komata,

The Office of Hawaiian Affairs (OHA) is in receipt of your January 20, 2011 letter requesting comments on a draft environmental assessment (DEA) for the proposed Ke Ala Kahawai o Waimea Project (project). This DEA has been prepared pursuant to Chapter 343, Hawaii Revised Statutes and the National Environmental Policy Act to support the use of County of Hawai'i and State of Hawai'i funds and lands. Federal funding may also be provided to support the project. The County of Hawai'i-Department of Parks and Recreation is the approving agency for the DEA.

The project proposes the construction of a shared use path (path) extending approximately 4.5 miles through Waimea on the Island of Hawai'i. The path will comply with Americans with Disabilities Act guidelines and will be paved 10-12 feet wide to facilitate access by pedestrians, bicyclists and non-motorized vehicles. The project will be completed in four increments, with the first being completed initially and subsequent increments completed as funding becomes available and required easements secured. The later increments (3 and 4) include an option for a dedicated equestrian trail (trail) which would be constructed parallel, but be separated from the path.

The DEA (page 2-4) details that the project is intended to address certain needs which have been identified within the Waimea Community which include:

- Alternative, non-vehicular transportation options for Waimea residents and visitors;

- Improved safety for pedestrians, bicyclists, and others using non-motorized modes of transportation;

- Connectivity between residences, businesses and schools;
- Enhanced access to and enjoyment of natural and scenic areas; and
- Increased opportunities for recreation and physical fitness

OHA is generally supportive of these types of efforts which have the potential to provide alternative transportation options while improving safety, increased recreational opportunities and appropriate access to natural, cultural and scenic areas. We look forward to seeing this project achieving its full potential. We concur with the proposal within the DEA (page 4-50) that native species be used to replace any non-native trees or vegetation removed during project activities.

In a letter dated January 21, 2011 to the Federal Highways Administration (attached), OHA expressed our concerns on the possible impacts of this project on cultural and historic sites, including Native Hawaiian burials. We are confident that these concerns will be addressed as this project moves forward.

OHA concurs with the "finding of no significant impact" determination in the DEA. We do advocate that project proponents continue consultation with the larger community as the project moves into specific design and planning stages. Thank you for the opportunity to provide comments. Should you have any questions, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Chief Executive Officer

Attachments (1): January 21, 2011 OHA letter to the Federal Highways Administration

C: Robert K. Lindsey, Jr.- OHA, Hawai'i Island Trustee
Leslie Kurisaki, Kimura International

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Clyde Namu‘o, Chief Executive Officer
State of Hawai‘i
Office of Hawaiian Affairs
711 Kapi‘olani Boulevard, Suite 500
Honolulu, Hawai‘i 96813

Dear Mr. Namu‘o:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter to Mr. James Komata of the County of Hawai‘i Department of Parks and Recreation (DPR) dated February 17, 2011. We note your concurrence with the plan to replace non-native trees and vegetation removed with native species.

We also have a copy of your Section 106, National Historic Preservation Act (NHPA) letter to the Federal Highway Administration (FHWA) expressing your concerns on potential impacts to cultural resources, particularly in the western increments of the path. These issues will be addressed as the project moves forward. Consultation has been conducted with the individuals and groups you have identified.

We note your concurrence with the County’s “finding of no significant impact.” As suggested, consultation with the larger community will continue as the first increment moves into design and as future increments are planned.

Thank you for taking the time to review the Draft EA. If you have future comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

PHONE (808) 594-1888 FAX (808) 594-1865

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

HRD11/5496

January 21, 2011

Pat V. Phung, Lead Civil Engineer
Federal Highway Administration- Hawai'i Division
300 Ala Moana Boulevard, Room 3-306
Honolulu, Hawai'i 96850

Re: National Historic Preservation Act Section 106 Consultation
Ke Ala Kahawai o Waimea Project
Waimea, Island of Hawai'i

Aloha e Mr. Phung,

The Office of Hawaiian Affairs (OHA) is in receipt of your December 22, 2010 letter initiating consultation pursuant to Section 106 of the National Historic Preservation Act of 1966 as amended for the proposed construction of "Ke Ala Kahawai o Waimea" (undertaking), a shared use path (path) extending approximately 4.5 miles through Waimea on the Island of Hawai'i. The path will comply with Americans with Disabilities Act guidelines and will be paved 10-12 feet wide to facilitate access by pedestrians, bicyclists and non-motorized vehicles. The undertaking will be completed in four increments, with the first (depicted in the attachment of your letter) being completed initially and subsequent increments completed as funding becomes available and required easements secured. The later increments (3 and 4) include an option for a dedicated equestrian trail (trail) which would be constructed parallel, but be separated from the path.

Although the path will be completed in increments within an unknown timeframe, we see this Section 106 consultation process as being for the overall undertaking and hope it will be completed prior to construction of "Increment 1" of the path beginning. We understand that because the use of federal funds and State of Hawai'i and County of Hawai'i lands and funds are proposed compliance documents (documents) are being prepared pursuant to the requirements of the National Environmental Policy Act and Chapter 343, Hawaii Revised Statutes. We anticipate the opportunity to reviewing these documents separately and look forward to commenting on them.

You have preliminarily determined the area of potential effect (APE) for this undertaking to be the entire 4.5 mile path alignment, existing road segments which will provide access to the path and in areas where the trail proposed- a larger corridor approximately 200 feet wide. Existing road segments will not be modified as they will only serve as connecting points to the

path. We believe your preliminary APE determination is appropriate at this time and we look forward to a formal determination as undertaking planning and design is finalized.

At this juncture, you are requesting input from consulting parties on historic properties or cultural sites which may be situated within the APE and recommendations on other organizations and individuals who may be willing to participate in the Section 106 consultation process for this undertaking.

OHA believes that unmarked burials may be encountered during undertaking activities along the entire length of the path and seek assurances that applicable laws will be implemented should burials be inadvertently discovered. We do have specific concerns relative to the western increment of the path, where the APE widens to accommodate the proposed trail. Numerous archaeological studies and investigations have occurred in this vicinity through the years, but two immediately come to mind: the first is the archaeological investigations conducted by the Bishop Museum for the proposed Mudlane-Waimea-Kawaihae road corridor circa 1983 and the second is a more recent archaeological study conducted for the Department of Hawaiian Home Lands residential subdivision in Lālāmilo.

While the exact relationship between the areas covered by the above mentioned investigation and survey and the APE are unknown to us at this time, we do know that numerous historic properties and cultural sites, including burials were identified and advocate that this be considered as you are completing your review.

We recommend consultation with the following groups and individuals we may be willing to share their thoughts on historic properties and cultural sites within the APE with you: the Waimea Hawaiian Civic Club, Kanu o Ka 'Āina School, individuals with an association with Parker Ranch and Mr. Leningrad Elarionoff. Please remember that this list is not all encompassing and we are sure additional groups and individuals will be identified as you move forward with your consultation process. We also note that there are certain individuals who may be especially concerned with the area where the path is proposed to terminate at its western end. Generally known by the name "Lihu'e", we are aware that certain traditions also identify smaller areas known as "Pupua" or "Papua" and "Wawa'a" or "Wa'a'wa'a" in this specific location. We respectfully suggest you keep this in mind during your consultation process.

Thank you for providing an opportunity to comment and we look forward to continuing consultation with you and all other parties. Should you have any questions or concerns, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Chief Executive Officer

C: Robert K. Lindsey, Jr.- OHA Trustee, Hawai'i Island
William Aila, Jr.- State of Hawai'i Historic Preservation Officer
Dr. Pua Aiu, Administrator- State Historic Preservation Division

WAIMEA MIDDLE PUBLIC CONVERSION CHARTER SCHOOL
67-1229 MAMALAHOA HIGHWAY * KAMUELA, HAWAII 96743
PHONE: (808) 887-6090 Ext. 225

February 21, 2011

Mr. Glenn Kimura
Kimura International
1600 Kapiolani Blvd, #1610
Honolulu, HI 96814

RE: KE ALA KAHAWAI O WAIMEA – DRAFT ENVIRONMENTAL ASSESSMENT – January 2011

Dear Mr. Kimura,

On behalf of the 270 6th-8th grade students and their families, and also our more than 50 teachers and staff, I am writing to convey continued support for Ke Ala Kahawai o Waimea, the Waimea Trails and Greenways 4.8 mile multi-use path, as proposed in the Draft Environmental Assessment dated January 2011.

This path will provide much needed connectivity and a route for alternative, non-vehicular transportation for many Waimea children to and from our public schools. As you may know, public schools in Hawai'i are not permitted to provide bus transportation for children who live within a mile radius of the school. In Waimea, this includes several high-population but very low income housing areas including Noelani Apartments and several adjacent low-to-moderate income rental apartments. Nearly 100 keiki live in Noelani's public housing apartments, most of whom are our elementary and middle school students. These children must either walk to school along the edge of a very congested highway each morning and afternoon where there is virtually no curb and sidewalk, or their families -- who are already struggling financially -- must drive them to and from school out of concern for their safety. This proposed trail would immediately improve the safety of these children and reduce peak hour traffic congestion in Waimea.

Further, this trail would provide valuable opportunities for exercise – something that all of the current health data indicates our children urgently need for their immediate "readiness to learn" here at school, and their long term wellbeing to prevent obesity and the onset of diabetes and other chronic diseases. In fact, the Centers for Disease Control recently posted very alarming data about the exceedingly high risk children today face related to lack of exercise and poor nutrition that will, in fact, shorten their lives.

Therefore, as our school's community liaison – committed to doing what's best for kids and advocating for their overall wellbeing as well as academic progress -- I am convinced that creating this trail is both highly desirable and that it will become a significant community asset.

No question, there are still some design issues, but I am confident that these can be resolved with the same professional care and balancing of needs that got the path's design to this point. In particular this includes careful consideration of what was called "Waimea's Heritage Trees" at the recent public input meeting. Trees are treasured in our community, and I urge every effort be made to save healthy trees.

Mahalo for this opportunity to comment. I appreciate both the integrity of the work done to date and the thoughtful approach of the County staff and planning team and also Federal Highways staff to be sure that this proposed multi-use path becomes a meaningful and appropriate community asset.

Mahalo,

Patti Cook
Community Liaison

cc: Mayor Billy Kenoi, Robert Fitzgerald, Director, Hawai'i County Dept. of Parks and Recreation

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Patti Cook, Community Liaison
Waimea Middle Public Conversion Charter School
67-1229 Mamalahoa Highway
Kamuela, Hawai‘i 96743

Dear Ms. Cook:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter dated February 21, 2011 expressing your support for the proposed trail as a route for alternative, non-vehicular transportation to and from Waimea schools.

The County is committed to working with the community to mitigate the loss of large trees near the Waimea Nature Park, and to address other outstanding design and environmental concerns as the project moves forward.

We appreciate your taking the time to review the Draft EA and your continued support. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

NEIL ABERCROMBIE
GOVERNOR

GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
Ford N. Fuchigami
Jan S. Gouveia
Randy Grune
Jadine Urasaki

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

IN REPLY REFER TO:

STP 8.0372

March 8, 2011

RECEIVED MAR 18 2011

Mr. James Komata
Park Planner
Department of Parks and Recreation
County of Hawaii
101 Pauahi Street, Suite 6
Hilo, Hawaii 96720

Dear Mr. Komata:

Subject: Ke Ala Kahawai O Waimea
Draft Environmental Assessment (DEA)

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project. DOT understands the subject 4.8 mile long, multi-use path will follow the Waikoloa Stream, and extend from Church Row in Waimea town to a future County park on Kawaihae Road, across the Kamuela View Estates subdivision. One of the access points to the subject project will be off Kawaihae Road.

Given the project location, the State's highway facility, Kawaihae Road, will be impacted. The DOT Highways Division is concluding its review of the subject project. Upon completion of this review, DOT will provide additional comments as necessary.

DOT appreciates the opportunity to provide comments on the subject project. If there are any questions or the need to meet with Highways Division staff, please contact Mr. David Shimokawa of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,

GLENN M. OKIMOTO, Ph.D.
Director of Transportation

c: Leslie Kurisaki, Kimura International Inc.

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Glenn M. Okimoto, Ph.D., Director of Transportation
State of Hawai‘i
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai‘i 96813-5097

Dear Mr. Okimoto:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata of the County of Hawai‘i Department of Parks and Recreation (DPR) dated March 8, 2011. We note your comment that one of the access points to the project, specifically, the western terminus at the Clark property, will be off Kawaihae Road, and that it will be impacted. We also understand that your Highways Division will provide additional comments regarding the project.

Thank you for taking the time to review the Draft EA. If you have future comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

William P. Kenoi
Mayor

William T. Takaba
Managing Director

Frank J. DeMarco, P.E.
Director

Ivan M. Torigoe
Deputy Director

County of Hawai'i

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

25 Aupuni Street • Hilo, Hawai'i 96720
(808) 961-8083 · Fax (808) 961-8086
http://co.hawaii.hi.us/directory/dir_envmng.htm

RECEIVED FEB 08 2011

February 2, 2011

County of Hawai`i
Department of Parks & Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720

Attention: Mr. James Komata, Park Planner

RE: Ke Ala Kahawai O Waimea ("the stream trail of Waimea")
Waimea, South Kohala District

Dear Mr. Komata,

We have no comments to offer on the subject project.

Thank you for allowing us to review and comment on this project.

Sincerely,

Frank DeMarco

Frank J. DeMarco, P.E.
DIRECTOR

cc: Kimura International, Inc.
1600 Kapi`olani Blvd., Suite 1610
Honolulu, HI 96814
Attn: Ms. Leslie Kurisaki

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Frank J. DeMarco, P.E.
Director
County of Hawai‘i
Department of Environmental Management
25 Aupuni Street
Hilo, Hawai‘i 96720

Dear Mr. DeMarco:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata of the County of Hawai‘i Department of Parks and Recreation (DPR) dated February 2, 2011. We note you have no comments on the subject project.

Thank you for taking the time to review the Draft EA. If you have future comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

William P. Kenoi
Mayor

Darryl J. Oliveira
Fire Chief

Glen P. I. Honda
Deputy Fire Chief

County of Hawai'i
HAWAI'I FIRE DEPARTMENT
25 Aupuni Street • Suite 2501 • Hilo, Hawai'i 96720
(808) 932-2900 • Fax (808) 932-2928

RECEIVED FEB 11 2011

February 7, 2011

Mr. Glenn T. Kimura
Kimura International Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawai'i 96814

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
KE ALA KAHAWAI O WAIMEA, WAIMEA TRAILS AND GREENWAYS
COUNTY OF HAWAI'I PARKS AND RECREATION
WAIMEA, SOUTH KOHALA DISTRICT
TMK: VARIOUS

Due to the length of the trail and the type of proposed usage (possible horseback riding, bicycles, hiking and jogging), we recommend and request at minimum, access for our ambulance and off-road vehicles.

for DARRYL OLIVEIRA
Fire Chief

RP:lpc

Hawai'i County is an Equal Opportunity Provider and Employer.

From: Fire Station - Waimea Shift B [mailto:hcfdsta9-b@co.hawaii.hi.us]
Sent: Thursday, May 05, 2011 2:32 PM
To: Leslie Kurisaki
Subject: RE: Waimea Trails and Greenways

Aloha Leslie

Sorry meant to get back to you sooner but got a little side tracked. After consulting with others at the station we haven't come up with any other concerns with the trail project. Maybe we could just elaborate on some of the situations.

I don't believe our concerns would create much of an environmental impact to the areas of the trail. Trail markers to be used as reference locations could be made from natural objects. Markers would be more useful if they were no more than ¼ mile apart.

Access along the length of the trail by a four wheel drive vehicle would be desirable but it doesn't need to be continuous. Access points connecting to the trail at various areas would make response and transport easier and more timely for us and therefore more beneficial for the public. More obviously would be better, but existing roads transecting the trail would be ideal.

We also have a rescue/medical helicopter stationed within 5min. airtime from town. Not sure of the entire length or location of the trail but any potential landing sites could be identified .

As far as fire prevention is concerned, dead and dry underbrush should be kept to a minimum. Once trail is in use, debris from trail maintenance should not be stored in large, hard to extinguish piles and preferably hauled out.

If you have any questions or concerns feel free to contact me at Waimea Fire Station .

Mahalo

Capt. John Whitman
Work: 887-3021
Cell: 895-0857

From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Thursday, April 28, 2011 11:25 AM
To: hcfdsta9@co.hawaii.hi.us
Subject: Waimea Trails and Greenways

Aloha, Captain Whitman,

Thank you for talking to me today and verifying information about your station's equipment and personnel.

As I mentioned, we're doing the Environmental Assessment for the Waimea Trails and Greenways project, so also wanted to hear any concerns you have about the project. You mentioned the need for accessibility in case of a medical emergency on the trail, and suggested trail markers to help locate 911 calls. We understand that emergency vehicle access onto the trail is not a requirement, but the closer they can get the better, so at least having mowed areas etc. where a 4-wheel drive can access the trail would be good.

Please let me know if you or others have any other concerns or suggestions.

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Darryl Oliveira, Fire Chief
County of Hawai‘i
Fire Department
25 Aupuni Street, Suite 2501
Hilo, Hawai‘i 96720

Dear Chief Oliveira:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft Environmental Assessment (EA) comment letter dated February 7, 2011. We note your recommendation for access for your ambulance and off-road vehicles.

We were also able to follow up by phone and later e-mail with Captain John Whitman at the Waimea Station. He clarified that the emergency access along the length of the trail is desirable but not required to be continuous. Access points connecting to the trail at various areas would make response and transport easier and timely, and the greater the accessibility for emergency vehicles, the greater the public benefit. Captain Whitman stated that access to the trail via existing roads transecting the trail would be ideal. He also recommended trail markers not more than ¼ mile apart to help with identifying location during emergencies.

As far as fire prevention, Captain Whitman recommended that dead and dry underbrush be kept to a minimum, and once the trail is in use, debris from trail maintenance should not be stored in large, hard to extinguish piles and preferably hauled out. This information will be added to the Final EA.

Thank you for taking the time to review the Draft EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

William P. Kenoi
Mayor

Harry S. Kubojiri
Police Chief

Paul K. Ferreira
Deputy Police Chief

County of Hawai'i

POLICE DEPARTMENT
349 Kapi'olani Street • Hilo, Hawai'i 96720-3998
(808) 935-3311 • Fax (808) 961-2389

February 14, 2011

TO : JAMES KOMATA, PARK PLANNER
DEPARTMENT OF PARKS & RECREATION

FROM : HENRY J. TAVARES JR., ASSISTANT CHIEF, AREA II OPERATIONS

SUBJECT: KE ALA KAHAWAI O WAIMEA (WAIMEA TRAILS & GREENWAYS)
DRAFT ENVIRONMENTAL ASSESSMENT (DEA)
LOCATION: WAIMEA, SOUTH KOHALA DISTRICT,
ISLAND OF HAWAI'I

The above-referenced Draft Environmental Assessment (DEA) has been reviewed, and we have no comments to offer at this time.

I understand that South Kohala Community Policing Officer Paul Bugado attended the community meeting on February 9, 2011, at the Waimea Middle School cafeteria.

Should you have any concerns, please contact Captain James Sanborn, South Kohala District commander, at 887-3080.

JNS:dmv

cc: Kimura International, Inc.
RS100212

From: Leslie Kurisaki [mailto:lkurisaki@kimurainternational.com]
Sent: Thursday, April 14, 2011 8:59 AM
To: 'Clemson Lam, Architect'; 'Leningrad Elarionoff'
Cc: 'Bobby Command'; 'James Komata'; 'Robert Fitzgerald'; 'Glenn Kimura'
Subject: police bike patrol

Team,

I just talked to Capt. Sanborn at the South Kohala Station. He said they had the bike patrol training scheduled at one time, but it has been postponed (funding?) and he wasn't sure when it will be able to resume. He said he is trying to bring the bike patrols back, the main impetus was to improve response in Waikoloa Village. Police used to have bike patrols years back when community policing was a big thing, and he thought it was good. The bike patrol training is mostly a West Hawaii effort.

Asked whether he had any concerns about the trail. He said he is a proponent of the Crime Prevention Through Environmental Design (CPTED) approach, and therefore would be concerned with design issues such as visibility, natural surveillance, lighting, placement of vegetation/foliage, etc. High use and eyes on the trail are good.

He confirmed that officers would respond to reported incidents on the trail as available. There are 4 patrol officers working at any one time; 2 at Waikoloa. Officers could access the trail from the shared roads; they don't need to be able to drive onto the trail.

Leslie Kurisaki
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hawaii 96814
Phone (808) 944-8848
Fax (808) 941-8999

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Henry J. Tavares, Jr.
Assistant Chief, Area II Operations
County of Hawai‘i
Police Department
349 Kapi‘olani Street
Hilo, Hawai‘i 96720-3998

Dear Assistant Chief Tavares:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your memo dated February 14, 2011 to James Komata of the Department of Parks and Recreation responding to the Draft EA for this project. We note that the Police Department has no comments to offer.

You are correct that Officer Paul Bugado attended the community meeting for this project on February 9, 2011. We also followed up with Captain James Sanborn, South Kohala District commander at a later date. Captain Sanborn clarified an issue that came up at the community meeting about the status of the bicycle mounted patrol training. He explained that the training was scheduled at one time but was recently postponed, and he was unsure when it would resume.

When asked if he had any concerns about the proposed trail, Captain Sanborn said he is a proponent of the Crime Prevention Through Environmental Design (CPTED) approach, and therefore he would be most concerned with design issues such as visibility, natural surveillance, lighting, placement of vegetation/foliage, etc.

Thank you for taking the time to review the Draft EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

County of Hawaii
Department of Public Works - Traffic Division

9 February 2011
Revised 17 Feb 2011

Review Comments

To: Kiran Emler
From: Justin K. Privett (JKP), Signs and Markings Section
Maurice N. Nakata (MMN), Street Lights Section
Ron L. Thiel (RLT), Division Chief
Re: The Stream Trail of Waimea FEA

Item	Comment	By
1	Section 1.2, Proposed Action. Reference guidelines in Part 9 of the Manual of Uniform Traffic Control Devices. Guidelines should be followed especially at trail and roadway intersections	JKP
2	Section 4.6.2, Project Impacts and Mitigation, page 4-78. Lighting should be installed at street connections/trailheads if the adjoining subdivision is lit.	MMN
3	Section 4.6.2, Project Impacts and Mitigation, page 4-78. Minor roadway or sidewalk improvements should include on-street parking facilities (which may include marked stalls and "no parking" signs to protect sight lines) and signs to indicate the location of trail access points/trailheads.	JKP
4	Section 3.2.2, Bike Lanes. Designate exclusive use by bicyclists only if sufficient shoulder or sidewalk is also available for pedestrians.	RLT
5	General Comment. There have been references to cost of project. Can something be added to this EA regarding costs?	RLT

William P. Kenoi
Mayor

William T. Takaba
Managing Director

Warren H. W. Lee
Director

Brandon A. K. Gonzalez
Deputy Director

County of Hawai'i
DEPARTMENT OF PUBLIC WORKS
Aupuni Center
101 Pauahi Street, Suite 7 · Hilo, Hawai'i 96720-4224
(808) 961-8321 · Fax (808) 961-8630
www.co.hawaii.hi.us

February 16, 2011

Mr. James Komata, Park Planner
County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, Hawai'i 96720

Subject: Draft Environmental Assessment
Waimea Trails and Greenways
Ke Ala Kahawai o Waimea Shared Use Path

We received the subject Draft EA, dated January 2011, and have the following comments:

1. We request the proposed trail be designed to maximize pedestrian access for the purpose of minimizing vehicular conflicts with pedestrians on County streets.

2. All trail connections and other improvements to a County road shall conform to Chapter 22, Streets and Sidewalks, of the Hawaii County Code. A permit for work within the County Right-of-Way is required. Signs are required at roadway intersections in accordance with the 2009 Manual on Uniform Traffic Control Devices, Part 9. Lighting should be provided at trailheads and roadway intersections in areas with existing street lights. Consider roadside improvements for on-street parking facilities (may include marked stalls and "no parking" signs to protect sight lines). Provide signs to mark trailhead locations.

3. Plan review by the Disability and Communications Access Board is required.

4. Portions of the proposed trail follow and cross over Waikoloa and Keanuiomano Streams. Portions of the project lie within areas designated as special flood hazard areas on the Flood Insurance Rate Maps (FIRM) or areas that are in the process of inclusion as special flood hazard areas. The proposed project will be required to comply with Hawaii County Code Chapter 27, Floodplain Management. Flood studies and submittals of map change applications to FEMA may be required prior to and following alterations of a special flood hazard area. Grading and watercourse alterations are subject to approval of the Department of Public Works under Chapters 10 and 27 of Hawaii County Code and the Hawaii County Storm Drainage Standards.

County of Hawai'i is an Equal Opportunity Provider and Employer.

5. On page 4-31 under Flood Hazards, the EA states "a variance must be obtained from the County". Please omit that statement from the EA. Variances are only considered for proposed improvements that do not meet the minimum requirements of Chapter 27 and qualify under the criteria stated in Section 27-27.

6. The statement that the entire project corridor west of and including the County Refuse Station "are not susceptible to flooding" should be omitted. No special flood hazard areas have been designated for the area on the FIRM as they are currently outside of the effective FIRM study limits. However, portions of the area may still be subject to flooding. In addition, the Lalamilo Development will submit for a Letter of Map Revision upon completion of grading for Lalamilo Development Phase 2.

7. All earthwork and grading shall conform to Chapter 10, Erosion and Sediment Control, of Hawaii County Code. Care should be taken not to change existing drainage patterns. All development generated runoff (from new parking lots) shall be disposed of on-site and shall not be directed toward any adjacent properties.

8. Please be informed that if drywells will be used, an Underground Injection Control (UIC) permit may be required from the Department of Health, State of Hawaii.

If you have any questions, please contact Kiran Emler of our Engineering Division Kona office at 327-3530.

Warren H. W. Lee, P.E.
Director

KE

cc: Ms. Leslie Kurisaki, Kimura International Inc.
Planning Director
DPW Engineering, Hilo/Kona

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Warren H.W. Lee, P.E.
Director
County of Hawai‘i
Department of Public Works
Aupuni Center
101 Pauahi Street, Suite 7
Hilo, Hawai‘i 96720-4224

Dear Mr. Lee:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata of the County of Hawai‘i Department of Parks and Recreation (DPR) dated February 16, 2011. We offer the following responses to your comments:

1. The trail will provide a bicycle and pedestrian spine and is being designed to maximize pedestrian access and encourage non-vehicular transportation within town.

2. All trail connections and other improvements shall conform to the applicable provisions of the Hawai‘i County Code and the 2009 Manual on Uniform Traffic Control Devices. The County will consider roadside improvements for on-street parking, and “no parking” signs as needed on narrow residential streets such as Kahawai Street.

3. Plans will be reviewed by the State’s Disability and Communications Access Board.

4. Areas of the trail within the FIRM special flood hazard areas will comply with Hawai‘i County Code Chapter 27, Floodplain Management. Approval from the Department of Public Works will be obtained for grading and any watercourse alteration, in accordance with the Hawai‘i County Code and County Storm Drainage Standards.

5. Statement deleted as requested.

6. Statement deleted as requested.

7. Acknowledged.

8. Acknowledged.

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Thank you again for your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County DPR

William P. Kenoi
Mayor

William T. Takaba
Managing Director

Walter K.M. Lau
Deputy Managing Director

County of Hawai'i
Office of the Mayor

25 Aupuni Street, Suite 2603 • Hilo, Hawai'i 96720 • (808) 961-8211 • Fax (808) 961-6553
KONA 74-5044 Ane Keohokalole Hwy . Bldg C • Kailua-Kona Hawai'i 96740
(808) 323-4444 • Fax (808) 323-4440

RECEIVED FEB 25 2011

February 17, 2011

Mr James Komata, Park Planner
Department of Parks and Recreation
County of Hawai'i
101 Pauahi Street, Suite 6
Hilo, HI 96720

Dear Mr Komata

Subject **Draft Environmental Assessment (DEA)**
Waimea Trails & Greenways
Ke Ala Kahawai O Waimea

We have reviewed the Draft Environmental Assessment (DEA) prepared by KIMURA INTERNATIONAL, INC. for the County of Hawai'i's, proposed project - Ke Ala Kahawai O Waimea and have no comments to offer at this time.

Thank you for the opportunity to review the DEA

Mahalo,

Billy Kenoi
MAYOR

cc Ms Leslie Kurisaki, KIMURA INTERNATIONAL, INC.

KIMURA INTERNATIONAL INC.

September 12, 2011

Mayor Billy Kenoi
County of Hawai‘i
25 Aupuni Street, Suite 2603
Hilo, Hawai‘i 96720

Dear Mayor Kenoi:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata of the Department of Parks and Recreation (DPR) dated February 17, 2011. We note you have no comments on the subject project.

Thank you for taking the time to review the Draft EA. If you have future comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

February 23, 2011

RECEIVED FEB 24 2011

TO: Mr. Robert A. Fitzgerald, Director
County of Hawai'i, Department of Parks and Recreation

FROM: Milton D. Pavao, Manager-Chief Engineer

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
WAIMEA TRAILS AND GREENWAYS – KE ALA KAHAKAI O WAIMEA

We have reviewed the subject Draft Environmental Assessment and have the following comments and conditions.

Should the proposed use require water service, the Department would request the exact locations of water service and estimated maximum daily water usage calculations for each meter, prepared by a professional engineer licensed in the State of Hawai'i, for review and approval.

If a meter is installed, a reduced pressure type backflow prevention assembly must be installed within five feet of the meter on private property. The installation of the backflow prevention assembly must be inspected and approved by the Department before commencement of water service.

Should there be any questions, please contact Mr. Ryan Quitoriano of our Water Resources and Planning Branch at 961-8070, extension 256.

Sincerely yours,

Milton D. Pavao, P.E.
Manager-Chief Engineer

RQ:dfg

copy - Kimura International, Inc.

The Department of Water Supply is an Equal Opportunity provider and employer.

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Milton D. Pavao, P.E., Manager-Chief Engineer
County of Hawai‘i
Department of Water Supply
345 Kekuanaoa Street, Suite 20
Hilo, Hawai‘i 96720

Dear Mr. Pavao:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your memo to Mr. Robert Fitzgerald of the County of Hawai‘i Department of Parks and Recreation (DPR) dated February 23, 2011. If water service is required on the trail or at future County parks along the route, your Department will be contacted with the exact locations of water service and estimated daily water usage calculations. All requirements noted will be met.

Thank you for taking the time to review the Draft EA. If you have future comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Organizations

Leslie Kurisaki

From: Jeff McDevitt [jeffmcd65@gmail.com]
Sent: Saturday, February 12, 2011 11:27 AM
To: lkurisaki@kimurainternational.com
Subject: Support for WGT

Dear Folks,

I would like to give my support to the WGT effort to create the trail through Waimea along the Waikoloa stream. I am aware of the myths being circulated by others that cast a negative light on this trail. I am a member of the International Mtn. Bikers Assoc. and we have heard all of these before, in opposition to trails built on the mainland. They have all been proven false with multiple studies in different locations. Not one of the myths was ever found to come true.

Shortsighted people are trying to stymie any government activity these days since all they want is to downsize government. The Kauai trail experience shows that no County tax dollars need be spent for the Waimea trail, however, so their argument has no relevance.

Please add my support to this trail project. It will be heavily used and much appreciated by the folks in Waimea.

Thanks,

Jeff McDevitt
PATH HAWAII President

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Jeff McDevitt, President
PATH Hawai‘i
P.O. Box 62
Kailua-Kona, HI 96745

Dear Mr. McDevitt:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your email to Leslie Kurisaki on February 12, 2011 expressing your support for *Ke Ala Kahawai o Waimea* and the efforts of the Waimea Trails and Greenways Committee. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County DPR

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

February 16, 2011

RECEIVED FEB 18 2011

Mr. Bob Fitzgerald
County of Hawaii
Dept. of Parks and Recreation
25 Aupuni St
Hilo, HI 96720

Dear Mr. Fitzgerald:

Subject: Draft Environmental Assessment (DEA)
Ke Ala Kahawai o Waimea, Waimea Trails and Greenways
Waimea, South Kohala, Hawaii Island
Various TMKs
Questions and Comments

Waimea Outdoor Circle, an organization with 200 members, is a branch of The Outdoor Circle, a statewide organization with 3000 members. Ulu La'au, the Waimea Nature Park TMK (3)6-6-03:07, is a project of Waimea Outdoor Circle. Ulu La'au means "Garden of Trees". Historic maps of Waimea show this particular area of Waimea was named Ulu La'au by the 1830s. Ke Ala Kahawai o Waimea will come through Ulu La'au.

We are writing this letter to express our concerns and to provide comments on the above referenced Draft Environmental Assessment.

When trees are cut down in Waimea, the public contacts us to stop the destruction. We advocate for saving all healthy trees possible and understand that at times, when trees are assessed as potential hazards that they must be removed.

After reading the "Mike Kraus Tree Risk Assessment"(Mentioned on 4-49) of 498 trees which grow along the proposed path, we reviewed his findings from Lindsey Rd. to Opelo Rd.. Many trees are dead or damaged. Some are just growing in or too near the designated path of the trail. We counted 119 dead or damaged trees and understand that they need to be removed. However, we believe that the 357 trees recommended for removal, out of 498 total trees, is excessive. These trees give Waimea a sense of place, a backdrop of town, a shady area that hikers and bikers will look forward to entering.

The South Kohala Community Development Plan states 1.6 "Recognize and protect significant trees and other plants in Waimea" "Preserving Waimea's close relationship with nature is critical to preserving its "sense of place". The cultural and aesthetic value of prominent eucalyptus trees is evident.

In the final Environmental Assessment please provide mitigation plans to give back the greenery and shade that will be caused by the removal of so many trees

and/or reconsider the need for such a large scale removal. Please address this in the EA.

The eucalyptus trees are not native but are "Waimea Heritage Trees" planted in the "Great Depression". Eucalyptus robusta also called "swamp mahogany" was planted near streams to keep areas from being swampy. The trees were also planted in pastures and in town for windbreaks. Our winds can get up to 50 miles an hour. Large scale tree removal will affect Waimea Nature Park, Carter Professional Center. Canada France Hawaii Telescope Headquarters and Ahuli Subdivision. The mature trees also cut down on noise pollution to Ahuli Subdivision from trail users. Provide details as to what will be done to protect these areas

Mike Kraus says these trees have a life span of 130 years if cared for. That leaves them 50 more years of life.

1. Can saving some of the trees be mitigated by moving the 10 ft. trail to curve within the 30 ft. easement? If not, why not?
2. Why was Ahuli Subdivision not mentioned in the DEA?
3. How can wind damage to property now protected by mature trees be mitigated?
4. Why does the cover photo and the photo at the bottom on page 4-7 show the very trees in Ulu La'au, adjoining Ahuli Subdivision, scheduled for removal?

Some of the purposes given in the DEA for Ke Ala Kahawai o Waimea are as follows:

(2-3) Enhanced access to and enjoyment of natural scenic areas.
(4-9) (photo) Lush and shady area enjoyed by the community:
(4-71) …visual experience lush shady and forested

In section (4-38) it mentions replacing vegetation with native or appropriate plants in the riparian zone.

5. How large will these plants need to be to replace old growth trees?
How many trees will be planted? Please note that tiny seedlings won't make the area lush, shady and forested for many years.

4.3.1 Stream Biota (page 4-45)

6. There is no mention of the endangered Kamehameha Butterflyin the DEA. We see them often in Ulu La'au and have planted their host plant Mamaki. Please provide information in the DEA about this important species and how the project will affect its habitat.

Regarding the proposed intersection of the Ulu La'au Park entrance drive, the Trail, and the County Road, it is our understanding that if a wide strip of concrete for the Trail is installed it will not slow traffic entering the Park. The entry drive to Ulu La'au is now

covered with "drain rock" to slow vehicles. In our experience this works well as a traffic calming feature. It would be a tragedy to have hikers, bikers or park users injured by cars.

7. Provide details in the FEA about the entrance and explain why this intersection is not mentioned in the DEA? How could this problem be mitigated?
8. How will you keep motorized vehicles off the trail if the proposal allows them access at this point?

Waimea Outdoor Circle has supported the trail and invited it to come through the Park. Many of the troubling details have come up recently, or were discussed with previous County administrations. It is of utmost importance that the trail has a positive impact on the community. We await your response to our comments and questions.

Sincerely,

Mary M. Kitchen
Waimea Outdoor Circle President
P.O. Box 6144
Kamuela, Hi. 96743

Carol Hendricks
Waimea Nature Park Chair
P.O. Box 6144
Kamuela, Hi. 96743

Cc: Gary Hooser, Acting Administrator OEQC
Mayor Billy Kenoi
Kimura International
JAMES KOMATA

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Mary M. Kitchen, President
Ms. Carol Hendricks, Waimea Nature Park Chair
Waimea Outdoor Circle
P.O. Box 6144
Kamuela, Hawai‘i 96743

Dear Ms. Kitchen and Ms. Hendricks:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. Bob Fitzgerald of Hawai‘i Department of Parks and Recreation (DPR) dated February 16, 2011. On behalf of the County, we applaud the efforts of the Waimea Outdoor Circle to keep Waimea clean, green and beautiful, and especially the extraordinary work in creating the haven of tranquility that is Ulu La‘au, the Waimea Nature Park.

June 15, 2011 Meeting

We would like to thank you for meeting with Mr. James Komata of the DPR, Imata and Associates (design consultant for Increment 1) and representatives of the Waimea Trails and Greenways Committee on June 15, 2011. We understand that during that meeting, the group walked the trail alignment in the vicinity of the Waimea Nature Park, identified trees that would be removed, and discussed various issues of concern raised in your February 16, 2011 letter.

The DPR has noted that it shares the Waimea Outdoor Circle’s desire to retain as many healthy trees as possible along *Ke Ala Kahawai o Waimea*, and recognizes the importance of these trees in providing shade, windbreaks, noise buffers, and overall ambiance. Only those trees required to accommodate the path or to ensure trail user safety will be removed. Trees that are were listed in the Mike Kraus report, but are outside the easement would not necessarily be affected by this project.

All trees proposed for removal by the project are non-native, and will be replaced with native vegetation such as Ohia, kukui, naio, etc. The County has agreed that trees will be replaced one-for-one, although not necessarily matching in size. We understand this approach is similar to what was accomplished at the Waimea Nature Park, where non-native Wattle and Christmas berry was replaced with more appropriate native plants.

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The WOC has expressed concerns about safety at the proposed intersection of the Ulu La‘au Park entrance drive and the trail. The County has agreed to install a gate, fencing, speed bump and concrete apron (integral with the trail) to extend into the park approximately 20 feet.

At the park entrance, the County will provide gate posts and fencing, however any custom or special gate other than chain link would need to be provided by the WOC. The County stated, however, that if the gate is provided at the time of trail construction, the project would install it. The WOC would be provided a key to the gate and access will be coordinated with the County.

The WOC has indicated its preference for a concrete rather than an asphalt trail surface. The County has agreed to use colored concrete in an earth tone to mitigate a harsh visual appearance.

At the June 15 walk through, the WOC expressed a desire to preserve the existing asphalt road to Camp Tawara. The County explained that due to Americans with Disabilities Act accessibility requirements, that would not be possible. The WOC requested that the location be designated by signage and that the area be visually differentiated, for example by varying the color of the concrete.

With regard to signage, the WOC requested signage requiring dogs to be on leashes and prohibiting motorized vehicles. The County has agreed to this.

Other Issues in Your February 16, 2011 Letter

Your February 16, 2011 Draft EA comment letter requested mitigation plans for the loss of greenery and shade caused by the removal of trees. The County has agreed to provide the WOC with a copy of its landscape plans for Increment 1 for review. The plans will be provided to your organization.

Regarding the lack of discussion of the Kamehameha butterfly in the Draft EA, the primary focus of the biological survey is to identify listed or proposed threatened or endangered species within the project area. The Kamehameha butterfly and their host Mamaki plant, while both very important native species, are not listed species and will not be impacted by the project. Similarly, other native invertebrates found in the area but not impacted by the trail are not addressed. That said, we commend the WOC for its efforts to encourage the populations of the Kamehameha butterfly and Mamaki plant within the Waimea Nature Park.

Summary

The County and the WTG Committee look forward to continuing a cooperative partnership with the WOC. It is in everyone’s best interest to ensure that *Ke Ala Kahawai o Waimea* is complimentary to and enhances access to Ulu La‘au—as we are all working toward the same

goal of providing green, open space for the community. Thank you for your continued support of *Ke Ala Kahawai o Waimea.*

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

Cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

South Kohala Traffic Safety Committee
P.O. Box 383375
Waikoloa, HI 96738

County of Hawaii
Department of Parks and Recreation
c/o Mr. James Komata, Park Planner
101 Pauahi Street, Suite 6
Hilo, HI 96720

February 19, 2011

Ref: Proposed Ke Ala Kahawai o Waimea Project –Waimea Trails and Greenways– Waimea, HI – Comments for Draft EA

South Kohala Traffic Committee views this project and the rest of the Waimea Traffic Circulation Improvement Projects as 3 Capital Improvement Project priorities to improve traffic safety and flow in the South Kohala District. The section below summarizes points of the South Kohala Community Development Ordinance that must be incorporated in the design of this project. Some items will require additional funding, but should be scheduled timely and sequentially to comply with this Hawaii County Ordinance.

Re: Consideration of South Kohala Community Development Plan Policies.

In studying the draft environmental analysis various options and alternatives, we ask that consideration be given to the policies and objectives contained in the recently enacted South Kohala Community Development Plan Ordinance.

The top two District-wide policy objectives contained in the SKCDP are
#1: Preserve the Culture and Sense of Place of South Kohala Communities
#2: Provide for the Transportation and Circulation needs of the South Kohala Community and for commuters to/from Kohala.

Specifically with respect to Waimea, the SKCDP provides for the implementation of the Waimea Circulation Study's short-term mitigation improvements including the widening of a section of Mamalahoa Highway. There were however concerns expressed that this highway widening would be harmful to Waimea's "country town" character. [See SKCDP Waimea Plan Strategy #5.5, page 75] Consistent with that concern, specifically applicable strategies are:

Strategy 5.1 "Plan, design, and construct walkways and bikeways within the existing rights of way of the main Waimea Roads: Kawaihae Road and Mamalahoa Highway" [SKCDP Waimea Plan Strategy 5.1, page 73]; and

SKCDP Waimea Plan Strategy 1.6 "Recognize and protect significant trees and other plants in Waimea" …. "Preserving Waimea's close relationship with nature is critical to preserving its "sense of place". [SKCDP Waimea Plan Strategy #1.6, page 70. The cultural and aesthetic value of the prominent trees along Mamalahoa highway has been repeatedly recognized over the years. The 1986 Waimea Design Plan likewise highlighted the importance of the prominent eucalyptus trees paralleling Mamalahoa Highway immediately east of the Town. [1986 Waimea Design Plan page 14 "Landscape Features"]

We therefore ask that these community and environment concerns be weighted as significant in any design options, including (1) by providing for pedestrian and bicycle traffic, any linkages to mass-transit options such as the Intra-Waimea Hele-on bus, and (2) by preserving prominent trees and providing for intermittent "nature spaces" between the traffic lanes.

South Kohala Traffic Safety Committee at the regular meeting of the Committee on February 8, 2011 approved (25 attendees) the following comments for your firm's consideration in revising the draft EA.

1. Coordination with Hawaii County Transit Administrator Tom Brown is necessary to design for future and present bus stops and turn outs to provide bus connections to trail entry points listed on page 3-13 (future County Park, Refuse Transfer Station, Kahawai Street, Opelo Road, Waimea Nature Park, Carter Center, Lindsey Road and Church Row. Stops and turnouts need to be within easy walking distance of the trail.

2. Additional Multi-modal connectivity is needed with adequate vehicle parking lots within walking distance of the entry points in compliance with ADA requirements to provide access for people with disabilities. Neighborhoods and agricultural lands need to be protected from excessive roadside parking, trespassing, noise, littering, vandalism and other encroachments due to the Trail. Please list and explain mitigating measures.

3. Page 3-13 "Most trail users are expected to be Waimea residents and many will not require vehicle parking". There is no data to support this statement. Adequate parking will need to be required. Currently most residents do not walk through town, to and from school or work. Several proponents at the February 9th EA Presentation, almost in unison, stated that the trail will encourage walking (or bicycling) and counter this current reliance on motorized transportation. However past information collected supports that the Waimea residents will continue to travel by vehicle or bus to the trail heads and other destinations. The documented use of motorized vehicles by Waimea residents to travel short distances is reported in: Waimea Traffic Circulation Study by Parsons Brinckerhoff; public testimony regarding the Parker School Amendment to USE 05-001 Permit Application; future Regional Park planning and other recent studies provided by consultants and government agencies. There is a current Waimea mind set that one travels by vehicle to an event or destination. Other residents of the area and tourists wanting to use the Trail will require parking also. It seems this documented historic parking need is being overlooked, understated or neglected.

4. The draft EA seems incomplete without any data or projections regarding the number of expected Trail users (walkers, bicyclists, disabled and joggers). There is no data or projections of reduction in the number of vehicles using the local roads due to the Trail. It is hard to see a cost benefit of the Trail as a mitigating measure to reduce traffic congestion in Waimea without supporting data and projections. Please provide the supporting data.

5. Concerns regarding Trail users crossing "busy Kawaihae Road to reach major destinations in Waimea Town or connect to the stream side alignment (of the Trail), presenting a traffic safety issue" was one of the rationales to disqualify the Mauka Alignment. How will safe access for Mauka Waimea residents in Kamuela Views and other mauka subdivisions of Kawaihae Road be provided to safely access the preferred Trail alignment?

6. The HDOT letter dated 6/22/2010 from then Director Morioka requested that the "DEA should assess impacts to State highway facilities and address issues such as access improvements, interaction of project-generated traffic, foot & nonmotorized traffic with vehicle traffic and safety controls". Where are these assessments and recommended traffic safety mitigation measures stated?

7. Implement traffic calming techniques and consider design speed on the 10 foot wide concrete trail. Pedestrian/bicycle conflicts need to be avoided through educational

signage, speed control measures and speed limit enforcement. Please incorporate a speed control plan.

8. Mitigate traffic queuing at trail entry points and the impact to emergency response vehicles.

9. The TE funding source was not explained fully at the meeting. A better explanation in the EA would dispel the idea that the funds would be available and could be better utilized for projects like the Waiaka Bridge Replacement and Alignment Project.

10. Provide value cost engineering for the following unexplained items;
    a. A budget cost analysis of the long term maintenance costs of the Trail and funding sources (concrete replacement, major erosion control, surface drainage and repair of flood damage.
    b. A budget cost analysis of the short term maintenance costs of the Trail and funding sources. Partnering with the community was briefly mentioned as an "in kind" minor maintenance labor contribution. Past offers of "in-kind" contributions of labor were rejected by the County due to Injury Liability Risk. How will this partnering be different and how will the Liability issue be addressed to protect all involved and the taxpaying public? Is there a written agreement executed by the "partners"?
    c. Rest station costs, scope of amenities and priorities so that items that can not be funded and implemented immediately should then be sequenced and prioritized for future funding as planned enhancements and improvements of this base funded project. Cost effectiveness of designing and procuring funding for these future improvements now is important to the taxpayers.

11. Page 3-7 states "Ke Ala Kahawai o Waimea enjoys widespread community support". Generally South Kohala Traffic Safety Committee and other groups like Waimea Outdoor Circle support a trail concept "Big Picture" that also meets the goals, objectives and priorities of the South Kohala Community Development Ordinance. At the February 9, 2011 Draft EA presentation, individuals and groups raising concerns were immediately met with increasingly hostile rebuttals from the Kimura International presenter/facilitator. Some of the attendees were subject to comments such as don't be so emotional, "women in Waimea Outdoor Circle are "tree huggers" from various individuals. Past draft EA presentations involved people raising concerns, the concerns were recorded without rebuttal and then the concerns were given consideration and future clarification before the final draft EA. I saw many people get up and walk out due to the increasingly hostile rebuttals, or become agitated to the point the meeting was finally closed appropriately by Director Fitzgerald. If the goal was to build community consensus the opposite was accomplished.

12. The lack of data, projections, and supporting facts regarding statements in the Draft EA was very evident to the attendees. An example was when neighboring property owners raised security concerns, presenter Mr. Kimura stated the police would provide security. Mr. Kimura then asked the attending police officer how many bicycle mounted patrol officers were available. The answer was that the officer lacked the authority and knowledge to respond other than to say the local station had no trained bicycle patrolmen currently and only 3 old non operational bicycles. Further each shift had only 4 officers to patrol the entire South Kohala District and that reports of theft, vandalism, trespassing and mischief without suspects at the scene would not be a priority for police dispatchers. The consultant obviously had not researched the issue before the meeting.

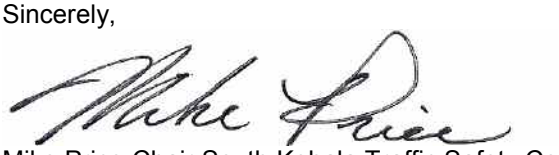
    This incident was followed by inability of the sub consultant to respond to questions regarding the projected cost of the phases of the trail. The Consultant merely shrugged and said he could not answer. The reference that the Trail would be Federally funded

and not County funded ignored the fact that working citizens pay more federal taxes than State and County taxes annually whether the tax is transportation related or income related. Taxpayer money is involved and should be explained by a sub consultant specifically hired at taxpayer cost and tasked to provide a justifiable budget.

13. More facts, budget cost analysis and data supporting the Trail along with consideration of community concerns is needed. We look forward to viewing a more comprehensive revised draft EA.

Thank you for this opportunity to comment on this long awaited project draft EA. Please continue to communicate the progress of this draft EA to the Committee. If we can be of any assistance with this effort please contact me at 808 883-2918 or whao@hawaii.rr.com .

Sincerely,



Mike Price-Chair South Kohala Traffic Safety Committee

CC: SKTSC
Ms. Leslie Kurisaki – Kimura International, Inc.
Mayor Billy Kenoi
Director Bob Fitzgerald – Department of Parks and Recreation
Tom Brown – County Transit Agency
Councilman Pete Hoffmann

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Mike Price, Chair
South Kohala Traffic Safety Committee
P.O. Box 383375
Waikoloa, Hawai‘i 96738

Dear Mr. Price:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata County of Hawai‘i Department of Parks and Recreation dated February 19, 2011. We offer the following responses to your comments:

1. The County and its design consultant(s) will coordinate with Hawaii County Transit Administrator when designing trail entry points.

2. Your letter states that adequate vehicle parking lots need to be provided within walking distance of the entry points, but then in the very next sentence, that neighborhoods and agricultural lands need to be protected from these types of encroachments. Trail parking lots will be provided at future parks at the Clark property and adjacent to the refuse transfer station. Please keep in mind that primary intent of the trail is to provide a transportation alternative to encourage people to get out of their cars. Providing vehicle parking lots along the trail route does not further that objective.

3. We stand by the EA statement that most trail users will be Waimea residents and many will not require vehicle parking. One of the primary reasons for the trail is to provide residents with an alternative to driving to school, work or town. You are correct that the Waimea Traffic Circulation Study (PB Americas, Inc., 2007) documents the prevalent use of motorized vehicles, and the current “mind set” that one travels by vehicle to an event or destination. However, this is precisely the reason the same study identifies the need for more bicycle and pedestrian facilities (p. 19-20), and recommends a bicycle-pedestrian network augmented through the use of the Waimea Trails and Greenways project paths (p. 53).

Most of those using the trail for transportation purposes (i.e., commuting to school or work) will bike or walk from their point of origin, or be “dropped off” by a driver somewhere along the path. That is, these users are unlikely to need long-term parking areas. Rather, it is more likely that recreational users, such as families with young children, and those walking for pleasure or

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exercise may require parking. Parking will be available at the future County parks next to the Refuse Transfer Station and at the Clark property. In the interim, parking will be available at other community parks and public areas within town, such as near the Waimea Nature Park. Trail parking will not be allowed on Kahawai Street, as this is a privately-owned (Parker Ranch) road, not a County road.

4. Although there are no specific projections, several recent studies may shed light on the anticipated number trail users. The March 2005 *Safe Routes to School* study for Waikoloa and Waimea found that while 12% of Waimea students live close enough to school to walk or bike, only 5 percent walk or bike to school and 9 percent walk or bike home. A survey of Waimea parents found that the main reason they chose to drive their children over other alternatives was "Safety" (mentioned by 51% of respondents). When students were surveyed, 19% said they would like to get to school by bike, and 7% would like to walk (both higher numbers than are able to do so now). The study concluded that *"if bike paths were available, particularly if there were safe crossings of Highways 19 and 190, many more could get to school under their own power…Many barriers exist, but it appears that progress toward healthier and safer alternative to every parent driving their children to school is possible…*".

The likelihood of trail use by commuting students was reinforced by both the principal and the community liaison of Waimea Middle Public Conversion Charter School (PCCS). In letter sent during the Draft EA comment period, Principal John Colson stated that "a safe trail would offer my students the opportunity to talk or ride their bike to and from school" and noted that it would also benefit both campuses of HPA, Waimea Country School and Waimea Elementary School. Ms. Patti Cook, the Waimea Middle PCCS Community Liaison noted the presence of high population, low income housing areas within a mile of their school, including Noelani Apartments and several low-to-moderate rental apartments. She noted that nearly 100 children live in Noelani's public housing apartments, most of whom attend Waimea Elementary and Middle schools. Ms. Cook explained that these children must walk to school along the edge of a very congested highway where there is virtually no curb and sidewalks, or their families—who are already struggling financially—must drive them to and from school out of concern for their safety. She concluded that the proposed trail would immediately improve the safety of these children and reduce peak hour traffic congestion.

A December 2005 study conducted for the Waimea Community Development Plan Committee identified various issues of concern and interest to Waimea residents. This study was conducted by Nino Walker, a graduate student at the University of California at Berkeley, and consisted of 45 personal interviews and a survey of 148 respondents. One of the survey questions asked, *"If you could make only three changes to Waimea to make a better place to live/work/do business what would they be?"* The top answer to this question was to "fix traffic" (84% of respondents) and the second was to "improve non-vehicular options" (40% of respondents). Of those who wanted to improve non-vehicular options, 39% specifically said to "make it more walkable" and 20% said "make it bike friendlier." Another question in the Walker survey asked, *"What land*

use changes, transportation improvements or other factors would allow you to use your car less frequently?" The most frequent response was "make the town bike friendly" (47%) and the second was "more trails" (30%).

Although they do not estimate the number of potential trail users, both studies cited, as well as the input from Waimea school officials show clearly that there is an unmet desire for transportation alternatives. In addition to the number of individuals who will use the trail for transportation, there will be many who utilize it for recreation, exercise, and socialization. The importance of these "non-transportation" priorities are also supported by the Walker study, which found the three main reasons people chose to live in Waimea are the sense of community (43%), the environment and landscape (42%) and the climate (60%).

To address your comment about the "cost benefit of the Trail as a mitigating measure to reduce traffic congestion," we would like to reiterate that the proposed project was endorsed in the Waimea Traffic Circulation Study (December 2007) as part of its comprehensive program to alleviate traffic congestion in Waimea. The Waimea Traffic Circulation Study states that, *"…a solid system that provides bicyclists and pedestrians with mobility within Waimea would be desirable…The plan utilizes existing and proposed roadways and augments this backbone through the use of the Waimea Trails and Greenways project paths"* (p. 53).

5. Safe pedestrian access to town for mauka residents is an ongoing traffic safety issue that will continue to need to be addressed. The lack of sidewalks through this area has been noted in a number of documents, including the Waimea Traffic Circulation Study. The provision of bike lanes on Kawaihae Road, which were recommended in Bike Plan Hawai'i, will improve bicycling connectivity to the *Ke Ala Kahawai o Waimea*, but clearly, the provision of safe pedestrian ways and crossings remains a challenge. The County looks forward to working with the South Kohala Traffic Safety Committee and State of Hawai'i Department of Transportation to facilitate safe pedestrian access from Kawaihae Road.

6. The purpose of the path is to function as a major spine route for bicycles and pedestrians. Users will access the path at various points according to their needs, and common sense will generally dictate the interaction between these multiple users. Aside from posted reminders of path user etiquette and signage on the shared access roads, no major access improvements are planned.

7. We concur that potential pedestrian and bicycle conflicts on the trail need to be avoided through education, as well as signage reminding users of trail etiquette. Basic rules for the use of multi-use trails include being aware of and courteous of other trail users, staying to the right of the trail (except when passing), slowing down at corners, traveling at a reasonable speed, and yielding to other users when entering or crossing the trail. Public education, posting signs, and self-policing is the approach that is used on most multi-use trails in Hawai'i and around the country. Control of speeds can also be managed through trail design, for example, by

meandering the path. These approaches are generally better received and more cost-effective than trying to enforce a "speed control plan." However, in some jurisdictions on the mainland where paths are congested, 15 mph speed limits have been implemented. A similar rule could be implemented in the future if necessary.

8. The trail will be off limits to motorized vehicles, with the exception of mobility devices (e.g., electric wheelchairs) and emergency vehicles if needed. In most instances, police and emergency vehicles will park near an access point and walk to the incident area, although emergency vehicle access will be possible. Traffic queuing at trail entry points and emergency vehicle access is not expected to be a problem.

9. The Final EA will include an expanded discussion of FHWA's Transportation Enhancement (TE) program.

10. The Draft EA provided a rough cost estimate for construction of the various trail increments. At some point in time, the County and the WTG Committee will do additional estimates of long-term and short-term maintenance costs. The Final EA will provide typical costs from the Kaua'i multi-use path for comparison.

The County's intent is that the WTG Committee and community will be responsible for routine maintenance of the trail, including the day to day talks of litter pick up, removal of trash and debris, weed and dust control, and trimming vegetation. The WTG Committee will continue to organize community work days and provide "adopt a section of the trail" opportunities. No pavilions, restrooms, or other structures are proposed along the trail, as these would entail higher maintenance costs.

The County will be have primary responsibility for remedial maintenance and repair throughout the life of the path. This will be budgeted through the Department of Parks and Recreation's annual maintenance budget.

Regarding liability, the County of Hawaii is adequately self insured and will provide its own counsel if necessary. Furthermore, the County is held to much higher standards than the private sector when mitigating potential liabilities. Any public-private partnerships are thoroughly vetted by County Corporation Counsel.

Future County parks are planned adjacent to the County Refuse Transfer station and at the Clark property, and will include rest rooms and parking areas. These parks are future unplanned and unfunded projects. The cost of benches, drinking fountains and other amenities will be budgeted as each increment of the trail is planned, funded and developed. The County always strives to provide these amenities in the most cost-effective manner possible.

11. We are not clear on the intent of this comment or its relevance to the Environmental Assessment, but your recollection and interpretation of events is noted.

12. Captain James Sanborn of the South Kohala Police Station was contacted on April 14, 2011, and confirmed that the Police Department would be responsible for responding to calls regarding security and crime along the trail. He explained that bicycle mounted patrol training was scheduled at one time but was recently postponed, and he was unsure when it would resume. This is probably why the officer attending the meeting could not provide a definite answer. Captain Sanborn commented that he is trying to bring the bike patrols back, as the Police Department used have bicycle patrols in the past when there was an emphasis on community policing. He thought the bicycle patrols were a good thing.

Asked whether he had any specific concerns about the proposed trail, Captain Sanborn said he said he is a proponent of the Crime Prevention Through Environmental Design (CPTED) approach, and therefore would be concerned with design issues such as visibility, natural surveillance, lighting, placement of vegetation/foliage, etc.

Order of magnitude cost estimates for the various trail phases were included in the Draft EA. We would like to clarify that the sub consultant you are referring to is the design engineer for Increment 1 only, and was not “specifically hired to provide a justifiable budget” for the entire trail.

13. Additional information as appropriate and pertinent will be provided in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

Cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

WAIMEA COMMUNITY ASSOCIATION

P.O. Box 2655, Kamuela, HI 96743

WCA Officers:

President:
Sherm Warner
885-1725

Secretary:
Patti Cook
937-2833

Treasurer:
Brian Thomas
895-2000

Immediate Past President:
Bill Sanborn
895-1122

Directors:
Leslie Hall
Bob Hunter
Paul Johnston
Alycia Juvik
Pete Lindsey
Patricia Provalenko
Riley Smith

Stewardship Advisors:
Josh Akana
Pomai Bertelmann
Bets Lawrence
Chadd Paishon

Sergeant at Arms:
Anne Field-Gomes

February 21, 2011

Glenn Kimura
Kimura International
1600 Kapiolani Blvd, #1610
Honolulu, HI 96814

Dear Mr. Kimura,

As the recent publication of the draft Environmental Assessment for Ke Ala Kahawai o Waimea (Waimea Trails and Greenways) and the February 9, 2011 meeting for public comments mark milestones in the progress of this project, the Waimea Community Association would like reaffirm its support for this process and emphasize our hope that in working together toward this goal Waimea can achieve the dreams of those who began this project 15 years ago at the same time that we find solutions to mitigate the concerns and incorporate the suggestions of those who have attended so many meetings and offered oral or written testimony.

We are thankful for the support of our County Administration, particularly Bob Fitzgerald and James Komata of the Dept of Parks and Recreation, for their support and for their pursuit of Federal funds to advance this project, which is simultaneously a park and an alternative transportation corridor.

Special thanks to the many people who for years and years have advanced this project to its current status, especially to Clem Lam and the Waimea Trails and Greenways committee, for their foresight in conceiving what promises to become an artery of community cohesion and wellness.

Sincerely,

Sherm Warner

cc: Leslie Kurisaki
Bob Fitzgerald
James Komata

Founded in the early 1960s and initially called Waimea-Kawaihae Community Association, WCA is a grassroots community group formed to:

- Gather and present information and to facilitate discussion of issues affecting Waimea ;
- To advise community members on how and where to make their voices heard, individually or collectively;
- Promote open participation from all of the Waimea community for the purpose or recommending poliices and legislation for careful growth of Waimea, while preserving the valued qualities fo the region;
- Develop leadership within the community, and
- Initiate, coordinate and support projects to further community development and harmony: cultural, economic, physical and spiritual.

Everyone is invited to WCA's monthly Town Meetings from 5:15—7 p.m. on first Thursdays. Membership is not required to attend town meetings but is urged and includes periodic e-mail notices of important community news, events and issues.

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Sherm Warner
Waimea Community Association
P.O. Box 2655
Kamuela, Hawai‘i 96743

Dear Mr. Warner:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter dated February 21, 2011 expressing the Waimea Community Association's support for this project, and expressing your willingness to work together to mitigate concerns and incorporate suggestions from other community members.

Thank you for taking the time to review the Draft EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

Cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Community Individuals

Leslie Kurisaki

From: ClarrySF@aol.com
Sent: Thursday, February 03, 2011 8:34 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail: History and Cultural Heritage

Dear Ms. Leslie Kurisaki,

I am very pleased to read the article in today's Hawaii Tribune-Herald on the proposed Waimea Trail along the Waikoloa Stream.

This is to suggest that the very interesting history and cultural heritage of the Waikoloa Stream be researched and highlighted to draw attention toward, and generate support for, the project.

Waimea with its many streams and climates supportive of well-organized agricultural practices appears to have been a significant location of early Hawaiians. The Waikoloa Stream likely played a significant role in Waimea's early development from which it grew into the community it is today. Hawaii Preparatory Academy (HPA) is tapping into this history and heritage nearby its Energy Lab where early crops are being grown in a learning environment.

Most people would assume sugar on the Big Island began along the Hamakua coast. This is unlikely in view of information that the Waikoloa Stream was probably the source of irrigation water for the first sugar plantation on the Big Island. Not to be confused with Kauai, it was called the "Lihue Plantation". Bob Dye, who had many articles on Hawaii over the years published in the Honolulu Advertiser, wrote an article on the Lihue Plantation in the November 1986 issue of Honolulu Magazine.

The Lihue Plantation was started under Governor Kuakini by early Chinese sugar masters (tongsee) in the 1830s. (The first contract laborers, Chinese, came to Hawaii in 1852. All others came later.) The plantation was located in what is today the Lalamilo farm lots, makai of Puopelu, the home of Parker Ranch's Richard Smart.

Besides the Honolulu Magazine article, information on this plantation is also available in the 1974 issue of the Hawaiian Journal of History. Both the Honolulu Magazine article and the 1974 issue of the Hawaiian Journal of History are available at the Hilo Public Library.

Here's a bit of very interesting history that starts with the Waikoloa Stream and the Lihue Plantation. Before starting plantations in Kohala and Hilo, the Chinese sold the Lihue Plantation in the 1840s to Abram Feyerweather whose daughter, Julia, married Chun Afong of Oahu, who became the first Chinese millionaire in Hawaii. He along with other Chinese sponsored a big celebration for King Kalakaua. Bob Dye wrote a book on Chun Afong Merchant Prince of the Sandalwood Mountains: Afong and the Chinese in Hawai'i.

Chun and Julia Afong had 12 daughters and 4 sons! Author Jack London wrote a short story inspired by Chun Afong titled Chun Ah Chun. Much later, Jack London's story morph into the 1961 Broadway musical 13 Daughters written with music and lyrics by Eaton Magoon Jr. Don Ameche had the lead role, Nona Beamer was Hawaiian consultant and her son, Keola Beamer, had a part.

This is a Hawaii story, a Big Island, Waimea, and a sugar story. Though regrettably there's virtually no water in it today, this story began on the Waikoloa Stream.

Aloha,
Stafford Clarry
165 Halai St.
Hilo, HI 96720
808.990.3155

Leslie Kurisaki

From: ClarrySF@aol.com
Sent: Thursday, February 03, 2011 1:30 PM
To: lkurisaki@kimurainternational.com
Subject: Re: Waimea Trail: schoolchildren

Thank you Ms. Kurisaki. I will try to attend the public meeting.

In addition to my history and cultural heritage interest, my daughter lives in Waimea, within walking distance of Waimea Middle School, hence my particular interest in the Waimea Trail which would run near the HPA Village Campus which my grandson attends. There's more value in this trail than "pedestrian". It's also a heritage corridor, and it could be a very pleasant and scenic one at that.

Incidentally, the Chinese who sold the plantation to Abram Feyerweather was my great-great-great grandfather. His Hawaiianized name was spelled in different ways, Aiko or Achow; his Chinese name was Lum Ah Jo. After Waimea, he started plantations in Kohala and Ponohawai in Hilo, and across the Wailuku River in Amauulu and Papaikou. He had the first bowling alley in Hilo. He's buried in the old St. Joseph's Cemetery behind Hilo Terrace Apartments on Wainuenue Avenue. He died in 1895 in a house that was next to Starbucks on Kilauea Avenue. The house, affectionately known as "Termite Tavern", was, sadly, torn down only about 10 years ago. His daughter, Amelia Akoi, married Victor Kamukai who turned his name around to Kamukai Victor. They had 11 children and that's how the Victors of Hilo began. One married a Watson and they had 14 children, one of whom married a Moniz who worked for the then Hilo Tribune-Herald for exactly 50 years (1909-1959). Legend says he never took a day of sick leave. He was my grandfather. He and my grandmother, who worked for the Palace Theater for 30+ years, lived in a house next to the Hongwanji Buddhist temple on Kilauea, where today a financial services' office is located, which is next to the property where Aiko lived next to Starbucks.

I was born in Hilo, attended school here, and spent more of my life overseas in South Asia, East Africa, and in the Middle East where I still spend some months every year. Every place has its interesting stories that contribute to citizens' pride in their communities in terms of history and cultural heritage value. In addition to its practical value, the proposed Waimea Trail probably runs through a lot of interesting sites of local stories which have no less value than what we would experience along the Waikiki Historic Trail which, by the way, has a marker on the site where the Chun Afong Villa was located. Again, the story begins along the proposed Waimea Trail.

Aloha,
Stafford

In a message dated 03/02/2011 11:29:43 Hawaiian Standard Time, lkurisaki@kimurainternational.com writes:

> Dear Mr. Clarry,
>
> Thank you so much for your extremely informative and thoughtful e-mails. We appreciate your taking the time to share your knowledge and ideas. I forwarded your first e-mail to our project team (including the County Parks and Rec folks, and our archaeological/cultural consultants) and will do the same with this one. I will also include a copy of your e-mails in the Final Environmental Assessment.
>
> I hope you are able to attend the public meeting next Wednesday (2/9) at Waimea Middle School. Thank you for your support of this project.

Aloha,

Leslie

Leslie Kurisaki

Kimura International, Inc.

1600 Kapiolani Blvd., Suite 1610

Honolulu, Hawaii 96814

Phone (808) 944-8848

Fax (808) 941-8999

From: ClarrySF@aol.com [mailto:ClarrySF@aol.com]
Sent: Thursday, February 03, 2011 11:14 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail: schoolchildren

Dear Ms. Leslie Kurisaki,

Further to my previous email, this is to call for increased attention to the potential use of the proposed Waimea Trail by schoolchildren.

Many, perhaps most, schoolchildren on one side of Waimea Town attending schools on the other side have to travel in vehicles that pass through the high congestion point at the traffic light located at the junction of the Kawaihae Road and the Mamalahoa Highway.

Admittedly, I have not studied all the details in your draft EIS. But I wonder about access points to the proposed trail. It seems the proposed Waimea Trail could become a major almost daily pedestrian route through Waimea Town for schoolchildren. If access points are conveniently located, schoolchildren could connect with the trail and walk up or down to their schools. This would reduce vehicle traffic through the traffic light, especially during morning periods when citizens are on their way to school and work.

To illustrate, schoolchildren resident in Luala'i or anywhere on that side could walk through Waimea Nature Park to the trail and continue over to HPA, up to Parker School, down to Kanu O Ka Aina Charter School, down to the Montessori School (with parents/guardians), or up to activities at the two churches. They could also walk to play at Waimea Park, or across to friends' homes located on the other side.

In effect, this is already occasionally done, ie walking through the Waimea Nature Park and jumping across the stream, which is not advisable when it is infrequently full of water, following a trail through the trees and cutting through property where Long's Pharmacy is located. As it currently is, this is not a route most children would be allowed to walk without appropriate supervision. Lighting and other safety features also need to be considered.

Aloha,

Stafford Clarry

165 Halai St.

Hilo, HI 96720

808.990.3155

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Stafford Clarry
165 Halai Street
Hilo, Hawai‘i 96720

Dear Mr. Clarry:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mails to Leslie Kurisaki and the project team on February 3, 2011 providing a wealth of historical information about Waimea, Waikoloa Stream, and the people, places and events connected to this project. This information has been shared with the Department of Parks and Recreation, the Mayor's Office, the Waimea Trails and Greenways Committee, and the project's cultural and archaeological consultants. Hopefully, much of this fascinating history can be shared with the community through interpretive displays or signs along the trail.

We thank you for attending the community meeting on February 9, 2011 and for your February 21, 2011 e-mail noting your observations. We especially appreciate your taking the time to review the Draft EA and provide suggestions for improvement. Copies of your e-mails will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Komata, James [JKOMATA@co.hawaii.hi.us]
Sent: Monday, February 07, 2011 2:56 PM
To: lkurisaki@kimurainternational.com; glennk@kimurainternational.com
Subject: Fw: Cost to Great Benefit too Few

FYI
James Komata, Park Planner
From my BlackBerry

From: Nathalie Santos
To: Komata, James
Sent: Mon Feb 07 08:28:52 2011
Subject: FW: Cost to Great Benefit too Few

FYI

From: Cynthia L. Morse, CPA [mailto:finance@cmorse.com]
Sent: Friday, February 04, 2011 4:16 PM
To: 'Alex'; 'Pete Hoffmann'; parks_recreation@co.hawaii.hi.us; 'Honma, Clayton'; 'Fitzgerald, Robert'
Cc: mountainroadcycles@gmail.com; 'Fabienne Bisaro'; 'whoa'; 'Jessica Salerno'; 'Laura Dierenfeld'; 'John Simmerman'; 'Clem Lam'; 'Kareen'; 'James Bell'; 'Gretchen Van Der Heyden'; 'Katherine Cross'
Subject: RE: Cost to Great Benefit too Few

Pete, Bob and Clayton,

I too support the Waimea trails and Greenways project. For all the green space around Waimea, far too little land is accessible for walking or hiking, activities that our government would be wise to support. In his book, Thrive, Author Dan Buettner found that cities that offer easy access to green spaces, encourage bicycle riding, and limit development in places such as San Luis Obispo, California have notably happier residents than other communities. SLO requires new offices spaces to provide showers for cyclists and they've banned fast food within city limits, initiatives that have resulted in a healthier population and reduced traffic.

I also very much support the ban on plastic bags. The cheap price of plastic doesn't account for its negative effects on the environment and wildlife. I regularly pick up 5-6 plastic bags on my daily walks. We rely on government to regulate free-market failures. People will adjust to living without free plastic bags, but not unless they are either 1) banned or 2) forced to pay a fee commensurate with their true costs. I believe you'll find enterprising solutions to the ban on plastic bags that may even stimulate the local economy.

Please support Waimea trails and Greenways project, and the ban on plastic bags.

Cynthia Morse

Cynthia L. Morse, CPA
P.O. Box 6457
65-1120 Opelo Rd. Ste. A11
Kamuela, HI 96743
Tel: 808.885.4829
Fax: 866-527-5336

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Cynthia L. Morse, CPA
P.O. Box 6457
65-1120 Opelo Rd., Suite A11
Kamuela, Hawai‘i 96743

Dear Ms. Morse:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail sent on February 4, 2011 to the County Department of Parks and Recreation in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Freddy Rice [frcattlecompany@gmail.com]
Sent: Thursday, February 10, 2011 1:00 PM
To: lkurisaki@kimurainternational.com
Subject: comment f

Aloha Mr. Kimura, I'm sending my comments from the meeting last night at Waimea middle school in reference to Ke Ala Kahawai o Waimea project. We have a long term lease that the trail will go through.
This is the largest section of the trail. No one from your office has ever contacted us to see what needs to happen to protect our cattle herd and the people on the trail as they go through our ranch. We found that disappointing. Please make note in your minutes from the meeting. Regards Harold "Freddy" Rice

Leslie Kurisaki

From: Freddy Rice [frcattlecompany@gmail.com]
Sent: Friday, February 11, 2011 9:27 AM
To: Leslie Kurisaki
Subject: Re: Waimea Trails and Greenways

Thank you for your response:

I will be available almost anytime after the first of March.

The area that you have marked through the state lands is in my pasture lease with the state. Under the lease agreements I am not allowed to simply give permission for people not part of my operation to enter for public use, nor is the state able to do the same.

Should the state and I agree that a certain portion of my lease can be with drawn for public use there is the question of secure fences and liability.

The proposed trail is exactly on the same line that the DHHL has propose to put the fence separating my lease from their development.
You better make contact with them as they were surprised to learn of your proposal on their boundary.

There is a major issue to be addressed concerning animals. I have loss over 60 head of cattle from dogs the pass three years. Any dog that gets on the property have been and will be killed by USDA Predator Control people.

Consideration should be given to the plastic bag problem from the dump.. When ever there is a strong wind, which is frequent, plastic bags in spite of the county's best effort line up thick on my fences.
The county has been good about going in with a crew and cleaning up the bags. It is a never ending problem. The smell from the dump could be a problem with the prevailing trade winds.

We will have to consider the disease aspect of horses from who knows where on the property.

I believe we can solve these issues fairly easily. However, no one is trespassing on my lease until they are resolved.

Personally, while I support the concept, I am against the use of government funds for a recreational project that only a very small part of the people who live in Waimea will use. There are many real life needs for funding. With the National and State debt, a feel good.
non income producing resource using project for basically resource users is poor use of government money. Sincerely Freddy Rice

On Thu, Feb 10, 2011 at 5:36 PM, Leslie Kurisaki <lkurisaki@kimurainternational.com> wrote:
> Dear Mr. Rice,
>
>.
>
> Thank you for your e-mail and your comments last night. We sincerely
> apologize for not contacting you to date, and would certainly like to
> meet with you to discuss the issues you raise. We have walked the

> entire route with Clem and Leningrad and have seen your leased area,
> but would like to talk to you about how the trail could affect your
> operations, and how to mitigate these effects.
>
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>
> We can come to Waimea to meet anytime after next week—the week of
> February
> 21 is open (any day except Thursday 2/24), as is the following week
> (first week of March).
>
>
>
> Please let us know a convenient time and place and we will be there.
> We look forward to meeting with you.
>
>
>
> Aloha,
>
> Leslie
>
>
>
> Leslie Kurisaki
>
> Kimura International, Inc.
>
> 1600 Kapiolani Blvd., Suite 1610
>
> Honolulu, Hawaii 96814
>
> Phone (808) 944-8848
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> Fax (808) 941-8999
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> -----Original Message-----
> From: Freddy Rice [mailto:frcattlecompany@gmail.com]
> Sent: Thursday, February 10, 2011 1:00 PM
> To: lkurisaki@kimurainternational.com
> Subject: comment f
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>
>
> Aloha Mr. Kimura, I'm sending my comments from the meeting last night
>
> at Waimea middle school in reference to Ke Ala Kahawai o Waimea
>
> project. We have a long term lease that the trail will go through.
>
> This is the largest section of the trail. No one from your office has
>
> ever contacted us to see what needs to happen to protect our cattle

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Freddy Rice
PO Box 98
Kamuela, HI 96743

Dear Mr. Rice:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mails sent on February 10 and 11, 2011 commenting on this project, and for meeting with us and representatives of the Waimea Trails and Greenways Committee on February 21, 2011.

At the February 21 meeting, you noted your primary concern was potential liability as a result of a public trail going through your leased land. You indicated that you had no objection to the trail, but wanted blanket liability coverage in the event that someone is injured or trespasses onto your property. Our understanding is that private owners and lessees are held harmless when their lands are used for a public purpose such as a trail (per HRS 520-4, Landowners' Liability), but this issue needs further follow-up between the County and the State, and sub-lease agreements may need to be executed. In addition to liability issues, you also expressed concern that the development of the trail does not cause your lease to be revoked in the interest of public benefit.

The notes from our meeting were e-mailed to you on March 9, 2011 and approved by you on March 10, and have been forwarded to the County Department of Parks and Recreation. The Final Environmental Assessment and minutes of our meeting will become a permanent record of the issues you raised. When development of the path reaches your property, your concerns will need to be addressed in whatever agreements are made to use your leased land.

Thank you for your cooperation. A copy of this letter will be included in the Final Environmental Assessment. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President
cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: HOELIKE@aol.com
Sent: Thursday, February 10, 2011 11:16 PM
To: c.lam4@hawaiiantel.net; lkurisaki@kimurainternational.com; glennk@kimurainternational.com
Cc: jkomata@co.hawaii.hi.us; rcommand@co.hawaii.hi.us; rfitzgerald@co.hawaii.hi.us; david-hilo@hawaii.rr.com; Pat.phung@dot.gov
Subject: Re: Waimea trails and Greenways

Hi Folks,

Below is an e mail that has been making the rounds and when it mentioned my name, I responded and am forwarding a copy to you all.

Leningrad

Aloha All,

I would prefer to not respond to the below e mail. However, being that my name is mentioned in an accusatory way implying that I have prior refused to compromise, I feel an obligation to set the record straight.

I have had many discussions with Carol Hendricks, Ken Block, and Mary Kitchen on issues concerning the trail. In most of those situations, I was interested in hearing what their concerns were. On some occasions, I have tried to explain, as I understood, why some proposals are as they are. I have never felt that Ke Ala Kahawai O Waimea plans were already completed and decided. The trail surface being concrete was not a decision I supported but one suggested by others who have worked with trails and the maintenance requirement that follows. I have never felt that the above people who I have had conversations with were unreasonable and sure hope that they in turn never thought that of me. I have always felt that we shared the same interest and that being, our community.

In reference to the eucalyptus robusta trees, I have never trusted those trees due to personal experiences. I have openly expressed my dislike for those trees but have never campaigned for their destruction. On three occasions I witnessed the death of people killed from the falling branches. On two occasions, the men were killed while the wives were sitting in the car with them. On one occasion, the wife was in the car with her daughter and saw the man killed . Because of those experiences, I never take my wife or grandchildren walking on the trail that goes between the eucalyptus trees by the Catholic church or the Carter center.

On the issue of riparian destruction, I have lived in Waimea since 1968 and on every occasion that flooding has caused damage, it was because of stream blockage. I have worked very hard cleaning the stream blockages in the Nature Park, above the Nature Park and below the Nature Park. The trail will allow the public to see the stream condition on a regular basis respond as needed to prevent damages caused by flooding. One of the most severe stream blockages that had been in place for at least 20 years was just cleared by us, the trail volunteers. There still remains a number of fallen trees in the stream that remain as potential blockages do be dealt with in the future.

On break away bridges, the subject has been discussed many times in the last few years. It is my opinion that it is too soon in the planning stage to conclude that a break away bridge would better serve the purpose of stream crossings as compared to box culverts or regular span bridges.

In reference to the statement:
"Leningrad, it is about time you have shown some interest in compromise"

I have always understood that we are in a process of gathering information and that the conclusions will follow as the facts are realized. It was not I who organized an opposition group to try and stop the trail at the last meeting. Fran Tabor says that she is most willing to hear what I have to say. The fact is that I am only one in a sea of supporters and each of them has as much of a say as the next person. This is NOT my trail. I am positive of the support based on our ability to obtain the volume of volunteers and the free use of equipment when we need them. I am contacted almost daily by others saying that they are willing to help whenever we need help.

Now let me tell you why I support the trail.

I was born and raised in Kau, Hawaii. My mother was born and raised in the Waimea area where her family remains to this day. As a child, we made frequent trips to Waimea and with my cousins, I explored the Parker Ranch pastures and especially our favorite location, the Waikoloa Stream. I returned to Waimea in 1968, married and soon had children. I took my children exploring in all of the secrete places I experienced as a child. As the town's population grew, I saw fences go up with No Trespassing signs attached. Soon, even the Parker Ranch gates were locked with signs threatening arrest and large fines for those who dare to violate. It broke my heart to see this take place.

I watched the Sandalwood subdivision erect the earthen barrier along the Kawaihae Road, then saw them place a wooden fence on that barrier and then vegetation which completely blocked the once priceless view of Mauna Kea and Mauna Loa with the Puu Opelu home of Richard Smart in the foreground. MKBH Chef Blum was one of a few people who experienced that majestic view from Hale Kea, the former A. W. Carter residence. As a Police Officer, I witnessed hundreds of people taking pictures of this priceless view. That priceless view has been forever removed from public enjoyment.

If approved and completed, the Ke Ala Kahawai O Waimea will forever protect and preserve that sliver of land along the Waikoloa Stream that affords a reduced version of that lost view for all to enjoy. It will allow the young and aged, old timers and visitors, strangers and residents to enjoy the beauty and openness of what once was the inviting call that lured settlers to this part of the island. Our towns history is not locked under the roofs of huge mansions or in the fenced yards of petty selfish individuals. Our towns history is in the Water that flows from the hills of PuuKapu in Waikoloa Stream. Installing Ke Ala Kahawai O Waimea will allow us to retain that segment of our history and allow for others to experience and see a piece of Waimea that few have seen or even realize that it exists.

WOC has the goal to keep Waimea Clean, Green, and Beautiful. Ke Ala Kahawai O Waimea can be an extension of the Nature Park. About a half of it can be Clean, Green and Beautiful. The second half can only be Clean and Beautiful, due to the dry terrain that it traverses being Green may be too much of a task.

I would now like to take this opportunity and ask you for your willingness to support the concept of the trail and to work with us in addressing the concerns that have been raised. Please send your comments before February 21, 2011 to:

County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720
Attn. Mr. James Komata, Park Planner

With a copy to:
Kimura International
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814
Attn. Ms. Leslie Kurisaki

Or you can send comments via e-mail to:

lkurisaki@kimurainternational.com

Thank You Very Much.

Leningrad

In a message dated 2/9/2011 4:01:36 P.M. Hawaiian Standard Time, drfrantabor@gmail.com writes:

> Aloha, In no way can I condone the destruction of the riparian buffer zone along the Waikoloa Stream that is in direct contradiction to Best Management Practices under the U.S. Environmental Protection Act and the Hawaii State Best Management Practices for Stream Management Zones. Destruction of heritage trees and the riparian buffer zone leads to increased flood risk and soil erosion that leads to property damage and possible personal injury. I cannot condone what has already been destroyed.
>
> Further, I cannot accept a "mega highway path" of 10-12 feet wide, when this can be less wide with the use of ATV mini-ambulances. ATV mini-ambulances can cross standing flood waters that a full-size street ambulance cannot. Reducing the path to 8-10 feet will save millions in construction costs. Also, I cannot support a mega concrete bridge next to my house that would make my house unsellable. In 2010, I was in contact with the National Park Service who uses wooden/fiberglass breakaway bridges widely in the national parks. I also have the name of the supplier who sells these bridges to the park service. Breakaway bridges are also used in Boulder Colorado with great success. Using breakaway bridges could save hundreds of thousands of dollars in construction costs.
>
> Leningrad, it is about time you have shown some interest in compromise. I am most willing to hear what you have to say. However, I have done my homework and I am very knowledgeable on this subject. I hope you will listen to my ideas with an open mind.
>
> **FYI, I am not opposed to multi-use paths. However, I am opposed to this path in its current proposed location and route.** In my younger years, I was an avid bicycle rider and belonged to a bicycle touring group. However, I want this path built in an appropriate location, with proper environmental protections, and at a cost that is not out of line with its intended use.
>
> Fran

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Leningrad Elarionoff
PO Box 1737
Kamuela, Hi. 96743

Dear Leningrad:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mailed comments in support of this project. Your comments will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Kiyoshi Najita [kiyoshi@bigemptyfield.com]
Sent: Friday, February 11, 2011 8:02 AM
To: lkurisaki@kimurainternational.com
Cc: c.lam4@hawaiiantel.net
Subject: {Released} Proposed Waimea Trail

Aloha,

I am writing in support of the proposed trail in Waimea. I have lived in Waimea for sixteen years and, as a teacher at Parker School, have led groups of students participating in numerous Trails and Greenways projects, including work on our lovely nature park. As an avid bicyclist, I also support the development and expansion of the trial.

As charming as Waimea is, it lacks a pedestrian culture. Any avenue for reducing auto traffic and encouraging more people to encounter one another in a healthy, outdoor setting must be encouraged. As a member of a family with four generations from the Big Island, I have seen our beautiful natural spaces chopped up into house lots and office buildings for decades. Preserving and enhancing one of our most distinctive natural features is commendable. The stewards of this project are experienced architects and engineers with an abiding aloha for our natural resources.
I am confident that all can work together to serve the mutual benefit of all members of the community.

>From a business standpoint, the Big Island is rapidly becoming an authentic eco-tourism destination, but Waimea remains something of a stopover point for most visitors. A trail would attract tourists interested in exploring beautiful natural spaces and then lingering a while longer to shop and dine.

I have seen this project languish in the earliest stages of its proposal for many years now. Please consider these words of support for this desirable improvement to the Waimea community.

Sincerely,

Kiyoshi Najita
Parker School English Department Chair

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Kiyoshi Najita, English Department Chair
Parker School
65-1224 Lindsey Road
Kamuela HI 96743

Dear Mr. Najita:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail sent on February 11, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Phyllis Tarail [ptarail@hawaii.rr.com]
Sent: Friday, February 11, 2011 6:37 AM
To: lkurisaki@kimurainternational.com
Subject: Support of Waimea Trail & Greenway

Aloha,

I am a resident of Waimea living in the Luala`i development--a short walk from the Waimea Nature Park with access to the currently open portion of the trail. My husband and I walk in our development, into town or on this trail every day and we are excited about the prospect of having a beautiful, longer walk along the Waikoloa stream available to us.

I write this email in support of the Waimea Trail and Greenway and you may use my name as a supporter.

Phyllis Tarail
67-1292 Pua`ena St.
Waimea
769-4490

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Phyllis Tarail
67-1292 Pua ʻena Street
Waimea, Hawaiʻi 96743

Dear Ms. Tarail:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail sent on February 11, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawaiʻi County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: James Bell [bellj012@hawaii.rr.com]
Sent: Friday, February 11, 2011 8:49 AM
To: parks_recreation@co.hawaii.hi.us
Subject: Waimea Trails and Greenways Draft Environmental Assessment

Dear: Mr James Komata, Park Planner

I'm writing you this letter to add my support to the Draft EA for the subject trail. Please add this email to the draft EA showing my support for the trail. I have supported this trail for the last 12-1/2 years, spending many a weekend helping to push his along. I have a teeshirt that says 'I Worked' on the front with a print of the trail on the back. It is a favorite of mine.
I believe that it has many supporters in Waimea. Please do all you can to make this a good project.

James Bell
PO Box 437202
Kamuela, HI 96743
bellj012@hawaii.rr.com

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. James Bell
P.O. Box 437202
Kamuela, Hawai‘i 96743

Dear Mr. Bell:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail to James Komata of the County Department of Parks and Recreation on February 11, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Kristin Delgado [alohadelgado@hawaiiantel.net]
Sent: Friday, February 11, 2011 9:31 AM
To: lkurisaki@kimurainternational.com
Subject: I fully support the Waimea Trail and Greenway Project

Aloha Leslie Kurisaki,

I am emailing you today to show my support of the Waimea Trail and Greenway Project. Born and raised here in Waimea, I have seen the access to trails around Waimea restricted.

I am now a mother of two, and feel that we need this Trail and Greenway Project. I fully understand the project and support it. The keiki of Waimea need more places to ride their bikes, hike, walk. That is lacking right now. As a mother trying to get back into shape, I struggle with finding places to run while pushing my jogging stroller.

Waimea is a wonderful place to live. It's a great place for families. The Waimea Trail and Greenway Project will make it even better. I am confident of this. Thank you so much for your time.

Sincerely,
Kristin Delgado

Leslie Kurisaki

From: Mark Modeen [mmodeen@hawaii.rr.com]
Sent: Friday, February 11, 2011 9:59 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail & Greenway Support
Attachments: Waimea Trail & Greenway - Myths & Realities.pdf

Leslie Kurisaki,

I am in support of this Project. Please review the attached "Myths & Reality" for a more accurate picture of the issues surrounding this Project. Please support this Project.

Thank you.

>Mark Modeen

Myths and Realities of the Waimea Trail and Greenway Project

Myth #1: The County will spend $18 million to construct the trail.

Reality: The trail can easily cost the county nothing and put more local people to work than even the $35 million, 1.7 mile Ane Keohokalole Highway project now being built in Kona.

To suggest the County would fund this entire amount is not accurate. The $18 million figure is the estimated cost to build all three phases of a five mile streamside trail, likely spent over a very long period of time. The cost is a reflection of how hard the committee has worked to make sure the trail was the best fit for neighboring land owners by accommodating their request to have the trail on one side of the stream or the other, necessitating many expensive bridges. If the Environmental Assessment is accepted by the Federal Highway Administration, the project would be eligible for federal transportation funds that Congress has mandated states spend on trail projects like the Waimea Trail and Greenway. On Kauai , a six-mile paved trail is now complete with $0 of county funds because the required local matching funds came from the value of land donations and volunteer hours. Further, more local jobs will be created by a trail project like this one than a large highway project, due to the labor-intensive land clearing, trail surface work and landscaping required to build a trail as opposed to the transplanted construction crews from O'ahu, expensive equipment mobilization and massive quantities of shipped-in materials necessary for highway construction. While a highway project will have a select few people driving Caterpillar D-9's or other large equipment, a more human-scale trail requires concrete being poured by local contractors into forms placed by hand, native plants going in the soil by local landscapers and hand clearing by local laborers. This is not meant to disrespect the need for professional crews, roadway connectivity or the importance of the Ane Keohokalole Highway, or suggest that local workers are not being used on this highway project. Rather, this information is trying to provide some perspective on how the money required to build the trail will be spent, and the job benefits this funding can provide our Big Island workforce.

Myth #2: Peoples' concerns are not being heard.

Reality: The consultant, community and the county have been exemplary in their efforts to reach out and listen to everyone and incorporate those concerns into the Environmental Assessment process.

The Waimea Trails and Greenways Committee meets every Monday at 5pm to discuss the trail and these meetings are open to the public. The consultant and county have made their contact information available and hosted community meetings to air concerns. Sadly, the vocal minority opposed to the trail have unfairly accused the EA

process of being biased and secret which seriously jeopardizes the ability of the EA process to be completed and seriously threatens the acceptance of the EA by the Federal Highway Administration. All this ends up doing is jeopardizes the County's ability to attract federal funds sitting there unspent in state transportation coffers. Tragically, the State of Hawaii Department of Transportation recently gave back $4.5 million in federal Transportation Enhancement (TE) funds specifically set aside for trail projects like this one due to lack of demand from the counties. Think of the jobs that could have been generated from that money we lost.

Myth #3: The trail will be like the "H-3 freeway" through the Waimea community.

Reality: The trail is designed to be a ten-foot wide meandering Shared-Use Path, also called a multi-use pathway, designed according to professional engineering standards to allow for two people to walk side by side in casual conversation while someone in a wheelchair, riding a bike, pushing a baby jogger or walking their dog may calmly pass in the other direction.

The civil engineering profession has learned over several decades how to build trails that people will enjoy in the 21st century. As designed, the trail will be able to accommodate everyone, including those who enjoy life from the seat of a wheelchair to a child riding their bicycle to school to a an elderly couple walking their dog or a mother getting exercise with her child in a baby jogger. The trail will follow the natural topography and curves of the Waikoloa Stream in a way that allows for bidirectional travel; that is, the ability for people to pass each other going the opposite direction, whether on bike, wheelchair, foot or stroller. This is a standard that trails all over the country are built to and that will be the safest and most enjoyable for everyone who is using the trail.

Myth #4: The trail will cause flooding, invite crime, trespassing and threaten the value of people's homes.

Reality: The Waimea Trail and Greenway will make the Waikoloa stream corridor safer, more resilient to flooding, a place of pride for the community, enhance Waimea's local economy as well as provide greater mobility choices for our most economically disadvantaged citizens.

The Waimea community has in many ways turned their back on the Waikoloa stream by closing off public accesses to it and generally neglecting the increasingly dangerous build up of dead trees and bushes in the stream bed, which may have lead, in part, to the devastating flood of 2004. It's now common to see graffiti and illegal dumping along the portion of the stream hidden behind the KTA shopping center. By building a trail along the stream, much needed eyes and ears of responsible Waimea citizens will be there to enjoy and reclaim this forgotten, beautiful corridor through the community. By providing public access, the trail will encourage citizen surveillance of activities along

the route and enable citizens to report suspicious or illegal activity to police. The trail affords greater access to the stream to clear out dangerous debris on a more regular basis so that when the next big rain storm comes, the water can flow freely. Bollards will be placed so that motorized traffic cannot enter the trail. Further, the easements secured by the County enable the trail to be build down near the stream and affords a wide area for planting trees and other privacy screening that strategically block the sight of homes that are located far up above the trail, while preserving nearby homeowners' views of the mountains and oceans. There are numerous studies pointing to tremendous economic benefits to communities with trails, including increased real estate values and growth of local businesses. Places like Boulder, Colorado consistently rank in the top five best places to live year after year in part due to expansive trail networks. Finally, the Waimea Trail and Greenway goes right along two public housing apartment complexes where many families call home. The trail offers these families a mobility alternative to the tremendous economic burden of car ownership by providing a safe, easy and convenient walking or bicycling access to school, shopping, work and parks.

Myth #5: The trail will cause 378 trees to be cut down.

Reality: Only a select number of trees will be cut down to build the trail while new ones are planted, and every effort will be made to preserve trees that serve an important purpose for shade, ambiance, privacy and erosion control.

Trees are a critical element to the Waimea Trail and Greenway project. Tree removal will be very selective and be limited as much as possible to the trees that are dead, dying or that a trained arborist recommends may be safely removed to accommodate the trail without threatening the integrity of nearby trees. The trail may be split around big trees and the corridor may be replanted with more appropriate trees species and other landscaping as part of the construction of the trail and beyond that time by community members.

Myth #6: It's obvious that everybody wants this trail so I don't need to speak up in support.

Reality: The few opponents of the trail have falsely accused the consultant tasked with a fair and transparent Environmental Assessment process of a biased "built in agenda" that unnecessarily alarms people and seriously threatens the future of this trail that of other trail projects around the island. *It is imperative* that the vast majority who support this trail and others who want to see similar facilities in their community speak up and let their voice be counted.

How can you help make the Waimea Trail and Greenway a reality for Waimea and template of excellence for other Hawaii Island communities?

Please **send your comments** in support of this trail **BY FEBRUARY 21ST** to:

EMAIL: Leslie Kurisaki, Consultant at: lkurisaki@kimurainternational.org

LETTER: County of Hawaii Department of Parks and Recreation
Attention: James Komata, Park Planner
Aupuni Center, 101 Pauahi Street, Suite 6
Hilo, Hawaii 96720

with a copy to,

Kimura International
1600 Kapiolani Blvd. #1610
Honolulu, HI 96814-3806

Leslie Kurisaki

From: Derrick Salmon [salmon@cfht.hawaii.edu]
Sent: Friday, February 11, 2011 10:43 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways trial

HI

I am a long time resident of Waimea, and continue to work here.
Although I currently live in Kohala, I have lived in Waimea for 25 years up to a few years ago, and have followed the development of this trail.

I am completely supportive of the trail and its development. It will add greatly to the quality of life for the those in the community, and find many, if not most, of the arguments against it rather contrived and alarmist - and most can be mitigated to a large degree.

Please back this community-led effort to add a trail that will reduce on-road traffic, increase pedestrian and cycle safety and provide a picturesque path through Waimea that will greatly enhance the natural experience so many of us value in living and working here.

Derrick Salmon

Leslie Kurisaki

From: Gary West [garymwest@gmail.com]
Sent: Friday, February 11, 2011 12:09 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail & Greenway

I am in support of the Waimea Trail & Greenway. I am also in support of future projects like this one.

Gary West

Leslie Kurisaki

From: Carl Lam [clam96743@hotmail.com]
Sent: Friday, February 11, 2011 12:18 PM
To: lkurisaki@kimurainternational.com
Subject: waimea trails and greenways feedback

To whom it may concern,
Being a current Architecture Student and aspiring Architect, I completely support the Waimea Trails and Greenways project. It will allow the local residents and the visiting public to connect with the lush landscape that our beautiful town has to offer. It will also allow pedestrians to be able to connect from residential areas to the center of town without using the automobile. Having a Green trail promotes a healthy lifestyle and will also provide a place for people to run and exercise without being side by side with a 10inch lifted turbo diesel truck. Designing for a sustainable future starts now!

Best Regards,

Carl Lam

February 11, 2011

Mr. Robert Fitzgerald
County of Hawaii
Director Parks and Recreation
101 Pauahi Street Suite 6
Hilo, HI 96740

Re: Waimea Trails and Greenways Draft Environmental Assessment

Dear Mr. Fitzgerald ,

I would like to voice my support for the Waimea Trails and Greenways project. This singular project could have the biggest positive impact on Waimea in so many ways.

As a Waimea resident, I know that the only places one can walk or ride a bicycle are along the road ways. Over the years we have found more and more restrictions on access through Parker Ranch, White Road trail to Waipio Valley and Sherwood forest. As a bicycle commuter, I must ride along the highway with cars and trucks that are going 35 to 55 mph. A separate transportation corridor as described in the DEA would give a large number of people who live in Waimea, as well as visitors, a chance to enjoy the beautiful environment of Waimea without the noise and pollution of automobiles, trucks, power lines and pavement.

The Waikoloa Stream runs through the middle of town and is not seen or appreciated by the public at large unless one is lucky enough to live right on it. The trail's location next to the stream would make this asset of Waimea accessible. Flooding along this stream is caused by the numerous trees that continuously fall and drop stream clogging branches into the stream bed, catching debris as the water moves down stream and forming dams that cause the water to overflow it's banks. With awareness and constant monitoring of the stream by trail users, these obstructions can be removed before they cause water backups and flooding. This has been demonstrated by the active trail committee and their volunteers who have donated time and energy to clear the stream bed.

By providing a safe, scenic bicycle and walking route, this trail would promote the "green" concept of living offering people an opportunity of reducing their carbon footprint by walking or biking rather than using their automobiles. This reduces the dependence on oil for our only means of transportation.

Our community built the North Hawaii Community Hospital, a world class facility using the latest in health philosophy as well as equipment. Earl Bakken's vision of a healing center in Waimea encourages people to live a healthy life style. This trail can serve as a facility that gives people the opportunity to integrate exercise while going about their daily lives.

In this tough economy, bringing available federal money into our depressed construction industry

would provide many local jobs. This is a trail that cannot be out sourced, it has to be built on site and could use local venders, workmen and contractors to complete the work. Once built, the trail would draw users in the growing eco tourism industry and support local businesses such as the bike shop, farmer's markets and local restaurants. Cost to the County would be minimal since the federal matching requirements can be satisfied using some of the generous land donations that have been made to the trail as well as in kind volunteer hours that have been donated to the trail.

There are concerns brought to the public meeting on February 9 by a vocal few. Because of these concerns, some called for a halt to this project. All of these concerns can be worked out if people are willing to work together and don't let their personal situation override the larger good this project will bring to the community aa a whole.

Please allow this worthy project to become a reality for the Waimea community.

Sincerely,



Clemson Lam

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Clemson Lam
Ms. Janet Lam
P.O. Box 1893
Kamuela, HI 96743

Dear Clem and Janet:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mailed comments in support of this project. Your comments will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Peggi [peggik@gmail.com]
Sent: Friday, February 11, 2011 9:36 PM
To: lkurisaki@kimurainternational.com
Subject: Fwd: I support the Waimea Trails and Greenways

> Dear Ms. Kurisaki,
> I live adjacent to the preferred trail alignment of Ke Ala Kahawai O Waimea. I support the development of a paved path. I work in Waimea and walk to work. The path will provide an alternate route to my workplace one mile away. When I first walked to work in 1994 Mamalahoa Hwy was a two lane road through the center of Waimea. Mamalahoa is now five lanes wide. Traffic travels faster than ever before.
>
> I've worked on the trail committee since 1995. My fellow committee member got involved so he could have a place to ride bikes with his nine year old son. That boy is now a young man.
>
> We have tried to do and follow every instruction from various government offices over the years to achieve the goal of building a multi-use trail along the Waikoloa stream. The requirements keep changing like a moving target. I am hopeful this EA will finally meet the requirements of funding agencies so that we may move forward with the trail before another 15 years passes by.
>
> Sincerely,
> Peggi Kamisato

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Peggi Kamisato
P.O. Box 2279
Kamuela, HI 96743

Dear Ms. Kamisato:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail on February 11, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: HOELIKE@aol.com

Sent: Friday, February 11, 2011 9:37 PM

To: HOELIKE@aol.com; c.lam4@hawaiiantel.net; lkurisaki@kimurainternational.com; glennk@kimurainternational.com

Cc: jkomata@co.hawaii.hi.us; rcommand@co.hawaii.hi.us; rfitzgerald@co.hawaii.hi.us; david-hilo@hawaii.rr.com; Pat.phung@dot.gov

Subject: Re: Waimea trails and Greenways

Hello Again,

I am a member of both, the Waimea Outdoor Circle and the Waimea Trails and Greenways. I have been actively involved in both of these organizations for about ten years. I have only been a dues paying member with the WOC for about 5 years but have been actively working on the Nature Park Project beginning from their second work day.

Naturally, our conversations while working often includes the Ke Ala Kahawai O Waimea. Since that last meeting on February 9, in the cafeteria, I have been trying to recall all of the issues discussed and how to minimize the concerns that have been expressed. I admit to not possessing instant recall but will try to express some of the issues of concern and the possible ramifications.

Please understand that I AM NOT AN AUTHORISED SPOKES PERSON FOR THE WOC.

In one of the e mails I received last night, I was reminded that at one time the WOC was very supportive of the trail and that it was because it was presented and perceived to being "a trail." The Draft EA as presented the other night depicts the Trail as a concrete path similar to that of a 10' wide driveway and at one point referred to as a "straight as an arrow highway." While that description is plainly an exaggeration, that is the perceived impact it will have on the Nature Park and the intended ambiance in developing the park.

Let me explain. Waimea Nature Park in located in the heart of Waimea Town. The property sat there undisturbed for years, wild, tangled, and uninviting before being acquired by the Waimea Outdoor Circle to be transformed into a park. Today, it is organized, inviting, manicured, full of interesting native plants with some of them being rare and endangered. A lot of love and Labor, not to mention upkeep expenses for water, tools, equipment, buildings and numerous additional contributions have been voluntarily invested into the park.

Those of us who visit the park often, whether to do volunteer work or just to enjoy the park, witness the pleasure visitors experience while being there and, that in itself, confirms our dedication to maintain the ambiance. The WOC's goal to keep Waimea Clean, Green, and Beautiful is highly commendable. The Nature Park is a step beyond that. It is an effort to provide a heaven of tranquility within walking distance right in heart of a bustling community. On any given day and time, one can witness young lovers wondering hand in hand through the park. There will be friends sitting at the picnic tables in conversation while their children play on the grass or explore the stream. There will be groups sitting together sharing their meals while still others walk through on their way to the other side of town. Then there will be the occasionnal sit alone person with laptop computer silently at

work. The list goes on and on.

At the Feb. 9, meeting, Carol Hendricks, Park Chair, talked about the entry to the park. She asked for speed bumps to be installed at the entry so as to slow down the vehicles entering the park. That request is simple but that plea may have a deeper meaning related to the ambiance of the park.

Concrete has a very functional and practical use and purpose. We as Native Hawaiians have lamented the paving by concrete of our beloved islands for years however, the paving continues and paradise will soon be a concrete slab.

With that thought in mind, it could be that Ms. Hendricks, representing the WOC as chair of the Nature Park, in her own way was lamenting the approaching concrete slab and its cold, hard approach as it creeps parallel to the entry area to the park that has been set aside to be a place of tranquility in the heart of our town.

I cannot read her mind nor do I even hint to knowing what her intentions were when she made the request to provide an obstacle that would slow people down as they enter the park. The concrete path allowing for bicycles to speed through the area at 20 miles per hour may not be supportive of the ambiance in developing this park.

It is my suggestion that the team charged with the trails and greenway project look into the possibility of softening the presence of the concrete trail as it passes parallel to the Nature Park while remaining ADA compliant. Upon compiling a list of possible solutions, I suggest that the team meet with the WOC people and afford them a choice to of a more acceptable medium for the Park segment of the trail that will compliment and enhence the intent of the Nature Park as it passes by.

This softening effect may be conducive to preserving the section to the old Camp Tarara road featured on the cover of the EA. I believe that it is a fitting and proper tribute to incorporate the Camp Tarara road into the Trail. It will slow the bicycles down and cause those who utilize the trail to reflect on the thousands of men who gave their lives that we may have the freedom to exercise the process we are doing today.

If a lesser durable trail surface be used to border the Nature Park, a plus will be that access for maintenance purposes will be less difficult and may be worth the effort of maintaining harmony among the groups and the community.

Thank You For Your Time,

Leningrad Elarionoff
Waimea

Leslie Kurisaki

From: Jon Jokiel [jonjokiel@hotmail.com]
Sent: Saturday, February 12, 2011 7:52 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail

Aloha-

We need more trails for people on the big island not new highways. The Waimea trail will be used by the community to enjoy. We've got to get people out of thier cars and this is the perfect way for them to exercise and get places without their car.

Mahalo,

Jon Jokiel

Leslie Kurisaki

From: David L Kopra [dkopra@hawaii.rr.com]
Sent: Sunday, February 13, 2011 1:12 PM
To: lkurisaki@kimurainternational.com
Cc: CLEM LAM; Kris Kopra; MIKE KOPRA; Barbara Kopra
Subject: Waimea Trail

My name is David Kopra. I first visited Waimea on The Big Island in 1972, almost 40 years ago. My wife Barbara and I have lived here full time for 23 three years and raised our four children in this community. I cannot imagine having spent these wonderful years anywhere else.

I am compelled to write to express my Whole Hearted support for the Waimea Trails and Greenways project that is being developed here in Waimea along the Waikoloa Stream. This Trail is The Most Fantastic asset we could possibly provide for all our community today and for generations to come.

This is a unique opportunity for us to development the basic infrastructure that will tie our village together. This trail will provide a safe, natural park setting for our youth and all of us, to walk run and ride our way to a healthy environmentally conscious life style, as we commute through our daily lives.

I especially want to thank all the community members who have so graciously provider the needed easements and support to make this project possible. I promise you will not regret your support. Along with the justified pride in your generosity, property values will be greatly enhanced by being located on this trail. I wish I had a trail front house.

I am asking all my friends to please step up and embrace this project. Now is our chance to make our world a little better place. Show the kids how much we care.

ALWAYS ALOHA DAVID

Leslie Kurisaki

From: Randy Campbell [randyc@keck.hawaii.edu]
Sent: Monday, February 14, 2011 9:08 AM
To: lkurisaki@kimurainternational.com
Cc: Peggi Kamisato
Subject: Waimea Trail

To Whom it May Concern:

Waimea needs this trail.

It will provide a save corridor for kids to walk to school. Kids currently walk along the highway, within a few feet of heavy traffic. This is reason enough to build the trail but there are many more benefits that include:
Reduction of traffic,
Improved recreation with walking, running, cycling, horseback riding, etc.
Green space protection,
Quality of life,
Real estate value,
Use by both locals and visitors.

Many communities throughout the world have added trails and greenways to their infrastructure and there is an overwhelming body of evidence that speaks to the success of trail systems for improving communities.

I helped on the work day to clear the space for the small section of the trail currently in use. I use this very tiny amount of trail regularly. I very much support expanding the trail per the current plan and will actively work to develop it and maintain it. Please let this work go forward.

Sincerely,
Randy Campbell

W. M. Keck Observatory Astronomer
and
Waimea Country School Trustee

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Randy Campbell
W.M. Keck Observatory Astronomer
65-1120 Mamalahoa Hwy
Kamuela, HI 96743

Dear Mr. Campbell:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail sent on February 11, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Alex [alex@woodburyhawaii.com]
Sent: Monday, February 14, 2011 5:16 PM
To: lkurisaki@kimurainternational.com; Komata, James
Cc: Honma, Clayton; Fitzgerald, Robert
Subject: NEPA Assessment Waimea Trails and Greenways

Attachments: WTG Comments.pdf; ATT00004.txt


WTG
ıments.pdf (80


ATT00004.txt
(210 B)

Dear Ms. Kurisaki, and Mr. Komata,

Per the Request of Kimura International,

attached are my comments regarding the Waimea Trails and Greenways project:

February 13, 2011
County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720
Attn. Mr. James Komata, Park Planner

With a copy to:
Kimura International
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814
Attn. Ms. Leslie Kurisaki

Re: NEPA Assessment Waimea Trails and Greenways

Dear Mr. Komata and Ms. Kirisaki

The Waimea Trails and Greenways (WTG) project has consumed many members of this community for over a decade, it started out as an equestrian venture, to provide a safe path for horseback riders to travel through a community that was formerly a cart and buggy ranching town, but has in recent decades become dominated by motor vehicle traffic and traffic routes. Sidewalks in our community were omitted for decades in favor of grassy swales. Development and road widening have consumed most of these grassy swales, and pedestrian means of travel have largely been lost with recent roadways expansion. The WTG trail has provided many of us with an alternative to riding in a car or risking our necks on the road. The WTG vision has been recently adopted by many other members of the community including cyclists, walkers, runners, and organizations such as PATH People's Advocacy for Trails Hawaii and the Waimea Preservation Association. Work days have been organized with overflow turn out, and our community has come together around this concept of a simple trail to allow a different mode of safe transportation, and a different view of our town; a view of trees and streams, wildlife, and vegetation. I find it typical that there has been a recent effort by a select group of NIMBIs (Not In My Back Yard) to trounce the idea of this trail by an opposition consumed with project cost and motivated by the fear of change. So far, the public monies that I've seen spent on this project have been for the EA (which I support) but the effort, that has actually produced a working trail to date has been donated through community effort. Effort that myself and many many others have personally contributed to.

As my good friend Cindy point out recently, studies have demonstrated that communities that have trails, parks, and bike paths, and offer easy access to green spaces have notably happier residents than other communities. As I related in a recent email to my elected officials, and several members of the Hawaii County Parks and Recreation Office, I **FULLY SUPPORT** the Waimea trails and Greenways project. And for what it's worth, I vote and I pay a bucket load of property taxes. I'd like to see some of that tax money go specifically to this project and more of my tax dollars go to these types of projects in the future.

I run this trail nearly every morning with my dog, I walk it regularly with my family, I ride mountain bikes on it with friends, and I fully enjoy it. It makes our town a better place, and it is a much needed alternative transportation route.

Very Truly Yours,

Alex Woodbury
Kamuela Resident and WTG user

Leslie Kurisaki

From: Janet Lam [janetlam5@hotmail.com]
Sent: Monday, February 14, 2011 7:47 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways Environment Assessment--Comments

To: Leslie Kurisaki, Kimura International
From: Janet Lam, Waimea Resident
Re: Waimea Trails and Greenways Environmental Assessment

The people of Waimea on the Big Island are united in their concern for the well-being of the natural beauty of this unique town. The discussion of building a non-vehicular transportation route through the center of town along the Waikoloa Stream has aroused enthusiasm and well as fears regarding the impact the trail will have.

Having listened to the concerns about tree removal, stream destruction, crime, and the visual impact of a twelve foot wide trail, I urge the county to focus on the many benefits of this project to the Waimea community.

Several people at the community meeting testified that Waimea is rural and that a trail of this size will destroy the rural nature of the town. Personally, I find it hard to capture the rural sense that Waimea once had when I am sitting in one of 8 lanes of traffic waiting my turn to drive through the town's main intersection. I also wonder how we are to enjoy Waimea's rural setting now that the many places my family used to enjoy hiking are closed off as private land. Waimea currently has no places for people to walk legally aside from public roadsides and the feeling is not rural.

Yet we have a lovely stream bed meandering through the heart of town, we have public access rights to the land along the stream, and we have the possibility of providing non-vehicular access from many of Waimea's residential areas through town along this stream. Most people are not even aware of this stream and those who are know that much of the area is an impassable web of Christmas berry, fallen trees, and California grass. I urge you to acknowledge that constructing a trail along the stream will give the residents new opportunities to enjoy the rural natural setting, and will insure proper maintence and care of the stream which has long been neglected.

When the Catholic Church granted an easement for the trail. the priest at the time stated that he was eager to see a public trail which would reduce the criminal activities in the dense wooded area behind the Church. Indeed, this goal has largely been realized with the community construction of a walking path through this area.

When I moved to Waimea, tall eucalyputs and cyprus trees grew abundantly. Unfortunately many of the cyprus trees became diseased and died, many of the eucalyptus toppled in storms, and many trees were also cut as the town grew. In the heart of town, a remaining row of eucalpytus trees serves as a reminder of the WPA project in the 1930s where the federal government put people to work planting trees throughout the Kohala area as windbreaks. These remaining trees are now eighty years old. If it is true that Eucalyptus has a maximum life span of 120 years as members of the Waimea Outdoor Circle stated at the community meeting, we should expect to be losing these trees at an increasing rate whether a trail is built or not. In a forward thinking community, we would be wise to plan for a future with trees by planting trees now that are appropriate to the nature of a small town. This will happen as an added benefit to the Waimea trail project.

As both a regular pedestrian and a bicycle rider, I enthusiastically support the twelve foot wide trail. Each morning, I walk with a friend and I know that we easily span six feet as we walk comfortably side by side. If a bicyle were to pass us, the rider could move around us safely on a twelve foot wide trail. Likewise, two mom's with strollers would need eight feet to walk side by side.

I believe the word 'trail' has caused some confusion as we tend to think of a trail as a 3-4 foot wide wooded path. We have some of that now thanks to the coordination of community work days by the Waimea Trails and

Greenways Committee.
However, we would be very short sighted to make such a narrow trail as the permanent installation. I am certain that once this trail is built, members from every segment of the community will be using it, loving it, and feeling proud to have it in Waimea.

Please support this important project.

Leslie Kurisaki

From: Miles Mason [milespaints@gmail.com]
Sent: Tuesday, February 15, 2011 6:36 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail

Dear Sirs:

I writing in support of the stream trail project in Waimea.

As a long time resident of Kamuela/Waimea, and an avid runner and bicyclist, I feel that this trail is long overdue.

The lack of community parks, trails, bike paths, and outdoor physical fitness equipment such as sport courts, horizontal bars, parallel bars and the like in this town is unacceptable in this day and age.

It is amazing to me that public improvement projects in Waimea (such as the bypass road proposal under discussion for over 20 years now, or the Wai'aka Bridge upgrade) take so long to see action. This trail will benefit residents and visitors alike and should not fall into this pit of stalling and inactivity like the above mentioned projects.

Let's get this trail done!

Sincerely,

Miles M. Mason
808-238-0649

--
www.MilesTropicalArt.com

Leslie Kurisaki

From: Keawe Liu [kliu@hpa.edu]
Sent: Tuesday, February 15, 2011 10:57 AM
To: lkurisaki@kimurainternational.com
Cc: Clem Lam
Subject: Waimea Trail

To Whom it may concern,

I am writing to voice my strong support for the construction of a bike/walking/emergency access trail through Waimea town. The need for this trail is critical and immediate. Opposition is based on individual property values and individual dislikes – support is based on **community** needs and safety.

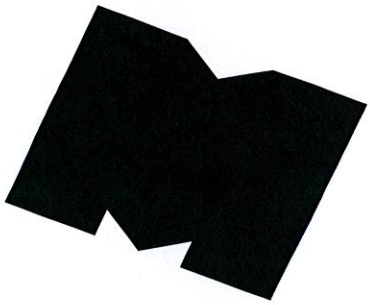
Waimea has inadequate roadways, with tiny and dangerous shoulders. Additionally, our town is in a bottleneck situation. There are nearly no alternate routes available for emergency facility access if one of the main roadways were to be blocked. The County should be concerned that due to negligence and the lack of adequate upgrades to infrastructure some tragic accident happens which leads to a death and subsequent litigation.

Our roadways, combined with the lack of safe routes for bicycles and pedestrians (no crosswalks West of Waimea Park or East of the Police station), should be a major concern for the County. Since the automobile bypass has been shelved (again), the only other way to reduce traffic and minimize congestion and danger to pedestrians and bicyclists is to build this path.

I have personally been run off the road by a motorist more than once, but luckily was never injured. Fix this situation before something horrible happens, and bring our town into the 21st century with smart planning for non-motorized transportation.

Aloha,
Keawe Liu

matthew pearce
design & webservices
65-1206 mamalahoa hwy. bldg 1 ste 1
post office box 6293 kamuela, hawaii 96743
808-885-6161 • 808-443-0032 fax • sysop@kamuela.com



County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720
Attn. Mr. James Komata, Park Planner

February 15, 2011

To Whom It May Concern:

I am writing to express my support for the proposed Waimea Trails & Greenways Project along Waikoloa Stream through Waimea. This project will be great for the community!

Sincerely,

Matthew Pearce

cc: Kimura International
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814
Attn. Ms. Leslie Kurisaki

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Matthew Pearce
65-1202 Mamalahoa Highway, Bldg. 1, Suite 1
P.O. Box 6293
Kamuela, Hawai‘i 96743

Dear Mr. Pearce:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter dated February 15, 2011 in support of this project. A copy of your letter will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

John B. Ray
65-1278 Laelae Road, Kamuela, HI 96743
808-937-2947
Email: jr@sunfuelshawaii.com

RECEIVED FEB 16 2011

County of Hawaii
Department of Parks and Recreation
101 Pauahi St, Suite 8
Hilo, HI 96720
Attn: James Komata, Park Planner

February 15, 2011

RE: Waimea Trails and Greenways Project

Aloha,

My name is John Ray and I am submitting testimony in support of the Waimea Trails and Greenways Project. I have lived and worked in Waimea for 35 years and served as President of the Waimea Community Association, Chair of the South Kohala Traffic Safety Committee and was a co-founder of the Waimea Preservation and Waimea Main Street Organizations.

I believe the trail project represents a unique opportunity for our community to create non-vehicular access away from arguably one of the most dangerous and congested traffic corridors on the island. That being said, I would encourage the adoption of more flexible surface standards to lessen the impacts on existing trees, neighbors, etc.

Thank you for the opportunity to comment,



John Ray

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. John B. Ray
65-1278 Laelae Road
Kamuela, Hawai‘i 96743

Dear Mr. Ray:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter dated February 15, 2011 in support of this project. A copy of your letter will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Mr. Robert Fitzgerald
County of Hawaii
Director of Parks and Recreation
101 Pauahi St. Suite 6
Hilo, HI 96740

RECEIVED
FEB 22 PM 3:10
PARKS & RECREATION
COUNTY OF HAWAII

Feb. 16, 2011

Dear Mr. Fitzgerald:

After attending the public meeting on February 9, 2011 at Waimea Elementary School cafeteria, I firmly support Waimea Trails and Greenways Program.

I live on Spencer Road which connects with Kapiolani, Lindsey and Nohenalu Roads. There are no sidewalks with adults and children walking on these roads. Walkers including parker School students always have to look for cars both ways and walk on the shoulder of the road which is not paved when a car passes by. Its a good thing we have so far Courteous drivers and Alert walkers.

Its just a matter of time when someone under the influence or not Paying attention will cause an accident.

I therefore strongly support the Waimea Trails and Greenways project to proceed as an area for the Waimea Community to have a Safe walking place.

Sincerely,
Thomas K. Sing
P.O. Box 6604
Kamuela, HI 96743

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Thomas K. Sing
P.O. Box 6604
Kamuela, Hawai‘i 96743

Dear Mr. Sing:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter of support dated February 16, 2011 sent to Mr. Robert Fitzgerald of the County Department of Parks and Recreation.

A copy of your letter will be included in the Final EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Deborah L. Chang
P.O. Box 202
Pa`auilo, HI 96776
February 16, 2011

Mr. James Komata, Park Planner
County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720

RECEIVED FEB 17 2011

Dear Mr. Komata:

SUBJECT: Comments on the Draft Environmental Assessment (DEA) for *Ke Ala Kahawai o Waimea* - Waimea Trails and Greenways

I attended the public meeting held on February 9 in Waimea, and there were a few vehement objections at the meeting that I want to comment on as well as make a few suggestions for the Final EA. Mahalo to County Parks and Recreation, the Mayor's Office, and the Waimea Trails and Greenways Committee for persevering in this initiative. Mahalo also to Glenn Kimura and Bob Fitzgerald for effectively managing the sometimes tense and emotionally charged February 9th meeting.

I grew up in Waimea and if someone had told me that 20+ years in the future, Waimea town would actually have traffic jams, I would have laughed heartily in disbelief! I mention this, because as we look at this greenway proposal for Waimea, we should be thinking at least 20 years into the future and imagining what Waimea will look like for our grand and great-grandchildren. Future generations will thank us for our foresight while we enjoy the pathway in our wheelchairs. I want to see Waimea retain its rural character as much as anyone, but opposing the greenway as being an inappropriate, urban facility fails to acknowledge that Waimea will surely change in the future. As Waimea grows to accommodate more residents and places of school and work, this greenway will only increase in value as a linear park, by enhancing the open space and beauty of Waikōloa Stream and connecting residents to the town center with a safer and quieter alternative to the main highway. One has only to look at the future plans of the Department of Hawaiian Homelands and Parker Ranch to see that many more people will be calling Waimea "home."

Hundreds of miles of greenways have been built in other states (Iowa, Minnesota, Wisconsin, California, Massachusetts, Oregon, North Carolina, Colorado, Maryland, Texas, Florida, ETC!). It was the "President's Commission on Americans Outdoors," appointed by President Reagan in 1985, that brought the word, "greenway," into common usage and reported that Americans were clamoring for more access into natural recreation corridors closer to their homes. Fears of increased vandalism, crime and erosion of property values have commonly been raised. The final EA should locate and review more recent studies that have looked into these issues. It is understandable that some residents and property owners along the proposed Waimea greenway express these same concerns. It is in everyone's best interests that the greenway be properly

designed, managed and secured. We should be learning from the experiences (and mistakes) of greenways in other states (and Kaua`i). Often the fears (of liability and crime) far exceed the realities. No public facility can be expected to be problem-free, and we don't stop providing public facilities because someone, someday, might damage something, commit a crime, or get hurt.

The final EA needs to clearly explain how funding of this greenway is planned to occur in increments; how federal funding has been the intent all along when designing it as a 10-foot wide, shared use path that would be partially wheelchair accessible and wide enough for bicycles & pedestrians; how the cost-share expenditure for the County could very well be minimal; how community involvement can reduce costs; and whether an interim, un-surfaced trail can be built and responsibly used while the community waits for federal funding to become a reality. The concerns people express about the cost of the greenway underscore the need for a more comprehensive explanation of funding alternatives and methods in the final EA.

Greenways and trails are commonly routed along natural drainage areas, manmade flood control projects and utility corridors (i.e., Big and Little Dry Creek Trails in Colorado) without exacerbating flood conditions and dangers. The reasoning is that these strips of land don't need to be neglected, ugly corridors and are potentially valuable for multiple purposes, including recreation, alternative transportation, wildlife habitat, scenic open space, etc.

As for tree removal, the arborist's tree risk assessment has been interpreted to mean that 357 trees will have to be removed to make way for the greenway. This is an unfortunate misconception. Clearly trees and other plants are a necessary part of the natural stream environment and essential to preventing stream bank erosion. There appears to be room for compromise in the design and construction phase where tree removal is concerned. At some point it will be necessary to agree on a definition of what people mean by a "heritage tree." Nevertheless, removal of decaying and hazardous trees is prudent, as is replanting. The greenway presents a special opportunity to replant with native species and to showcase native Hawaiian vegetation in a way that will complement the Waimea Outdoor Circle's *Ulu Lā`au* Nature Park.

Ke Ala Kahawai o Waimea is a rare greenway opportunity in Hawai`i with demonstrated community volunteer support. I worry that this opportunity will evaporate if we don't take advantage of it now.

Sincerely,

Debbie

cc: Kimura International

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Deborah L. Chang
P.O. Box 202
Pa‘auilo, Hawai‘i 96776

Dear Ms. Chang:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter dated February 16, 2011 to Mr. James Komata of the County Department of Parks and Recreation. We appreciate your insights and suggestions, particularly from the perspective of a life-long Waimea resident. The Final EA will include updated and expanded information on the impact of trails on property values, crime and vandalism. A discussion of the FHWA's Transportation Enhancement (TE) program and other funding sources will be included.

On June 15, 2011, the County, Imata and Associates (Increment 1 design consultant) and representatives of the Waimea Trails and Greenways Committee met with the Waimea Outdoor Circle to discuss their concerns regarding the removal of trees and general design and compatibility issues. The Final EA provides a summary of these discussions and mitigation commitments.

A copy of your letter will be included in the Final EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com. Thank you for your continued support of this project.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recr

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: aniko2@juno.com
Sent: Thursday, February 17, 2011 2:58 PM
To: lkurisaki@kimurainternational.com
Subject: In Support of Waimea Trails and Greenways

Leslie Kurisaki, Consultant,
kimurainternational

Dear Leslie,

I am writing in support of the Waimea Trail in your best alignment. It would be wonderful to make a complete trail

from the Clark Park to Church Row and beyond in Waimea. Glenn's presentation was well done and

the Environmental Study should be accepted and moved to design and construction phases as soon as possible

to protect the remaining riparian area through Waimea for all to use and enjoy.

Sincerely,

Avi Okin

64-5267 Puanuanu Place

Kamuela, HI 96743

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KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Avi Okin
64-5267 Puanuanu Place
Kamuela, Hawai‘i 96743

Dear Mr. Okin:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail dated February 17, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Tanya Everts [teverts1@gmail.com]
Sent: Friday, February 18, 2011 5:34 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea trail

Aloha,

I'm an elementary teacher at Parker School and would like to take just a moment to state how important I feel a trail through Waimea would be. I have many students who currently walk or ride their bikes home without any real safe route on which to do so. I have 2 young boys of my own who beg to ride their bikes to school, but riding along the side of the road is not a safe option and not a risk that I'm willing take. If there were a walk/ bike path, I'm willing to bet that as a family we would ride to work/school at least 50% of the time. What important values that could teach children today. It could help teach them to conserve nonrenewable resources, while at the same time help them to develop healthy lifestyle habits.

Thank you for your time and both my husband and I strongly support this trail project.

With Aloha,
Tanya Everts

TO: Kimura International, Inc.
Mr. Glenn T. Kimura
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
FROM: Fran L. Tabor
SUBJECT: **Waimea Trails and Greenways (Ke Ala Kahawai O Waimea); Comments to the Draft Environmental Assessment (DEA)**
DATE: February 17, 2011

1 The following are my comments to the DEA submitted before February 21, 2011:

COMMUNITY SUPPORT

2 The Draft Environmental Assessment (DEA) of the Waimea Trails and Greenways (WTG), also known as Ke Ala Kahawai O Waimea, on page 3-7, states that "Ke Ala Kahawai O Waimea enjoys widespread community support and this alignment is incorporated and endorsed in a number of public planning documents." Is the statement of "widespread support" based on a validated community third-party study? It appears to be based on a selected sample of only those residents who attended CDP planning sessions only. It IS NOT a representative sample of the larger Waimea community. Therefore, the DEA's statement appears to be unsubstantiated and invalid. It is anecdotal at best and cannot be relied upon as accurate. A valid independent statistical study would have to be done of the larger Waimea community to make the DEA's statement valid/reliable. Has Kimura International, or anyone else, conducted such research? Where are the statistical findings and results in the DEA?

FLOOD HAZARD

3 On page 4-31, the DEA discusses flood hazard. This section of the DEA is inadequate and unacceptable in its research, analysis, evaluation and recommendations. The DEA makes reference to 100-500 year floods but makes no reference or analysis of the extensive flood history of damaging floods of less than the 100 year ranking in the Waimea area. I would refer you to the extensive research findings on this topic, including, but not limited to:

4 National Weather Service: Storm Data and Unusual Weather Phenomena (March 2004)
Hawaii County Multi-Hazard Mitigation Plan, particularly Chapter 2, page 9
State of Hawaii Multi-Hazard Mitigation Plan, 2010, pp. 3-29 through 3-31.
From page 3-29, "During the last 3 years, the South Kohala and Waikoloa areas have experienced intense flash flood that has caused considerable damage."

5 On October 15, 2006, there was a 6.7 magnitude earthquake that struck the Big Island. The earthquake had major flood potential implications. This is not mentioned in the DEA. Further, the DEA does not discuss earthquake impact on flooding of the Waikoloa Stream. The Honolulu Advertiser reported on October 16, 2006, "Fearing a catastrophic dam break, state and Hawaii County officials drained two 50-million gallon reservoirs above Waimea. We will never know how close we came to a major disaster," said Lanny Nakano, Hawaii County assistant civil defense administrator." The Waikoloa Stream is the emergency drainage for the reservoirs above Waimea. If the WTG path had been in place at the time and the reservoirs broke significantly with a major flash flood, there could have been injury or loss of life from a flash flood. Why is there is NO mention or discussion of this event and its impacts in the DEA?

6 On March 14, 2004, a torrential flood in Waimea (30-year rated) is only one of an extensive flood history. It caused the Waikoloa Stream to overflow in a raging river. The flood damaged the Acupuncture College, Canada France Telescope, other business, the church areas, homes, streets, and

the Nature Park. There is no mention, discussion or analysis in the DEA of this event. Why not? The torrent was not just water, but included branches, whole trees, rocks, boulders, silt and half my neighbor's backyard. His house was flooded and has been on the market for two years. Buyers back out of the sale as soon as it is disclosed that the property was damaged from the Waikoloa Stream due to this flood event. If the WTG path had been in use during this event, people might have been injured or killed along the path.

7 The March 2004 torrential 30-year rated flood was not an isolated event as the proponents of the WTG maintain. These proponents state that the flood was caused by a blockage of debris. I refer you to the National Weather Service findings that contradict what the proponents state. I also refer Kimura International to a Hawaii report "Floods, Hawaii Water Resources Regional Study, April 1975", that reports Hawaii islands extensive flood history with cost damage reports with each storm.

8 On page 4-32, the DEA states, "As an alternative to a concrete or still river crossing structure, wooden bridges designated to 'break away' during major flood events could be a less expensive alternative." It is widely known that debris caught in culverts causes back flow flooding that can cause property damage and possible injury to people. There is no analysis, evaluation or discussion of the benefits of breakaway bridges in the DEA. Why is there such deficient reporting in the DEA of this issue? Why does the DEA lack comprehensive evaluation, discussion and recommendations?

9 The DEA states on page 4-32, "Since flood events occur infrequently . . . " This statement is not correct according to the the State of Hawaii Multi-Hazard Plan, 2010, page 3-29. It reports, "According to the data from the last 50 years, on average, a damaging flood occurs on the Big Island every 2 years. During the past 50 years, however, the threat due to stream flooding has increased dramatically because of the risk taken to develop extensively in flood prone areas." The DEA statement appears incorrect, unsubstantiated, and plainly wrong. Why does Kimura International not clarify these issues in the DEA?

10 Further, it is well-established that non-porous construction materials contribute to runoff and contribute to increased flood waters. In my opinion, the use of concrete as a path material is unacceptable in a flood area. A path of 10-12 feet is unacceptable as it increases the non-porous runoff surface. A wide concrete bridge at the Waikoloa Stream, west of Sandalwood is also unacceptable. Why does the DEA not address the impact of building materials on flooding?

BEST MANAGEMENT PRACTICES, LAWS, REGULATIONS, EXECUTIVE ORDERS, AND OTHER RELATED GOVERNMENT ISSUES

11 On page 4-38, the DEA states, "Construction impacts can be mitigated through best management practices."

12 However, why does the DEA neglect to research, mention, discuss, analyze, recommend anything related to either Federal or State government decrees as they relate to buffer zones, watershed protection, stream-side management, or other related environmental concerns? This would include, but not limited to: Environmental Protection Act , Watershed Protection and Flood Prevention Act, FEMA, Clean Water Act, National Wetlands Mitigation Action Plan, Wild Rivers Act, Flooding Control and Drainage (County of Hawaii), Kohala Mountain Watershed Management Plan, and Watershed Protection and Management Program: Best Management Practices (State of Hawaii). Why does the DEA completely ignores these issues? This is not acceptable and is unsatisfactory.

13 I understand that Best Management Practices are only guidelines/ recommendations. However they are written for a purpose – to protect the environment from destruction, reduce flood risk, ensure embankment stability, and reduce soil erosion among other benefits. The DEA must address these issues and the County start paying attention and incorporating best management practices into public policy.

TOXINS AND BACTERIA IN THE WAIKOLOA STREAM

14 The Kohala Mountain Watershed Management Plan (p.59) reports that, " Swimming in the streams could result in Leptospirosis and Cryptosporidiosis, potentially fatal illnesses caused by water-borne micro-organisms spread by pigs, dogs, mongooses, rats, and even frogs." There will be dogs on the path and there are frogs in the Stream. There is some chance that children will play in the Waikoloa Stream along the WTG path. Illness/death is a possibility. The DEA does not address this issue adequately.

FIRE RISK

15 The area west of Sandalwood is very dry and poses a fire risk. According to the Kohala Mountain Watershed Management Plan, fire causes the removal of vegetation cover, loss of the soil-anchor feature of root masses, and exposure of bare mineral soil. This makes burned areas susceptible to high levels of erosion. Climatic conditions are often related to seasonal rainfall, where dry summer months and brisk winds can lead to high-risk fire conditions (USFWS 1998))"
Why is there is NO discussion or analysis of fire risk in the DEA? Will there be irrigation to mitigate fire risk in the area west of Sandalwood? Who will be responsible for this responsibility and at what cost?

NOISE

16 On page 4-40, the DEA states, "The stream and terrain will provide a natural noise buffer and the physical separation will alleviate security concerns." Kimura has no basis in fact for these two assertions. Did Kimura International do an acoustical study on which to base this statement? Did Kimura International study/evaluate noise or security issues?

17 The gulch/canyon next to my home acts as an echo chamber. I can hear the farmers on Chris Robb's farm speaking. Further, there was an acoustical engineering study done at my home by Mr. Yoichi Ebisu (Honolulu) a few years ago. A new study would need to be conducted.

18 In addition, those homes closer to town where the path is between the Stream and the residence ARE going to be impacted by noise. There is no physical separation. At night especially, noise will be attenuated. Some people will use the path after dark when the path is closed (based on a Google search of path safety/security of other paths).

19 Lastly, removing trees will intensify ambient sound. Why does the DEA neglect to discuss this or present mitigating strategies?

20 The DEA's statements appear to be incorrect, misleading and unsubstantiated.

SECURITY, CRIME, AND PRIVACY

21 On page 4-40, the DEA states, "Designing a path with high visibility, combined with the presence of other path users will provide 'eyes on the trail,' discouraging loitering, vandalism and other undesirable activity." This is an unsubstantiated statement. At the DEA meeting on 02/09/11, the Hawaii County police stood up and said that they do not have the resources to patrol the path. Who will provide

security?

22 On page 4-59, the DEA quotes a 1971 (40 years old) report. Facts from 40 years ago are not valid or relevant. Kimura International should conduct a Google search "crime on bike paths" and read the results. Updated and realistic findings need to be thoroughly discussed in the DEA and not white-washed or glossed over. Further, I would remind you that the Hawaii police (per their own statements at the 02/09/11 DEA presentation meeting, do NOT have the resources to patrol the WTG path. Who will protect the public? And who will pay for it?

23 Further, I call your attention to the fact that this is a RURAL area. It is not Denver or Sacramento or Seattle. This a farming and ranching community and there are hazards associated with this fact that Kimura International fails to address in the DEA. Why is there is no discussion of crop safety from theft or other challenges associated with farming discussed in the DEA? Why are these not addressed in the DEA?

24 On September 10, 2010, and on a regular basis, the most recent incident on January 31, 2011, there is rifle fire/shot gun fire from the Lalamilo farm lots area. On September 10, 2010, there was rifle fire. A young man (about 17-20 years old) emerged from the trees between Chris Robb's farm and Parker Ranch pasture land on the Kona side of the Waikoloa Stream. I told him I heard rifle fire. He said to me that he heard the rifle fire and it scared him. I told him to get out of the area right away. I e-mailed County Councilman, Pete Hoffmann, and Leslie Kurisaki from Kimura International. Why is there is no mention or discussion of this event discussed in the DEA.

25 Young adults are bound to be curious and wander off the WTG. I would hate to learn of a path user being killed or injured by gun fire by hunters/farmers doing their job. I think it is naïve to believe path users will use an urban standard of behavior and understand the risks that living in a rural area poses.

26 With regard to crime along multi-use paths, I would simply ask that you do a Google search "crime on bike paths, I think that Kimura International should re-evaluate its DEA statements that are largely unsubstantiated by the facts.

LANDSCAPE MAINTENANCE AND USE OF LANDSCAPE POISONS

27 The DEA does not discuss plant maintenance or weed control along the Waikoloa Stream. It is well-established that Hawaii County uses poisons (herbicides/pesticides) in their landscape maintenance. Why does the DEA does not address these poisons entering the Waikoloa Stream resulting in further degradation of the water quality and these poisons finding their way to the ocean, further polluting the ocean? Why does the DEA lack of evaluation of the use of poisons around the Waikoloa Stream ? This is unacceptable.

AGRICULTURAL BUFFER ZONE

28 On November 8, 2007, the State of Hawaii Department of Agriculture issued a letter to Mr. Chris Yuen, Department of Planning, Hawaii County. This letter points out the need for a buffer of an effective 800 to 1,000 feet around the Lalamilo farm lots to minimize pesticide drift and other issues. Why does the DEA not discuss this letter, its recommendations, and impacts on the WTG or health, safety, or the environment? This is unacceptable and must be addressed in the DEA.

HERITAGE TREE REMOVAL

29 It is unacceptable to remove these trees and destroy the little remaining riparian buffer zone that still exists. Removal of trees leads to increased flood risk, soil erosion, increased noise level and other

adverse impacts. It also contributes to the loss of sense of place and serenity. In my opinion, it is bad public policy.

30 According to "Building Management Hawaii (December 2006-2007), "The runoff is often more than just soil - - leaves, pesticides, fertilizers, oil, chemicals, plastics and other surface debris materials all wash into streams and ocean areas. Roofed and paved surfaces create more runoff potential – less available porous ground surface to absorb the rainfall." This increases flood risk and environmental degradation.

31 According to the Hawaii Department of Health, Clear Water Branch - - Polluted Runoff Control Program (10/15/08 – 06/30/08) study, "A few mitigating measures could be implemented include: stream bank stabilization, **riparian buffer establishment**, low impact retrofitting for storm management . . ."

PROPERTY VALUES

32 On page 4-58, the DEA cites the Burke-Gilman Trail constructed in 1978 (33 years ago). On page 4-59, the DEA states, "Based on similar trails elsewhere, it is unlikely that the proposed Ke Ala Kahawai O Waimea will have a negative impact on property values of adjacent homes." This statement is unsubstantiated and incorrect. More recent studies (e.g., the University of Delaware, 2006) disagrees and is a more current finding. This study shows that homes directly adjacent to the path lose value. Those farther away may gain value. Negative visual impact also reduces property value.

33 Why doesn't Kimura International provide updated research in the DEA and not quote 33 year old findings? A report of 33 year old data is not credible.

CONFIGURATION/MATERIALS OF THE WTG PATH

34 A concrete 10-12 foot path is unacceptable for all the reasons discussed elsewhere in my comments.

35 A concrete culverted (or not) bridge (e.g. Pako subdivision style or any other concrete bridge design) across the Waikoloa Stream at the west end of Sandalwood is unacceptable as discussed elsewhere in my comments.

36 The use of barbed wire fencing anywhere along the WTG path is unacceptable for safety. Imagine a child riding a bicycle and falling into barbed wire.

37 Has Kimura International considered and evaluated alternative materials? The DEA must analyze, evaluate, and consider alternatives. Why does the DEA not consider these issues?

38 Natural planting materials, such as: trees, bushes, grasses, and other plant materials should be planted along the WTG to protect the riparian zone, Waikoloa Stream, and safety of path users from greater injury (vs. barbed wire). Costs will be higher, but significant environmental and safety risks are reduced. And, the WTG's beauty, serenity, and enjoyment will be enhanced.

DECREASED PRIVACY

39 The DEA does not discuss this issue. I would urge Kimura International to do a Google search "Bike path privacy" and read the results. This issue needs to be honestly, adequately, and thoroughly evaluated in the DEA.

LACK OF PARKING

40 The DEA does not address car parking. Some path users will want only to use a portion of the WTG path. That means that they will be parking on single lane, private roads, inadequate and inappropriate for car parking. How will this be handled by the police on a private road?

NO SITE VISIT, NO DIALOGUE WITH KIMURA INTERNATIONAL

41 I will echo Mr. Freddie Rice, who stated at the 02/09/11 DEA presentation that no one from Kimura International has talked to him. No one from Kimura International has had a conversation with me either. Nor has anyone from Kimura International visited my residential site to inspect and evaluate the Waikoloa Stream, buffer zone areas, or proposed water crossing west of Sandalwood. This is unacceptable.

COST VS BENEFIT OF THE WTG PATH: SUMMARY

42 I believe it is bad public policy to develop the WTG path. I believe that the WTG project should be blocked from development. The negative impacts are too great to benefit only a few, at too high a financial cost, and the noted destruction risks to the environment.

43 **Consider who is the user of the WTG path? At what cost do we build a path with high negative risks at $18 million for a few users and destroy the environment in the process? Is this path for less than a handful of bicycle commuters? What are their numbers and demographics? The DEA does not address these questions.**

44 In general, **what parents are going to allow their children from Kamuela View Estates/Hawaiian Homelands to use a path to school that goes up hill (600 foot gain in about 4.8 miles) into the (Trade) winds at a usual 10-15 mph in the dark in the morning and maybe rain. The child likely will be carrying a 10 lb. book pack. It will likely take at least one hour to get to town on a bicycle from Kamuela View Estates area (children don't go so fast). Realistically, parents drop their children off to school on their way to work in their cars.**

45 **The WTG path is clearly for recreational purposes. It is not a commuter, alternative transport path. DOT cannot support a recreational path.**

46 **If the County, DOT, or other funders are going to spend money on a recreational project to benefit many more users, I think that the $18 million for the WTG would be money better spent by Hawaii County to start building the planned district park with many more SAFE child, young adult and adult benefits. Let's start to build that park now. NOW THAT'S A PLAN I CAN GIVE MY FULL SUPPORT TO.**

47 **Or use the money to address more vital and higher priority County issues and furlough fewer employees. How about putting them to work repairing County roads and bridges that already exist?**

48 **I expect this letter to be incorporated into the DEA and into the public record. I expect that the revised DEA will be more rigorous in its research, analysis, reporting, and recommendations. I further expect it to be fully objective, reporting negative impacts, "connecting the dots" that show how factors impact each other such as trees/noise/flooding/soil erosion etc., and to provide a full picture of the issues. A continued gloss-over or white-wash of the issues in the DEA is unacceptable.**

(Signature page follows)

Respectfully submitted,

Fran L. Tabor

cc: to be determined

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Fran L. Tabor
PO Box 2045
Kamuela, HI 96743

Dear Ms. Tabor:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata County of Hawai'i Department of Parks and Recreation dated February 17, 2011. We offer the following responses to your comments.

Community Support

The EA statement about widespread support was based on the fact that the Waimea Trails and Greenways project has been specifically identified and endorsed in a number of public planning documents including the South Kohala Community Development Plan (November 2008), the Waimea Traffic Circulation Study (December 2007) and Bike Plan Hawai'i (September 2003), the State's bicycling master plan. The State Comprehensive Outdoor Recreation Plan (SCORP) also mentions the desirability statewide *for "more safe and continuous pathways for biking, walking, and jogging that connect communities. Paths set apart from roadways provide safe places for children to walk, run, skate, ride their bikes, and play. Paths also significantly reduce pedestrian and bicycle conflicts with motor vehicles."* (SCORP 2008, p. 112).

Each of these planning documents underwent months of public reviews and hearings, with opportunity for public comment. The planning process for these documents involve analysis of the merits and demerits of proposals, months of public reviews and hearings, and vetting by various County and State agencies. The accepted documents presumably reflect the desired policy and planning objectives of the County/State governments as well as those of the majority of the affected citizens.

Finally, we realize that the EA process is not, and should not be seen as a "popularity contest." That said, during the Draft EA comment period we received a total of 58 written comments from community individuals (i.e., excluding government agencies). Of this total, 46 (80%) were in support of the project, 9 (15%) were opposed, and 3 (5%) were neutral.
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Flood Hazard

The bridges and retaining walls included in the design of the proposed project will not interfere with stream flow. The trail, including stream crossings, will be designed to allow the passage (either through the crossing structure or over the crossing structure) of up to the 100-year flood with no increase in flood water elevation. This is a requirement of the County of Hawai‘i’s Floodplain Management program directed by Chapter 27 of the Hawai‘i County Code. Therefore, the project will be neutral in terms of impacting flood damage along the stream; i.e., potential flood damage would remain the same with or without the project.

The March 2004 flooding of Waikoloa Stream was preceded by intense rain, and was due in part to the existing physical conditions of the stream (sharp stream bends and generally inadequate flow-carrying capacity) as well as blockages caused by fallen tree branches and debris. The blockage in turn caused the stream to overflow its banks and flow through the main street through town. Damage to the Waimea Nature Park was also caused by overtopping due to stream blockage. WTG Committee member Leningrad Elarionoff said that he personally spent several days clearing out that blockage before getting assistance from military personnel from Pohakuloa Training area to finish the job. This incident reiterates the importance of regular inspections and efforts to keep the stream free of fallen debris. Access to the stream areas via the proposed trail will facilitate this ongoing stream maintenance effort.

Regarding earthquakes and the potential for a catastrophic dam break, the Waimea reservoirs are being reconstructed by the Board of Water Supply to meet current safety standards thereby diminishing the probability of failure. The volume of water stored in the reservoir is far less than that volume of flood water discharged in a 10-year storm. A detailed study of the failure mode and discharge of the relatively small Waimea Reservoirs would serve no practical purpose.

Breakaway bridges are discussed as an alternative on page 4-32 of the Draft EA. Whatever crossing is proposed, its design needs to be reviewed and accepted by County and State engineers.

Regarding concerns over non-porous construction materials, the trail design must comply with County design requirements. One such requirement is that the project must be “runoff neutral”. The increase in impervious area due to the concrete trail would be offset by installation of appropriate drainage structures to ensure there is no increase in runoff from the site.

Best Management Practices

The project is subject to the provisions of the Federal Clean Water Act and many other regulations, including the ones mentioned in your letter. The project will follow and meet all applicable federal, State and County regulations.

The project is required by the County, State and federal regulations to implement both construction and permanent Best Management Practices (BMP); i.e., these are not "only guidelines/recommendations."

Toxins and Bacteria in Waikoloa Stream

Waikoloa Stream is an intermittent stream and is often a dry river bed. Nonetheless, we acknowledge that leptospirosis and other possible infectious disease risks may already exist in the stream. We will recommend that warning signs be posted as part of the overall signage program if the Department of Health determines that there is a health hazard. Requiring dog owners to pick up after their dogs will also help prevent contamination in the streams. The presence of the trail will facilitate the water quality monitoring efforts for those involved with the Kohala Mountain Watershed Management program.

Fire Risk

The drought experienced over the past several years has increased the risk of brush fires. The ongoing drought conditions were discussed in the Draft EA. If necessary, signage can be posted to remind trail users not to dispose of cigarettes or to start fires, although most of this is common sense.

Noise

The proposed trail area between the Lalamilo Research Station and the Clark Property is located entirely on agriculturally zoned land (Zone A-1a). The entire Sandalwood Subdivision is also on agriculturally zoned land, which according to Hawaii County Code (§25-5-70) allows for "agricultural and very low density agriculturally-based residential use." According to §25-5-72, uses permitted by law on these lands include: agricultural parks, agricultural products processing, crop production, game and fish propagation, livestock production, and wind energy facilities--all of which could generate noise from tractors, delivery trucks, and other farm-related equipment and operations. The fact is that you live in an area zoned for agricultural use. Noise emanating from Mr. Chris Robb's farm appears to be consistent with that zoning.

Noise generated by trail users through normal conversation or non-motorized vehicles such as bicycles or roller blades are unlikely to approach the noise levels of other legally-permitted activities in an agricultural zone, such as those listed above. Because the trail will be located across the stream from both Sandalwood and Lalamilo subdivisions, noise impacts on residents will be reduced further. Complaints about excessive noise should be directed to the local police.

Security, Crime, Privacy

The Final EA will provide an expanded discussion of the issues of security, crime, and privacy in relation to multi-use trails.

From the perspective of the local Police Department, Captain James Sanborn of the South Kohala Police Station confirmed in an April 14, 2011 phone call that the Police Department would be responsible for responding to calls regarding security and crime along the trail. When asked if he had any concerns about the trail, he said he is a proponent of the Crime Prevention Through Environmental Design (CPTED) approach, and therefore he would be most concerned with design issues such as visibility, natural surveillance, lighting, placement of vegetation/foliage, etc.

Regarding the incidents of rifle fire you describe, we would like to repeat what Mr. Bobby Command wrote to you on April 11, 2011, in response to your e-mail on this same topic:

> *Discharge of a firearm in a residential area is illegal and is an enforcement issue, and I would urge you to contact the police. Discharge of a firearm on a farm may be legal depending on the circumstances. Again, I would urge you to report this incident to the police.*

As an aside, in a recent meeting with Mr. Freddy Rice, he mentioned an ongoing problem he has had with his cattle being attacked by packs of dogs, and noted how he has had to occasionally fire his rifle to scare the dogs away. Mr. Rice also wanted assurances that he would not be liable for trespassers wandering off the path. Anyone wandering off the path onto private property would be trespassing, and property owners may call the police.

Landscape Maintenance

To minimize project cost, no extensive introduced landscape vegetation is proposed. The County, in cooperation with the Waimea Trails and Greenways Committee, will develop a trail management and maintenance plan.

Agricultural Buffer Zone

Our understanding is that the November 8, 2007 letter from the State Department of Agriculture regarding an 800-1000 foot buffer was written specifically in reference to the project for a proposed bypass road that would have passed the Lalamilo Farm Lots. This has no bearing on the proposed trail project. Moreover, the entire trail corridor between the Lalamilo Research Station and the Clark Property, including the Sandalwood subdivision, is currently in the State Agricultural District, as well as zoned for agricultural use by the County.

"Heritage Tree" Removal

The County recognizes the importance of trees in providing shade, windbreaks, noise buffers, and overall ambiance. Although many trees will need to be removed for the trail, only those required to accommodate the path and to ensure user safety will be cut down. The Waimea Outdoor Circle has agreed with this approach.

Property Values

Thank you for your reference to the 2006 University of Delaware Study. It was a very comprehensive overview of a number of studies of multi-use trails throughout the country. We have incorporated the findings in the Final EA.

Configuration/Materials of the WTG Path

Concrete is the County's preferred surface material because it is the most durable and will minimize long-term maintenance costs. The entire path does not necessarily have to be concrete, and according to the Federal Highway Administration (FHWA) guidelines, the path could be comprised of other materials such as asphalt, crushed rock, or soils mixed with stabilizing agents, provided it meets ADA requirements. The Final EA provides a comparison of concrete and other materials.

The physical appearance of the trail is a design issue that will be addressed further during the design phase. Mitigating measures to soften the appearance of the trail include meandering the trail alignment, placement of vegetation, colored and/or textured concrete, and use of alternative surface materials.

The common definition of the riparian zone is the area directly adjacent to the edge of the stream. This area now has grasses and other vegetation. Excavation required to provide new plantings in this area would adversely impact the upper stream bank stability. Barbed wire has never been proposed for use along the trail.

Decreased Privacy

The law defines a violation of privacy for homeowners as an "unreasonable and highly offensive intrusion" of their seclusion or solitude. The proposed path will not result in an intrusion onto homeowner privacy within the confines of their property. For example, in the case of the Sandalwood subdivision, residences are a minimum one-acre agricultural lot with front to back dimensions of 200 to 300 feet. Dwellings are located a distance of approximately 100 to 175 feet from the proposed edge of the path easement, which is located across Waikoloa Stream. In our opinion, this does not constitute an unreasonable and highly offensive intrusion into homeowner seclusion or solitude. Privacy concerns to landowners along the trail will be taken into

consideration when vegetation is planted, and vegetative screening can be incorporated where it is consistent with trail design and does not impact safety.

Lack of Parking

Parking for users of the path will be available on public streets and at community parks. In the future, parking areas will be developed on the Clark property and the future County park next to the Refuse Transfer Station. In order to minimize impacts to Kahawai Street residents, the EA has suggested prohibiting street parking on Kahawai Street. The downside is that residents and their guests will also be prohibited from parking on the street. Because Kahawai Street is owned by Parker Ranch, any proposed mitigation will need to be discussed with them and implemented with their consent.

Site Visit

As planners, we evaluate the project area using tools such as aerial photos, topographic maps, and reconnaissance surveys of the site. At the public meeting to discuss the EA, you informed me of the location of your residence. During our site visit, we walked along the proposed alignment near your residence and note that the path is across from your home and on the opposite side of Waikoloa Stream.

We met with Mr.Freddy Rice because he is the lease holder of a large stretch of land for which an easement is required. He had legitimate concerns as the leaseholder and wanted to personally express them. He is not opposed to the path but wanted some reassurances that his operations would be protected. In your case, we are not requesting an easement to go over your property, and the proposed crossing west of Sandalwood will not directly impact your property.

Cost vs. Benefit

As far as project cost, it has always been the County's and WTG Committee's intent to leverage federal money, in particular FHWA's Transportation Enhancement (TE) funds. These funds are specifically earmarked for activities that "help expand transportation choices," including pedestrian and bicycle facilities.

The FHWA Hawai‘i Division and State of Hawai‘i Department of Transportation has confirmed that as of April 2011, there was approximately $16 million in TE funds available for eligible projects in Hawai‘i. They have also indicated that over the past several years, FHWA has allocated to the State approximately $3.7 million annually for TE projects. Unfortunately, most of these funds have gone unused, due to lack of eligible projects.

The County of Kaua‘i has utilized TE funds for a six-mile long segment of multi-use (bike and pedestrian) path in the Kapa‘a area. In that case, the County of Kaua‘i was able to use the

assessed value of privately-donated land as its 20% local match. It is the County and WTG Committee's hope to similarly leverage TE funds which historically have been underutilized statewide.

Regarding children using the path to go to school, the March 2005 *Safe Routes to School* study for Waikoloa and Waimea found that while 12% of Waimea students live close enough to school to walk or bike, only 5 percent walk or bike to school and 9 percent walk or bike home. A survey of Waimea parents found that the main reason they chose to drive their children over other alternatives was "Safety" (mentioned by 51% of respondents). When students were surveyed, 19% said they would like to get to school by bike, and 7% would like to walk (both higher numbers than are able to do so now).

The likelihood of trail use by commuting students was reinforced by both the principal and the community liaison of Waimea Middle Public Conversion Charter School (PCCS). In letter sent during the Draft EA comment period, Principal John Colson stated that "a safe trail would offer my students the opportunity to talk or ride their bike to and from school" and noted that it would also benefit both campuses of HPA, Waimea Country School and Waimea Elementary School. Ms. Patti Cook, the Waimea Middle PCCS Community Liaison noted the presence of high population, low income housing areas within a mile of their school, including Noelani Apartments and several low-to-moderate rental apartments. She noted that nearly 100 school-aged children live in Noelani's public housing apartments, most of whom attend Waimea Elementary and Middle schools. Ms. Cook explained that these children must walk to school along the edge of a very congested highway where there is virtually no curb and sidewalks, or their families—who are already struggling financially—must drive them to and from school out of concern for their safety. She concluded that the proposed trail would immediately improve the safety of these children and reduce peak hour traffic congestion.

Thank you for taking the time to review the Draft EA and to provide your comments. A copy of your letter will be included in the Final EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

RECEIVED FEB 19 2011

February 17, 2011

My name is Natlee Oshiro. I reside on Kahawai Street. My property is located at the end of this street. My concern way back in the mid 90's was the fact that my property was the last on the street. As we are now we are the only turn around spot. The wear and tear of my driveway was and still is my concern.

I went to the public meeting on February 9. I saw the plans, heard the discussions. It was noted improvement on Kahawai Street would include signage. I smile when I envision its effectiveness or the thought that someone actually thought this would work. Who will enforce such a sign and the no parking rules on my street? I too, envision a solution maybe my 85 year old dad can police the street to enforce that rule would that be as effective as signs? I think not.

I listened to the budget, I know that is a lot of money and I am not naive enough to think one part of the government will be able to fund this. It would take all of us together to get this funded. I don't want to support this project with my hard earned money. A few will enjoy it but the majority of our town would not. It does not seem fair. Get together and hui the funds so that our roads are better, our bridges are safe, we have parks for all uses and lights to play in the evenings at our ballparks, bleachers, fix the grandstand that is a historical building in our community. My point is that there are lots to be done to make it beneficial to more of our community. That should be our focus.

I believe in the near future we will all go back to a public meeting at it would be announced that the Waimea Trail and Greenways will revise their stand after much thought and seeing that it wouldn't be responsible citizens to request such a budget for such a task a modified version will emerge. The "new" plan would still connect to town along the Waikoloa stream but from Kahawai Street to town not South Kohala View Estates. There is my problem again the turn around traffic on Kahawai. A feasible conclusion? How do you explain the continuing work being down on the trail? Its almost complete.

About 75 years ago my grandfather Yutaka Kimura worked on Parker Ranch. His family was getting to be school age and he needed them to

be in town. A.W. Carter built him a house and its still standing with many of the original structures. It was a prized home and we all grew up here. I often think of my grandfather and how he must have worked to provide such a home for his family. How it showed what kind of worker he was to be able to receive such a gift from the ranch. My dad worked for 40 years on the ranch also and had a chance to purchase this property and it is still in our family. It is full of history as we are on part of Camp Tarawa . The area is huge. We grew up hearing stories of such times. One family had a hamburger stand, another sold newspaper and yet another did ironing so much history. We are immensely lucky and yet it is an attribute to my grandfather work ethics and being respected by his employer. My family never forgets that. I hope my thoughts and concerns came through. I do not want Kahawai to be a connector road as Opelo and I want to preserve the spirit of my grandparents as well as my parents as they spent so many years at the end of this street all alone.

Truly yours,

Natlee Oshiro

RECEIVED FEB 19 2011

February 17, 2011

I live on Kahawai Street and not in favor of the so called path. I grew up on the Hamakua coast and always enjoyed going through Waimea's farms and open pastures to and from Kawaihae.
In 1966, at the age of 18, I moved to Waimea and it has been my address ever since. I would hate see people in pastures instead of cattle and horses.
There is a Parker Ranch gate at the end of Kahawai Street. On the gate there are 2 signs that clearly reads "No trespassing" I see people going through the gate daily ignoring the sign. I know they are not illiterate as some are professional and retired individuals. I can't imagine strangers walking on this road at all hours as clearly signs don't mean anything.

Sincerely,

Stanley Oshiro

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Natlee Oshiro
Mr. Stanley Oshiro
PO Box 163
Kamuela, HI, 96743

Dear Ms. Natlee Oshiro and Mr. Stanley Oshiro:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawai‘i

Thank you for your letters dated February 17, 2011 providing comments on this proposed project. We would like to respond to some of the concerns you have raised.

You have expressed concern about Kahawai Street being identified as one of the “signed shared roadways” providing public access to the trail. We understand that Kahawai Street is a very narrow, local road with no sidewalk or shoulders, and identifying it as a trail access point will increase the number of people using the road. In order to avoid adverse impacts to residents, we are recommending that street parking be prohibited. Another option is to limit trail access on Kahawai Street to pedestrians and bicycles, so that non-residents are discouraged from entering Kahawai Street to “drop off” trail users. If trail users need to be dropped off, this can be done on Kawaihae Road. We realize that the downside with these options is that residents and their guests will also be prohibited from parking on the street.

You have noted that because your house is located at the end of the street, your driveway is used as a turn-around spot, causing wear and tear on your driveway. One suggestion is for the project to relocate the existing access gate another 50 feet or so closer to the trail, to provide a vehicle turn around area. This would eliminate the existing problem of cars turning around in your driveway.

However, because Kahawai Street is owned by Parker Ranch, any of the proposed mitigations above will need to be worked out between the County and Parker Ranch and implemented with the consent of Parker Ranch.

Another concern you raised in your letter was the cost of the project. It has always been the County’s and WTG Committee’s intent to utilize federal money, in particular Transportation Enhancement (TE) funds available through the Federal Highway Administration (FHWA). These funds are specifically earmarked for activities that “help expand transportation choices,” including pedestrian and bicycle facilities.

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

The FHWA Hawai‘i Division and State Department of Transportation have confirmed that as of April 2011, there was approximately $16 million in TE funds available for eligible projects in Hawai‘i. Over the past several years, FHWA has allocated approximately $3.7 million annually to the State DOT for TE improvements, much of it unspent because of a lack of eligible projects.

The County of Kaua‘i has recently funded a six-mile long segment of multi-use (bike and pedestrian) path in the Kapa‘a area using TE funds for 80% of the cost. Kaua‘i County used the assessed value of privately-donated land as its 20% local match, resulting in minimal expenditure of County funds. The Hawai‘i County Department of Parks and Recreation and the Waimea Trails and Greenways Committee is hoping to similarly leverage these available federal funds.

Both of you have shared your family’s long history in the area, noted the importance of preserving historic areas such as Camp Tarawa, and the traditional lifestyle and spirit of the community. The County and the WTG Committee see this project as an opportunity to recapture and preserve much of this history and enhance the features that make Waimea unique. For example, long time residents like yourselves have noted that less than a generation ago, the area along Waikoloa Stream was unobstructed by homes and fences and that children regularly played alongside the stream. Today, much of the surrounding lands are gated and fenced, and the stream is largely hidden from view. *Ke Ala Kahawai o Waimea* will provide the opportunity for individuals of all ages and physical abilities to walk along the stream and partake in the natural beauty of Waikoloa Stream. This will be a public area available and accessible to all, not just a select few. The trail will also improve access to the Camp Tarawa area. Interpretive signage can be added along the trail to educate the community about the historic significance of the area.

On behalf of the County, we would like to thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

Leslie Kurisaki

From: AVA WILLIAMS [avasgone2hawaii@me.com]
Sent: Friday, February 18, 2011 9:31 AM
To: lkurisaki@kimurainternational.com
Cc: Elliott Scott
Subject: Waimea Trails

To whom it may concern -

We are writing to voice our strong support for the proposed trail in Waimea. This is a beautiful town in a wonderful setting and we are extremely thankful for this. However, Waimea doesn't have any safe and legal places to walk, ride bikes with kids or push strollers while enjoying the surroundings. Nor do we have a safe way to commute or use alternative methods of transportation: our only link from one side of town to another is a very busy highway that is unsafe for pedestrian and bicycle traffic. More people would walk to get groceries, pick up their mail, meet friends in town or frequent the farmer's market, **without driving**, if a longer and more developed nature trail existed. The nature park is a wonderful starting point with the short trails that surround it. Our kids love playing there and walking the trails -- each turn is like a new discovery for them.

I participated in the meeting on February 9th, 2011 where the Draft Environmental Assessment was discussed. I hear the concerns of some of the other citizens whose homes are in proximity of the trail. I hear the concerns over the cost of the trail. However, now is the time to move forward on this while there is still the potential for federal funding. This is a strong community. I am confident that we can all work together to find acceptable solutions. Everyone will rally to protect the homeowners and be respectful of their property rights. This trail will be a fabulous addition to the community for years to come. The keiki deserve a way to access nature safely and without trespassing. If completed, this is something that the community will look back on down the line and be proud of its choice.

Mahalo,
Ava Williams and Scott Elliott

Leslie Kurisaki

From: Dawn Velasquez [dawn@pahawaii.com]
Sent: Friday, February 18, 2011 9:33 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenway

Aloha,

I want to add my voice to those that support the 16-year old Waimea Trail and Greenway project. Feel free to contact me if necessary.

Dawn Velasquez

808-557-4284

Leslie Kurisaki

From: Kerry Kamisato [kekamisa@ksbe.edu]
Sent: Friday, February 18, 2011 9:49 AM
To: lkurisaki@kimurainternational.com
Subject: support for Waimea Trail

To Whom It May Concern:

Subject: Waimea Trail, Ke Ala Kahawai O Waimea

I live adjacent to the proposed route of the trail, it will be right behind me. For the past years, I have been a supporter of the trail and have volunteered in several work days or helping out in informational community events. I feel that the trail will be a great benefit to the entire community of Waimea.

The reason why I live in Waimea is because of the beautiful scenery and open spaces, not because of its roadways and traffic issues. Sure the traffic issues are being addressed but at the expense of safe waking and biking areas. Traffic speeds have increased, not just on the highways but on the adjoining narrow streets. The amount of traffic has also increased, as Waimea has grown and will continue to grow in population. This growth will fuel the need for more space to accommodate traffic so the need for a trail to provide a safe open space and route is needed for the community.

We need to protect our right to enjoy the beauty of Waimea. The beauty of the outdoors should not be limited to those who have the keys to gated areas, have the view, or the money. The Trail will give the community this opportunity to freely enjoy the beauty of Waimea. The Trail will protect this right for the generations to come.

Mahalo,

Kerry Kamisato

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Leslie Kurisaki

From: Michael C Whelan [michael@emeraldstride.com]
Sent: Friday, February 18, 2011 9:57 AM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails & Greenways Support

Aloha Leslie Kurisaki-

I am emailing you in support of the proposed community trail for Waimea. As a resident of Hawaii for 34 years and having spent most of that time on Oahu, I have experienced first hand the inability of our civic leaders to plan appropriately for both present and future generations. Not only will such a trail provide for our present community needs in offering a open space for families, as well as a safe route for our school children, it will also set aside a valuable open area for future generations. We need to act now as the need is too great to push aside for another time to work it out.

Please file my petter in support of this great community project. Mahalo!

With Aloha,
Michael Whelan

Sent from my iPhone

Leslie Kurisaki

From: Julia Simmons [jsimmons@keck.hawaii.edu]
Sent: Friday, February 18, 2011 1:00 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways project

Dear Sir or Madam,

After attending the informational meeting about the EA for the Waimea Trails and Greenways project, I even more enthusiastically support the trail!

I think that each of the concerns of the opposition were addressed satisfactorily.

The trail will be a wonderful place to ride bikes with my family since I do not ride on the highway due to the dangerous traffic. It will keep a greenway through the heart of Waimea as our area becomes more and more urbanized. If this project is delayed until after future subdivision and development of the land, it will never happen.

Thank you for letting me voice my opinion,

Julia Simmons

Waimea, HI

Leslie Kurisaki

From: Deborah Spencer [dspencer@keck.hawaii.edu]
Sent: Friday, February 18, 2011 3:07 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail & Greenways Project

Dear Leslie Kurisaki,

I am a Waimea resident/homeowner and wish to lend my support for the Waimea Trail & Greenways Project. I believe we need this project here in Waimea, as it would benefit my family and so many others.
Please add me to the list of those who are in support and let me know if there is anything I can do to assist.

Thank you,

Deborah Spencer
P.O. Box 1929
Kamuela, Hawaii 96743
808-430-1753
debbie.found@yahoo.com

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Deborah Spencer
P.O. Box 1929
Kamuela, Hawai‘i 96743

Dear Ms. Spencer:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail sent on February 18, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Scott & Paula Cairns [spcairns@mac.com]
Sent: Friday, February 18, 2011 9:55 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail and Greenway

Aloha,

The Waimea Trail and Greenway is an important and valuable project for our community on Hawai'i Island. Greenways such as this help connect residents of communities, improve the health of it's citizens and reduces automotive traffic. A well-planned pathway system ties into well-designed safe streets, allowing people of all ages to travel and play. Such a system functionally ties together people's homes with real destinations. Waimea is a wonderful community and a project like this will serve as a model to other Big Island communities.

Please build the trail.

Respectfully,

Scott and Paula Cairns
769-1363

Leslie Kurisaki

From: Susan Pueschel [pueschels001@hawaii.rr.com]
Sent: Friday, February 18, 2011 3:36 PM
To: lkurisaki@kimurainternational.com
Cc: Clemson Lam, Architect
Subject: letter of support for Waimea Trails & Greenways
Attachments: EB endorse Waimea Trails.doc

Aloha,

Please see the attached letter of support from Dr. Earl Bakken for the Waimea Trails and Greenways project.

Mahalo,

Susan Pueschel
For
Earl Bakken

Earl E. Bakken
M.D., Hon. C.
Hon. D. Sc. (3)
Hon. D.H.L. (2)
F.A.C.C. Hon.
F.I.C.S. Hon.
F.I.E.E.E.
F.I.S.A.

February 18, 2011

To Whom It May Concern:

I am sending this letter in support of The Draft Environmental Assessment for Ke Ala Kahawai O Waimea - the Streamside Trial of Waimea, known more commonly as Waimea Trails and Greenways.

I think it is extremely important that we do whatever we can to get this trail system in place and functioning as soon as possible.

I have been working heavily on a Manifesto for Hawaii Island which emphasizes our urgent need to become independent of oil as fuel for commuting. By 2013 it is predicted that our gas prices will double, and our people will not be able to afford this.

Right now, in our Waimea community, we have a great opportunity for promoting bicycle commuting. A volunteer group has worked hard for the past several years, donating time and energy to keep the Waikoloa stream bed clear in preparation for Ke Ala Kawahai O Waimea, but we need it soon as an alternate and separate transportation corridor to promote walking and bicycling as much as possible.

Not only would this project encourage independence from oil as fuel, it will bring jobs to our local economy, and will ultimately promote better health for our Hawaii Island people – something I've been working passionately on for the past 20+ years.

Thank you for your consideration.

Dreaming on,

Earl E Bakken

Earl Bakken

Mailing Address:
PO Box 384360
Waikoloa, HI 96738

Physical Address:
Bakken Hale
Kiholo Bay, Highway 19,
Milemarker 82.5
Kailua-Kona, HI 96740

808.325.3127
Fax.808.325.0928
bakken@bakkenhale.com
www.earlbakken.com

KIMURA INTERNATIONAL INC.

September 12, 2011

Dr. Earl E. Bakken
P.O. Box 384360
Waikoloa, Hawai‘i 96738

Dear Dr. Bakken:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter dated February 18, 2011 in support of this project. A copy of your letter will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Ellen Cordeiro [ellenc808@gmail.com]
Sent: Friday, February 18, 2011 4:42 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trail

Aloha,

I support the trail.

Mahalo,

Ellen

Sent from my iPad

Carmine DiPronio
PO Box 1457
Kamuela, Hawaii 96743
February 18, 2011

RECEIVED FEB 22 2011

James M. Komata, Park Planner
Department of Parks & Recreation, County of Hawai`I
101 Pauahi Street, Suite 6
Hilo, Hawai`i 96720

SUBJECT: Draft Environmental Assessment (DEA) for Ke Ala Kahawai O Waimea ~ Waimea Trails and Greenways (WTG)

1. I understand in the DEA it states this has to be a commuter path in order to qualify for federal funds.

2. How many residents actually live along or near the full length of the path? How many residents are actually going to ride or walk to work or school on the concrete path? Why doesn't the Draft DEA have any statistics to show these numbers? How many residents actually work in the center of town that will use this as a commuter option?

3. How many residents have to use this trail to qualify it as a commuter path rather than a recreational path?

4. The concrete path route estimates are very costly. The path has multiple stream crossings and a tunnel under a major highway. Is this a cost effective way to benefit a chosen few?

4. The Hawaii County has imposed furloughs and pay cuts to Hawaii County workers. The Hawaii County and State is now considering fees for many essential services and recreational areas to try and balance the budget. Why didn't Hawaii County residents have the option to use these federal, state and county funds for other essential projects that would have benefited all of the Hawaii County residents? Why isn't our county officials working on essential projects to benefit all Hawaii County residents instead of wasting our tax dollars and human resources on a concrete path for only a chosen few?

Feel free to contact me for further discussion on this issue at 1-808-756-3508.

Respectully,

Carmine DiPronio

cc: Mr. Glenn T. Kimura
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

7009 2820 0003 4793 5287

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

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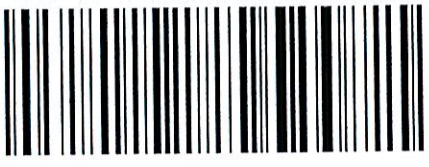

7009 2820 0003 4793 5287

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Carmine DiPronio
P.O. Box 2183
Kamuela, Hawai‘i 96743

Dear Ms. DiPronio:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter to Mr. James Komata, County Department of Parks and Recreation (DPR) dated February 18, 2011 providing comments on the Draft Environmental Assessment. We offer the following responses to the points in your letter.

1. There are various federal programs that could provide funding for the trail, and each program has different funding criteria. However, the intent of the County administration and the Waimea Trails and Greenways (WTG) Committee is to seek Federal Highway Administration (FHWA) Transportation Enhancement (TE) funds for the majority of the project funding. These funds are specifically earmarked for activities that “help expand transportation choices,” including pedestrian and bicycle facilities. Mr. Pat Phung of the FHWA Hawai‘i Division has confirmed that over the past several years, his agency has been allocated approximately $4.9 million in TE funds annually for eligible projects in Hawai‘i. Unfortunately, most of the earmarked funds have gone unused, due to lack of demand from the counties. To date, the County of Kaua‘i has been the only jurisdiction in the State to utilize TE funds, for a six-mile long segment of multi-use (bike and pedestrian) path in the Kapa‘a area. In that case, the County of Kaua‘i was able to use the assessed value of privately-donated land as its 20% local match.

The County of Hawai‘i is very concerned about the current economic conditions, funding cutbacks, furloughs, and pay cuts for County workers. The administration is working on many fronts to address this issue, including economic development initiatives and infrastructure improvements. This project, albeit small, would help create jobs for local contractors.

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Providing families with more options and enhancing quality of life are among this administration's highest priorities, and are especially important during stressful economic times. Rather than being an amenity for only a chosen few, the *Ke Ala Kahawai o Waimea* will provide a transportation alternative that can be used by individuals of all ages and social and economic backgrounds. The trail has the potential to reduce automobile dependence, alleviate local traffic, promote exercise and a healthy lifestyle, and enhance recreational opportunities. The County does not view this as wasted money or effort, but a long-term investment in the well being of the community. Moreover, the availability of federal funds--which have been allocated specifically for these types of improvements--makes this a prudent and efficient use of County resources.

2. There is no way of knowing exactly how many residents are going to use the path to get to school or work. However, previous studies indicate there is a high level of interest in such a commuting alternative. A March 2005 *Safe Routes to School* study for Waikoloa and Waimea found that while 12% of Waimea students live close enough to school to walk or bike, only 5 percent walk or bike to school and 9 percent walk or bike home. A survey of Waimea parents found that the main reason they chose to drive their children over other alternatives was "Safety" (mentioned by 51% of respondents). When students were surveyed, 19% said they would like to get to school by bike, and 7% would like to walk (both higher numbers than are able to do so now). The study concluded that *"if bike paths were available, particularly if there were safe crossings of Highways 19 and 190, many more could get to school under their own power…Many barriers exist, but it appears that progress toward healthier and safer alternative to every parent driving their children to school is possible…*".

The likelihood of trail use by commuting students was reinforced by both the principal and the community liaison of Waimea Middle Public Conversion Charter School (PCCS). In letter sent during the Draft EA comment period, Principal John Colson stated that "a safe trail would offer my students the opportunity to talk or ride their bike to and from school" and noted that it would also benefit both campuses of HPA, Waimea Country School and Waimea Elementary School. Ms. Patti Cook, the Waimea Middle PCCS Community Liaison noted the presence of high population, low income housing areas within a mile of their school, including Noelani Apartments and several low-to-moderate rental apartments. She noted that nearly 100 *keiki* live in Noelani's public housing apartments, most of whom attend Waimea Elementary and Middle schools. Ms. Cook explained that these children must walk to school along the edge of a very congested highway where there is virtually no curb and sidewalks, or their families—who are already struggling financially—must drive them to and from school out of concern for their safety. She concluded that the proposed trail would immediately improve the safety of these children and reduce peak hour traffic congestion.

Another study shows a high level of interest in non-vehicular options. A December 2005 study conducted for the Waimea Community Development Plan Committee identified various issues of concern and interest to Waimea residents. This study was conducted by Nino Walker, a graduate student at the University of California at Berkeley, and consisted of 45 personal interviews and a

survey of 148 respondents. One question in the survey asked, *"If you could make only three changes to Waimea to make a better place to live/work/do business what would they be?"* The top answer to this question was to "fix traffic" (84% of respondents) and the second was to "improve non-vehicular options" (40% of respondents). Of those who wanted to improve non-vehicular options, 39% specifically said to "make it more walkable" and 20% said "make it bike friendlier." Another question in the Walker survey asked, *"What land use changes, transportation improvements or other factors would allow you to use your car less frequently?"* The most frequent response was "make the town bike friendly" (47%) and the second was "more trails" (30%).

3. According to Federal Highway Administration (FHWA), there is no established number of individuals who have to use the trail to qualify it as a commuter versus a recreational path. However, projects funded under FHWA's Transportation Enhancement (TE) program must *"benefit the traveling public and help communities to increase transportation choices and access, enhance the built and natural environment, and provide a sense of place."* As such, FHWA will evaluate how well the project functions as a transportation facility, how it benefits the traveling public, how it meets ADA accessibility guidelines, and its long-term benefits. The level of community interest and support are also important in deciding whether to fund a project.

4. see #1 above

Thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

RECEIVED FEB 22 2011

To: Kimura International, Inc.
Mr. Glenn Kimura
1600 Kapiolani Blvd., Suite 1610
Honolulu, Hi. 96814

From: Pamela Cushnie, Waimea resident
Subject: Waimea Trails and Greenways, comments to the draft EA of January 2011

Date: February 18, 2011

Thank you for allowing me to speak during the Feb.9, 2010 meeting in Waimea. I will try to clarify my concerns about the shortcomings of the recent draft EA.

1) Mixed communications:

a. Why did Leslie say that only a "question and answer format would be allowed on 2/9, and that public testimony would not be taken"? That was not the actual format on Feb. 9.

b. Why exactly does the "path" need to be 10 feet wide? Mr. Kimura stated on 2/9 that it could be 5 ft. wide in sections to go around trees. His statement seems to conflict with the understanding that the path needs to be 10 ft. wide to accommodate emergency vehicles, and also conflicts with Ms. Dierenfield's statement that it needs to be 10 ft. wide to accommodate 2-way walking traffic.

c. Why are there conflicting written statements as to:
the projected costs of increments ($ 4.8 million in the dEA for Increment I vs. $ 7.28 from David Imata in the WTrails meeting minutes), and
the length of the project (4.7 mi. vs. 8.4 mi. in the DEA, Management Summary)?

d. Which is the correct information: "the path can only receive Federal funds if the entire project is ADA accessible" according to County information, or that "sections of the path may not be ADA accessible" but we will still apply for Federal funds?

e. How much County money has already been spent on this Path? It is fiscally responsible reporting to show how much tax-payer money has already been spent, as well as projected future costs. I have been told that once a County has spent money on a project, Federal money cannot be requested.

2) Would you please cite and make available your survey results for the DEA statement on p. 4-56, "there is a high level of support for the project within the community"?

I think it would be interesting for the next EA (or revised DEA) to provide a map of Waimea showing the properties along both of the trails, and whether the DEA has received comments from those residents being for or against the project. A map showing residences with concerns might be very enlightening to the County and readers of the next EA.

When the DEA specifically mentions 2 subdivisions by name as being strongly against the alternate trail, why does it not also mention the other landowners/ leasees who are also against it?

Should I think that my Pako subdivision's concerns count more than any of the other many letters written? I would hope not, yet my subdivision was singled out in a public document.

Apologies to residents, after publication of the EAs, for the shortcomings of the DEA are not adequate enough. It seems as if the public is having to do a lot of the "repair and supervision" work on the DEA. Is this an indication of the way the Path project might be loosely supervised if it ever comes into existence?

Please state your findings clearly and factually, for instance: 9 out of 9 letters received from residents in Sandalwood are against the Proposed Path, 25 out of 26 letters received from residents along the alternate Mauka path are against the path.

3) Would you please cite your survey results for the statement on p.4-56, " ...positive impact on the local visitor industry"?

4) Could you please identify areas providing adequate parking for tour buses, vans and cars and corresponding results from a Traffic Mitigation Survey?

I believe you have recently asked the Waimea Board of Water Department to move their fence line back along Kawaihae Road, near Merriman's Restaurant, in order to accommodate parking for the trail. This corner is one of the most difficult to drive through, with approximately 8 approaches onto the highway within a 50' distance. The South Kohala Traffic Safety Committee acknowledged this dangerous intersection by having the County place "no parking" markers along the highway, in an effort to keep the intersection less congested and improve visibility.

5) Could you please be more specific about the 30 feet (10 ft. on either side of the path): how and by whom it will be cleared of vegetation? Will this routinely involve the use of plant poison (ie. RoundUp) or be done by mechanical means?

A recent brushfire along the lower Kawaihae Road was apparently started by the County's brush-clearing machines. Might this pose a similar concern during dry conditions? How would the Fire Department access the Path?

6) Would you please cite DEA survey results for the expected use of the trails by residents?

I would expect the survey to be conducted in an impartial manner, with some of the following categories addressed:

2010 Census citing number of residents in Waimea town.
Number of families living within walking distance of the proposed path
Number of parents who would send their children off to school and not know if they made it safely or not until late afternoon
Number who would not need to use their car to transport heavier or perishable items
Number who would use the Path for fitness and recreation
Number who would use the Path for errands instead of a car

(Number of businesses who believe they would benefit from the path and
Number of residents along the Path willing to assume some responsibility for reporting emergencies along the Path, clean up litter blown onto their property, and approve of a fence along the path.... Not "Use of Path" per se but interesting information)

Have you thought through the actual children-walking –to-school process? If a parent sends a child off walking in the nice weather in the morning, they will not know if the child arrives safely. The school does not call. If it is nice weather in the morning but rainy or windy in the afternoon, the child may have no other option but to walk in the rain. If a parent wants their child to ride the school bus to get home, they must first pay by the quarter year, whether they use it or not.

7) In Chapter 4, page 58, paragraph 3, there is an unfinished sentence. "It is also recommended that the WTC....". What is the completed sentence?

8) I noticed that many of your cited documents were very old sources. The DEA Property Value reference was from 1978, the Census information was from 2000, and Crime reference was from 1971. Do you not have anything more recent? Even conflicting data would be more helpful, and should at least be presented as such.

9) Page 4-61. Please cite some of your sources pertaining to "real world experiences with thousands of miles of trails."

10) Please show written proof of the assertion that the Alternate "Mauka" Trail was designated in the 1990's.

11) Page 5-5. "WTG members personally passed out flyers to residents". Who handed them out, to whom, and how many?

Since the WTC was apparently acting on behalf of the County, I'd like to know how they were distributed and who received them. If the WTG was not acting on behalf of the County, a more thorough process should have been put in place for distribution of important information. Even Goodfellows Construction mails out flyers with community/road information.

My only Path information came from a flyer given to the Sandalwood Board of Directors. There was no request for the Board to distribute the flyer any further. In fact, it was apparently considered "confidential", and available only to the Board members. This seems like a very ineffective way for the WTG to "hand out" flyers.

When I made copies that were later distributed to approximately 40 residents along the Mauka Trail, from Hale Kea Farms to HPA, none of those residents had heard of the alternate trail or the meeting.

12) I appreciate the DEA's findings that the Mauka path is not viable. Would you please permanently take it off any Project plans, as currently shown on page 407 of the DEA Management Summary?

Sincerely,

Pamela Cushnie

Pamela Cushnie

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Pamela Cushnie
PO Box 1632
65-1242 Pako Pl.
Kamuela, HI 96743

Dear Ms. Cushnie:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your memo dated February 18, 2011 providing comments on the Draft Environmental Assessment. We offer the following responses to the five major issue areas identified in your cover letter:

1. Mixed communications:

   a. The set format for the February 9, 2011 community meeting was a PowerPoint presentation and a question and answer period. It was not our intent to take formal "public testimony," although obviously some individuals in attendance chose to present their opinions in that format. Our intent that evening was to answer questions, listen to comments, and to try to give everyone an equal opportunity to speak.

   b. A ten to twelve-foot wide path allows for greater volume (two–way traffic) and will be able to accommodate a mix of users, including bicyclists, walkers, joggers, baby strollers, etc. The Federal Highway Administration (FHWA) Guidebook on Trail Development (Chapter 14, Shared Use Path Design) emphasizes that the width of a shared-use path not only affects pedestrian usability but also determines the types of users who can use the path. It recommends a minimum 10-foot width, as well as graded areas at least two-feet on either side. The FHWA Guidebook notes that shared use paths with heavy volumes of users can be 12 to 14 feet in width. It is not anticipated that there will be the heavy trail volume or fast-moving traffic to require a 12 to 14-foot wide path.

   c. As indicated on p. 4-57 of the Draft EA, the estimated cost of the path is $5.8 million for Increment 1 (Lindsey Road to Kahawai Street). The segment between Church Row and Lindsey road was estimated at about $3 million, and the area from Kahawai Street to the Clark property could be just over $10 million. The total length of the trail is approximately 4.8 miles.

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d. The sections of the path receiving federal funds must be ADA accessible to the extent feasible. If there are areas where ADA-accessibility cannot be met, signs will be posted indicating noting so, and the accessible locations will be posted. The State Department of Health's Disability and Communication Access Board (DCAB) will review trail plans and make recommendations for accessibility.

e. Suggest contacting the County if you have questions on how much has already been spent on this path.

2) Support for the project

There has been no official "survey" of public opinion documenting the high level of support for the project. However, the Waimea Trails and Greenways project has been specifically identified and endorsed in a number of public planning documents including the South Kohala Community Development Plan (November 2008), the Waimea Traffic Circulation Study (December 2007) and Bike Plan Hawai'i (September 2003), the State's bicycling master plan.

The State Comprehensive Outdoor Recreation Plan (SCORP) mentions the desirability statewide *for "more safe and continuous pathways for biking, walking, and jogging that connect communities. Paths set apart from roadways provide safe places for children to walk, run, skate, ride their bikes, and play. Paths also significantly reduce pedestrian and bicycle conflicts with motor vehicles."* (SCORP 2008, p. 112).

Each of these planning documents underwent months of public reviews and hearings, with opportunity for public comment. The accepted documents presumably reflect the desired policy and planning objectives of the County/State governments as well as those of the majority of the affected citizens.

Regarding the mention of various subdivisions, please rest assured that no one subdivision or group's comments are more important than another's. We will revisit this section in the EA to ensure that no one subdivision appears to be "singled out" as for or against the project.

Rather than being for "repair and supervision," the 30-day public review of a Draft EA is a standard part of the federal and State environmental review process, and is intended to provide the public with an opportunity to provide input and comment on the document. Necessary revisions and additional information will be incorporated into the Final EA.

The EA process is an information disclosure process, which provides information on existing (baseline) conditions and evaluates a project's likely environmental impacts. The County and the Federal Highway Administration (FHWA), the accepting agencies for the EA, are less concerned with the number of letters received "for" or "against" the project, than with whether the technical analysis is accurate and complete. The EA is <u>not a popularity contest</u>. However, in answer to

your question, during the Draft EA comment period we received a total of 58 written comments from community individuals (i.e., excluding government agencies). Of this total, 46 (80%) were in support of the project, 9 (15%) were opposed, and 3 (5%) were neutral. These letters will be reproduced in the Final EA.

3) Impact on local visitor industry

A December 2005 study conducted for the Waimea Community Development Plan Committee identified various issues of concern and interest to Waimea residents. This study was conducted by Nino Walker, a graduate student at the University of California at Berkeley, and consisted of 45 personal interviews and a survey of 148 respondents. One of the open ended questions asked was "*If someone came to visit you in Waimea, but you only had one place to go, where would you take your visitor?"* Of the 145 respondents, 55 (38%) responded "hiking." Twenty-seven (27) respondents (18%) said "place with good views of the landscape," and 10 (7%) responded "Nature Park." These three answers represent nearly 70% of all responses, indicating that the natural beauty of Waimea is by far the number one attraction for visitors.

4) We were not familiar with the parking and fence situation near Merriman's Restaurant that you mention, and consulted with Clem Lam of the Waimea Trails and Greenways Committee. He had not heard of this parking and fence issue either, and noted that the trail is down at the end of Opelo Road, and they have moved the fence at Kanu O Ka Aina – at the dead end at their gate.

5) 30-foot Right-of-Way

The 30 feet is the width of the trail right-of-way, and the width of the easement that has been granted to the County. The trail itself will be from 10-12 feet in width within this right-of-way. The entire 30-foot ROW will not be cleared of vegetation.

6) Use of trail by residents

Although there are no specific projections, several recent studies may shed light on the anticipated number trail users. The March 2005 *Safe Routes to School* study for Waikoloa and Waimea found that while 12% of Waimea students live close enough to school to walk or bike, only 5 percent walk or bike to school and 9 percent walk or bike home. A survey of Waimea parents found that the main reason they chose to drive their children over other alternatives was "Safety" (mentioned by 51% of respondents). When students were surveyed, 19% said they would like to get to school by bike, and 7% would like to walk (both higher numbers than are able to do so now). The study concluded that *"if bike paths were available, particularly if there were safe crossings of Highways 19 and 190, many more could get to school under their own power…Many barriers exist, but it appears that progress toward healthier and safer alternative to every parent driving their children to school is possible…*".

The likelihood of trail use by commuting students was reinforced by both the principal and the community liaison of Waimea Middle Public Conversion Charter School (PCCS). In letter sent during the Draft EA comment period, Principal John Colson stated that "a safe trail would offer my students the opportunity to talk or ride their bike to and from school" and noted that it would also benefit both campuses of HPA, Waimea Country School and Waimea Elementary School. Ms. Patti Cook, the Waimea Middle PCCS Community Liaison noted the presence of high population, low income housing areas within a mile of their school, including Noelani Apartments and several low-to-moderate rental apartments. She noted that nearly 100 keiki live in Noelani's public housing apartments, most of whom attend Waimea Elementary and Middle schools. Ms. Cook explained that these children must walk to school along the edge of a very congested highway where there is virtually no curb and sidewalks, or their families—who are already struggling financially—must drive them to and from school out of concern for their safety. She concluded that the proposed trail would immediately improve the safety of these children and reduce peak hour traffic congestion.

The 2005 Nino Walker survey cited above (question 3) also asked, *"If you could make only three changes to Waimea to make a better place to live/work/do business what would they be?"* The top answer to this question was to "fix traffic" (84% of respondents) and the second was to "improve non-vehicular options" (40% of respondents). Of those who wanted to improve non-vehicular options, 39% specifically said to "make it more walkable" and 20% said "make it bike friendlier." Another question in the Walker survey asked, *"What land use changes, transportation improvements or other factors would allow you to use your car less frequently?"* The most frequent response was "make the town bike friendly" (47%) and the second was "more trails" (30%).

Although they do not estimate the number of potential trail users, both studies cited, as well as the input from Waimea school officials show clearly that there is an unmet desire for transportation alternatives. In addition to the number of individuals who will use the trail for transportation, there will be many who utilize it for recreation, exercise, and socialization. The importance of these "non-transportation" priorities are also supported by the Walker study, which found the three main reasons people chose to live in Waimea are the sense of community (43%), the environment and landscape (42%) and the climate (60%).

7) This sentence will be revised.

8) Unfortunately, only very limited 2010 U.S. Census information is currently available. However, we will revisit the areas of the document you cite and check again whether more updated information can be obtained.

9) References will be provided.

10) Alternate “Mauka” Trail—This alternative was originally considered (and dismissed) by the WTG Committee in the late 1990’s. We have verified this and seen a copy of a 1999 CAD drawing prepared by Mr. Clem Lam for the WTG Committee. As stated in the EA, this alignment was rejected by the WTG Committee members, and therefore was not widely publicized or included in any official document.

11) The initial community meeting on March 24, 2010 was publicized by the County through mailings sent to County, State and federal agencies, community organizations, local churches, large landowners, and a number of community leaders, including members of the native Hawaiian community. Notice of the meeting was sent to various print and on-line media, including West Hawai‘i Today. In addition to this publicity effort, the WTG Committee members volunteered to help by posting notices at community gathering spots and handing out flyers to residents. According to our records, Kimura International printed over 100 flyers that were posted or distributed by WTG members. However, we cannot say exactly which WTG members passed out flyers and to whom.

Despite rumors that the flyers were “confidential,” organizations and individuals receiving the information were encouraged to give them wide circulation. We apologize if the individuals you talked to did not see a notice of the meeting. Thank you for doing your part to get the word out to 40 of your neighbors.

12) As Leslie Kurisaki explained in her e-mail to you dated March 30, 2011, when Glenn and Bob Fitzgerald said that the Waiauia Stream alternative (i.e., mauka alternative) will be “permanently dropped from consideration,” they did not mean that all mention of this alternative will be eliminated from the Final EA. The discussion of this alternative in Chapter 3, Alternatives Analysis (which considers, evaluates and then dismisses various alternatives) will remain in the Final EA. Figure 2, Alternatives Considered, will continue to show the mauka alternative, along with the all the alternatives considered.

An Alternatives Analysis is an essential part of an environmental evaluation conducted in accordance with the National Environmental Policy Act (NEPA). Some individuals have asked that all mention of the mauka alternative be eliminated from the EA. If this were done, there would always be a chance that someone in the future could raise it again. The Alternatives Analysis provides the documentation that this alternative was evaluated and determined to be infeasible and undesirable. It puts that issue to bed. It is the County’s intent to permanently drop the mauka alternative from further consideration.

Thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

To: Kimura International, Inc
Mr. Glenn T. Kimura
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
FROM: Kurt Shively
SUBJECT: Waimea Trails and Greenways; Comment to the Draft Environment Assessment (DEA)

DATE: February 18, 2011

The following are my comments to the DEA submitted before February 21, 2011:
3.2.3 Alternative Trail Alignments and Segments "Mauka Alternatives"

What right does WTG and Kimura International have to put a public trail around my house, through my private subdivision and across my property?

Why in the DEA does it state "that these alternatives were originally identified by the WTG Committee members in the early 1990's?

This is a false statement, I believe this alternative alignment was not considered until seeking federal funds. On March 23, 2010, WTG members sat down at a meeting and divided into groups. I believe, this is when the orange path (mauka alternate trail was determined).

You also go to on to state "at the time these mauka routes were proposed, the Pako and Ohia Ku Subdivisions across Kohala Mountain Road from HPA had not been built and much of the route was open and undeveloped. Today these mauka alignments would pass directly through private subdivisions, requiring easements from individual landowners or land condemnation, both costly and politically unpalatable options.

These alternatives were not proposed in the 1990's. These are false statements. Ohia Ku subdivision was developed in the 1990's and the alternative bike path was not proposed until 2010. So don't try and make it look like our subdivision is in the way of the bike path. We would like proof showing the documents of the mauka alternative proposed trail that you claim were made in the 1990's.
These statements need to be removed from the final EA.

What right does the Hawaii County, Kimura International and WTG have to threaten private homeowners with condemnation for a concrete path? Is condemnation being addressed concerning a property owner north of Lindsey Road?

Why does the DEA state on page 407 under management summary ,project acreage, state that this trail is going to be 8.4 miles a preferred alignment, at 4.7 miles , and an alternate alignment at 3 miles ?
This makes it look as if the mauka alternate route is still part of the whole project. This was supposed to be either the alternative trail or the preferred trail; not shown as a combined trail. We are requesting you show the alignment separate, not together.

According to the South Kohala Community Development Plan 2020 the expansion of the town is headed south of the new Parker Ranch connector road. Why haven't you considered building the proposed trail in this location before development begins? This way people have a choice to buy property along a concrete path, not shoved in their backyards without any consideration.

On page 114, the DEA discusses Waimea Traffic Circulation Study. The Study noted that a major traffic issue is on going congestion at the Lindsey Road/Mamalahoa Highway intersection, which has been documented for over twenty five years. You turn it's comments around and make it sound like it is all about bike trails. This study was to address traffic congestion at Lindsey Road, Mamaloha Highway intersection.

The county, state and federal government needs to work together to build a road from Kawaihae Highway

out to the vicinity of the Waimea Airport to allievate the traffic congestion (hundreds of truckers daily) not waste the money on a concrete bike path for a special interest group. Then the traffic could utilize the new Waimea connector road and make the bike/walk path along side of it. This would be cost effective, less maintenance and decrease traffic congestion for the rural community of Waimea residents.

Why would Hawaii County even consider wasting tens of million of dollars for a bike path only for a chosen few? If the County and Federal Government are going to spend money on a recreational project it should benefit the entire County of Hawaii taxpayers. Example: this money should be used for a by-pass road around the Waimea town to benefit all of the Island residents. Any money allocated for Hawaii County should be targeted for a new by-pass, not a bike/walk trail.

I look forward to more meetings on this issue.

Thank you for this opportunity to comment on this draft EA.

Sincerely,

Kurt Shively

Kurt Shively
PO Box 2233
Kamuela, Hawaii 96743
February 18, 2011

James M. Komata, Park Planner
Department of Parks & Recreation, County of Hawai`I
101 Pauahi Street, Suite 6
Hilo, Hawai`i 96720

SUBJECT: Draft Environmental Assessment (DEA) for Ke Ala Kahawai O Waimea ~ Waimea Trails and Greenways (WTG)

Dear Mr. Komata:

The following are my comments to the DEA submitted before February 21, 2011:
3.2.3 Alternative Trail Alignments and Segments "Mauka Alternatives"

1. Why in the DEA does it state "that these alternatives were originally identified by the WTG Committee members in the early 1990's? Based on my review of the 2004 South Kohala Community Development Plan (CDP) and the Waimea Trails and Greenway meeting minutes, the alignment for the Mauka Alternatives was not identified prior to 2010. Therefore, the following statement found on page 3-5 is false and should be removed from the document:

   The "mauka" trail alternatives shown on Figure 2 are located north of Kawaihae Road, toward the Kohala Mountains. These alternatives were originally identified by the WTG Committee members in the early 1990's.

2. Ohia Ku subdivision was developed in the 1990's and the alternative bike path was not proposed until 2010. Since there is no evidence that the mauka alternatives were identified by a government agency prior to 2010, this statement should also be removed from the document. The following statement on page 3-5 should also be removed:

   At the time these mauka routes were proposed, the Pako and Ohia Ku Subdivisions across Kohala Mountain Road from HPA had not been built and much of the route was open and undeveloped. Today...

3. I agree with this statement on page 3-5:

   ...these mauka alignments would pass directly through private subdivisions, requiring easements from individual landowners or land condemnation, both costly and politically unpalatable options.

4. Why has the County granted WTG so much power, the power to identify private property for condemnation and development?

5. Is condemnation being addressed concerning a property owner north of Lindsey Road?

6. Why does Project Description on page 407 of the DEA state the project area is 8.4 miles?:

   The current project area covers approximately 8.4 miles.

   This makes it look as if the mauka alternate route is included in the project. The mauka trail should be identified separately from the preferred trail; not shown as a combined trail. We are requesting the project description be amended to specify the length of the alternatives separately, not together.

7. According to the South Kohala Community Development Plan 2020 the expansion of the town is headed south of the new Parker Ranch connector road. Why haven't you considered building the proposed trail in this location before development begins? This way people have a choice to buy property along a concrete path, not shoved in their backyards without any consideration.

8. On page 114, the DEA discusses Waimea Traffic Circulation Study. The Study noted that a major traffic issue is on going congestion at the Lindsey Road/Mamalahoa Highway intersection, which has been documented for over twenty five years. You turn it's comments around and make it sound like it is all about bike trails. This study was to address traffic congestion at Lindsey Road, Mamaloha Highway intersection.

9. The county, state and federal government needs to work together to build a road from Kawaihae Highway out to the vicinity of the Waimea Airport to allievate the traffic congestion (hundreds of truckers daily) not waste the money on a concrete bike path for a special interest group. Then the traffic could utilize the new Waimea connector road and make the bike/walk path along side of it. This would be cost effective, less maintenance and decrease traffic congestion for the rural community of Waimea residents.

10. Why would Hawaii County even consider wasting tens of million of dollars for a bike path only for a chosen few? If the County and Federal Government are going to spend money on a recreational project it should benefit the entire County of Hawaii taxpayers. Example: this money should be used for a by-pass road around the Waimea town to benefit all of the Island residents. Any money allocated for Hawaii County should be targeted for a new by-pass, not a bike/walk trail.

I look forward to more meetings on this issue, where all concerns will be heard and sensibly addressed.

Thank you for this opportunity to comment on this draft EA.

Sincerely,

Kurt Shively Jason Shively

cc: Mr. Glenn T. Kimura
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Kurt Shively
P.O. Box 2233
Kamuela, HI 96743

Dear Mr. Shively:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter to Mr. James Komata dated February 18, 2011. We offer the following responses to your comments.

1. The National Environmental Policy Act (NEPA) requires that the EA include a discussion of alternatives considered. As stated in the Draft EA, the "mauka alternative" was originally considered (and dismissed) by the WTG Committee in the late 1990's. We have documentation of this statement in the form of 1) a graphic of this alignment developed by Mr. Clem Lam in 1996 for the WTG Committee, and 2) meeting notes from an April 1, 1996 meeting of the WTG Committee, referring to the mauka alignment. As stated in the EA, this alignment was rejected by the WTG Committee members, and therefore was not widely publicized or included in any official document.

2. The mauka alternatives was not developed or proposed by a government agency prior to 2010. This alternative was considered, and later dismissed, by the WTG Committee in the late 1990's. We can clarify this statement in the Final EA.

3. Noted.

4. No private property is being condemned for this project. Private landowners along the route have granted the County easements for the trail.

5. Unclear what this comment refers to.

6. The proposed trail is 4.8 miles in length. Any references otherwise will be corrected. As stated in Chapter 3, the mauka alternative has been eliminated from further consideration.

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7. *Ke Ala Kahawai o Waimea* follows the meandering path of Waikoloa Stream, the source of much of Waimea's history and a natural resource which belongs to the public, not to a select group of landowners. The trail is not being shoved into anyone's backyard. For example, in the case of the Sandalwood subdivision, dwellings are located a distance of approximately 100 to 175 feet from the proposed edge of the path easement, which is located across Waikoloa Stream. The trail will also be located across the stream from the Department of Hawaiian Homelands Lalamilo subdivision.

The law defines a violation of privacy for homeowners as an "unreasonable and highly offensive intrusion" of their seclusion or solitude. The proposed path will not result in an intrusion onto homeowner privacy within the confines of their property.

8. The purpose of the Waimea Traffic Circulation study was to mitigate traffic congestion as well as to maintain the special character of the Town of Waimea. Therefore, "innovative ways of addressing the traffic congestion area needed" (Waimea Traffic Circulation Study, 2007, Executive Summary, p. i).

You are correct that the Lindsey Road/Mamalahoa Highway intersection was identified as a key component of the existing traffic congestion. However, recommended short-range actions to address the current traffic issues in Waimea Town included a combination of roadway improvements, transit improvements, and pedestrian/bicycle improvements (p. 39). Please note this recommendation on p. 53 of the study:

> *It was stated frequently by the community that a solid system that provides bicyclists and pedestrians with mobility in Waimea would be desirable. Figure 33 illustrates a potential bicycle and pedestrian network that would provide this mobility. The plan utilizes existing and proposed roadways as the backbone of a bicycle-pedestrian network and augments this backbone through the use of the Waimea Trails and Greenways project paths. It is recommended that bicycle and pedestrian facilities be part of all future roadway construction projects.*

9 and 10. The County does not intend to waste tens of millions of dollars for this project. Rather, it has always been the County's and WTG Committee's intent to leverage federal money, in particular Federal Highway Administration (FHWA) Transportation Enhancement (TE) funds. These funds are specifically earmarked for activities that "help expand transportation choices," including pedestrian and bicycle facilities. (TE funds cannot be used for a bypass road around Waimea Town).

The FHWA Hawai‘i Division and State of Hawai‘i Department of Transportation has confirmed that as of April 2011, there was approximately $16 million in TE funds available for eligible projects in Hawai‘i. They have also indicated that over the past several years, FHWA has allocated to the State approximately $3.7 million annually for TE projects. Unfortunately, most

of these funds have gone unused, due to lack of eligible projects. The County of Kaua‘i has utilized TE funds for a six-mile long segment of multi-use (bike and pedestrian) path in the Kapa‘a area. In that case, the County of Kaua‘i was able to use the assessed value of privately-donated land as its 20% local match. It is the County and WTG Committee’s hope to similarly leverage TE funds which historically have been underutilized statewide.

Thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

LaDonna Shively
PO Box 2233
Kamuela, Hawaii 96743
February 18, 2011

RECEIVED FEB 22 2011

James M. Komata, Park Planner
Department of Parks & Recreation, County of Hawai`I
101 Pauahi Street, Suite 6
Hilo, Hawai`i 96720

SUBJECT: Draft Environmental Assessment (DEA) for Ke Ala Kahawai O Waimea ~ Waimea Trails and Greenways (WTG)

Dear Mr. Komata:

I am writing to share my disapproval of the proposed CONCRETE PATH proposed by Waimea Trails and Greenway committee (WTG). I STRONGLY urge you not to rush forward but to reexamine the numerous issues raised on the current proposal. PLEASE HOLD additional forums with the citizens of Waimea NOT just to voice your plans, but to hear our voices and answer the many questions this project has raised. The following are but a few community concerns:

1. Aside from the cost it is unthinkable that beautiful heritage trees will be sacrificed for yards of concrete. Why would you even consider the destruction of these valuable lands and stream front properties?

2. Why does the DEA on page 3-7 claim there is "widespread support for this project"? I personally went door to door to almost every resident along both the proposed and the mauka alignment. Ninety five percent of these residents are against the concrete path coming along or through their backyards. Where is your statistics to show you actually spoke to the residents of Waimea?

3. COSTS-- I also object to the expense, particularly during these trying economic times. Why would anyone consider borrowing millions of dollars to develop what can very well be considered an unnecessary project? This is a rural community of less than 14,000 people. We can not justify spending this kind of money for a chosen few.

4. LANDSCAPE MAINTENANCE --Why doesn't the DEA mention how Hawaii County will maintain the concrete path? It is well known that the County uses pesticides to control their landscape maintenance. Why doesn't the DEA address these poisons entering the stream? If the county uses machinery for landscaping maintenance, how are they going to address safety for the people on the trail? Will the county need to shut down the trail for periodic maintenance?

5. FIRE -- On page 57 Chapter 4 under Waimea Refuse Transfer Station to "Clark Property" it states winds are frequently gusty through this area. The dry conditions have been

exacerbated by the ongoing drought. Anywhere on this concrete path could be considered a fire hazard due to the possibility of people smoking, people intentionally starting fires. In 2010, Hawaii County landscape crew was operating its equipment along Kawaihae Road. The equipment sparked a fire that burned hundreds of acres. Why doesn't your EA address natural accidents and arson fires that are well known over the past 5 years around South Kohala?

6. PARKING -- The DEA does not address vehicle parking during and after project construction. The DEA states on Chapter 4- page 78 Affected Environment, Impacts and Mitigation "...there will be no adverse traffic impacts during construction of the various path segments. However, as the path is built out, construction vehicles and equipment may temporarily require access form some of the local roads branching off Kawaihae Road, such as Opelo Road, Pu'u Opelu Road, or Kahawai Street. Once the concrete path is built, parking on these local roads by path users will not be allowed. Posted signs will reinforce this message."

   The DEA does not address the full negative impact on residents adjacent to the trail, nor traffic congestion, that will undoubtedly result from people parking at trail access points. Will residents of Kahawai Street and Pu`u Opelu Road be allowed to park where they live? This project will create more traffic congestion for the highways and the homeowners that live along these roads. I would like to know how this will be enforced and by whom? Are you expecting the homeowners to come out of their homes and ask the people to please move their car from in front of their homes because the sign right there says no parking. Good luck. People go and park where ever they feel like it and this county project becomes a homeowners nightmare 24 hours a day 7 days a week.

7. PUBLIC SAFETY
   4.7 PUBLIC SERVICES AND FACILIITES
   4.7.1 POLICE--The DEA states the local police will have the primary responsibility for public safety on the path. Several years ago, the Waimea Community Association purchased bicycles for the Police to establish police bike patrols to monitor the trail.
   At the DEA meeting on February 9, 2011, the Hawaii County police officer stood up and said the police department of Waimea does not have trained police bike patrols to monitor the trail. The bikes they have are old and not useable. With cutbacks how can the county assure us that it will adequately patrol this trail in the years to come? Who is going to provide security?

8. BARBED WIRE fences are inappropriate for a path. They are known to cause injury.

9. SECURITY
   How is the concrete path going to be shut down at night? The State and County Parks are shut down at night because of homeless looking for a place to live, vandalism, drinking, fighting and many more reasons. On Sunday, February 13th, 2011, I was on the path and when I entered into the nature park I saw two homeless people sleeping in the park. Who is going to be controlling the trail 24/7?

In closing, I strongly urge each and everyone of you to consider the negative impact this project will have on this community. Consider the long term consequences and additional expense you'd be imposing on already burdened residents. We believe that there are viable alternatives to destroying the peace, serenity, and privacy of our properties.

The County and WTG are putting the responsibility of policing a public path on the backs of the homeowners that don't even want the trail in the first place. I am certain this would not want to be a legacy a public official leaves behind.

Thank you for the consideration concerning this project.

Respectfully~

LaDonna Shively

Lawen Hickey

Shannon Shively

cc: Mr. Glenn T. Kimura
Kimura International, Inc.
1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. LaDonna Shively
P.O. Box 2233
Kamuela, HI 96743

Dear Ms. Shively:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter to Mr. James Komata dated February 18, 2011. We offer the following responses to your comments.

1. The County recognizes the importance of trees in providing shade, windbreaks, noise buffers, and overall ambiance. Only trees required to accommodate the path and to ensure user safety will be cut down. The exact number will be determined during the design phase. The County will be working with the Waimea Outdoor Circle to address these issues in the Waimea Nature Park area.

2. The Waimea Trails and Greenways project has been specifically identified and endorsed in a number of public planning documents including the South Kohala Community Development Plan (November 2008), the Waimea Traffic Circulation Study (December 2007) and Bike Plan Hawai‘i (September 2003), the State's bicycling master plan. The State Comprehensive Outdoor Recreation Plan (SCORP) mentions the desirability statewide *for "more safe and continuous pathways for biking, walking, and jogging that connect communities. Paths set apart from roadways provide safe places for children to walk, run, skate, ride their bikes, and play. Paths also significantly reduce pedestrian and bicycle conflicts with motor vehicles."* (SCORP 2008, p. 112).

Each of these planning documents underwent months of public reviews and hearings, with opportunity for public comment. The accepted documents presumably reflect the desired policy and planning objectives of the County/State governments as well as those of the majority of the affected citizens.

Also, although the Environmental Assessment process is not intended to be a "popularity contest," during the Draft EA comment period, a total of 58 written comments were received from community individuals (i.e., excluding government agencies). Of this total, 46 (80%) were in support of the project, 9 (15%) were opposed, and 3 (5%) were neutral.

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3. Costs--The County does not intend to borrow “millions of dollars” to develop this trail. Rather, it has always been the County’s and WTG Committee’s intent to leverage federal money, in particular FHWA’s Transportation Enhancement (TE) funds. These funds are specifically earmarked for activities that “help expand transportation choices,” including pedestrian and bicycle facilities.

The FHWA Hawai‘i Division and State of Hawai‘i Department of Transportation has confirmed that as of April 2011, there was approximately $16 million in TE funds available for eligible projects in Hawai‘i. They have also indicated that over the past several years, FHWA has allocated to the State approximately $3.7 million annually for TE projects. Unfortunately, most of these funds have gone unused, due to lack of eligible projects. The County of Kaua‘i has utilized TE funds for a six-mile long segment of multi-use (bike and pedestrian) path in the Kapa‘a area. In that case, the County of Kaua‘i was able to use the assessed value of privately-donated land as its 20% local match. It is the County and WTG Committee’s hope to similarly leverage TE funds which historically have been underutilized statewide.

Moreover, many of the dollars spent on the trail will go to workmen, suppliers, and businesses in Waimea. The trail will be built by local companies, thereby creating and supporting local jobs.

4. Landscape Maintenance—As explained in the Draft EA, the WTG Committee will partner with the County Department of Parks and Recreation (DPR) to assume primary stewardship of the trail’s long-term care and oversight. The WTG Committee will be responsible for “routine” maintenance including the day-to-day tasks of litter pick-up, removal of trash and debris, weed and dust control, and trimming vegetation. The WTG Committee will organize periodic community work days as well as organize “adopt a section of the trail” opportunities for the business community, organizations, and individuals similar to the highway adoption program.

The County of Hawai‘i will have primary responsibility for remedial maintenance throughout the life of the path, including repairing, replacing or restoring major components on a regular basis as well as correcting defects or damage due to erosion, flood, or other natural events.

Low maintenance, native vegetation will be utilized along the trail to the greatest extent possible. Once plantings are established, the County does not forsee the need for extensive maintenance efforts or the use of heavy machinery or pesticides.

5. Fires— The drought experienced over the past several years has increased the risk of brush fires. The ongoing drought conditions were discussed in the Draft EA. The presence of the trail will not affect the likelihood of brush fires or increase fire risk. A concrete trail actually provides a fire break.

6. Parking—Parking for users of the path will be available on public streets and at community parks. In the future, parking areas will be developed on the Clark property and the future County park next to the Refuse Transfer Station. In order to minimize impacts to Kahawai Street residents, the EA has suggested prohibiting street parking on Kahawai Street. The downside is that residents and their guests will also be prohibited from parking on the street. Because Kahawai Street is owned by Parker Ranch, any proposed mitigation will need to be discussed with them and implemented with their consent.

7. Public Safety-- Captain James Sanborn of the South Kohala Police Station was contacted on April 14, 2011, and confirmed that the Police Department would be responsible for responding to calls regarding security and crime along the trail. He explained that bicycle mounted patrol training was scheduled at one time but was recently postponed, and he was unsure when it would resume. This is probably why the officer attending the DEA meeting on February 9, 2011 could not provide a definite answer. Captain Sanborn said he is supporting the effort to bring bike patrols back to the South Kohala district.

8. Barbed wire has never been proposed along the trail. We agree that it would be inappropriate.

9. Security— Asked whether he had any specific concerns about the proposed trail, Police Captain Sanborn said he said he is a proponent of the Crime Prevention Through Environmental Design (CPTED) approach, and therefore would be concerned with design issues such as visibility, natural surveillance, lighting, placement of vegetation/foliage, etc. The concrete path will not be lit at night and its use will be limited to daylight hours. Signs stating this will be posted, but unlike public parks, the path cannot be “shut down” or secured. Citizens observing illegal or suspicious activity on the path should contact the police.

Thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

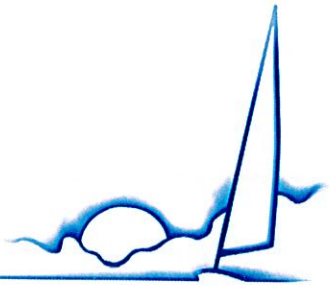
KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

Maile Charters



February 19, 2011

Mr. James Komata
Park Planner
County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720

Dear Mr. Komata;

I'd like to express my support for the vital Greenways path system development in Waimea. A Greenways path system would provide residents the opportunity to walk or bicycle around town without trying to battle the roadway. It would allow parents to walk their children to school in an enjoyable and relaxed manner, with the underpass under Kawaihae Road providing a safer crossing alternative for certain school routes. And, it would improve the quality of life significantly for residents.

When the City of Boulder first discussed developing a Greenways Path system in 1987, residents voiced many of the same concerns that have been raised here. However, after it was built, the Greenways System became so popular in Boulder that it is almost considered synonymous with quality of life there. This is highlighted by the fact that homes that directly border a Greenways path are valued $40,000 higher than those that do not, and this is the first quality a realtor will point out.

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www.adventuresailing.com tania@adventuresailing.com
Cell – 808.960.9744 Fax – 808.882.1820 Toll Free – 800.726.SAIL

It's very unfortunate that the town of Waimea wasn't very well planned, making it very difficult to walk or bicycle from one part of the small downtown to another. The Greenways path would provide some alternative to trying to manage without sidewalks, paths, pedestrian crossings and bicycle facilities, in this otherwise beautiful, and small, town. Hopefully, someday, the downtown core will be redesigned. And, combined with a Greenways network, this would make Waimea truly a wonderful place to be.

Thank you for your consideration and effort on this manner.

Kind regards and aloha,

Tania Howard
Managing Partner, Maile Charters

Cc: Leslie Kurisaki

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Tania Howard
Managing Partner, Maile Charters
P.O. Box 44335
Kamuela, Hawai‘i 96743

Dear Ms. Howard:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter of support dated February 19, 2011 to Mr. James Komata of the County Department of Parks and Recreation. The example you cite of the Greenways Path system in Boulder, Colorado was especially interesting, given that some Waimea residents have expressed concerns about the effect on neighboring property values. Our research has found that like Boulder, most greenway trails have resulted in an increase in surrounding property values, and in some cases, individuals who initially opposed the trail have become its strongest supporters. The Final EA will provide a discussion of the current research on this issue.

A copy of your letter will be included in the Final EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

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Leslie Kurisaki

From: margaret [margaretwille@mac.com]
Sent: Sunday, February 20, 2011 8:28 AM
To: Leslie Kurisaki
Cc: Clem Lam; Robert Fitzgerald
Subject: WTG EA comments

Attachments: WTG.doc; ATT00058.txt


WTG.doc (49 KB)


ATT00058.txt (227 B)

Aloha Leslie: Re; DRAFT EA FOR WTG TRAIL: COMMENTS

Here are my suggestions for the draft EA:

To: Kimura International
Cc: Clem Lam Waimea Trails & Greenways Committee
Re: Draft Environmental Assessment
Ke Ala Kahawai o Waimea Trail ("the Trail")
Date: February 19, 2011

Comments regarding the draft Environmental Assessment. Please consider these comments in conjunction with all previously submitted comments.

1. Although I have some significant issues with the current design plan and suggest some location adjustments, I am very supportive of the overall proposed trail plan. To put it simply this trail will tie this community together in many ways – it will contribute greatly to changing Waimea-town from a highway shopping center destination into a village community. Construction of this trail will implement key federal and state policies as well as implement specific Hawaii County General Plan mandates including those contained in the recently passed South Kohala Community Development Plan.

2. Balance in overall design. In general the width of the walk should be keep to a minimum – if possible no more than 8 feet wide for much of the walk way – to complement the rural surroundings but also to minimize erosion and reduce costs. We want balance here – yes we (many of us) very much want the trail.... but also want to minimize pavement in this town, minimize erosion, and minimize improper uses of the paved trailway. Whenever design materials that are permeable can be used is also obviously preferable.

3. Significant trees. The one area in which the design element as currently drafted could conflict with the environmental statutory mandates relates to the proposal to remove a significant number of eucalyptus trees along the stream between Lindsey Road and Kahawai Street. This is not simply a design issue – given the potential environmental and aesthetic impact. If the trail corridor is to pass through these eucalyptus trees, design mitigation measures should be required so that removal of any healthy trees is minimal.

The antagonistic statements made by the scientist working with Kimura Associates, on this issue were divisive and inappropriate. With regard to riparian buffer concerns, his principle response was that the law does not require them to address certain concerns being raised. That attitude will land this project in court – for sure. He seemed to have no appreciation of the importance of stream erosion concerns, riparian buffer issues, and the environmental benefit of the eucalyptus trees planted along the stream. It is hard to imagine that this consultant is unaware that cutting down even very few trees close together will likely in the eventual blow down of many more if not all of the trees in that location.

The fact that these eucalyptus trees are not classified as a "native species" based on the date they were introduced on the Big Island but are instead designated as a "non-native" (introduced post European arrival) does not eliminate their historic and environmental value.

The path must be built to eliminate the need for any whole scale removal of these trees... this can be done by minimizing the path width to the maximum extent and where necessary breaking the path into two sections – each 5 foot wide, and constructing the path in this area as a bridge --- in other words – none of the tree roots should be removed. Absolutely minimal ground disturbance should be the watchword. I say this for aesthetic reasons as well but in

particular based on previous experience related to selective logging. These issues should not be minimized – those trees were put there for a reason and that reason still exists: the flooding potential of this stream will be greatly increased if more than a minimal number of these trees are removed. These trees are also important as a windbreak.

The Waimea Design Plan (Hawaii County Council Resolution) specifically mentions the importance of preserving clusters of trees, such as these. Likewise the overriding #1 Waimea Community Development Plan is "Sense of Place" and Waimea's diverse array of mature trees is very much a part of this sense of place.
Many of Waimea's "heritage trees" located on private property are continuing to be cut down despite the cultural, aesthetic, and environmental importance of mature tree growth in this area. Certainly in this stream location, removal of these trees should be avoided (other than those that are dead or seriously diseased).

The University of Montana study of Waimea area also stressed the importance of curtailing the cutting down of mature tree canopy in Waimea – given the importance of tree cover as a key factor in local weather patterns (to oversimplify this concept --how far from the hills the "rain/mist line" is located is largely based on how far the cool tree cover prevents evaporation of clouds). Waimea is already undergoing radical climate change, in part due to the decrease in tree canopy and increase in asphalt and other heat raising infrastructure construction. This is not something that will have a cumulative impact in the distant future but is happening now. Therefore if for some reason it is impossible to design this trail so a to limit tree removal to an insignificant number of trees – then the trail should branch – with the handicapped/paved route going out to the street and an alternate dirt path weaving though the trees as a spur route. The argument that this will be unfair to those who want to be on wide pavement or to those who are handicapped will not hold up because in order to provide that venue you will effectively provide the menu for the erosion of the path during the next major flooding events – and before long there will be no path for anyone to enjoy. I expect those who are unfamiliar with logging operations around streams will think I am exaggerating, but unfortunately this is not the case.

In conclusion, if the design elements and variances from the usual trail requirements are not possible then consideration should be given to taking abutting land from the Magoon or other properties to provide a trail corridor that does not ram go through the midst of these trees bordering the stream.

3. Parker School area. I also suggest some reduction in the immediate scope of the project – otherwise it may never happen –given the estimated price tag. For example at least temporarily the trail should not be built to go under the Lindsey Road bridge... Instead the path should cross the stream from Parker School to the KTA shopping center rear parking lot area. There is no harm in spending a little time on the street sidewalk. Then with some encouragement the owners of the Paniolo Inn and Parker School may be talked into allowing the trail to stay on the north side of the stream. If this project is as successful as I believe it will be, the Paniolo Inn will want the traffic to go along its property as an invitation for path users to take a break at its restaurant. This easterly end of the trail is very important to the town in terms of its potential use as an alternative to vehicular traffic for persons bringing children to Parker School. Construction of this portion of the stream should not be delayed.

4. Lindsey Road Area. Furthermore the design plans in the area around the Lindsey Road are unrealistic. Go take a look at the Lindsey Bridge location and hold up the conceptual plans contained in this draft and you should appreciate that to implement the plan as proposed you will need to remove all the beautiful vegetation in this location – Without a doubt the proposed design for this location will destroy the beauty of the area. My guess is this design was created when the County thought the entire Lindsey bridge was going to need to be rebuilt. However that is not the case and only the outer sides of the bridge need to be replaced – hence designing an under bridge path will not be part of that bridge replacement project. Here as elsewhere there can be narrow side paths to allow folks to visit this location – without destroying the reason it is beautiful. This course of action will also avoid the need for eminent domain since the property owners here are adamant against the trail following the stream to the bridge. Please note that in the supplemental use permit conditions that I negotiated with Parker School – the school will provide a linking easement form this path to provide access to some future acquired access from Mamalahoa. If that term of the agreement is not nailed down in the foreseeable future, it may not be available indefinitely.

5. Preference for south of stream corridor. In the area from the Research Station (around Opelo Road) to Kahawai Street – I negotiated with Parker Ranch to give an additional area on the south side of the stream for the WTG easement. Although I have not walked the length of this segment, I believe locating the trail on that south side is preferable given the slopes of the ground and the preference to keep the path away from residences.

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Margaret Wille
65-1316 Lihipahi Rd.
Kamuela, HI 96743

Dear Ms. Wille:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your comment letter dated February 19, 2011. The following respond to the comments raised in your letter:

1. Thank you for your ongoing support of the trail project and your willingness to work together to resolve outstanding design issues and mitigate impacts. Input from the community is very important in this process.

2. Balance in overall design.

We share your concern about achieving balance in overall design, and constructing a trail that will complement the natural surroundings, minimize erosion and reduce costs. Regarding the proposed width, trail functionality is another important objective that must be considered.

The Federal Highway Administration (FHWA) Guidebook on Trail Development (Chapter 14, Shared Use Path Design) emphasizes that the width of a shared-use path not only affects pedestrian usability but also determines the types of users who can use the path. It recommends a minimum 10-foot width with graded areas at least two-feet on either side to allow for greater usability and the two-way movement of a variety of users, for example, bicyclists, pedestrians, joggers, baby strollers, and skaters. The FHWA notes that shared use paths with heavy volumes of users can be 12 to 14 feet in width.

We do not anticipate having the heavy trail volume or fast-moving traffic to require a 12 to 14-foot wide path, but a ten-foot width is generally accepted as the minimum width for a multi-use path.

Regarding permeable materials, concrete is the County's surface of choice, because of its durability and lower maintenance requirements. Other more permeable materials such as crushed rock, or soils mixed with stabilizing agents may be allowed by the Federal Highway Administration (FHWA) provided they meet ADA requirements, but are less durable and will therefore require more frequent repair or replacement and higher maintenance costs. This is

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particularly true in areas with higher use and that are subject to occasional flooding and washout. The Final EA will provide a comparison of various trail surfaces and more information on why concrete is preferred. Mitigation measures to "soften" the appearance of a concrete path include use of earth-tone colored concrete, textured concrete, meandering the trail alignment, and landscaping.

Overall, achieving a balance in the trail's appearance, functionality, durability, environmental impact, and cost (both upfront and long-term maintenance) is a challenge, and some trade-offs will be involved.

3. Significant trees.

The County shares your desire to retain as many healthy trees as possible and recognizes the importance of trees in providing shade, windbreaks, noise buffers, and overall ambiance. Although many trees will need to be removed for the trail, only those required to accommodate the path and to ensure user safety will be cut down. Note that the tree risk assessment done by Mike Kraus was also concerned with user safety, as Eucalyptus trees are vulnerable to breakage of large limbs and therefore can present a danger and liability issue for the County. In order to mitigate the removal of trees, the County has agreed to replace the trees one-for-one, although not necessarily with trees of the same size. Native species will be used. On June 15, 2011, the County, its Increment 1 contractor, and representatives of the Waimea Trails and Greenways Committee met with individuals from the Waimea Outdoor Circle to discuss these and other design issues. Coordination with the Waimea Outdoor Circle will continue throughout the Increment 1 design.

Removal of trees along the trail is not expected to have a significant impact on the flooding potential of the stream. According to the County's hydrologist for Increment 1, the trees block the floodplain and their removal would not increase the depth of flood water in the floodplain. The March 2004 flooding of Waikoloa Stream was preceded by intense rain, and was due in part to the existing physical conditions of the stream (sharp stream bends and generally inadequate flow-carrying capacity) as well as blockages caused by fallen tree branches and debris. The blockage in turn caused the stream to overflow its banks and flow through the main street through town. Damage to the Waimea Nature Park was also caused by overtopping due to stream blockage. This incident reiterates the importance of regular inspections and efforts to keep the stream free of fallen debris. Access to the stream areas via the proposed trail will facilitate this ongoing stream maintenance effort.

Parker School area.

The EA presents the long-term, full build out plan for the trail. The construction of a trail crossing under the Lindsey Road bridge is proposed if and when the bridge is replaced. The County has indicated that an underpass for the trail will be part of its request for proposal (RFP)

when the Lindsey Road bridge is reconstructed. In the interim, trail users can be directed to cross the street at the stop light and get back on the trail, or more likely, they will create an informal trail under the bridge. We understand that easements through the Lodge will need to be acquired before construction for this phase begins.

4. Lindsey Road Area.

The trail crossing under the Lindsey Road bridge is part of the eastern-most increment currently planned as either Increment 3 or 4, and realistically, will not occur for at least four to six years. The brushy, dense vegetation along the stream east of Lindsey Road is comprised of non-native species. However, efforts will be made to retain a natural ambiance, and native plants will be utilized for landscaping along the trail.

5. Preference for south of stream corridor.

We respectfully disagree with the recommendation that the trail be on the south side of the stream between the CTAHR Lālāmilo Research Station and Kahawai Street. A trail on the south side would require another stream crossing between the Research Station and the Parker Ranch lands. We agree that remaining on the south side of the stream would be ideal if the trail could also be located on the south side through the Lālāmilo Research Station. The planning team met with CTAHR representatives and asked whether this would be possible, but were told it would be too disruptive to ongoing operations. Moreover, the easements have already been obtained for the north side of the stream through this area. The trail will pass close to about five houses in the Brilhante subdivision, but in this section, the trail is at a lower elevation and a short fence could provide privacy for these residents. Once the trail gets onto Parker Ranch land, the trail will be across the stream from the Sandalwood subdivision.

Thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

Leslie Kurisaki

From: Susan B. Hunt [susan.bh@hawaiiantel.net]
Sent: Sunday, February 20, 2011 11:00 PM
To: lkurisaki@kimurainternational.com
Cc: marius@hawaiiforest.com
Subject: Support of the Waimea Trail

Dear Ms. Kurisaki,

My husband Marius Ellis and I are writing in support of the Waimea Trails and Greenway project. We have been actively involved with volunteer work on the existing trail and would like to see it extended.

Susan B. Hunt and Marius Ellis
P.O. Box 6255
Kamuela, HI 96743
Phone/Fax: 808-885-5811

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Susan B. Hunt and Mr. Marius Ellis
P.O. Box 6255
Kamuela, Hawai‘i 96743

Dear Ms. Hunt and Mr. Ellis:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail dated February 20, 2011 in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

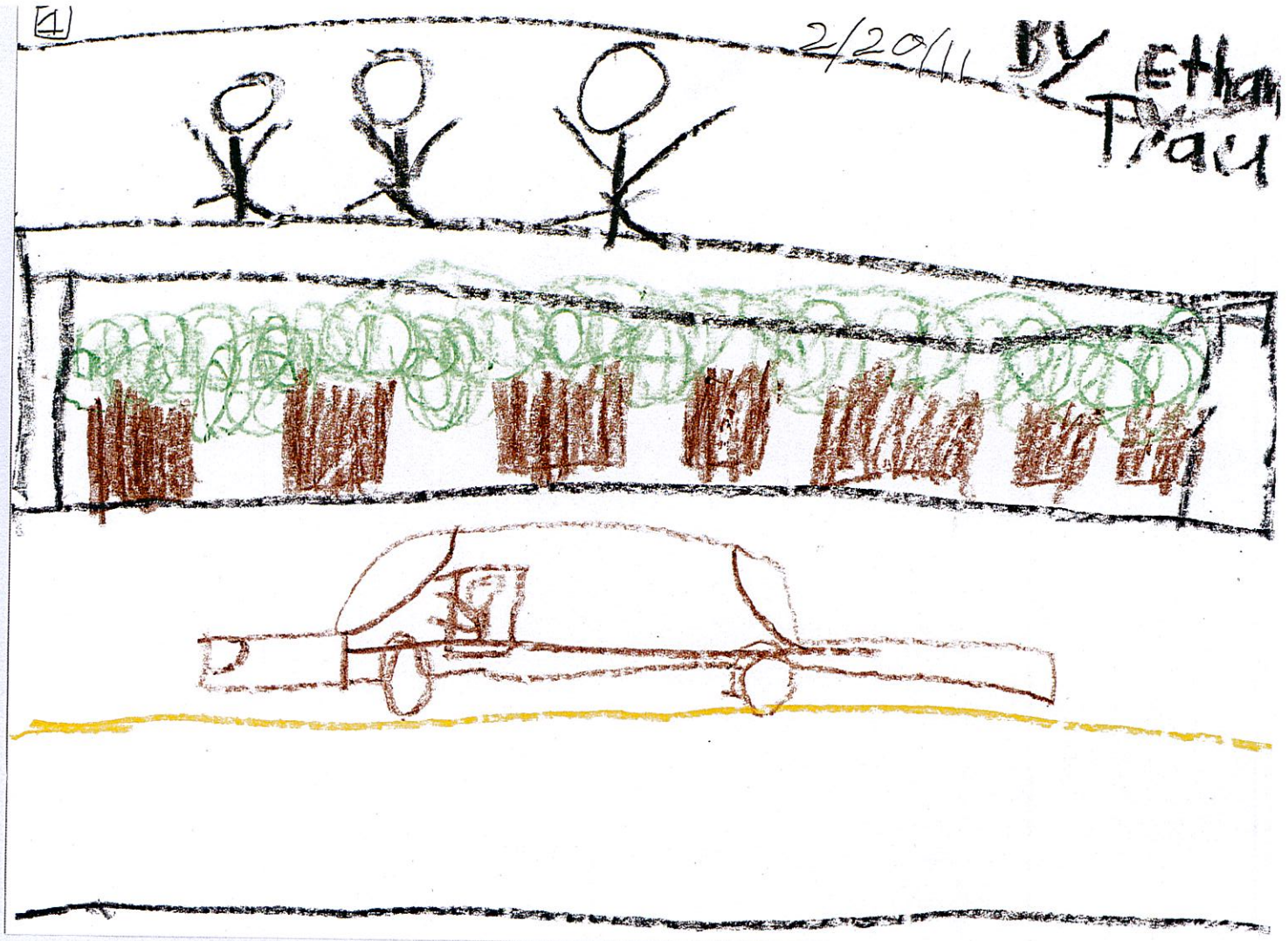
From: Colette Tyau [ctyau@keck.hawaii.edu]
Sent: Sunday, February 20, 2011 1:27 PM
To: lkurisaki@kimurainternational.com
Subject: {Released} Support for Waimea Trails and Greenways
Attachments: EthanTyauWaimeaTrails.pdf; AriaMarieTyauWaimeaTrails.pdf

Dear Leslie Kurisaki,
My family and I whole heartedly support the Waimea Trails and Greenways project! This community has grown tremendously since I was a child. Back then we didn't have as many people, cars or even traffic lights so walking around town wasn't what it is now. Times have changed! And now more than ever we need safe walking, biking, hiking, and running paths for our Ohana.

This project will provide that, as well as, keep Waimea beautiful and green. Directed foot traffic would also keep our community safe by bringing light and continuous use into areas that were once dark; an ingredient for kids to get into trouble. Attached please also find statements from my children Ethan Tyau age 9 and AriaMarie Tyau age 8. I am confident our dog Coffee Tyau would put in his vote of support if he could.

Thank you again for your time,
Colette Tyau
Kamuela, HI 96743

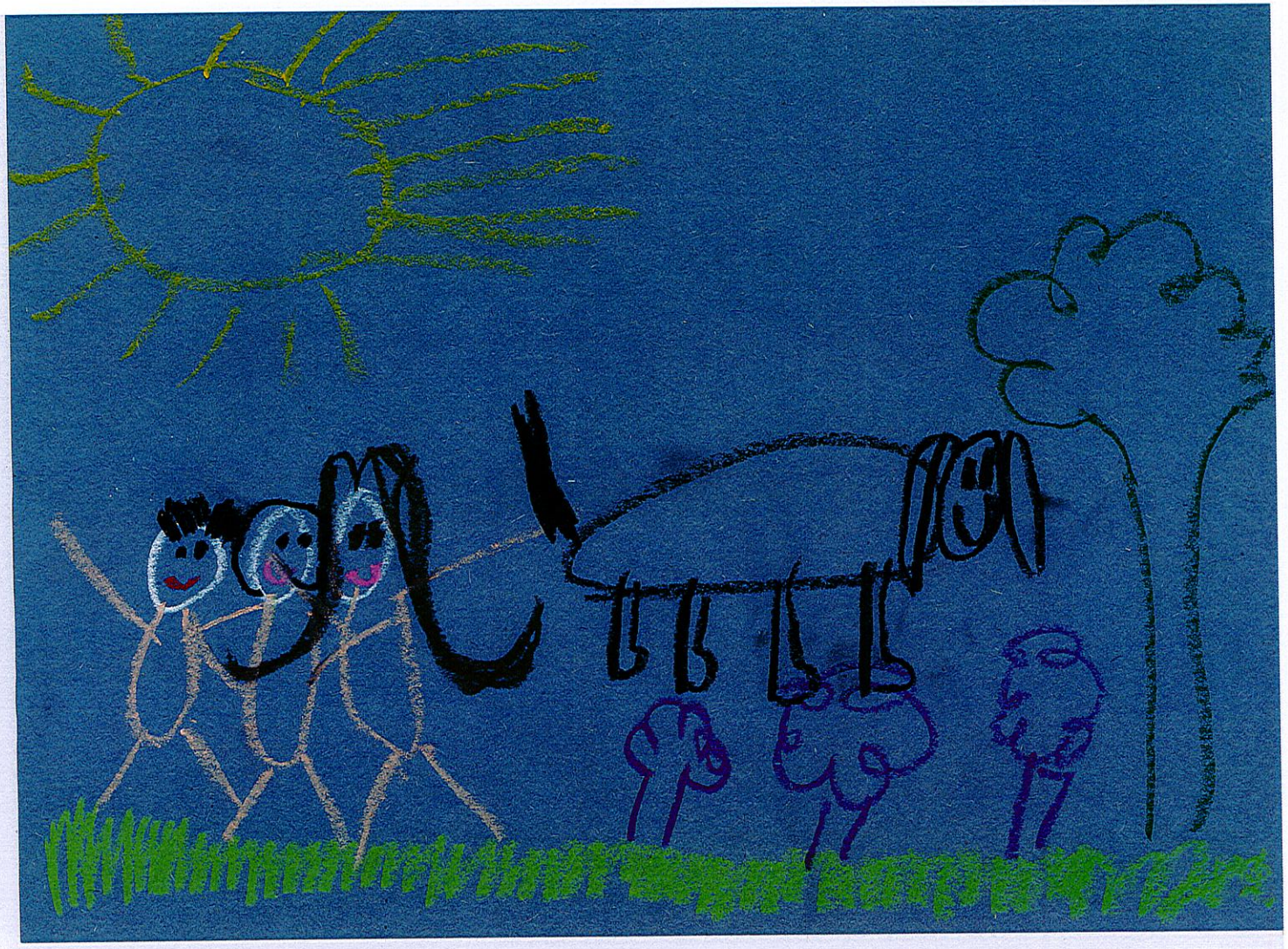
Colette Tyau
W. M. Keck Observatory
65-1120 Mamalahoa Hwy.
Kamuela, HI 96743
Ph: (808) 881-3538
Fax: (808) 881-3535


[4]
2/20/11
BY
Ethan
Tran

2/20/11

I would like to ~~rdmy~~ ride my scateboard and walk my dog and walk with my frends, safely in wimala town so me and evreyone can be safe.

BY Ethan Tyau



I want a path so I can play with my dog and see rivers explore new plasis and play, Jump, and sing. I also can pik flors and don't have to wachout for cars.

2/20/11 Aria-Marie Tyau

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Colette Tyau
W.M. Keck Observatory
65-1120 Mamalahoa Highway
Kamuela, Hawai‘i 96743

Dear Ms. Collette Tyau, Ethan, and AriaMarie,

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail dated February 20, 2011 in support of this project. We send a special thank you to Ethan and AriaMarie for your wonderful letters and drawings. A copy of your letters will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

February 21, 2011

To: County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720
Attn. Mr. James Komata, Park Planner

With an email copy to:
Kimura International
1600 Kapiolani Blvd, Suite 1610
Honolulu, HI 96814
Attn. Ms. Leslie Kurisaki
lkurisaki@kimurainternational.com

To whom it may concern:

I am a property owner on Kahawai St. in Waimea and I understand that a trail entry location is planned for the end of my street for the Waimea Trails and Greenways project.

I understand that this might cause additional traffic on this road, which I fully understand is owned by Parker Ranch and I and all of my neighbors on the same street have an easement over the road to access our homes.

Despite it's an "in my backyard" situation, **I am in complete support of this project**!

These trails are a wonderful addition to the community and a benefit to the people who live here, and while there are many concerns about various aspects of the trail, I feel the positives definitely outweigh the negatives.

I trust the people that have been working on this plan for years, to proceed thru the process accurately and that the professionals in their field that are hired to complete their portion of the process are working in the best interests of the community.

Respectfully submitted,

Nancy Alvord
Realtor Broker, Lava Rock Realty

Property owner: 65-1198 Kahawai St. Kamuela, HI 96743

808 896-2239
nancy@lavarockrealty.com

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Nancy Alvord
Realtor Broker, Lava Rock Realty
65-1198 Kahawai Street
Kamuela, Hawai‘i 96743

Dear Ms. Alvord:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter of support dated February 21, 2011 to Mr. James Komata of the County Department of Parks and Recreation. We appreciate the fact that although you are a resident of Kahawai Street which will be a designated trail access road, you are in complete support of the project.

A copy of your letter will be included in the Final EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor’s Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: George Ainge [g4ainge@gmail.com]
Sent: Monday, February 21, 2011 3:33 PM
To: lkurisaki@kimurainternational.com
Subject: Waimea Trails and Greenways public comment

To whom it may concern:

I am a strong supporter of the Trails project. I attended the recent public meeting and was surprised to hear so many negative comments about this important project. Instead of repeating what many others have said I just wanted to add some personal observations and suggestions.

I have lived in Waimea for 20 years in the Kanehoa subdivision which is just down the hill from the Kamuela View Estates. I work in town at the hospital so I drive the Kawaihae Road daily. Over the years the traffic has drastically increased along this two lane road and conditions are crowded and dangerous, especially at rush hour. The number of bikers and pedestrians have grown exponentially without much improvement in the space used by bikers, joggers and walkers. Having this trail will allow these groups to get away from this busy roadway and will surely save some from injury and possibly death. I frequently see drivers taking chances along the Kawaihae Road and I have witnessed several close calls with bikers and school children walking to the multiple schools along this corridor. Since there are no left hand turn lanes some impatient and careless drivers are passing on the right hand shoulder which is used as a "sidewalk" by hundreds everyday. My greatest fear is that an unseen small child will be run over by a car passing on the right. This will be a very sad day in Waimea because we will all know that having this trail could have prevented it. For this safety reason alone this project must go forward so the bikers and pedestrians can be separated and protected from the cars and trucks that use the crowded Kawaihae Road.

In response to safety and security concerns along the proposed trail I am in agreement with those who think this could become a problem. I would like to comment that in this high tech age there are many effective methods that can be used to make the trail safe. I think video surveillance could work very nicely and deter a large percentage of the crime. We could also have a "Blue light" security system along the length of the trail, similar to the systems that are used on almost every college campus in the country. Having solar powered call boxes/alarms and possibly video camera units spread out along the trail would be expensive but well worth it. I am guessing that such security techniques are already in use along many similar trails. A little research and close collaboration with the Police department could answer a lot of these concerns. (Incidentally, I think it will be extremely important to work with police officials who are in positions of authority and responsibility instead of only relying on testimony of police officers with a limited scope and perspective like the one who was present at the meeting).

At the public meeting there was a lot of fuss made over the big flood in 2004. I agree that such a surge of water could devastate the trail and anyone using it. It is probably true that anyone who got caught on the other side of the stream could not be reached by rescue personnel. However, the same can be said for almost all the houses below the Waiaka bridge. On the day of the flood the road was impassable to vehicles at multiple spots for several hours. I tried to drive into town that afternoon and was met by large rivers of water crossing the Kawaihae road at multiple points. With a Toyota Landcruiser I made it as far as the Waiaka bridge but didn't dare try to cross the wall of water crossing over the Waiaka bridge. I am pretty confident that the County's rescue vehicles would also have been stopped at this point. I also heard that the Queen K highway was overrun with water for many hours at the point the

stream crosses the road just north of the Mauna Kea resort entrance. This means that rescue vehicles coming from the Mauna Lani station would not be able to approach Waimea from the Kawaihae side. The other obvious point that maybe nobody wanted to bring up but should not be overlooked is that no sane person will be out biking or jogging the trail on a horrendous day like that.

I have one last comment about the interface between cars and pedestrians. If the school children of Waimea Middle and Elementary school use this trail coming from the Kawaihae side into town there will be a great temptation for them to leave the trail behind the Carter Professional Center and cut through their parking lot and then cross the highway to school where there is no crosswalk. I don't know what the best solution is but I do know that simply telling them to cross at the main intersection will not be 100% effective. As a child I was hit by a car while running across a busy street away from a crosswalk. I am pretty sure that this delusion that a 7 year old can outrun a passing car is not unique to me. I hope you can address this issue in a future draft.

Aloha,
George Ainge

Could you please send me a confirmation that you received this message. Thank you.

Leslie Kurisaki

From: mail.jensens@gmail.com
Sent: Monday, February 21, 2011 2:06 PM
To: lkurisaki@kimurainternational.com
Subject: Support for Waimea Trail

I hope that I've gotten this mailed before the deadline to register our strong support for the proposed Waimea trail project. We have been residents of Waimea for the past 32 years. The trail would be a wonderful asset for our entire community. By providing a safe location to hike, walk and bicycle away from car and truck traffic, the trail would contribute to the health and welfare of our neighbors while giving us a safe alternative to driving. I think that the negative response you have heard is due to the fear of change...even good change can be threatening to some people. The advantages of this project far outweigh the criticism and worries voiced by noisy naysayers. Please register the unconditional support of our family for this project. Thank you, Pamela, Victor, Susannah and Sofia Jensen

Leslie Kurisaki

From: ClarrySF@aol.com
Sent: Monday, February 21, 2011 4:00 PM
To: lkurisaki@kimurainternational.com
Cc: c.lam4@hawaiiantel.net; araticlarry@gmail.com; arjunclarry@gmail.com
Subject: The Waimea Trail: Comments & Considerations

Ms. Leslie Kurisaki
Kimura International

Dear Leslie,

The Waimea Trail Draft EA is quite a hefty document. Notably, about half the document is input mostly from members of the Waimea community the trail is intended to serve. The February 9th community discussion was a very worthy and admirable exercise in community participation. Though originally from Hilo, with family in Waimea which I've visited since the early 1950s, part of my background is community development in cross-cultural environments with NGOs and UN agencies on the Indian Subcontinent, East Africa, and the Middle East. Much of my focus since 1991 has been on the reconstruction and resettlement of hundreds of destroyed communities in the Kurdistan Region of Iraq.

This response offers comments and considerations to be examined for infusion into the final version. Some of the concerns and questions raised during the community meeting could undoubtedly have been satisfied by a more careful and thorough reading of the Draft EA. You did your part and it is a matter of proverbially leading the horse to water but not being able to make it drink. Perhaps an executive summary would have helped?

1. It needs to be recognized that the EA design and content is strongly geared toward securing federal funding for the project. While most everyone would agree that without funding there is no project, we also need to avoid the situation where funding becomes the project. More work needs to be done on elaborating how this project will enhance the quality of life for the people of a particular area, which in this case, of course, refers to the citizens of Waimea Town.

2. This means more attention and effort to be paid to articulating the demographic groups, with projected numbers, of those who would use the trail. This is best not to be left to assumptions - spend the money, construct the trail, and the people will use it. More thought needs to be given to design details that will encourage and support high use. Considering the population of Waimea Town, who would likely use the trail, why? Who would likely not use it, why? What factors need to be addressed to maximize (optimize) usage in order to enhance quality of life at the reasonably lowest per capita cost.

3. To illustrate, first, let's assume the trail is intended to welcome all users of all ages who are physically capable of moving, by non-motorized means, from one part of Waimea Town to another part. This means walkers and runners including those with dogs (on a short leash), those who are blind and deaf including those who cannot hear because their iPods are too loud, and those moving while using their smartphones to talk, text, or focus on reading news and checking email, etc. This would also mean wheelchair users, bikers, skaters (roller-bladers), skateboarders, push-scooterers, and the like.

4. Second, "welcoming" means that no group should be excluded. If any group is excluded, the community's quality of life would be diminished and the per capita cost would rise. With different users moving at different speeds, all user groups need to feel safe and secure from being bumped or hit by other groups. We don't want to wind up in a situation akin to that of paddle-boarders vs. surfers, which is happening in areas of limited vastness. While the sidewalks in Hilo's Liliuokalani Park are too narrow to accommodate all forms of non-motorized movement, it's a shame that push-scooters, skates, and skateboards are now banned even from the one-way, low-speed roadway. Trail width and other specifications that address the "welcoming

factor" need to be considered and articulated in the EA.

5. Third, "welcoming" alone is not enough. Maximizing/optimizing usage will not happen by itself. No doubt some will use the trail without invitation as soon as it becomes available with or without a ceremonial opening. Others will need encouragement to get them going. Programs to actively encourage usage also need to be considered and articulated in the EA.

4. Waimea Town is a long town and many of its citizens, perhaps more than half, live beyond the limits the current trail design is intended to serve. While the EA design could be considered the first stage, it would strengthen the project if it is demonstrated to be part of a larger, longer-term trail vision to enhance the quality of life of most, if not all, citizens of Waimea. What about all the people who live east of Church Row? It may appear daunting given the property realities, but imagine schoolchildren being able to bike to school from those areas. To really stretch the point, when it comes to recreation we could envision a trail that runs all the way from Waipio Valley to Kawaihae via Mud Lane and Waimea Town. Different parts of this modern-day "Ala Kahakai Trail" would have different specifications to meet the requirements of different groups.

5. At the community meeting, passionate words were spoken against urbanization that the proposed Waimea Trail allegedly would supposedly accelerate. This needs to be squarely addressed and not brushed aside. Waimea Town's distinctive character is rural, village, paniolo, ranching, horses and cows, etc. Some of us can remember when Waimea Town was a community of fewer than 1,000 people, perhaps fewer than 500, in the early 1950s. Today, it is a community of more than 7,000 which is still relatively small by some standards. Efforts have been made to maintain its rural-ranch character and this has been fairly successful as demonstrated by the low profile, small town architecture of most newer commercial and many residential structures. But "natural" population and vehicle increases confront the Waimea character that many people know and feel very strongly about.

6. While we can argue how a trail, in general, is more rural than urban, this is not just another trail in just another town, an impersonal model that might suit federal government perspectives and requirements most anywhere. The EA should reflect how this particular trail serves not only wants and needs about mobility, but also reflects the feelings of a particular people in a particular place. Perhaps this could be best done by demonstrating in the EA how the Waimea Trail fits the Waimea Community Development Plan (CDP), if there is one.

7. Access points. Welcoming usage is enhanced by convenient access points. The number of trail access points mentioned in the EA appear to be far too few to maximize/optimize usage. More access points need to be inserted into the design.

8. Trees. The point was well made by the ladies of the Waimea Outdoor Circle in talking about Waimea's character and sense of place. Those older eucalyptus trees are indeed an instrumental part of the character of Waimea. After being away for a long while, when driving up from Honokaa to Waimea I looked for the trees I knew during much younger years. I saw some along the road but there was disappointment until I found what I was looking for on the Old Mamalahoa Road. US Supreme Court Justice William O. Douglas argued that "trees have standing". A relevant story that illuminates the connection between particular trees and feelings about a sense of place is in James Michener's 1948 Pulitzer prize-winning book Tales of the South Pacific. The story, "Mutiny", is about Norfolk Island, once a penal colony but later used to accommodate descendants of sailors of Mutiny on the Bounty fame from Pitcairn Island which was too small to support the increasing population. During WW-II, US Seabees intended to construct an airstrip on Norfolk Island from which to attack Japanese supply lines. The preferred site had a majestic row of Norfolk Pines to be removed but the Seabee commander had to face the local population who preferred the trees to the airstrip, including the 90-year old granddaughter of Fletcher Christian.

9. Trail color, a construction detail. There is a glaring image of the Waimea Trail being a gleaming white 10-foot wide sidewalk like the almost white newer sidewalks in Hilo. Whatever the width, this is to urge the selection of a color that compliments, not confronts, the natural surroundings. One example is the reddish-brownish smooth walkway from the Kaloko-Honokohau National Historical Park Visitor's Center, on the maikai side, not the glaring white walkway adjacent to the parking area.

10. HPA Village Campus should also be mentioned in section 2.2.3 along with the other schools. Though not right on it, the proposed Waimea Trail would indeed make it possible for more HPA students to walk to school. A convenient access via the property where Long's Pharmacy is located and a suitably safe crosswalk across Kawaihae Road would be needed.

11. Mauka alternatives. Strong objection was voiced against mentioning the mauka alternatives in the EA. Indeed, since the alternatives are completely out of the question, what is the purpose of including them? Keeping them in the EA does not appear to serve any purpose other than, perhaps, adding contrast that strengthens the suitability of the preferred route.

12. Maximizing/optimizing usage is a function of convenience, technical specifications to meet the requirements of a variety of non-motorized movement, safety, security, and attractiveness of the natural environment. It is also a function of enhanced value in terms of history and cultural heritage peculiar to the people and place. As mentioned in an earlier email, the Waikoloa Stream was the source of water for the first sugar plantation on the Big Island. It began in the 1830s by Chinese under Governor Kuakini. According to the Hawaii County Planning Department the 258-acre plantation - curiously called the Lihue Plantation - was eventually divided up into today's Lalamilo Farm Lots. Incidentally, I am informed by a family member of an earlier generation that the Waikoloa Stream used to be locally called Root Bear Stream because of its color. There must be other cultural features that the Trail could highlight, in addition to becoming an ethno-botanical walk.

13. Where the trail crosses Lindsay Road, obviously it's best if it goes under the road in a way that allows all forms of smooth non-motorized movement. Further, it would seem that a breakaway bridge would be unnecessary if the stream is keep clean of all major debris such as fallen trees that could become a dam during rare times when water in the stream is at the normal maximum level. While the 2004 flood was passionately highlighted as a deficiency in the EA, it was a bit disconcerting that the apparently well-known cause of the flood (debris-plugged streambed) was not also mentioned in the same breath.

14. Undoubtedly, the Waimea Trail could become a great asset for the people of Waimea Town if accessibility is convenient and an appropriately high percentage of Waimea citizens actually use it. This is the real measurable indicator of success. It's not about winning the funding, which is an interim objective.

15. This is a very long-term project. It took a long time to get to this stage. It will take many years to complete. What is very important is for the process of constructing and using the trail begin soonest possible in order to stimulate additional support for latter stages in the long term, and to facilitate improved movement in the short term to the extent that funding allows.

16. In order to continue and enhance sustainable community involvement, to promote their ownership, the construction, maintenance, and management of the trail from the start are best placed in local hands. It's their trail. While it may not be quite true literally, we should be mindful of the adage that "no one washes a rented car".

The extent of community involvement in this project is admirable. It has given me ideas I will take back to Kurdistan where, fortunately, and this may sound surprising, resource availability is not an issue. But that's part of the problem. In oil-rich countries, taxes, for the most part, are unimportant because, eg all Iraqi oil belongs to all Iraqi people and is managed by government. It's not private wealth. Under such circumstances, community participation is low. This is all to say that resource scarcity has its positive features, too.

All the best for this very worth and enjoyable project. Aloha,

Stafford Clarry

Leslie Kurisaki

From: Kevin Wiesmann [kwiesmann@gmail.com]
Sent: Monday, February 21, 2011 6:08 PM
To: lkurisaki@kimurainternational.com
Subject: Yea!

Leslie,

Although I wasn't able to open the draft EA on the Waimea Community Association website AND I wasn't at the last community meeting I still felt it necessary to show my support for the Waimea Trail before the deadline. My wife and I attended previous meetings and are knowledgeable about the subject. As a resident of Sandalwood and a local physician I see the project only bringing benefits to Waimea and its people. May this email serve as my support for the project.

Sincerely,

Kevin Wiesmann

Mike Donoho
P.O. Box 437141
Kamuela, Hawaii 96743

February 21, 2011

Aloha,

This letter represents my strong support for the Waimea Trails and Greenways (WTG) project. I have lived in Waimea on and off since 1973, and have also lived in other communities on Hawaii Island as well as brief periods in Honolulu, California, Georgia and South Carolina. This has given me a unique perspective in seeing Waimea grow from a relatively small town over four decades to what it has become, as well as seeing the functionality of other places in Hawaii and the United States. I received a Masters degree in planning from the University of Hawai'i at Mānoa and have worked in planning for both the private sector as well as for State and Federal governments in that capacity.

Having said all of this, the WTG is not just a good idea or an amenity that would be nice to have, it is essential infrastructure for our community in its ongoing development as the third urban center of Hawaii Island. This project exemplifies the "livable cities" concept, and while many would argue that Waimea is not a city, when our children grow up it will have a far different feel than it does now. Who would argue that we do not want our community to be "livable," regardless of its size? This would be the first step in diversifying our transportation options in a time when they need it the most - rising fuel costs, increasing pollution, growing population, less active lifestyles. Not only have trails like this been established in places where all of the same fears existed, but they have been established without the substance of all of those fears becoming reality.

I taught my daughter to ride a bike in Waimea, but we haven't ridden much since as our safe riding options are limited. I have been a bicycle commuter in Waimea since 1997, but I will not allow my daughter to continue to learn to ride alongside roadways that are largely unsafe for the novice bicyclist. We need so much to get to a place that other cities take for granted. We need bike lanes throughout our community, we need roadway options that relieve the growing traffic congestion, we need corridors that allow us to learn about and care for our delicate ʻāina, especially in the unique watershed of Waiʻulaʻula. If we cannot get past this project, which to me is a "gimme" at this point, how can we get to the other things that we desperately need to continue to grow into the future? How many people know that 'o'opu still exist in the streams that flow through our town? How many know that most of the $18 million price tag is in the form of priceless aloha, from generous land donations to the thousands of volunteer hours over the past 17 years? Get out, get informed, and get involved. The people involved are good people, intelligent people, and some of the true cornerstones of our town. You will be amazed at what happens when we use fear to beget preparedness rather than allow it to be our paralysis.

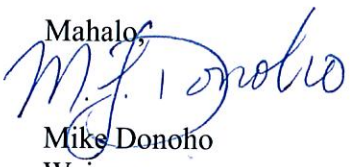
There are certainly valid concerns to be heard: will this negatively change our community; will this create a debt that we should not incur for ourselves and our children; will this create a pathway for increased crime in our community in trespassing, theft, vandalism, muggings, assault; will people be in harm's way walking and biking in the floodplain? And on and on. These are fears, and not the basis to abandon a project, which would surely waste a lot of time

Mike Donoho
P.O. Box 437141
Kamuela, Hawaii 96743

and resources already invested in this trail, but the starting point for open discussion, mitigation development, and good planning. Any proposal will prompt fear that we will be worse off than we are now. Take a look at the long list of things that have happened on our island and in our community that drew out fears in the beginning that never materialized. Take another look at the list of things that never happened due to fear of the unknown. To which list should this trail go? This must happen, because we have so much more to accomplish and pass on to all of the generations that follow us.

An argument that has rung loud and often about this trail is that we cannot afford it, but based on all of the above and for the sake of our children, we cannot afford to NOT have this trail. To those who have shared their fears, let's work together on them. If we just quit, then fear wins. In the end, let aloha prevail!

Mahalo,



Mike Donoho
Waimea

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Mike Donoho
P.O. Box 437141
Kamuela, Hawai‘i 96743

Dear Mr. Donoho:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter of support dated February 21, 2011. We acknowledge your comment that this project is not just a good idea, an amenity or a "nice to have," but is essential infrastructure for the community. Also, you state that although there have been valid concerns raised about the project, these concerns should not be the basis to abandon the project, but the starting point for open discussion, development of mitigation, and good planning.

A copy of your letter will be included in the Final EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Sherman Warner [shermw@hawaiiantel.net]
Sent: Monday, February 21, 2011 9:45 PM
To: Glenn Kimura; Leslie Kurisaki
Subject: Waimea Trails & Greenways

Mr. Kimura and Ms. Kurisaki,

I heartily support Ke Ala Kahawai o Waimea, the Waimea Trails and Greenways 4.8 mile multi-use path, as proposed in the Draft Environmental Assessment dated January 2011.

This path will provide much needed connectivity and a route for alternative, non-vehicular transportation as well as opportunities for exercise, for communing with nature, and for interacting with our neighbors in a public space. Much of the path's route is now inaccessible and "hidden" in the center of our town; by creating a public space, winding along the banks of Waikōloa Stream, Ke Ala Kahawai o Waimea will become an invaluable community asset. It will contribute to the physical health of community members and create safer routes for children and adults at the same time that it creates social health in our community by providing a space that can be shared by people of all ages.

There are still some design issues and I am confident that those issues can be resolved with the same care and balancing of needs that got the path's design to this point. Trees are an important asset in our community, and it is hoped that every effort will be made to save healthy trees by narrowing, re-routing, or dividing the path. At the same time, we hope that community members respect the expertise of Michael Krauss, one of our State's pre-eminent arborists, and his judgment that many of the trees along the route of the path are in poor health and may present a danger to users of the path.

For a couple of decades, I was a high mileage runner with a career that involved extensive travel, and across the United States, in Canada, Australia, England and Germany, I have run on multi-use paths like Ke Ala Kahawai o Waimea. They are treasured community assets, and I look forward to Waimea be able to enjoy the benefits of such a path. Whether these paths were on a former railroad right of way, a historic canal tow path, rural river banks, mountain trails, or the edge of the Hudson River, they brought people together in an interactive public space. Waimea is, geographically, a town without a center. The downside of being a town which sprawls along opposing sides of a single road, rather than growing in all directions from a central public space, is that we lack a core. One reason we love our farmers markets is that for a couple of hours every Saturday morning we have a public commons. Ke Ala Kahawai o Waimea will bring that sense of connectivity and shared open space to Waimea every day of the week.

Mahalo,
Sherm Warner

Leslie Kurisaki

From: Riley Smith [rsmith@lanihau.net]
Sent: Monday, February 21, 2011 11:17 PM
To: 'Leslie Kurisaki'
Cc: Glenn Kimura; Bob Fitzgerald; James Komata; Pat Phung, P.E.
Subject: Testimony in Support of the Waimea Trails and Greenways EA

Ms. Kurisaki…As I testified at your public presentation in Waimea two weeks ago, I am in favor of the Waimea Trails and Greenways project.

a. I am an owner of a residential lot in Kamuela View Estates (Western terminus of the project). My resident address is 62-2007 Mahua Street: tmk: (3) 6-2-6: 41. The project will end about 500' from my home. It will benefit our subdivision, as well as the greater Waimea community.
b. This $18 million project will benefit from FHWA Enhancement funds. The donated land can be used to offset the cost of the "local match" required to fund the project. The amount of cash required to be provided by the County of Hawaii is likely to be minimal.
c. This project is following the necessary FHWA/NEPA requirements in order to be eligible to receive FHWA funds. Alternate routes are considered/the one along the Waikoloa Stream alignment is the preferred route.
d. Through the NEPA process, community input is welcomed, impacts are identified and mitigating measures to address these impacts will be included, as part of the Final EA.
e. Kimura International and its subconsultants are experts in their fields. They have been working with the community and addressing all questions that have been asked. As professionals, their input and suggested mitigation measures should be followed.

Let me know if you have any questions.
Riley

Riley Smith, P.E.
Lanihau Properties, LLC
VP - Properties, Honokohau Development Project Manager
(808) 936-7129

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Riley Smith, P.E.
Lanihau Properties, LLC
P.O. Box 6633
Kamuela, HI 96743

Dear Mr. Smith:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your email dated February 21, 2011 in support of this project. A copy of your letter will be included in the Final EA. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: friendsofthefuture@gmail.com on behalf of Michelle Medeiros [zspamtrap@gmail.com]
Sent: Tuesday, February 22, 2011 12:46 PM
To: jkomata@co.hawaii.hi.us
Cc: lkurisaki@kimurainternational.com
Subject: Comments for Kealakahawai O Waimea Draft Environmental Assessment
Attachments: ChelleDEAcomments.pdf; DrewDraftEAcomments.pdf

Included in this e-mail are two attachments containing copy of separate comments on Draft Environmental Assessment for the proposed project, Kealakahawai O Waimea ~ Waimea Trails and Greenways, from Drew Medeiros and Michelle Medeiros, hereby submitted to the County of Hawai`i.

Michelle Medeiros
PO Box 2183
Kamuela, Hawai`i 96743
February 21, 2011

County of Hawaii
Department of Parks and Recreation
c/o Mr. James Komata, Park Planner
101 Pauahi Street, Suite 6
Hilo, HI 96720

RE: Comments for Draft Environmental Assessment for Proposed Ke Ala Kahawai o Waimea – Waimea Trails and Greenways

The following comments are submitted in response to the Draft Environmental Assessment for Proposed Ke Ala Kahawai ~ Waimea Trails and Greenways.

1. Will the Waimea Trails and Greenway Committee of the Waimea Preservation Association be involved in responding to DEA comments? Will other members of the community be afforded the same opportunity to respond to comments on the DEA?

2. Regarding the alternatives analysis, according to slide #9 presented by Glenn Kimura on February 9, 2011, "*The Council on Environmental Quality has indicated that the alternatives analysis is "the heart" of the environmental analysis. Agencies must: Rigorously explore and objectively evaluate all reasonable alternatives...*"

   "*Social Impacts The creation of a multi-use trail providing non-vehicular transportation options and recreational enhancement will be a positive benefit for the Waimea residents and visitors of all ages.*" page 4-56 (pdf 93)

   Why hasn't the DEA more rigorously and objectively identified the negative social impacts of the proposed project? The DEA has identified many positive benefits, but fails to identify the negative impacts which have been identified by residents through meetings with Waimea Trails and Greenways and other public forums regarding the proposed project. The failure of the DEA to include the negative impacts identified by residents leads me to conclude that the DEA is not rigorous nor objective. I therefore strongly disagree with the assessment that the proposed project will be a positive benefit for Waimea residents.

3. "*Social Impacts The creation of a multi-use trail providing non-vehicular transportation options and recreational enhancement will be a positive benefit for the Waimea residents and visitors of all ages.*" page 4-56 (pdf 93)

   I agree that the proposed project will provide positive benefit for visitors. As the statement indicates, visitors are expected to use the proposed project. There are multiple indications

in the DEA that visitors are expected to use the proposed project (see page 1-1, 2-3, 4-36, 4-56).

Why then hasn't the DEA more rigorously addressed the impact of noise, traffic, social dynamic etc of this project generated population on the community, the stream, traffic safety?

Why isn't the estimated resident and visitor usage quantified? Wouldn't an increased population of visitors in an area that is currently serene, peaceful, and private have a negative impact on neighboring residents?

For example, in Waimea, the White Road Trail was once freely, publicly accessible. Visitor use of White Road Trail resulted in significant negative social impacts to the residents living near the White Road trail.Just as the White Road Trail provided benefits to visitors to the detriment of the residents, the proposed project is likely to have the same impact on residents. In weighing the benefits and liabilities of the proposed project, the liabilities out weigh the benefits of this so called asset to the community. Why is the County of Hawai`i asking residents who live adjacent to the preferred proposed project alignment to bear the burden of the negative impacts for the benefit of visitors or other residents?

4. As indicated on page 22 of the DEA and according to slide #25 presented by Glenn Kimura on February 9, 2011, the preferred proposed project alternative "Creates a community gathering place." Community gathering places may have many benefits to the users of the places, and many negative impacts on the residents who will have to live with the unintended consequences of said gathering places.

   What about the loss of privacy, added stress, and health impacts to more than 100 residents living in the 50 (approximate) homes adjacent to the gathering place, the proposed preferred project alignment? Why isn't the loss of peace, serenity, and privacy by; the added concern for trespass and theft to; and noise disturbances affecting these residents identified as a negative social impact? Don't those factor change a community as well?

5. A 10 -12 foot wide paved path with 10 feet of clearing on both sides will bring urbanization to a rural community, and allow potentially large numbers of people to access, gather and disturb what is currently a peaceful and serene location. Why hasn't the DEA addressed these negative social impacts?

6. *"It was also noted that these mauka segments would require trail users to cross busy Kawaihae Road to reach major destinations in Waimea Town or connect to the stream side alignment, presenting a traffic safety issue. The traffic safety issue was also raised by the State Department of Transportation in its early consultation letter." page 3-6 (pdf 27)*

   Why didn't the environmental analysis identify and address the same concerns for the preferred proposed project alignment? If the project is to be used as an alternative nonvehicular transportation option, won't residents will have to walk or bike along existing roadways "*cross busy Kawaihae Road*?"

   Why weren't the traffic safety issues of project-generated traffic rigorously explored and objectively evaluated as indicated by the *Council on Environmental Quality*?

7. The project is expected to generate additional traffic through visitor use as well (see comment 2 for text quoted from DEA page 4-56). Where is the DEA analysis of traffic and traffic safety impacts due to visitor usage?

8. *"School-aged children are expected to be among the primary beneficiaries and users of the multiuse trail." page 4-56 (93)*

   What percentage of the school-aged children are expected to use the trail to get from their homes to their schools and back? Is the number of residents who will use the trail significant relative to the total population of Waimea? Is the benefit to the residents and visitors who will enjoy the trail for recreation or commuting worth the cost to the residents who will be burdened with the loss of privacy, peace, serenity ~ the loss of their way of life?

9. According to Figure 3, the proposed preferred project alignment appears to cross private property east of the Waimea Nature Park. Is the estimated cost to purchase easements or other legal access to these properties included in the estimated $18 million dollar project cost?

10. "*Property values ... The study that has received the most attention on this subject involves the Burke-Gilman trail in Seattle.*" page 4-58 (95 pdf).

    While the study of the Burke-Gilman trail reveals the impact on property values when a urban environment is afforded access to open space, the results of the study cannot predict the impact on property values when those properties are in a rural community and urbanization encroaches on that community. Constructing a 10-12 foot wide path , with nine (9) bridges, and 10 feet of clearing on both sides of the path is urbanization of a natural rural environment. The use of the Burke-Gilman trail study is therefore not a valid comparison. Why doesn't the DEA forego this comparison since it is an "apples and oranges" comparison and identify a more appropriate comparison?

11. The value of the property neighboring the proposed preferred project alignment is not only monetary. There is also intrinsic value. Why isn't the County of Hawai`i respecting this value? Why is the County of Hawai`i willing to diminish the intrinsic value of living adjacent to open space for the purposes of recreational opportunities for visitors and other residents? Why has the County of Hawai`i decided that the lifestyles of the residents living adjacent to the proposed preferred project alignment are negligible? That they no longer have a right to privacy?

12. "*There could also be increased potential for business opportunities, such as bicycle or skate sales and rentals, and the sale of refreshments.* " page 4-56 (95 pdf)

    Skating and skateboarding on paved surface is a noisy activity. If skateboarding will not be permitted, how will that prohibition be enforced? Waimea Trails and Greenways is already

unable to limit the use of the path to non-motorized vehicles and pedestrians as evidenced by their meeting notes indicating problems with a motorcycle/dirt bike.

Skating, skateboarding, bicycling is generally a higher speed activity than pedestrians. If this path becomes part of the training plan for athletes such Ironman competitors, I forsee serious conflicts between pedestrians and high speed bicyclists. How will speeds be controlled to prevent collisions?

13. "*The trail will eliminate the need to drive to parks, giving people the option to walk or bike.*" page 4-82 (119 pdf)

    This statement is blatantly erroneous and should be removed from the DEA. The proposed project will not "eliminate" the need to drive to parks. How many of the more than 9,000 people living in the 96743 zip code will be able to walk or bike to the proposed project, particularly along the roads which lead to the park which the DEA claims are unsafe for novice bicyclists and pedestrians (DEA page 2-5)? Do the proposed project planners expect visitors to walk or bike to the proposed project along the roads the DEA claims are unsafe?

14. "*The streamside trail will create a dedicated open space corridor...*" 2-8 (pdf 22)

    This statement is also erroneous. The streamside area is already an open space corridor. it does not require any develpment to make it so. The streamside area is already accessible through the Waimea Nature Park Ulu La`au. This statement should be revised or omitted.

15. "*The State of Hawai'i Department of Transportation's Bike Plan Hawai'i (September 2003), the State's bicycling master plan, designates Kawaihae Road through Waimea Town and Mamalahoa Highway as proposed "signed shared roadways." ....Adding bike lanes would go a step beyond a signed shared roadway as recommended in Bike Plan Hawai'i.*" pages 3-2 and 3-5 (pdf 24 and 27)

    Why does the DEA "*go a step beyond a signed shared roadway as recommended in Bike Plan Hawai`i?*" By selecting bike lanes as alternative as opposed the **bicycling master plan** recommendations, benefits to pedestrians were excluded. Given the circumstances of Waimea's Kawaihae road, bike lanes aren't a step beyond a shared roadway, they are a step below. Isn't a reasonable alternative to the proposed project the recommendation set forth in the **bicycling master plan**? Wouldn't a signed shared roadway provide people with a safer way to exercise, enjoy open space of our rural community, access the existing trail, commute to/from home to business areas? Was the bicycling master plan not included as an alternative in the DEA because it would have many of the positive impacts of the proposed project and none of the negative impacts, and therefore be the preferred alternative?

16. Waimea residents DO NOT NEED the proposed project, DO NOT NEED access to open space, DO NOT NEED more recreational opportunities, DO NOT NEED an alternative transportation route that is not supported by safer existing roadways and safer existing pedestrian ways, DO NOT NEED to impose the negative impacts of a recreational opportunity, born from a **desire, not need,** on other residents who would live near the opportunity.

17. What is the County of Hawai`i's plan for maintaining the proposed project should it be completed? Where will the funds for maintenance come from? If Waimea Trails and Greenways is already unable to manage the trespass of motorized vehicles on the existing Trail, how can they be expected to manage a larger area with expanded trespass which would be made easier by paving?

I strongly oppose the proposed project as planned. There are many alternatives to the proposed project which have not been included in the DEA that would provide more benefits and fewer negative impacts. I strongly urge the County of Hawai`i not to move forward with the plans described in the DEA.

Michelle Taira Medeiros

Michelle Taira Medeiros

cc: jkomata@co.hawaii.hi.us
lkurisaki@kimurainternational.com

KIMURA INTERNATIONAL INC.

September 12, 2011

Ms. Michelle Medeiros
P.O. Box 2183
Kamuela, Hawai‘i 96743

Dear Ms. Medeiros:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your letter to Mr. James Komata, County Department of Parks and Recreation (DPR) dated February 21, 2011 providing comments on the Draft Environmental Assessment. We offer the following responses to the points in your letter.

1. Responses to the Draft EA comment letters are prepared by Kimura International on behalf of the County DPR, the project proponent. In some instances, we have also requested a review by representatives of the Waimea Trails and Greenways (WTG) Committee, to ensure that our answers are accurate and factual. However, the response represents the position of the County administration, not the WTG Committee.

2. The “Alternative Analysis” and evaluation of environmental impacts are two distinct requirements of NEPA, and represent two separate sections of the Environmental Assessment.

You ask why the Draft EA did not more rigorously and objectively evaluate the negative impacts that have been identified by residents. The early consultation process conducted for the EA included a public information meeting on March 24, 2010 and a written request for comments conducted in May and June 2010. The comments received during this early consultation period are summarized in Table 9-1 in Chapter 9 of the Draft EA. As you can see, almost all the “negative” comments received pertained to the Mauka Alternative, which has since been dismissed. Some concerns that were raised about the currently proposed Waikoloa Stream path included noise, perceived decline in property values, security and police protection. All of these concerns were addressed in the Draft EA. Objections and concerns raised during the Draft EA comment period have been addressed in the Final EA.

3. A major objective of the trail is to provide a viable transportation alternative, and Waimea residents would be the primary beneficiaries of this function. The trail is not being promoted as a major tourist attraction. On the other hand, it cannot be built for the exclusive use of Waimea residents, especially if federal funds are being used. Visitors use our public roads, highways, harbors and airports, and are an integral part of our economy; and pay taxes as well.

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Regarding noise impacts, the trail is located entirely on agriculturally zoned land from the Lalamilo Research Station to its western terminus at the Clark Property. Both the Sandalwood and the future DHHL Lalamilo subdivisions are also located on agriculturally zoned land (Zone A-1a), which according to Hawaii County Code (§25-5-70) provides for "agricultural and very low density agriculturally-based residential use." According to §25-5-72, uses permitted by law on these lands (which you refer to as "serene, peaceful and private") include: agricultural parks, agricultural products processing, crop production, game and fish propagation, livestock production, and wind energy facilities--all of which could generate noise from tractors, delivery trucks, and other farm-related equipment and operations.

By comparison, noise generated by trail users through normal conversation or non-motorized vehicles such as bicycles or roller blades are unlikely to approach the levels of legally-permitted activities on these agricultural lands. Because the trail will be located across the stream from both Sandalwood and Lalamilo subdivisions, noise impacts on residents will be reduced further. Complaints about excessive noise should be directed to the local police.

You cite the experience with the White Road Trail, and your comments imply a fear that something similar could result with *Ke Ala Kahawai o Waimea*. Our understanding is that the White Road Trail, a scenic hike leading to an unbelievable view of the back of Waipio Valley, was publicized in tourist guide books. As a result, the public road leading to the trail head became inundated with cars and tour buses parking along the road. Similar traffic concerns have been raised for Kahawai Street, which is a narrow, private road owned by Parker Ranch providing access to residential lots. However, there are a couple of major differences between the White Road Trail experience and *Ke Ala Kahawai o Waimea*. First, the White Road Trail led to a major, scenic view point, and proposed trail does not, so there is unlikely to be the same level of demand by "sightseers." Second, there are multiple roads and access points to *Ke Ala Kahawai o Waimea*, and all users do not have to funnel through Kahawai Street. In order to minimize impacts to Kahawai Street residents, it is recommended that street parking be prohibited, and/or use for trail access be limited to pedestrians and bicyclists. The downside is that Kahawai Street residents and their guests would also be prohibited from street parking. Another suggestion raised during the Draft EA comment period was to extend Kahawai Street closer to the trail to provide a vehicle turn around area. This option would require an agreement and modified easement from Parker Ranch. Because Kahawai Street is owned by Parker Ranch, any of the proposed mitigations will need to be discussed with them and implemented with their consent.

4. It is unclear which residents "will have to live with the unintended consequences of said gathering places" and what those unintended consequences might be. While the trail will serve as an important community gathering place, trail users will generally be moving along its route, and will not be loitering on anyone's private property or intruding on anyone's privacy. In the event of trespassing, excessive noise, theft or other illegal or undesirable behavior, trail users and residents should contact the police.

We can find no literature or medical evidence that multi-use paths cause stress or health impacts to adjacent residents. On the contrary, walking trails, bike paths are often cited as the number one asset for community health.

As far as a loss of privacy, the law defines a violation of privacy for homeowners as an "unreasonable and highly offense intrusion" of their seclusion or solitude. The proposed path will not result in an intrusion onto homeowner privacy within the confines of their property. For example, in the case of the Sandalwood subdivision, residences are a minimum one acre agricultural lot with front to back dimensions of 200 to 300 feet. Dwellings are located a distance of approximately 100 to 175 feet from the proposed edge of the path easement, which is located across Waikoloa Stream. In our opinion, this does not constitute an unreasonable and highly offensive intrusion into homeowner seclusion or solitude. Privacy concerns to landowners along the trail will be taken into consideration when vegetation is planted, and vegetative screening can be incorporated where it is consistent with trail design and does not impact safety.

5. See response to #3 above. Again, the area between the Lālāmilo Research Station and the Clark property is zoned by the County for agriculture use, and all homes within this area are defined as an "agriculturally-related residential use." It is unlikely that noise from use of the trail will be comparable to other legally-allowed activities, such as agricultural processing, crop production, or livestock operations.

6. Safe pedestrian access to town from areas north of Kawaihae Road is an ongoing traffic safety issue that will continue to need to be addressed. The lack of sidewalks through this area have been noted in a number of documents, including the Waimea Traffic Circulation study, and the provision of safe pedestrian ways and crossings remains a challenge. The County is willing to work with the State of Hawai'i Department of Transportation and other groups such as the South Kohala Traffic Safety Committee to facilitate safe access to the trail from Kawaihae Road.

7. See response to #3 above, regarding use of the trail by visitors.

8. The March 2005 *Safe Routes to School* study for Waikoloa and Waimea found that while 12% of Waimea students live close enough to school to walk or bike, only 5 percent walk or bike to school and 9 percent walk or bike home. A survey of Waimea parents found that the main reason they chose to drive their children over other alternatives was "Safety" (mentioned by 51% of respondents). When students were surveyed, 19% said they would like to get to school by bike, and 7% would like to walk (both higher numbers than are able to do so now). The study concluded that *"if bike paths were available, particularly if there were safe crossings of Highways 19 and 190, many more could get to school under their own power…Many barriers exist, but it appears that progress toward healthier and safer alternative to every parent driving their children to school is possible…*".

The likelihood of trail use by commuting students was reinforced by both the principal and the community liaison of Waimea Middle Public Conversion Charter School (PCCS). In letter sent during the Draft EA comment period, Principal John Colson stated that "a safe trail would offer my students the opportunity to talk or ride their bike to and from school" and noted that it would also benefit both campuses of HPA, Waimea Country School and Waimea Elementary School. Ms. Patti Cook, the Waimea Middle PCCS Community Liaison noted the presence of high population, low income housing areas within a mile of their school, including Noelani Apartments and several low-to-moderate rental apartments. She noted that nearly 100 school-aged children live in Noelani's public housing apartments, most of whom attend Waimea Elementary and Middle schools. Ms. Cook explained that these children must walk to school along the edge of a very congested highway where there is virtually no curb and sidewalks, or their families—who are already struggling financially—must drive them to and from school out of concern for their safety. She concluded that the proposed trail would immediately improve the safety of these children and reduce peak hour traffic congestion.

9. Easements for the trail have already been secured through this area.

10. While the western-most section of the Burke-Gilman trail passes through urban areas of Seattle, the trail also connects eastward into rural areas, linking with the Sammamish River Trail and extending for another 10 miles from Bythe Park in Bothell to Marymoor Park in Redmond. The King County regional trail system also extends into rural areas. One such trail is the Snoqualmie Valley Trail that meanders past working farms as well as preserved open space areas for 36 miles. Studies have shown that initial objections from adjacent property owners have changed over time, and the trails are now largely viewed as a positive amenity for the entire community.

11. We acknowledge that the perception and intrinsic value of open space and privacy for some individuals living along the trail will change. However, the pertinent issue is whether the advantages of providing public benefits for a large proportion of the population outweighs an individual's right to exclusive enjoyment of a natural resource.

Long-time residents recall that less than a generation ago, the area along Waikoloa Stream was unobstructed by homes and fences and that children regularly played alongside the stream. Today, much of the surrounding lands are gated and fenced, and the stream is largely hidden from view; in fact, some residents don't even realize that the Waikoloa Stream passes directly through the center of town. *Ke Ala Kahawai o Waimea* will provide the opportunity for individuals of all ages and physical abilities, residents and visitors, to partake in the natural beauty of the Waikoloa Stream and environs. These natural resources are public resources. It is the County's position that the opportunity for public access to these resources outweighs the "intrinsic value" any one individual may place on his or her exclusive enjoyment.

12. With any multi-use trail, there is always the possibility of use conflicts. The potential for pedestrian and bicycle/skateboard conflicts on the trail need to be avoided through education, as well as signage reminding users of trail etiquette. Basic rules for the use of multi-use trails include being aware of and courteous of other trail users, staying to the right of the trail (except when passing), slowing down at corners, traveling at a reasonable speed, and yielding to other users when entering or crossing the trail. Public education, posting signs, and self-policing is the approach that is used on most multi-use trails in Hawai‘i and around the country. Control of speeds can also be managed through trail design, for example, by meandering the path.

The trail will be off limits to motorized vehicles, with the exception of mobility devices (e.g., electric wheelchairs) and maintenance and emergency vehicles as needed.

13. This question has taken the EA statements out of context. The intent of the statement you cite was that the trail would provide linkages for people to get to the park without having to drive. Trail users will not be “expected” or coerced to walk or bike along Kawaihae Road and Mamalahoa Highway. Waimea residents are intelligent and resourceful enough to access the trail at a safe location and in a way that best suits their individual needs and abilities.

14. We stand by this statement in the EA. At present, there is not complete access to the entire trail corridor. Easements already secured provide access to the streamside along the first increment, but easements are still being secured for other areas. Once the trail is built, a permanent dedicated open space corridor will be achieved for the entire length for everyone to enjoy.

15. The County still supports the Bike Plan Hawai‘i recommendation to establish signed shared roadways on Kawaihae Road and Mamalahoa Highway. Signed shared roadways are identified by signage as preferred bike routes, and may include paved shoulders or wide outside lanes, but not a separate marked bike lane The South Kohala CDP also recommends providing sidewalks and bikeways within the existing rights-of-way for these major roadways. These improvements are entirely compatible with and complimentary to the proposed *Ke Ala Kahawai o Waimea*, and would greatly enhance the overall circulation system in Waimea.

However, the EA’s Alternatives Analysis concluded that these recommendations did not meet important objectives of the project’s stated “Purpose and Need.” Specifically, bike lanes and sidewalk improvements do not provide access to natural and scenic areas, or provide opportunities for recreation, as does the preferred alternative (multi-use trail along Waikoloa Stream). The Final EA has been revised to clarify that the recommendations for sidewalks and signed shared bike lanes on Kawaihae Road and Mamalahoa Highway still remain highly desirable and recommended transportation actions.

16. Your opinion is noted.

17. We agree that ongoing maintenance, operation and stewardship of *Ke Ala Kahawai o Waimea* will be essential to its long-term success. The WTG Committee will partner with the County Department of Parks and Recreation (DPR) to assume primary stewardship of the trail's long-term care and oversight. The WTG Committee has agreed to be responsible for routine maintenance such as litter pick-up, removal of trash and debris, weed and dust control, and trimming vegetation. The County DPR will have primary responsibility for repairing, replacing or restoring major components on a regular basis as well as correcting damage due to erosion, flood, or other natural events. A long-term operation and maintenance plan for the trail will be developed jointly by the WTG Committee and the County. The plan will identify and assign responsibility for the maintenance tasks. Other issues to be addressed include user safety, rules, policies for trail use, and other issues associated with ongoing stewardship of the trail.

Thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.



Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

Drew Medeiros
PO Box 2183
Kamuela, Hawai`i 96743
February 21, 2011

County of Hawaii
Department of Parks and Recreation
c/o Mr. James Komata, Park Planner
101 Pauahi Street, Suite 6
Hilo, HI 96720

RE: Comments for Draft Environmental Assessment for Proposed Ke Ala Kahawai o Waimea – Waimea Trails and Greenways

The following comments are submitted in response to the Draft Environmental Assessment for Proposed Ke Ala Kahawai ~ Waimea Trails and Greenways.

- Page 3-13 of the DEA states that a retaining wall will be constructed to prevent the stream from eroding the bank near the proposed paved path. Streams naturally meander and change course overtime. How will restricting this natural process impact water quality and stream life? What is the long term affect of this restriction to the up stream and down stream course, flooding, bank stability?

- The way that streams naturally meander and change course keeps the stream clear and free flowing. This natural process determines the rate of water flow and depth of the stream. The bridges and retaining walls included in the design of the proposed project will interfere with this natural process. This could lead to sediment deposit that will restrict the flow of the stream, deepening of the stream bed, erosion of the stream bank in other locations, etc. Although the standard is a 100 year flooding event, recent history has shown that 30 year flooding events have resulted in serious property damage. How will restricting the natural flow of the stream change the stream over flow during 30 year flooding events? What will be the impact to residents and properties neighboring the stream?

- Retaining walls and nine (9) bridges are significant restriction of stream flow over a short distance of 4.8 miles. Disturbing the natural equilibrium of the stream will likely have unintended negative consequences. And in the long term, to preserve the concrete path of the proposed project, the stream will need to be further constrained with more concrete retaining walls resulting in a ditch. Doesn't the construction of concrete walls and bridge the natural beauty of the stream? Doesn't this make the stream a concreted urbanized ditch? Doesn't this diminish the value of the stream? Why hasn't the EA

accounted for the negative impact on natural beauty due to constructed elements such as retaining walls and bridges?

- The magnitude of concrete and construction identified for the preferred proposed project diminishes the natural experience of the stream. The end result of the preferred proposed project will be an experience that is little different than walking along the stream near the Lindsey Road Bridge, KTA, or W. M. Keck Observatory parking lot. Waimea is a rural community. Walking or bicycling along Kawaihae Road which nearly parallels the alignment of the preferred proposed project can be recreational and an experience of open space. So why did the DEA determine that improved bike lanes on Kawaihae Road would not enhance recreation and open space? The preferred proposed project alignment borders commercial and residential structures. There may some day be structures on both sides of the stream. So how will the "open space" of the preferred proposed project be different from the open space of Kawaihae Road?

- "*Ke Ala Kahawai O Waimea enjoys widespread community support...*" (page 3-7)
  Where is the evidence to support this statement? Without evidence to support this statement, it is an example of the pervasive bias of this DEA. This DEA does not meet the standard of objectivity set by The Council on Environmental Quality.

  This statement should be removed from the document. If the cited statement is not removed from the document, and no evidence of overwhelming support of this project by Waimea residents is provided, the following statement should be added: "*This project also enjoys widespread community opposition.*"

  According to US Census 2000 Data and subsequent projections, the resident population of zip code 96743 exceeds 9,000 individuals. The opinions of the few people noted in attendance of the Waimea Trails and Greenways Committee, or the fewer than 200 people that have attended the South Kohala Community Development Plan meetings, are not a statistically significant representation of "widespread community support."

In summary, the proposed project is a poor application of fund, will benefit few residents, will and have negative impacts on stream stability. As these comments illustrate, the DEA fails to provide a rigorous, objective analysis of alternatives.

I look forward to reading responses to these comments,

Drew Medeiros

Drew Medeiros

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Drew Medeiros
P.O. Box 2183
Kamuela, Hawai‘i 96743

Dear Mr. Medeiros:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawai‘i

Thank you for your letter to Mr. James Komata, County Department of Parks and Recreation (DPR) dated February 21, 2011 providing comments on the Draft Environmental Assessment. We offer the following responses to the bullet points in your letter.

Items 1 and 2. The bridges and retaining walls included in the design of the proposed project will not interfere with stream flow. The trail, including stream crossings, will be designed to allow the passage (either through the crossing structure or over the crossing structure) of up to the 100-year flood with no increase in flood water elevation. This is a requirement of the County of Hawai‘i’s Floodplain Management program directed by Chapter 27 of the Hawai‘i County Code, and will be verified by a hydrologist and the Federal Emergency Management Agency (FEMA). Therefore, the project will be neutral in terms of impacting flood damage along the stream. .

The March 2004 flooding of Waikoloa Stream was preceded by intense rain, and was due in part to the existing physical conditions of the stream (sharp stream bends and generally inadequate flow-carrying capacity) as well as of blockages caused by fallen tree branches and debris. The blockage in turn caused the stream to overflow its banks and flow through the main street through town. Damage to the Waimea Nature Park was also caused by overtopping due to stream blockage. WTG Committee member Leningrad Elarionoff said that he personally spent several days clearing out that blockage before getting assistance from military personnel from Pohakuloa Training area to finish the job. This incident reiterates the importance of regular inspections and efforts to keep the stream free of fallen debris. Access to the stream areas via the proposed trail will facilitate this ongoing stream maintenance effort.

As far as impacts to residents and properties neighboring the stream, anyone purchasing streamside property within the designated flood zone risks having their property damaged even without bridges or culverts. However, this inherent risk will not be increased because of the project.

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Item 3. Approximately 1,183 LF of retaining walls are currently proposed for this project, and this will be primarily in the first increment, between Lindsey Road and Kahawai Street. The terraced retaining walls are designed to adjust the severe slope in that particular area to achieve the desired path elevation and will be along only one side the path. This means that there should not be a "concrete ditch" look or feel to the path in this location.

Retaining walls that support the path will be under one side of the path and are designed to support the path, deter undermining of the path due to stream erosion and ultimately to raise or lower the path to a desired elevation at the select locations where the path is near the stream or drop-off. The wall is designed to be 1-foot higher than the finished grade, meaning that there should only be a vertical visual presence of 1-foot of wall while walking on the path at the indicated locations. Additionally the wall is 2-feet away from the path edge making it look more like a curb or low seat wall. The wall face maybe visible from other locations along the path but it will be "under" that indicated portion of path and not "above" it.

Retaining walls "in the stream" are now proposed for four isolated locations in the first increment. One of these locations is at the second stream crossing near the Catholic Church. This area is unique because the stream naturally bends just prior to location of the stream crossing. The retaining walls in this area are needed to protect both the path from being undermined, and the stream banks from erosion. There will be no concrete lining of the bottom of the stream bed between the retaining walls and so a concrete lined ditch would not be an appropriate description of this section.

Item 4. The Alternatives Analysis concluded that the alternative to provide bike lanes on Kawaihae Road and Mamalahoa Highway would not fully meet the project's stated purpose and need to enhance access to natural and scenic areas and to increase opportunities for recreation. Bike lanes will, however, greatly improve bicycle transportation on these major roads. We will convey this point more clearly in the Final EA.

You speculate that there may some day be structures on both sides of the stream. For that to occur, the adjacent lands (which are zoned for agriculture between the Lalamilo Research Station and Clark property) would need to go through the entitlement process. Approval for further residential and commercial development would require justified economic and population demand, and the willingness of the community to accept growth. Under this scenario, we agree that the path would be no different from Kawaihae Road. But this possibility provides even more reason to create an open space corridor along the stream which is accessible and dedicated to public use.

Item 5. You question the EA statement that the project has a wide level of community support--we stand by this statement. The Waimea Trails and Greenways project has been specifically identified and endorsed in a number of public planning documents including the South Kohala Community Development Plan (November 2008), the Waimea Traffic Circulation Study

(December 2007), and Bike Plan Hawai‘i (September 2003), the State's bicycling master plan. The State Comprehensive Outdoor Recreation Plan (SCORP) also mentions the desire *for "more safe and continuous pathways for biking, walking, and jogging that connect communities. Paths set apart from roadways provide safe places for children to walk, run, skate, ride their bikes, and play. Paths also significantly reduce pedestrian and bicycle conflicts with motor vehicles."* (SCORP 2008, p. 112).

Each of these planning documents underwent months of public reviews and hearings, with opportunity for public review and comment. The accepted documents reflect the policy and planning objectives of the County/State governments and presumably the vision and the desires of the community.

We acknowledge that there is also some community opposition to this project. The NEPA EA process is an information disclosure process, and the intent of the document is to discuss existing conditions and likely environmental impacts. The FHWA has reiterated to us that the EA process is not a popularity contest. That said, during the Draft EA comment period we received a total of 58 written comments from community individuals (i.e., excluding government agencies). Of this total, 46 (80%) were in support of the project, 9 (15%) were opposed, and 3 (5%) were neutral; indicating a high level of community support. All comment letters received will be reproduced in the Final EA.

Thank you for taking the time to provide your comments. If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

DONALD O. COX, PH.D., P.E.
65-1158 MAMALAHOA HWY, NO. 8A, PMB 134
KAMUELA, HI 96743

21 February 2011

Mr. James Komata, Park Planner
County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720

Re: Waimea Trails and Greenways Draft EA

Dear Mr. Komata:

Enclosed is a 27-page document titled "Questions and Comments Regarding the Draft EA for the Waimea Trails and Greenways Project (WTG Project, "the Project")" which are my comments and questions regarding the Draft EA that should be addressed before the EA is considered final. Please note that, like this letter, the enclosure is printed on both sides of the each page.

The tax-paying citizens of the County of Hawaii have numerous concerns regarding the Waimea Trails and Greenways (WTG) Project as it is envisioned in the Draft EA. My interest was aroused when I discovered that an "alternate route" (called the "Mauka Alternative" in the Draft EA) was going to be considered as part of the current EA. But as I learned more about the Project my concerns moved beyond the "alternate route" issue. I discuss a few of the major areas below, and list specific issues and concerns in the enclosure.

1. It is quite apparent that the primary reason, the sole objective, for the Project design as currently conceived is to meet requirements for Federal funding. Promoting it as an "alternative transportation facility" and designing it to meet ADA requirements support this fact. The WTG Project is not a natural "trail" or "path"; it is a concrete road that will scar the natural beauty of the Waikōloa Stream and surrounding area. And the number of people that can, let alone will, use it as an "alternative transportation facility" is limited, especially when compared to the number of citizens in the County, State or Country that will be asked to pay for the Project. In excess of $18 million for less than five miles of roadway that few will use as transportation is not justified, especially considering the fiscal conditions at all levels of government.

2. Concerning the "Mauka Alternative:" I was told by Mr. Clemson Lam (during the 19 July 2010 WTG meeting) that this alternative was developed during a 23 March 2010 community meeting kicking off the current EA. It was not considered in the 2004 EA the County paid for, and I have yet to see any documentation showing it was considered previously. Few, if any, property owners along the alternative route were directly notified; most of us discovered this additional route by word of mouth. WTG was requested, by the County's consultants Kimura, to list contacts they felt should be notified (WTG Meeting Notes, 17 May, 2010). Thus, all the Project backers could participate fully in its promotion, while the general public, and those most effected by the alternative, were kept in the dark. Where is the transparency that is suppose to exist with our County government? As stated by one member of the community during the

recent community meeting to discuss the Draft EA, there seems to be an agenda to ram this Project down the throats of the County residents without them understanding what is really involved.

3. While the "Mauka Alternative" is rejected in the Draft EA, its inclusion has raised the concerns of those whose property would be affected by a path located as proposed by this alternative. Many worry, "What is to keep the County or other agency from raising the "Mauka Alternative" again in the future?" The wording in the EA must firmly reject consideration of this alternative as a possible location for a path now or at any time in the future.

4. There are better, more important, "alternative transportation facilities" that should be considered in lieu of the WTG Project. In the South Kohala CDP, Section 4.3.4, entitled "Action Program—Walkways and Bikeways for Waimea," it describes, in the very first paragraph, that the "critical need" is to "plan, design and construct walkways and bikeways within the existing rights of way of the main Waimea Roads: Kawaihae Road and Mamalahoa Highway." Yet this alternative is totally rejected in the Draft EA, and for reasons that are unfounded. And there is much discussion in the Draft EA about community participation in workdays to build a wood-chipped path along the same easements where the concrete road is proposed to pass. Why not let the community continue to build this type of path along the WTG Project alignment? Such a trail is much more natural, less intrusive to the environment, and less expensive to build. And much of the $18 million would remain available to refurbish and maintain the current County Parks, especially those at the beaches used by tourists and locals alike (see the letter from Mr. Sean Gallagher published in the 28 January 2011 WHT)?

5. Lastly, the Draft EA reads as if it was written as a public relations document promoting the WTG Project, not as an impartial, unbiased analysis of the environmental impact this Project will have. There is much opinion without supporting fact or documentation. Statements in the EA should be supported by fact rather than be mere speculation and opinion. Otherwise, the EA will have no credibility, and the monies paid the consultant Kimura will have been wasted.

Thank you for your consideration. If you have questions or would like to discuss my comments included in the enclosure, please feel free to call me at 808-885-5321 or contact me by e-mail at coxphd@gmail.com. Or I can be reached by mail at the above address.

Sincerely,

Donald O. Cox, Ph.D., P.E.

Encl.

cc: Ms. Leslie Kurisaki – Kimura International, Inc.
Mayor William P. Kenoi (w/out Encl.)
Director Robert A. Fitzgerald – Department of Parks and Recreation (w/out Encl.)
Councilman Pete Hoffmann (w/out Encl.)

Questions and Comments Regarding the Draft EA for the Waima Trails and Greenways Project (WTG Project, "the Project")

1. Section 1, Page 1-2, 2nd Paragraph: "This document supersedes an earlier EA for Waimea Trails and Greenways completed for the project in February 2004."

How or why does the DEA "supersede" the earlier EA? What is the factual basis or law that allows the DEA to "supersede" the earlier EA? The earlier EA does not disappear does it? Is it not a document the county paid for and "approved?" The word "supersedes" should be changed to "augment."

2. Section 1.2, Page 1.2, 2nd Paragraph : "The intent is to have the path comply with Americans with Disabilities ACT (ADA) guidelines for outdoor areas for the majority of its length. In areas where it is technically infeasible to achieve ADA compliance, signage will be installed and alternative access points will be identified."

Why was this intent incorporated in the Project? What effect does this intent have on the total cost of the project? How was the cost benefit decision to meet this intent determined, and by whom? Are the costs associated with "signage" and "alternative access points" included in the cost estimates of Section 1.2? If not, what is additional costs associated with these items?

3. Section 1.2, Page 1.2, 3rd Paragraph: " Design and construction costs for the first increment have been estimated at $5.8 million. Future increments will be developed as funding becomes available and as required easements are secured. It is estimated that the entire trail, including the first increment, will cost upward of $18 million to design and construct."

Do the above estimates include the monies already expended for the consultants (Shigezawa and Imata) and the earlier EA? If not how much has been spent on these items? Do these estimates include costs for all necessary improvements, such as the development of additional parks and parking facilities required to accommodate Project users? Do they include the costs of acquiring the additional easements necessary to complete the Project? Who prepared these estimates and what documentation to support them is available? Since the design is yet to be completed, what is the basis for these estimates? What documentation is available that shows how the estimates were generated, and where can it be reviewed? What does "upward" mean in the last sentence quoted above? Why not present an estimate prefaced with "not to exceed?" How long will it take to complete the first increment? How long is it expected to take to complete the Project? The wording of the first two sentences suggests funding for the first increment is available. Is funding for the first increment already secured? If so, where is the money coming from (County, State, Federal)—who is paying for the first increment? Why is the cost estimate for the first increment $1.25 million less than that Mr. Imata presented at the 28 June, 2010 WTG meeting?

THE PARTIES MAKING THESE ESTIMATES MUST BE IDENTIFIED IN THE EA AND THE BASIS/DOCUMENTATION FOR THE ESTIMATES MUST BE REFERENCED IN THE EA. WITHOUT INCLUDING THIS INFORMATION, THESE STATEMENTS HAVE NO JUSTIFICATION AND ARE STRICTLY OPINIONS, AND SHOULD NOT BE INCLUDED.

AN ESTIMATE OF, AND BASIS FOR, THE TIME REQUIRED TO COMPLETE INCREMENT ONE, AND ALSO THE ENTIRE PROJECT, SHOULD BE INCLUDED IN THE EA.

THE PUBLIC, THEIR REPRESENTATIVES, AND FUNDING AGENCIES NEED TO HAVE REALISTIC ESTIMATES OF COSTS AND TIME TO COMPLETION, AND THE BASIS/DOCUMENTATION FOR THESE ESTIMATES, IN ORDER TO PROPERLY JUDGE THE MERRITS OF THE PROJECT.

4. Section 2.1, Page 2-1: "Project History"

How was the information that is presented in this section obtained—what were the sources? What documents were reviewed, and are available for County residents to review, that support the information presented in this section?

5. Section 2.1, Page 2-1, 2nd Paragraph: "In late 1994, the group held a number of community meetings where residents discussed their goals and concerns, and explored a number of potential routes."

What is the "group" referred to here? Who were the organizing members and how many were in the "group?" How many "residents" participated in these community meetings? Were any of these "potential routes" to the north of Kawaihae Road? Specifically, was the current "Mauka Alternative" considered? If so, where is this documented? What documentation is available that supports the contentions of this sentence?

6. Section 2.1, Page 2-1, last Paragraph: "A Request for Proposals (RFP) went out in September 1996 and by May 1997 a consultant was selected by the County to begin formal trail mapping, surveying, and design."

What was the total cost of hiring this consultant? Are these costs included in the estimates of Section 1.2? What documentation of their efforts is available and where can it be reviewed? When was the decision to make the Project ADA compliant decided, and by whom?

7. Section 2.1, Page 2-2, 3rd complete Paragraph: "The EA, which complied with State of Hawai'i Chapter 343 HRS environmental regulations, was completed in February 2004, and a finding of No Significant Impact (FONSI) issued by the County."

In the 2004 EA is there mention of any alternatives, other than the "No Action" alternative? During the 19 July 2010 WTG meeting I was told by Mr. Lam that the "Mauka Alternative" was developed during a Community meeting held 23 March 2010 to inform the public of the

initiation of the current EA, which suggests the statement listed as Item 5 above, regarding what was going on in 1994, may be incorrect. At the same time, Mr. Lam also told me the inclusion of the "Mauka Alternative" was necessary to meet requirements for the current EA, since they were now perusing Federal funding and, not to worry, because this alternative would be rejected in the current EA (which it has been). See Item 101, below.

8. Section 2.1, Page 2-2, 4th complete Paragraph: "This allowed portions of a 17.6-acre parcel adjacent to the County Refuse Transfer Station to be used for parking and access to the trail project."

Will this parcel be developed as part of the Project—that is, will the "parking and access to the trail" be done as part of the Project, or at some later date? Are the costs to develop the parcel and complete the "parking and access to the trail" included in the cost estimates referred to in Section 1.2 (see Item 3 above)?

9. Section 2.1, Page 2-3, 1st Paragraph: "By the end of 2007, preliminary designs were in progress but at the end of 2007, Kaz Shigezawa, the prime consultant for the project, retired. Mr. Shigezawa and his team had been on the job for 10 years. The WTG Committee met with Mayor Harry Kim to discuss this dilemma, and in February 2008, the County hired Imata and Associates to complete design of Increment 1, between Lindsey Road and Kahawai Street.

Are the fees paid to Mr. Shigezawa and others he may have employed in his efforts as a consultant to the County included in the cost estimates referred to in Item 3 above? If not, how much money did the County spend to retain their consultant, Mr. Shigezawa, during the 10 years he was employed? What documentation of the work efforts of Mr. Shigezzwa is available for public review and where can they be studied? Are the fees that have been paid by the County to Imata and Associates since February 2008 included in the cost estimates referred to in Item 3 above? If not, how much money has the County spent to retain Imata and Associates during their tenure on the Project? Have Imata and Associates (IA) completed the design of Increment 1? Are IA still the primary design consultants on the Project? How, and by whom, were the two consultants chosen, and their fees determined?

10. Section 2.1, Page 2-3, 3rd Paragraph: "At the same time, the County and WTG committee continued to explore potential funding sources for the remaining increments of the trail. During consultation with the Federal Highway Administration (FHWA), one of the major funding sources for trails and greenways projects, it became clear that a prerequisite for federal funding would be an EA that complied with the provisions of the National Environmental Policy Act (NEPA). The FHWA indicated that although the DPR's 2004 EA complied with the State's environmental law, it did not fully meet NEPA requirements. Therefore, federal funding could not be sought until a NEPA EA was completed and approved. At that point, the County, in consultation with the WTG Committee, agreed to prepare a new EA that complied with both NEPA and Chapter 343 HRS environmental regulations, under the Imata and Associates contract."

The first sentence of this paragraph is unclear: It suggests that the funding sources for Increment 1 have been secured at that time. Have the funding sources for Increment 1 been secured? Who

were the personnel at the FHWA that were consulted regarding funding sources? Who from the County and/or WTG participated in the discussions with the FHWA? What prompted the County's interest in pursuing FHWA funds? When did this occur? In particular, was it before or after the DPR's 2004 EA? What is the relation between the County and WTG Committee? Why was WTG Committee "consulted" regarding funding of the current EA? Is the contract for the current EA between Kimura International (KI) and the County or between Imata and Associates and KI? How much money is KI receiving for preparing the current EA? Is this money for the contract with KI included in the cost estimates discussed in Item 3 above?

11. Section 2.2, Page 2-3, 1st Paragraph: "The purpose of the proposed *Ke Ala Kahawai O Waimea*, the stream trail of Waimea, is to create a green corridor alongside Waikōloa Stream which will provide an accessible, non-vehicular pathway between residences, businesses, and schools."

The term "green corridor" is misleading. Waikōloa Stream provides the "green corridor," as stated in the following sentence from Section 2.2.4: "Its path closely follows the route of Waikōloa Stream, which although is not continuously flowing, provides a scenic green corridor which is all but invisible from the main roadways." Unless the Project design includes green-tinted concrete the wording here should be "path," "trail," or more accurately "roadway," and not "green corridor."

12. Section 2.2.2, Page 2-5, 3rd complete Paragraph: "The paved, ADA-compliant path will provide a safe route which is separated from traffic, and can be easily used by less mobile, less physically active residents, including persons with disabilities, seniors, young children, and parents with strollers."

The word "paved" is misleading. The word "paved" should be changed to "concrete." The selected material of construction for the Project is concrete and not asphalt, which is what the public thinks of when reading the word "paved." The word "easily" is misleading and an opinion with no factual basis. The word "easily" should be removed, especially since the sentence discusses "less physically active residents." There is a 600-foot elevation change over the length of the Project. The prevailing winds are normally blowing in the downhill direction. This will not make it an "easy" time for "persons with disabilities, seniors, young children, and parents with strollers" traveling into town on the Project. The word "safe" is misleading and an opinion with no factual basis. What is meant by "safe" in this sentence? Who is going to ensure that the Project is "safe"? The word "safe" should be removed from this sentence.

13. Section 2.2.3, Page 2-5, 1st Paragraph: "The preferred alignment, which follows Waikōloa Stream, is easily accessible from surrounding residential subdivisions, and passes directly adjacent to the Department of Hawaiian Home Land's future Lālāmilo project, planned for over 400 homestead lots."

The word "easily" is misleading, is an opinion not based on fact, and should be removed. For many subdivisions the access points to the Project are a significant distance away and require travel on surface streets and Kawaihae Road. For the Lālāmilo project to take advantage of the Project will require that they build an additional stream crossing. Thus, the word "directly" is

misleading and should be removed. Are the costs associated with the additional stream crossing included in the estimate of Section 1.2?

14. Section 2.2.3, Page 2-6, partial Paragraph at top: "SRTS efforts in Waimea have focused on improving car drop off areas, pedestrian awareness, and a "mini-walking school bus" where children walk together from a drop-off point on school property to the classroom. The creation of the proposed path is a large part of the overall strategy to provide students with safe routes and to encourage walking and bicycling to school."

In the second sentence, whose " overall strategy" is it that is being referred to here and where is it documented? If the answer is SRTS, then the word "large" is misleading and should be removed, unless the source at SRTS who makes this claim is identified, as their "large" efforts seem to be described in the first sentence. The second sentence could be changed to read, "SRTS is relying on the creation of the proposed path to provide students with safe routes and to encourage walking and bicycling to school."

15. Section 3.2.2, Page 3-5, 1st Paragraph: "Adding bike lanes would go a step beyond a signed shared roadway as recommended in Bike Plan Hawai'i. However, the existing roads are narrow and adding bike lanes would require wider shoulders, involving land acquisition along the right-of way....However, the study cites the limited roadway width in most areas of Kawaihae Road and Mamalahoa Highway, which makes the addition of bike lanes difficult to implement "

What is the total width of the right-of way, including utility easements, for Kawaihae Road from Kamuela View Estates to Waimea Town? Have the authors reviewed the South Kohala Community Development Plan, Section 4.3.4, where it states the right of way is 50-60 feet, leaving 12 feet on each side for walkways and/or bikeways. Are the utility poles on both sides of Kawaihae Road, located some distance from the paved surface, on private land? Is there not additional right-of way beyond the current pavement that could be used for bike/pedestrian travel? Therefore, "land acquisition along the right-of way" is not necessary, and the last phrase of the second sentence should be removed. In the last sentence, "limited roadway width" and "difficult to implement" are opinion statements, not based on fact, and no reference from "the study" is presented to justify these statements. Therefore, the concluding sentence of the paragraph should be removed.

16. Section 3.2.3, Page 3-5, 1st Paragraph: "The "mauka" trail alternatives shown on Figure 2 are located north of Kawaihae Road, toward the Kohala Mountains. These alternatives were originally identified by the WTG Committee members in the early 1990's, as a possible way to link the mauka residential areas with Hawai'i Preparatory Academy (HPA) without crossing the highway."

How many alternatives located north of Kawaihae Road are shown in Figure 2? If there is only one alternative shown on Figure 2, as I believe, then all terms that are plural in this section ("alignments, segments, alternatives") should be changed to the singular. What is the basis for the second sentence of this paragraph? What documentation is available to support this statement? If this is true, why were no Alternative Alignments included in the 2004 EA prepared

for the County? Is it not true that the "Mauka Alternative" was chosen during a 23 March, 2010 Community meeting held to inform the community of the instigation of the Kimura EA? If so, this information should be included in the paragraph. Also, see Item 7 above.

17. Section 3.2.3, Page 3-6, 1st Paragraph: "The traffic safety issue was also raised by the State Department of Transportation in its early consultation letter."

This sentence's placement is misleading and should be removed. It suggests the State Department of Transportation's concerns of traffic safety apply only to this alternative. The 2 June 2010 letter from the State Department of Transportation states in part:

> "However, the optional segments and alternative paths may impact DOT Highways facilities, Kawaihae Road and Kohala Mountain Road. The DEA should assess the impact to State highway facilities and address issues such as, but not limited to, access improvements, interaction of project generated traffic, foot and non-motorized traffic with vehicle traffic and traffic controls measures."

Thus, their concerns relate to all parts of the Project that interact with DOT highways facilities, which would include anything involved with Kawaihae Road—like access points along Kawaihae Road and parking on Kawaihae road.

18. Section 3.2.3, Page 3-6, 2nd complete Paragraph: "Based on the environmental analysis as well as community input received during the EA early consultation period, all of the "mauka alternatives" located north of Kawaihae Road were determined to be infeasible and/or undesirable. This Alternative Analysis recommends that all of these mauka trail alignments be eliminated from further consideration."

To address the concerns of the community there must be assurance that there is no possible consideration of the Mauka Alternative at any point in the future. Therefore, the last sentence of this paragraph must have the phrase, "now and at any time in the future" included at the end of the sentence, so it reads as follows: "This Alternative Analysis recommends that all of these mauka trail alignments be eliminated from further consideration, now and at any time in the future."

19. Section 3.2.4, Page 3-7, 2nd Paragraph: "This alignment was identified by the WTG Committee after years of consultation and outreach with the community, and extensive negotiations with both public and private landowners along the route."

What basis is there to say "years of consultation and outreach within the community?" Many of us believe this has not been the case (look at the way the public was informed of the Mauka Alternative; see Item 102 below). This is an opinion statement, not based on fact, and should be removed. The sentence should read, "This alignment was indentified by the WTG Committee after extensive negotiations with both the public and private landowners along the route."

20. Section 3.2.4, Page 3-8, 1st Sentence: "Another more preferable option is for the trail to cross under Lindsey Road, at the same elevation as the stream, which passes under the road in a culvert."

To whom is this "another more preferable option," and on what facts or documentation is the statement based? This is an opinion statement and not based on fact. The sentence should be changed to read, "Another option is for the trail to cross under Lindsey Road, at the same elevation as the stream, which passes under the road in a culvert."

21. Section 3.2.4, Page 3-13, 2nd to last Paragraph: "Future parking lots will be constructed on the Clark Property at the far western end of the trail, and at the future County Park adjacent to the refuse transfer station. No other designated parking lots are planned. Many users are likely to park near the Waimea Nature Park, Waimea Park or other areas within Waimea town, and access the trail on foot. Most trail users are expected to be Waimea residents, and many will not require vehicle parking."

Is construction of the parking lots and County Parks part of the WTG Project? Are they included in the cost estimates of Section 1.2? If there is no other designated parking planned, where are vehicles accessing the Project from the County Refuse Transfer Station, Kahawai Street, Opelo Road, the Waimea Nature Park, Carter Center, Lindsey Road, and Church Row to park? How many cars can park "near" the Waimea Nature Park and Waimea Park? How will people parking in the areas discussed in this paragraph get to the Project? Answers to these questions must be included in the EA in order for a proper assessment of the Project's impact on traffic safety, parking congestion, personal safety and cost.

22. Section 3.2.4, Page 3-13, last Paragraph: "Although the trail will be accessible from designated points along its length, major landowners along the path have such as Parker Ranch and the University of Hawai'i CTAHR have requested fencing to prevent unauthorized entry into actively used pasture or agricultural areas."

The first "have" in the sentence should be removed.

23. Section 3.3, Page 3-17, 1st Paragraph: "All of the alternatives discussed in this Alternatives Analysis chapter were considered, but the preferred alternative, for a multi-use path following Waikōloa Stream, is clearly superior and is the County of Hawai'i's preferred option."

The phrase "is clearly superior" is an opinion statement, not based on fact, and should be removed from the sentence so it reads, "All of the alternatives discussed in this Alternatives Analysis chapter were considered, but the preferred alternative, for a multi-use path following Waikōloa Stream, is the County of Hawai'i's preferred option."

24. Section 3.3, Page 3-17, 2nd Paragraph: "One of the primary criteria for evaluating alternatives is to what extent they meet the project's purpose and need. There are several stated purpose and need objectives, including: 1) providing alternative non-vehicular transportation options; 2) improving safety for pedestrians, bicyclists and non-motorized transport; 3) providing connectivity between major destination points; 4) enhancing access to and enjoyment of natural

and scenic areas; and 5) increasing recreation and fitness opportunities. Only the proposed *Ke Ala Kahawai o Waimea* meets every one of these objectives."

The information in the first two sentences is either obvious or repeated from previous sections, and the last sentence is an opinion statement not based on fact and is false; other alternatives also meet every one of the objectives. This entire paragraph should be removed because it is redundant and/or not true.

25. Section 3.3, Page 3-17, 3rd Paragraph: "The preferred alternative also offers the greatest feasibility and buildability."

In whose mind does the preferred alternative offer the greatest feasibility and buildability? What facts is this statement based upon? This is an opinion statement not based on fact and should be removed, or the person(s) believing this statement and the facts it is based upon should be identified. What is the "feasibility and buildability" of the alternative presented in Section 3.2.2 compare with that of the preferred alternative?

26. Section 3.3, Page 3-17, 3rd Paragraph: "The alternative to construct bike lanes would also require land condemnation to sufficiently widen major roadways."

What is the basis for this statement? This is an opinion statement not based on fact and should be removed, or the person(s) believing this statement and the facts it is based on should be presented. Also, see South Kohala Community Development Plan, Section 4.3.4, and Item 15 above.

27. Section 3.3, Page 3-17, last Paragraph: "Other alternatives, such as constructing bike lanes on Kawaihae Road and Mamalahoa Highway would require road widening and land acquisition. This would be extremely costly, and likely have adverse impacts on landowners, commercial areas and disrupt traffic during construction."

The statements in these two sentences are opinion statements not based on fact, and in some instances are wrong. They should be removed or rewritten containing only facts, as follows, "Other alternatives, such as constructing bike lanes on Kawaihae Road and Mamalahoa Highway would require road widening. This may have adverse impacts on landowners, commercial areas and disrupt traffic during construction." See South Kohala Community Development plan, Section 4.3.4, and Items 15 & 26 above.

28. Section 3.3, Page 3-18, last Paragraph: "However, as required by the National Environmental Policy Act (NEPA), the environmental analysis in Chapter 4 includes a short discussion of the impact of the (now dismissed) alternatives."

This is not done in Chapter 4. The "short discussion of the impact of the (now dismissed) alternatives" typically only includes discussion of the Mauka Alternative; there is no discussion of the "Bike Lanes Along Kawaihai Road and Mamalahoa Highway" alternative (Section 3.2.2.) All sections of Chapter 4 should be rewritten to include a discussion of this alternative.

29. Section 3.3, Page 3-19, 1st complete Paragraph: "The preferred Waikōloa Stream trail has widespread support, developed over years of community planning and discussion. Dozens of community volunteers have spent hours clearing portions of the trail, and there is a high level of enthusiasm and community pride for this project. *Ke Ala Kahawai o Waimea* has the support of many community organizations, including the Waimea Trails and Greenways, People's Advocacy for Trails Hawai'i (PATH), and the Waimea Outdoor Circle.

What is the basis for these statements? What studies, proof, facts, or documents show there is "widespread support," that "there is a high level of enthusiasm and community pride for this project," that the Project "has the support of many community organizations, including the Waimea Outdoor Circle?" These are all opinion statements not based on fact and should be removed, or the sentences rewritten as follows, "The preferred Waikōloa Stream trail has developed over years of community planning and discussion. Dozens of community volunteers have spent hours clearing portions of the trail. *Ke Ala Kahawai o Waimea* has the support of the Waimea Trails and Greenways and People's Advocacy for Trails Hawai'i (PATH)."

30. Section 3.2, Page 3-19, 2nd complete Paragraph: "*Ke Ala Kahawai o Waimea*, the stream trail of Waimea, is by far the superior alternative of any discussed in this Alternatives Analysis, and enjoys widespread public support. *Ke Ala Kahawai o Waimea* is the preferred alternative, and will be the subject of this Environmental Assessment."

Regarding the first sentence of this Paragraph: Who believes this and what is the factual basis for this sentence? This sentence is an opinion statement not based on fact and should be removed (unless the person/organization who believes it and the facts it is based on are identified.) The term "by far" is unnecessary and only shows the bias of the writer and reduces credibility of the Draft EA. Regarding the second sentence of this Paragraph: Who is making the decision on what is the preferred alternative (Kimura, WTG, DPR)? Who ever made the choice should be identified and their reasoning explained using facts not unsupported opinion.

31. Section 4.2.1, Page 4-10, Caption to lower Photograph: "A small wooden bridge at Opelo Road on the Lālāmilo Research Station property. In this area, the path would be located on the north side of the stream, behind the Kanu o ka 'Āina PCS (shown in background).

The word "behind" is confusing and the location is not clear. The second sentence should be changed, using the words "north of" or "south of" instead of "behind."

32. Section 4.2.1, Page 4-12, 1st Paragraph: "The section of the trail between Opelo Road and Kahawai Street has recently been cleared by volunteers and is being enjoyed by local residents. Additional community work days are planned to continue improving this segment."

The first sentence is not true. The section of the trail between Opelo Road and Kahawai Street has been partially cleared but there is no path completed between these streets. Since the EA is concerned with the installation of a 10-foot wide concrete roadway, how is the second sentence related to the purpose of the EA? Since the first sentence is not true and the second sentence has no relevance to the EA, the paragraph should be removed.

33. Section 4.2.1, Page 4-12, last Caption on Page: "Improvements are recommended in the future to keep foot and bicycle traffic off private property."

What is meant by this caption? Is this a private or County road? What "improvements" are necessary? Who will make the "improvements? Are you suggesting the private owner should make these "improvements?" Is there a public easement adjacent to the private road? More factual explaination of the situation along this road should be included in the EA.

34. Section 4.2.1, Page 4-15, 1st complete Paragraph: "The dry conditions have been exacerbated by the ongoing drought. This area offers sweeping views of the Kohala Mountains in the distance."

These sentences add no information relevant to the purpose of the EA and should be removed.

35. Section 4.2.1, Page 4-18, 5th Paragraph: "The completed path will be a benefit to the public housing residents."

What facts is this sentence based on and who is presenting this opinion? Have the public housing residents been asked their opinion? Where are the results of such a survey and where can they be reviewed? This sentence is an opinion statement not based on fact and should be removed. If it to remains it must read, "According to Mr. X and/or based on Information Y, the completed path will be a benefit to the public housing residents," with "Mr. X" and "Information Y" supplied in the sentence.

36. Section 4.2.1, Page 4-18, last Paragraph: "The County has already secured an easement from Parker Ranch for trail access through a portion of this same parcel, and the easement would just need to be modified to include Kahawai Street."

The word "just" should be removed; it only shows the bias of the writer, causes a loss of credibility and impartiality, and adds no meaning. The sentence should be written, "The County has already secured an easement from Parker Ranch for trail access through a portion of this same parcel, but the easement would need to be modified to include Kahawai Street."

37. Section 4.2.1, Page 4-19, 2nd Paragraph: "However, the presence of the path will not adversely affect these residents, as the stream will provide a natural physical and noise buffer."

What information, studies, etc. is this statement based upon and whose opinion is it? Have the affected residents been asked their opinion? This is an opinion statement not based on fact and should be removed. Or it must be corrected to include whose opinion is represented and what factual information it is based upon (see Item 35 above).

38. Section 4.2.1, Page 4-19, 4th Paragraph: "The stream should provide a natural buffer between the path and the residential area. DHHL will need to provide access to the trail from their development through bridges, culverts or ford crossings. These access points will most likely be used exclusively by DHHL lessees, and therefore can be sited, designed and constructed to address the department's needs and concerns."

What is meant by "should provide a natural buffer?" Whose opinion is presented in the first sentence and what is the factual basis upon which it is based? If there is no factual basis for the sentence, it should be deleted. The first part of the third sentence is also an opinion statement and wrong; how can DHHL exclude others from using the crossing they need to access the Project? The second sentence should read, "DHHL will need to provide access to the trail from their development through bridges, culverts or ford crossings; these can be sited, designed and constructed to address the department's needs and concerns."

39. Section 4.2.2, Page 4-20, 2nd complete Paragraph: "Site work required for construction of the trail will entail clearing and grubbing vegetation, grading the trail, stockpiling excavated material, and hauling debris to approved disposal sites."

Why no mention of tree removal? Since Old Growth Heritage Trees must be removed to build the Project, and this is a concern to many citizens, this sentence should refer to the necessity of such tree removal, and therefore should read as follows, "Site work required for construction of the trail will entail removal of Old Growth Heritage Trees, clearing and grubbing vegetation, grading the trail, stockpiling excavated material, and hauling debris to approved disposal sites."

40. Section 4.2.3, Page 4-22, 1st complete Paragraph: "The construction of the trail will require vegetation removal, excavation and site work, stirring up dust and increasing the potential for localized erosion."

See Item 39 above. The sentence should read as follows, "The construction of the trail will require removal of Old Growth Heritage Trees, vegetation removal, excavation and site work, stirring up dust and increasing the potential for localized erosion."

41. Section 4.2.3, Page 4-22, 2nd complete Paragraph: "Cleared areas will be revegetated as quickly as possible."

What is meant by "revegetated?" This sentence is vague and should be more specific. What will be used to "revegetate" the cleared areas (grass, plants, trees and what types)? What is meant by "as quickly as possible" (how may days, weeks, months, or if/when money is available)? Are the costs for such work included in the estimates of Section 1.2?

42. Section 4.2.3, Page 4-22, 4th complete Paragraph: "Under a No Action alternative, there would be no impacts to soils or agriculture operations. The mauka alternatives located north of Kawaihae Road would not impact ongoing agricultural operations, although limited sections pass through areas actively used as pasture land."

As stated as a general omission in Item 28 above, there is no mention of the effect (or lack there of) on soil or agriculture operations of the option presented in Section 3.2.2. This should be included here, as it should in all sections entitled "Impacts of Other Alternatives."

43. Section 4.2.4, Page 4-30, 4th Paragraph: "Site work during construction of the multi-use path will entail clearing and grubbing vegetation, grading the trail to rough elevation, stockpiling excavated material, and hauling debris to approved disposal sites."

See Items 39 & 40 above.

44. Section 4.2.5, Page 4-35, 3rd Paragraph: "All project alternatives except No Action, involve some path areas within Zone AE, and as such, have impacts and mitigation similar to the proposed alternative."

This statement is not true. The alternative presented in Section 3.2.2, which has (again) been neglected in this "Impact of Other Alternatives" would not involve path areas within Zone AE. The sentence must read, "The project alternatives except No Action and Bike Lanes Along Kawaihae Road and Mamalahoa Highway, involve some path areas within Zone AE, and as such, have impacts and mitigation similar to the proposed alternative."

45. Section 4.2.6, Page 4-36, 1st complete Paragraph: "The proposed stream trail will be a living laboratory, providing a venue where local school children can learn how to monitor water quality, stream erosion, etc."

How is a concrete roadway a "living Laboratory? This statement is false because the Project can not be a living laboratory, it can only give access. This sentence should be rewritten to read, "The proposed stream trail will give access to a living laboratory, providing a venue where local school children can learn how to monitor water quality, stream erosion, etc."

46. Section 4.2.6, Page 4-38, 1st Paragraph: "The creation of a streamside trail and greenway will have an overall positive impact on the Wai'ula'ula watershed area, and is compatible with ongoing efforts for watershed management. Trails and greenways can provide more than a recreation amenity, and are widely used for both floodplain management and watershed protection. This is especially important along riparian areas, lands that in contact with rivers and streams. The project can be an important component of a riparian zone improvement and preservation effort. Although some non-native vegetation will be removed to construct the trail, there is the opportunity to replace it with native or more appropriate vegetation, enhancing the riparian zone."

What facts, documentation or studies support the statements in this paragraph? This paragraph is all opinion statements. Who is making these statements, what are there qualifications to make them, and what facts are they based upon? If the information solicited in this question is not included, then the paragraph should be deleted. Furthermore, much of this paragraph is irrelevant to "Project Impacts and Mitigation." Lastly the 3rd sentence is not grammatically correct.

47. Section 4.2.6, Page 4-38, 5th Paragraph: "The mauka alternatives would have impacts similar to the proposed action, but to varying degrees, and construction impacts can be mitigated through best management practices."

Again, there is no discussion of the alternative of Section 3.2.2 in this "Impacts of Other Alternatives." It should be included. See Item 28 above.

48. Section 4.2.7, Page 4-39, last Paragraph: "Noise-sensitive areas along the route include residential areas such as the Sandalwood subdivision and the future DHHL Lālāmilo subdivision."

How can the Draft EA neglect all the homes and apartments between the Waimea Nature Park and Kahawai Street, which is the area most likely to be affected by Project noise since the Project is on the north side of the stream in this region, and includes many long time residents living in cowboy ranch houses that were moved to their current site, and where their families have lived for generations? If you are going to show concern for the DHHL Lālāmilo subdivision that doesn't even exist yet, the sentence should include the homes in the area described, which are the ones most vulnerable to noise from the Project. The sentence should read, "Noise-sensitive areas along the route include residential areas such as the region between Waimea Nature Park and Kahawai Street, the Sandalwood subdivision and the future DHHL Lālāmilo subdivision."

49. Section 4.2.7, Page 4-40, 1st Paragraph: "Many of the noise and loitering concerns expressed by residents can also be mitigated through selection of the alignment within the negotiated easement and landscaping. … The stream and terrain will provide a natural noise buffer, and the physical separation will alleviate security concerns. Rest areas will be sited away from residential areas. Designing the path with high visibility, combined with the presence of other path users will provide "eyes on the trail," discouraging loitering, vandalism, and other undesirable activity."

These statements are almost all opinion statements with no basis in fact. How can the "terrain" provide "a noise buffer" (trees and shrubs present) if the path is also designed with "high visibility" (trees and shrubs not present)? What is meant by "path users will provide eyes on the trail?" Are they expected to put themselves at risk when "undesirable activity" takes place, and act as police? What if there are no other path users present when "undesirable activity" takes place? Who is expressing these opinions, what are their qualifications to express them, and what documented information are they based upon. If this information cannot be included, the paragraph should be removed.

50. Section 4.2.7, Page 4-40, last Paragraph: "Impact of Other Alternatives"

There is no discussion of the alternative presented in Section 3.2.2. See Item 28 above.

51. Section 4.2.8, Page 4-42, 2nd Paragraph: "Impact of Other Alternatives"

There is no discussion of the alternative presented in Section 3.2.2. See Item 28 above.

52. Section 4.3.1, Page 4-47, 1st complete Paragraph: "Impact of Other Alternatives"

There is no discussion of the alternative presented in Section 3.2.2. See Item 28 above.

53. Section 4.3.2, Page 4-50, 1st Paragraph: "Overall, the Natural Resources Assessment (AECOS, Inc. 2010) concluded that the vegetation within the project corridor is neither pristine nor unique and is not considered worthy of preservation. The large eucalyptus and black wattle trees in Increment 1 have no particular botanical value, nor do they enjoy statutory protection. The construction of the path will not have an adverse impact on botanical resources, and will not impact any threatened or endangered species or their habitat. The proposed path will not impact the native trees and shrubs that have been planted within the Waimea Nature Park"

How can cutting down trees, clearing and grubbing vegetation, and grading the trail "not have an adverse impact on botanical resources" and/or "not impact the native trees and shrubs?" Instead of paraphrasing what is stated in the AECOS Report, you should quote and reference where it states: 1) is neither pristine or unique and is not considered worthy of preservation, 2) have no particular botanical value, 3) will not have an adverse impact on botanical resources. Statements such as these reduce the credibility of the EA unless they are presented in context and supported by facts and documentation presented by qualified people.

54. Section 4.3.2, Page 4-50, 3rd Paragraph: "It is recommended that the County and the WTG Committee follow the study's recommendation to remove trees determined be unstable, unhealthy, or which pose a potential danger to trail users."

The word "to" should be inserted between "determined" and "be." Who is making this recommendation, what are their qualifications, what is its basis, and to which study does it refer? This information should be included in this paragraph.

55. Section 4.3.2, Page 4-50, 5th Paragraph: "Impacts of Other Alternatives"

There is no discussion of the alternative presented in Section 3.2.2. See Item 28 above.

56 Section 4.4.2, Page 4-56, 4th Paragraph: "The creation of *Ke Ala Kahawai o Waimea* will provide a safe and viable alternative to driving for students attending Waimea Elementary and Middle Schools, Parker School, and Kanu o ka ʻĀina PCS, all of which are easily accessible from the path."

How many access points to the Project are there? What is the distance between these access points? How will students get to the access points? Since there are four access points to the Project, most students will need to travel across and/or along residential streets within the subdivision they live and Kawaihae Road to gain access to the Project. In many cases they will need to cross Lindsay Road or Mamalahoa Highway to reach their campus. In addition, they will be riding uphill into the prevailing trade winds. Therefore, the words "safe" and "easily" are a matter of opinion and should be removed from the sentence.

57. Section 4.4.2, Page 4-57, 2nd Paragraph: "The construction of the multi-use path will involve the expenditure of public funds by the County and possibly various federal agencies. It is estimated that Increment 1 of the trail, the segment between Lindsey Road and Kahawai Street, would cost approximately $5.8 million to design and construct. The segment between Church

Row and Lindsey Road was estimated at about $3 million, and the area from Kahawai Road to the western end could be just over $10 million. In total, the cost of design and construction would likely exceed $18 million."

What is included in these estimates? What facilities, improvements, or other expenses are not included in the estimates, but discussed in this Draft EA? See Item 3 above. And the language "upward of" (Item 3) and "exceed" in this paragraph should be reconciled.

58. Section 4.4.2, Page 4-58, 2nd Paragraph: "However, because much of the project funds are likely to come from federal sources outside the region, the wages paid to workers, payments to suppliers, and the subsequent expenditures could have a large cumulative effect on the local economy."

What makes it likely that much of the project funds will come from federal sources? What is the basis for this statement? What federal representatives have indicated that much of the project funds are likely to come from federal sources? This sentence is speculation as it assumes federal funding sources, and involves economic analysis beyond the scope of the EA. Therefore, it should be removed from the paragraph.

59. Section 4.4.2, Page 4-58, 3rd Paragraph: "On the other hand, other jurisdictions, such as the County of Kaua'i, has imposed restrictions on commercial activities on or near their bike and pedestrian paths."

What relevance does this have to the current Project? What similarities and differences are there between the Kaua'i situation and the Project? This sentence has no relevance to the Project and should be removed.

60. Section 4.4.2, Page 4-58, 4th Paragraph: "It is also recommended that the Waimea Trails and Greenways Committee"

This is not a complete sentence.

61. Section 4.4.2, Page 4-59, 2nd complete Paragraph: "Based on similar trails elsewhere, it is unlikely that the proposed *Ke Ala Kahawai O Waimea* will have a negative impact on property values of adjacent homes. The presence of the trail may even have a positive effect on values in the surrounding community."

Whose opinions are these and what are their qualifications? What similar trails and how similar are they? What makes it unlikely it will have a negative impact? What factual basis is there for these statements? Has an analysis by local realtors been done to support the contentions in these sentences? This is an opinion paragraph, unsupported by fact, or based on facts not relevant to the Project situation. Therefore the paragraph should be removed.

62. Section 4.4.2, Page 4-59, last Paragraph: "For example, visibility of the trail from surrounding businesses and homes coupled with high use of the trail by law abiding citizens provides natural surveillance, discouraging undesirable behavior. Although sometimes neighbors

will suggest that a greenway path be hidden from view, this is counterproductive from a safety perspective. Likewise, thick brush or solid fencing can restrict natural surveillance while providing places for law breakers to hide. Evidence from other trail projects show that maintaining a clear zone of at least ten feet on either side of the path is a good safety measure, as is trimming surrounding vegetation to improve public visibility of the trail. Regular maintenance of the path by the Department of Parks and Recreation will reinforce that the path is actively monitored."

What is meant by "high use" and "natural surveillance?" What if there is not high use or natural surveillance—what happens then? What if there is high use by non-law-abiding citizens? Will the Project be designed with "a clear zone of at least ten feet on either side" of the 10-foot wide concrete roadway? How is such a Project a "green corridor" or a place for "people to connect with their natural surroundings?" What is meant by "regular maintenance" and how does this lead to the thought that the Project is "actively monitored?" How much is this "regular maintenance" expected to cost, whom will pay for it, and is the cost included in the estimates of Section 1.2?

63. Section 4.4.2, Page 4-60, 1st complete Paragraph: "Various means of access control ways to define territory can be used to distinguish public and private spaces. For example, along the access roads, signage will be included to direct trail users to the path. Vegetation, landscaping, sidewalks, or low-scale wooden fencing might be considered on these roads to keep trail users off private property. In some segments of the path where easements have already been granted, landowners have requested that fencing be installed to keep trail users out of pasture or cultivated areas. In other areas, such as along the Sandalwood subdivision, the stream itself provides a natural buffer, defining the location of public and private lands. Bollards placed in the path near the signed shared access roads are an option to keep unauthorized vehicles off the path without fencing."

Are the "various means of access control ways to define territory" budgeted in the Project? Are the "vegetation, landscaping, sidewalks, or low-scale wooden fencing" budgeted in the Project, or is it expected that property owners or their tenants will fund these items? What is a "natural buffer" and how does it "define public and private lands?" What is the basis for stating the "stream itself provides a natural buffer, defining the location of public and private lands," when, already "landowners have requested that fencing be installed to keep trail users out of their land?" Do they see something that the Project promoters refuse to acknowledge? What is there to keep the curious from crossing the streambed? Does the private property owners land include the streambed? Who will pay for the "bollards?"

64. Section 4.4.2, Page 4-60, 2nd complete Paragraph: "Waimea residents have cited anecdotally one incident involving a property crime where the perpetrator escaped on foot via the existing trail, before jumping into a getaway car. The use of public access ways during commitment of a crime is always a possibility. However, there is little evidence that the improvement of the trail increases the likelihood of crime. As an example, the County of Kaua'i has not had any reported criminal activity directly related to its newly completed multi-use path since the first section of the trail opened in 2007. That trail has received rave reviews from both

residents and visitors, and enjoys high levels of use year round. Future increments are currently being planned.

What does "anecdotally" mean in the first sentence? What is the basis for stating, "there is little evidence that the improvement of the trail increases the likelihood of crime?" This is an opinion statement and should be deleted, or supporting evidence provided. How and why is the "example" of Kaua'i similar to or different from the situation of the Project? What relevance do the "reviews" that the Kaua'i path has received, or whether "future increments may be planned" there, have to the Project? The last three sentences of this paragraph should be removed, unless the relevance to the Project are given with facts and documentation.

65. Section 4.4.2, Page 4-60, last Paragraph: "Hawai'i's Recreational Use Statute, Chapter 520, Hawai'i Revised Statutes (HRS), substantially limits public and private landowner liability. The intent of this law is to protect landowners who open their land to the public for recreation free of charge. Private landowners who have land adjacent to paths are also protected by trespassing laws. Adjacent landowners generally are not at risk as long as they do not engage in "willful and wanton misconduct" against trespassers, such as recklessly or intentionally creating a hazard."

Have the statements in this paragraph been reviewed and approved by a lawyer? What does "substantially" mean in the first sentence? What does "intent" mean in the second sentence? What is there to stop frivolous lawsuits related to Project use, which the public must then pay to defend—either as individual property owners or tax payers? Thus, landowners and County residents will be likely exposed to liability issues, will they not? The paragraph "explains away" a serious problem with generalities not based on fact or supported by the real-world situation. Landowners will be exposed to liability issues, so why belittle the fact? This is another example of the bias shown throughout the Draft EA that lessens the credibility of the document.

66. Section 4.4.2, Page 4-61, 1st Paragraph: "In general, the State and Counties "selfinsure" against tort claims arising from bicycle or other accidents.

Who pays for the State and Counties to "selfinsure?" This paragraph must include a statement indicating how the State and County self-insurance is funded.

67. Section 4.4.2, Page 4-61, 2nd Paragraph: "While concerns about liability are understandable, real world experience with thousands of miles of paths and trails nationwide have shown that liability exposure can be minimized through appropriate legal protection and proper trail design, maintenance and management."

What "real world experience" can be referenced that supports the claims of this sentence? If none is available that relates to situations which may arise with the Project, this sentence is an opinion statement with no basis in fact, and should be removed.

68. Section 4.4.2, Page 4-61, Paragraphs entitled "Recommended Risk Management Strategies"

What do these generalities do to ensure risk is managed? What specific actions, related to the Project can be taken, who will perform them, and how they will be funded? Further, the "strategies" presented come second hand, from Bike Plan Hawai'i/Rails-to-Trails Conservancy, and are based on Rail-Trails. How does this relate to, or give guidance for, the current Project, which is not using old rail right-of-way easements but is following a stream bed?

69. Section 4.4.3, Page 4-62, 4th Paragraph: "The interpretive plan will be completed prior to construction of Increment 1."

What is the basis for this statement? Who will complete the interpretive plan? Who will pay for it? Is the cost part of the $5.8 million estimate of Section 1.2? What steps will be taken to ensure it is completed?

70. Section 4.4.3, Page 4-68, 5th Paragraph: "Community members consulted expressed some concerns regarding the project corridor. Respondents commented that the stream should be kept clear of any brush to reduce overflow during a high volume period. Second, the safety and security of residents living along the trail was also a concern. However, all interviewees expressed the opinion that the trail was a good community-based project."

Who are the community members consulted? What will be done to address their concerns? How will brush removal be enforced? What will be done to address their concerns about safety and security? What do they mean by "a good community-based project?" This statement is unclear, is an opinion statement not based on fact, and has no basis for being included in the EA unless details about what is meant by "a good community-based project" are included. Who were the interviewees? Where are their opinions documented and where can this documentation be reviewed by the public?

71. Section 4.4.3, Page 4-69, Section entitled "Impacts of Other Alternatives"

What are the archaeological, historic and/or cultural impacts of the alternative presented in Section 3.2.2? As stated in footnote 4 on page 4-66, <u>all</u> alternatives have to be considered, and there is no discussion of the alternative of Section 3.2.2. Also see Item 28.

72. Section 4.4.4, Page 4-70, 4th Paragraph: "The views on the mauka side, across the stream are of the spacious one and two-story homes on large residential lots which border the stream, with the rising Kohala mountains in the backdrop."

What does "spacious" mean in this sentence? This word is an opinion statement, not based on fact, and "spacious" should be removed from the sentence.

73. Section 4.4.4, Page 4-71, 1st Paragraph: "Despite the varying physical landscape and visual environment throughout the path corridor, the improvements will not have an adverse visual impact anywhere along the route. The path will modify the visual environment by providing a man-made, improved trail that will be used by walkers, joggers, and bicyclists, and possibly equestrians in the areas west of the refuse transfer station. The path will be flat and follow the natural topography, and will not have significant impacts on view planes or public

views. The intent of the project is to create a safe and convenient way for the public to enjoy the natural environment, and every effort will be made to blend it into the natural landscape."

What is the factual basis for the statement in the first sentence above, where it reads, "the improvements will not have an adverse visual impact anywhere along the route?" Removing trees does not have an adverse visual impact? A 10-foot wide concrete road, with 10-foot wide "clear areas" on each side do not have an adverse visual impact? If not explain why. How is this statement consistent with the second sentence above, where it reads, "The path will modify the visual environment?" How can a road with a change in elevation of over 600 feet be "flat?" How can a 10-foot wide concrete roadway, with 10-foot wide "clear areas" on each side, not "have significant impacts on view planes or public views?" How is removing trees and foliage and building a 10-foot wide concrete roadway, with 10-foot wide "clear areas" on each side, consistent with the statement that, "every effort will be made to blend it into the natural landscape?" Also in the last sentence, "the intent is to create a safe and convenient way for the public to enjoy the natural environment:" "Intent" is one thing and actual outcome another, but how can a 10-foot concrete roadway possibly be called "natural?" All these sentences are opinion statements, not based on fact, show the bias of the author and reduce credibility of the entire document, and must be removed.

74. Section 4.4.4, Page 4-71, 2nd Paragraph: "The presence of more people and non-motorized vehicles will modify the visual environment. However, the number of trail users will be distributed along the route, so that the visual impact of people and activity in any one area will be minimal."

How many people will use the trail and what is the basis for the estimate? How will users be distributed along the route? What studies have been done to answer these questions? If no studies have been performed, these are opinion statements with no factual basis and should be deleted.

75. Section 4.4.4, Pages 4-72 & 4-73: "Visual Simulations of *Ke Ala Kahawai o Waimea*"

What is meant by "Visual Simulations?" In my mind, a "visual simulation" would show digital images (photos) of sections of the WTG Project easement with a 10-foot wide concrete roadway digitally "installed" in its proper location and the trees and foliage "removed." The photos appear to be of other paths, not "simulations" of the WTG Project, and they should be identified as such. Where are the paths located that are shown in the photos? What path(s) do they show? What are the demographics of the states, communities, towns and/or people where the path(s) are located? What are the materials of construction of the paths shown? What was the cost of construction per mile for these paths? How, and by how many, are these path(s) used? What is the total length of the path(s) shown and how do they relate to the 4.8-mile WTG Project? How do people get to the path(s), how many access points are there, and where do they park? Are these users commuting to work, school or a business, or are they "enjoying the natural environment?" Are there residential areas along the path(s)? Are the path(s) patrolled by security personnel? How and by whom are the path(s) maintained, and who pays for the maintenance/repair? How is the construction and utility of these path(s) similar to, or different from, the WTG Project?

76. Section 4.4.4, Page 4-74: "Impacts of Other Alternatives"

What will be the visual and aesthetic impacts of the alternative presented in Section 3.2.2? See Item 28.

77. Section 4.5, Page 4-75, 2nd Paragraph: "Shallow drywells and interconnected inlets will be placed along the path to collect the runoff due to the increased impervious area."

Have the costs associated with the required "drywells and interconnected inlets" been included in the cost estimate of Section 1.2? If not, what will be the additional cost of supplying these "drywells and interconnected inlets?"

78. Section 4.5, Page 4-75, last Paragraph: "For Increment 1, water fountains will be provided at rest areas where water lines are in close proximity."

Have the costs associated with the "water fountains" been included in the cost estimate of Section 1.2? If not, what will be the additional cost of supplying these "water fountains?"

79. Section 4.5, Page 4-76, 1st Paragraph: "In Increment 1, there is the possibility that an existing leach field next to the Kanu o ka 'Āina PCS will need to be relocated. Any existing utilities that are impacted during construction of the path or its associated facilities will be replaced."

Have the costs associated with the relocation of the "leach field" and replacement of "impacted utilities" been included in the cost estimate of Section 1.2? If not, what will be the additional cost of the required relocation and/or replacements?

80. Section 4.5, Page 4-76, 2nd Paragraph: "There will be no impact on the existing refuse transfer station, or State or HELCO baseyards which are near the path alignment. The use of South Kohala Distribution Road for public trail access will not disrupt or affect these uses."

Will there not be additional traffic, both pedestrian and vehicular, and parked vehicles along South Kohala Distribution Road if the road is used for public access? The answer must be yes, assuming the Project will be used. Thus, "no impact" in the first sentence and "not disrupt or affect" in the second are opinion statements not based on fact. What studies or other documentation support the opinions stated in this paragraph? Whose opinion is expressed in this paragraph, and what facts is it based upon? These sentences are opinion statements, with no factual support presented, and should be removed.

81. Section 4.5, Page 4-76, 4th Paragraph: "Like the preferred alternative, the mauka alternatives that have been dismissed would not have included include lighting or other utility improvements."

Either "have included" or "include" should be removed from the sentence. And again, there is no mention of the affect of the alternative presented in Section 3.2.2; this must be included in this section of the EA. See Item 28 above.

82. Section 4.6.2, Page 4-77, 4th Paragraph: "In addition to implementing the Bike Plan Hawai'i recommendation for shared bike routes on Kawaihae Road and Mamalahoa Highway, the study recommends implementation of the Waimea Trails and Greenways project."

Why is there no reference in this sentence to Section 3.2.2? After "Highway" and before the comma should be added, "(see Section 3.2.2)"

83. Section 4.6.2, Page 4-78, 2nd Paragraph: "There will be signage indicating their role as access routes, and on the smaller residential roads, there may be some minor roadway or sidewalk type improvements."

What "signage" and "minor roadway or sidewalk type improvements" are under consideration, are they necessary, and are their costs included in the cost estimate of Section 1.2? And the sentence would sound more professional if the word "type" was removed.

84. Section 4.6.2, Page 4-78, 3rd Paragraph: "Once the trail is built, parking on these local roads by trail users will not be allowed. Posted signs will reinforce this message."

Who will enforce the "no parking" for trail users rule (law?) and how will the enforcement agency be able to tell whether a vehicle belongs to a trail user, a local resident, or the friend of a local resident? If they don't park on these "local roads" where will they park? How will that effect the parking/traffic situation on roads where they must park?

85. Section 4.6.2, Page 4-78, 4th Paragraph: "There will be no negative, long-term impacts to area roads, and the project is compatible with other traffic reduction strategies for Waimea, both short and long-term. The project has the support of County and State highway officials. In a June 2, 2010 EA early consultation letter, the Hawai'i Department of Transportation indicated that given the location of the preferred alternative, it did not anticipate any significant, adverse impacts to its transportation facilities."

What is the factual basis for the first sentence? Where will trail users park and how will that impact area roads, pedestrian and vehicular traffic along those roads, and local residences along those roads? The rest of the paragraph is not true and misstates the HDOT letter, which speaks for itself (Appendix G, page 173 using Adobe 9). It is also inconsistent with the first paragraph of Section 4.6.3. Where in the 2 June 2010 HDOT letter does it state the HDOT "supports" the Project? See Item 17 above, and in particular the last sentence quoted from the 2 June 2010 letter. What has been done, what facts support what has been done, and where in the Draft EA does it "access the impact to state highway facilities?" Will not parking, and increased traffic resulting from trail users traveling to reach access points, impact Kawaihae Road? This must be addressed in the EA.

86. Section 4.6.3, Page 4-78: "Impact of Other Alternatives"

What is the impact of the alternative presented in Section 3.2.2 on traffic and transportation? This must be included in this section. See Item 28 above.

87. Section 4.6.3, Page 4-78, last Paragraph: "The mauka alternatives would intersect with Kawaihae Road at several points, and run parallel to Kawaihae Road in the vicinity of the Kamuela View Estates."

How many intersections are "several?" According to Section 3.2.3, it's two (Kahawai Street and at Kamuela View Estates). Substitute "two" and remove the word "several," or explain what "several" means and change Section 3.2.3.

88. Section 4.7.1, Page 4-79, 1st Paragraph: "Waimea is served by the Hawai'i County Police Department which has a station in the Waimea Civic Center, located on Kamamalu Street to the south of Church Row. Seventeen police officers are assigned to the station."

What area is the Waimea Civic Center Police Department responsible for policing? How many citizens live within the area served by the Waimea Civic Center Police Department facility, and over how many square miles? How many officers are available on any given shift, and how many are assigned to the Waimea Town area on any given shift? How frequently and/or how much time will the police have to patrol the Project?

89. Section 4.7.1, Page 4-79, 2nd Paragraph: "The project will not have a significant impact on the need for police facilities or services. As more people use the path, there will likely be occasional calls to police for surveillance, enforcement and possible intervention, as is the case for any public area. Despite the concerns of some homeowners along the path route, there is considerable evidence that such paths do not attract or increase crime. A comprehensive study was conducted by the Rails-to-Trails Conservancy in cooperation with the National Park Service (1998)."

What is the basis in fact for the first sentence? Is this the Police Department's position, and, if so, where is it published or expressed that is available to the public? The first sentence is an opinion; whose opinion is it, what is it based on, and where is the documentation that supports this statement? What is the factual basis for the second sentence? Does this sentence state the Police Department's position? The second sentence is an opinion statement; whose opinion is it, what is it based upon, and where is the documentation that supports this statement? Third sentence: are you dismissing the concerns of "some" homeowners as unfounded? How many is "some?" Has a study been conducted that show this to be fact? What facts allow dismissal of the concerns of "some" homeowners; where can they be found? Is the sole basis for this the information in a Rails-to Trails Conservancy report? How does a Rails-to-Trails report compare or relate to a path placed along a virgin streambed, and not a railroad right-of-way? What documentation is available that supports the opinion that the situation(s) discussed in the Rails-to-Trails report are relevant to the conditions/situation for the WTG Project? These sentences are opinion statements, not based on fact, and should be removed, or supporting evidence referenced.

90. Section 4.7.1, Page 4-79, 4th Paragraph: "Local police will have the primary responsibility for public safety on the path. Several years ago, the Waimea Community Association purchased bicycles for the Police Department to establish police bike patrols to monitor the trail. An active and involved community will also contribute to public safety, reducing the need for police services. As noted previously, a trail that is designed to be highly visible, combined with the consistent presence of legitimate users will deter unwanted or illegal activity. Keeping paths clean and well maintained will increase a sense of community ownership and reduce incidents of litter, graffiti and vandalism. Public information and education, voluntary patrols, and alert neighbors who report suspicious activity will all contribute to the safety and success of the path."

What is the condition of the bicycles that were given to the Police Department by the Waimea Community Association—are they servicable? Does the Police Department have the trained personnel to man the bikes, and will it affect other Police obligations if they are assigned to the Project? Has the Police Department indicated when, and how often, they would have Officers available to patrol the Project? Third sentence in paragraph: What are the expectations when the author states, "active and involved community?" What is the basis for stating that our community will be "active and involved" in policing the path? How will an "active and involved" community reduce the need for police services—what is the factual basis for this statement, and does the Police Department believe it reduces their obligations? What facts and/or documentation support the opinion statements of this sentence? Fourth sentence: How does the path become highly visible—what makes it so? How visible is "highly visible?" What does, "consistent presence of legitimate users" mean? How many? What time of day? What is a "legitimate user," and how does that differ from an "illegitimate user?" What if only "illegitimate users" use the trail? What is the basis in fact for the statements in sentence four? Sentence Five: Who is going to keep the path clean and well maintained, and who will pay them to do it? Is the cost of maintaining the Project in the cost estimate of Section 1.2? If not, how much is this effort going to cost, and who will pay for it? Last sentence: Who will, and how will they, inform and educate the public? Who will pay for this public information and education? Who has volunteered for "patrols?" What is the basis for believing there will be "voluntary patrols?" How often will the "voluntary patrols" be working the trail? What is the factual basis for expecting "alert neighbors" to "reporting suspicious activity?" How quickly will the Police Department respond if such "alert neighbors" do "report suspicious activity?" Other than the first sentence, this paragraph is entirely opinion statements, not based on fact or supportable by documentation, is totally self-serving to the Project supporters, and has no credibility what so ever. Therefore, it should be removed—except for the first sentence.

91. Section 4.7.2, Page 4-79, 5th Paragraph: "Waimea is served by the Hawai'i County Fire Department's Waimea Station No. 9, located in Waimea Town. The station is an engine company with one engine, a tanker and a medic unit. Backup support is provided by Engine Company No. 14 in South Kohala, which has one engine, one tanker, a medic unit, helicopter, and fuel truck."

How many firemen are assigned to Waimea Station No. 9? How many firemen are trained as medics? How many firemen are working each shift?

92. Section 4.7.2, Page 4-80, 1st Paragraph: "The construction of a multi-use path will not increase demand for fire or emergency services. In an early consultation letter dated September 25, 2009, the Hawai'i Fire Department outlined the fire protection requirements for the project. This included the provision and maintenance of fire apparatus and access roads in accordance with UFC Section 10.207, and providing adequate water supply for fire protection in accordance with UFC Section 10.301(c). A copy of the letter is included in Chapter 9."

What is the factual basis for the first sentence? Is this the opinion of the Fire Department? How can increasing the responsibilities of the Fire Department, by "adding" the Project to their service area, not increase the demand on the Fire Department? This is an opinion statement, not based on fact or supported by any documentation, and should be removed. Where in Chapter 9 is the 25 September, 2009 letter referenced in the paragraph? There is only one letter from the Fire Department listed in Table 9-1, and it's dated 1 June 2010, and it does not appear to be included as part of Chapter 9 either. When you reference a letter from Chapter 9 you should supply the page number (for example, the HDOT letter of 2 June 2010 is page 173 when reviewing the Draft EA with Adobe Reader 9—See Item 105 below). Without the referenced letter to review, how can one comment on the remaining statements of this paragraph?

93. Section 4.7.2, Page 4-80, 2nd Paragraph: "In most instances, it may be more efficient for police or medical personnel to access the trail via the designated signed shared roadways, park their vehicles and walk the short distance to the incident area."

What is a "short distance?" Whose opinion is this? Is this the opinion of the Police Department? Is it a "short distance" if the incident is half way between access points, which can be over three-quarters of a mile? The phrase, "the short distance" should be removed from this sentence, unless Police and Fire Departments give documentation indicating this is their opinion. This is yet another example of language bias to the Project and which reduces credibility of the entire Draft EA.

94. Section 4.7.2, Page 4-80, 3rd Paragraph: "None of the project alternatives would impact police, fire, or emergency services, although the police department would be likely to share traffic safety concerns regarding the points where the mauka alignments would cross Kawaihae Road."

Why would the Police Department have "traffic safety concerns regarding the points where the mauka alignments would cross Kawaihae Road," and not have those same concerns for every person that has to cross and/or travel along Kawaihae Road to access the Project? The sentence, to be true, must assume that there will be no need for police, fire or emergency services on the Project at any time. Does the sentence assume the police will not patrol the Project? How can increasing the responsibilities of the Police and Fire Departments, by "adding" the Project to their service area, not increase the demand on their services? This sentence is another self-serving statement with no factual basis, and is wrong. All the alternatives will impact the services of police, fire and emergency services, except the alternative presented in Section 3.2.1.

95. Section 4.7.3, Page 4-81, 1st Paragraph: "The proposed alignment along Waikōloa Stream passes in close proximity to most of the public and private schools in Waimea, with easy

and safe access between the trail and the campus....The project is compatible with the federal Safe Routes to School initiative.

How do students get from their homes to access points if they don't live on the Project? Is it not true that they must cross and/or travel along roadways, including Kawaihae Road and Mamalahoa Highway, and move through the Lindsay Road/Mamalahoa Highway intersection? So, whose opinion is it that they will have "easy and safe access between trail and the campus?" How many students are using the trail as it now exists, and what percentage of the total population that could use the trail as it now exists do these students represent? The first sentence above should end at the comma, and the second sentence above should be entirely removed—it is a repeat of what is said previously in the paragraph.

96. Section 4.7.3, Page 4-81, 3rd Paragraph: "The mauka alternatives located north of Kawaihae Road were originally intended to link HPA's main campus on Kohala Mountain Road with the surrounding residential areas to the east and west. Although these segments could provide a direct biking or walking route to HPA, it is uncertain how many HPA students live in the surrounding subdivisions and would take advantage of such a path. If a mauka alternative had been seriously considered, further investigation would have been needed to determine whether anticipated use would justify its construction. The mauka alternatives would provide little benefit to students attending other schools in Waimea, and did little to provide alternative transportation options for Waimea students."

If it's "uncertain how many HPA students live in the surrounding subdivisions and would take advantage of such a path," why is it not uncertain how many students, in general, live in the surrounding subdivisions and would take advantage of such a path? What studies have been done to determine how many students would use the Project? What studies have been done to determine how many more students would use the Project than are using the wood-chipped trail already in place? Third sentence: So the mauka alternative was not "seriously considered?" Then why was it considered at all? What reason was there to include it and then not "seriously consider" it? Was the alternative presented in Section 3.2.2 "seriously considered?" What would be the impact of the alternative of Section 3.2.2 on schools (again, all alternatives are suppose to be considered in this section; see Item 28 above)? What "further investigation" was done to better determine "how many students live in the surrounding subdivisions and would take advantage of the Project," or was this also not "seriously considered?" What is done to "seriously consider" an alternative, and why was it not done for all alternatives? What studies, tests, or documentation was done to "justify construction" of any of the alternatives?

97. Section 4.7.4, Page 4-81, last Paragraph: "The Waimea Outdoor Circle is in the process of developing a 10-acre Waimea Nature Park, also known as Ulu La'au, or "garden of trees.""

Since the Project passes through the "garden of trees", how many trees will need to be removed from the "garden of trees" to complete the Project? What percentage of the total number of trees do the trees that need to be removed represent? Will the Waimea Outdoor Circle still be able to call their park the "garden of trees?"

98. Section 4.7.4, Page 4-81, 1st Paragraph: "The trail will eliminate the need to drive to parks, giving people the option to walk or bike."

How does the Project "eliminate the need to drive" for the soccer coach who must bring the necessary equipment? Don't the people already have "the option to walk or bike?" This sentence (like many others in the Draft EA) is a self-serving overstatement of the facts, and, to be true, it should read, "The trail will reduce the need to drive to parks, and give people another option for walking or biking."

99. Section 4.7.4, Page 4-81, 2nd Paragraph: "The project includes two new public parks along *Ke Ala Kahawai O Waimea*."

Are these parks "included" as part of the Project? Do the cost estimates of Section 1.2 "include" the costs of these parks? If not, what additional cost to the County will be involved in their construction and who will pay for them?

100. Section 4.7.4, Page 4-81: "Impacts of Other Alternatives"

Again, there is only discussion of the impact of the mauka alternative. What would be the impact of the alternative of Section 3.2.2? See Item 28 above.

101. Section 5.1.5, Page 5-5, 2nd complete Paragraph: "A public meeting on the project was held on March 24 2010 at the Waimea Middle School to provide information about the project and the upcoming Environmental Assessment. Notice of the meeting was sent to County, State and federal agencies, including the DHHL and the State public housing authority. Mailed notices were sent to community organizations, large landowners, and various print and on-line media, and notice of the meeting was published in the West Hawai'i Today newspaper. WTG Committee members personally passed out flyers to residents, who were told to inform their friends and neighbors. The meeting was attended by over 50 individuals from the community."

What was the date of the Waimea Middle School meeting, 23 or 24 March? Both dates appear in the Draft EA; which is it? What effort was made to inform residences in developments affected by the Mauka Alternative of the meeting, especially those directly adjacent to the mauka alternative alignment? How is it that few, if any, residents of the Pako and Ohia Ku subdivisions, or other properties along the mauka alternative alignment received notification of the March meeting or the mailed notices? What percentage of the Waimea population is represented by the "over 50" individuals who attended? Is an attendee list available? How were the attendees selected that are listed in Chapter 9, page 9-4, and why were all attendees not selected for inclusion in that list? During the meeting, which attendees were involved in development of the Mauka Alternative? How were they selected? What percentage of the "over 50" attendees were involved in the development of the Mauka Alternative? How was the Mauka Alternative developed; what was the basis for the choice of the location? Who was the author of the "mailed notices," and what was included in the text? A copy of the "mailed notice" and a list of those that received it should be included in the EA.

102. Section 5.1.5, Page 5-5, 3rd complete Paragraph: "During the EA early consultation period, government agencies and interested stakeholders were again notified. The project has received wide publicity over the years, and the proposed path along the stream has wide acceptance and support. The DHHL, in an early consultation letter, indicated that it was excited that this trail system and greenways project was becoming a reality, as it would provide recreational opportunities and commuting alternatives for future DHHL lessees. They did indicate some concern with the potential for crime and loitering near their residential lots, and requested that the trail be properly managed and maintained."

Who determined which people were "interested stakeholders?" How were the "interested stakeholders again notified?" How is it that few, if any, "interested stakeholders" with property along the mauka alternative alignment were notified? What is the factual basis for the second sentence? Whose opinions are represented by the second sentence, and on what documentation, studies, or reports is it based? What will be done to alleviate the DHHL's "concern with the potential for crime and loitering near their residential lots," and ensure that "the trail is properly managed and maintained?" How, and by whom, will this management and maintenance be funded? Is it part of the cost estimates of Section 1.2?

103. Section 5.3.2, Page 5-12

When quoting from the SKCDP, why is the complete text of "Strategy 5.1" not quoted, especially since the first paragraph directly relates to the alternative presented in Section 3.2.2? What is the rational for excluding the first paragraph of Strategy 5.1? If you quote the entire text of "Strategy 5.2," then in fairness should not all of "Strategy 5.1" be quoted?

104. Section 9.2, Page 9-4

See Item 101 above.

105. Section 9.2.1: "Comments Received During Pre-Assessment Consultation"

It would be helpful, and professional, to list the letters, e-mails, etc. in chronological order, number each page, and include the page numbers in Table 9.1. This makes it possible for citizens to refer to the comments in a consistent manner, and help interested parties locate them more easily.

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Donald O. Cox, Ph.D.., P.E.
65-1158 Mamalahoa Highway, No. 8A, PMB 134
Kamuela, HI 96743

Dear Mr. Cox:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your Draft EA comment letter to Mr. James Komata of the County of Hawai'i Department of Parks and Recreation (DPR) dated February 19, 2011. We offer the following responses to the five major issue areas identified in your cover letter:

1. This Environmental Assessment has been prepared to comply with the provisions of the National Environmental Policy Act (NEPA), and thereby qualify the project for various sources of federal funding, primarily from the Federal Highway Administration (FHWA). As you know, ADA-accessibility is required for any publicly-funded recreational facility to the extent feasible.

The existing wood chipped trail has aesthetic value, but brings its own maintenance challenges such as ongoing weed intrusion, degradation of the wood chips, etc. The uneven surface and presence of roots and rocks makes access nearly impossible for those in wheelchairs or with baby strollers, and even bicycling is difficult for young children, those without mountain bikes, or less skilled riders. Some walkers have complained that they will not use it to walk to work because they don't want to get their shoes muddy and dusty.

You state that, *"The WTG Project is not a natural "trail" or Path"; it is a concrete road that will scar the natural beauty of the Waikoloa Stream and surrounding area."* It is correct that the multi-use path will not have a dirt, grass or wood chip surface, but it does not necessarily have to be concrete. According to FHWA guidelines, the path could be comprised of other materials such as asphalt, crushed rock, or soils mixed with stabilizing agents, provided it meets ADA requirements. While other materials may provide a more rustic or "natural" appearance, the disadvantage is that these surfaces are generally less durable than concrete, and will require more frequent repair or replacement. The concrete can also be stained an earth tone to provide a less stark appearance. The Final EA will provide additional information comparing concrete and other trail surfaces.

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Given the County's priority to minimize long-term maintenance costs, concrete is the surface of choice. In a recent meeting with the County and the Waimea Trails and Greenways Committee, the Waimea Outdoor Circle also agreed with the use of earth-tone colored concrete.

The physical appearance of the trail is a design issue that can be addressed during the design phase. Mitigating measures to avoid the appearance of a "concrete road" include meandering the trail alignment, placement of vegetation, colored and/or textured concrete, and use of alternative surface materials.

You express concern over scarring the natural beauty of Waikoloa Stream and surrounding area. The trail proponents believe that instead, the trail will provide an opportunity for more people to enjoy this natural beauty and appreciate this resource. The area along Waikoloa Stream, which less than a generation ago was accessible and unobstructed, is now largely hidden from view, and enjoyed by only a few. The trail will provide access for individuals of all ages and physical abilities, residents and visitors, allowing everyone the opportunity to partake in the natural beauty of the Waikoloa Stream and environs.

As far as project cost, it has always been the County's and WTG Committee's intent to leverage federal money, in particular FHWA's Transportation Enhancement (TE) funds. These funds are specifically earmarked for activities that "help expand transportation choices," including pedestrian and bicycle facilities. The FHWA Hawai‘i Division and State of Hawai‘i Department of Transportation has confirmed that as of April 2011, there was approximately $16 million in TE funds available for eligible projects in Hawai‘i. They have also indicated that over the past several years, FHWA has allocated to the State approximately $3.7 million annually for TE projects. Unfortunately, most of these funds have gone unused, due to lack of eligible projects.

The County of Kaua‘i has utilized TE funds for a six-mile long segment of multi-use (bike and pedestrian) path in the Kapa‘a area. In that case, the County of Kaua‘i was able to use the assessed value of privately-donated land as its 20% local match. It is the County and WTG Committee's hope to similarly leverage TE funds which historically have been underutilized statewide. The Final EA will provide an expanded discussion of TE funding.

2. "Mauka Alternative:" As stated in the Draft EA, the "mauka alternative" (i.e., the alignment north of Kawaihae Road, between Ohia Street and Kahawai Street) was originally considered (and dismissed) by the WTG Committee in the late 1990's. This was confirmed by Mr. Clem Lam, who has in his possession 1) a graphic of this alignment which he developed in 1996 for the WTG Committee, and 2) meeting notes from an April 1, 1996 meeting of the WTG Committee, referring to the mauka alignment. As stated in the EA, this alignment was rejected by the WTG Committee members, and therefore was not widely publicized or included in any official document.

You are correct that the mauka alternative was not mentioned in the 2004 EA. In fact, the lack of an "Alternatives Analysis" was cited by the FHWA as one of the reasons this 2004 EA failed to meet federal NEPA requirements. The current EA was prepared to fulfill these federal environmental requirements.

3. "Mauka Alternative:" As stated above and explained in the Draft EA, an Alternatives Analysis is an essential part of an environmental evaluation conducted in accordance with NEPA. When the NEPA EA process was started, we asked the WTG Committee what other alternatives had previously been considered. The mauka alternative, as well as the Lalamilo Farmlots equestrian segment (also discussed and dismissed in the EA), were mentioned.

Some concerned individuals have asked that all mention of the mauka alternative be eliminated from the EA. If this were done, there would always be a chance that someone in the future could raise it again. The Alternatives Analysis provides the documentation that this alternative was evaluated and determined to be infeasible and undesirable. It puts that issue to bed. It is the County's intent to permanently drop the mauka alternative from further consideration.

4. The County fully supports the South Kohala CDP recommendations to provide sidewalks and bikeways within the existing rights-of-way for the Kawaihae Road and Mamalahoa Highway. This recommendation was made in Bike Plan Hawai'i and is entirely compatible with and complimentary to the proposed *Ke Ala Kahawai o Waimea*. Sidewalks and bikeways on Kawaihae Road and Mamalahoa Highway would provide a valuable transportation and pedestrian safety function, are compatible with the proposed trail. These recommendations were by no means "totally rejected in the Draft EA." Bike lanes and sidewalk improvements, however, do not fully meet the project's stated "Purpose and Need," because they do not meet other stated objectives; specifically, providing access to natural and scenic areas, or opportunities for recreation. We will revise the EA to clarify that the recommendation for sidewalks and bike lanes on Kawaihae Road and Mamalahoa Highway still remain highly desirable and recommended transportation actions.

As an aside, although FHWA's TE funds cannot be used to refurbish and maintain current beach parks, they can be used by the State Department of Transportation for sidewalk and bike lane improvements on Kawaihae Road and Mamalahoa Highway.

5. An Environmental Assessment is intended to be a disclosure document which is required to provide a factual assessment of existing (baseline) conditions and to assess a project's likely environmental impacts. Obviously, the assessment of future impacts is a *prediction*, but one that is based on accurate data, sound reasoning, and comparable experience in similar situations elsewhere. As you know, some of the environmental factors that must be evaluated (e.g., visual impact, social impact, quality of life) cannot be objectively measured, and therefore include a degree of subjective judgment. That said, we appreciate your identifying areas where citations and documentation should be provided, suggestions on rewording to convey a more factual tone,

and identifying passages that need further clarification. Thank you for taking the time to conduct a thorough review and to communicate your suggestions to us.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai'i County Department of Parks and Recreation

Leslie Kurisaki

From: Komata, James [JKOMATA@co.hawaii.hi.us]
Sent: Tuesday, February 22, 2011 8:04 AM
To: lkurisaki@kimurainternational.com; glennk@kimurainternational.com
Subject: Fw: Comments on the DEA for Ke Ala Kahawai o Waimea - Waimea Trails and Greenways

James Komata, Park Planner
From my BlackBerry

From: Nancy Erger
To: Komata, James
Sent: Mon Feb 21 20:33:00 2011
Subject: Comments on the DEA for Ke Ala Kahawai o Waimea - Waimea Trails and Greenways

Rick Gmirkin & Nancy Erger
P.O. Box 442
Kamuela, HI 96743
February 19, 2011

Mr. James Komata, Park Planner
County of Hawaii
Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, HI 96720

SUBJECT: Comments on the Draft Environmental Assessment (DEA) for *Ke Ala Kahawai o Waimea* - Waimea Trails and Greenways

Dear Mr. Komata:

We support the preferred alternative for the proposed Waimea Trails and Greenways as described in the DEA.

This trail will provide a safe, scenic walking and bicycle route for residents and visitors alike. This trail will also promote a healthy lifestyle while allowing people an opportunity to reduce their carbon footprint by walking or biking rather than using their automobiles.

I sincerely hope the FEA will address any community concerns and the trail be approved to move forward.

Mahalo a nui,

Rick Gmirkin & Nancy Erger

KIMURA INTERNATIONAL INC.

September 12, 2011

Mr. Rick Gmirkin and Ms. Nancy Erger
P.O. Box 442
Kamuela, Hawai‘i 96743

Dear Mr. Gmirkin and Ms. Ergers:

Subject: *Ke Ala Kahawai o Waimea*, Waimea Trails and Greenways
Draft Environmental Assessment
Waimea, South Kohala District, Island of Hawaii

Thank you for your e-mail dated February 21, 2011 to Mr. James Komata in support of this project. A copy of your e-mail will be included in the Final EA.

If you have additional comments or questions, please feel free to call Leslie Kurisaki at (808) 944-8848 or via e-mail at lkurisaki@kimurainternational.com.

Sincerely,

KIMURA INTERNATIONAL, Inc.

Glenn T. Kimura, President

cc: Bobby Command, Mayor's Office
Robert Fitzgerald, Hawai‘i County Department of Parks and Recreation

1600 Kapiolani Blvd., Suite 1610
Honolulu, HI 96814
Tel: 808 944-8848 ● Fax: 808 941-8999

Leslie Kurisaki

From: Mike [mvarney@hawaii.rr.com]
Sent: Thursday, February 24, 2011 8:52 AM
To: lkurisaki@kimurainternational.com
Cc: Clem Lam
Subject: Proposed Waimea Trails and Greenways EA

Hello Leslie,

Thank you for being able to comment on the proposed Waimea Trails and Greenways Draft Environmental Assessment.

My family and I have been residents in Waimea for almost 20 years. My wife and I have been attending meetings for the trail for at
least 15 since we purchased our home along Waikoloa stream TMK 65009017.

We have had the pleasure of enjoying the beauty of this property and what is has to offer.
Our kids have grown up playing in pasture by the stream. We hope to someday share this with the rest of the Waimea community.

Our family fully supports this proposed trail along Waikoloa stream and hope it becomes a reality.

Kimura International has done an excellent job on the EA and this trail will someday become the center point for outdoor recreation and fun for the families and residents of Waimea.

Many thanks and aloha

Mike Varney

Vivian, Connor and Bennett Varney

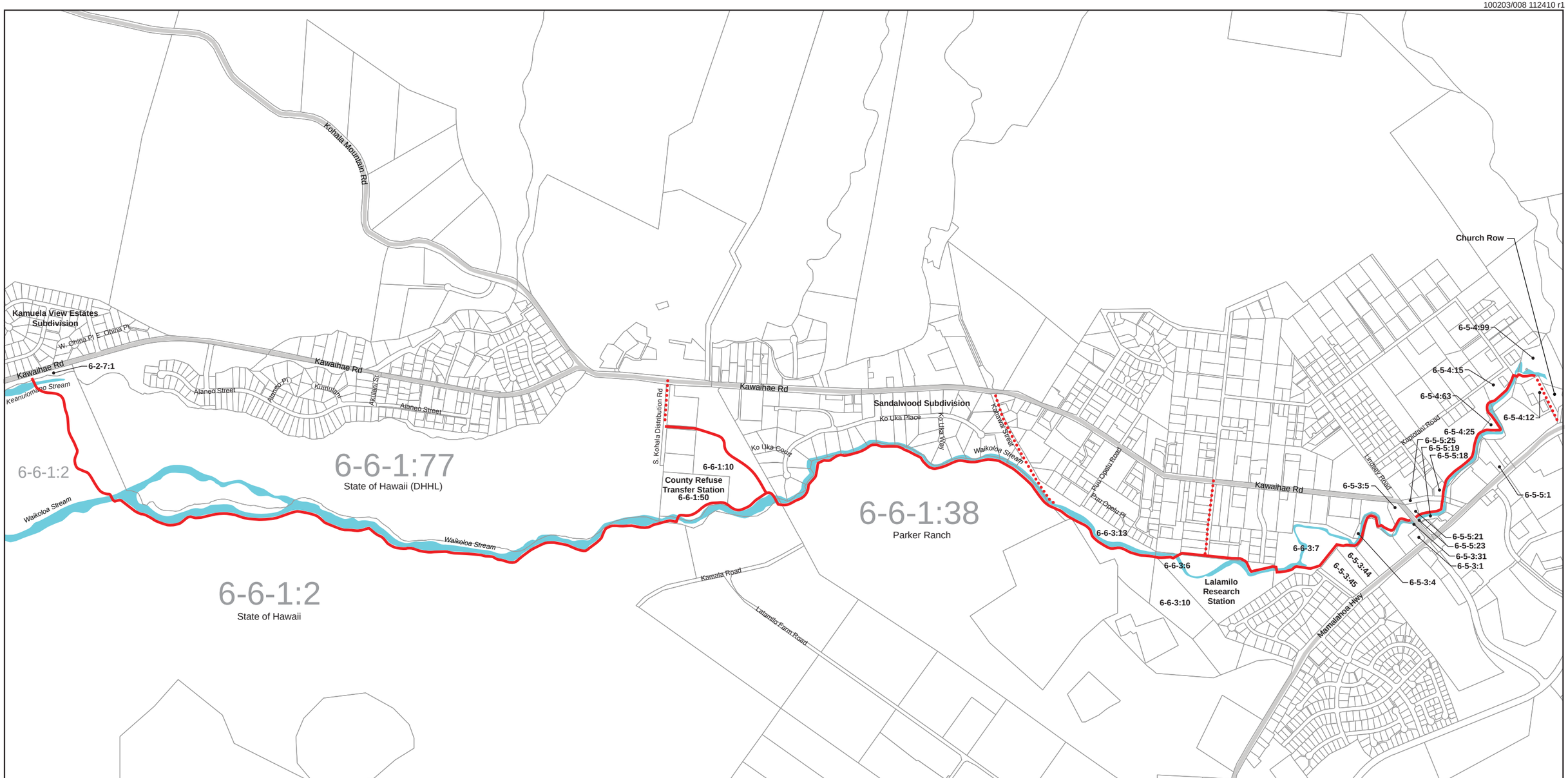
Appendix A
List of Landowners and TMK's

List of Landowners and TMKs

The following table lists parcels directly adjacent to the trail. Easements have been or will be obtained as needed.

TMK	Parcel	Owner(s)	Parcel Size
3 6 2 001 ---			
	002	State Of Hawaii	872 acs
3 6 2 007 ---			
	001	County of Hawaii	8.1 acs
3 6 5 003 ---			
	001	Bank Of Hawaii Trust	1.7 acs
	004	County Of Hawaii	1.149 acs
	005	Parker Land Trust	1.040 acs
	031	County Of Hawaii	1,046 sf
	044	Carter Professional Center	2.2701 acs
	045	Canada France Hawaii Telescope Corp.	3.22580 acs
3 6 5 004 ---			
	012	Hawaii Baptist Convention	72,378 sf
	015	State Of Hawaii	2.00 acs
	025	Parker School	12.166 acs
	063	Parker School	1.468 acs
	099	Parker Ranch Foundation Trust	243,239 sf
3 6 5 005 ---			
	001	Puna Plantation Hawaii, Ltd.	55,525 sf
	018	Parker School	1.205 acs
	019	Parker School	45,694 sf
	021	Bank of Hawaii Trust	18,512 sf
	023	County Of Hawaii	745 sf
	025	Parker School	37,052 sf
3 6 6 001 ---			
	002	State Of Hawaii Harold F Rice Jr	8573.733 acs
	010	State Of Hawaii	17.60 acs
	038	Parker Land Trust	215.380 acs
	050	State Of Hawaii (County Of Hawaii Kamuela Rubbish Dump)	8.896 acs
	077	Hawaiian Home Lands	219.713 acs
3 6 6 003 ---			
	006	State Of Hawaii	15.855 acs
	007	State Of Hawaii (The Outdoor Circle)	10.187 acs
	010	Parker Land Trust	8.109 acs
	013	Parker Land Trust	15.405 acs

** source: Hawaii County Real Property Tax Office*
http://www.hawaiipropertytax.com/Search/GenericSearch.aspx?mode=PARID



LEGEND

- Shared Use Path
- Signed Shared Roadway

NORTH

0 300 600 1200

SCALE IN FEET

LANDOWNERS AND TMK's

Ke Ala Kahawai O Waimea,
Waimea Trails and Greenways
Draft Environmental Assessment

Appendix B

Natural Resources Assessment Update Report
AECOS, Inc.
revised November 2, 2010

Natural resources assessment update report for the Waimea Trails and Greenways Project, Kamuela Island of Hawai‘i[1]

June 22, 2001
Revised November 2, 2010

AECOS No. 920B

Eric B. Guinther, Reginald David, and Derral Herbst
AECOS Inc.
Kamehameha Hwy., Kāne‘ohe, Hawai‘i 96744
Phone: (808) 235-7770 Fax: (808) 254-3029 Email: aecos@aecos.com

Introduction

This revised report presents the results of field surveys conducted in late May 2000 along the route of the proposed Waimea Trails & Greenways (WTG) project in Waimea on the Island of Hawai‘i (Figure 1) and repeated in September 2010. The purpose of the survey was to assess the presence of sensitive biota and habitat along a proposed route of a walking and bikeway trail from the east end of Waimea (Kamuela) Town to a point west of town near South Kohala Estates Subdivision. Although this route remains the preferred one, alternatives for some sections have been proposed and these were also assessed in general terms in 2010. For the most part, the proposed trail and bikeway follows Waikoloa Stream and incorporates a short, existing pedestrian walkway known as “Ke Ala Kahawai o Waimea” (The Stream Trail of Waimea) presently originating at the Waimea Outdoor Circle, native plant park and garden: “Ulu La‘au” and ending at Puu Opelu Road. The intent of the project is to expand the existing Ke Ala Kahawai o Waimea (WTG, undated).

The focus of this report is on sensitive biological resources associated with Waikola Stream and riparian habitats. By sensitive biota is meant species listed (or candidate species) as threatened or endangered by the federal government (see USFWS, 1999a, 1999b), or by state administrative rules (DLNR, 1986), or species comprising a community of native plants and animals that may or may

[1] Report prepared for Kimura International, Honolulu and intended for use in environmental documents and permit submittals for the Waimea Trails & Greenways project.

not be under any specific threat of extirpation, but which would be regarded as special and worthy of preservation.

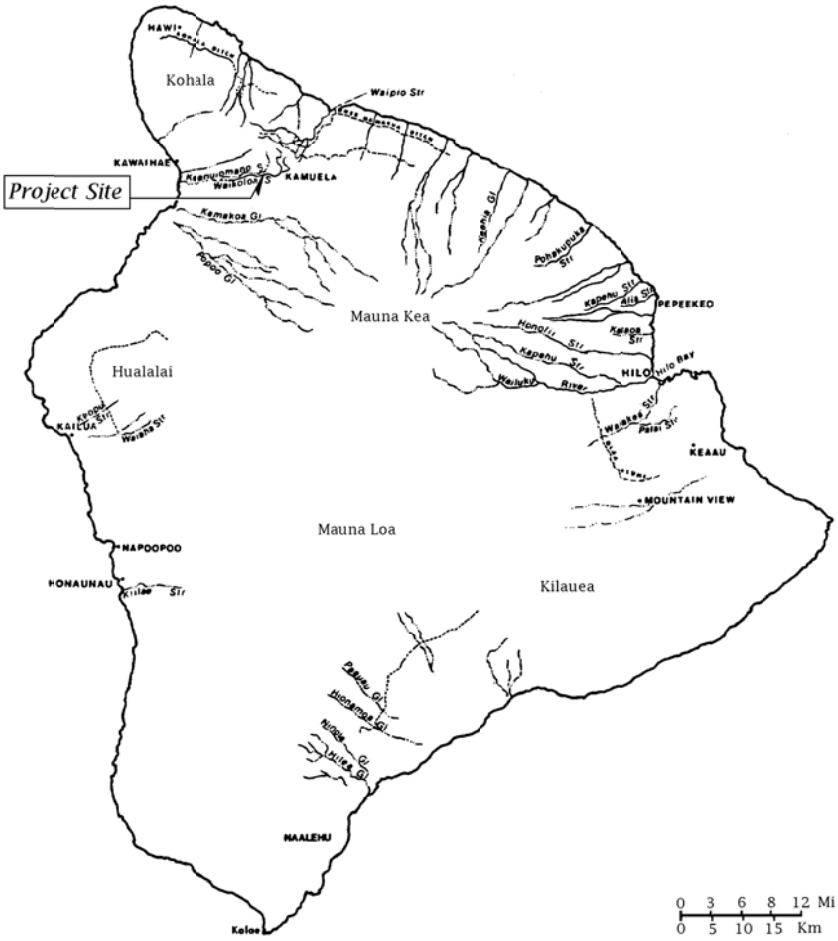


Figure 1. Map of streams on the Island of Hawaiʻi (Big Island) showing general WTG project location.

Methods

The original report (AECOS, 2001) was based on surveys conducted by Reginald David (vertebrate biologist), Dr. Derral Herbst (botanist), and Eric Guinther (aquatic biologist). For the recent revisit to the site, Reginald David covered vertebrates and Eric Guinther covered botanical resources.

Water Quality

Water quality data were collected in 2000 primarily for use in characterizing aquatic habitats encountered. These measurements, limited in both spatial and temporal coverage, are not intended to serve as a baseline of stream water quality, merely to contribute to such an effort. Water quality data collected for this survey are discussed in the report section on Aquatic Environments. The fact that one author was involved in a separate survey downstream from Waimea during the same general period of time was used to advantage to expand temporal coverage of water quality measurements. Some measurements were made *in situ*, while others were obtained from water samples collected and shipped to *AECOS* Inc. laboratory on Oʻahu. Analytical methods used for these samples are listed in *AECOS* (2001).

Floristic Survey

Prior to conducting the field work, pertinent literature and maps were reviewed by the botanist. A walk-through survey method was used and conducted on May 22-23, 2000 (Herbst; assisted by Guinther). The area surveyed comprised the flagged Trails and Greenways corridor and a narrow buffer zone of about 3 m (10 ft) on either side of the corridor. Observations concerning the flora and vegetation were recorded and a species list was prepared. The nomenclature of the higher plants follows that of Wagner, Herbst, and Sohmer (1990, 1999) for the native and naturalized plants, Staples and Herbst (2005) for the cultivated plants, and Palmer (2003) for the ferns. Most of the same route was traversed in 2010 (Guinther) and the previous flora listing (*AECOS*, 2001) used as a checklist. Conditions were much drier in 2010 than in 2000, particularly in the pastureland west of town, and therefore many of the plants recorded in 2000 were not observed in 2010. Further, some sections of the proposed route (and alternative routes) were not surveyed in 2010; mostly these were in the middle of Waimea Town.

Stream Surveys

A survey of aquatic environments was conducted on May 22-23 and June 5, 2000. Conditions and aquatic inhabitants of the segment of Waikoloa Stream within the proposed Trails & Greenways corridor were determined by walking along the stream making visual observation and sampling selected features with a fine-mesh hand net. An insect net was used to capture flying insects along the survey route. Observations of aquatic biota were of an incidental nature. More intrusive methods (e.g., electroshocking or chemical treatments such as rotenone) might well reveal additional species not observed by our survey. In

general, the water was too shallow for snorkeling to be of any advantage, but it is nearly always the case that repeated visits will reveal species not observed during any single visit to an area. Only casual observations of selected parts of the stream were made in 2010; however, a detailed survey of the streams was completed in late 2001 (Englund, et al., 2002), following our initial survey in 2000.

Vertebrate Surveys

The original avian and mammalian surveys were conducted in May 2000. Seventeen avian count stations were placed approximately 400 m (1300 ft) apart along the length of the proposed corridor and the (then) one alternative alignment. Six-minute unlimited distance counts were made at each station. Count stations were counted once; additionally, a tally was made of birds detected during the census time on site. Field observations were made with the aid of Leica 10 X 42 binoculars and by listening for vocalizations. Counts were concentrated during the early morning hours between 0630 hrs and 1000 hrs, the peak of daily bird activity. An additional 2 hrs were spent one evening in an attempt to detect nocturnally flying seabirds and owls over-flying the area. Time not spent counting was used to search the corridor and the surrounding area for species, and habitats not detected during count sessions. Most of the same route was traversed in 2010. Conditions were much drier than in 2000, particularly in the pastureland west of town. Some sections of the proposed route (and alternative routes) were not surveyed in 2010; mostly these were in the middle of Waimea Town.

All observations of mammalian species were of an incidental nature. With the exception of the Hawaiian hoary bat (*Lasiurus cinereus semotus*), all other terrestrial mammals found on the Island of Hawaiʻi are alien species. Most are ubiquitous; no trapping program was proposed or undertaken to quantify the usage by alien mammalian species of the study site. A running tally was kept of all vertebrate species observed and heard while within the proposed right-of-ways. The survey of mammals was limited to visual and auditory detection, coupled with observation of scat, tracks and other animal sign. Visual scans were made for Hawaiian hoary bats, or *ʻopeʻapeʻa* as they are locally known, during crepuscular periods on one evening and one morning for the 2000 survey.

Avian phylogenetic order and nomenclature presented in this report follows *The American Ornithologists' Union Check-list of North American Birds 7th Edition* (American Ornithologists' Union, 1998), and the 42nd through the 51st supplements to *Check-list of North American Birds* (American Ornithologists' Union, 2000; Banks et al., 2002, 2003, 2004, 2005, 2006, 2007, 2008, Chesser et

al., 2009, 2010). Mammal scientific names follow *Mammals in Hawaii* (Tomich, 1986).

General Site Description

Geology/Geography

Rainfall — There are few readily accessible places in the Hawaiian Islands where the rainfall gradient is steeper than at Waimea (Kamuela) on the Big Island. Rainfall just a mile east of town approaches 2000 mm (80 inches) annually and exceeds 3000 mm (100 in) on the slopes of Kohala Mountain above the saddle between Kohala and Mauna Kea, while a similar distance west of town the annual rainfall is closer to 500 mm (20 inches). This difference, as one passes from the windward slope of Mauna Kea to the leeward slope of Mauna Kea and adjacent Kohala has a profound effect on the natural vegetation and the streams of the area. While residents are well aware of the different experiences with respect to rains of their fellow citizens living in another part of town, the proposed Trails and Greenways will expose all who venture along a significant portion of its length to the varied climates of Hawaiʻi's Big Island. The project site and most of the South Kohala and North Kona Districts have been experiencing drought conditions over the past 3 years. The average rainfall for the western half of the project area is approximated 10 inches a year. Over the past 5 years, precipitation has been down approximately 22%; and over the past two years, by more than 52% (NCDC, 2000a).

At Lalamilo Field (Station 191.1 — located at 797 m or 2614 ft elevation near the Waimea-Kohala Airport south of Kamuela), for the period May 1 through June 6, 2000 (some 20 days prior to and including the period of field work), there was a total of 6 mm (0.24 in) of rain, with no single 24-hour period exceeding 1 mm (0.04 in). At a coastal station called Puʻu Kohala Heiau (Station 98.1 — located at 43 m or 141 ft elevation near Kawaihae), only one rainfall event was recorded for this period: 10 mm (0.4 in) on May 18 (NCDC, 2000b). This latter was a significant event (if it occurred), but is not correlated with any rainfall upslope at Lalamilo Field.

Conditions in September 2010 were far drier than those encountered in 2000 (Dicus, 2007; CWRM, 2010; see Fig. 2). At the best of times the area west of Waimea Town is extremely dry, averaging perhaps 15 in (38 cm) of rain or less a year; during 2010, the Kawaihae and ʻŌuli areas were classified as suffering "D4" or exceptional drought conditions (Climate Prediction Center, National Weather Service, 2010).



Figure 2. Pastureland, photographed September 2010, near the western end of the project area illustrating impact of extreme drought conditions on vegetation.

Trails and Greenways Route — The proposed corridor surveyed in 2000 started directly north of the Imiola Church, wending its way west, following along Waikoloa Stream, crossing the Kawaihae Road (state Route 19) just north of the intersection with State Route 190 in downtown Waimea. The proposed trail would parallel Waikoloa Stream south of the existing residential development located off Kawaihae Road, passing south of the Kamuela refuse transfer station. The corridor then continues west for approximately another 2800 m (1.7 mi), crossing Keanuʻiʻomanō Stream before ending at the Kawaihae Road directly across from the South Kohala Estates Subdivision. An alternate alignment located within Waimea town passes close to the Canada France Telescope Company headquarters building. More recently suggested alternatives include a route that departs the preferred route along Waikoloa Stream going up Lindsay Road to the mauka (north side) of private property along Kawaihae Road and on to Keanuʻiʻomanō Stream, then following that stream to the intersection of state routes 19 and 250 (Waiaka Bridge), up Route 250 to pastureland behind developments off Kawaihae Road to ʻOhina Street in

South Kohala View Estates. Another suggested alternative follows Keanuʻiʻomanō Stream instead of Waikoloa Stream at the far western end of the project area.

The proposed corridor gently slopes from east to west from a maximum elevation of slightly more than 800 m (2600 ft) above sea level (ASL) down to approximately 450 m (1480 ft) ASL. The substrate is made up of a Mauna Kea lava flow dating from the Pleistocene age that is estimated to have been formed between 65,000 and 250,000 years ago. This flow is considered to be one of the oldest surface flows known from Mauna Kea (Wolfe and Morris, 1996). This flow is partially covered by alluvial and colluvial sand and gravel deposits, along the eastern end of the corridor close to the Imiola Church.

Vegetation

The most recent and complete classification of Hawaiian plant communities is that by Gagne and Cuddihy (1999). Their classification scheme is based upon three nesting regimes: elevation, moisture, and physiognomy; and includes only those communities that the authors considered "natural," that is, plant communities that are not harvested nor maintained as monocultures of cultivated species such as is found in plantations, pastures, orchards or croplands; as well as those that have been altered or destroyed by development. The latter communities often are designated as "Anthropogenic" or "Alien" Communities as they are man-induced and consist of exotic or alien species, sometimes intermixed with a scattering of native plants. This vegetation type occurs in areas disturbed or altered by man.

Following the Gagne/Cuddihy classification scheme, the vegetation of the entire project site falls within the Anthropogenic or Alien Vegetation Community category. For convenience, several sub-types can be delineated for the area surveyed. These are:

1. Pasture
2. Riparian
3. Urban

A brief description of each of these vegetation subcommunities is given below.

1) Pasture — The eastern end of this grassland habitat has a dense ground cover consisting primarily of Kikuyu grass (*Pennisetum clandestinum*) with occasional weedy herbs intermixed. The composition of the vegetation gradually changes until, at the western end of the proposed project site, it consists of a sparse growth of *'akia* (*Wikstroemia pulcherrima*), lantana (*Lantana camara*), fountain grass (*Pennisetum setaceum*), purslane (*Portulaca*

pilosa), *Polycarpon tetraphyllum* and other shrubs, grasses and forbs that favor a dry, sparsely vegetated habitat. Had 2000 been a more typical, wetter winter, the vegetation would be expected to be more lush and have more species diversity; more grasses and herbs, especially annuals would be present. As a consequence of low rainfall over a period of several years, many of the herbaceous species recorded on the 2000 surveys were not seen in 2010.

2) Riparian — This vegetation association includes the plants that live in and beside the stream. In more formal studies, these two communities (aquatic and riparian vegetation, respectively) are treated as two separate and distinct community types, but, for convenience, they have been combined in this informal survey. The vegetation of Waikoloa Stream is depauperate, comprising a few individuals of such species as the sedges ʻ*akaʻakai*, or great bulrush (*Schoenoplectus lacustris* ssp*. validus*) and umbrella plant or ʻ*ahuʻawa haole* (*Cyperus involucratus*); water smartweed (*Persicaria punctata*), *kamole* or primrose willow (*Ludwigia octovalvis*), and a moss.

The riparian vegetational community is much better developed, especially at its eastern end, and is dominated by such species as: wandering Jew (*Tradescantia fluminensis*), yellow ginger or ʻ*awapuhi melmele* (*Hedychium flavescens*), Christmas berry (*Schinus terebinthifolius*), wattle (*Acacia parramattensis*), mock orange *Philadelphus inodorus* var. *grandiflorus*), swamp mahogany (*Eucalyptus robusta*), and garden nasturtium (*Tropaeolum majus*).

3) Urban — This vegetation association comprises the vegetables, flowers, lawn grasses, and ornamental trees and shrubs used to landscape houses, public buildings, parks, and streets; along with the weeds that normally grow in these inhabited areas. Examples of these species include eucalyptus (*Eucalyptus* spp.), snow bush (*Breynia nivosa*), tree fern (*Cyathea* sp.), cherry (*Prunus* sp.), lily-of-the-Nile (*Agapanthus praecox* subsp. *orientalis*.), and Kikuyu grass (*Pennisetum clandestinum*). Native plants such as ʻ*ohiʻa* (*Metrosideros polymorpha* Gaud.) and ʻ*akia* or *kauhi* (*Wikstroemia pulcherrima*), ʻ*ilima* (*Sida fallax*) and *pohinahina* (*Vitex rotundfolia*) have been used to landscape part of the main street through town. Further, extensive plantings of native plants have been made at Ulu Laʻau Park (WOC, undated) that were not present in 2000. Only species located close to the existing Ke Ala Kahawai o Waimea (WTG trail) have been added to our updated list. The urban weeds are mostly the same as those found in the other vegetative communities in the project area.

No attempt has been made to compile a list of the species of this vegetative community as it is beyond the scope of the survey as it will not be directly impacted by the proposed project. It is mentioned here primarily for completeness as the trail will pass through part of the town, but will generally

follow established sidewalks and roads. The 2010 survey did not visit all of the urban environment traversed in 2000. However, a recent survey of trees located along the proposed WTG (Kraus, 2009) assesses impacts to these elements of the urban vegetation. Trees identified by the arborist have been added to the flora listing.

Vertebrates

Given the alien dominated vegetation along the entire corridor of the proposed project it is not surprising that the vast majority of the avian and mammalian species present within the project area are alien to the Hawaiian Islands. What few native avian species utilize resources within the general project area are all indigenous migratory species that spend the late fall and winter months in Hawaii and the Tropical Pacific, and returning to the high Arctic in the spring to breed and nest.

Waikoloa Stream System Description

Many of the streams draining the upper southern slope of Kohala Mountain, where median annual rainfall is 1270 mm (50 in) or more, flow towards the south or southwest until they encounter the interface between Kohala Mountain and Mauna Kea. The more easterly of these streams become tributary to Waiulaula Gulch, and the erosive power from these intermittent inputs have created a ravine that is, in places, 12 to 15 m deep. However, in many places, down-cutting has been considerably less, possibly reflecting highly resistant strata. The moderately steep slope of the mountain, flashy flows from infrequent heavy rains, and the nature of the geological formation (layers of highly porous and highly dense, non-porous rock) all contribute to a process of braiding of the stream channels. That is, water flows can diverge then reconnect further downslope. This process is more characteristic of the stream channels located below the project area (*AECOS* Consultants, 2000).

The two largest tributaries of Waiulaula Gulch are Waikoloa and Keanuʻiʻomanō Streams, which are perennial in their upper reaches. These two streams come together below the project area, and the proposed greenway route mostly follows the more southerly branch, Waikoloa, only crossing Keanuʻiʻomanō at the lower end of the proposed trail. The Hawaii Stream Assessment (Hawaii Cooperative Park Service Unit, 1990) lists Waikoloa Stream (state code No. 8-5-03) as a perennial stream in which the flow is interrupted (that is, not flowing year round at lower elevations). Presumably, the designation of "Waikoloa" in

much of that document is intended to encompass all of the watershed (Waiulaula Gulch, and both Waikoloa and Keanuʻiʻomanō streams).

The Park Service Unit report rates Hawaiian perennial streams on a number of characteristics using a four-point scale. Waikoloa Stream is rated "L" for limited (lowest ranking) under aquatic resources (it is ranked "W" for "without resources" in the section on Aquatic Resources) and "O" or outstanding for cultural resources. It is not ranked for either recreational or riparian resources. The stream is also indicated as having a palustrine wetland associated with it, but the location of this wetland is not indicated. No wetlands of any consequence or wetlands different from wet areas within the stream banks were observed in the project area.

The "limited" aquatic resources ranking is based upon various reports providing information on the biota in Waikoloa Stream. With respect to the lack of a rating for riparian resources, further detail is provided in the Hawaii Stream Assessment indicating that none of the stream flows through native forest and wild pig (*Sus scrofa*) is potentially a problem species (detrimental animal) in this environment. Although Waikoloa Stream is not given a recreational resources score because opportunities for camping, hiking, fishing, swimming, boating, hunting, and scenic views are presently few, future plans for Waikoloa Stream would significantly alter the relationships between residents and visitors to this unique part of the Hawaiʻi and the local water course.

A summary of information for the stream system in the project area and adjacent streams on this part of the Big Island is given as Table 2 in *AECOS* (2001). This table provides a systematic approach to listing multi-branched streams and gulches, stream resources, and stream survey information that can be somewhat difficult to interpret, and therefore is not included in this revised report. More recent stream surveys, particularly Englund, Preston, and Arakaki (2002), provide detailed references for assessing impacts of the WTG on stream resources in Waimea.

Field Survey Results

Flora

The vascular flora of the project site comprises a mix of native and introduced species of trees, shrubs, grasses, and forbs; consisting of 175 taxa in 62 families. Twelve of the 175 taxa (7%) are considered native (4 endemic, 8 indigenous), but are common, widely distributed species. The remaining 163 taxa (93%) are

naturalized, non-native species, including three that probably were brought to the islands by the early Polynesian emigrants and have since become naturalized (Table 1).

Table 1. Status of plant species in the project survey area.

	Native	Naturalized	Total
Pteridophyta	2 (33.3%)	4 (66.6%)	6
Gymnospermae	0 (0.00%)	2 (100%)	2
Dicotyledonae	8 (6.4%)	116 (93.5%)	124
Monocotyledonae	2 (4.6%)	41 (95.3%)	43
TOTAL	12 (6.8%)	163 (93.1%)	175

The following checklist (Table 2) was compiled from observations made by Herbst on May 22-23, 2000 and by Guinther on September 10, 2010 on the WTG corridor. The entries are arranged alphabetically under their family names and include the scientific name, the common name, and the status of the species (i.e., native or non-native). Synonyms which occur in recent Hawaiian literature are included under the currently accepted name. In addition, an arborist examined and tagged a total of 498 large trees in the project area. The vast majority of these trees were eucalyptus (*E. robusta* and *E. saligna*) and black wattle (Kraus, 2009).

Table 2. Annotated Checklist of the vascular plants of the Waimea Trails and Greenways Project Site, Kamuela, Island of Hawai'i; modified to reflect results from September 2010.

SCIENTIFIC NAME	(common name)	STATUS	Notes
PTERIDOPHYTA			
BLECHNACEAE (blechnum fern family)			
Blechnm occidentale L.	(hammock fern)	X	--
DRYOPTERIDACEAE (sword fern family)			
Diplazium sandwichianum (Presl) Diels	(*ho'i'o*)	E	--
LINDSAEACEAE (lace fern family)			
Odontosoria chinensis (L.) J. Sm.	(*pala'a*, lace fern)	I	--

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
PTERIDACEAE (pteris fern family)			
Adiantum raddianum Presl.	(*ʻiwaʻiwa*, maidenhair fern)	X	--
Adiantum hispidulum Sw.	(five-finger maidenhair fern)	X	<1>
THELYPTERIDACEAE (maiden fern family)			
Thelypteris dentata (Forsk.) St. John	(downy wood fern)	X	<1>
GYMNOSPERMAE			
ARAUCARIACEAE			
Araucaria columnaris (G. Forster) J.D. Hook.	(Cook-pine)	X	<2, 3>
TAXODIACEAE			
Taxodium sp.	cypress	X	<2, 3>
ANGIOSPERMAE			
DICOTYLEDONAE			
ACANTHACEAE (acanthus family)			
Asystasia gangetica (L.) T. Anderson	(Chinese violet)	X	--
Dicliptera chinensis (L.) Juss.	---	X	<2>
AMARANTHACEAE (amaranth family)			
Amaranthus spinosus L.	(spiny amaranth)	X	--
Amaranthus viridis L.	(slender amaranth)	X	<1>
ANACARDIACEAE (mango family)			
Schinus terebinthifolius Raddi	(Christmas berry)	X	<1,3>
APIACEAE (parsley family)			
Foeniculum vulgare Mill.	(fennel)	X	--
Petroselinum crispum (Mill.) A.W.Hill	(parsley)	X	--
ASTERACEAE (sunflower family)			
Ageratina adenophora (Spreng.) R. King & H. Robinson	(Maui pamakani)	X	<1>
Bidens pilosa L.	(Spanish needle)	X	<1>
Bidens alba (L.) DC	---	X	<2>
Centaurea melitensis L.	(Napa or star thistle)	X	--
Cirsium vulgare (Savi) Ten.	(bull thistle)	X	<1>
Conyza bonariensis (L.) Cronq.	(hairy horseweed)	X	<1>
Conyza canadensis var. *pusilla* (Nutt.) Cronq.	(horseweed)	X	<1>

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
ASTERACEAE (continued)			
Crassocephalum crepidioides (Benth.) S. Moore	---	X	<2>
Delairea odorata Lem.	(German or Italian ivy)	X	<1>
Emilia fosbergii Nicolson	(Flora's paintbrush)	X	--
Erechtites valerianifolia (Wolf) DC	(fireweed)	X	--
Erigeron bellioides DC	(fleabane)	X	--
Galinsoga parviflora Cav.	---	X	--
Galinsoga quadriradiata Ruiz & Pav.	(Peruvian daisy)	X	<1>
Gamochaeta purpurea (L.) Cabr.)	(purple cudweed)	X	<1>
Hypochoeris radicata L.	(hairy cat's ear, gosmore)	X	<1>
Pluchea carolinensis (Jacq.) G. Don	(sourbush)	X	<1>
Senecio madagascariensis Poir	---	X	<1>
Sonchus oleraceus L.	(sow thistle)	X	<1>
Spagneticola trilobata (L.) Pruski	wedelia	X	<2>
Taraxacum officinale W.W. Weber	(dandelion)	X	<1>
Tridax procumbens L.	(coat buttons)	X	--
Verbesina encelioides (Cav.) Benth. & Hook.	(golden crown-beard)	X	<1>
BALSAMINACEAE (touch-me-not family)			
Impatiens wallerana J.D. Hook.	(busy Lizzie, touch-me-not)	X	--
BASELLACEAE (basella family)			
Anredera cordifolia (Ten.) Steenis	(Madeira vine, *'uala hupe*)	X	<1>
BRASSICACEAE (mustard family)			
Capsella rubella Reut.	(shepherd's purse)	X	--
Cardamine flexuosa With.	(bittercress)	X	<1>
Lepidium virginicum L.	(pepperwort)	X	<1>
Lobularia maritima (L.) Desv.	(sweet alyssum)	X	--
Raphanus sativus L.	(radish)	X	--
Sisymbrium officinale (L.) Scop	(hedge mustard)	X	--
BUDDLEIACEAE (butterfly bush family)			
Buddleia asiatica Lour.	(dog tail)	X	<1>
Buddleia madagascariensis Lam.	(smoke bush)	X	<1>
CACTACEAE (cactus family)			
Opuntia ficusindica (L.) Mill.	(panini, prickly pear, papipi)	X	<1>

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
CAPRIFOLIACEAE (honeysuckle family)			
Sambucus mexicana K.Presl ex A.DC	(Mexican elder)	X	<1>
CARYOPHYLLACEAE (pink family)			
Petrorhagia velutina (Guss.) P.Ball & Heyw.	(Childing pink)	X	--
Polycarpon tetraphyllum (L.) L.	---	X	<1>
Silene gallica L.	(small-flowered catchfly)	X	--
CASUARINACEAE (she-oak family)			
Casuarina equisetifolia L.	(common ironwood)	X	<1,3>
CELASTRACEAE			
Elaeodendron orientale Jacq.	(false olive)	O	<4>
CHENOPODIACEAE (goosefoot family)			
Atriplex semibaccata R.Br.	(Australian saltbush)	X	--
Chenopodium carinatum R.Br..	---	X	<2>
Chenopodium murale L.	('aheahea, goosefoot)	X	<1>
Salsola tragus L.	(Russian thistle, tumbleweed)	X	--
CONVOLVULACEAE (morning-glory family)			
Ipomoea indica (J. Burm.) Merr.	(*koali 'awa*, *koali 'awahia*)	I	<1>
Ipomoea obscura (L.) Ker-Gawl.	---	X	<2>
CRASSULACEAE (orpine family)			
Bryophyllum pinnatum (Lam.) Oken	(air plant)	X	<1>
CUCURBITACEAE (gourd family)			
Sechium edule (Jacq.) Sw.	(pipinell, chayote)	X	--
EUPHORBIACEAE (spurge family)			
Aleurites moluccana (L.) Willd.	(*kukui*)	P	<2>
Chamaesyce hirta (L.) Millsp.	(hairy spurge)	X	<1>
Chamaesyce prostrata (Aiton) Small	(prostrate spurge)	X	<1>
Ricinus communis L.	(castor bean)	X	<1>
FABACEAE (pea family)			
Acacia parramattensis Tind.	---	X	<1>
Acacia mearnsii De Wild.	(black wattle)	X	<3>

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
FABACEAE (continued)			
Acacia koa A. Gray	(*koa*)	X	<3>
Chamaecrista nictitans (L.) Moench	(partridge pea)	X	<2>
Desmodium sandwicense E. Mey.	(Spanish clover, pua pilipili)	X	<1>
Erythrina sandwicensis Degener	(wiliwili)	E	<1>
Neonotonia wightii (Wight & Arnott) Lackey	(glycine vine)	X	<1>
Indigofera suffruticosa Mill.	('iniko,indigo)	X	<1>
Macroptilium lathyroides (L.) Urb.	(wild bean, cow pea)	X	<1>
Melilotus alba Medik.	(white sweet clover)	X	--
Trifolium dubium Sibth.	(small hop-clover)	X	<1>
Trifolium repens L. var. *repens*	(white clover)	X	<1>
GENTIANACEAE (gentian family)			
Centaurium erythraea Raf. ssp. *erythraea*	(bitter herb)	X	--
GERANIACEAE (geranium family)			
Erodium cicutarium (L.) L'Her.	(alfilaria, pin clover)	X	<1>
Geranium homeanum Turcz.	(cranesbill)	X	<1>
HYDRANGEACEAE (hydrangea family)			
Philadelphus inodorus var. *grandiflorus* (Willd.) A. Gray	(mock orange)	X	--
LABIACEAE (mint family)			
Stachys arvensis L.	(staggerweed)	X	--
LYTHRACEAE (loosestrife family)			
Cuphea carthagenensis (Jacq.) Macbr.	(tarweed)	X	<1>
Lythrum maritimum Kunth	(pukamole, ninika)	X	--
MALVACEAE (hibiscus family)			
Abutilon grandifolium (Willd.) Sweet	(hairy abutilon)	X	<2>
Malva parviflora L.	(cheese weed)	X	--
Malvastrum coromandelianum (L.) Garcke ssp. *coromandelianum*	(false mallow)	I	<1>
Sida fallax Walp.	('ilima)	I	<1>
Sida rhombifolia L.	---	X	<1>
Sida spinosa L.	(prickly sida)	X	<2>

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
MYRTACEAE (myrtle family)			
Eucalyptus camaldulensis Dehnh.	(river red gum)	X	<1>
Eucalyptus globulus Labill.	(blue gum)	X	<1, 3>
Eucalyptus pilularis Sm.	(blackbutt)	X	<3>
Eucalyptus robusta Sm.	(swamp mahogany)	X	<1, 3>
Eucalyptus saligna Sm.	(Sydney blue gum)	X	<4>
Psidium cattleianum Sabine	(strawberry guava)	X	--
Psidium guajava L.	(common guava)	X	<1>
Rhodomyrtus tomentosa (Aiton) Hassk.	(downy myrtle)	X	<2>
NYCTAGINACEAE (four-o'clock family)			
Bougainvillea spectabilis Wild.	(Bougainvillea)	X	<2>
Mirabilis jalapa L.	(four-o-clock)	X	<1>
OLEACEAE (olive family)			
Olea europaea spp. *cuspidata* (Wall. ex G. Don) Ciferri	(olive, 'oliwa)	X	<1>
ONAGRACEAE (evening primrose family)			
Ludwigia octovalvis (Jacq.) Raven	(primrose willow, *kamole*)	P?	<1>
OXALIDACEAE (wood sorrel family)			
Oxalis corniculata L.	(yellow wood sorrel)	P?	<1>
Oxalis debilis var. *corymbosa* (DC) Lourt.	(pink wood sorrel)	X	--
PAPAVERACEAE (poppy family)			
Argemone glauca (Prain) Pope var. *glauca*	(pua kala)	E	--
PITTOSPORACEAE (pittosporum family)			
Pittosporum undulatum Venten.	(Victorian box)	X	--
PLANTAGINACEAE (plantain family)			
Plantago lanceolata L.	(narrow-leaved plantain)	X	<1>
Plantago major L.	(common plantain)	X	<1>
POLYGONACEAE (buckwheat family)			
Persicaria punctata (Elliot) Small	(water smartweed)	X	<1>
Synonym = *Polygonum punctatum* Elliot			

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
PORTULACACEAE (purslane family)			
Portulaca oleracea L.	(purslane, pigweed)	X	<1>
Portulaca pilosa L.	(purslane)	X	--
PROTEACEAE (protea family)			
Grevillea robusta R. Br.	(silk oak)	X	--
ROSACEAE (rose family)			
Eriobotrya japonica (Thunb.) Lindl.	(loquat)	X	
Prunus serrulata Lind.	(Japanese flowering cherry)	X	
Rubus argutus Link	(prickly Florida blackberry)	X	--
Rubus rosifolius Sm.	(thimbleberry)	X	--
SCROPHULARIACEAE (figwort family)			
Castilleja arvensis Cham. & Schlechtend.	(Indian paintbrush)	X	--
Lophospermum erubescens D.Don	(larger roving sailor)	X	
SOLANACEAE (nightshade family)			
Nicandra physalodes (L.) Gaertn.	(apple of Peru)	X	--
Physalis peruviana L.	(*poha*, ground cherry)	X	<1>
Solanum americanum Mill.	(*popolo*, glossy nightshade)	I?	--
Solanum linnaeanum Hepper & P.Jaeger	(apple of Sodom)	X	<1>
STERCULIACEAE (cocoa family)			
Waltheria indica L	('*uhaloa*)	I	<1>
THYMELAEACEAE ('akia family)			
Wikstroemia pulcherrima Skottsb.	('*akia*, kauhi)	E	<1>
TROPAEOLACEAE (nasturtium family)			
Tropaeolum majus L.	(garden nasturtium)	X	<1>
TURNERACEAE (turnera family)			
Turnera ulmifolia L.	(yellow alder)	X	--
URTICAEAE (nettle family)			
Pilea microphylla (L.) Liebm.	(artillery plant)	X	<1>

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
VERBENACEAE (verbena family)			
Lantana camara L.	(lantana)	X	<1>
Stachytarpheta cayennensis (Rich.) Vahl	(stachytarpheta)	X	--
Verbena litoralis Kunth	(*owi*, *oi*)	X	<1>
MONOCOTYLEDONEAE			
AGAVACEAE (agave family)			
Phormium tenax J.R.Forster & G.Forster	(New Zealand flax)	X	<1>
Yucca gloriosa L.	(Spanish bayonet, yucca)	X	<1>
ARACEAE (aroid family)			
Monstera deliciosa Lieb	(monstera)	X	--
Xanthosoma roseum Schott	---	X	<1>
CANNACEAE (canna family)			
Canna indica L.	(canna)	X	<1>
COMMELINACEAE (spiderwort family)			
Commelina diffusa N.L. Burm.	(honohono)	X	<1>
Tradescantia fluminensis Vellozo	(wandering Jew)	X	--
CYPERACEAE (sedge family)			
Cyperus gracilis R. Br.	(McCoy grass)	X	--
Cyperus involucratus Rottb.	(umbrella plant)	X	--
Cyperus polystachyos Rottb.	---	I	<1>
Kyllinga brevifolia Rottb.	(kili'o'opu)	X	<1>
Schoenoplectus lacustris ssp. *validus* (Vahl) T. Koyama	('aka'akai, great bulrush)	I	<1>
IRIDACEAE (iris family)			
Crocosmia crocosmiiflora (E. Morr.) N.E. Brown	(montbretia)	X	--
Gladiolus dalenii van Geel	(gladiolus)	X	--
LILIACEAE (lily family)			
Asparagus densiflorus (Kunth) Jessop	(asparagus fern)	*X*	*<2>*
Zephyranthes grandiflora Lindley	(wind lily)	X	--

Table 2 (continued).

SCIENTIFIC NAME	(common name)	STATUS	Notes
POACEAE (grass family)			
Arundo donax L.	(Spanish reed)	X	<1>
Avena barbata Pott ex Link	---	X	--
Bothriochloa pertusa (L.) A. Camus	(pitted beardgrass)	X	<2>
Bromus catharticus Vahl	(rescue grass)	X	<1>
Chloris gayana Kunth	(Rhodes grass)	X	<1>
Cynodon dactylon (L.) Pers.	(Bermuda grass)	X	<1>
Digitaria ciliaris (Retz.) Koeler	(Henry's crabgrass)	X	<1>
Digitaria sp.		X	<2>
Eleusine indica (L.) Gaertn.	(wire grass)	X	<1>
Eragrostis tenuifolia (A. Rich.) Steud.	---	X	<1>
Lolium perenne L.	(perennial ryegrass)	X	<1>
Melinis minutiflora P. Beauv.	(molasses grass)	X	<1>
Melinus repens (Willd.) Zizka	(Natal redtop)	X	<1>
Panicum maximum Jacq.	(Guinea grass)	X	<1>
Paspalum conjugatum Bergius	(Hilo grass)	X	--
Paspalum urvillei Steud.	(Vasey grass)	X	<1>
Pennisetum clandestinum Chiov.	(Kikuyu grass)	X	<1>
Pennisetum purpureum Schumach.	(Napier grass)	X	<1>
Pennisetum setaceum (Forssk.) Chiov.	(fountain grass)	X	<1>
Poa annua L.	(annual bluegrass)	X	<1>
Saccharum officinarum L.	(sugar cane)	P	--
Setaria gracilis Kunth	(yellow or perennial foxtail)	X	<1>
Setaria palmifolia (J. Koenig) Stapf	(palmgrass)	X	<1>
Setaria verticillata (L.) P. Beauv.	(bristly foxtail)	X	--
Sporobolus africanus (Poir.) Robyns & Tournay	(smutgrass)	X	--
Vulpia myuros (L.) C.C.Gmelin	(rat tail fescue)	X	--
ZINGIBERACEAE (ginger family)			
Hedychium flavescens Roscoe	(yellow ginger)	X	<1>

EXPLANATION OF TABLE 2 COLUMN HEADINGS AND SYMBOLS:

STATUS:

E = endemic (native to the Hawaiian Islands and not occurring naturally elsewhere).

I = indigenous (native to the Hawaiian Islands and elsewhere).

P = Polynesian introduction.

X = naturalized exotic (non-native species of accidental or deliberate introduction).

Table 2 (continued).

NOTES:

<1> = Observed in both 2000 and 2010 surveys.

<2> = Observed in 2010 survey, but not reported in 2000 survey.

<3> = Noted by the arborist (Kraus, 2009).

<4> = These reported species (Kraus, 2009) may be the same plants as reported previously (*AECOS*, 2001): *Elaeodendron orientale = Olea europaea* spp*. cuspidata; Eucalyptus saligna = E. globulus; Acacia mearnsii = A. paramattensis; Eucalyptus pilularis = E. camaldulensis.*

Stream Hydrology

Although Waikoloa is listed as a perennial stream (Hawaii Cooperative Park Service Unit. 1990), its flow characteristics are complex. Within the project area, the stream is interrupted, consisting of isolated pools that link together during rainy periods to form a more continuous aquatic feature. There are ample outcrops of bedrock that accumulate pooled water, and some large pools may be seep or spring fed. Even during periods when water is flowing within the stream bed in the project area, it is not often that this flow continues as surface flow all the way to the ocean. Freshet flows of such a magnitude occur very infrequently. Further complicating the situation, at least as observed during our 2000 surveys, was a leaking pipe located near Puu Opelu Road (Fig. 3). This pipe appears to be used for moving irrigation water from storage reservoirs upslope on Kohala Mountain to Parker Ranch lands southeast of the stream, and turned on for intermittent periods each day. Water leaking from this pipe on 2000 was sufficient to establish flow much of the way to the lower end of the proposed Trails and Greenways corridor near South Kohala Estates Subdivision.

Water Quality

Water within Waikoloa Stream at the times of our field surveys consisted of either standing, isolated pools or flowing water clearly arising from a leak in a transmission pipe across the stream — the origin of this water was not investigated. Consequently, water samples representing the stream in the project area" were collected from Keanuʻiʻomanö Stream under the Route 19 highway bridge (Waiaka Bridge) on two separate occasions as indicated in Table 5. This location is upstream of the lower end of the proposed Trails and Greenways corridor.



Figure 3. Right bank of Waikoloa Stream near Puu Opelu Rd. Water transmission pipe that was the source of most of the flow observed in 2000 below this point appears in background. No flow was occurring at this time (June 5, 10:25 AM), although flow started sometime within the next 30 minutes.

The water quality results show stream water of exceptional quality. All of the values are close to or within the normal range for streams with minimal anthropogenic influences. Turbidity is very slightly elevated, as is the total nitrogen (TN). Hawaii Administrative Rules (HAR) §11-54-05.2 (State water quality regulations) establish that a dry season turbidity mean value should be under 2.0 and TN mean should be under 200 µg N/l for compliance. Note that these are average values (geometric means, actually) and therefore the fact that our values are close to these "limits," only suggest that the stream water quality may be just over or just under these specific standards if additional samples were collected over time. All other values measured are below the respective standards. Turbidity and total N standards are least often met by streams in the State of Hawaiʻi.

Table 3. Some basic water quality characteristics of Keanuʻiʻomanō Stream, Island of Hawaiʻi (2000).

	Time sampled	Location	pH (pH units)	Cond. (µmhos/cm)	Turb. (ntu)	TSS (mg/l)
Sta. 1					-	
5-23-00	14:30	Rte. 19	----	32.4	----	1.2
6-06-00	13:45	"	7.36	35.6	2.46	1.4

	Time sampled	Location	Nitrate + nitrite (µg N/l)	Ammonia (µg N/l)	Total N (µg N/l)	Total P (µg P/l)
Sta. 1						
5-23-00	14:30	Rte. 19	----	----	199	17
6-06-00	13:45	"	4	2	191	24

---- Analysis not done (sample for this analysis not collected at this date/time)

Considering the elevation (over 700 m or 2300 ft ASL) of the project area compared with most stream systems in the Hawaiian Islands, it was thought stream temperature recordings would be of some interest. Because small, natural streams typically reflect local air temperature with moderation of daytime extremes, the cooler climate of the Waimea area should result in cooler water temperatures, even during the "summer" months. Recording temperature probes were placed in Waikoloa Stream in a deep, isolated pool near the upper end of the project area and in flowing water under the highway bridge on Keanuʻiʻomanō Stream (Sta. 1). Results are summarized in Table 4.

Table 4. Summary of temperature (ºC) recording probe setup in Waikoloa and Keanuʻiʻomanō streams, June 2000.

RECORDING PROBE	MEAN ± STD. DEV.	MIN	MAX	N ~ (DAYS)
Waikoloa Stream				
May 22-23, 2000	**16.2** ± 0.14	16.0	16.3	96 (2)
Keanuʻiʻomanō Stream				
May 22-23, 2000	**18.8** ± 2.22	16.6	24.4	84 (2)

June 5 - 6, 2000	**19.0** ± 3.58	17.1	36.5	110 (2)

The difference in temperature between the recording made in Waikoloa Stream (at 815 m ASL) and that in Keanuʻiʻomanō Stream (a 735 m ASL) partly reflects the differences in elevation of the two sites and the minimal solar input at the Waikoloa site. The Waikoloa Stream site is a moderately deep, shaded pool that barely changed temperature over 24 hrs (Fig. 4), whereas the probe in flowing Keanuʻiʻomanō Stream, demonstrates a typical diurnal cycle of daytime warming of some 8 Cº on May 22-23 (Table 4).

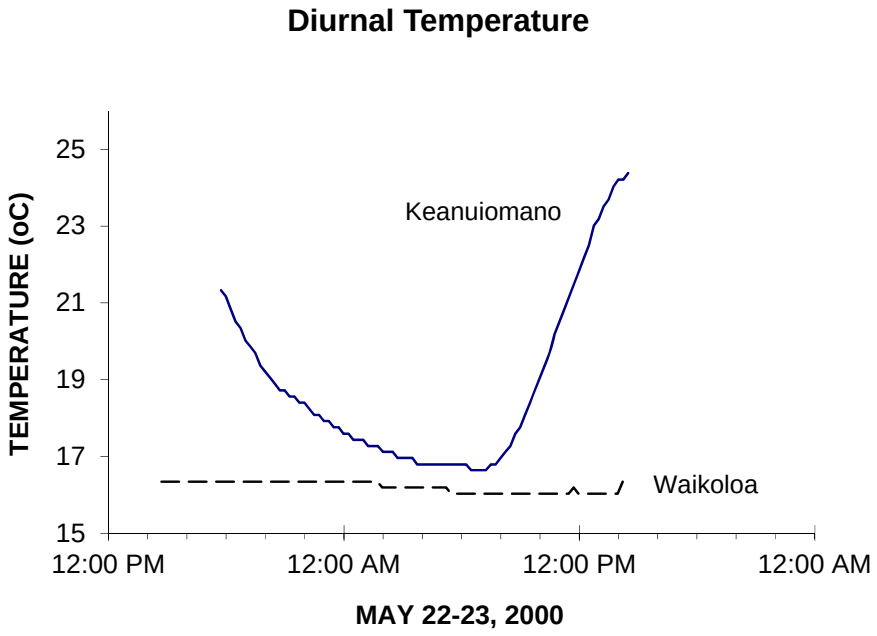


Figure 4. Temperature recordings for May 22-23, 2000 in Waikoloa and Keanuʻiʻomanō Streams near Kamuela.

The temperature recorded on June 5-6,2000 at the Keanuʻiʻomanō Stream location (Fig. 5) provided a curious mix, with June 5 showing minimal diurnal variation and June 6 temperature rising steeply through the day, even more steeply than was the case on May 23. Although variation in solar input (cloudy vs. cloudless day) might explain the difference, a more likely cause is variation

in stream flow related to stream withdrawals or inputs further up slope. A USGS gaging station (No. 16756500) located on Keanuʻiʻomanō Stream just upstream of the Waiaka Bridge might provide a record of the variation.

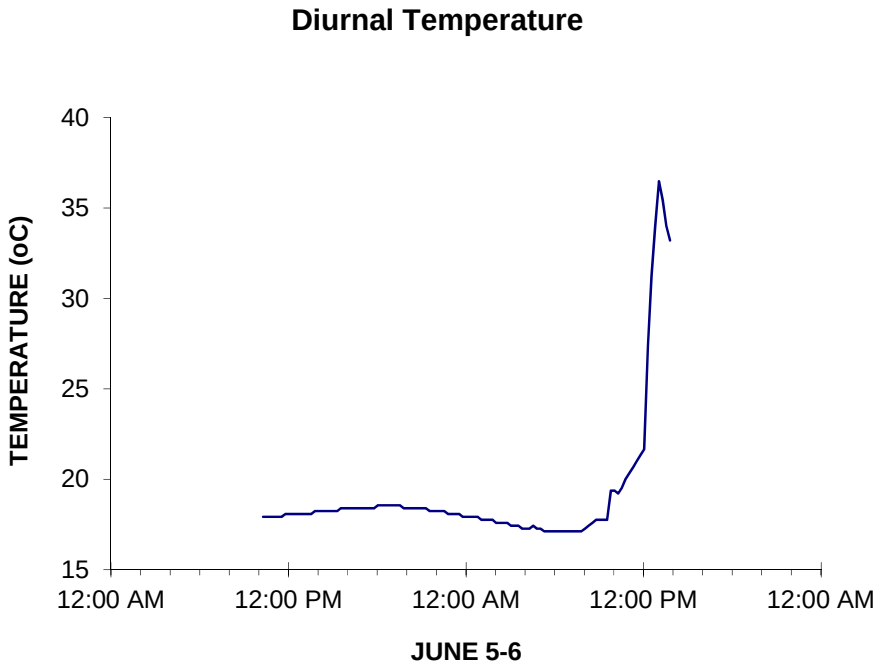


Figure 5. Temperature recording for June 5-6, 2000 in Keanuʻiʻomanō Stream near Kamuela.

Aquatic Biota

Although flowing water of good volume was present in Waikoloa Stream at times during the 2000 field survey, flow was limited to the stream segment below a water transmission pipe (Fig. 3, above) to a point not far downstream from the County landfill (at least 2 km or 1.2 mi along the stream bed). Most of the stream bed of Waikoloa Stream, however, is cutting downward through highly resistant basalt, and basins and potholes are plentiful, capturing the intermittent flow and/or water from rains in pools of various sizes and permanence all along the reach within the project area. Below Waimea Town, Waikoloa Stream becomes increasingly dry during all but major storm flows

(freshets). That the stream loses considerable erosive power downstream is very evident by the stream bed becoming clogged with sediment and vegetation before it joins Keanuʻiʻomanō Stream (see AECOS Consultants, 2000).

A December 2001 survey was made of Waikoloa and Keanuʻiʻomanō streams by Englund, Preston, and Arakaki (2002) for the DHHL Lālāmilo Project, located at the west end of the WTG project. Stream areas surveyed extended upstream into Waimea Town, thus encompassing all of the WTG project area. At the time of this survey both streams were described as "fully flowing." Aquatic insect sampling was emphasized, using the methodology described in Englund and Preston (1999).

Given the intermittent nature of the flowing water, the aquatic macrofauna of this stream system within the project area is rather sparse. Clearly, aquatic insects with their adult stage capable of long-distance dispersion, have the best opportunity to colonize the isolated bodies of water encountered, and a significant portion of the fauna listed in Table 5 is aquatic insects. Adult dragonflies, both green darner (*Anax junius*) and globe skimmer (*Pantala flavescens*), were regularly encountered flying along the stream bed. Much less often seen, perhaps because of strong winds during the field visits, were bluet damselflies (*Enallagma civile*). A native *Megalagrion* (*M. blackburni*) damselfly was encountered in 2000 along Waikoloa Stream at elevations near 760 m (2500 ft) ASL, within the project area. This species is a relatively strong flier, and adults are often observed far from breeding streams. Immatures of this species prefer swift stream waters (Polhemus and Asquith, 1996), and most of the population lives further upslope from the project area.

Sampling for damselflies (Odonata) was of particular interest in both the 2000 and 2001 stream surveys because two endemic Hawaiian species are now listed as endangered (USFWS, 2010a) and a number of others are under consideration for listing. The two species of *Megalagrion* listed as endangered are the Flying Earwig Hawaiian Damselfly (*M. nesiotes*) and Pacific Hawaiian Damselfly (*M. pacificum*; USFWS, 2010a). Four species of *Megalagrion* are candidate species (USFWS, 2009): *M. leptodemus*, *M. nigrohamatum nigrolineatum*, *M. oceanicum*, and *M. xanthomelas*. The first three are Oʻahu endemics, only known from that island. *M. xanthomelas*, the orangeblack Hawaiian damselfly, is locally abundant on Molokaʻi, Lanaʻi, and Hawaiʻi. This species tends to breed in coastal wetlands fed by basal springs or in the lower reaches of perennial streams, although will opportunistically exploit temporary pools bordering flashy streams. Eggs are laid on aquatic vegetation (Polhemus and Asquith, 1996).

Historically, the flying earwig Hawaiian damselfly (*M. nesiotes*) was known from the islands of Hawaiʻi and Maui. The species has not been seen on Hawaiʻi for

over 80 years, although extensive surveys within apparently suitable habitat in the Kaʻu and Olaʻa areas were conducted from 1997 to 2008. The last observation of the species on Maui was in 2005, despite surveys from 1993 through 2008 at several of its historically occupied sites. The 2005 population was associated with *uluhe* fern on a rocky talus slope (USFWS, 2009a). Not much is known about the breeding biology of *M. nesiotes*; what is known suggests this species breeds in "scattered pockets of water [in the forest] or in the bases [leaf axils] of leaves of tropical plants" (Perkins, related by Kennedy, 1934). Adults appear not to associate with streams, so an impact to this species from the trail project is very unlikely.

The Pacific Hawaiian damselfly (*M. pacificum*) is now believed to be extirpated from the islands of Oʻahu, Kauaʻi, and Lanaʻi (Polhemus and Asquith, 1996). It was believed that the species had been extirpated from the Island of Hawaiʻi when in 1998 a population was discovered within a small stream along the Hamakua Coast (Englund, 1998). *M. pacificum* breeds in seepage fed pools bordering the terminal reaches of perennial streams (Moore and Gagne, 1982; Polhemus and Asquith, 1996). They seem to prefer areas of dense vegetation, and seem not to stray far from breeding pools. This habitat is not present in the project area.

Aquatic snails, flatworms, and leeches are present in the stream in the project area, indicating some constancy of aquatic habitat, even if only as small, standing pools. The alga, *Spyrogyra* sp., is also prominent in some pools. No fishes of any kind were observed in the project area, although both guppies (*Poecilia reticulata*) and mosquitofish (*Gambusia affinis*) are reported from the streams here (Table 5). Further, surveys by DLNR-DAR (D. Kuamoʻo, Hawaii, pers. comm. cited in Englund et al., 2002) note that the endemic goby, *ʻoʻopu ʻalamoʻo* (*Lentipes concolor*) uses these stream channels to access the permanently flowing, upper reaches of Waikoloa and Keanuʻiʻomanō Streams. Apparently, *ʻoʻopu ʻalamoʻ* has been found in several permanent spring-fed pools downstream in Keanuʻiʻomanō Stream in or near the project area (D. Kuamoʻo, *ibid*).

Vertebrates

Birds — During the 2000 survey a total of 400 individual birds of 18 species, representing 11 separate families were detected during station counts (Table 8). An additional three species—Wild Turkey (*Meleagris gallopavo*), Barn Owl (*Tyto alba*), and Northern Mockingbird (*Mimus polyglottos*)—were recorded as incidental observations while transiting between station counts. During that survey two species, House Finch (*Carpodacus mexicanus*) and Sky Lark (*Alauda a. arvensis*), represented slightly more than 50% of the total number of birds

detected. House Finch was the most common species detected during stations counts and accounting for 24% of the total number of birds recorded.

Table 5. Checklist of aquatic fauna observed or previously reported from Waiulaula Gulch, Waikoloa and Keanuʻiʻomanō streams.

Species	Common name	Status	QC Code	Abundance
ALGAE				
CHLOROPHYTA, ZYGNEMATALES	(green algae)			
ZYGNEMATACEAE				
Spirogyra sp.		?nat	10	A
INVERTEBRATES				
TURBELLARIA, TRICLADIDA	flatworms			
PLANARIIDAE				
indet.		nat	10	R
ANNELIDA, HIRUDINEA	leeches			
indet.		nat	10	C
MOLLUSCA, GASTROPODA	(mollusks)			
PHYSIDAE				
Physa virgata	pond snail	nat	10	U
ARTHROPODA, CRUSTACEA	(crustaceans)			
OSTRACODA				
indet.	clam shrimp		01	--
DECAPODA, ATYIDAE				
Atyoida bisulcata Randall	ʻopae kalaʻole	**end**	01	--
ARTHROPODA, INSECTA	(insects)			
COLEOPTERA, DYTISCIDAE				
Rhantus gutticollis		nat	02	--
Rhantus cf. *pacificus* (Boisduval)	larvae	**end**	10	U
DIPTERA, CERATOPOGONIDAE				
Forcipomyia hardyi		**end**	02	--
DIPTERA, CHIRONOMIDAE				
Chironomus sp.		**?end**	02	--
Cricotopus bicinctus (Meigen)		nat	02	--
Orthocladius grimshawi		**end**	02	--
DIPTERA, EPHYDRIDAE				
Scatella bryani		**end**	02	--
Scatella clavipes (Wirth)		**end**	02	--
DIPTERA, MUSCIDAE				
Lispe sp.		**end**	02	--
ODONATA, AESHNIDAE				
Anax junius (Drury)	green darner	nat	10, 02	C
Anax strenuous Hagen	giant Hawaiian darner	**end**	02	--
ODONATA, LIBULELLIDAE				

Crocothemis servilia Drury	scarlet skimmer	nat	02	--
Orthemus ferruginea (Fabricius)		nat	02	--
Pantala flavescens (Fabricius)	globe skimmer, adult	**ind**	10	C

Table 5 (continued).

Species	Common name	Status	QC Code	Abundance
ODONATA, COENAGRIONIDAE				
Enallagma civile (Hagen)	bluet, adult	nat	10, 02	R
Megalagrion blackburni McLachlan	Blackburn's damselfly	**end**	21	R
VERTEBRATES				
VERTEBRATA, PISCES	(fishes)			
POECILIIDAE				
Poecilia reticulata Peters	guppy, rainbow fish	nat	01	--
Gambusia affinis (Baird & Girard)	mosquitofish	nat	02	--
VERTEBRATA, AMPHIBIA	(frogs & toads)			
BUFONIDAE				
Rhinella marina (L.)	cane toad, tadpole	nat	10	C
RANIDAE				
Rana catesbeiana Shaw	bullfrog, adult	nat	10	C

KEY TO SYMBOLS IN TABLE 5

Status:

nat. - naturalized. An introduced or exotic species.
ind. - indigenous. A native species also found elsewhere in the Pacific.
end. - endemic - A native species found only in the Hawaiian Islands.

QC Code:

01 – Observed in the stream system and reported in *AECOS* Consultants (2000) or collected by Dr. S. Montgomery downstream of the project area (Montgomery, 2000).
02 – Reported from the survey of Englund, Preston, and Arakaki (2002).
10 - Observed in the field by the aquatic biologist on May 22-23 or June 5-6, 2000.
20 – Collected May 22-23 or June 5-6, identified in the laboratory; specimen(s) not saved.
21 – Collected May 22-23 or June 5-6; identified in the laboratory; voucher specimen(s) saved.

Abundance categories:

R – Rare - only one or two individuals seen.
U - Uncommon - several to a dozen individuals observed.
C - Common - Seen everywhere, although generally not in large numbers.
A - Abundant - found in large numbers and widely distributed.
P – Present - noted as occurring, but quantitative information lacking.

Given the habitat conditions present on the site in 2010, it is not surprising that bird numbers and diversity were significantly lower during the 2010 survey than those recorded in 2002. During this latest survey, we only recorded 117 individual birds representing 16 separate species (Table 6). Two species House Finch and Common Myna (*Acridotheris tristis*) accounted for 47% of the total number of birds recorded during this latest survey, House Finch was once again the most frequently recorded species, representing slightly more than 27% of the total number of birds recorded.

Table 6. Avian Species Recorded Waimea Greenways 2000 & 2010

Common Name	Scientific Name	ST	2000	2010
	GALLIFORMES			
	PHASIANIDAE - Pheasants & Partridges			
	Phasianinae - Pheasants & Allies			
Grey Francolin	*Francolinus pondicerianus*	A	0.94	0.18
Black Francolin	*Francolinus francolinus*	A	0.94	0.09
Erckel's Francolin	*Francolinus erkelii*	A	0.26	-
Chicken (domestic)	*Gallus Sp?*	AD	0.65	-
Common Peafowl	*Pavo cristatus*	A	0.06	-
	Meleagridinae - Turkeys			
Wild Turkey	*Meleagris gallopavo*	A	**I-1**	
	CHARADRIIFORMES			
	CHARADRIIDAE - Lapwings & Plovers			
	Charadriinae - Plovers			
Pacific Golden-Plover	*Pluvialis fulva*	IM	-	0.36
	INCERTAE SEDIS			
	PTEROCLIDIDAE - Sandgrouse			
Chestnut-bellied Sandgrouse	*Pterocles exustus*	A	0.35	0.18
	COLUMBIFORMES			
	COLUMBIDAE - Pigeons & Doves			
Rock Pigeon	*Columba livia*	A	0.12	0.18
Spotted Dove	*Streptopelia chinensis*	A	0.47	0.18
Zebra Dove	*Geopelia striata*	A	0.88	0.27
	STRIGIFORMES			
	TYTONIDAE - Barn Owls			
Barn Owl	*Tyto alba*	A	**I-1**	-
	PASSERIFORMES			
	ALAUDIDAE - Larks			

Sky Lark	*Alauda arvensis*	A	4.65	1.09
	ZOSTEROPIDAE - White-eyes			
Japanese White-eye	*Zosterops japonicus*	A	2.45	0.91

Table 6 (continued).

Common Name	**Scientific Name**	**ST**	**2000**	**2010**
	TIMALIIDAE - Babblers			
Red-billed Leiothrix	*Leiothrix lutea*	A	0.41	-
	MIMIDAE - Mockingbirds & Thrashers			
Northern Mockingbird	*Mimus polyglottos*	A	**I-1**	0.18
	STURNIDAE - Starlings			
Common Myna	*Acridotheres tristis*	A	2.53	1.36
	CARDINALIDAE - Cardinals Saltators & Allies			
Northern Cardinal	*Cardinalis cardinalis*	A	0.82	0.36
	FRINGILLIDAE - Fringilline and Carduline Finches & Allies			
	Carduelinae - Carduline Finches			
House Finch	*Carpodacus mexicanus*	A	5.59	2.91
	PASSERIDAE - Old World Sparrows			
House Sparrow	*Passer domesticus*	A	2.18	0.45
	ESTRILDIDAE - Estrildid Finches			
African Silverbill	*Lonchura cantans*	A	0.24	0.36
Nutmeg Mannikin	*Lonchura punctulata*	A	0.35	0.36

Key to Table 6:

ST	Status
A	Alien Species – Introduced to Hawaiʻi by humans
AD	Alien Domestic Species – Not known to be established on the Island Hawaiʻi
IM	Indigenous Migratory Species – Native migratory species does not nest in Hawaiʻi
I -	Incidental Observation followed by number of individuals detected
2000	Relative Abundance - Number of individual birds recorded divided by stations (17)
2010	Relative Abundance - Number of individual birds recorded divided by stations (11)

Terrestrial Mammals — During the 2000 survey we recorded a total of six mammalian species. Domestic dogs (*Canis f. familiaris*) were heard or seen at every avian count station sampled. The near ubiquitous, small Indian mongoose (*Herpestes a. auropunctatus*) and cat (*Felis catus*), were seen within Waimea town, but were not seen in the pasture areas south of Puʻu Opleu Road. Numerous domestic cattle (*Bos taurus*) were encountered within the pasture areas along the corridor. Two groups of three goats (*Capra h. hircus*) were seen staked in separate locations along the upper corridor.

Scat and tracks of domestic dog, small Indian mongoose, cat, domestic cattle and horse (*Equus c. caballus*) were encountered along the bulk of the proposed main corridor. Additionally we found skeletal remains of dog, domestic cattle and European house mouse (*Mus musculus domesticus*) east of the Kamuela refuse transfer station. The latter were found in several owl pellets. During the 2010 survey we saw one live cow, three live horses, and several feral goats. We also encountered 17 dead cows, one dead horse, and one dead mongoose, which graphically demonstrate the severity of the ongoing drought conditions.

Hawaiʻiʻs sole endemic terrestrial mammalian species, the endangered Hawaiian hoary bat, or *ʻope'ape'a*, was not detected during the course of either of the surveys conducted within the project corridor.

Discussion

Vegetation

During this survey, no plants which are candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543), were seen, and none have been documented historically from the proposed project site (although listed species are reported from this general part of the island). None of the trees on the site are, nor could be, considered candidates for the county exceptional tree program. The vegetation is neither pristine nor unique and is not considered worthy of preservation. The large non-native trees in the area have been examined by Kraus (2009). These trees have no particular botanical value, nor do they enjoy statutory protection. However, trees provide numerous amenities beneficial to the purposes of the project and these amenities will need to be weighed before removal of any large, healthy trees along the trail route.

Many natives trees and shrubs, including at least one listed species, have been planted at Ula Laʻau (garden), some in close proximity to the trail. In particular, *hala pepe* or *Pleomele* sp (some species are listed or considered "candidates" for listing), *mau hau hele* or *Hibiscus brackenridgei* (endangered), and *koki'o ke'ike'o* (*Hibiscus arnottianus*; a subspecies is listed as endangered) were seen in the area where the trail is planned to connect to the existing WTG trail.

Aquatic Biota

While aquatic habitats in the project area are sometimes limited to isolated pools, these are present in moderate abundance, ranging from water-filled

potholes to large ponds approaching (or in at least one case, apparently exceeding) 2 m (6 ft) in depth. A 2 km long segment between Puu Opelu Road and a point downslope of the County landfill on the other hand, had a very normal, perennial stream appearance, with a depauperate fauna (no fishes), reflecting the fact that water flow is, in fact intermittent on a daily basis. Stream conditions continue to get drier downslope (AECOS Consultants, 2000), but presumably are wetter upslope of the project area. Some segments of the streams tributary to Waiulaula Gulch are perennially flowing. The ecology of these perennial segments is poorly known, although they are not particularly remote.

The proposed project to construct a trail system with scattered stream crossings should have no impact on this fauna, since opportunities for migrations up or down Waiulaula Gulch and Waikoloa Stream would be limited to times and conditions when runoff derived flows would be substantial and small bridge or culvert structures insignificant if properly designed. The project would include one crossing of Keanuʻiʻomanō Stream. Presumably this would require construction of a bridge or a substantial culvert. In all cases, bridges with minimal support within the stream bed would be the environmentally preferred. However, culverts that have either unlined bottom surfaces (i.e., the natural bed left exposed) or a surface that is not elevated above the natural stream bed should also avoid adverse impacts on native, anadromous stream fauna.

The native damselfly (*M. blackburni*), while rare in the project area, is one of the more commonly encountered native species of *Megalagrion*. This is a somewhat relative statement, however. Alien or introduced damselflies are far more common in developed areas and lowlands of the Hawaiian Islands than any of the native species.

No federally listed as Threatened or Endangered, or rare or imminently threatened species of aquatic animals were found in or around the areas of Waikoloa and Keanuʻiʻomanō Streams assessed during the surveys by *AECOS* (2001) and Englund et al. (2002). *Lentipes concolor*, reported from the area streams by DKNR-DAR, is considered a "species of concern" (SoC) by USFWS (2010b).

Vertebrates

Avian Resources — The findings of these surveys are consistent with at least five other avian surveys that I have conducted on various portions of the subject property (David, 1996, 2000, 2004, 2006; *AECOS*, 2001), as well as with several other surveys conducted within similar habitat in the South Kohala District, or

on lands that are adjacent to the project site within the recent past (David, 2002, 2005, 2009, 2010a).

All but one of the avian species recorded within the project area during both the 2000 and 2010 surveys considered to be alien to the Hawaiian Islands (Table 8). The single native species recorded was Pacific Golden-Plover (*Pluvialis fulva*). The Pacific Golden-Plover is an indigenous, migratory, shorebird species that nests in the high Arctic during the late spring and summer months, returning to Hawaiʻi and the Tropical Pacific to spend the fall and winter months each year. This bird usually leaves Hawaiʻi for the flight back to the Arctic in late April or the very early part of May each year.

Although not detected during this survey, it is possible that small numbers of the endangered endemic Hawaiian Petrel (*Pterodroma sandwichensis*) and the threatened Newell's Shearwater (*Puffinus auricularis newelli*) over-fly the project site between the months of April and December (Banko, 1980a, 1980b; Harrison, 1990; Day et al., 2003a). Recent surveys using ornithological radar have recorded these species flying inland from Kawaihae (Day et al., 2003a).

Hawaiian Petrels were formerly common on the Island of Hawaiʻi (Wilson and Evans, 1890–1899). This pelagic seabird reportedly nested in large numbers on the slopes of Mauna Loa and in the saddle area between Mauna Loa and Mauna Kea (Henshaw, 1902), as well as at the mid-to-high elevations of Mount Hualālai. It has, within recent historic times, been reduced to relict breeding colonies located at high elevations on Mauna Loa and, possibly, Mount Hualālai (Banko, 1980a; Banko et al., 2001; Cooper and David, 1995; Cooper et al., 1995; Day et al., 2003a;, Harrison, 1990; Simons and Hodges, 1998). Hawaiian Petrels were first listed as an endangered species by the USFWS in 1967 and by the State of Hawaiʻi in 1973 (USFWS, 1967; DLNR, 1998)

Newell's Shearwaters were formerly common on the Island of Hawaiʻi (Wilson and Evans, 1890–1899). This species breeds on Kauaʻi, Hawaiʻi, and Molokaʻi. Newell's Shearwater populations have dropped precipitously since the 1880s (Banko, 1980b; Day et al., 2003b). This pelagic species nests high in the mountains in burrows excavated under thick vegetation, especially *uluhe* (*Dicranopteris linearis*) fern. Newell's Shearwater was listed as a threatened species by the USFWS in 1975 and by the State of Hawaiʻi in 1973 (USFWS, 1975; DLNR, 1998).

The primary cause of mortality in both Hawaiian Petrels and Newell's Shearwaters is thought to be predation by alien mammalian species at the nesting colonies (USFWS, 1983; Simons and Hodges, 1998; Ainley et al., 2001; Hue et al., 2001). Collision with man-made structures is considered to be the

second most significant cause of mortality of these seabird species in Hawaiʻi. Nocturnally flying seabirds, especially fledglings on their way to sea in the summer and fall, can become disoriented by exterior lighting. When disoriented, seabirds often collide with manmade structures and, if they are not killed outright, the dazed or injured birds are easy targets of opportunity for feral mammals (Hadley, 1961; Telfer, 1979; Sincock, 1981; Reed et al., 1985; Telfer et al., 1987; Cooper and Day, 1998; Podolsky et al., 1998; Ainley et al., 2001). No suitable nesting habitat occurs within or close to the proposed project site for either of these pelagic seabird species.

Mammalian Resources — The findings of the surveys are consistent with at least five other mammalian surveys conducted on various portions of the subject property (David, 1996, 2000, 2004, 2006; AECOS, 2001), as well as with several other surveys conducted within similar habitat in the South Kohala District, or on lands that are adjacent to the project site within the recent past (David, 2002, 2005, 2009, 2010a).

Just as the extreme drought has resulted in the loss of cover, feeding resources, and water for avian species, these same conditions have also radically altered the habitat from a terrestrial mammalian perspective. Currently there is very little vegetation on the site suitable to sustain anything but the hardiest of feral ungulates.

Although no rodents were detected during the course of the surveys, it is probable that at least a few of the four established alien Muridae known from the Island of Hawaiʻi: roof rat (*Rattus r. rattus*), Norway rat (*Rattus norvegicus*), Polynesian rat (*Rattus exulans hawaiiensis*), and European house mouse, use resources within the project area on occasion, as all are human commensal species. No species currently listed, or proposed for listing under either the federal or state endangered species programs were detected during the course of this survey (DLNR, 1998; USFWS, 2010).

Given the nature of the highly disturbed alien dominated grasslands present on the subject property, it is not expected that development and operation of the proposed Waimea Greenways project will result in significant impacts to native avian or mammalian species that may be present within the area. From a native avian and mammalian perspective, there is nothing special about this site, and in fact the current conditions on the site do not support any protected avian and mammalian species.

Hawaiian Petrel and Newell's Shearwater — The principal potential impact that construction and operation of the proposed project poses to Hawaiian Petrels and Newell's Shearwaters is the increased threat that birds will be

downed after becoming disoriented by lights associated with the project. The two main areas that outdoor lighting could pose a threat to these nocturnally flying seabirds is if, 1) during construction if it is deemed expedient, or necessary to conduct nighttime construction activities, 2) street lights and other outdoor lighting that may be necessary or desirable following build-out of the project.

Conclusions and Recommendations

The watershed within and around the WTG project area has been heavily disturbed by grazing and development for over 150 years. Aquatic habitats and biota contained within this area remain relatively pristine, albeit apparently intermittent (Englund, et al., 2002).

Efforts should be made to minimize impacts to the stream channels during construction as native, amphidromous stream animals, especially *Lentipes concolor*, use these stream channels to access the permanently flowing, upper reaches of Waikoloa Stream. If a culverts are required where the trail crosses the stream(s), these need to be constructed with the bottom of the structure completely flush with the natural streambed to avoid blocking upstream faunal migrations.

Best management practices should be employed during construction to prevent soil erosion into the stream channel that would eventually make its way to the ocean and potentially impacting coral bottom areas. If any work needs to be done in or around the stream channel during construction of the trail, it is recommended that this be conducted during the drier months when the streams are not flowing and runoff from construction areas would be minimal.

If nighttime construction activity, either actual construction activity or equipment maintenance, is proposed during the construction phase of the project, all associated lights should be shielded, and if large flood/work lights are used, they should be placed on poles that are high enough to allow the lights to be pointed directly towards the ground.

If streetlights are installed in conjunction with the project, it is recommended that lights be shielded to reduce the potential for interactions of nocturnally flying Hawaiian Petrels and Newell's Shearwaters with external lights and man-made structures (Reed et al., 1985; Telfer et al., 1987). This minimization measure would serve the dual purpose of minimizing the threat of disorientation and downing of Hawaiian Petrels and Newell's Shearwaters, while at the same time complying with the Hawaii County Code § 14 – 50 *et seq.* which requires the shielding of exterior lights so as to lower the ambient glare

caused by unshielded lighting to the astronomical observatories located on Mauna Kea.

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Appendix C

Tree Risk Assessment

Tree Works, Inc., Michael M. Kraus, Consulting Arborist

April 30, 2009

Michael M. Kraus
Consulting Arborist

April 30, 2009

Waimea Trails and Greenways

Tree Risk Assessment

Prepared by:
Michael M. Kraus ASCA

TREE WORKS, INC
P O Box 277
Hilo, HI 96721



Site Location

The section of the trail covered in this tree risk assessment begins near the end of Kahawai Street and follows the course of Waikoloa Stream to the bridge where the stream flows under Lindsay Road. The area the trail runs through is a largely unimproved corridor along the stream. Some parts of this trail pass through heavily wooded areas. The most heavily wooded areas with the largest trees are in the upper portion of the trail from the Nature Park to Lindsay road.

The primary large trees affecting the trail include several species of Eucalyptus: Tasmanian Blue Gum (*Eucalyptus globulus),* Blackbutt Eucalyptus (*Eucalyptus pilularis),* Robusta Eucalyptus *(Eucalyptus robusta),* and Saligna Eucalyptus (*Eucalyptus saligna).* There are some Eucalyptus trees that were not identified by species; these trees may be hybrid varieties. Other significant trees along the trail route are: Ironwood trees *(Cassuarina sp)*, Cook pines *(Araucaria columnaris),* Black Wattle *(Acacia mearnsii),* False Olive *(Elaeodendron orientale)*, and Christmas Berry trees *(Schinus terebinthifolius).*

The purpose of this report is to assess the risk posed by these trees to the trail, to users of the trail and to the neighboring properties. This report also addresses the impact the construction of the trail will have on the trees.

Management recommendations for all trees that are determined to pose a significant risk to the trail, its users and the neighboring properties within the next five years are included in this report. Small trees and brush that do not have the potential to pose a risk are not addressed in this report.

Tree Works, Inc. conducted a field review and assessment of 498 large trees that pose a potential risk to the trail, its users and the neighboring properties. This assessment was restricted to the defined large trees within the trail properties and did not assess large trees on nearby properties that may present potential hazards to people or property on or off this property.

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Tree Works, Inc. identified, located, measured, and assessed each of the trees in this report. A ground-based, visual inspection and assessment of each designated tree was conducted by Tree Works, Inc. ISA Certified Arborists Michael Kraus, Thomas Wuscher, Christian Kraus, John Mayfield and Kahana Itozaki.

All of the trees covered by this report are tagged with a numbered circular one and a quarter inch diameter aluminum disk attached to the tree with a stainless steel ring nail. The number the tree is tagged with is the number used to identify the tree in the report.

The trail site is a narrow strip of land and many of the 357 trees recommended for removal stand in or very close to the proposed trail. The size and shape of the site and the trail and the size of the trees determines that all of the large trees on the site pose a potential risk to the trail.

The tree and site criteria used to identify and evaluate the risk posed by the individual trees included:

Tree species: This is significant for identification and for the known strengths and weaknesses of the different species.

Tree size, DBH (diameter breast height), height and crown spread.

Potential targets; this includes the trail and its users and the surrounding properties and infrastructure.

Tree form and crown class: Many of the large trees along this trail are the remnants of a larger forest that was removed in the last ten years. Trees in large stands develop asymmetrical crowns due to competition from the surrounding trees. They also develop trunks that lack taper and root systems adapted to being supported and protected by the surrounding trees. Many of the trees possess a trunk lean; in some cases this lean is severe. The unbalanced weight distribution and trunk lean affect the direction a tree will fall. A tree will usually fall in the direction of the lean and crown weight.

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Tree health: Some of the trees that were assessed were dead and some were in declining health. This may be attributed to the age and species of tree, competition from the surrounding trees and the recent drought.

Adverse site conditions: The construction of the trail and the removal of the surrounding forest are the primary site condition affecting these trees.

Root defects: Most of the root defects observed was caused by the stream eroding the roots of the trees. There are many trees on this site that have fallen due to the stream eroding the soil around the roots.

Trunk defects: Some of the trees have evidence of decay in the trunk. Some trees have decayed to the point where they have failed; others appear to be close to the point of failure.

Scaffold limb defects: Many of the trees assessed have signs of past limb failure. Robusta eucalyptus is notorious for dropping large limbs. Some of the trees have broken limbs hanging in the trees.

Evidence of previous tree and limb failures: Many of the assessed trees show signs of previous major limb or top failure. There are also many whole trees on this site that have failed. The large number of stumps and logs on the ground in some parts of the site is evidence that many trees have been removed from this site.

The goal of the risk evaluation process is to assess the danger associated with a tree. By conducting a systematic, through evaluation trees and the parts of a tree that are likely to fail are identified so that they can be removed or treated to reduce the risk. The goal of the evaluation is fulfilled solely by performing the inspection and recording the observations.

The management recommendations made for the individual trees are just that; they are recommendations. If the trail is to be built where an as it is designed several hundred trees will have to be removed. For the trees that remain on the site after the trail is built some risk will remain. Some level of risk will always be present when people live among trees. The decision of how much risk is tolerable remains with the owner and manager of the trail.

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This report its observations and recommendations are submitted with the following understanding:

Arborists are specialists in tree management and care who use their education, knowledge, training and experience to inspect and assess tree health and condition, and to identify measures that reduce risk of personal injury and property damage from trees.

Arborists cannot detect every condition that could possibly lead to the structural failure or decline in the health of a tree. Trees are living, dynamic organisms and as such are constantly changing. Trees can fail in ways that we do not fully understand and cannot always predict. Conditions that can lead to failure can be hidden underground or within trees. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time.

Recommended pruning or removal of trees may involve considerations beyond the scope of the arborist's services such as cost, public sensitivity, and other issues.

Trees can be managed, but they cannot be controlled. The only way to eliminate all risk associated with trees is to eliminate all trees.

Clients may choose to accept or disregard the recommendation of the arborist, or to seek additional advice.

The following section of individual tree assessments begins at the upper end of this trail segment at Lindsay road and proceeds down to the lower end at Kahawai Street. This directional flow is broken from tree number 423 to tree number 439. These trees are at the upper end of the trail.

For any questions or for further information regarding this risk assessment and report please contact Michael Kraus at the numbers listed below or at Michael@treeworksinc.com.

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Appendix D
Section 7, Endangered Species Act Consultation

United States Department of the Interior

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

#239

In Reply Refer To:
2009-SL-0375

AUG 28 2009

Mr. Robert A. Fitzgerald
Director, Department of Parks and Recreation
101 Pauahi Street, Suite 6
Hilo, Hawaii, 96720

Subject: Species List for Waimea Trials and Greenways, Phase I, South Kohala District, Island of Hawaii (Job No. P-3595)

Dear Mr. Fitzgerald:

We are in receipt of your letter dated July 27, 2009, requesting a list of federally endangered and threatened species that may be found in the vicinity of Phase 1 of the proposed Waimea Trials and Greenways project. The proposed activities include constructing a 10-foot (3-meter) wide reinforced concrete trail for shared pedestrian and bicycling use. Phase-I is approximately 1 mile (1.6 kilometers) in length and begins at Kahawai Street and ends near the Lindsey Road Bridge in the town of Kamuela, South Kohala District, Island of Hawaii. We received your letter on July 31, 2009.

Based on information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program, and the Hawaii GAP Program, the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*), and the Blackburn's sphinx moth (*Manduca blackburni*) may occur in the project vicinity. There is no federally designated critical habitat in the project area.

We offer the following information to assist you in avoiding and minimizing project impacts to Hawaiian hoary bats and Blackburn's sphinx moth:

- Hawaiian hoary bats roost and give birth in both exotic and native woody vegetation. Although use of the project area by Hawaiian hoary bats is currently unknown, to avoid potential impacts to this species, no woody plants suitable for bat roosting should be removed or trimmed during the bat birthing and pup rearing season (July through September). If you must clear the property during the Hawaiian hoary bat pupping season, we recommend conducting biological surveys to determine if bats are present. Please contact our office regarding survey methodology.

- There are no known occurrences of Blackburn's sphinx moth's preferred native host plants in the area of your proposed project; however, the moth is known to lay eggs on

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non-native tree tobacco (*Nicotiana glauca*) plants. To pupate, Blackburn's sphinx moth larvae burrow into the soil near their host plants and can remain in a state of torpor for up to a year before emerging from the soil. Because tree tobacco may occur within the vicinity of the proposed project site, we recommend the following:

- The project area should be surveyed for the presence of tree tobacco by a qualified botanist.
- If tree tobacco plants are found, these plants should be surveyed by a qualified entomologist for the presence of Blackburn's sphinx moth eggs and larvae. Pl

Thank you for the opportunity to assist you with your proposed project. If you have any questions regarding this letter, please contact Dr. Jeff Zimpfer, Fish and Wildlife Biologist, Consultation and Technical Assistance Program (phone: 808-792-9431; email: jeff_zimpfer@fws.gov).

Sincerely,

for Loyal Mehrhof
Field Supervisor

U.S. Department of Transportation
Federal Highway Administration

Hawaii Federal-Aid Division

300 Ala Moana Blvd., Rm 3-306
Box 50206
Honolulu, HI 96850
Phone: (808) 541-2700
Fax: (808) 541-2704
http://www.fhwa.dot.gov/hidiv

November 19, 2010

In Reply Refer To:
HDA-HI

CERTIFIED MAIL
7010 1060 0000 9538 1386

Mr. Loyal Mehrhoff, Field Supervisor
U.S. Department of the Interior
Fish and Wildlife Service
Pacific Islands Fish and Wildlife Office
300 Ala Moana Blvd., Room 3-122, Box 50088
Honolulu, Hawai'i 96850

Dear Mr. Mehrhoff:

Subject: Section 7, Endangered Species Act (ES)
Request for Concurrence with "NLAA" Determination
Ke Ala Kahawai O Waimea, Waimea Trails and Greenways
Waimea, South Kohala District, Hawai'i Island
Various TMKs

The Federal Highway Administration (FHWA), in cooperation with the County of Hawai'i, wishes to inform the U.S. Fish and Wildlife Service (USFWS) of its determination that the subject project is "not likely to adversely affect (NLAA)" any listed threatened or endangered species. Moreover, there is no federally designated critical habitat within the project area. This determination has been made in accordance with Section 7 of the Endangered Species Act (ESA), and we are seeking your concurrence with our determination.

Project Overview

The *Ke Ala Kahawai O Waimea* ("stream trail of Waimea") will be a multi-use bicycle and pedestrian path extending approximately 4.5 miles through Waimea on the Island of Hawai'i. The project is proposed by the County of Hawai'i, Department of Parks and Recreation (DPR) in collaboration with the Waimea Trails and Greenways Committee of the Waimea Preservation Association. A Draft Environmental Assessment (DEA) is currently being prepared for the project in accordance with the National Environmental Policy Act (NEPA) and State of Hawai'i's Chapter 343 HRS environmental regulations.

A major objective of the *Ke Ala Kahakai O Waimea* project is to provide an alternative form of transportation linking major destination points including residential areas, schools, office and commercial areas, and recreational areas. The path will follow the meandering route of Waikoloa Stream, beginning at Church Row in Waimea Town, and heading west through urban and agricultural lands, terminating at a future County park (former Clark property) on Kawaihae Road, opposite the South Kohala View Estates subdivision (see attached figure). The path will be paved, 10 to 12 feet in width and comply with Americans with Disabilities Act (ADA) guidelines for most of its length. It will be constructed in phases as funding is available.

A separate equestrian trail may also be developed in the area west of the County refuse transfer station. The equestrian trail would roughly parallel, but be physically separated from the main path. A trail head and horse trailer parking could be constructed on State-owned land adjacent to the County Transfer station.

Coordination with the USFWS

Two recent letters have been received from the USFWS regarding this project. The first letter, dated August 28, 2009 was sent to the County Department of Parks and Recreation in response to a request for a "species list" for Increment 1 of the proposed project. Increment 1 is the first phase of the project to be developed, covering a one-mile segment between Lindsey Road and Kahawai Street. The second letter from USFWS, dated June 18, 2010, was received during the DEA early consultation period.

Both letters note that based on the information in USFWS files and data compiled by the Hawai'i Biodiversity and Mapping Program and the Hawai'i GAP program, the federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) and Blackburn's sphinx moth (*Manduca blackburni*) may occur in the project area. Blackburn's sphinx moth larvae feed upon non-native tree tobacco (*Nicotiana glauca*) and potentially other non-native host plants. The USFWS indicated that from the information on hand, it could not ascertain whether there are host plants at the proposed project site.

The endangered Hawaiian hoary bat was not detected during biological surveys conducted in 2000 and in 2010 by AECOS, Inc. Neither the Blackburn's sphinx moth nor the host tree tobacco was identified during the either of the surveys. Because the tree tobacco is fairly drought tolerant, it would have been observed during at least one of the surveys if it were present. The biologists have concluded that neither tree tobacco nor other non-native plants presently known to have potential to support Blackburn's sphinx moth larvae (USFWS, 2005[1]) presently occur in the area where vegetation will be removed. Therefore, the Blackburn's sphinx moth will not be harmed by the project.

2000 and 2010 Natural Resources Assessments

Natural resource assessments for the project were conducted in May 2000 and updated in November 2010 by AECOS, Inc. The assessments included stream biota, botanical resources,

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[1] USFWS. 2005. Recovery Plan for Blackburn's Sphinx Moth (*Manduca blackburni*). Trdion 1, U.S. Fish and Wildlife Service, Portland, OR. 125 pp.

avifauna and terrestrial mammals. The purpose of the surveys was to assess the presence of sensitive biota and habitat, defined as species listed (or candidate) as threatened or endangered by the federal government or by State administrative rules, or species comprising a community of native plants and animals regarded as special and worthy of preservation.

No threatened or endangered species were identified in any of the field studies. The findings are briefly described below.

Stream Biota. The assessment of stream biota was based on a 2000 field survey of Waikoloa Stream conducted by AECOS, Inc., and a December 2001 survey of Waikoloa and Keanu'i'omanō Streams conducted for the Department of Hawaiian Home Land's Lalamilo project.

Both the 2000 and 2001 surveys sampled for damselflies. Of the two endemic Hawaiian species of Megalagrion now listed as endangered, the Flying Earwig Hawaiian Dameselfly (*M. nesiotes*) has not been seen on Hawai'i Island for over 80 years. Because adults appear not to associate with streams, the trail would be unlikely to impact this species. The other species, the Pacific Hawaiian Damselfly (*M. pacificum*), is believed to be extirpated from the Island of Hawai'i. In addition, the preferred habitat of this species is not present in the project area.

No threatened or endangered aquatic animals were found in or around the Waikoloa or Keanu'i'omanō Stream areas during either the 2000 or 2001 surveys. It was noted that surveys conducted by the Department of Land and Natural Resources, Division of Aquatic Resources (DLNR-DAR) identified the endemic goby, *'o'opu 'alamo 'o* (*Lentipes concolor*) as using these stream channels to access the permanently flowing, upper reaches of the streams.

The proposed project could have up to nine stream crossings over Waikoloa Stream, and one crossing over Keanu'i'omanō Stream. The AECOS, Inc. study concluded that the proposed project should have no adverse impact on stream fauna, but recommended that any culverts at the crossings either have unlined bottom surfaces or a surface that is completely flush with the natural streambed, to avoid blocking upstream migrations of the *'o'opu 'alamo'o.*

Finally, as recommended by USFWS in its June 18, 2010 letter, best management practices will be followed during construction to minimize degradation of water quality.

Botanical Resources. Based on Gagne and Cuddihy's 1999 classification of Hawaiian plant communities, the vegetation within the entire project corridor was categorized as Anthropogenic or Alien, with three sub-types: pasture, riparian, and urban. No threatened or endangered plant species were found.

Several endemic plant species were identified within the project corridor, including a sword fern, *ho'i'o* (*Diplazium sandwichianum*), *wiliwili* (*Erythrina sandwicensis*), *pua kala* and *'akia.* Indigenous species identified include the lace fern *pala 'a (Odontosoria chinensis); Cyperus polystachyos* Rottb., a member of the sedge family; *'aka'akai* or great bulrush; *koali,* in the morning-glory family; false mallow; 'ilima (*Sida fallax* Walp.); *popolo* or glossy nightshade (*Solanum americanum* Mill.), and 'uhaloa (*Waltheria indica).*

The vast majority of trees within the project area were eucalyptus (*E. robusta and E. saligna*) and black wattle (*Acacia mearnsii*), both non-native species. None of the trees in the project corridor are, or could be considered candidates for the County's exceptional tree program.

Avifauna and Terrestrial Mammals. The biologists noted the ongoing drought and very dry habitat conditions in 2010, and bird numbers and diversity were significantly lower than during the original 2000 survey. In 2000, a total of 400 individual birds of 18 species representing 11 separate families were detected during station counts. During the 2010 survey, only 117 individual birds representing 16 separate species were recorded.

All but one of the avian species recorded during both the 2000 and 2010 surveys are considered to be alien to the Hawaiian Islands. The single native species recorded was the Pacific Golden-Plover (*Pluvialis fulva*), an indigenous, migratory shorebird that nests in the high Arctic during the late spring and summer and returns to Hawai'i to spend the fall and winter.

During the original 2000 survey, six mammalian species were detected--domestic dogs (*Canis f. familiaris*), small Indian mongoose (*Herpestes a. auropunctatus*), cat (*Felis catus*), numerous domestic cattle (*Bos taurus*), and two groups of goats (*Capra h. hircus*). By contrast, during the 2010 survey, only one live cow, three live horses and several feral goats were observed. Also encountered were 17 dead cows, one dead horse, and one dead mongoose, graphically demonstrating the severity of the ongoing drought conditions.

The study noted that just as the extreme drought has resulted in the loss of cover, feeding resources, and water for avian species, the habitat for terrestrial mammals has also been radically altered. Currently, there is very little vegetation on the site to sustain anything but the hardiest of feral ungulates.

Overall, the biological assessments concluded that given the nature of the highly disturbed, alien dominated grasslands within the project corridor, the construction and operation of the *Ke Ala Kahawai O Waimea* path will not result in significant impact to native avian or mammalian species. From a native avian and mammalian perspective, there is nothing special or unique about this site, and current conditions do not support any protected avian and mammalian species (AECOS, Inc. 2010).

Threatened and Endangered Species

Although no threatened or endangered species or their habitats were identified within the project area, it is possible that small numbers of the endangered endemic Hawaiian Petrel (*Pterodroma sandwichensis*) and the threatened Newell's Shearwater (*Puffinus auricularis newelli*) overfly the area. The primary potential impact of the project on Hawaiian Petrels and Newell's Shearwaters is the possibility that these birds will become disoriented and downed as a result of outdoor lighting.

In order to mitigate these potential impacts, if night time construction activity or equipment maintenance is proposed, all associated lights will be shielded. If large flood/work lights are used, they should be placed on poles that are high enough to allow the lights to be pointed directly towards the ground.

No lighting is currently proposed for the multi-use path. However, it is possible that decisions will be made to light certain segments or areas, such as the parking lots at two future County parks along the path. If lights are installed, they will be shielded. This measure would serve the dual purpose of minimizing the threat of disorientation and downing of Hawaiian Petrels and Newell's Shearwaters, while at the same time complying with Hawai'i County Code §14-50 et seq. requiring shielding to lower ambient glare on the Mauna Kea observatories.

NLAA Determination

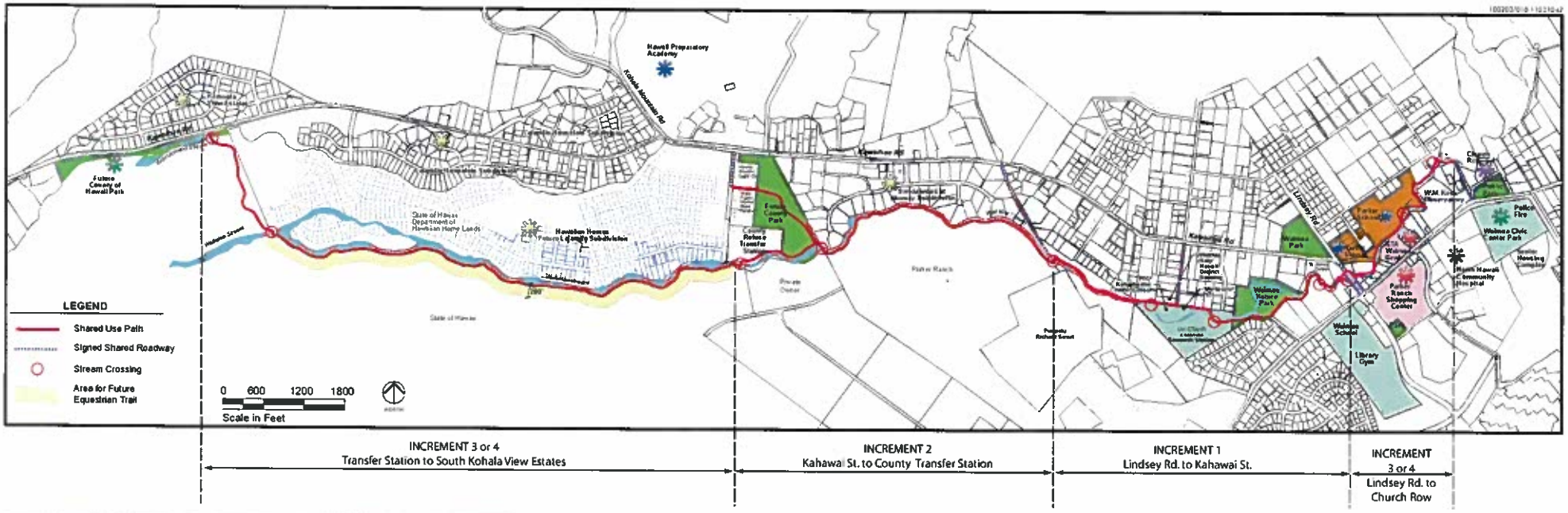
Based on the above information, we have determined that the project is not likely to adversely affect any listed species or their habitats. We respectfully seek your concurrence with this determination. If you have any questions, please feel free to contact me at (808) 541-2305. Thank you for your assistance.

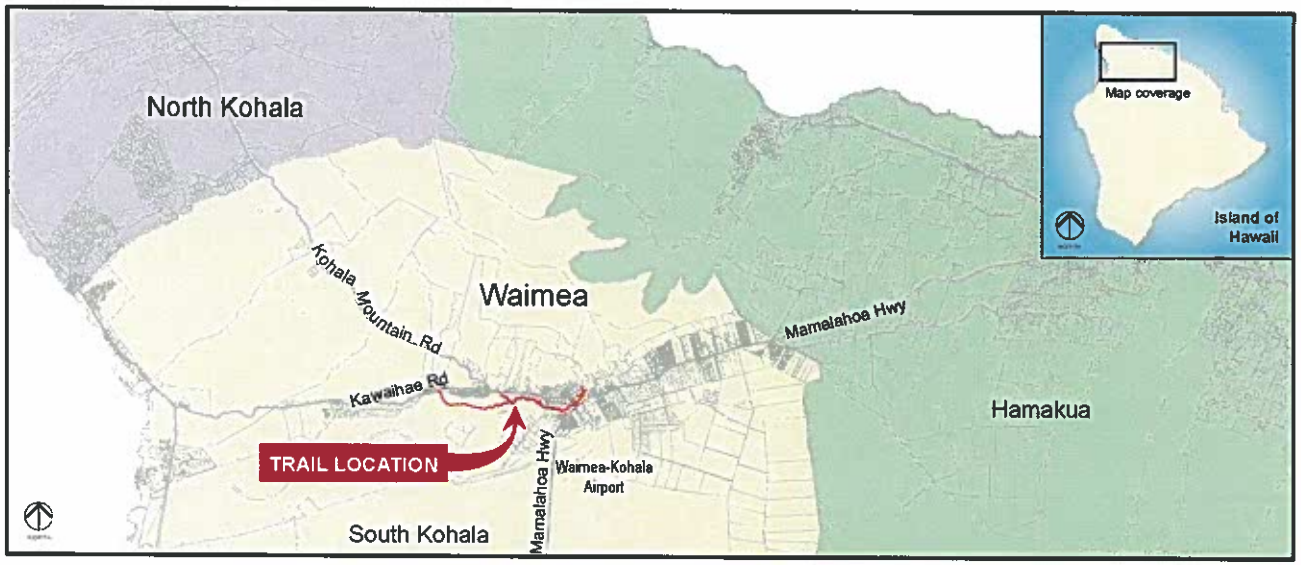
Sincerely,

Pat V. Phung, P.E.
Lead Civil Engineer

Enclosure

cc: Mr. Bob Fitzgerald, County of Hawai'i Department of Parks and Recreation
Mr. Glenn Kimura, Kimura International, Inc.





WAIMEA TRAILS AND GREENWAYS
Ke Ala Kahawai O Waimea
SHARED USE PATH

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2011-SL-0056

DEC 2 0 2010

Mr. Pat V. Phung, P. E.
Federal Highway Administration
300 Ala Moana Boulevard, Room 3-306, Box 50206
Honolulu, Hawaii 96850

Subject: Informal Section 7 Consultation for Ke Ala Kahawai O Waimea, Waimea Trails and Greenways, South Kohala, Hawaii

Dear Mr. Phung:

We received your November 19, 2010, letter, on November 22, 2010, seeking our concurrence that the proposed Ke Ala Kahawai O Waimea project, a multi-use 4.5-mile (mi) (7.25-kilometer (km)) bicycle and pedestrian path in Waimea on the island of Hawaii, will not adversely affect the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) or Blackburn's sphinx moth (*Manduca blackburni*). We reviewed the project pursuant to the Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531 et seq.), as amended, and the Migratory Bird Treaty Act [16 U.S.C. 703-712].

Project Description

The Ke Ala Kahakai O Waimea will be a shared-use path extending 4.5 mi (7.25 (km) through Waimea. The shared-use path begins at a future County park (former Clark property) opposite the South Kohala View Estates subdivision on the west, and will end at Church Row in Waimea on the east. The shared-use path generally follows the meandering course of the Waikoloa Stream through urban and agricultural lands. The proposed path will be paved, 10 to 12 feet (ft) (3 to 4 meters (m)) in width and accessible to pedestrians, bicyclists, and other non-motorized vehicles. A separate equestrian path may also be developed that would roughly parallel the shared-use path. A major objective of the shared-use path is to provide an alternative form of transportation that will link major destination points including residential areas, schools, office and commercial areas, and recreational areas. This project does not include work at night. To minimize impacts to the Waikoloa Stream, you have agreed to follow the best management practices for sedimentation and erosion control that we recommend in our June 18, 2010 letter.

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Species Affected

Blackburn's sphinx moth
The Blackburn's sphinx moth is one of Hawaii's largest native insects with a wingspan of up to 5 inches (12 centimeters). The Blackburn's sphinx moth is endemic to the Hawaiian Islands and is currently found on the islands of Hawaii, Maui, and Kahoolawe. The current population of the species is unknown and trends in population status have not been determined due to difficulties in estimating population densities. Loss and degradation of habitat for the species continues due to overgrazing by introduced ungulates. Alien arthropods continue to impact the species through predation, competition, and parasitism. In addition, the accidental or intentional release of alien predators and competitors continues to threaten the species (Service 2005, p. 1).

The native *Nothocestrum latifolium* (aiea) and *N. breviflorum* (aiea) are both known larval host plants for the Blackburn's sphinx moth larvae, as well as the non-native tree tobacco (Service 2005, p. 10). The 2000 and 2010 surveys by AECOS, Inc., found no tree tobacco or aiea plants in the area to be impacted by this project; thus, there is likely no suitable habitat for larvae of Blackburn's sphinx moth. Based on the survey information, we concur with your determination that the proposed project may affect, but is not likely to adversely affect, the Blackburn's sphinx moth.

Hawaiian Hoary Bat
The Hawaiian hoary bat is a medium-sized (0.5-0.8 ounces (14-22 grams)), nocturnal, insectivorous bat (Service 1998, p. 2-8). Threats to the Hawaiian hoary bat include habitat destruction (elimination of roosting sites), and possibly direct and indirect effects of pesticides, and disease (Service 1998, p. 15-16). Additionally, fences constructed of barbed wire result in bat mortality because they become entangled in the barbs. Clearing vegetation and fencing are the primary potential impacts of this proposed project that may impact Hawaiian hoary bats. Clearing woody vegetation greater than 15 ft (4.6 m) tall (the preferred size of roost trees) during the pupping season could potentially result in take of bats. During the pupping season, females carrying their pups may be less able to rapidly vacate a roost site as the vegetation is cleared; additionally, female bats may leave their pups in the roost tree while they themselves forage, leaving young bat pups unable to flee a tree that is being felled. Potential adverse effects from such disturbance can be avoided or minimized by not clearing vegetation between May 15 and August 15, the period in which bats are at greater risk.

To minimize potential impacts to Hawaiian hoary bats, a December 12, 2010, email, stated that woody vegetation taller than 15 ft (4.6 m) high will not be cleared between May 15 and August 15. Based on this avoidance and measure, the Service concurs with your determination this proposed project may affect, but is not likely to adversely affect the Hawaiian hoary bat.

Unless the project description changes, or new information reveals that the proposed project may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to section 7 of the ESA is necessary. If you have any questions regarding this letter, please contact

Dr. Jeff Zimpfer, Fish and Wildlife Biologist, Consultation and Habitat Conservation Planning Program (phone: 808-792-9431; email: jeff_zimpfer@fws.gov).

Sincerely,

for Loyal Mehrhoff
Field Supervisor

References

U.S. Fish and Wildlife Service. 1998. Recovery plan for the Hawaiian hoary bat (*Lasiurus cinereus semotus*). Department of the Interior, U.S. Fish and Wildlife Service, Portland, Oregon.

U.S. Fish and Wildlife Service. 2005. Recovery plan for the Blackburn's sphinx moth (*Manduca blackburni*). Department of the Interior, U.S. Fish and Wildlife Service, Portland, Oregon.

Appendix E

Literature Review and Field Inspection for the
Waimea Trails and Greenways Project
Cultural Surveys Hawai‘i
October 2010

Literature Review and Field Inspection for the Waimea Trails and Greenway Project Lālāmilo, ʻŌuli, Mamoualoa, Lanikepu, Keoniki, Waiaka, Kauniho, Waikōloa, Waiauia, Haleaha Ahupuaʻa, South Kohala District, Hawaiʻi Island, Various TMK's

Prepared for
Kimura International, Inc.

Prepared by
Michelle F. Pammer, B.A.,
and
Hallett H. Hammatt, Ph.D.

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Kailua, Hawaiʻi
(Job Code: LALAMILO 2)

October 2010

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Management Summary

Reference	Literature Review and Field Inspection for the Waimea Trails and Greenway Project Lālāmilo, ‘Ōuli, Mamoualoa, Lanikepu, Keoniki, Waiaka, Kauniho, Waikōloa, Waiauia, Haleaha Ahupua‘a, South Kohala District, Hawai‘i Island, Various TMK’s (Pammer and Hammatt 2010)
Date	October 2010
Project Number (s)	Cultural Surveys Hawai‘i, Inc. (CSH) Project Code: LALAMILO 2
Investigation Permit Number	The fieldwork for this project was carried out under archaeological permit number 10-10 issued by the State Historic Preservation Division / Department of Land and Natural Resources (SHPD/DLNR)
Project Location	The proposed project area is defined by two narrow corridors, the shared use path (preferred alignment) and the alternate alignment. The preferred alignment extends along and occasionally crossing Waikōloa Stream from South Kohala View Estates in the west to “Church Row” in Waimea Town in the east. The alternate alignment extends from the north end of Kahawai Street in the east and follows various streams north of Kawaihae Rd. to South Kohala View Estates in the west. The project area is depicted on a 1995 Kamuela USGS 7.5-minute topographic quadrangle
Land Jurisdiction	State; Private
Agencies	SHPD/DLNR
Project Description	The proposed project involves the development of a cleared and marked trail along Waikōloa Stream. The proposed trail is part of The Waimea Trails and Greenway Project which is designed to provide a green belt through Waimea town for non-motorized transportation. The overall trail system passes through 10 separate *ahupua‘a*, Lālāmilo, ‘Ōuli, Mamoualoa, Lanikepu, Keoniki, Waiaka, Kauniho, Waikōloa, Waiauia, Haleaha, on the island of Hawai‘i. The proposed project consists of a preferred alignment which follows the Waikōloa Stream, south of Kawaihae Road, and an alternate alignment which is north of Kawaihae Road. The study also includes a possible equestrian trail, located along a portion of the western half of the preferred alignment, beginning at the first crossing of the Waikōloa Stream and ending at the County Refuse Transfer Station.
Project Acreage	The current project area covers approximately 8.4 miles: a preferred alignment at 4.7 miles, an alternate alignment at 3 miles, and the shared use roadways totaling 0.72 miles.

Area of Potential Effect (APE)	For the purposes of the current literature review and field inspection, the APE is defined as the entire, approximately 8.4-mile, project area.
Historic Preservation Regulatory Context	Multiple surveys have been completed along the preferred alignment, including an archaeological assessment of the preferred alignment in 2000 (Kikiloi et al. 2002) and an inventory survey of Increment 1 in the eastern half of the preferred alignment (Yucha et al. 2009). The current study will mostly address the alternate alignment and the signed shared roadways which will not include a constructed trail, but represent the connection points to the trail (Opelo Road, Kahawai Street, and South Kohala Distribution Road). This investigation is not an archaeological inventory survey, per the requirements of HAR Chapter 13-276. However, this study includes detailed historical, cultural, and archaeological background research, and a field inspection of the actual sections of the project area. The document is intended to facilitate the project's planning and support the project's historic preservation compliance. Based on results, cultural resource management recommendations are presented. An archaeological assessment was conducted by CSH in 2000 of the project areas preferred alignment (Kikiloi et al. 2002). Though this project was titled an 'archaeological assessment', it was not considered an archaeological assessment per HAR Chapter 13-276 and would be more appropriately termed a 'literature review and field inspection'. An archaeological assessment typically consists of an archaeological inventory level survey with no historic properties identified, as per HAR Chapter 13-13-284-5. Throughout the remainder of this report, the Kikiloi et al. (2002) report will be referred to as a literature review and field inspection. In 2003, a companion cultural impact assessment (CIA) study was prepared to support the Kikiloi et al. 2002 literature review and field inspection (Souza et al 2003). This CIA is used to support the current project area; however, if the alternate alignment is chosen for trail's location, an addendum CIA should be prepared. The original CIA was prepared to support the project's Hawai‘i state environmental review, per the guidelines of the Hawai‘i State Department of Health's Office of Environmental Quality Control "*Guidelines for Assessing Cultural Impacts*", further evaluates the project's potential impacts to cultural resources. Both documents will support the project's historic preservation consultation effort.

Fieldwork Effort	The fieldwork component of this literature review and field inspection was accomplished on August 18, 2010 by two CSH archaeologists, Michelle Pammer, B.A. and Rosanna Runyon, B.A. under the general supervision of Hallett H. Hammatt, PhD (principal investigator). The fieldwork required approximately 2 person-days to complete.
Number of Historic Properties Identified	The pedestrian inspection identified 14 historic properties: seven previously identified historic properties or historic property concentrations, and 7 newly identified historic properties, consisting of multiple features within or adjacent to the current field inspection area
Identified Cultural Resources and Significance Assessments	During the course of the field inspection, CSH identified 14 historic properties that may be affected by the project: Seven previously identified historic properties or historic property concentrations: SIHP – 18568, SIHP – 18581, SIHP - 18587, SIHP - 18588, SIHP - 18590, SIHP – 18593, and a historic property concentration containing six previously identified historic properties (SIHP - 18569, -18583 to -18586, and -18597); and seven newly identified historic properties, consisting of multiple features (CSH 001-007). Only the previously identified sites are considered significant as insufficient data was collected for the newly identified sites to conduct significant assessments at this time. Additionally, two of the previously identified historic properties have been recommended for preservation (SIHP – 18588 and SIHP – 18590).
Mitigation Recommendation	A thorough review of historical records, previous archaeology, and modern land use, suggest that the area surrounding the current project area has been significantly impacted during historic times, specifically during the construction of modern subdivisions. Much of the project area has likely been graded to support the subdivisions and associated roadways, and some evidence of bulldozing was apparent during the field inspection. However, previous archaeology as well as results from the current project suggests that a significant number of historic properties remain within the area despite the surrounding land disturbance. The field inspection revealed a large number of both pre and post-contact historic properties that will be affected by the proposed project. These findings are consistent with previous surveys of the surrounding area. Of the previously identified historic properties located within the project area that would be affected by the proposed alternate alignment corridor, at least two of the historic properties have been

	recommended for preservation, SIHP #'s -18588, burial mounds, and -18590, permanent habitation (Rechtman 2000:20). Preservation measures have been taken for SIHP # -18588, which now has a large enclosure encircling the two mounds. The remaining previously identified historic properties are either recommended for no further work or have no specific recommendations due to the standards at the time of the original study (Rechtman 2000; Barrera Jr. 1994). Within the preferred alignment, two historic properties have also been recommended for preservation by avoidance: SIHP# 50-10-06-26871 Feature A, a collapsed and severely damaged concrete ford or bridge, and SIHP# 50-10-06-26873 (CSH 3), a historic-era concrete ford and associated roadway (Yucha et al. 2009). Because this report is only a literature review and field inspection and not an inventory survey, the newly identified historic properties (CSH 001 – 007), have not been fully documented. Therefore, a full archaeological significant assessment per HAR Chapter 13-276 is not part of this study. Thus, if the alternate alignment is chosen for the Waimea Trails and Greenway project, further documentation in the form of an archaeological inventory survey is recommended for its entire length. Increment 1 of the current project area's preferred alignment was previously subject to an inventory level survey (see Figure 9; Yucha et al. 2009). If the preferred alignment is chosen for the Waimea Trails and Greenway Project's final location, an archaeological inventory survey is recommended, though an additional inventory survey would not be required for the Increment 1 portion. Previous archaeological studies have shown a high density of historic properties, similar to the findings for the current study, within the preferred alignment corridor. Two previous studies have been conducted for the Waimea Trails and Greenway Project along the preferred alignment, a 2002 literature review and field inspection along 6 miles of the trail (Kikiloi et al 2002) and an inventory survey of a 1.1 mile portion located between Lindsey Road and Kahawai Street (Yucha et al 2009). Additionally, in 1993, Chiniago Inc. conducted an archaeological inventory survey of approximately 50 acres for the Sandalwood Estates, which borders the northern edge of the central portion of the preferred alignment (Barrera Jr. 1993) and in 2002, an inventory survey was also conducted of an approximately 266 acre area bordering the north edge of the preferred alignment's western half (Haun et al 2002). Though the eastern half of the alternate alignment has not been inspected, based on the findings from previous archaeological studies within the area, it is likely that the historic property density is similar to that found within the western portion.

	Based on the background studies and field inspection, Cultural Surveys Hawai`i recommends an inventory-level survey for the entire chosen alignment, preferred or alternate, including the proposed location for the possible equestrian trail. No further work is required for Increment 1, surveyed by Yucha et al. in 2009. The field inspection indicated that the alternate alignment has a concentration of sites similar to that of the preferred alignment. It is recommended that an inventory survey should await a staked alignment so that historic properties can be accurately located in relation to the alignment.

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Section 1 Introduction

1.1 Project Background

At the request of Kimura International, Inc., Cultural Surveys Hawai‘i (CSH) conducted an Literature Review and Field Inspection for the Waimea Trails and Greenway Project Lālāmilo, ‘Ōuli, Mamoualoa, Lanikepu, Keoniki, Waiaka, Kauniho, Waikōloa, Waiauia, Haleaha Ahupua‘a, South Kohala District, Hawai‘i Island. The project covers an approximately 8.4 mile corridor and encompasses a significant number of TMK’s and land owners. This information has been formatted in a table which can be found in Appendix A.

The proposed project area is defined by two narrow corridors, the shared use path (preferred alignment) and the alternate alignment. The preferred alignment extends along and occasionally crossing Waikōloa Stream from South Kohala View Estates in the west to “Church Row” in Waimea Town in the east. The alternate alignment extends from the north end of Kahawai Street in the east and follows various streams north of Kawaihae Rd. to South Kohala View Estates in the west. The project area is depicted on a 1995 Kamuela USGS 7.5-minute topographic quadrangle (Figure 1), tax map (Figure 2 and Figure 3), and aerial photograph (Figure 4).

The proposed project involves the development of a cleared and marked trail along Waikōloa Stream. The proposed trail is part of The Waimea Trails and Greenway Project which is designed to provide a green belt through Waimea town for non-motorized transportation. The overall trail system passes through 10 separate *ahupua‘a*, Lālāmilo, ‘Ōuli, Mamoualoa, Lanikepu, Keoniki, Waiaka, Kauniho, Waikōloa, Waiauia, Haleaha, on the island of Hawai‘i.

The proposed Waimea Trails and Greenway Project consists of a preferred alignment which follows the Waikōloa Stream, south of Kawaihae Road, and an alternate alignment which is north of Kawaihae Road (Figure 5). The study also includes a possible equestrian trail, located along a portion of the western half of the preferred alignment, beginning at the first crossing of the Waikōloa Stream and ending at the County Refuse Transfer Station. Multiple surveys have been completed along the preferred alignment, including an archaeological assessment of the preferred alignment in 2000 (Kikiloi et al. 2002) and an inventory survey of Increment 1 in the eastern half of the preferred alignment (Yucha et al. 2009). The current study will mostly address the alternate alignment and the signed shared roadways which will not include a constructed trail, but represent the connection points to the trail (Opelo Road, Kahawai Street, and South Kohala Distribution Road).

This investigation is not an archaeological inventory survey, per the requirements of HAR Chapter 13-276. However, this study includes detailed historical, cultural, and archaeological background research, and a field inspection of the actual sections of the project area. The document is intended to facilitate the project’s planning and support the project’s historic preservation compliance. Based on results, cultural resource management recommendations are presented. An archaeological assessment was conducted by CSH in 2000 of the project areas preferred alignment (Kikiloi et al. 2002). Though this project was titled an ‘archaeological assessment’, it was not considered an archaeological assessment per HAR Chapter 13-276 and would be more appropriately termed a ‘literature review and field inspection’. An archaeological

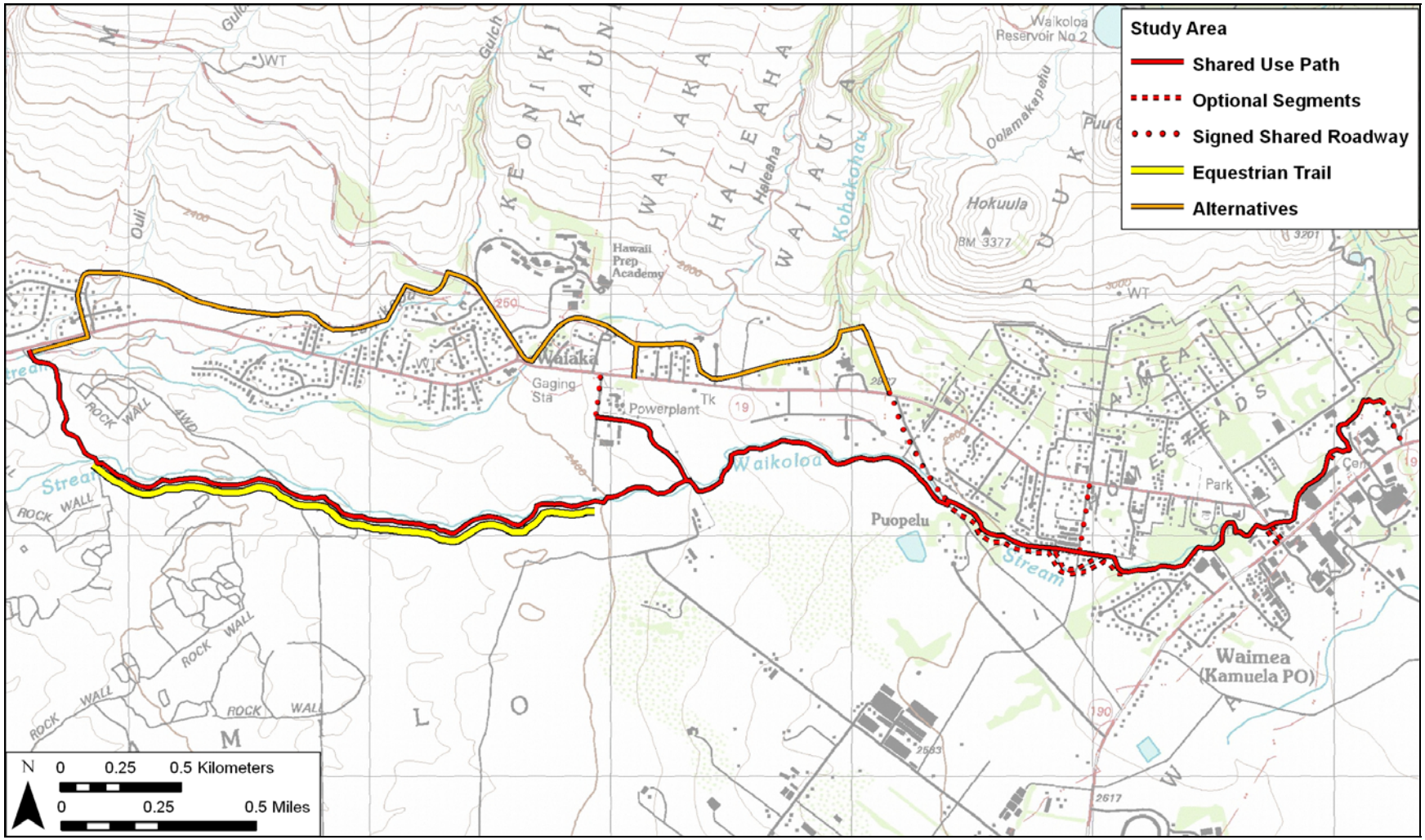

Figure 1. Portion of the 1995 Kamuela USGS 7.5-minute topographic quadrangle showing the current project area

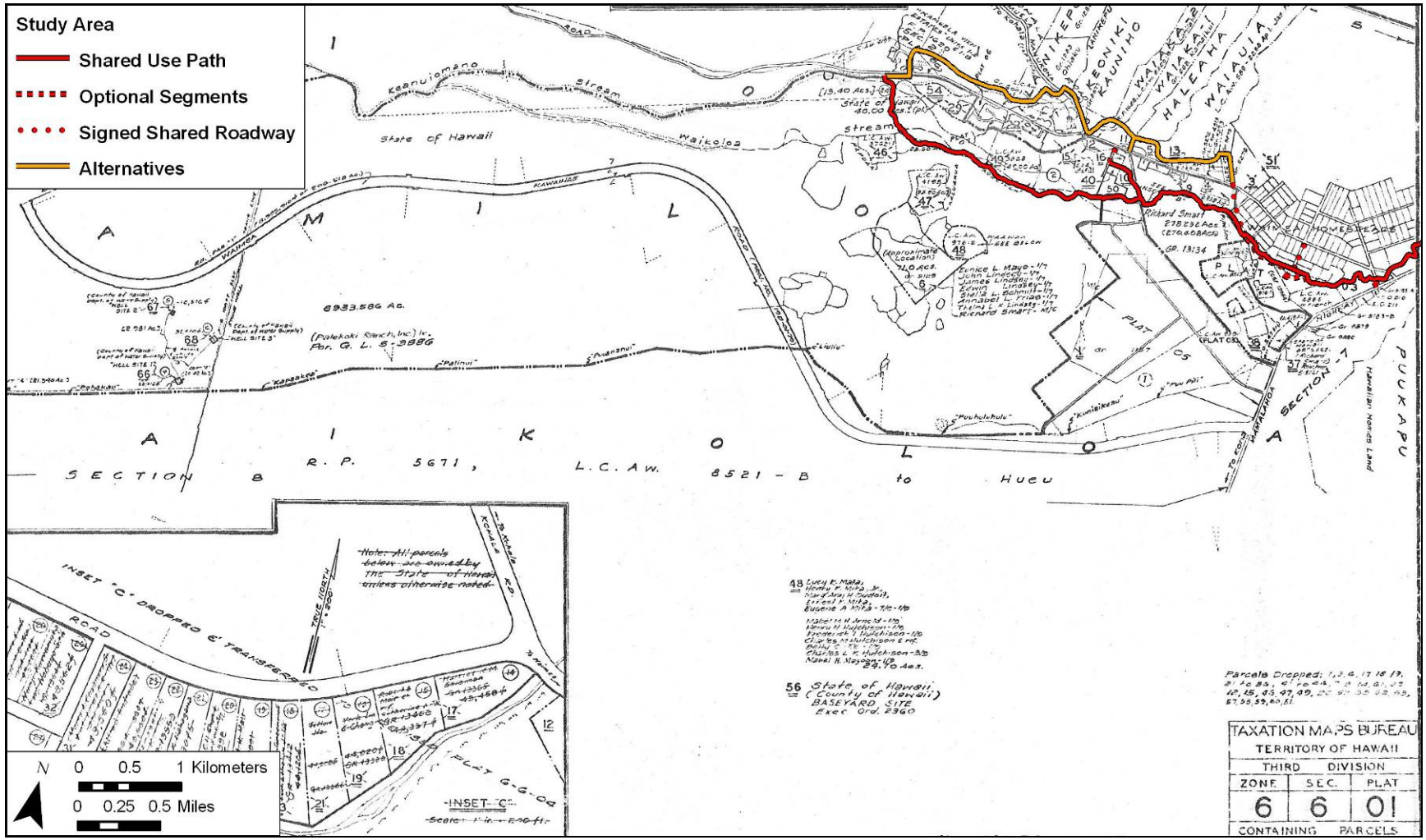

Figure 2. Tax Map Key (TMK) [3] 6-6-01 showing the western half of the project area

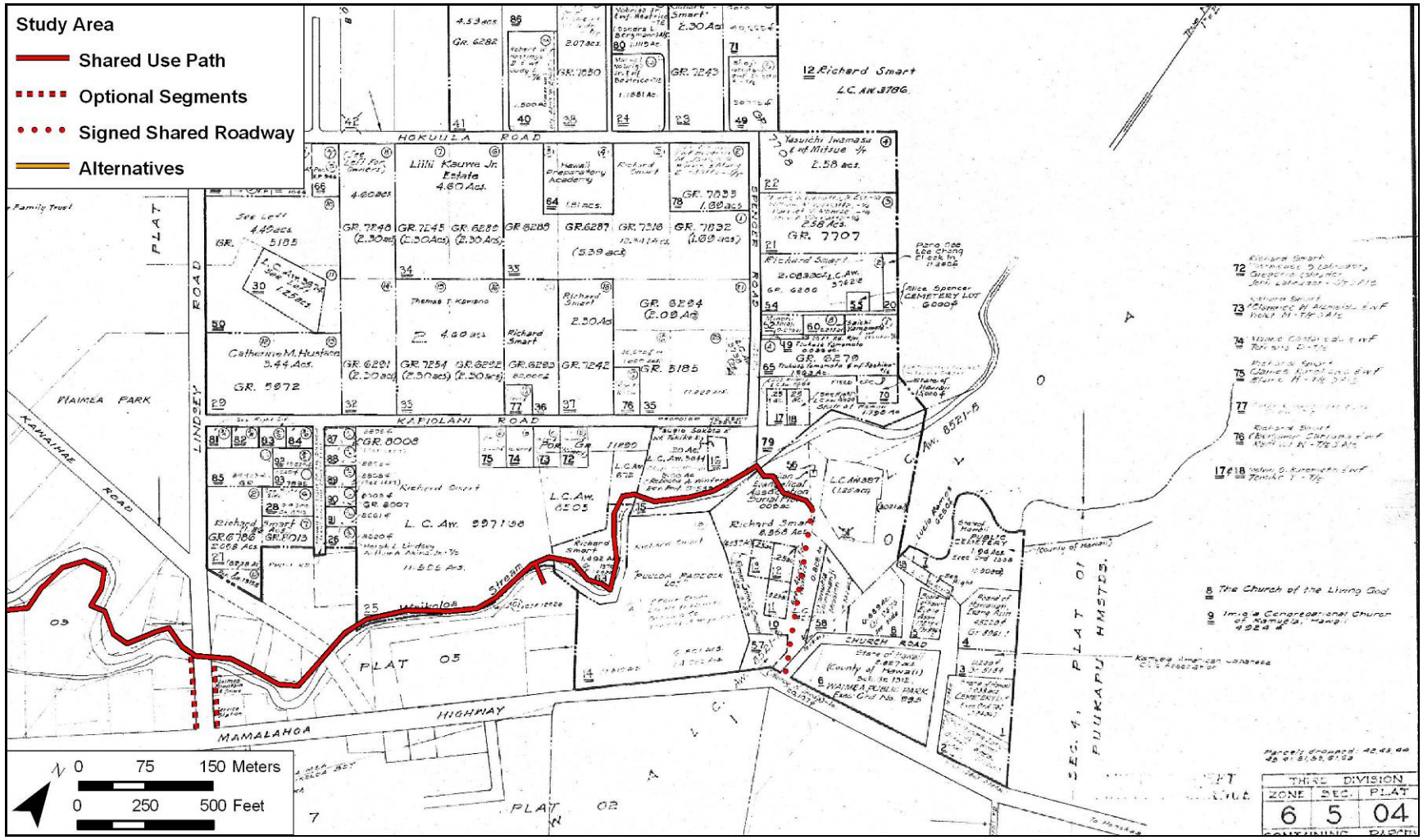

Figure 3. TMK [3] 6-5-04 showing the eastern half of the project area

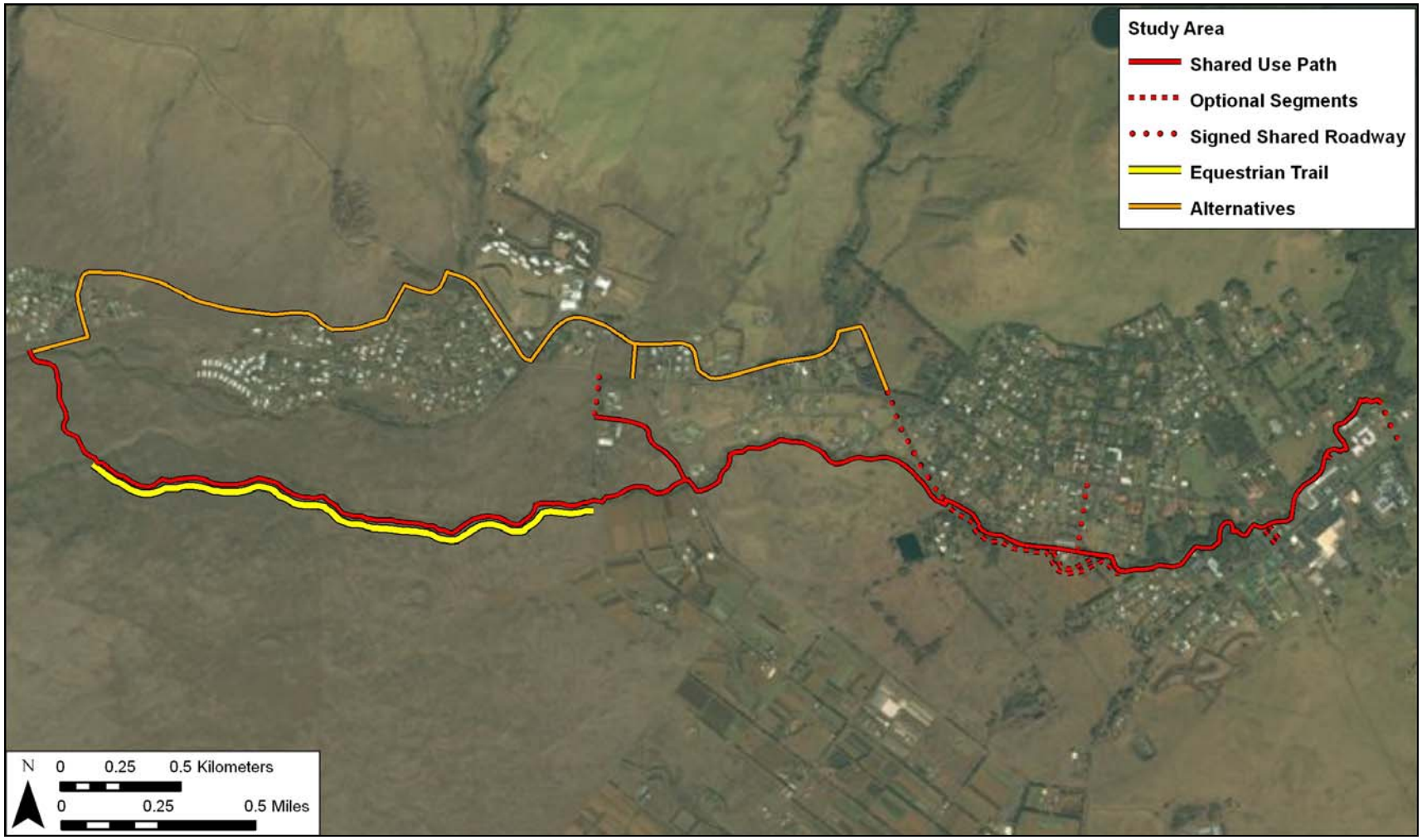

Figure 4. Aerial photograph showing the current project area (source: Geoeye 2001)

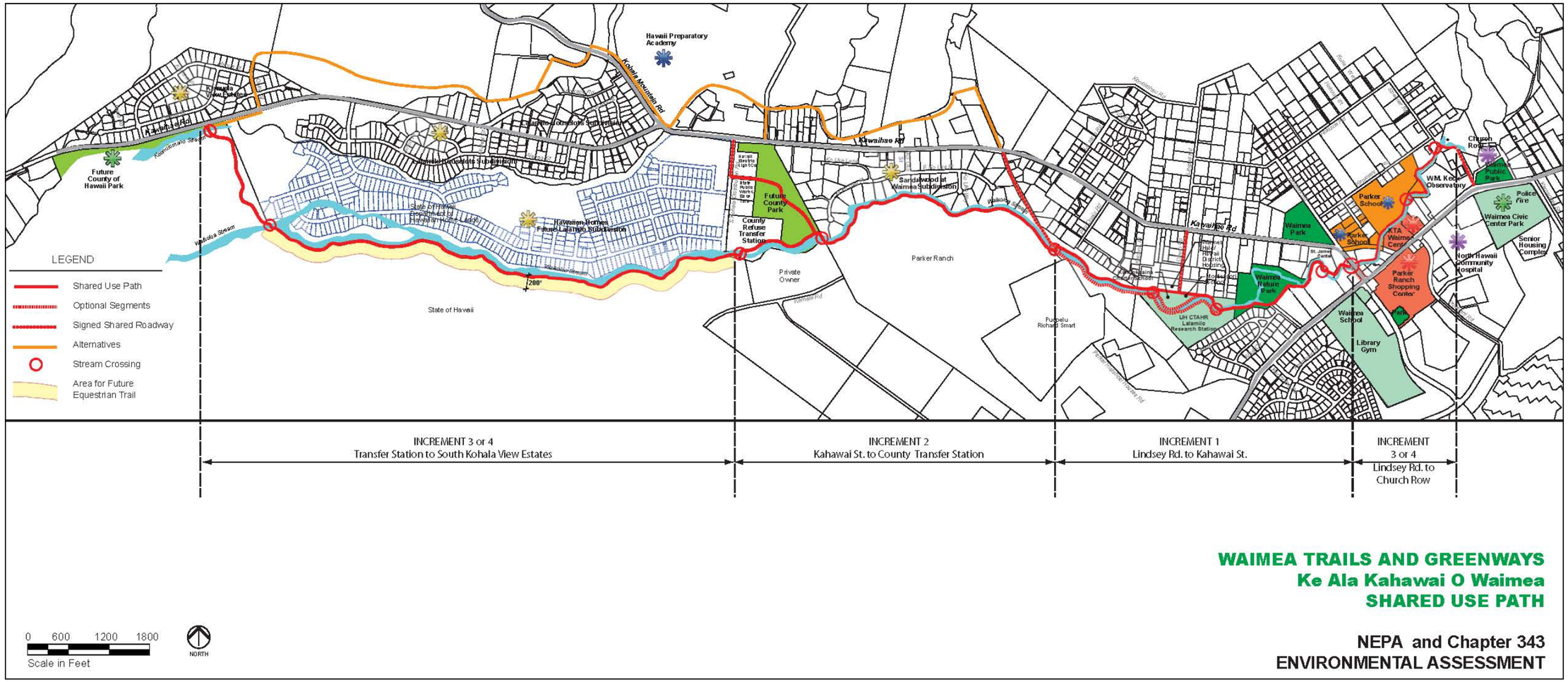

Figure 5. The proposed project area map showing the locations of the alternate alignment, preferred alignment (shared use path), the signed shared roadways, and the proposed are for a future equestrian trail.

assessment typically consists of an archaeological inventory level survey with no historic properties identified, as per HAR Chapter 13-13-284-5. Throughout the remainder of this report, the Kikiloi et al. (2002) report will be referred to as a literature review and field inspection. In 2003, a companion cultural impact assessment (CIA) study was prepared to support the Kikiloi et al. 2002 literature review and field inspection (Souza et al 2003). This CIA is used to support the current project area; however, if the alternate alignment is chosen for trail's location, an addendum CIA should be prepared. The original CIA was prepared to support the project's Hawai‘i state environmental review, per the guidelines of the Hawai‘i State Department of Health's Office of Environmental Quality Control "*Guidelines for Assessing Cultural Impacts*", further evaluates the project's potential impacts to cultural resources. Both documents will support the project's historic preservation consultation effort.

1.2 Scope of Work

The agreed upon scope of work for this archaeological literature review and field inspection is as follows:

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

1.3 Environmental Setting

1.3.1 Natural Environment

The project area is located in the Waimea area of Hawai‘i Island and includes a corridor running generally west-east from Kamuela View Estates to the western edge of the Waimea Public Park. The preferred alignment corridor is along Waikōloa Stream. In its entirety the trail and greenway may extend about 12 miles, however, the current report only covers approximately 8.4 miles: a preferred alignment at 4.7 miles, an alternate alignment at 3 miles, and the shared use roadways totaling 0.72 miles. The study also includes a possible equestrian trail located along a portion of the western half of the preferred alignment, but because this portion has not been confirmed as part of the project it is not included within the project area acreage.

In a larger context, the project area is situated in the Waimea Saddle region between the Kohala Mountains and Mauna Kea Volcano at elevations between 2,000-3,000 ft above sea

level. The climate is generally cool, moist and windy. Temperatures usually range between 60-70° F, with mean maximums between 70-80 °F, and mean minimums in the upper 40° F. The mean annual rainfall ranges from 500 to 750 mm (20 to 30 in) per year (Giambelluca et al. 1986). Winds are dominated by consistent northeasterly trades. There are three major streams flowing off the Kohala slopes and onto the plains of Waimea, including Lanikepu, Waikōloa, and Kohākōhau (also known as Keanu‘i‘omanō) Streams.

Soils within the project area primarily consist of Waimea Very Fine Sandy Loam, 6 to 12 percent slopes (Figure 6). Soils of the Waimea series are described as, " ...well-drained very fine sandy loams that formed in volcanic ash… on uplands at an elevation ranging from 2,000 to 6,000 feet" (Sato et al. 1973).

Vegetation within the project area consists of Ironwood (*Casuarina equisetifolia*), Christmas Berry (*Lycium carolinanum*), Yellow Ginger (*Hedychium flavescems*), *‘Ape* (*Alocasia macrorrhiza*), Bamboo (*Schizostachyum glaucifolium*), Spanish Needle (*Bidens alba*), Castor Bean (*Ricinus communis*), Eucalypts, Banana (*Musa paradisiacal*), *Māmaki* (*Pipturus albidus*), exotic plantings of conifers, and exotic grasses.

1.3.2 Built Environment

The project area is located within narrow undeveloped corridors that border several developed areas from Kamuela View Estates to the western edge of the Waimea Public Park. The eastern end of the project area’s preferred alignment is bordered by the Waimea Public Park, W.M Keck Observatory, Church Row, and the Hawaii Belt Road. The central portion is bordered by Residential and commercial subdivisions, Waimea Nature Park, the University of Hawai'i College of Tropical Agriculture and Human Recourses Lālāmilo Research Station, the Hale Waimea Apartment Complex, and small stretches of pasture land. The western end is bordered by residential subdivisions (Kamuela View Estates) to the north and open pasture land to the south.

The eastern end of the alternate alignment extends from the north end of Kahawai Street, heading north into the pasturelands and follows various streams north of Kawaihae Rd. The central portion of this alignment is bordered by Hawaii Preparatory Academy (HPA) and residential and commercial subdivisions. The western end of the project area is bordered by South Kohala View Estates and pasturelands in the west.

The project area is depicted on a 1995 Kamuela USGS 7.5-minute topographic quadrangle (see Figure 1), tax map (see Figure 2 and Figure 3), and aerial photograph (see Figure 4). The current study will mostly address the alternate alignment and the signed shared roadways which represent the connection points to the preferred alignment corridor (Opelo Road, Kahawai Street, and South Kohala Distribution Road) as seen in Figure 5.

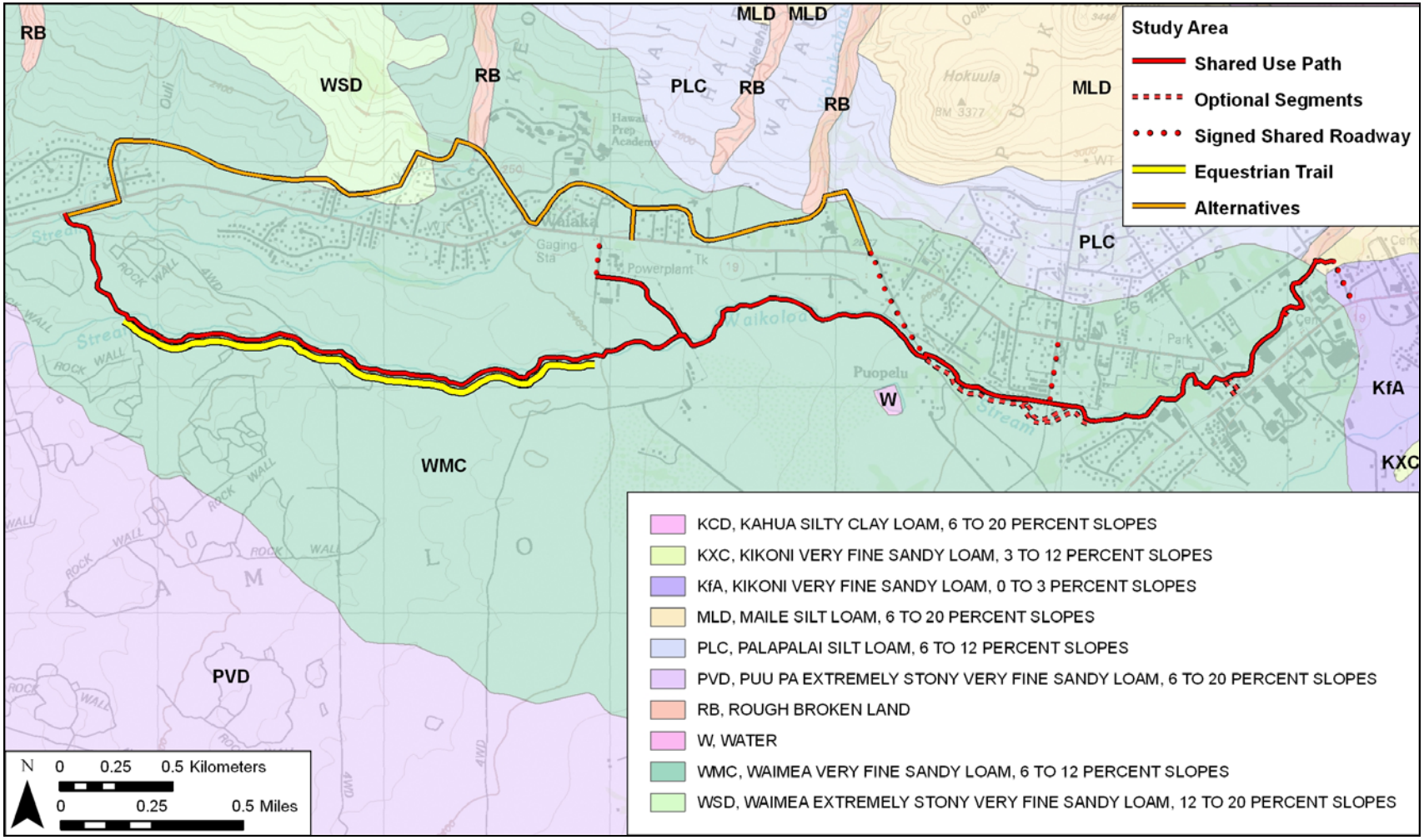

Figure 6. Overlay of Soil Survey of the State of Hawai‘i (Sato et al. 1973), indicating sediment types within the project area

Section 2 Methods

2.1 Field Methods

The fieldwork component of this literature review and field inspection was carried out under archaeological research permit number 10-10, issued by the Hawai‘i State Historic Preservation Division/Department of Land and Natural Resources (SHPD/DLNR), per Hawai‘i Administrative Rules (HAR) Chapter 13-13-282. The fieldwork component of this literature review and field inspection was accomplished on August 18, 2010 by two CSH archaeologists, Michelle Pammer, B.A. and Rosanna Runyon, B.A. under the general supervision of Hallett H. Hammatt, PhD (principal investigator). The fieldwork required approximately 2 person-days to complete.

In general, the purpose of the field inspection was to develop data on the nature, density, and distribution of archaeological sites within the project area's alternate alignment. The field inspection consisted of a walk-through reconnaissance within the accessible areas of the alternate alignment and the signed shared roadways. Potential archaeological sites or site areas were to be documented with written descriptions and photographs and located with a GARMIN GPSMAP60Cx unit (accuracy +/- 2-5 m). A walk-through was not possible for some areas due to abundant residences preventing access. In these areas photos were taken as best as possible of the general area and assessed from the road for possible archaeological sites.

2.2 Document Review

Background research included: a review of previous archaeological studies on file at SHPD; review of documents at Hamilton Library of the University of Hawai‘i at Mānoa, the Hawai‘i State Archives, the Mission Houses Museum Library, the Hawai‘i Public Library, and the Archives of the Bishop Museum; study of historic photographs at the Hawai‘i State Archives and the Archives of the Bishop Museum; and study of historic maps at the Survey Office of the Department of Land and Natural Resources. Historic maps and photographs from the CSH library were also consulted. In addition, Māhele records were examined from the Waihona ‘Aina database (<www.waihona.com>).

Section 3 Background Research

3.1 Traditional and Historical Background

3.1.1 Place Names and *Mo‘olelo*

Ke kīpu‘upu‘u ho‘anu ‘ili o Waimea

(The Kīpu‘upu‘u rain of Waimea that chills the skin of people)

[Puku‘i 1983:188; #1748]

The project area region is generally referred to as “Waimea” which literally means reddish water, as it was thought to be tinted as it was drained through the *hāpu‘u* tree fern forests or though the red soil (Elbert, Ms in Barrera and Kelly 1974). Waimea has been poetically characterized as being “like a spear rubbed by the wind, as the cold spray is blown by the *kipu‘upu‘u* rain...” (Proverb from a Kamehameha *mele* quoted by Henry Judd in Doyle 1953:42) and has a rich history that is evident in its place names and proverbs.

The area is also popularly known as Kamuela (Samuel), named either for post master Samuel Spencer or for the rancher, Samuel Parker (Pukui et al. 1974). In *‘Ōlelo no‘eau* (Pukui 1983), Waimea is noted as an area of cool climate and chilling rains:

> (A) *Hele po‘ala i ka anu of Waimea*
>
> Going in a circle in the cold of Waimea
>
> Said of a person who goes in circles and gets nowhere. Waimea, Hawai‘i is a cold place and when foggy, it is easy for one unfamiliar with the place to lose his way [Puku‘i 1983: 83; #757].
>
> (B) *Ka ua Kī pu‘upu‘u o Waimea/ Waimea i ka ua Kīpu‘upu‘u*
>
> The Kīpu‘upu‘u rain of Waimea/ Waimea, land of the Kīpu‘upu‘u rain
>
> An expression often used in songs of Waimea Hawai‘i. This area is famed for its cold rain. When Kamehameha organized an army of spear fighters and runners from Waimea, they called themselves Kīpu‘upu‘u after the cold rain of their homeland [Puku‘i 1983:169, 319; #1571 & #2913].
>
> (C) *Ka ua paliloa o Waimea*
>
> The Tall-cliff rain of Waimea
>
> The rain of Waimea, Hawai‘i, that sweeps down cliffs. [Puku‘i 1983:172; #1593]

Ke kānoa kapu o Lono-Makahiki: ‘oia ho‘i ‘o Hōkū‘ula!

(The sacred bowl of Lono-Makahiki: it is Hōkū‘ula!)

[*Ka Hōkū o Hawai‘i* 4/23/1914 in Franklin et al. 1994]

Translated and interpreted by Kepā Maly (Franklin et. al 1994), the legend of Ka-Miki was published in the Hawaiian newspaper *Ka Hōkū of Hawai‘i* between the years of 1914-1917. It is

a story about two brothers and their journey around the island of Hawai‘i. The legend includes references to over 800 place names, and provides interesting information about Pu‘u Hōkū‘ula, the most prominent hill located just north of Waimea town.

> Hōkū ‘ula (Red Star): When Ka-Miki and Maka‘iole drew near to completing their formal *‘ōlohe* training (fighting and competing skills) under their goddess/ great grandmother Ka‘uluhe, she told them to go and visit their *kūpuna* (ancestress) Lani-nui-ku‘i-a-mamao-loa who dwelt at Lanimaomao (Waimea). Lani-nui-ku‘i-amamao-loa was the guardian and keeper of the sacred *kānoa* (*‘awa* mixing bowl) Hōkū‘ula which belonged to Lono-Makahiki, and the *ma‘au (*strainer) called Kalau-o-Kāhuli which was upon the plain of Waikōloa. These two items were to be used in *‘awa* ceremonies for the brothers *‘ailolo* (brain eating- completion of training ceremonies) [*Ka Hōkū o Hawai‘i* 2/5/1914 in Franklin et al. 1994].

The association of the bowl, or *kānoa* of the god Lono (a provider of abundant crops and rain-laden clouds) with Hōkū‘ula may refer to the agricultural lands of the region; i.e., (1) the bowl or container could symbolize a land of agricultural abundance; (b) the sprinkling of waters from the bowl could refer to the waters of the streams that flow from the uplands and spread across the plains; and (c) the importance of the rituals of Lono in agricultural endeavors, particularly in the areas of Kohala where large rain-fed field systems have been archaeologically documented. Thus the legendary account may symbolically represent actual resources of the Waimea region.

3.1.2 Accounts of Pu‘u Kapu

A missionary account by Lorenzo Lyons in the 1850's tells of legends within the setting of Waimea, that may relate to the origin of the name “Pu‘u Kapu”:

> On a nearby ridge stood another *heiau* built “...by the great Akua Makuakua who has come from far off Kahiki.” from the hillside he watched the rainbows “...and there he found the beautiful goddess Wao.” They lived at Hōkū‘ula Each time Wao was ready to bear a child she returned to the Waimea hills, which were sacred to her. The *kapu* was proclaimed in her honor- the forbidden ground extended ...”down across the plains to whatever place a stone happened to stop rolling when started above by her servants” [Doyle 1953 in Barrera and Kelly 1974]

According to legend, Wao changed her servants into stones to guard the land during the night hours; when daylight came she transformed them back into their human forms (Barrerra and Kelly 1974:1).

Lorenzo Lyons also tells of the legendary story of a Ho‘opili-a-Hae, and mentions her as being the founder of a *heiau* for women in Waimea:

> The earliest chiefs of Waimea of whom we have record stemmed from the same Ulu-Hema line that led to Līloa, the founder of the island dynasty. Līloa’s grandson Keawe-nui-a-‘Umi took as one of his wives Ho‘opili-a-Hae, daughter of Līloa’s *kahuna* Pae-a-Molenole. [Clark and Kirch, 1983:26]

> (The *heiau*) was attended exclusively by young virgins. In the sanctity of the cool highland forest, they "...performed the sacred ceremonies, learning also the science of healing so that they might eventually minister to others. Hoapiliaha‘e’s children were named for the five rains of the *heiau*" [Doyle 1953: 42-43] (in Barrerra and Kelly 1974:1)

A passing reference to Pu‘u kapu is made in the story of "Kai A Kahinalii" in which a fisherman of Kawaihae who fishes all day long and, setting out early. observes: "the sun has now risen, and was looking over the hills of Pu‘u kapu." (Thrum 1923:229)

3.1.3 Historical Battles at Waimea

‘O ke aluka koa a Kama i Waimea

(a multitude of warriors had Kama at Waimea)

[Kamakau 1961:55-61 in Barrerra and Kelly 1974]

Hōkū ‘ula, located just northeast of the alternate alignment and north of the east end of the preferred alignment within the current project area, is famed for being the location of a prominent battle ground in which Kamalālāwalu, the ruler of Maui Island waged war against the island of Hawai‘i. Deceived by misleading advice from his trusted advisors and poor strategic planning, Kamalālāwalu arrived on Hawai‘i island, landing at Kawaihae only to realize that there were no people there. The Maui forces continued up to Hōkū‘ula, a prominent bluff. Situated in this manner, he believed his army would be able to have the advantage in defending themselves against the Hawai‘i island forces.

Upon hearing of Kamalālāwalu‘s arrival, Lonoikamakahiki, the Hawai‘i island ruler sent armies from Kona, Ka‘ū, Puna, and Hilo to Hōkū‘ula, where the Maui warriors were stationed. The following morning Kamalālāwalu observed that the lowlands were literally covered with countless men. He soon realized that his Maui forces were inferior in numbers and asked his ally Kumaikeau "*E Kumaikeau ma, pehea kēia? He aha kēia lehulehu o lalo?*" "Kumaikeau and the rest of you, how is the situation? What is the extent of their numbers below?" Kumaikeau relied "*‘Akahi nō au a ‘ike i ka nui o nā kānaka o Hawai‘i nei,*" "I have never seen so many people in Hawai‘i before..." After three days of negotiations, the two combating forces waged battle, with Lonoikamakahiki gaining the victory over Kamalālāwalu’s army (Fornander 1916:342-350).

Another battle fought in the Waimea area was between the leeward and windward chiefs of Hawai‘i Island toward the middle of the 18th century. This clash took place at Mahiki, east of Waimea and just across the district boundary in Hāmākua. Here the father of the great chief Alapa‘inuiakauaua was leading his forces against the Hilo chiefs when he was killed. Alapa‘inui was on Maui at the time but returned to Hawai‘i and ultimately regained control of the Kona and Kohala districts (Kamakau 1961: 65). Eventually he went on to take over the whole island of Hawai‘i and place it under his rule. In his later years, Alapa‘inui lived first in Waipi‘o, then lived for sometime in Waimea, and later moved to Kawaihae (Kamakau 1961: 77).

During Kamehameha’s campaign to extend his rule to all the major islands, he stayed at Waimea and at Kawaihae for some time. There are mentions of Kamehameha’s visits to Waimea in 1791 and 1792 when he rebuilt Pu‘u Koholā Heiau (Clark and Kirch 1983). At that time a large work force was required and the people of Waimea were solicited. It has also been

suggested by Clark and Kirch (1983:27) that food and tapas were brought from Waimea to feed and clothe the many warriors in preparation of the *Peleleu* fleet to battle Maui and O‘ahu in 1794 and 1795.

3.1.4 Post-contact Period

The Waimea area, with its favorable soils, and water from Kohala Mountain streams that could be harnessed and distributed on the fairly level plains, was an obvious area for the expansion of introduced food crop production. Waimea was very productive agriculturally in the early years following contact with the Western world. Based on early accounts, *kalo*, or taro (*Colocasia esculata sp.)* was the dominant crop with *‘uala*, or sweet potatoes (*Ipomoea batatas sp.*) and *kō*, or sugar cane (*Saccharum officinarum sp*.) also grown in substantial quantities.

The decline in traditional Hawaiian agriculture in the Waimea region has been attributed to factors such as 1) depopulation and the concomitant abandonment of the fields; 2) the pursuit of other commercial interests such as sandalwood and the *pulu* trade, sugarcane, and finally the introduction of cattle.

It is important to mention that after the abandonment of traditional Hawaiian agriculture in Waimea, there were two resurgences of agricultural endeavors to boost the economy of Waimea (Clark and Kirch 1983). In the late 1820's, two Chinese, Lau Ki and ‘Aiko started a sugar mill at Līhu'e in upper Lālāmilo. While the mill was not successful commercially, sugar production continued in the Waimea area (Barrerra and Kelly 1974: 47).

It was during this time that an expansive irrigation system was developed consisting of several dendritic ‘*auwai* that diverted water from Waikōloa and Lanimaumau Streams. Portions of one named ‘*auwai*, "Akona's *‘Auwai*", is located within portions of the project area’s preferred alignment. Akona's *‘Auwai* was used primarily to power the sugar mill at Līhu'e and to irrigate nearby sugarcane fields (Burtchard and Tomonari Tuggle 2003). "Akona was a Chinese who lived in the Waimea area in the 1840's and 50's (and perhaps somewhat before and after)" (Clark 1981:28).

In the late 1830's, cotton was grown in Waimea when Governor Kuakini ordered the planting of an “immense field of cotton in the Waimea area,” (Kuykendall 1967: 183). In the late 1840's and early 1850's, both sweet and Irish potatoes were cultivated extensively, however by 1865, their crops were reported to have been greatly diminished.

3.1.5 Sandalwood and *Pulu*

The mountains surrounding Waimea were well known for rich sandalwood reserves. During the early part of the 19th century as contact with the West was growing, the extent of the sandalwood trade was evident as it became one of the earliest commodities of a newly formed market oriented economy.

Similar to the sandalwood trade was the exploitation of *pulu*, the soft fiber gathered from the buds of the tree fern (*Cibotium sp*.) and used for stuffing pillows, mattresses, and furniture (Thrum 1929 in Erkelens 1998: 15). The *pulu* trade began in 1851 with shipments to the WestCoast of North America and Australia. Like sandalwood, the over-exploitation of this resource also led to its demise and by 1860, the trade had virtually ended (Doyle 1945: 182).

3.1.6 Population Estimates

The general impression of the pre-contact settlement pattern, constructed from a variety of archaeological and early historical sources, is one of scattered settlements along Waikōloa Stream (Clark 1987: 103; Erkelens 1998: 11). During subsequent decades, with the arrival of western foreigners and missionaries, impressions of the life and landscape would be recorded for 19th-century Waimea. In 1823, Asa Thurston counted 220 houses in his walk through Waimea in the section between ‘Ōuli and Pu‘u Kapu (a distance of approximately 4.8 km or 3 miles); this was interpreted as representing a population of 1,100 to 1,200 individuals (Ellis 1979:399 in Erkelens 1998:11). Although the population was concentrated at Kea‘ali‘i (located along Wai‘aka Stream) at the time of Thurston’s visit, a settlement of 300 to 400 individuals near the present Waimea town is a reasonable estimate (Clark 1987: 103).

It was not, however, until the 1830s that a missionary would be stationed in northern Hawai‘i. On July 13, 1832 Lorenzo Lyons and his wife Betsy arrived at Kawaihae by brig from Honolulu to take up residence at Waimea. Lorenzo Lyons had a church and school (for adults) at Waimea in 1835, serving a congregation of 100 to 500 Hawaiians. In his writings, Lyons stated:

> During the past year I have taken a census of the population of this district and find it to be as follows: Waimea, 1,396; Kohala 6,175; Hamakua 4,015; total 11,586, from which it appears there has been a diminution of the people 3,500, within three and a half years. Marriages are numerous. But the progeny are wanting. Children are not in general, objects of desire. Taxes are in proportion to the number of children. My census may not be correct. Many think I am numbering them for the purpose of taxation, and conceal a part of their number. [Doyle 1945:82-83]

3.1.7 The Māhele

The Organic Acts of 1845 and 1846 initiated the process of the Māhele, the division of Hawaiian lands, which introduced private property into Hawaiian society. In 1848, the crown and the *ali‘i* received their land titles. The common people (*maka‘āinana*) received their *kuleana* awards (individual land parcels) in 1850. It is through records for Land Commission Awards (LCAs) generated during the Māhele that the first specific documentation of land use within the vicinity of the project area comes to light.

The records associated with these awards illuminate the character of the settlement within the *ahupua‘a* at the mid-19th century. The majority of the individual *kuleana* claims are situated close to streams emptying from the southern scope of Kohala Mountain. The streams include Waikōloa, Kohākōhau, Haleaha, Waiaka, and Kanikepu. These and other streams flowed onto the Waimea plain then turned to the west (*makai*) to flow down slope towards the Kawaihae/Puako area. The focus of habitation and agriculture was at the base of Kohala Mountain and extending out onto the Waimea plain. The awarded *kuleana* were in a relatively narrow band extending from approximate elevation 2,100 ft and 2,900 ft. This zonal band would include the proposed preferred alignment corridor as well as the alternate alignment.

Approximately 31 LCAs are located within the vicinity of the current project area’s preferred and alternate alignments (Figure 7 and Table 1). Documentation of a sample of these LCAs was

reviewed in an attempt to reconstruct land use patterns during the mid 19th century (Table 2 and Appendix B). The Māhele documentation in the vicinity of the project area shows a presence of several house lots with associated dry land agricultural fields, as well as a slaughter house within what is now Waimea Town. Of particular note is the high frequency of prominent foreign awardees, like William French and William Beckley, who are associated with early business ventures throughout the Hawaiian Islands.

It should be noted that LCA 04886 is not a house lot or fields as was common in the area, but a slaughter house owned by William French. Kuakini had expressed a liking for one of French's horses and so French gave him "one of his good horses and that is how he had received that cattle slaughtering area in Waimea. It has been enclosed with a stone wall and French has lived there well to this time; no one has objected to him" (Native Testimony vol. 2, pg. 494-495; February 2, 1848). This slaughter house was likely associated with the large cattle industry located within Waimea, largely as part of the Parker Ranch.

3.1.8 Cattle Industry

The first cattle were delivered to Hawai'i in 1793 by Captain George Vancouver aboard the HMS Discovery. The cattle were a gift to Kamehameha I, who, following Vancouver's advice, immediately placed a 10-year *kapu* on the cattle, which greatly increased their number (Brennan 1995). An examination of the cattle industry in the Waimea area clearly shows its dominant role. The cattle industry, which eventually changed the economy and lifestyle of Waimea, had its origins in bullock hunting, which was controlled by Hawaiian chiefs. The initial increase in cattle population was aided by a ten-year *kapu* placed on hunting or taking of cattle. Feral cattle multiplied rapidly and ran wild on the plains of Waimea. For some two to three decades after the lifting of the protective ban, bullock hunters were employed to hunt down the wild cattle and take them to a market.

In the 1830's, meat, hides, and tallow began to be marketed, and thus formed the true beginning of the cattle industry. By 1847, about two-thirds of Waimea area had been converted to pasture for government herds of cattle, as well as for sheep and horses (Doyle 1945). By the middle of the 1800's the Waimea region was the center of the industry.

The cattle industry had two major impacts on Waimea. The first was the effect of marauding cattle on the unprepared Hawaiian farmer (Erkelens 1998:19). As early as 1802, there were complaints concerning the destruction of gardens by feral cattle (Turnbull 1813:243, in Barrerra and Kelly 1974:44). In 1836, Waimea was surrounded by a stone wall to protect it from cattle.

The second major impact on Waimea was the increase in population as a result of economic opportunities provided by the cattle industry (Erkelens 1998:19). Bishop (Bishop 1828, in Erkelens 1998:19) reports that Kuakini's arrival in Waimea marked the beginning of the cattle industry, as attendance at church services increased to approximately 1,000 individuals from a previous attendance of 200 (Doyle 1945).

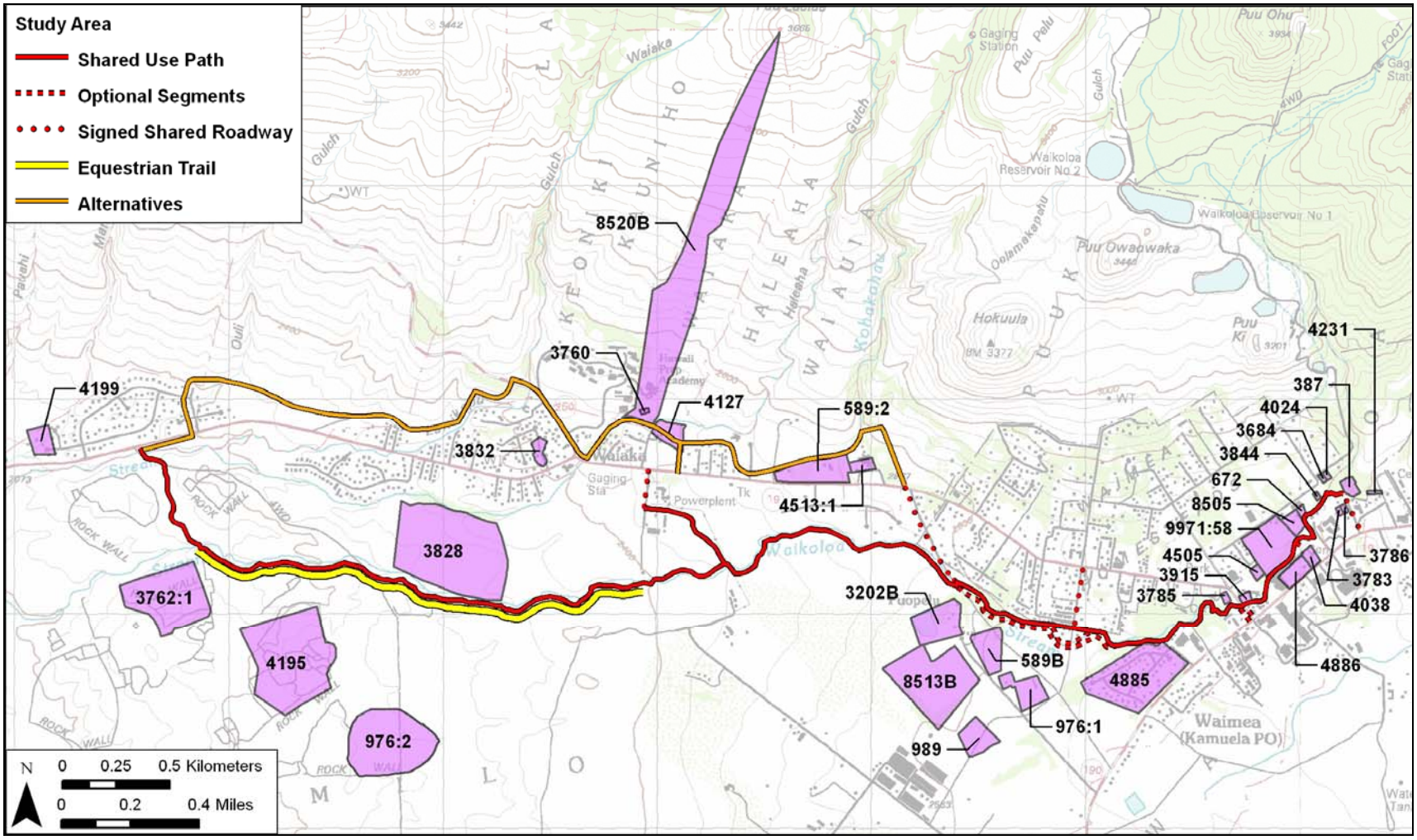

Figure 7. Map showing the approximate location of Land Commission Awards within the vicinity of the project area

Table 1. Land Commission Awards Located in the Vicinity of the Current Project Area

Land Claim #	**Claimant**	***‘Ili***
00387	Lyons, Lorenzo	Waikōloa
00589	Fay, James	Keanuiomano
00589B	Naholowaa	Pu‘uapelu
00672	Hall, James	Waimea
00976	Beckley, William	Owahawaha (Waawaa)
00989	Davis, John	Napooakolu
03202B	Bowers, Jose	Pu‘uopelu
03684	Makalahae	Waikōloa
03760	Aa, Jose	Waiaka
03762	Auwae	Papuaa
03783	Ohiku	Waikōloa
03785	Olepau	Kauakanaka, Opeawai, Alaohia
03786	Opunui, W.	Waikōloa
03828	Palea, J.A.	Koaliula
03832	Poolipi	Kauniho
03844	Puahala	Waikōloa
03915	Nahoena	Waimea
04024	Seabury, James	Waikōloa
04038	Beadle	Waimea
04127	Kuahine	Waiakanui
04195	Kanehailua	Kaluaana
04199	Kaikai	Ouli
04231	Kaulua, G.	Paulama
04505	Manuwa	Waimea
04513	Paukeaho	Keanuiomano
04885	French, William	Ahuli
04886	French, Wm.	Puloa

08505	Kikipane	Waikōloa
08513B	Hoolulu	Napo‘oakolu
08520B	Lahilahi, M.	Waiaka & 2
09971	Leleiohoku, W.P.	Puanui, Kawaihae, Pohua 1, Kaaiao, Kamakahonu, Niulii

Table 2. Table of a Sample of Land Commission Awards With Descriptions of Land Use

Land Claim #	Claimant	*‘Ili*	Land Use
00589B	Naholowaa	Pu‘uapelu	1 house lot, 3 fields partly under cultivation
03202B	Bowers, Jose	Pu‘uopelu	House lot, 3 fields
03832	Poolipi	Kauniho	Lot for cultivation with 1 house
04513	Paukeaho	Keanuiomano	1 house; 2 taro gardens in forest
04886	French, Wm.	Puloa	Slaughter house, grass houses, cookhouse

Following Kuakini’s construction of the road between Kawaihae and Waimea in 1830, ox carts were able to haul commercial items much more efficiently than was previously possible. Although missionary census records for the period from 1832 to 1845 suggest little overall change in population of Waimea (approximately 1,000 individuals), there was undoubtedly a change in composition of the constituency from predominantly Hawaiian to a mix of foreigners and Hawaiians.

3.1.9 Parker Ranch and the 20th Century

John Palmer Parker, an American born in Newton, Massachusetts in 1790, intended a sailing career when he left home in 1809. After several years at sea, Parker arrived on Hawai‘i Island in 1815 and decided to remain there. By 1819, Parker had a Hawaiian *ali‘i* wife, Kipikane, and a baby daughter, Mary. Parker and his family went to live at Waiapuka in Kohala where he farmed on twenty-one acres that had been granted to him by Kamehameha. In this era, most of the ranch work consisted of capturing wild cattle and domesticating them. As the ranching industry expanded so did responsibilities such as managing the many personnel of the Parker Ranch, building houses and growing food to feed all. Subsequently, Parker hired South American and Mexican horsemen to train his ranch hands to track, rope, brand, and bring in the wild cattle. These “vaquero”, “*paniolo*,” or “espangnol” not only introduced the management of cattle and horses, but also brought colorful clothes, hats and saddles that became the mark of Hawaiian *paniolo*. The first Hawaiian *paniolo* or cowboys actually predate many of the mainland western cowboys. The ranch personnel also made most of their own gear and machinery, including saw mills.

In the last years of the 19th Century, Waimea remained a small town concentrating on the shipment of cattle to export markets. The Waimea of 1881 was graced with two stores, a boarding house, lodging house, and a coffee saloon (Bowser 1881:540). Even at this seemingly late date, wild cattle were occasionally a problem. In 1888, Paul Jarrett was the first to commence fencing Parker Ranch lands to segregate the domesticated from the wild cattle (Doyle 1904). The next Parker Ranch manager, A.W. Carter, (manager 1899-1936), consolidated all the Parker family land holdings under the control of his ward, Thelma Parker. A.W. Carter then began in earnest to increase ranch lands, systematically breed for better, stronger, healthier cattle and horse stock, bought a barge to ship cattle with other Big Island ranchers, increased ditches for watering livestock and imported different grasses and feed for cattle. He provided the U.S. military branches with cavalry horses. He also ventured for a short time into training horses and horsemen for polo teams, and then became one of the major providers of horses in Hawai'i and abroad for work, pleasure, and shows. His son, A.H. Carter succeeded him in 1937. The Parker Ranch had become one of the biggest private businesses in Hawaii and remains the dominant economic force in Waimea.

Since the early 1900s Waimea has been part of a fast paced urbanization of the Big Island. After the World War II (late1940s-1950s) a small portion of land near South Kohala Distribution Road was use as a dump “and remnant pieces of disposed car parts and miscellaneous “junk” can be seen lying on the surface (personal communication, Woody Ramous in McGuire 2002). More recently new developments such as the Sandalwood Subdivision, the Waimea Center, Carter Professional Center, and the Canada France Hawaii Telescope have added to the growing town of Waimea.

In 1993 the W. M. Keck Observatory was placed on Mauna Kea. The headquarters resides in Waimea Town, south of the Waikōloa Stream and north of Mamalahoa Highway. Waimea continues to grow with further urbanization, though Parker Ranch remains a mainstay of the economy of the area.

3.1.10 Camp Tarawa

In 1943, the U.S. Army leased approximately 91,000 acres in Waikōloa from Parker Ranch for military training that continued until June 1946. Artillery firing and troop maneuvers by the 2nd Marine Division, the 28th Regiment, 5th Marine Division, the 6th Marine War Dog Platoon, the 31st Naval Construction Battalion, the Army’s 471st Amphibian Truck Company, the Army’s 6th Section of the 726th Signal Aircraft Warning Company, the 11th Amphibian Tractor Battalion, and the 5th Joint Assault Signal Company occurred over large expanses of the leased lands (Conner 1950, Bryson 1995).

Initially named Camp Waimea, the central operations area, located on the south side of Waimea Town adjacent to the current project area, became known as Camp Tarawa. "It consisted of tents, Quonset huts, wooden structures, and roads covering approximately 467 acres: the largest military settlement on the Big Island during World War II" (Nees and Williams 1998:16). The camp was named by marines of the 2nd Marine Division returning directly from victory at Tarawa Atoll located approximately 2,479 miles to the southwest of the small town of Waimea. The roadways within Camp Tarawa were also given names of islands and locations in and around Tarawa Atoll.

A second wave of marines, those of the 5th Marine Division, was stationed at Camp Tarawa for another purpose. "Pu‘u Ula‘ula and Buster Brown were scaled daily so that men would be ready to climb the infamous Mt. Suribachi when the time came…" (Bryson 1995:15). The men were preparing for the fateful attack on Iwo Jima, which occurred on February 19, 1945.

The influx of up to 50,000 U.S. Marines at Camp Tarawa had profound and lasting effects on the small town of Waimea. Among these effects were the increased revenue brought to local businesses, electricity, refrigeration, and the arrival of the hamburger. At least two hamburger stands popped up around Camp Tarawa including The Magnolia Inn, located within the present boundaries of Lanakila Park, adjacent to an eastern portion of the project area's preferred alignment (Melrose 1997). Hisa Kimura recounts of the Waimea hamburger stands:

> One day, Tsugi, or "Sue" as she was called by the marines, saw a boy who looked local in the endless line of diners. When she asked him if he were local or not, he introduced himself as Ira Hayes, an American Indian. (Bryson 1995:15)

As quickly as they had appeared, the Marines stationed near Waimea had departed, and by the end of June, 1946, Camp Tarawa was abandoned, roadways were renamed, and camp infrastructure was left for ruin.

3.2 Previous Archaeological Research

This section is separated into two sections, a general summary of the previous archaeology within the vicinity of the project area, and a summary specific to the current project. Previous archaeological studies conducted within the vicinity of the current project area are shown in Figure 8 and presented in Table 3. The following is a summary of these archaeological studies.

One of the most widely cited studies in this area was completed by Barrera and Kelly (1974). In 1973, the Bishop Museum conducted an archaeological survey and historical review for the proposed Waimea to Kawaihae Road corridor, during which over 4,500 archaeological features were identified, the majority of which were located either near the coast at Kawaihae or in the Lālāmilo area near Waimea.

Of particular interest are the historic properties located in upper Lālāmilo and upper Waikōloa, which are nearest to the current project area. Based on the survey results, Lālāmilo contains nearly 3,500 features (Barrerra and Kelly 1974). The study resulted in the designation of the "*Kuleana* and Ranch District" in the Lālāmilo portion of the project area (Ibid.). This information is important as it indicates the high density of surface archaeology that one can expect to find in upper Lālāmilo near the project area. Historic properties have been described as being included in an extensive habitation and agricultural system.

In 1981, Bishop Museum conducted an archaeological survey of the proposed Lālāmilo Agricultural Park, located south of the current project area, abutting a portion of the preferred alignment and containing a portion of the possible future equestrian trail (Clark 1981). A total of 321 historic properties were identified and recorded. The historic properties were broadly associated with the Waimea agricultural system. One historic property number, SIHP# -9179, was assigned to all of the irrigation ditches (*‘auwai*) within the study area including "Akona *‘auwai*", portions of which are located within or adjacent to portions of the current project area's preferred alignment. Clark (1981:28) describes Akona's *‘Auwai* as follows:

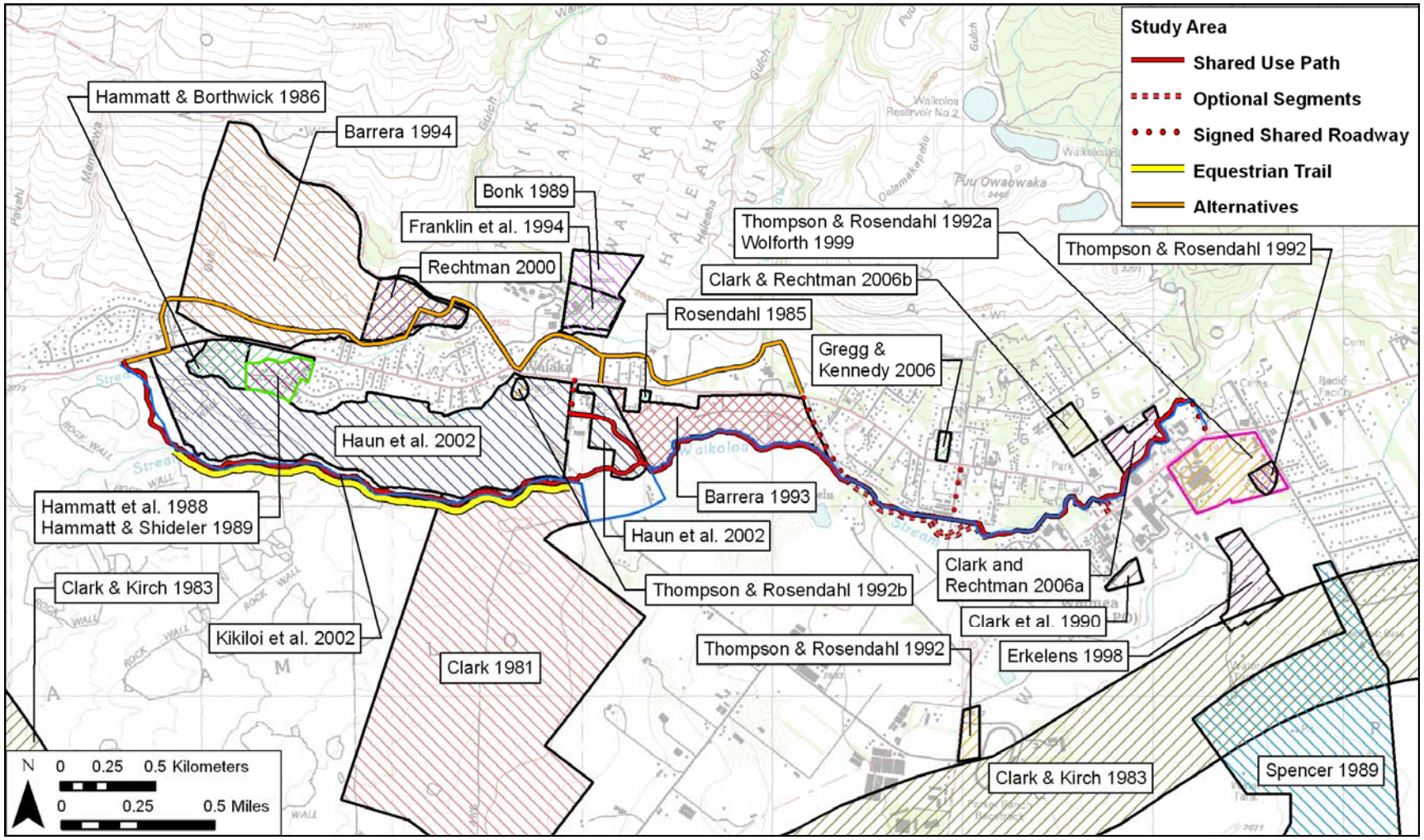

Figure 8. Map showing location of previous archaeological studies in the Waimea area relative to the current project area

Table 3. Previous Archaeological Studies in the Waimea area

Reference	Nature of Study	Location	Findings
Barrera & Kelly 1974	Archaeological Reconnaissance Survey	Waimea to Kawaihae Road Corridor	Approx. 4,561 features were recorded incl. habitation and agricultural complexes. The majority were near coastal Kawaihae or in the Lālāmilo area near Waimea. Of particular interest is the area referred to as the "*kuleana* and ranch district."
Clark 1981	Archaeological Survey	Adjacent to existing Lālāmilo Farm Lots, bounded on the north by Waikōloa Stream	321 historic properties associated with the Waimea agricultural system. SIHP# -9179 *'auwai* system including Akona's *'Auwai*.
Clark and Kirch 1983	Archaeological Investigations	0.61 km wide corridor extending just south of Waimea Town	Defined the Waimea agricultural system and subsystems. SIHP# -2684, dendritic *'auwai* possibly connecting to Akona's *'Auwai*
Rosendahl 1985	Archaeological Reconnaissance Survey	TMK [3] 6-6-001: 005 por.	None
Hammatt & Borthwick 1986	Archaeological Reconnaissance Survey	Lālāmilo Houselots Subdivision	8 historic properties including agricultural features and complexes typical of the Waimea Field System
Hammatt et al. 1988	Archaeological Inventory Survey w/ Subsurface Testing	Lālāmilo Houselots Subdivision	Seven Archaeological historic properties recorded and limited subsurface excavation conducted. Both habitation and agricultural historic properties were documented.
Hammatt & Shideler 1989	Lālāmilo,Ka La Loa Subdivision	Data Recovery	Data analysis suggested that the informal agricultural activity (represented in ag. mounds) were occurring by the mid 13th century, and field boundary walls were constructed by the mid-15th century, with permanent habitation occurring from early 16th century to

Reference	Nature of Study	Location	Findings
			the late 18th century.
Bonk 1989	Archaeological Reconnaissance Survey	Waiaka, N side of road to Kawaihae	Agricultural terraces related to Field Complex #1 as defined by Clark and Kirch (1983)
Spencer 1989	Archaeological Investigations	30’ wide 4,500’ long Ag Pipeline Corridor	None
Clark et al. 1990	Archaeological Testing and Data Recovery	Waimea School Improvements TMK [3] 6-7-002: 017 por.	Documentation of SIHP# 8808 part of the Waimea agricultural system as defined by Clark and Kirch (1983).
Thompson & Rosendahl 1992a	Archaeological Inventory Survey	7 parcels scattered around edge of Waimea Town	SIHP# -16095, *‘auwai* complex SIHP# -18054, agricultural field complex
Thompson & Rosendahl 1992b	Archaeological Inventory Survey	TMK [3] 6-7-002:017 por.	Further documentation of SIHP# -16095
Barrera Jr. 1993	Archaeological Inventory Survey	Sandalwood Estates, 50-acres	SIHP# -14948 a complex of pre-contact agricultural field borders
Barrera Jr. 1994	Archaeological Inventory Survey	TMK: [3] 6-2-001:009	43 historic properties, SIHP#’s 18558 – 18601, consisting of habitations, agriculture, burials, walls, trails, and ‘animal barriers’
Franklin et al. 1994	Archaeological Inventory Survey	Hawai‘i Preparatory Academy TMK [3] 6-5-001:033 por.	SIHP# -19643 to -19649 including two significant historic properties, a historic habitation terrace (SIHP# -19648) and a cemetery and associated features (SIHP# -19649)
Erkelens 1998	Archaeological Investigations	Waimea Town Center	SIHP# -8812 *kuleana* lots SIHP# -19416 Duncan-Lanakila Cemetery SIHP# -19417 Pukalani stables and blacksmith shop SIHP# -19418 veterinary office

Reference	Nature of Study	Location	Findings
			SIHP# -19419 breaking corral.
Wolforth 1999	Data Recovery	TMK [3] 6-7-002:013	Documentation of an *‘auwai* within the study area
Rechtman 2000	Supplemental Archaeological Inventory Survey	TMK [3] 6-2-001:091	Assessment of previously identified historic properties. SIHP# -18579 (newly identified), historic trash dump.
Haun et al. 2002	Archaeological Inventory Survey	DHHL Residential Development	76 historic properties generally related to habitation and agricultural practices
Kikiloi et al. 2002	Literature Review and Field Inspection	Waimea Trails and Greenway Project	During the assessment they concluded that the trail corridor intersects a number of features, such as ‘*auwai* and field walls and recommended an inventory survey.
Clark and Rechtman 2006a	Archaeological Inventory Survey	TMK [3] 6--5-004:025 and -063	SIHP# -26680 historic wall SIHP# -26681 historic wall SIHP# -26682 *‘auwai* SIHP# -26683 wooden structure (WWII-era)
Clark and Rechtman 2006b	Archaeological Monitoring	TMK [3] 6-5-004:029, 030, and 050	SIHP# -24168 Feature H - stone and concrete decorative element
Gregg and Kennedy 2006	Archaeological Assessment	TMK [3] 6-5-002:043	None
Yucha et al. 2009	Archaeological Inventory Survey	Increment 1 for the Waimea Trails and Greenway Project	SIHP# -26871 WWII-era infrastructure; Camp Tarawa SIHP# -26872 Akona’s *‘Auwai* SIHP# -26873 Concrete ford and roadway

> The main channel was labeled the Akona *‘auwai* by Wall, thus lending its name to the entire subset…The Akona subsystem branches into a large dendritic network through the center of the survey area. It is this irrigation network which fed into the Līhu'e sugarcane fields. It also, however, extends well beyond this, indicating that it is not merely a development for the short-lived sugar industry in Lālāmilo.

In 1983, Bishop Museum conducted archaeological investigations of the Mudlane-Waimea-Kawaihae road corridor (Clark and Kirch 1983). The fieldwork, performed in 1973, identified 4,561 archaeological features. These feature complexes were then referred to as the Waimea agricultural system:

> The Waimea agricultural system comprises the remains of an extensive series of agricultural features, throughout which are scattered multiple residential structures. The system forms a large arc to the W and S of the present-day village of Waimea. Beginning on the S flank of Kohala Mountain, a short distance below Pu‘u La‘ela‘e, this system extends down the slope and onto the Waimea plain W of town. It then bends to the E, fading out just S of Waimea and W of Kuhio Village (Clark and Kirch 1983: 293).

Additionally, numerous historic properties were identified, both agricultural and habitation, and the project provided a broad database for comparing site distribution data from the coast to upland. Excavations associated with the Mudlane to Kawaihae project resulted in a total of 45 charcoal samples undergoing radiocarbon analyses. Approximately 71% of the dates were post 1600 A.D. and considered relatively late (Clark and Kirch 1983). Additionally, the Mudlane to Kawaihae project yielded “evidence that the prehistoric and early historic inhabitants of the Waimea region practiced an intensive form of cultivation, utilizing what Clark has termed ‘supplemental irrigation.’” This differs from the two classic forms of indigenous Hawaiian agriculture, irrigated pondfield cultivation and dryland field-system cultivation. (Ibid.: 528).

As a result of the information gained through the Mudlane to Kawaihae project, Clark went on to develop a settlement pattern model for the Kawaihae-Waimea region (Clark 1987) This settlement pattern included four zones: Coastal Zone, Intermediate Zone, Kula zone, and Wilderness zone. The current project area lies within the Kula Zone, described as follows:

> Extends from the Intermediate Zone to between 7.3 and 9.7 km inland. It ranges in elevation from 585 m to 830 m (1,919-2,722 ft) in elevation, with small sections extending to as much as 975 m (3,198 ft) elevation. Subsistence activity is dominated by agriculture…Crops included sweet potatoes, dry-land taro, gourds, and *wauke*. Habitation sites included single use sites, extended and recurrent occupations, and permanently occupied sites. Habitation features include small walled shelters, caves, overhangs, terraces, platforms, and enclosures. The more intensively occupied habitation sites are clustered in neighborhoods sometimes larger wards. Burial features are also present (Clark 1987).

In 1985, Paul H. Rosendahl, Ph.D., Inc (PHRI), conducted an archaeological reconnaissance survey of the Kawaihae Reservoir No. 1 Site, located in the central portion of the current project

area between the alternate and preferred alignments (Rosendahl 1985). No surface historic properties were encountered and no further archaeological work was recommended.

In 1986, Cultural Surveys Hawai‘i (Hammatt and Borthwick 1986) conducted an archaeological reconnaissance survey on approximately 50 acres located immediately north of Waikōloa Stream. Eight historic properties, typical of the Waimea Agricultural System, were located (portions of Field Complexes 1 and 2). This work was followed by a detailed archaeological survey and subsurface testing of 12 acres of the original study area (Hammatt et al. 1988). Seven historic properties were documented including both agricultural and habitation complexes. Excavations revealed an abundance of indigenous artifacts and midden, indicating "this small agricultural-habitation complex was in use in the late prehistoric period and was abandoned before European manufactured goods were available (probably 1820 or before)" (Hammatt et al. 1988:69). Data recovery of historic properties yielded radiocarbon dates which "suggest an initial low investment agricultural effort probably in sweet potato production, followed by a gradual intensification of effort just to the west over a period of several centuries" (Hammatt and Shideler 1989:50).

In 1989, University of Hawai‘i at Hilo conducted an archaeological reconnaissance survey near the Hawai'i Preparatory Academy in Waimea located north of the current project area's alternate alignment (Bonk 1989). The study area is located within Field Complex #1 as defined by Clark and Kirch (1983). Historic properties located within the study area consisted of varying sizes of agricultural terraces. No *‘auwai* or habitation structures were observed. Data recovery and additional mapping of these terraces was recommended prior to construction within the project area.

In 1989, Soil Conservation Service conducted archaeological investigations of the Lālāmilo agricultural addition irrigation pipeline corridor and the livestock distribution system and management area (Spencer 1989). The study area is located southeast of the current project area. No historic properties were observed and no further archaeological work was recommended.

In 1990, Bishop Museum conducted archaeological testing and data recovery for the Waimea School improvements (Clark et al. 1990). The study area is located southeast of the current project area. Surface and subsurface investigations focused on documentation of previously recorded SIHP# -8808, part of the Waimea agricultural system as defined by Clark and Kirch (1983). Three *‘auwai*, were studied. Profiles suggest a historic period origin with some indirect evidence for possible pre-contact construction. A sample from the lower charcoal lens yielded a preferred range of A. D. 1449 to 1674.

In 1992, PHRI conducted an archaeological inventory survey for potential historic properties for the North Hawai'i Community Hospital (Thompson and Rosendahl 1992a). The study area consisted of seven individual parcels located near the current project area. The survey identified two historic properties, SIHP# -16095 and -18054. SIHP# -16095 is an ‘*auwai* system located on the surface of Parcels 1 to 4. SIHP# -18054 is an agricultural field complex located within Parcel 7 with is near the alternate alignment for the current project. The agricultural field complex was equated to Field Complex 2 as defined by Clark and Kirch (1983).

In 1992, PHRI conducted an archaeological inventory survey for the Waimea Elderly Housing Project (Thompson and Rosendahl 1992b). The project area is located near the alternate

alignment for the current project. The study consisted of further documentation of SIHP# -16095, an `*auwai* system. A program of archaeological monitoring was recommended.

In 1993, Chiniago Inc. conducted an archaeological inventory survey of approximately 50 acres for the Sandalwood Estates (Barrera Jr. 1993). The study area borders the preferred alignment for the current project area. A complex of agricultural field borders was identified during subsurface testing and assigned SIHP# -14948. The agricultural field borders were determined to be located at the east of Field Complex 2 as defined by Clark and Kirch (1983). No further archaeological work was recommended.

In 1994, PHRI conducted an archaeological inventory survey for the Hawai‘i Preparatory Academy Waimea campus expansion (Franklin et al. 1994). The study area is located north of the current project area's alternate alignment. During fieldwork, seven historic properties (SIHP# -19643 to -19649) associated with agriculture and habitation were identified. The historic properties comprised the formal types: water channel, cemetery, terrace, concrete foundation, and alignment. Only two historic properties, SIHP# 19648, a historic habitation terrace and SIHP -19649 a cemetery with associated feature were determined to be significant.

In 1994, Comstock Cultural Resource Management, Inc. conducted an archaeological inventory survey of approximately 250 acres (Barrera 1994). The study area is part of the western half of the alternate alignment for the current project area. 43 historic properties were identified, both pre-contact and historic, and included habitations, agriculture, burials, walls, trails, and 'animal barriers'.

In 1998, International Archaeological Research Institute, Inc. (IARII) conducted archaeological investigations of the *kuleana* lots at Pukalani within the Waimea Town Center project area (Erkelens 1998). The study area is located southeast of the current project area. A total of five historic properties were documented during the study; SIHP# -8812 *kuleana* lots, SIHP# -19416 Duncan-Lanakila Cemetery, SIHP# -19417 Pukalani stables and blacksmith shop, SIHP# -19418 veterinary office, and SIHP# -19419 breaking corral.

In 1999, PHRI conducted data recovery for the North Hawai‘i Community Hospital with focus on investigations at an *'auwai* in the Lālāmilo field system (Wolforth 1999). The study area is located southeast of the east end of the current project area. During the study, an *'auwai* located within the study was cross-sectioned and bulk sediment samples were collected for radiocarbon dating and palynological analysis. Several subsurface features were also identified.

In 2000, Rechtman Consulting, LLC conducted a supplemental archaeological inventory survey of TMK [3] 6-2-001:091 located within the western portion of the alternate alignment for the current project area (Rechtman 2000). The study assessed previously recorded historic properties within the current project area and encountered one newly identified historic property, SIHP# -18579, a historic trash dump. Additionally, several new agricultural features of SIHP# -18581 were identified.

In 2000, CSH conducted a literature review and field inspection of approximately 6 miles for the proposed Waimea Trails and Greenway Project (Kikiloi et al 2002). This literature review and field inspection consisted of a pedestrian inspection of the proposed alignment, which roughly follows the route of the preferred trail alignment and possible future equestrian trail location for the current project. Most of the area had been urbanized to such an extent that no

surface historic properties exist, except for concrete and boulder stream crossing structures(s). One section in the western portion contained historic property complexes associated with agriculture and habitation from the pre-and post- contact eras. The Trail Corridor intersected a number of features, such as, `auwai and field walls. The corridor was not staked; thus a precise inventory of possibly affected historic properties and features was not possible and an inventory survey investigation of the staked alignment was recommended.

In 2002, Haun and Associates conducted and archaeological inventory survey of a 266-acre area for a Department of Hawaiian Home Lands (DHHL) development at Lālāmilo (Haun et al. 2002). The study area is located near the west end of the current project area. A total of 76 historic properties consisting of 819 features were documented during the study. Historic property types included mounds, enclosures, walls, irrigation ditches, platforms, and field boundaries.

In 2006, Rechtman Consulting, LLC conducted an archaeological inventory survey of TMK [3] 6--5-004:025 and -063 (Clark and Rechtman 2006). The study area is located partially within the east end of the current project area. A total of four historic properties were documented during the study (SIHP# -26680 to -26683). These historic properties consisted of two historic walls, one *‘auwai* that extends parallel to Waikōloa Stream, and a historic wooden structure likely erected by the U.S. Military during WWII.

In 2006, Rechtman Consulting, LLC conducted archaeological monitoring of development activities associated with the Waimea Parkside Residential Subdivision (Clark and Rechtman 2006b). The study area is located north of the east end of the current project area. No historic properties were newly identified during the study, however, an additional feature (Feature H) was added to SIHP# -24168. Feature H of SIHP# -24168 is described as a small stone and concrete construction with a concave concrete floor. The feature was determined to function as a "former decorative garden element or a small pond" (Clark and Rechtman 2006b:6). Two adze fragments along with midden and historic trash were also recorded throughout the study area.

In 2006, Archaeological Consultants of the Pacific, Inc. conducted and archaeological assessment of a property located at TMK [3] 6-5-002:043 (Gregg and Kennedy 2006). The study area is located north of the current project area. No historic properties were identified during the study.

In 2009, CSH conducted an archaeological inventory survey of Increment 1 for the Waimea Trails and Greenway Project (Yucha et al. 2009). The study area is located near the east end of the project areas preferred alignment, between Lindsey Road and Kahawai Street. A total of three historic properties were documented during the study (SIHP# -26871, SIHP# -26872, and SIHP# -26873). These historic properties consisted of WWII-era infrastructure associated with Camp Tarawa, a portion of Akona’s *‘Auwai,* and a concrete ford and associated roadway.

3.3 Previous Archaeology Associated with the Waimea Trails and Greenway Project

The Waimea Trails and Greenway Project consists of two separate alignments, a preferred alignment and an alternate alignment (see Figure 5). The preferred alignment is located along Waikōloa Stream from Kamuela View Estates to the western edge of the Waimea Public Park.

There are three signed shared roadways leading from Kawaihae Road to the preferred alignment. The first, westernmost roadway follows Opelo Rd, the second, central roadway follows Kahawai Street, and the third roadway follows the S. Kohala Distribution Road for a short distance, turning east to then cut through the Future County Park to meet with the preferred alignment at Waikōloa Stream. The signed shared roadways will not include a constructed trail, and represent the connection points to the trail.

Two previous studies have been conducted for the Waimea Trails and Greenway Project along the preferred alignment, a 2000 literature review and field inspection along 6 miles of the trail (Kikiloi et al 2002) and an inventory survey of a 1.1 mile portion located between Lindsey Road and Kahawai Street (Yucha et al 2009; Figure 9). Neither the signed shared roadways nor the alternate alignment have been previously surveyed. The field inspection portion of this study area focused on areas that had not yet been surveyed (the signed shared roadways and the alternate alignment. The previously conducted archaeological investigations provide sufficient information for the recommendations specific to the preferred alignment. A summary of the fieldwork and findings from the previous studies is provided below.

3.3.1 2002 Literature Review and Field Inspection (Kikiloi et al.)

In 2000, CSH conducted a literature review and field inspection of approximately 6 miles for the proposed Waimea Trails and Greenway Project (Kikiloi et al 2002; Figure 10). Though this project was titled an ‘archaeological assessment’, it was not considered one per HAR Chapter 13-276 and would be more appropriately termed a literature review and field check. An archaeological assessment typically consists of an archaeological inventory level survey with no historic properties identified, as per HAR Chapter 13-13-284-5. This literature review and field inspection consisted of a pedestrian inspection of the proposed route, which roughly follows the route of the preferred trail alignment for the current project. The inspected area was divided into five different sections based on terrain type, degree of urbanization, and the potential for cultural resources (Figure 10). The western portion of this project area borders the Haun et al. 2002 inventory survey of 266-acres, located just north of the project area.

Section 1 encompassed the trail corridor from the Kawaihae Road intersection at South Kohala View Estates to the County Refuse Transfer Station. Section 1 is within what has been referred to as the Lālāmilo Field Complex, a subset of the Waimea agricultural system (Clark 1987). Additionally, Section 1 is, at least in part, within the “Lalamilo Kuleana and Ranch District;” State site 50-10-05-2292 (Barrera and Kelly 1974).

The Field Complex and Kuleana and Ranch District designations were based on surveys related to the proposed Waimea/Kawaihae Highway. The types of sites and features reported on include `auwai (irrigation ditches), agricultural fields and house sites (both pre-and post contact). The `auwai - some stone-lined, others with soil embankments - extend off the three streams, Waikōloa, Keahuiomano and Lanikepu, in Section 1 of the project area.

The `auwai irrigate fields which are delineated by low mounded walls, sometimes utilizing the natural landscape. Natural swales or depressions are often enhanced to create the fields. The house sites range from low platforms to high-walled enclosures and, as mentioned earlier, are from both before and after A.D. 1776. The historic time period house sites have been documented as related to 1800s Land Commission Awards (i.e. LCA or kuleana).

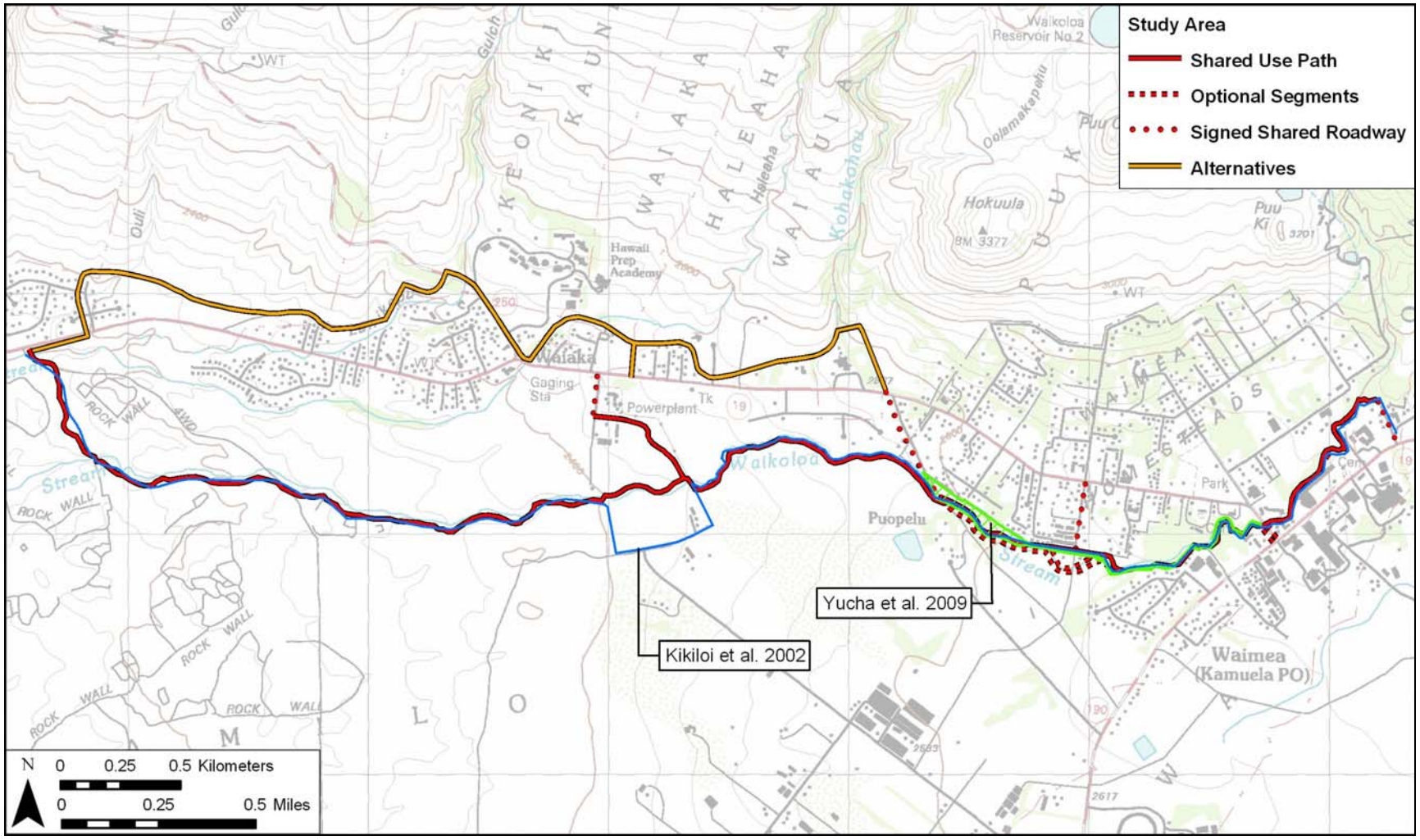

Figure 9. Portion of the 1995 Kamuela USGS 7.5-minute topographic quadrangle showing the location of the current project area in relation to the 2002 Kikiloi et a. and 2009 Yucha et al. project areas.

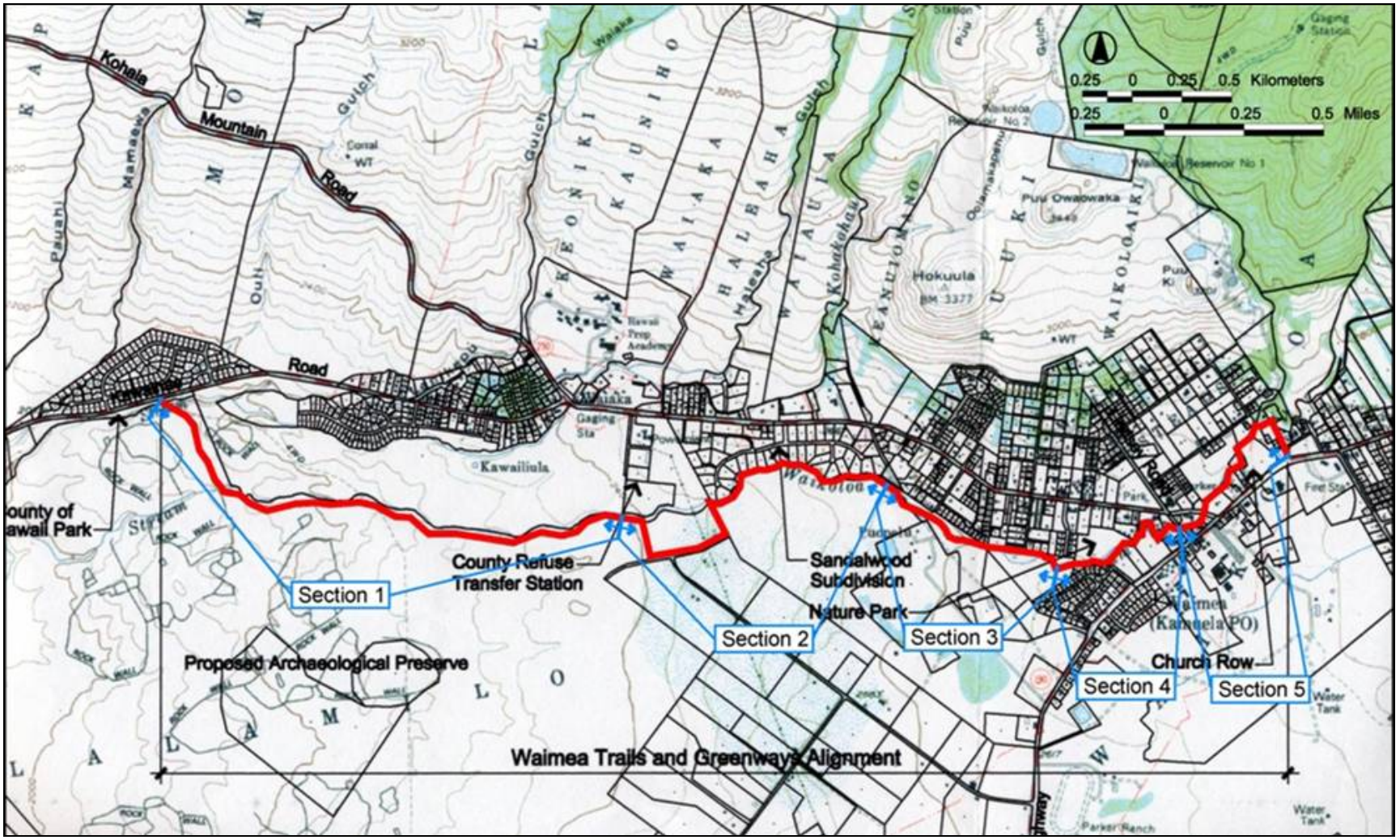

Figure 10. USGS Topographic Map, Kamuela Quadrangle, showing the location of the Kikiloi et al. (2002) project area and the location of each of the 5 sections.

Section 1 was not staked during the field inspection so no specific site or features designations were accomplished in relation to intersects with the Kikiloi et al. (2002) proposed trail route. The field inspection did indicate that certain `auwai sections, a wall segment, and a number of fields are in the vicinity of the trail corridor. No house sites appear to be within the trail corridor.

Section 2 refers to the portion of the trail corridor between the existing county refuse transfer station and the eastern end of the Sandalwood Subdivision. At the conjunction of Sections 2 and 3 is an old concrete ford in Waikōloa Stream. The ford is associated with an old, asphalt covered roadway that extends from the Kawaihae Road to Pu`u `Opelu, the former Parker Ranch Headquarters and residence of Richard Smart, now a museum open to the public. The roadway and associated stream crossing are presumably older than 50 years and thus can be considered historic properties, although the proposed trail would have no significant impact on the features.

The portion of the proposed trail corridor adjoining the Sandalwood Subdivision is pasture type land that is presently separated from active pasture by a new fence line. The area had not been grazed for a while and the Kikuyu grass is fairly thick. No historic features were observed on either side of the fence line. The heavily grazed side had excellent ground visibility. The ungrazed side had poor ground visibility.

The portion of Section 2 that is State land, just east of the existing transfer station, has been altered extensively by bulldozing and old landfill activities. The trail corridor follows a bulldozed path between Waikōloa Stream and the ‘mountain of trash’ of the old land fill. No historic properties were observed in Section 2.

Section 3 refers to the portion of the proposed trail route between the east end of the Sandalwood subdivision and Waiki`i Village Road. The proposed route shifts to the northern side of Waikōloa Stream for most of Section 3 where it is adjacent to existing houselots. The area has been altered in association with the residential properties and no archaeological resources were observed in Section 3.

Section 4 refers to the area between Waiki`i Village Road and Lindsay Road Bridge. This section is dominated by a stand of large Eucalyptus trees within which Waikōloa Stream makes afew sharp bends or meanders. Unlike Section 5, the buildings and associated infrastructure (e.g. parking lots) within Section 4 do not encroach up to the edge of the stream. The stand of Eucalyptus trees buffers the proposed trail route from the office buildings.

Remnant structures related to a pipeline crossing and possibly a concrete ford were observed in Section 4. The large concrete slab remnant had an imprinted date of “194_,” suggesting a World War II association. The pipe crossing remnant structures are short, faced, ramp like structures with the faced vertical side facing the stream. Construction type is similar to the Section 5 crossing, consisting of basalt boulders and concrete.

Section 5 is the eastern trail terminus at Church Row westward to the Waikōloa stream bridge at Lindsey Road. Section 5 has been altered extensively by modern urbanization. The proposed route would be on the southern side of Waikōloa stream which has been more altered by recent construction than the northern side. Construction activity in this section includes: the Baptist Church yard, KECK office complex, new parking lots for the Koa Grill Restaurant, and the Waimea Shopping Center.

The southern bank of Waikōloa Stream in Section 5 is dominated by thick kikuyu grass, christmas berry, ginger, and other introduced plants. The area between the modern buildings and the stream is fairly narrow especially behind the Waimea Shopping Center. Two historic structures were observed within Section 5; a stacked stone wall behind the KECK offices and a remnant of a basalt boulder and concrete stream crossing. The boulder wall is typical of the many dry masonry stone walls in the Waimea area and presently serves as the stream side property boundary for the KECK office complex. The remnant boulder and concrete stream crossing appears to be for an old narrow roadway and/or for an old pipeline. The old stream crossing is situated behind a row of stores some 200 ft. east of the Lindsey Road bridge. Additionally, the eastern terminus of the trail is in close proximity to Imi`ola Church and associated cemetery. The church is on the State and National Register of Historic Places and has been allotted State Site # 50-10-06-7151.

Based on the field observation, Sections 2-5 have been urbanized to such an extent that no surface historic properties exist, except for concrete and boulder stream crossing structures(s). Section 1, west of the County Refuse Transfer Station, has been altered little during the modern urbanization of Kamuela town. Section 1 contains site complexes associated with agriculture and habitation from the pre-and post- contact eras (Barrera and Kelly 1974, Clark and Kirch 1983, Clark 1987). The Trail Corridor intersects a number of features, such as, `auwai and field walls. The corridor was not staked in Section 1; thus a precise inventory of possibly affected sites and features was not undertaken for this assessment.

Based on the background studies and field inspection Cultural Surveys Hawai`i recommended an inventory-level survey for the entire route. The field inspection indicated that the focus of the inventory survey should be in the area west of the County Refuse Transfer Station (i.e. Section 1). It was recommended that an inventory survey should await a staked alignment so that sites can be accurately located in relation to the alignment. It was also suggested that alternatively, the inventory survey results could be utilized to create an alignment with less impact to archaeological resources.

3.3.2 2009 Archaeological Inventory Survey (Yucha et al.)

In 2009, Cultural Surveys Hawaii conducted an archaeological inventory survey of an 8.96-acre portion of the Waimea Trails and Greenway Project (Yucha et al. 2009). This portion, measuring approximately 1.1 miles, is within the current project area’s east end of the preferred alignment. A complete pedestrian survey identified three historic properties consisting of four features within or adjacent to the 8.96-acre project area along Waikōloa Stream (Figure 11; Table 4). These historic properties consisted of a collapsed and severely damaged concrete ford or bridge (SIHP # -26871 Feature A), a remnant portion of paved road (SIHP # -26871 Feature B), an earthen ditch segment (SIHP# -26872), and an intact concrete ford and adjoining roadway (SIHP# -26873). SIHP# -26871 Features A and B were determined to be WWII-era constructions associated with Camp Tarawa. SIHP# -26872 was determined to be a remnant portion of "Akona's *‘Auwai*", a mid-19th century irrigation ditch used for irrigating sugar cane fields and supplying the Līhu‘e Sugar Mill (Burtchard and Tomonari Tuggle 2003). SIHP# -26783 was determined to be an early- to mid-20th century concrete ford and adjoining roadway that was used throughout the 20th century as a route between the Māmalahoa Highway and Kawaihae Road that bypassed the town of Waimea.



Figure 11. Portion of the 1995 Kamuela USGS 7.5-minute topographic quadrangle showing historic properties located during the Yucha et al. 2009 inventory survey

Additionally, two modest and generally modern modifications were observed, consisting of a basalt stone and concrete terrace and a pipeline support. Both of these modifications were determined to lack site integrity.

SIHP# -26871 consisted of two features (Feature A and B) related to WWII-era infrastructure associated with Camp Tarawa. Feature A is a collapsed ford or bridge with an etched date of July 1942. Feature B is a remnant portion of roadway likely part of Abemama Road of the former Camp Tarawa. SIHP# -26871 was recommended significant under Hawai‘i Register Criteria A due to its direct association with WWII and Criteria D due to its information content.

SIHP# -26871 Feature A would not be adversely affected by the proposed trail and greenway project and therefore is was recommended for preservation in the form of avoidance and protection. If, in the course of future development, SIHP# -26871 is potentially affected, "the portion of the ford containing the written name and date be recovered for use in a permanent interpretive marker at this location" (SHPD Correspondence LOG# 2009.3224, DOC# 0908MD07; See Appendix C). It was suggested that interpretive signage at the location of SIHP# -26871 Feature A may be developed in consultation with SHPD to provide Waimea residents and pedestrians using the trail with information on the history of the area. Interpretive signage at SIHP# -26871 Feature A may include a short synopsis of Camp Tarawa and how the camp transformed the lives of Waimea residents during and after World War II.

SIHP# -26871 Feature B is recommended for no further work. Sufficient information regarding location, function, age, and construction had been generated by the inventory survey investigation.

SIHP# 50-10-06-26872 (CSH 2), an early post contact irrigation ditch (Akona's *‘Auwai*), was recommended significant under Hawai‘i Register Criteria A due to its association with the advent of commercial sugarcane agriculture on Hawai'i Island as a major agricultural trend lasting for over a century and D due to its information content. SIHP# 50-10-06-26872 was recommended for preservation in the form of avoidance and protection. It was recommended that any proposed alteration to SIHP# 50-10-06-26872 would require prior consultation with, and approval of, SHPD.

SIHP# 50-10-06-26873 (CSH 3), a historic-era concrete ford and associated roadway, was recommended significant under Hawai‘i Register Criterion D due to its information content. Sufficient information regarding location, function, age, and construction was generated by the inventory survey investigation and no further work was recommended for SIHP# 50-10-06-26873.

The Yucha et al. (2009) project area is located within Section 3 and Section 4 of the Kikiloi et al. (2002) survey area. Kikiloi et al. (2002) observed no archaeological resources within Section 3, though and an intact concrete ford and adjoining roadway (SIHP# -26873) was observed during the Yucha et al. (2009) inventory survey. Within Section 4, Kikiloi et al. (2002) identified multiple “remnant structures” including a large concrete slab remnant with an imprinted date of “194_”. This slab was relocated during the Yucha et al. 2009 survey and recorded as having the name "A BASTIN" and the date "JULY 1942" printed on it and was designated SIHP# -26871. Other remnant structures were observed within Section 4 and it is likely that they are the same historic properties located and recorded by Yucha et al. (2009) as SIHP # -26871 Feature A,

SIHP # -26871 Feature B and SIHP# -26872, as well as the two modifications observed but not recorded as sites based on their lack of site integrity.

The findings of the inventory survey were largely as expected when compared to land use in the vicinity of the project area. No pre-contact or traditional Hawaiian historic properties were identified within the project area. Previous archaeological research (Clark 1981; Barrera Jr. 1993; Haun et al. 2002) suggests that pre-contact land use associated with the Waimea agricultural field system was generally located to the west and south of the project area. It seems likely however, that the area along Waikōloa Stream within the project area could have served a similar purpose. Historic and modern development beginning in the mid-19th century may have impacted or completely destroyed any pre-contact historic properties located on the surface of the project area.

Table 4. Summary of historic properties located within the current project area

SIHP# 50-10-06-	Feature	Type	Function	Probable Age	Significance	Recommendations
26871	A	Ford	Transportation	WWII-Era	A, D	Preservation (avoidance and protection)*
	B	Road	Transportation	WWII-Era	A, D	No Further Work
26872	-	Ditch	Agriculture/ Water Control	Post-Contact	A, D	Preservation (avoidance and protection)
26873	-	Ford	Transportation	Post-Contact	D	No Further Work

3.4 Predictive Model

A thorough review of historical records, previous archaeology, and modern land use, suggest that the area surrounding the current project area has been significantly impacted during historic times, specifically during the construction of modern subdivisions. Much of the project area has likely been graded to support the subdivisions and associated roadways, and some evidence of bulldozing was apparent during the field inspection. One area of interest is the location of Akona's *‘Auwai*, which according to historic maps originates at a large meander on the south side of Waikōloa Stream within or adjacent to the preferred alignment for the current project area and

continues west, parallel to the main stream channel. The eastern half of the alternate alignment as well as the eastern half of the preferred alignment borders several modern subdivisions and residential areas suggesting possible impacts to any historic properties in these locations. Historic properties located within the margins of Waikōloa Stream will likely be associated with vehicular or utility stream crossings including fords, bridges, or pipeline supports.

Based on studies within the alternate alignment corridor (the majority of the area inspected during the current study), the majority of this area should contain extensive historic properties in the form of pre-Contact as well as Historic features. The pre-Contact historic properties are most likely associated with agriculture (terraces, walls, mounds), though permanent habitation sites as well as burials have also been reported in the area (Franklin et al. 1994; Rechtman 2000; Haun 2002). Some areas of post-Contact disturbance and modification to pre-Contact historic properties has occurred in the area (Rechtman 2000) and the current study found some evidence of this within the western portion of the alternate alignment.

Section 4 Results of Fieldwork

4.1 Survey Findings

The field inspection consisted of a limited pedestrian survey of the Waimea Trails and Greenway project's proposed alternate alignment, where access was available, and three of the signed shared roadways; Opelo Rd., Kahawai St., and South Kohala Distribution Rd. The portions of the project area (i.e. preferred and alternate alignments) subject to previous studies (Kikiloi et al. 2002; Yucha et al. 2009) were not revisited during this fieldwork portion of this study. The signed shared roadways were largely along existing roads and access was not an issue. The route along the South Kohala Distribution Road goes through the Future County Park and access into this area was also available. The eastern half of the alternate alignment is above a large neighborhood and access to the area was limited (Figure 12). For the most part, this area was inspected from side streets and the main road with limited to no pedestrian inspection occurring. The western portion of the alternate alignment, located west of Hawaii Preparatory Academy, was accessible without disturbance to the surrounding residences. The findings from this area are representative of the entire alternate alignment (Figure 13).

The pedestrian inspection identified 14 historic properties: seven previously identified historic properties or historic property concentrations, and 7 newly identified historic properties, consisting of multiple features within or adjacent to the current survey area (Table 5; Figure 14). In general, the purpose of the field inspection was to develop data on the nature, density, and distribution of archaeological sites within the project area and did not include thorough documentation or an application for SIHP #'s. The field inspection consisted of a walk-through reconnaissance within the accessible areas of the project area. Potential archaeological sites or site areas were documented with written descriptions and photographs and located with a GARMIN GPSMAP60Cx unit (accuracy +/- 2-5 m).

4.2 Description of Previously Identified Historic Properties

During the course of the field inspection, CSH relocated seven previously identified historic properties or historic property concentrations: SIHP – 18568, SIHP – 18581, SIHP - 18587, SIHP - 18588, SIHP - 18590, SIHP – 18593, and a historic property concentration containing six previously identified historic properties (SIHP -18569, -18583, -18584, -18585, -18586, and -18597) (Barrera 1994; Rechtman 2000). The historic properties were photographed, the descriptions were updated and GPS points were taken. Figure 15 depicts the identified historic property's locations in association with the Barrera 1994 site map.

SIHP – 18568 was first recorded in 1994 by Barrera as "…a concentration of free standing stone walls located adjacent to the south end of Ouli Gulch, covering an area of 50 by 100 meters… The position of the walls and their construction technique suggest that they are animal barriers dating from the prehistoric period" (Figure 16 and Figure 17). CSH relocated the historic property and updated the description to add that the alignments appear to represent multiple large enclosures with the southern boundary located near the western end of the alternate alignment. SIHP – 18568 contains multiple enclosures, terraces, a rock shelter/overhang, a stone lined fire pit, and additional alignments. The complex is likely extensive and connects to other complexes



Figure 12. Eastern half of the alternate alignment corridor with houses and neighborhoods blocking access; view to northeast.

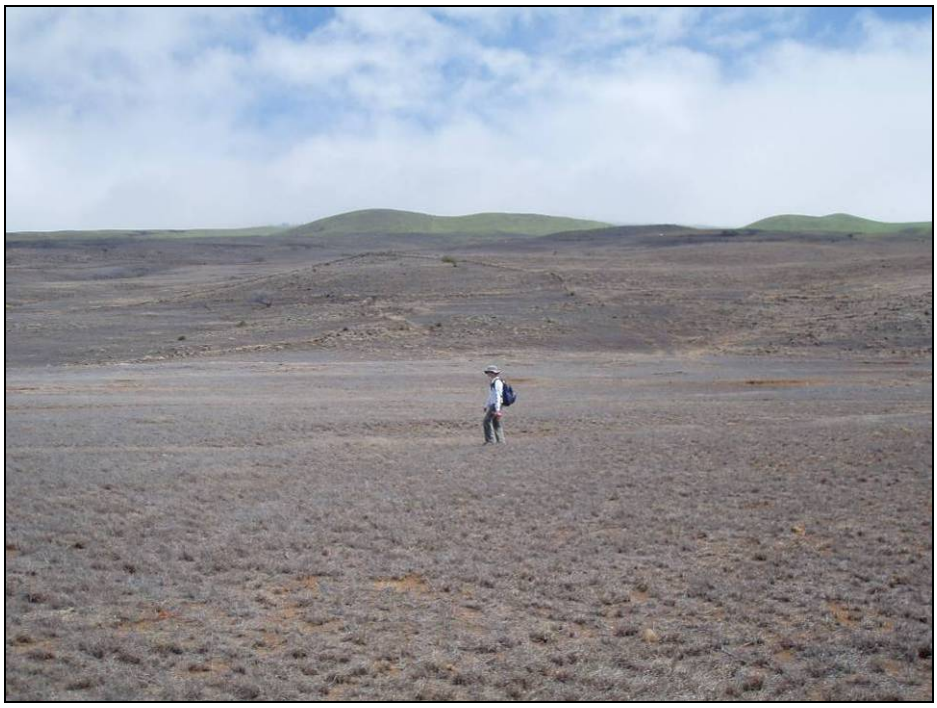

Figure 13. Western half of the alternate alignment corridor; view to north. Note the alignments and complexes on the hills in the background

Table 5. Summary of Historic Properties Identified by the Field Inspection and Previous Archaeological Studies (Barrera 1994; Rechtman 2000)

SIHP # (50-10-06)	CSH Site #	Type	Function	Age	Mitigation Recommendations
18568		Wall Complex	Animal Husbandry	Pre- Contact	Unknown
18581		Agricultural Complex	Agriculture	Pre-Contact	No Further Work
18587		Wall	Boundary Marker	Post-Contact	No Further Work
18588		Mound	Burial	Pre-Contact	Preservation
18590		Enclosure	Permanent Habitation	Pre-Contact	Preservation
18593		Wall	Ranch Wall	Post-Contact	No Further Work
18569, 18583, 18584, 18585, 18586, 18597		Walls, enclosures, walls, mounds and a trail segment	Multi-Function	Pre- and post-Contact	Unknown
	001	Alignment	Not Determined	Not Determined	Further Documentation
	002	Enclosure	Not Determined	Not Determined	Further Documentation
	003	Wall	Not Determined	Not Determined	Further Documentation

SIHP # (50-10-06)	CSH Site #	Type	Function	Age	Mitigation Recommendations
	004	Terraces	Not Determined	Not Determined	Further Documentation
	005	Alignment	Not Determined	Not Determined	Further Documentation
	006	Enclosure	Not Determined	Not Determined	Further Documentation
	007	Alignment/ Enclosure	Not Determined	Not Determined	Further Documentation

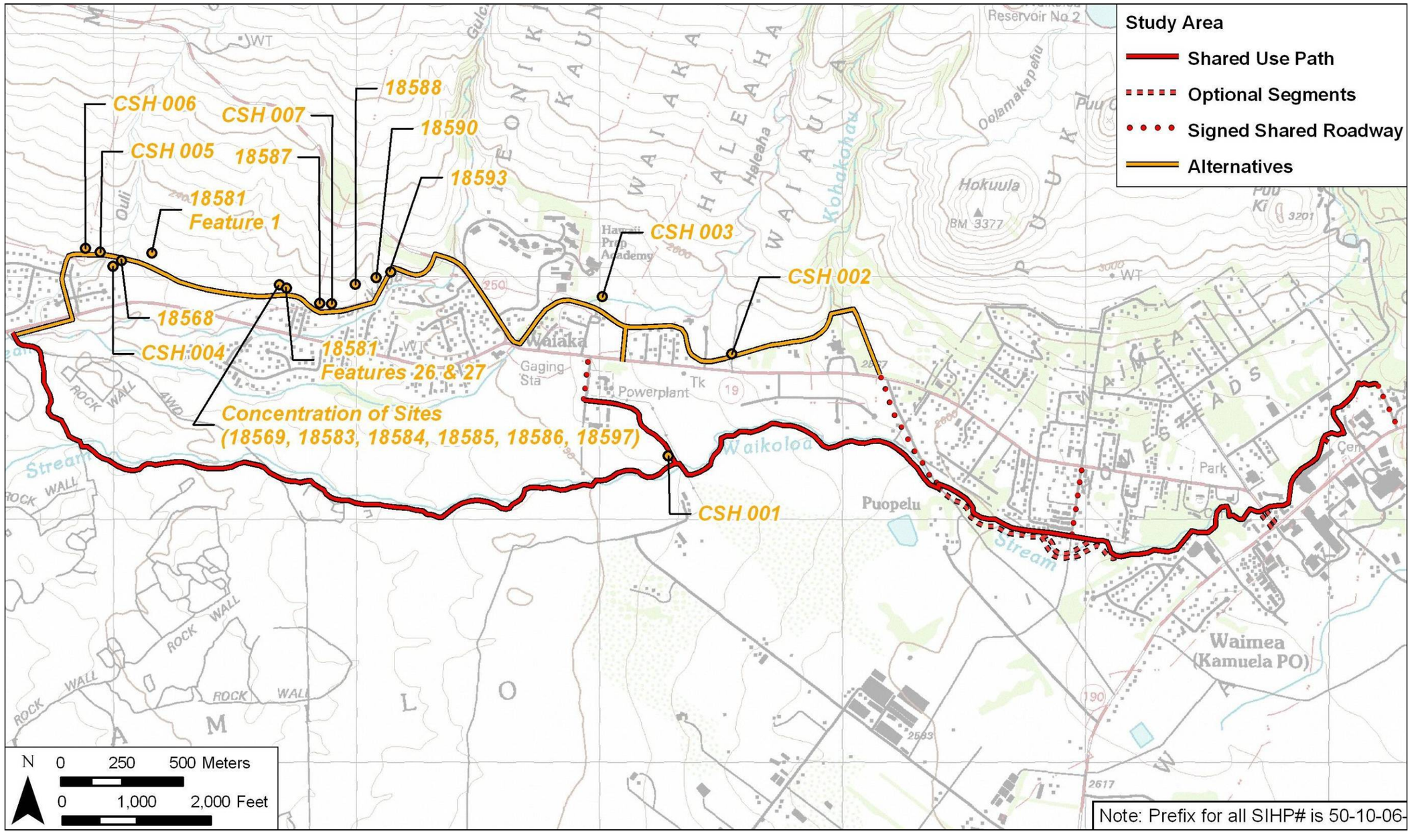

Figure 14. Portion of the 1995 Kamuela USGS 7.5-minute topographic quadrangle showing the historic properties identified during the current field inspection

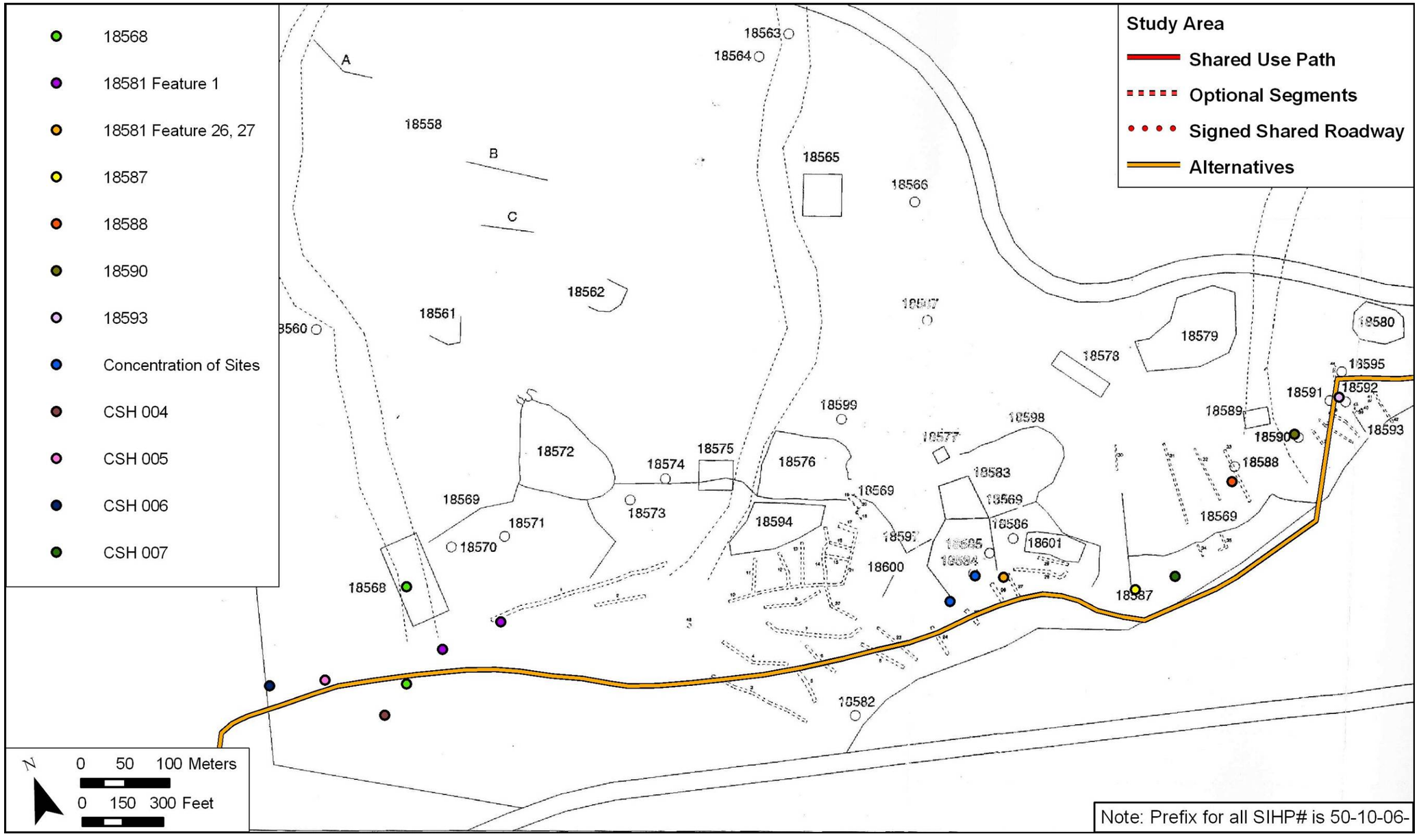

Figure 15. The Barrera 1994 site map depicting the surveyed portion of the alternate alignment and the historic properties identified and relocated. Note the historic property density throughout the area north of the project area’s alternate alignment.

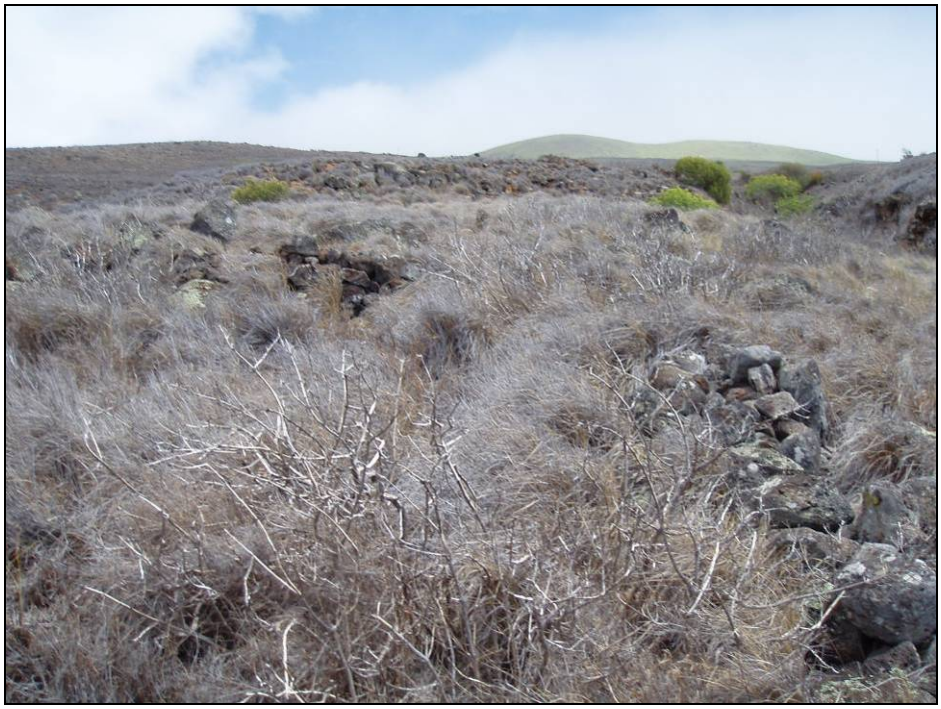

Figure 16. SIHP # -18568, north eastern corner of a large enclosure; view to north



Figure 17. SIHP # -18568, rock shelter; view to west

with a series of walls and alignments. It is constructed of cobbles and boulders stacked 2-3 courses high and heads in a N/S – E/W direction. Along the alignment to the north is a second enclosure in the northeast corner with a small opening into the larger SIHP – 18568 enclosure. To the east of the enclosure, near the outside of the entrance, is a stone lined fire pit, consisting of an excavated pit with 4 upright pahoehoe slabs lining the sides. This fire pit was located on the upper tier of 2-3terraces leading to a clearing under a tree. Above the enclosure is a rock shelter with soot on the ceiling suggesting a small shelter.

SIHP – 18581 is an agricultural complex consisting of 46 formal agricultural features located along Lanikepu Stream first recorded by Barrera in 1994 (Figure 18). Some of the features recorded by Barrera (1994) were relocated by Rechtman in 2000 and 12 new features were identified, bringing the feature total to 58. The agricultural features include earth and rock embankments, retaining walls, earth and rock berms, areas of erosion, water channels, a field well, terraces, mounds and stone piles. CSH relocated some of the SIHP – 18581 features, including: Feature 1 an earth and rock embankment and Features 26 and 27, earth embankments. Many features were located within the alternate alignment (Features 3, 4, 5, 6, 8, 23, 24, and 25) but this area appeared to have been disturbed by bulldozing and it is likely that these features have been destroyed.

During the course of the field inspection, CSH located an area with a large concentration of historic properties, recorded in 1994 by Barrera (Figure 19 and Figure 20). This area appears to be a large site complex which has been split into multiple historic properties in the 1994 Barrera report, SIHP #’s -18569, -18583, -18584, -18585, -18586, and -18597. These historic properties consist of multiple walls, enclosures, retaining walls and sections of a trail, all of pre-Contact and post-Contact origins. CSH relocated the site complex and updated the description. The historic property is a large complex of walls and mounds that extend both N-S and E-W. The southern end of the wall, (likely part of SIHP -18583) is the point nearest to the location of the alternate alignment. The wall begins near the base of the hill and extends upslope (north), the extent of which is unknown, and additional walls can be seen running E-W, connecting to this wall. Upslope from the base of the site complex is a rock mound (SIHP -18586) on the SW side and an upright stone to the north on a hill top in the corner of a wall. A three-tiered platform (SIHP -18584) is located just east of the wall and consists of leveled platforms continuing downslope towards the project area. The level platforms are approximately 5 m wide and each terrace is approximately 50 cm in height.

SIHP – 18587 is a boundary wall located in the western half of the project area corridor, north of the alternate alignment (Figure 21). This wall was first recorded by Barrera (1994) and was updated by Rechtman (2000) as a stacked boundary wall located along the Lanikepu/‘Ōuli Ahupua‘a boundary. Rechtman record that the wall remains intact for 118 meters and measures 1.2 m wide by 1.2 meters high and is likely a post-Contact boundary wall and post dates the surrounding fields (Rechtman 2000:12). CSH relocated this wall during the current field inspection and added that the wall extends upslope in a NE-SW direction. The wall is faced and stacked about 5 courses high and appears to have two stages of construction. The first 1-2 courses appear to be older and consist of medium basalt boulders partially inset into the slope. The remaining 3-4 courses are added onto the first portion of the wall and consist of smaller basalt cobbles and boulders.



Figure 18. SIHP # -18581 Feature 1, single stone alignment; view to north



Figure 19. Looking upslope to the interconnecting walls and complexes of SIHP #’s -18569, -18583, -18584, -18585, -18586, and -18597; view south



Figure 20. What is likely the southern portion of SIHP # -18583, ‘garden area’ walls, looking downslope towards the project area below; view south



Figure 21. SIHP # -18587, wall. Note the two stages of construction; view to northwest

SIHP – 18588 consists of two mounds (Feature A and Feature B) first recorded by Barrera in 1994 as a pre-Contact burial location (Figure 22 through Figure 24). Barrera reported that Feature A is

> "…a rectangular stone mound measure 1.20 by 1.80 meter… and standing to a height of 0.60 meter. Because the feature's external characteristics resemble other structures on Hawaii Island known to be human burials, it was partially dismantled to determine whether this was the case. The excavation revealed a large capstone weighing several hundred pounds covering a dirt filled cavity in the bedrock. This dirt deposit was partially excavated to a depth of 0.50 meter, at which point excavation ceased, the high likelihood that the feature is a grave having been established. (Barrera 1994:18)

Feature B was situated 14 meters north of Feature A and was felt to have a similar function and so was not disturbed. SIHP – 18588 was updated by Rechtman (2000) who also excavated a test unit in Feature A. During the course of the excavation, coffin fragments were encountered, confirming the interpretation of the mounds' function as burial. CSH relocated the mounds and added that they are contained within a large stone enclosure and the walls are stacked 4-5 courses high. A small entrance is located on the north (upslope) side and the interior of the walls are faced, though the exterior is collapsed with no apparent facing. Feature A mound is located in the center of the enclosure on the south side, constructed from small boulders and cobbles, and is faced on the east side. Feature B is located in the center of the north side of the enclosure, near the enclosure's entrance. The enclosure likely functions as protection as part of a preservation measure for the burial mounds, as there is one new house currently being built approximately 50 meters north of this enclosure.

SIHP – 18590 is a pre-Contact permanent habitation located in the western half of the project area corridor, north of the alternate alignment, near the Old Kohala Mountain Road (Figure 25). Barrera originally recorded this historic property as "…a roughly square terraced enclosure measuring 10.2 by 10.6 meters…" (Barrera 1984:19). Rechtman updated the historic property as having stacked walls measuring approximately 1.5 meters wide by 1.2 meters high (2000:14). Rechtman agreed with the permanent habitation function, but felt that it was in fact associated with the historic period burials located nearby (SIHP – 18588). CSH relocated the enclosure and added that the enclosure is on an E-W sloping hillside and is largely unleveled. It measures approximately 1m high in the SE (upslope) corner, sloping down to approximately 50cm high in the SW (downslope) corner. The upslope (east) side has interior facing of the walls, mainly in the NE and SE corners. The SE corner contains an inset faced area with a thicker faced wall running north. The inset area contains a basalt outcrop and placed semi-circle of basalt boulders stacked 1-2 courses. A partially upright boulder is placed in the center of the western wall, propped up with several cobbles, which is likely a modern addition.

SIHP – 18593 is a wall first recorded by Barrera in 1994 and updated by Rechtman in 2000 (Figure 26). It is a freestanding wall that is approximately 40 meters long, 1 meter wide and 1 meter high. It is thought to be a remnant of a historic period ranch wall (Barrera 1994; Rechtman 2000). CSH relocated the wall and added that the wall was stacked 4 courses high and the



Figure 22. SIHP # -18588, large protective enclosure containing two burial mounds; view to west



Figure 23. SIHP # -18588 Feature A, faced burial mound; view to west



Figure 24. SIHP # -18588 Feature B, burial mound, with entrance into the enclosure in the background; view to north



Figure 25. SIHP # -18590, permanent habitation enclosure; view to southwest



Figure 26. SIHP # -18593, wall; view to southeast

construction of a house that is located just upslope of this wall likely destroyed a portion of this wall.

4.3 Description of Newly Identified Sites

The field inspection also identified seven sites that had not been recorded previously. These sites were given temporary CSH numbers, locations were recorded with GPS, photographed and described but no further work was conducted. SIHP #’s have not been requested for these sites and further documentation is required if the project moves forward in this area.

CSH 001 is an L-shaped alignment within a field adjacent to the Waimea Transfer Station (Figure 27). This area appears to have been heavily disturbed by bulldozer activities, likely associated to the transfer station and industrial buildings in the area. The alignment consists of small boulders stacked 1-2 courses high. The area upslope of the alignment is raised slightly suggesting a possible terrace, but based on the level of disturbance surrounding the alignment it is likely the result of bulldozer push. Haun et al (2002) conducted an archaeological inventory survey of a 266.4-acre area, which included the 17-acre Future County Park which contains a portion of the current project area. Haun identified an agricultural complex, SIHP – 22632, that consisted of 700 agricultural features, 15 of which were within the Future County Park area (Haun et al. 2002). CSH 001 appears to be further southeast than the southernmost feature recorded by Haun, but may be an additional feature of SIHP -22632.



Figure 27. CSH 001, L-shaped alignment adjacent to the Waimea Transfer Station; view to west

CSH 002 is a large enclosure, located in the northeastern portion of the alternate alignment (Figure 28). This area was not accessible during the field inspection and was viewed from an area approximately 150 meters to the west. A GPS point was taken from the location the historic property was viewed from, to the west of the enclosure within the driveway of 65-1508 Kawaihae Road, on the north side of Kohākōhau Stream. The enclosure is located just north of a private property and appears to be fenced in as part of that property. The walls appeared to be approximately 1.5 – 2 m high, and looked to be slightly collapsing. Only the northwest corner could be seen and it is possible that it functioned as a post-Contact animal enclosure. It may also be a pre-Contact structure modified for post-Contact use.

CSH 003 is a wall located just west of the Hawaii Preparatory Academy (HPA) campus, on the south side of Kohākōhau Stream (Figure 29). The wall was observed from the north side of the stream and appears to be approximately 50 cm high, 4-5 courses, with an associated barbed wire fence. It is likely that this wall is a post-Contact in origin, based on the barbed wire, though it could be a modified pre-Contact wall. CSH 003 borders the stream and the residences that are located along the stream and is oriented E/W. The total length is unknown.

CSH 004 consists of two terraces located just south of the alternate alignment on its western edge (Figure 30). The terraces are constructed from basalt boulders and cobbles and measure approximately 50 cm wide 4 m long and 40 cm high. One terrace is oriented E/W while the other



Figure 28. CSH 002, enclosure, located in the northeastern portion of the alternate alignment; view to east



Figure 29. CSH 003, wall, on the south side of Kohākōhau Stream; view to south



Figure 30. CSH 004; two terraces; view to east

is oriented N/S and they form a shape similar to an L-shaped alignment. The terraces appear to have been previously disturbed and are likely remnants. This historic property is likely an additional feature to SIHP – 18581, an agricultural complex recorded by Barrera in 1994.

CSH 005 is an L-shaped alignment located in the western edge of the alternate alignment to the north of the alignments location (Figure 31). There is an area to the east of the alignment that may have been a third wall, but it appears to be heavily disturbed. CSH 006 measures approximately 1 m wide and contains no facing. The function of this alignment was not determined.

CSH 006 is a large enclosure with associated terracing and platforms (Figure 32). The enclosure extends north (upslope) and is situated so that the central upslope (north) half is within a small gulch, acting as a sort of bowl which may have been used as a windbreak. The walls are low with no facing. The two terraces are located on the southeast side (downslope) of the enclosure and are stacked 3 courses high, measuring approximately 70cm high and 80 cm wide with no facing. The terraces create large level areas approximately 5 m wide. East of the enclosure is a natural rock formation/crevice, with some minimal cobble filling. The function of this historic property was not determined.

CSH 007 consists of a single boulder alignment/enclosure in a semi-circular design on the south side of a natural grouping of large basalt boulder bedrock outcrops (Figure 33). The alignment consists of a single row of large boulders and is very informal in nature. It is likely post-Contact and modern trash was observed in and around the enclosure.



Figure 31. CSH 005, L-shaped alignment; view to southwest

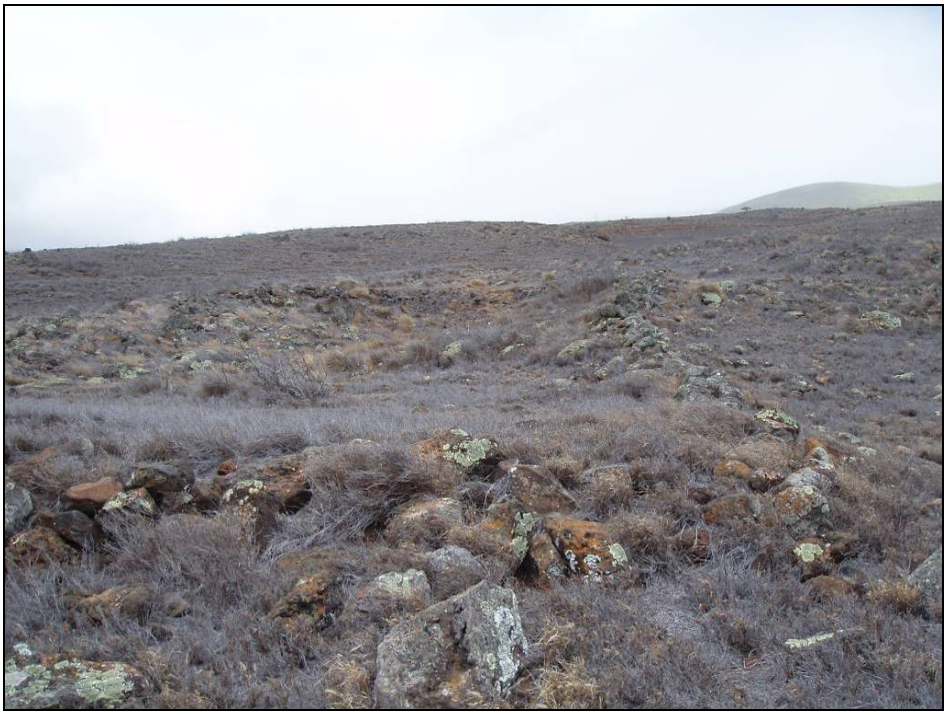

Figure 32. CSH 006, large enclosure with associated terracing and platforms; view to north



Figure 33. CSH 007, semi-circular single boulder alignment/enclosure; view to north

Section 5 Summary and Recommendations

5.1 Summary

Two CSH archaeologists, Michelle Pammer, B.A. and Rosanna Runyon B.A., completed the field inspection on August 18, 2010, which required two person-days. All fieldwork was conducted under CSH's annual archaeological permit No. 10-10 issued by SHPD per HAR Chapter 13-282, and under the general supervision of Hallett H. Hammatt, Ph.D. (principal investigator). The field inspection served to confirm the presence and density of archaeological sites within the proposed corridors for the Waimea Trails and Greenway Project alternate alignment.

The field inspection consisted of a limited pedestrian survey of the alternate alignment, where access was available, and three of the signed shared roadways; Opelo Rd., Kahawai St., and South Kohala Distribution Rd. The preferred alignment, including the location of the possible future equestrian trail, has been subject to multiple archaeological studies, therefore a field inspection was not required for this area (Clark 1981; Kikiloi et al. 2002; Yucha et al. 2009). The signed shared roadways are mainly along existing roads and access was not an issue into these areas. The eastern half of the alternate alignment was largely inaccessible as it was located above a large neighborhood. For the most part, this area was inspected from side streets and the main road with limited to no pedestrian inspection occurring. The western portion, located west of Hawaii Preparatory Academy between the Old Kohala Mountain Road and Kawaihae Road, was accessed without disturbance to the surrounding residences. The findings from this portion of the alternate alignment are considered a representative sample for the entire length of this alignment.

The findings of the current field inspection are largely as expected when compared to land use and previous archaeological studies in the vicinity of the current project area. A total of 14 pre and post-contact historic properties were identified: seven previously identified historic properties or historic property concentrations, and seven newly identified historic properties. Previous archaeological research (Clark 1981; Barrera Jr. 1993; Barrera 1994; Rechtman 2000; Haun et al. 2002) suggests that pre-contact land use associated with the Waimea agricultural field system was located largely within the current project area and its surrounding area. Historic and modern development, beginning in the mid-19th century, have likely impacted or completely destroyed many pre-contact historic properties located near or within the current project area.

Seven of the historic properties, and one historic property concentration, identified during the current field inspection were previously identified and described by two separate studies (Barrera 1994 and Rechtman 2000). These studies were located within the central to western portion of the proposed corridor for the alternate alignment of the Waimea Trails and Greenway Project. These historic properties are both pre-Contact and Historic in age and represent agricultural, habitation and boundary functions. Additionally, seven newly identified historic properties were observed, mainly within the alternate alignment's western portion. Three of the newly identified historic properties were observed in the eastern portion of the alternate alignment and along one of the shared use paths. Most of the observed historic properties were not directly within the alternate alignment corridor, but it is likely that they would be impacted by this project. Due to limited access within the eastern portion of the proposed alternate alignment location, the

findings within the western portion are to be representative of the entire length of the alternate alignment. The eastern half of the proposed alternate alignment was mainly observed from a distance. This portion had evidence of extensive terracing and walls that were easily visible from the main highway, as well as at least one large enclosure (CSH 002) which was observed from a property approximately 150 meters west of the enclosure. This suggests that the eastern half of this alignment has a similar density of historic properties and historic property types as the western half.

Two previous studies have been conducted for the Waimea Trails and Greenway Project along the project area's preferred alignment: a 2002 literature review and field inspection along 6 miles of the trail (Kikiloi et al 2002) and an inventory survey of a 1.1 mile portion located between Lindsey Road and Kahawai Street (Yucha et al 2009). The Kikiloi et al 2002 project was a literature review and field check level project, consisting of a pedestrian inspection along a route roughly following the preferred trail alignment for the current project. It was found that most of the alignment had been urbanized to such an extent that no surface historic properties existed, except for concrete and boulder stream crossing structures. The western portion, which aligns with the southern edge of the Haun et al. study (2002), west of the County Refuse Transfer Station, has been altered little during the modern urbanization of Kamuela town. This portion contains site complexes associated with agriculture and habitation from the pre-and post- contact eras.

Kikiloi et al. (2002) recommended an inventory-level survey for the entire route with the focus of the inventory survey on the area west of the County Refuse Transfer Station. It was recommended that an inventory survey should await a staked alignment so that sites can be accurately located in relation to the alignment. It was also suggested that alternatively, inventory survey results could be utilized to create an alignment with less impact to archaeological resources.

In 2009, Yucha et al. conducted an archaeological inventory survey of Increment 1, an 8.96-acre portion of the Waimea Trails and Greenway Project within the east end of the current project area's preferred alignment. The Yucha et al. (2009) project area is located within Section 3 and Section 4 of the Kikiloi et al. (2002) survey area. A complete pedestrian survey identified three historic properties consisting of four features within or adjacent to the 8.96-acre project area along Waikōloa Stream. These historic properties consisted of a collapsed and severely damaged concrete ford or bridge (SIHP # -26871 Feature A), a remnant portion of paved road (SIHP # -26871 Feature B), an earthen ditch segment (SIHP# -26872), and an intact concrete ford and adjoining roadway (SIHP# -26873). Two historic properties were recommended for preservation by avoidance (SIHP# 50-10-06-26871 Feature A and SIHP# 50-10-06-26872) while no further work was recommended for the remaining two historic properties.

These two studies suggest that the eastern portion of the project area's preferred alignment has been significantly disturbed by modern urbanization and very few historic properties are likely to be present within this area. However, the western portion of the preferred alignment will likely contain a similar site density to that found by Haun et al (2002). This is supported by the site density also observed during the course of fieldwork for the current project. Based on these findings, the preferred and alternate alignments should be expected to contain a consistently high density of sites in areas that have not been previously disturbed by modern land use.

5.2 Recommendations

A thorough review of historical records, previous archaeology, and modern land use, suggest that the area surrounding the current project area has been significantly impacted during historic times, specifically during the construction of modern subdivisions. Much of the project area has likely been graded to support the subdivisions and associated roadways, and some evidence of bulldozing was apparent during the field inspection. However, previous archaeology as well as results from the current project suggests that a significant number of historic properties remain within the area despite the surrounding land disturbance.

The field inspection revealed a large number of both pre and post-contact historic properties that will be affected by the proposed project. These findings are consistent with previous surveys of the surrounding area.

Of the previously identified historic properties located within the project area that would be affected by the proposed alternate alignment corridor, at least two of the historic properties have been recommended for preservation, SIHP #’s -18588, burial mounds, and -18590, permanent habitation (Rechtman 2000:20). Preservation measures have been taken for SIHP # -18588, which now has a large enclosure encircling the two mounds. The remaining previously identified historic properties are either recommended for no further work or have no specific recommendations due to the standards at the time of the original study (Rechtman 2000; Barrera Jr. 1994). Within the preferred alignment, two historic properties have also been recommended for preservation by avoidance: SIHP# 50-10-06-26871 Feature A, a collapsed and severely damaged concrete ford or bridge, and SIHP# 50-10-06-26873 (CSH 3), a historic-era concrete ford and associated roadway (Yucha et al. 2009).

Because this report is only a literature review and field inspection and not an inventory survey, the newly identified historic properties (CSH 001 – 007), have not been fully documented. Therefore, a full archaeological significant assessment per HAR Chapter 13-276 is not part of this study. Thus, if the alternate alignment is chosen for the Waimea Trails and Greenway project, further documentation in the form of an archaeological inventory survey is recommended for its entire length. Increment 1 of the current project area’s preferred alignment was previously subject to an inventory level survey (see Figure 9; Yucha et al. 2009). If the preferred alignment is chosen for the Waimea Trails and Greenway Project’s final location, an archaeological inventory survey is recommended, though an additional inventory survey would not be required for the Increment 1 portion.

Previous archaeological studies have shown a high density of historic properties, similar to the findings for the current study, within the preferred alignment corridor. Two previous studies have been conducted for the Waimea Trails and Greenway Project along the preferred alignment, a 2002 literature review and field inspection along 6 miles of the trail (Kikiloi et al 2002) and an inventory survey of a 1.1 mile portion located between Lindsey Road and Kahawai Street (Yucha et al 2009). Additionally, in 1993, Chiniago Inc. conducted an archaeological inventory survey of approximately 50 acres for the Sandalwood Estates, which borders the northern edge of the central portion of the preferred alignment (Barrera Jr. 1993) and in 2002, an inventory survey was also conducted of an approximately 266 acre area bordering the north edge of the preferred alignment’s western half (Haun et al 2002). Though the eastern half of the alternate

alignment has not been inspected, based on the findings from previous archaeological studies within the area, it is likely that the historic property density is similar to that found within the western portion.

Based on the background studies and field inspection, Cultural Surveys Hawai`i recommends an inventory-level survey for the entire chosen alignment, preferred or alternate, including the proposed location for the possible equestrian trail. No further work is required for Increment 1, surveyed by Yucha et al. in 2009. The field inspection indicated that the alternate alignment has a concentration of sites similar to that of the preferred alignment. It is recommended that an inventory survey should await a staked alignment so that historic properties can be accurately located in relation to the alignment.

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Appendix A TMK's and Land Owners

Table 6. Client Provided Table of the TMK's and Land Owners within the Project Area's Preferred and Alternate Alignment

Div	TMK	Parcel	Owner(s)	Size
PARCELS ALONG TRAIL (Preferred Alignment)				
3	**6 5 03**			
		1	Bank of Hawaii Trust	1.7--- ac
			The Easley Corporation	
		2	GREENWOOD CENTER LLC	5.068 acs
		4	County of Hawaii	1.149 ac
		44	CARTER PROFESSIONAL CENTER	
		45	Canada France Hawaii Telescope Corp.	3.22580 acs
		7	Episcopal Church of Hawaii	74,968 sf
		6	Episcopal Church of Hawaii	25,901 sf
		29	FHB TRUST RE SVC	
		12	Ronald Robert Young Revocable Living Trust	30,262 sf
		15	Norma M Matsumoto	46,250 sf
			HAYASHI,RICHARD I	
			HAYASHI,THOMAS K	
		18	Hiroko Tanaka Trust	
			George Tanaka	
			Naomi Harper-Tanaka	
			Hiromi Tanaka	
			Tamiko Buckley	
		47	Kimberly A Young	19,931 sf
		17	Hiroko Tanaka Trust	
			George Tanaka	
			Naomi Harper-Tanaka	
			Hiromi Tanaka	
			Tamiko Buckley	
		41	NAKAMURA,FAMILY TRUST	
		19	Hiroko Tanaka Trust	
			George Tanaka	
			Naomi Harper-Tanaka	
			Hiromi Tanaka	
			Tamiko Buckley	
		34	WAIKII-KAMUELA COTTAGES	
		30	Bank of Hawaii Trust	23,871 sf

			The Easley Corporation	
		40	RAPOZA,FRANK C	
		35	LEWI,CLINT L K	
		39	Isami Nishie & Wf Dorothy E. Trust	
		36	KILGORE,MATTHEW	
			KILGORE,PATRIZIA R	
		13	WAIMEA PROPERTIES LLC	
		38	SANBORN,JEVON W	
		37	PUHI,WALTER L JR	
			PUHI,LEILA A K	
		32	CHOCK WAIMEA PARTNERS	
			C & T RESTAURANTS LLC	
		46	Episcopal Church of Hawaii	
		5	Parker Land Trust	1.040 ac
		8	LPSR PROPERTIES, LLC	
		9	MAXIM INTEGRATED PRODUCTS INC	
3	**6 5 04**			
		12	HAWAII BAPTIST CONVENTION	
		99	Parker Ranch Foundation Trust	
		10	Marcelle Francoise Loren Trust	
		15	State of Hawaii	
		14	California INSTITUTE OF Technology	
		63	Parker School	
		25	Parker School	
		79	State of Hawaii	
		56	Hawaii Conference Foundation	
		16	Ida Iliff Perkins Revocable Living Trust	
		8	Church of the Living God	
		13	FHB TRUST RE SVC	
		6	State of Hawaii - Waimea Public Park	
		11	Walter Kihoi	
		63	Parker School	
3	**6 5 05**			
		20	YIM,ROWELL A TRST	38,825 sf
			WAIMEA INN INC	
			YIM,LILA-ANNE K TRST	
		1	Puna Plantation Hawaii, Ltd	55,525 sf
		2	Puna Plantation Hawaii, Ltd, et al	1.434 ac
		3	Puna Plantation Hawaii, Ltd	2.68 acs
		18	Parker School	1.205 ac

		4	Puna Plantation Hawaii, Ltd	18,347 sf
		15	Puna Plantation Hawaii, Ltd	11,882 sf
		13	DAHLBERG,CHARLES W TRST	0.077 ac
			DAHLBERG,SHEA ELIZABETH MANUKIAILANI	
			DAHLBERG,JAMES LEE KAWOHIKIAILANI	
		14	DAHLBERG,CHARLES W TRST	0.180 ac
			DAHLBERG,SHEA ELIZABETH MANUKIAILANI	
			DAHLBERG,JAMES LEE KAWOHIKIAILANI	
		5	ALII COCONUT INC	
		6	WONG 2006 TRST	11,409 sf
			DAHLBERG,SHEA ELIZABETH MANUKIAILANI	
			DAHLBERG,CHARLES W	
			DAHLBERG,JAMES LEE KAWOHIKIAILANI	
		21	Bank of Hawaii Tr/Himin Inc	18,512 sf
		10	Mrs. Miriam W. Koki	
		19	Parker School	45,694 sf
		23	County of Hawaii	745 sf
		7	Puna Plantation Hawaii, Ltd	
3	**6 05 09**			
		24	Edith S. Mitsunaga Trust	
		41	PA'A AINA TRUST	
		63	Michael and Jennifer Bryan	
		16	BOYETT,JAMES CASEY	
			BOYETT,BLOSSOM CHING TRST	
		18	WILLMAN,MARK G	
			WILLMAN,GINA L	
		84	UYEDA,YOSHIMI	
			UYEDA,FAMILY TRST	
		85	COOK,MARY ANN TRUST	
		86	JOHNSON,SCOTT CARL	
			JOHNSON,ZOE CHRYSEMA	
		92	Cynthia M Akana	
		93	Benjamin and Nancy Alvord	
		87	ELARIONOFF,PAULA E	
		64	ELARIONOFF,PAULA E	
		73	NORMAN,DENNIS	

			NORMAN,MARY	
		72	KIMURA CONDO	
			KIMURA,SAMUEL	
			KIMURA,ELLA	
		63	Michael and Jennifer Bryan	
		24	Edith S Mitsunaga Revocable Living Trust	
		17	VARNEY,MICHAEL L	
			VARNEY,VIVIAN R	
		19	Ernestine Young	
		20	Joseph A. Patterson Trust	
		87, 64	ELARIONOFF,PAULA E	
		73	NORMAN,DENNIS	
			Mary Norman	
		96	James W Steckling	
		95	HEWETT,MELVIN B	
			SORENSON,JULIE	
		44	Shigaru and Emily Sakata	
		43	Yaroku and Elaine Dochin	
		42	Minaru Matsuura & Wf Thelma	
		2	HALL,HOWARD TRUST	
			HALL,PATRICIA TRUST	
		97	David amd Stacey Porteus	
		98	Sheila Darlene Cooper	
		99	James H Nelson IV	
			Christine Cash	
		2	KEANAAINA,LUANA	
			KATO,LIVIA	
		94	KAMISATO,KERRY K	
			KAMISATO,MARY M	
		95	HEWETT,MELVIN B	
			SORENSON,JULIE	
		96	STECKLING,JAMES W TRST	
		97	David amd Stacey Porteus	
		98	COOPER,SHEILA DARLENE	
		99	James H Nelson IV	
			Christine Cash	
		100	KEANAAINA,LUANA	
			KATO,LIVIA	
			NAKAMOTO,SHIRLEY P	
3	**6 06 01**			

		40	State of Hawaii Dept of Public Works Corporation Yard	2.41 acs
		16	Hawaii Elec. Light Co., Inc.	3.0 acs
		77	Hawaiian Home Lands	
		56	County of Hawaii - PROR Rd Easement	
		50	State of Hawaii (County of Hawaii Kamuela Rubbish Dump)	
		48	Charles M Hutchison	
			Betty C. Hutchison	
			Charles Hutchison	
			Charles Hutchison	
			Henry K Mika, Jr.	
			Henry Hutchison	
			Lucy K Mata	
			Ernest K Mika	
			Eugene Mika	
			Mary Ann Dudoit	
			Frederick Hutchison	
		2	State Of Hawaii	
			RICE,HAROLD F JR	
		9	State of Hawaii	
			DAVIS,GARY L	
		10	State of Hawaii	
		38		
3	**6 06 03**			
		7	State of Hawaii (The Outdoor Circle)	
		6	State of Hawaii	
		10	Parker Land Trust	
		13	Parker Land Trust	
		2	Parker Land Trust	
		11	Parker Land Trust	
		8	Parker Land Trust	
		3	Parker Land Trust	
		4	Parker Land Trust	
3	**6 06 04**			
		1	LONG,WILLIAM FLOYD	1.453 ac
			LONG,LYNDA ARTHUR	
		2	TUREK,SUE	1.230 ac
		121	VU,DAVID	
		122	KIMOKEO,CHARLES Y K	
			KIMOKEO,DEBRA A S	

		123	MIELKE,MARC	
		12	State of Hawaii	
3	**6 06 05**			
		35	RIOPEL,RICHARD/HARRIET TRST	
		25	Kiyotsugu and Shizuko Hirako	
		27	YAGI,ROANNE H	
			ROBB,CHRISTOPHER J	
			ROBB,VIRGINIA S	
3	**6 06 08**			
		31	Irma I Loper	
		28	Theodore Bell Jr	
			TAYAN,ROSALIND K	
		32	Peter A In	
		30	Beverly Louise SKLADZIEN	
		29	Amy Shioji Trust	
			REMOVED FROM MAP - NOT ON PROPERTY	
		33	Michelle Kim Hanano	
		35	Takako Ota	
			OTA,ELMER SHOJI	
			OTA,MICHELE SACHIKO	
		36	Reid and Nu Daeng Finch	
		37	Frank N Tanaka Trust	
			TANAKA,YAEKO TRUST	
			TANAKA,DEE ANN	
		38	Elmer Ota	
			Joy Ota	
		34	SERRAO,DONALD/MARILYN TR	
			SERRAO,STEPHANIE A	
			SERRAO,DOUGLAS A	
3	**6 06 09**			
		1	MONAHAN,DAVID JAMES	
			MONAHAN,LAURA ELIZABETH SIMPSON	
		2	SHEPARD,MARIEROSE M	
		3	FERREIRA,MANUEL U	
		4	SHIMIZU,WAYNE	
			SHIMIZU,HELEN HOOKE	
		5	HAWAII PREPARATORY ACADEMY	
		6	MAR,THOMAS W	
			ZALESKI,JUDITH MAR TRST	

			ENGBRECHT,PATRICIA M TRST	
		7	DOI,NELSON K TRUST	
			DOI,EIKO TRUST	
3	**6 06 10**			
		10	PETERSEN,HUGH G III	
			PETERSEN,JUDITH A	
		11	GARON,STEVE	
		12	GRECO,JOAN	
		13	HARRIS,ROGER A	
			HARRIS,KADIE F	
		25	MEHRING,JEFFREY GERALD	
		17	BRKLACICH,RICHARD S	
			ALDERSON,ANDREA	
		23	NIELSEN,KURT R	
			NIELSEN,KATE B	
		26	RICHARDS,SARAH MARKS TR	
		28	DELMER,PHILIP RONALD	
			DELMER,DIANE CORRINE	
		16	JOHNSON,NANCY N	
		24	DOUGLAS,RANDY E	
			LANGTON,CHERYL ANN	
		21	BIRNBAUM,MARCIA ANN	
		27	CARNETT,WILLIAM G TR	
			CARNETT,JEWEL T TR	
		20	PERRY,STEPHEN LAURENCE	
			PERRY,ROBYN MARY	
		15	FUJIMOTO,MICHAEL K	
			FUJIMOTO,THUY N	
		18	BROOKS,BURTA A TR	
		14	MAUKA HOLUALOA IV PARTNERSHIP	
		19	MOYNAHAN,BRENDAN G TR	
3	**6 06 11**			
		1	MALONEY,TR	
		2	THURSTON,CHARLES PAUL K JR	
			THURSTON,KATHLEEN K S L	
		3	BRILHANTE,WILLIAM V TRST	
		4	WIESMANN,KEVIN M	
			BUDDENHAGEN,JENNIFER M M	
		5	ANDERSON,DALE L	

			ANDERSON,DOROTHY S	
			AIONA,DAWN E	
			AIONA,WILLIAM T JR	
		6	MARYL GROUP INC	
		7	TABOR,FRAN L TR	
		8	MULLI,CHRIS	
INT'L ADDRESS			MULLI,EVELYN Q	
		9	KUME,MASAHIRO	
			KUME,KUNIKO	
		10	DIPRONIO,CARMINE III	
		17	STACY,BRET H	
			HEVERLY,DORE-JEAN	
		18	BAYBROOK GEORGE W	
			BAYBROOK-HECKENBACH,REBECCA	
			HECKENBACH,JAMES	
			BAYBROOK,MARGIE A	
3	**6 07 02**			
		30	US Reif/MJW Waimea Fee LLC	
		27	US Reif/MJW Waimea Fee LLC	
			BANKOH CORPORATION	
		32	US Reif/MJW Waimea Fee LLC	
		21	US Reif/MJW Waimea Fee LLC	
		46	US Reif/MJW Waimea Fee LLC	
			Campbell & Sims	
3	**6 02 01**			
		2	State of Hawaii - Palekoki Ranch Inc.	
PARCELS ALONG ALTERNATE ROUTE				
3	**6 05 06**			
		15	Parker Ranch Foundation Trust	3.635 acs
			MARY E REVANA	
		18	Richard Smart Trust	0.5802 ac
			William White III Trust	
		1	Parker Ranch Foundation Trust	1.7576 ac
			Ryan White Trust	
			William White III Trust	
			Paul White Trust	
		16	Parker Ranch Foundation Trust	1.759 ac
			Campbell Family Trust	

			William White III Trust	
3	**6 01 03**			
		25	State Of Hawaii (Kawaihae Harbor Project)	20.165 acs
3	**6 05 01**			
		10	DEPT OF HAWN HOME LANDS	230.127 acs
			SOLOMON FLORA	
		9	Parker Land Trust	
		54	ANDRADE,JADELYN HOONANEA	1.928 ac
		53	KEKAMALEI FAMILY LTD PARTNERSHIP	0.616 ac
		45	Waimea Gardens (Condominiums)	
		55	BEERMAN,LEE BRUCE	0.50 ac
		51	Hawaii Preparatory Academy	1.204 ac
		33	Hawaii Preparatory Academy	101.616 acs
3	**6 06 04**			
		56	BATES GALE R	0.064 ac
			BATES MICHAEL K	
			VAN DER OORD CHAREE L	
			VAN DER OORD WILLEM J	
		57	KOPRA BARBARA S	13,235 sf
			KOPRA DAVID L	
		117	MONAHAN,DAVID	20,644 sf
			MONAHAN,LAURA	
	INT'L ADDRESS	85	LANG BERNADETTE BOUVET TR	
		114	PURELL KEVIN F E	0.585 ac
			PURELL MELORA K	
		115	MONAHAN DAVID J	0.775 ac
			MONAHAN LAURA E	
		112	COX FAMILY TRUST	0.506 ac
3	**6 02 01**			
		9	Parker Land Trust (Kamuela View Estates)	166.665 acs
		8	Parker Land Trust	894.742 acs
		5	State of Hawaii, Parker Ranch Inc.	
3	**6 05 01**			
		6	State of Hawaii	
			Parker Ranch, Inc.	
		8	Hawaii Preparatory Academy	
		9	Parker Land Trust	
		52	Parker Ranch Foundation Trust	9.048 acs
			William White III Trust	

		2	Parker Ranch Foundation Trust	23.440 acs
			William White III Trust	
		14	PERRY-FISKE,ANNA L CHARI TR	108.98 acs
3	**6 05 06**			
		9	Parker Ranch Foundation Trust	
			Mary E Revana	
		3	PERRY-FISKE,ANNA L CHARI TR	3.406 acs
		8	LINDSEY RONALD	
			SMART STEFANIE LEE HAVENS	
		12	SMART,STEFANIE LEE HAVENS	3.305 acs
		5	Parker Ranch Foundation Trust	0.260 ac
			PARKS,JEROME P JR	
			PARKS,JANIS L	
		13	LINDSEY,RONALD	
			LINDSEY,RONALD C	
3	**6 05 12**			
		30	Michael Hale	31,995 sf
		31	State of Hawaii	12,165 sf
		29	MATSUNAGA,PETER H	43,032sf
		7	VAN DER HEYDEN,GEORGE E	1.010 ac
			VAN DER HEYDEN,GRETCHEN H	
		8	PAKO HOMEOWNERS ASSOCIATION	0.604 ac
		1	WARD,HAROLD L TR	1.587 ac
			WARD,MARY ANN TR	
		6	CHANCER,LAUREN S TR	1.106 ac
		5	CHANCER,ROBERT P TTEE	1.348 ac
		27	MORIFUJI,TOMIKO W	10,614 sf
			MORIFUJI,TOMIKO TR	
		23	BUDGE,ALEXANDER G JR TR	12,859 sf
		18	AINSLIE,SAMUEL E TR	
			AINSLIE,LAURIE T TR	
		17	JOHNSON,LILIAS J H TR EST	25,031 sf
		14	YARAWAMAI,MAXIMUS	21,371 sf
			YARAWAMAI,CYNTHIA JO	
		9	State of Hawaii	35,329 sf
		12	BRUTOCO,RINALDO S	
			BRUTOCO,LALLA S	30,844 sf
		11	BALLESTEROS,MAILE S	27,899 sf
		10	HANANO,MICHAEL Y	13,161 sf
			HANANO,MARY JANE	

3	**6 05 01**			
		6	State of Hawaii	135.00 acs
			Parker Ranch, Inc.	
		8	Hawaii Preparatory Academy	
		14	PERRY-FISKE,ANNA CHARIT TR	108.98 acs
		9	Paker Land Trust	
3	**6 06 04**			
		89	HENRICKSON,ROBERT L	0.506 ac
			HENRICKSON,BETTY Y K	
		96	PHILLIPS,JAMES S TR	28,500 sf
			PHILLIPS,NANCY J TR	
		58	TEGMAN,BRUCE A	0.18 ac
			BUSCHER,LINDA ROSE	
			TEGMAN,JANE M	
			PHILLIPS,NANCY S TR	
			BUSCHER,JOHN HARRY	
			PHILLIPS,JAMES S TR	
		91	PAULSON,DIANE	0.819 ac
		90	PHILLIPS,JAMES S TR	14,500 sf
			PHILLIPS,NANCY S TR	
		1	LONG,WILLIAM FLOYD	
			LONG,LYNDA ARTHUR	
3	**6 05 09**			
		25	Hawaii Housing Authority	30,000 sf
		26	Hawaii Housing Authority	30,000 sf
		27	VENTIMIGLIA,BONNIE	30,000 sf
		28	PECK,DANIEL DOUGLAS	8,460 sf
			LOREN,MARCELLE FRANCOISE	
		29	SUNAHARA,ALYSANDRA NAOMI TR	20,000 sf
		30	KANESHIRO,MELVIN T TR	20,000 sf
		31	KANESHIRO,MELVIN T TR	20,000 sf
		32	KANESHIRO,EHTEL Y TRUST	17,000 sf
3	**6 05 03**			
		28	HAMADA,Y OHANA LLC	1.15 ac
		12	YOUNG,RONALD ROBERT TR	
			YOUNG,BETTY SPENCER TR	
		13	Waimea Properties, LLC	30,262 sf
		15	MATSUMOTO,NORMA M	46,250 sf
			HAYASHI,RICHARD I	
			HAYASHI,THOMAS K	

		17	Hiroko Tanaka Trust	
			George Tanaka	
			Naomi Harper-Tanaka	
			Hiromi Tanaka	
			Tamiko Buckley	
		18	Hiroko Tanaka Trust	
			George Tanaka	
			Naomi Harper-Tanaka	
			Hiromi Tanaka	
			Tamiko Buckley	
		47	YOUNG,KIMBERLY A	19,931 sf
3	**6 06 12**			
		22	Hawaiian Home Lands	12.66 acs
		23	Hawaiian Home Lands	3.45 acs
3	**6 02 01**			
		2	State of Hawaii	166.665 acs
			Parker Land Trust	
		11	State of Hawaii	144 acs
			Parker Ranch, Inc.	
3	**6 02 06**			
		23	RYAN,GREGORY JAMES	18,569 sf
			RYAN,CECELIA ANNE	
		22	RYAN,GREGORY J	20,258 sf
			RYAN,CECELIA A	
		13	HAMADA,TERRY H TR	15,148 sf
			HAMADA,JOYCE S TR	
		12	CORDEIRO,ALBERT E TR	15,064 sf
			CORDEIRO-VIERRA,IRENE M TR	
		1	CHUTE,JOHN	15,116 sf
			CHUTE,CHRISTINA	
		21	MADONNA,ANNETTE M	15,003 sf
		14	REDISKE,ROBERT G	15,472 sf
		42	COHEN,RICHARD W	17,748 sf
		24	SEIFRIED,JOANNE G	15,415 sf
		20	SOONG,MELVIN K TRST	
			SOONG,BARBARA N TRST	
		19	HOKOANA,EVAN B K	
			HOKOANA,LESLIE N F	
		18	FARIAS,MARK K	
			FARIAS,DIANNA L	

		50	ANDERSON,BRIAN	
			CROSTHWAITE,RUBY	
			CROSTHWAITE,ANGEL	
		49	URBIC,MICHAEL S	
			URBIC,LORRAINE	
		48	KLEIN-ODA,BILLIE L	
		47	KOUKE,ROLAND T	
		46	CHENG,WOOD TR 2004	
		45	WELCH,ALISON	
		44	SANCHEZ,EUGENIO C	
			SANCHEZ,ANGELITA C	
3	**6 06 01**			
		77	Hawaiian Home Lands	
3	**6 02 18**			
		1	SCHAEFER,JERALD J/HELEN I SURVIVOR'S TR	
		2	BARLOW,ROBERTA H TR	
		3	SHIVELY,KURT B TR	
			SHIVELY,LADONNA M TR	
		4	DAWSON,JOHN	
			DAWSON,BEVERLY	
		5	MEDEIROS,DREW WILLIAMS KALANI	
			MEDEIROS,MICHELLE KAY FUJIE TAIRA	
3	**6 06 06**			
		3,4,5	State Of Hawaii	
			EDNIE,RICHARD D	
		6	BUTTERFIELD,ROBERT H TRUST	
			BUTTERFIELD,CHARLOT K TRUST	
		17	EDNIE,RICHARD D TRUST	
			EDNIE,SANDRA F TRUST	

Appendix B Land Commission Awards

Waihona 'Aina
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Mahele Database | Boundary Commission | Land Grants | Royal Patents | Review Cart & Checkout

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Mahele Database Documents
Number: 00589B

Claim Number:	**00589B**		
Claimant:	**Naholowaa**		
Other claimant:			
Other name:	Kaholowaa		
Island:	**Hawaii**		
District:	**Kohala, South**		
Ahupuaa:	**Waimea**		
Ili:	**Puuapelu**		
Apana:	**1**	Awarded:	**1**
Loi:		FR:	
Plus:		NR:	
Mala Taro:		FT:	**65v5**
Kula:		NT:	
House lot:	**1**	RP:	**6682**
Kihapai/Pakanu:	3	Number of Royal Patents:	**1**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**No**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**

Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**3 fields partly under cultivation**

No. 589B, Naholowaa, Wednesday, January 30th
F.T. 65v5

William Beckley, sworn deposed, He wrote the claim for Naholoaa and gave it into the Land Office at Honolulu and furthermore deposeth, that he knows the claim of Naholoaa to consist of 3 fields, on which he has his house lot, not enclosed, partly cultivated, situated on the Ili Puuapelu, Waimea, the gift of William Beckley, konohiki, A.D. 1846. Surrounded by waste land of konohiki. I know of no counter claim.

[Award 589B; R.P. 662; Punopelu S. Kohala; 1 ap.; 4.89 Acs]

Number: 03202B

Claim Number:	**03202B**		
Claimant:	**Bowers, Jose**		
Other claimant:			
Other name:			
Island:	**Hawaii**		
District:	**Kohala, South**		
Ahupuaa:	**Waimea**		
Ili:	**Puuopelu**		
Apana:	**1**	Awarded:	**1**
Loi:		FR:	
Plus:		NR:	
Mala Taro:		FT:	**62v4**
Kula:		NT:	
House lot:	**1**	RP:	**8443**
Kihapai/Pakanu:	3	Number of Royal Patents:	**1**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**No**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**

Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**3 fields & house**

No. 3202B, Jose Bowers, Waimea, Monday, January 28th 1850
F.T. 62v5

William Beckley konohiki, sworn deposed, He wrote the claim of Jose Bowers and gave it to the Board at Honolulu. Also knows the claim of Jose Bowers, to consist of 3 fields, on which is house is built. It is not enclosed, situated in the Ili Puuopelu, Ahupuaa Waimea.

The gift of Mr. Beckley, konohiki, 1847. There is no counter claim.

[Award 3202B; R.P. 8443; Puuopelu Waimea; 1 ap.; 7.6 Acs; Index lists Jose B. Bowers]

Claim Number:	**03832**		
Claimant:	**Poolipi**		
Other claimant:			
Other name:			
Island:	**Hawaii**		
District:	**Kohala, South**		
Ahupuaa:	**Waimea**		
Ili:	**Kauniho**		
Apana:	**1**	Awarded:	**1**
Loi:		FR:	
Plus:		NR:	**49v8**
Mala Taro:		FT:	
Kula:		NT:	**36v4**
House lot:	**1**	RP:	
Kihapai/Pakanu:		Number of Royal Patents:	**0**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**

Oranges:		Wall/Fence:	**No**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**Lot for cultivation with house**

No. 3832, Poolipi, Waimea, Hawaii, January 7, 1848
N.R. 49v8

Greetings to the Land Commissioners: I have a small houselot at Kauniho, Waimea, Hawaii. It is 50 fathoms by 50 fathoms. It was from William Beckley, the konohiki.
POOLIPI

N.T. 36-37v4
No. 3832, Poolipi, September 18, 1848

William Bakle, sworn and stated, I have seen it at the ili land of Kauniho Pahale. He had asked me for a lot for cultivation to which I had agreed. The boundaries to the place for which he had asked are all mine and I have agreed willingly. No one has objected to this day.

[Award 3832; Kauniho Waimea S. Kohala; 1 ap.; 1.6 Acs]

Number: 04513

Claim Number:	**04513**		
Claimant:	**Paukeaho**		
Other claimant:			
Other name:			
Island:	**Hawaii**		
District:	**Kohala, South**		
Ahupuaa:	**Waimea**		
Ili:	**Keanuiomanu**		
Apana:	**1**	Awarded:	**1**
Loi:		FR:	
Plus:		NR:	**53v8**
Mala Taro:	2	FT:	
Kula:		NT:	**32v4**
House lot:		RP:	**8158, 8454**
Kihapai/Pakanu:		Number of Royal Patents:	**2**
Salt lands:		Koele/Poalima:	**No**

Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**Yes**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**Awarded 1 apana; 1 house; 2 taro gardens in forest**

No. 4513, Paukeaho, Waimea, Hawaii, January 12, 1848
N.R. 53v8

Greetings to the Honorable Land Commissioners: I wish to explain to you that I have a houselot at Keanuiomano, Waimea, Hawaii, which was from William Beckley. The length is 40 fathoms, the width is 35 fathoms. It is enclosed with a stone wall and there are two houses in it. I desire to secure this place for myself. There are two taro gardens in the forest of this land.
PAUKEAHO

N.T. 32v4
No. 4513, Paukeaho, September 16, 1848, Done

William Backle, sworn and stated, "I have seen the house-lot in my ili land at Keanuiomano in Waimea, Hawaii. I have given my approval for this house-lot just as he has indicated in his document. It has been partially enclosed with one house in it and the entire boundary is mine. I have agreed he may have the area which he has cultivated, but I have never known its boundaries; perhaps the surveyor may know because they had this place before and when I had acquired this land, I learned then that his interest is mine, where he now is living. No one has objected to him."

[Award 4513; Land Patents 8158; Keanuiomano S. Kohala; 1 ap.; 1.35 Acs]

Number: 04886

Claim Number: **04886**

Claimant:	**French, William**		
Other claimant:			
Other name:			
Island:	**Hawaii**		
District:	**Kohala, South**		
Ahupuaa:	**Waimea**		
Ili:	**Pahonu**		
Apana:	**1**	Awarded:	**1**
Loi:		FR:	5v3
Plus:		NR:	
Mala Taro:		FT:	**167v2**
Kula:		NT:	**494v4**
House lot:		RP:	**68**
Kihapai/Pakanu:		Number of Royal Patents:	**1**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**No**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**Slaughter house, grass houses, cookhouse**

No. 4886, W. Franch [French], February 2, 1848
N.T. 494-495v2

There is a cattle slaughter house at Waimea in Hawaii.

S. Rice, sworn by the Word of God and stated, I have seen when Kuakini had said, "I like one of Mr. French's horses very much." After this French had given [Kuakini] one of his good horses and that is how he had received that cattle slaughtering area in Waimea. It has been enclosed with a stone wall and

French has lived there well to this time; no one has objected to him.

John G. Munn, sworn by the Word of God and stated, My testimony is almost the same as Rice's that which he has just given here because in the year 1840 Kuakini and I bought that famous horse. I have seen Kuakini give that land for that horse and since that time there was peaceful living to the present time. No one has ever objected to French.

[Award 4886; R.P. 68; Puloa Waimea S. Kohala; 1 ap.; 2.8 Acs; See No. 4884 for Foreign Register and Foreign Testimony documents]

Appendix C SHPD Correspondence

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

August 5, 2009

Hallett H. Hammatt, Ph.D.
Cultural Surveys Hawaii, Inc.
PO Box 1114
Kailua, Hawaii 96734

LOG NO: 2009.3224
DOC NO: 0908MD07
Archaeology

Dear Dr. Hammatt

SUBJECT: **Chapter 6E-8 Historic Preservation Review –**
Archaeological Inventory Survey of 8.96 Acres with Three (3) New Sites
Lalamilo Ahupua`a, South Kohala District, Island of Hawaii
TMKs: (3) 6-5-003:004, 005, 007 & 044 (all, por.) and 6-6-003:006 & 013 (both, por.)

This letter reviews the aforementioned report (*Yucha, Shideler and Hammatt 2009; Draft Archaeological Inventory Survey for the Waimea Trails and Greenway Project, Lalamilo Ahupua`a, South Kohala District, Hawaii Island, TMK: [3] 6-5-003:004 por., :005 por., :007 por., :044 por., 6-6-003:006 por., :013 por; SCH Job Code: LALAMILO 1*) which we received on July 22, 2009. This report summarizes an archaeological inventory survey in which three new sites were recorded. The three sites are: SIHP 50-10-06-26871, a WWII-era infrastructure associated with Camp Tarawa, recommended as significant under criteria "a" and "d"; SIHP -26872, an early post-contact era irrigation ditch (Akona's *Auwai*), recommended as significant under criteria "a", "c" and "d"; and SIHP -26873, an historic-era concrete ford and associated roadway, recommended as significant under criterion "d."

This AIS covers Phase 1 of the Waimea Trails and Greenway Project, and follows a site reconnaissance conducted by your firm around 2000. Phase 1 is the portion of the trail that will be ADA-accessible. A site visit was conducted by SHPD Hawaii Island Section Assistant Archaeologist Morgan Davis with project engineers David and John Imata of Imata & Associates; Galen Kuba from the County of Hawaii Department of Public Works, and Bobby Command, County of Hawaii Assistant to the Mayor.

We have some general questions/comments that we are requesting be clarified:

1. Was the survey done for this Phase 1 8.96 acres, or does the acreage represent the entire area that will be ultimately surveyed as part of the entire trail? In the Management Summary on p. i the entire acreage is listed as the project area, but in the Environmental Setting section on p. 8 this survey is said to cover 1.1 of a total 12 miles of the project.
2. In the Background Research section, please include information on the arrival of cattle to Hawaii.
3. Please include a chart in your Summary and Interpretation section indicating your recommendations for significance etc. for the sites. This information is currently only available in the Management Summary.

Dr. Hallet H. Hammatt
Page 2 of 2

We have concerns about some of the recommended significance evaluations and treatments, as detailed below.

Site 26871: We concur with the suggested significance assessments for this site, however, we cannot at this time concur with the proposed treatment. We do not find that either the current context or condition of either feature is sufficient to warrant the avoidance (preservation) you propose as a mitigation measure. Feature A is broken and no longer functional; we suggest that the portion of the ford containing the written name and date be recovered for use in a permanent interpretive marker at this location.

The Feature B asphalt-paved roadway has been extensively modified by current landscaping as part of the Greenways project as it runs from the parking area through an interpretive garden. Signs, water lines, sewer plumbing, a park bench and wooden steps all impinge into the current roadway and associated embankment. It is therefore no longer in a setting or context that represents the World War II era. We believe that sufficient information has been obtained by this AIS, and that no further work is required to document this section of the road.

Site 26872: You recommend that the portion of the ditch within the project area is significant under criteria "a", "c" and "d". We would appreciate an expanded explanation for why you are recommending criteria "a" and "c". The ditch has apparently been repeatedly damaged (during WWII and roadway constructions in the past); we would appreciate your thoughts on its qualities as an excellent example of its type (criterion "c"). We will consider the recommended treatment for this site after the question regarding criterion "c" has been addressed.

Site 26873: We concur with the recommended significance under criterion "d" for this a post-Contact ford, and concur with your recommendation of no further work for this site.

We look forward to reviewing a revised version of this AIS. If you have questions about this letter please contact Morgan Davis of our Hawaii Island Section at (808) 933-7650.

Aloha,

Nancy A. McMahon

Nancy McMahon, Deputy SHPO/State Archaeologist
and Historic Preservation Manager
State Historic Preservation Division

Appendix F
Other Archaeological Studies

Final Archaeological Inventory Survey (Increment 1)
Cultural Surveys Hawai'i, August 2009

SHPD letter dated September 8, 2009 regarding Archaeological Inventory Survey

Archaeological Assessment of Proposed Waimea Trails and Greenways Project
Cultural Surveys Hawai'i, December 2002

Cultural Impact Assessment
Cultural Surveys Hawai'i December 2003

Final
Archaeological Inventory Survey
For the Waimea Trails and Greenway Project
Lālāmilo Ahupua‘a, South Kohala District, Hawai‘i Island
TMK: [3] 6-5-003:004 por., :005 por., :007 por., :044 por., 6-6-003:006 por., :013 por.

Prepared for
Gerald Park, Urban Planner

Prepared by
Trevor M. Yucha, B.S.,
David W. Shideler, M.A.,
and
Hallett H. Hammatt, Ph.D.

Cultural Surveys Hawai‘i, Inc.
Kailua, Hawai‘i
(Job Code: LALAMILO 1)

August 2009

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Management Summary

Reference	*Final* Archaeological Inventory Survey For the Waimea Trails and Greenway Project, Lālāmilo Ahupua‘a, South Kohala District, Hawai‘i Island, TMK [3] 6-5-003:004 por., :005 por., :007 por., :044 por., 6-6-003:006 por., :013 por. (Yucha et al. 2009)
Date	August 2009
Project Number (s)	Cultural Surveys Hawai‘i, Inc. (CSH) Project Code: LALAMILO 1
Investigation Permit Number	The fieldwork for this archaeological inventory survey investigation was carried out under archaeological permit number 09-20 issued by the State Historic Preservation Division / Department of Land and Natural Resources (SHPD/DLNR)
Project Location	The project area is defined by a narrow corridor extending along and occasionally crossing Waikōloa Stream between Lindsey Road and Kahawai Street in Lālāmilo Ahupua‘a, South Kohala District, Hawai‘i Island. The project area is depicted on the 1995 Kamuela USGS 7.5-minute topographic quadrangle.
Land Jurisdiction	TMK [3] 6-5-003:004 is understood to be owned by the County of Hawai‘i, TMK [3] 6-5-003:005 and 6-6-003:013 are understood to be owned by Parker Land Trust, TMK [3] 6-5-003:007 is understood to be owned by the Episcopal Church in Hawai‘i, TMK [3] 6-5-003:044 is understood to be owned by the Carter Professional Center, and TMK [3] 6-6-003:006 is understood to be owned by the State of Hawai'i.
Agencies	SHPD/DLNR
Project Description	The proposed project involves the development of a cleared and marked trail along Waikōloa Stream. The section of proposed trail within the current project area is part of The Waimea Trails and Greenway Project which is designed to provide a green belt through Waimea town for non-motorized transportation.
Project Acreage	The current project area consists of 8.96 acres. In its entirety the trail and green way project may extend about 12 miles, however, the current archaeological inventory survey only covers approximately 1.1 miles of the easternmost extent of the trail system.
Area of Potential Effect (APE)	For the purposes of the current archaeological inventory survey, the APE is defined as the entire, approximately 8.96-acre, project area.

Historic Preservation Regulatory Context	This document was prepared to support the proposed project's historic preservation review under Hawai‘i Revised Statutes (HRS) Chapter 6E-8/42 and Hawai‘i Administrative Rules (HAR) Chapter 13-13-275/284. In consultation with the Hawai‘i State Historic Preservation Division (SHPD), the archaeological inventory survey investigation was designed to fulfill the State requirements for an archaeological inventory survey per HAR Chapter 13-13-276.
Fieldwork Effort	The fieldwork component of this archaeological inventory survey was accomplished on June 26, 2009 by two CSH archaeologists, Trevor Yucha, B.S. and David Shideler, M.A. under the general supervision of Hallett H. Hammatt, PhD (principal investigator). The fieldwork required approximately 1 person-day to complete.
Number of Historic Properties Identified	A total of three historic properties were identified within or near the current project area.
Historic Properties Recommended Eligible to the Hawai'i Register of Historic Places (Hawai'i Register)	All of the historic properties identified within or adjacent to the current project area are recommended eligible to the Hawai‘i Register: SIHP# 50-10-06-26871 (CSH 1), WWII-era infrastructure associated with Camp Tarawa, is recommended as significant under Hawai'i Register - Criteria A and D. SIHP# 50-10-06-26872 (CSH 2), an early post contact irrigation ditch (Akona's *‘Auwai*), is recommended as significant under Hawai'i Register - Criteria A and D. SIHP# 50-10-06-26873 (CSH 3), a historic-era concrete ford and associated roadway, is recommended as significant under Hawai‘i Register - Criterion D.
Effect Recommendation	The archaeological inventory survey investigation identified three historic properties within the current project area. All three historic properties will potentially be affected by the proposed project CSH's project specific effect recommendation is "effect, with agreed upon mitigation measures." The recommended mitigation measures will reduce the project's potential adverse effect on these significant historic properties.

Mitigation Recommendation	SIHP# 50-10-06-26871 (CSH 1), consists of two features (Feature A and B) related to WWII-era infrastructure associated with Camp Tarawa. Feature A is a collapsed ford or bridge with an etched date of July 1942. Feature B is a remnant portion of roadway likely part of Abemama Road of the former Camp Tarawa. Recommendations for SIHP# 50-10-06-26871 were developed in consultation with SHPD. SIHP# -26871 Feature A will not be adversely affected by the current proposed trail and greenway project and therefore is recommended for preservation in the form of avoidance and protection. If, in the course of future development, SIHP# -26871 is potentially affected, "the portion of the ford containing the written name and date be recovered for use in a permanent interpretive marker at this location" (SHPD Correspondence LOG# 2009.3224, DOC# 0908MD07; See Appendix B). Interpretive signage at the location of SIHP# -26871 Feature A may be developed in consultation with SHPD to provide Waimea residents and pedestrians using the trail with information on the history of the area. Interpretive signage at SIHP# -26871 Feature A may include a short synopsis of Camp Tarawa and how the camp transformed the lives of Waimea residents during and after World War II. SIHP# -26871 Feature B is recommended for no further work. Sufficient information regarding location, function, age, and construction has been generated by the current inventory survey investigation. SIHP# 50-10-06-26872 (CSH 2), an early post-contact irrigation ditch (Akona's *‘Auwai*). Preservation in the form of avoidance and protection is recommended. Any proposed alteration to SIHP# 50-10-06-26872 will prior require consultation with and approval of SHPD. SIHP# 50-10-06-26873 (CSH 3), a historic-era concrete ford and associated roadway. No further work is recommended. Sufficient information regarding location, function, age, and construction has been generated by the current inventory survey investigation.

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Section 1 Introduction

1.1 Project Background

At the request of Gerald Park, Urban Planner, Cultural Surveys Hawai‘i (CSH) conducted an archaeological inventory survey for the proposed Waimea Trails and Greenway Project, Lālāmilo Ahupua‘a, South Kohala District, Hawai‘i Island, TMK [3] 6-5-003:004 por., :005 por., :007 por., :044 por., 6-6-003:006 por., :013 por. The proposed project area is defined by a narrow corridor extending along and occasionally crossing Waikōloa Stream between Lindsey Road and Kahawai Street. The project area is depicted on a 1995 Kamuela USGS 7.5-minute topographic quadrangle (Figure 1), tax map (Figure 2 to Figure 4), and aerial photograph (Figure 5).

The proposed project involves the development of a cleared and marked trail along Waikōloa Stream. The section of proposed trail within the current project area is part of The Waimea Trails and Greenway Project which is designed to provide a green belt through Waimea town for non-motorized transportation. The overall trail system passes through several well-known areas of Waimea, Puopelu, and Wai‘aka and 3 separate *ahupua‘a* including Lālāmilo, Waikōloa, and ‘Ōuli, on the island of Hawai‘i.

Under Hawai‘i state historic preservation legislation, archaeological inventory surveys are designed to identify, document, and provide significance and mitigation recommendations for historic properties. Under this legislation, historic properties are defined as any “building, structure, object, district, area, or site, including *heiau* and underwater site, which is over fifty years old.” A project’s effect and potential mitigation measures are evaluated based on the project’s potential impact to “significant” historic properties (those historic properties determined eligible, based on established significance criteria, for inclusion in the Hawai‘i Register of Historic Places [Hawai‘i Register]). Determinations of eligibility to the Hawai‘i Register result when a state agency official’s historic property “significance assessment” is approved by the State Historic Preservation Division/Department of Land and Natural Recourses (SHPD/DLNR), or when SHPD/DLNR itself makes an eligibility determination for an historic property (HAR Chapter 13-284).

In consultation with SHPD, this inventory survey investigation was designed to fulfill the state requirements for archaeological inventory surveys (HAR Chapter 13-276).

1.2 Scope of Work

The following archaeological inventory survey scope of work is designed to satisfy the Hawai‘i state requirements for archaeological inventory surveys (Hawai‘i Administrative Rules [HAR] Chapter 13-276 and Chapter 13-275/284):

1) Historic and archaeological background research, including a search of historic maps, written records, Land Commission Award documents, and the reports from prior archaeological investigations. This research will focus on the specific project area’s past land use, with general background on the pre-contact and historic settlement patterns of the *ahupua‘a* and district. This background information will be used to compile a

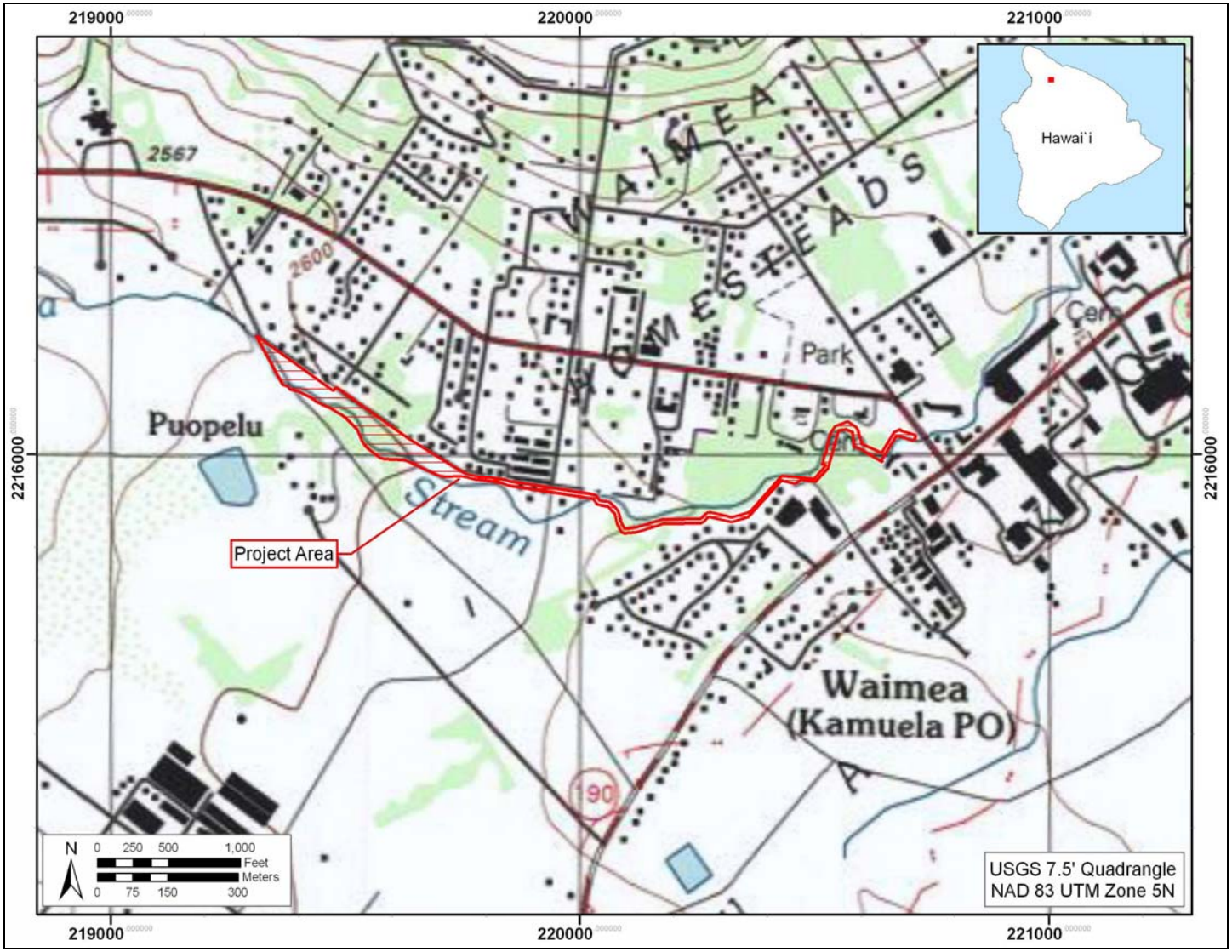

Figure 1. Portion of the 1995 Kamuela USGS 7.5-minute topographic quadrangle showing the current project area

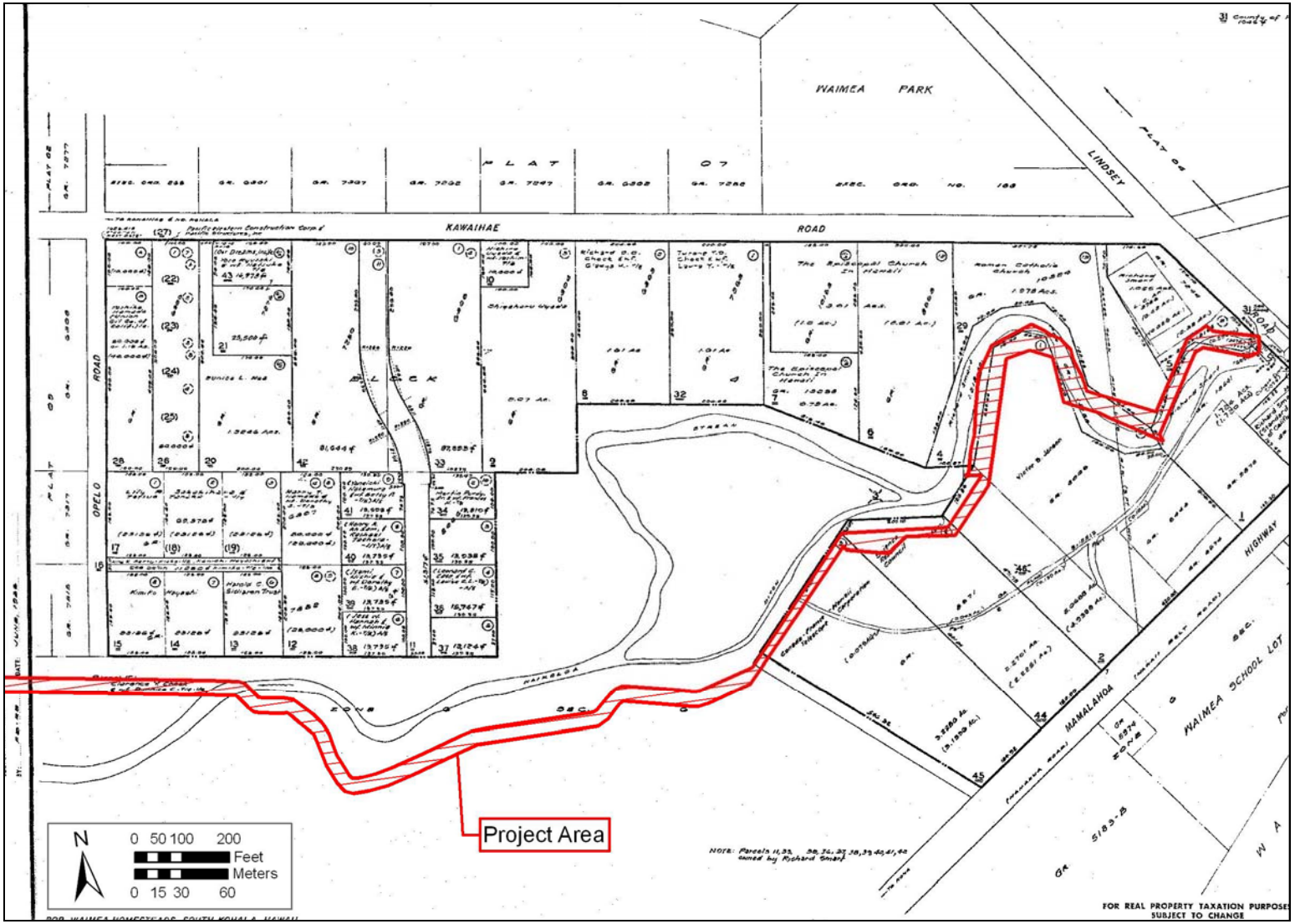

Figure 2. Tax Map Key (TMK) [3] 6-5-03 showing the eastern half of the project area

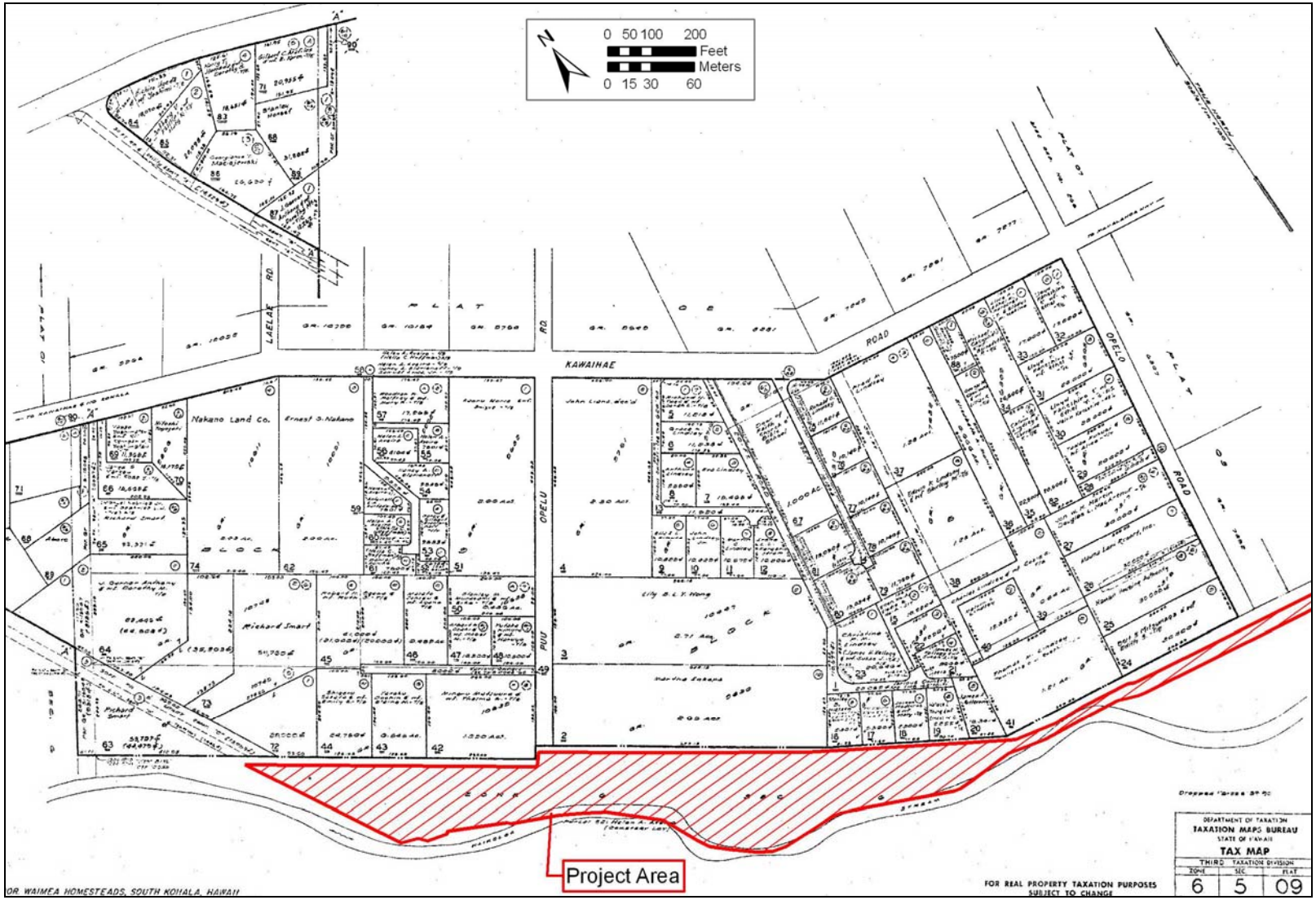

Figure 3. TMK [3] 6-5-09 showing the western half of the project area

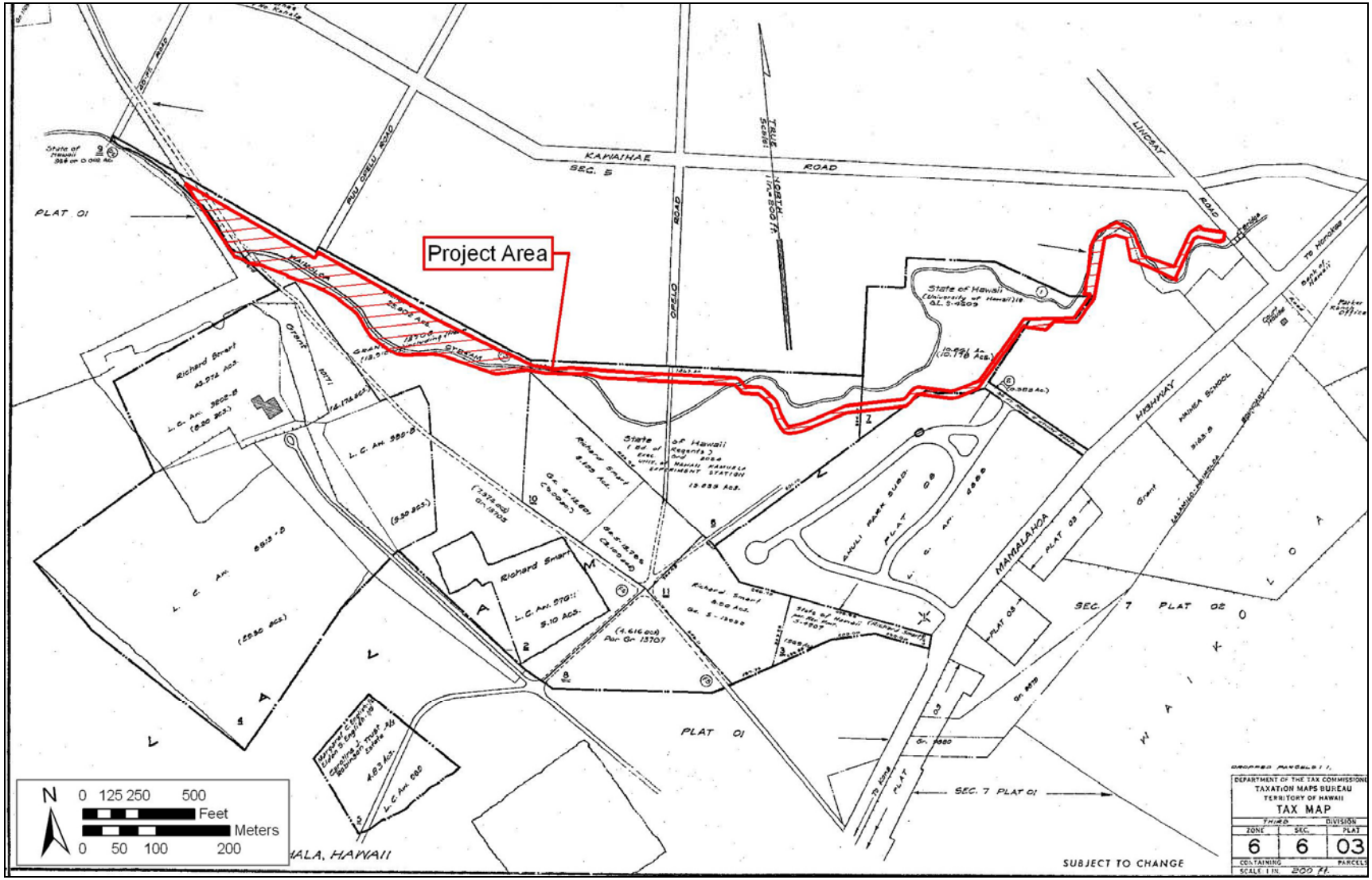

Figure 4 TMK [3] 6-6-03 showing the entire project area

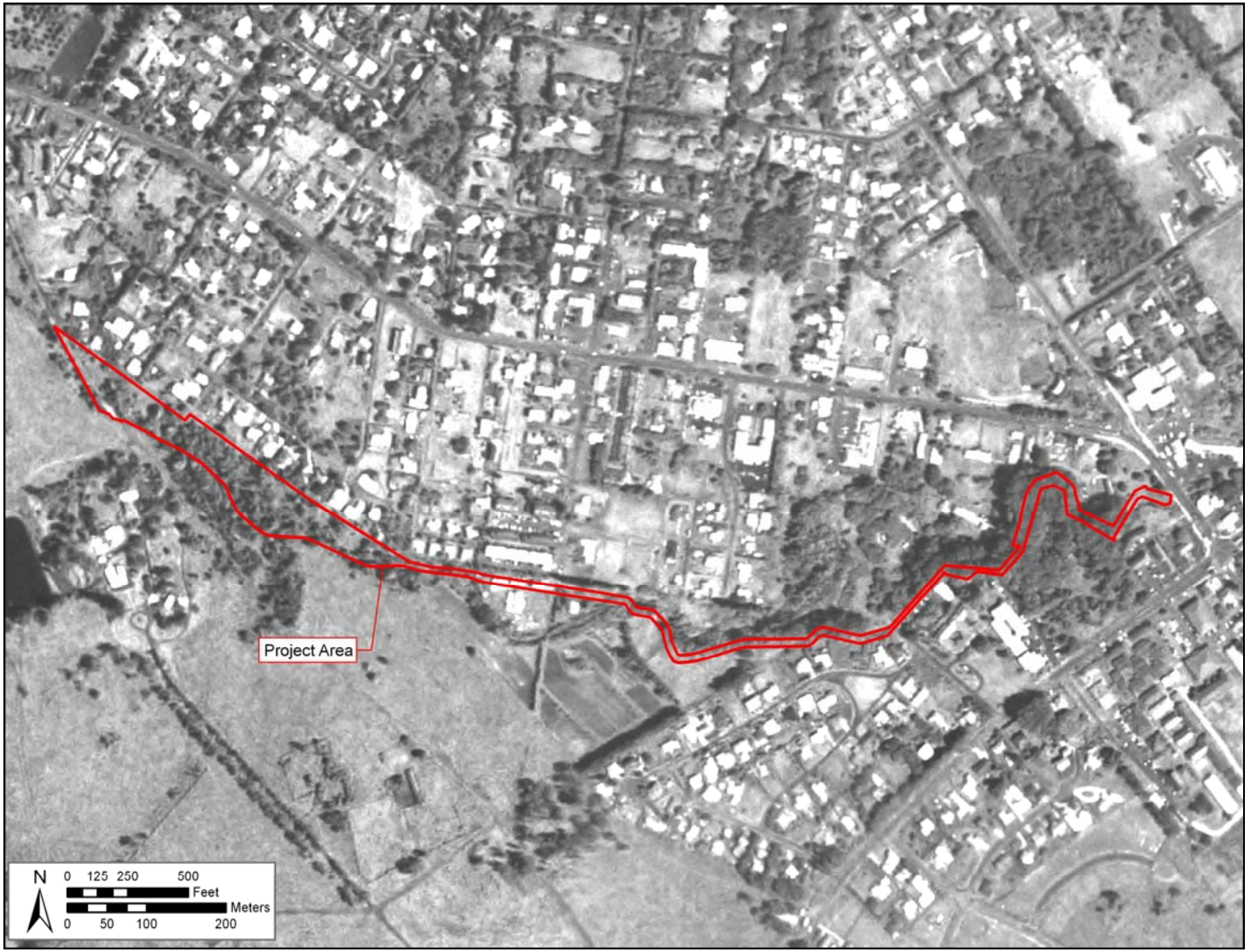

Figure 5. Aerial photograph showing the current project area (source: USDA Orthophoto 2000)

predictive model for the types and locations of historic properties that could be expected within the project area.

2) A complete (100 %) systematic pedestrian inspection of the project area to identify any potential surface historic properties. Surface historic properties will be recorded with an evaluation of age, function, interrelationships, and significance. Documentation will include photographs, scale drawings, and, if warranted, limited controlled excavation of select sites and/or features.
3) Based on the project area's environment and the results of the background research, subsurface testing by hand excavation to identify and document subsurface historic properties that would not be located by surface pedestrian inspection may be appropriate. Appropriate samples from these excavations will be analyzed for cultural and chronological information. All subsurface historic properties identified will be documented to the extent possible, including geographic extent, content, function/derivation, age, interrelationships, and significance.
4) As appropriate, consultation with knowledgeable individuals regarding the project area's history, past land use, and the function and age of the historic properties documented within the project area.
5) As appropriate, laboratory work to process and gather relevant environmental and/or archaeological information from collected samples.
6) Preparation of an inventory survey report, which will include the following:
    a) A project description;
    b) A section of a USGS topographic map showing the project area boundaries and the location of all recorded historic properties;
    c) Historical and archaeological background sections summarizing prehistoric and historic land use of the project area and its vicinity;
    d) Descriptions of all historic properties, including selected photographs, scale drawings, and discussions of age, function, laboratory results, and significance, per the requirements of HAR 13-276. Each historic property will be assigned a Hawai‘i State Inventory of Historic Properties number;
    e) If appropriate, a section concerning cultural consultations [per the requirements of HAR 13-276-5(g) and HAR 13-275/284-8(a) (2)].
    f) A summary of historic property categories, integrity, and significance based upon the Hawai‘i Register of Historic Places criteria;
    g) A project effect recommendation;
    h) Treatment recommendations to mitigate the project's adverse effect on any historic properties identified in the project area that are recommended eligible to the Hawai‘i Register of Historic Places.

This scope of work includes full coordination with the SHPD/DLNR and county relating to archaeological matters. This coordination takes place after consent of the owner or representatives.

1.3 Environmental Setting

1.3.1 Natural Environment

The project area is located in the Waimea area of Hawai‘i Island and includes a corridor running generally east-west from Lindsey Road in the east to Kahawai Street in the west. The corridor is along Waikōloa Stream. In its entirety the trail and green way may extend about 12 miles, however, the current archaeological inventory survey only covers approximately 1.1 miles of the total extent of the trail system.

In a larger context, the project area is situated in the Waimea Saddle region between the Kohala Mountains and Mauna Kea Volcano at elevations between 2,000-3,000 ft above sea level. The climate is generally cool, moist and windy. Temperatures usually range between 60-70° F, with mean maximums between 70-80 ^{o}F, and mean minimums in the upper 40° F. The mean annual rainfall ranges from 500 to 750 mm (20 to 30 in) per year (Giambelluca et al. 1986). Winds are dominated by consistent northeasterly trades. There are three major streams flowing off the Kohala slopes and onto the plains of Waimea, including Lanikepu, Waikōloa, and Kohākōhau (also known as Keanu‘i‘omanō) Streams.

Soils within the project area consist of Waimea Very Fine Sandy Loam, 6 to 12 percent slopes (Figure 6). Soils of the Waimea series are described as, " ...well-drained very fine sandy loams that formed in volcanic ash… on uplands at an elevation ranging from 2,000 to 6,000 feet" (Sato et al. 1973).

Vegetation within the project area consists of Ironwood (*Casuarina equisetifolia*), Christmas Berry (*Lycium carolinanum*), Yellow Ginger (*Hedychium flavescems*), *‘Ape* (*Alocasia macrorrhiza*), Bamboo (*Schizostachyum glaucifolium*), Spanish Needle (*Bidens alba*), Castor Bean (*Ricinus communis*), Eucalypts, Banana (*Musa paradisiacal*), *Māmaki* (*Pipturus albidus*), exotic plantings of conifers, and exotic grasses.

1.3.2 Built Environment

The project area is located within a narrow undeveloped corridor that borders several developed areas from Lindsey Road to Kahawai Street. The eastern end of the project area is bordered by the Lindsey Road Bridge, Waimea Country Lodge, Paniolo Country Restaurant, Lanakila Park, and portion of the adjacent Catholic Church complex. The central portion of the project area is bordered by Residential and commercial subdivisions, Waimea Nature Park, the University of Hawai'i College of Tropical Agriculture and Human Recourses Lālāmilo Research Station, the Hale Waimea Apartment Complex, and small stretches of pasture land. The western end of the project area is bordered by residential subdivisions to the north and open pasture land to the south.

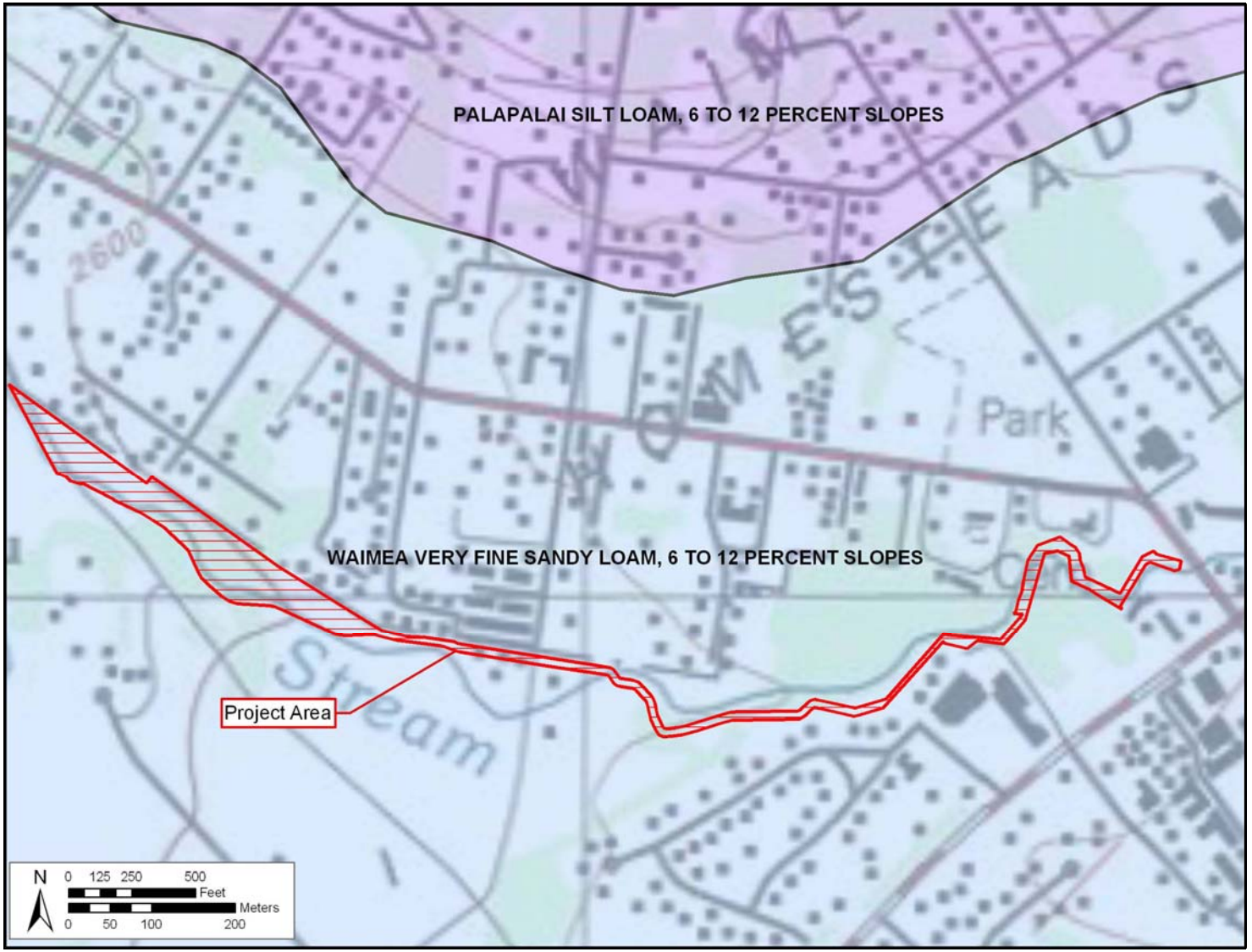

Figure 6. Overlay of Soil Survey of the State of Hawai‘i (Sato et al. 1973), indicating sediment types within the project area

Section 2 Methods

2.1 Field Methods

The fieldwork component of the archaeological inventory survey investigation was carried out under archaeological research permit number 09-20, issued by the Hawai‘i State Historic Preservation Division/Department of Land and Natural Resources (SHPD/DLNR), per Hawai‘i Administrative Rules (HAR) Chapter 13-13-282. The fieldwork component of this archaeological inventory survey was accomplished on June 26, 2009 by two CSH archaeologists, Trevor Yucha, B.S. and David Shideler, M.A. under the general supervision of Hallett H. Hammatt, PhD (principal investigator). The fieldwork required approximately 1 person-day to complete.

A complete ground survey of the project area was undertaken for the purpose of historic property identification and documentation. The ground survey of the project area was accomplished through systematic sweeps. The interval between the archaeologists was generally between 5 to 10 m. All historic properties were documented through detailed written description, with evaluation of function, interrelationships, and significance; photographs; scale drawings using standard tape-and-compass mapping procedures; and located with a GARMIN GPSMAP60Cx unit (accuracy +/- 2-5 m).

2.2 Document Review

Background research included: a review of previous archaeological studies on file at SHPD; review of documents at Hamilton Library of the University of Hawai‘i at Mānoa, the Hawai‘i State Archives, the Mission Houses Museum Library, the Hawai‘i Public Library, and the Archives of the Bishop Museum; study of historic photographs at the Hawai‘i State Archives and the Archives of the Bishop Museum; and study of historic maps at the Survey Office of the Department of Land and Natural Resources. Historic maps and photographs from the CSH library were also consulted. In addition, Māhele records were examined from the Waihona ‘Aina database (<www.waihona.com>).

Section 3 Background Research

3.1 Traditional and Historical Background

3.1.1 Place Names and *Mo‘olelo*

Ke kīpu‘upu‘u ho‘anu ‘ili o Waimea

(The Kīpu‘upu‘u rain of Waimea that chills the skin of people)

[Puku‘i 1983:188; #1748]

The project area region is generally referred to as “Waimea” which literally means reddish water, as it was thought to be tinted as it was drained through the *hāpu‘u* tree fern forests or though the red soil (Elbert, Ms in Barrerra and Kelly 1974). Waimea has been poetically characterized as being “like a spear rubbed by the wind, as the cold spray is blown by the *kipu‘upu‘u* rain...” (Proverb from a Kamehameha *mele* quoted by Henry Judd in Doyle 1953:42) and has a rich history that is evident in its place names and proverbs.

The area is also popularly known as Kamuela (Samuel), named either for post master Samuel Spencer or for the rancher, Samuel Parker (Pukui et al. 1974). In *‘Ōlelo no‘eau* (Pukui 1983), Waimea is noted as an area of cool climate and chilling rains:

> (A) *Hele po‘ala i ka anu of Waimea*
>
> Going in a circle in the cold of Waimea
>
> Said of a person who goes in circles and gets nowhere. Waimea, Hawai‘i is a cold place and when foggy, it is easy for one unfamiliar with the place to lose his way [Puku‘i 1983: 83; #757].
>
> (B) *Ka ua Kī pu‘upu‘u o Waimea/ Waimea i ka ua Kīpu‘upu‘u*
>
> The Kīpu‘upu‘u rain of Waimea/ Waimea, land of the Kīpu‘upu‘u rain
>
> An expression often used in songs of Waimea Hawai‘i. This area is famed for its cold rain. When Kamehameha organized an army of spear fighters and runners from Waimea, they called themselves Kīpu‘upu‘u after the cold rain of their homeland [Puku‘i 1983:169, 319; #1571 & #2913].
>
> (C) *Ka ua paliloa o Waimea*
>
> The Tall-cliff rain of Waimea
>
> The rain of Waimea, Hawai‘i, that sweeps down cliffs. [Puku‘i 1983:172; #1593]

Ke kānoa kapu o Lono-Makahiki: ‘oia ho‘i ‘o Hōkū‘ula!

(The sacred bowl of Lono-Makahiki: it is Hōkū‘ula!)

[*Ka Hōkū o Hawai‘i* 4/23/1914 in Franklin et al. 1994]

Translated and interpreted by Kepā Maly (Franklin et. al 1994), the legend of Ka-Miki was published in the Hawaiian newspaper *Ka Hōkū of Hawai‘i* between the years of 1914-1917. It is

a story about two brothers and their journey around the island of Hawai‘i. The legend includes references to over 800 place names, and provides interesting information about Pu‘u Hōkū‘ula, the most prominent hill located just north of Waimea town.

> Hōkū ‘ula (Red Star): When Ka-Miki and Maka‘iole drew near to completing their formal *‘ōlohe* training (fighting and competing skills) under their goddess/ great grandmother Ka‘uluhe, she told them to go and visit their *kūpuna* (ancestress) Lani-nui-ku‘i-a-mamao-loa who dwelt at Lanimaomao (Waimea). Lani-nui-ku‘i-amamao-loa was the guardian and keeper of the sacred *kānoa* (*‘awa* mixing bowl) Hōkū‘ula which belonged to Lono-Makahiki, and the *ma‘au (*strainer) called Kalau-o-Kāhuli which was upon the plain of Waikōloa. These two items were to be used in *‘awa* ceremonies for the brothers *‘ailolo* (brain eating- completion of training ceremonies) [*Ka Hōkū o Hawai‘i* 2/5/1914 in Franklin et al. 1994].

The association of the bowl, or *kānoa* of the god Lono (a provider of abundant crops and rain-laden clouds) with Hōkū‘ula may refer to the agricultural lands of the region; i.e., (1) the bowl or container could symbolize a land of agricultural abundance; (b) the sprinkling of waters from the bowl could refer to the waters of the streams that flow from the uplands and spread across the plains; and (c) the importance of the rituals of Lono in agricultural endeavors, particularly in the areas of Kohala were large rain-fed field systems have been archaeologically documented. Thus the legendary account may symbolically represent actual resources of the Waimea region.

3.1.2 Accounts of Pu‘u Kapu

A missionary account by Lorenzo Lyons in the 1850's tells of legends within the setting of Waimea, that may relate to the origin of the name “Pu‘u Kapu”:

> On a nearby ridge stood another *heiau* built “...by the great Akua Makuakua who has come from far off Kahiki.” from the hillside he watched the rainbows “...and there he found the beautiful goddess Wao.” They lived at Hōkū‘ula Each time Wao was ready to bear a child she returned to the Waimea hills, which were sacred to her. The *kapu* was proclaimed in her honor- the forbidden ground extended ...”down across the plains to whatever place a stone happened to stop rolling when started above by her servants” [Doyle 1953 in Barrera and Kelly 1974]

According to legend, Wao changed her servants into stones to guard the land during the night hours; when daylight came she transformed them back into their human forms (Barrerra and Kelly 1974:1).

Lorenzo Lyons also tells of the legendary story of a Ho‘opili-a-Hae, and mentions her as being the founder of a *heiau* for women in Waimea:

> The earliest chiefs of Waimea of whom we have record stemmed from the same Ulu-Hema line that led to Līloa, the founder of the island dynasty. Līloa’s grandson Keawe-nui-a-‘Umi took as one of his wives Ho‘opili-a-Hae, daughter of Līloa’s *kahuna* Pae-a-Molenole. [Clark and Kirch, 1983:26]

> (The *heiau*) was attended exclusively by young virgins. In the sanctity of the cool highland forest, they "...performed the sacred ceremonies, learning also the science of healing so that they might eventually minister to others. Hoapiliaha‘e’s children were named for the five rains of the *heiau*" [Doyle 1953: 42-43] (in Barrerra and Kelly 1974:1)

A passing reference to Pu‘u kapu is made in the story of "Kai A Kahinalii" in which a fisherman of Kawaihae who fishes all day long and, setting out early. observes: "the sun has now risen, and was looking over the hills of Pu‘u kapu." (Thrum 1923:229)

3.1.3 Historical Battles at Waimea

‘O ke aluka koa a Kama i Waimea

(a multitude of warriors had Kama at Waimea)

[Kamakau 1961 :55-61 in Barrerra and Kelly 1974]

Hōkū ‘ula, located approximately 5 kilometers west of the present project area, is famed for being the location of a prominent battle ground in which Kamalālāwalu, the ruler of Maui Island waged war against the island of Hawai‘i. Deceived by misleading advice from his trusted advisors and poor strategic planning, Kamalālāwalu arrived on Hawai‘i island, landing at Kawaihae only to realize that there were no people there. The Maui forces continued up to Hōkū‘ula, a prominent bluff. Situated in this manner, he believed his army would be able to have the advantage in defending themselves against the Hawai‘i island forces.

Upon hearing of Kamalālāwalu‘s arrival, Lonoikamakahiki, the Hawai‘i island ruler sent armies from Kona, Ka‘ū, Puna, and Hilo to Hōkū‘ula, where the Maui warriors were stationed. The following morning Kamalālāwalu observed that the lowlands were literally covered with countless men. He soon realized that his Maui forces were inferior in numbers and asked his ally Kumaikeau "*E Kumaikeau ma, pehea kēia? He aha kēia lehulehu o lalo?*" "Kumaikeau and the rest of you, how is the situation? What is the extent of their numbers below?" Kumaikeau relied "*‘Akahi nō au a ‘ike i ka nui o nā kānaka o Hawai‘i nei.*," "I have never seen so many people in Hawai‘i before..." After three days of negotiations, the two combating forces waged battle, with Lonoikamakahiki gaining the victory over Kamalālāwalu’s army (Fornander 1916:342-350).

Another battle fought in the Waimea area was between the leeward and windward chiefs of Hawai‘i Island toward the middle of the 18th century. This clash took place at Mahiki, east of Waimea and just across the district boundary in Hāmākua. Here the father of the great chief Alapa‘inuiakauaua was leading his forces against the Hilo chiefs when he was killed. Alapa‘inui was on Maui at the time but returned to Hawai‘i and ultimately regained control of the Kona and Kohala districts (Kamakau 1961: 65). Eventually he went on to take over the whole island of Hawai‘i and place it under his rule. In his later years, Alapa‘inui lived first in Waipi‘o, then lived for sometime in Waimea, and later moved to Kawaihae (Kamakau 1961: 77).

During Kamehameha’s campaign to extend his rule to all the major islands, he stayed at Waimea and at Kawaihae for some time. There are mentions of Kamehameha’s visits to Waimea in 1791 and 1792 when he rebuilt Pu‘u Koholā Heiau (Clark and Kirch 1983). At that time a large work force was required and the people of Waimea were solicited. It has also been suggested by Clark and Kirch (1983:27) that food and tapas were brought from Waimea to feed

and clothe the many warriors in preparation of the *Peleleu* fleet to battle Maui and O‘ahu in 1794 and 1795.

3.1.4 Post-contact Period

The Waimea area, with its favorable soils, and water from Kohala Mountain streams that could be harnessed and distributed on the fairly level plains, was an obvious area for the expansion of introduced food crop production. Waimea was very productive agriculturally in the early years following contact with the Western world. Based on early accounts, *kalo*, or taro (*Colocasia esculata sp.)* was the dominant crop with *‘uala*, or sweet potatoes (*Ipomoea batatas sp.*) and *kō*, or sugar cane (*Saccharum officinarum sp*.) also grown in substantial quantities.

The decline in traditional Hawaiian agriculture in the Waimea region has been attributed to factors such as 1) depopulation and the concomitant abandonment of the fields; 2) the pursuit of other commercial interests such as sandalwood and the *pulu* trade, sugarcane, and finally the introduction of cattle.

It is important to mention that after the abandonment of traditional Hawaiian agriculture in Waimea, there were two resurgences of agricultural endeavors to boost the economy of Waimea (Clark and Kirch 1983). In the late 1820's, two Chinese, Lau Ki and ‘Aiko started a sugar mill at Līhu'e in upper Lālāmilo. While the mill was not successful commercially, sugar production continued in the Waimea area (Barrerra and Kelly 1974: 47).

It was during this time that an expansive irrigation system was developed consisting of several dendritic ‘*auwai* that diverted water from Waikōloa and Lanimaumau Streams. Portions of one named ‘*auwai*, "Akona's *‘Auwai*", are depicted within and in the vicinity of the current project area (Figure 7 and Figure 8). Akona's *‘Auwai* was used primarily to power the sugar mill at Līhu'e and to irrigate nearby sugarcane fields (Burtchard and Tomonari Tuggle 2003). "Akona was a Chinese who lived in the Waimea area in the 1840's and 50's (and perhaps somewhat before and after)" (Clark 1981:28). Historic maps depict Akona's *‘Auwai* as originating at the start of a large meander of Waikōloa Stream within or adjacent to the current project area and extending southwest through Land Commission Award (LCA) #0976 belonging to William Buckley (Figure 9).

In the late 1830's, cotton was grown in Waimea when Governor Kuakini ordered the planting of an “immense field of cotton in the Waimea area,” (Kuykendall 1967: 183). In the late 1840's and early 1850's, both sweet and Irish potatoes were cultivated extensively, however by 1865, their crops were reported to have been greatly diminished.

3.1.5 Sandalwood and *Pulu*

The mountains surrounding Waimea were well known for rich sandalwood reserves. During the early part of the 19th century as contact with the West was growing, the extent of the sandalwood trade was evident as it became one of the earliest commodities of a newly formed market oriented economy.

Similar to the sandalwood trade was the exploitation of *pulu*, the soft fiber gathered from the buds of the tree fern (*Cibotium sp*.) and used for stuffing pillows, mattresses, and furniture (Thrum 1929 in Erkelens 1998: 15). The *pulu* trade began in 1851 with shipments to the West

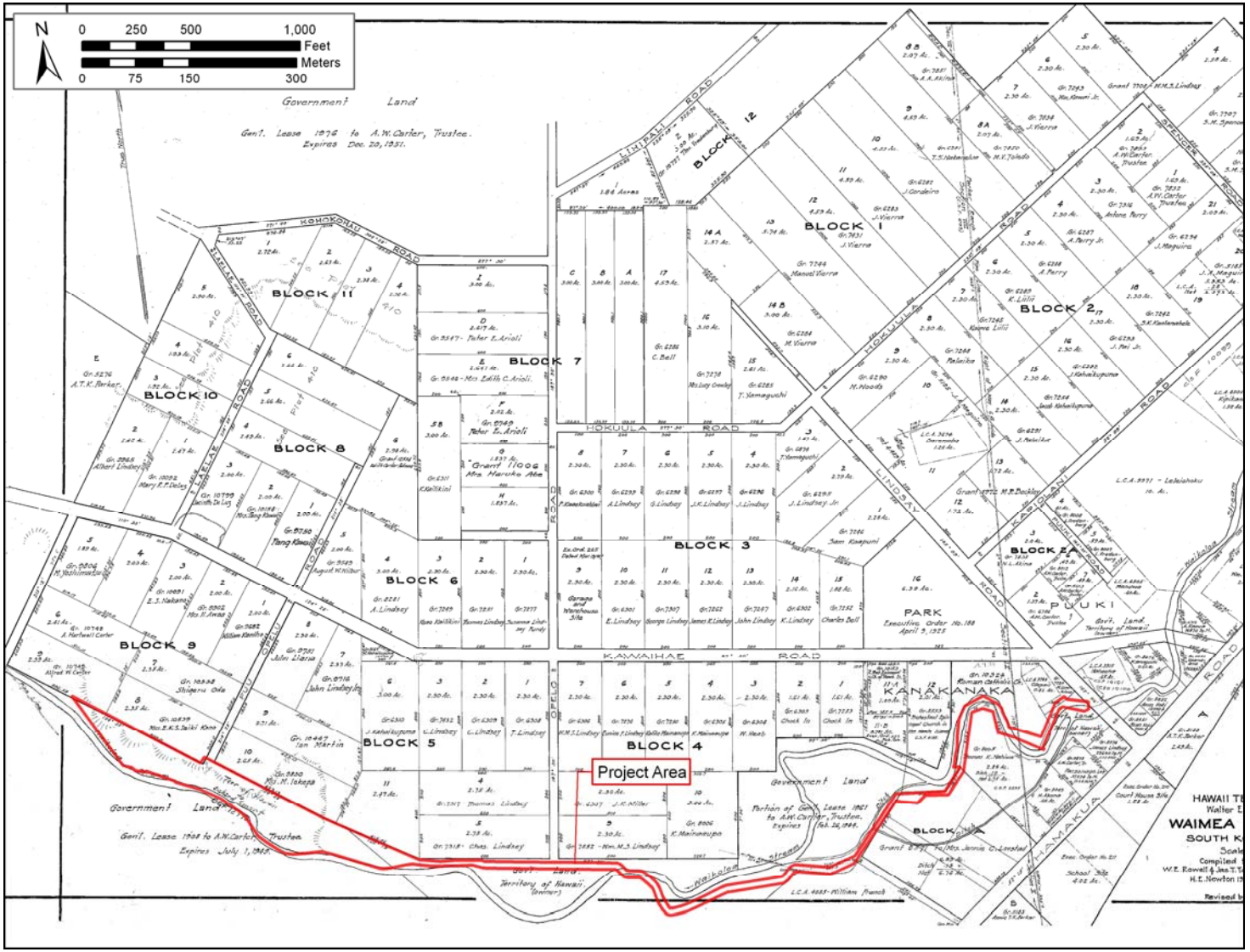

Figure 7. 1908 W.E. Wall map showing Akona's *‘Auwai* (labeled as "Ditch") adjacent to the current project area

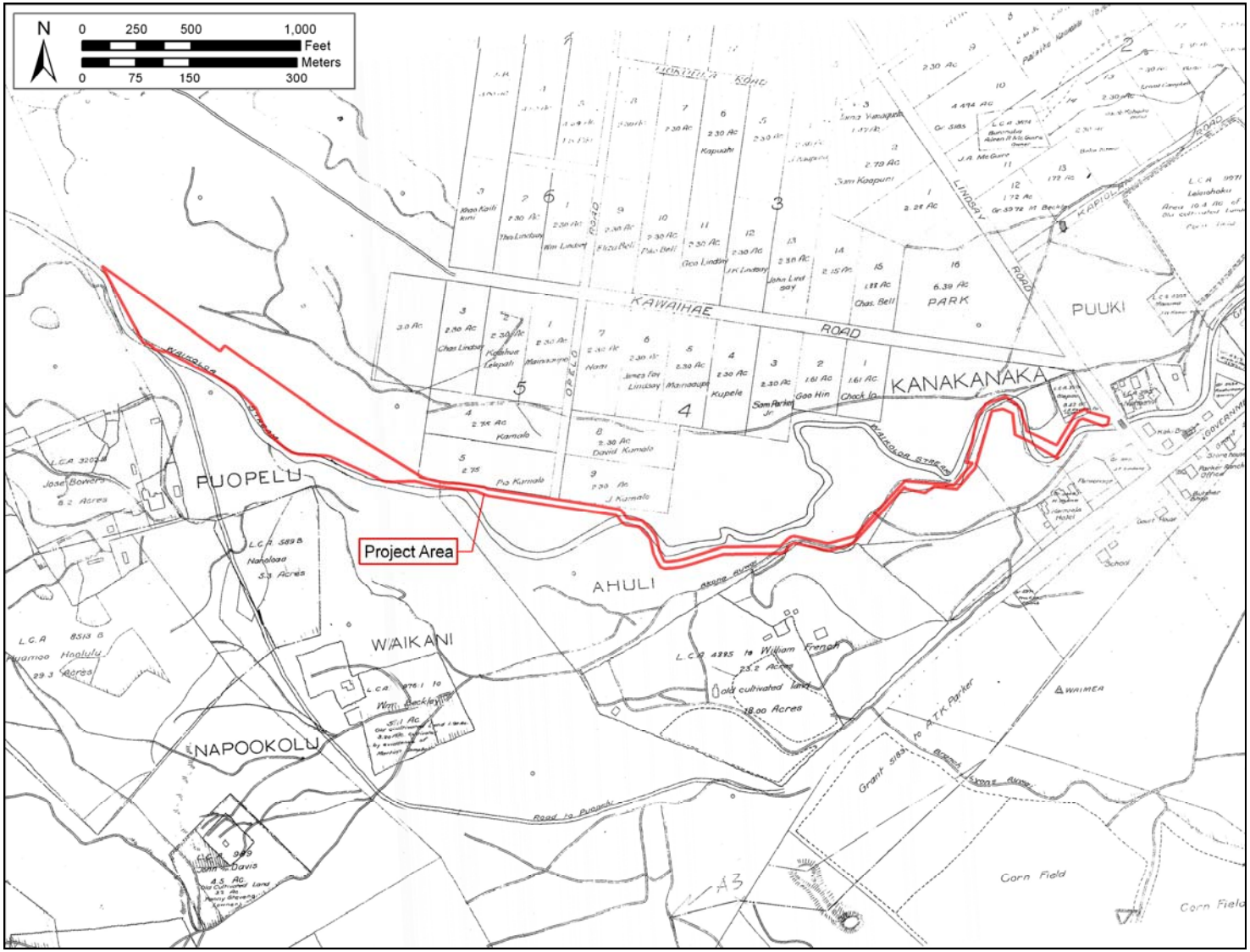

Figure 8. 1914 Newton and Adams Registered Map (2576) showing Akona's *‘Auwai* within and near the current project area

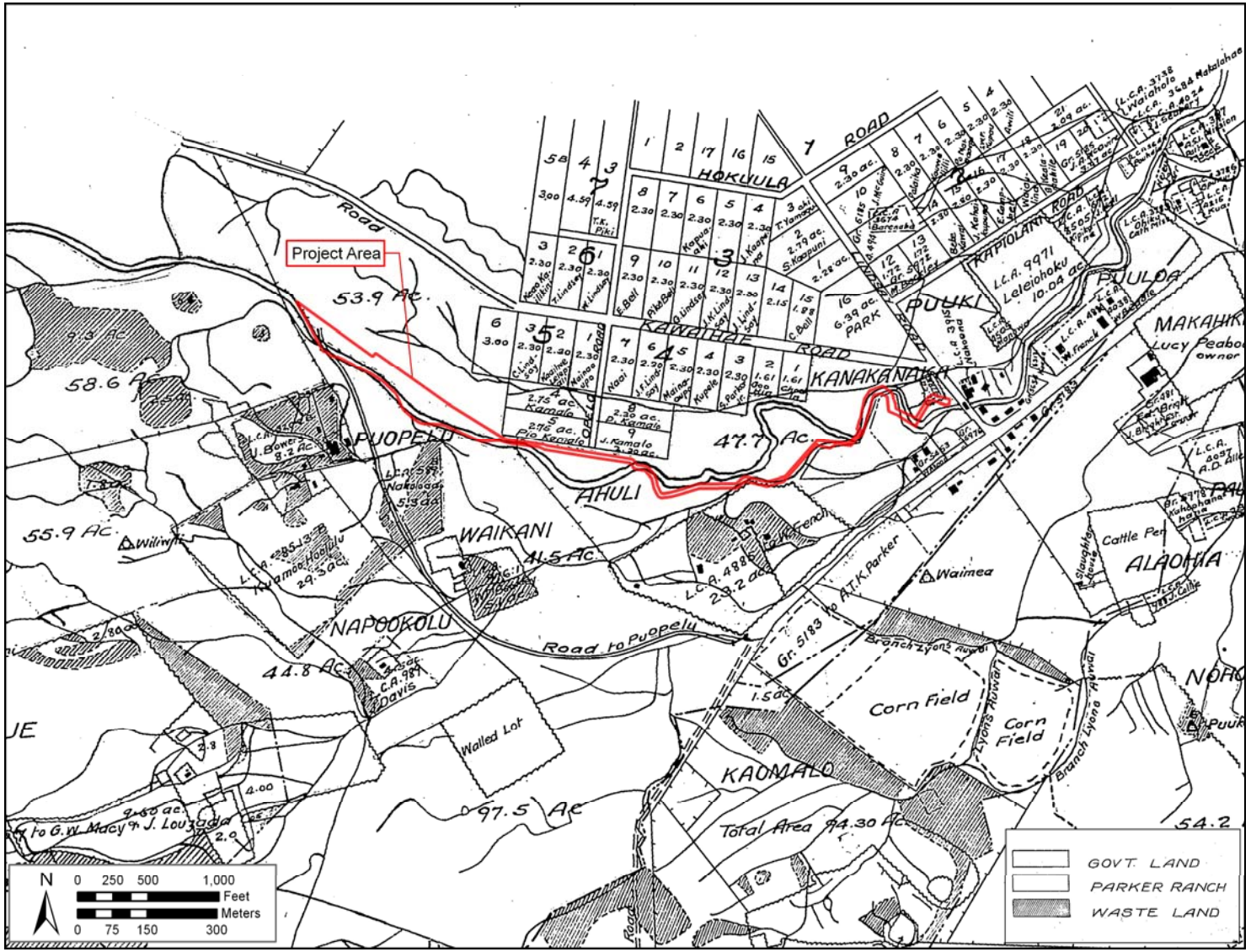

Figure 9. 1915 Classification Survey showing Akona's *‘Auwai* extending from Waikōloa Stream through the current project area

Coast of North America and Australia. Like sandalwood, the over-exploitation of this resource also led to its demise and by 1860, the trade had virtually ended (Doyle 1945: 182).

3.1.6 Population Estimates

The general impression of the pre-contact settlement pattern, constructed from a variety of archaeological and early historical sources, is one of scattered settlements along Waikōloa Stream (Clark 1987: 103; Erkelens 1998: 11). During subsequent decades, with the arrival of western foreigners and missionaries, impressions of the life and landscape would be recorded for 19th-century Waimea. In 1823, Asa Thurston counted 220 houses in his walk through Waimea in the section between ‘Ōuli and Pu‘u Kapu (a distance of approximately 4.8 km or 3 miles); this was interpreted as representing a population of 1,100 to 1,200 individuals (Ellis 1979:399 in Erkelens 1998:11). Although the population was concentrated at Kea‘ali‘i (located along Wai‘aka Stream) at the time of Thurston’s visit, a settlement of 300 to 400 individuals near the present Waimea town is a reasonable estimate (Clark 1987: 103).

It was not, however, until the 1830s that a missionary would be stationed in northern Hawai‘i. On July 13, 1832 Lorenzo Lyons and his wife Betsy arrived at Kawaihae by brig from Honolulu to take up residence at Waimea. Lorenzo Lyons had a church and school (for adults) at Waimea in 1835, serving a congregation of from 100 to 500 Hawaiians. In his writings, Lyons stated:

> During the past year I have taken a census of the population of this district and find it to be as follows: Waimea, 1,396; Kohala 6,175; Hamakua 4,015; total 11,586, from which it appears there has been a diminution of the people 3,500, within three and a half years. Marriages are numerous. But the progeny are wanting. Children are not in general, objects of desire. Taxes are in proportion to the number of children. My census may not be correct. Many think I am numbering them for the purpose of taxation, and conceal a part of their number. [Doyle 1945:82-83]

3.1.7 The Māhele

The Organic Acts of 1845 and 1846 initiated the process of the Māhele, the division of Hawaiian lands, which introduced private property into Hawaiian society. In 1848, the crown and the *ali‘i* received their land titles. The common people (*maka‘āinana*) received their *kuleana* awards (individual land parcels) in 1850. It is through records for Land Commission Awards (LCAs) generated during the Māhele that the first specific documentation of land use within the vicinity of the project area comes to light.

A total of six LCAs are located within the vicinity of the current project area (See Figure 9 and Figure 10). Documentation of these LCAs was reviewed in an attempt to reconstruct land use patterns during the mid 19th century (Table 1 and see Appendix A). Māhele documentation in the vicinity of the project area shows a presence of several house lots with associated dry land agricultural fields. Of particular note is the high frequency of prominent foreign awardees, like William French and William Beckley, who are associated with early business ventures throughout the Hawaiian Islands.

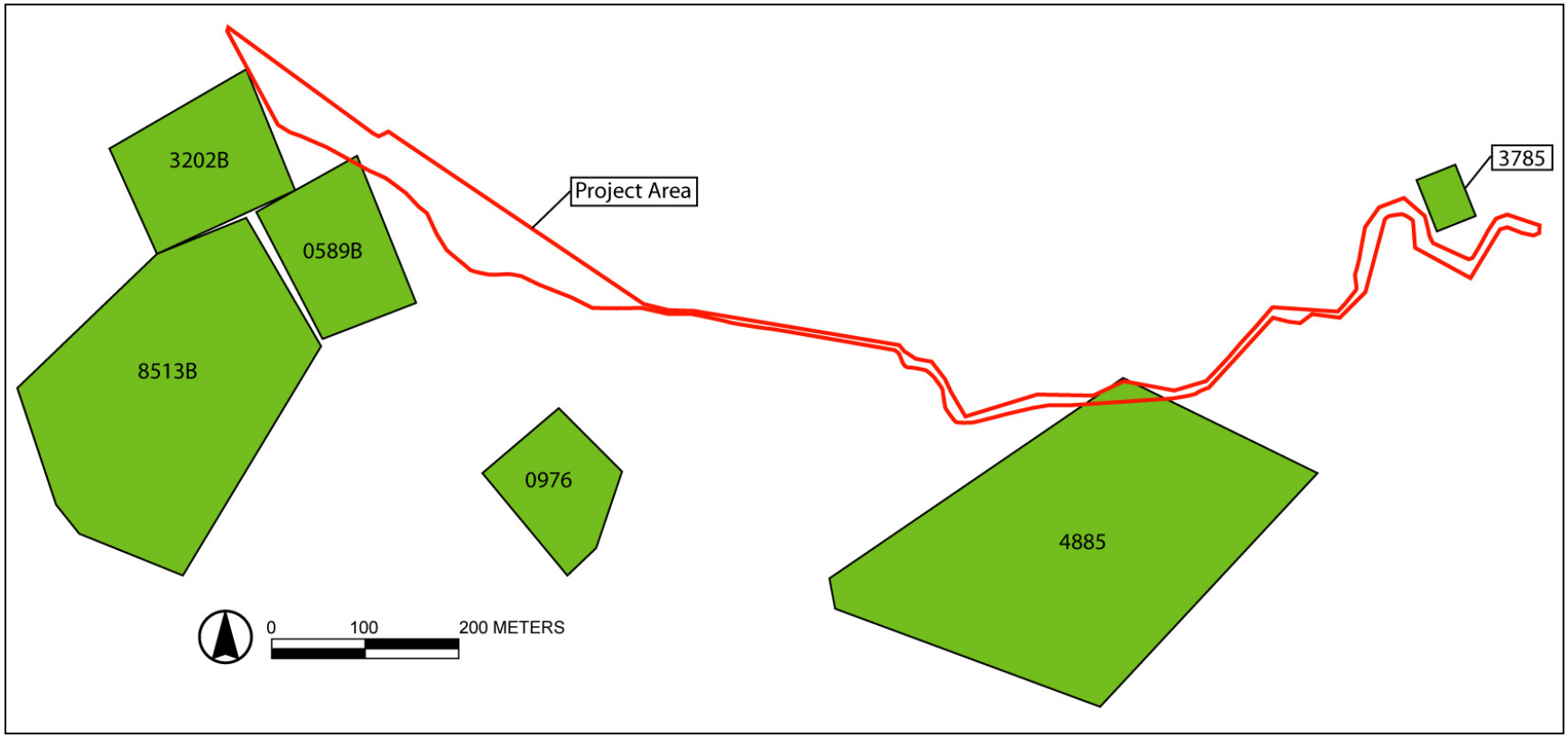

Figure 10. Map showing the approximate location of Land Commission Awards within the vicinity of the project area

Table 1. Land Commission Awards Located in the Vicinity of the Current Project Area

Land Claim #	Claimant	*‘Ili*	Land Use
00589B	Naholowaa	Pu‘uapelu	1 house lot, 3 fields partly under cultivation
00976	Beckley, William	Owahawaha (Waawaa)	1 House lot enclosed by stone wall
03202B	Bowers, Jose	Pu‘uopelu	House lot, 3 fields
03785	Olepau	Kauakanaka, Opeawai, Alaohia	1 lot with 3 houses
04885	French, William	Ahuli	Dwelling house and premises
08513B	Hoolulu	Napo‘oakolu	1 field partly cultivated

3.1.8 Cattle Industry

The first cattle were delivered to Hawai'i in 1793 by Captain George Vancouver aboard the HMS Discovery. The cattle were a gift to Kamehameha I, who, following Vancouver's advice, immediately placed a 10-year *kapu* on the cattle, which greatly increased their number (Brennan 1995). An examination of the cattle industry in the Waimea area clearly shows its dominant role. The cattle industry, which eventually changed the economy and lifestyle of Waimea, had its origins in bullock hunting, which was controlled by Hawaiian chiefs. The initial increase in cattle population was aided by a ten-year *kapu* placed on hunting or taking of cattle. Feral cattle multiplied rapidly and ran wild on the plains of Waimea. For some two to three decades after the lifting of the protective ban, bullock hunters were employed to hunt down the wild cattle and take them to a market.

In the 1830's, meat, hides, and tallow began to be marketed, and thus formed the true beginning of the cattle industry. By 1847, about two-thirds of Waimea area had been converted to pasture for government herds of cattle, as well as for sheep and horses (Doyle 1945). By the middle of the 1800's the Waimea region was the center of the industry.

The cattle industry had two major impacts on Waimea. The first was the effect of marauding cattle on the unprepared Hawaiian farmer (Erkelens 1998:19). As early as 1802, there were complaints concerning the destruction of gardens by feral cattle (Turnbull 1813:243, in Barrerra and Kelly 1974:44). In 1836, Waimea was surrounded by a stone wall to protect it from cattle.

The second major impact on Waimea was the increase in population as a result of economic opportunities provided by the cattle industry (Erkelens 1998:19). Bishop (Bishop 1828, in Erkelens 1998:19) reports that Kuakini’s arrival in Waimea marked the beginning of the cattle industry, as attendance at church services increased to approximately 1,000 individuals from a previous attendance of 200 (Doyle 1945).

Following Kuakini's construction of the road between Kawaihae and Waimea in 1830, ox carts were able to haul commercial items much more efficiently than was previously possible. Although missionary census records for the period from 1832 to 1845 suggest little overall change in population of Waimea (approximately 1,000 individuals), there was undoubtedly a change in composition of the constituency from predominantly Hawaiian to a mix of foreigners and Hawaiians.

3.1.9 Parker Ranch and the 20th Century

John Palmer Parker, an American born in Newton, Massachusetts in 1790, intended a sailing career when he left home in 1809. After several years at sea, Parker arrived on Hawai‘i Island in 1815 and decided to remain there. By 1819, Parker had a Hawaiian *ali‘i* wife, Kipikane, and a baby daughter, Mary. Parker and his family went to live at Waiapuka in Kohala where he farmed on twenty-one acres that had been granted to him by Kamehameha. In this era, most of the ranch work consisted of capturing wild cattle and domesticating them. As the ranching industry expanded so did responsibilities such as managing the many personnel of the Parker Ranch, building houses and growing food to feed all. Subsequently, Parker hired South American and Mexican horsemen to train his ranch hands to track, rope, brand, and bring in the wild cattle. These "vaquero", "*paniolo*," or "espangnol" not only introduced the management of cattle and horses, but also brought colorful clothes, hats and saddles that became the mark of Hawaiian *paniolo*. The first Hawaiian *paniolo* or cowboys actually predate many of the mainland western cowboys. The ranch personnel also made most of their own gear and machinery, including saw mills.

In the last years of the 19th Century, Waimea remained a small town concentrating on the shipment of cattle to export markets. The Waimea of 1881 was graced with two stores, a boarding house, lodging house, and a coffee saloon (Bowser 1881:540). Even at this seemingly late date, wild cattle were occasionally a problem. In 1888, Paul Jarrett was the first to commence fencing Parker Ranch lands to segregate the domesticated from the wild cattle (Doyle 1904). The next Parker Ranch manager, A.W. Carter, (manager 1899-1936), consolidated all the Parker family land holdings under the control of his ward, Thelma Parker. A.W. Carter then began in earnest to increase ranch lands, systematically breed for better, stronger, healthier cattle and horse stock, bought a barge to ship cattle with other Big Island ranchers, increased ditches for watering livestock and imported different grasses and feed for cattle. He provided the U.S. military branches with cavalry horses. He also ventured for a short time into training horses and horsemen for polo teams, and then became one of the major providers of horses in Hawai'i and abroad for work, pleasure, and shows. His son, A.H. Carter succeeded him in 1937. The Parker Ranch had become one of the biggest private businesses in Hawaii and remains the dominant economic force in Waimea.

3.1.10 Camp Tarawa

In 1943, the U.S. Army leased approximately 91,000 acres in Waikōloa from Parker Ranch for military training that continued until June 1946. Artillery firing and troop maneuvers by the 2nd Marine Division, the 28th Regiment, 5th Marine Division, the 6th Marine War Dog Platoon, the 31st Naval Construction Battalion, the Army's 471st Amphibian Truck Company, the Army's 6th Section of the 726th Signal Aircraft Warning Company, the 11th Amphibian Tractor Battalion,

and the 5th Joint Assault Signal Company occurred over large expanses of the leased lands (Conner 1950, Bryson 1995).

Initially named Camp Waimea, the central operations area, located on the south side of Waimea Town adjacent to the current project area, became known as Camp Tarawa (Figure 11 to Figure 13). "It consisted of tents, Quonset huts, wooden structures, and roads covering approximately 467 acres: the largest military settlement on the Big Island during World War II" (Nees and Williams 1998:16). The camp was named by marines of the 2nd Marine Division returning directly from victory at Tarawa Atoll located approximately 2,479 miles to the southwest of the small town of Waimea. The roadways within Camp Tarawa were also given names of islands and locations in and around Tarawa Atoll (See Figure 12).

A second wave of marines, those of the 5th Marine Division, was stationed at Camp Tarawa for another purpose. "Pu‘u Ula‘ula and Buster Brown were scaled daily so that men would be ready to climb the infamous Mt. Suribachi when the time came…" (Bryson 1995:15). The men were preparing for the fateful attack on Iwo Jima, which occurred on February 19, 1945.

The influx of up to 50,000 U.S. Marines at Camp Tarawa had profound and lasting effects on the small town of Waimea. Among these effects were the increased revenue brought to local businesses, electricity, refrigeration, and the arrival of the hamburger. At least two hamburger stands popped up around Camp Tarawa including The Magnolia Inn, located within the present boundaries of Lanakila Park, adjacent to the eastern tip of the project area (Melrose 1997). Hisa Kimura recounts of the Waimea hamburger stands:

> One day, Tsugi, or "Sue" as she was called by the marines, saw a boy who looked local in the endless line of diners. When she asked him if he were local or not, he introduced himself as Ira Hayes, an American Indian. (Bryson 1995:15)

As quickly as they had appeared, the Marines stationed near Waimea had departed, and by the end of June, 1946, Camp Tarawa was abandoned, roadways were renamed, and camp infrastructure was left for ruin.

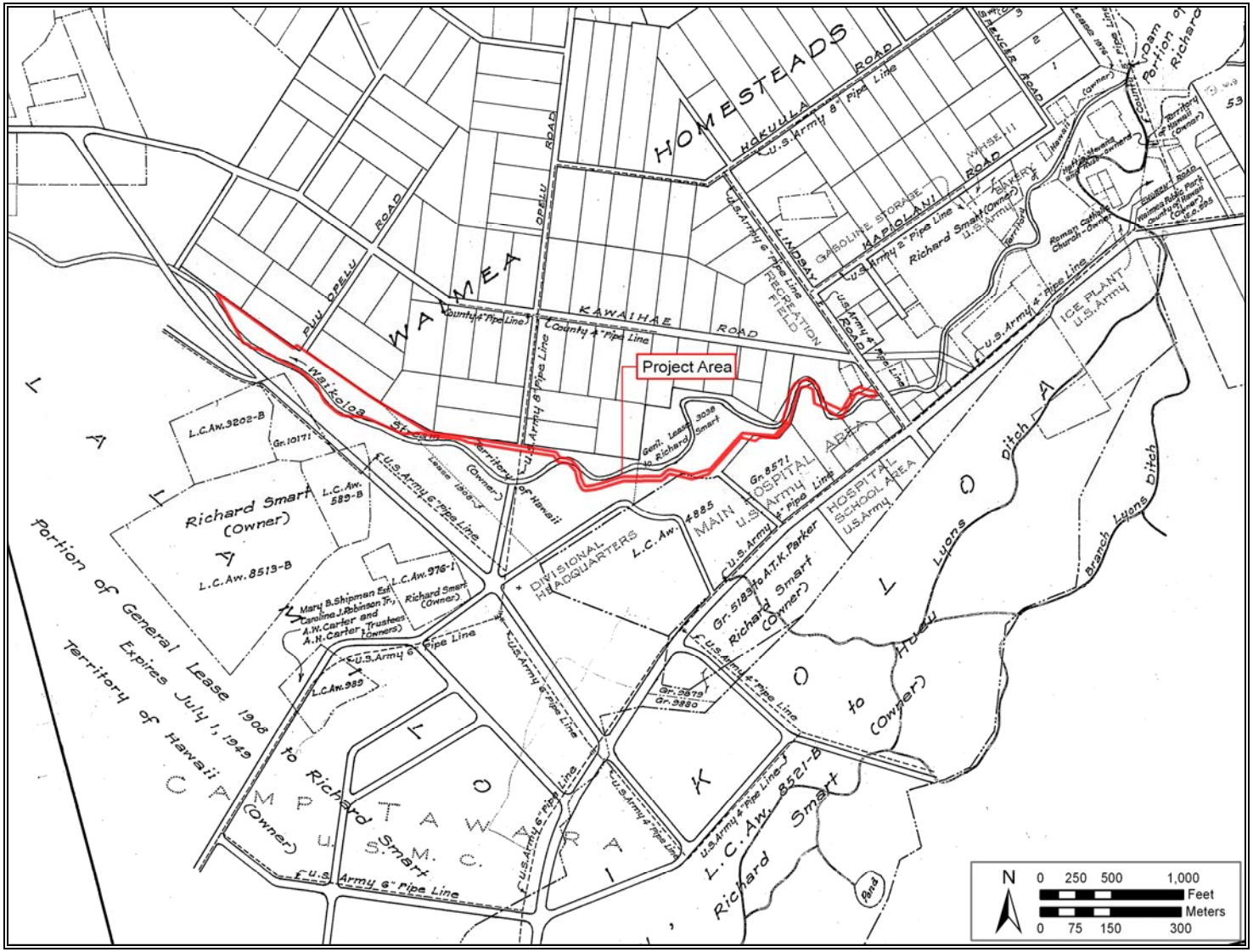

Figure 11. 1945 Al Marks Plat Map showing the location of Camp Tarawa adjacent to the current project area.

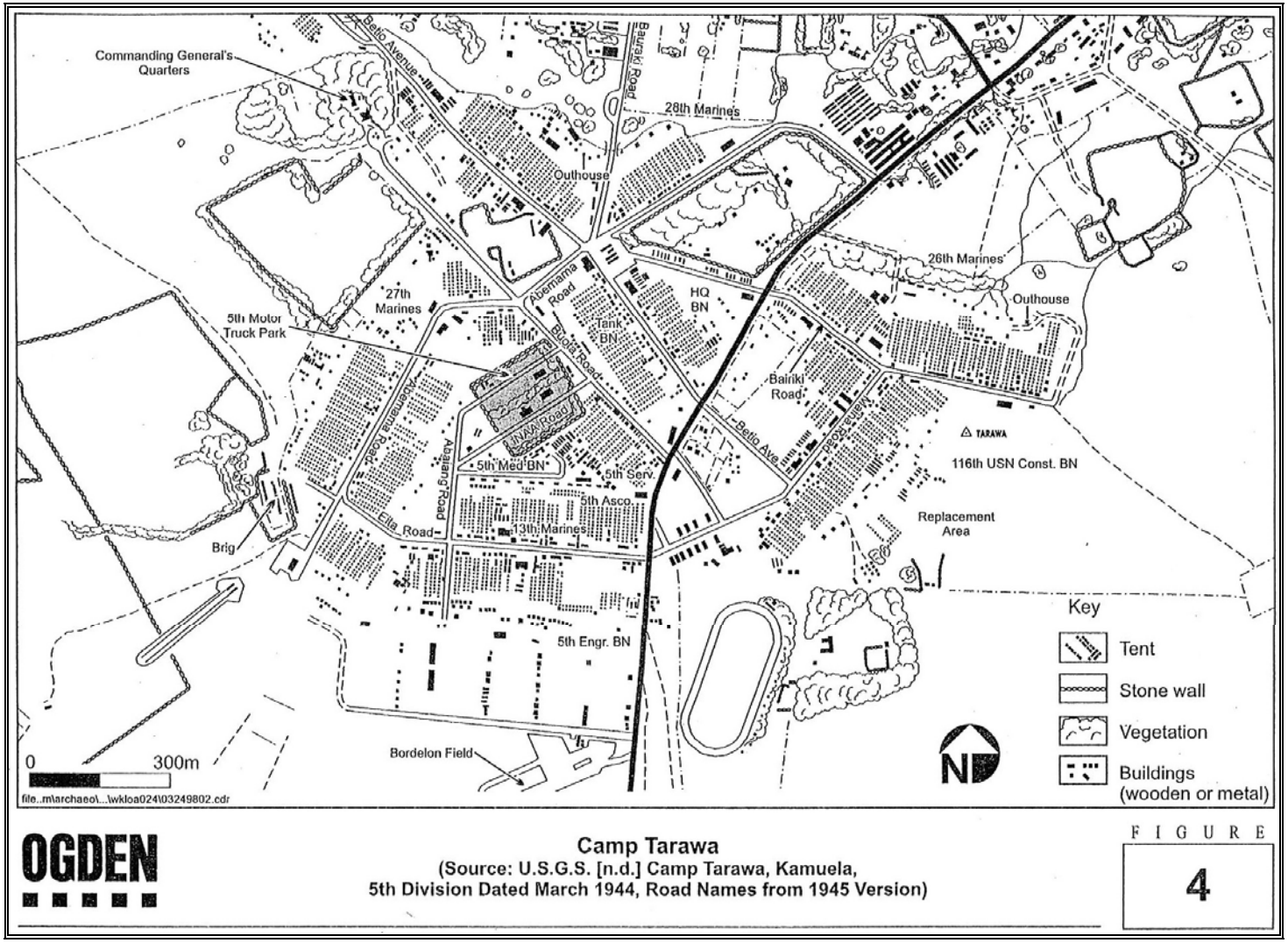

Figure 12. Map from Nees and Williams (1998:17) showing Camp Tarawa adjacent to the portion of Waikōloa Stream within the current project area

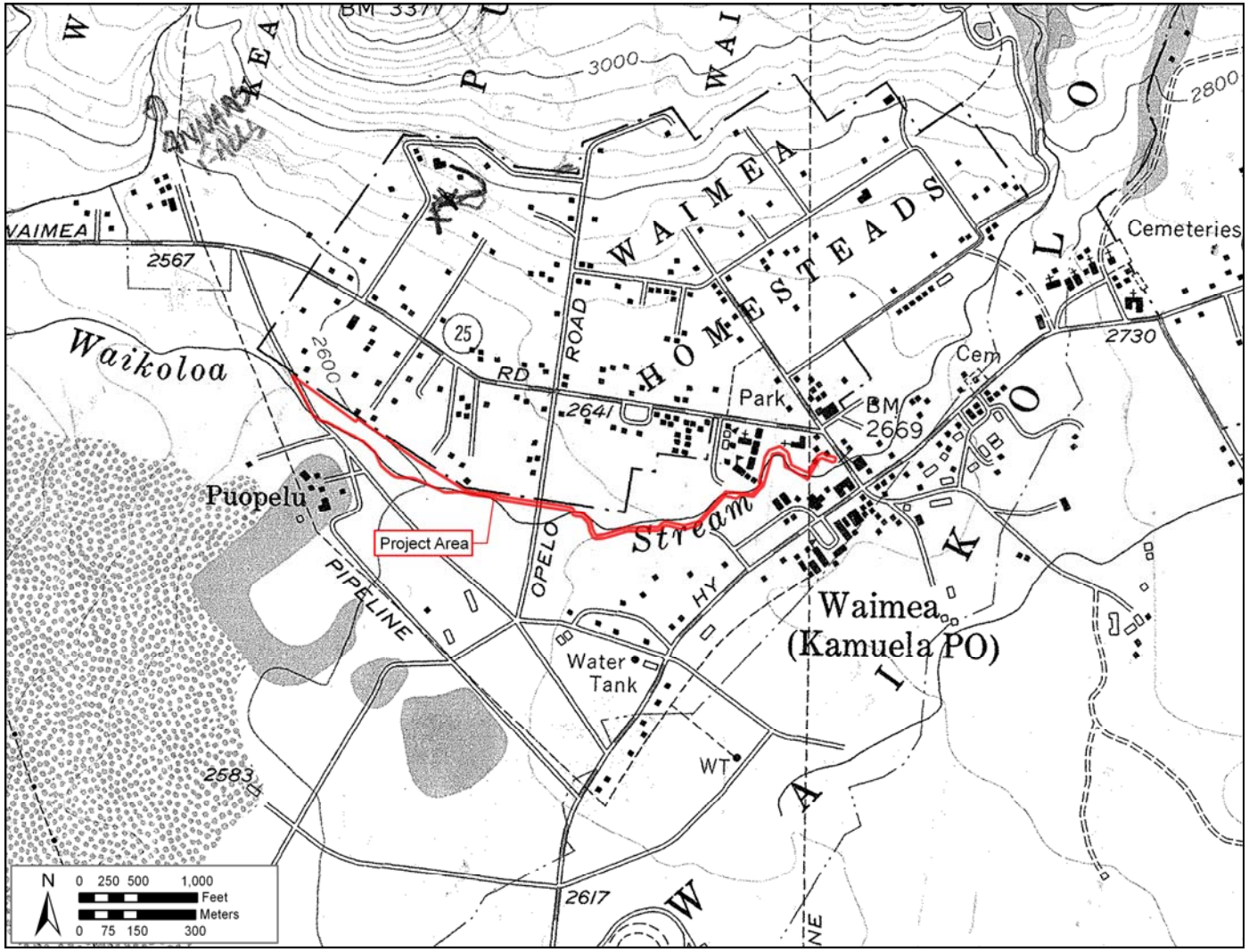

Figure 13. 1956 USGS 7.5-minute Kamuela Quadrangle Map showing remnant Camp Tarawa roadways adjacent to the current project area

3.2 Previous Archaeological Research

Previous archaeological studies conducted within the vicinity of the current project area are shown in Figure 14 and presented in Table 2. The following is a summary of these archaeological studies.

In 1981, Bishop Museum conducted an archaeological survey of the proposed Lālāmilo Agricultural Park, located approximately 1.3 km west of the current project area (Clark 1981). A total of 321 historic properties were identified and recorded. The historic properties were broadly associated with the Waimea agricultural system. On site number, SIHP# -9179, was assigned to all of the irrigation ditches (*‘auwai*) within the study area including "Akona *‘auwai*", portions of which are located within or adjacent to the current project area. Clark (1981:28) describes Akona's *‘Auwai* as follows:

> The main channel was labeled the Akona *‘auwai* by Wall, thus lending its name to the entire subset…The Akona subsystem branches into a large dendritic network through the center of the survey area. It is this irrigation network which fed into the Līhu'e sugarcane fields. It also, however, extends well beyond this, indicating that it is not merely a development for the short-lived sugar industry in Lālāmilo.

In 1983, Bishop Museum conducted archaeological investigations of the Mudlane-Waimea-Kawaihae road corridor (Clark and Kirch 1983). The fieldwork, performed in 1973, identified 4,561 archaeological features. The study area, located approximately 1 km south of the current project area, recorded one dendritic *‘auwai* (SIHP# -2684) that may be connected to Akona's `Auwai near the current project area. Additionally, numerous sites were identified, both agricultural and habitation, and the project provided a broad data base for comparing site distribution data from the coast to upland.

In 1985, Paul H. Rosendahl, Ph.D., Inc (PHRI), conducted an archaeological reconnaissance survey of the Kawaihae Reservoir No. 1 Site located approximately 1.3 km northwest of the current project area (Rosendahl 1985). No surface historic properties were encountered and no further archaeological work was recommended.

In 1989, University of Hawai‘i at Hilo conducted an archaeological reconnaissance survey near the Hawai'i Preparatory Academy in Waimea located approximately 1.4 km northwest of the current project area (Bonk 1989). The study area is located within Field Complex #1 as defined by Clark and Kirch (1983). Historic properties located within the study area consisted of varying sizes of agricultural terraces. No *‘auwai* or habitation structures were observed. Data recovery and additional mapping of these terraces was recommended prior to construction within the project area.

In 1989, Soil Conservation Service conducted archaeological investigations of the Lālāmilo agricultural addition irrigation pipeline corridor and the livestock distribution system and management area (Spencer 1989). The study area is located approximately 1.3 km southeast of the current project area. No historic properties were observed and no further archaeological work was recommended.

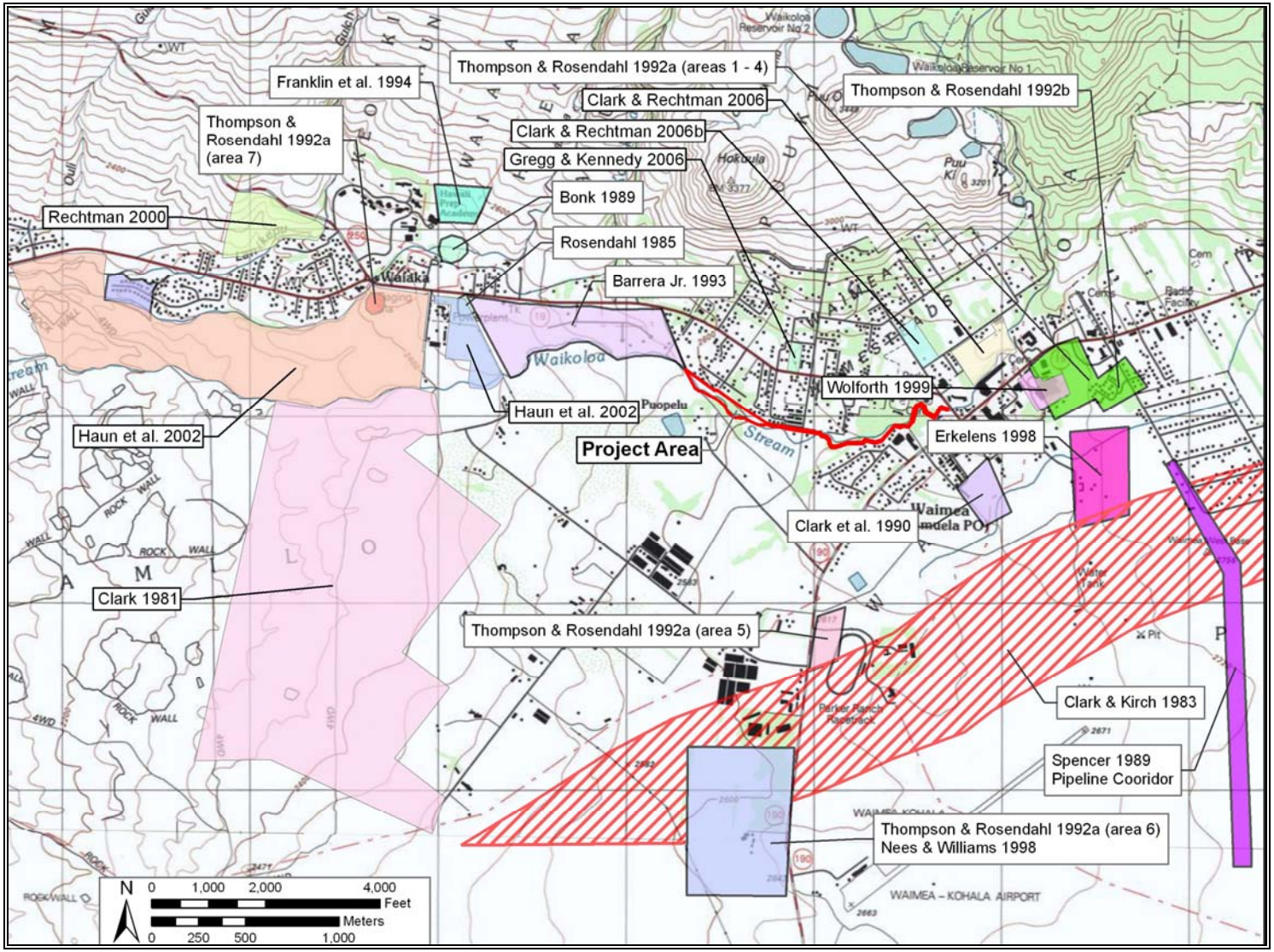

Figure 14. Map showing location of previous archaeological studies in the Waimea area relative to the current project area

Table 2. Previous Archaeological Studies in the Waimea area

Reference	Nature of Study	Location	Findings
Clark 1981	Archaeological Survey	Adjacent to existing Lālāmilo Farm Lots, bounded on the north by Waikōloa Stream	321 historic properties associated with the Waimea agricultural system. SIHP# -9179 *‘auwai* system including Akona's *‘Auwai*.
Clark and Kirch 1983	Archaeological Investigations	0.61 km wide corridor extending just south of Waimea Town	Defined the Waimea agricultural system and subsystems. SIHP# -2684, dendritic *‘auwai* possibly connecting to Akona's *‘Auwai*
Rosendahl 1985	Archaeological Reconnaissance Survey	TMK [3] 6-6-001: 005 por.	None
Bonk 1989	Archaeological Reconnaissance Survey	Waiaka, N side of road to Kawaihae	Agricultural terraces related to Field Complex #1 as defined by Clark and Kirch (1983)
Spencer 1989	Archaeological Investigations	30’ wide 4,500’ long Ag Pipeline Corridor	None
Clark et al. 1990	Archaeological Testing and Data Recovery	Waimea School Improvements TMK [3] 6-7-002: 017 por.	Documentation of SIHP# 8808 part of the Waimea agricultural system as defined by Clark and Kirch (1983).
Thompson & Rosendahl 1992a	Archaeological Inventory Survey	7 parcels scattered around edge of Waimea Town	SIHP# -16095, *‘auwai* complex SIHP# -18054, agricultural field complex
Thompson & Rosendahl 1992b	Archaeological Inventory Survey	TMK [3] 6-7-002:017 por.	Further documentation of SIHP# -16095
Barrera Jr. 1993	Archaeological Inventory Survey	Sandalwood Estates, 50-acres	SIHP# -14948 a complex of pre-contact agricultural field borders
Franklin et al. 1994	Archaeological Inventory Survey	Hawai‘i Preparatory Academy TMK [3] 6-5-001:033 por.	SIHP# -19643 to -19649 including two significant historic properties, a historic habitation terrace (SIHP# -19648) and a cemetery and associated features (SIHP# -19649)

Reference	Nature of Study	Location	Findings
Erkelens 1998	Archaeological Investigations	Waimea Town Center	SIHP# -8812 *kuleana* lots SIHP# -19416 Duncan-Lanakila Cemetery SIHP# -19417 Pukalani stables and blacksmith shop SIHP# -19418 veterinary office SIHP# -19419 breaking corral.
Nees and Williams 1998	Archaeological and Biological Monitoring of UXO Investigations	Former Camp Tarawa	SIHP# -21325 C-shape SIHP#-21326 enclosure remnant Approximately 96 WWII-era artifacts and artillery fragments
Wolforth 1999	Data Recovery	TMK [3] 6-7-002:013	Documentation of an *‘auwai* within the study area
Rechtman 2000	Supplemental Archaeological Inventory Survey	TMK [3] 6-2-001:091	Assessment of previously identified historic properties. SIHP# -18579 (newly identified), historic trash dump.
Haun et al. 2002	Archaeological Inventory Survey	DHHL Residential Development	76 historic properties generally related to habitation and agricultural practices
Clark and Rechtman 2006	Archaeological Inventory Survey	TMK [3] 6--5-004:025 and -063	SIHP# -26680 historic wall SIHP# -26681 historic wall SIHP# -26682 *‘auwai* SIHP# -26683 wooden structure (WWII-era)
Clark and Rechtman 2006b	Archaeological Monitoring	TMK [3] 6-5-004:029, 030, and 050	SIHP# -24168 Feature H - stone and concrete decorative element
Gregg and Kennedy 2006	Archaeological Assessment	TMK [3] 6-5-002:043	None

In 1990, Bishop Museum conducted archaeological testing and data recovery for the Waimea School improvements (Clark et al. 1990). The study area is located approximately 355 m southeast of the current project area. Surface and subsurface investigations focused on documentation of previously recorded SIHP# -8808, part of the Waimea agricultural system as defined by Clark and Kirch (1983). Three *‘auwai*, were studied. Profiles suggest a historic period origin with some indirect evidence for possible pre-contact construction. A sample from the lower charcoal lens yielded a preferred range of A. D. 1449 to 1674).

In 1992, PHRI conducted an archaeological inventory survey for potential sites for the North Hawai'i Community Hospital (Thompson and Rosendahl 1992a). The study area consisted of seven individual parcels located in the general vicinity of the current project area. The survey identified two historic properties, SIHP# -16095 and -18054. SIHP# -16095 is an ‘*auwai* system located on the surface of Parcels 1 to 4. SIHP# -18054 is an agricultural field complex located within Parcel 7. The agricultural field complex was equated to Field Complex 2 as defined by Clark and Kirch (1983).

In 1992, PHRI conducted an archaeological inventory survey for the Waimea Elderly Housing Project (Thompson and Rosendahl 1992b). The project area is located approximately 770 m east of the current project area. The study consisted of further documentation of SIHP# -16095, an `*auwai* system. A program of archaeological monitoring was recommended.

In 1993, Chiniago Inc. conducted an archaeological inventory survey of approximately 50 acres for the Sandalwood Estates (Barrera Jr. 1993). The study area borders the western edge of the current project area. A complex of agricultural field borders was identified during subsurface testing and assigned SIHP# -14948. The agricultural field borders were determined to be located at the east of Field Complex 2 as defined by Clark and Kirch (1983). No further archaeological work was recommended.

In 1994, PHRI conducted an archaeological inventory survey for the Hawai‘i Preparatory Academy Waimea campus expansion (Franklin et al. 1994). The study area is located approximately 1.6 km northwest of the current project area. During fieldwork, seven archaeological sites (SIHP# -19643 to -19649) associated with agriculture and habitation were identified. The sites comprised the formal types: water channel, cemetery, terrace, concrete foundation, and alignment. Only two sites, SIHP# 19648, a historic habitation terrace and SIHP -19649 a cemetery with associated feature were determined to be significant.

In 1998, International Archaeological Research Institute, Inc. (IARII) conducted archaeological investigations of the *kuleana* lots at Pukalani within the Waimea Town Center project area (Erkelens 1998). The study area is located approximately 795 m east of the current project area. A total of five historic properties were documented during the study; SIHP# -8812 *kuleana* lots, SIHP# -19416 Duncan-Lanakila Cemetery, SIHP# -19417 Pukalani stables and blacksmith shop, SIHP# -19418 veterinary office, and SIHP# -19419 breaking corral.

In 1998, Ogden Environmental and Energy Services Co., Inc. conducted archaeological and biological monitoring of unexploded ordnances (UXO) investigations within former Camp Tarawa (Nees and Williams 1998). The study area is located approximately 2.1 km south of the current project area. Two historic properties were documented during the study consisting of SIHP# -21325, a C-shape, and SIHP# -21326, an enclosure remnant. Additionally a total of

approximately 96 WWII-era artifacts and artillery fragments were recovered at or near the surface.

In 1999, PHRI conducted data recovery for the North Hawai‘i Community Hospital with focus on investigations at an *‘auwai* in the Lālāmilo field system (Wolforth 1999). The study area is located approximately 479 m east of the east end of the current project area. During the study, an *‘auwai* located within the study was cross-sectioned and bulk sediment samples were collected for radiocarbon dating and palynological analysis. Several subsurface features were also identified.

In 2000, Rechtman Consulting, LLC conducted a supplemental archaeological inventory survey of TMK [3] 6-2-001:091 located approximately 2.2 km northwest of the current project area (Rechtman 2000). The study assessed previously recorded historic properties within the current project area and encountered one newly identified historic property, SIHP# -18579, a historic trash dump. Additionally, several new agricultural features of SIHP# -18581 were identified.

In 2002, Haun and Associates conducted and archaeological inventory survey for Department of Hawaiian Home Lands (DHHL) development at Lālāmilo (Haun et al. 2002). The study area is located approximately 1.2 km west of the current project area. A total of 76 historic properties consisting of 819 features were documented during the study. Site types included mounds, enclosures, walls, irrigation ditches, platforms, and field boundaries.

In 2006, Rechtman Consulting, LLC conducted an archaeological inventory survey of TMK [3] 6--5-004:025 and -063 (Clark and Rechtman 2006). The study area is located approximately 230 m east of the current project area. A total of four historic properties were documented during the study (SIHP# -26680 to -26683). These historic properties consisted of two historic walls, one *‘auwai* that extends parallel to Waikōloa Stream, and a historic wooden structure likely erected by the U.S. Military during WWII.

In 2006, Rechtman Consulting, LLC conducted archaeological monitoring of development activities associated with the Waimea Parkside Residential Subdivision (Clark and Rechtman 2006b). The study area is located approximately 300 m north of the east end of the current project area. No historic properties were newly identified during the study, however, an additional feature (Feature H) was added to SIHP# -24168. Feature H of SIHP# -24168 is described as a small stone and concrete construction with a concave concrete floor. The feature was determined to function as a "former decorative garden element or a small pond" (Clark and Rechtman 2006b:6). Two adze fragments along with midden and historic trash were also recorded throughout the study area.

In 2006, Archaeological Consultants of the Pacific, Inc. conducted and archaeological assessment of a property located at TMK [3] 6-5-002:043 (Gregg and Kennedy 2006). The study area is located approximately 413 m north of the current project area. No historic properties were identified during the study.

3.3 Predictive Model

A thorough review of historical records, previously archaeology, and modern land use suggest that the area surrounding the current project area has been significantly impacted during historic

times, specifically during the construction of Camp Tarawa and modern subdivisions. The entire southern edge of the project area beyond the margins of Waikōloa Stream has likely been graded to support WWII-era infrastructure associated with Camp Tarawa including roadways and temporary buildings. Of particular interest however is the location of Akona's *‘Auwai*, which according to historic maps (See Figure 7 to Figure 9), originates at a large meander on the south side of Waikōloa Stream within or adjacent to the current project area and continues west, parallel to the main stream channel. The northern edge of the current project area borders several modern subdivisions and residential areas suggesting possible impacts to any historic properties in this location. Historic properties located within the margins of Waikōloa Stream will likely be associated with vehicular or utility stream crossings including fords, bridges, or pipeline supports.

Section 4 Results of Fieldwork

4.1 Survey Findings

A complete pedestrian survey identified three historic properties consisting of four features within or adjacent to the current project area along Waikōloa Stream (Figure 15). These historic properties consisted of a collapsed and severely damaged concrete ford or bridge (SIHP # -26871 Feature A), a remnant portion of paved road (SIHP # -26871 Feature B), an earthen ditch segment (SIHP# -26872), and an intact concrete ford and adjoining roadway (SIHP# -26873). SIHP# -26871 Features A and B were determined to be WWII-era constructions associated with Camp Tarawa. SIHP# -26872 was determined to be a remnant portion of "Akona's *‘Auwai*", a mid-19th century irrigation ditch used for irrigating sugar cane fields and supplying the Līhu‘e Sugar Mill (Burtchard and Tomonari Tuggle 2003). SIHP# -26783 was determined to be an early- to mid-20th century concrete ford and adjoining roadway that was used throughout the 20th century as a route between the Māmalahoa Highway and Kawaihae Road that bypassed the town of Waimea.

Additionally, two modest and generally modern modifications were observed within the project area consisting of a basalt stone and concrete terrace and a pipeline support. Both of these modifications were determined to lack site integrity.

The terrace is located near the eastern end of the project area adjacent to the Lindsey Road Bridge along the edge of Lanakila Park (Figure 16 and Figure 17). The terrace measures approximately 50 m long with a maximum width of 1.5 m and a maximum height of 0.8 m. The terrace is constructed of water-rounded to sub-angular basalt cobbles to medium boulders. Concrete was observed throughout the terrace adhering to the basalt stone. A one inch metal water line was observed extending from ground surface to the top of the terrace and capped by a closed valve. Collapse was observed in several areas. The terrace was determined to be a modern landscaping modification associated with Lanakila Park. After WWII, the raised bed between the terrace and the edge of Waikōloa Stream was planted with flowers. Currently the terrace is surrounded by mowed grass and shrubbery.

The pipeline support consists of two basalt cobble and concrete wall segments built into the sides of Waikōloa Stream behind the Catholic Church complex (Figure 18). Corroded steel pipes were observed within the foundation of one of these support walls. The pipeline support wall located within the current project area appeared to have been recently and informally constructed (Figure 19). The roman numeral "IV" was observed etched into the top of the support (Figure 20). The pipeline support on the opposite edge of Waikōloa Stream, outside of the current project area, appears to be slightly older but lacked the site integrity needed for eligibility as an historic property.

Detailed descriptions of the three historic properties located within or adjacent to the current project area are presented in the following section.

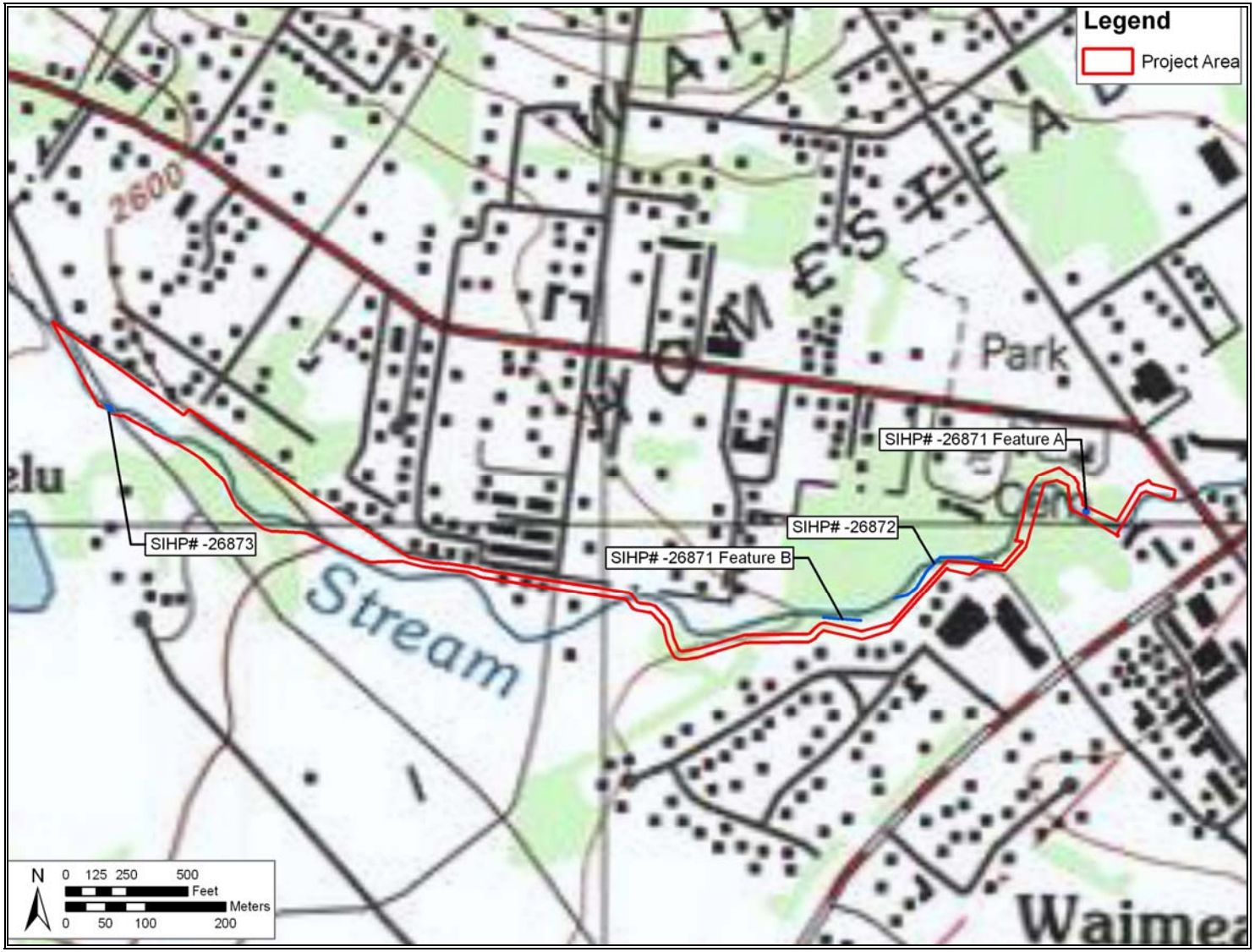

Figure 15. Portion of the 1995 Kamuela USGS 7.5-minute topographic quadrangle showing historic properties



Figure 16. Stone terrace bounding Lanakila Park near Lindsey Road Bridge, view to southeast



Figure 17. Stone terrace bounding Lanakila Park near Lindsey Road Bridge, view to east



Figure 18. Two pipeline supports along Waikōloa Stream, view to south



Figure 19. Modern pipeline support structure within the current project area, view to east



Figure 20. Roman numeral "IV" etched into the top of the pipeline support within the project area, view to east

4.2 Site Descriptions

4.2.1 SIHP# 50-10-06-26871

SITE TYPE: Military Infrastructure

FUNCTION: Transportation

FEATURES: 2

DIMENSIONS: Feature A - 7.5 m by 4.2 m
Feature B - 47.9 linear m

CONDITION: Poor (remnant)

PROBABLE AGE: WWII (1939-1945)

TAX MAP KEY: Feature A - [3] 6-5-003:004
Feature B - [3] 6-6-003:007

DESCRIPTION:

SIHP# -26871 (CSH 1) consists of two features (Feature A and Feature B) located within the eastern half of the current project area (See Figure 15). Feature A, a collapsed concrete ford or stream crossing, is located within the Waikōloa Stream bed approximately 315 linear meters from Feature B. Feature B is a remnant portion of paved roadway located perpendicular to the southern edge of Waikōloa Stream. While geographically distant, SIHP# -26871 Features A and B are temporally equivalent. Both features are attributed to WWII-era military infrastructure associated with the adjacent Camp Tarawa.

Feature A is a collapsed and nearly destroyed ford or stream crossing consisting of a concentration of seven concrete slabs within the bed of Waikōloa Stream (Figure 21 and Figure 22). The southern edge of Feature A is located approximately 2.0 m north of the proposed trail stream crossing. Characteristics of the concrete slabs of Feature A include variable thickness (35-75 cm), uneven surfaces, and internal composition consisting of basalt gravel and water-rounded cobbles all suggesting expedient and informal construction. The name "A BASTIN" and the date "JULY 1942" were observed etched into the side of the largest slab of concrete (Figure 23). The construction techniques, function, date, and proximity to Camp Tarawa of Feature A all suggest that it was expediently constructed during the early part of WWII as a stream crossing for pedestrians and potentially vehicles moving to and from Camp Tarawa and Waimea town.

Feature B is a remnant portion of paved roadway that extends along the western edge of the Waimea Nature Park within the proposed trail alignment (Figure 24). The majority of the roadway segment in covered with mowed grass except a well-trodden central portion. The roadway is bounded in several locations by large trees and shrubbery. A tall berm (approximately 2.0 m) rises along the southern perimeter of Feature B to the edge of several private residences delineated by a stacked basalt stone wall 3 to 6 courses high (Figure 25) SIHP# -26871 Feature B is likely the remnant of Abemama Road that extended northeast to southwest through Camp Tarawa (See Figure 12).



Figure 21. SIHP# -26871 Feature A within Waikōloa Stream, view to northeast



Figure 22. SIHP# -26871 Feature A within Waikōloa Stream, view to north



Figure 23. SIHP# -26871 Feature A inscription on concrete slab, view to east



Figure 24. SIHP# -26871 Feature B remnant roadway, view to west



Figure 25. Boundary wall adjacent to SIHP# 26871 Feature B, view to south

4.2.2 SIHP# 50-10-06-26872

SITE TYPE: Ditch (Akona's `Auwai)

FUNCTION: Agriculture/Water Control

FEATURES: 1

DIMENSIONS: Approximately 143.5 linear m

CONDITION: Good

PROBABLE AGE: Post-Contact

TAX MAP KEY: [3] 6-6-003:007

DESCRIPTION:

SIHP# -26872 (CSH 2) consists of an earthen ditch located within the eastern half of the project area. The ditch originates at a sharp bend in Waikōloa Stream and continues to the southwest effectively bypassing a large meander in the stream (Figure 26 and Figure 27). The ditch measures approximately 143.5 linear m with a width ranging from 3 to 6 m and a maximum depth of 1.9 m. The western end of the ditch segment has been filled in near SIHP# -26871 Feature B suggesting that this portion of the ditch was graded during construction of Camp Tarawa (Figure 28). A sediment berm has been constructed at the eastern end of the ditch where it connects to Waikōloa Stream so that water is properly diverted into the main meandering channel of the stream (Figure 29). SIHP# -26872 is bounded by house lots to the south and the Waimea Nature Park to the north.

SIHP# -26872 is depicted on historic maps as early as 1908 (See Figure 7) labeled at "ditch" and subsequently in 1914 and 1915 (See Figure 8 and Figure 9) labeled as "Akona's *‘Auwai*". These historic maps indicate that the remnant portion of SIHP# -26872 (Akona's *‘Auwai*) located adjacent to the current project area is the source of the *‘auwai* where is breaks from Waikōloa Stream and continues westward for at least 2.5 miles as a dendritic channel.

Historic background research suggests that Akona's *‘Auwai* was used primarily to power the sugar mill at Līhu‘e and to irrigate nearby sugarcane fields (Burtchard and Tomonari Tuggle 2003). "Akona was a Chinese who lived in the Waimea area in the 1840's and 50's (and perhaps somewhat before and after)" (Clark 1981:28). Clark further describes Akona's *‘Auwai* as:

The main channel was labeled the Akona *‘auwai* by Wall, thus lending its name to the entire subset. The Akona subsystem branches into a large dendritic network through the center of the survey area. It is this irrigation network which fed into the Līhu‘e sugarcane fields. It also, however, extends well beyond this, indicating that it is not merely a development for the short-lived sugar industry in Lālāmilo (Clark 1981:28).

During the Bishop Museum archaeological survey (Clark 1981) all *‘auwai* that were identified within the study area (located approximately 1.3 km west of the current project area), including portions of Akona's *‘Auwai*, were assigned a single site number, SIHP# -9179. While Akona's *‘Auwai* may be included within SIHP# -9179, the current archaeological study sought to



Figure 26. SIHP# 26872 (Akona's *‘Auwai*), view to west



Figure 27. SIHP# 26872 (Akona's *‘Auwai*), view to southwest



Figure 28. Western end of SIHP# 26872 (Akona's *‘Auwai*) showing the Waimea Nature Park, view to west



Figure 29. Eastern end of SIHP# 26872 (Akona's *‘Auwai*) at connection with Waikōloa Stream showing sediment berm and placed log, view to north

assign Akona's *‘Auwai* an individual number, SIHP# -26872 for description and mitigation purposes. It is interesting to note that the 1956 and 1995 USGS Kamuela Quadrangle maps (See Figure 1 and Figure 13) depict the main channel of Waikōloa Stream as flowing within SIHP# -26872 and do not show the current stream meander that bends around the northern end of the Waimea Nature Park.

4.2.3 SIHP# 50-10-06-26873

SITE TYPE: Ford
FUNCTION: Transportation
FEATURES: 1
DIMENSIONS: 16.8 m by 11.3 m
CONDITION: Good
PROBABLE AGE: Post-Contact
TAX MAP KEY: [3] 6-6-003:013
DESCRIPTION:

SIHP# -26873 consists of an intact ford and associated roadway located at the western end of the current project area (Figure 30). The ford is constructed entirely of concrete with basalt gravels. The eastern side of the ford within Waikōloa Stream consists of a concrete ramp to the north and an open channel leading to a 0.7 m diameter culvert that has been completely filled in with alluvium (Figure 30 to Figure 33). A mortared cut basalt stone wall measuring two courses high was observed at the northeastern corner of the ford extending northward approximately 5.0 m (Figure 32). The western side of the ford consists of a vertical to slightly sloping concrete face measuring 1.2 m high with the central culvert located slightly above the current stream water level (Figure 33). The surface of the ford is generally level rising slightly along its northern and southern edges to meet the adjoining roadway. The adjoining roadway consists of highly weathered cement that has been paved over with asphalt to near the edges of the ford.

A ford or bridge and associated roadway at the location of SIHP# -26873 is depicted on historic maps as early as 1914 (See Figure 8) and is labeled as "Road to Puopelu". The 1908 W.E. Wall map (See Figure 7) depicts "Pu‘u Opelu" road north of Waikōloa Stream, but does not show the road extending south across the stream. It seems likely that the current ford (SIHP# -26873) at this location was constructed as a replacement for an earlier, modest stream crossing prior to WWII. A map of Camp Tarawa (from Nees and Williams 1998:17; See Figure 12) depicts the roadway adjoining SIHP# -26873 as "Betio Avenue" and shows the location of the existing ford.

Background research and historic maps suggest that the SIHP# -26873 ford and adjoining roadway were used throughout the 20th century as a route between the Māmalahoa Highway and Kawaihae Road that bypassed the town of Waimea.



Figure 30. SIHP# 26873 ford and associated roadway, view to northwest



Figure 31. Eastern side of SIHP# -26873 showing concrete ramp and sediment-filled culvert opening, view to west



Figure 32. Cut basalt stone wall at the northeastern corner of SIHP# -26873, view to northeast



Figure 33. Western side of SIHP# 26873 showing culvert, view to east

Section 5 Summary and Interpretation

The findings of the current inventory survey are largely as expected when compared to land use in the vicinity of the current project area. A total of three post-contact historic properties were identified (Table 3). No pre-contact or traditional Hawaiian historic properties were identified within the project area. Previous archaeological research (Clark 1981; Barrera Jr. 1993; Haun et al. 2002) suggests that pre-contact land use associated with the Waimea agricultural field system was generally located to the west and south of the current project area. It seems likely however, that the area along Waikōloa Stream within the current project area could have served a similar purpose. Historic and modern development beginning in the mid-19th century may have impacted or completely destroyed any pre-contact historic properties located on the surface of the current project area.

It was during the mid-19th century that SIHP# -26872 (Akona's *‘Auwai*) was constructed for irrigating sugar cane fields and supplying the Līhu‘e Sugar Mill (Burtchard and Tomonari Tuggle 2003). Historic maps (See Figure 7 to Figure 9) indicate that the remnant portion of SIHP# -26872 (Akona's *‘Auwai*) located adjacent to the current project area is the source of the *‘auwai* where is breaks from Waikōloa Stream and continues westward for at least 2.5 miles as a dendritic channel. SIHP# -26872 (Akona's *‘Auwai*) was likely truncated and partially filled during development in Waimea associated with Parker Ranch, residential construction, and Camp Tarawa.

In the early 20th century, a ford or bridge was constructed at the western end of the current project area across Waikōloa Stream. The ford appears on historic maps as early as 1915 (See Figure 9) and is associated with the "Road to Puopelu". It seems likely that the current ford (SIHP# -26873) at this location was constructed as a replacement for an earlier, modest stream crossing prior to WWII. SIHP# -26873 ford and adjoining roadway were used throughout the 20th century as a route between the Māmalahoa Highway and Kawaihae Road that bypassed the town of Waimea.

In 1942, the construction of Camp Tarawa likely impacted the majority of land within the current project area. Much of the land south of Waikōloa Stream was graded and a network of roadways connecting encampments and temporary buildings was constructed. It was during this construction that a large section of SIHP# -26872 (Akona's *‘Auwai*) was likely filled and destroyed. A remnant portion of roadway (SIHP# -26871 Feature B) was identified during the current survey extending parallel to the southern edge of Waikōloa Stream within the eastern half of the project area. SIHP# -26871 Feature B is likely the remnant of Abemama Road that extended northeast to southwest through Camp Tarawa (See Figure 12). Additionally a collapsed concrete ford or bridge (SIHP# -26871 Feature A) was identified near the eastern edge of the current project area. SIHP# -26871 Feature A, with an etched date of July 1942, suggests that it was likely constructed as a stream crossing access from Camp Tarawa to Waimea Town.

Table 3. Summary of historic properties located within the current project area

SIHP# 50-10-06-	Feature	Type	Function	Probable Age	Significance	Recommendations
26871	A	Ford	Transportation	WWII-Era	A, D	Preservation (avoidance and protection)*
	B	Road	Transportation	WWII-Era	A, D	No Further Work
26872	-	Ditch	Agriculture/ Water Control	Post-Contact	A, D	Preservation (avoidance and protection)
26873	-	Ford	Transportation	Post-Contact	D	No Further Work

* See Section 7.2 Mitigation Recommendations for clarification

Section 6 Significance Assessments

The current archaeological inventory survey investigation has documented three historic properties within or adjacent to the project area (See Table 3).

Significance is determined after evaluation of the historic property in light of the five broad criteria used by the Hawai‘i State Register of Historic Places (HAR 13-284-6). The criteria are the following:

A Historic property reflects major trends or events in the history of the state or nation.

B Historic property is associated with the lives of persons significant in our past.

C Historic property is an excellent example of a site type.

D Historic property has yielded or may be likely to yield information important in prehistory or history.

E Historic property has cultural significance to an ethnic group, including, but not limited to, religious structures, burials, and traditional cultural properties.

SIHP# -26871 consists of two features (Feature A and B) related to WWII-era infrastructure associated with Camp Tarawa. Feature A is a collapsed ford or bridge with an etched date of July 1942. Feature B is a remnant portion of roadway likely part of Abemama Road of the former Camp Tarawa. SIHP# -26871 is recommended significant under Hawai‘i Register Criteria A due to its direct association with WWII and Criteria D due to its information content.

SIHP# 50-10-06-26872 (CSH 2), an early post contact irrigation ditch (Akona's *‘Auwai*), is recommended significant under Hawai‘i Register Criteria A due to its association with the advent of commercial sugarcane agriculture on Hawai'i Island as a major agricultural trend lasting for over a century and D due to its information content.

SIHP# 50-10-06-26873 (CSH 3), a historic-era concrete ford and associated roadway, is recommended significant under Hawai‘i Register Criterion D due to its information content.

Section 7 Project Effect and Mitigation Recommendations

7.1 Project Effect

CSH's project specific effect recommendation is "effect, with agreed upon mitigation measures." The recommended mitigation measures will reduce the project's potential adverse effect on these significant historic properties.

7.2 Mitigation Recommendations

SIHP# 50-10-06-26871 (CSH 1), consists of two features (Feature A and B) related to WWII-era infrastructure associated with Camp Tarawa. Feature A is a collapsed ford or bridge with an etched date of July 1942. Feature B is a remnant portion of roadway likely part of Abemama Road of the former Camp Tarawa. Recommendations for SIHP# 50-10-06-26871 were developed in consultation with SHPD.

SIHP# -26871 Feature A will not be adversely affected by the current proposed trail and greenway project and therefore is recommended for preservation in the form of avoidance and protection. If, in the course of future development, SIHP# -26871 is potentially affected, "the portion of the ford containing the written name and date be recovered for use in a permanent interpretive marker at this location" (SHPD Correspondence LOG# 2009.3224, DOC# 0908MD07; See Appendix B). Interpretive signage at the location of SIHP# -26871 Feature A may be developed in consultation with SHPD to provide Waimea residents and pedestrians using the trail with information on the history of the area. Interpretive signage at SIHP# -26871 Feature A may include a short synopsis of Camp Tarawa and how the camp transformed the lives of Waimea residents during and after World War II.

SIHP# -26871 Feature B is recommended for no further work. Sufficient information regarding location, function, age, and construction has been generated by the current inventory survey investigation.

SIHP# 50-10-06-26872 (CSH 2), an early post-contact irrigation ditch (Akona's *‘Auwai*). Preservation in the form of avoidance and protection is recommended. Any proposed alteration to SIHP# 50-10-06-26872 will prior require consultation with and approval of SHPD.

SIHP# 50-10-06-26873 (CSH 3), a historic-era concrete ford and associated roadway. No further work is recommended. Sufficient information regarding location, function, age, and construction has been generated by the current inventory survey investigation.

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Appendix A Land Commission Awards

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Mahele Database Documents
Number: 00976

Claim Number:		**00976**	
Claimant:		**Beckley, William**	
Other claimant:			
Other name:			
Island:		**Hawaii**	
District:		**Hamakua, Hilo, Kohala South**	
Ahupuaa:		**Waimea, Waipio°, Punahoa°, Halawa**	
Ili:		**Owahawaha (Waawaa), Waikane, Muliwai°, Punahoa°**	
Apana:	**4**	Awarded:	**1**
Loi:		FR:	
Plus:		NR:	**574v2**
Mala Taro:		FT:	**201v3, 62v5**
Kula:		NT:	
House lot:	**1**	RP:	**5065**
Kihapai/Pakanu:		Number of Royal Patents:	**1**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**Yes**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**

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Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**S. Kohala award only**

No. 976, William Beckley, Honolulu, November 17, 1847
N.R. 574v2

The Honorable Land Commissioners of Hawaii: We have seen the document about claiming lands, therefore I hereby write concerning my land.

One land, called Muliwai, a kupono /probably an `ili kupono, an independent `ili/, at Waipio on Hawaii, from the Mo`i, Kamehameha III.

One farm at Waimea on Hawaii, from the Mo`i, Kamehameha III.

One house lot at Waimea on Hawaii.

One house lot at Punahoa in Hilo on Hawaii, bought by us from Kaeo.
I am, with thanks,
WILLIAM BECKLEY
These are all awarded except Muliwai in Waipio taken in division

F.T. 201v3
Cl. 976, William Beckley, November 15, 1849
Cl. 812, Asa Kaeo, Eleele from page 138 [Award 387, Hilo Mission]

To the Honorable Commissioners Land at Honolulu.
Gentlemen, I hereby relinquish all claims to the lot of land in dispute between the American Board of Commissioners for Foreign Missions and myself, situated just makai of the Protestant Church in Hilo, Hawaii and beg to withdraw the same from your further consideration,
I remain, gentlemen, &c, &c,
William Beckley,

Correct copy. Resumed Page 62 volume 5

F.T. 62-63v5
No. 976, William Beckley, See Vol. III, page 201

This claim consists of 5 lots.

1. The Ili Muliwai, Ahupuaa Waipio, Hamakua, the property of His Hawaiian Majesty Kamehameha 3rd of which he is konohiki.

2. The ili of Pualoalo, Ahupuaa Halawa, District Kohala, the gift of His Hawaiian Majesty Kamehameha 3d, since reverted to the Hawaiian Government, and sold to Kaihe.

3. An house lot situated on Ahupuaa Punahou, in the district of Hilo, bought of Asa Kaeo, this lot was disputed by Kalakuaioha, now claimed by the Mission board.

4. Kanehailua, sworn deposed, I know this lot to a portion of land in kula of Waimea. Ahupuaa Kohala called Owahawaha. It is enclosed by a stone wall, has one house on it belonging to Lakapu, the man employed by William Beckley to take care of it, but he has no right in the soil, the gift of His Hawaiian Majesty Kamehameha 3. A.D. 1845.

It is bounded: on all sides by waste land of konohiki.

Kanakaole, sworn deposed, that the evidence of Kanehailua was true. They know of no counter claim.

5. James Fay, sworn deposed, knows the house lot of William Beckley, to be situated on the Ili Waikani, Ahupuaa Waimea, Kohala and that he bought it of Robert Robinson. I do not know the exact amount he paid for it.

It is surrounded on all sides by the waste or uncultivated land of konohiki. I have never heard his claim disputed.

Note: This is the piece of land Governor Adams gave to Robert Robinson in exchange. See Robinson's claim No. 231.

[Award 976; R.P. 5065; Waimea S. Kohala; 2 ap. 29.59 Acres; Waawaa S. Kohala; 1 ap.; 24.7 Acs; Waikani S. Kohala; 1 ap.; 4.903 Acs; Hilo & Waipio claims not awarded]

Number: 03785

Claim Number:	**03785**
Claimant:	**Olepau**
Other claimant:	
Other name:	
Island:	**Hawaii**
District:	**Kohala, South**
Ahupuaa:	**Waimea**
Ili:	**Kauakanaka, Opeawai, Alaohia**

Apana:	**1**	Awarded:	**1**
Loi:		FR:	
Plus:		NR:	**48v8**
Mala Taro:		FT:	
Kula:		NT:	**40v4**
House lot:	**1**	RP:	
Kihapai/Pakanu:		Number of Royal Patents:	**0**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**No**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**

Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**3/2 houses on lot; claims land in Opeawai, receives land in Kauakanaka**

No. 3785, Olepau, Waimea, Hawaii, January 12, 1848
N.R. 48v8

To the Honorable Land Commissioners, Greetings: I hereby describe my houselot at Opeawai, Alaohia, Waimea, Hawaii. The length is 36 fathoms and so is the width. Wilama Bekele /William Beckeley/, the konohiki, has consented. There are three houses in this lot, which has not been completely fenced, however, it is being done. I desire to secure this place for myself.
OLEPAU

N.T. 40v4
No. 3785, Olepau, September 16, 1848

W. Bakle, sworn and stated, I have seen in the ili land at Kanakanaka a house-lot which has been enclosed, with two houses in it. The surrounding boundaries are mine only and his /Olepau/ interest is from me. I had heard that was an old land belonging to him and when he had asked me in 1848, I consented to let him have that place without any objections.

[Award 3785; Kauakanaka Waimea S. Kohala; 1 ap.; .42 Ac.]

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Mahele Database Documents
Number: 00589B

Claim Number:	**00589B**			
Claimant:	**Naholowaa**			
Other claimant:				
Other name:	Kaholowaa			
Island:	**Hawaii**			
District:	**Kohala, South**			
Ahupuaa:	**Waimea**			
Ili:	**Puuapelu**			
Apana:	**1**		Awarded:	**1**
Loi:			FR:	
Plus:			NR:	
Mala Taro:			FT:	**65v5**
Kula:			NT:	
House lot:	**1**		RP:	**6682**
Kihapai/Pakanu:		3	Number of Royal Patents:	**1**
Salt lands:			Koele/Poalima:	**No**
Wauke:			Loko:	**No**
Olona:			Lokoia:	**No**
Noni:			Fishing Rights:	**No**
Hala:			Sea/Shore/Dunes:	**No**
Sweet Potatoes:			Auwai/Ditch:	**No**
Irish Potatoes:			Other Edifice:	**No**
Bananas:			Spring/Well:	**No**
Breadfruit:			Pigpen:	**No**
Coconut:			Road/Path:	**No**
Coffee:			Burial/Graveyard:	**No**
Oranges:			Wall/Fence:	**No**
Bitter Melon/Gourd:			Stream/Muliwai/River:	**No**
Sugar Cane:			Pali:	**No**
Tobacco:			Disease:	**No**

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Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**3 fields partly under cultivation**

No. 589B, Naholowaa, Wednesday, January 30th
F.T. 65v5

William Beckley, sworn deposed, He wrote the claim for Naholoaa and gave it into the Land Office at Honolulu and furthermore deposeth, that he knows the claim of Naholoaa to consist of 3 fields, on which he has his house lot, not enclosed, partly cultivated, situated on the Ili Puuapelu, Waimea, the gift of William Beckley, konohiki, A.D. 1846. Surrounded by waste land of konohiki. I know of no counter claim.

[Award 589B; R.P. 662; Punopelu S. Kohala; 1 ap.; 4.89 Acs]

Number: 03202B

Claim Number:	**03202B**				
Claimant:	**Bowers, Jose**				
Other claimant:					
Other name:					
Island:	**Hawaii**				
District:	**Kohala, South**				
Ahupuaa:	**Waimea**				
Ili:	**Puuopelu**				
Apana:	**1**		Awarded:	**1**	
Loi:			FR:		
Plus:			NR:		
Mala Taro:			FT:	**62v4**	
Kula:			NT:		
House lot:	**1**		RP:	**8443**	
Kihapai/Pakanu:		3	Number of Royal Patents:	**1**	
Salt lands:			Koele/Poalima:	**No**	
Wauke:			Loko:	**No**	
Olona:			Lokoia:	**No**	
Noni:			Fishing Rights:	**No**	
Hala:			Sea/Shore/Dunes:	**No**	
Sweet Potatoes:			Auwai/Ditch:	**No**	
Irish Potatoes:			Other Edifice:	**No**	
Bananas:			Spring/Well:	**No**	
Breadfruit:			Pigpen:	**No**	
Coconut:			Road/Path:	**No**	
Coffee:			Burial/Graveyard:	**No**	
Oranges:			Wall/Fence:	**No**	
Bitter Melon/Gourd:			Stream/Muliwai/River:	**No**	

Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**3 fields & house**

No. 3202B, Jose Bowers, Waimea, Monday, January 28th 1850
F.T. 62v5

William Beckley konohiki, sworn deposed, He wrote the claim of Jose Bowers and gave it to the Board at Honolulu. Also knows the claim of Jose Bowers, to consist of 3 fields, on which is house is built. It is not enclosed, situated in the Ili Puuopelu, Ahupuaa Waimea.

The gift of Mr. Beckley, konohiki, 1847. There is no counter claim.

[Award 3202B; R.P. 8443; Puuopelu Waimea; 1 ap.; 7.6 Acs; Index lists Jose B. Bowers]

Number: 04885

Claim Number:	**04885**
Claimant:	**French, William**
Other claimant:	
Other name:	
Island:	**Hawaii**
District:	**Kohala, South**
Ahupuaa:	**Waimea**
Ili:	**Ahuli**

Apana:	**1**	Awarded:	**1**
Loi:		FR:	5v3
Plus:		NR:	
Mala Taro:		FT:	**167,177v2**
Kula:		NT:	**493v2**
House lot:	**1**	RP:	**67**
Kihapai/Pakanu:		Number of Royal Patents:	**1**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**No**

Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	**Dwelling hous & premises**

[4885], No. 4882, William French, Honolulu, January 15, 1848
F.R. 5v3
[Listed as 4882-4886]

To the Board of Land Commissioners, I hand you 6 surveys of real estate for which I claim titles: Viz.

4882, No. 1 Warehouse premises, known by the name of French's Honolulu premises, with the Butcher's shop and one half of the wharf known as Charlton's & French's wharf, and Blacksmith's shop.

4883, No. 2 Premises in Honolulu, where I now reside.

4884, No. 3 Warehouse & premises at Kawaihae, Hawaii.

4885, No. 4 Dwelling house and Premises at Waimea, Hawaii.

4886, No. 5 Slaughter house premises, and small enclosure adjoining, with grass houses and cookhouse thereon.

All the above named places have been surveyed by Mr. Metcalf, whose surveys please to find on file with this petition, and notify me when to lay them before you, with the necessary vouchers.
Signed, &c, William French

Understanding that a native woman, Kekai, has laid in a claim to house and premises now occupied by Mr. John Ladd in Honolulu, opposite my dwelling house. I have to state that said house was built by me, with the exception of the stone work which was done by John Ebbetts, deceased, during his absence on a voyage to Canton, in which he died. I have never been remunerated in full for my outlays, and have his written instructions how to appropriate his property in case of accident to him. The land was originally purchased from Richard Fort by said Jno Ebbets.
Signed, William French

See claim & testiony under No. 534

F.T. 167-168v2 [part of claim 4882]
Claim 4882 to 4886, Wm. French, February 2
4884

Samuel Rice, sworn, I know these houses situated at Pahonu in Hawaii, They [are enclosed] with a stone wall which I think is the boundary. I heard Governor Adams say he had given eh place to claimant in 1838 on condition of his building a wharf for the boats, and that it should be his. He built the stone house and wharf and has occupied the premises ever since in peace.

John Munn, sworn, I know the place and that the account of Mr. Rice is correct. I have often heard K [uakini?] say the same [blank section of page - illegible] know claimant has [blank section of page - illegible ?has held quiet possession of it?] since he obtained it in 1838 [blank section of page - illegible].

4885

Samuel Rice, I know [blank section of page - illegible] ..huli Waimea for his own [blank section of page - illegible] [I] always understood got the place from [blank section of page - illegible ?Kuakini?] for services as Bullock catcher in 1831 and [blank section of page - illegible] the place and the Governor [blank section of page - illegible] like only do not encroach on the main road? He then took the place and enclosed it with a stone wall. I never heard of any opposition to his occupation. Mr. French purchased it from him in 1840 and has held it in peace ever since. If the Governor had not approved of Hughes's right to it, he would have opposed the transfer to claimant, which he on the contrary approved, I believe. (See copy of Bill of Sale).

John Munn, I know Hughes built a stone house there but not the particulars of the acquisition. I should infer he would not have built a valuable stone house and wall on the premises without good authority from Kuakini. Both Hughes and claimant have always held the place undisputed during their successive terms of occupation, as far as I know.

F.T. 177v2
Claim 2885, William French, continued from page 167

Know all men by these presents that I, William Hughs, of Waimea, Hawaii have this day sold to William French, merchant of Oahu, my dwelling house and buildings & land adjoining the saem, situatted in Waimea and known by the name of Hughes' place for, and in consideration of th sum of $20.00, and do also hereby agree to guarrantee the same to himself, his heirs, executors, and administrators free from all claims or deamdns of any one person or persons from this date. In witness of which I have hereunder set my hand & seal this 25th of July 1840.
Waimea, Hawaii, 25 July 1840
H. Hughes
Witness: John P. Parker, A. Charles Davies

N.T. 493-494v2
No. 4885, W. Franch [French], February 2, 1848

S. Rice, sworn by the Word of God and stated, I have seen French's place in Waimea, Hawaii. French and Hughs had a lease with Kuakini and I had heard Hughs talking with Kuakini saying, "Where shall I build a house for me?" Kuakini answered saying, "You may build your house on the place that you desire to do so." With that answer Hughs began working for Kuakini as cowhand and sometime later Hughs built his house there and lived peacefully to the year 1840. He had a sale with French and French lived in peace since that time to this day, no one objecting to him.

John G. Munn, sworn by the Word of God and stated, "I have seen Hughs build his house, but I do not know when he had obtained it. I think Hughs would not have built an expensive house like that house had Kuakini not approved because it was very expensive. I know known that Hughs has lived there peacefully. The result of this interest is not very clear until Hughs shall come."

[Award 4885, R.P. 67; Ahuli Waimea; 1 ap. 21.9 Acs; See No. 4884 for Foreign Register, Foreign & Native Testimony documents]

Number: 08513B

Claim Number:	**08513B**
Claimant:	**Hoolulu,**
Other claimant:	Beckley,
Other name:	
Island:	**Hawaii**
District:	**Kohala, South**

Ahupuaa:	**Waimea**		
Ili:	**Napooakolu**		
Apana:	**1**	Awarded:	**1**
Loi:		FR:	
Plus:		NR:	
Mala Taro:		FT:	**64v5**
Kula:		NT:	
House lot:		RP:	**5062**
Kihapai/Pakanu:		Number of Royal Patents:	**1**
Salt lands:		Koele/Poalima:	**No**
Wauke:		Loko:	**No**
Olona:		Lokoia:	**No**
Noni:		Fishing Rights:	**No**
Hala:		Sea/Shore/Dunes:	**No**
Sweet Potatoes:		Auwai/Ditch:	**No**
Irish Potatoes:		Other Edifice:	**No**
Bananas:		Spring/Well:	**No**
Breadfruit:		Pigpen:	**No**
Coconut:		Road/Path:	**No**
Coffee:		Burial/Graveyard:	**No**
Oranges:		Wall/Fence:	**No**
Bitter Melon/Gourd:		Stream/Muliwai/River:	**No**
Sugar Cane:		Pali:	**No**
Tobacco:		Disease:	**No**
Koa/Kou Trees:		Claimant Died:	**No**
Other Plants:		Other Trees:	
Other Mammals:	**No**	Miscellaneous:	

No. 8513B, Kuamoo Hoolulu
F.T. 64-65v5

William Beckley, sworn deposed, he wrote the claim for Kuamoo Hoolulu, his wife, and gave it in himself to Board Land Commission at Honolulu.

Jose Bowers, sworn deposed, he knows the claim of Kuamoo Hoolulu to consist of a field on the Ili Napooakolu, Waimea, the gift of William Beckley, the konohiki, A.D. 1846, partly cultivated. They are surrounded by the waste land of konohiki. I know of no counter claim.

Kaikeike, sworn deposed, that the evidence given by Jose Bowers is true. I know of no counter claim.

F.T. 104v5

August 7th, Received of Kuamoo Hoolulu, No. 8313B, $12.00

[Award 8513B; R.P. 5062; Napooakolu Waimea Kohala; 1 ap.; 29.44 Acs]

Appendix B SHPD Correspondence

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

August 5, 2009

Hallett H. Hammatt, Ph.D.
Cultural Surveys Hawaii, Inc.
PO Box 1114
Kailua, Hawaii 96734

LOG NO: 2009.3224
DOC NO: 0908MD07
Archaeology

Dear Dr. Hammatt

SUBJECT: **Chapter 6E-8 Historic Preservation Review –**
Archaeological Inventory Survey of 8.96 Acres with Three (3) New Sites
Lalamilo Ahupua`a, South Kohala District, Island of Hawaii
TMKs: (3) 6-5-003:004, 005, 007 & 044 (all, por.) and 6-6-003:006 & 013 (both, por.)

This letter reviews the aforementioned report (*Yucha, Shideler and Hammatt 2009; Draft Archaeological Inventory Survey for the Waimea Trails and Greenway Project, Lalamilo Ahupua`a, South Kohala District, Hawaii Island, TMK: [3] 6-5-003:004 por., :005 por., :007 por., :044 por., 6-6-003:006 por., :013 por; SCH Job Code: LALAMILO 1*) which we received on July 22, 2009. This report summarizes an archaeological inventory survey in which three new sites were recorded. The three sites are: SIHP 50-10-06-26871, a WWII-era infrastructure associated with Camp Tarawa, recommended as significant under criteria "a" and "d"; SIHP -26872, an early post-contact era irrigation ditch (Akona's *Auwai*), recommended as significant under criteria "a", "c" and "d"; and SIHP -26873, an historic-era concrete ford and associated roadway, recommended as significant under criterion "d."

This AIS covers Phase 1 of the Waimea Trails and Greenway Project, and follows a site reconnaissance conducted by your firm around 2000. Phase 1 is the portion of the trail that will be ADA-accessible. A site visit was conducted by SHPD Hawaii Island Section Assistant Archaeologist Morgan Davis with project engineers David and John Imata of Imata & Associates; Galen Kuba from the County of Hawaii Department of Public Works, and Bobby Command, County of Hawaii Assistant to the Mayor.

We have some general questions/comments that we are requesting be clarified:

1. Was the survey done for this Phase 1 8.96 acres, or does the acreage represent the entire area that will be ultimately surveyed as part of the entire trail? In the Management Summary on p. i the entire acreage is listed as the project area, but in the Environmental Setting section on p. 8 this survey is said to cover 1.1 of a total 12 miles of the project.
2. In the Background Research section, please include information on the arrival of cattle to Hawaii.
3. Please include a chart in your Summary and Interpretation section indicating your recommendations for significance etc. for the sites. This information is currently only available in the Management Summary.

Dr. Hallet H. Hammatt
Page 2 of 2

We have concerns about some of the recommended significance evaluations and treatments, as detailed below.

Site 26871: We concur with the suggested significance assessments for this site, however, we cannot at this time concur with the proposed treatment. We do not find that either the current context or condition of either feature is sufficient to warrant the avoidance (preservation) you propose as a mitigation measure. Feature A is broken and no longer functional; we suggest that the portion of the ford containing the written name and date be recovered for use in a permanent interpretive marker at this location.

The Feature B asphalt-paved roadway has been extensively modified by current landscaping as part of the Greenways project as it runs from the parking area through an interpretive garden. Signs, water lines, sewer plumbing, a park bench and wooden steps all impinge into the current roadway and associated embankment. It is therefore no longer in a setting or context that represents the World War II era. We believe that sufficient information has been obtained by this AIS, and that no further work is required to document this section of the road.

Site 26872: You recommend that the portion of the ditch within the project area is significant under criteria "a", "c" and "d". We would appreciate an expanded explanation for why you are recommending criteria "a" and "c". The ditch has apparently been repeatedly damaged (during WWII and roadway constructions in the past); we would appreciate your thoughts on its qualities as an excellent example of its type (criterion "c"). We will consider the recommended treatment for this site after the question regarding criterion "c" has been addressed.

Site 26873: We concur with the recommended significance under criterion "d" for this a post-Contact ford, and concur with your recommendation of no further work for this site.

We look forward to reviewing a revised version of this AIS. If you have questions about this letter please contact Morgan Davis of our Hawaii Island Section at (808) 933-7650.

Aloha,

Nancy A. McMahon

Nancy McMahon, Deputy SHPO/State Archaeologist
and Historic Preservation Manager
State Historic Preservation Division

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
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LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

September 8, 2009

Hallet H. Hammatt, Ph.D.
Cultural Surveys Hawaii, Inc.
PO Box 1114
Kailua, Hawaii 96734

LOG NO: 2009.3316
DOC NO: 0909MD12
Archaeology

Dear Dr. Hammatt:

SUBJECT: **Chapter 6E-8 Historic Preservation Review –**
Archaeological Inventory Survey of 8.96 Acres with 3 New Sites
Lalamilo Ahupua'a, South Kohala District, Island of Hawai'i
TMKs: (all, por.) (3) 6-5-003:004, 005, 007 & 044 and 6-6-003:006 & 013

Thank you for resubmitting the above-referenced report (*Archaeological Inventory Survey For the Waimea Trails and Greenway Project, Lalamilo Ahupua`a, South Kohala District, Hawaii Island, TMK: [3] 6-5-003:004 por., :005 por., :007 por., :044 por., 6-6-006:006 por., :013 por.; CSH Job Code: LALAMILO 1*), which we received on August 28, 2009. This report summarizes an archaeological inventory survey in which three new sites were recorded. The three sites are: SIHP 50-10-06-26871, WWII-era infrastructure associated with Camp Tarawa, recommended as significant under criteria "a" and "d"; -26872, an early post-contact irrigation ditch (Akona's *`Auwai*), recommended as significant under criteria "a" and "d"; and -26873, a historic-era concrete ford and associated roadway, recommended as significant under criterion "d." We concur with these significance recommendations. No further work is recommended for -26873 and we concur with that recommendation.

SIHP 26872, the ditch, has been recommended for preservation via avoidance as no part of the planned trail (which is to be constructed to be ADA accessible for persons with disabilities) is anticipated to affect it, and we concur with that recommendation. Should required ADA plans change this assumption SHPD is to be contacted so mitigation efforts can be discussed.

SIHP 26871 includes two features. Feature A, the ford, is recommended for preservation. Feature B, the remnants of a WWII-era road, is recommended for no further work. We concur with the recommendation for Feature B, and concur with the recommendation for mitigation regarding preservation of the portion of Feature A - the Ford - that contains the inscription and date. Because this Feature A does lie in the path of the trail's stream crossing, we request that a preservation/interpretation plan be developed for our review and approval which will involve using the signature portion of the Ford to create an interpretive monument with interpretive signage.

We had previously requested minor revisions to an earlier draft of this report (*Log No. 2009.3224, Doc No. 0908MD07*) and all changes have been made. The report is generally of good quality and meets the requirements of HAR §13-276, thus fulfilling the historic preservation review requirements for this project. Upon receipt of this letter please submit one paper copy of your report marked "Final" to our Kapolei office along with a CD containing a searchable pdf version of the final report and a copy of this approval letter, marked to the attention of the "**Kapolei Library**."

We look forward to reviewing the preservation plan for Feature A of SIHP 26871. If you have questions about this letter please contact Morgan Davis at (808) 933-7650.

Aloha,

Nancy A. McMahon

Nancy McMahon, Deputy SHPO/State Archaeologist and Historic Preservation Manager
State Historic Preservation Division

Cc:

Ken C. Kawahara, P.E., Deputy Director
Department of Land and Natural Resources
Commission on Water Resource Management
PO Box 621
Honolulu, Hawaii 96809

AN ARCHAEOLOGICAL ASSESSMENT OF PROPOSED WAIMEA TRAILS AND GREENWAY PROJECT WITHIN THE LĀLĀMILO AND WAIKŌLOA *AHUPUA'A*, SOUTH KOHALA DISTRICT, ISLAND OF HAWAI`I (TMK 6-2, 6-5, 6-6)

by

Scott T. Kikiloi, B.A.,
Douglas F. Borthwick, B.A.,
and
Hallett H. Hammatt, Ph.D.

Prepared for

GERALD PARK URBAN PLANNER

Cultural Surveys Hawaii
December 2002

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I. INTRODUCTION

Cultural Surveys Hawaii, Inc. conducted an archaeological assessment for the proposed Waimea Trails and Greenway Project. The proposed trail route borders Waikōloa Stream from "Church Row" in Waimea town to South Kohala View Estates (Figure).

The Waimea Trails and Greenway Project is designed to provide a green belt through Waimea town for non-motorized, people-friendly community access along a stretch of Waikōloa Stream. The primary function of the proposed trail is to provide an alternative transportation route for non-motorized vehicles in the Waimea area. The linear project area passes through several well-known areas of Waimea, Puopelu, and Wai`aka and 3 separate *ahupua`a* including Lālāmilo, Waikōloa, and `Ōuli, on the island of Hawai`i (TMK 6-2, 6-5, & 6-6) (Figure 1).

A. Project Background

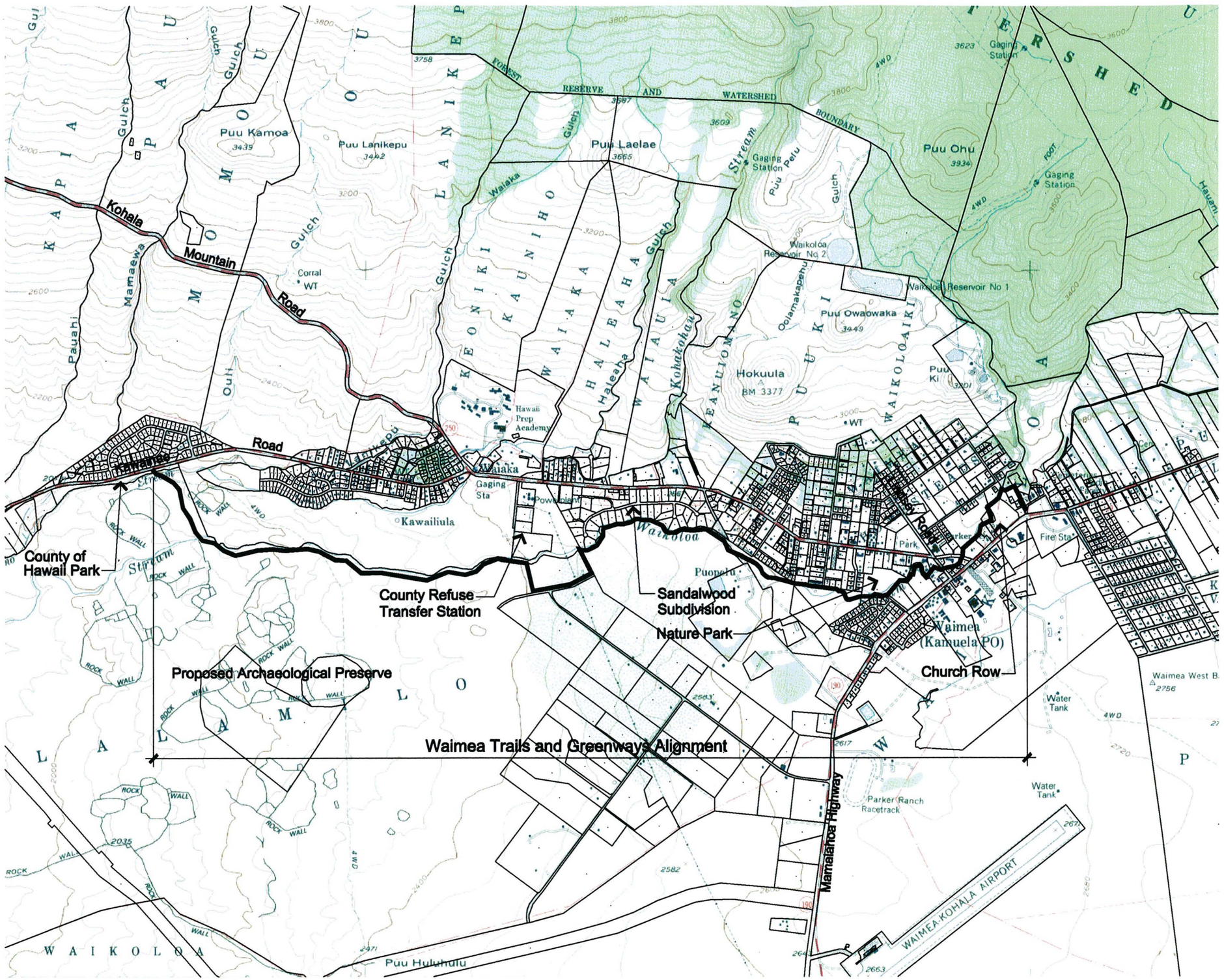
Cultural Surveys Hawai`i (CSH) was contacted by Gerald Park Urban Planner to provide an archaeological assessment for a roughly 6 mile section of a proposed 12 mile route characterized as a "multi-use pedestrian bikeway and equestrian path".

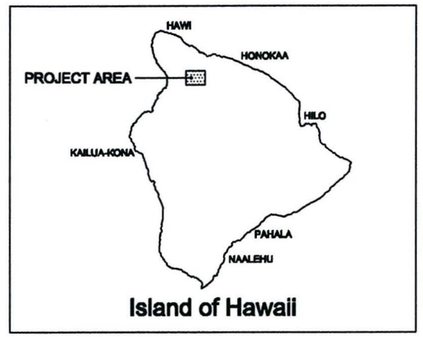
The assessment includes historical background and previous archaeological research. The research work consisted of the examination of historical documents, Land Commission Awards, historic maps, with the specific purpose of identifying traditional Hawaiian and subsequently historic land use patterns. The review of existing archaeological and historical information allowed us to reconstruct traditional land use activities in the project area and help in our assessment to minimize impact on these resources. Fieldwork for the Waimea Trails and Greenway Project was conducted May 22nd and 23rd , 2000 by Matt McDermott B.A., and Doug Borthwick, B.A.. The research and fieldwork were conducted under the overall guidance of the project director Hallett Hammatt, Ph. D.

B. Project Area Description

The project area is located in the Waimea area of Hawai`i Island and includes a corridor running generally east-west from South Kohala View Estates in the west to "Church Row" in Waimea Town in the east. The corridor is along Waikōloa and Keanu`imanō Streams with several north-south running access routes projecting off from the main trail. In its entirety the trail and green way may extend about 12 miles. The corridor researched for the present archaeological assessment is approximately 6 miles long and varies from 30-45 feet wide.

In a larger context, the project area is situated in the Waimea Saddle region between the Kohala Mountains and Mauna Kea Volcano at an elevations about 2,000-3,000 feet above sea level. The climate is generally cool, moist and windy. Temperatures usually range





Source: USGS, Kamuela Quadrangle

Figure 1
Location Map

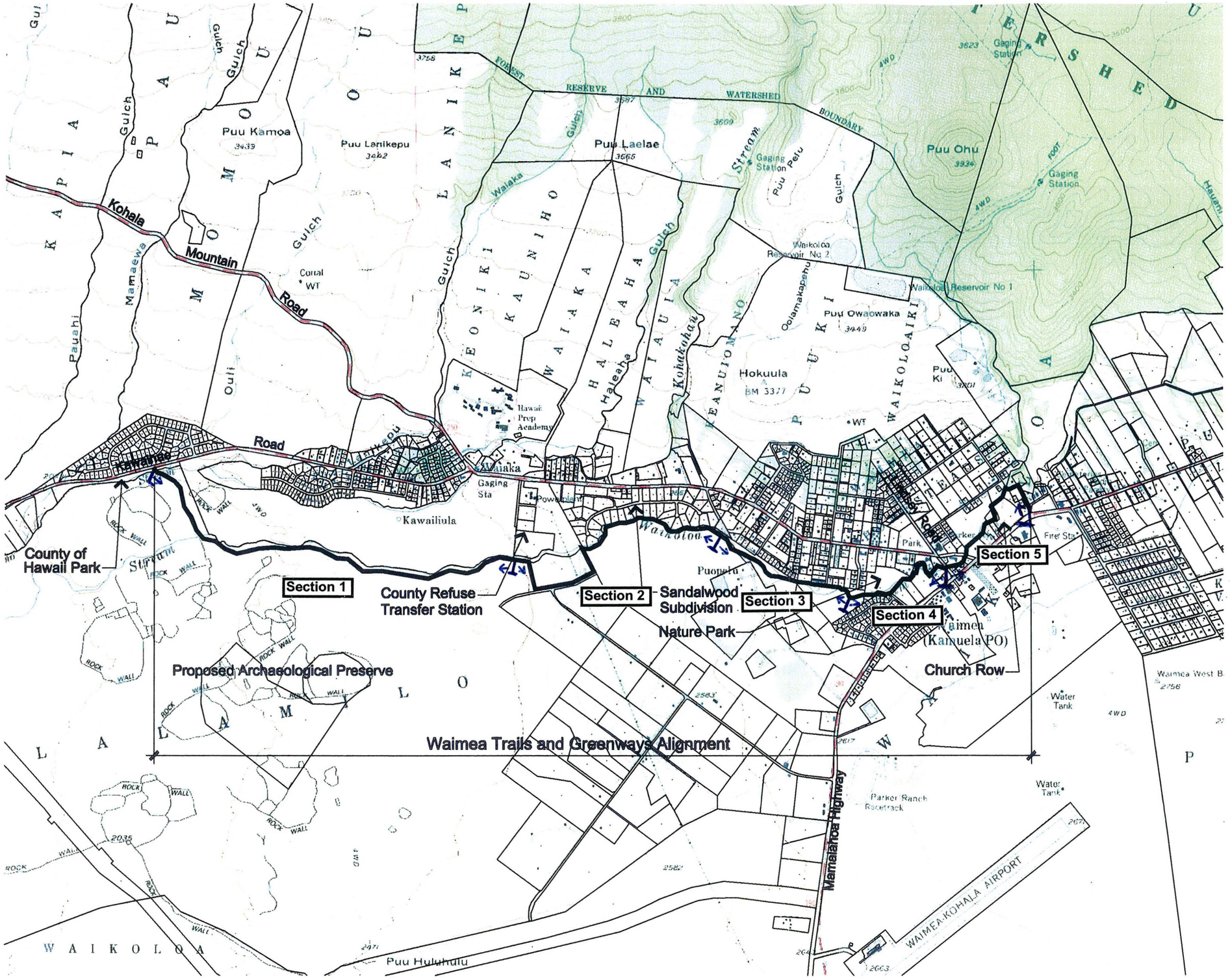
Waimea Trails & Greenways

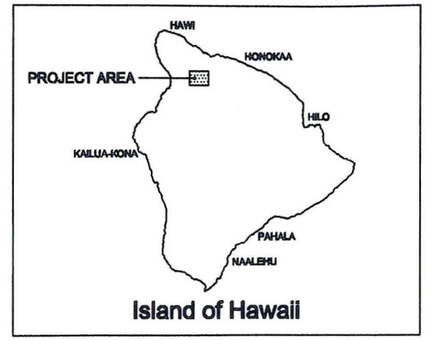
Department of Parks & Recreation — Waimea, Island of Hawaii

NORTH

LINEAL SCALE (FEET)
1000 500 0 500 1000 2000

Gerald Park
Urban Planner
November 2001





Source: USGS, Kamuela Quadrangle

Figure 2
Location Map Showing Sections 1 - 5

Waimea Trails & Greenways

Department of Parks & Recreation — Waimea, Island of Hawaii

NORTH

LINEAL SCALE (FEET)
1000 500 0 500 1000 2000

Gerald Park
Urban Planner
November 2001

between 60-70° F, with mean maximums between 70-80° F, and mean minimums in the upper 40° F. The annual rainfall ranges from 75- 100 in. per year, with heavy rain fall within the months of January to April. Winds are dominated by consistent northeasterly trades. The soils within the project area are of a Waimea series that consists of well drained very fine sandy loam that formed in volcanic ash. These incepticol soils are usually in areas that are gently sloping to moderately steep. There are three major streams flowing off the Kohala slopes and onto the plains of Waimea, including Lanikepu, Waikōloa, and Kohākōhau (also known as Keanu`i`omanō) Streams.

From west to east the project area includes different climates, terrains, and degrees of urbanization. For the purpose of this assessment the corridor was divided into five sections, based mainly on degree or urbanization:

Sect. 1: So. Kohala View Estates to Hawai`i County Refuse Transfer Station (Fig. 2)
Sect. 2: West end of Refuse Transfer Station to Sandalwood Subdivision (Fig. 2)
Sect. 3: East end of Sandalwood Subdivision to Waiki`i Rd. (Fig. 2)
Sect. 4: Waiki`i Rd. to Lindsey Road Bridge (Eucalyptus forest)(Fig. 2)
Sect. 5: Lindsey Road Bridge to Iwiola Catholic Church (Fig. 2)

C. Scope of Work/Methodology

The entire project area was covered by pedestrian investigation along the proposed 6 mile route. The archaeological assessment consisted of the following steps:

1. Background research on the Waimea area, but focusing on the proposed trails and green way corridor. The research consisted of an examination of historic maps, archival documents, and especially previous archaeological research in the area. The files of the State Historic Preservation Division were consulted for previous archaeological reports and other information on archaeological sites.

2. The entire corridor was covered on foot using the best available maps. The majority of the corridor could be accurately located on the ground based on the provided maps using known land marks such as existing roads, buildings and natural features. However, in portions of section 5 (see above) accurate survey was not possible based on available project maps.

3. The preparation of a report to contain results of the background search and field inspection. This report assesses the impact of the proposed route on archaeological resources. Maps of the entire trail and greenway route are provided showing location of all archaeological sites on or near the corridor. The report provides County recommendations regarding impacts on archaeological resources

II. TRADITIONAL BACKGROUND

The history of the Waimea region of Hawai`i island has been documented in a number of studies and publications including, but not limited to the *Fornander Collection of Hawaiian Folk-lore* (Fornander 1916-1919), *Ruling Chiefs of Hawai`i* (Kamakau 1961), *Place Names of Hawai`i* (Puku`i et. al 1974), *`Ōlelo No`eau* (Puku`i 1983), *Hōkū o Hawai`i*" Newspaper (Franklin et. al 1994) and missionary accounts (Baldwin and Lyons 1837; Doyle 1904, 1945, 1953; Bishop 1828; Ellis 1969).

These studies include references to oral traditions, the legendary rulers and personalities, early historic accounts, land ownership, and the changes in land use from traditional to modern times. The following section is a synopsis of these and other sources so as to provide a general overview of the historical and cultural setting related to the project area.

A. Place Names and *Mo`olelo*

The importance of place and stories connected to that place are an important part of traditional Hawaiian culture and the transmission of cultural knowledge from one generation to the next. The proposed Waimea Trails and Green Way Project falls withing the traditional *ahupua`a* boundaries of Lālāmilo (lit., milo tree branch), Waikōloa (lit., duck water; or could refer to a name of a wind), and `Ōuli (refering to the name of a famous soldier of Kahekili's who was skilled with the *ma`a*, or sling) (Puku`i et al. 1974). Puopelu (shortened for Pu`u`ōpelu) literally means `ōpelu hill and Wai`aka, means "laughing-water." The name Wai`aka is used to identify both a stream that flows off of the Kohala mountains, and the land section.

Ke kipu`upu`u ho`anu `ili o Waimea
(The Kipu`upu`u rain of Waimea that chills the skin of people)
[Puku`i 1983:188; #1748]

The project area region generally referred to as "Waimea" which literally means reddish water, as it was thought to be tinted as it was drained through the *hapu* tree fern forests or though the red soil (Elbert, Ms in Barrerra and Kelly 1974). Waimea has been poetically characterized as being "like a spear rubbed by the wind, as the cold spray is blown by the *kipu`upu`u* rain..." (Proverb from a Kamehameha *mele* quoted by Henry Judd in Doyle 1953:42) and has a rich history that is evident in its place names and proverbs.

"Waimea" is a name that also identifies several localities in this section of Kohala (Franklin et. al 1994). They are (a) the town of Waimea (also called Kamuela [Samuel]), named either for post master Samuel Spencer or for the rancher, Samuel Parker (Pukui et al. 1974); (b) a region, or *kalana*, that extends from the coast to the uplands and encompasses several *ahupua`a* between Kawaihae and Waikōloa; (c) the upland area only of that region including the entire plain between Kohala and Mauna Kea Mountains ; and (d) the upland region of intensive residential and agricultural occupation- the Waimea Field System (Clark and Kirch 1983:46). In *`Ōlelo no`eau* (Pukui 1983), Waimea is noted

as an area of cool climate and chilling rains:

> (A) *Hele po`ala i ka anu of Waimea*
> Going in a circle in the cold of Waimea
>
> Said of a person who goes in circles and gets nowhere. Waimea, Hawai'i is a cold place and when foggy, it is easy for one unfamiliar with the place to lose his way [Puku`i 1983: 83; #757].
>
> (B) *Ka ua Kīpu`upu`u o Waimea/ Waimea i ka ua Kīpu`upu`u*
> The Kīpu`upu`u rain of Waimea/ Waimea, land of the Kīpu`upu`u rain
>
> An expression often used in songs of Waimea Hawai`i. This area is famed for its cold rain. When Kamehameha organized an army of spear fighters and runners from Waimea, they called themselves Kipu`upu`u after the cold rain of their homeland [Puku`i 1983:169, 319; #1571 & #2913].
>
> (C) Ka ua paliloa o Waimea
> The Tall-cliff rain of Waimea
>
> The rain of Waimea, Hawai`i, that sweeps down cliffs. [Puku`i 1983:172; #1593]

Ke kānoa kapu o Lono-Makahiki: `oia ho`i `o Hōkū`ula!
(The sacred bowl of Lono-Makahiki: it is Hōkū`ula!)
[*Ka Hōkū of Hawai`i* 4/23/1914 in Franklin et. al 1994]

Translated and interpreted by Kepā Maly (Franklin et. al 1994), the legend of Ka-Miki was published in the Hawaiian newspaper "Ka Hōkū o Hawai`i" between the years of 1914-1917. It is a story about two brothers and their journey around the island of Hawai'i. The legend includes references to over 800 place names, and provides interesting information about Pu`u Hōkū`ula, the most prominent hill located just north of Waimea town.

> Hōkū`ula (Red Star): When Ka-Miki and Maka`iole drew near to completing their formal *`ōlohe* training (fighting and competing skills) under their goddess/ great grandmother Ka`uluhe, she told them to go and visit their kūpuna (ancestress) Lani-nui-ku`i-a-mamao-loa who dwelt at Lanimaomao (Waimea). Lani-nui-ku`i-amamao-loa was the guardian and keeper of the sacred *kānoa* (*`awa* mixing bowl) Hōkū`ula which belonged to Lono-Makahiki, and the *ma`au* (strainer) called Kalau-o-Kāhuli which was upon the plain of Waikōloa. These two items were to be used in *`awa* ceremonies for the brothers *`ailolo* (brain eating- completion of training ceremonies) [*Ka Hoku o Hawai`i* 2/5/1914 in Franklin et. al 1994].

The association of the bowl, or *kānoa* of the god Lono (a provider of abundant crops and rain-laden clouds) with Hōkū`ula may refer to the agricultural lands of the region; i.e., (1) the bowl or container could symbolize a land of agricultural abundance; (b) the sprinkling

of waters from the bowl could refer to the waters of the streams that flow from the uplands and spread across the plains; and (c) the importance of the rituals of Lono in agricultural endeavors, particularly in the areas of Kohala were large field systems have been archaeologically documented. Thus the legendary account may symbolically represent actual resources of the Waimea region.

B. Accounts Related to *Heiau*

Thomas Thrum in his survey of *heiau* sites on the island of Hawai`i documented a single *heiau* in Waimea. Uli, the name of the *heiau,* was of unknown size and class and dedicated to Hākau and said to have been rebuilt by Kamehameha, and its images and steps repaired. Coconuts for its consecration were brought from Puako, 12 miles away. A low mound only remains to indicate its site, opposite of the church premises (T.Thrum 1908:).

A missionary account by Lorenzo Lyons in the 1850's tells of legends within the setting of Waimea, and mentions a *heiau* in the area:

> On a nearby ridge stood another *heiau* built "...by the great Akua Makuakua who has come from far off Kahiki." from the hillside he watched the rainbows "...and there he found the beautiful goddess Wao." They lived at Hōkū`ula.Each time Wao was ready to bear a child she returned to the Waimea hills, which were sacred to her. The *kapu* was proclaimed in her honor- the forbidden ground extended ..."down across the plains to whatever place a stone happened to stop rolling when started above by her servants" [Doyle 1953 in Barrera and Kelly 1974]

According to legend, Wao changed her servants into stones to guard the land during the night hours; when daylight came she transformed them back into their human forms (Barrerra and Kelly 1974:1).

Lorenzo Lyons also tells of the legendary story of a Ho'opili-a-Hae, and mentions her as being the founder of a *heiau* for women in Waimea:

> "The earliest chiefs of Waimea of whom we have record stemmed from the same Ulu-Hema line that led to Liloa, the founder of the island dynasty. Liloa's grandson Keawe-nui-a-'Umi took as one of his wives Ho'opili-a-Hae, daughter of Liloa's *kahuna* Pae-a-Molenole." [Clark and Kirch, 1983:26]
>
> "(The *heiau*) was attended exclusively by young virgins. In the sanctity of the cool highland forest, they "...performed the sacred ceremonies, learning also the science of healing so that they might eventually minister to others. Hoapiliaha`e's children were named for the five rains of the *heiau*" [Doyle 1953: 42-43] (in Barrerra and Kelly 1974:1)

C. Historical Battles at Waimea

`O ke aluka koa a Kama i Waimea
(a multitude of warriors had Kama at Waimea)
[Kamakau 1961 :55-61 in Barrerra and Kelly 1974]

Hōkū`ula, located approximately 1 mile east of Wai`aka, is famed for being the location of a prominent battle ground in which Kamalālāwalu, the ruler of Maui Island waged war against the island of Hawai'i. Deceived by misleading advice from his trusted advisors and poor strategic planning, Kamalālāwalu arrived on Hawai`i island, landing at Kawaihae only to realize that there were no people there. They continued up to Hōkū`ula, a prominent bluff about half a mile in height to its summit. Situated in this manner, he believed his army would be able to have the advantage in defending themselves against the Hawai`i island forces.

Upon hearing of Kamalālāwalu's arrival, Lonoikamakahiki, the Hawai`i island ruler sent an army from Kona, Ka`u, Puna, and Hilo to Hōkū`ula, where the Maui warriors where stationed. The following morning Kamalālāwalu observed that the lowlands were literally covered with countless men. He soon realized that his Maui forces were inferior in numbers and asked Kumaikeau "*E Kumaikeau ma, pehea kēia? He aha kēia lehulehu o lalo?*" "Kumaikeau and the rest of you, how is the situation? What is the extent of their numbers below?" Kumaikeau relied "*`Akahi nō au a `ike i ka nui o nā kānaka o Hawai`i nei...*," " I have never seen so many people in Hawai`i before..." After three days of negotiations, the two combating forces waged battle, with Lonoikamakahiki gaining the victory over Kamalālāwalu's army (Fornander 1916:342-350).

Another battle fought in the Waimea area was between the leeward and windward chiefs of Hawai`i Island toward the middle of the 18th century. This clash took place at Mahiki, east of Waimea and just across the district boundary in Hamakua. Here the father of the great chief Alapa`inuiakauaua was leading his forces against the Hilo chiefs when he was killed. Alapa`inui was on Maui at the time but returned to Hawai'i and ultimately regained control of the Kona and Kohala districts (Kamakau 1961: 65). Eventually he went on to take over the whole island of Hawai'i and place it under his rule. In his later years, Alapa`inui lived first in Waipi`o, then lived for sometime in Waimea, and later moved to Kawaihae (Kamakau 1961: 77).

During Kamehameha's campaign to extend his rule to all the major islands, he stayed at Waimea and at Kawaihae for some time. There are mentions of Kamehameha's visits to Waimea in 1791 and 1792 when he rebuilt Pu'u Koholā *heiau* (Clark and Kirch 1983). At that time a large work force was required and the people of Waimea were solicited. It has also been suggested by Clark and Kirch (1983:27) that food and tapas were brought from Waimea to feed and clothe the many warriors in preparation of the *Peleleu* fleet to battle Maui and O'ahu in 1794 and 1795.

III. POST-CONTACT PERIOD

The Waimea area, with its favorable soils, and water from Kohala Mountain streams that could be harnessed and distributed on the fairly level plains, was an obvious area for the expansion of introduced food crop production. Waimea was very productive agriculturally in the early years following contact with the Western world. Based on early accounts, *kalo*, or taro (*Colocasia esculata sp.)* was the dominant crop with *`uala*, or sweet potatoes (*Ipomoea batatas sp.*) and *kō*, or sugar cane (*Saccharum officinarum sp.*) also grown in substantial quantities.

The decline in traditional Hawaiian agriculture in the Waimea region has been attributed to factors such as 1) depopulation and the concomitant abandonment of the fields; 2) the pursuit of other commercial interests such as sandalwood and *pulu* trade, sugarcane, and finally the introduction of cattle.

It is important to mention that after the abandonment of traditional Hawaiian agriculture in Waimea, there were two resurgences of agricultural endeavors to boost the economy of Waimea (Clark and Kirch 1983) . In the late 1820's, two Chinese, Lau Ki and `Aiko started a sugar mill at Lihue in upper Lālāmilo. While the mill was not successful commercially, sugar production continued in the Waimea area (Barrerra and Kelly 1974: 47). In the late 1830's, cotton was grown in Waimea when Governor Kuakini ordered the planting of an "immense field of cotton in the Waimea area," (Kuykendall 1967: 183). In the late 1840's and early 1850's, both sweet and Irish potatoes were cultivated extensively, however by 1865, there crops were reported to have been greatly diminished.

A. Sandalwood and *Pulu*

The mountains surrounding Waimea were well known for rich sandalwood reserves. During the early part of the 19th century as contact with the West was growing, the extent of the sandalwood trade was evident as it became one of the earliest commodities of a newly formed market oriented economy.

Similar to the sandalwood trade was the exploitation of *pulu*, the soft fiber gathered from the buds of the tree fern (*Cibotium sp.*) And used for stuffing pillows, mattresses, and furniture (Thrum 1929 in Erkelen 1998: 15). The *pulu* trade began in 1851 with shipments to the West Coast of north America and Australia. Like sandalwood, the over-exploitation of this resource also led to its demise and by 1860, the trade had virtually ended (Doyle 1945: 182).

B. Population Estimates

The general impression of the pre-contact settlement pattern, constructed from a variety of archaeological and early historical sources, is one of scattered settlements along Waikōloa Stream (Clark 1987: 103; Erkelens 1998: 11). During subsequent decades, with the arrival

of western foreigners and missionaries, impressions of the life and landscape would be recorded for 19th-century Waimea. In 1823, Asa Thurston counted 220 houses in his walk through Waimea in the section between `Ōuli and Pu`u Kapu (a distance of approximately 4.8 km or 3 miles); this was interpreted as representing a population of 1,100 to 1,200 individuals (Ellis 1979:399 in Erkelens 1998: 11). Although the population was concentrated at Kea`ali`i (located along Wai`aka Stream) at the time of Thurston's visit, a settlement of 300 to 400 individuals near the present Waimea town is a reasonable estimate (Clark 1987: 103).

It was not, however, until the 1830s that a missionary would be stationed in northern Hawai`i. On July 13, 1832 Lorenzo Lyons and his wife Betsy arrived at Kawaihae by brig from Honolulu to take up residence at Waimea. Lorenzo Lyons had a church and school (for adults) at Waimea in 1835, serving a congregation of from 100 to 500 Hawaiians. In his writings, Lyons stated:

> "During the past year I have taken a census of the population of this district and find it to be as follows: Waimea, 1,396; Kohala 6,175; Hamakua 4,015; total 11,586, from which it appears there has been a diminution of the people 3,500, within three and a half years. Marriages are numerous. But the progeny are wanting. Children are not in general, objects of desire. Taxes are in proportion to the number of children. My census may not be correct. Many think I am numbering them for the purpose of taxation, and conceal a part of their number." [Doyle 1945:82-83]

C. Cattle Industry

An examination of the cattle industry in the Waimea area clearly shows its dominant role. The cattle industry, which eventually changed the economy and lifestyle of Waimea, had its origins in bullock hunting, which was controlled by Hawaiian chiefs. The initial increase in cattle population was aided by a ten year *kapu* placed on hunting or taking of cattle. Feral cattle multiplied rapidly and ran wild on the plains of Waimea. For some two to three decades after the lifting of the protective ban, bullock hunters were employed to hunt down the wild cattle and take them to a market.

In the 1830's, meat, hides, and tallow began to be marketed, and thus formed the true beginning of the cattle industry. By 1847, about two-thirds of Waimea area had been converted to pasture for government herds of cattle, as well as for sheep and horses (Doyle 1945). By the middle of the 1800's the Waimea region was the center of the industry.

The cattle industry had two major impacts on Waimea. The first was the effect of marauding cattle on the unprepared Hawaiian farmer (Erkelens 1998:19). As early as 1802, there were complaints concerning the destruction of gardens by feral cattle (Turnbull 1813:243, in Barrerra and Kelly 1974:44). In 1836, Waimea was surrounded by a stone wall to protect it from cattle (Baldwin and Lyons 1837).

The second major impact on Waimea was the increase in population as a result of economic

opportunities provided by the cattle industry (Erkelens 1998:19). Bishop (Bishop 1828, in Erkelens 1998:19) reports that Kuakini's arrival in Waimea marked the beginning of the cattle industry, as attendance at church services increased to approximately 1,000 individuals from a previous attendance of 200 (Bishop 1828; WMR 1832; Doyle 1945)

Following Kuakini's construction of the road between Kawaihae and Waimea in 1830, ox carts were able to haul commercial items much more efficiently than was previously possible. Although missionary census records for the period from 1832 to 1845 suggest little overall change in population of Waimea (approximately 1,000 individuals), there was undoubtedly a change in composition of the constituency from predominantly Hawaiian to a mix of foreigners and Hawaiians..

D. Parker Ranch and the 20th Century

John Palmer Parker, an American born in Newton, Massachusetts in 1790, intended a sailing career when he left home in 1809. After several years at sea, Parker arrived on Hawai`i Island in 1815 and decided to remain there. By 1819, Parker had a Hawaiian *ali`i* wife, Kipikane, and a baby daughter, Mary. Parker and his family went to live at Waiapuka in Kohala where he farmed on twenty-one acres that had been granted to him by Kamehameha. In this era, most of the ranch work consisted of capturing wild cattle and domesticating them. As the ranching industry expanded so did responsibilities such as managing the many personnel of the Parker Ranch, building houses and growing food to feed all. Subsequently, Parker hired South American and Mexican horsemen to train his ranch hands to track, rope, brand, and bring in the wild cattle. These "vaquero", "paniolo," or "espangnol" not only introduced the management of cattle and horses, but also brought colorful clothes, hats and saddles that became the mark of Hawaiian *paniolo*. The first Hawaiian *paniolo* or cowboys actually predate many of the mainland western cowboys. The ranch personnel also made most of their own gear and machinery, including saw mills.

In the last years of the 19th Century, Waimea remained a small town concentrating on the shipment of cattle to export markets. The Waimea of 1881 was graced with two stores, a boarding house, lodging house, and a coffee saloon (Bowser 1881:540). Even at this seemingly late date, wild cattle were occasionally a problem. In 1888, Paul Jarrett was the first to commence fencing Parker Ranch lands to segregate the domesticated from the wild cattle (Doyle 1904). The next Parker Ranch manager, A.W. Carter, (manager 1899-1936), consolidated all the Parker family land holdings under the control of his ward, Thelma Parker. A.W. Carter then began in earnest to increase ranch lands, systematically breed for better, stronger, healthier cattle and horse stock, bought a barge to ship cattle with other Big Island ranchers, increased ditches for watering livestock and imported different grasses and feed for cattle. He provided the U.S. military branches with cavalry horses. He also ventured for a short time into training horses and horsemen for polo teams, and then became one of the major providers of horses in Hawaii and abroad for work, pleasure, and shows. His son, A.H. Carter succeeded him in 1937. The Parker Ranch had become one of the biggest private businesses in Hawaii and remains the dominant economic force in Waimea.

IV. PREVIOUS ARCHAEOLOGICAL RESEARCH

A. Previous Studies

A number of archaeological investigations have been conducted in the general vicinity of the project area (Table 1), including studies by Pete *et. al* (1970), Barrera and Kelly (1974), Neller and Beggerly (1980), Clark (1981;1987), Clark and Kirch (1983), Kam (1983), Bonk (1985; 1989), Hammatt, Borthwick, and Shideler (1988), Hammatt and Shideler (1989), Spencer (1989), Cordy (1989), McEldowney (1990), Clark *et al.* (1990), Thompson and Rosendahl (1991;1992), Erkelens (1993;1998), Allan and Schilz (1994), and Franklin *et. al* (1994). For the purpose of this report, however, only the studies conducted closest to the Waimea Trails and Greenways project area were reviewed in detail.

One of the most widely cited studies in this area was completed by Barrera and Kelly (1974). In 1973 Bishop Museum conducted an archaeological survey and historical review for the proposed Waimea to Kawaihae Road corridor during which over 4,500 archaeological features were identified, the majority of which were located either near the coast at Kawaihae or near Waimea.

Of particular interest are the sites located in upper Lalamilo and upper Waikōloa, that are closest to the current project area. Based on the survey results, Lalamilo contains nearly 3,500 features (Barrerra and Kelly 1974). The study resulted in the designation of the "Kuleana and Ranch District" in the Lalamilo portion of the project area (*Ibid.*) This information is important because it indicates the high density of surface archaeology that one can expect to find in upper Lalamilo near the project area. Sites have been described as a habitation and agriculture system. The findings were expanded upon in later studies (Clark 1981; Clark and Kirch 1983) which referred to these feature complexes as the Waimea agricultural system:

> The Waimea agriculture system comprises the remains of an extensive series of agricultural features, throughout which are scattered multiple residential structures... (*op. cit.*: 293).

In 1981 Bishop Museum conducted a survey and excavation project along the Mudlane to Kawaihae Road right-of-way (Clark and Kirch 1983) and that same year a reconnaissance of 1.9 acres in Waimea Town was done by the Historic Preservation Office (Kam 1983). In 1985 a reconnaissance of three reservoir sites and a large watershed area extending from Waimea to Pa`auilo was conducted (Bonk 1985b), a reconnaissance of four parcels proposed for residential developments was done (Bonk 1985a) and a reconnaissance of a reservoir site in a parcel adjoining the present project area was conducted (Rosendahl 1985)

In 1986, Cultural Surveys Hawai'i (Hammatt and Borthwick 1986) conducted archaeological investigations on approximately 50 acres located on Waikōloa Stream and followed in 1988 by further detailed survey and testing (Hammatt et. al 1988). The next work in the area was a reconnaissance of approximately 100 acres at Hawai'i Preparatory Academy (Bonk 1989) and data recovery of sites in the project area originally investigated

by Hammatt and Borthwick in 1986 and 1988 (Hammatt and Shideler 1989). The year 1989 also saw follow up investigation of Pa`auilo/Waimea Watershed Project that had been covered by Bonk in 1985 (Spencer 1989).

Two brief checks in the Waimea area were conducted by staff member of the State Historic Preservation Division in 1991 (Smith 1991; McEldowney 1991), and an inventory survey of potential hospital sites in several locations around Waimea were conducted in that same year Thompson and Rosendahl 1991).

Recent archaeological investigations in the Waimea Town have further documented 19th and early 20th century habitation and associated sites (Erkelens 1998). The investigations included surface and sub-surface surveys. Five sites were identified, including house, burials, and agricultural sites. All sites and materials observed were historic either from the mid 19th or early 20th century. The sub-surface investigations also indicted that extensive bulldozing had disturbed large areas of the 10+ acre parcel (Erkelens 1998).

Most recently, Erkelens (1998) surveyed State Site # 50-10-06-8812 in the *kuleana* house lots within Waimea Town Center and five previously unrecorded sites. State Site # 50-10-06-19416 is a historic cemetery. State Site #s 50-10-06-19417, 19418, and 19419 are four historic structures grouped into three sites. The final unrecorded site is a burial location, with no State Site number given.

B. Anticipated Finds

These projects have demonstrated the presence of an extensive complex of agricultural and residential features in the Waimea area. The core of this complex extends westward from about the Waimea Fire Station down to approximately 1800 ft. a.m.s.l. (Above mean sea level), and covered the lower slopes of the Kohala Mountains down as far as Pu`u Pa in Waikōloa. This agricultural system has been characterized variously as dryland, irrigated dryland, and supplementally irrigated. This system consisted of a series of agricultural fields, either in the form of manufactured terraces or arrangements of low earthen berms, many of which were fed by irrigated ditches collecting water from streams draining the Kohala Mountains. Residential areas, consisting of both permanent and temporary field shelters, have been found throughout the area.

The result of reviewing previous archaeological work provided the basis for assessing the probability of locating features and/or sites within the project area, as well as indicating what types of features and/or sites to expect. It was expected that features/sites would be part of the Waimea-Lālāmilo agricultural system, with both prehistoric and early historic components. Because of the presence of the field system within the project area, it was thought that unless portions of the trail had been heavily disturbed in the recent past, there would be a relatively high probability that surface or subsurface historic sites would be found in various densities, especially in the undeveloped portion of the project area (*makai* of the refuse transfer station).

Table 1: Previous Archaeological Projects in the Vicinity of Waimea Town

Reference	Report Title	Description and Results
Barrera and Kelly 1974	*Archaeological and Historical Surveys of the Waimea to Kawaihae Road Corridor, Island of Hawai`i. Report 74-1. Dept. of Anthro.*, B.P. Bishop Museum.	An Archaeological survey of a corridor of roughly 10,272 acres and 4,561 archaeological features were recorded. The majority of which were near Kawaihae, on the coast or in the Lalamilo area near Waimea. Of particular interest is the area referred to as the "kuleana and ranch district."
Neller and Beggerly 1980	*An Archaeological Reconnaissance of the Proposed Improvements to the Lālāmilo-Pu`ukapua Irrigation System Waimea, Hawai`i*	Archaeological Reconnaissance for a proposed pipeline installation project area of 14,000 sq. feet. No sites were present in or near the vicinity, although A few buildings were of historic interest.
Clark 1981	Archaeological Survey of Section 4 Mudlane-Waimea Kawaihae Road Corridor. In *The Mudlane-Waimea-Kawaihae Archaeological Project: Interim Report I.*	An archaeological survey of 295 acres located in the uplands of Lalamilo. During the survey, 321 sites, including both agricultural and residential features were identified. The district contains many residential structures scattered through out what was once an extensive agricultural system. The agricultural system was divided into four complexes, each with its own characteristics.
Clark and Kirch 1983	Report 7, Archaeological Investigations in Section 4, In *Archaeological Investigations of the Mudlane-Waimea-Kawaihae Road Corridor, Island of Hawai`i*	Inventory survey of portions of the road not covered in the previous survey. Numerous sites were identified, both agricultural and habitation, and the project provided a broad data base for comparing site distribution data from the coast to upland.
Bonk 1985	An Archaeological Survey in Portions of Waikoloa, Pu`ukapu and `Ōuli, District of South Kohala, Hawai`i.	Inventory survey in four areas encompassing 300 acres of land. Nine sites were located in Areas I and II. Four of them were recommended for additional work. No sites were identified in Area III, and numerous sites were located in Area IV (a parcel between Kawaihae-Waimea Road and the Kohala-Waimea Road).
Clark 1987	Waimea-Kawaihae, a Leeward Hawai'i Settlement System	The chronological development of a intensively used agricultural field systems and permanent settlement in Waimea.
Hammatt, Borthwick, and Shideler 1988	Intensive Archaeological Survey of 12.4 Acres for Proposed Lalamilo House Lots, Unit 2, Lalamilo, South Kohala, Hawai`i. Cultural Surveys Hawai`i.	Archaeological investigations on a 12 acre parcel in Upper Lalamilo. Seven Archaeological sites recorded and limited subsurface excavation conducted. Both habitation and agricultural sites were documented.

Hammatt and Shideler 1989	Archaeological Investigations at Ka La Loa Subdivision, Lalamilo, South Kohala, Hawai`i. Ms on file with Cultural Surveys Hawai`i.	Further investigations on two identified sites from 1988 study. Data analysis suggested that the informal agricultural activity (represented in ag. mounds) were occurring by the mid 13th century, and field boundary walls were constructed by the mid-15th century, with permanent habitation occuring from early 16th century to the late 18th century.
Spencer 1989	Archaeological Investigations of the Lālāmilo Agricultural Addition Irrigation Pipeline Corridor and Livestock Water Distribution System and Management Area, Waimea-Pa`auilo Watershed, Hawai'i Country, Hawai`i.	An investigation of a water pipeline corridor and the reconnaissance of the Nienie area. No cultural resources observed, and assessed that the probability of encountering significant cultural properties was too low to warrant a more intensive inventory.
Bonk 1989	An Archaeological Reconnaissance Survey in a Portion of Wai`aka, South Kohala, Hawai`i.	Survey of an 8 acre piece of land that falls into a major agricultural field complex identified by Clark (1981) as field complex #1. The project area contained no residential structures or stone-walled structures or features. only "low mildly terraced field ridges" and " larger terraces with broader and flatter surfaces behind soil embankments."
McEldowney 1990	Memorandum concerning a field check of pastoral lot #100, awarded to Mr. James Akiona, Hawaiian Home Lands, Pu`ukapu, South Kohala, Hawai`i.	Inspection of a mapped stone complex of 2 enclosures. The larger oval enclosure measured 58 x 43 meters and was subdivided by an internal wall that cuts through the downslope of the western end. The smaller rectangular enclosure measures 20 x 13 m. Both have unknown functions but it is speculated that they are historic cattle ranching structures. Site is significant because it is the only example of its kind in the vicinity.
Clark, Davidson, and Cleghorn 1990	Archaeological Testing and Data Recovery for the Waimea School Improvements, Lot A (TMK:6-7-2:17), Waikōloa, South Kohala, Hawai'i Island.	Surface and subsurface investigations of previously recorded site (50-10-06-8808); one of two field sites in Field Complex 4 that is part of the Waimea agricultural system (Clark 1981). Three `auwai, or irrigation ditches were studied. Profiles suggest a historic period origin, although some indirect evidence is present for possible prehistoric construction. A sample from the lower charcoal lens in a subsurface activity lens yielded an age range with multiple calendrical conversion. The preferred range is A. D. 1449 to 1674).
Thompson and Rosendahl 1991 & 1992	Archaeological Inventory Survey Potential Sites for North Hawai'i Community Hospital /Archaeological Inventory Survey Waimea Elderly Housing Project	An archaeological inventory survey of Waimea Elderly Housing project area. The field survey consisted of 100% pedestrian reconnaissance, with no significant cultural remains of any kind were observed.

Erkelens 1993	Review of Historical Documents and Background Literature, Waimea Town Center Project	A report to serve as a summary of the preliminary investigations relating to the Waimea Town Center project which encompasses 385 acres. The review of the survey indicated that information previously gathered is incomplete for the project area. Not all archaeological sites and features are presently known. Previously recorded maps are not detailed or complete.
Schilz 1994	Final report: Archaeological Survey and Evaluation Land of `Ōuli District of South Kohala, Island of Hawai`i, Hawai`i.	A survey in lands within the `Ōuli *ahupua`a*. A total of 75 sites were recorded including 45 military sites, 14 ranching sites, 9 historic sites, and 7 traditional Hawaiian sites. (State Site Numbers 50-10-05-14679 through 50-10-05-14752, and State Site # 50-10-5-9012)
Franklin, Maly and Rosendahl 1994	Archaeological Inventory Survey Hawai'i Preparatory Academy Waimea Campus Expansion	Inventory survey of 14.9 acre proposed HPA Waimea Campus. During fieldwork, seven archaeological sites associated with agriculture and habitation were identified. The sites comprised the formal types: water channel, cemetery, terrace, concrete foundation, and alignment. Only two sites were significant a historic habitation/ cemetery and an earl historic habitation terrace.
Erkelens 1998	The Kuleana Lots at Pukalani Waimea Town Center Project Area	A archaeological investigation of project area 385 acres. Sites include three 19th century house lots, a historic cemetery, four historic structures, a burial. Skeletal remains of two individuals were encountered during subsurface testing. Preservation of cemetery and rehabilitation/ preservation of the historic buildings are recommended.

V. RESULTS OF FIELD SURVEY

On May 22-23, 2000, archaeologists Matt McDermott and Doug Borthwick conducted a field inspection of the proposed Waimea Trails and Greenway Project that extends about 6 miles long and varies from 30-45 ft wide. The project area that was inspected was divided into five different sections based on terrain type, degree of urbanization, and the potential for cultural resources.

Section 1 (Figure 3) encompasses the trail corridor from the Kawaihae Road intersection at South Kohola View Estates to the County Refuse Transfer Station. The corridor begins at the confluence of Keahuiomano and Lanikepu Streams near Kawaihae Road. The corridor shifts from the north to south side of Waikōloa Stream in this section then angles southeast along Keahuiomano Stream to the western end of the refuse transfer station.

Section 1 is, within what has been referred to as the Lālāmilo Field Complex, a subset of the Waimea agricultural system (Clark 1987). Additionally, Section 1 is, at least in part, within the "Lalamilo Kuleana and Ranch District;" State site 50-10-05-2292 (Barrera and Kelly 1974)(Figure 2).

The Field Complex and Kuleana and Ranch District designations were based on surveys related to the proposed Waimea/Kawaihae Highway. The types of sites and features reported on include *`auwai* (irrigation ditches), agricultural fields and house sites (both pre-and post contact). The *`auwai* — some stone-lined, others with soil embankments — extend off the three streams, Waikaloa, Keahuiomano and Lanikepu, in Section 1 of the project area.

The *`auwai* irrigate fields which are delineated by low mounded walls, sometimes utilizing the natural landscape. Natural swales or depressions are often enhanced to create the fields.

The house sites range from low platforms to high-walled enclosures and, as mentioned earlier, are from both before and after A.D. 1776. The historic time period house sites have been documented as related to 1800s Land Commission Awards (*i.e.* LCA or *kuleana*).

Section 1 was not staked during the field inspection so no specific site or features designations were accomplished in relation to intersects with the proposed trail route. The field inspection did indicate that certain *`auwai* sections, a wall segment, and a number of fields are in the vicinity of the trail corridor. No house sites appear to be within the trail corridor.

Section 2 (Figure 4) refers to the portion of the trail corridor between the existing county refuse transfer station and the eastern end of the Sandalwood Subdivision. The corridor is on the southern side of Waikōloa Stream for the Sandalwood Subdivision portion then shifts to the northern side near the old land fill and existing transfer station. At the conjunction of Sections 2 and 3 is an old concrete ford in Waikōloa Stream. The ford is associated with an old, asphalt covered roadway that extends from the Kawaihae Road to

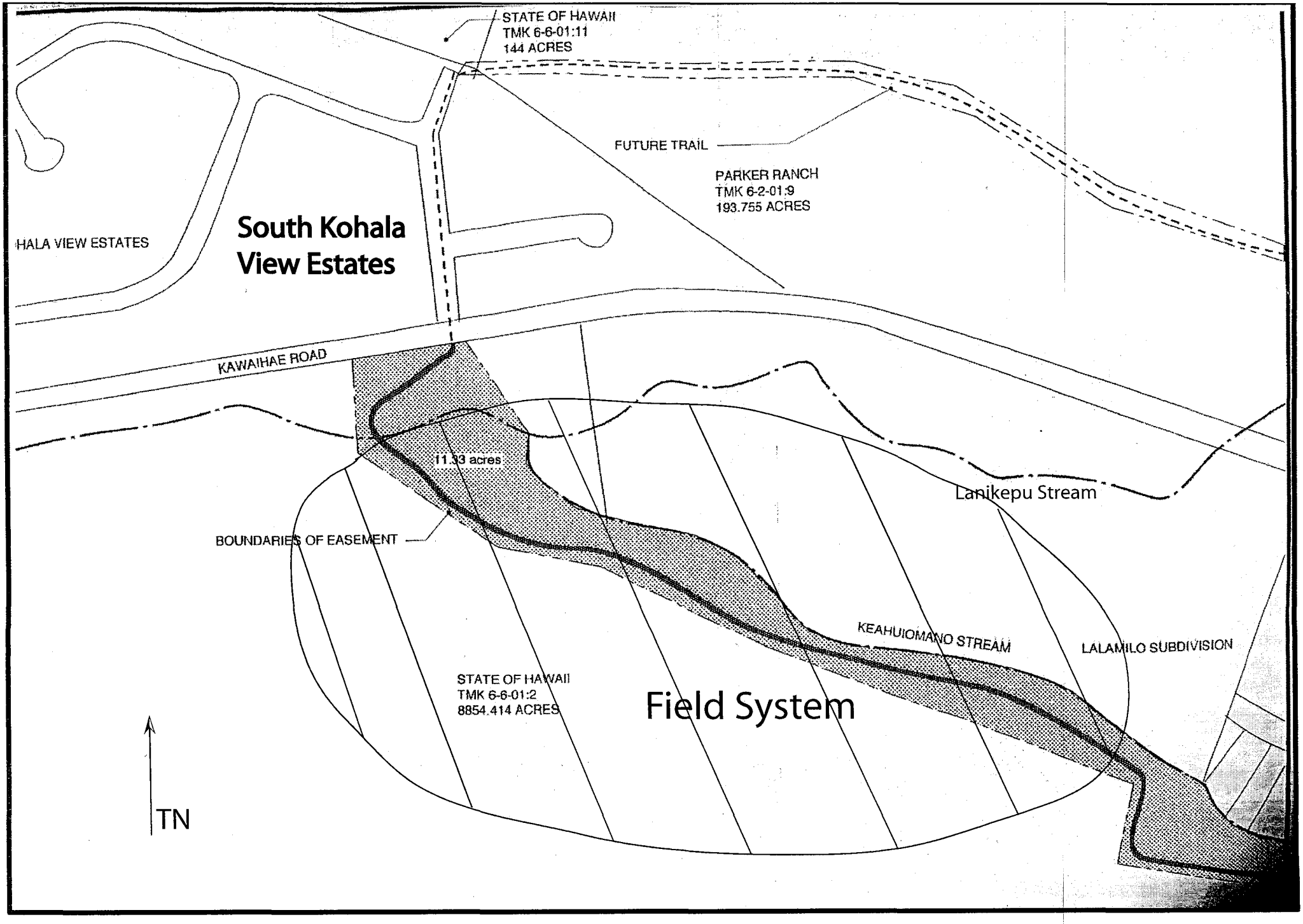


Figure 3 Map Showing Section 1

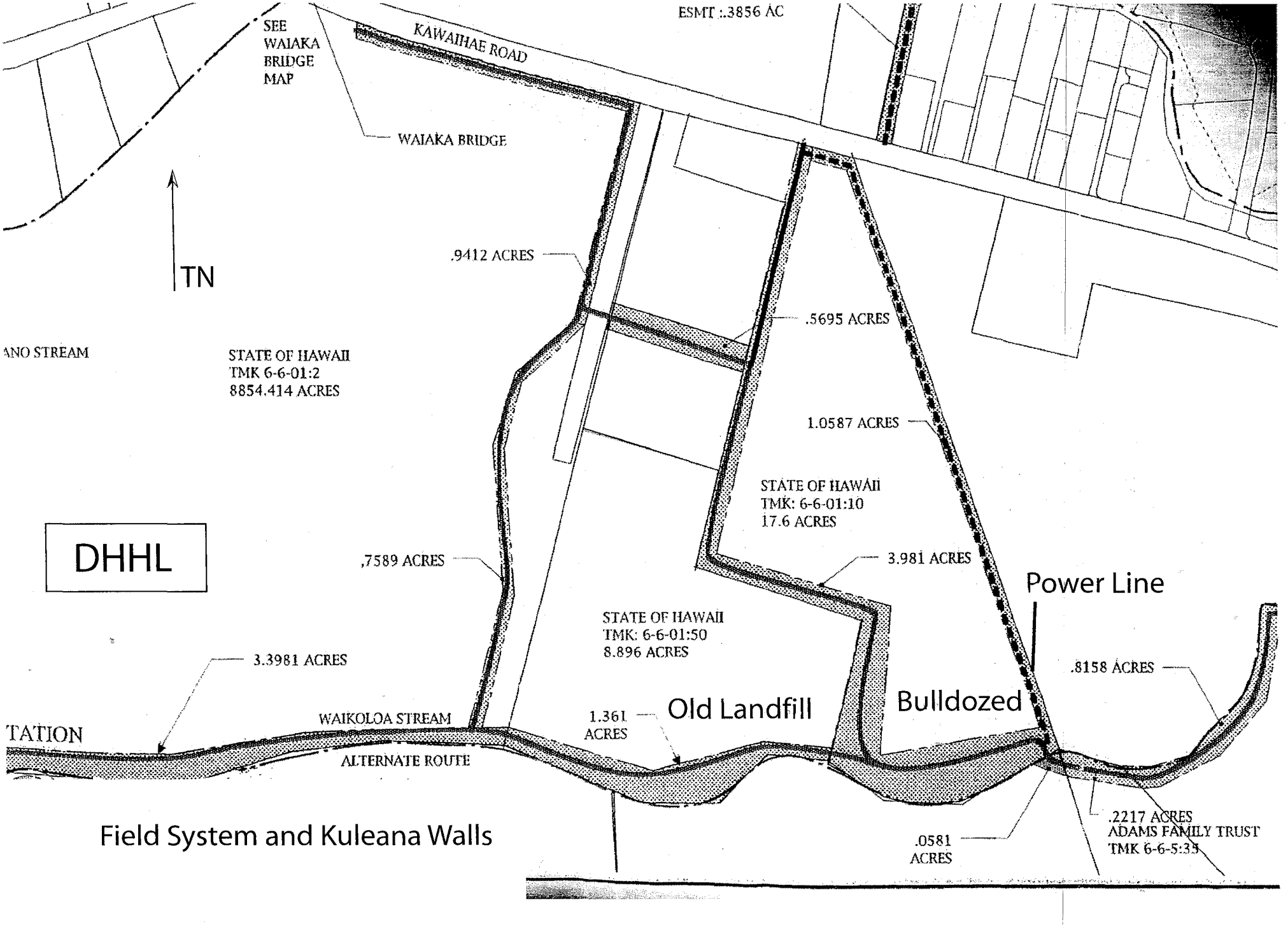


Figure 4 Map Showing Section 2

Pu`u `Opelu, the former Parker Ranch Headquarters and residence of Richard Smart, now a museum open to the public. The roadway and associated stream crossing are presumably older than 50 years and thus can be considered historic properties, although the proposed trail would have no significant impact on the features.

The portion of the proposed trail corridor adjoining the Sandalwood Subdivision is pasture type land that is presently separated from active pasture by a new fence line. The area had not been grazed for a while and the Kikuyu grass is fairly thick. No historic features were observed on either side of the fence line. The heavily grazed side had excellent ground visibility. The ungrazed side had poor ground visibility.

The portion of Section 2 that is State land, just east of the existing transfer station, has been altered extensively by bulldozing and old landfill activities. The trail corridor follows a bulldozed path between Waikōloa Stream and the 'mountain of trash' of the old land fill. No historic properties were observed in Section 2.

Section 3 (Figure 5) refers to the portion of the proposed trail route between the east end of the Sandalwood subdivision and Waiki`i Village Road. The proposed route shifts to the northern side of Waikōloa Stream for most of Section 3 where it is adjacent to existing houselots. The area has been altered in association with the residential properties and no archaeological resources were observed in Section 3.

Section 4 (Figure 6) refers to the area between Waiki`i Village Road and Lindsay Road Bridge. This section is dominated by a stand of large Eucalyptus trees within which Waikōloa Stream makes a few sharp bends or meanders. The proposed trail route is on the southern side of the stream between existing buildings and the stream. However unlike Section 5, the buildings and associated infrastructure (*e.g.* parking lots) within Section 4 do not encroach up to the edge of the stream. The stand of Eucalyptus trees buffers the proposed trail route from the office buildings.

Remnant structures related to a pipeline crossing and possibly a concrete ford were observed in Section 4. The large concrete slab remnant had an imprinted date of "194_," suggesting a World War II association. The pipe crossing remnant structures are short, faced, ramp like structures with the faced vertical side facing the stream. Construction type is similar to the Section 5 crossing, consisting of basalt boulders and concrete.

Section 5 (Figure 7) is the eastern trail terminus at Church Row westward to the Waikōloa stream bridge at Lindsey Road. Section 5 has been altered extensively by modern urbanization. The proposed route would be on the southern side of Waikōloa stream which has been more altered by recent construction than the northern side. Recent construction activity in this section includes: the Baptist Church yard, KECK office complex, new parking lots for the Koa Grill Restaurant, and the Waimea Shopping Center.

The southern bank of Waikōloa Stream in Section 5 is dominated by thick kikuyu grass, christmas berry, ginger, and other introduced plants. The area between the modern buildings and the stream is fairly narrow especially behind the Waimea Shopping Center.

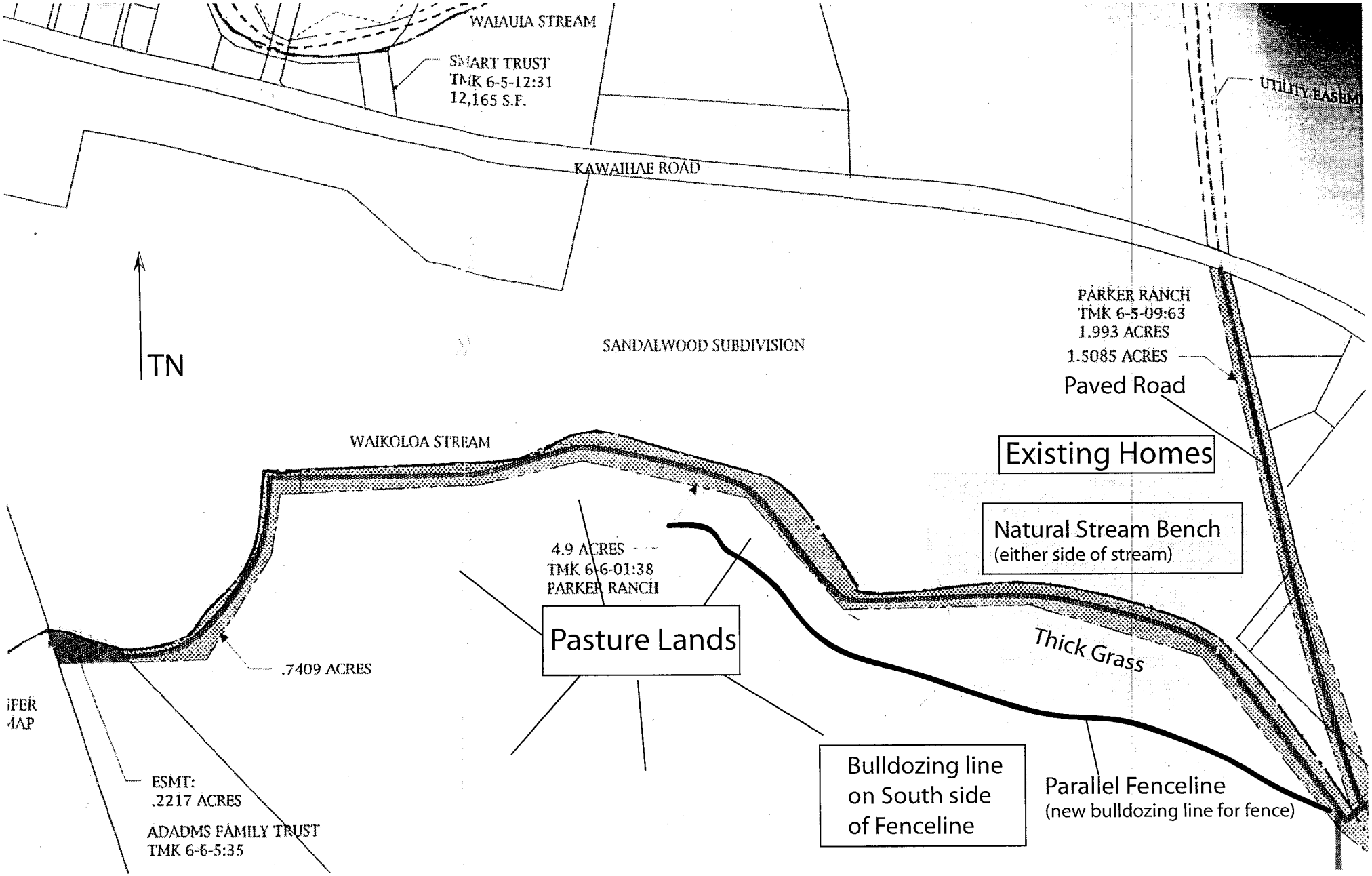


Figure 5 Map Showing Section 3

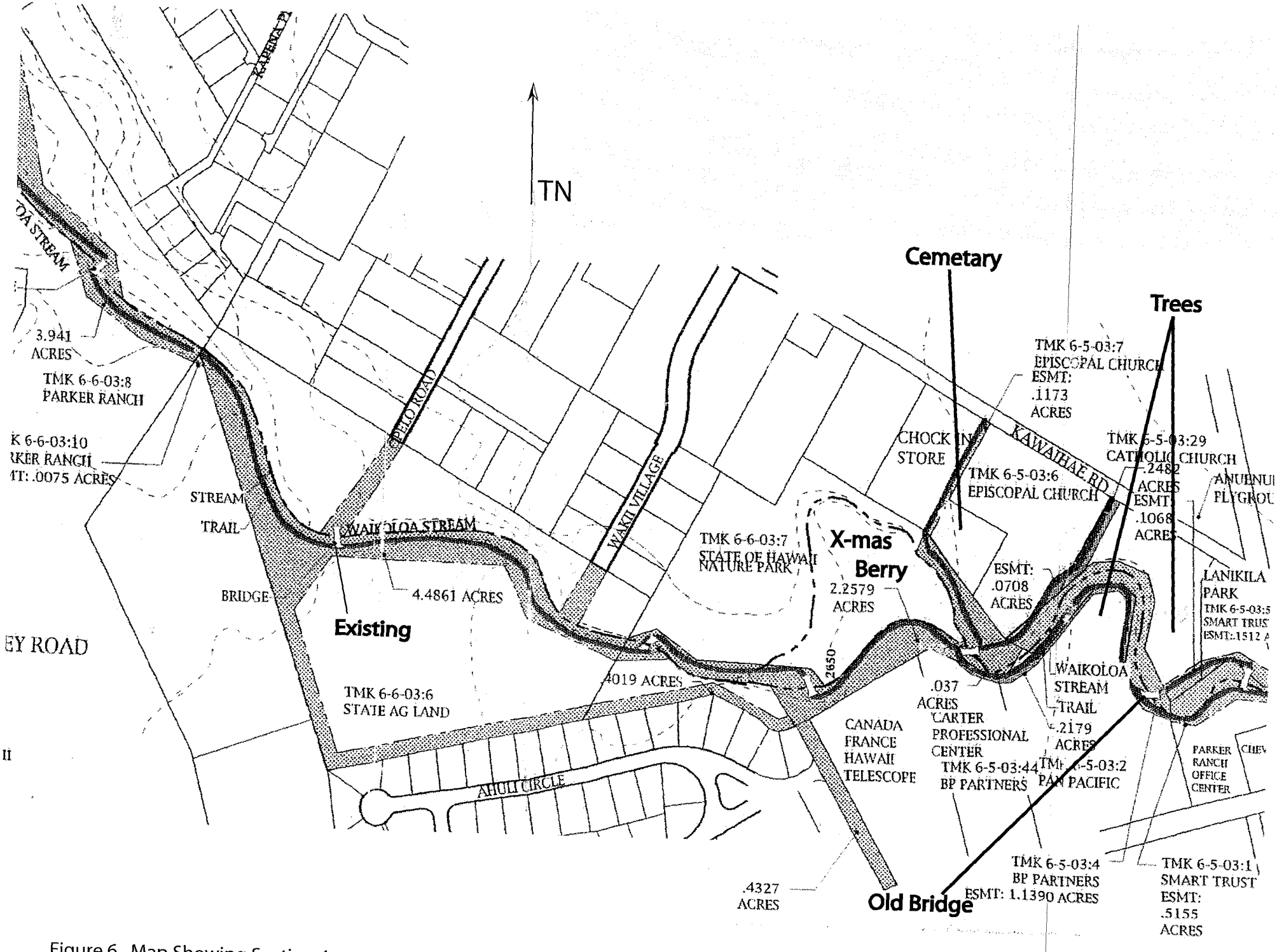


Figure 6 Map Showing Section 4

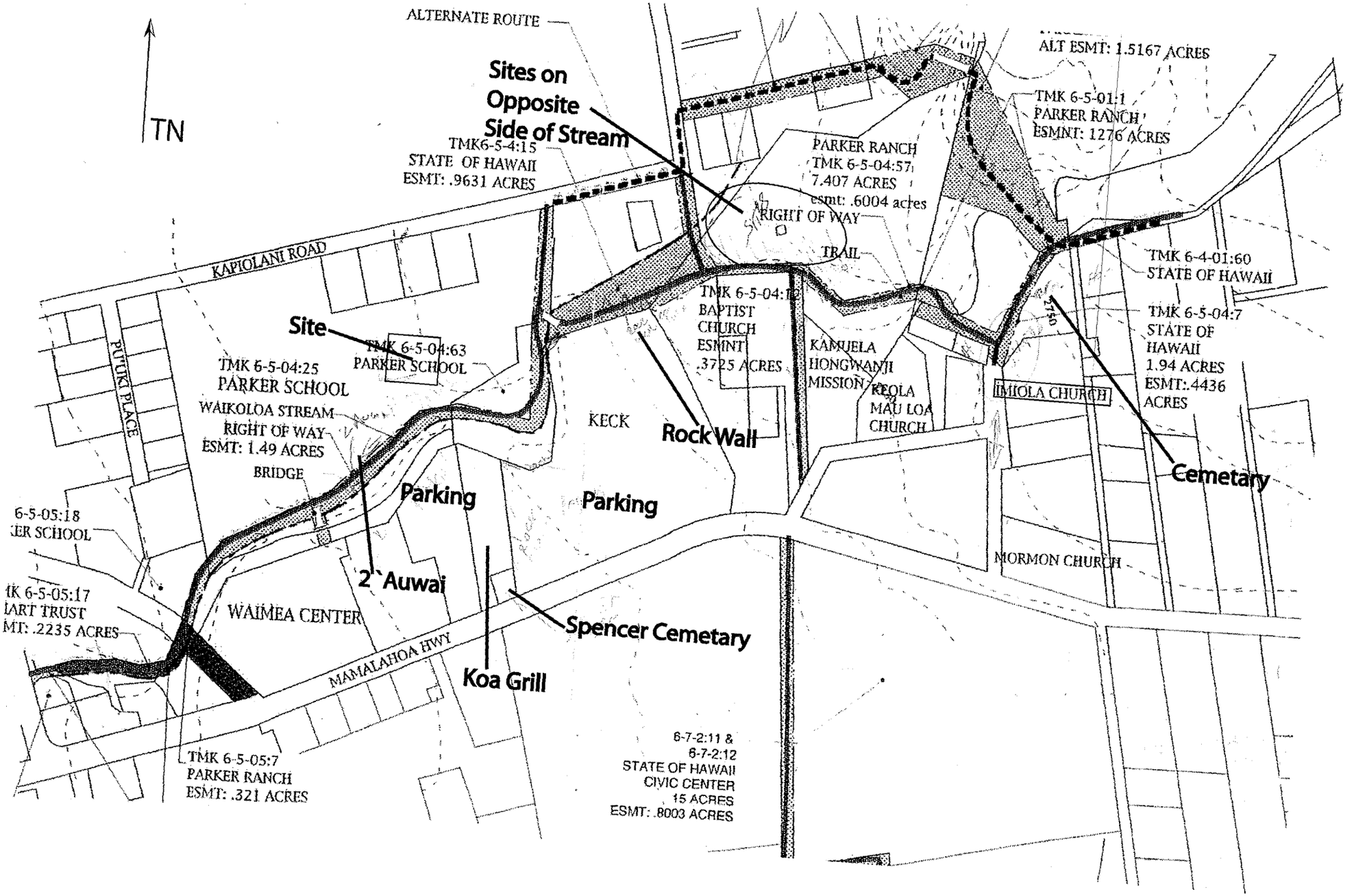


Figure 7 Map Showing Section 5

Two historic structures were observed within Section 5; a stacked stone wall behind the KECK offices and a remnant of a basalt boulder and concrete stream crossing. The boulder wall is typical of the many dry masonry stone walls in the Waimea area and presently serves as the stream side property boundary for the KECK office complex. The remnant boulder and concrete stream crossing appears to be for an old narrow roadway and/or for an old pipeline. The old stream crossing is situated behind a row of stores some 200 ft. east of the Lindsey Road bridge.

Additionally, the eastern terminus of the trail is in close proximity to Imi`ola Church and associated cemetery. The church is on the State and National Register of Historic Places and has been allotted State Site # 50-10-06-7151.

VI. SUMMARY AND RECOMMENDATIONS

The trail corridor was separated into five sections to aid in the discussion of field observations. Based on the field observation, Sections 2-5 have been urbanized to such an extent that no surface historic properties exist, except for concrete and boulder stream crossing structures(s). Section 1, west of the County Refuse Transfer Station, has been altered little during the modern urbanization of Kamuela town. Section 1 contains site complexes associated with agriculture and habitation from the pre-and post- contact eras (Barrera and Kelly 1974, Clark and Kirch 1983, Clark 1987). The Trail Corridor intersects a number of features, such as, *`auwai* and field walls. The corridor was not staked in Section 1; thus a precise inventory of possibly affected sites and features was not undertaken for this assessment.

Based on the background studies and field inspection Cultural Surveys Hawai`i recommends an inventory-level survey for the entire route. The field inspection indicated that the focus of the inventory survey should be in the area west of the County Refuse Transfer Station (*i.e.* Section 1). Complete background studies would complement the field survey providing a basis from which to assess all identified sites.

The inventory survey should await a staked alignment so that sites can be accurately located in relation to the alignment. Alternatively, the inventory survey results could be utilized to create an alignment with less impact to archaeological resources.

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CULTURAL IMPACT ASSESSMENT FOR THE PROPOSED WAIMEA TRAILS AND GREENWAY PROJECT, WAIMEA, SOUTH KOHALA DISTRICT ISLAND OF HAWAI‘I

Portions of TMK 6-2, 6-5, 6-6

by

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Prepared for

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by
Cultural Surveys Hawai‘i, Inc.
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I. INTRODUCTION

A. Project Background

At the request of Gerald Park, Urban Planner, Cultural Surveys Hawai‘i, Inc. (CSH) conducted a Cultural Impact Assessment for a roughly 6 mi. (10 km) section of a proposed 12 mi. (19 km) Waimea Trails and Greenway project. The proposed route is characterized as a "multi-use pedestrian bikeway". The Waimea Trails and Greenway Project is designed to provide a green belt through Waimea Town for non-motorized, pedestrian-friendly community access along a stretch of Waikōloa Stream. The primary function of the proposed trail is to provide an alternative transportation route for non-motorized vehicles in the Waimea area. The project corridor passes through several well-known areas of Waimea, Pu'uopelu, and Wai‘aka and three *ahupua‘a* including Lālāmilo, Waikōloa, and ‘Ōuli, on the island of Hawai‘i (portions of TMK 6-2, 6-5, and 6-6) (Figures 1-2).

B. Project Area Description

The project area is located in the Waimea area of South Kohala Hawai‘i Island and includes a corridor running generally west-east from the South Kohala View Estates in the west to "Church Row" in Waimea Town in the east (Figures 1-2). The corridor runs along Waikōloa and Keanu‘imanō Streams, with several north-south access routes projecting off from the main trail. In its entirety, the trails and greenway may extend approximately 12 miles. The corridor researched for the present study is between the South Kohala View Estates on the west and Church Row on the east.

The project area is situated in the Waimea Saddle region, between the Kohala Mountains and Mauna Kea Volcano, at an approximate elevation of 2,000-3,000 ft. (600-1,200 m) A.M.S.L.. The climate is generally cool, moist, and windy. Temperatures normally range between 60-70º F, with mean maximums between 70-80º F, and mean minimums in the upper 40º F. The average annual rainfall ranges from 75-100 in. (190-250 cm), with heavy rainfall between the months of January and April (Giambelluca et al. 1986). Winds are dominated by consistent northeasterly trades. The soils within the project area are of a Waimea Series that consists of well drained, very fine sandy loam that formed in volcanic ash. These incepticol soils are usually in areas that are gently sloping to moderately steep (Foote et al. 1972). There are three major streams flowing off the Kohala slopes and onto the plains of Waimea, including Lanikepu, Waiōkloa, and Kohākōhau (also known as Keanu‘i‘omanō) Streams.

From west to east, the project area includes varying climates, terrains, and degrees of urbanization. For the purpose of this cultural impact evaluation, the corridor was divided into five sections, based mainly on degree of urbanization (Figures 1-2):

Section 1: South Kohala View Estates to Hawai'i County Refuse Transfer Station
Section 2: West end of Refuse Transfer Station to east end of Sandalwood Subdivision
Section 3: East end of Sandalwood Subdivision to Waiki‘i Rd.
Section 4: Waiki‘i Rd. to Lindsey Road Bridge (Eucalyptus forest)
Section 5: Lindsey Road Bridge to Imi‘ola Catholic Church

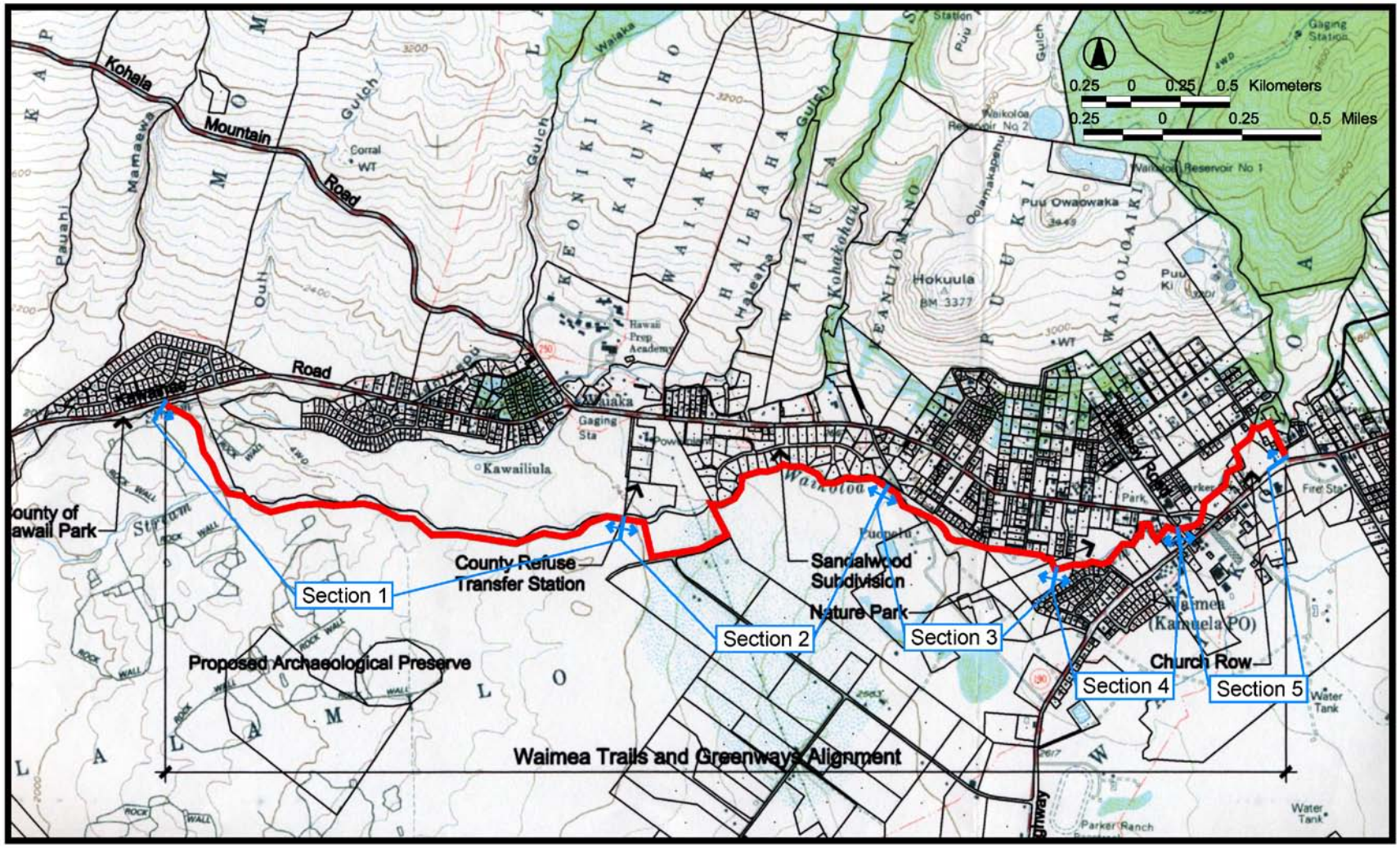

Figure 1 USGS Topographic Map, Kamuela Quadrangle, showing the location of the project area.

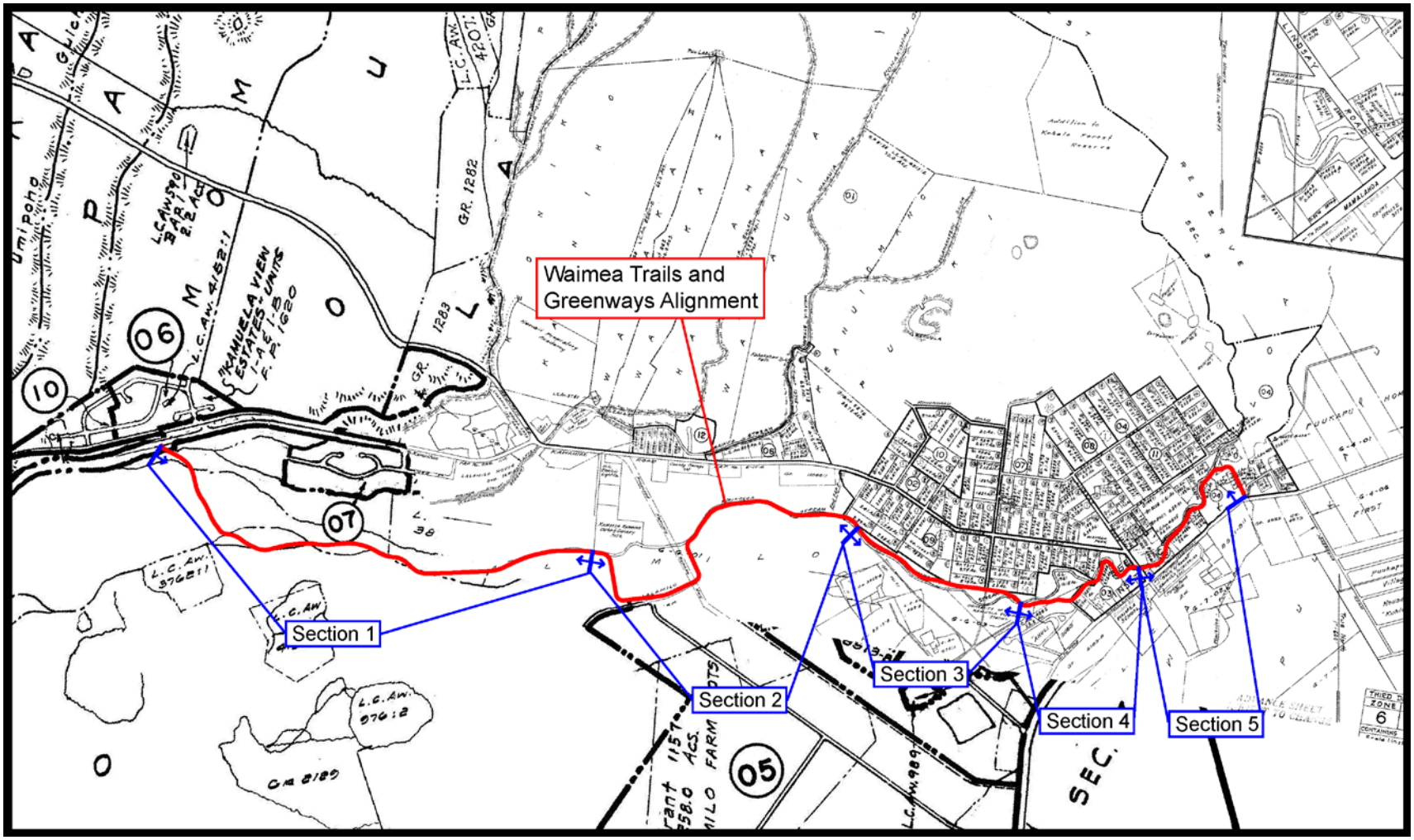

Figure 2 **Portions of TMK 6-2, 6-5, and 6-6, showing the location of the project area.**

C. Scope of Work

The agreed upon scope of work of this Cultural Impact Assessment is summarized as follows:

1. Examination of historical documents, Land Commission Awards, and historic maps, with the specific purpose of identifying traditional Hawaiian activities, including gathering of plant, animal, and other resources or agricultural pursuits as may be indicated in the historic record.
2. A review of the existing archaeological information pertaining to the sites on the property as they may allow us to reconstruct traditional land use activities and identify and describe the cultural resources, practices, and beliefs associated with the parcel, and identify present uses, if appropriate.
3. Conduct community consultations with persons knowledgeable about the historic and traditional practices in the project area and region.
4. Preparation of a report on items 1-3 summarizing the information gathered related to traditional practices and land use. The report assessed the impact of the proposed action on the cultural practices and features identified.

D. Methods

Historical documents, maps, and photographs were researched at: the Kaua‘i Historical Society, the Hawai‘i State Archives; the Survey Office of the Department of Accounting and General Services; the Hawai‘i State Library; the Bernice Pauahi Bishop Museum archives and library; Hamilton Library at the University of Hawai‘i at Mānoa; the Mission Houses Museum Library; the State Historic Preservation Division (SHPD) library; and the library of Cultural Surveys Hawai‘i.

Hawaiian organizations, government agencies, community members and cultural and lineal descendants with ties to Waimea were contacted to: (1) identify potentially knowledgeable individuals with cultural expertise and knowledge of the project area and the surrounding vicinity, and (2) identify cultural concerns and potential impacts within the project area.

E. The Interview Process

Once potential participants were identified, they were contacted by telephone or in person. If the individual expressed a willingness to participate, an appointment was scheduled at a location of the individual’s choosing. Following the interview’s completion, it was transcribed. The interviewees were given the opportunity to review a draft typed transcript for corrections, editing and additions. Excerpts from the interviews were then incorporated into the text where appropriate.

II. CULTURAL BACKGROUND

The history of the Waimea region of Hawai‘i island has been documented in a number of studies and publications including, but not limited to the Fornander Collection of Hawaiian Folklore (Fornander 1916-1919), Ruling Chiefs of Hawa**i** (Kamakau 1961), Place Names of Hawaii (Puku‘i et al. 1974), ‘Ōlelo No‘eau (Puku‘i 1983), Hōkū o Hawai‘i” Newspaper (Franklin et al. 1994) and missionary accounts (Baldwin and Lyons 1837; Doyle 1904, 1945, 1953; Bishop 1828; Ellis 1969).

These studies include references to oral traditions, the legendary rulers and personalities, early historic accounts, land ownership, and the changes in land use from traditional to modern times. The following section is a synopsis of these and other sources so as to provide a general overview of the historical and cultural setting related to the project area.

A. Place Names and *Mo‘olelo*

The importance of place names and stories connected to an area are an important part of traditional Hawaiian culture and the transmission of cultural knowledge from one generation to the next. The proposed Waimea Trails and Greenway Project falls within the traditional *ahupua‘a* boundaries of Lālāmilo (lit., milo tree branch), Waikōloa (lit., duck water; or could refer to a name of a wind), and ‘Ōuli (referring to the name of a famous soldier of Kahekili’s army who was skilled with the ma‘a, or sling) (Puku‘i et al. 1974). Puopelu (shortened for Pu‘u‘ōpelu) literally means ‘ōpelu hill, and Wai‘aka means “laughing-water.” The name Wai‘aka is used to identify both a stream that flows off of the Kohala mountains and a land section.

***Ke kipu‘upu‘u ho‘anu ‘ili o* Waimea**
(The Kipu‘upu‘u rain of Waimea that chills the skin of people)
[Puku’i 1983:188; #1748]

The region generally referred to as “Waimea,” which literally means reddish water, as it was thought to be tinted as it drained through the *hapu‘u* tree fern forests or through the red soil (Elbert, Ms in Barrera and Kelly 1974). Waimea has been poetically characterized as being “like a spear rubbed by the wind, as the cold spray is blown by the *kipu‘upu‘u* rain...” (Proverb from a Kamehameha *mele* quoted by Henry Judd in Doyle 1953:42) and has a rich history that is evident in its place names and proverbs.

“Waimea” is a name that also identifies several localities in this section of Kohala (Franklin et al. 1994). They are (a) the town of Waimea (also called Kamuela [Samuel]), named either for postmaster Samuel Spencer, or for the rancher Samuel Parker (Puku‘i et al. 1974); (b) a region, or *kalana,* that extends from the coast to the uplands and encompasses several *ahupua‘a* between Kawaihae and Waikōloa; (c) the upland area only of that region including the entire plain between the Kohala and Mauna Kea Mountains; and (d) the upland region of intensive residential and agricultural occupation- the Waimea Field System (Clark and Kirch 1983:46). In *‘Ōlelo no’eau* (Pukui 1983), Waimea is noted as an area of cool climate and chilling rains:

A. *Hele poʻala i ka anu of Waimea*

Going in a circle in the cold of Waimea

Said of a person who goes in circles and gets nowhere. Waimea, Hawai ̔i is a cold place and when foggy, it is easy for one unfamiliar with the place to lose his way [Puku'i 1983: 83; #757].

B. *Ka ua Kīpuʻupuʻu o Waimea / Waimea i ka ua Kīpuʻupuʻu*
The Kīpuʻupuʻu rain of Waimea / Waimea, land of the Kīpuʻupuʻu rain
An expression often used in songs of Waimea Hawaiʻi. This area is famed for its cold rain. When Kamehameha organized an army of spear fighters and runners from Waimea, they called themselves Kīpuʻupuʻu after the cold rain of their homeland [Pukuʻi 1983:169, 319; #1571 & #2913].

C. *Ka ua paliloa o Waimea*
The Tall-cliff rain of Waimea
The rain of Waimea, Hawai'i, that sweeps down cliffs. [Pukuʻi 1983:172; #1593]

Waimea was known for a place of learning the art of fighting. "The land of Waimea was one of the lands where there were many warriors from ancient times. That place, Waimea, furnished Kamehameha with armies of men trained in battle" (Desha 2000: 188). The warriors that came out of this area were called Kīpuʻupuʻu warriors. The traditional *mele* Hole Waimea maybe the reason behind the naming of the Waimea warriors:

Hole Waimea I ka ihe a ka makani	Waimea is stripped by the spear of the wind
Hao mai nā ʻale a ke Kīpuʻupuʻu	Blown by the gust of the Kīpuʻupuʻu
He lāʻau kalaʻihi ia na ke anu	A staff made stiff in the cold
ʻŌʻō I ka nahele o Mahiki	Pierced is the forest of Mahiki

Desha translates the hidden meaning:

> There is a hidden meaning in this old *mele*, as that forest of Mahiki was a place for making spears for the warrior in ancient times. In times of peace, the *aliʻi* and the men would go there to prepare for the times of war to come.
>
> When Kamehameha was staying at Kawaihae, he went with his many warriors to that forest for the making of spears. Some of his court accompanied them, in other words, the chiefly women. At this place of the story, the writer conceals the hidden meaning of the "stripping of Waimea by the spears of the wind" and it is for the reader to guess the meaning. (Desha 2000:192)

***Ke kānoa kapu o Lono-Makahiki:ʻoia hoʻi ʻo Hōkūʻula*!**
(The sacred bowl of Lono-Makahiki: it is Hōkūʻula!)
[Ka Hōkū of Hawaiʻi 4/23/1914 in Franklin et al. 1994]

Translated and interpreted by Kepā Maly (in Franklin et al. 1994), the legend of Ka-Miki was published in the Hawaiian newspaper "Ka Hōkū o Hawaiʻi" between the years of 1914-1917. It is a story about two brothers and their journey around the island of Hawaiʻi. The legend includes

references to over 800 place names, and provides interesting information about Puʻu Hōkūʻula, the most prominent hill located just north of Waimea town.

> Hōkūʻula (Red Star): When Ka-Miki and Makaʻiole drew near to completing their formal ʻōlohe training (fighting and competing skills) under their goddess/great grandmother Kaʻuluhe, she told them to go and visit their kūpuna (ancestress) Lani-nui-kuʻi-a-mamao-loa who dwelt at Lanimaomao (Waimea). Lani-nui-kuʻi-amamao-loa was the guardian and keeper of the sacred kānoa (ʻawa mixing bowl) Hōkūʻula which belonged to Lono-Makahiki, and the maʻau (strainer) called Kalau-o-Kāhuli which was upon the plain of Waikōloa. These two items were to be used in ʻawa ceremonies for the brothers ʻailolo (brain eating- completion of training ceremonies) [Ka Hoku o Hawaiʻi 2/5/1914 in Franklin et al. 1994].

The association of the bowl, or *kānoa* of the god Lono (a provider of abundant crops and rain-laden clouds) with Hōkūʻula may refer to the agricultural lands of the region; i.e., (1) the bowl or container could symbolize a land of agricultural abundance; (b) the sprinkling of waters from the bowl could refer to the waters of the streams that flow from the uplands and spread across the plains; and (c) the importance of the rituals of Lono in agricultural endeavors, particularly in the areas of Kohala where large field systems have been archaeologically documented. Thus, the legendary account may symbolically represent actual resources of the Waimea Region.

B. Accounts Related to *Heiau*

Thomas Thrum in his survey of *heiau* sites on the island of Hawaiʻi documented a single *heiau* in Waimea. The *heiau*, Uli, was of unknown size and class, and was dedicated to Hākau. Uli was said to have been rebuilt by Kamehameha, and its images and steps repaired. Coconuts were brought from Puako, 12 miles away, for its consecration. Only a low mound remains to indicate the location of the *heiau*, opposite of the church premises (T.Thrum 1908).

A missionary account by Lorenzo Lyons in the 1850's tells of legends within the setting of Waimea, and mentions a *heiau* in the area:

> On a nearby ridge stood another *heiau* built "...by the great Akua Makuakua who has come from far off Kahiki." From the hillside he watched the rainbows "...and there he found the beautiful goddess Wao." They lived at Hōkūʻula. Each time Wao was ready to bear a child she returned to the Waimea hills, which were sacred to her. The kapu was proclaimed in her honor- the forbidden ground extended "...down across the plains to whatever place a stone happened to stop rolling when started above by her servants." [Doyle 1953 in Barrera and Kelly 1974]

According to legend, Wao changed her servants into stones to guard the land during the night hours. When daylight came she transformed them back into their human forms (Barrera and Kelly 1974:1).

Lorenzo Lyons also tells of the legendary story of a Hoʻopili-a-Hae, and mentions her as being the founder of a *heiau* for women in Waimea:

> "The earliest chiefs of Waimea of whom we have record stemmed from the same Ulu-Hema line that led to Liloa, the founder of the island dynasty. Liloa's grandson Keawe-nui-a-'Umi took as one of his wives Ho'opili-a-Hae, daughter of Liloa's kahuna Pae-a-Molenole." [Clark and Kirch, 1983:26]
>
> "(The *heiau*) was attended exclusively by young virgins. In the sanctity of the cool highland forest, they "...performed the sacred ceremonies, learning also the science of healing so that they might eventually minister to others. Hoapiliaha'e's children were named for the five rains of the *heiau*." [Doyle 1953: 42-43] (in Barrera and Kelly 1974:1)

C. Historical Battles at Waimea

'O ke aluka koa a Kama i Waimea
(a multitude of warriors had Kama at Waimea)
[Kamakau 1961 :55-61 in Barrera and Kelly 1974]

Hōkū'ula, located approximately 1 mile east of Wai'aka, is famed for being the location of a prominent battle ground in which Kamalālāwalu, the ruler of Maui Island waged war against the Hawai'i Island forces. Deceived by misleading advice from his trusted advisors and poor strategic planning, Kamalālāwalu arrived on Hawai'i landing at Kawaihae, only to realize that there were no people there. They continued up to Hōkū'ula, a prominent *pu'u*. Situated in this manner, he believed his army would be able to have the advantage in defending themselves against the Hawai'i Island forces.

Upon hearing of Kamalālāwalu's arrival, Lonoikamakahiki, the Hawai'i Island ruler sent an army from Kona, Ka'u, Puna, and Hilo to Hōkū'ula, where the Maui warriors where stationed. The following morning Kamalālāwalu observed that the lowlands were literally covered with countless men. He soon realized that his Maui forces were inferior in numbers and asked Kumaikeau "*E Kumaikeau ma, pehea kēia? He aha kēia lehulehu o lalo*?" "Kumaikeau and the rest of you, how is the situation? What is the extent of their numbers below?" Kumaikeau relied "'*Akahi nō au a 'ike i ka nui o nā kānaka o* Hawai'i nei..." "I have never seen so many people in Hawai'i before..." After three days of negotiations, the two combating forces waged battle, with Lonoikamakahiki gaining the victory over Kamalālāwalu's army (Fornander 1916:342-350).

Another battle fought in the Waimea area was between the leeward and windward chiefs of Hawai'i Island toward the middle of the 18th century. This clash took place at Mahiki, east of Waimea, and just across the district boundary in Hamakua. Here, the father of the great chief Alapa'inuiakauaua was leading his forces against the Hilo chiefs when he was killed. Alapa'inui was on Maui at the time but returned to Hawai'i and ultimately regained control of the Kona and Kohala districts (Kamakau 1961: 65). Eventually he went on to take over the whole island of Hawai'i and place it under his rule. In his later years, Alapa'inui lived first in Waipi'o, then lived for sometime in Waimea, and later moved to Kawaihae (Kamakau 1961: 77).

During Kamehameha's campaign to extend his rule to all the major islands, he stayed at Waimea and at Kawaihae for some time. There are mentions of Kamehameha's visits to Waimea in 1791 and 1792 when he rebuilt Pu'u Koholā heiau (Clark and Kirch 1983). At that time a large work force was required and the people of Waimea were solicited. It has also been

suggested by Clark and Kirch (1983:27) that food and *tapas* were brought from Waimea to feed and clothe the many warriors in preparation of the Peleleu fleet to battle Maui and O‘ahu in 1794 and 1795.

III. HISTORICAL BACKGROUND

A. Post-Contact Period

The Waimea area, with its favorable soils and water from Kohala Mountain streams that could be harnessed and distributed on the fairly level plains, was an obvious area for the expansion of introduced food crop production. Waimea was very productive agriculturally in the early years following contact with the Western world. Based on early accounts, *kalo*, or *taro* (Colocasia esculata sp.) was the dominant crop with *ʻuala*, or sweet potatoes (Ipomoea batatas sp.) and *kō*, or sugar cane (Saccharum officinarum sp.) also grown in substantial quantities.
The decline in traditional Hawaiian agriculture in the Waimea region has been attributed to factors such as: 1) depopulation and the concurrent abandonment of the fields; 2) the pursuit of other commercial interests, such as the sandalwood and *pulu* trade, sugarcane cultivation, and the introduction of cattle.

It is important to mention that after the abandonment of traditional Hawaiian agriculture in Waimea, there were two resurgences of agricultural endeavors to boost the economy of Waimea (Clark and Kirch 1983). In the late 1820's, two Chinese, Lau Ki and ʻAiko started a sugar mill at Lihue, in upper Lālāmilo. While the mill was not successful commercially, sugar production continued in the Waimea area (Barrerra and Kelly 1974: 47). In the late 1830's, cotton was grown in Waimea when Governor Kuakini ordered the planting of an "immense field of cotton in the Waimea area," (Kuykendall 1967: 183). In the late 1840's and early 1850's, both sweet and Irish potatoes were cultivated extensively. However by 1865, these crops were reported to have been greatly diminished.

B. Māhele and Land Commission Awards

The Organic Acts of 1845 and 1846 initiated the process of the Mahele - the division of Hawaiian lands - which introduced private property into Hawaiian society. In 1848 the crown and the *aliʻi* (royalty) received their land titles.

Kuleana awards for individual parcels within the *ahupuaʻa* were subsequently granted in 1850. These awards were presented to tenants - native Hawaiians, naturalized foreigners, non-Hawaiians born in the islands, or long-term resident foreigners who could prove occupancy on the parcels before 1845 (Apple 1978:45). .

The records associated with these awards illuminate the character of the settlement within the *ahupuaʻa* at the mid-19th century. The majority of the individual *kuleana* claims are situated close to streams emptying from the southern scope of Kohala Mountain. The streams include Waikoloa, Kohakohau, Haleaha, Waiaka, and Kanikepu. These and other streams flowed onto the Waimea plain then turned to the west (*makai*) to flow down slope towards the Kawaihae/Puako area. The focus of habitation and agriculture was at the base of Kohala Mountain and extending out onto the Waimea plain. The awarded *kuleana* were in a relatively narrow band extending from approximate elevation 2,100 ft and 2,900 ft. This zonal band would include the presently proposed trail corridor.

LCA claims in proximity to the corridor include land use data such as house lots with associated cultivation and enclosed walls, agriculture such as *taro* and *mamaki.* This pattern of land use is exemplified in LCA 3828 to J. A. Palea. Kauhini testified on behalf of Palea ‘s claim of two house lots and a land claim:

> I have seen/it/in three sections, two house-lots and one land section. The land section is in the *ili* land of Waikoloa [Waikoloa Nui or Lalamilo] in Waimea, Hawaii. It had a fence at one time; it has fallen apart at this time. Two houses for Palea are in there. He had built them and the boundaries are:
>
> Mauka, Waho, also Makai by Hueu’s land
>
> Kohala, by Wiliama Pekele’s [Beckley’s] land

Palea received this land in 1847 from Hueu. This is an old place on which Palea has lived since 1829. He is living there at the present time (Native Testimony Vol. 4:31).

Research for the proposed Waimea to Kawihae Highway resulted in the designation of the Lālāmilo *Kuleana* and Ranch District (Barrera and Kelly 1974). The district boundaries encompass a portion of the trail corridor.

C. Sandalwood and Pulu

The mountains surrounding Waimea were well-known for rich sandalwood reserves. During the early part of the 19th century, as contact with the West was growing, the extent of the sandalwood trade was evident as it became one of the earliest commodities of a newly formed market oriented economy.

Similar to the sandalwood trade, was the exploitation of *pulu*, the soft fiber gathered from the buds of the tree fern (Cibotium sp.).Pulu was used for stuffing pillows, mattresses, and furniture (Thrum 1929 in Erkelen 1998: 15). The *pulu* trade began in 1851, with shipments to the West Coast of North America and Australia. Like sandalwood, the over-exploitation of this resource also led to its demise. By 1860, the trade had virtually ended (Doyle 1945: 182).

D. Population Estimates

The general impression of the pre-contact settlement pattern, constructed from a variety of archaeological and early historical sources, is one of scattered settlements along Waikōloa Stream (Clark 1987: 103; Erkelens 1998: 11). During subsequent decades, with the arrival of western foreigners and missionaries, impressions of the life and landscape would be recorded for 19th-century Waimea. In 1823, Asa Thurston counted 220 houses in his walk through Waimea. In the section between ‘Ōuli and Pu‘u Kapu (a distance of approximately 4.8 km or 3 miles), this was interpreted as representing a population of 1,100 to 1,200 individuals (Ellis 1979:399 in Erkelens 1998: 11). Although the population was concentrated at Kea‘ali‘i (located along Wai‘aka Stream) at the time of Thurston’s visit, a settlement of 300 to 400 individuals near the present Waimea town is a reasonable estimate (Clark 1987: 103).

It was not, however, until the 1830's that a missionary would be stationed in northern Hawai‘i. On July 13, 1832, Lorenzo Lyons and his wife Betsy arrived at Kawaihae by brig from Honolulu to take up residence at Waimea. Lorenzo Lyons had a church and school (for adults) at Waimea in 1835, serving a congregation of from 100 to 500 Hawaiians. In his writings, Lyons stated:

> “During the past year I have taken a census of the population of this district and find it to be as follows: Waimea, 1,396; Kohala 6,175; Hamakua 4,015; total 11,586, from which it appears there has been a diminution of the people 3,500, within three and a half years. Marriages are numerous. But the progeny are wanting. Children are not in general, objects of desire. Taxes are in proportion to the number of children. My census may not be correct. Many think I am numbering them for the purpose of taxation, and conceal a part of their number.” [Doyle 1945:82-83]

E. Cattle Industry

An examination of the cattle industry in the Waimea area clearly shows its dominant role. The cattle industry, which eventually changed the economy and lifestyle of Waimea, had its origins in bullock hunting, which was controlled by Hawaiian chiefs. The initial increase in cattle population was aided by a ten year *kapu* placed on hunting or taking of cattle. Feral cattle multiplied rapidly and ran wild on the plains of Waimea. For some two to three decades after the lifting of the protective ban, bullock hunters were employed to hunt down the wild cattle and take them to a market.

In the 1830's, meat, hides, and tallow began to be marketed, and thus formed the true beginning of the cattle industry. By 1847, about two-thirds of Waimea area had been converted to pasture for government herds of cattle, as well as sheep and horses (Doyle 1945). By the middle of the 1800's the Waimea region was the center of the industry.

The cattle industry had two major impacts on Waimea. The first was the effect of marauding cattle on the unprepared Hawaiian farmer (Erkelens 1998:19). As early as 1802, there were complaints concerning the destruction of gardens by feral cattle (Turnbull 1813:243, in Barrera and Kelly 1974:44). In 1836, Waimea was surrounded by a stone wall to protect it from cattle (Baldwin and Lyons 1837).

The second major impact on Waimea was the increase in population as a result of economic opportunities provided by the cattle industry (Erkelens 1998:19). Bishop (Bishop 1828, in Erkelens 1998:19) reports that Kuakini’s arrival in Waimea marked the beginning of the cattle industry, as attendance at church services increased to approximately 1,000 individuals from a previous attendance of 200 (Bishop 1828; WMR 1832; Doyle 1945)

Following Kuakini’s construction of the road between Kawaihae and Waimea in 1830, ox carts were able to haul commercial items much more efficiently than was previously possible. Although missionary census records for the period from 1832 to 1845 suggest little overall change in the population of Waimea (approximately 1,000 individuals), there was undoubtedly a change in composition of the constituency, from predominantly Hawaiian to a mix of foreigners and Hawaiians.

F. Parker Ranch and the 20th Century

John Palmer Parker, an American born in Newton, Massachusetts in 1790, had intended a sailing career when he left home in 1809. After several years at sea, Parker arrived on Hawai‘i Island in 1815 and decided to remain there. By 1819, Parker had a Hawaiian *ali‘i* wife, Kipikane, and a baby daughter, Mary. Parker and his family went to live at Waiapuka in Kohala where he farmed on twenty-one acres that had been granted to him by Kamehameha. In this era, most of the ranch work consisted of capturing wild cattle and domesticating them. As the ranching industry expanded, so did responsibilities such as managing the many personnel of the Parker Ranch, building houses and growing food to feed all. Subsequently, Parker hired South American and Mexican horsemen to train his ranch hands to track, rope, brand, and bring in the wild cattle. These "*vaquero," "paniolo*," or "*espangno*l" not only introduced the management of cattle and horses, but also brought colorful clothes, hats, and saddles that became the mark of Hawaiian *paniolo*. The first Hawaiian *paniolo*, or cowboys, actually predate many of the mainland western cowboys. The ranch personnel also made most of their own gear and machinery, including saw mills.

In the last years of the 19th Century, Waimea remained a small town concentrating on the shipment of cattle to export markets. The Waimea of 1881, was graced with two stores, a boarding house, lodging house, and a coffee saloon (Bowser 1881:540). Even at this seemingly late date, wild cattle were occasionally a problem. In 1888, Paul Jarrett was the first to commence fencing Parker Ranch lands to segregate the domesticated from the wild cattle (Doyle 1904). The next Parker Ranch manager, A.W. Carter, (manager 1899-1936), consolidated all the Parker family land holdings under the control of his ward, Thelma Parker. A.W. Carter then began in earnest to increase ranch lands, systematically breed for better, stronger, healthier cattle and horse stock, bought a barge to ship cattle with other Big Island ranchers, increased ditches for watering livestock, and imported different grasses and feed for cattle. He provided the U.S. military branches with cavalry horses and ventured for a short time into training horses and horsemen for polo teams. Parker Ranch then became one of the major providers of horses in Hawai‘i and abroad for work, pleasure, and shows. A.W. Carter's son, A.H. Carter succeeded him in 1937. The Parker Ranch had become one of the biggest private businesses in Hawai‘i and remains the dominant economic force in Waimea.

Since the early 1900s Waimea has been part of a fast paced urbanization of the Big Island. After the World War II (late1940s-1950s) a small portion of land near South Kohala Distribution Road was use as a dump "and remnant pieces of disposed car parts and miscellaneous "junk" can be seen lying on the surface (personal communication, Woody Ramous in McGuire 2002). More recently new developments such as the Sandalwood Subdivision, the Waimea Center, Carter Professional Center, and the Canada France Hawaii Telescope have added to the growing town of Waimea.

In 1993 the W. M. Keck Observatory was placed on Mauna Kea. The headquarters resides in Waimea Town, south of the Waikōloa Stream and north of Mamalahoa Highway. Waimea continues to grow with further urbanization, though Parker Ranch remains a mainstay of the economy of the area.

IV. PREVIOUS ARCHAEOLOGICAL RESEARCH

A. Previous Studies

A number of archaeological investigations have been conducted in the general vicinity of the project area (Table 1, Figure 3). However, for the purpose of this report, only the studies conducted nearest to the proposed Waimea Trails and Greenways project area were reviewed in detail.

One of the most widely cited studies in this area was completed by Barrera and Kelly (1974). In 1973, the Bishop Museum conducted an archaeological survey and historical review for the proposed Waimea to Kawaihae Road corridor, during which over 4,500 archaeological features were identified, the majority of which were located either near the coast at Kawaihae or in the Lālāmilo area near Waimea.

Of particular interest are the sites located in upper Lālāmilo and upper Waikōloa, which are nearest to the current project area. Based on the survey results, Lālāmilo contains nearly 3,500 features (Barrerra and Kelly 1974). The study resulted in the designation of the "*Kuleana* and Ranch District" in the Lālāmilo portion of the project area (Ibid.) (Figure 4). This information is important as it indicates the high density of surface archaeology that one can expect to find in upper Lālāmilo near the project area. Sites have been described as being included in an extensive habitation and agricultural system. The findings were later expanded upon in 1981, when the Bishop Museum conducted a survey and excavation project along the Mudlane to Kawaihae Road right-of-way (Clark 1981; Clark and Kirch 1983). These feature complexes were then referred to as the Waimea agricultural system (Figure 5):

> The Waimea agricultural system comprises the remains of an extensive series of agricultural features, throughout which are scattered multiple residential structures. The system forms a large arc to the W and S of the present-day village of Waimea. Beginning on the S flank of Kohala Mountain, a short distance below Pu'u La'ela'e, this system extends down the slope and onto the Waimea plain W of town. It then bends to the E, fading out just S of Waimea and W of Kuhio Village (Clark and Kirch 1983: 293).

Excavations associated with the Mudlane to Kawaihae project resulted in a total of 45 charcoal samples undergoing radiocarbon analyses. Approximately 71% of the dates were post 1600 A.D. and considered relatively late (Clark and Kirch 1983). Additionally, the Mudlane to Kawaihae project yielded "evidence that the prehistoric and early historic inhabitants of the Waimea region practiced an intensive form of cultivation, utilizing what Clark has termed 'supplemental irrigation.'" This differs from the two classic forms of indigenous Hawaiian agriculture, irrigated pondfield cultivation and dryland field-system cultivation. (Ibid.: 528)

As a result of the information gained through the Mudlane to Kawaihae project, Clark went on to develop a settlement pattern model for the Kawaihae-Waimea region (Clark 1987) This settlement pattern included four zones: Coastal Zone, Intermediate Zone, Kula zone, and Wilderness zone. The current project area lies within the Kula Zone, described as follows:

Table 1 Previous Archaeological Studies in the Vicinity of the Project Area

Author (Date)	Location	Nature of Study	Findings
Barrera & Kelly (1974)	Waimea to Kawaihae Road Corridor;	Archaeological Reconnaissance Survey	Approx. 4,561 features were recorded incl. habitation and agricultural complexes. The majority were near coastal Kawaihae or in the Lālāmilo area near Waimea. Of particular interest is the area referred to as the "*kuleana* and ranch district."
Ching (1979)	Lālāmilo	Archaeological Reconnaissance Survey	Many archaeological features recorded incl. habitation and agricultural complexes.
Neller & Beggerly (1980)	Lālāmilo to Puʻukapua Irrigation System	Archaeological Reconnaissance Survey	No sites were present in or near the vicinity, although a few buildings were of historic interest.
Clark (1981)	Section 4 (Upland Lālāmilo) Mudlane-Waimea Kawaihae Road Corridor	Archaeological Inventory Survey and Data Recovery	321 sites, including both agricultural and residential features were identified. Extensive agricultural system divided into four complexes, each with its own characteristics.
Clark & Kirch (1983)	Mudlane-Waimea Kawaihae Road Corridor	Archaeological Inventory Survey and Data Recovery	Numerous sites identified, both agricultural and habitation. Project provided a broad data base for comparing site distribution data from the coast to upland.
Bonk (1985a)	Waikōloa, Puʻukapu, ʻŌuli	Archaeological Reconnaissance Survey	11 Sites including habitation and agricultural features
Bonk (1985b)	Waimea to Paʻauilo Watershed	Archaeological Reconnaissance Survey	Single archaeological site including 2 features
Rosendahl (1985)	Lālāmilo	Archaeological Reconnaissance Survey	No sites located
Hammatt & Borthwick (1986)	Lālāmilo Houselots Subdivision	Archaeological Reconnaissance Survey	8 sites including agricultural features and complexes typical of the Waimea Field System

Hammatt et al. (1988)	Lālāmilo Houselots Subdivision	Archaeological Inventory Survey w/ Subsurface Testing	Seven Archaeological sites recorded and limited subsurface excavation conducted. Both habitation and agricultural sites were documented.
Hammatt & Shideler (1989)	Lālāmilo,Ka La Loa Subdivision	Data Recovery	Data analysis suggested that the informal agricultural activity (represented in ag. mounds) were occurring by the mid 13th century, and field boundary walls were constructed by the mid-15th century, with permanent habitation occurring from early 16th century to the late 18th century.
Spencer (1989)	Lālāmilo, Waimea-Pa‘auilo Watershed	Archaeological Reconnaissance Survey	No cultural resources observed
Bonk (1989)	Wai‘aka	Archaeological Reconnaissance Survey	Contained “low mildly terraced field ridges” and “larger terraces with broader and flatter surfaces behind soil embankments.” Falls into field complex #1 (Clark 1981).
Clark et al. (1990)	Waikōloa, Waimea School Improvements	Archaeological Testing and Data Recovery	Profiles of 3 *‘auwai* suggest a historic period origin, prehistoric construction possible. Charcoal sample yielded an age range with preferred date range is A.D. 1449 to 1674
McEldowney (1991)	Pu‘ukapu pastoral lot #100	Field Check	stone complex of 2 enclosures
Thompson & Rosendahl (1992)	Potential Sites for North Hawaiʻi Community Hospital / Waimea Elderly Housing Project	Archaeological Inventory Survey	Backhoe testing of *‘auwai* features encountered charcoal samples which yielded radiocarbon dates as early as 770-1020 A.D.
Erkelens (1993)	Waimea Town Center Project	Review of Historical Documents and Background Literature	Review of the Waimea Town Center survey indicated that information previously gathered is incomplete for the project area. Not all archaeological sites and features are presently known.

Schilz (1994)	ʻŌuli	Archaeological Inventory Survey	Total of 75 sites recorded including 45 military sites, 14 ranching sites, 9 historic sites, and 7 traditional Hawaiian sites.
Franklin et al. (1994)	Hawaiʻi Preparatory Academy Waimea Campus Expansion	Archaeological Inventory Survey	7 sites associated with agriculture and habitation identified. The sites comprised the formal types: water channel, cemetery, terrace, concrete foundation, and alignment
Erkelens (1998)	The Kuleana Lots at Pukalani Waimea Town Center Project Area	Archaeological Inventory Survey w/ Subsurface Testing	Sites include 3 19th century house lots, historic cemetery, 4 historic structures, a burial. Skeletal remains of two individuals were encountered during subsurface testing.
Haun et al. (2002)	Lālāmilo, DHHL Residential Development	Archaeological Inventory Survey w/ Subsurface Testing	Identified 75 sites including 818 agricultural and habitation features. Radiocarbon dating indicated utilization as early as 1500s A.D.
McGuire and Haun (2002)	DHHL Residential Development at Lālāmilo South Kohala District	Cultural Impact Assessment	No on-going cultural practices identified
Kikiloi and Borthwick (2002)	Waimea Trails and Greenway Project	Archaeological Assessment	During the assessment they concluded that the trail corridor intersects a number of features, such as ʻ*auwai* and field walls and recommended an inventory survey.

Table 2 Field Complexes of the Waimea Agricultural System (per. Clark and Kirch 1983)

Field Complex	Location	Description
1	On the Kohala Slope, between Lanikepu and Haleʻaha Gluches, N of Keanuʻiʻomanō and Kohākōhau Streams	Upper elevation portion dominated by low, mildly terraced field ridges. Lower portion has larger, broad and flat terraces behind soil embankments. Water channels run down slope for drainage. Main channel of ʻ*auwai* diverted from Kohākōhau Stream.
2	Bounded on N by Keanuʻiʻomanō and Kohākōhau Streams, and on S by Waikōloa Stream	Low terraces with retaining faces or ridges of soil and/or stone. Long axes of fields oriented perpendicular to prevailing winds. Main channels of *ʻauwai* diverted from Kohākōhau Stream and drain into Waikōloa Stream. Residential features scattered

		throughout area.
3	Between Waikōloa Stream on the N and Puʻu Pā hill on the S.	Largest field complex. Both residential and agricultural features scattered throughout. Dominant agricultural features include: bounded field units; small planting swales; pondfields; ʻ*auwai*; minor planting features (mounds, small terraces, modified outcrops). Evidence of ʻsupplemental irrigationʼ system.
4	Directly S of the Village of Waimea	Long, narrow fields demarcated by low soil ridges. ʻ*Auwai* divert water from Waikōloa Stream. Also includes residential structures. Similar to Field Complex 3

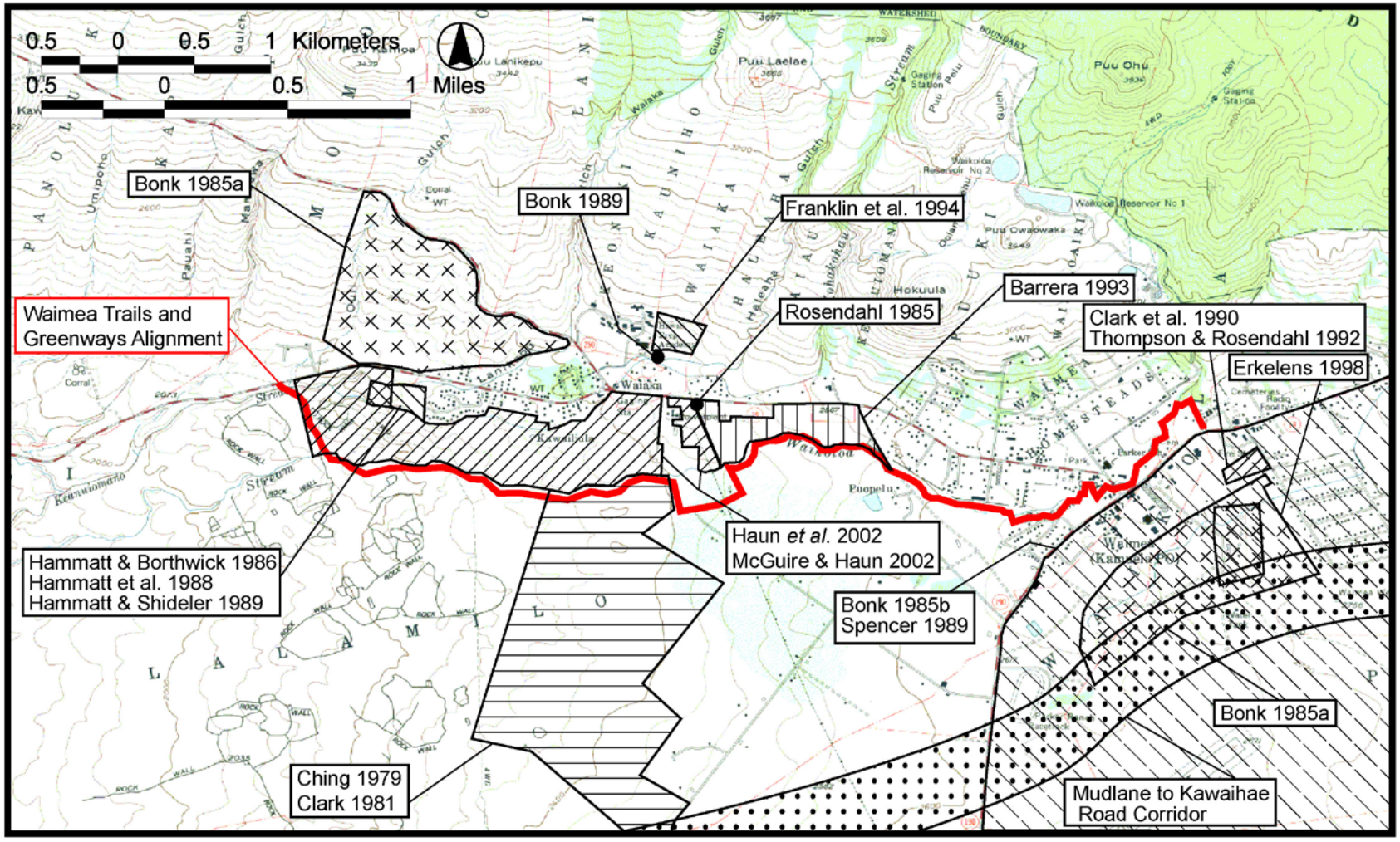

Figure 3 Previous Archaeological Studies in the Vicinity of the Project Area.

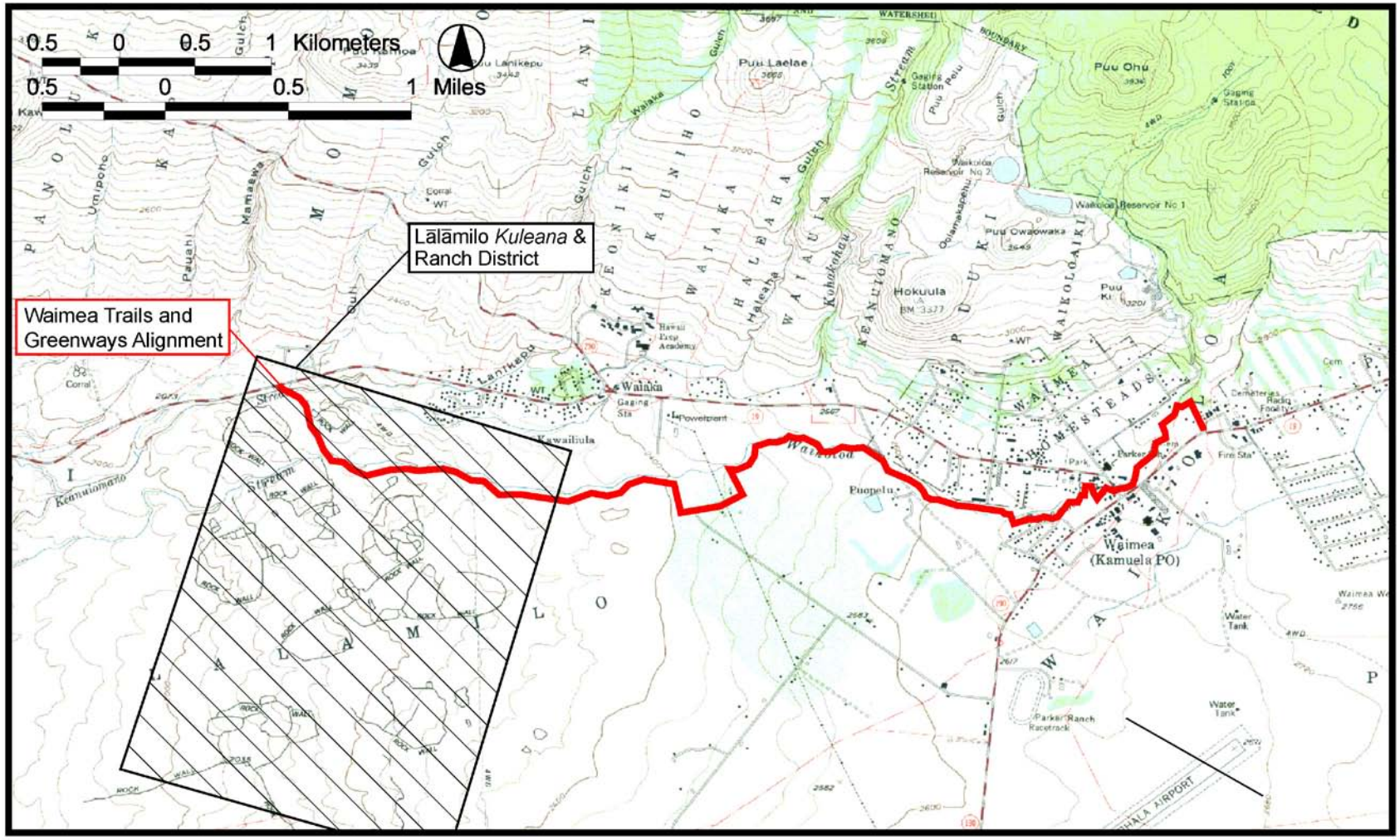

Figure 4 USGS Map Showing the Location of the *Kuleana* and Ranch District Designated by Barrera and Kelly (1974).

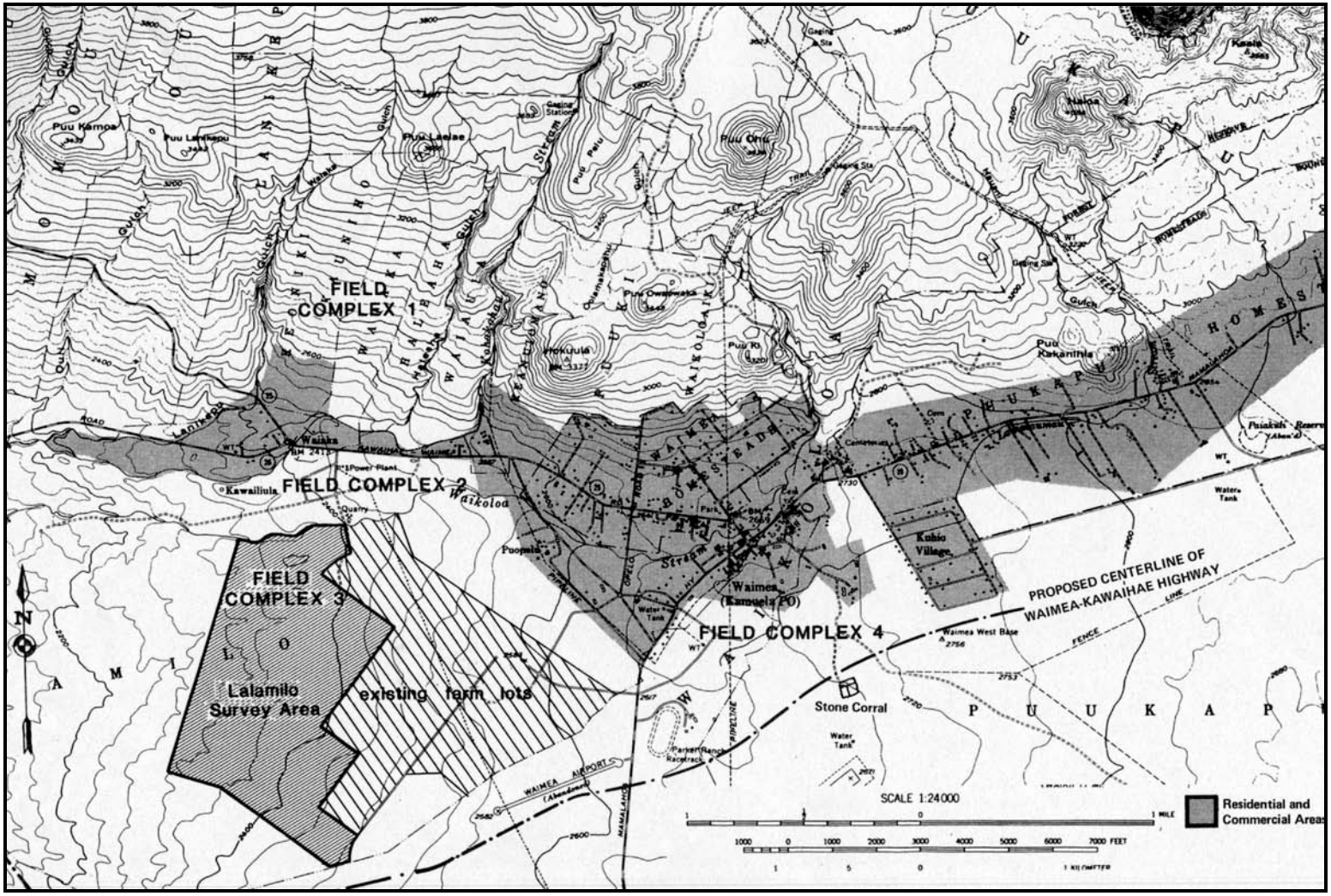

Figure 5 **Map Showing the Location of Field Complexes 1-4 of the Waimea Agricultural System, Lālāmilo Survey Area, and Existing Farm Lots (Clark and Kirch 1983) Note Field Complexes are General Areas and Do Not Have Definite Boundaries.**

> Extends from the Intermediate Zone to between 7.3 and 9.7 km inland. It ranges in elevation from 585 m to 830 m (1,919-2,722 ft) in elevation, with small sections extending to as much as 975 m (3,198 ft) elevation. Subsistence activity is dominated by agriculture…Crops included sweet potatoes, dry-land taro, gourds, and *wauke*. Habitation sites included single use sites, extended and recurrent occupations, and permanently occupied sites. Habitation features include small walled shelters, caves, overhangs, terraces, platforms, and enclosures. The more intensively occupied habitation sites are clustered in neighborhoods sometimes larger wards. Burial features are also present (Clark 1987).

In 1985, a reconnaissance survey of four parcels proposed for residential developments was completed (Bonk 1985a). Areas I and II of the survey, located south of Waimea Town, contained both agricultural and residential complexes (portions of Field Complex 4). Area IV, located west of Waiʻaka, contained several residential sites (portions of Field Complex 2). Also in 1985, a reconnaissance survey of three reservoir sites and a large watershed area extending from Waimea to Paʻauilo was conducted, in which both residential and agricultural features were located (portions of Field Complex 4) (Bonk 1985b).

In 1986, Cultural Surveys Hawaiʻi (Hammatt and Borthwick 1986) conducted an archaeological reconnaissance survey on approximately 50 acres located immediately north of Waikōloa Stream. Eight sites, typical of the Waimea Agricultural System, were located (portions of Field Complexes 1 and 2). This work was followed by a detailed archaeological survey and subsurface testing of 12 acres of the original study area (Hammatt et al. 1988). Seven sites were documented including both agricultural and habitation complexes. Excavations revealed an abundance of indigenous artifacts and *midden*, indicating "this small agricultural-habitation complex was in use in the late prehistoric period and was abandoned before European manufactured goods were available (probably 1820 or before)" (Hammatt et al. 1988:69) Data recovery of sites yielded radiocarbon dates which "suggest an initial low investment agricultural effort probably in sweet potato production, followed by a gradual intensification of effort just to the west over a period of several centuries" (Hammatt and Shideler 1989:50).

A reconnaissance survey of approximately 100 acres was conducted at Hawai**ʻ**i Preparatory Academy in Waiʻaka (Bonk 1989). Agricultural features associated with Field Complex 1 were located.

In 1990, an inventory survey with subsurface testing and data recovery was conducted at the Waimea School improvements Lot A (Clark et al. 1990). Various agricultural features were located (portions of Field Complex 4). Radiocarbon dating of charcoal recovered during subsurface testing yielded a date range of A.D. 1449 to 1674.

Thompson and Rosendahl (1992) conducted and an inventory survey of potential hospital sites in several locations around Waimea. Numerous agricultural features were located, comprising portions of Field Complexes 2-4.

Recent archaeological investigations in the Waimea Town Center project area have further documented 19th and early 20th century habitation and associated sites (Erkelens 1998). The

investigations included surface and sub-surface surveys. Five sites were identified, including house, burials, and agricultural sites (portions of Field Complex 4). All sites and materials observed were historic either from the mid 19th or early 20th century. The sub-surface investigations also indicted that extensive bulldozing had disturbed large areas of the 10+ acre parcel (Ibid.).

An archaeological inventory survey for a proposed DHHL residential development at Lālāmilo bordering the western portion of the proposed trail was completed in 2002 (Haun et al. 2002). During the inventory survey 75 sites with 818 features were identified and documented. Feature types included, agricultural, permanent and temporary habitation, burial, military defensive position, historic foundation, storage, and a quarry. Based on radiocarbon dating, artifact analyses, and historic documentary research, traditional Hawaiian utilization of the project area was posited to be as early as the 1500s and extending into the mid-1800s (Haun et al. 2002). The DHHL Development Survey area bordered portions of the proposed trail corridor. The proposed trail corridor west (*makai*) of the County Transfer Station would include similar site types.

A cultural impact assessment was also conducted for the same DHHL parcel (McGuire and Haun 2002). The assessment included a detailed background history and a single interview. No present-day cultural practices of any kind were identified though past cultural practices were discussed:

> Past cultural practices identified were related to agricultural practices and the utilization of an ancient *ʻauwai* or ditch system which traversed much of the Lālāmilo area. The project area is part of the larger Lālāmilo field system evidenced by remnant *ʻauwai* and dryland terraces. Hawaiian burial practices (pre-contact and historic) were conducted in the project area as evidenced by the presence of burials and graves sites (McGuire and Haun 2002:47).

An archaeological assessment was conducted for the Waimea Trails and Greenway Project (Kikiloi and Borthwick 2002). During the assessment they concluded that the trail corridor intersects a number of features, such as ʻ*auwai* and field walls. On the western end of the project there were site complexes associated with agriculture and habitation sites from pre-and-post contact eras (Barrera and Kelly 1974, Clark and Kirch 1983, Clark 1987). There are historic features previously documented such as the Imiʻola Church State Site #50-10-06-7151 and associated cemetery, the Spencer Cemetery, and a concrete ford with a date of 1943 suggesting a pre crossing clearly indicating World War II use. This assessment recommended that an archaeological inventory survey be carried out.

V. BACKGROUND OF *KAMA' ĀINA* INTERVIEWEES

Kama'āina and *kūpuna* with knowledge of the Waimea area were interviewed for this assessment. Four of the interviewees Melvin Hewett, Hisao Kimura, Alan Lindsey, and Lynn Taylor participated in formal interview sessions that were taped and transcribed.

Presented below are backgrounds of the four interviewees. Excerpts from the interviews are incorporated in Section VI TRADITONAL PRACTICES OF WAIMEA RELATIVE TO THE WAIKŌLOA STREAM.

MELVIN HEWETT

Mr. Hewett grew up in Waimanalo homestead on the Island of O'ahu. He later moved to the Island of Hawai'i and is currently a trustee for Parker Ranch. Mr. Hewett started with Parker Ranch in 1991. Mr. Hewett has been involved in long range planning (eg.Waimea 20/20) for Parker Ranch and is well aware of the many issues that go into good planning in the Waimea, Kohala region.

HISAO KIMURA

Hisao Kimura was born in a leap year so he is either 90 or 91 years of age. He attended Waimea School then went to work for Parker Ranch in 1931. Mr. Kimura was the supervising horticulturist for the nursery and responsible for planting and importing of grasses in the ranch paddocks and pastures. He retired from Parker Ranch in 1978.

ALAN LINDSEY

Alan Lindsey was born in 1931 and was raised in Māhukona. The Lindsey 'ohana goes back 6 generations in the Waimea area. He attended Kamehameha Schools in 1941. In 1948 was employed by Parker Ranch as a cowboy, he later became supervisor. He retired in 1988 from the ranch.

LYNN TAYLOR

Lynn Taylor moved to Waimea, Hawai'i in 1954 along with her husband James M. Taylor, the head master of Hawai'i Preparatory Academy (HPA). Mrs. Taylor started the elementary school for HPA. Mr. Taylor accepted a job in 1975 as head master at La Jardin in Kailua O'ahu, where they both moved for twenty years. Lynn Taylor now resides in Waimea and is involved in many community activities and organizations such as Waimea Outdoor Circle, and the Waimea Trail Committee.

VI. TRADITIONAL PRACTICES OF WAIMEA RELATIVE TO THE WAIKŌLOA STREAM

This project seeks to assess traditional cultural practices as well as resources along the trail way. This section will express the different types of traditional practices, cultural resources associated with Waimea. Excerpts from interviews are incorporated throughout this section where applicable.

A. Gathering for Plant Resources

No specific documentation was found in regards to gathering of plants along Waikōloa Stream. However, Mr. Lindsey mentioned that there was a lot of plants near the stream "There was a lot of '*ilima* before …It used to be all the '*olena* and use to have the *poha*" .Mr Lindsey also mentioned he used the root of the *kowali* (morning glory) plant to heal the broken bones of his dogs. He would pound the root with Hawaiian salt place it in the *ti* leaf and apply it on the dogs wound. Other long time residents Mr. Kimura and Mrs. Taylor indicated that they remember the banks of the stream as just low pasture grasses and that the vegetation adjacent to the stream now is relatively recent (ie post 1960). The majority of vegetation present now are invasive imports. During this assessment, there were no current practices related to traditional gathering rights identified.

B. Gathering Resources from the Waikōloa Stream

No specific documentation was found in regards to gathering for subsistence from the stream. From the *kama' āina* interviewees Alan Lindsey expressed his knowledge of the different types of riparian resources in the stream such as tilapia and '*ōpae:*

> They have the shrimps. The '*ōpae*, but you have to get them with the net that they cannot see, if they see that net they swim some place else. So you know how we used to catch them, you know the oranges used to come in the orange bag or the potatoes bags, they get the orange or green bags. What we do we put them underneath where the *'ōpae* going come down and hook them up with ropes catch these 2 sides. And then when they drop inside they cannot go through because it is just like a net, like a strainer, like when you mix your poi, same thing. It is orange or green that they cannot see when they drop down it is too late they are in the bag already. Then all they do is take them home and boil them and you get fresh '*ōpae*. If you put a white bag there they move somewhere else. I think up there still get yet, but I don't know if anybody go up.

Other interviewees mentioned the absence of people fishing and gathering from the stream. Long time resident and Parker Ranch employee H. Kimura who was the ranches' horticulturalist did not recall anyone 'fishing', other than kids just having fun. Based on informant information there was limited varieties of plants and fish in the stream and that the precious resources was the water.

C. Historic Properties

Imi‘ola Church and an associated cemetery are located at the eastern terminus of the trail. The church is on the State and National Register of Historic Places and has been allotted State Site # 50-10-06-7151. Relatively close by on Mamalahoa Highway is the Spencer Family Cemetery.

The proposed trail intersects a number of agricultural features, such as, ‘*auwai* and field walls *makai* (west) of the County Transfer Station adjacent to the DHHL property. Other site types in that area include, house sites and burials. The area *makai* of the transfer station has been altered far less than the urban core of Waimea. The area is referred to as a portion of the ‘Waimea Agricultural System’ and the ‘Lālāmilo *Kuleana* Ranch District’ (Barrera and Kelly 1974). Site types include late prehistoric to historic agricultural features, consisting of modified outcrops, mounds, terraces, field boundaries and irrigation ditches (‘*auwai*). During the archaeological assessment a number of concrete fords and remnant structures related to a pipeline crossing were observed within and along the banks of Waikōloa Stream.

D. Burials

No specific documentation was found regarding ‘*iwi* in the project area. However, there are church (ie Imi‘ola) and family cemeteries (ie Spencer Family) within the Waimea Town area. When asked about burials along the stream Mr. Lindsey mentioned “No not in that area because all what is up on the ranch Mānā all the burials are in their own cemetery, Parker Ranch got their own cemetery, they have their own family in there”. Previously undocumented burials and possible burial sites were documented *makai* (west) of the County Transfer Station (Haun et al. 2002) in areas through which the trail is planned. Additionally, south of the Waikōloa Stream in the ‘*ili* of Pukalani two unmarked burials were encountered (Erkelens 1998).

E. Trails

None of the interviewees mentioned any historic trails that could be affected by the proposed trail.

Based on late 19th and 20th century maps the primary transportation routes *mauka/makai* correlate closely to the existing major roadways. The primary transportation route the Waimea-Kawaihae Road is north of the proposed trail. The Hawi Mountain Road intersects the Waimea/Kawaihae road at Wai‘aka near HPA also north of the proposed trail corridor. Mamalahoa Highway (and its predecessor) enters Waimea Town south of the proposed trail corridor. The proposed trail corridor will have certain access points to existing transportation corridors. The informants indicated that they had no knowledge of any historic trails that might be affected by the proposed greenway trail.

F. Nā Mea ‘*Uhane*

There are some things in life that people just can’t explain, things not seen or heard but felt deep in your *na‘au* (gut). Alan Lindsey mentioned the “calling tree” a tree that has strong spiritual powers:

> ….You know by Kohala Estates, you go right across that banyan tree. You know what they call that banyan tree? The "calling tree", when they used to take cattle down in the morning, I used to get up at twelve at night, one o'clock we used to meet at the Ranch Restaurant, eat our breakfast. That banyan tree calls people and some guys…sometimes they go straight for the banyan tree, we say, "where you going?" They hear voices, that are the dead, that is the old Hawaiian dead people, and sometimes you can hear them, they call. But you know I am not afraid of that kind of stuff see because my dad never did make me scared. That is why I could ride any bucking horse and everything. I used to ride bucking bull. …They say it's a "calling tree". But I don't believe in that, the only guy that can call me is the heavenly father, then I go to that tree. It is all superstition.

A few of the interviewees mentioned a "Rain Rock" which is located north of the project area. Alan Lindsey stated that this "rain stone" was down by Anna's Ranch and people used to believe in it. Mr. Kimura (HK) mentioned that people would pray on this rock for rain:

HK: …we have the famous well known "Rain Rock" that the Hawaiians have told us to respect and worship.

CSH: Oh, the rain rock!

HK: On the *ma uka* side.

CSH: Kind of by Anna Perry Fiskes old place.

HK: That's right. You could lie on it.

CSH: Did it rain?

HK: Sometime you got to believe, yeah.

CSH: What is the story that they used to tell you about that rock?

HK: Well…whenever you need….every so often we get slight drought season and sometimes more severe than others then we go there *pule*.

…..

HK: My family (father worked for Parker Ranch) lived in the ranch house with a water tank. Water was collected from the roof of the house. Neighbors came and helped them whenever there was a severe drought. We shared this water, when condition-weather was dry.

CSH: They were catching water on the water tank? Or was it still piped in from the stream?

HK: Yeah, water tank. Catchments, from your roof and it accumulates because we use it only on severe drought.

CSH: So all the individual houses had their own individual pipeline in the stream?

HK: From the stream, The County Water Department would see that homes be supplied by piped in water system and each home-the source of the water is form the running water. Yeah. So what we used for a strainer was the Bull Durham bag, everybody had Bull Durham, everyone smokes Bull Durham.

CSH: Put the bag at the end of the pipe.

HK: You collect all of that. You would be surprised.

G. Climate Changes in Waimea

As we sat and talked with different people from the community regarding Waikōloa Stream, many were concerned that occasionally the stream ran dry. In fact, the *kama'āinas* mentioned that it doesn't rain as much as it once did. Cattle ranching has played a large part in deforestation which has resulted in less rainfall. Complicating the situation is the tapping and redirecting of streams which has reduced the water flow in a number of streams.

In 1856 the Waimea community was concerned about water issues and how it would affect their community in the future. With the introduction of cattle and the clearing of the forest there was less of an orographic precipitation process. (Orographic Precipitation- precipitation caused by the lifting of moist air over a mountain barrier).

> It is in the memory of many foreigners now living there, when the whole of these plains were covered with a thick wood, to the very edge of the slope. Where hardly a tree is to be seen for miles, we were informed by an old resident, that twenty-five years ago he lost himself with his team in the weeds. He also stated that at that time there was far more rain at Waimea than there is now, which indeed might be readily inferred, as clearing the land has been almost entirely effected by the cattle. The few head brought by Vancouver in 1793 increased so rapidly, that early in the present century thousands of them were killed for their hides. At this moment they swarm in the thick jungle that covers the windward or eastern slopes towards Hamakua. They are now gradually destroying this, and thousands of old dead trees both standing upright and lying prostrate, from the present boundary of these woods, and exhibit the mode in which the destruction is effected; for whilst the old trees die of age, no young ones are seen taking their places, as during the last thirty or forty years, the cattle have eaten or trodden them down.
>
> At the present time the vapors and rain which are brought across the plain by the trade winds, area generally dissipated between Waimea village and Lihue, which latter place is something under a mile nearer the brow of the hill, and it is quite usual to notice that at Lihue the weather is fine and the sun shining, whilst at Waimea it is wet, raw and misty. This spot where the vapors now commonly terminate, is three or four miles from the debatable ground between the two winds before alluded to. (Sandwhich Islands monthly Magazine, February 1856:44-47 in Barrera and Kelly 1974)

Further in the early 1900's Alfred Carter, of Parker Ranch, filed a petition against the Territory of Hawaii for wrongfully diverting water from the Waikōloa Stream. The residents of Waimea used the stream for basic normal household usage and for pasture lands. It was not used for large scale irrigation system. In the days of traditional farming Waimea was known for it's famous *Kipu'upu'u* rains, only at times did the fields need irrigation. This was acknowledged the by the Supreme Court:

> The evidence is to the effect that there were a very few *lois* of *taro* in the locality in questions. It was shown that the Hawaiians habitually raised in their house-lots dry land taro, bananas and vegetables as well as sugar cane which they cultivated for human consumption as well as for food for their animals. And it is a fair inference from the evidence that the ditch system at Waimea was constructed from the purpose of supplying water to the inhabitants for household purposes and for the irrigation, when the natural rainfall was insufficient, of their cops (Hawaiian Reports Vol. 24: in McGuire and Haun 2002).

In 1917 the case was appealed and the Hawai'i State Supreme Court maintained their decision that the Territory owned all the waters of Waikōloa stream, and that the waters were "subject to reasonable use" by both the Territory and the petitioner (Hawaiian Reports Vol. 24: in McGuire and Haun 2002).

Lynn Taylor observed more of a water flow between 1954-1974 and has a theory of why it rains less:

> Most local inhabitants will tell you that it rains less now then formerly, and I think this is true. I do have a theory that the clouds, which have been built up by the trade winds blowing across the Pacific, are no longer almost constantly seeded by the moisture rising from the plunging waterfalls and streams which aren't there, so they often blow away without dropping their precious rain.

In support of Mrs. Taylor's theory there is an article in the Journal of Geophysical Research, they state that "Numerous studies with general circulation models suggest that tropical deforestation can result in regional-scale climate change, namely increased air temperature and wind speed and reduced precipitation and relative humidity".(Hoffmann, WA, W Schroeder, RB Jackson. 2003).

All the informants mentioned water resources, or lack there of, as one of Waimea's primary concerns. None of those interviewed, however, felt that the proposed trail would adversely affect stream resources.

VII. SUMMARY AND RECOMMENDATIONS

Summary

Based on background studies much of the project area has been urbanized to such an extent that no surface historic properties exist, except for concrete and boulder stream crossing structures. However the area *makai* of the county transfer station has been slightly altered and contains complexes associated with agriculture and habitation sites from the pre-and post-contact eras. The trail corridor intersects a number of features, such as ‘*auwai*, and field walls. The area includes a wide array of site types including documented burial sites.

A cultural impact assessment of an approximately 266.4 acres of the DHHL property west of the County Transfer Station documented numerous historic properties. The consultation process included a single knowledgeable individual who indicated that there were no on going cultural practices. It was noted that past cultural practices were evident by remnants of ‘*auwai* and dryland terraces, as well as presence of burials and graves sites (McGuire and Haun 2002:47).

This cultural impact assessment did not identify any cultural practitioners or any on going practices within the project area.

There were some concerns the community had regarding the project corridor. The stream should be kept clear of any brush to reduce any overflow during a high volume periods. Second, safety of residents who live along the proposed trail. Melvin Hewett expressed his concern stating that “I think from our (Parker Ranch) standpoint, security, and people not wandering right into the homes is the biggest concern”. The area that Mr. Hewett is referring to is Parker Ranch’s “Heritage Area” which includes Pu‘u Opelu the home of Richard Smarts estate. However all of the interviewees expressed the opinion that the trail was a good community based project.

Recommendations

Based on the above findings, it is recommended that no further formal cultural impact mitigations measures are warranted. However, informants wanted the consultation process to continue through the build-out phase of the project.

It should be noted, however, that historic properties associated with former traditional Hawaiian activities in the project area, such as artifacts, cultural layers, and burials may be present despite the decades of cattle ranching and associated activities in the area west (*maka*i) of the county transfer station.

It is our understanding that Waimea is a very close and family oriented community. Thus we feel that it would be educational to have some interpretive themes for the proposed trail corridor. Themes referenced by the informants included history, legends, and how the environment has changed water resources of the Waimea area.

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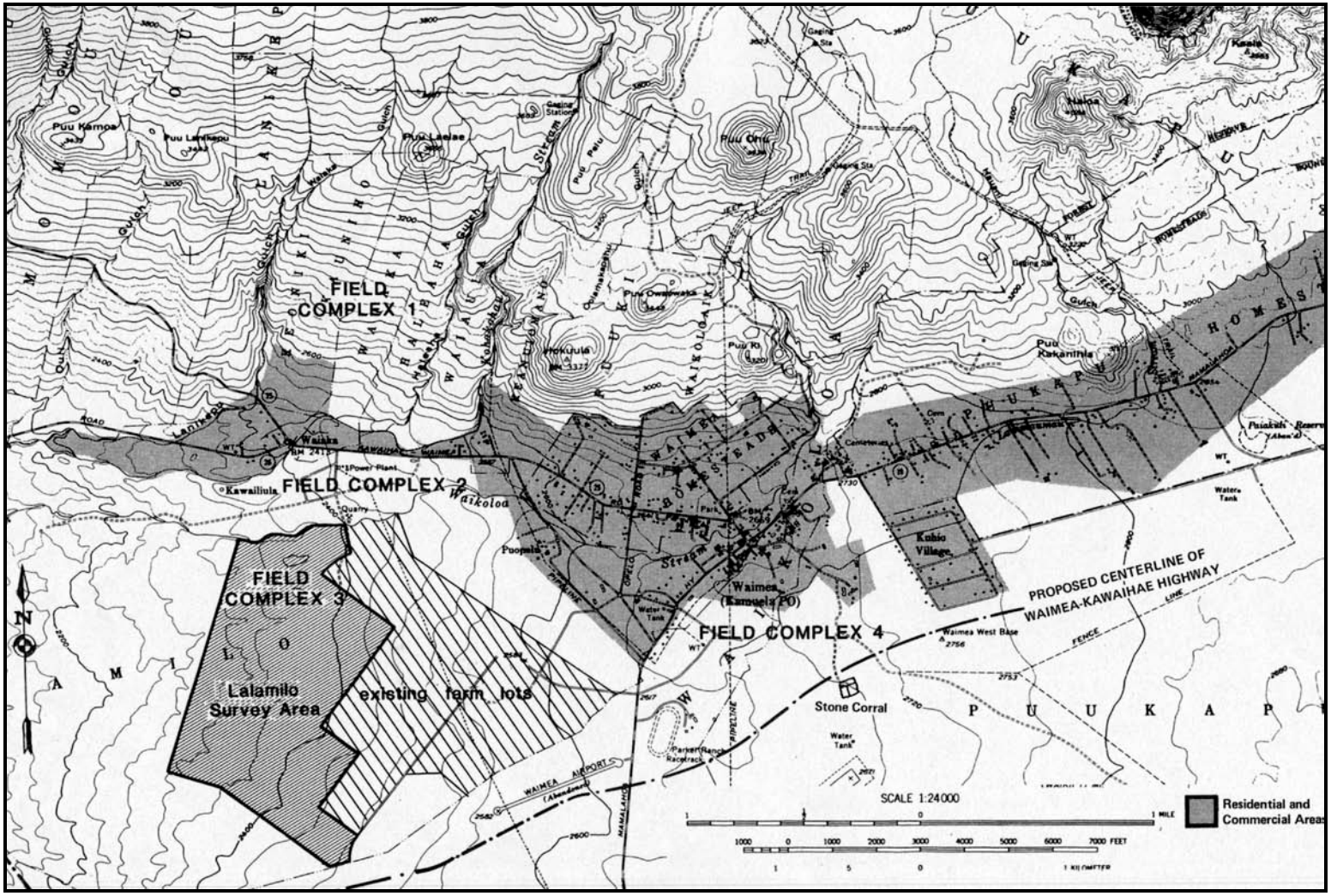

Figure 5 **Map Showing the Location of Field Complexes 1-4 of the Waimea Agricultural System, Lālāmilo Survey Area, and Existing Farm Lots (Clark and Kirch 1983) Note Field Complexes are General Areas and Do Not Have Definite Boundaries.**

> Extends from the Intermediate Zone to between 7.3 and 9.7 km inland. It ranges in elevation from 585 m to 830 m (1,919-2,722 ft) in elevation, with small sections extending to as much as 975 m (3,198 ft) elevation. Subsistence activity is dominated by agriculture…Crops included sweet potatoes, dry-land taro, gourds, and *wauke*. Habitation sites included single use sites, extended and recurrent occupations, and permanently occupied sites. Habitation features include small walled shelters, caves, overhangs, terraces, platforms, and enclosures. The more intensively occupied habitation sites are clustered in neighborhoods sometimes larger wards. Burial features are also present (Clark 1987).

In 1985, a reconnaissance survey of four parcels proposed for residential developments was completed (Bonk 1985a). Areas I and II of the survey, located south of Waimea Town, contained both agricultural and residential complexes (portions of Field Complex 4). Area IV, located west of Waiʻaka, contained several residential sites (portions of Field Complex 2). Also in 1985, a reconnaissance survey of three reservoir sites and a large watershed area extending from Waimea to Paʻauilo was conducted, in which both residential and agricultural features were located (portions of Field Complex 4) (Bonk 1985b).

In 1986, Cultural Surveys Hawaiʻi (Hammatt and Borthwick 1986) conducted an archaeological reconnaissance survey on approximately 50 acres located immediately north of Waikōloa Stream. Eight sites, typical of the Waimea Agricultural System, were located (portions of Field Complexes 1 and 2). This work was followed by a detailed archaeological survey and subsurface testing of 12 acres of the original study area (Hammatt et al. 1988). Seven sites were documented including both agricultural and habitation complexes. Excavations revealed an abundance of indigenous artifacts and *midden*, indicating "this small agricultural-habitation complex was in use in the late prehistoric period and was abandoned before European manufactured goods were available (probably 1820 or before)" (Hammatt et al. 1988:69) Data recovery of sites yielded radiocarbon dates which "suggest an initial low investment agricultural effort probably in sweet potato production, followed by a gradual intensification of effort just to the west over a period of several centuries" (Hammatt and Shideler 1989:50).

A reconnaissance survey of approximately 100 acres was conducted at Hawai**ʻ**i Preparatory Academy in Waiʻaka (Bonk 1989). Agricultural features associated with Field Complex 1 were located.

In 1990, an inventory survey with subsurface testing and data recovery was conducted at the Waimea School improvements Lot A (Clark et al. 1990). Various agricultural features were located (portions of Field Complex 4). Radiocarbon dating of charcoal recovered during subsurface testing yielded a date range of A.D. 1449 to 1674.

Thompson and Rosendahl (1992) conducted and an inventory survey of potential hospital sites in several locations around Waimea. Numerous agricultural features were located, comprising portions of Field Complexes 2-4.

Recent archaeological investigations in the Waimea Town Center project area have further documented 19th and early 20th century habitation and associated sites (Erkelens 1998). The

investigations included surface and sub-surface surveys. Five sites were identified, including house, burials, and agricultural sites (portions of Field Complex 4). All sites and materials observed were historic either from the mid 19th or early 20th century. The sub-surface investigations also indicted that extensive bulldozing had disturbed large areas of the 10+ acre parcel (Ibid.).

An archaeological inventory survey for a proposed DHHL residential development at Lālāmilo bordering the western portion of the proposed trail was completed in 2002 (Haun et al. 2002). During the inventory survey 75 sites with 818 features were identified and documented. Feature types included, agricultural, permanent and temporary habitation, burial, military defensive position, historic foundation, storage, and a quarry. Based on radiocarbon dating, artifact analyses, and historic documentary research, traditional Hawaiian utilization of the project area was posited to be as early as the 1500s and extending into the mid-1800s (Haun et al. 2002). The DHHL Development Survey area bordered portions of the proposed trail corridor. The proposed trail corridor west (*makai*) of the County Transfer Station would include similar site types.

A cultural impact assessment was also conducted for the same DHHL parcel (McGuire and Haun 2002). The assessment included a detailed background history and a single interview. No present-day cultural practices of any kind were identified though past cultural practices were discussed:

> Past cultural practices identified were related to agricultural practices and the utilization of an ancient *ʻauwai* or ditch system which traversed much of the Lālāmilo area. The project area is part of the larger Lālāmilo field system evidenced by remnant *ʻauwai* and dryland terraces. Hawaiian burial practices (pre-contact and historic) were conducted in the project area as evidenced by the presence of burials and graves sites (McGuire and Haun 2002:47).

An archaeological assessment was conducted for the Waimea Trails and Greenway Project (Kikiloi and Borthwick 2002). During the assessment they concluded that the trail corridor intersects a number of features, such as ʻ*auwai* and field walls. On the western end of the project there were site complexes associated with agriculture and habitation sites from pre-and-post contact eras (Barrera and Kelly 1974, Clark and Kirch 1983, Clark 1987). There are historic features previously documented such as the Imiʻola Church State Site #50-10-06-7151 and associated cemetery, the Spencer Cemetery, and a concrete ford with a date of 1943 suggesting a pre crossing clearly indicating World War II use. This assessment recommended that an archaeological inventory survey be carried out.

V. BACKGROUND OF *KAMA' ĀINA* INTERVIEWEES

Kama'āina and *kūpuna* with knowledge of the Waimea area were interviewed for this assessment. Four of the interviewees Melvin Hewett, Hisao Kimura, Alan Lindsey, and Lynn Taylor participated in formal interview sessions that were taped and transcribed.

Presented below are backgrounds of the four interviewees. Excerpts from the interviews are incorporated in Section VI TRADITONAL PRACTICES OF WAIMEA RELATIVE TO THE WAIKŌLOA STREAM.

MELVIN HEWETT

Mr. Hewett grew up in Waimanalo homestead on the Island of O'ahu. He later moved to the Island of Hawai'i and is currently a trustee for Parker Ranch. Mr. Hewett started with Parker Ranch in 1991. Mr. Hewett has been involved in long range planning (eg.Waimea 20/20) for Parker Ranch and is well aware of the many issues that go into good planning in the Waimea, Kohala region.

HISAO KIMURA

Hisao Kimura was born in a leap year so he is either 90 or 91 years of age. He attended Waimea School then went to work for Parker Ranch in 1931. Mr. Kimura was the supervising horticulturist for the nursery and responsible for planting and importing of grasses in the ranch paddocks and pastures. He retired from Parker Ranch in 1978.

ALAN LINDSEY

Alan Lindsey was born in 1931 and was raised in Māhukona. The Lindsey 'ohana goes back 6 generations in the Waimea area. He attended Kamehameha Schools in 1941. In 1948 was employed by Parker Ranch as a cowboy, he later became supervisor. He retired in 1988 from the ranch.

LYNN TAYLOR

Lynn Taylor moved to Waimea, Hawai'i in 1954 along with her husband James M. Taylor, the head master of Hawai'i Preparatory Academy (HPA). Mrs. Taylor started the elementary school for HPA. Mr. Taylor accepted a job in 1975 as head master at La Jardin in Kailua O'ahu, where they both moved for twenty years. Lynn Taylor now resides in Waimea and is involved in many community activities and organizations such as Waimea Outdoor Circle, and the Waimea Trail Committee.

VI. TRADITIONAL PRACTICES OF WAIMEA RELATIVE TO THE WAIKŌLOA STREAM

This project seeks to assess traditional cultural practices as well as resources along the trail way. This section will express the different types of traditional practices, cultural resources associated with Waimea. Excerpts from interviews are incorporated throughout this section where applicable.

A. Gathering for Plant Resources

No specific documentation was found in regards to gathering of plants along Waikōloa Stream. However, Mr. Lindsey mentioned that there was a lot of plants near the stream "There was a lot of '*ilima* before …It used to be all the '*olena* and use to have the *poha*" .Mr Lindsey also mentioned he used the root of the *kowali* (morning glory) plant to heal the broken bones of his dogs. He would pound the root with Hawaiian salt place it in the *ti* leaf and apply it on the dogs wound. Other long time residents Mr. Kimura and Mrs. Taylor indicated that they remember the banks of the stream as just low pasture grasses and that the vegetation adjacent to the stream now is relatively recent (ie post 1960). The majority of vegetation present now are invasive imports. During this assessment, there were no current practices related to traditional gathering rights identified.

B. Gathering Resources from the Waikōloa Stream

No specific documentation was found in regards to gathering for subsistence from the stream. From the *kama' āina* interviewees Alan Lindsey expressed his knowledge of the different types of riparian resources in the stream such as tilapia and '*ōpae:*

> They have the shrimps. The '*ōpae*, but you have to get them with the net that they cannot see, if they see that net they swim some place else. So you know how we used to catch them, you know the oranges used to come in the orange bag or the potatoes bags, they get the orange or green bags. What we do we put them underneath where the *'ōpae* going come down and hook them up with ropes catch these 2 sides. And then when they drop inside they cannot go through because it is just like a net, like a strainer, like when you mix your poi, same thing. It is orange or green that they cannot see when they drop down it is too late they are in the bag already. Then all they do is take them home and boil them and you get fresh '*ōpae*. If you put a white bag there they move somewhere else. I think up there still get yet, but I don't know if anybody go up.

Other interviewees mentioned the absence of people fishing and gathering from the stream. Long time resident and Parker Ranch employee H. Kimura who was the ranches' horticulturalist did not recall anyone 'fishing', other than kids just having fun. Based on informant information there was limited varieties of plants and fish in the stream and that the precious resources was the water.

C. Historic Properties

Imi‘ola Church and an associated cemetery are located at the eastern terminus of the trail. The church is on the State and National Register of Historic Places and has been allotted State Site # 50-10-06-7151. Relatively close by on Mamalahoa Highway is the Spencer Family Cemetery.

The proposed trail intersects a number of agricultural features, such as, ‘*auwai* and field walls *makai* (west) of the County Transfer Station adjacent to the DHHL property. Other site types in that area include, house sites and burials. The area *makai* of the transfer station has been altered far less than the urban core of Waimea. The area is referred to as a portion of the ‘Waimea Agricultural System’ and the ‘Lālāmilo *Kuleana* Ranch District’ (Barrera and Kelly 1974). Site types include late prehistoric to historic agricultural features, consisting of modified outcrops, mounds, terraces, field boundaries and irrigation ditches (‘*auwai*). During the archaeological assessment a number of concrete fords and remnant structures related to a pipeline crossing were observed within and along the banks of Waikōloa Stream.

D. Burials

No specific documentation was found regarding ‘*iwi* in the project area. However, there are church (ie Imi‘ola) and family cemeteries (ie Spencer Family) within the Waimea Town area. When asked about burials along the stream Mr. Lindsey mentioned “No not in that area because all what is up on the ranch Mānā all the burials are in their own cemetery, Parker Ranch got their own cemetery, they have their own family in there”. Previously undocumented burials and possible burial sites were documented *makai* (west) of the County Transfer Station (Haun et al. 2002) in areas through which the trail is planned. Additionally, south of the Waikōloa Stream in the ‘*ili* of Pukalani two unmarked burials were encountered (Erkelens 1998).

E. Trails

None of the interviewees mentioned any historic trails that could be affected by the proposed trail.

Based on late 19th and 20th century maps the primary transportation routes *mauka/makai* correlate closely to the existing major roadways. The primary transportation route the Waimea-Kawaihae Road is north of the proposed trail. The Hawi Mountain Road intersects the Waimea/Kawaihae road at Wai‘aka near HPA also north of the proposed trail corridor. Mamalahoa Highway (and its predecessor) enters Waimea Town south of the proposed trail corridor. The proposed trail corridor will have certain access points to existing transportation corridors. The informants indicated that they had no knowledge of any historic trails that might be affected by the proposed greenway trail.

F. Nā Mea ‘*Uhane*

There are some things in life that people just can’t explain, things not seen or heard but felt deep in your *na‘au* (gut). Alan Lindsey mentioned the “calling tree” a tree that has strong spiritual powers:

> ….You know by Kohala Estates, you go right across that banyan tree. You know what they call that banyan tree? The "calling tree", when they used to take cattle down in the morning, I used to get up at twelve at night, one o'clock we used to meet at the Ranch Restaurant, eat our breakfast. That banyan tree calls people and some guys…sometimes they go straight for the banyan tree, we say, "where you going?" They hear voices, that are the dead, that is the old Hawaiian dead people, and sometimes you can hear them, they call. But you know I am not afraid of that kind of stuff see because my dad never did make me scared. That is why I could ride any bucking horse and everything. I used to ride bucking bull. …They say it's a "calling tree". But I don't believe in that, the only guy that can call me is the heavenly father, then I go to that tree. It is all superstition.

A few of the interviewees mentioned a "Rain Rock" which is located north of the project area. Alan Lindsey stated that this "rain stone" was down by Anna's Ranch and people used to believe in it. Mr. Kimura (HK) mentioned that people would pray on this rock for rain:

HK: …we have the famous well known "Rain Rock" that the Hawaiians have told us to respect and worship.

CSH: Oh, the rain rock!

HK: On the *ma uka* side.

CSH: Kind of by Anna Perry Fiskes old place.

HK: That's right. You could lie on it.

CSH: Did it rain?

HK: Sometime you got to believe, yeah.

CSH: What is the story that they used to tell you about that rock?

HK: Well…whenever you need….every so often we get slight drought season and sometimes more severe than others then we go there *pule*.

…..

HK: My family (father worked for Parker Ranch) lived in the ranch house with a water tank. Water was collected from the roof of the house. Neighbors came and helped them whenever there was a severe drought. We shared this water, when condition-weather was dry.

CSH: They were catching water on the water tank? Or was it still piped in from the stream?

HK: Yeah, water tank. Catchments, from your roof and it accumulates because we use it only on severe drought.

CSH: So all the individual houses had their own individual pipeline in the stream?

HK: From the stream, The County Water Department would see that homes be supplied by piped in water system and each home-the source of the water is form the running water. Yeah. So what we used for a strainer was the Bull Durham bag, everybody had Bull Durham, everyone smokes Bull Durham.

CSH: Put the bag at the end of the pipe.

HK: You collect all of that. You would be surprised.

G. Climate Changes in Waimea

As we sat and talked with different people from the community regarding Waikōloa Stream, many were concerned that occasionally the stream ran dry. In fact, the *kama'āinas* mentioned that it doesn't rain as much as it once did. Cattle ranching has played a large part in deforestation which has resulted in less rainfall. Complicating the situation is the tapping and redirecting of streams which has reduced the water flow in a number of streams.

In 1856 the Waimea community was concerned about water issues and how it would affect their community in the future. With the introduction of cattle and the clearing of the forest there was less of an orographic precipitation process. (Orographic Precipitation- precipitation caused by the lifting of moist air over a mountain barrier).

> It is in the memory of many foreigners now living there, when the whole of these plains were covered with a thick wood, to the very edge of the slope. Where hardly a tree is to be seen for miles, we were informed by an old resident, that twenty-five years ago he lost himself with his team in the weeds. He also stated that at that time there was far more rain at Waimea than there is now, which indeed might be readily inferred, as clearing the land has been almost entirely effected by the cattle. The few head brought by Vancouver in 1793 increased so rapidly, that early in the present century thousands of them were killed for their hides. At this moment they swarm in the thick jungle that covers the windward or eastern slopes towards Hamakua. They are now gradually destroying this, and thousands of old dead trees both standing upright and lying prostrate, from the present boundary of these woods, and exhibit the mode in which the destruction is effected; for whilst the old trees die of age, no young ones are seen taking their places, as during the last thirty or forty years, the cattle have eaten or trodden them down.
>
> At the present time the vapors and rain which are brought across the plain by the trade winds, area generally dissipated between Waimea village and Lihue, which latter place is something under a mile nearer the brow of the hill, and it is quite usual to notice that at Lihue the weather is fine and the sun shining, whilst at Waimea it is wet, raw and misty. This spot where the vapors now commonly terminate, is three or four miles from the debatable ground between the two winds before alluded to. (Sandwhich Islands monthly Magazine, February 1856:44-47 in Barrera and Kelly 1974)

Further in the early 1900's Alfred Carter, of Parker Ranch, filed a petition against the Territory of Hawaii for wrongfully diverting water from the Waikōloa Stream. The residents of Waimea used the stream for basic normal household usage and for pasture lands. It was not used for large scale irrigation system. In the days of traditional farming Waimea was known for it's famous *Kipu'upu'u* rains, only at times did the fields need irrigation. This was acknowledged the by the Supreme Court:

> The evidence is to the effect that there were a very few *lois* of *taro* in the locality in questions. It was shown that the Hawaiians habitually raised in their house-lots dry land taro, bananas and vegetables as well as sugar cane which they cultivated for human consumption as well as for food for their animals. And it is a fair inference from the evidence that the ditch system at Waimea was constructed from the purpose of supplying water to the inhabitants for household purposes and for the irrigation, when the natural rainfall was insufficient, of their cops (Hawaiian Reports Vol. 24: in McGuire and Haun 2002).

In 1917 the case was appealed and the Hawai'i State Supreme Court maintained their decision that the Territory owned all the waters of Waikōloa stream, and that the waters were "subject to reasonable use" by both the Territory and the petitioner (Hawaiian Reports Vol. 24: in McGuire and Haun 2002).

Lynn Taylor observed more of a water flow between 1954-1974 and has a theory of why it rains less:

> Most local inhabitants will tell you that it rains less now then formerly, and I think this is true. I do have a theory that the clouds, which have been built up by the trade winds blowing across the Pacific, are no longer almost constantly seeded by the moisture rising from the plunging waterfalls and streams which aren't there, so they often blow away without dropping their precious rain.

In support of Mrs. Taylor's theory there is an article in the Journal of Geophysical Research, they state that "Numerous studies with general circulation models suggest that tropical deforestation can result in regional-scale climate change, namely increased air temperature and wind speed and reduced precipitation and relative humidity".(Hoffmann, WA, W Schroeder, RB Jackson. 2003).

All the informants mentioned water resources, or lack there of, as one of Waimea's primary concerns. None of those interviewed, however, felt that the proposed trail would adversely affect stream resources.

VII. SUMMARY AND RECOMMENDATIONS

Summary

Based on background studies much of the project area has been urbanized to such an extent that no surface historic properties exist, except for concrete and boulder stream crossing structures. However the area *makai* of the county transfer station has been slightly altered and contains complexes associated with agriculture and habitation sites from the pre-and post-contact eras. The trail corridor intersects a number of features, such as ‘*auwai*, and field walls. The area includes a wide array of site types including documented burial sites.

A cultural impact assessment of an approximately 266.4 acres of the DHHL property west of the County Transfer Station documented numerous historic properties. The consultation process included a single knowledgeable individual who indicated that there were no on going cultural practices. It was noted that past cultural practices were evident by remnants of ‘*auwai* and dryland terraces, as well as presence of burials and graves sites (McGuire and Haun 2002:47).

This cultural impact assessment did not identify any cultural practitioners or any on going practices within the project area.

There were some concerns the community had regarding the project corridor. The stream should be kept clear of any brush to reduce any overflow during a high volume periods. Second, safety of residents who live along the proposed trail. Melvin Hewett expressed his concern stating that “I think from our (Parker Ranch) standpoint, security, and people not wandering right into the homes is the biggest concern”. The area that Mr. Hewett is referring to is Parker Ranch’s “Heritage Area” which includes Pu‘u Opelu the home of Richard Smarts estate. However all of the interviewees expressed the opinion that the trail was a good community based project.

Recommendations

Based on the above findings, it is recommended that no further formal cultural impact mitigations measures are warranted. However, informants wanted the consultation process to continue through the build-out phase of the project.

It should be noted, however, that historic properties associated with former traditional Hawaiian activities in the project area, such as artifacts, cultural layers, and burials may be present despite the decades of cattle ranching and associated activities in the area west (*maka*i) of the county transfer station.

It is our understanding that Waimea is a very close and family oriented community. Thus we feel that it would be educational to have some interpretive themes for the proposed trail corridor. Themes referenced by the informants included history, legends, and how the environment has changed water resources of the Waimea area.

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Thompson, L. and P. Rosendahl
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Appendix G
Section 106, National Historic Preservation Act Consultation

U.S. Department of Transportation
Federal Highway Administration

Hawaii Federal-Aid Division

300 Ala Moana Blvd., Rm 3-306
Box 50206
Honolulu, HI 96850
Phone: (808) 541-2700
Fax: (808) 541-2704
http://www.fhwa.dot.gov/hidiv

December 22, 2010

In Reply Refer To:
HDA-HI

CERTIFIED MAIL
7010 1060 0000 9538 1201

Dr. Pua Aiu, Administrator
State Historic Preservation Division
Kākuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawai`i 96707

Dear Dr. Aiu:

Subject: Section 106, National Historic Preservation Act Consultation
Ke Ala Kahawai O Waimea, Waimea Trails and Greenways
Waimea, South Kohala District, Hawai'i Island
Various TMKs

The Federal Highway Administration (FHWA), in cooperation with the County of Hawai'i, is initiating consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA) and the Advisory Council on Historic Preservation's regulations for Protection of Historic Properties (36 CFR Part 800) for a proposed undertaking that may affect historic properties.

Ke Ala Kahawai O Waimea ("the stream trail of Waimea") will be a multi-use bicycle and pedestrian path extending approximately 6.4 miles through Waimea on the Island of Hawai'i. The trail is proposed by the County of Hawai'i, Department of Parks and Recreation (DPR) in collaboration with the Waimea Trails and Greenways Committee of the Waimea Preservation Association. A Draft Environmental Assessment (DEA) is currently being prepared for the project in accordance with the Federal National Environmental Policy Act (NEPA) and the State of Hawai'i's Chapter 343 HRS environmental regulations.

The purpose of this letter is to request your agency's input regarding any issues or historic properties with religious or cultural significance that may be affected by this undertaking. We are also seeking names of other organizations or individuals who should be contacted as part of this Section 106 consultation process.

Purpose and Need for Project

A major objective of *Ke Ala Kahakai O Waimea* is to provide an alternative form of transportation that will link major destination points including residential areas, schools, office and commercial areas, and recreational areas. The streamside multi-use path will also provide recreational and fitness opportunities and enhance natural, open space areas which can be enjoyed by all segments of the community.

As part of the NEPA environmental process, a number of alternative alignments were considered, including segments located mauka of Kawaihae Road. However, the preferred alignment which follows Waikoloa Stream was found to be superior in meeting the project's purpose and need with minimal environmental impacts.

Project Description

Ke Ala Kahakai O Waimea will be a shared use path extending approximately 4.5 miles through Waimea, through urban and agricultural lands. The path begins at Church Row in Waimea Town, moves west following the meandering course of Waikoloa Stream, and ends at a future county park (former Clark property) opposite the South Kohala View Estates subdivision. The path will be paved, 10 to 12 feet in width and accessible to pedestrians, bicyclists, and other non-motorized vehicles. It is intended that the path will comply with Americans with Disabilities Act (ADA) guidelines for outdoor areas for the majority of its length.

Development of *Ke Ala Kahawai O Waimea* may be implemented by the DPR or through joint efforts with other County, State or Federal agencies, or community groups. Because of its length, the project will be constructed in phases or increments, as shown in the attached Figure. Increment 1, which is currently in design, encompasses the segment between Lindsey Road and Kahawai Street. Subsequent increments will be developed as funding becomes available and as required easements are secured.

The project also includes an option for a separate, dedicated equestrian trail in the area west of the County refuse transfer station. The equestrian trail would roughly parallel, but be physically separated from the main shared use path. If an equestrian trail were built, a trail head and horse trailer parking could be constructed on State-owned land adjacent to the County Transfer station. From this point, the equestrian trail could head west on State land, where there is sufficient land for it to be safely separated from the main path.

The Area of Potential Effect (APE)

For purposes of Section 106, the Area of Potential Effect (APE) is defined as the entire path alignment following Waikoloa Stream, as well as existing road segments that will provide access to the path. The road segments, including sections of Opelo Road, Kahawai Street, and South Kohala Distribution Road, will not be modified, but will be signed and serve as designated connecting points to *Ke Ala Kahawai O Waimea.*

In the area west of the County Refuse Transfer Station, the APE encompasses a corridor up to 200 feet wide, since it may include a separate equestrian trail in addition to the main bicycle and pedestrian shared use path.

Historic Properties within the APE

A number of archaeological and historic surveys have been completed within the APE. These include a literature review and field inspection of the entire alignment between the South Kohala View Estates and Church Row conducted in 2000 (Cultural Surveys Hawai'i, Kikiloi et al. 2002, an inventory survey of the 1.1 mile Increment 1 (Cultural Surveys Hawai'i, Yucha et al. 2009), and an updated literature review and field inspection (Cultural Surveys Hawai'i, 2010). The findings are discussed below.

2002 Literature Review and Field Inspection

This literature review and field inspection consisted of a pedestrian inspection of a route which roughly corresponds to the currently proposed *Ke Ala Kahawai O Waimea* alignment. The inspected area was divided into five different sections based on terrain type, degree of urbanization, and the potential for cultural resources. The study found that most of the area has been urbanized to such an extent that no surface historic properties exist, except for concrete and boulder stream crossing structures. One section in the western portion contained historic property complexes associated with agriculture and habitation from the pre- and post-contact eras. The APE intersected a number of features such as 'auwai, and field walls. Because the corridor was not staked, a precise inventory of possibly affected historic properties and features was not possible. The study recommended that an inventory survey investigation of the final, staked alignment be conducted.

2009 Archaeological Inventory Survey, Increment 1

In 2009, Cultural Surveys Hawai'i conducted an archaeological inventory survey of an 8.96-acre portion of the APE, representing Increment 1 of the project. This section measured approximately 1.1 miles in length, and is located at the eastern end of the preferred alignment, between Kahawai Street and Lindsey Road.

A complete pedestrian survey identified three historic properties consisting of four features within or adjacent to the 8.96 project area along Waikoloa Stream. These historic properties consisted of a collapsed and severely damaged concrete ford or bridge (SIHP #-26871, Feature A), a remnant portion of paved road (SIHP #-26871, Feature B), an earthen ditch segment (SIHP # -26872), and an intact concrete ford and adjoining roadway (SIHP # -26873).

The collapsed ford and paved road were determined to be WWII-era constructions associated with Camp Tarawa. The irrigation ditch was determined to be a remnant portion of a mid-19th century irrigation ditch used for irrigating sugar cane fields. Both the collapsed ford and irrigation ditch would not be adversely affected by the proposed project, but were recommended for preservation in the form of avoidance and protection. No further work was recommended for the other two properties.

2010 Literature Review and Field Inspection

An updated literature review and field inspection was conducted by Cultural Surveys Hawai'i in 2010. The purpose of this study was to confirm the findings of the earlier 2002 study, and to investigate the signed, shared roadway sections and possible equestrian trail which were not included in the earlier (2002) study. The 2010 study also discussed the alternative alignments that were evaluated as part of the NEPA process, but which have subsequently been dismissed in favor of the preferred alignment.

The 2010 study reiterated the earlier recommendation for an archaeological inventory survey as the various increments of the trail are implemented and a staked alignment is available. This will ensure that historic properties are accurately located in relation to the alignment. No further work is recommended for Increment 1, where an inventory survey has already been completed.

Input is Requested

We are seeking your agency's input on historic or cultural resources as part of the Section 106, NHPA consultation process. We also ask for the names of other organizations or individuals who should be consulted as part of this process.

Please transmit your comments to us ***within 30 days upon receipt of this letter.*** If you need additional review time or would like additional information, please contact Mr. Pat Phung at (808) 541-2305. Thank you for your assistance.

Sincerely,

Pat V. Phung, P.E.
Lead Civil Engineer

Enclosure

FHWA Letterhead

(date)

Dear:

Subject: Section 106, National Historic Preservation Act Consultation
Ke Ala Kahawai O Waimea, Waimea Trails and Greenways
Waimea, South Kohala District, Hawai‘i Island
Various TMKs

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Please transmit your comments to us ***within 30 days upon receipt of this letter.*** If you need additional review time or would like additional information, please contact Mr. Pat Phung at (808) 541-2305. Thank you for your assistance.

Sincerely,

Pat V. Phung, P.E.

Lead Civil Engineer

Enclosures

By certified mail

Cc: Mr. Bob Fitzgerald, County of Hawai‘i Department of Parks and Recreation
Mr. Glenn Kimura, Kimura International, Inc

Waimea Trails and Greenways
Section 106 NHPA Contact List
Revised 11/30/2010

Government Agencies

Dr. Pua Aiu, Administrator
State Historic Preservation Division
Kākuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawai`i 96707

Mr. Dan Quinn, Administrator
State of Hawai'i
Department of Land and Natural Resources
State Parks Division
P.O. Box 621
Honolulu, Hawai'i 96809

Mr. Aric Arakaki
Ala Kahakai National Historic Trail
National Park Service
73-4786 Kanalani Street, #14
Kailua-Kona, HI 96740

Mr. Clyde Namuo
State of Hawaii
Office of Hawaiian Affairs
711 Kapiolani Boulevard
Honolulu, Hawaii 96813

Hawaii Island Burial Council
c/o SHPD Hawaii Island Office
40 Pookela Street
Hilo, Hawaii 96720

Mr. Leningrad Elarionoff, Member
Hawaii Island Burial Council
P.O. Box 1737
Kamuela, Hawaii 96734
Phone: 885-1895

Mr. Charles Young, Vice Chair
Hawaii Island Burial Council
P.O. Box 505
Honaunau, HI 96726

Organizations/Registered NHOs

Mr. Kiersten Faulkner, Executive Director
Historic Hawai'i Foundation
P.O. Box 1658
Honolulu, Hawai'i 96806

Hui Malama I Na Kupuna O Hawai'i Nei
Honorable Edward Halealoha Ayau
622 Wainaku Ave.
Hilo, HI 96720
Email: halealoha@wave.hicv.net
(per CSH, send e-mail only)

Mr. Isaac Harp
P.O. Box 437338
Kamuela, HI 96743
885-8540 (hm)
345-6085 (cell)
Imua-hawaii@hawaii.rr.com

Ku'ulei Keakealani, Director
Kaupulehu Cultural Center at Kalaemano
P.O. Box 6043
Kamuela, HI 96743

Mr. Samuel A. "Bunny" Kahanamoku
P.O. Box 2158
Kamuela, HI 96743

Hui Ho'oniho
c/o Honorable Edward Halealoha Ayau
622 Wainaku Ave.
Hilo, HI 96720

Hawaiian Civic Club of Hilo
Mr. Arthur Hoke
P.O. Box 543
Hilo, HI 96721

The I Mua Group
Mr. Melvin Soon
422 Iliaina Street
Kailua, HI 96734

Hui Kakoʻo ʻAina Hoʻopulapula
767 Kailua Road
Kailua, HI 96734

Hawaii Maoli
Mr. Henry Gomes
P.O. Box 1135
Honolulu, HI 96807

Royal Hawaiian Academy of Traditional Arts
Mr. L. Suganuma
835 Ahuwale Street
Honolulu, HI 96821

Na Kuʻauhau ʻo Kahiwakaneikopolei
H. Kanoeokalani Cheek
P.O. Box 5411
Kaneohe, HI 96744

Maluʻohai Residents Association
Ms. Shirley Swinney
P.O. Box 700911
Kapolei, HI 96707

The Friends of ʻIolani Palace
Kippen de Alba Chu
P.O. Box 2259
Honolulu, HI 96804

Papa Ola Lokahi
Ms. Vivian Ainoa
894 Queen Street
Honolulu, HI 96813

Council for Native Hawaiian Advancement
Mr. Robyn Danner
1050 Queen Street
Honolulu, HI 96814

Native Hawaiian Economic Alliance
Ms. Vickie Smith
1050 Queen Street
Honolulu, HI 96814

Mr. Keoni Kealoha Alvarez
RR3 Box 1043
Pahoa, HI 96778

Other WTG Project Stakeholders

Pastor Dean T. Kauka
Imiloa Congregational Church
65-1084 Mamalahoa Highway
Kamuela, HI 96743

Waimea Hawaiian Homesteaders Association
PO BOX 6753
Kamuela, HI 96743

Puukapu Homesteaders??
(address)
(address)

Mr. Keith Wallis
E Mau Na Ala Hele
P.O. Box 6384
Kamuela, HI 96743

Mr. Brandi K. Beaudet
Parker Ranch, Inc.
67-1435 Mamalahoa Highway
Kamuela, HI 96743

Ms. Taffi Wise
Kanu O Ka Aina Learning Ohana
P.O. Box 6511
Kamuela, HI 96743

Dr. Billy Bergin
Paniolo Preservation Society
P.O. Box 640
Kamuela, HI 96743

Mr. Bill Sanborn
Waimea Preservation Association
P.O. Box 1892
Kamuela, HI 96734

Ms. Mabel Tolentino
Waimea Hawaiian Civic Club
P.O. Box 6305
Kamuela, HI 96743

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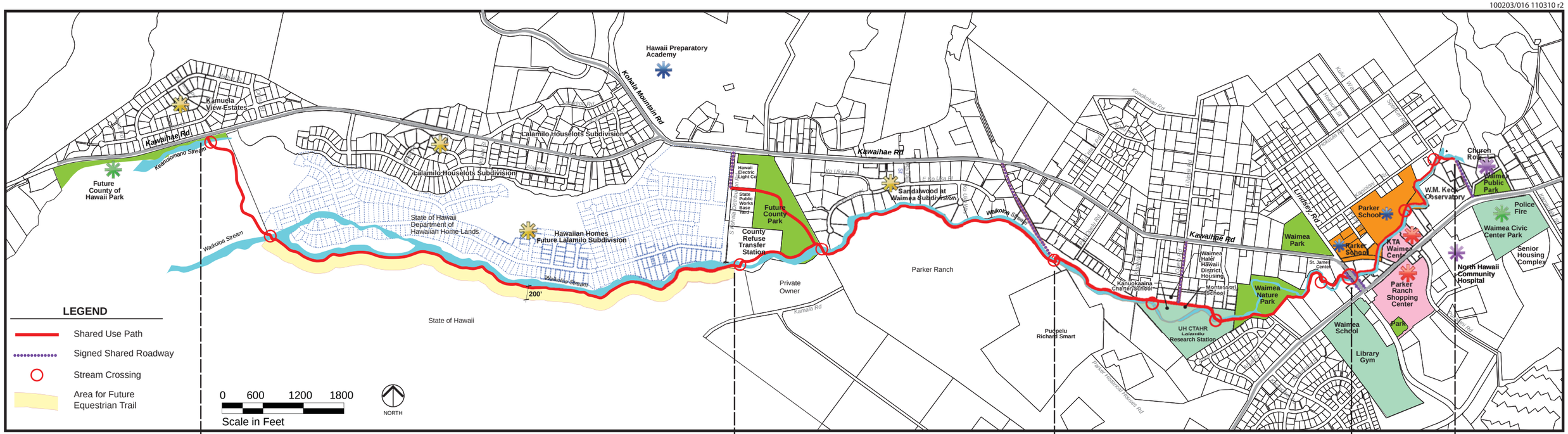
Hawaii Preparatory Academy
Kohala Mountain Rd
Kawaihae Rd
Kamuela View Estates
Kawaihae Rd
Kawaihae Stream
Future County of Hawaii Park
Lalamilo Houselots Subdivision
Lalamilo Houselots Subdivision
State of Hawaii Department of Hawaiian Home Lands
Hawaiian Homes Future Lalamilo Subdivision
Waikoloa Stream
Waikoloa Stream
200'
State of Hawaii
Hawaii Electric Light Co
State Public Works Base Yard
Future County Park
County Refuse Transfer Station
Private Owner
Sandalwood at Waimea Subdivision
Ko Lika Lane
Ko Lika Pl
Waikoloa Stream
Parker Ranch
Kamalla Rd
Pucpelu Richard Smart
Kawaihae Rd
Waimea Park
Waimea Hale Hawaii District Housing
Kanuokaaina Charter School
Montessori School
St. James Cemetery
Waimea Nature Park
UH CTAHR Lalamilo Research Station
Parker School
Parker School
KTA Waimea Center
Parker Ranch Shopping Center
Park
Waimea School
Library Gym
Lindsey Rd
Church Row
Waimea Public Park
W.M. Keck Observatory
Police Fire
Waimea Civic Center Park
Senior Housing Complex
North Hawaii Community Hospital
Kawaihae Rd
Korealohai Rd
Kaiholena Rd
Kaiholena Pl
Kaiholena Cir
Kaiholena Way
Kaiholena Loop
Kaiholena Pl
Kaiholena Rd

PHONE (808) 594-1888 FAX (808) 594-1865

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

HRD11/5496

January 21, 2011

Pat V. Phung, Lead Civil Engineer
Federal Highway Administration- Hawai'i Division
300 Ala Moana Boulevard, Room 3-306
Honolulu, Hawai'i 96850

Re: National Historic Preservation Act Section 106 Consultation
Ke Ala Kahawai o Waimea Project
Waimea, Island of Hawai'i

Aloha e Mr. Phung,

The Office of Hawaiian Affairs (OHA) is in receipt of your December 22, 2010 letter initiating consultation pursuant to Section 106 of the National Historic Preservation Act of 1966 as amended for the proposed construction of "Ke Ala Kahawai o Waimea" (undertaking), a shared use path (path) extending approximately 4.5 miles through Waimea on the Island of Hawai'i. The path will comply with Americans with Disabilities Act guidelines and will be paved 10-12 feet wide to facilitate access by pedestrians, bicyclists and non-motorized vehicles. The undertaking will be completed in four increments, with the first (depicted in the attachment of your letter) being completed initially and subsequent increments completed as funding becomes available and required easements secured. The later increments (3 and 4) include an option for a dedicated equestrian trail (trail) which would be constructed parallel, but be separated from the path.

Although the path will be completed in increments within an unknown timeframe, we see this Section 106 consultation process as being for the overall undertaking and hope it will be completed prior to construction of "Increment 1" of the path beginning. We understand that because the use of federal funds and State of Hawai'i and County of Hawai'i lands and funds are proposed compliance documents (documents) are being prepared pursuant to the requirements of the National Environmental Policy Act and Chapter 343, Hawaii Revised Statutes. We anticipate the opportunity to reviewing these documents separately and look forward to commenting on them.

You have preliminarily determined the area of potential effect (APE) for this undertaking to be the entire 4.5 mile path alignment, existing road segments which will provide access to the path and in areas where the trail proposed- a larger corridor approximately 200 feet wide. Existing road segments will not be modified as they will only serve as connecting points to the

path. We believe your preliminary APE determination is appropriate at this time and we look forward to a formal determination as undertaking planning and design is finalized.

At this juncture, you are requesting input from consulting parties on historic properties or cultural sites which may be situated within the APE and recommendations on other organizations and individuals who may be willing to participate in the Section 106 consultation process for this undertaking.

OHA believes that unmarked burials may be encountered during undertaking activities along the entire length of the path and seek assurances that applicable laws will be implemented should burials be inadvertently discovered. We do have specific concerns relative to the western increment of the path, where the APE widens to accommodate the proposed trail. Numerous archaeological studies and investigations have occurred in this vicinity through the years, but two immediately come to mind: the first is the archaeological investigations conducted by the Bishop Museum for the proposed Mudlane-Waimea-Kawaihae road corridor circa 1983 and the second is a more recent archaeological study conducted for the Department of Hawaiian Home Lands residential subdivision in Lālāmilo.

While the exact relationship between the areas covered by the above mentioned investigation and survey and the APE are unknown to us at this time, we do know that numerous historic properties and cultural sites, including burials were identified and advocate that this be considered as you are completing your review.

We recommend consultation with the following groups and individuals we may be willing to share their thoughts on historic properties and cultural sites within the APE with you: the Waimea Hawaiian Civic Club, Kanu o Ka 'Āina School, individuals with an association with Parker Ranch and Mr. Leningrad Elarionoff. Please remember that this list is not all encompassing and we are sure additional groups and individuals will be identified as you move forward with your consultation process. We also note that there are certain individuals who may be especially concerned with the area where the path is proposed to terminate at its western end. Generally known by the name "Lihu'e", we are aware that certain traditions also identify smaller areas known as "Pupua" or "Papua" and "Wawa'a" or "Wa'a'wa'a" in this specific location. We respectfully suggest you keep this in mind during your consultation process.

Thank you for providing an opportunity to comment and we look forward to continuing consultation with you and all other parties. Should you have any questions or concerns, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Chief Executive Officer

C: Robert K. Lindsey, Jr.- OHA Trustee, Hawai'i Island
William Aila, Jr.- State of Hawai'i Historic Preservation Officer
Dr. Pua Aiu, Administrator- State Historic Preservation Division

U.S. Department of Transportation
Federal Highway Administration

Hawaii Federal-Aid Division

300 Ala Moana Blvd., Rm 3-306
Box 50206
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Fax: (808) 541-2704
http://www.fhwa.dot.gov/hidiv

May 18, 2011

In Reply Refer To:
HDA-HI

CERTIFIED MAIL
7010 2780 0000 5798 0552

Dr. Pua Aiu, Administrator
State Historic Preservation Division
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawai'i 96707

Dear Dr. Aiu:

Subject: Section 106, National Historic Preservation Act Consultation
Ke Ala Kahawai O Waimea, Waimea Trails and Greenways
Waimea, South Kohala District, Hawai'i Island, Various TMKs

This is a follow-up to an earlier letter dated December 22, 2010 regarding Section 106 consultation in accordance with the National Historic Preservation Act (NHPA) for the above-referenced project. The December 22nd letter was sent to you via certified mail.

As noted previously, the County of Hawai'i, in collaboration with the Waimea Trails and Greenways Committee of the Waimea Preservation Association, is proposing to construct *Ke Ala Kahawai O Waimea* ("the stream trail of Waimea"), a multi-use bicycle and pedestrian path, 4.8 miles in length through Waimea on the Island of Hawai'i. A Draft Environmental Assessment (DEA) was prepared in accordance with the Federal National Environmental Policy Act (NEPA) and the State of Hawai'i's Chapter 343 HRS environmental regulations, and underwent a 30-day public review period.

As part of the Section 106 process, the Federal Highway Administration (FHWA) requested input from your agency, as well as a number of other native Hawaiian organizations and individuals. Comments were requested within 30 days. Only one comment letter, from the Office of Hawaiian Affairs, was received and is enclosed for your information.

The FHWA seeks the SHPO's concurrence in writing with the NHPA Section 106 determination of "no adverse effect" on historic properties. If we do not hear from you within 30 days, we will proceed with this determination.

If you have any questions, please contact me at (808) 541-2305. Thank you for all your assistance.

Sincerely,

Pat V. Phung, P.E.
Lead Civil Engineer

Enclosure

cc: Mr. Bob Fitzgerald, County of Hawai'i Department of Parks and Recreation
Mr. Glenn Kimura, Kimura International, Inc

PHONE (808) 594-1888 FAX (808) 594-1865

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

HRD11/5496

January 21, 2011

Pat V. Phung, Lead Civil Engineer
Federal Highway Administration- Hawai'i Division
300 Ala Moana Boulevard, Room 3-306
Honolulu, Hawai'i 96850

Re: National Historic Preservation Act Section 106 Consultation
Ke Ala Kahawai o Waimea Project
Waimea, Island of Hawai'i

Aloha e Mr. Phung,

The Office of Hawaiian Affairs (OHA) is in receipt of your December 22, 2010 letter initiating consultation pursuant to Section 106 of the National Historic Preservation Act of 1966 as amended for the proposed construction of "Ke Ala Kahawai o Waimea" (undertaking), a shared use path (path) extending approximately 4.5 miles through Waimea on the Island of Hawai'i. The path will comply with Americans with Disabilities Act guidelines and will be paved 10-12 feet wide to facilitate access by pedestrians, bicyclists and non-motorized vehicles. The undertaking will be completed in four increments, with the first (depicted in the attachment of your letter) being completed initially and subsequent increments completed as funding becomes available and required easements secured. The later increments (3 and 4) include an option for a dedicated equestrian trail (trail) which would be constructed parallel, but be separated from the path.

Although the path will be completed in increments within an unknown timeframe, we see this Section 106 consultation process as being for the overall undertaking and hope it will be completed prior to construction of "Increment 1" of the path beginning. We understand that because the use of federal funds and State of Hawai'i and County of Hawai'i lands and funds are proposed compliance documents (documents) are being prepared pursuant to the requirements of the National Environmental Policy Act and Chapter 343, Hawaii Revised Statutes. We anticipate the opportunity to reviewing these documents separately and look forward to commenting on them.

You have preliminarily determined the area of potential effect (APE) for this undertaking to be the entire 4.5 mile path alignment, existing road segments which will provide access to the path and in areas where the trail proposed- a larger corridor approximately 200 feet wide. Existing road segments will not be modified as they will only serve as connecting points to the

path. We believe your preliminary APE determination is appropriate at this time and we look forward to a formal determination as undertaking planning and design is finalized.

At this juncture, you are requesting input from consulting parties on historic properties or cultural sites which may be situated within the APE and recommendations on other organizations and individuals who may be willing to participate in the Section 106 consultation process for this undertaking.

OHA believes that unmarked burials may be encountered during undertaking activities along the entire length of the path and seek assurances that applicable laws will be implemented should burials be inadvertently discovered. We do have specific concerns relative to the western increment of the path, where the APE widens to accommodate the proposed trail. Numerous archaeological studies and investigations have occurred in this vicinity through the years, but two immediately come to mind: the first is the archaeological investigations conducted by the Bishop Museum for the proposed Mudlane-Waimea-Kawaihae road corridor circa 1983 and the second is a more recent archaeological study conducted for the Department of Hawaiian Home Lands residential subdivision in Lālāmilo.

While the exact relationship between the areas covered by the above mentioned investigation and survey and the APE are unknown to us at this time, we do know that numerous historic properties and cultural sites, including burials were identified and advocate that this be considered as you are completing your review.

We recommend consultation with the following groups and individuals we may be willing to share their thoughts on historic properties and cultural sites within the APE with you: the Waimea Hawaiian Civic Club, Kanu o Ka 'Āina School, individuals with an association with Parker Ranch and Mr. Leningrad Elarionoff. Please remember that this list is not all encompassing and we are sure additional groups and individuals will be identified as you move forward with your consultation process. We also note that there are certain individuals who may be especially concerned with the area where the path is proposed to terminate at its western end. Generally known by the name "Lihu'e", we are aware that certain traditions also identify smaller areas known as "Pupua" or "Papua" and "Wawa'a" or "Wa'a'wa'a" in this specific location. We respectfully suggest you keep this in mind during your consultation process.

Thank you for providing an opportunity to comment and we look forward to continuing consultation with you and all other parties. Should you have any questions or concerns, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Chief Executive Officer

C: Robert K. Lindsey, Jr.- OHA Trustee, Hawai'i Island
William Aila, Jr.- State of Hawai'i Historic Preservation Officer
Dr. Pua Aiu, Administrator- State Historic Preservation Division

U.S. Department of Transportation
Federal Highway Administration

Hawaii Federal-Aid Division

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Honolulu, HI 96850
Phone: (808) 541-2700
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http://www.fhwa.dot.gov/hidiv

May 18, 2011

In Reply Refer To:
HDA-HI

CERTIFIED MAIL
7010 2780 0000 5798 0552

Dr. Pua Aiu, Administrator
State Historic Preservation Division
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawai'i 96707

Dear Dr. Aiu:

Subject: Section 106, National Historic Preservation Act Consultation
Ke Ala Kahawai O Waimea, Waimea Trails and Greenways
Waimea, South Kohala District, Hawai'i Island, Various TMKs

This is a follow-up to an earlier letter dated December 22, 2010 regarding Section 106 consultation in accordance with the National Historic Preservation Act (NHPA) for the above-referenced project. The December 22nd letter was sent to you via certified mail.

As noted previously, the County of Hawai'i, in collaboration with the Waimea Trails and Greenways Committee of the Waimea Preservation Association, is proposing to construct *Ke Ala Kahawai O Waimea* ("the stream trail of Waimea"), a multi-use bicycle and pedestrian path, 4.8 miles in length through Waimea on the Island of Hawai'i. A Draft Environmental Assessment (DEA) was prepared in accordance with the Federal National Environmental Policy Act (NEPA) and the State of Hawai'i's Chapter 343 HRS environmental regulations, and underwent a 30-day public review period.

As part of the Section 106 process, the Federal Highway Administration (FHWA) requested input from your agency, as well as a number of other native Hawaiian organizations and individuals. Comments were requested within 30 days. Only one comment letter, from the Office of Hawaiian Affairs, was received and is enclosed for your information.

The FHWA seeks the SHPO's concurrence in writing with the NHPA Section 106 determination of "no adverse effect" on historic properties. If we do not hear from you within 30 days, we will proceed with this determination.

If you have any questions, please contact me at (808) 541-2305. Thank you for all your assistance.

Sincerely,

Pat V. Phung, P.E.
Lead Civil Engineer

Enclosure

cc: Mr. Bob Fitzgerald, County of Hawai'i Department of Parks and Recreation
Mr. Glenn Kimura, Kimura International, Inc

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Clyde W. Nāmu'o
Chief Executive Officer

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