

**FINAL
ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT**

**KAUAI COMMUNITY COLLEGE
REDESIGNATION TO URBAN DISTRICT**

Proposing Agency:
University of Hawaii
Community Colleges

Accepting Authority:
University of Hawaii
Community Colleges

Prepared by:
Wilson Okamoto Corporation

November 2012

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	S-1
PREFACE	P-1
1.0 INTRODUCTION	1-1
1.1 Background.....	1-1
2.0 PROJECT LOCATION AND DESCRIPTION	2-1
2.1 Project Location	2-1
2.2 Existing Facilities and Uses	2-1
2.3 Surrounding Uses	2-9
2.4 Project Need and Objectives	2-9
2.5 Project Description.....	2-9
2.6 Project Schedule and Cost	2-10
3.0 DESCRIPTION OF THE EXISTING ENVIRONMENT, PROJECT IMPACTS AND MITIGATION MEASURES	3-1
3.1 Climate.....	3-1
3.2 Geology and Topography	3-1
3.3 Soils.....	3-3
3.4 Hydrology.....	3-9
3.4.1 Ground Water.....	3-9
3.4.2 Surface Water	3-10
3.4.3 Coastal Waters.....	3-14
3.5 Wetlands.....	3-15
3.6 Natural Hazards.....	3-16
3.6.1 Hurricanes, Tsunamis and Earthquakes	3-17
3.6.2 Flood Hazard	3-17
3.7 Flora and Fauna	3-19
3.7.1 Flora.....	3-19
3.7.2 Fauna.....	3-20
3.8 Noise.....	3-23
3.9 Air Quality	3-23
3.10 Archaeological Resources	3-24
3.11 Cultural Resources	3-29
3.12 Traffic.....	3-34
3.13 Views	3-40
3.14 Socio-Economic Characteristics	3-41
3.15 Public Services	3-42
3.16 Infrastructure.....	3-44

TABLE OF CONTENTS (continued)

	<u>Page</u>
4.0 RELATIONSHIP TO LAND USE, POLICIES AND CONTROLS	4-1
4.1 State of Hawaii.....	4-1
4.1.1 Hawaii State Plan.....	4-1
4.1.2 State Land Use District	4-4
4.1.3 Coastal Zone Management.....	4-4
4.2 County of Kauai	4-7
4.2.1 County of Kauai General Plan.....	4-7
4.2.2 Lihue Development Plan.....	4-14
4.2.3 County Comprehensive Zoning Ordinance	4-14
4.2.4 Special Management Area	4-14
5.0 ALTERNATIVES CONSIDERED	5-1
5.1 No Action Alternative	5-1
6.0 DETERMINATION AND COMPLIANCE.....	6-3
7.0 LIST OF REQUIRED PERMIT APPROVALS	7-1
8.0 CONSULTATION.....	8-1
8.1 Pre-Assessment Consultation.....	8-1
8.2 Draft EA Consultation	8-2
9.0 REFERENCES.....	9-1

List of Figures

Figure 2-1	Location Map	2-2
Figure 2-2	Tax Map Key.....	2-3
Figure 2-3	Aerial of KCC Campus.....	2-4
Figure 2-4	Photo Key	2-5
Figure 2-5	Project Site Photos	2-7
Figure 2-6	Proposed Land Use Boundary Amendment Petition Area	2-11
Figure 2-7	Updated Long Range Development Plan.....	2-15
Figure 3-1	Soils Map.....	3-5
Figure 3-2	Land Study Bureau	3-6
Figure 3-3	Agricultural Lands of Importance in the State of Hawai'i.....	3-7
Figure 3-4	Surface Water	3-11
Figure 3-5	Flood Zone Map.....	3-18
Figure 3-6	Historic Surface Features	3-26

TABLE OF CONTENTS (continued)

	Page
Figure 4-1 County of Kauai General Plan: Heritage Resources Map	4-9
Figure 4-2 County of Kauai General Plan: Land Use Map	4-13
Figure 4-3 Lihue Development Plan Land Use Map.....	4-15
Figure 4-4 Kauai County Zoning	4-16

List of Tables

Table 2-1 Long Range Development Plan: Proposed Facilities	2-12
Table 3-1 Evaluation of Historic Features	3-28
Table 3-2 Peak Hour Trip Generation	3-37
Table 3-3 Projected Year 2020 (Without and With Project) Traffic Operation Conditions	3-38
Table 3-4 Demographic Characteristics: 2010	3-41

Appendices

Appendix A	Biological Surveys of the University of Hawaii, Kauai Community College, Rana Biological Consulting, Inc. and AECOS Consultants, September 30, 2010.
Appendix B	Archaeological Literature Review and Field Inspection for Kauai Community College Rezone Campus Project, Cultural Surveys Hawaii, Inc., December 2010.
Appendix C	Cultural Impact Assessment for Kauai Community College Redesignation to Urban District, Cultural Surveys Hawai'i, Inc., April 2012.
Appendix D	Traffic Impact Report, Kauai Community College Redesignation to Urban District, Wilson Okamoto Corporation. December 2010.
Appendix E	Pre-Assessment Consultation Letters
Appendix F	Draft Environmental Assessment Consultation Letters

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SUMMARY

Proposing Agency:	University of Hawaii Community Colleges 2327 Dole Street Honolulu, Hawaii 96822 Contact: Mr. Brian Kashiwaeda
Accepting Authority:	University of Hawaii Community Colleges 2327 Dole Street Honolulu, Hawaii 96822 Contact: Mr. Brian Kashiwaeda
Authorized Agent:	Wilson Okamoto Corporation 1907 S. Beretania Street, Suite 400 Honolulu, Hawaii 96826 Contact: Mr. Earl Matsukawa, AICP
Project Location:	Puhi, Lihue District, Kauai, Hawaii
Tax Map Key:	TMK 3-4-07: 01, 02, 03, and 06
Project Area	Approximately 199 acres
State Land Use Boundary Amendment Petition Area:	Approximately 153 Acres TMK 3-4-07: 0por. 1, 02, and 03
Existing Use:	Kauai Community College Campus
State Land Use Designation:	Agricultural
Zoning Designation:	Agricultural
Lihue Development Plan Designation:	Public
Proposed Action:	Amend the State Land Use Boundary to redesignate a portion of Kauai Community College campus from Agricultural District to Urban District.

Impacts: No significant impacts are anticipated. The project will allow the Kauai Community College to upgrade and expand its facilities.

Determination: Finding of No Significant Impact (FONSI)

Parties Consulted During the Draft EA:

Federal

U.S. Fish and Wildlife Service

State

Department of Agriculture

Department of Business, Economic

Development, and Tourism, Land Use
Commission

Department of Health

Department of Land and Natural Resources

Historic Preservation Division

Department of Transportation

Office of Hawaiian Affairs

Department of Hawaiian Homelands

Representative Hermina M. Morita

Representative James Kunane Tokioka

Representative Roland D. Sagum, III

Senator Gary L. Hooser

County

Department of Public Works

Department of Water

Fire Department

Kauai County Council

Planning Department

Police Department

Transportation Agency

Other

Grove Farm

Island School

Kauai Kilohana Partners

Kawaikini New Century Public Charter School

Punana Leo o Kauai

Wilcox Family Ltd. Partnership

PREFACE

This Final Environmental Assessment (EA) is prepared pursuant to Chapter 343, Hawaii Revised Statutes, and Title 11, Chapter 200, Administrative Rules, Department of Health, State of Hawaii. Proposed is an agency action by the University of Hawaii Community Colleges (UHCC) to obtain necessary entitlements for the Kauai Community College campus, located along Kaunualii Highway in Puhi on the Island of Kauai. The preparation of this Final EA arises from the use of State funds and lands.

The campus is presently designated as Agricultural District on the State Land Use District boundary map, and Agricultural District under the County's zoning map. As a result, UHCC proposes to redesignate the campus property to Urban District, a more appropriate land use classification. Development of the campus within an existing approximately 99-acre parcel (TMK 3-4-07:03) was permitted through a Special Permit granted by the State Land Use Commission on April 6, 1973. The campus is also comprised of an additional approximately 100 acres in three parcels identified as TMK 3-4-07:01, 02, and 06. While most of this land is undeveloped, the approximately 40-acre parcel identified as TMK 3-4-07:02 contains two Hawaiian Language Immersion schools, including the Punana Leo o Kauai Pre-School and the Kawaikini New Century Public Charter School. The Punana Leo o Kauai Pre-School occupies school facilities that were built before the KCC campus was established. The Kawaikini New Century Public Charter School is a K-12 school that occupies existing buildings but was also granted a Special Permit, Use Permit and Class IV Zoning Permit by the County of Kauai on May 26, 2009.

This environmental assessment is being prepared pursuant to Section 11-200-7, Hawai'i Administrative Rules. UHCC proposes to amend the State Land Use Boundary to re-designate a portion of KCC campus from Agricultural District to Urban District. However UHCC is not proposing any major projects at this time. KCC does not envision implementing any major projects within the next 10 years.

Since the plan lacks definitive detail required to address concerns, such as drainage plans, sustainability plans, etc., it is anticipated that subsequent Environmental Assessment (EA) or Environmental Impact Statement (EIS) will need to be prepared pursuant to Chapter 343, Hawaii Revised Statutes (HRS) for individual development of projects when more plans for such project become available.

Since the publication of the Draft EA, the State Land Use Boundary Amendment petition area has been reduced from 199 acres (entire KCC campus) to approximately 153 acres consisting of the campus core and the areas surrounding Punana Leo o Kauai Pre-School and Kawaikini New Century Public Charter School (TMK: 3-4-07: por. 01, 02, and 03).

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1.0 INTRODUCTION

1.1 Background

Kauai Community College (KCC) is a two-year public community college and the only public institution of higher education on the island. It provides community services in addition to its education mission. Originally created in 1928 as Kalaheo Vocational School, to provide training primarily for vocational and technical skills, the school was designated as an independent area trade school, and renamed Kauai Vocational School in 1939. By 1954, to alleviate a shortage of adequate facilities, a new campus was established in Lihue, and the name of the school was changed to Kauai Technical School.

The Hawaii Community Colleges Act of 1964 (Act 39) transferred the Kauai Technical School from the Department of Education to the University of Hawaii. The school converted to a community college the next year and was given its current name, Kauai Community College.

In 1969, the college began to develop into a comprehensive community college by adding a liberal arts program to complement the existing business and technical-vocational programs. The new campus in Puhi was dedicated in 1977, on land donated by Grove Farm in 1972. Since that time, new buildings have been added to support the college's expanding programs, and reconstruction has taken place to repair the damage done by Hurricane Iniki in 1992, which was considerable. In 1995, the school received its final 40 acres from Grove Farms.

The college continues to expand in its offerings to its students and the community. In addition to increasing its course offerings and community involvement, the college has focused on expanding its technological resources, to offer distance education courses through HITS (Hawaii Interactive Television System), and on-island delivery is helping some students to complete undergraduate and graduate degrees while remaining on Kauai. Other inroads are being made to build connections to community and global institutions. KCC continues to expand upon its role as an educational resource and community center for the island of Kauai.

In 1997, the Hawaii Legislature appropriated funds to prepare a Long Range Development Plan (LRDP) for KCC as an update to the original master plan. The LRDP was published in August 1999 and provides guidelines for the development of the campus to accommodate a population of 3,000 full time equivalent (FTE) students. Currently, KCC has an enrollment of 700 FTE students. Hence, much of the planned campus development has yet to be implemented.

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2.0 PROJECT LOCATION AND DESCRIPTION

2.1 Project Location

The KCC campus is located in Puhi, approximately two miles west of Lihue, on the island of Kauai (see Figure 2-1). The entire 199-acre campus, built on former sugar cane land, is owned by the State of Hawaii, University of Hawaii. The campus is comprised of four parcels identified as Tax Map Key (TMK) 3-4-07:01, 02, 03, and 06 (see Figure 2-2). These parcels are comprised of 59 acres, 40 acres, 99 acres, and 1 acre, respectively.

2.2 Existing Facilities and Uses

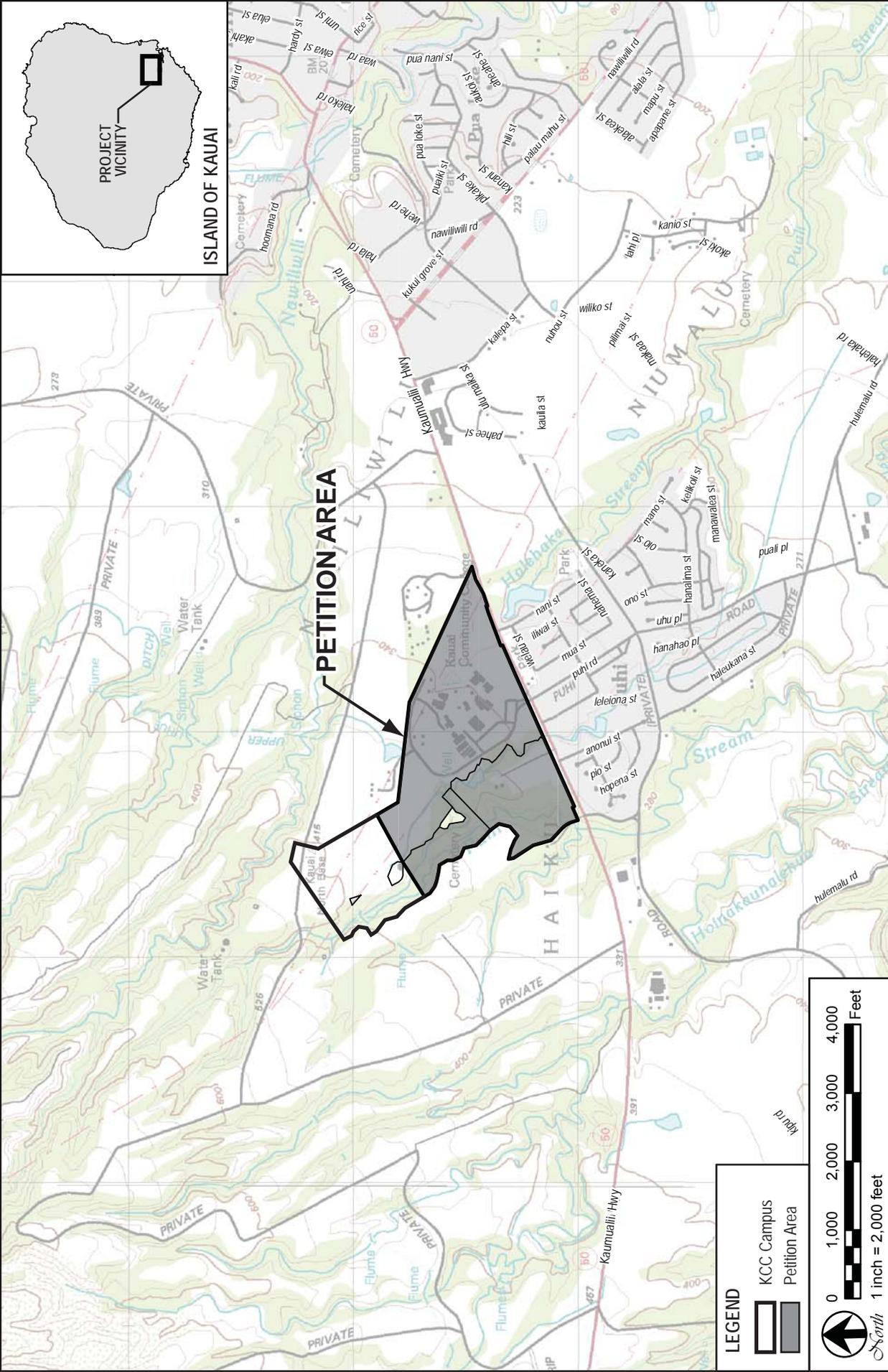
Majority of the existing campus facilities are centrally located in TMK: 3-4-07: 03, as shown (see Figures 2-3 to 2-5). The campus consists of approximately 43 buildings, internal roadways, parking, tennis courts, open lawn areas, landscaping, and a pedestrian pathway system that provides access between various areas of the campus. A ditch along the eastern boundary, extends eastward from the area north of the existing roadway into an off-site reservoir located adjacent to Island School. This ditch connects to a reservoir on Grove Farm Company Inc.'s (Grove Farm) property makai of Kaumualii Highway.

Access to the KCC campus is provided by two roadways, the first of which runs along the perimeter of the campus and intersects with Kaumualii Highway, and the second of which runs along Kilohana Plantation. The campus has two main parking lots, as well as a lawn area to the west of the entrance that is used for overflow parking. There are two bus stops serving the campus. One is located near the entrance to the property, and the other is located near the Administration Building alongside the main parking lot.

The KCC Diversified Agriculture Program utilizes approximately 14 acres of land (TMK 3-4-07: 02) southwest of the existing main campus. The Puhi Reservoir, located along the boundaries of parcel 02 and 03, provides irrigation water through an irrigation ditch system for the cultivation of diversified crops, which include taro and a number of loi. The ditch system extends mauka in a northwesterly direction through to agricultural lands mauka of the KCC property.

Two Hawaiian Language Immersion schools, including the Punana Leo o Kauai Pre-School and the Kawaikini New Century Public Charter School are also located within parcel 02. The Punana Leo o Kauai Pre-School occupies school facilities that were built before the KCC campus was established. The Kawaikini New Century Public Charter School is a K-12 school that occupies existing buildings but was also granted a Special Permit, Use Permit and Class IV Zoning Permit by the County of Kauai on May 26, 2009. Both schools have a 25 year lease with the KCC and are considered separate entities from KCC.

TMK 3-4-07: 01 is heavily vegetated with the northern portion used for sugar cane cultivation. Puhi Stream and wooded gulch is located along the western boundary.

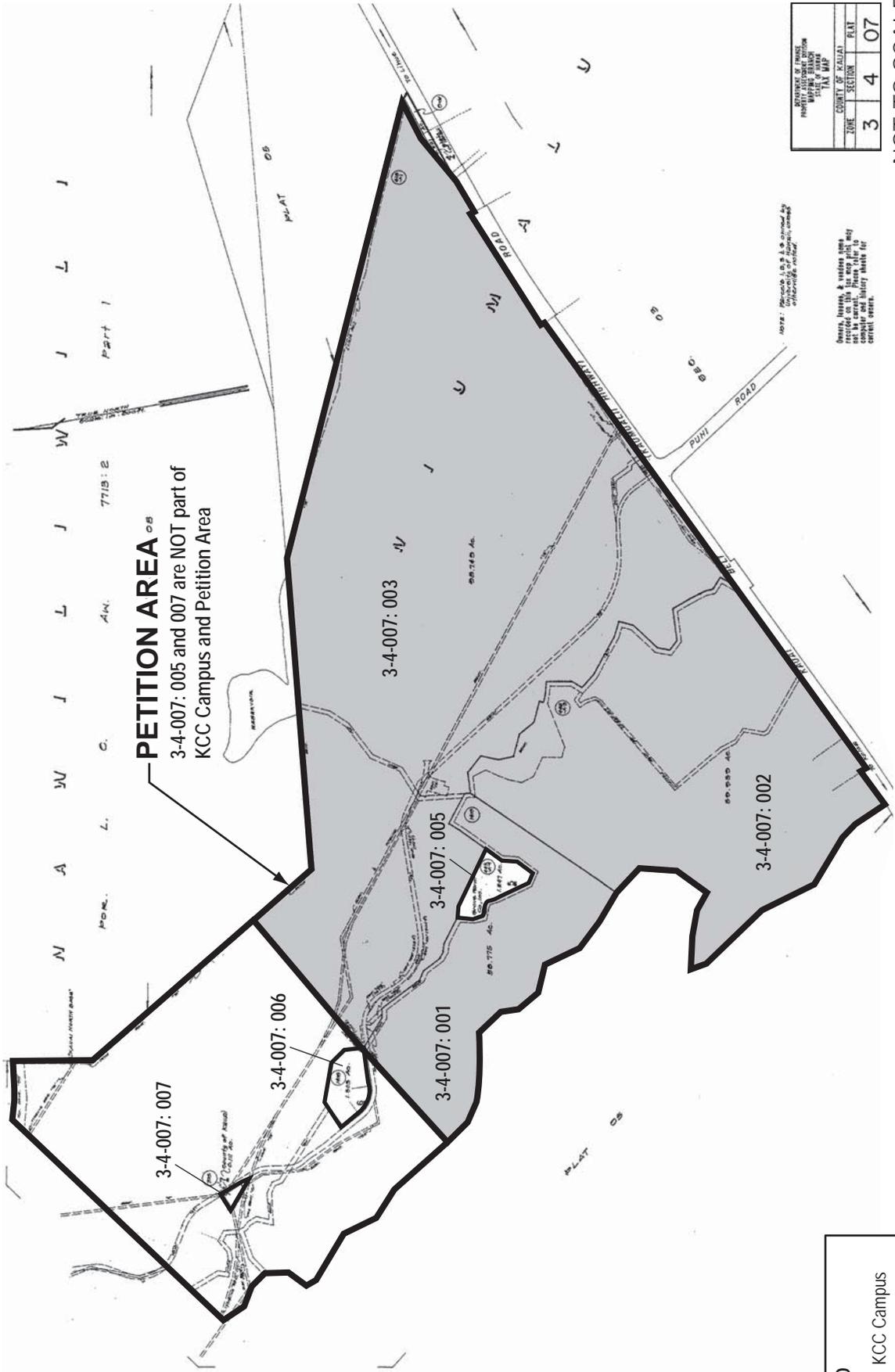


KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

LOCATION MAP

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FIGURE 2-1



NOT TO SCALE

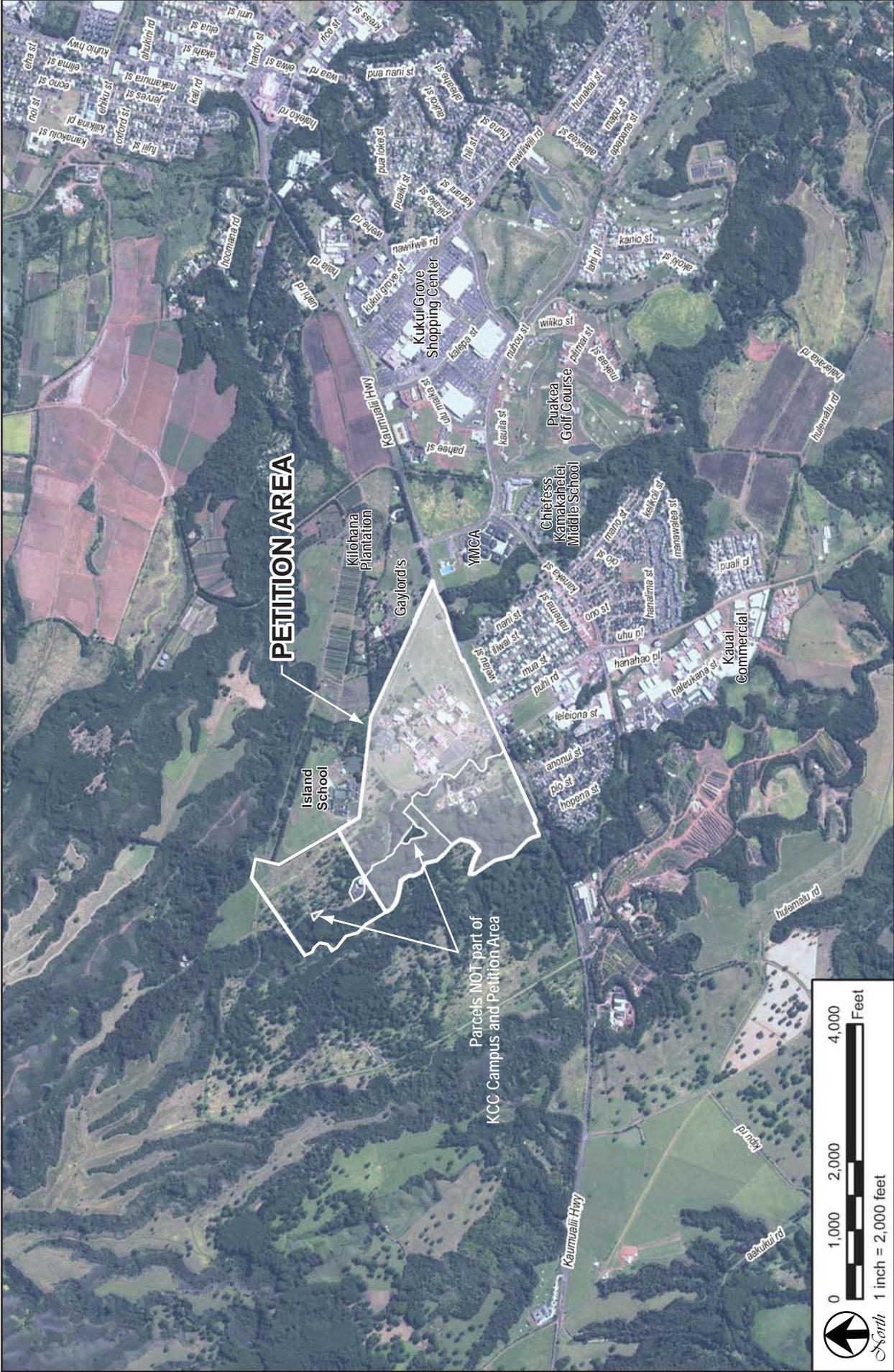
KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

TAX MAP KEYS 3-4-007: 001, 002, 003 AND 006

FIGURE

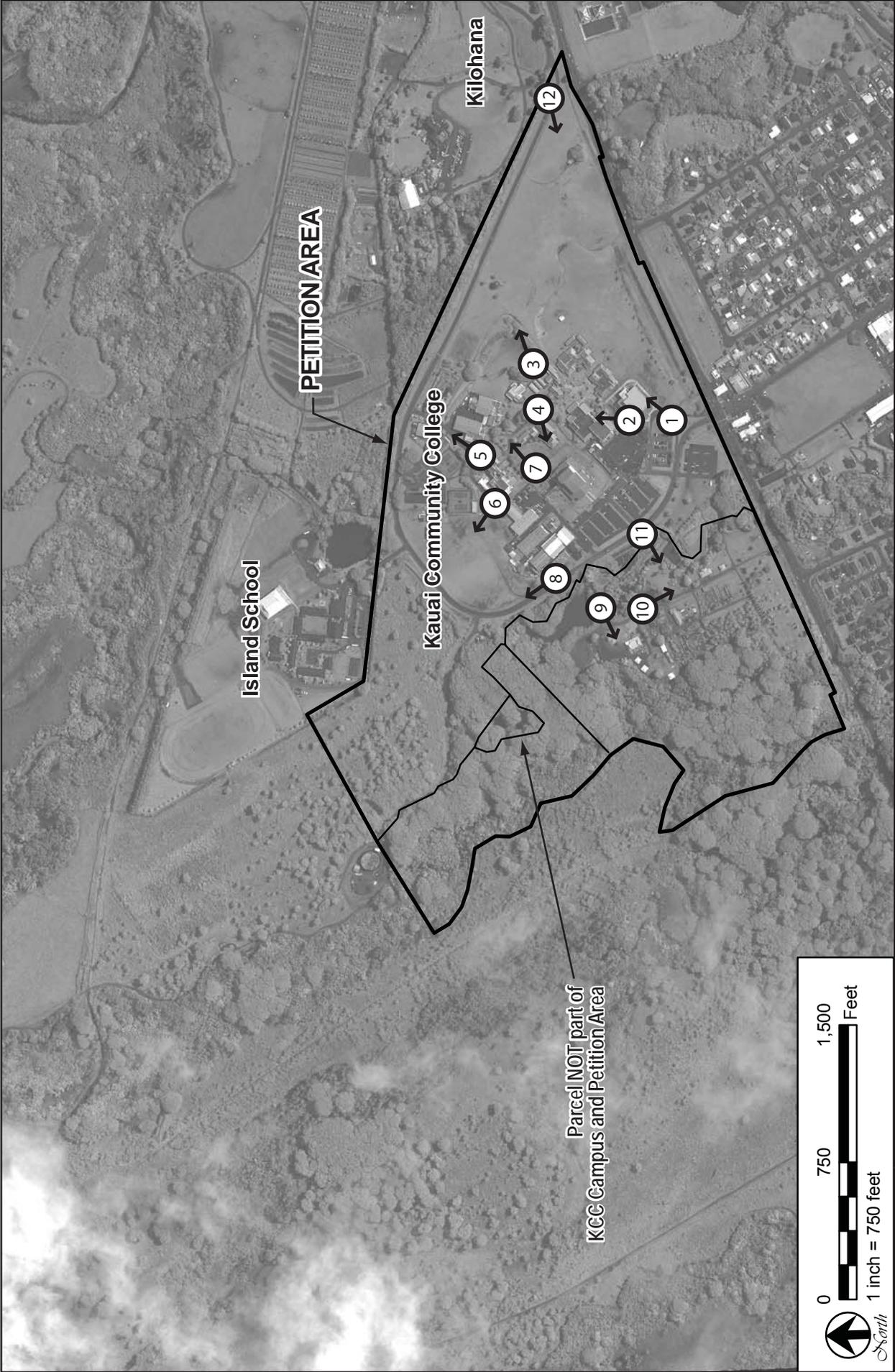
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KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

SURROUNDING USES MAP



<p>FIGURE</p> <p>2-4</p>	<p>KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT</p> <p>PHOTO KEY MAP</p>	 <p>WILSON OKAMOTO CORPORATION ENGINEERS • PLANNERS</p>
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1. One Stop Center



2. Learning Resource Center



3. Detention basin/open area along the eastern portion of campus



4. Center of campus facing the back of Performing Arts Center



5. Access road near maintenance facility and automotive facilities



6. Open field mauka of the campus



7. Campus Center



8. Access road west of the campus. Center of Continuing and Training to the right



9. Punana Leo o Kauai Preschool and Kawaiki New Century Public Charter School



10. Access road to the agricultural fields area



11. Loi in the agricultural fields



12. Detention basin/open area along the Eastern portion of campus. Facing towards the campus

KAUAI COMMUNITY COLLEGE CAMPUS REDESIGNATION TO URBAN DISTRICT

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A University owned parcel, identified as TMK 3-4-07: 06, is used for a water tank.

TMK 3-4-07: 05, which is amid but not part of the KCC campus consists of Puhi Camp Cemetery which is owned by Grove Farms. A small parcel (TMK 3-4-07: 07), located within parcel 01 is owned by the County of Kauai, and also is not part of the KCC campus.

2.3 Surrounding Uses

Agricultural lands used for sugar cane production are located adjacent to the project site on the north, west, and southwest, as shown in Figure 2-3. Grove Farm Co., Inc. owns agricultural lands located to the north of the project site as well as lands to the west and southwest.

The Island School, a 38.4 acre private school with student grades pre-K to 12, and Kilohana Plantation are also located to the north and northeast of the project site, respectively.

Chiefess Kamakahahei Middle School and WMCA is located across from KCC to the southeast at the intersection of Nuhou Street and Kaumualii Highway.

Kaumualii Highway borders the campus to the south and serves as the main access road for the project site. Makai of the Kaumualii Highway are lands owned by Grove Farm Development. These lands include commercial uses, a 3-acre county park, the Klussman Reservoir, some vacant land and residential land uses.

2.4 Project Need and Objectives

The KCC Long Range Development Plan proposes the development of the existing KCC campus site to accommodate a population of 3,000 full time equivalent (FTE) students with an interim phase of 1,500 FTE students. Development of the existing campus was permitted through a Special Permit granted by the State Land Use Commission. However, the County Planning Department informed KCC that future expansion of the campus would not be permitted through another Special Permit. Re-designating the KCC campus from the State Agricultural District to the Urban District would be appropriate due to its developed character. In accordance with the County's position, UHCC proposes to redesignate a portion of the KCC campus from Agricultural to Urban in preparation of future projects and need for County approvals.

2.5 Project Description

The University of Hawaii Community Colleges (UHCC) proposes to amend the State Land Use Boundary to re-designate a portion of KCC campus from Agricultural District to Urban District. The SLUB petition area encompasses approximately 153 acres (TMK: 3-4-07: por. 01, 02, and 03) (see Figure 2-6).

The proposed project is the eventual development of the KCC campus, generally following land use allocations recommended by the Ultimate Site Plan presented in the KCC's LRDP. An updated LRDP shows this conceptual land use allocation by program (see Figure 2-7) and Table 2-1 is a list of proposed facilities.

Although development of the campus was previously permitted through a Special Permit granted by the State Land Use Commission, KCC was subsequently apprised by the County Planning Department that future expansion of the campus will not be permitted through another Special Permit. Re-designation of the KCC campus from the State Land Use Agricultural District to the Urban District would be more consistent with its developed character and would complete conveyance of land use jurisdiction to the County, which would regulate uses through its zoning code. Further discussions will be pursued with the County as to which zoning designation and/or permits would be appropriate for the KCC campus.

The UHCC is not proposing any major projects at this time. The project description provided updates KCC's LRDP contained in their 1999 LRDP. The updated plan is not based on a planning process such as that used in preparing the 1999 LRDP, but a status on the projects proposed in the 1999 LRDP. KCC does not envision implementing any major projects such as the recently completed One Stop Center and bookstore within the next 10 years.

Since the plan lacks definitive detail required to address concerns, such as drainage plans, sustainability plans, etc., it is anticipated that subsequent Environmental Assessment (EA) or Environmental Impact Statement (EIS) will need to be prepared pursuant to Chapter 343, Hawaii Revised Statutes (HRS) for individual development of projects when more plans for such project become available.

This assessment does not consider the following types of projects which do not have significant impacts on the environment and could qualify as exempt activities, pursuant to Chapter 343-6, HRS and Chapter 11-200-8, HAR:

- Minor building renovations to meet program requirements, health and safety requirements, energy conservation measures, and accessibility for disabled persons.
- General site, utility, and landscaping improvements, which will provide for infrastructure requirements for specific projects, enhance aesthetic environment, and meet accessibility requirements for disabled persons.

2.6 Project Schedule and Cost

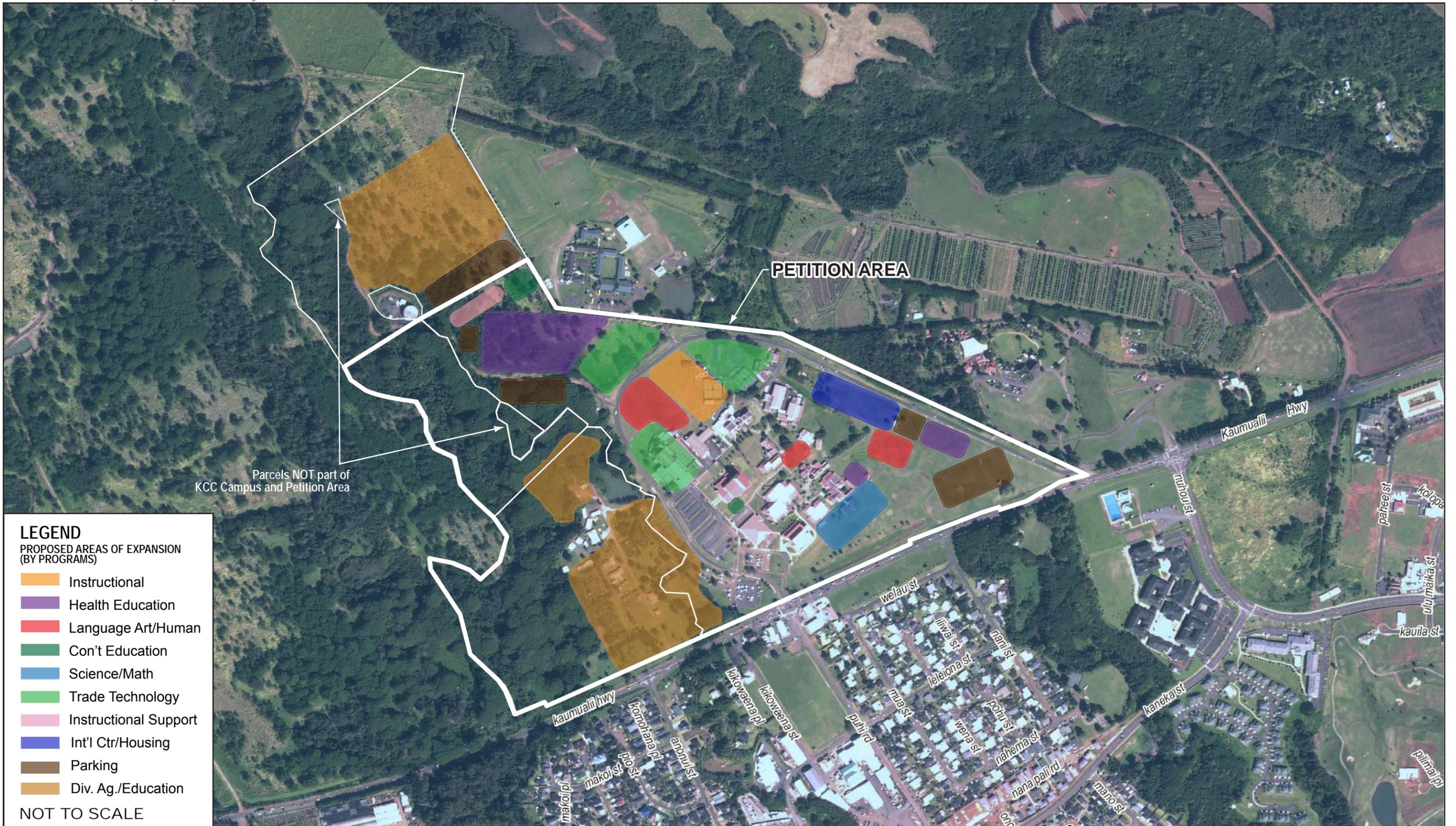
The purpose of the project is to redesignate a portion of the KCC campus from State Agricultural District to Urban District to allow for the future expansion of the campus. Expansion of the facilities is dependent upon funding availability. KCC currently does not have funds to construct any of the facilities at this time and does not envision implementing any major projects within the next 10 years, as described in Section 2.5.

Table 2-1 Long Range Development Plan: Proposed Facilities		
Building/Addition	GSF	Status
Instructional		
Business Education	16,300	Pending
Business Education	11,300	Pending
Culinary Arts	30,600	Pending
Health Education		
Health Education	8,200	Pending
Early Childhood	12,600	Pending
Gymnasium	23,400	Pending
Locker Facilities	10,200	Pending
Language, Arts & Humanities, Journalism		
Language, Arts & Humanities, Journalism	13,400	Pending
Language, Arts & Humanities	10,600	Pending
Hawaiian Studies	11,600	Pending
Canoe/Woodwork Shop	1,300	Pending
Halau	1,600	Pending
Fine Arts	6,700	Pending
Theatre/Music/Dance	12,800	Pending
Continuing Education		
Addition to Theatre	3,260	Pending
Diversified Ag/Edu-Tourism Facility	4,600	Pending
Greenhouse Lab (2)	1,600 each	Pending
Construction Shop/Storage	3,200	Pending
Science & Mathematics		
Science & Math/Social Sciences	15,400	Pending
Science & Math/Social Sciences	11,900	Pending
Natural Sciences Lab	6,800	Pending
Science & Math Support Facilities	3,000	Pending
Trade Technology		
Technology Center and Support	8,400	Pending
Technology Facilities	8,000	Pending
Electrical	19,500	Pending
Drafting/CADD	20,700	Pending
Welding	7,400	Pending
Automotive	32,600	Pending
Institutional/Academic Support		
Admin./Student Services/OCET (Once Stop Center)	31,900	Completed
O&M Building for Grounds keeping	3,600	Pending
O&M Building for Motor Pool	5,000	Pending
O&M Building for AC Chillers and Pumps	2,600	Pending

Source: Kauai Community College Long Range Development Plan (August 1999)

Table 2-1 (continued)		
Long Range Development Plan: Proposed Facilities		
Building/Addition	GSF	Status
Institutional/Academic Support(continued)		
Addition to Campus Bookstore	3,000	Pending
High Technology Conference Center	8,000	Pending
Japanese Tea House	9,200	Pending
Housing Complex	18,700	Pending
Addition to Learning Resources Center	1,640	Pending
Media/Computer Services (Bookstore/OCET)	19,300	Completed
<i>Source: Kauai Community College Long Range Development Plan (August 1999)</i>		

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KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

UPDATED LONG RANGE DEVELOPMENT PLAN

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3.0 DESCRIPTION OF THE EXISTING ENVIRONMENT, PROJECT IMPACTS AND MITIGATION MEASURES

The following is a description of the existing environment, assessment of potential impacts and proposed measures to mitigate potential adverse impacts resulting from the proposed project.

3.1 Climate

The climate in the Puhi, Lihue, Kauai is characterized as semi-tropical. The average temperature in the Puhi area is 73 degrees Fahrenheit (F). The prevailing wind patterns are the northeasterly trade winds, which range from 10 to 15 miles per hour. The Puhi area has a mean annual precipitation of 65.8 inches, while the median annual precipitation ranges from 50 to 75 inches, with most of the rainfall occurring between October and May.

Impacts and Mitigation Measures

No significant impacts on climate in the project area are anticipated. The proposed project is not anticipated to affect temperatures, wind, or rainfall levels in the project area.

3.2 Geology and Topography

Geology: Kauai is the oldest and most northwesterly of the eight main Hawaiian Islands. The island is made up largely of a huge basaltic shield volcano, which has the largest central caldera in the Hawaiian Islands. The caldera of the shield volcano is ovoid (egg-shaped), approximately 12 miles long northeast-southeast, and 10 miles wide northwest-southwest. The Island still has the roughly circular outline of the original circular dome, even though it has been profoundly affected by collapse, faulting, erosion, and later volcanism.

Kauai was formed by two major lava flows. The Waimea volcanic series refers to the flows that formed the original volcanic shield and caldera of the Island. The Koloa volcanic series refers to subsequent flows that overlaid much of the Waimea volcanic series formations on the lower slopes of the Island. The rocks on Kauai are all volcanic, except for minor amounts of sediments derived from volcanic rocks by erosion, and a narrow, discontinuous fringe of calcareous reef and beach deposits.

Topography: The topography of the project area is relatively flat with slopes ranging from 1.0 percent to 5.0 percent. Elevations in the project area range from 310 feet mean sea level (msl) at the lowest point near Kaumualii Highway to 380 feet msl at the highest level at the northern, mauka boundary.

A detention basin, located east of the main campus facilities is a prominent topographical feature on the campus. In addition to the detention basin are two large drainageways, characterized by steeper slopes that are located on either side of the main campus. The drainageway to the detention basin extends southeastward to lands

makai of Kaumualii Highway. The other drainageway is located to the west of the main campus facilities and extends northward, connecting up to the Puhi Reservoir.

The Puhi Reservoir and its associated drainageway form the border between TMK 3-4-07:03 and 02. A lowland drainage area, characterized by steeper topography, extends from the reservoir to the area mauka of Kaumualii Highway. A higher flat area, once an old plantation housing is now used by the KCC Diversified Agriculture Program, is sandwiched between this drainage feature and the gulch of Puhi Stream. The wooded gulch of the Puhi Stream, which is characterized by greater slope gradations, is estimated to occupy over 50 percent of TMKs 3-4-07:01 and 02.

Impacts and Mitigation Measures

No significant impacts on geology and topography in the project area are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated. Any land disturbing activities would not result in significant impacts on the geology or topography of the petition area.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on the topography – particularly in regard to drainage improvements. By developing and implementing appropriate mitigation measures in design, however, individual projects and cumulative impacts on geology and topography are not anticipated to be significant. As more definitive plans for these major projects are developed they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

The proposed project may result in some alteration of the topography within the project site; however, any impacts on drainage patterns will be addressed through appropriate engineering design to prevent excessive surface flows or ponding.

Construction activities would inevitably involve land-disturbing activities that may result in some soil erosion. Various mitigative measures will be incorporated in the project's design to minimize potential short-term erosion impacts during construction activities.

A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing facilities may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, a NPDES

Permit for Storm Water Associated with Construction Activities will be required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NDPEs will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

The proposed future expansion will extend out from the main campus. Areas along the streams and drainage ways are proposed for diversified agriculture and education. In the event that future development occurs near these sensitive resources, impacts on aquatic habitat and native stream species will be evaluated. Future development of the campus will implement best management practices, where appropriate.

If appropriate, a drainage master plan will also be prepared pursuant to the latest County's Storm System Manual and will consider discharges from Kawaikini School.

3.3 Soils

According to the U.S. Department of Agriculture Natural Resources Conservation Service, the project site is comprised of soils within the Puhi series and rough broken land (see Figure 3-1). The Puhi series consists of deep, well drained soils found on uplands at elevations of 175 to 500 feet with slopes of 3 to 40 percent. The soils are formed in material weathered from basic igneous rock and have surface layer of brown to very dark brown, friable silty clay loam and silty clay. Puhi soils are used for the production of sugar cane, orchards, and truck crops. The natural vegetation consists of guava, Java plum, pangolagrass, kikuyugrass, elephantopus, joe, yellow foxtail and rhodomyrtus.

Rough broken land soils consist of very steep land broken by numerous intermittent drainage channels. These soils occur on mountainsides and in gulches statewide. Elevations range from nearly sea level to about 8,000 feet with slopes of 40 to 70 percent. The local relief is between 25 and 500 feet. The soils are 20 to more than 60 inches deep over soft, weathered rock which are mixed with the soil in many places. The annual rainfall amounts to 25 to more than 200 inches. The soils have rapid runoff and active geologic erosion. Rough broken land is primarily used for watershed and wildlife habitat. It is also used for pasture and woodland.

The Detailed Land Classification – Island of Kauai published by the University of Hawaii Land Study Bureau (LSB) evaluates the quality or productive capacity of certain lands on the island for selected crops and overall suitability in agricultural use. A five-class productivity rating system was established with “A” representing the class of highest productivity and “E” the lowest. The productivity ratings were based on statewide standards of crop yields and levels of management at the time the classification was

made. Majority of the project site is rated “B”, with the remaining area rated “C”, “E” or not classified (see Figure 3-2).

The State Department of Agriculture’s Agricultural Lands of Importance in the State of Hawaii (ALISH) classify lands into four agricultural types, Prime Lands, Unique Lands, Other Lands, and Unclassified. Majority of the project site is not classified, with the remaining area classified as “Prime Lands” or “Other Lands” (see Figure 3-3).

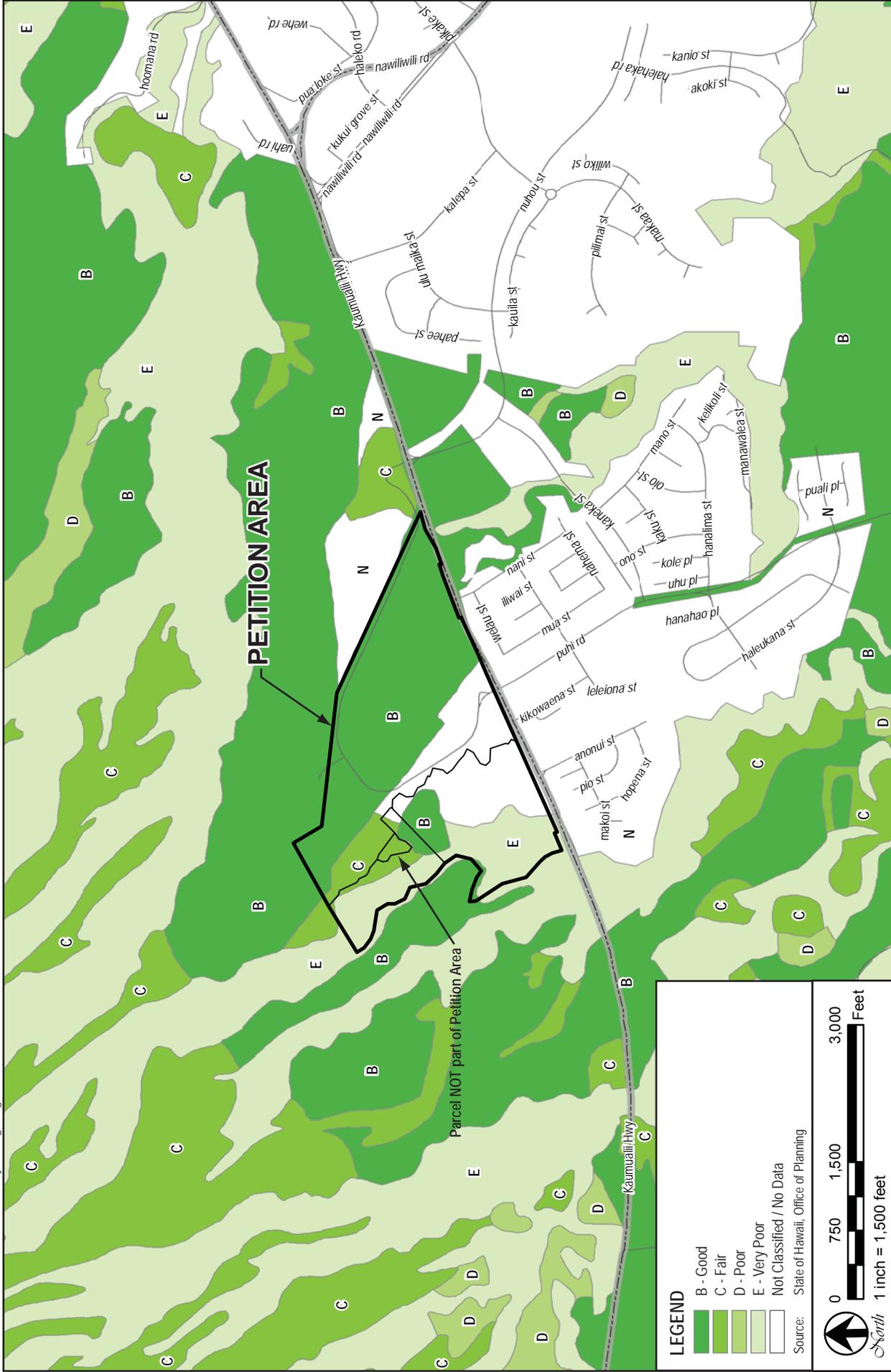
Members of the 1978 Constitution Convention recognized the growing pressure of urbanizing agricultural lands and directed the legislature to devise laws to preserve agriculture as an economic base by, among other things, ensuring the availability of agricultural lands. That year Article XI, Section 3 of Hawaii’s State Constitution was amended. The amendment obligated legislature to: 1) provide standards and criteria for identifying which lands would be considered IAL; and 2) provide standards and criteria for rezoning and reclassifying lands designated as IAL.

After nearly 30 years Hawaii’s State Legislature passed SLH 2005 Act 183 in 2005 which defined and established eight criteria to designate IAL and authorized each of the counties to create maps identifying IAL and to submit those maps to the State Land Use Commission (LUC) for designation of those lands as IAL. The new law also created incentives to both encourage landowners to have their lands designated as IAL and to counteract what the legislature expected to be adversity to such a designation

Pursuant to the Act 183 SLH 2005 and Act 233 SLH 2008, the County of Kauai conducted a study (County of Kauai Important Agricultural Lands Study, Second Draft, August 2011) to identify potential Important Agricultural Lands (IALs) on the island of Kauai. From August 2009 to September 2011, the County of Kauai with assistance from the University of Hawaii at Manoa consulted with the Stakeholder and Technical Advisory Committee (STAC) and community. The County integrated community input with technical data to map IAL in Kauai. Based on criteria definitions and weights, GIS maps of each IAL criterion were produced. The final IAL scores of agricultural lands were calculated by combining weights and indices of all eight criteria.

All of the agricultural lands were evaluated and scores ranged from a low of 0 to a high of 40 points. The higher the score, the more a land area meets the eight criteria. According to the draft IAL study, the recommended threshold for lands to be considered IAL is 25 points. At this threshold, 65, 680 acres of land on Kauai would be designated IAL.

A majority of the KCC campus does not have an IAL score since the area is designated as Urban Center in the County of Kaua’i General Plan 2000. The northern portion (TMK 3-4-07: por. 01) of KCC campus is designated as Agriculture in the General Plan with IALs score ranging from 23.60 to 25.73 (Personal communication with Lea Kaiaokamalie, County of Kauai, June 2012). Surrounding areas are also in Agriculture with IALs score ranging between 24.31 and 25.50.



KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

LAND STUDY BUREAU DETAILED LAND CLASSIFICATION MAP

FIGURE

3-2



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Impacts and Mitigation Measures

No significant impacts on soils in the project area are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated. Improvements involving land disturbing activities that may result in soil erosion will incorporate mitigation measures to minimize potential impact.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on soils due to a cumulatively larger scale of land disturbance. By developing and implementing appropriate mitigation measures in design and through best management practices to control soil runoff, however, individual projects and cumulative impacts on soils are not anticipated to be significant. As more definitive plans for these major projects are developed they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

The proposed petition area is not considered important agricultural lands, therefore no significant impact on agricultural lands is anticipated.

Construction activities would inevitably involve land-disturbing activities that may result in some soil erosion. Various mitigative measures will be incorporated in the project's design to minimize potential short-term erosion impacts during construction activities.

A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing facilities may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, a NPDES Permit for Storm Water Associated with Construction Activities will be required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NPDES will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

The proposed future expansion will extend out from the main campus. Areas along the streams and drainage ways are proposed for diversified agriculture and education. In the event that future development occurs near these sensitive

resources, impacts on aquatic habitat and native stream species will be evaluated. Future development of the campus will implement best management practices, where appropriate.

If appropriate, a drainage master plan will also be prepared pursuant to the latest County's Storm System Manual and will consider discharges from Kawaikini School.

3.4 Hydrology

3.4.1 Ground Water

The project site is located within the Lihue Aquifer Sector Area which is comprised of five Aquifer System Areas identified as Kilauea, Anahola, Wailua, Hanamaulu, and Koloa. The project site is located within the Hanamaulu Aquifer System (20102) area which has a total area of 55 square miles and extends from the Wailua drainage divide in the north to the Haupu Ridge in the south and from the Hanapepe drainage divide in the west to the coast in the east.

The Hanamaulu Aquifer System yields 36 million gallons per day (mgd). The aquifer is predominantly composed of high-level aquifers perched on beds of weathered soil, ash, and dense lavas and constrained at high levels by the relatively low permeability of the aquifer. The aquifer experiences annual rainfall of 83 inches. The aquifer also consists of basal groundwater contained deep below the surface in Koloa lava formations near the coast.

Impacts and Mitigation Measures

No significant impact to groundwater underlying the project site is anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. These improvements are not likely to introduce to, nor release from the soil any materials which could adversely affect groundwater, including groundwater sources for domestic use. Therefore, no short or long-term impacts related to such minor improvements are anticipated.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts due to a cumulatively larger scale of land disturbance. By developing and implementing appropriate mitigation measures in design and through best management practices to control soil runoff, however, individual projects and cumulative impacts on groundwater are not anticipated to be significant. As more definitive plans for these major projects are developed they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

Construction material wastes will be appropriately disposed of and must also be prevented from leaching into receiving bodies of water. Dewatering activity is not anticipated.

Improvements involving land disturbing activities that may result in soil erosion will incorporate mitigative measures to minimize potential impacts. Construction would inevitably involve land-disturbing activities that may result in some soil erosion. Various mitigative measures will be incorporated in the project's design to minimize potential short-term erosion impacts during construction activities.

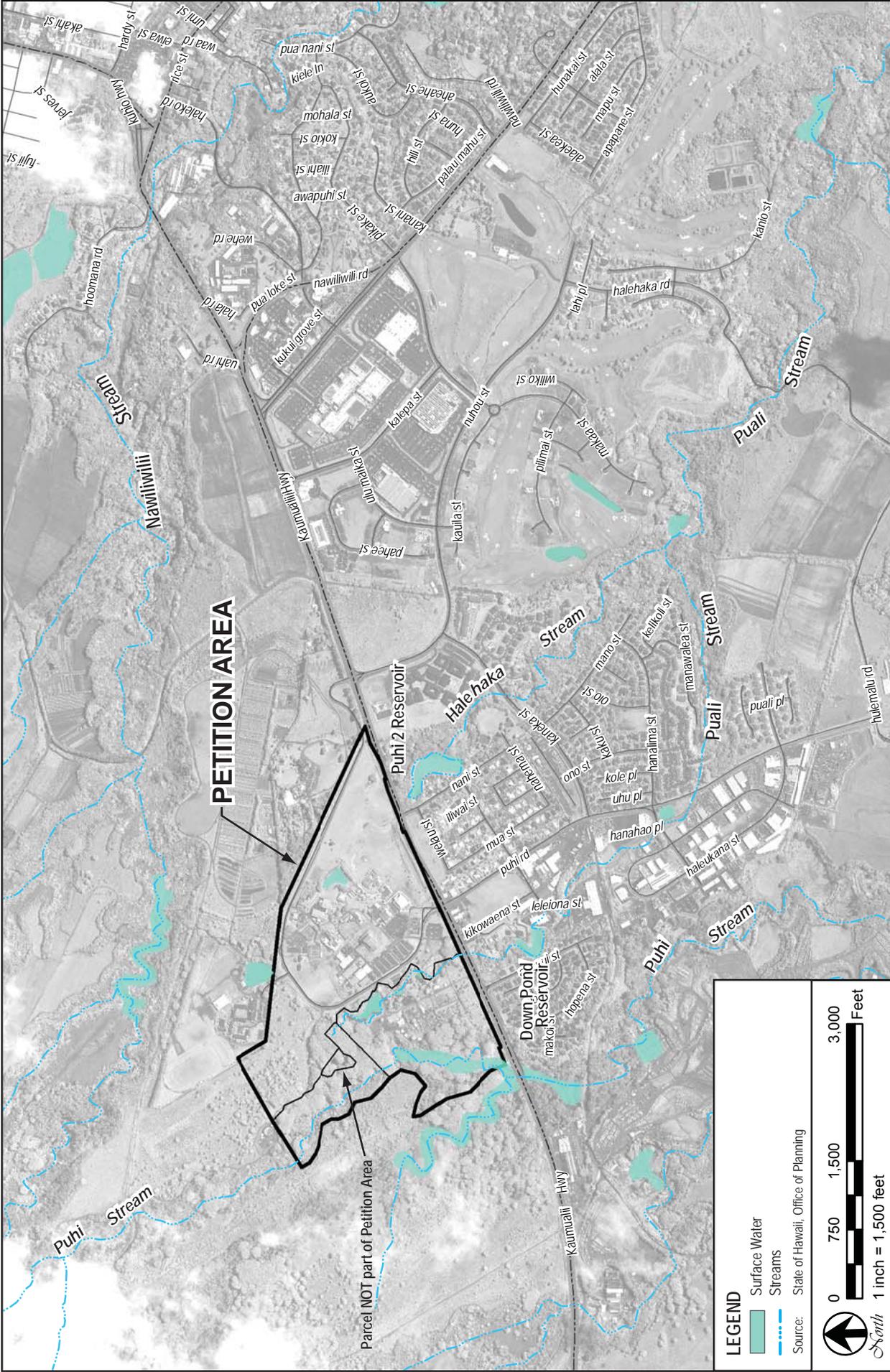
A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing facilities may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, a NPDES Permit for Storm Water Associated with Construction Activities will be required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NPDES will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

3.4.2 Surface Water

Streams within or in the immediate vicinity of the project site included the Puhi Stream, Puali Stream, Halehaka Stream, and the Nawiliwili Stream (see Figure 3-4).

The Puhi Stream is a tributary of the Papakolea Stream. The Puhi Stream flows south through the western portion of the project site until it converges with the Hoinakaunalehu Stream, forming the Papakolea Stream. The Papakolea Stream is a perennial stream that is used as part of the irrigation system constructed by Grove Farm. Papakolea Stream flows through the wetlands in the Huleia National Wildlife Refuge before discharging into the Huleia Stream, a perennial stream which originates in Mount Kahili and flows east to Nawiliwili Bay.

The Puali Stream is a perennial stream that begins at the center of the project site and flows southeast to Nawiliwili Bay. The stream is shallow and narrow with a flat streambed that consists of mostly gravel. The upper reaches of Puali Stream begin at Puhi Camp Reservoir which is fed by an irrigation ditch system belonging to Grove Farm. The middle reaches of the stream flows through a dense growth of grass before passing under Kaumualii Highway in a small box culvert, and then through a series of modified channels and culverts. It then flows downstream in an earthen trapezoidal channel through a housing development and Puhi Industrial Park. Then it flows through



LEGEND

- Surface Water
- Streams

Source: State of Hawaii, Office of Planning

0 750 1,500 3,000

Feet

1 inch = 1,500 feet

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KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

SURFACE WATER MAP

FIGURE

3-4

a narrow canyon covered with moderately dense forest until Halehaka Road Bridge where it becomes more open. The lower reaches flow through Niumalu Flat, a coastal wetland that is used for agriculture including wetland taro and pastureland.

The Halehaka Stream is a tributary of the Puali Stream and emanates from KCC campus just mauka of Kaumaulii Highway. The stream flows in the southeast direction

The Nawiliwili Stream is a perennial stream located north of the project site that flows southeast to Nawiliwili Bay. The northernmost tip of the KCC campus appears to drain towards Nawiliwili Stream. The upper reaches of the stream consists of a north and a south tributary that flow through undeveloped former sugarcane land. The middle reach of the stream is a small, shallow, slow-flowing stream that begins on the slopes of Kilohana Crater where the north and south tributaries converge. The middle reach flows through mostly open land which is primarily agricultural and low density residential. The lower reach of Nawiliwili Stream flows through a steeply incised gulch and onto the coastal plain before discharging into Nawiliwili Bay at the west end of Kalapaki Beach.

The 2006 Integrated Report (State of Hawai'i Department of Health, January 11, 2008) is the first effort by the State Department of Health (DOH) to integrate both reporting requirements for the Clean Water Act (CWA) Section 305(b) and 303(d). The CWA Section 305(b) requires states to describe overall status of water quality statewide and the extent to which water quality provides the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows recreational activities in and on the water. The CWA Section 303(d) requires states to submit a list of Water Quality Limited Segments, waters that do not meet state water quality standards, plus a priority ranking of listed waters, based on the severity of pollution and the uses of the waters.

The 2006 Integrated Report identified water quality in Nawiliwili Bay, as well as its contributing streams, Huleia, Nawiliwili, Puali and Papakolea Streams as impaired by excessive nutrients and turbidity. The DOH established Total Maximum Daily Loads (TMDLs) for these four streams. TMDLs are required for pollutant impaired water bodies on the State's Clean Water Act Section 303(d) list. The primary objectives of the TMDLs are to guide action that will control sources of excessive nutrients, sediment, and pathogens, and to improve water quality of the streams so that waterbodies throughout Nawiliwili Bay, will be protected and sustained.

There are two reservoirs within the project site. Approximately three acres in size, the two reservoirs are connected by ditches and are used for irrigation.

Natural drainage channels are located throughout the project site. Runoff is collected by a series of catch basins, intake boxes and grassed swales and ditches and then directed through a series of underground pipes to detention basins in the southeast portion of the project site. The water is then piped across Kaumaulii Highway to a Halehaka Reservoir which feeds into Halehaka Stream.

Impacts and Mitigation Measures

No significant impacts to surface waters located near or within the project site are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated. Improvements involving land disturbing activities that may impact surface waters will incorporate mitigation measures to minimize potential impact.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on surface waters due to a cumulatively larger scale of land disturbance. Construction activities with future larger projects, however, will not alter existing streams.

Potential impacts to the quality of surface water in the project area during excavation and grading activities associated with construction will be regulated by the County grading ordinance and the NPDES permit administered by the DOH. Construction activities would inevitably involve land-disturbing activities that may result in some soil erosion. Various mitigative measures will be incorporated in the project's design to minimize potential short-term erosion impacts during construction activities.

A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing facilities may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, a NPDES Permit for Storm Water Associated with Construction Activities will be required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NDPEs will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

UHCC is not proposing any major project near or along Puali Stream. Any improvements would be minor in scope and most likely occur within the campus core. Since the current plan lacks definitive detail required to address concerns such as drainage and impacts to aquatic resources, it is anticipated that subsequent Environmental Assessment (EA) or Environmental Impact Statement (EIS) will need to be prepared pursuant to Chapter 343, HRS for the development of individual projects when more concrete plans for such projects become available.

As individual projects are designed, their drainage requirements relative to the watershed in which they are located will be considered. It is anticipated that some drainage requirements would be addressed in the immediate vicinity of a building, parking area, or other new facility to capture and retain or detain flows. If discharges beyond the immediate vicinity are anticipated, then the capacity of the larger drainage systems serving the campus to accommodate those flows would need to be considered to prevent excess flows from entering natural drainage courses and streams. If the cumulative drainage impacts of future projects are anticipated to be more efficiently and cost effectively addressed through the preparation of a campus drainage master plan, such a plan will be prepared. All drainage plans are subject to review and approval by the Kauai Department of Public Works.

Based on the above considerations, flows from the KCC campus would not exceed drainage requirements. Therefore, its contribution to the cumulative flows within streams such as Puali Stream would not be significant. Should it be determined that the drainage system for the campus is inadequate to meet drainage standards, the Kauai DPW could require a broader downstream study to determine appropriate mitigation measures. In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on soils due to a cumulatively larger scale of land disturbance.

In the event that future development occurs near these sensitive resources, impacts on aquatic habitat and native stream species will be evaluated. Although unlikely, if any alterations to the stream bed or banks are proposed, a Stream Channel Alteration Permit will be submitted to DLNR.

3.4.3 Coastal Waters

The coastal water offshore of the project site is Nawiliwili Bay which is located approximately 3.15 miles to the east. The State DOH classifies this coastal water as Class A. The objective of this class is that "their use for recreational purposes and aesthetic enjoyment be protected. These waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class." (Water Quality Standards, Title 11, Chapter 54, Hawaii Administrative Rules). In addition, DOH identifies Nawiliwili Bay as an impaired water body (see also Section 3.4.2)

The natural drainage course for the project site is Puali Stream, which is designated Class 2 Inland.

Impacts and Mitigation Measures

No significant impacts on coastal waters in the vicinity of the project area are anticipated. UHCC is not proposing any major projects at this time. Any

improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated. Improvements involving land disturbing activities that may impact coastal waters will incorporate mitigation measures to minimize potential impact.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on coastal waters due to a cumulatively larger scale of land disturbance. Construction activities with future larger projects, however, will not alter existing streams or drainage patterns.

During construction, storm runoff may carry increased amounts of sediment into the storm drain system and streams due to erosion from exposed soils. This runoff could potentially impact the water quality of coastal waters in the area.

A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing facilities may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, a NPDES Permit for Storm Water Associated with Construction Activities will be required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NPDES will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

3.5 Wetlands

The United States Department of the Interior, National Wetlands Inventory Maps identifies known wetlands; in general, wetlands are determined by the presence of two of the following three conditions: 1) hydrology; 2) hydric soils; and/or 3) wetland vegetation. The National Wetlands Inventory Maps identified three wetlands which are located within the project site. Two of the wetlands are "forks" of the Puhi Stream and the third is an abandoned reservoir which is now used as a detention basin (see Figure 3-4).

Impacts and Mitigation Measures

No significant impacts on wetlands are anticipated. Puhi Reservoir located within the KCC campus, provides irrigation to loi located to the south of the reservoir. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated. Improvements involving land disturbing activities that may impact wetlands will incorporate mitigation measures to minimize potential impact.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on coastal waters due to a cumulatively larger scale of land disturbance. Construction activities with future larger projects, however, will not alter wetlands.

Construction would inevitably involve land-disturbing activities that may result in some soil erosion. Various mitigative measures will be incorporated in the project's design to minimize potential short-term erosion impacts during construction activities.

A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing facilities may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, a NPDES Permit for Storm Water Associated with Construction Activities will be required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NPDES will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

3.6 Natural Hazards

The Disaster Mitigation Act of 2000 requires that each State develop a hazard mitigation plan, in order to receive funding following a disaster. The Act also requires the development of local or county plans for that particular county to be eligible for post-disaster funding. The purpose of these requirements is to have programs and projects in place that will help minimize the loss of life, property, and overall cost of disasters.

The State of Hawai'i and the University of Hawai'i prepared their Multi-Hazard Mitigation Plans in 2010 and 2009, respectively. Both plans identify natural hazards and provide a strategy for reducing risks of natural hazards.

The UH plan also assessed the risk and vulnerability of each of the campuses compared with the natural hazards.

KCC is located approximately 2.5 miles from the ocean at an average elevation of 300 feet above mean sea level (UH Multi Hazard Plan, 2009).

3.6.1 Hurricanes, Tsunamis and Earthquakes

Hurricanes and Strong Winds: The island of Kauai has experienced many high wind events. Hurricane Dot (1959), Iwa (1982) and Iniki (1992) were damaging. KCC is designated as a public hurricane shelter.

Tsunamis: Kauai experienced tsunamis in 1946, 1957 (runup 53 feet), 1965 (runup 4 feet). KCC is located outside of the tsunami evaluation zone and is in an area of relatively low exposure and sensitivity.

Earthquakes: Approximately 95% of earthquakes in Hawaii are linked to volcanic activity. The UBC (Uniform Building Code) contains six seismic zones, ranging from “zero” (no chance of severe ground shaking) to 4 (10% chance of severe shaking in a 50-year interval). Ratings decrease with increasing distance from an earthquake’s source. The County of Kauai is located in Zone 1.

Impacts and Mitigation Measures

The University of Hawaii system has taken positive actions for disaster preparedness and mitigation. Such actions include planning and policy frameworks and regulations, hazard mitigation education and risk reduction programs, shelter “hardening” or structure improvements to reduce risk and hazards, “greening” campuses with sustainability and energy initiatives, and forecasting building operating and safety costs annually.

UH proposes to conduct engineering analysis and building facility retrofits to address potential hurricane, earthquake and flood hazards.

3.6.2 Flood Hazard

According to the Flood Insurance Rate Map (FIRM) (Community Panel Number 150020307E, Effective Date: September 16, 2005, and Community Panel Number 150020309E, Effective Date: September 16, 2005) prepared by the Federal Emergency Management Agency (FEMA), the project site is located within Zone “X”, defined as “Areas determined to be outside the 0.2% annual chance floodplain” as shown in Figure 3-5 Flood Zone Map. The project site is located outside the tsunami inundation zone.

According to the UH Multi-Hazard Mitigation Plan (2009), KCC is located in an area where flooding is primarily due to runoff and overland flows which is relatively less prone to extensive flood damage. The three major streams that have recorded floods in the Lihue area are Hanamaulu, Nawiliwili, and Huleia Streams, which are located to the northeast or south of KCC campus.

Impacts and Mitigation Measures

No significant impacts on flood hazards are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. UHCC is not increasing the impervious surface area, therefore, no impact to flood hazards.

In the longer term, implementation of major project shown in the updated LRDP will increase impermeable surfaces on campus, which could increase surface runoff and downstream flood potential if not appropriately mitigated. By developing and implementing appropriate mitigation measures in drainage design, however, individual project and cumulative impacts on flood hazards are not anticipated to be significant. As more definite plans for these major projects are developed, they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

3.7 Flora and Fauna

A Biological Survey was conducted by Rana Biological Consulting, Inc. in August 2010. The report is included as Appendix A and is summarized below.

3.7.1 Flora

The project area supports three distinct types of environments which are based upon land use: 1) the landscaped KCC campus and adjoining agriculture station southwest of the campus, 2) abandoned agricultural lands northwest of the campus, and 3) a broad, steep-sided gulch covered forest along the west side of the abandoned fields and agriculture station.

The vegetation in the landscaped area of the KCC campus and the adjoining agriculture station contain a number of native and Polynesian introduced species, including 12 Polynesian “canoe” plants, 14 species of vascular plants indigenous to the Hawaiian Islands, and 11 species of vascular plants endemic to these islands. Outside of the landscaped areas, 88 species of gymnosperms, ferns, and flowering plants were found. Of these 88 species, there are 5 native plants, 3 ferns, 1 endemic flowering plant (*Acacia koa*), and 1 Polynesian introduction (*‘ohe* or bamboo).

The abandoned agricultural fields north of the developed campus are dominated by Guinea grass (*Urochloa maxima*) growing so thick, preventing the surveying of these areas except along old farm roads. Large albizia (*Falcataria moluccana*) trees are also present and other species are seen invading the margins of the fields.

The greatest diversity of plants on undeveloped land was found in the gulch formed by Puhi Stream. A mature secondary forest consisting of mostly *Macaranga tanarius*, albizia and Java plum occupies the bottom and the low sloping ground of the northern margin of the gulch. Other noticeable plants include rose apple (*Syzygium jambos*), avocado (*Persea americana*), coffee (*Coffea Arabica*), hala (*Pandanus tectorius*), bamboo (*Bambusa vulgaris* and *Schizostachyum glaucifolium*), and strawberry guava (*Psidium cattleianum*). The upper end of the gulch is more diverse with at least two species of eucalyptus present. Pothos (*Epipremnum pinnatum ‘Aureum’*) and yellow granadilla (*Passiflora laurifolia*) vines are abundant at the margin of the forest. The gulch floor is relatively flat and broad, supporting some plants adapted to wetland conditions including *Pteridium aquilinum* and *Cyclosorus interruptus*.

Impacts and Mitigation Measures

No significant impacts on flora species are anticipated. The KCC campus and the partly developed and undeveloped surrounding lands lack botanical resources that would merit special concern, with some exceptions. In the undeveloped areas, the species present are common to lowland windward Kaua'i, and are nearly all non-native species (except one or two *koa* trees), and not requiring or deserving of preservation on this property. A number of unusual trees (including native species) within the former agriculture station at the southwest corner of the campus have been planted over a long period of time and now constitute a botanical resource worth preserving. These trees should be worked into landscaping of future development plans for this area.

No plant species currently listed as endangered, threatened, or proposed for listing under either federal or the State of Hawaii endangered species programs were recorded as growing naturally on the KCC property. One listed species was observed as an ornamental in a Hawaiian native plant garden. Therefore, it is not expected that proposed expansion of the campus will result in deleterious impacts to any plant species currently listed as endangered, threatened, or proposed for listing under either Federal or State of Hawai'i endangered species statutes.

3.7.2 Fauna

Twelve avian count stations spaced approximately equal distant from each other were sited within the campus, both within currently developed areas as well as in parts of the site, which are still undeveloped. A total of 526 individual birds of 18 species, representing 15 separate families, were recorded during station counts. An additional 3 species, Hawaiian Goose or *Nēnē* (*Branta sandvicensis*), Common Moorhen (*Galinula chloropus sandvicensis*), and Black-crowned Night-Heron (*Nycticorax nycticorax hoactli*), were also observed while transiting the site between count stations.

Four species, Common Myna (*Acridotheris tristis*), Zebra Dove (*Geopelia striata*), Japanese White-eye (*Zosterops japonicus*) and Red Junglefowl (*Gallus Gallus*) accounted for 57.4 percent of all birds recorded during station counts. The most commonly recorded species was Common Myna, which accounted for slightly more than 20 percent of the total number of individual birds recorded.

Four of the 21 species detected during the course of the survey are native species, Hawaiian Goose (*Nēnē*), Common Moorhen, Pacific Golden Plover, and Black-crowned Night-Heron. The Hawaiian Goose (*Nēnē*) and Common Moorhen are listed as endangered under both the State and Federal endangered species statutes. 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 Hawai'i and the Tropical Pacific to spend the fall and winter months each year. The remaining 17 avian species detected during the survey are all considered to be alien to the Hawaiian

Islands. It is probable that the Hawaiian endemic subspecies of the Short-eared Owl, or Pueo (*Asio flammeus sandwichensis*) use resources in the general project area, as they are regularly seen foraging over open fields in the low-to-mid elevations on the Island.

Although not observed during the survey, the Hawaiian Petrel (*Pterodroma sandwichensis*), and the threatened endemic sub-species of the Newell Shearwater (*Puffinus auricularis newelli*) have been recorded flying over the project site between April and the end of November each year. The Hawaiian Petrel is listed as endangered and the Newell Shearwater as threatened under both Federal and State of Hawai'i endangered species statutes. 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. Collision with manmade structures caused by disorientation from exterior lighting is considered to be the second most significant cause of mortality of these seabird species in Hawai'i. There are no nesting colonies or appropriate nesting habitat for either of these listed seabird species within or close to the school site.

There are no rare, threatened, or endangered fauna species within the project site. The findings of the avian survey are consistent with the location of the property, and the habitat present on the site.

No mammalian species protected or proposed for protection under either the Federal or State of Hawai'i endangered species programs were detected during the course of this survey. All terrestrial mammals currently found on the Island of Kaua'i, with the exception of the endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*), or 'ope'ape'a as it is known locally, are alien species, and most are ubiquitous. The survey of mammals was limited to visual and auditory detection, coupled with visual observation of scat, tracks, and other animal sign. Five mammalian species were detected during the course of this survey including dogs (*Canis f. familiaris*), cats (*Felis c. catus*), domestic cattle (*Bos Taurus*), pigs (*Sus s. scrofa*), and goats (*Capra h. hircus*)

It is likely that the four established alien *muridae*, Roof rat (*Rattus r. rattus*), Norway rat (*Rattus norvegicus*), European house mouse (*Mus musculus domesticus*), and Polynesian rats (*rattus exulans hawaiiensis*), found on Kaua'i use various resources found within the general project area. All of these introduced rodents are deleterious to native ecosystems and the native faunal species dependent on them.

Impacts and Mitigation Measures

No significant impacts on fauna within the project site are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5.

In the longer term, implementation of major projects shown in the LRDP will not adversely affect any rare, threatened, or endangered species of animal or its habitat. Future construction of facilities will require the removal of some of the existing plant species that provide a small habitat for various bird and mammal

species that commonly occur in sub-tropical environments, however, when landscaping is completed, many of these displaced species are anticipated to return.

There is no federally delineated Critical Habitat present within the project site or adjacent to the property. Thus, the further development of KCC will not result in impacts to federally designated Critical Habitat. There is no equivalent statute under the State law.

During construction of facilities, whether major or minor in scope, an endangered species awareness program will be developed which includes general information on the endangered species act and protected species, specific restrictions that will be in force on the job site to protect endangered species, and a set of protocols on who, and how job site personnel will respond to any downed or injured endangered species that may occur. All construction personnel will be required to be familiar with the program, its guidelines, restrictions and protocols that will need to be followed.

If construction activities occur during *Nēnē* nesting season, which typically runs from October through March, the project site should be surveyed by a qualified biologist before the onset of the construction, to determine if any active *Nēnē* nesting activity is occurring on the site. If active *Nēnē* nesting occurs while construction activities are ongoing, it may be advisable to have a *Nēnē* monitor on site to ensure that the birds are not harmed.

The primary potential impact that the proposed project poses to the nocturnally flying Hawaiian Petrels and Newell Shearwaters (*Puffinus newelli*) is the increased threat that individual birds will be downed after becoming disoriented by new exterior lighting associated with possible night-time construction activity, and structures that are built on the property. To reduce this possibility, all exterior lighting within the proposed project will be shielded or of the cut-off luminaire or indirect lighting types, and/or directed downward, or separately circuited to reduce the potential for interaction with exterior lights and man-made structures.

The principal potential impact that the further development of the site poses to Hawaiian hoary bats is during the clearing and grubbing phases of the project. If heavy vegetation of the periphery of the existing developed school facilities needs to be cleared, that clearing should not occur during the pupping/rearing season between May 15 and August 31. Woody plants greater than 15 feet tall should not be removed during this period. Hawaiian hoary bats roost in both exotic and native woody vegetation and leave their young unattended in “nursery” trees and shrubs when they forage.

3.8 Noise

Ambient noise in the vicinity of the project site is predominantly attributed to vehicular traffic along Kaumualii Highway.

Impacts and Mitigation Measures

UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. No significant impacts on ambient noise levels are anticipated as a result of the project. In the short-term, associated construction activities with these smaller improvements will have ambient noise impacts at the project site. Operation of the construction equipment and vehicles will raise ambient noise levels in the project vicinity. Construction operations will be conducted in compliance with the State DOH Administrative Rules, Title 11, Chapter 46, "Community Noise Control" regulations. These rules require a noise permit if the noise levels from construction activities are expected to exceed the allowable levels stated in Chapter 46 rules. It shall be the contractor's responsibility to minimize noise by properly maintaining noise mufflers and other noise-attenuating equipment, and to maintain noise levels below allowable regulatory limits. Also, the guidelines for the hours of heavy equipment operation and noise curfew times as set forth by the State DOH noise control regulations must be adhered to.

In the longer term, implementation of major projects shown in the updated LRDP will individually and cumulatively increase ambient noise levels in the vicinity as a result of the associated increase in vehicular traffic generated by the proposed project. As more definitive plans for these major projects are developed, they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

3.9 Air Quality

The State DOH operates 13 ambient air monitoring stations throughout the State. The pollutants monitored by the State are generally done on a regional level, and most of these stations are located at various sites on the Island of Oahu. There are no monitoring stations for lead. Stations located on the Island of Hawaii are intended to monitor pollutants associated with volcanic (vog) and geothermal activity (SO₂ and H₂S). Another monitoring station is located in Kihei on the Island of Maui. However, the monitoring objective for this station is for pollutants associated with agricultural activities (PM₁₀ and PM_{2.5}). The monitoring station on Kauai is located in Niualu and monitors air quality impacts from cruise ships (SO₂, CO, NO₂, and PM_{2.5}).

Regional air quality on Kauai and in the State is generally characterized as relatively clean and low in pollution. According to the DOH's *2011 Annual Summary Hawaii Air Quality Data*, the criteria pollutant levels remain below state and federal ambient quality standards at all state and local air monitoring stations in the State.

Air quality in the vicinity of the project site is generally good with prevalent tradewinds blowing seaward through most of the year. Within the immediate vicinity of the project site, air quality is primarily affected by vehicular-related emissions in the form of carbon monoxide (CO) generated by traffic along Kaumualii Highway and other nearby roadways.

Impacts and Mitigation Measures

UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. No significant impact on air quality is anticipated as a result of the project. In the short-term, there will be air quality impacts related to construction activities including fugitive dust generated by soil disturbance and emissions from construction vehicles and equipment and commuting construction workers. Potential air quality impacts during construction of the proposed project will be mitigated by complying with the State of Hawaii Department of Health Administrative Rules, Title 11, Chapter 60-11.1 "Air Pollution Control". Compliance with State regulations will require adequate measures to control fugitive dust by methods such as water spraying and sprinkling of loose or exposed soil or ground surface areas and dust-generating equipment during equipment. Exhaust emissions from construction vehicles are anticipated to have negligible impact on air quality in the vicinity as the emissions would be relatively small and readily dissipated.

In the long-term, implementation of major projects shown in the updated LRDP will individually and cumulatively impact ambient air quality in the vicinity as a result of associated increase in air quality impacts related to construction activities including fugitive dust generated by soil disturbance and emissions from construction vehicles and equipment and commuting construction workers. Concentrations of CO are readily dissipated by relatively low winds. However, the elevated CO concentrations are anticipated to dissipate. As more definitive plans for these major projects are developed, they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

3.10 Archaeological Resources

An archaeological literature review and field inspection of the project site was conducted by Cultural Surveys Hawaii, Inc. in August 2010. The report is included in Appendix B and is summarized below.

The survey consisted of a pedestrian inspection of the KCC campus. A total of ten historic surface features were found during the pedestrian survey, all of which appear to be associated with Grove Farm Plantation and sugar irrigation. These historic surface features consist of five irrigation ditches (CSH 1, CSH 2, CSH 4, CSH 6, and CSH 9), one of which is abandoned (CSH 1); three reservoirs (CSH 3, CSH 5, and CSH 7), one of which is abandoned (CSH 3); an abandoned wooden flume (CSH 8); and the Puhi

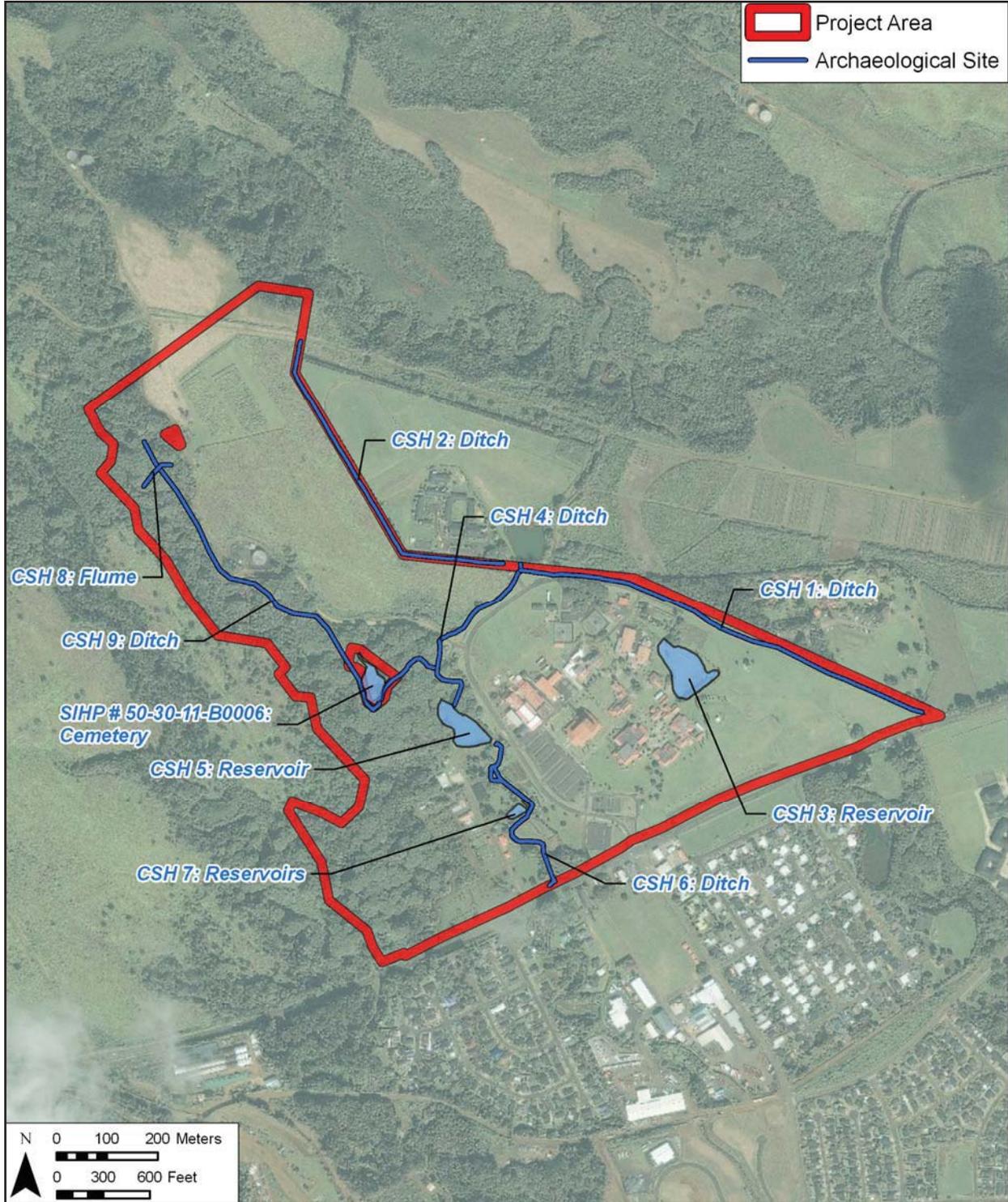
Camp Cemetery (CSH 10), which has been previously identified as SIHP # 50-30-11-B006 (see Figure 3-6).

Nine historic surface features (CSH 1 to CSH 9) are identified as Grove Farm Plantation infrastructure, and therefore comprise one historic property. These plantation era features include five irrigation ditches (CSH 1, CSH 2, CSH 4, CSH 6, and CSH 9). CSH 1 is an abandoned irrigation ditch which begins at the southwest side of a reservoir that is adjacent to and northeast of the project area and flows in a southeasterly direction forming the southeastern boundary of the project area. CSH 2 is located on the northeastern boundary of the project. CSH 2 is not currently used for irrigation, but it collects storm drainage and surface runoff from the Island School and its athletic fields, located to the east of KCC. CSH 4 flows west past the existing KCC buildings and then continues south, flowing into the northeast portion of a reservoir (CSH 5).

CSH 6 consists of an irrigation ditch (CSH 6a) with five associated features including a concrete and metal gate (CSH 6b), three stone pillars (CSH 6c), a cobble and concrete road (CSH 6d), a rock stacked bridge (CSH 6e), and a bridge incised with "1938" (CSH 6f). CSH 9 extends southeast from the northern boundary of the project area, past the south side of the Puhī Camp Cemetery (CSH 10 / SIHP # 50-30-11-B006), and flows into another irrigation ditch (CSH 4).

Three plantation era reservoirs (CSH 3, CSH 5, and CSH 7) associated with the Grove Farm Plantation are located within the KCC campus. CSH 3 is located in the southeast portion of the proposed project area adjacent to existing buildings. This abandoned reservoir is currently used as a flood control basin for the KCC campus. CSH 5 is located in the center of the project area, just to the east of Punana Leo Pre-School. Water from this reservoir flows through a concrete and metal water control gate under the road that leads to Punana Leo Pre-School and exits in a concrete flume to flow down into a reservoir (CSH 5). CSH 7 consists of two small reservoirs, CSH 7a and CSH 7b. Water from the larger reservoir (CSH 7a) flows from the south side of the reservoir through a modern pipe and into an irrigation ditch (CSH 6). The second smaller reservoir (CSH 7b) receives overflow from the larger reservoir (CSH 7a) through a small modern pipe.

An abandoned wooden flume (CSH 8) is located along the slopes of a gulch. Extending across the gulch, the flume is supported by two retaining walls constructed of concrete and boulders situated on both sides of the gulch. The flume appears to be intact for the most part with a small portion of the central area missing. The Puhī Camp Cemetery (CSH 10 / SIHP # 50-30-11-B006), is within a separate parcel owned by Grove Farm, surrounded by the KCC campus. The cemetery is located north of Punana Leo Pre-School and northwest of a reservoir (CSH 5). The cemetery is situated on a flat to gently sloping area with a short dirt road that runs through the center of the cemetery. An irrigation ditch (CSH 9) flows along the north, west, and south sides of the cemetery.



Source: Cultural Surveys Hawai'i, Inc.



WILSON OKAMOTO
CORPORATION
ENGINEERS • PLANNERS

KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

HISTORIC SURFACE FEATURES

FIGURE

3-6

The cemetery includes 172 graves with dates of death ranging from 1920 to 1977, with the majority of dates in the 1960s. Cemetery headstones, made from various materials from marble to stone to concrete blocks, are incised with Filipino, Japanese, and Chinese names, with Filipino appearing to be the most common.

Previous archaeological studies were conducted within or adjacent to the project area is summarized below:

- KCC Archaeological Reconnaissance (Palama 1973): In 1973, an archaeological reconnaissance of approximately 57 acres of the gully portion of KCC, an area north and west of the current developed portion of KCC was conducted. During the reconnaissance, an old auwai, an old military complex, Puhi Camp Cemetery (SIHP No. 50-30-11-B006), old plantation camp remains associated with Puhi Camp, an extant plantation camp, and possible loi were found. According to plantation camp residents, limited farming had occurred along the gully and residents were not aware of taro cultivation.
- Archaeological Inventory Survey for Eight Areas for Grove Farm (Rosendahl, 1989): One of eight survey areas is located within the project area, adjacent to Kaumualii Highway. The area was described as consisting of “residential homesteads and yard.” No cultural material was observed.
- Lihue/Puhi/Hanamaulu Master Plan (Walker et al., 1991): Approximately 220 acres within and adjacent to the project area were included in the 1,550 acre Lihue/Puhi/Hanamaulu Master Plan. The report describes the area as being modified and used for sugar cane cultivation and further states *“areas in sugar cane were only sampled...[and] were not generally surveyed...because areas altered by sugar cane cultivation are unlikely to contain archaeological features, and because sugar cane cultivation within the project area doe not occur in low swale or alluvial flat areas that may contain buried cultural deposits.”*
- Kaumualii Highway Archeological Assessment (Hammatt and Chiogioji, 1998): CSH conducted an archaeological assessment of an approximately 11.5-km long portion of the Kaumualii Highway corridor, a portion of which is adjacent to the southern boundary of KCC. During the survey, no surface traditional Hawaiian archaeological sites were observed during the entire survey although four historic properties (two bridges, a cemetery and an office building) were noted. No State site numbers were assigned.
- KCC One-Stop Center AIS and CIA (Hammatt and Shideler, 2004): CSH conducted an AIS and CIA for KCC’s One-Stop Center. The area was graded with an established lawn with no indicators of any archaeological concern. SHPD, OHA, staff of KCC’s Hawaiian Studies Program, and KNIBC did not express any concerns for adverse impacts to cultural practices by the proposed

project. SHPD further concluded that “no further archaeological work was needed for the project.”

Impacts and Mitigation Measures

UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no significant impact on archaeological and historical resources is anticipated as a result of the project.

In the longer term, implementation of major projects shown in the updated LRDP may impact the historic features identified during the survey. Specifically, some projects may have an adverse effect on historic features related to plantation era infrastructure. While no additional work appears to be necessary for the majority of features (see Table 3-1), consultation with State Historic Preservation Division of Department of Land and Natural Resources (SHPD/DLNR) is recommended regarding the tentative evaluations of these features and to determine what, if any, mitigation may be appropriate. SHPD/DLNR recommends an archaeological inventory survey specific to the proposed project plans to provide additional documentation of the nine plantation infrastructure features.

Feature	Feature Type	Function	Age	Notes	Evaluation Criteria
CSH 1	Irrigation ditch	Water control	Plantation era	Abandoned	D
CSH 2	Irrigation ditch	Water control	Plantation era	Currently in use for run-off	D
CSH 3	Reservoir	Water control	Plantation era	Abandoned	D
CSH 4	Irrigation ditch	Water control	Plantation era	Currently in use	D
CSH 5	Reservoir	Water control	Plantation era	Currently in use	D
CSH 6	Irrigation ditch and five associated appurtenances	Water control	Plantation era	Currently in use	D
CSH 7	Reservoir	Water control	Plantation era	Currently in use	D
CSH 8	Flume	Water control	Plantation era	Abandoned	D
CSH 9	Irrigation ditch	Water control	Plantation era	Currently in use	D
CSH 10 (SIHP B0006)	Cemetery	Burial	1920-1977	Designated as SIHP# 50-30-11-B0006	--

Additional documentation / research is recommended for one of the plantation era features (CSH 6). Six of the plantation era features (CSH 1, CSH 3, CSH 4, CSH 5, CSH 8, and CSH 9) appear to have been sufficiently documented and no further work is recommended. Two of the plantation era features (CSH 2, CSH 7) have lost their integrity to convey their historic significance due to design and material alterations.

No further work is recommended for CSH 10 / SIHP # 50-30-11-B006, the Puhi Camp Cemetery, the historic property is not part of KCC campus and the State Land Use Boundary petition area, however, preservation, in the form of avoidance and protection is recommended during future development of the KCC campus.

The nine historic features (CSH 1 -9) identified are Grove Farm Plantation infrastructure, and therefore comprise of one historic property. The features are considered significant under criterion "D", *"have yielded, or is likely to yield information important for research or prehistory or history."*

Since KCC is not proposing any major projects at this time additional archaeological studies would be conducted at the appropriate time.

The SHPD concurred with the recommendations (see Appendix B).

3.11 Cultural Resources

Cultural Surveys Hawai'i, Inc. (CSH) conducted a Cultural Impact Assessment (CIA). The results are summarized below and the assessment is included in its entirety as Appendix C. The purpose of the CIA is to consider the project's effect on cultural practices. This assessment provides information pertinent to the assessment of the proposed project's impacts to cultural practices and resources (per the *Office of Environmental Quality Control's Guidelines for Assessing Cultural Impacts*). The impacts may include Traditional Cultural Properties (TCPs) of ongoing cultural significant that may be eligible for including on the State Register of Historic Places.

Settlement and Subsistence: The ahupuaa of Nawiliwili, Niunalu, and Haiku were permanently inhabited and intensively used in pre-Contact and early historic times, based on archaeological, historical, and oral history documentation. Historically, settlement of the study area was predominantly along the coastal areas as evidenced by the concentration of permanent house sites, temporary shelters, heiau, fishponds, and intensive cultivation in these areas. In addition, moololo and wahi pana associated with the study area are plentiful, suggesting early settlement of the area by Native Hawaiians. The study area drastically changed between 1886 and 1935, in which loi cultivation had significantly decreased and replaced by pastureland and sugar cane cultivation. According to Mr. Chun, one of the interviewees, it is very unlikely that the project area supported much human habitation until the plantation era with the establishment of Puhi Camp.

Heiau: No known heiau currently exists within the study area. However, historic maps show that only one heiau, Kuhiau heiau, existed along the shoreline of the study area in Nawiliwili Ahupuaa. This heiau is thought to be associated with its sister heiau, Paukini Rock, which marks the boundary between Nawiliwili and Kalapaki. Three other heiau were located in Kalapaki Ahupuaa, directly north of Nawiliwili. These include remnants of an unknown heiau at Kukii Point, and two heiau along rocky points at Ninini and Ahukini. Physical evidence of these heiau have been obliterated by historic activities and more recent development. Nevertheless, the sacred nature of the landscape in and around these heiau, are still appreciated.

Commercial Sugar Cane Agriculture: As western dominance grew in Hawai'i, sugar came to dominate economic, political, and social life in the islands. In 1935, commercial cultivation of sugar began in Koloa, which created needs for a larger supply of laborers. As plantations were established, the native Hawaiian population could no longer meet the plantation's needs, therefore foreign labor was imported, particularly from Japan, China and the Philippines.

Lihue Plantation, situated adjacent to the project area, began as a partnership between Henry Augustus Pierce, Judge William Little Lee and Charles R. Bishop in 1849. From 1854 to 1862, under the management of William Harrison Rice, the plantation invested heavily in irrigation ditch infrastructure.

Grove Farm Plantation was established by Warren Goodale after acquiring land in 1850. In 1856 the plantation was sold to Judge Herman Widemann. Judge Widemann asked George Wilcox to undertake the supervision of the irrigation ditch for Grove Farm Plantation. In 1864, Wilcox rapidly expanded development of the irrigation infrastructure. In 1870, Wilcox bought Grove Farm from Widemann. Over the next ten years Wilcox leased and bought thousands of acres in Haiku, increasing the acreage of Grove Farm nearly ten-fold.

An 1878 Government Survey Map also shows little development within the project vicinity and sugar plantations which have not expanded to their later extent.

Grove Farm operated under Wilcox until 1933 when he died. During his time, the plantation flourished and Grove Farm was at the forefront of housing improvements, during a time when plantation housing was inadequate throughout the Hawaiian Islands. Between 1917 and 1920, Grove Farm built 120 houses in a single new camp for workers which became known as Puhi Camp. The new housing at Puhi attracted the attention of the Hawaiian Sugar Planter's Association (HSPA) and the dwellings became the standard for the plantation industry in the 1920s.

In the 1920s, Grove Farm began building along the route of the present day Kaunualii Highway and just south of the present day Kaua'i Community College. Puhi Camp also extended in the current project area. The camp consisted of approximately 600 homes occupied by 1,200 workers and their families.

In mid-1960s, Sam Wilcox of Grove Farm donated 200 acres of former sugar land to the State for Kaua'i Community College. Most of the Puhi Camp housing was removed in the 1970s prior to the construction of KCC. In the 1980s, the last homes in Puhi Camp were dismantled. Currently, newer buildings for the Punana Leo O Kaua'i Pre-School and Kawaikini New Century Public Charter School, and a few agricultural plots occupy some of the former Puhi Camp lands.

Consultation: Hawaiian organizations, agencies and community members were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and the vicinity. Outreach included efforts to contact 32 individuals and agencies. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), the Kauai/Niihau Island Burial Council (KNIBC), the Hui Malama I Kupuna O Hawaii Nei, the Kauai/Niihau Hookipa Network, the Kaumualii Hawaiian Civic Club, the Kaua'i Historical Society, Malama Kauai, and community members of the Lihue District.

Of the 22 people who responded, eight kupuna and/or kamaaina participated in formal interviews for more in-depth contributions to the CIA and two people provided a statement via e-mail and telephone.

This community consultation indicates that additional significant cultural resources, namely streams and watersheds as well as the Huleia National Wildlife Refuge near and downstream from the project area, have not been adequately documented and assessed for their ecological relationship with natural and cultural resources within and near the project area. The study area and environs, in particular the loi, kula or lands in valley bottoms in this particular context, rivers, streams and Nawiliwili Bay, has a long history of use by Kanaka Maoli and other kamaaina groups for a variety of past and present cultural activities and gathering practices. Participants consulted reveal their knowledge of these practices and resources.

At least two community members, Mr. Pereira and Mr. Chun discuss fishing, gathering opihi and limu in Nawiliwili Bay, and crabbing along Huleia River which continue today among residents of the area. Both members discuss spear and throw-net fishing which for Mr. Pereira consisted of catching akule, manini, and squid using his own throw-net which he creates and sells to others. Several community members (Mr. Robert White, Mr. Pereira and Mr. Chun) narrate heenalu practices and associated moololelo in the past and present. Two participants note the abundance of freshwater resources and the watershed near the project area and highlight the ecological relationship of natural and cultural resources within or near the project area.

Participants also related moololelo about the practice of hukilau, the origin of the name "Puhi" which is connected to the cave of a shark god in Haiku, as well as the presence of spirits in the project area in the form of fireballs. At least five participants related to the gathering of plants such as bamboo shoots, papaya, mangoes, passionfruit, guava

and pepeiao (cloud ear fungus) in the project area along with catching crayfish, oopu and frogs in the irrigation ditches and reservoirs while at least two community contacts related about the hunting of pheasants and wild boars. Participants also discuss burials and note the existence of a historic cemetery surrounded by the project area, and another cemetery nearby. Many participants stress the importance of respecting and sharing resources with one another, the ecological relationship that shapes natural and cultural resources, and the need to keep the ecological balance of keeping contaminants away from the watershed upon which the project area is built to ensure a healthy environment for Nawiliwili Bay and the wildlife refuge area downstream of the project area.

Other important findings from community consultations are summarized below:

1. In the 1960s and 70s, the ahupuaa of Nawiliwili, Niupalu, and Haiku, consisted of small rural towns with taro cultivated relatively to the ocean. Mr. Chun describes Nawiliwili Valley as having had many taro fields which later turned into cattle pasture and grassland.
2. The project area is agricultural land formally owned by Grove Farm where pineapple, cattle, and later sugar cane, were farmed. Plantations provided a livelihood for many residents of Kaua'i like Mr. Pereira and Kupuna Makanani.
3. The project area included the former Old Puhi Camp, a plantation camp for the workers of Grove Farm Plantation and their families.
4. Two graveyards, known to Puhi residents as "Old Puhi Cemetery" (SIHP No. 50-30-11-BG0006) and "Cement Pond," are located outside of but within 200 meters of the project area. The cemetery is divided into two sections for Japanese and Filipino families despite the multi-cultural makeup of Puhi. Some graves are of Filipino veterans who have no known family with only crossed in the ground for their burial. According to Mr. Takahashi, other ethnicities chose to be buried elsewhere and many graves were removed by their families. "Cement Pond," exists approximately 200 meters north of the project area and consists of three burials. Participants speculate that these burials are not of Puhi Camp residents but possibly affluent Japanese. Kupuna Makanani recalls how it was possible to bury family members around one's residence when she was growing up.
5. Mr. Chun reiterates that the sugarcane plantations would have displaced features of cultural significance within the project area and also points out that the population centers would have been concentrated along the coast or along the Huleia River. Therefore, the likelihood of finding heiau and other cultural features would be higher along the coast than within the project area. No participants had knowledge of any heiau within the project area. However, one participant notes a moololo about fireballs, which reflect the presence of spirits in Native Hawaiian culture, near the project area.
6. Mr. Chun and Mr. White indicate that development has changed water flow patterns as well as water quality. Mr. Chun attributes muddy water in Nawiliwili Bay not only to heavy rains flooding the Huleia River but to development and land based activities upstream, such as the previous sugar mill and existing Marriott Hotel. Mr. Chun

believes that fresh water has shaped the ecology of Nawiliwili Bay in that corals do not grow in the presence of fresh water. He speculates that the sandy bottoms of the bay and the location of the coral reef further out in the bay, is due to the decreased salinity from the influx of fresh water.

7. The traditional practice of lei making was and continues to be practiced by residents of the study area.

Impacts and Recommendations

Based on consultation for the CIA, the following recommendations were proposed by interviewees:

- Puhi Camp Cemetery: The cemetery is located on TMK: 3-4-07: 005, owned by Grove Farm and not part of the KCC campus and State Land Use Boundary petition area. During consultation for the CIA, the interviewees preferred that the burials remain in place and be protected. If any work in or around the cemetery is proposed in the future, families with ties to the cemetery should be consulted with.
- Former Puhi residents are concerned about the further loss of history and memories of Puhi Camp as the campus expands. The residents (interviewees) recommended that a replica bulletin board used in everyday life of Puhi Camp and containing the history of the camp be built and installed on KCC campus.
- Due to concerns expressed by participants about the possible impacts of the KCC expansion to the ecology and its interrelationship with the natural and cultural resources within and near the project area, it is recommended that KCC limit or consider the use of non-toxic pesticides and employ appropriate best management practices.
- Due to the current traffic congestion directly in front of the KCC campus attributed in part to vehicles turning into Chevron gas station, and the likelihood that the traffic will likely be exacerbated by the KCC expansion, it is recommended that KCC work with the County or the State to install the “necessary signage or asphalt marking” as well as other safe means to improve intersection flow.

As mentioned in Chapter 2, KCC is not proposing any major projects at this time. In the longer term, implementation of major projects is not anticipated to have significant individual or cumulative impacts on cultural resources. Should cultural or burial sites be identified during future ground disturbance in the project area, all work should immediately cease and the appropriate agencies notified pursuant to applicable law. The recommendations suggested by interviewees will be considered and implemented, if appropriate.

3.12 Traffic

A Traffic Impact Report for the proposed project was conducted by Wilson Okamoto Corporation in December 2010. Since KCC is not proposing any major projects at this time, the Traffic Impact Report (TIR) was prepared to identify and assess the traffic impacts based on projected student enrollment. The TIR involved: the evaluation of existing roadway and traffic operations in the vicinity; analysis of future roadway and traffic conditions without the proposed project; analysis and development of trip generation characteristics for the proposed project; superimposing site-generated traffic over future traffic conditions; identification and analysis of traffic impacts resulting from the proposed project; and recommendations of improvements, if appropriate, that would mitigate the traffic impacts resulting from the proposed project. The results are summarized below and the study is included as Appendix D.

Field investigations were conducted on September 14-16, 2010 and consisted of manual turning movement count surveys during the morning peak hours between 6:00 a.m. and 9:00 a.m., and the afternoon peak hours between 3:00 p.m. and 6:00 p.m. at the intersections of Kaumualii Highway and Puhi Road, Kaumualii Highway and Nani Street, and Kaumualii Highway and Nuhou Street. In addition, a 24-hour mechanical count survey was conducted along the main access for KCC north of the Kaumualii Highway and Puhi Road intersection.

The morning peak hour of traffic generally occurs between 7:15 a.m. and 8:15 a.m. in the vicinity of the project. In the afternoon, the peak hour of traffic generally occurs between the hours of 4:00 p.m. and 5:00 p.m.

Analysis of highway capacity is based on the concept of Level of Service (LOS). LOS is a quantitative and qualitative assessment of traffic operations. LOS are defined by LOS "A" through "F"; LOS "A" representing ideal or free-flow traffic operating conditions and LOS "F" unacceptable or potentially congested traffic operating conditions.

The primary access for KCC is provided via an access road at the intersection of Kaumualii Highway and Puhi Road. In the vicinity of the community college, Kaumualii Highway is a predominantly two-lane, two-way roadway generally oriented in the east-west direction. At the signalized intersection with Puhi Road, both approaches of Kaumualii Highway have exclusive turning lanes and one through lane. Puhi Road is a predominantly two-lane, two-way roadway generally oriented in the north-south direction. At the intersection of Kaumualii Highway, the northbound approach of Puhi Road has a shared left-turn and through lane, and an exclusive right-turn lane. The southbound approach of the intersection is comprised of the access road for the community college which has a shared left-turn and through lane, and an exclusive right-turn lane. An additional westbound departure lane is provided along Kaumualii Highway at this intersection to allow southbound right-turning vehicles to proceed freely through the intersection.

At the intersection with Puhi Road, Kaumualii Highway carries 933 vehicles eastbound and 728 vehicles westbound during the a.m. peak period. During the p.m. peak period, traffic volumes are higher with 996 vehicles traveling eastbound and 1,012 vehicles traveling westbound. The left-turn traffic movement on both approaches of the highway operate at LOS "D" and LOS "E" during the a.m. and p.m. peak periods, respectively, while the right-turn traffic movements operate at LOS "B" during both peak periods. The eastbound through traffic movement operates at LOS "C" during both peak periods while the westbound through traffic movement operates at LOS "C" and LOS "D" during the a.m. and p.m. peak periods, respectively. Traffic queues periodically formed on the eastbound and westbound approaches of the intersection with average queue lengths of 10-12 vehicles observed on both approaches during both peak periods. These queues were observed to clear the intersection after each traffic signal cycle change.

The Puhi Road approach of the intersection carries 230 vehicles and 281 vehicles northbound during the a.m. and p.m. peak periods, respectively. The northbound left-turn and through traffic movement on this approach operates at LOS "D" and LOS "E" during the a.m. and p.m. peak periods, respectively, while the right-turn traffic movement operates at LOS "C" and LOS "D" during the a.m. and p.m. peak periods, respectively. Traffic queues periodically formed on the Puhi Road approach of the intersection with average queue lengths of 9-11 vehicles observed during both peak periods. These queues were observed to clear the intersection after each traffic signal cycle change.

The southbound approach of the intersection is comprised of the access road for KCC which carries 104 vehicles and 160 vehicles, respectively. The southbound left-turn and through traffic movement on this approach operates at LOS "C" and LOS "E" during the a.m. and p.m. peak periods, respectively. Traffic queues periodically formed on the access road approach of the intersection with average queue lengths of 2-3 vehicles observed during both peak periods. These queues were observed to clear the intersection after each traffic signal cycle change.

Northeast of the intersection with Puhi Road, Kaumualii Highway intersects Nani Street. At this unsignalized T-intersection, the eastbound approach of the highway has one lane that serves through and right-turn traffic movements while the westbound approach has one lane that serves left-turn and through traffic movements. Nani Street is a two-lane, two-way roadway generally oriented in the north-south direction. At the intersection with the highway, the Nani Street approach has one lane that serves left-turn and right-turn traffic movements.

At the intersection with Nani Street, Kaumualii Highway carries 808 vehicles eastbound and 766 vehicles westbound during the a.m. peak period. During the p.m. peak period, traffic volumes are higher with 927 vehicles traveling eastbound and 1,040 vehicles traveling westbound. The critical traffic movement along the highway at this intersection is the westbound approach which operates at LOS "A" during both peak periods.

The Nani Street approach of the intersection carries 95 vehicles and 51 vehicles northbound during the a.m. and p.m. peak periods, respectively. Traffic queues periodically formed on the Nani Street approach of the intersection with average queue lengths of 1-3 vehicles observed during both peak periods.

Further northeast, Kaumualii Highway intersects Nuhou Street. At this signalized intersection, the eastbound approach of the highway has exclusive turning lanes and one through lane while the westbound approach has one through lane and a shared through and right-turn lane. Nuhou Street is a four-lane, two-way roadway generally oriented in the north-south direction. At the intersection with the highway, the northbound approach of Nuhou Street has a shared left-turn and through lane, and an exclusive right-turn lane. The southbound approach of the intersection is comprised of the secondary access for KCC which has one lane that serves all traffic movements.

At the intersection with Nuhou Street, Kaumualii Highway carries 897 vehicles eastbound and 1,008 vehicles westbound during the a.m. peak period. During the p.m. peak period, the overall traffic volume is approximately the same with 968 vehicles traveling eastbound and 957 vehicles traveling westbound. The left-turn traffic movement on both approaches of the highway operate LOS "E" during both peak periods while the eastbound through and westbound through and right-turn traffic movements operate at LOS "C" during both peak periods. The eastbound right-turn traffic movement along the highway operates at LOS "B" during both peak periods. Traffic queues periodically formed on the eastbound and westbound approaches of the intersection with the most significant queuing occurring on the eastbound approach of the intersection. Queue lengths in excess of 15 vehicles were observed on the eastbound approach during this peak periods. Most of these queues cleared after each traffic signal cycle change, but occasionally vehicles had to wait for more than one traffic signal cycle length.

The Nuhou Street approach of the intersection carries 283 vehicles and 285 vehicles northbound during the a.m. and p.m. peak periods, respectively. The traffic movements on this approach operate at LOS "D" during both peak periods. Traffic queues periodically formed on the Nuhou Street approach of the intersection with most significant queuing occurring during the p.m. peak period. Average queue lengths of 10-12 vehicles were observed during this peak period with these queues observed to clear the intersection after each traffic signal cycle change.

The southbound approach of the intersection is comprised of the access road for KCC which carries 113 vehicles and 114 vehicles southbound during the a.m. and p.m. peak periods, respectively. This approach operates at LOS "E" and LOS "D" during the a.m. and p.m. peak periods, respectively. Traffic queues periodically formed on the access road approach of the intersection with average queue lengths of 1-3 vehicles observed during both peak periods. These queues were observed to clear the intersection after each traffic signal cycle change.

The State of Hawaii Department of Transportation (DOT) is currently widening Kaunualii Highway from a two-lane undivided highway to a four-lane divided highway between Anonui Street and the Lihue Mill Bridge. The highway will have two travel lanes in each direction with auxiliary lanes provided at the intersections along this segment once construction is completed in 2012.

According to KCC, less than 1% of the student population walk and bike to school (Mr. G. Nitta, personal communication, July 2, 2012).

Impacts and Mitigation Measures

The cumulative traffic volumes consist of site-generated traffic superimposed over Year 2020 projected traffic demands. The LRDP entails the development of new facilities that will allow the expansion of existing programs at the college. In conjunction with the expansion of these programs, enrollment at KCC is expected to increase. Enrollment projections published by the University of Hawaii for KCC currently extend only to 2015. However, in coordination with KCC and utilizing standard linear regression techniques, the enrollment projections were extended to the Year 2020 when the full time equivalent (FTE) course enrollment at KCC is expected to increase from 864 students to 1,038 students. Project site trip generation characteristics applied to the a.m. and p.m. peak hours of traffic to measure the impact resulting from the LRDP is summarized in Table 3-2.

Table 3-2 Peak Hour Trip Generation		
JUNIOR/COMMUNITY COLLEGE		
INDEPENDENT VARIABLE:		Increase in FTE enroll = 174 students
		PROJECTED TRIP ENDS
A.M. PEAK	ENTER	29
	EXIT	6
	TOTAL	35
P.M. PEAK	ENTER	33
	EXIT	13
	TOTAL	35

Source: Wilson Okamoto Corporation. *Traffic Impact Report For The Kauai Community College Long Range Development Plan*. December 2010.

Primary access to KCC will continue to be provided via the intersection of Kaunualii Highway and Puhi Road with secondary access provided via the intersection of Kaunualii Highway and Nuhou Street. For the purpose of this report, all new trips generated by KCC are conservatively assumed to utilize the primary access since most of the on-campus parking is provided off this roadway. At the intersection of Kaunualii Highway and Puhi Road, the directional distribution of site-generated vehicles is assumed to remain similar to existing conditions. At the other study intersection, all site-generated vehicles are

assumed to continue through the intersections to travel to/from the community college.

The Year 2020 cumulative a.m. and p.m. peak hour traffic conditions with the implementation of the proposed project are summarized in Table 3-3. The projected Year 2020 operating conditions without the proposed project are provided for comparison purposes.

Table 3-3 Projected Year 2020 (Without and With Project) Traffic Operation Conditions						
Intersection	Critical Traffic Movement		A.M.		P.M.	
			Year 2020 w/out Project	Year 2020 with Project	Year 2020 w/out Project	Year 2020 with Project
Kaumualii Hwy/ Puhi Rd	Eastbound	LT	C	C	D	D
		TH	B	B	B	B
		RT	B	B	B	B
	Westbound	LT	C	C	D	D
		TH	B	B	B	B
		RT	B	B	B	B
	Northbound	LT-TH	C	C	C	C
		RT	B	B	B	B
	Southbound	LT-TH	C	C	C	C
RT		B	B	B	B	
Kaumualii Hwy/ Nani St	Westbound	LT	A	A	A	B
	Northbound	LT-RT	B	B	B	B
Kaumualii Hwy/ Nuhou St	Eastbound	LT	D	D	D	D
		TH	C	C	B	B
		RT	B	B	B	B
	Westbound	LT	D	D	D	D
		TH-RT	B	B	B	B
	Northbound	LT-TH	C	C	C	C
		RT	C	C	B	B
Southbound	LT-TH-RT	D	D	C	C	

Source: Wilson Okamoto Corporation. *Traffic Impact Report For The Kauai Community College Long Range Development Plan*. December 2010.

The travel forecast of through traffic was developed based upon the historical traffic count data obtained from the State Department of Transportation (SDOT), Highway Division survey stations in the vicinity of the project area. The historical data indicates a stable or declining growth in traffic and, as such, an annual traffic growth rate of approximately 0.5% per year was conservatively assumed along Kaumualii Highway in the project vicinity. Using the Year 2010 as the Base Year, a growth factor of 1.05 was applied to the existing through traffic demands along Kaumualii Highway to achieve the projected Year 2020 traffic demands.

Without the implementation of the LRDP, traffic operations in the vicinity of KCC are expected to improve during both peak hours of traffic due to the widening of Kaumualii Highway to a four-lane divided highway. The traffic movements at the intersection of Kaumualii Highway and Puhi Road are expected to operate at LOS "C" or better during a.m. peak period and LOS "D" or better during the p.m. peak period while those at the intersection with Nani Street are expected to operate at LOS "B" or better during both peak periods. At the intersection with Nuhou Street, the traffic movements are expected to operate at LOS "D" or better during both peak periods.

With the implementation of the LRDP, traffic operations in the vicinity of KCC are expected, in general, to operate at LOS similar to Year 2020 without project conditions despite the addition of site-generated traffic to the surrounding roadways. The westbound left-turn traffic movement along Kaumualii Highway the intersection with Nani Street is expected to operate at a slightly lower LOS during the p.m. peak period. The remaining critical movements at this intersection, as well as the other study intersections are expected to continue operating at LOS similar to without project conditions. In addition, the total traffic volumes entering the study intersection are expected to increase by less than 2% during both peak periods with the proposed project. The increases in the total traffic volumes are in the range of daily volume fluctuations along Kaumualii Highway and represent a minimal increase in the overall traffic volumes.

Based on the analysis of the traffic data, the following are the recommendations of this study:

- Maintain sufficient sight distance for motorists to safely enter and exit all project roadways.
- Maintain adequate on-site loading and off-loading service areas and prohibit off-site loading operations.
- Maintain adequate turn-around area for service, delivery, and refuse collection vehicles to maneuver on-site to avoid vehicle-reversing maneuvers onto public roadways.
- Maintain sufficient turning radii at all project roadways to avoid or minimize vehicle encroachments to oncoming traffic lanes.
- If the implementation of Kauai Community College's Long Range Development Plan is not completed by the Year 2020, prepare an updated Traffic Impact Report that incorporates a revised project completion year.

With the implementation of the aforementioned recommendations, the implementation of the LRDP is not expected to have a significant impact on traffic operations in the vicinity of the project.

Future development proposed within the State highway right-of-way will require construction plans to be submitted to DOT, Highways Division.

Less than 1% of the student population walk and bike to school. The percentage may increase with the widening of Kaumualii Highway. An evaluation of pedestrian and bicycle traffic could be considered at a later date when KCC has more detailed plans.

If and when appropriate, UHCC will retain a traffic consultant to identify impacts and propose mitigation measures for future projects, as needed. UHCC will provide updates to HDOT regarding future development of the KCC campus.

3.13 Views

The project site is located in Puhi which is characterized largely by agricultural lands. Scenic resources which are visible from the edges of the project site include Haupu (Hoary Head) Mountain Range to the southwest and Kilohana crater and Mount Waialeale to the north. Because of the relatively flat topography on the existing campus, the most significant views can be experienced along the periphery of the campus as views from the central portion of the campus are often blocked by existing buildings. The limited vegetation along the edge of the campus fronting Kaumualii Highway makes the KCC campus highly visible from the highway.

The Heritage Resources Map for the Lihue area designates portions of Kaumualii Highway located to the east and west of the project site as a Scenic Roadway Corridor. Scenic Roadway Corridors conserve open space, scenic features, and views within and along Kauai's major roadways and lands visible from these roadways to preserve Kauai's rural character.

Impacts and Mitigation Measures

No significant impacts on visual resources in the project area are anticipated. The campus is composed of mostly one-story buildings, except for the performing arts center and one stop center. In the longer term, implementation of major projects shown in the updated LRDP will individually and cumulatively affect the visual characteristic of the campus. The new buildings are envisioned to be generally one- or two-story structures. The new buildings will adhere to the Design Guidelines in KCC's LRDP, which addresses the overall design direction, materials, and standards for new building projects.

The future expansion of the campus includes additional parking lots to accommodate student population. The proposed parking lots will be screened and beautified with consistent landscaping.

The future expansion of the campus will minimize the intrusion of buildings on the visual environment through architectural design criteria and extensive landscaping.

3.14 Socio-Economic Characteristics

The project area is situated within the Puhi-Hanamaulu Census Tract (CT 404). In 2010, the Puhi-Hanamaulu CT had a resident population of 8,740 people with a median age of 39.3 years. The census identified 6.7 percent of the population being 0-4 years of age, 19.9 percent being 5-19 years, 58.5 percent being 20-64 years, and 14.8 percent being 65 years or older. There were 2,564 households out of which 33.9 percent have children under 18 living with them. The 2010 census identified 51.8 percent as Asian and 17.3 percent as White. The average household size in Puhi is 3.23 persons. A summary of the demographic characteristics in the area can be found in Table 3-4 (U.S. Census Bureau, 2000).

Subject	Census Tract 404 Puhi-Hanamaulu		Kauai	
	Number	Percent	Number	Percent
Total population	8,740	100.0	67,091	100.0
AGE				
Under 5 Years	587	6.7	4,281	6.4
5 – 19 years	1,741	19.9	12,380	18.4
20 – 64 years	5,115	58.5	40,445	60.3
65 years and over	1,297	14.8	9,985	14.9
Median age (years)	39.3	--	41.3	--
RACE (alone or in combination with other races)				
White	1,513	17.3	22,159	33.0
Black or African American	32	0.4	278	0.4
American Indian and Alaska Native	12	0.1	254	0.4
Asian	4,529	51.8	21,016	31.3
Native Hawaiian and other Pacific Islander	632	7.2	6,060	9.0
Other	85	1.0	608	0.9
Two or more races	1,937	22.2	16,716	24.9
HOUSEHOLD (BY TYPE)				
Total Households	2,564	100.0	23,240	100.0
Family households (families)	1,923	75.0	16,147	69.5
Married-couple family	1,339	52.1	11,654	50.1
With own children under 18 years	574	22.4	6,368	27.4
Female householder, no husband present	390	15.2	2,924	12.6
With own children under 18 years	191	7.4	1,300	5.6
Nonfamily households	641	25.0	7,093	30.5
Households with non-relatives	502	19.6	5,255	22.6
Average household size	3.23	--	2.84	--
HOUSING OCCUPANCY AND TENURE				
Total Housing Units	2,876	100.0	29,793	100.0
Occupied units	2,564	89.2	23,240	78.0
By owner	1,575	61.4	13,968	60.1
By renter	989	38.6	9,272	39.9
Vacant units	312	10.8	6,553	22.0

Source: U.S. Census Bureau, Census 2010

A mix of land uses can be found in the vicinity of the project area including residential, commercial and agricultural activities. Commercial activities in the vicinity of the project area are centered in Lihue where numerous retail, office, and other business establishments are located.

Impacts and Mitigation Measures

The proposed project will generally have positive social and economic impacts in the region.

In the short-term, the project will confer some positive benefits in the local area. The project will add construction jobs in the vicinity, thereby stimulating that sector of the economy. Indirect economic impacts may include benefits to local retail businesses resulting from construction activities. Construction activities associated with the proposed project will create some adverse impacts such as minor disruptions of traffic, potentially affecting motorists, residents and businesses near the project site, and increased noise nuisances in the immediate vicinity of the project site.

In the longer term, implementation of the major projects shown in the updated LRDP would individually and cumulatively confer positive benefits in the local areas, as discussed above.

3.15 Public Services

Police: Police protection is provided by the Kauai Police Department which has four stations located in Lihue, Hanalei, Kapaa, and Waimea. The Kauai Police Department is divided into three Patrol Service Bureaus, the Hanalei District in the north, the Lihue District in the southeast, and the Waimea District in the southwest. Lihue District provides service for the Kapaa and Lihue communities which include the areas of Puhi, Nawiliwili, Hanamaulu, and Wailua. The Lihue District's office is located on the first floor of the Kauai Police Department's Headquarters in Lihue at 3990 Kaana Street, approximately 2.5 miles east of the project site.

Fire: Fire protection services are provided by the Kauai County Fire Department which is located in Lihue at 4444 Rice Street, approximately 1.7 miles east of the project site. The Kauai County Fire Department operates seven fire stations throughout the island located in Hanalei, Kapaa, Lihue, Koloa, Kalaheo, Hanapepe, and Waimea. The project site will be serviced by the Lihue Fire Station which is located at 4223 Rice Street, approximately two miles east of the project site.

Health Care Services: Wilcox Memorial Hospital & Kauai Medical Clinic is located at Suite B, 3-3420 Kuhio Highway in Lihue approximately 2.5 miles from the project site. This facility provides comprehensive inpatient, outpatient and same day services for Kauai residents and visitors. Various medical offices are also located in the Lihue area to the serve the residents of the area.

Schools: The State Department of Education (DOE) operates four public schools in the Lihue area. Public school students in grades K to 5 attend King Kaumualii Elementary School and Elsie H. Wilcox Elementary School. King Kaumualii Elementary School is located at 4380 Hanamaulu Road, approximately 3.5 miles northeast from the project site. Elsie H. Wilcox Elementary School is located at 4319 Hardy Street, approximately 2.15 miles east from the project site. Public school students in grades 6 to 8 attend Chiefess Kamakahalei Middle School which is located at 4431 Nuhou Street, approximately 0.5 miles southeast from the project site. Public school students in grades 9 to 12 attend Kauai High School which is located at 3577 Lala Road, approximately 2.4 miles southeast of the project site. The public library serving the Lihue area is the Lihue Public Library which is part of the State of Hawaii Library System. The Lihue Public Library is located at 4344 Hardy Street.

Island School, is located mauka and adjacent to KCC. It is Kauai's largest private, non-sectarian, independent school accommodating Grades Pre-Kindergarten (Pre-K) through 12, and has a current enrollment of approximately 370 students.

Recreational Facilities: Park facilities on Kauai are operated by the State and the County. The State's Department of Land and Natural Resources Division of State Parks operates nine parks that offer outdoor recreation and heritage resources. The nearest State park to the project site is Ahukini State Park which is located at the end of Ahukini Road in Lihue, approximately 4.25 miles northeast of the project site. Ahukini State Park includes Ahukini Pier, a concrete pier situated at the mouth of Hanamaulu Stream, which is offers views of Hanamaulu Bay. Ahukini Pier is also an excellent place for pole fishing and netting. The County of Kauai's Department of Parks & Recreation operates 17 parks in the Lihue area including 13 neighborhood parks, three beach parks, and one stadium. The County also operates eight neighborhood centers that offer recreational and educational programs for the communities of Kauai. The Lihue Neighborhood Center is located 3353 Eono Street, approximately two miles northeast of the project site.

Impacts and Mitigations Measures

No significant impacts on public services in the project area are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. These minor improvements are not anticipated to significantly impact police and fire protection, medical services, public schools, and recreational facilities.

In the longer term, implementation of larger projects shown in the updated LRDP could individually and cumulatively increase demand for police and fire protection and medical services. It would likely not represent a significant increase relative to the overall regional demand. The proposed project will be staffed with security officers on site. The proposed project will be designed and built in compliance with the applicable County fire code requirements. Additional fire prevention and

suppression measures will be provided by installing sprinkler systems and fire alarm systems in all buildings within the project.

The proposed expansion of the KCC campus is not expected to affect student enrollment at public school facilities in the area. Therefore, it will not hinder the educational services provided to residents in the area.

The proposed expansion of the KCC campus is not expected to affect in-migration to Kauai County and the project area and, therefore, is not anticipated to create additional demands on existing recreational facilities.

3.16 Infrastructure

Water: Water service for the KCC campus is provided by the County Department of Water's system. There are two water tanks with pipelines running through the KCC campus to Kaunualii Highway. A water tank with overflow elevation of 510 feet and a well is located to the northwest of the campus and a water tank with overflow elevation of 393 feet with pump station is located within the exterior boundary of the project site. KCC uses a 3 inch water meter from the County Department of Water to service its facilities.

Wastewater: An aerobic sewage treatment plant, constructed when the campus was established is no longer in service. Existing campus sewer system is connected to an off-site treatment plant operated by Grove Farm since April 2001.

Solid Waste: Solid waste disposal is provided by a private waste disposal company. Solid waste is picked up twice a week and taken to Kekaha Landfill for disposal. A recycling bin is also picked up once a week and taken to Nawiliwili for recycling.

Electrical and Communications: The existing a primary metered 12.47 KV system is provided by Kauai Island Utility Cooperative (KIUC). KIUC serves the campus from an overhead utility lines along Kaunualii Highway. This service then runs underground to the Electrical Switchgear Building that houses the primary meter. Each building or group of buildings on the campus is linked to the primary meter via an underground conduit system, has its own pad mounted transformer that converts the 12.47 KV service to an appropriate voltage system.

Telephone service is provided by Hawaiian Telecom which is routed along Kaunualii Highway. The main communications switchboard for the telephone system is located in the One Stop Center.

Impacts and Mitigation Measures

No significant impacts on the provision of water, wastewater, solid waste, drainage, electrical, and telephone services are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in

scope as discussed in Section 2.5. Therefore no short or long-term impacts related to such minor improvements are anticipated.

In the longer term, implementation of major projects shown in the update LRDP could potentially have individual and cumulative impacts on infrastructure. The County Planning Department and County Department of Water will be consulted with regarding the County's Water Use and Development plan. When plans for specific facilities are developed, the University will provide water demands and calculations to the DLNR, Engineering Division.

UHCC is currently upgrading their facilities statewide, including KCC, to use energy efficient measures as part of an on-going energy performance program. If future development occurs, water and energy efficient fixtures and practices will be implemented, where appropriate, regarding Leadership in Energy and Environmental Design (LEED) certification. In addition, alternative water resources will be considered, wherever practicable. UHCC will comply with Section 196-9 Energy efficiency and environmental standards for state facilities, motor vehicles, and transportation fuel, HRS.

If appropriate, close coordination will be maintained with the respective government agencies and utility companies to ensure that the utility lines will not be adversely impacted and the appropriate utility services will not be interrupted to adjacent areas.

UHCC cannot determine projected resource use and waste generation at this time based on the updated development plan since it lacks definitive detail. UHCC is not proposing any major projects at this time. As previously discussed, subsequent EA or EIS will be prepared and processed for such project(s).

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4.0 RELATIONSHIP TO LAND USE, POLICIES AND CONTROLS

The plans and policies relating to the proposed project range from broad program guidance to land use controls governing the project site. Construction of the proposed project is in consonance with the various plans, policies, and regulatory controls, as discussed below.

4.1 State of Hawaii

4.1.1 Hawaii State Plan

The Hawaii State Plan (Chapter 226, Hawaii Revised Statutes, as amended) provides the overall theme, goals, objectives, policies and priority guidelines for statewide planning. The Hawaii State Plan also directs the appropriate State agencies to prepare functional plans for their respective program areas. The proposed project supports and is consistent with the following State Plan objectives:

Section 226-11 Objectives and policies for the physical environment—land-based, shoreline, and marine resources.

(b)(3) Take into account the physical attributes of areas when planning and designing activities and facilities.

(b)(8) Pursue compatible relationships among activities, facilities, and natural resources.

Comment: No significant impacts on geology and topography in the project area are anticipated. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated. Any land disturbing activities would not result in significant impacts on the geology or topography of the petition area.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on the topography – particularly in regard to drainage improvements. By developing and implementing appropriate mitigation measures in design, however, individual projects and cumulative impacts on topography are not anticipated to be significant. As more definitive plans for these major projects are developed they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

Potential impacts on drainage patterns resulting from alteration of the topography within the KCC campus will be addressed through appropriate engineering design to prevent excessive surface flows or ponding. Construction activities would inevitably involve land-disturbing activities that may result in some soil erosion.

Various mitigative measures will be incorporated in the project's design to minimize potential short-term erosion impacts during construction activities.

The proposed future expansion will extend out from the main campus. Areas along the streams and drainage ways are proposed for diversified agriculture and education. In the event that future development occurs near these sensitive resources, impacts on aquatic habitat and native stream species will be evaluated. Future development of the campus will implement best management practices, where appropriate.

A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing facilities may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, a NPDES Permit for Storm Water Associated with Construction Activities will be required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NPDES will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

Section 226-12 Objectives and policies for the physical environment—scenic, natural beauty, and historic resources.

(b)(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

(b)(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.

(b)(5) Encourage the design of developments and activities that complement the natural beauty of the islands.

Comment: UHCC is not proposing any projects at this time. Any improvements would be minor scope as discussed in Section 2.5. Therefore, no significant visual or aesthetic impacts are anticipated as a result of the project. Existing public viewpoints of the project include Haupu (Hoary Head) Mountain Range to the southwest and Kilohana Crater and Mount Waialeale to the north.

No significant impacts on visual resources in the project area are anticipated. The campus is composed of mostly one-story buildings, except for the performing arts center and one stop center. In the longer term, implementation of major projects shown in the updated LRDP will individually and cumulatively

affect the visual characteristics of the campus. The new buildings are envisioned to be generally one- or two-story structures. The new buildings will adhere to the Design Guidelines in KCC's LRDP, which addresses the overall design direction, materials, and standards for new building projects.

The future expansion of the campus includes additional parking lots to accommodate student population. The proposed parking lots will be screened and beautified with consistent landscaping.

The future expansion of the campus will minimize the intrusion of buildings on the visual environment through architectural design criteria and extensive landscaping.

As more definite plans for major projects are developed, they would be subject to Chapter 343, HRS and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

In the longer term, implementation of major projects shown in the updated LRDP may impact the historic features identified during the survey. Specifically, some projects may have an adverse effect on historic features related to plantation era infrastructure. While no additional work appears to be necessary for the majority of features, as shown in Table 3-1, consultation with State Historic Preservation Division of Department of Land and Natural Resources (SHPD/DLNR) is recommended regarding the tentative evaluations of these features and to determine what, if any, mitigation may be appropriate. SHPD/DLNR recommends an archaeological inventory survey specific to the proposed project plans to provide additional documentation of the nine plantation infrastructure features.

Additional documentation / research is recommended for one of the plantation era features (CSH 6). Six of the plantation era features (CSH 1, CSH 3, CSH 4, CSH 5, CSH 8, and CSH 9) appear to have been sufficiently documented and no further work is recommended. Two of the plantation era features (CSH 2, CSH 7) have lost their integrity to convey their historic significance due to design and material alterations.

No further work is recommended for CSH 10 / SIHP # 50-30-11-B006, the Puhi Camp Cemetery, the historic property is outside of the current project area, however, preservation, in the form of avoidance and protection is recommended during future development of the KCC campus.

In the event that any burials are found during construction activities, all work will immediately cease pending consultation with the Department of Land and Natural Resources State Historic Preservation Division. The treatment of any

remains will be in accordance with procedures approved by the Kaua'i Island Burial Council and the State Historic Preservation Division.

Since KCC is not proposing any major projects at this time additional archaeological studies would be conducted at the appropriate time.

Section 226-21 Objectives and policies for socio-cultural advancement—education.

(b)(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.

(b)(5) Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.

Comment: Kauai Community College is a post-secondary institution which provides an expansive continuum of opportunities in academic, technical, vocational and cultural programs. KCC provides education/training which contributes to the development of life-long learners who think critically, appreciate diversity, and lead successful, independent, socially responsible, and personally fulfilling lives. Development of the KCC campus will further the College's mission of providing education/training for students going on to further education and into the workforce.

4.1.2 State Land Use District

The State Land Use Law is intended to preserve, protect, and encourage the development of lands in the State for uses which are best suited to the public health and welfare of Hawaii's people. The Hawaii Land Use Law in Chapter 205, Hawaii Revised Statutes (HRS), classifies all land in the State into four land use districts: Urban, Agricultural, Conservation, and Rural.

The project site lies within the State Land Use Agricultural District (see Figure 2-6). Development is permitted through a Special Permit granted by the State Land Use Commission on April 6, 1973. Further expansion of the campus will require either a Special Permit or an amendment to the State Land use District boundaries from "Agriculture" to "Urban" depending on the size and type of development.

The KCC Redesignation to Urban District Project proposes to amend the State Land Use Boundary to re-designate approximately 153 acres of the KCC campus from Agricultural District to Urban District. Re-designation of the KCC campus would convey land use jurisdiction to the County, which would regulate uses through its zoning code.

4.1.3 Coastal Zone Management

The State's Coastal Zone Management policies and regulations are prescribed under Chapter 205A, Hawaii Revised Statutes. The coastal zone management area is defined to include all lands of the State and the area extending seaward from the shoreline to the limit of the State's management authority. As a result, the project is within the CZM

area and subject to being consistent with the CZM program objectives and policies. The Hawaii Coastal Zone Management Program focuses on ten policy objectives:

1. *Recreational Resources. To provide coastal recreational opportunities accessible to the public and protect coastal resources uniquely suited for recreational activities that cannot be provided elsewhere.*

Comment: The project will not affect access to the shoreline as it is not a shoreline property, nor is it in the vicinity of the island's shoreline.

2. *Historic Resources. To protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.*

Comment: UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no significant impact on archaeological and historical resources is anticipated as a result of the project.

In the longer term, implementation of major projects shown in the updated LRDP could individually and cumulatively impact the historic features identified during survey. Specifically, some projects may have an adverse effect on historic features related to plantation era infrastructure. While no additional work appears to be necessary for the majority of features (see Table 3-1), consultation with SHPD/DLNR is recommended regarding the tentative evaluations of these features and to determine what, if any, mitigation may be appropriate. SHPD/DLNR recommends an archaeological inventory survey specific to the proposed project plans to provide additional documentation of the nine plantation infrastructure features. See Section 3.10 for further discussion.

3. *Scenic and Open Space Resources. To protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.*

Comment: The project will be developed to ensure visual compatibility with the surrounding environment. The project is not located along the shoreline and is not anticipated to negatively impact coastal and scenic and open space resources.

4. *Coastal Ecosystems. To protect valuable coastal ecosystems, including reefs, from disruption and to minimize adverse impacts on all coastal ecosystems.*

Comment: The project site is not located along the shoreline and will not impact coastal ecosystems.

5. *Economic Uses. To provide public or private facilities and improvements important to the State's economy in suitable locations; and ensure that coastal dependent*

development such as harbors and ports, energy facilities, and visitor facilities are located, designed, and constructed to minimize adverse impacts in the coastal zone area.

Comment: The project would allow for KCC to expand its facilities when appropriate providing educational opportunities. The project is not a coastal dependent development.

6. *Coastal Hazards. To reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*

Comment: The project is not located in a tsunami, erosion or subsidence area. According to the Flood Insurance Rate Map (FIRM) (Community Panel Number 150020307E, Effective Date: September 16, 2005, and Community Panel Number 150020309E, Effective Date: September 16, 2005) prepared by the Federal Emergency Management Agency (FEMA), the project site is located within Zone "X", defined as "Areas determined to be outside the 0.2% annual chance floodplain" as shown in Figure 3-6 Flood Zone Map. The project site is located outside the tsunami inundation zone.

According to the UH Multi-Hazard Mitigation Plan (2009), KCC is located in an area where flooding is primarily due to runoff and overland flows which is relatively less prone to extensive flood damage. The three major streams that have recorded floods in the Lihue area are Hanamaulu, Nawiliwili, and Huleia Streams.

Appropriate mitigation measures will be implemented to mitigate storm water runoff associated the project.

7. *Managing Development. To improve the development review process, communication, and public participation in the management of coastal resources and hazards.*

Comment: Opportunities for public participation of the project is provided through the Environmental Assessment public comment process.

8. *Public Participation. To stimulate public awareness, education, and participation in coastal management; and maintain a public advisory body to identify coastal management problems and provide policy advice and assistance to the CZM program.*

Comment: Opportunities for public participation of the project is provided through the Environmental Assessment public comment process.

9. *Beach Protection. To protect beaches for public use and recreation; and locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion.*

Comment: KCC is located approximately 2.5 miles from the ocean at an average elevation of 300 feet above mean sea level (UH Multi Hazard Plan, 2009).

10. *Marine Resources. To implement the State's ocean resources management plan.*

Comment: The project is not located on or near the shoreline and is not anticipated to significantly impact marine resources.

4.2 County of Kauai

4.2.1 County of Kauai General Plan

The County General Plan (2000) provides broad policy statements to guide land use regulations, new developments and facilities, and planning for County facilities and services. Relevant sections of the General Plan and their consistency with the project are as follows:

General Plan Policies: *The proposed project is consistent with the following policies:*

3 Caring For The Land, Water And Culture

3.2 Scenic Views

3.2.1 Policy

(a) *In developing public facilities and administering land use regulations, the County shall seek to preserve scenic resources and public views. Public views are those from a public place, such as a park, highway, or along the shoreline.*

(b) *The County shall observe the following general principles in maintaining scenic resources:*

(1) *Preserve public views that exhibit a high degree of intactness or vividness.*

▪ *"Intactness" refers to the integrity of visual patterns and the extent to which the landscape is free from structures or other visually encroaching features.*

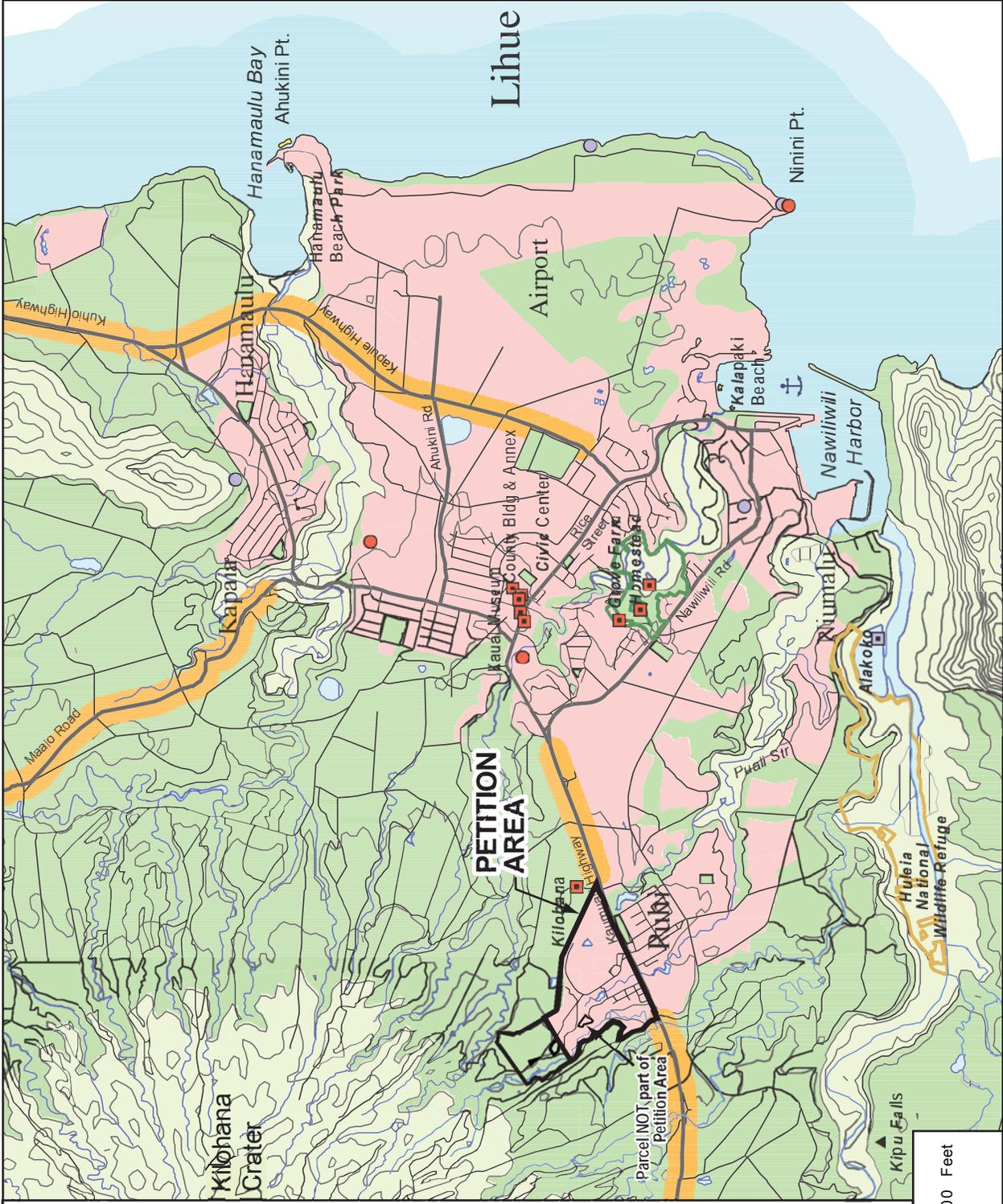
▪ *"Vividness" relates to the memorability of a view, caused by contrasting landforms which create striking and distinctive patterns.*

(Examples are the silhouette of Mt. Haupu against the horizon, views of Nounou Mountain from the valley and the coast, and the view of Hanalei Valley from the overlook.)

- (2) Preserve the scenic qualities of mountains, hills and other elevated landforms, qualities such as the silhouette against the horizon and the mass and shape of the landform.*
- (3) Preserve the scenic qualities of lowland/open spaces features, such as the shoreline, the edge of a coastal bluff, a marsh, a fishpond, or a historic or cultural property. Structures should not impede or intrude upon public views of the feature and should not alter the character of the immediate area around the land feature, historic or cultural property.*

Comment: UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no significant visual or aesthetic impacts are anticipated as a result of the project. Existing public viewpoints of the project include Haupu (Hoary Head) Mountain Range to the southwest and Kilohana Crater and Mount Waialeale to the north (see Figure 4-1). The Heritage Resources Map for Lihue Planning District designates portions of Kaunualii Highway located to the east and west of the project site as a Scenic Roadway Corridor, as shown in Figure 4-2 (County of Kauai, 2000). Scenic Roadway Corridors conserve open space, scenic features, and views within and along Kauai's major roadways and lands visible from these roadways to preserve Kauai's rural character.

The campus is composed of mostly one-story buildings, except for the performing arts center and one stop center. In the longer term, implementation of major projects shown in the updated LRDP will individually and cumulatively affect the visual characteristic of the campus. New buildings are envisioned to be generally one- or two-story structures. New buildings will adhere to the Design Guidelines in KCC's LRDP, which addresses the overall design direction, materials, and standards for new building projects.

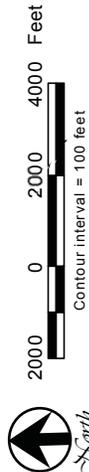


LEGEND

- Important Land Form
- Open Space, Parks, Agriculture, Conservation
- Residential, Urban Center, Resort, Transportation, Military
- Streams, Reservoirs, Ponds
- Scenic Roadway Corridors
- Coral Reefs
- Marshes
- Resource Parks & Sites
- Federal & State Natural Preserves
- Registered Archaeological Sites (excluding burials & lava tubes)
- Heiau Site
- Registered Historic Buildings & Structures
- Other Important Historic Buildings & Structures
- Major Taro Growing Areas
- Other Natural, Historic, Cultural, Scenic Features
- Special Streams
- Streams
- Small Boat Harbors/Ramps

Source: County of Kauai, General Plan

* Marshes legend was corrected to be consistent with Kauai GP Heritage Resources Island Map



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KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

KAUAI GENERAL PLAN
LIHUE PLANNING DISTRICT HERITAGE RESOURCES MAP

FIGURE

4-1

3.4 Watersheds, Streams and Water Quality

3.4.2 Policy

(a) *Site Development. Plan, design and develop sites to:*

- a. *Protect areas that provide important water quality benefits – i.e., wetlands;*
- b. *Protect areas that are particularly susceptible to erosion and sediment loss – i.e., stream banks;*

Comment: UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated. Any land disturbing activities would not result in significant impacts on geology, topography, and soils of the petition area.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on topography – particularly in regard to drainage improvements. By developing and implementing appropriate mitigation measures in design, however, individual projects and cumulative impacts on topography are not anticipated to be significant. As more definite plans for these major projects are developed, they would be subject to Chapter 343, HRS and require preparation of an environmental assessment. At that time more specific information on appropriate mitigation measures could be provided.

The proposed project will result in some alteration of the topography within the project site; however, any impacts on drainage patterns will be addressed through appropriate engineering design to prevent excessive surface flows or ponding.

Construction activities would inevitably involve land-disturbing activities that may result in some soil erosion. Various mitigative measures will be incorporated in the project's design to minimize potential short-term erosion impacts during construction activities.

A full range of erosion and sediment controls will be instituted during grading and excavation operations of the project, and in compliance with the County's Grading Ordinance and the State Department of Health's (DOH) NPDES Permit for Storm Water Associated with Construction Activities. The future development of individual facilities or improvements to existing may or may not involve land disturbances exceeding 1.0 acre. For those that exceed the 1.0 acre threshold, an NPDES Permit for Storm Water Associated with Construction Activities will be

required prior to construction. Moreover, if hydrotesting or dewatering is required, separate NDPES will be submitted. Mitigation measures will be instituted following site-specific assessments, incorporating structural and non-structural Best Management Practices (BMPs), as deemed appropriate. All discharges related to the project construction or operation activities will comply with the State's Water Quality Standards.

6 *Enhancing Towns & Communities and Providing for Growth*

6.3 *Lihue*

6.3.4.2 *Policies*

(a) *Regional Growth and Public Facilities*

(1) New growth shall be concentrated in the Puhi-Lihue-Hanamaulu urban center.

Comment: The proposed project is situated within the Puhi-Lihue-Hanamaulu urban center. UHCC is not proposing any major projects at this time. Any improvements would be minor in scope, as discussed in Section 2.5. In the short-term, development of the KCC campus will have positive benefits in the local area by adding construction jobs in the vicinity, thereby stimulating that sector of the economy. Indirect economic impacts may include benefits to local retail businesses resulting from construction activities. In the long-term, implementation of major projects shown in the updated LRDP would individually and cumulatively confer positive benefits in the local area. KCC will provide academic, technical, vocational and cultural programs to a population of 3,000 FTE students.

8 *Improving Houses, Parks and Schools*

8.3 *Education*

8.3.1 *Policy*

- (a) *Strive for a strong education system which provides Kauai's children, teens, college students, and adults with the knowledge and skills needed to obtain a well-paying job on Kauai.*

- (d) *Consider schools as community resources for learning about specialized environmental, cultural, and historic subjects related to Kauai and each of its communities. Schools should also assume important community functions such as recreational centers, meeting facilities, and emergency shelters.*

Comment: KCC is a post-secondary institution providing an expansive continuum of opportunities in academic, technical, vocational and cultural programs

The KCC Redesignation to Urban District project proposes to amend the State Land Use Boundary to re-designate a portion of (approximately 153 acres) the KCC campus from Agricultural District to Urban District. Re-designation of the KCC campus would convey land use jurisdiction to the County, which would regulate uses through its zoning code. Development of the KCC campus would generally follow land use allocations recommended by the Ultimate Site Plan presented in the KCC Long Range Development Plan. Additional facilities will further the College's mission of providing education/training for students going on to further education and into the workforce.

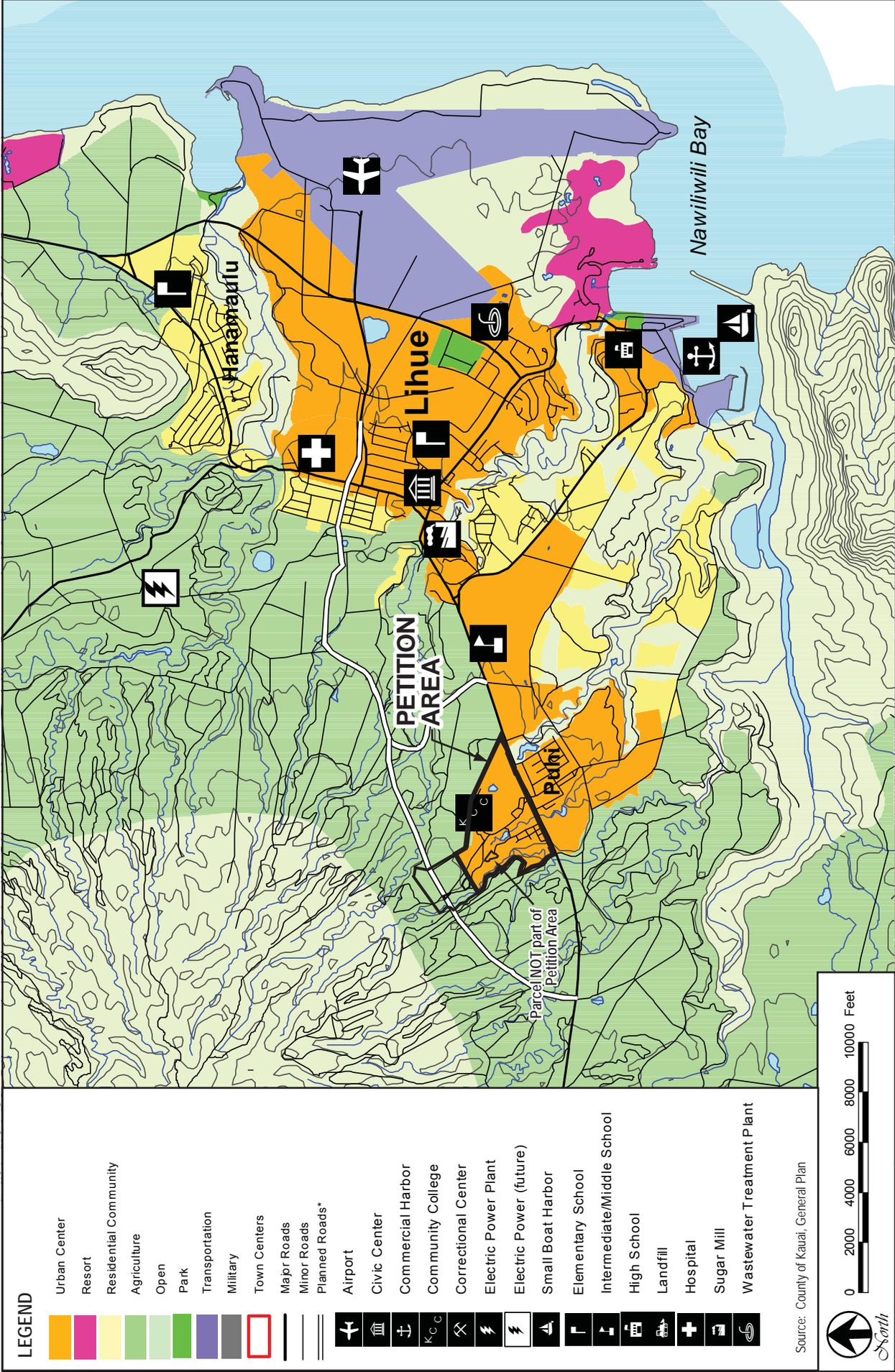
In the long-term, implementation of major projects shown in the updated LRDP would individually and cumulatively confer positive benefits in the local area.

General Plan Land Use Map Designation: The Land Use Map of the County of Kauai General Plan Lihue Planning District designates the project site as Urban Center (see Figure 4-2). The County of Kauai policies for Urban Center Designations are as follows (Section 5.4.1.1 Policy):

- (a) *Lands included within the Urban Center designation shall be centers of government, commerce and transportation that serve the entire county or a large region. Uses may include shopping centers, government offices, churches and other institutions, office complexes, and industrial facilities. Residential or resort uses may also be located within the Urban Center designation, where compatible.*
- (b) *Urban Center areas are typically served by wastewater collection and treatment facilities and major roads. Urban Center lands may be zoned for any type of use, including General Commercial, General Industrial, Resort, and Residential.*

Comment: According to the County of Kauai General Plan (2000), the Lihue Planning District Land Use Map places a "Public Facilities" symbol for a community college at the KCC campus. The proposed project is consistent with the "community college" public facilities symbol.

The campus is also designated Urban Center. The proposed project is consistent with the Urban Center designation, which provides for centers of government, commerce and transportation that serve the entire county or a large region. Uses within the Urban Center include shopping centers, government offices, churches and other institutions, office complexes, and industrial facilities. As mentioned previously, since the publication of the Draft EA, the State Land Use Boundary Amendment Petition Area has been reduced from 198 acres to



KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

KAUAI GENERAL PLAN

LIHUE PLANNING DISTRICT LAND USE MAP

FIGURE 4-2

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153 acres. The petition area follows the County's GP "urban center" designation. In the future, if UHCC decides to develop the northern portion of the campus, another SLUB amendment and a GP amendment would be required.

4.2.2 Lihue Development Plan

The County's Lihue Development Plan, adopted by County ordinance in 1976, provides physical, social and economic measures which relate specifically to these communities. The Lihue Development Plan land use designation for the project site is "Public" (see Figure 4-3). A small portion of TMK 3-4-07:03 and the remaining property (TMKs 3-4-07:02, 01 and 06) are designated as "Open" and "Agriculture". The plan recommends revising the present zoning to accommodate the KCC by changing the zoning from an agriculture zone to an R-1 Special Treatment-Public zone.

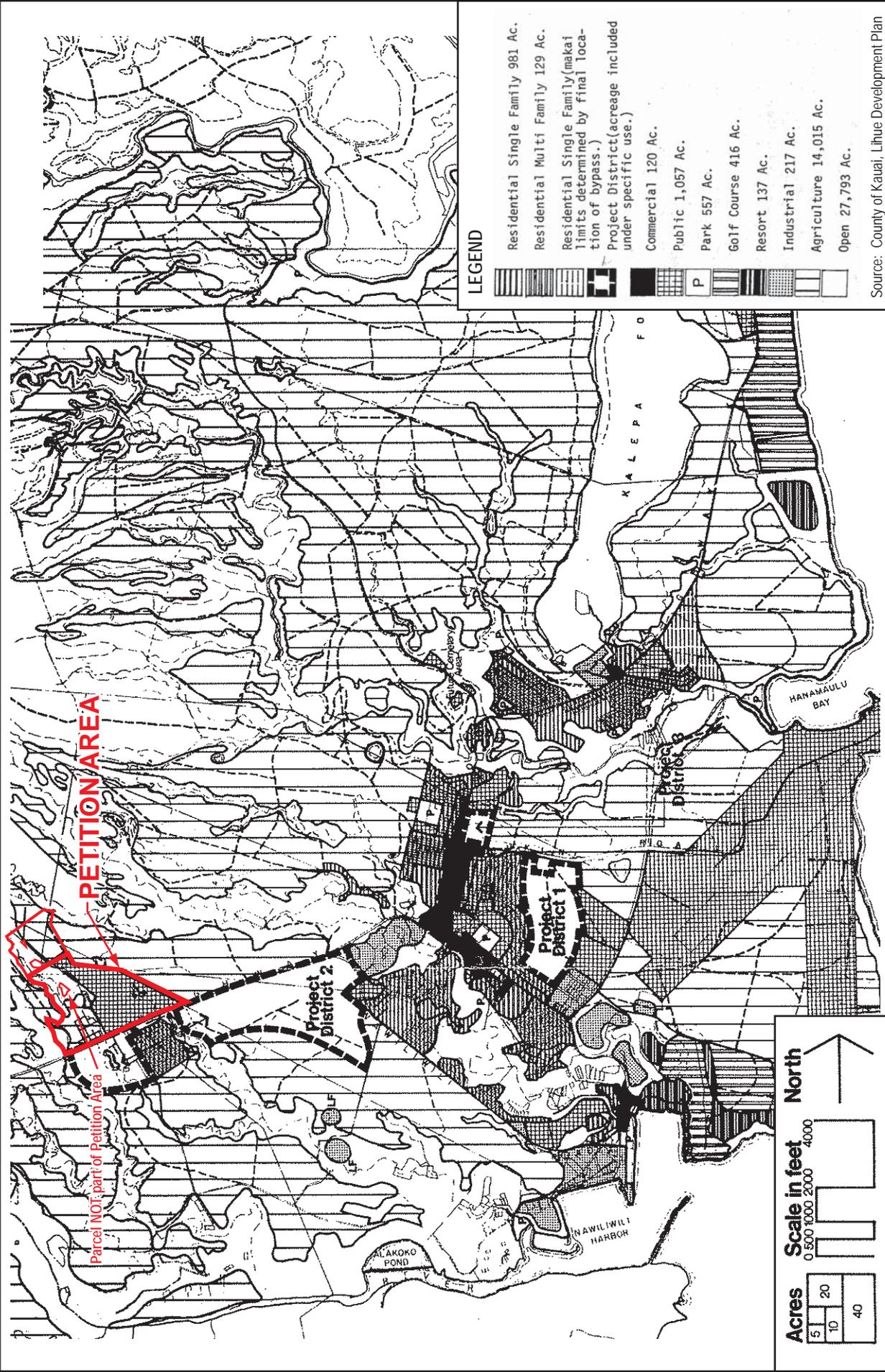
4.2.3 County Comprehensive Zoning Ordinance

The Kauai County Comprehensive Zoning Ordinance ("CZO") sets forth standards for land development and construction of buildings and other structures in the County. The CZO establishes land use districts and delineates the respective types of permitted uses and development that can take place in those districts.

The zoning designations for the project site are "Agricultural District" and "Open District" as shown in Figure 4-4. UHCC may apply for a Zone Change, however UHCC will further consult with the County Planning Department.

4.2.4 Special Management Area

The Coastal Zone Management Act contains the general objectives and policies upon which all counties within the State have structured specific legislation which created Special Management Areas (SMA). Any development within the Special Management Area boundary requires a SMA Use permit which is administered by the County of Kauai. The KCC campus is not located within the County's SMA.



LEGEND

- Residential Single Family 981 Ac.
- Residential Multi Family 129 Ac.
- Residential Single Family (makai limits determined by final location of bypass.)
- Project District (acreage included under specific use.)
- Commercial 120 Ac.
- Public 1,057 Ac.
- Park 557 Ac.
- Golf Course 416 Ac.
- Resort 137 Ac.
- Industrial 217 Ac.
- Agriculture 14,015 Ac.
- Open 27,793 Ac.

Source: County of Kauai, Lihue Development Plan

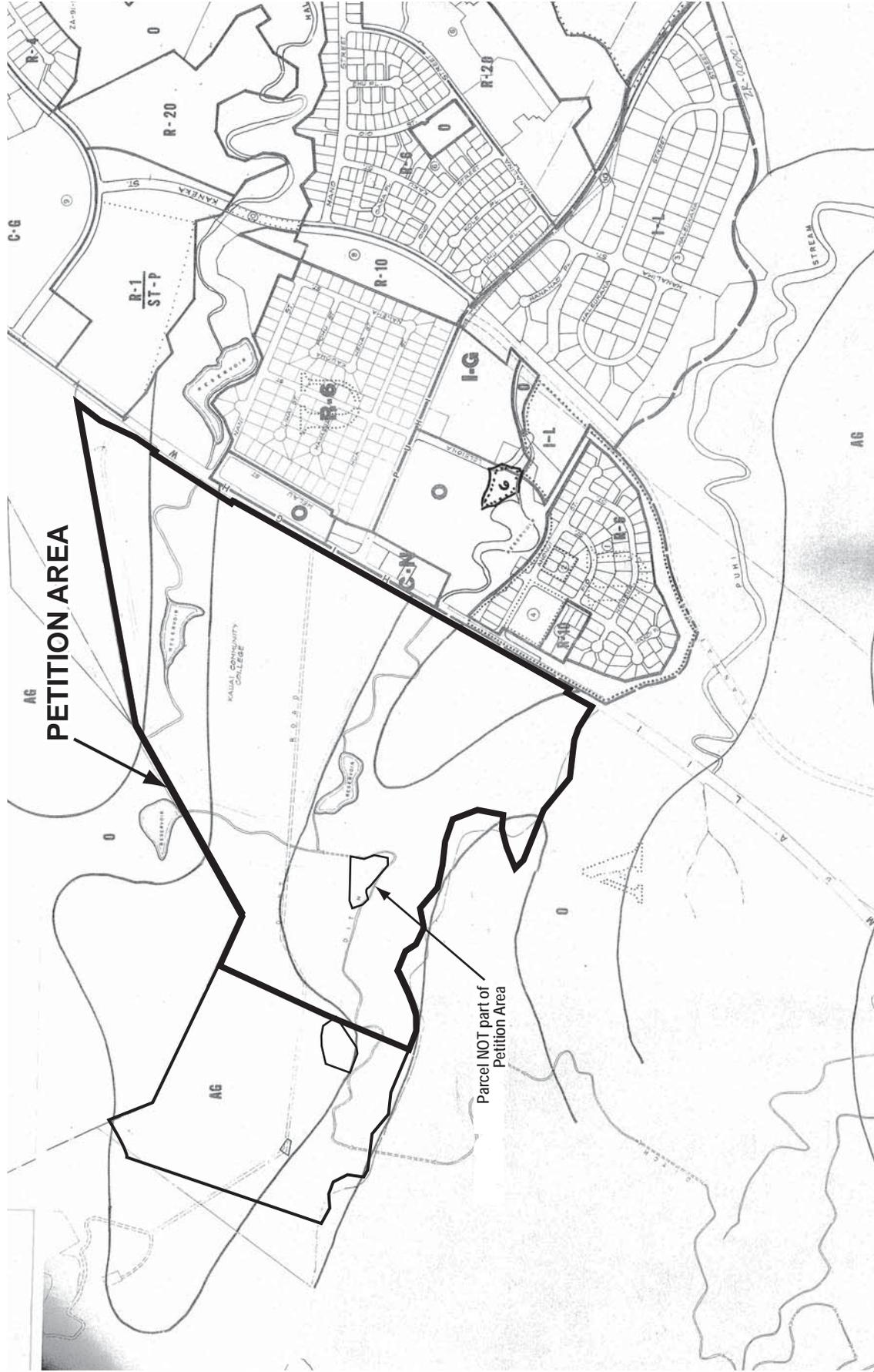
KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

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LIHUE DEVELOPMENT PLAN LAND USE MAP

FIGURE

4-3



* Approximate boundary based on apparent parcel boundary and natural features shown on the County's zoning map.



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KAUAI COMMUNITY COLLEGE REDESIGNATION TO URBAN DISTRICT

COUNTY OF KAUAI ZONING MAP

FIGURE

4-4

5.0 ALTERNATIVES CONSIDERED

5.1 No Action Alternative

Under the No Action Alternative, the KCC campus site would continue to be designated Agricultural District. Future development of the KCC campus would not be permitted and the existing campus would continue to serve the current student population and anticipated enrollment increases.

The No Action Alternative would also preclude all other short- and long-term beneficial and adverse physical, environmental and socio-economic impacts described in this EA.

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6.0 DETERMINATION AND COMPLIANCE

This Final EA was prepared for review in accordance with the consultation process of Chapter 343, HRS. Based on the significance criteria set forth in Section 11-200-12 of Title 11, Chapter 200, Administrative Rules, State Department of Health, it is determined that the proposed project will not have a significant effect on the environment and that therefore this Finding of No Significant Impact (“FONSI”) will be filed with the State Office of Environmental Quality Control (OEQC) following the public consultation period. The reasons supporting this determination are described below according to these significance criteria.

As discussed in Section 2.5, the UHCC is not proposing any major projects at this time. The project description provided in the Final EA updates KCC’s Long Range Development Plan (LRDP) contained in the 1999 LRDP. It reflects the administration’s concepts for addressing the college’s current and future needs and opportunities. Notably, the updated plan is not based on a planning process such as that used in preparing the 1999 LRDP. KCC does not envision implementing any major projects such as the recently completed One Stop Center and Bookstore within the next 10 years. This environmental assessment is being prepared pursuant to Section 11-200-7, Hawai’i Administrative Rules.

Since the plan lacks definitive detail required to address concerns such as drainage through the preparation of a drainage master plan, it is anticipated that subsequent Environmental Assessment (EA) or Environmental Impact Statement (EIS) will need to be prepared pursuant to Chapter 343, HRS for individual development of projects when more plans for such projects become available

This assessment does not consider the following types of projects which do not have significant impacts on the environment and could qualify as exempt activities, pursuant to Chapter 343-6, HRS and Chapter 11-200-8, HAR:

- Minor building renovations to meet program requirements, health and safety requirements, energy conservation measures, and accessibility for disable persons.
- General site, utility, and landscaping improvements which will provide for infrastructure requirements for specific projects, enhance aesthetic environment, and meet accessibility requirements for disabled persons.

In the context of the preceding discussion, the reasons for supporting a FONSI determination are described below according to these significance criteria.

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

UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to minor improvements are anticipated.

In the longer term, implementation of major projects shown in the updated LRDP may impact the historic features identified during the survey. Specifically, some projects may have an adverse effect on historic features related to plantation era infrastructure. See Sections 3.10 and 3.11 for more information.

SHPD/DLNR recommends an archaeological inventory survey specific to the proposed project plans to provide additional documentation of the nine plantation infrastructure features.

The proposed project will not involve the loss or destruction of any natural or cultural resources since the project site has been previously disturbed with the development of the existing KCC campus.

In the event that any burials are found during construction activities, all work will immediately cease pending consultation with the Department of Land and Natural Resources State Historic Preservation Division. The treatment of any remains will be in accordance with procedures approved by the Kauai/Niihau Island Burial Council and the State Historic Preservation Division.

In the longer term, the proposed expansion of KCC campus will not adversely affect any rare, threatened, or endangered species of animal or its habitat. See Section 3.7, 3.10, for more information.

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

UHCC is not proposing any major projects at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no short or long-term impacts related to minor improvements are anticipated.

In the longer term, implementation of major projects shown in the updated LRDP could have potential individual and cumulative impacts on topography, soils, and surface waters due to a cumulatively larger scale of land disturbance. By developing and implementing appropriate mitigation measures in design and through best management practices, potential impacts will be minimized. As more definite plans for these major projects are developed, they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time more specific information on appropriate mitigation measures could be provided.

In summary, the project will not curtail the beneficial uses of the environment.

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

The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii. The redesignation of a portion of KCC campus from Agriculture to Urban is consistent with the County General Plan's "urban center" designation. The reclassification is more consistent with its current developed nature as a school campus, as well as with existing urban lands and development in the vicinity of Kaunualii Highway. As presented in this EA, the project's potential temporary adverse impacts are associated primarily with short-term construction-related activities and can be mitigated through adherence to standard construction mitigation practices.

(4) Substantially affect the economic or social welfare of the Community or State;

UHCC is not proposing any major project at this time. Any improvements would be minor in scope as discussed in Section 2.5. In the short-term, the project will confer some positive benefits in the local area. due to the hiring of construction workers and purchasing of materials from local suppliers.

In the longer term, implementation of the major projects shown in the updated LRDP would individually and cumulatively confer positive benefits in the local areas. The project will have beneficial social impacts due to the improvement of the State's higher education system.

(5) Substantially affect public health;

UHCC is not proposing any major project at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no significant impacts on ambient noise levels and ambient air quality are anticipated. Short-term impacts related to construction-related activities such as air and noise, will be mitigated by complying with State regulations. The appropriate mitigation measures will be implemented to minimize the impact to the students and KCC staff, as well as the surrounding neighbors.

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

UHCC is not proposing any major project at this time. Any improvements would be minor in scope as discussed in Section 2.5. Therefore, no significant secondary impacts or adverse impacts to public facilities or services is anticipated.

In the longer term, implementation of larger projects shown in the updated LRDP could individually and cumulatively increase demand for police and fire protection and medical services. It would likely not represent a significant increase relative to the overall

regional demand. The proposed project will be staffed with security officers on site. The proposed project will be designed and built in compliance with the applicable County fire code requirements. Additional fire prevention and suppression measures will be provided by installing sprinkler systems and fire alarm systems in all buildings within the project.

The proposed expansion of the KCC campus is not expected to affect student enrollment at public school facilities in the area. Therefore, it will not hinder the educational services provided to residents in the area.

The proposed expansion of the KCC campus is not expected to affect in-migration to Kauai County and the project area and, therefore, is not anticipated to create additional demands on existing public facilities and services.

The project is consistent with the Kaua'i General Plan and could help to stimulate the planned economic development of the Lihue Development Plan.

(7) Involve a substantial degradation of environmental quality;

UHCC is not proposing any major project at this time. Any improvements would be minor in scope, as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on the environment. By developing and implementing appropriate mitigation measures in design and through best management practices to control soil runoff, ambient air quality, ambient noise, etc, potential impacts will be minimized. With the incorporation of mitigation measures during the construction period, the project will not result in long-term degradation to the environmental quality.

As more definitive plans for these major projects are developed, they would be subject to Chapter 343, HRS, and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

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

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on the environment. By developing and implementing appropriate mitigation measures in design and through best management practices to control soil runoff, ambient air quality, ambient noise, etc, potential impacts will be minimized. The proposed project will not create a commitment for any larger actions, nor will it contribute to cumulative negative effect upon the

environment. The proposed project involves the further expansion of an existing use and consistent with land use plans and designations.

Initially, UHCC proposed to redesignate the whole KCC campus from Agriculture to Urban. Based on consultations with the County Planning Department, Land Use Commission, and Office of State Planning, the petition area was reduced to approximately 153 acres from 199 acres, to follow the County's GP "urban center" designation.

As explained in Section 2.5, since the plan lacks definitive detail required to address concerns such as drainage through the preparation of a drainage master plan, it is anticipated that subsequent Environmental Assessment (EA) or Environmental Impact Statement (EIS) will need to be prepared pursuant to Chapter 343, HRS for individual development of projects when more plans for such projects become available.

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

There are no known rare, threatened or endangered species of flora or fauna or associated habitat on the project site that could be adversely affected by the proposed action.

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

UHCC is not proposing any major project at this time. Any improvements would be minor in scope, as discussed in Section 2.5. Therefore, no short or long-term impacts related to such minor improvements are anticipated.

In the longer term, implementation of major projects shown in the updated LRDP could potentially have individual and cumulative impacts on the environment. By developing and implementing appropriate mitigation measures in design and through best management practices to control soil runoff, ambient air quality, ambient noise, etc, potential impacts will be minimized. Operation of construction equipment would temporarily elevate ambient noise and concentrations of exhaust emission in the immediate vicinity of the project site. Short-term impacts related to construction-related activities such as air, noise, grading, etc., will be mitigated by complying with State and County regulations.

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

The project site is located within Zone "X", which is defined as "Areas determined to be outside the 0.2% annual chance floodplain". No significant impacts to flood hazards are anticipated as a result of the proposed action. The project site is located outside of the tsunami inundation zone.

(12) *Substantially affect scenic vistas and viewplanes identified in County or State plans or studies; or*

UHCC is not proposing any projects at this time. Any improvements would be minor scope as discussed in Section 2.5. Therefore, no significant visual impacts are anticipated. Existing public viewpoints of the project include Haupu (Hoary Head) Mountain Range to the southwest and Kilohana Crater and Mount Waialeale to the north.

No significant impacts on visual resources in the project area are anticipated. The campus is composed of mostly one-story buildings, except for the performing arts center and one stop center. In the longer term, implementation of major projects shown in the updated LRDP will individually and cumulatively affect the visual characteristics of the campus. New buildings are envisioned to be generally one- or two-story structures. The new buildings will adhere to the Design Guidelines in KCC's LRDP, which addresses the overall design direction, materials, and standards for new building projects.

The future expansion of the campus includes additional parking lots to accommodate student population. The proposed parking lots will be screened and beautified with consistent landscaping.

The future expansion of the campus will minimize the intrusion of buildings on the visual environment through architectural design criteria and extensive landscaping.

As more definite plans for major projects are developed, they would be subject to Chapter 343, HRS and require preparation of an environmental assessment. At that time, more specific information on appropriate mitigation measures could be provided.

The future expansion of the campus will minimize the intrusion of buildings on the visual environment through architectural design criteria and extensive landscaping.

(13) *Require substantial energy consumption.*

UHCC is not proposing any projects at this time. Any improvements would be minor scope as discussed in Section 2.5. Therefore, no significant increase in energy consumption is anticipated. In the short-term, construction of minor improvements and operation of the project will not require a substantial increase in energy consumption.

In the longer-term, implementation of major projects shown in the updated LRDP could potentially increase energy consumption.

UHCC is currently upgrading their facilities statewide, including KCC, to use energy efficient measures as part of an on-going energy performance program. If future

development occurs, water and energy efficient fixtures and practices will be implemented, where appropriate, regarding Leadership in Energy and Environmental Design (LEED) certification. In addition, alternative water resources will be considered, wherever practicable. UHCC will comply with Section 196-9 Energy efficiency and environmental standards for state facilities, motor vehicles, and transportation fuel, HRS.

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7.0 LIST OF REQUIRED PERMIT APPROVALS

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

State of Hawaii

Department of Health

- National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activities

Disabilities Communication and Access Board (DCAB)

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

State Historic Preservation Division

- Historic Buildings Review

County of Kauai

Planning Department

- Use Permit
- Building Permit
- Grading Permit
- Zone Change

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8.0 CONSULTATION

8.1 Pre-Assessment Consultation

The following agencies and organizations were contacted during the preparation of the Draft EA. Of those who formally replied during the pre-assessment period, some had no comments while others provided substantive comments as indicated by the ✓ and ✓✓, respectively. All written comments are reproduced herein as Appendix E.

Federal

U.S. Fish and Wildlife Service ✓✓

State

Department of Agriculture

Department of Business, Economic Development, and Tourism

Land Use Commission

Office of State Planning ✓✓

Department of Health (DOH)

DOH, Clean Air Branch ✓✓

Department of Land and Natural Resources

Division of State Parks ✓

Land Division, Kauai District ✓

Commission on Water Resource Management ✓✓

Engineering Division ✓✓

Historic Preservation Division ✓✓

Division of Forestry and Wildlife ✓

Department of Transportation ✓✓

Office of Hawaiian Affairs

Department of Hawaiian Homelands ✓

Representative Hermina M. Morita

Representative James Kunane Tokioka

Representative Roland D. Sagum, III

Senator Gary L. Hooser

County

Department of Public Works ✓✓

Department of Water ✓✓

Fire Department

Kauai County Council

Planning Department ✓✓

Police Department ✓

Transportation Agency

Other

Grove Farm

Island School

Kauai Kilohana Partners
Kawaikini New Century Public Charter School

Punana Leo o Kauai
Wilcox Family Ltd. Partnership

8.2 Draft EA Consultation

The following agencies and organizations were contacted during the preparation of the Draft EA. Of those who formally replied, some had no comments while others provided substantive comments as indicated by the ✓ and ✓✓, respectively. All written comments are reproduced herein as Appendix F.

Federal

U.S. Fish and Wildlife Service ✓

State

Department of Agriculture

Department of Business, Economic Development, and Tourism (DBEDT)

Land Use Commission

Office of State Planning ✓✓

Department of Health (DOH)

DOH, Clean Water Branch ✓✓

Department of Land and Natural Resources

Division of State Parks

Land Division, Kauai District

Commission on Water Resource Management ✓✓

Engineering Division ✓

Historic Preservation Division

Division of Forestry and Wildlife ✓

Division of Aquatic Resources ✓✓

Department of Transportation ✓✓

Office of Hawaiian Affairs ✓✓

Department of Hawaiian Homelands ✓

University of Hawaii, Water Resources Research Center ✓✓

Representative Hermina M. Morita
Representative James Kunane Tokioka
Representative Roland D. Sagum, III
Senator Gary L. Hooser

County

Department of Public Works

Department of Water ✓✓

Fire Department ✓✓

Kauai County Council
Planning Department
Police Department
Transportation Agency

Other

Grove Farm
Island School
Kauai Kilohana Partners
Kawaikini New Century Public Charter School

Meetings were also conducted with the Land Use Commission staff (June 14, 2012), Office of State Planning (September 29, 2011 and July 3, 2012, and the County of Kauai Planning Department (June 5, 2012).

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