

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAI'I

In The Matter Of The Petition Of)	DOCKET NO. A05-761
)	
ERIC A. KNUDSEN TRUST)	FINDINGS OF FACT,
)	CONCLUSIONS OF LAW, AND
To Amend The Agricultural Land Use District)	DECISION AND ORDER
Boundary Into The Urban Land Use District)	ACCEPTING A FINAL
For Approximately 127.490 Acres Of Land At)	ENVIRONMENTAL IMPACT
Po'ipū, District Of Koloa, Island And County)	STATEMENT
Of Kaua'i, State Of Hawai'i, Tax Map Keys:)	
2-8-13: Por. 1; 2-8-14: Por. 1, 2, 3, Por. 4, Por. 19)	
And Por. Lot 19-B (Hapa Road))	
_____)	

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER
ACCEPTING A FINAL ENVIRONMENTAL IMPACT STATEMENT

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FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER
ACCEPTING A FINAL ENVIRONMENTAL IMPACT STATEMENT

The Land Use Commission ("Commission"), having examined the Final Environmental Impact Statement ("FEIS")¹ filed by the Eric A. Knudsen Trust ("Petitioner"), on October 17, 2006, and upon consideration of the matters discussed therein, at its meeting on November 2, 2006, in Kailua-Kona, Hawai'i, hereby makes the following findings of fact and conclusions of law:

FINDINGS OF FACT

1. On July 8, 2005, Petitioner filed a Petition For Land Use District Boundary Amendment ("Petition").

¹ The document was termed a Proposed FEIS to reflect that there may be subsequent revisions made to the document.

2. The Petition requested the reclassification of approximately 127.4 acres of land, identified as Tax Map Keys: 2-8-13: por. 1; 2-8-14: por. 1, 2, 3, por. 4, por. 19; and por. Lot 19-B (Hapa Road) (collectively "Petition Area"), from the State Land Use Agricultural District to the State Land Use Urban District.

3. The Petition included an Environmental Impact Statement Preparation Notice ("EISPN"), pursuant to sections 343-5(a)(1), Hawai`i Revised Statutes ("HRS"), and section 11-200-6(b)(1)(A), Hawai`i Administrative Rules ("HAR").

4. On July 13, 2005, and by a written Order dated August 18, 2005, the Commission (i) agreed to be the accepting authority pursuant to chapter 343, HRS; and (ii) determined that the proposed action may have a significant effect on the environment to warrant the preparation of an Environmental Impact Statement ("EIS").

5. The Office of Environmental Quality Control ("OEQC") published notice of the EISPN in its July 23, 2005, issue of *The Environmental Notice*, which began a 30-day public comment period that ended on August 22, 2005.

6. Upon receipt of the comments, Petitioner prepared a Draft Environmental Impact Statement ("DEIS"), which was transmitted to the OEQC on February 7, 2006. The OEQC published notice of the availability of the DEIS in its February 23, 2006, issue of *The Environmental Notice*, which began a 45-day public comment period that ended on April 10, 2006.

7. The following federal, state, and county agencies; public utility; private organizations; and individuals provided responses on the DEIS: the U.S. Department of the Army, U.S. Army Engineer District; the Commission; the State Office of Planning (“OP”); the State Department of Business, Economic Development and Tourism, Strategic Industries Division; the State Department of Defense, Office of the Director of Civil Defense; the State Department of Education; the State Department of Transportation; the State Department of Health, Environmental Planning Office; the State Department of Land and Natural Resources (“DLNR”), Division of Forestry and Wildlife; the DLNR, State Historic Preservation Division; the OEQC; the University of Hawai`i Environmental Center; the County of Kaua`i (“County”) Fire Department; and the County Department of Water.

8. On October 17, 2006, Petitioner filed the FEIS with this Commission.²

9. On October 30, 2006, OP filed a Statement Regarding The Proposed Final Environmental Impact Statement recommending that the LUC not accept the FEIS until Petitioner provided written confirmation from the U. S. Fish and Wildlife Service that all lava tubes have been located on the Petition Area and that proposed mitigation measures are acceptable.

² The FEIS, among other things, refined the acreage comprised by the Petition Area to approximately 127.490 acres.

10. On November 1, 2006, the County Planning Department (“Planning Department”) filed a Statement Regarding The Proposed Final Environmental Impact Statement joining the OP’s recommendation that the LUC not accept the FEIS for the reasons as stated by the OP. The Planning Department further requested that prior to the acceptance of the FEIS, a public hearing be held on Kaua`i to address both the impact to endangered species and archaeological resources within the Petition Area.

11. On November 2, 2006, the Commission met in Kailua-Kona, Hawai`i, to consider acceptance of Petitioner’s FEIS. Walton D. Y. Hong, Esq.; Stacey T. J. Wong; Tom Witten; and Kimi Yuen appeared on behalf of Petitioner. Bryan C. Yee, Esq., and Abe Mitsuda appeared on behalf of OP. James K. Tagupa, Esq., appeared on behalf of the County. At the meeting, the County requested that this matter be continued to the Commission’s videoconference meeting in Lihu`e, Kaua`i, on November 6, 2006, so that members of the public on Kaua`i could have an opportunity to comment on the acceptance of Petitioner’s FEIS. Following discussion, the Commission denied the County’s request on the basis that public notice requirements for meetings under section 92-7, HAR, could not be satisfied given the amount of time available. The Commission then heard testimony from the OP regarding its concerns that the FEIS should not be accepted until the USFWS provides written confirmation that all lava tubes have been located on the Petition Area and that Petitioner’s proposed mitigation measures are acceptable. Petitioner then argued that the FEIS should be

accepted because it complied with the requirements of chapter 343, HRS, and chapter 11-200, HAR. In response to the written and oral statements of the OP and the County, Petitioner proposed amended language, as reflected in Exhibit "A" attached hereto and incorporated herein by reference, to be included in the discussion on lava tubes, cave systems, and endangered species within the FEIS. Following discussion, the Commission requested that the following modifications be inserted to Petitioner's amended language wherever such reference is made throughout the FEIS (additions underscored; deletions struckthrough):

Given the nature of the site and the possibility of finding additional lava tubes or cave systems, additional care will also be taken during construction or any site work throughout the project site and petition area. Best practices such as minimizing ground disturbance and grading during civil design and construction and recommending pier and post foundation systems to minimize the area of ground disturbance will be followed. Should presently unknown lava tubes or cave systems be located or should lava tubes or cave systems be breached and/or ~~either~~ endangered species ~~are~~ be found, work will stop immediately and the USFWS will be contacted to determine the appropriate mitigative measures to be taken. The Trust will comply with all USFWS requirements in order to mitigate the situation.

12. The Commission finds that the FEIS, with Petitioner's proposed amended language as modified by this Commission, generally conforms to the content requirements of section 11-200-18, HAR, to the extent that it includes (i) the DEIS revised to incorporate substantive comments received during the consultation and review process; (ii) reproductions of all letters received containing substantive

comments; (iii) a list of persons, organizations, and public agencies commenting on the DEIS; (iv) the responses of Petitioner to each substantive question, comment, or recommendation received in the review and consultation processes; and (v) text written in a format that allows the reader to easily distinguish changes made to the text of the DEIS.

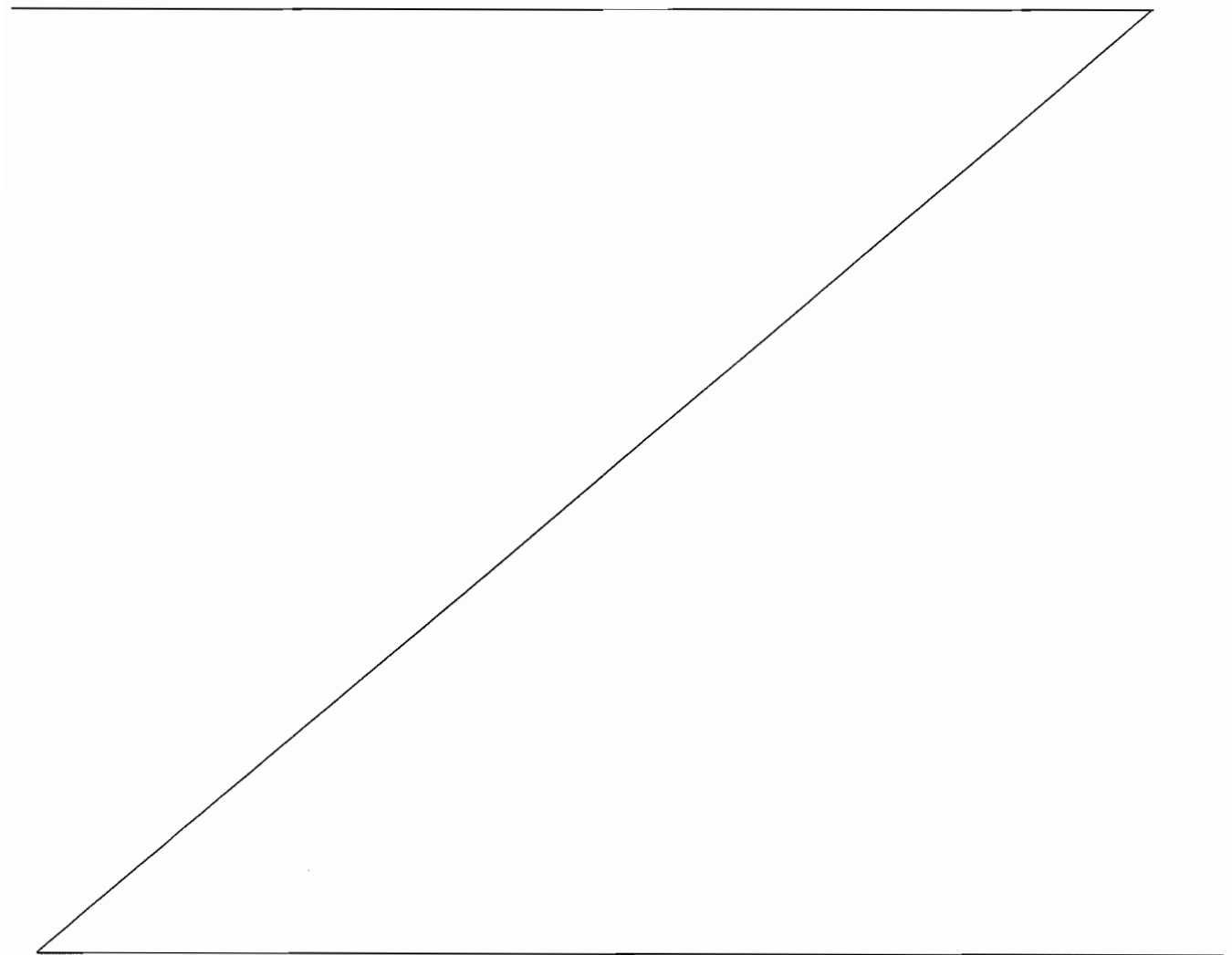
13. After due deliberation at the Commission's meeting on November 2, 2006, a motion was made and seconded to accept Petitioner's FEIS, with Petitioner's proposed amended language as modified by this Commission. There being a vote tally of 5 ayes and 4 absent, the motion carried.

CONCLUSIONS OF LAW

Pursuant to chapter 343, HRS, and the EIS Rules under chapter 11-200, HAR, and a motion having been made at a meeting on November 2, 2006, in Kailua-Kona, Hawai'i, and the motion having received the affirmative votes required by section 15-15-13, HAR, and there being good cause for the motion, this Commission concludes that Petitioner's FEIS, with Petitioner's proposed amended language as modified by this Commission, generally satisfies the criteria and procedures governing the acceptance of an FEIS under section 11-200-23, HAR.

DECISION AND ORDER

IT IS HEREBY ORDERED that the FEIS filed by Petitioner under Docket No. A05-761/Eric A. Knudsen Trust, with Petitioner's proposed amended language as modified by this Commission, be ACCEPTED pursuant to chapter 343, HAR, and chapter 11-200, HAR.




ADOPTION OF ORDER

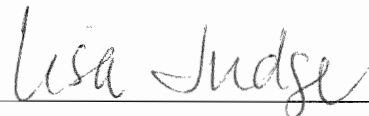
The undersigned Commissioners, being familiar with the record and proceedings, hereby adopt and approve the foregoing ORDER this 16th day of November, 2006. This ORDER and its ADOPTION shall take effect upon the date this ORDER is certified and filed by this Commission.


Done at Makena, Maui, Hawai'i, this 16th day of November, 2006, per motion on November 2, 2006.


APPROVED AS TO FORM


Deputy Attorney General

LAND USE COMMISSION
STATE OF HAWAII

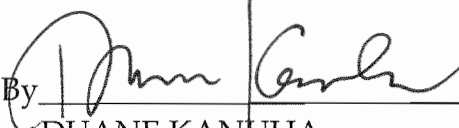
By 
LISA JUDGE
Chairperson and Commissioner

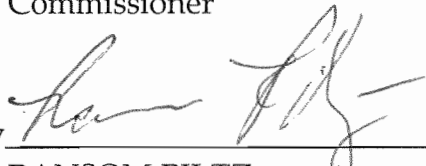
By 
MICHAEL FORMBY
Vice-Chairperson and Commissioner

By 
STEVEN LEE MONTGOMERY
Vice-Chairperson and Commissioner

By _____ (absent)
THOMAS CONTRADES
Commissioner

By _____ (absent)
KYONG-SU IM
Commissioner

By  _____
DUANE KANUHA
Commissioner

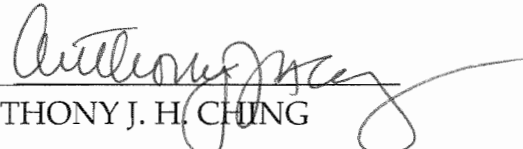
By  _____
RANSOM PILTZ
Commissioner

By _____ (absent)
NICHOLAS TEVES
Commissioner

Filed and effective on
NOV 21 2006

By _____ (absent)
REUBEN WONG
Commissioner

Certified by:


ANTHONY J. H. CHING

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VILLAGE AT PO'IPŪ

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The remaining 127.490 acres ~~north of the railroad berm of the project site~~ are in the Agricultural State Land Use District and ~~will require the Trust is currently seeking~~ approval by the State Land Use Commission (LUC) to reclassify the State Land Use District to the Urban District. It is currently designated as Residential Community in the County General Plan.

With the existing zoning and existing State Land Use designations, an estimated maximum of roughly 324-323 units and 190-189 additional dwelling units (ADUs) are permitted within the project area based on density calculations allowed with the existing zoning.¹ With the approval of the SLUDBA petition and the reclassification of the lands within the Agricultural District to the Urban District, the permitted maximum would increase to 421 units and 287 ADUs; this is an increase of an additional 98 units and 98 ADUs would be allowed with the change to the Urban State Land Use District. The increase in maximum allowable density would occur in the petition area, which is zoned Open. The current County Zoning Ordinance allows one lot per acre density within the Open zone if the State Land Use District is Urban; for Open zoned parcels in the Agricultural District, only one lot per five acres may be subdivided.

Please note that at the time of this writing, the County Council is considering the extension of the sunset date for ADUs in non-residentially zoned lands (Bill No. 2173). Section 8-26.1(a) of the County Zoning Ordinance (CZO), which allows ADUs to be built on non-residentially zoned lots, will expire on December 31, 2006. After that date, no building permit shall be granted for an ADU on non-residentially zoned lots under Section 8-26.1(a) unless the Council votes to extend the expiration date. If the date is not extended, no ADUs would be permitted in the Open zoned areas of the project site and the increase in density within the petition area will be limited to the 98 units, rather than the maximum of 196 with ADUs. However, to be conservative, the potential impacts for the project are described in this EIS for the potential development of ADUs as appropriate in case the sunset date is extended beyond December 31, 2006.

¹ This estimate is based on allowable density--the maximum number of units allowed by County zoning. The calculation consists of multiplying existing, zoned area acreage and the density allowed for that area (per County zoning). The 163.473 acres in Agriculture State Land Use District (SLUD) with Open Zoning allows 62 dwelling units, 14.929 acres of Urban SLUD/R-4 Zoning allows 59 dwelling units, 11.300 acres of Urban SLUD/R-6 Zoning allows 68 dwelling units, and 13.400 acres of Urban SLUD/R-10 Zoning allows 134 dwelling units. The sum of the maximum number of dwelling units permitted with existing zoning and State Land Use is 323 (62+59+68+134). Additional dwelling units are currently allowed for all units except those within the R-10 Zoning District so the maximum number of ADUs allowed is 189 (62+59+68=189). Therefore, the existing zoning and State Land Use for the 203.102 acres of EAK Trust land currently allows 323 dwelling units with 189 additional dwelling units.

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VILLAGE AT PO'IPŪ

1.3.2 Summary of Potential Impacts and Proposed Mitigation Measures

Flora

No threatened or endangered plant species or species of concern have been found on the Village at Po'ipū site or within the SLUDBA petition area. The proposed conceptual master plan attempts to improve botanical resources by clearing the project site and petition area of the existing alien and invasive species. Native plants will be installed within the archaeological sites and preserves proposed throughout the project site including the petition area. Native and non-invasive species also will be encouraged throughout the Village at Po'ipū project as part of the Landscape Master Plan and Design Guidelines.

Fauna

The proposed Village at Po'ipū is not expected to impact any endangered or threatened species as none were found within the project site or SLUDBA petition area during the avifaunal and feral mammal survey. Although none were observed during the surveys on the site, two listed species, Newell's shearwater (threatened) and Hawaiian petrel (endangered), are known to fly over Kōloa-Po'ipū between nesting areas in the mountains and foraging areas at sea. Because young birds are known to be distracted by outdoor lighting, the Village at Po'ipū will minimize potential impacts to these birds by requiring that all outdoor lighting be shielded and pointed downwards. No exposed or visible light bulbs will be permitted. These requirements, among other detailed requirements for outdoor lighting, will be included in the Village at Po'ipū Design Guidelines to which all future homeowners must abide by contract. The Village at Po'ipū will also recommend the use of lights approved by the International Dark-Sky Association (IDA). In addition, the faunal survey concluded that the project might positively impact the migratory Pacific Golden Plover and endangered Hawaiian Hoary Bat. However, the native Pueo (Hawaiian Owl) will less likely utilize the area once the tall grasses are cleared. The Pueo is endangered only on the island of O'ahu and not anywhere else in the State. Also, although not noted during the fauna survey, the Nene (Hawaiian goose) will less likely utilize the area once the scrubland is cleared but may frequent nearby golf courses and open areas within the project site such as the archaeological preserves and parks. Care will be taken during construction to avoid harming any endangered wildlife that may be present onsite. Because there are no distinguishing differences between the project site as a whole and the petition area in terms of vegetation or physical developments, the potential impacts for the petition area are expected to be similar to those described for the entire project site. Additional discussion is provided in Section 3.7.

Critical Habitat

There are two areas within the Village at Po'ipū project site designated as "critical habitats" by the United States Fish and Wildlife Service (USFWS) for the endangered Kaua'i Cave Wolf Spider and Kaua'i Cave Amphipod. However, at the time of their

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VILLAGE AT PO'IPŪ

designation, it was not known whether either species inhabited the sites. The critical habitats center around two lava tubes and were selected by the USFWS since these areas could potentially harbor one or both of the species. ~~the~~The conceptual master plan for the Village at Po'ipū protects these sites with a fifty-foot buffer within which no development will occur. These areas will be preserved as archaeological sites-preserves and will be planted with native plants to improve possible habitat conditions for the endangered Kaua'i Cave Wolf Spider and Amphipod should they exist on site. The entrances to the lava tubes will be secured with protective grating or fencing. Given the nature of the site and the possibility of finding additional lava tubes or cave systems, additional care will also be taken during construction or any site work throughout the project site and petition area. Best practices such as minimizing ground disturbance and grading during civil design and construction and recommending pier and post foundation systems to minimize the area of ground disturbance will be followed. Should lava tubes or cave systems be breached and either endangered species are found, work will stop immediately and the USFWS will be contacted to determine the appropriate mitigative measures to be taken. The Trust will comply with all USFWS requirements in order to mitigate the situation. Both critical habitat sites are within the SLUDBA petition area.

Archaeological Resources

~~Extensive a~~Archaeological inventory surveys covering the entire project site studies, as well as data recovery and preservation plans have been conducted-completed and approved by the State Historic Preservation Division (SHPD)for the entire property. In addition, data recovery and preservation plans have been completed for portions of the project including Phase One of the Village at Po'ipū.

All of the archaeological sites recommended for preservation by the State Historic Preservation Division (SHPD) as well as those recommended for possible preservation will be protected. Fifty-foot buffers ~~have been~~will be provided around each archaeological site and continuous archaeological preserves have been created around large complexes and where multiple sites are located close to one another. The entrances to the two lava tubes will be secured with protective grating or fencing. In total, the area set aside for archaeological sites and preserves for the Village at Po'ipū project encompasses over 23 acres. Roughly fourteen acres of the archaeological preserves are located within the SLUDBA petition area.

The vehicular and pedestrian circulation networks will be designed to provide both visual connections and direct access to the sites. In most cases, roadways will run adjacent to the preservation sites so that cultural practitioners, researchers and other interested persons may easily access the sites. Appropriate interpretive signage will be provided at the archaeological preserves. In addition, the signs will instruct visitors of the care and respect required to preserve the sites for future generations. Native plants will be planted at the archaeological sites. Furthermore, given the nature of the site and

**DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ**

the possibility of finding additional lava tubes or cave systems, the Knudsen Trust and its contractors will comply with all laws and rules regarding the preservation of archaeological and historic sites should any site, lava tubes or cave systems be found during archaeological data recovery, demolition and construction. sShould any lava tubes or cave systems, human remains, *iwi kupuna* or Native Hawaiian cultural or traditional deposits be found during ground disturbance or excavation, work will cease immediately where the cultural material is found and the site shall be protected from further damage. The archaeologist and/or contractor shall immediately contact SHPD, which will assess the significance of the find and determine the appropriate mitigation measures to be taken. The Trust will comply with all SHPD requirements in order to mitigate the situation. Alternate public access routes will be provided if safety-related restrictions are put in place during construction and the appropriate agencies will be contacted pursuant to applicable law. In preparation for permits that will be sought from the County in the future, the Trust is also working with the Kaua'i Historic Preservation Review Commission to see if they have any additional comments or concerns. They are currently having difficulty holding quorum so the Trust will continue to work with them as soon as they are able to reconvene.

Cultural Resources

Based on interviews with people knowledgeable with the Kōloa-Po'ipū area and the Village at Po'ipū site, the primary cultural concerns pertain to the protection and preservation of culturally and historically significant archaeological sites and the protection of natural resources. In the past, potentially significant sites have been damaged or destroyed by stone robbers and other activities. As discussed above, the Village at Po'ipū will improve stewardship of cultural resources through the establishment of over 23 acres of archaeological preserves, fourteen acres of which are located in the SLUDBA petition area. The All of the archaeological preserves will be accessible to the public and will allow continued access by cultural practitioners.

Traffic

The traffic impact analysis report (TIAR) conducted for this EIS project concludes that the Village at Po'ipū will have a minimal impact on local and regional traffic compared to other regional developments. It estimates that the Village at Po'ipū will generate approximately 242 trips during the morning traffic peak hour and 320 trips during the afternoon traffic peak hour. For the SLUDBA petition area, the 98 single family units would generate an estimated 52 vehicle trips during the morning peak hour and 69 during the afternoon peak hour. These numbers would double if all ADUs are constructed on the 98 petition area lots.

The TIAR reveals that even without the proposed Village at Po'ipū project, several roadway improvements will be needed to mitigate background traffic projected for the region due to several other projects being constructed in the area. These improvements include the Western Bypass Road as well as roundabouts or traffic signals at the

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

following intersections: Po'ipū Road/Ala Kinoiki Road, Ala Kinoiki Road/Weliweli Road, Po'ipū Road/Ho'owili Road and Po'ipū Road/Kiahuna Plantation Drive.

To mitigate traffic specifically generated by the Village at Po'ipū project and the petition area, no additional improvements would be needed if roundabouts are installed as recommended to mitigate background traffic growth. However, if traffic signals are installed instead of roundabouts, minor adjustments to lane configurations would be required to accommodate traffic generated by the project. There would be no change in recommendations for traffic impacts related specifically to the petition area.~~recommends improvements to two intersections within the vicinity of the project to facilitate satisfactory traffic flow in the area.~~

~~In addition~~The Village at Po'ipū project will provide roadway improvements such as a new mauka-makai roadway that would provide another evacuation route for the resort areas during an emergency. In addition, the Village at Po'ipū project would encourage the use of alternative modes of transportation within the region by providing a network of pedestrian/bicycle paths, including a shared bike and pedestrian path in Hapa Road. These pedestrian/bicycle paths, will weave throughout the project site, linking the different neighborhoods and archaeological preserves to one another as well as providing a major portion of a regional link between Kōloa Town and beaches and resorts of Po'ipū. This will encourage residents and visitors to walk or bike to various destinations around the area such as Po'ipū Beach, the Kiahuna Tennis and Swim Club, Po'ipū Spa and Fitness, the Po'ipū Shopping Village, and Kōloa Town as an alternative to driving. Additional regional circulation issues are being investigated by Charlier Associates, Inc. (Boulder, CO) for the Kōloa-Po'ipū region. The Trust is participating in this study and may provide additional improvements depending on the proposed recommendations resulting from the study and the County's response to those recommendations. The Kōloa-Po'ipū Area Circulation Plan is estimated to be completed in early 2007.

Population

At full occupancy, the Village at Po'ipū is expected to have between 1,037 and 1,573 persons with approximately half anticipated to be full-time residents. For the petition area, the 98 additional single-family lots are estimated to house approximately 343 people. If the additional dwelling units are built on each of the 98 lots, this number would double to 686. The additional units gained by the SLUDBA petition would house roughly a third of the proposed Village at Po'ipū community.

Housing

According to the Hallstrom market study, the Po'ipū-Kōloa housing market is currently in a moderately to strongly undersupplied condition. There is not enough housing to meet demand. Development in the area has been limited since the 1980s, with very low vacancy rates, high market interest, and rapidly appreciating prices over the last several

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

years. The total number of housing units in the Po'ipū-Koloa area is estimated to be approximately 1,400 units. Therefore, coupled with the projected population increase over the next 20 years, the actualization of a healthy and stable housing market in the Po'ipū-Koloa area will need 2,544 to 5,517 additional housing units by 2025 (Hallstrom Group 2005). The proposed Village at Po'ipū project will help satisfy this demand for housing by adding approximately 216 to 369 single family units² and 134 multi-family units to the Po'ipū-Kōloa housing stock.

The SLUDBA petition area alone represents approximately 98 single family lots. Should additional dwelling units be allowed and built on those lots, potentially 196 additional units could be provided within the petition area should the LUC amend the area to Urban.

Employment

The Village at Po'ipū will generate jobs during construction and after its completion. During the first ten years of build-out and operation, the base project (no ADUs)³ will generate 1,734 worker years of employment with an average annual job count of 174 additional jobs per year positions onsite, which can easily be absorbed by the currently available employment pool. Over the same ten-year period, approximately \$77.9 million in wages will be paid. After the first ten years, the ongoing management of the site will generate approximately 29 on-site and 12 indirect or off-site positions. For the petition area alone, it is estimated that the construction of the 98 single family units will generate 254 worker years and \$15.2 million in wages.

Economic Impacts

The economic impact analysis prepared by the Hallstrom Group estimates that the State of Hawai'i will receive nearly \$43.8 million in primary tax receipts during the first decade of development and operation, and a stabilized amount of \$4.8 million annually. The County of Kaua'i will receive \$10 million during the first ten years of the project, and \$1.3 million per year thereafter. In no year does the State or County suffer a revenue shortfall (costs exceeding receipts) relative to the project. Please note that these estimates were calculated for the base 350 units (216 single-family and 134 multiple family units) and do not include the potential ADUs since these are estimated to be built out over an extended period of time.

² If ADUs are no longer permitted on non-residentially zoned lots after 12/31/06, the estimated range of single family units would decrease to 216-264 units since ADUs would not be permitted in the Open Zoning District.

³ The Hallstrom Group prepared the Market Study, Economic Impact Analysis and Public Costs/Benefits Assessment to the base case project (216 single family and 134 multiple family units, total of 350 units). Their assumption is that the development of the ADUs would be spread out over time and left to the discretion of future homeowners and therefore the impacts difficult to predict at this time.

**DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ**

The economic impacts specific to the 98 additional single family units were extrapolated from the assumptions used in the Hallstrom report. Annual discretionary spending for the 98 units is estimated to be \$16.5 million per year. Estimated direct impact to the Kaua'i economy for the 98 units in the petition area during the three years of development is estimated to be \$104.7 million with a stabilized annual impact of \$18.0 million thereafter. As these dollars move through the island market, they will have a multiplier effect increasing the economic impact of the 98 units to \$209.4 million during the three years of development and stabilized \$36.0 million each year thereafter. Public cost/benefit analysis estimates that the 98 units in the petition area would generate a net benefit of \$78,457.82 for the County and \$182,453.46 for the State each year.

Public Services

The de facto population of the Village at Po'ipū is project to be 1,037 to 1,573. For the 98 single family units within the petition area, the projected population is estimated to be 343 with twice that number, 686, should additional dwelling units be built on each lot. Because approximately half of this population is expected to be part-time residents/visitors, pressure on government services and funds will be less than a community of full-time residents, as visitors typically do not rely on the full range of government services that full-time residents require. Property owners at the Village at Po'ipū, even those that are not full-time residents, will pay property taxes on a full-time basis, and excise taxes when they purchase goods and services on the island. Infrastructure requirements such as water, wastewater and drainage, are calculated based on the total number of units and therefore estimate the needs and impacts as though the community consisted entirely of full time residents and includes ADUs.

A public cost/benefit analysis has been prepared and is included in Appendix O. Based on the analysis, in no year-single year do aggregate public costs to the State or County exceed public income. In addition, County of Kaua'i and State of Hawai'i agencies providing public services have been contacted regarding the potential impact of the increase in population associated with the Village at Po'ipū. Their preliminary comments have been incorporated in this EIS and the Knudsen Trust will continue to work with the agencies to ensure implementation of proper mitigative measures required by the project during detailed design and construction of the project.

Water

Based on an average demand of 500 gallons per day (gpd) for single family units and 350 gpd for multifamily units, the full build-out of the project would generate an average demand of about 231,400 gallons per day. Of this total, 98,000 gpd is directly attributed to the 98 additional single family lots and its 98 additional dwelling units that would be allowed by the urbanization of the petition area. The County of Kaua'i Department of Water (DOW) will supply ~~potable~~ safe drinking water to home sites in the Village at Po'ipū. The Knudsen Trust is entering a cost-sharing agreement with the DOW for any new facilities that must be installed to supply the project and will pay

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

facilities reserve charges per the agreement. In addition, the Village at Po'ipū will install, own and maintain a separate irrigation system using non-potable drinking water for all landscaping within common areas and the larger single-family lots will be developed. The non-potable drinking water will be supplied by a private system, sourced from two on-site wells and Grove Farm's Waita Reservoir as needed and will help reduce the use of safe drinking water for irrigation for the project.

Wastewater

Based on a 250-gpd per multi-family unit generation rate and a 400-gpd per single-family generation rate, the proposed project would produce roughly 181,100 gpd at full build out. The 98 single family units in the petition area would generate 39,200 gpd of that total or 78,400 gpd if all 98 additional dwelling units are built. Wastewater generated by the Village at Po'ipū project will be collected and routed to the privately owned and operated Po'ipū Water Reclamation Facility (PWRF) for treatment. An upgrade and expansion of the wastewater plant was initiated in 2004. The first phase of improvements has been completed and included a new biological process, capable of treating up to 1,000,000 gallons per day of wastewater. With the completion of this phase, the Po'ipū Reclamation Facility has sufficient capacity to treat all the wastewater that will be generated by the Village at Po'ipū.

The second phase of improvements is estimated for completion at the end of 2005 has been completed and includes tertiary filtration and ultraviolet (UV) disinfection. When the second phase of improvements is completed, the treatment plant will now meet R-1 standards, which is the highest level of effluent quality regulated by the State of Hawai'i. It is expected that the effluent will be used by the neighboring Kiahuna Mauka Partners projects to irrigate the common areas of their development as well as the Kiahuna Golf Course. This will increase reuse of wastewater and reduce the amount of potable safe drinking water requirements used for irrigation in the region.

Drainage

Although the Village at Po'ipū will result in the construction of impermeable areas such as roads and homes that will increase the amount of runoff generated, the proposed improvements planned for the Village at Po'ipū drainage system will meet County requirements to maintain or reduce peak discharge rates at pre-development levels. The onsite detention basins are expected to actually reduce the peak discharge rate compared with existing levels. The plan also proposes using a combination of bioswales, vegetated drainage filtration and detention basins, as well as engineered networks of drain inlets, manholes, and drainage pipes. The incorporation of bioswales into the drainage process will help filter and slow runoff, improving the water quality of the runoff before it reaches the drainage systems and eventually the ocean. Because drainage is a cumulative impact that relates to the region as a whole, the impacts directly attributed to the petition area were not calculated by the engineers. However, based on the preliminary engineering report, drainage areas 3 and 4 comprise most of

**DRAFT-FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ**

the petition area and the peak discharge rate for those two drainage areas are expected to decrease after development compared with existing conditions. Furthermore, since the units planned within the petition area will have a lower density than those areas outside the petition area and County zoning for the Open District only allows ten percent lot coverage, the petition area lots must maintain permeable surfaces over 90 percent of the lot area which should help minimize any additional runoff generated in the petition area.

1.3.3 Relationship to Land Use Policies

State Land Use Law, Chapter 205, Hawaii Revised Statutes

Within the Village at Po'ipū project site, approximately ~~124.7~~127.490 acres are within the Agricultural District and approximately ~~78.380~~471 acres are within the Urban District. The proposed residential uses are permitted within the Urban District. A State Land Use District Boundary Amendment (SLUDBA) ~~will be required~~is being sought to reclassify the areas within the Agricultural District to Urban. ~~An additional~~The 2.709-acre portion of Hapa Road ~~is also that is~~ within the Agricultural District ~~and~~ will be included in the SLUDBA petition per the LUC request and with permission of the County of Kaua'i.

Hawaii Coastal Zone Management Program, Chapter 205A, Hawaii Revised Statutes

The Coastal Zone Management Area as defined in Chapter 205A, HRS, includes all the lands of the State. As such, the Village at Po'ipū is within the Coastal Zone Management Area. However, ~~it is~~the project site and petition area are not located along a shoreline and ~~is~~are outside of the Special Management Area (SMA). Conformance with the Coastal Zone Management Program is further discussed in Section 5.1.3 of this Draft EIS.

Hawaii State Plan, Chapter 226, Hawaii Revised Statutes

The Hawaii State Plan (Chapter 226, HRS) establishes a set of goals, objectives, and policies that serve as long-range guidelines for the growth and development of the State. As proposed, the Village at Po'ipū (including the petition area) is relevant to many of goals, objectives, and policies set forth by the Hawaii State Plan. The proposed project balances the provision of needed housing in South Kaua'i with the preservation of historic resources and implements environmentally-sensitive management of resources and wastes such as the use of ~~non-potable~~drinking water for irrigation and the biofiltration of runoff water. Conformance with specific elements of the Hawaii State Plan is discussed in detail in Section 5.1.4 of this Draft EIS.

State Functional Plans

The Hawaii State Plan directs State agencies to prepare functional plans for their respective program areas. There are 13 state functional plans that serve as the primary implementing vehicle for the goals, objective, and policies of the Hawaii State Plan. The

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

functional plans applicable to the Village at Po'ipū and petition area are discussed in Section 5.1.5 of this Draft EIS.

County of Kaua'i General Plan

The General Plan of the County of Kaua'i is a policy document that is intended to help guide development for the enhancement and improvement of life on Kaua'i. The document provides the County's vision for Kaua'i and establishes the strategies to help achieve that vision. The General Plan includes land use maps for planning districts on Kaua'i. The Kōloa-Po'ipū-Kalāheo Planning District Land Use Map designates the entire Village at Po'ipū site including the petition area as "Residential Community." The residential uses proposed in the Village at Po'ipū master plan are consistent with this designation.

County of Kaua'i Zoning

Similar to the State Land Use Districts, the Comprehensive Zoning Ordinance for the County of Kaua'i regulates the type and location of development permitted on the island. The existing Kaua'i County zoning for the Village at Po'ipū community includes a mix of Residential zoning R-4, R-6 and R-10 and the Open District. The SLUDBA petition area is zoned Open District. The proposed residential development ~~will~~ is expected conform to existing zoning.

1.3.4 Required Permits and Approvals

A preliminary list of permits and approvals required for the Village at Po'ipū project and SLUDBA petition area is presented in Table 1 below. Please note that Phases One and Two of the project which encompasses the makai area of the project site do not require State Land Use Boundary Amendment as it is currently classified as Urban District. Phase One is currently awaiting subdivision approval and Phase Two is currently under design. These phases are included in this EIS for Chapter 343, HRS compliance in order to describe potential cumulative impacts as they relate to the entire Village at Po'ipū project.

**DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ**

Table 1: List of Anticipated Permits and Approvals

PERMIT/APPROVAL	RESPONSIBLE AGENCY	STATUS
Chapter 343, HRS compliance	State Land Use Commission (LUC), Office of Environmental Quality Control	Submitted Proposed Final EIS to the LUC, 10/06; LUC Hearing tentatively scheduled 11/06.
State Land Use District Boundary Amendment	State Land Use Commission	Phases One and Two: completed 7/7/77 (Docket A76-418). Phase Three: Submitted Petition 7/8/05 (Docket A05-761); action pending.
National Pollutant Discharge Elimination System (NPDES)	State Department of Health	Phase One: Approved 4/8/05. Phase Two: estimated submittal by 10/07.
Archaeological Inventory Surveys	State Historic Preservation Division	All reports submitted and accepted as of 2/06.
Archaeological Data Recovery and Preservation Plan, Compliance with Chapter 6E, HRS	State Historic Preservation Division	Phase One: reports accepted by SHPD 9/91, 12/04, 1/05, 3/05. Phase Two: estimated submittal 10/07.
Grading/Building Permits	Kaua'i County Department of Public Works	Phase One: Estimated approval by 1/07.
Subdivision Approval	Kaua'i County Planning Department	Phase One: construction plans approved 4/06, final subdivision approval estimated by 1/07. Phase Two: estimated submittal 10/07.
Well Construction Permit/ Pump Installation Permit	DLNR Commission on Water Resource Management	Expected submittal by 12/06.

1.3.5 Alternatives to the Proposed Action

The alternatives that have been considered are:

- 1) No action;
- 2) Other uses of the property (including agriculture, park/open space, or other urban uses); and
- 3) Postponing action pending further study.

A full discussion of these alternatives is provided in Section 6.0.

**DRAFT-FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ**

1.3.6 Probable Adverse Environmental Effects That Cannot Be Avoided

Potential adverse environmental effects that cannot be avoided include the change in character and visual appearance of the site from scrub and rangeland to a residential community, impacts from increased traffic, solid waste generation and electrical power demand. Potential short-term impacts include impacts to air quality and noise levels during construction. These potential impacts are the same for the petition area since there is no significant difference between the existing condition of the petition area and the rest of the project area. These impacts are more fully discussed in Section 4.0 of this EIS.

1.3.7 Cumulative and Secondary Impacts

The cumulative and secondary impacts generated by the Village at Po'ipū are assessed based on the context and vision for the Kōloa-Po'ipū-Kalāheo area as provided by the Kaua'i General Plan. As part of the Residential Community designated in the General Plan, the Village at Po'ipū community including the petition area and in conjunction with neighboring developments anticipated for the area will increase much needed housing supply in South Kaua'i in order to support the expected increase in population and to keep growth focused in and around existing towns and communities. As described in the General Plan, area traffic will increase as will the demand for public infrastructure and services. These impacts are more fully discussed in Section 7.2 of this EIS.

1.3.8 Rationale for Proceeding with the Village at Po'ipū Notwithstanding Unavoidable Effects

In light of the above mentioned unavoidable effects, the creation of the Village at Po'ipū (including the petition area) should proceed because relatively minor negative impacts will be offset by substantial positive impacts, including: 1) the expansion and diversification of the Kōloa-Po'ipū area housing stock; 2) conformance with the County of Kaua'i General Plan; 3) creation of public amenities including parks, bike and pedestrian paths, and archaeological preserves; 4) clearing of invasive species and planting of native plants that may improve habitats of endangered species; and 5) the wages, taxes, and overall positive economic impacts of the Village at Po'ipū for the State and County.

1.3.9 Unresolved Issues

The Knudsen Trust is currently working with the County of Kaua'i Housing Agency to meet its remaining affordable housing requirements for the ~~Village at Po'ipū project~~SLUDBA petition area. See Section 2.6 for the full discussion. Please note that in satisfaction of the original 1977 State Land Use Boundary Amendment (Docket A76-

DRAFT-FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

418) which reclassified the lands on the *makai* portion of the project site of the railroad berm as well as lands to the west from the Agricultural District to the Urban District, a \$2,000,000 payment was made to the County of Kaua'i to fulfill its affordable housing obligation. This condition was confirmed as being satisfied by the LUC on October 16, 1995. Phase ~~1~~ One and ~~2~~ Two of the Village at Po'ipū project are located in this area *makai* of the railroad berm and therefore do not have any affordable housing requirements to fulfill.

Reconnaissance surveys of the USFWS Critical Habitats have not yet been completed to determine if the two endangered species, the Kaua'i cave wolf spider and amphipod, exist in the two critical habitat areas designated on the property and within the petition area since they are located in the last phase (Phase Three) of the project. Reconnaissance surveys of the two USFWS Critical Habitats will be completed prior to detailed design work for Phase Three to determine if the species inhabit the caves. As the last phase of development, construction is not expected to commence until at least 2010. In order to make the study timely, the Trust will investigate the sites prior to design work for Phase Three and will report its findings to the USFWS. If the species are found at that time, the Trust will work with the USFWS to develop an appropriate plan to protect the species. Regardless of whether the two endangered species inhabit the two critical habitat areas or not, the Trust intends to preserve the sites by including fifty-foot buffers around the two lava tubes within which no development will occur. These preserves will be landscaped with native plants which will help improve potential habitat conditions for the two species. In addition, the entrances to the two lava tubes will be secured with protective grating or fencing. Given the nature of the site and the possibility of finding additional lava tubes or cave systems, additional care will also be taken during construction or any site work throughout the project site and petition area. Best practices such as minimizing ground disturbance and grading during civil design and construction and recommending pier and post foundation systems to minimize the area of ground disturbance will be followed. Should lava tubes or cave systems be breached and either endangered species are found, work will stop immediately and the USFWS will be contacted to determine the appropriate mitigative measures to be taken. The Trust will comply with all USFWS requirements in order to mitigate the situation.

The Trust is also working with the Kaua'i Historic Preservation Review Commission (KHPRC) to review the proposed plans for the archaeological preserves and the list of sites to be preserved. Archaeological inventory surveys for the entire project site have been completed to date and approved by the State Historic Preservation Division. In addition, several data recovery reports and preservation plans have been completed and approved by SHPD. (See Section 4.1 and Appendices C-J.) However, the Trust is seeking input from the KHPRC to further refine the plans in preparation of future County approvals that may require KHPRC input. An overview of the project was presented to the KHPRC on September 7, 2006 and a site visit will be scheduled with the KHPRC in the future. The KHPRC is currently having difficulty holding quorum

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

due to several vacancies on the Commission so a schedule of these events is not known at this time. The Trust will continue to work with the KHPRC and follow their recommendations as appropriate.

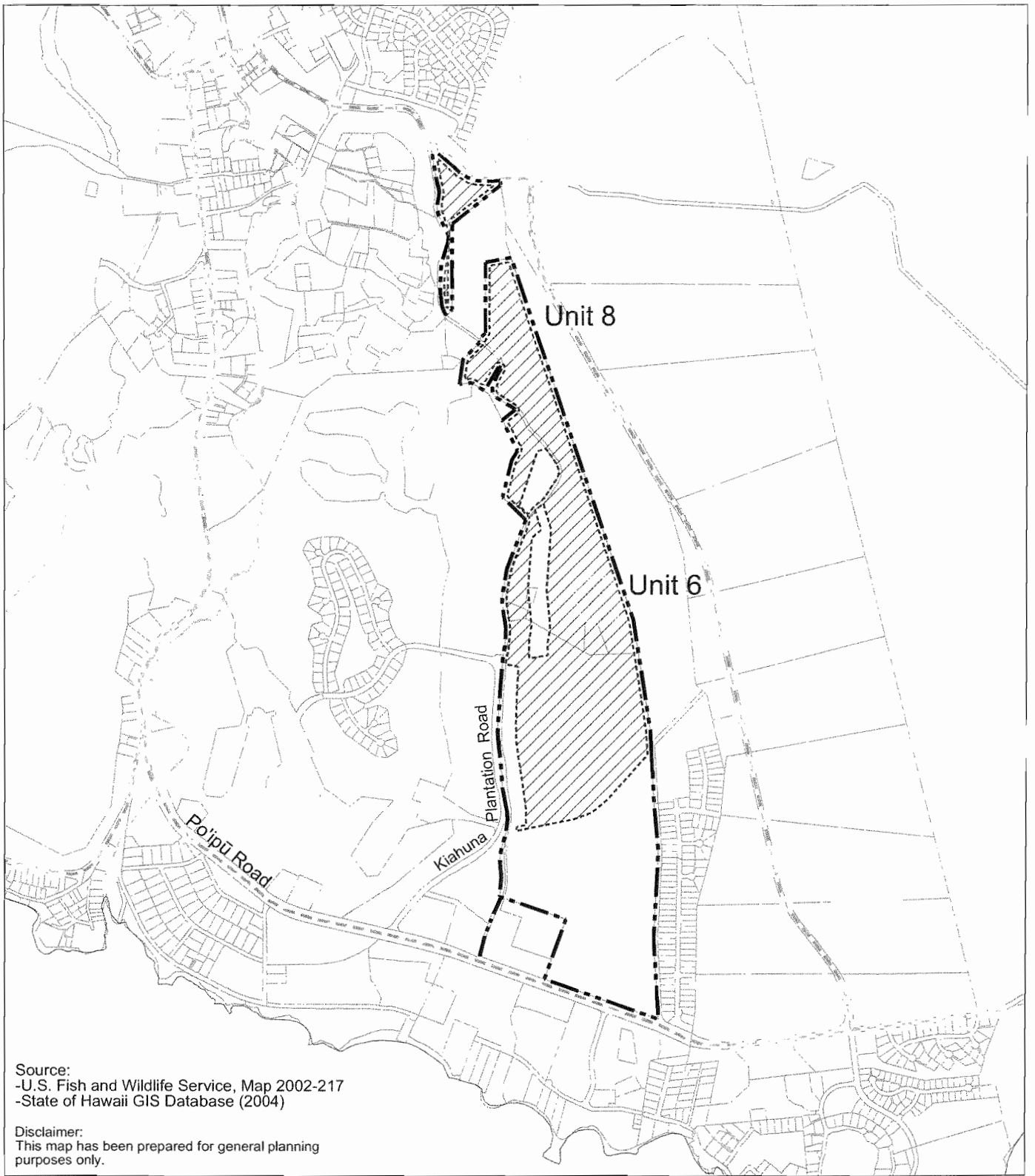
In addition, regional circulation issues are currently being investigated by Charlier Associates, Inc. (Boulder, CO) for the Kōloa-Po'ipū region. Information from the project's website states that: "The plan is intended to build upon the significant prior planning efforts of Kaua'i County, local landowners and developers, and other stakeholders who care about the unique identity and character of this special community. The plan will identify solutions and strategies to address traffic impacts from current conditions and new developments in the Kōloa-Po'ipū area. Using a collaborative process involving residents, developers, Kaua'i County staff and other stakeholders, the plan will develop a prioritized list of specific projects and strategies to respond to current and anticipated traffic congestion, safety issues, and other concerns. The plan's objective is to encourage a balanced transportation system that includes all major transportation modes: automobiles, public transportation, bicycling, and walking." The Trust is participating in this study and may provide additional improvements related to the Village at Po'ipū project depending on the proposed recommendations resulting from the study and the County's response to those recommendations. The Kōloa-Po'ipū Area Circulation Plan is estimated to be completed in early 2007.

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

report its findings to the USFWS. If the species are found at that time, the Trust will work with the USFWS to develop an appropriate plan to protect the species. The archaeological data recovery plan recommends securing the lava tube openings with protective grating or fencing which should also protect the two species should they be found in the lava tubes.

Although the critical habitat requirements are triggered only when federal funds or activities occur at the site, the conceptual master plan for the Village at Po'ipū includes a fifty-foot buffer around the lava tubes within which no development will occur. These areas will be preserved as archaeological sites and will be planted with native plants to improve possible habitat conditions for the endangered Kaua'i Cave Wolf Spider and Amphipod should they exist on site. As noted above, the entrance to the lava tubes will be secured with protective fencing or grating which should also help protect the arthropods should they exist in the lava tubes.

Given the nature of the site and the possibility of finding additional lava tubes or cave systems, additional care will also be taken during construction or any site work throughout the project site and petition area. Best practices such as minimizing ground disturbance and grading during civil design and construction and recommending pier and post foundation systems to minimize the area of ground disturbance will be followed. Should lava tubes or cave systems be breached and either endangered species are found, work will stop immediately and the USFWS will be contacted to determine the appropriate mitigative measures to be taken. The Trust will comply with all USFWS requirements in order to mitigate the situation.



LEGEND







-  USFWS Critical Habitat for Cave Wolf Spider and Cave Amphipods
-  Project Site Boundary
-  SLUDBA Petition Area
-  TMK Boundary
-  Major Streets
-  Streams

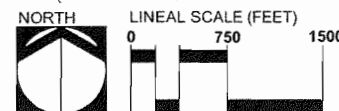
Figure 15
 U.S. Fish and Wildlife Service
 Critical Habitat Areas

Village at Po'ipū

Knudsen Trust South Kana'i

NORTH LINEAL SCALE (FEET)

0 750 1500



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~~DRAFT~~ FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

descriptions of all sites within proximity to Phase I—One construction activity and recommends how sites should be protected during the course of construction activities. See Appendix J for the complete plan.

Interim protection measures will include the following:

- **Demarcated Buffer Zones:** A buffer will be marked with an orange colored plastic barricade fence and appropriate signage during any construction in the immediate area of historic sites. The fencing and signage will remain in effect during all construction and landscaping activities in the vicinity. Avoidance instructions will be written into construction plans and specifications. No construction will take place within the buffer zone.
- **Written Notification and Invitation to Verification of Buffer Establishment:** The State Historic Preservation Division will be notified in writing once the interim buffer marker is erected and invited to verify the placement prior to any land alternation near the sites.
- **On-site Briefing of All Trades Working in the Vicinity:** All construction and landscaping crews working in the vicinity will have an on-site briefing informing them of the presence of the boundaries around the sites, asking for their avoidance of this area, and holding them accountable, for any breach of the maintenance of the integrity of the buffer zones.

4.1.4 Hapa Road

Although not included in any of the archaeological inventory studies prepared for the Village at Po'ipū, CSH provides a detailed description of the historic Hapa Road (site 992) and its rock walls in the Village at Po'ipū Phase I Interim Protection Plan (Appendix J). It describes the current condition of the road, portions of which have been paved into a modern road. The road itself is at least 100 years old and is believed to date back to the 1850s when the Catholic Church was built makai of Kōloa Town on the west side of the road. It probably predated this period as a mauka/makai trail. Because the rocky lands on either side of the road were used for cattle grazing, the walls were necessitated as pasture boundaries and to allow driving of cattle along the road during the early part of this century. The County of Kaua'i has mandated by ordinance and condition of zoning approvals that Hapa Road be improved into a pedestrian and bicycle path.

4.1.5 Summary of Potential Impacts and Mitigative Measures

All of the archaeological sites recommended for preservation to date as well as those recommended for possible preservation by SHPD have been protected in the conceptual master plan (see Figure 3). Fifty-foot buffers have been provided around each site and

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

continuous archaeological preserves have been created around large complexes and where multiple sites are located close to one another. The archaeological preserves will be landscaped with native plants and the entrances to the two lava tubes will be secured with protective grating or fencing. Within the Village at Po'ipū project site, over 23 acres have been set aside for archaeological sites and preserves. Within the petition area, roughly fourteen acres of archaeological preserves will be provided.

~~In addition,~~ A portion of Hapa Road will be improved as a pedestrian and bicycle path as mandated by the County of Kaua'i. The historic rock walls will be preserved in place where they are in good condition and restored where they have collapsed or have been damaged by stone robbing. The path is envisioned as part of an integrated pedestrian and bicycle network that will weave throughout the Village at Po'ipū project. The Knudsen Trust will work closely with SHPD and the County of Kaua'i on the design and development of Hapa Road.

CSH and representatives from the Knudsen Trust are working closely with the State Historic Preservation Division's (SHPD) Kaua'i representative, Nancy McMahon, on preservation and protection plans. Their work is ongoing as construction for Phase I One is expected to commence in 2006. As more data recovery and preservation plans studies are completed and approved for the project including the lower mauka area where a human tooth was found, similar steps will be taken to ensure all significant sites are protected as required by SHPD.

Given the nature of the site and the possibility of finding additional lava tubes or cave systems, ~~the~~ Knudsen Trust and its contractors will comply with all laws and rules regarding the preservation of archaeological and historic sites should any sites, lava tubes or cave systems be found during archaeological data recovery, demolition and construction. Should any lava tubes or cave systems, human remains, *iwi kupuna* or Native Hawaiian cultural or traditional deposits, be found during ground disturbance or excavation, work will cease immediately where the cultural material is found and the site shall be protected from further damage. The archaeologist and/or contractor shall immediately contact SHPD, which will assess the significance of the find and determine the appropriate mitigative measures to be taken. The Trust will comply with all SHPD requirements in order to mitigate the situation. ~~recommend appropriate mitigation measures, if necessary.~~ Alternate public access routes will be provided if safety-related restrictions are put in place during construction. As shown in the conceptual master plan for the Village at Po'ipū, the proposed vehicular and pedestrian circulation networks will be designed to provide both visual connections and direct access to the sites. In most cases, public roadways will run adjacent to the sites so that cultural practitioners, researchers and other interested persons may easily access the sites. However, low walls or other barriers should be erected around the archaeological preserves to discourage stone robbing. In addition, the entrances to the two lava tubes will be secured with protective grating or fencing to prevent unauthorized access to the

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

sites. Appropriate interpretive signage will be provided at the archaeological preserves. In addition, the signs will instruct visitors of the care and respect required to preserve the sites for future generations. Native plants will be used to landscape the sites. It is expected that the future Homeowners' Association (HOA) for the Village at Po'ipū will maintain the sites once the Knudsen Trust completes the initial improvements and transfers ownership to the HOA.

4.2 CULTURAL RESOURCES

Cultural Surveys Hawai'i (CSH) conducted a cultural impact assessment of the Village at Po'ipū site (including the petition area) to gather information about traditional cultural practices and pre-historic and historic cultural resources. Preparation of the assessment included archival and documentary research, review of existing archaeological information, and consultation with individuals with knowledge of the area, and the cultural resources, practices, and beliefs associated with the area. The cultural impact assessment is summarized below. Appendix K contains the full report.

Historical Cultural Context

Pre-Contact Kōloa. The Village at Po'ipū site is in the *ahupua'a* of Kōloa in the Kona District of Kaua'i Island. The project area is located at the eastern end of an expansive irrigation system that spread out across the *makai* plain of Kōloa Ahupua'a. Although few records exist that document traditional Hawaiian life in Kōloa Ahupua'a, the documentation of at least fourteen *heiau*, the presence of a *hōlua* course in the *mauka* reaches of the *ahupua'a*, and the myriad legends attached to Maulili Pool suggest a heightened cultural richness of the *ahupua'a*.

Archaeological investigations have revealed that the "lo'i lands of Kōloa" formed an extensive system -- the "Kōloa Field System" -- that extended from Lāwa'i to Weliweli. The Kōloa field system consisted of a series of parallel *'auwai* fed by Waikomo Stream. The system covered over 700 acres, making it one of the largest irrigated systems in the Hawaiian Islands.

Early Historic Period. Written accounts by visitors and settlers at Kōloa Ahupua'a primarily describe the westerners' own concerns. However, these accounts include occasional references to the Hawaiians of the *ahupua'a*.

The first western settlers arrived in Kōloa in December 1834, initiating a process of rapid change that would reshape the life of Kōloa in the nineteenth century. Commercial activities burgeoned in the 1830s. In 1835, Ladd and Company gained from the King and local chiefs the lease of about one thousand acres and began sugarcane cultivation. In response, Kōloa Town and the landing at the mouth of

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT VILLAGE AT PO'IPŪ

Waikomo Stream became major commercial centers. Chief exports included sweet potatoes, sugar, and molasses. Kōloa was also frequently used as a landing for whalers.

Toward the mid-nineteenth century, the Organic Acts of 1845 and 1846 initiated the process of the Mahele – the division of Hawaiian lands – which introduced private property ownership into Hawaiian society. The bulk of the Kōloa Ahupua'a (approximately 8,620 acres) was awarded to Moses Kekuaiwa, the son of Kekuanaoa and Kinua, and the brother of Alexander Liholiho (Kamehameha IV), Lot Kapuaiwa (Kamehameha V), and Victoria Kamāmalu. The next largest award went to the Protestant Mission and consisted of approximately 825 acres.

Eighty-eight other *kuleana* awards were given to individuals within Kōloa Ahupua'a. Three Land Commission Awards (LCAs) are located within the Village at Po'ipū project area. An additional five LCAs are located adjacent to the project area.

Documentation from the Mahele period provides the most information about traditional Hawaiian activities, practices and land use within the project area. Mahele documents indicate that within and around the Village at Po'ipū project area, land use and activity by the mid-nineteenth century included habitation and taro cultivation. This may reflect the continuation of traditional Hawaiian land use within the project area. Testimony from one awardee in the vicinity of the project site, R.A. Walsh of the Roman Catholic Mission, suggests that the portion of Kōloa including the project area comprises the eastern end of a *lo'i* (irrigated terrace) system of the *ahupua'a*.

Late 1800s to Present. It is likely that taro *lo'i* continued in existence in the 1880s and the population of Kōloa continued to be dispersed across the Kōloa plain. A hand-drawn map of Kōloa by Kōloa resident, Judge Henry Kawahinehelelani Blake depicts taro *lo'i* and houses in the central portion of the Village at Po'ipū project area through the late nineteenth century. These uses were likely a continuation of the fields and houses identified in the LCA records.

By the first decades of the twentieth century, cane fields spanned the landscape of Kōloa. However, sugar company field maps from the early 1900s indicate only small incursions of sugarcane within the present project area. By the mid-twentieth century, the project area was comprised of open pasture, with sugar cane extending into small portions. An aerial photograph taken on April 30, 2000 indicates that, at the end of the twentieth century, the project area continued to comprise open and brush-covered pastureland with now-discontinued sugar cane fields also present.

Interviews

As part of the cultural assessment, individuals were interviewed to obtain information concerning their knowledge of the Village at Po'ipū site or the vicinity. Summaries of

DRAFT-FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

these interviews follow below. Transcripts of the interviews are included in the cultural assessment report (Appendix K).

Chris Kauwe and **Billy Kaohelaui'i** were interviewed at Po'ipū Beach Park, which is just *makai* of the lands and cultural site that their group, Hui ~~Malama~~ Mālama Kāne I Olo Uma, is presently caring for. Mr. Kaohelaui'i recalled visiting the project area with his family during his childhood in Kōloa. He also recalled a trail lined with rocks that led past the church up to Kōloa Town. Mr. Kaohelaui'i believes cultural sites within the project area include *heiau*, house foundations, birth places, caves, and rock walls.⁷

Regarding current uses of the site, Mr. Kauwe identified several native herbs that he gathers from the project site for cultural practices. He also mentioned foot trails that lead into the project area from the Weliweli Tract subdivision. Both Mr. Kauwe and Mr. Kaohelaui'i believe that the archaeological sites in the project area were once continuous with the sites their group is caring for. Their concerns regarding the Village at Po'ipū project include watershed contamination, the loss of native plants, the loss of open space, and over-population and overcrowding. Mr. Kauwe also expressed concern that flooding could impact the lands *makai* of the site for which is group is currently caring.

Reginald Gage has been a Kaua'i resident since 1968 and serves on the Board of Directors of the Kaua'i Historical Society. Mr. Gage provided information about the origins of the name *Kōloa*, legends associated with Kōloa, and historic uses within the area. Regarding current cultural practices, Mr. Gage was not aware of any gathering of resources or cultural practices by Native Hawaiians or any other ethnic groups on the Village at Po'ipū site. Mr. Gage's greatest concern regarding the project site is the previous destruction or loss of archaeological sites. He noted that there could be unknown and undiscovered sites within the project area. He also suggested that although he does not know of any trails, it is likely that there were trails that have since been overgrown.

Kupuna Elizabeth Kalehuamakanoe Bukoski came to live in Kōloa in the 1930s. She now lives on Hapa Road immediately west of the proposed project area. During her interview, Mrs. Bukoski recalled sending her children into the project site to gather native plants for medicine, including *'uhaloa* and *pōpolo*. She also remembered many different native trees along Hapa Road, including *koa* and *kamani*. According to Mrs. Bukoski, Hapa Road was the first road in the area and that it was unpaved. She did not recall any other trails in the area. With regards to the proposed Village at Po'ipū project, Mrs. Bukoski expressed the belief that the project developer does not

⁷ Please note that no *heiau* were found onsite during the archaeological inventory surveys performed for the project site. Please refer to Section 4.1 and related appendices.

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

understand the area and its residents, and that it is unaware of potential historic sites. She is also concerned about the project's location across from her family's home.

David Chang is a local historian and long-time resident of Kōloa. In a phone interview with CSH, Mr. Chang expressed his concerns about the critical habitat of the Kaua'i Cave Wolf Spider and Amphipod.

Recommendations

To ensure the protection and preservation of all significant historic sites and any potential burial sites (if present), CSH recommends that preservation procedures formulated during archaeological investigations be implemented prior to and during future development. In the event that previously unrecorded, significant historic properties are encountered during the course of development activities, further preservation measures should be undertaken.

In order to mitigate the impact of future development on traditional gathering practices, native Hawaiian plants should be incorporated in the landscaping in and around archaeological preserve areas of the project. Access to these areas for gathering purposes should be coordinated with members of the local community.

CSH has determined that the Village at Po'ipū project (including the petition area) can have minimal impact upon native Hawaiian cultural resources, beliefs and practices, provided that the measures for the preservation of significant historic properties and burial treatment are implemented, and that there is proper treatment of any previously unrecorded, significant historic properties that may be encountered during development.

Potential Impacts and Mitigative Measures

Based on interviews held with people knowledgeable with the Kōloa-Po'ipū area and the Village at Po'ipū site, the primary cultural concerns pertain to the protection and preservation of culturally and historically significant archaeological sites. As discussed in Section 4.1, all of the archaeological sites recommended for preservation and possible preservation by SHPD within the project area and petition area will be preserved and are integrated into the design of the proposed Village at Po'ipū community (see Figure 3). Native plants, including those that are currently found onsite, will be planted within the archaeological preserves. Whenever possible, existing plants will be transplanted into these areas. The preserves will be accessible to the public and will allow continued access by cultural practitioners. During construction, the Office of Hawaiian Affairs recommends that access to the sites and for cultural gathering should continue as long as public safety can be ensured. Alternate public access routes will be provided if safety-related restrictions to access are put in place during construction.

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

the Village at Po'ipū will cause any significant detrimental impacts on air quality in the area.

Noise. In the short-term, construction of the Village at Po'ipū will generate noise that may impact nearby residences. The dominant noise sources during construction will be from equipment such as bulldozers, excavators, and diesel trucks. Increased noise due to construction will be short-term, limited to daytime hours, and must comply with the State Department of Health noise regulations.

In the long-term, traffic-related noise levels are expected to decrease and no vehicular-related noise impacts are anticipated due to the Village at Po'ipū. Regarding noise from post-construction operations, the design of the Village at Po'ipū will provide for the location and placement of stationary mechanical equipment (such as chillers, compressors, and air conditioning units) away from neighbors and residential units as much as is practical. Enclosed mechanical rooms may be required for some equipment.

7.5 RATIONALE FOR PROCEEDING WITH THE VILLAGE AT PO'IPŪ NOTWITHSTANDING UNAVOIDABLE EFFECTS

In light of the above mentioned unavoidable effects, the creation of the Village at Po'ipū (including the petition area) should proceed because relatively minor negative impacts will be offset by substantial positive impacts, including: 1) the increase in number and diversification of the Kōloa-Po'ipū area housing stock; 2) protection and documentation of significant archaeological sites and the creation of archaeological preserves including improvements for public access, clearing of invasive plant species and landscaping with native plants; 3) improved filtration and mitigation of surface water runoff from the existing site using bioswales, landscaping and native plants; 4) increased recreational facilities including parks, bicycle and pedestrian paths and the improvement of Hapa Road as a mauka-makai shared path; 5) conformance with the County of Kaua'i General Plan and its vision for accommodating growth in South Kaua'i; and 6) the wages, taxes, and overall positive economic impacts of the Village at Po'ipū. The proposed project provides a balanced solution for providing housing in an area close to existing urban areas and designated by the County General Plan for residential community while protecting significant archaeological resources, improving runoff water quality and replacing alien plant species with native plants.

7.6 UNRESOLVED ISSUES

The Knudsen Trust is currently working with the County of Kaua'i Housing Agency to fulfill any its affordable housing requirement for the Village at Po'ipū SLUDBA petition area. See Section 2.6 for the full discussion. Please note that in satisfaction of the original 1977 State Land Use Boundary Amendment (Docket A76-418) which

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

reclassified the lands *makai* of the railroad berm as well as lands to the west from the Agricultural District to the Urban District, a \$2,000,000 payment was made to the County of Kaua'i to fulfill its affordable housing obligation. This condition was confirmed as being satisfied by the LUC on October 16, 1995. Phases ~~1~~One and ~~2~~Two of the Village at Po'ipū project are located in this area *makai* of the railroad berm and therefore do not have any affordable housing requirements to fulfill.

Reconnaissance surveys of the USFWS Critical Habitats have not yet been completed to determine if the two endangered species, the Kaua'i cave wolf spider and amphipod, exist in the two critical habitat areas designated on the property and within the petition area since they are located in the last phase (Phase Three) of the project. Reconnaissance surveys of the two USFWS Critical Habitats will be completed prior to detailed design work for Phase Three to determine if the species inhabit the caves. As the last phase of development, construction is not expected to commence until at least 2010. In order to make the study timely, the Trust will investigate the sites prior to design work for Phase Three and will report its findings to the USFWS. If the species are found at that time, the Trust will work with the USFWS to develop an appropriate plan to protect the species. Regardless of whether the two endangered species inhabit the two critical habitat areas or not, the Trust intends to preserve the sites by including fifty-foot buffers around the two lava tubes within which no development will occur. These preserves will be landscaped with native plants which will help improve potential habitat conditions for the two species. In addition, the entrances to the two lava tubes will be secured with protective grating or fencing. Given the nature of the site and the possibility of finding additional lava tubes or cave systems, additional care will also be taken during construction or any site work throughout the project site and petition area. Best practices such as minimizing ground disturbance and grading during civil design and construction and recommending pier and post foundation systems to minimize the area of ground disturbance will be followed. Should lava tubes or cave systems be breached and either endangered species are found, work will stop immediately and the USFWS will be contacted to determine the appropriate mitigative measures to be taken. The Trust will comply with all USFWS requirements in order to mitigate the situation.

The Trust is also working with the Kaua'i Historic Preservation Review Commission (KHPRC) to review the proposed plans for the archaeological preserves and the list of sites to be preserved. Archaeological inventory surveys for the entire project site have been completed to date and approved by the State Historic Preservation Division. In addition, several data recovery reports and preservation plans have been completed and approved by SHPD. (See Section 4.1 and Appendices C-J.) However, the Trust is seeking input from the KHPRC to further refine the plans in preparation of future County approvals that may require KHPRC input. An overview of the project was presented to the KHPRC on September 7, 2006 and a site visit will be scheduled with the KHPRC in the future. The KHPRC is currently having difficulty holding quorum due to several vacancies on the Commission so a schedule of these events is not known

DRAFT FINAL ENVIRONMENTAL IMPACT STATEMENT
VILLAGE AT PO'IPŪ

at this time. The Trust will continue to work with the KHPRC and follow their recommendations as appropriate.

In addition, regional circulation issues are currently being investigated by Charlier Associates, Inc. (Boulder, CO) for the Kōloa-Po'ipū region. Information from the project's website states that: "The plan is intended to build upon the significant prior planning efforts of Kaua'i County, local landowners and developers, and other stakeholders who care about the unique identity and character of this special community. The plan will identify solutions and strategies to address traffic impacts from current conditions and new developments in the Kōloa-Po'ipū area. Using a collaborative process involving residents, developers, Kaua'i County staff and other stakeholders, the plan will develop a prioritized list of specific projects and strategies to respond to current and anticipated traffic congestion, safety issues, and other concerns. The plan's objective is to encourage a balanced transportation system that includes all major transportation modes: automobiles, public transportation, bicycling, and walking." The Trust is participating in this study and may provide additional improvements related to the Village at Po'ipū project depending on the proposed recommendations resulting from the study and the County's response to those recommendations. The Kōloa-Po'ipū Area Circulation Plan is estimated to be completed in early 2007.

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VILLAGE AT PO'IPŪ

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BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In The Matter Of The Petition Of)	DOCKET NO. A05-761
)	
ERIC A. KNUDSEN TRUST)	
)	CERTIFICATE OF SERVICE
To Amend The Agricultural Land Use District)	
Boundary Into The Urban Land Use District)	
For Approximately 127.490 Acres Of Land At)	
Po`ipū, District Of Koloa, Island And County)	
Of Kaua`i, State Of Hawai`i, Tax Map Keys:)	
2-8-13: Por. 1; 2-8-14: Por. 1, 2, 3, Por. 4, Por. 19)	
And Por. Lot 19-B (Hapa Road))	
_____)	

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Findings Of Fact, Conclusions Of Law, And Decision And Order Accepting A Final Environmental Impact Statement was served upon the following by either hand delivery or depositing the same in the U. S. Postal Service by regular or certified mail as noted:

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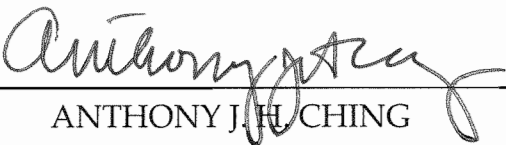
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ANTHONY J. HUCHING
Executive Officer