

**Final Environmental Assessment**

Submitted Pursuant to Hawai'i Revised Statutes,  
Chapter 343

**Access Road off Lauoho Road**

**County of Kaua'i**

Kalāheo, Kaua'i, Hawai'i

**Tax Map Key: (4) 2-3-09**

Applicant:

County of Kaua'i  
Department of Public Works  
Lihu'e, Kaua'i 96766

Approving Agency:

County of Kaua'i  
Department of Public Works  
Lihu'e, Kaua'i, 96766

Prepared by: National Tropical Botanical Garden and NKN Project  
Planning for County of Kaua'i, Department of Public Works

May 2009

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## 1.0 PROJECT DESCRIPTION

### 1.1 Location

The unnamed County roadway (“Roadway”) is located in the district of Koloa, Kalaheo ahupua'a. The Roadway to the north abuts Lauoho Road, is bounded to the east and south by National Tropical Botanical Garden-owned properties (NTBG), and to the west by landowners the Stella and Toshiro Kaneko Trusts.

The subject parcel, Tax Map Key (4) 2-3-09<sup>1</sup> is approximately 745 feet long, with a right-of-way of approximately 30 feet wide. The Roadway was created in 1940 to provide access to TMK (4) 2-3-009:11<sup>2</sup> formerly owned by the McBryde Sugar Company and currently owned by NTBG. A location map is found in **Exhibit 1** and the parcel is further identified in **Exhibit 2**.

### 1.2 Proposed Action

The County of Kaua'i, Department of Public Works is seeking County Council approval to abandon the Roadway and re-convey it to the current adjacent property owners NTBG and Toshi Kaneko. No land altering activities will occur as a result of this proposed abandonment and conveyance action.

This proposed action was initiated in response to a condition imposed by the County of Kaua'i, Department of Public Works on an application by the National Tropical Garden (NTBG) to construct a central housing facility for up to 24 visiting researchers, interns and other education program participants. Approval for NTBG's Special Permit SP-2008-01, Use Permit U-2008-02, and Class IV Zoning Permit Z-IV-2008-03 was granted by the Planning Commission on October 24, 2007, a copy of which can be found in **Appendix A**. Comments from the Department of Public Works are found in **Appendix B**.

#### History of Roadway

The Kalaheo Homestead Act, Kalaheo Homesteads Second Series created a 10 foot wide “government road” right-of-way as an access from Lauoho Road to the *kuleana* (LCA 6745<sup>3</sup>). In 1940 the Roadway was surrounded by Lot 134 on the east and the Reservoir Site 21 lot on the west.

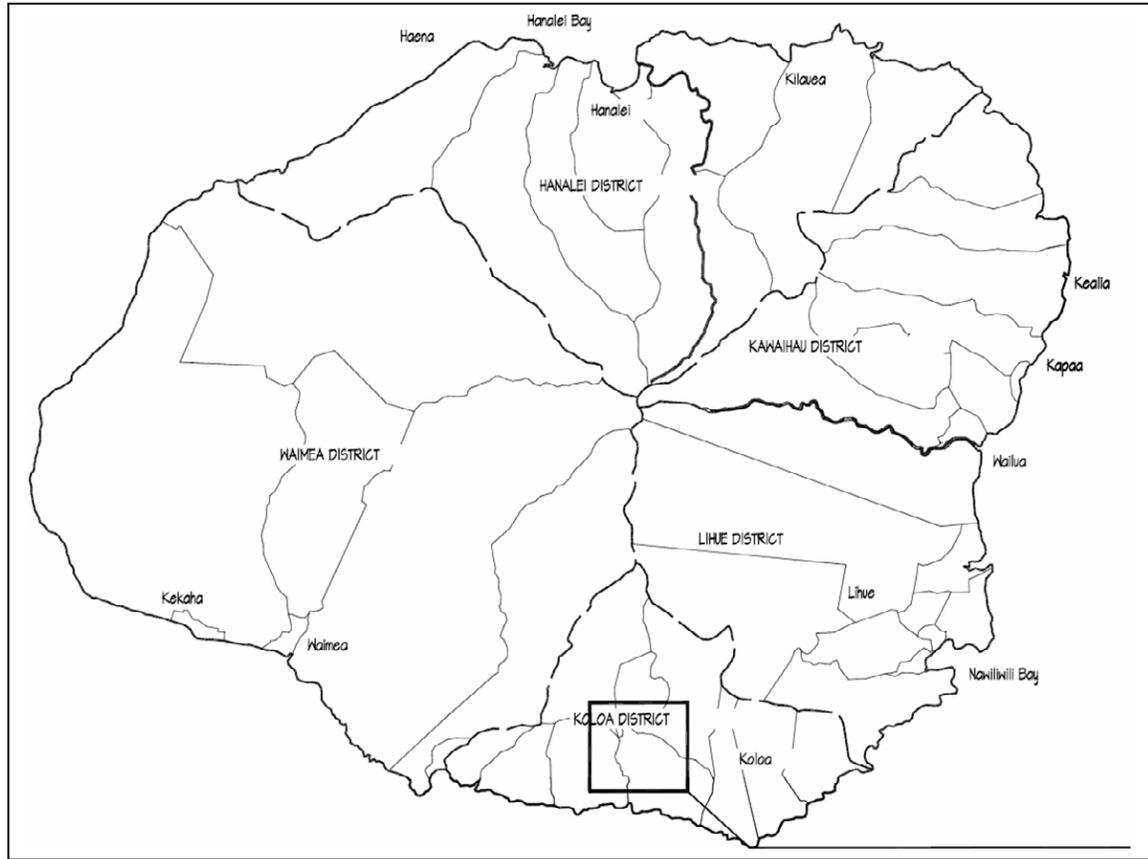
In 1940 the County initiated and acquired five small adjacent parcels in order to straighten and widen the road right-of-way to 30 feet and to provide vehicular access to TMK (4) 2-3-9:11 then owned by McBryde Sugar. The five small

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<sup>1</sup> The Roadway does not have a parcel number according to the Real Property Tax office.

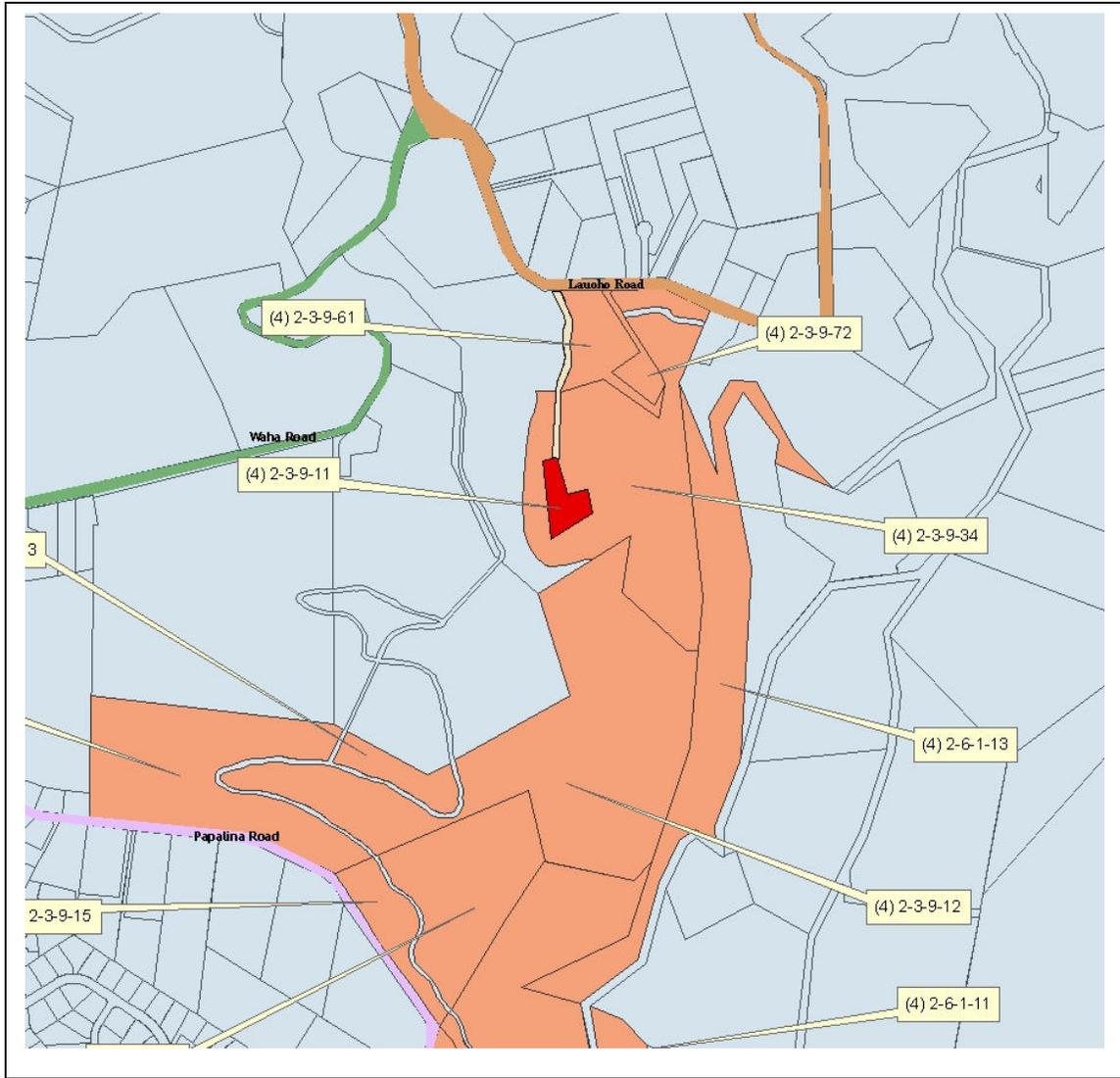
<sup>2</sup> L.C. Aw. 6745 Ap.2, 0.789 acres, TMK (4)2-3-9:11

<sup>3</sup> Currently owned by NTBG.



County of Kaua'i  
Department of Public Works  
Roadway Abandonment and Conveyance

**Location Map**  
**Exhibit 1**



County of Kaua'i  
Department of Public Works  
Roadway Abandonment and Conveyance

**TMK/Parcel**  
**Exhibit 2**

parcels were acquired from two adjacent property owners: three from the Stella and Toshiro Imada Trusts (successor NTBG) and two from McBryde Sugar Co (successor Toshi Kaneko).

As shown in **Exhibit 3** the Roadway today consists of the following components:

1. The existing 1940 “government road” approximately ten feet in width.
2. Three small parcels totaling approximately 9257 sq. ft., from Lot 134 and belonging to the Imada family in 1940<sup>4</sup> and currently belonging to NTBG.
3. Two small parcels totaling approximately 6000 sq. ft., from Reservoir Site 21 belonging to the McBryde Sugar Company in 1940<sup>5</sup> and currently belonging to Toshi Kaneko.
4. Two small remnant parcels which were absorbed into Lot 134 and the Reservoir Site 21 parcels.<sup>6</sup>

#### Imada Deed (successor is NTBG)

The September 10, 1940 deed<sup>7</sup> conveyed portions of the Roadway to the County of Kaua'i and established a road right-of-way through Lot 134, Kalaheo Homesteads, Second Series. The deed included the conveyance of three small parcels totaling approximately 9257 sq. ft. from the Imada family to the County.

#### McBryde Deed (successor is Kaneko)

The September 3, 1940 deed<sup>8</sup> conveyed portions of the Roadway to the County of Kaua'i and established a road right-of-way through Reservoir site No. 21. The deed included the conveyance of two small parcels totaling approximately 6000 sq. ft. to the County.

Although officially described as a Roadway, the actual use and function of this County-owned parcel is a driveway<sup>9</sup> to access NTBG's property. Upon accessing the Roadway off Lauoho Road, the road/driveway slopes down hill to the *kuleana*. Cut into the hillside, the drivable width is approximately 12 – 15 feet, although the County's right-of-way ownership is about 30 feet. The unpaved Roadway is approximately 745 feet long. No known improvements to the Roadway have been made by the Department of Public Works. Over the years, NTBG has placed gravel on the driveway to stabilize the surface on the one-lane access to the *kuleana* and TMK (4)2-3-9:34. Photos of the existing Roadway are found in **Exhibits 4 & 5**.

The road/driveway was created to access a jelly factory located on the *kuleana* parcel (TMK 4-2-3-09:11). The Kukui Brand jelly factory was established by Ryochi Tateishi. The factory was moved to a new location sometime during the 1950s or 60s.

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<sup>4</sup> See Exhibit 3: Parcels C, F and G.

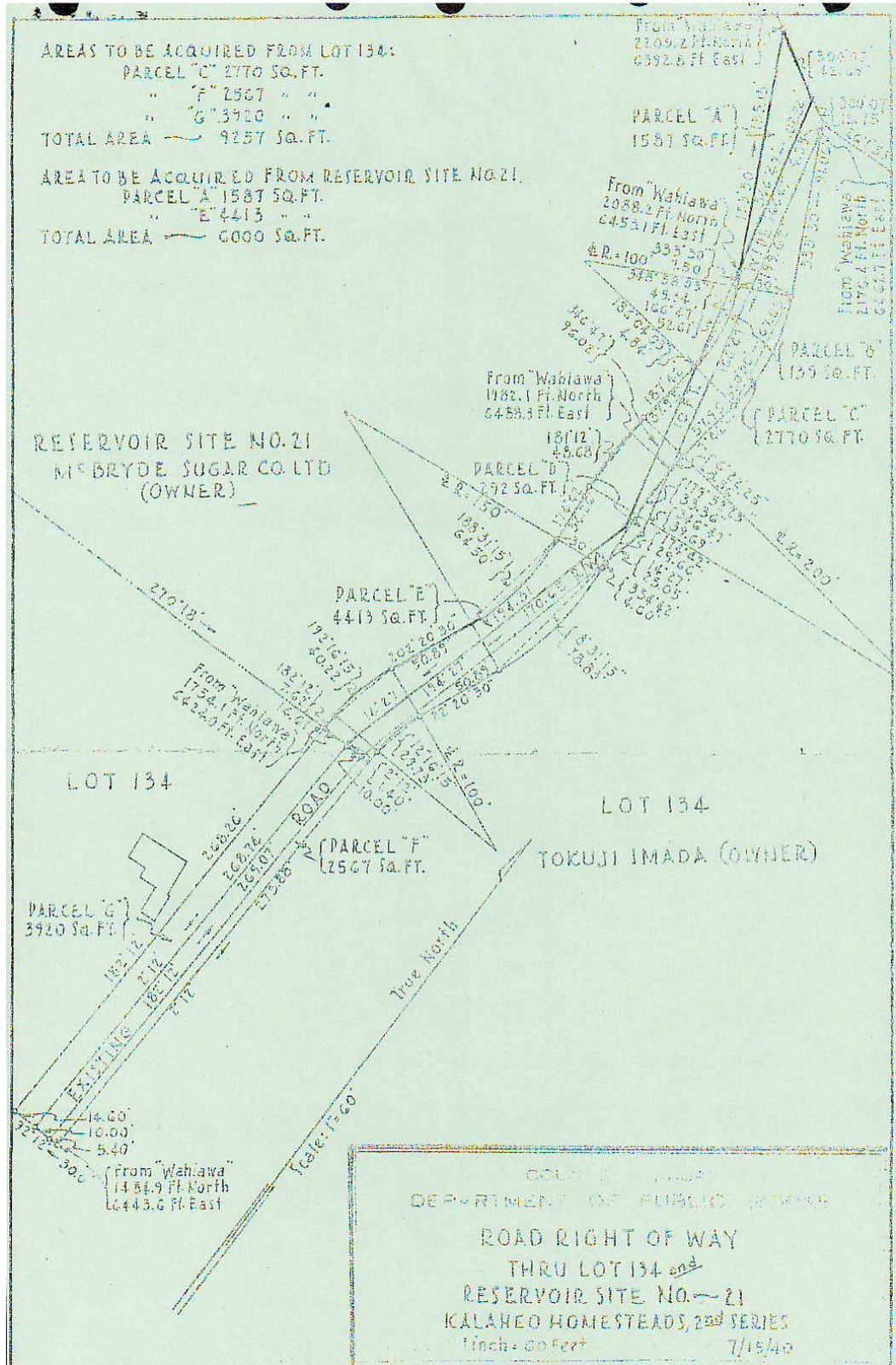
<sup>5</sup> See Exhibit 3: Parcels A and E.

<sup>6</sup> See Exhibit 3: Parcels B and D. Personal communication with Mr. Oscar Portugal, Department of Public Works, County of Kaua'i, February 6, 2009.

<sup>7</sup> Conveying from Grantors Tokuji Imada and Shimo Sueoka Imada, to Grantee County of Kaua'i.

<sup>8</sup> Conveying from Grantor McBryde Sugar Company, Limited, to Grantee County of Kaua'i.

<sup>9</sup> The Planning Director's Report on Special Permit SP-2008-01, Use Permit U-2008-02, Class IV Zoning Permit Z-2008-03 (National Tropical Botanical Garden) item #4 states, “It should be noted that based on the County's tax maps, the unimproved driveway area is actually an extension of the Lauoho right-of-way.”



County of Kaua'i  
Department of Public Works  
Roadway Abandonment and Conveyance

Kalāheo Homestead Map (1940)

Exhibit 3



Photo: Entrance to Roadway (driveway), off Lauoho Road (12-4-08).



Photo: Unimproved Roadway, just below entrance off Lauoho Road. Kalāheo Stream to the right on valley floor below (10-31-08).

#### Exhibit 4



Photo: Mid-way down Roadway, looking up towards Lauoho Road (10-31-08).



Photo: From bottom of Roadway looking up towards Lauoho Road (10-31-08)

**Exhibit 5**

### **1.3 Environmental Review Trigger**

Use of State or County lands or funds triggers the environmental review process as defined by Chapter 343, Hawai'i Revised Statutes (HRS). Therefore, an Environmental Assessment is required for this project.

### **1.4 Land Use**

The State Land Use District is *Agricultural*. The County of Kaua'i General Plan land use designation is *Agriculture* and the County's Zoning District is *Agriculture* and a small portion zoned *Open*. The surrounding agricultural parcels have not been used for intensive agriculture for over 70 years. A small farming activity is taking place across the valley on the west side of Kalāheo Stream on TMK (4) 2-3-9:33. The general area has now become a rural residential community. State Land Use District, General Plan and Zoning maps are found in **Exhibits 6, 7 and 8** respectively.

### **1.5 Project Schedule**

Submission of Draft EA	April 2009
Approval of Final EA & FONSI	June 2009
County Council Approval to Abandon & Convey	July 2009

### **1.6 Technical Characteristics and Public Services**

#### Transportation

The Roadway is approximately one-tenth of a mile from the intersection of Waha and Lauoho Roads in Kalaheo.

#### Fire and Police Services

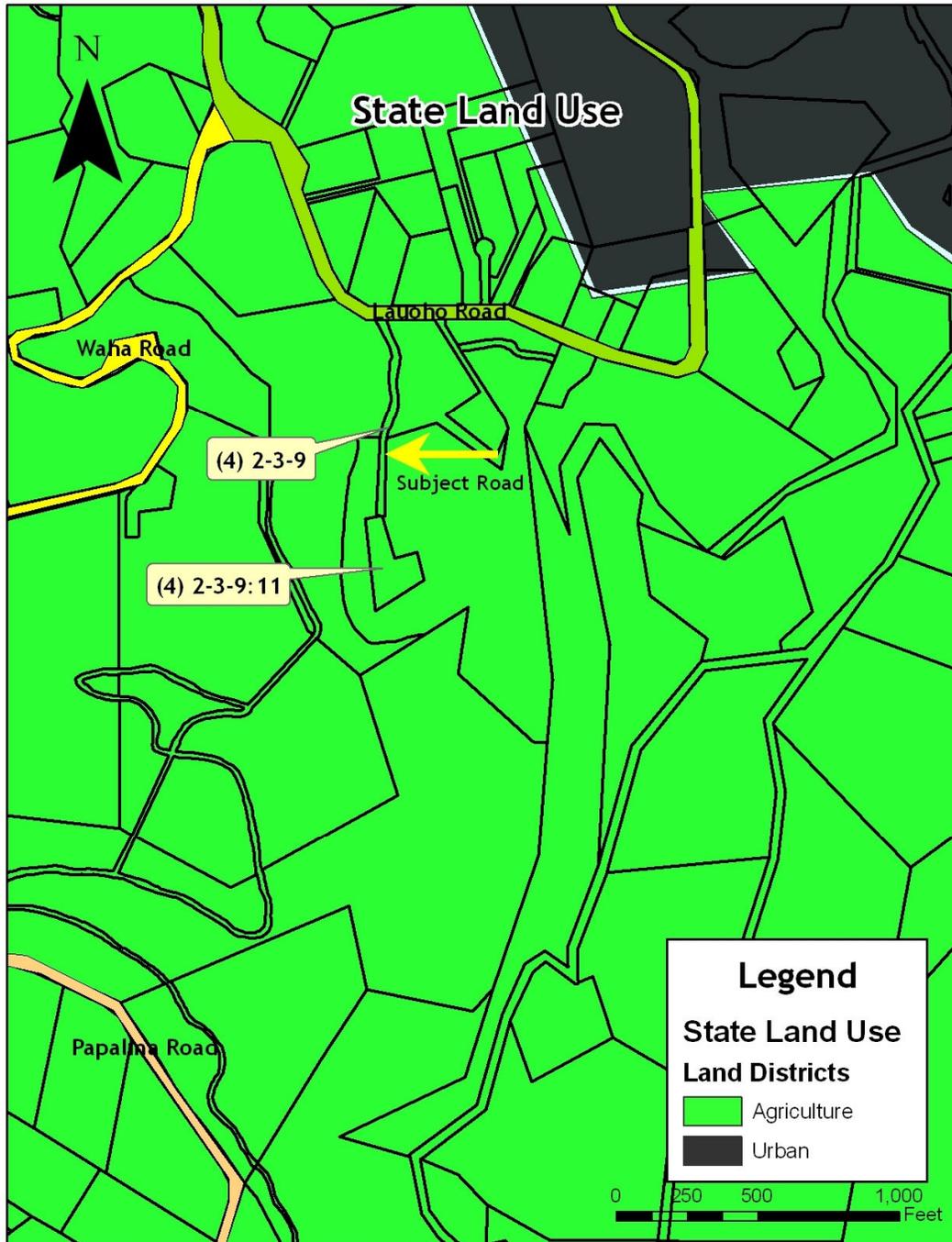
The Hanapepe Fire Station serves the subject property and the surrounding parcels. The Kaua'i Police Department's main headquarters is located in Lihu'e.

#### Sewage Treatment and Disposal

The proposal to abandon and convey does not involve any actions with respect to sewage treatment and disposal.

#### Solid Waste

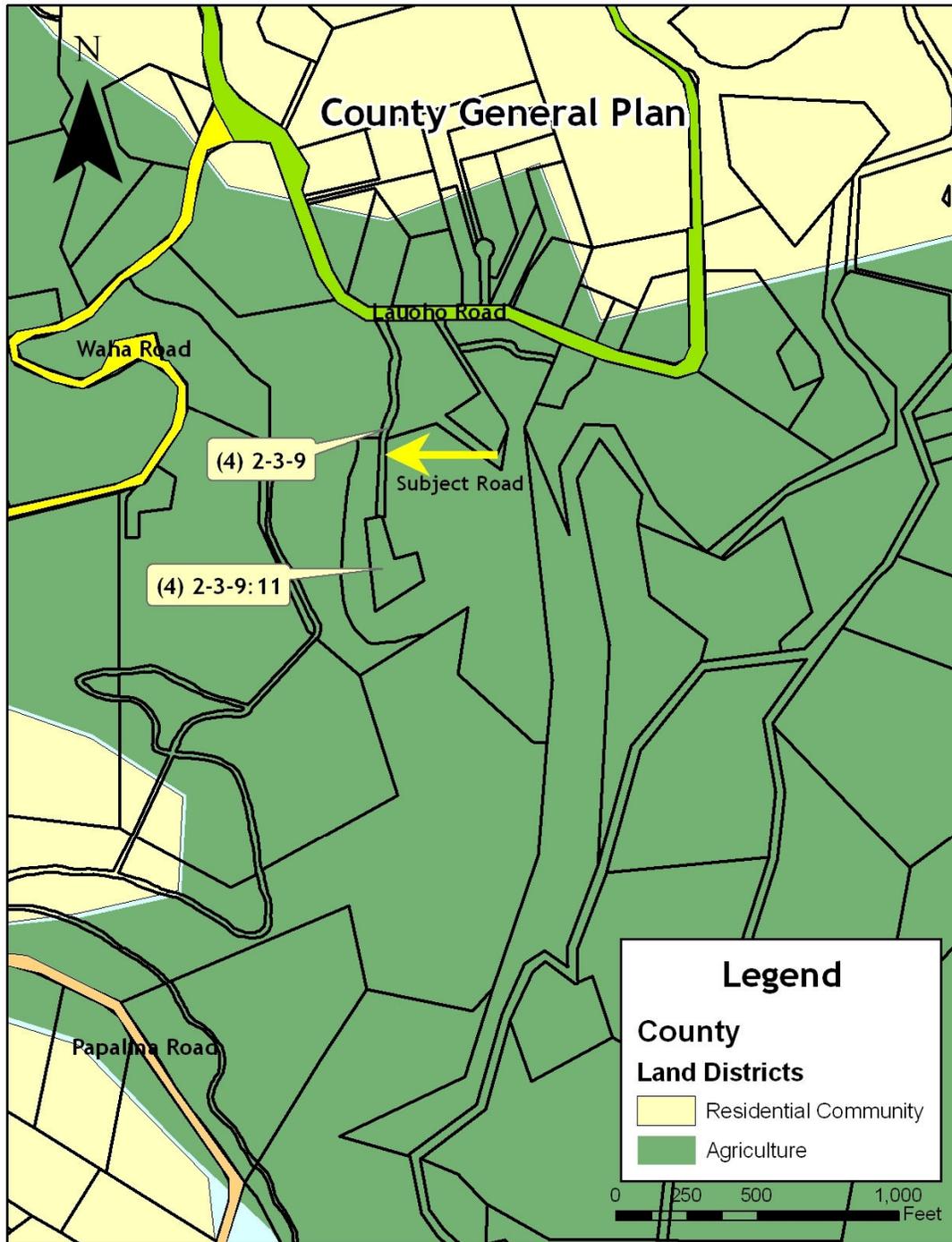
Solid waste disposal at this location is provided by the County of Kaua'i, Department of Public Works. The proposal does not involve any actions with respect to solid waste disposal.



County of Kaua'i  
Department of Public Works  
Roadway Abandonment and Conveyance

**State Land Use Map**

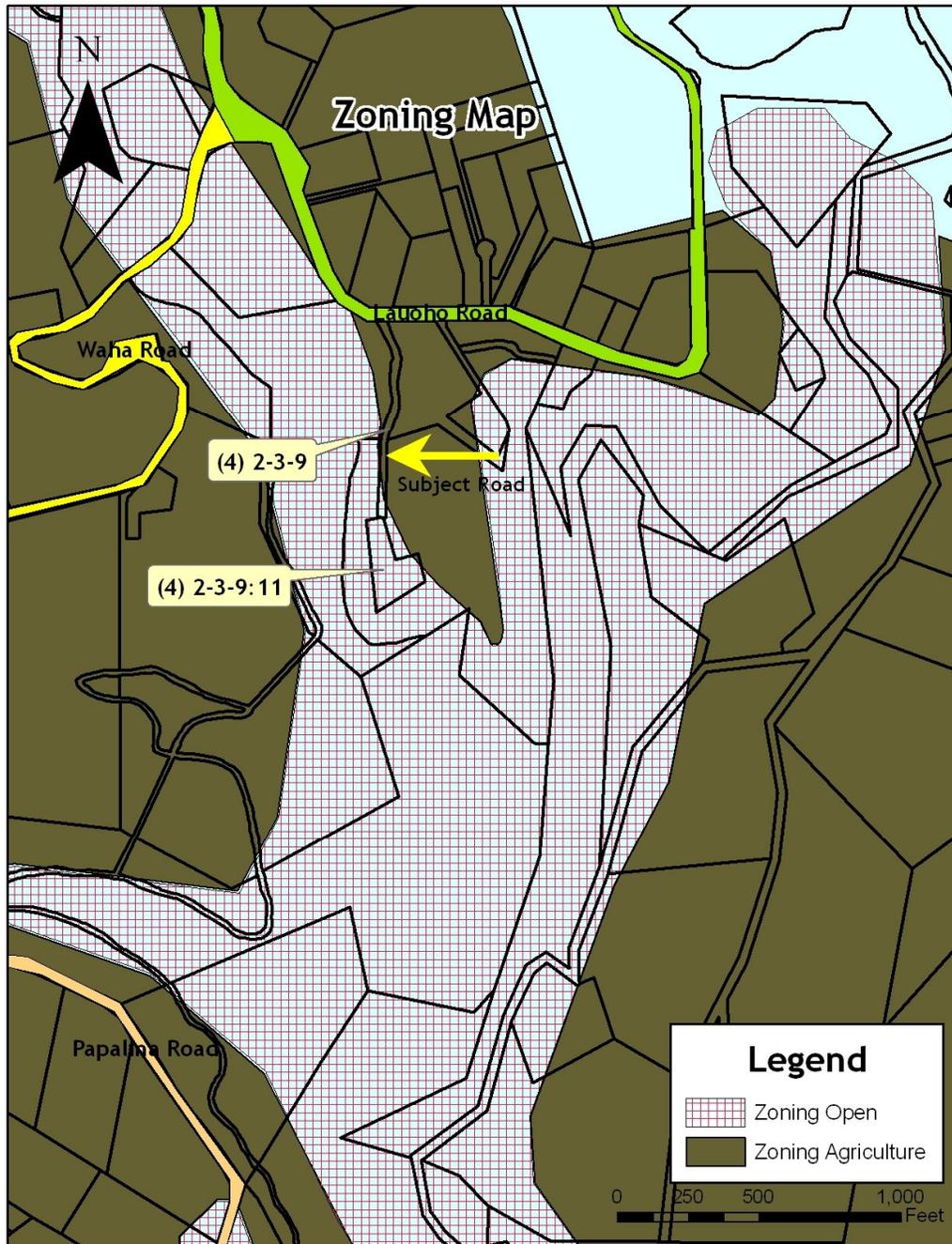
**Exhibit 6**



County of Kaua'i  
Department of Public Works  
Roadway Abandonment and Conveyance

**General Plan Map**

**Exhibit 7**



County of Kaua'i  
Department of Public Works  
Roadway Abandonment and Conveyance

**Zoning Map**

**Exhibit 8**

Water

The County of Kaua'i provides potable water to properties in the vicinity of the Roadway. The proposal does not involve any actions involving the Department of Water. However, the DOW stated that any subdivision or development of this area will be dependent on the adequacy of the source, storage and transmission facilities existing at the time.

Utilities & Communications

Utilities available at this location include electric (Kaua'i Island Utility Cooperative), and telephone service (Hawaiian Telcom). From Lauoho Road, a utility line carries service along the Roadway to parcel TMK (4) 2-3-9:34 and to the *kuleana* (TMK (4) 2-3-9:11). About mid-way along the abandoned Roadway, or approximately 350 feet south from the intersection of the Roadway and Lauoho Road, a utility easement carries to service TMK (4) 2-3-9:33 to the west.

**1.7 Socio-Economic Characteristics**Demographic Data

The 2000 U.S. Census reported that Kaua'i had a resident population of 58,463 (estimated 62,828 for 2007). The 2000 population reported for the Kalaheo Census Designated Place was 3,913 persons. Other relevant data follows:

Number of Households	1428
Median Household Income	\$57,813
Per Capita Income	\$23,501
Individuals Below Poverty Level	95
Percent Below Poverty Level	2.4%

Using the Census Designated Place data for Kalaheo, the predominant ethnic groups are White (40.0%), Asian (29.6%), Native Hawaiian and Other Pacific Islander (3.9%) and all others (26.5%).

Environmental Justice

A community meeting was held on Sunday, February 22, 2009 at the Kalāheo Neighborhood Center. Meeting announcements were posted throughout the community and distributed to the Kukuiolono and Lāwa'i Community Associations.

Two residents participated in the public meeting and did not express any concerns related to the subject of environmental justice such as adverse impacts on marginalized populations, or social or economic impacts on indigenous groups. A summary of the February 22 meeting is included in **Appendix D**.

### Cultural Impact Assessment

Act 50 requires state agencies and other developers to assess the effects of proposed land use or shore line developments on the “cultural practices of the community and State” as part of the HRS Chapter 343 environmental review process (2001).

The proposed action to abandon and convey the Roadway will have no impact on any known traditional or customary practices of native Hawaiians. There are no known traditional or customary practices of native Hawaiians that are presently occurring within the subject parcel that will be affected. The proposal will not detrimentally affect: access to any streams; access to the shoreline or other adjacent shoreline areas; or gathering along any streams, the shoreline or in the ocean. There are no known religious practices taking place on the Roadway parcel. The proposed action will have no negative impact on any cultural or historic sites or resources located within the boundaries of the Roadway parcel.

### Economic

This proposed abandonment and conveyance of the Roadway does not involve any short term impacts other than the County staff time required to process this Roadway abandonment and subsequent conveyance to other parties. No long-term economic impacts are anticipated.

### Historic, Cultural and Archaeological Resources

The construction of the Roadway along the hillside directly altered the land on the project site.

The project site does not contain any historic or archaeological sites listed on the State and National Registers of Historic Places (Registers). The closest historic sites listed on the Registers<sup>10</sup> are located in nearby Lāwa'i and in Hanapēpē. On the *kuleana* located at the terminus of the Roadway are the fragments of concrete foundations of the jelly factory that once operated on the site. Structures over 50 years old may be considered eligible for the Registers if they meet historic preservation standards.

## **1.8 Environmental Characteristics**

### Climate, Rainfall & Wind

The average rainfall is about 40-50 inches of rain per year according to the *Atlas of Hawai'i*. The closest rain gauge is located in nearby Kalaheo (HI43).

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<sup>10</sup> State of Hawai'i, Department of Land and Natural Resources, State Historic Preservation Division: <http://hawaii.gov/dlnr/hpd/hpgreeting.htm>.

Annual temperatures range from the mid-60's to mid-80's. Winds generally originate from the northeast (trade winds), although between October and April, the area may come under the influence of the southerly or southwesterly Kona storms.

### Geology & Topography

Kaua'i is one of the oldest of the Hawaiian Islands and consists of a single shield volcano built up from the sea floor by thousands of thin flows of basaltic lava. Following the volcanic period, long periods of erosion, waves cutting high sea cliffs, and streams cut deep canyons and valleys.

When accessing the Roadway, the subject parcel and surrounding area is defined by a natural valley that stretches from Lauoho Road to the north and extends down to Lāwa'i Bay to the south. The elevation at the top of the Roadway is 474.30 feet and 402.65 feet at the bottom where it intersects with the *kuleana* parcel.

### Aquatic Resources

Kalaheo Stream is located approximately 80 to 100 feet to the west of the Roadway. The stream is not listed in the Hawai'i Stream Assessment as a perennial stream. No aquatic, riparian, cultural, recreational resources have been identified for the Kalaheo Stream. There are no known aquatic resources that would be impacted by this proposal.

### Flora and Fauna

An inventory and survey of the flora and fauna was conducted on the Roadway parcel on November 25, 2008 by the National Tropical Botanical Garden staff. There are no known endangered or threatened species of flora or fauna on the Roadway right-of-way. The inventory and survey are found in **Appendix E**.

### Soils

Based on the State of Hawai'i's Land Study Bureau rating system the soil rating conducted by the study rates the soils within the project area as 'C' and 'D.' Soils with these ratings are considered to have moderate to poor productivity and are best suited for grazing activities. A five-letter overall agricultural productivity rating is used, where 'A' represents lands with the highest productivity rating and 'E' represents the lowest,<sup>11</sup>

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<sup>11</sup> Land Study Bureau.

### Hazards: Hurricanes and Flooding

The subject parcel is subject to hurricane impacts, as are all areas on Kaua'i. The nearby Kalāheo Stream is subject to flooding.

The vicinity of the Roadway is one of the areas studied in the Federal Management Agency (FEMA), Flood Insurance Study, County of Kaua'i, This parcel is identified on the Federal Emergency Management Flood Insurance Rate Map, Panel 15002-0292E (September 16, 2005), and shows the parcel located in Zone X. Zone X (unshaded) means that the area is outside the 500-year flood plain.

The proposed action will not alter the existing drainage pattern, and future conditions will remain the same as those currently in effect. Should any future actions occur involving the parcel, Best Management Practices will be followed to prevent damage by sedimentation, erosion or dust to streams, watercourses, natural areas and the property of others. Any future actions on the parcel will be also be subject to the drainage standards contained in the County of Kaua'i's Stormwater Runoff System Manual, dated July 2001.

## **2.0 AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES**

### **2.1 Existing Land Use**

The existing land use is a 12 – 15 foot wide driveway that accesses a *kuleana* which was land-locked until the partition of the Kalaheo Homesteads. The Roadway was created in order to access the *kuleana* parcel. The Homestead Act resulted in the County's 1940 action to widen the Roadway by the acquisition of the six small parcels described in Section 1.2 above.

#### Impacts and Mitigation Measures

The abandonment and conveyance is primarily a “paperwork” action. Since the Roadway is currently being used as an existing driveway, and the proposed action does not involve any physical activity on the property, no negative impacts are anticipated.

### **2.2 Topography and Soils**

The topography of the Roadway slopes down towards Lāwa'i Valley. It is unsuited for agricultural activity as evidenced by the fact that there has been no agricultural activity on the parcel within the last 70 years.

As previously described in Section 1.8, the rating for soils within the project area as 'C' and 'D.' Soils with these ratings are considered to have moderate to poor productivity and are best suited for grazing activities.

### Impacts and Mitigation Measures

The proposal to abandon and convey the existing Roadway will not have any negative impacts on the surrounding area.

Should any improvements be made to the Roadway following the abandonment and conveyance, proper permits will be obtained for any land altering construction. The project will abide by the County of Kaua'i, Department of Public Works' drainage standards. Best Management Practices for erosion and sediment controls will be implemented during the course of construction to mitigate any negative impacts to Kalāheo Stream.

## **2.3 Flora and Fauna**

As previously described in Section 1.8, Flora and Fauna, all of the flora and fauna found within the Roadway right-of-way are relatively common and widespread and are not considered to be rare, threatened, or endangered.

### Impacts and Mitigation Measures

No rare, threatened and/or endangered species of flora were found in the project area. The proposed abandonment and conveyance action is not anticipated to have any negative impacts on fauna within the project site.

## **2.4 Historic, Archaeological and Cultural Resources**

The project site does not contain any historic or archaeological sites listed on the National and State Registers of Historic Places.

On the *kuleana* located at the terminus of the Roadway are the fragments of concrete foundations of the jelly factory that once operated on the site. Structures over 50 years may be eligible for the Registers if the historic preservation standards can be met.

### Impacts and Mitigation Measures

The State Historic Preservation Division confirmed there are no historic properties affected. No impacts to historic sites, *iwi kupuna*, or native Hawaiian cultural or traditional deposits are anticipated unless during future land altering activities, cultural deposits or burials are inadvertently discovered on the property. In that case, all work will immediately cease, and the State of Hawai'i, Department of Land and Natural Resources will be contacted.

## **2.5 Scenic and Visual Resources**

Turning off Lauoho Road onto the road/driveway, on the left is a heavily vegetated hillside, and on the right the topography slopes down to the Kalāheo Stream.

The County's General Plan (November 2000) does not identify any scenic corridor or resources nearby.

#### Impacts and Mitigation Measures

The abandonment and conveyance of the subject parcel will not alter the landscape or any scenic or visual resources.

### **2.6 Air Quality and Noise**

The proposed action of abandonment and conveyance does not involve any air quality or noise issues.

#### Impacts and Mitigation Measures

No air quality or noise issues are anticipated. Should any unforeseen issues arise from the proposed action the County of Kaua'i will comply with all applicable Federal, State and County regulations and permitting requirements.

### **2.7 Drainage and Hazards**

A drainage study was not conducted for this project as the proposal does not involve any physical alterations to the property.

The parcel is identified on the Federal Emergency Management Flood Insurance Rate Map, Panel 15002-0292E (September 16, 2005), and shows the parcel located in Zone X. Zone X (unshaded) means that the area is outside the 500-year flood plain.

#### Impacts and Mitigation Measures

The proposed action will not alter the existing drainage pattern, and future conditions will remain the same as those currently in effect. Should any future actions occur involving the parcel, Best Management Practices will be followed to prevent damage by sedimentation, erosion or dust to streams, watercourses, natural areas and the property of others. Any future actions on the parcel will be also be subject to the drainage standards contained in the County of Kaua'i's Stormwater Runoff System Manual, dated July 2001.

### **2.8 Transportation**

The action of abandonment and conveyance of the Roadway will not involve any transportation impacts.

#### Impact and Mitigation Measures

There may be minor secondary transportation impacts following the conveyance of to the NTBG. NTBG plans to use the Roadway as an existing driveway to serve their approved central housing facility as described in Section 1.2 above, but at this time, there are no plans to improve the driveway area.

## **2.9 Economic Activity**

The proposed Roadway abandonment and conveyance does not involve any direct expenditure of County funds. Indirect costs include the staff time within the Department of Public Works and the County Attorney's office to process the abandonment request and subsequent conveyance documents.

### **Impacts and Mitigation Measures**

In the short term, the proposed action will involve county staff time to process the abandonment request and the subsequent conveyance documents. The abandonment and conveyance will remove the Roadway from the County inventory of roads, and in doing so will remove all improvement and maintenance costs, and liability.

## **2.10 Gathering and Access Rights**

The abandonment and conveyance of the Roadway will not impact any gathering or access rights of Native Hawaiians. Currently, there are no known traditional or cultural rights associated with the subject parcel.

### **Impacts and Mitigation Measures.**

Should any Native Hawaiian traditional gathering rights or public access rights be determined to exist on the subject parcel, those rights will not be restricted by this proposed action.

## **3.0 ALTERNATIVES TO THE PROPOSED ACTION**

### **3.1 "No Action" Alternative**

One alternative is not to proceed with the proposal to abandon and convey. This alternative would result in the continued ownership and liability of the Roadway by the County of Kaua'i, Department of Public Works, and the obligation to improve and maintain the road even though it is not used by the public.

### **3.2 "Abandon and Convey" Alternative**

This alternative involves seeking approval from the County Council to officially abandon the Roadway. The subsequent steps would include:

- ◆ Re-conveyance of Parcels A, D and E from Reservoir Site 21 to the successor owner of McBryde Sugar Co. (i.e., Kaneho)
- ◆ Re-conveyance of Parcels C, F and G from Lot 134 to successor owner of Tokuji Imada (i.e., NTBG).
- ◆ Quitclaim the remaining 10 foot wide center portion of the Roadway to NTBG.

**"Abandon and Convey" is the preferred alternative.**

#### 4.0 DETERMINATION

The impacts of the proposed action have been assessed. The proposed action is not anticipated to cause significant negative impacts to the environment. Therefore, a preliminary Finding of No Significant Impact (FONSI) is found. The determination of a FONSI is based on the following:

1. ***The proposed action does not involve an irrevocable commitment to loss or destruction of any natural or cultural resources;***  
No significant natural or cultural resources have been identified on the property.
2. ***The proposed Action will not curtail the range of beneficial uses of the environment;***  
The current use will continue as a driveway/access road to the NTBG parcels.
3. ***The proposed action does not conflict with the State's long-term goals or guidelines as expressed in Chapter 344, HRS, State Environmental Policy;***  
The project is consistent with the State's long-term environmental goals and will not have any significant negative effects on the environment.
4. ***The proposed action does not substantially affect the economic or social welfare of the community or state;***  
The economic or social welfare of the community will not be affected by the proposed action.
5. ***The proposed action does not substantially affect public health;***  
No public health impacts will be affected by this proposed action.
6. ***The proposed action does not involve substantial secondary effects;***  
The action of abandonment and conveyance does not involve any substantial secondary effects.
7. ***The proposed action does not involve substantial degradation of environmental quality;***  
The proposed action does not involve any physical activity on the property; therefore, no degradation of environmental quality will occur.
8. ***The proposed action does not cumulatively have a considerable effect on the environment or involve a commitment to larger actions;***  
The proposed action of abandonment and conveyance will not have a cumulative effect on the environment or involve a commitment to larger actions.

9. ***The proposed action does not affect a rare, threatened, or endangered species or its habitat;***  
There are no known rare, threatened, or endangered species located on the property.
10. ***The proposed action does not detrimentally affect air or water quality or ambient noise levels;***  
The proposed action will not affect air or water quality or ambient noise levels.
11. ***The proposed action does not affect an environmentally sensitive area;***  
The project site is not considered an environmentally sensitive area.
12. ***The proposed action does not substantially affect scenic vistas and view planes; and***  
The subject parcel has not been specifically identified as a scenic resource. Existing scenic vistas and view planes from Lauoho Road will not be impacted by the proposed action.
13. ***The proposed action does not require substantial energy consumption.***  
The proposed action will not require any additional energy consumption.

## 5.0 AGENCIES CONSULTED

Copies of the Draft EA were sent to the agencies, organizations and individuals listed below:

### State

Department of Transportation, Highways Division  
Department of Health  
DLNR, State Historic Preservation Division  
DBEDT, Office of State Planning  
Office of Hawaiian Affairs  
UHM, Environmental Center

### County

The Honorable Bernard Carvalho, Mayor  
The Honorable Kaipo Asing, Chair, County Council  
Department of Planning  
Department of Water  
Office of the County Attorney  
Kaua'i Island Burial Council  
Kaua'i Historic Preservation Review Commission

**Community and Other Organizations**

Lihu'e Public Library  
Koloa Public Library  
Koloa Community Association  
Lāwa'i Community Association  
Kukuiolono Community Association

## 6.0 REFERENCES

Armstrong, R. Warwick, editor. University of Hawai'i, Department of Geography. *Atlas of Hawai'i*, second edition. University of Hawai'i Press, Honolulu, 1983.

County of Kaua'i, Planning Department. *Kaua'i General Plan*. November 2000.

County of Kaua'i, Department of Public Works. Personal Communications on December 18, 2008 with Donald Fujimoto and Wallace Kudo, and on February 6, 2009 with Oscar Portugal, regarding abandonment and conveyance of the roadway.

County of Kaua'i, Real Property Division. Personal Communication on November 21, 2008, regarding TMK parcel number.

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## 7.0 APPENDICES

- Appendix A: NTBG Special Permit approval letter, October 24, 2007
- Appendix B: Public Works comments on Special Permit, August 20, 2007
- Appendix C: Flora and Fauna Inventory and Survey, November 25, 2008
- Appendix D: Summary Notes of Community on February 22, 2009
- Appendix E: Agency Comments and Responses

## **Appendix A**

### **Planning Department Letter of Approval for NTBG Central Housing Facility October 24, 2007**

**BRYAN J. BAPTISTE**  
MAYOR

**GARY K. HEU**  
ADMINISTRATIVE ASSISTANT



**IAN K. COSTA**  
DIRECTOR OF PLANNING

**IMAIKALANI P. AIU**  
DEPUTY DIRECTOR OF PLANNING

**COUNTY OF KAUA'I**  
**PLANNING DEPARTMENT**  
4444 RICE STREET  
KAPULE BUILDING, SUITE A473  
LIHU'E, KAUA'I, HAWAII 96766-1326  
TEL (808) 241-6677 FAX (808) 241-6699

October 24, 2007

National Tropical Botanical Gardens  
c/o Chipper Wichman  
3530 Papalina Road  
Kalāheo, Hawai'i 96741

**Subject: Special Permit SP-2008-01**  
**Use Permit U-2008-02**  
**Class IV Zoning Permit Z-IV-2008-03**  
**Applicant: *National Tropical Botanical Gardens***  
**Tax Map Key: (4) 2-3-09:34**

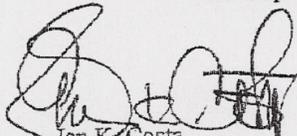
The Planning Commission at its meeting held on October 23, 2007 approved the subject permits to establish a Central Housing Facility which involves construction of a new 8-room dormitory, two 2-bedroom residential units, and conversion of a 3-bedroom residential dwelling on a parcel situated in Lāwa'i. Approval is subject to the following conditions as recommended by the Planning Department:

1. The Applicant is made aware that any further expansion of the facilities shall be subject to review by the Planning Commission, which may entail a new Public Hearing.
2. An Environmental Impact Assessment (EIA) fee based on the number of required off-street parking stalls shall be paid at the time of building permit application.
3. The Applicant shall resolve matters relating to the access road with the County Department of Public Works prior to building permit application.

AN EQUAL OPPORTUNITY EMPLOYER

National Tropical Botanical Gardens  
c/o Chipper Wichman  
October 24, 2007  
Page 2

4. The Applicant should resolve and comply with all agency requirements as recommended in the permit application review, including but not limited to the fire code requirements as imposed by the County Fire Department, water requirements for DOW, drainage flood studies for DPW-Building Division, and the individual wastewater system (IWS) requirements for the State Department of Health.
5. In order to minimize adverse impacts on the Federally Listed Threatened Species, Newell's Shearwater and other seabirds, if external lighting is to be used in connection with the proposed project, all external lighting shall be only of the following types: shielded lights, cut-off luminaries, or indirect lighting. Spotlights aimed upward or spotlighting of structures shall be prohibited.
6. The Applicant is advised that should any archaeological or historical resources be discovered during ground disturbing/construction work, all work in the area of the archaeological/historical findings shall immediately cease and the Applicant shall contact the State Department of Land and Natural Resources – Historic Preservation Division at (808) 742-7033 and the Planning Department at (808) 241-6677.
7. The Planning Commission reserves the authority to impose additional conditions, modify or delete conditions stated herein, or revoke the permits through proper procedures should the Applicant fail to comply with the conditions of approval.
8. The Applicant is advised that additional government agency conditions may be imposed. It shall be the applicant's responsibility to resolve those conditions with the respective agency(ies).



Ian K. Costa  
Director of Planning

xc: County – Public Works, Fire, Water, Finance-Real Property Division  
State – Health, Historic Preservation Division-DLNR.

NTBG-DormFacility\_Apr14L.CWichman

## **Appendix B**

### **Public Works Comments on NTBG Special Permit August 20, 2007**

SEP-24-2007 MON 03:54 PM COX PLANNING DEPT. FAX NO. 808 2410089 P. 05

COUNTY OF KAUAI  
PLANNING DEPARTMENT  
4444 RICE STREET, SUITE 473, LIHOE, HI 96765

TO: Ian K. Costa, Planning Director ( DALMACIO ) Date: August 20, 2007

SUBJECT: Zoning Permit Application Z-IV-2008-3, Use Permit Application U-2008-2 and  
Special Permit Application SP-2008-1, NATIONAL TROPICAL BOTANICAL  
GARDENS TMC: 2-3-09-024 PW # 07123

- TO: (X) PW-Engineering Div. ( ) PW-Waste Water (X) Building Division (Flood Review) ( ) PW-Parks & Recreation ( ) Solid Waste (X) Water Department - Water Resources & Planning Div. (X) State Health Dept. (X) State Historic Preservation Div. - DLNR (X) Irim Department ( ) Kuaui Housing Agency ( ) State Highways Div. - DOT (Kauai Office - FYI only) ( ) State Airports Div. - DOT (Kauai Office - FYI only) (X) State Land Use Commission - DBEDT ( ) State Office of Planning - DBEDT (X) State Dept. of Agriculture ( ) U.S. Fish and Wildlife Service - Ecological Service (O'ahu) ( ) Arboris Committee ( ) Arboris Committee (c/o Barbara Pandrigan) ( ) Kauai Historic Preservation Review Commission
- COUNTY OF KAUAI  
07 SEP 5 2 04  
PLANNING DEPT.

FOR YOUR COMMENTS (pertaining to your department): August 29, 2007

We reviewed the subject application for the construction of a dormitory and two (2) separate dwelling units to house visiting interns and researchers. We offer the following comments in regards to grading.

A. DRAINAGE:

- Kalāheo Stream traverses through the subject property. We believe the subject property is susceptible to flooding from Kalāheo Stream. Flood studies shall be provided to properly site the proposed dormitory and two dwelling units and to prevent structures from being built in flood prone areas. Flood studies shall be submitted to the Building Division's Flood Plain Coordinator for review and approval.
- Based on panel no. 292B of the Federal Insurance Rate Maps (FIRM) dated September 16, 2006, the Flood Zoning for the property is designated as Zone A. Zone A is describes

SEP 24 2007 MON 03:54 PM

COK PLANNING DEPT.

FAX NO. 808 2418888

P. 00

Z-IV-2008-03, U-2008-2, &amp; SP 2008-1

NATIONAL TROPICAL BOTANICAL GARDEN JW 8.07.122

August 29, 2007

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as special flood hazard areas subject to inundation by the 1% annual chance flood and for which base flood elevations have not been determined.

- Additionally, the driveway, parking lot and dwellings will increase storm water runoff to Kalāheo Stream. Mitigating drainage measures needs to be provided to maintain the pre-existing drainage flows and patterns. The flood study will need to evaluate the increased storm runoff as a result of the development. Flood studies shall be submitted to the Building Division's Flood Plain Coordinator for review and approval.

#### ACCESS:

- An inquiry has been made of the access road identified as TMK 2-3-09 which the subject property abuts and leads to TMK: 2-3-09-011. We understand that the subject roadway was conveyed to the County of Kaua'i, Territory of Hawaii on September 3, 1949 by Mr. Tokaji Imada for public road right of way and for so long as so used and not otherwise so that the estate of said Grantee (County), its successors and assigns, shall be and continue upon the conditional limitation that it shall cease and title shall immediately and without re-entry revert to the Grantor (Tokaji and Shimo Sueoka Imada), its successors and assigns, if and when the granted premises shall cease to be used for said purposes and use of same for said purposes shall be abandoned. For your information and use we are enclosing a copy of the Deed.

A field visit of the site by staff on 6-05-07. Our findings indicate that the access is currently chained off leading us to believe that the roadway has been abandoned. Our County Attorney's office has recommended that if the County does not wish to retain the road and abandon it, approval needs to be obtained from the County Council to abandon the roadway and then a file a notice with the Bureau of Conveyances to officially notify the public that the County no longer has any claims to the road. Filing of the notice of abandonment will trigger the reversion clause in the right of way agreement and ownership will revert to the heirs of the Tokaji and Shimo Imada. Engineering Division has requested comments from our Road Maintenance Division in regards to the disposition of the public roadway in question. Road Maintenance has no objections to abandoning the roadway. Prior to abandoning the roadway and obtaining County Council approval an Environmental Assessment will need to be prepared in accordance with Chapter HRS 34) and filed with the Office of Environmental Quality Control. We requests that the developers assist the County in the preparation of the Environmental Assessment and successfully obtaining County Council approval for abandoning the roadway.

The disposition and ownership of the access road needs to be resolved prior to the approval of the subject zoning, use and special permit application otherwise other

SEP-24-2007 MON 08:54 PM COK PLANNING DEPT.

FAX NO. 800 2418599

P. 07

NATIONAL TROPICAL BOTANICAL GARDEN PW 8.07.122

August 29, 2007

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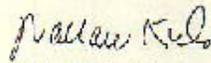
alternate access provisions will need to be obtained to the proposed building site.

**B. GRADING:**

- A grading permit may be required for the parking lot, driveway construction and Z-IV-2008-03, U-2008-2, & SP 2005-1.

outside of the building footprints if the grading quantities exceeds more than 100 cubic yards.

- Regardless if a grading permit is required or not, Best Management Practices (BMP's) shall be employed at all times to the maximum extent practicable to prevent damage by sedimentation, erosion or dust to streams, watercourses, natural areas, and the property of others.



Wallace Kudo, P.E.  
Chief, Engineering Division

CONCUR:



DONALD M. FUJIMOTO, P.E.  
County Engineer

WK

attachment:

- cc: Design and Permitting w/attachment
- Construction Inspection w/attachment
- Oscar Portugal w/attachment
- Building Division
- Road Maintenance w/attachment

Please return comments by September 4, 2007. Mahalo!

## **Appendix C**

### **Flora and Fauna Inventory and Survey November 25, 2008**

### Biological Survey of Theobald House Roadway

An inventory and survey of the flora and fauna was conducted on 25 November 2008 along the roadway from Lauoho Road down to the site of the old “jelly factory,” herein referred to as the Theobald House. The unpaved roadway slopes southward from Lauoho Road to the Theobald House site, which is owned by the National Tropical Botanical Garden. As might be expected in a low elevation area long developed for agriculture and housing, the vegetation is almost exclusively non-native and overwhelmingly weedy, with a number of formerly cultivated species firmly established and naturalized. This is especially true near the junction of the roadway and Lauoho Road. Under a dense canopy of *Hibiscus tiliaceus* (hau), *Schinus terebinthifolius* (Brazilian pepper) and *Syzygium cumini* (Java plum), two species of *Philodendron* dominate the understory. Seedlings and saplings of *Filicium decipiens* (Fern tree) were also seen and represent a new weed record for the island of Kauai.

Moving southward down the roadway, the canopy along the eastern side gradually opens slightly and the hau gives way to *Schefflera actionophylla* (Octopus tree), Java plum, and *Spathodea campanulata* (African tulip tree). Scattered individuals of *Mangifera indica* (mango), *Ficus microcarpa* (Chinese banyan), *Psidium guajava* (common guava), *Psidium cattleianum* (strawberry guava) and *Falcataria moluccana* (Albizia) are also present. The mid-stratum or shrub layer consists of *Leucaena leucocephala* (koa haole), *Senna surratensis* (Kolomona) and *Lantana camara* (lantana). The groundcover is predominantly *Sphagneticola triloba* (wedelia) which occurs throughout the area. In open areas or light gaps it is often co-dominant with *Urochloa maxima* (Guinea grass) and/or *Melinis minutiflora* (molassas grass). Scattered stands of the weedy ferns *Nephrolepis multiflora* and *Blechnum appendiculatum* grow on shady banks. At the bottom of the road, the land flattens and the trees and shrubs give way to a mown meadow dominated by wedelia and other weedy herbs.

Moving up the western side of the roadway from the house site the vegetation is again dominated by a groundcover of wedelia interspersed with scattered cultivated species (especially near the house site) such as *Acalypha godseffiana* (acalypha), *Cordyline fruticosa* (ti), *Macadamia integrifolia* (macadamia nut), and mango. Nearing the top of the roadway, a planting of *Cassia fistula* (yellow shower tree) dominates the roadside and then gives way to a hedge of *Hibiscus ×archeri* (red hibiscus).

The edges and banks of the roadway are dominated by a wide variety of common weedy herbs such as *Desmodium triflorum*, *Chamaecrista nictitans* (Partridge pea), *Centella asiatica* (goticola), and *Oplismenus hirtellus* (basket grass).

Only a single indigenous native species, *Psilotum nudum* (moa) was seen during the survey. This rather ubiquitous herb was found growing as an epiphyte on scattered trees along the eastern side of the roadway. Moa is common throughout the islands and is not considered rare or endangered.

Only four bird species were sighted or heard along the roadway. They include chickens (*Gallus gallus*), Mynahs (*Acridotheres tristis*), cattle egrets (*Bulbulcus ibis*) and Japanese white eyes (*Zosterops japonicus*). The paucity of bird species could be related to the time of day of the survey (mid-morning) or lack of suitable habitat. No native birds were sighted during the survey.

Conducted and submitted by:

Tim Flynn, Herbarium Collections Manager  
and  
David Lorence, Director of Research

National Tropical Botanical Garden  
3530 Papalina Road  
Kalaheo, HI 96741

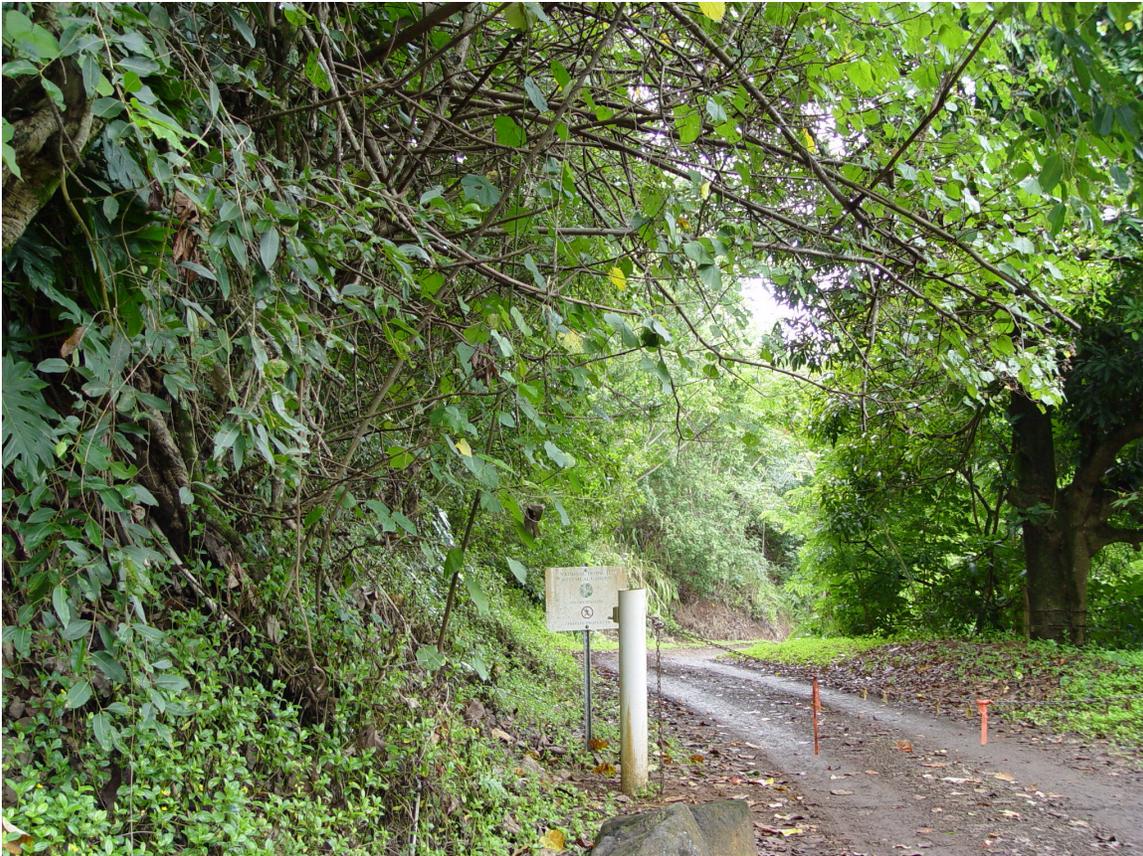


Figure 1. Roadway from Lauoho Road to Theobald house looking south. Shows canopy of overhanging hau and Java plum, with wedelia and philodendron ground cover on bank.



Figure 2. Bank on east side of roadway, showing ground cover of wedelia and philodendron, mid-stratum of Brazilian pepper, and canopy of Java plum.



Figure 3. Bank on east side of roadway, showing ground cover of wedelia and Guinea grass, mid stratum of Brazilian pepper and canopy of canopy octopus tree.



Figure 4. East side of roadway near bottom, showing bank with *Nephrolepis multiflora*, wedelia, molasses grass and other herbaceous weeds, and litchi trees.



Figure 5. Looking north up roadway from Theobald House, showing cultivated ti and acalypha on west (left) side, and litchi trees and wedelia-covered bank on east side.



Figure 6. Middle part of roadway showing common guava and wedelia ground cover on west (left) side, and bank with molasses grass, wedelia, and Java plum on east side.



Figure 7. Top of driveway looking northward to Lauoho Road, showing groundcover of wedelia and golden shower and mango trees and hibiscus shrubs on west (left) side, and wedelia-covered bank with overhanging Brazilian pepper and hau on east side.

**PLANTS**

<i>Family</i>	<i>Genus</i>	<i>Species</i>	<i>infraspecies</i>	<i>Common name</i>	<i>Status</i>
Acanthaceae	Thunbergia	fragrans		White thunbergia	introduced
Anacardiaceae	Mangifera	indica		Mango	introduced
Anacardiaceae	Schinus	terebinthifolius		Brazilian pepper	introduced
Apiaceae	Centella	asiatica		Goticola	introduced
Araceae	Philodendron	erubescens		Blushing philodendron	introduced
Araceae	Philodendron	pinnatifidum		Selloum	introduced
Araliaceae	Schefflera	actinophylla		Octopus tree	introduced
Arecaceae	Cocos	nucifera		Coconut	introduced
Asparagaceae	Cordyline	fruticosa		Ti	introduced
Asteraceae	Conyza	bonariensis		Hairy horseweed	introduced
Asteraceae	Crassocephalum	crepidioides			introduced
Asteraceae	Cyanthillium	cinereum		Little ironweed	introduced
Asteraceae	Elephantopus	mollis			introduced
Asteraceae	Emilia	sonchifolia		Flora's paintbrush	introduced
Asteraceae	Pluchea	carolinensis		Sourbush	introduced
Asteraceae	Sphagneticola	triloba		Wedelia	introduced
Bignoniaceae	Spathodea	campanulata		African tulip tree	introduced
Blechnaceae	Blechnum	appendiculatum			introduced
Clusiaceae	Clusea	rosea		Autograph tree	introduced
Commelinaceae	Commelina	diffusa		Honohono	introduced
Euphorbiaceae	Acalypha	wilkesiana			introduced
Fabaceae	Canavalia	cathartica		Maunaloa	introduced
Fabaceae	Cassia	fistula		Golden shower tree	introduced
Fabaceae	Chamaechrista	nictitans	var. glabrata	Partridge pea	introduced
Fabaceae	Desmodium	incanum		Spanish clover	introduced
Fabaceae	Desmodium	triflorum			introduced
Fabaceae	Indigofera	suffruticosa		`Iniko, Indigo	introduced
Fabaceae	Leucaena	leucocephala		Koa haole	introduced
Fabaceae	Mimosa	pudica		Hilahila	introduced
Fabaceae	Falcataria	moluccana		Albizia	introduced
Fabaceae	Senna	surratensis		Kolomona	introduced
Lamiaceae	Lantana	camara		Lantana	introduced
Lomariopsidaceae	Nephrolepis	multiflora		Boston fern	introduced
Malvaceae	Hibiscus	archeri		Red hibiscus	introduced
Malvaceae	Hibiscus	tiliaceus		Hau	introduced
Moraceae	Ficus	microcarpa		Chinese banyan	introduced
Myrtaceae	Psidium	cattleianum		Strawberry guava	introduced
Myrtaceae	Psidium	guajava		Common guava	introduced
Myrtaceae	Syzygium	cumini		Java plum	introduced
Orchidaceae	Spathoglottis	plicata		Philippine ground orchid	introduced
Passifloraceae	Passiflora	edulis		Lilikoi	introduced
Phyllanthaceae	Phyllanthus	debilis		Niruri	introduced
Poaceae	Melinis	minutiflora		Molassas grass	introduced
Poaceae	Oplismenus	hirtellus		Basket grass	introduced
Poaceae	Paspalum	fimbriatum		Panama paspalum	introduced
Poaceae	Sacciolepis	indica		Glenwood grass	introduced
Poaceae	Setaria	parviflora		Yellow foxtail	introduced

Poaceae	Urochloa	maxima	Guinea grass	introduced
Polypodiaceae	Phlebodium	aureum	Rabbit's foot fern	introduced
Polypodiaceae	Phymatosorus	grossus	Lauae fern	introduced
Proteaceae	Macadamia	integrifolia	Macadamia	introduced
<b>Psilotaceae</b>	<b>Psilotum</b>	<b>nudum</b>	<b>Moa</b>	<b>indigenous</b>
Pteridaceae	Pityrogramma	calomelanos	Silver fern	introduced
Rubiaceae	Spermacoce	assurgens	Buttonweed	introduced
Sapindaceae	Filicium	decipiens	Fern tree	introduced
Sapindaceae	Litchi	chinensis	Lychee	introduced
Thelypteridaceae	Christella	parasitica		

## **Appendix D**

### **Summary Notes of Community Meeting February 22, 2009**

**Meeting Summary**  
**County Road to be Abandoned in Kalaheo**  
**Kalāheo Neighborhood Center**  
**February 22, 2009 at 3:00 PM**

Meeting flyers were posted throughout the community (Koloa Big Save, Koloa Neighborhood Center, and post offices). Meeting announcements were distributed to Kukuioolono and Lāwa`i Community Associations. The meeting was convened at 3:10 PM, with Herbert Hikiji and Saburo Yoshioka in attendance.

Nadine Nakamura, NKN Project Planning opened the meeting by describing the proposed road abandonment and conveyance project, how the project was initiated, and a discussion of activities and projects on the adjacent properties.

Two concerns were raised:

1. Adjacent single-family home along the road could be impacted. Nadine clarified that the National Tropical Botanical Gardens owns the home in question. The resident responded that based on this feedback, this is no longer a concern.
2. There were several related questions about the National Tropical Botanical Garden's central housing facility, primarily about the purpose of the facility which will be used for temporary housing for visiting researchers and interns. Those questions were answered by Chipper Wichman, NTBG's Director and CEO.

There were no concerns about traditional cultural uses at this site. There were no objections to the abandonment and conveyance proposal.

The meeting was adjourned at 3:30 PM.

Recorded by:  
Barbara Robeson  
Nadine Nakamura

**Appendix E**  
**Agency Comments and Responses**