

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition)
of the)
)
HOUSING FINANCE AND DEVELOPMENT)
CORPORATION, STATE OF HAWAII)
)
To Amend the Conservation and)
Agricultural Land Use District)
Boundaries into the Urban Land)
Use District for Approximately)
727 acres at Kealakehe, North)
Kona, Island and County of)
Hawaii, State of Hawaii Tax Map)
Key No.7-4-8:17 (Portion))
)
)
_____)

DOCKET NO. A90-660

HOUSING FINANCE AND
DEVELOPMENT CORPORATION,
STATE OF HAWAII

This is to certify that this is a true and correct
copy of the Decision and Order on file in the office
of the State Land Use Commission, Honolulu Hawaii.

DEC 18 1990

Date

by

Rother
Executive Officer

FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND DECISION AND ORDER

LAND USE COMMISSION
STATE OF HAWAII
DEC 18 7 58 AM '90

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition)	DOCKET NO. A90-660
of the)	
)	
HOUSING FINANCE AND DEVELOPMENT)	HOUSING FINANCE AND
CORPORATION, STATE OF HAWAII)	DEVELOPMENT CORPORATION,
)	STATE OF HAWAII
To Amend the Conservation and)	
Agricultural Land Use District)	
Boundaries into the Urban Land)	
Use District for Approximately)	
727 acres at Kealakehe, North)	
Kona, Island and County of)	
Hawaii, State of Hawaii Tax Map)	
Key No.7-4-8:17 (Portion))	
)	
)	
)	

FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND DECISION AND ORDER

HOUSING FINANCE AND DEVELOPMENT CORPORATION
("Petitioner"), a public body and body corporate and politic of the State of Hawaii, filed a Petition on October 25, 1990, pursuant to Chapter 205, Hawaii Revised Statutes ("HRS"), Act 15, Session Laws of Hawaii 1988 ("Act 15"), Section 201E-210 HRS and Sections 15-15-46 and 15-15-97, Hawaii Land Use Commission Rules ("Commission Rules"), which Petition was amended on November 21, 1990, to amend the land use district boundary to reclassify approximately 727 acres of land from the Conservation and Agricultural Land Use District to the Urban District at Kealakehe, North Kona, Hawaii, Tax Map Key No.

7-4-8:17 (portion) 1/ (hereinafter "Property"), for a planned community primarily for affordable housing.

The Land Use Commission (hereinafter "Commission"), having heard and examined the testimony, evidence and arguments of counsel presented during the hearings, and the parties' proposed findings of fact, conclusions of law and order, hereby makes the following findings of fact and conclusions of law:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On August 24, 1990, Petitioner filed, served and caused to be published in the Honolulu Advertiser, the Honolulu Star-Bulletin, the West Hawaii Today, and the Hawaii Tribune Herald, a "Notice of Intent to File a Land Use District Boundary Amendment Petition" pursuant to Section 15-15-97 of the Commission Rules. On this same date, Petitioner also filed an affidavit of mailing, an affidavit of publication and a certificate of service pursuant to Section 15-15-97 of the Commission Rules.

1/ The "Notice of Intent to File a Land Use District Boundary Amendment Petition" filed herein on August 24, 1990 identified acreage of approximately 960 acres and included tax map key no. 7-4-08:12 (portion). The "Petition for Land Use District Boundary Amendment" filed herein on October 25, 1990 reduced the acreage to approximately 710 acres and deleted tax map key no. 7-4-08:12 (portion). By "Amendment to Petition for Land Use District Boundary Amendment Filed on October 25, 1990", filed on November 21, 1990, the acreage was increased to approximately 727 acres.

2. On October 11, 1990, Petitioner's "Motion to Accept Environmental Impact Statement" came before the Commission for action, which motion was granted by "Findings of Fact, Conclusions of Law, and Decision and Order Accepting An Environmental Impact Statement for A State Land Use District Boundary Amendment" filed on November 21, 1990.

3. On October 25, 1990, Petitioner filed its "Petition for Land Use District Boundary Amendment", affidavits of community meetings and certificate of service pursuant to Section 15-15-97 of the Commission Rules.

4. On October 25, 1990, the Commission caused a notice of hearing of the Petition to be published in the Honolulu Advertiser and the Hawaii Tribune Herald, newspapers of general circulation.

5. On November 14, 1990, a prehearing conference was conducted at the Commission's Office at which time the exhibit and witness lists were reviewed by all parties.

6. On November 21, 1990 Petitioner filed an "Amendment to Petition for Land Use District Boundary Amendment Filed on October 25, 1990" to increase the acreage of the petition area from approximately 710 acres to approximately 727 acres. Said Amendment designated approximately 335.508 acres of the petition area to be in the Agricultural Land Use District and approximately 391.541 acres in the Conservation Land Use District.

7. On November 26 and 27, 1990, the Commission held hearings on this Petition at the Royal Waikoloan Hotel, Ballroom. Waikoloa, Island and County of Hawaii, State of Hawaii.

8. On October 22, 1990, the Commission received a timely written request for intervention from Elizabeth Ann Stone and on November 23, 1990 the Commission received an untimely written statement from Ms. Stone. The request for intervention did not include the filing fee required under Section 15-15-52(g) of the Commission Rules. Ms. Stone did not appear at the hearing on the "Petition for Land Use District Boundary Amendment" and on November 26, 1990 the Commission voted to deny the request for intervention.

9. The Commission allowed the following persons to testify as public witnesses: James S. Greenwell, president of Lanihau Management Corporation and vice-president of Palani Ranch Company Inc.; Robert S. McClean, general partner of McClean Honokohau Properties; and Sandra Pechter Schutte, attorney for Isemoto Contracting, SJA Partnership and March Taylor.

10. The Commission received and allowed the letter from the following person to be admitted into evidence: Mike Luce, Immediate Past President, Big Island Business Council.

DESCRIPTION OF THE PROPERTY

11. The Property consists of approximately 727 acres of land in North Kona, Hawaii, approximately two miles north of

Kailua-Kona and five miles south of Keahole Airport.

Approximately 335.508 acres of land are in the Agricultural District and 391.541 acres of land are in the Conservation District. The Property lies immediately mauka of Queen Kaahumanu Highway and is roughly rectangular in configuration and lies in an east-west (mauka-makai) orientation.

Immediately to the east (mauka) of the Property is: the Kealakehe Urban District with its existing residential uses; the Kealakehe Elementary School; and the Kealakehe Intermediate School. Palani Road, a major county roadway also lies to the east (mauka).

To the south are Conservation and Agricultural District lands owned by the Liliuokalani Trust, including the 1,135-acre parcel which is the subject of LUC Docket No. A89-646/Liliuokalani Trust, and the existing Queen Liliuokalani Village, which contains single-family leasehold units. Also to the south is the property used for the County of Hawaii's (hereinafter "County") Kealakehe Landfill, County Police Department substation, a County solid waste transfer station, the West Hawaii Humane Society animal shelter, a privately operated terminal freight storage facility, and an electrical substation. Petitioner's Kealakehe Master Plan (Petitioner's Exhibit 2) indicates that 30 acres of this area is proposed as a Civic Center. The Civic Center site is neither included in the subject Petition nor discussed in Petitioner's Environmental Impact Statement (Petitioner's Exhibit 1A, 1B).

To the west (makai) of the Property is the State of Hawaii's (hereinafter "State") Honokohau Boat Harbor, and vacant, State-owned, Urban District lands. A municipal sewage treatment plant is planned for this location. The expansion of Honokohau Boat Harbor and other commercial uses are also being explored. The acreage north of the Property is in a multitude of uses. To the northwest of the Property is a 10-acre Urban District where industrial development is currently underway. This property was the subject of LUC Docket No. A87-618. Adjacent to the property are Conservation District and Agricultural District lands owned by Robert McClean, including the 90-acre property which is the subject of LUC Docket No. A89-643/Robert S. McClean, as Trustee of the Robert S. McClean Trust. Existing uses of the site include a rock quarry, a ready-mix concrete batch plant, and a boat storage shed and repair facilities. To the northeast of the Property are Conservation and Agricultural District lands belonging to Lanihau Partners L.P. and Palani Ranch. These lands are currently used for cattle grazing. Urban uses, including residential, business, commercial, and industrial uses are being considered for this site.

12. The topography of the Property is characterized by a continuous slope from an elevation of 50 feet above sea level at Queen Kaahumanu Highway to an elevation of 600 feet at the mauka boundary of the Property. The Property is relatively

flat from Queen Kaahumanu Highway to a point about 1,600 feet inland (mauka) with a slope of about three percent, then rising relatively consistently for the balance of the property with a slope of about twelve percent.

13. Average annual rainfall for the Property is estimated at 20 to 30 inches, depending upon elevation. The Property's leeward location and low-level elevation results in a relatively moderate temperature profile as compared with windward locations near sea-level. Temperatures for the Property are estimated to be 1 to 3 degrees cooler on average compared with average minimum and maximum daily temperatures recorded at the Old Kona Airport, located approximately two miles to the southwest, which are 67 degrees (F) minimum and 83 degrees (F) maximum.

14. The Property contains four soil types as classified by the U.S. Department of Agriculture Soil Conservation Service (December, 1973), which are described as follows:

A'a Lava Flows. (rLV) This lava has practically no soil covering and is bare of vegetation, except for mosses, lichens, ferns, and a few small ohia trees. It is at an elevation ranging from near sea level to 13,000 feet and receives from 10 to 250 inches of rainfall annually. It is associated with pahoehoe lava flows and many soils. This lava is rough and broken. It is a mass of clinkery, hard, glassy,

sharp pieces piled in tumbled heaps. In areas of high rainfall, it contributes substantially to the underground water supply and is used for watershed.

Pahoehoe Lava Flows. (rLW) This lava has a billowy, glassy surface that is relatively smooth. In some areas, however, the surface is rough and broken, and there are hummocks and pressure domes. Pahoehoe lava has no soil covering and is typically bare of vegetation except for mosses and lichens. In the areas of higher rainfall, however, scattered ohia trees, ohelo berry, and aalii have gained a foothold in cracks and crevices. This miscellaneous land type is at an elevation from sea level to 13,000 feet. The annual rainfall ranges from 10 inches to more than 140 inches. Some flat slabs of pahoehoe lava are used as facing on buildings and fireplaces. In areas of higher rainfall, this lava contributes to the groundwater supply.

Kaimu extremely stony peat, 6 to 20 percent slopes. (rKED) This soil is at low elevations on Mauna Loa. In a representative profile the surface layer is very dark brown extremely stony peat about 3 inches thick. It is underlain by fragmental A'a lava. This soil is neutral in reaction. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is not suitable for cultivation. Most of it is in native woodland. Small areas are used for pasture, macadamia nuts, papaya, and citrus fruits.

15. According to the Agricultural Lands of Importance to the State of Hawaii classification system (ALISH), approximately 18 acres of the Property are rated as "Other Important Agricultural Land", which is defined as land other than "Prime" or "Unique" Agricultural Land. The remainder of the Property is not classified under the ALISH classification system.

16. According to the classification system of the Land Study Bureau's Detailed Land Classification, overall agricultural productivity of the soils of the Property are rated "E" or very poorly suited for agricultural productivity.

17. The Property is owned in fee simple by the State of Hawaii, and is administered and managed by the Board of Land and Natural Resources.

18. Petitioner is negotiating to acquire the Property from the Board of Land and Natural Resources. The Board of Land and Natural Resources has authorized Petitioner to file the Petition.

19. The Property is currently vacant.

PROPOSAL FOR DEVELOPMENT

20. Petitioner proposes to develop a 960-acre mixed-use, master-planned community on the Property and adjacent lands, to be known as the "Villages of La'i'opua" (hereinafter "proposed project"). The proposed project is intended to carry out the State of Hawaii's overall goal of

increasing housing opportunities in North Kona for persons and families of all income levels. Petitioner proposes to develop the project under and in accordance with Chapter 201E, HRS and Act 15.

21. The proposed project is to consist of approximately 4,100 residential units, including single-family dwellings and multifamily dwellings, divided into 14 "villages". Approximately 2,684 residential units are proposed for the 727 acres which constitute the Property. In addition, land is to be set aside for an elementary school, a high school, parks, churches, day-care facilities and a golf course. A limited amount of land is to be set aside for retail/commercial uses as an integral part of the master-planned community. The proposed project is to also include two natural open-space preserves to protect two environmentally sensitive areas within the project, one for unique archaeological sites and the other for a cluster of uhi uhi trees, a federally designated endangered species.

22. The following land uses are proposed for the Property:

<u>Land Uses</u>	<u>Acres</u>	<u>Units</u>
Residential	372	2,684
Affordable rental housing	45	528
Affordable ownership housing	164	1,080
Market ownership housing	162	1,076
Non-Residential	321	
Community shopping center	22	
Neighborhood commercial	3	
Public golf course	195	
High school	45	
Elementary school	10	
Church/Day care center	6	
Neighborhood park	4	
Recreation center	3	
Archaeological preserve	7	
Uhiuhi plant preserve	5	
Roadways	21	
Total	<u>693</u>	

23. While the Property is comprised of 727 acres, the land uses for only 693 acres are shown designated in the Environmental Impact Statement (Petitioner's Exhibit 1A and 1B) and Master Plan (Petitioner's Exhibit 2). Undesignated acreage will probably be used for residential units.

24. Approximately 60 percent of the residential units in the proposed project will be developed to provide housing opportunities for persons and families whose income is 120 percent or less of the median income for the County of Hawaii. The remaining 40 percent of the residential units in the proposed project will be developed to provide housing opportunities for persons and families whose income is more

than 120 percent of the median income for the County of Hawaii. The median income for the County of Hawaii is established and published from time to time by the United States Department of Housing and Urban Development, and is adjusted for family size.

25. The proposed project is to be comprised of the following residential mix:

<u>Percentage (rounded)</u>	<u>Category</u>
Affordable:	
20%	Multifamily Rental (elderly, special needs): median income between 0 and 80%
5%	Multifamily Ownership: median income between 80% and 92%
9%	Single Family Ownership: median income between 92% and 100%
26%	Single Family Ownership: median income between 100% and 120%
Market:	
5%	Single Family Ownership: median income between 120% and 140%
30%	Single Family Ownership: median income more than 140%
5%	Multifamily Ownership: median income more than 120%

26. The proposed project is to be developed by "village" over a period of 10 to 20 years depending upon market demand. The area designated for the golf course is to be transferred by Executive Order to the County of Hawaii for development of a golf course.

PETITIONER'S FINANCIAL CAPABILITY TO UNDERTAKE PROPOSED PROJECT

27. Petitioner has characterized its role in the proposed project to be like that of a "master developer". In that role, Petitioner will obtain the necessary land use designation for the Property and cause the infrastructure (i.e. major roads and utility lines) to be in place up to the boundaries of the respective "villages" in the proposed project.

28. Estimated infrastructure costs for the proposed project will be as follows:

<u>Item</u>	<u>Cost (in millions of 1990 constant dollars)</u>
Land	\$ 15.1
Master Planning	.8
On-Site Development	81.9
Construction	345.1
Off-Site Development	65.3
Engineering	5.4
Roads	21.6
Sewer	9.1
Water	12.2
Park and School	1.7
Electrical	3.4
Landscaping	6.4
Contingency	8.2
4% GET exemption	<u>(2.7)</u>
TOTAL	\$508.2

29. Actual development of each "village" is to be performed by a private developer following guidelines established by Petitioner. Petitioner intends to provide and/or arrange for possible tax or other economic incentives.

30. As the housing finance and development agency for the State of Hawaii, Petitioner's activities are generally funded through general fund appropriations from the Hawaii

legislature, and other appropriations. Most of the development costs for the proposed project, which Petitioner will bear, will be financed through Petitioner's "Housing Revolving Fund" and the "Dwelling Unit Revolving Fund", which the Hawaii Legislature established and funds for such purpose. Petitioner is also considering funding development costs through capital improvement fund appropriations, bond financing and federal funding, if available.

31. Estimated costs for the proposed project in 1990 dollars, exceed the estimated income without revenue enhancements and/or subsidies, by \$68 million.

32. Petitioner will consider various measures to reduce the development costs or increase revenues for the proposed project, including but not limited to: Capital Improvement Project-funding for off-site infrastructure such as the mauka-makai road and the water system; reducing house sizes; building more multi-family and fewer single-family affordable units; changing the unit mix, target market and unit pricing; reducing the features and amenities; receiving proceeds from affordable units that are resold under the Shared Equity Program; leasing commercial areas in the project; partnership with private developers; and development of other lands.

STATE AND COUNTY PLANS AND PROGRAMS

33. The West Hawaii Regional Plan prepared by the Office of State Planning states, in part:

"In order to meet regional housing needs, the State and County should foster the development of support communities which would be strategically located near employment centers (resort destination nodes) and which would offer a range of market and subsidized housing units at a level that could capitalize on economies of scale.

"Support communities' refer to large, new residential communities that would house employees of the region and offer a range of support services, convenience stores, and other community facilities."

The proposed project is designated in the West Hawaii Regional Plan as a "support community".

34. The West Hawaii Regional Plan also designated two large areas in West Hawaii as "subregional planning area": the Keahole to Kailua-Kona area; and the Kawaihae to Waikoloa area. These planning areas are the most probable sites for future urban expansion and are vulnerable to competing, mixed land uses. The County of Hawaii Planning Department is the lead agency in undertaking subregional planning activities. The proposed project area is situated within the Keahole to Kailua-Kona subregional planning area.

35. The County of Hawaii Planning Department's subregional planning activities have resulted in a draft development plan which is recommended for approval by the County Planning Commission and is currently under consideration by the Council of the County of Hawaii. That plan, known as

the Keahole to Kailua Development Plan ("K to K Plan") addresses, among other things, the land uses between Keahole Airport and Kailua-Kona. The proposed project, a golf course, and other uses are reflected in the K to K plan.

36. The area of the proposed project is designated in the County of Hawaii's Land Use Pattern Allocation Guide Map as: alternate urban expansion; open; conservation; and industrial. Zoning for the property is Open, with a small portion zoned Agriculture, 1-acre lots (A-1a), along the mauka property boundary.

37. The Property does not fall within the Special Management Area delineated on the maps established pursuant to Section 205A-23, HRS and is, therefore, not subject to the Coastal Zone Management Act, Chapter 205A, HRS.

NEED FOR THE PROPOSED PROJECT

38. Petitioner is charged with the responsibility of providing housing opportunities throughout the State of Hawaii. The proposed project is intended to implement the Governor's Comprehensive State Housing Plan in West Hawaii by providing affordable housing units in this region.

39. Petitioner intends to develop a master-planned residential community which contains primarily detached single-family and multi-family residential units. While the total number of residential units to be developed is approximately 4,100 under the current master plan, flexibility

is necessary to adjust the ultimate number of residential units. Regardless of the number of residential units developed, 60% of such units are to be rented or priced to provide housing opportunities to persons and families earning 120% or less of the median family income for the County of Hawaii. Although the proposed project will include residential units for persons and families of very low income, a majority of the 60%-affordable residential units, will be made available to persons and families earning between 80% and 120% of median income for economic feasibility purposes, and to achieve a balanced community since the remaining 40% of the residential units are to be available to provide housing opportunities for persons and families earning more than 120% of the median income.

40. According to Petitioner's Market Assessment prepared by KPMG Peat Marwick in July 1990 for the proposed project, there is a need for additional housing units in West Hawaii for persons and families of all income levels, "West Hawaii" is defined as the areas of North Kona, South Kona, North Kohala and South Kohala. The very short supply of housing in West Hawaii has resulted in crowded living conditions and in high rents and sales prices. In the last decade, the West Hawaii resident population has increased substantially when compared with the increase in housing inventory.

41. The Market Assessment indicates a pent-up demand for approximately 2,300 units in West Hawaii, which is projected over the next 20 years to increase to 25,100 units. This projected demand is not likely to be met by all of the new units planned, both in the proposed as well as other projects in West Hawaii.

42. According to Petitioner's Market Assessment a total of 13,100 affordable housing units will be needed in the County of Hawaii by the year 2010 to enable the 60 percent home ownership goal to be attained. Of these units, approximately 7,860 will be needed in the Kealakehe market area, defined as North Kona, South Kona, North Kohala, South Kohala and Hamakua. Using similar analysis, the report indicates that 8,500 rental units will be needed in the County by 2010. Of these rental units, 5,100 will be needed in the Kealakehe area.

43. With respect to a golf course assessment, Petitioner's Market Assessment reports that demand for lower-priced daily fee play among island residents could increase strongly in the 1990 to 2010 period, providing market support for a municipal course. Projected play at the golf course on the proposed project is anticipated to reach similar levels to the comparable Hilo municipal course by 1995, and could reach sustainable capacity by 2000.

44. The Market Assessment did not address the commercial uses proposed in the proposed project.

IMPACT UPON RESOURCES OF THE AREA

Agricultural Resources

45. According to the Environmental Impact Statement prepared for the proposed project by Belt Collins & Associates ("EIS") [Petitioner's Exhibits 1A and 1B] the potential impacts to the soil and agricultural potential for the Property would be insignificant.

Water Resources

46. According to the EIS, the proposed project will require approximately 4.75 million gallons per day (mgd) of potable water to satisfy residential and non-residential demand. Based upon the EIS, Table 6-8, page VI-29, development of the Property will require approximately 1.5 mgd of potable water.

47. The proposed project and all others in the vicinity will draw water from the Keauhou aquifer system. The sustainable yield of this aquifer system has been estimated at 38 mgd. Existing uses utilize about 8 mgd; proposed developments would utilize an additional 23 mgd. As such, there is concern that, in the long term, should all proposed projects be developed, water needs will approach the sustainable yield for the aquifer.

48. While short-term water needs can be met with increased source development and distribution, long-term water needs will have to be addressed by and coordinated with developers in the region, and by County and State agencies.

49. Petitioner submitted the written testimony of the State of Hawaii, Department of Land and Natural Resources, Division of Water Resources Management ("DWR") as Petitioner's Exhibit 28, which was received in evidence. DWR is accelerating its exploratory well drilling program in the North Kona area to assist other State agencies meet their water needs for State-proposed projects. Currently, the Kalaoa Well is nearing completion and the Hualalai Well site has been selected for design. Bids for the latter well are to be received in mid-1991. Three new exploratory wells are planned as part of DWR's on-going program to increase water sources in the North Kona area. Subject to availability of funds, some of these wells could be completed as early as August 1993. DWR will be coordinating the location of these wells with the County of Hawaii, Department of Water Supply.

50. According to the EIS, it is unlikely that the proposed project lands are suitable for potable or non-potable water development due to the lands' relatively low elevation and the probability that the brackish water aquifer could extend under at least a portion of the property.

51. The EIS states that potential impacts to groundwater resources of the proposed project would be mitigated through the design and construction of a drainage infrastructure system that will be in full compliance with the standards of the Hawaii County Department of Public Works and the State Department of Health. In addition, potential adverse

impacts from pollutants would be mitigated through the use of slow time release or rapid uptake fertilizers, and U.S. Environmental Protection Agency and State Department of Health approved biocides that are applied by and under the direction of certified applicators.

52. The State of Hawaii, Department of Health seeks to have imposed upon the golf course lands, its "Eight (8) Conditions Applicable to This New Golf Course Development", April 1990, Version 3.

Water Quality

53. According to the EIS, the importation of topsoil for landscaping purposes could result in substantial increases in soil runoff before ground cover is firmly established. Long-term impacts could result from the introduction of pollutants associated with urbanization, most specifically the biocides and fertilizers associated with landscaping, and household and automotive-related chemical spills associated with the proposed residential and non-residential land uses.

54. In addition, the EIS states that runoff from roadways and parking lots could introduce petrochemicals associated with automobiles into the groundwater if allowed to percolate through underlying lava formations.

55. Petitioner proposes to mitigate potential adverse impacts to the groundwater resources and drainage characteristics of the project site through the design and construction of a drainage infrastructure system which is in

full compliance with County and State standards. Soil runoff during construction and pre-landscaping phases would be mitigated through careful design of residential areas, management controls established during construction, and a comprehensive landscaping program to be implemented with each phase of development.

56. OSP expressed concerns about protecting the quality of the groundwater and the nearshore waters. Petitioner offered in response to some of these concerns, the testimony of Kenneth Sakai of R.M. Towill Corporation, who is consultant to the County of Hawaii for its Kailua-Kona sewerage system. Mr. Sakai testified that earlier design for the system considered ocean outfall as a means of the effluent disposal, but recent concerns and more stringent regulation of ocean water quality and the development of the Hawaii Ocean Science and Technology Park near Keahole Airport among other concerns, resulted in the County's decision to dispose of the treated effluent by land reclamation, utilizing the golf course area on the Property. Potential for groundwater contamination is to be addressed by monitoring wells in the land reclamation site, by providing adequate soil and type of grass to establish a good root system for good water filtration, and proper selection of herbicides, pesticides and fertilizers to compensate for the nutrients already in the treated effluent and to provide for biodegradable products where available. Proper design and monitoring will minimize potential groundwater and nearshore

water contamination. Mr. Sakai also testified that the concern for groundwater and nearshore water contamination makes the creation of an artificial wetland area the most feasible means for treated effluent disposal when sewage production exceeds the disposal capacity of the proposed 195-acre golf course.

Flora

57. A botanical survey was conducted on the land of the proposed project in July 1989 by Petitioner's consultant, Char & Associates, to inventory the terrestrial flora, to describe the major vegetation types and to search for any endangered species. The survey disclosed an officially listed endangered species, the uhiuhi (Caesalpinia kawaiiensis, formerly known as Mezoneuron kawaiense), and a candidate endangered species, Bidens micrantha subspecies (ssp.) ctenophylla (no common name) on the Property. As an officially listed endangered species, the uhiuhi is protected by the Federal Endangered Species Act of 1973 and by the State's endangered species law, Chapter 195D, HRS. The Bidens micrantha ssp. ctenophylla is considered a Category 1 candidate endangered species by the U.S. Fish and Wildlife Service (1985), and as such should be regarded as a candidate for addition to the Endangered and Threatened Species List and consideration should be given it in environmental planning.

58. Nineteen uhiuhi plants were located on the Property in the botanical survey. According the State of

Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife, two additional uhiuhi plants were located and others, heretofore uncounted, may exist. Petitioner's consultant testified that the plants seed prolifically and with the elimination of cattle grazing on the Property, more uhiuhi seedlings are likely to exist.

59. The Biden micrantha ssp. ctenophylla was found scattered throughout the Property.

60. In order to mitigate the potential impact of the proposed project upon the habitat of the uhiuhi plant and upon the Biden micrantha ssp. ctenophylla, Petitioner's consultant proposed that a five-acre plant preserve be established around a cluster of eight uhiuhi plants, which would also help to preserve a number of other native plants in the area including the candidate Bidens micranth ssp. ctenophylla. In addition, the consultant recommended that a one-half acre preserve be established around each of the remaining uhiuhi plants. Petitioner has agreed to implement these recommendations.

61. Additional mitigation measures proposed in the EIS include: 1) the preparation of a mitigation plan for the uhiuhi plant in the project area, which will include a plan for the propagation of the uhiuhi plants and the Bidens micranth ssp. ctenophylla plants; 2) the initiation of State legislation to bring Hawaii law into conformance with Federal law regarding the relocation of endangered plant species; and

3) establishment of an escrow fund for the long-term preservation of endangered and candidate endangered species. These mitigation measures are to provide the means to cultivate seedlings and cuttings from the existing plants in a funded preserve to monitor the impacts of development upon the endangered and candidate endangered species, and ultimately to relocate the endangered plants to a more secure area.

62. The U. S. Department of Interior, Fish and Wildlife Service has rendered a favorable biological opinion based upon mitigation measures recommended in the EIS for the uhiuhi plant.

63. The EIS states that fountain grass, Pennisetum setaceum, is present in the project area, particularly in the northwestern portion of the Property. According to the State of Hawaii, Department of Agriculture, fountain grass is a noxious weed and care must be taken to control the spread of this groundcover. This is of particular concern because extensive grading and clearing is anticipated with site preparation. Control of fountain grass is a safety concern because during wildfires, this grass is highly flammable and extinguishing fires in fountain grasslands is difficult.

64. The State of Hawaii, Department of Agriculture will be designating ivy gourd (Coccinia grandis) as a noxious weed. Ivy gourd has been found within the Property and adjacent to the landfill. Similar care to contain the spread of ivy gourd must be taken like that for fountain grass.

Fauna

65. A survey of avifauna and feral mammals was conducted in August 1989 for the proposed project by Petitioner's consultant, Phillip L. Bruner. According to the survey report prepared by the consultant, no endangered or threatened species of birds or mammals were observed during the field survey, nor were any indigenous or endemic birds or mammals observed.

66. According to the State of Hawaii, Department of Agriculture, endangered waterbirds and other birds may be attracted to ponds in the proposed golf course area. Insect control activities at the ponds may have an adverse effect on these waterbirds if toxic chemical are used. The testimony of Kenneth Sakai of R. M. Towill Corporation, established that design features were available to discourage waterbirds from wading in the holding ponds and had been developed upon his consultation with the U. S. Department of the Interior, Fish and Wildlife Service.

Historical and Archaeological Resources

67. An archaeological inventory survey was conducted in September 1989 for the proposed project by Petitioner's consultant, Paul H. Rosendahl, Ph.D., Inc.

68. The survey identified a total of 106 historical sites on the proposed project. Four of the sites had been previously identified, two of which have been listed on the State Inventory of Historic Places (SIHP). According to the

EIS, these sites are the Mamalahoa Trail (SIHP site 00002) and the Kealakehe/Keahualu ahupua'a boundary wall (site 5011).

69. According to the Preliminary Title Report for Tax Map Key 7-4-8:17 by Title Guaranty of Hawaii, Petitioner's Exhibit 6, Schedule B, item 3, the Kings Highway trail, 15 feet wide, is shown on Tax Plan Map 7-4-008. Also identified in the Preliminary Title Report, Schedule B, item 2, is an Existing Roadway, 15 feet wide along Queen Kaahumanu Highway as shown on Tax Plan Map 7-4-008, which Petitioner's archaeological consultant identified as the Mamalahoa Trail.

70. According to the State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division (SHPD), all historic sites have likely been found by the inventory survey. The sites identified are typical of ahupua'a on arid leeward Kona slopes. These sites are primarily agricultural sites of the prehistoric field system of Kealakehe, with the interesting find of agricultural pits and mounds in large numbers at lower elevations. Some temporary habitation sites are scattered about, quite likely field shelters, as well as some small burial (or possible burial) sites and a few more permanent habitations at higher elevations. A few remnant portions of trails connecting these sites and the coast, and other areas are also present.

71. Of the 106 historic sites, seventy-nine (79) are still considered significant and are considered eligible for

inclusion on the Hawaii Register of Historic Places. Sixty of the 79 sites are to undergo archaeological data recovery; the other 19 sites are to be preserved, either as-is or with interpretation. Among the sites to be preserved are the Mamalahoa Trail ("a historic trail cutting across Kealakehe near Queen Kaahumanu Highway"), several smaller trails, the sites with burials or probable burials, and a preserve including three sites.

72. According to Petitioner's archaeological consultant, it is Petitioner's desire, as much as possible, to preserve burial sites in place unless other considerations raised with the Hawaii Island Burial Council would allow the disinterment and relocation as an acceptable alternative.

73. Petitioner is required to submit to SHPD a detailed historic preservation mitigation plan consisting of a preservation plan and an archaeological data recovery plan. The historic preservation mitigation plan must be approved by SHPD prior to any field work and prior to any construction in the vicinity of the historic sites. SHPD is also responsible for verifying successful execution of the mitigation plan prior to any construction in the vicinity of the sites. According to Petitioner's archaeological consultant, Petitioner will undertake such a plan if imposed as a condition of approval of the Petition.

74. According to SHPD, the proposed mid-elevation road crossing the project and continuing in a north-south

direction has yet to undergo archaeological survey outside the Property. Those other areas of the road will need to be surveyed and reviewed prior to construction outside the Property. Petitioner's archaeological consultant testified to having also performed an inventory survey in the adjacent Keahuolu lands owned by the Queen Liliuokalani Trust and finding historical sites there. Until the roadway alignment is established outside the Property boundaries, the extent of the sites affected is unknown.

75. The State Historic Preservation Division recommends the following condition be imposed to ensure that no adverse effect on historic sites will occur as a result of any boundary approval:

"The applicant shall preserve 19 historic sites and archaeologically data recover 60 historic sites, as agreed previously in writing with the State's Historic Preservation Division in compliance with Chapter 6E, HRS. The applicant shall submit a detailed historic preservation plan in two parts, a preservation plan portion and an archaeological data recovery plan portion. This mitigation plan must be approved by the State's Historic Preservation Division, prior to any field work and prior to any construction in the site vicinities. Also, the State's Historic Preservation Division must verify successful execution of the mitigation plan prior to any construction in the sites' vicinities."

Air Quality

76. An air quality impact analysis for the proposed project was conducted by Petitioner's consultant Barry D. Neal and Associates in July, 1990.

77. According to the study, present air quality in the project area is affected by air pollutants from natural, industrial, agricultural and/or vehicular sources. Natural sources include sea spray, aero-allergens from plants, wind-blown dust, and volcanic emissions. Major industrial sources of pollution are the Keahole Power Plant and the Kealakehe Landfill. The major source of vehicular pollution is the Queen Kaahumanu Highway.

78. Short-term impacts on air quality will likely occur from fugitive dust during the project construction phase and to a lesser extent, exhaust emissions from construction equipment and from workers' vehicles.

79. After construction, long-term impacts on air quality will occur primarily from emissions from vehicular traffic traveling to and from the development.

80. According to the study, projected worst-case carbon monoxide concentrations from vehicular traffic emissions in the vicinity of Palani Road and Queen Kaahumanu Highway in the year 2010, either with or without the proposed project, may exceed the State 1-hour standard. However, projected worst-case 1 hour carbon monoxide levels are within the national standard. In the worst-case 8-hour projection, the

State standard may be exceeded in the vicinity of Palani Road and Queen Kaahumanu Highway, and the national standard could also be exceeded on occasion. No mitigative measures for vehicle-generated air pollution were included in the study.

81. According to the EIS, major sources of industrial pollution include the Keahole Power Plant and the Kealakehe Landfill. Noxious fumes, smoke, and fugitive dusts are associated with the landfill. Emissions from the landfill tend to be carried over the project area by prevailing winds mostly during the daytime. Complaints from people residing and working near the landfill have been made. On occasion, the public schools in Kealakehe have been evacuated because of the smoke and fumes.

82. The impact of the Kealakehe Landfill on the proposed project can be lessened by preventing or quickly extinguishing fires as they occur. The County of Hawaii proposes closure of the landfill in 1992.

83. OSP recommends that increased use of the area for residences, commercial and industrial activities not occur until a solution is in place to address emissions from the landfill.

84. Volcanic emissions from Kilauea Volcano on the windward side of the Island produce a noticeable haze or "vog" over Kona. According to the State of Hawaii, Department of Health, volcanic emissions may cause both lung and eye irritations and may exacerbate existing chronic respiration

conditions, such as asthma and emphysema. Sulfur dioxide from the volcano also combines with the wastewater to produce acid rain.

85. According to Kenneth Sakai, retained by the County of Hawaii for the design of its Kailua-Kona sewerage system, odors from the sewage treatment plant located makai of Queen Kaahumanu Highway in the Kealakehe ahupua'a, even at its maximum capacity of 8 million gallons per day would not adversely affect the residential areas proposed for the Property.

Aural Quality

86. A noise impact study was conducted by Petitioner's consultant, Y. Ebisu and Associates in July 1990. According to the study, existing traffic noise levels in the project area are in the "significant exposure, normally unacceptable" category at 50-foot distances from the centerlines of Queen Kaahumanu Highway and Palani Road. As a result of the construction of the Kealakehe Parkway (the mauka-makai roadway), traffic noise levels are expected to increase at inland areas mauka of Queen Kaahumanu Highway. At full project build-out in the year 2010, noise attributable to both project and non-project traffic increase significantly. Setback distances along Queen Kaahumanu Highway will require 176 to 201 feet to reach normally acceptable levels. Along Palani Road, moderately large setback distances of 100 to 144 feet will be required to reach normally acceptable levels.

87. According to the noise study, traffic noise mitigation measures may be required along the planned residential areas fronting the Kealakehe Parkway although commercial and golf course uses are planned at this intersection with Queen Kaahumanu Highway.

88. Audible noise will be unavoidable during the entire project construction period. Petitioner will comply with all applicable noise regulations to minimize any adverse impacts.

Scenic and Visual Resources

89. The view of the proposed project from the existing Kealakehe residential community is limited to those areas abutting the existing community and is obscured to some degree by existing vegetation. The view of the proposed project is of areas of pahoehoe and a'a lava flow rubble with vegetation cover ranging from sparse grass to dense thickets of kiawe. The dominant view is of the coastline west of the property, Honokohau harbor, and the coastline extending north.

90. The view of the proposed project from the existing Queen Kaahumanu Highway is characterized by gently sloping land extending from the highway up to the existing community.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Transportation Services and Facilities

91. A traffic impact assessment report was prepared by Petitioner's consultant, Pacific Planning & Engineering,

Inc. dated July 1990. Forecasted future traffic conditions were based upon County of Hawaii projections for growth in population and employment, and future land use.

92. Major roadways in the vicinity of the Property are Queen Kaahumanu Highway, Palani Road and Mamalahoa Highway.

93. Existing street facilities include Kealakaa and Uluu'oa streets in the existing Kealakehe community which enter Palani Road at unsignaled T-intersections, and Kealakehe Parkway Road which provides access to Honokohau Harbor and enters Queen Kaahumanu Highway at an unsignalized T-intersection.

94. Based upon County of Hawaii projections, South Kohala and North Kona will experience dramatic increases in population and employment which will result in corresponding increases in traffic. Extensive roadway improvements will be necessary to accommodate the projected future traffic from other planned developments in the West Hawaii area, even without the proposed project.

95. A four-lane, mauka-makai roadway running between Queen Kaahumanu Highway and Mamalahoa Highway is proposed as a means of relieving projected traffic congestion along Palani Road. Petitioner will construct two-lanes of the roadway as part of the proposed project, for portions of the roadway within the project boundaries. Other mitigation measures which have been recommended to address increased traffic volume due in part to the proposed project are as follows:

1. A grade-separated interchange at the intersection of Queen Kaahumanu Highway and Kealakehe Parkway due to traffic demand and the requirement of the State Department of Transportation for non-interrupted flow along the highway.

2. A signalized intersection at Mamalahoa Highway and Kealakehe Parkway.

3. The Kealakehe Parkway extension between Queen Kaahumanu Highway and Mamalahoa Highway should be constructed as a four-lane roadway. Depending upon the number of intersections accessing the project, additional improvement such as the following may be necessary:

a. Signalize the intersections along Kealakehe Parkway when warranted; and

b. Provide auxiliary lanes (primarily left turn storage lanes) along Kealakehe Parkway and minor streets when warranted.

96. Petitioner also proposes to construct portions of a new 2-lane, mid-level road within the Property which will be parallel to Queen Kaahumanu Highway. Construction of the roadway beyond the Property and its connection with other major roadways will traverse property owned by other landowners and will require funding from other sources.

97. The County of Hawaii offered qualified support for the Petition. Among its concerns the County, through its Director of the Planning Department, Duane Kanuha, identified

the need for timing of the construction of the roadway systems in conjunction with the development of the project, to address adverse traffic impacts in the region.

98. The State of Hawaii, Department of Transportation ("DOT") provided written testimony which was received in evidence as Petitioner's Exhibit 27. DOT offered its cooperation to work with Petitioner to mitigate, as much as possible, the traffic impacts generated by the proposed development. DOT plans for roadway improvements in the area are as follows:

a. The traffic-carrying capacity of Queen Kaahumanu Highway is to be incrementally increased by conversion of the highway into a limited access freeway from Palani Road to Kawaihae, with access allowed only at interchanges. DOT will be constructing a new interchange at the intersection of Queen Kaahumanu Highway and the Kealakehe Parkway (mauka-makai roadway) to allow easier ingress to and egress from the Highway. To convert Queen Kaahumanu Highway into a limited access freeway, DOT will require and Petitioner acknowledges it will dedicate to DOT, the required right-of-way for the widening of the Highway within its project boundaries and construction of the interchange at Kealakehe Parkway.

b. DOT plans to extend the Kealakehe Parkway further mauka from Petitioner's project through private lands to Mamalahoa Highway. DOT has not determined the final alignment of the Parkway nor has it yet determined

intersections with cross streets in the mauka area. DOT will be requesting funds for planning and design for the Parkway from the next session of the State Legislature with a request for construction funds in the following biennium budget.

c. DOT also intends to begin studies of the extension of the Kealakehe Parkway makai of Queen Kaahumanu Highway, which when fully extended will provide an alternate traffic route into Kailua-Kona. This new roadway will relieve some of the existing congestion now occurring at the intersection of Palani Road and Queen Kaahumanu Highway.

d. Petitioner is to build the new two-lane Kealakehe Parkway from Queen Kaahumanu Highway through its proposed project. This roadway will collect traffic from the Petitioner's project and from other developments in the area and transfer the traffic onto Queen Kaahumanu Highway, the major highway serving the region. DOT will construct two additional lanes to Kealakehe Parkway within Petitioner's proposed project boundaries, when warranted. Mauka of Petitioner's project, the additional two lanes will be built by the private landowners when they develop their lands.

e. DOT will utilize existing funds to study other alternatives to help relieve the traffic congestion at the intersection of Queen Kaahumanu Highway and Palani Road.

99. Petitioner's traffic impact assessment report did not address roadway improvements required during interim years before full project build-out in 2010. Although Petitioner's

consultant relied upon County of Hawaii's projected land uses, no comparison was made between the projected uses and the uses described in the County's proposed Keahole to Kailua Development Plan.

100. Keahole Airport, owned and operated by the State of Hawaii, is located approximately 5 miles north of the proposed project and provides air transportation service for the entire western half of the Island of Hawaii. Proposed development in West Hawaii is projected to result in a significant increase in passenger and cargo operations at the Airport. The State of Hawaii is presently proposing expansion of the Airport to meet projected demand. While the proposed project, upon completion, is expected to result in greater demand for airport services, the planned expansion of the resort industry in West Hawaii is expected to have a more significant impact on air operations.

101. Two harbors service West Hawaii: Kawaihae Harbor and Honokohau Small Boat Harbor. Kawaihae Harbor is the only State of Hawaii commercial harbor in West Hawaii. Honokohau Small Boat Harbor is used primarily by private recreational boaters and charter boats. While no direct adverse impacts on harbor facilities are anticipated from the proposed project, DOT states that any plans to expand the proposed community makai of Queen Kaahumanu Highway will affect the Honokohau Boat Harbor.

Wastewater Treatment and Disposal

102. The average daily wastewater flow generated by the proposed project is projected to be 1.86 million gallons per day.

103. A new county sewage treatment plant is presently being constructed west (makai) of Queen Kaahumanu Highway on lands owned by the State of Hawaii in the Kealakehe ahupua'a and is projected for completion in February 1992. Its present design capacity is 2.89 million gallons per day.

104. The proposed project will utilize the new sewage treatment plant for wastewater disposal. Expansion of the plant's capacity to accommodate the proposed project was considered in planning the new facility.

105. Utilization of the new sewage treatment plant for disposal of wastewater of the proposed project is not anticipated to result in any significant adverse impacts. The testimony of Kenneth Sakai of R.M. Towill Corporation, established that proper design, operation and monitoring of the golf course area, which is to be used for the treated effluent disposal, will minimize potential contamination of the groundwater and nearshore waters. Approximately 1 million gallons per day of treated effluent can be disposed of by land reclamation of the golf course lands. Mr. Sakai testified that the remaining effluent generated from the current capacity of the sewage treatment plant could be disposed of by the creation of an artificial wetland area around the treatment plant if

there is no interest in utilizing the treated effluent for highway landscaping or other golf courses in the area. Approximately 40 acres of wetland area would be required to dispose of approximately 2 million gallons per day of effluent. If the sewage treatment plant is expanded to its full capacity of approximately 8 million gallons per day, an additional 160 acres would be required for an artificial wetland area if the entire balance of 7 million gallons per day were to be disposed of by this means. All of the wetland area need not be placed in one area. The present sewage treatment plant site is 56 acres, and is designed so that the odor source is at the center of the area. Mr. Sakai testified that with odor control facilities, malodorous impacts can be reduced to a radius of approximately 200 feet.

Surface Water and Drainage

106. The proposed project lands are covered by ancient a'a and pahoehoe lava flows. Due to the porous character of these flows and their rapid permeability, there are no defined drainage ways or perennial streams within the project area and consequently no floodways or floodzones have been identified or recorded.

107. Surface runoff and drainage will increase due to an increase in impermeable surfaces planned for the proposed project such as rooftops, roadways, parking lots, playground and sidewalks, and can be mitigated by design and construction

of a drainage infrastructure system in compliance with applicable County and State standards.

Power and Telephone

108. Electrical service for the proposed project will be provided by Hawaii Electric and Light Company. The demand estimated for the proposed project will require development of substation transformers and transmission lines.

109. Hawaiian Telephone Company will provide telephone service for the proposed project. Expansion of the existing telephone system will be required.

110. In an effort to minimize future demand for fossil-fuel based electrical power, design guidelines for the proposed project will encourage the implementation of energy conservation measures. Infrastructure allowing provision of natural gas to the project may be included.

Police and Fire Protection

111. The Kealakehe police substation is situated at the southwestern boundary of the Property. The Kailua-Kona fire station is located on Palani Road, near its intersection with Queen Kaahumanu Highway, approximately 2 miles from the proposed project.

Schools

112. The proposed project area is currently serviced by Konawaena Elementary, Intermediate and High Schools, and the Kealakehe Elementary and Intermediate Schools. In addition,

private school education is offered at Hawaii Preparatory Academy and Parker School in Waimea, about 45 miles north of the proposed project.

113. The proposed project includes sites for a new 45-acre high school and a new 10-acre elementary school. The proposed sites have received preliminary approval from the State of Hawaii, Department of Education.

Recreational Resources

114. Public recreational facilities presently serving the region include the Old Kona Airport State Park, Pahoehoe Beach Park, White Sands Beach Park, Kahaluu Beach Park, and the recreational facilities at Konawaena and Kealakehe Schools. In addition, construction of a new county gymnasium at the Old Kona Airport is scheduled to begin in mid-1990, along with expansion of the park's facilities to include tennis courts and swimming pool.

115. To augment the recreational needs for future residents, the proposed project includes three 4-acre neighborhood parks and over 30 acres of passive, open-space. The project design also includes a 195-acre public golf course to be developed by the County.

Healthcare Facilities

116. The Kailua-Kona region is served by Kona Hospital, a full-service health care facility operated by the State of Hawaii. Emergency ambulance service is located at the Kailua-Kona fire station.

117. The Kona Hospital is presently operating at capacity and development of the proposed project will significantly impact existing services.

118. Development of a new regional health facility is being considered and a hospital is proposed on adjacent Liliuokalani Trust lands.

Solid Waste Collection and Disposal

119. Based upon County of Hawaii generation rates, the proposed project is estimated to generate between 27 to 42 tons of refuse per day.

120. Solid waste disposal for West Hawaii is presently handled at the Kealakehe Landfill adjacent to the proposed project area. The Landfill is nearing capacity and is proposed for closure in 1992 according to the County of Hawaii and a new landfill site is under consideration.

121. The proposed project is not expected to create adverse impacts upon solid waste disposal conditions since initial occupancy of the homes in the proposed project is anticipated to coincide with the opening of a new landfill site.

CONFORMANCE WITH STATE LAND USE COMMISSION RULES

122. The Property is contiguous to and located immediately west (makai) of lands which are in the Urban District. Other Urban District lands are located to the west and northwest.

123. The Property is proximate to basic services as sewer, water, public highway, schools, parks, police and fire protection, power and other services.

124. While development of the Property will take place over a 10 to 20 year period, urbanization of the Property is necessary at this time because of the required infrastructure, layout of the roadway network, and need for affordable housing. A general time schedule for the development of the residential areas of the proposed project is as follows:

Village 1 and portion of mauka-makai roadway within project boundaries	Start 1990-91
Golf course lands conveyed to County of Hawaii for development	
Off-site infrastructure (roads, sewer lines, utility lines) for Villages 1, 2. Sewer connection county STP and Village 1	
Villages 1, 2, 3, 4	1990-1995
Off-site infrastructure for Villages 3, 4, 5	
Mid-level roadway within project boundaries	
Villages 4, 5, 6, 7	1996-2000
Off-site infrastructure for Villages 5, 6, 7, 8, 9, 10, 11	
Villages 7, 8, 9, 10	2001-2005
Off-site infrastructure for Villages 12, 13, 14	

CONFORMANCE WITH HAWAII STATE PLAN

125. The proposed project is consistent with the objectives, policies or priorities of the Hawaii State Plan, where the proposed project will:

a. Provide greater opportunities for persons and families of all income levels on a neighbor island to secure affordable, safe, sanitary livable housing in suitable environments that satisfactorily accommodate the needs and desires of such persons and families under a housing plan which will allocate 60% of the residential units for persons and families, including the elderly and special need groups, whose income is 120% or less of the median income for the County of Hawaii and 40% of the residential units for persons and families whose income is over 120% of the median income.

b. Encourage urban growth proximate to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures.

c. Seek participation from the private sector for developing the respective "villages", including the infrastructure and utilities therein; and

d. Promote, foster or advance social, economic, cultural and environmental interests or priorities within the setting of a master planned residential community which is

being developed to address the expressed need for affordable housing.

CONFORMANCE WITH COASTAL ZONE POLICIES AND OBJECTIVES

126. The proposed classification of the Property for the development of the project generally conforms with the policies and objectives for the Coastal Zone Management Program Chapter 205A, HRS, as amended.

RULING ON PROPOSED FINDINGS OF FACT

Any of the proposed findings of fact submitted by the Petitioner or the other parties not already ruled upon by the Commission by adoption herein, or rejected by clearly contrary findings of fact herein, are hereby denied and rejected.

Any conclusion of law improperly designated as a finding of fact shall be deemed and construed to be a conclusion of law. Any finding of fact improperly designated as a conclusion of law shall be deemed and construed to be a finding of fact.

CONCLUSIONS OF LAW

Pursuant to Chapter 205 of the Hawaii Revised Statutes, as amended, and the Hawaii Land Use Commission Rules, the Commission finds upon a preponderance of the evidence that the reclassification of all of the lands which are the subject of this Petition from the Agricultural and Conservation Land Use Districts into the Urban Land Use District, consisting of approximately 727 acres of land, situate at Kealakehe, North Kona, Island of Hawaii, State of Hawaii, subject to the

conditions stated in the Order, conforms to the standards for establishing the Urban Boundaries, is reasonable, nonviolative of Section 205-2, Hawaii Revised Statutes and is consistent with the Hawaii State Plan as set forth in Chapter 226, Hawaii Revised Statutes, as amended:

ORDER

IT IS HEREBY ORDERED that the Property, being the subject of this Docket No. A90-660 of Petitioner, Housing Finance and Development Corporation, State of Hawaii, consisting of approximately 727 acres situated at Kealakehe, North Kona, Island and County of Hawaii, State of Hawaii, and identified as Hawaii Tax Map Key: 7-4-8; portion of 17, and approximately identified in Exhibit "A" attached hereto and incorporated herein, for reclassification from the Agricultural District and Conservation District into the Urban District, shall be and is hereby approved, and the State Land Use District Boundaries be amended accordingly, subject to the following conditions:

1. Petitioner shall provide housing opportunities for low and moderate income Hawaii residents by offering for sale or rent on a preferential basis a number of residential units equal to sixty (60) percent of the residential units to be developed on the property to residents of the State of Hawaii with incomes up to 120 percent of the median family income for the County of Hawaii as determined by the U.S. Department of Housing and Urban Development, based on family

size, and a number of residential units equal to forty (40) percent of the residential units to be developed on the property to residents of the State of Hawaii with incomes greater than 120 percent of the median income for the County of Hawaii.

2. Petitioner shall design and construct all structures and buildings in compliance with County, State, and Federal codes and standards.

3. Petitioner shall submit to the County of Hawaii, Department of Public Works, all master plans for roadways, water, wastewater, drainage, and utilities for review prior to submittal of the individual construction plans for the various villages and non-residential uses.

4. Petitioner shall coordinate with the State of Hawaii, Department of Land and Natural Resources, the Department of Hawaiian Home Lands, and the Office of Hawaiian Affairs to address the issue of ceded lands.

5. There shall be no occupancy of any structures on the Property until a permanent solution to the smoke, fumes, and other health hazards associated with the Kealakehe Landfill is in place.

6. Petitioner shall disclose in its deeds to all initial purchasers of residential units on the Property the possible odor, air, noise, and dust pollution resulting from the Kealakehe Landfill, and from Queen Kaahumanu Highway,

Kealakehe Parkway, Palani Road, and any other roadways which are within or adjacent to the site.

7. In residential areas, Petitioner shall be responsible for implementing sound attenuation measures to reduce vehicular traffic noise levels in the petition area, including along Kealakehe Parkway, Palani Road, and other roadways, to levels acceptable to the State of Hawaii, Department of Health and the Department of Transportation.

8. Petitioner shall participate in an air quality monitoring program as specified by the State of Hawaii, Department of Health.

9. Petitioner shall implement effective soil erosion and dust control measures during all phases of the development.

10. Petitioner shall coordinate with the County of Hawaii, Department of Water Supply, the State of Hawaii, Department of Land and Natural Resources, other appropriate landowners, and/or other Federal, State, or County agencies regarding measures designed to obtain the required water for the project. Petitioner shall provide the necessary water source, storage, and transmission facilities to service the proposed project.

11. Petitioner shall connect the wastewater system for the proposed development on the Property to the Kealakehe Wastewater Treatment Plant. Construction of the structures within the Property shall not commence until Petitioner has

obtained assurances from the County of Hawaii that capacity at this plant and the effluent disposal system has been reserved for the Property; provided that, if the capacity at the Kealakehe Wastewater Treatment Plant and effluent disposal system is not sufficient for the proposed development on the Property, Petitioner may utilize other alternatives acceptable to the State Department of Health.

12. Petitioner shall participate in the funding and construction of transportation improvements at project access points as identified and deemed necessary by the State of Hawaii, Department of Transportation and in consultation with the County of Hawaii Department of Public Works. Petitioner shall set aside land for a park and ride facility, transit stop facility and other regional traffic improvements as proposed by applicable transportation agencies. Petitioner shall also participate on a fair share basis in the funding and construction of other on-site and off-site transportation improvements necessitated by the proposed development of the Property and in designs and schedules coordinated with and accepted by the State of Hawaii, Department of Transportation, and in consultation with the County of Hawaii Department of Public Works, provided that the extent of Petitioner's participation shall not exceed its fair share of the increased community impacts in the region, and provided further that in the event the County of Hawaii adopts an impact fee for transportation improvements, the foregoing funding requirement

may be modified or deleted to the extent that the cost of any specific traffic improvement is also included in the County of Hawaii's impact fee computation.

13. Petitioner shall undertake periodic monitoring of traffic conditions within and adjacent to the Property throughout the project's development period with the approval of the State of Hawaii, Department of Transportation and in consultation with the County of Hawaii Department of Public Works. Petitioner shall implement highway and other transportation improvements as required by the State of Hawaii, Department of Transportation and in consultation with the County of Hawaii Department of Public Works.

14. Petitioner shall appoint a transportation manager whose function is the formulation, use, and continuation of alternative transportation opportunities that would optimize the use of existing and proposed transportation systems. In the alternative, Petitioner may participate in a regional program for transportation management with other developers and/or landowners. This program shall address the formulation, use, and continuation of alternative transportation opportunities that would optimize the use of existing and proposed transportation systems.

15. Petitioner shall dedicate sufficient frontage to allow for a 300-foot right-of-way along Queen Kaahumanu Highway. Petitioner shall also dedicate sufficient frontage as determined by the State of Hawaii, Department of Transportation

to allow for a right-of-way at the Kealakehe Parkway interchange of Queen Kaahumanu Highway.

16. Petitioner shall ensure that a buffer area along the boundary of the Property be constructed to maintain the visual integrity from Queen Kaahumanu Highway. Petitioner shall further ensure that the proposed community shopping center or any other proposed use abutting Queen Kaahumanu Highway be screened from passing motorists and the Kaloko-Honokohau National Historic Park by landscaping improvements.

17. Petitioner shall preserve 19 historic sites and archaeologically data recover 60 historic sites, as agreed previously in writing with the Historic Preservation Division, State of Hawaii, Department of Land and Natural Resources in compliance with Chapter 6E, Hawaii Revised Statutes. The applicant shall submit to the State Historic Preservation Division a detailed historic preservation mitigation plan in two parts, a preservation plan portion and an archaeological data recovery plan portion. This mitigation plan must be approved by the State Historic Preservation Division, prior to any field work and prior to any construction in the vicinity of historic sites. Also, Petitioner must obtain verification by the State Historic Preservation Division that successful execution of the mitigation plan has been completed prior to any construction in the vicinity of historic sites.

18. Petitioner shall immediately stop work on the impacted area and contact the Historic Preservation Division, State Department of Land and Natural Resources, should any significant archaeological resources such as artifacts, shell, bones or charcoal deposits, human burial, or rock or coral alignments, paving or walls of historic or prehistoric significance be encountered during the development of the Property.

19. Petitioner shall establish plant preserves for the uhiuhi plant (Caesalpinia kavaiensis). There shall be one five-acre preserve and one-half acre preserve around each remaining uhiuhi plant. In addition, Petitioner shall formulate a fire contingency plan prior to construction in the project area. The fire contingency plan shall be approved by the State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife.

20. Petitioner shall coordinate with the County of Hawaii and the State of Hawaii, Department of Health to establish appropriate systems to contain spills and prevent materials such as petroleum products, chemicals, solvents or other pollutants from leaching into the storm drainage system and adversely affecting the groundwater and coastal waters.

21. Petitioner shall develop and maintain on-site facilities to ensure that the nearshore, offshore and deep ocean waters remain in pristine condition. Petitioner shall also participate in a water quality monitoring program with the

Natural Energy Laboratory of Hawaii and the Hawaii Ocean Science and Technology Park.

22. Petitioner shall prepare a drainage and erosion control plan and shall fund and construct the necessary drainage improvements and maintain ocean water quality to the satisfaction of the State of Hawaii, Department of Health. Petitioner shall, to the extent necessary as determined by the County of Hawaii, coordinate off-site improvements with adjoining landowners and developers, and/or other Federal, State, or City agencies.

23. Petitioner shall comply with "The Eight (8) Conditions Applicable to This Golf Course Development," prepared by the State Department of Health dated April, 1990 (Version 3), introduced as the Office of State Planning Exhibit No. 5.

24. Petitioner shall engage the services of a qualified golf course manager to oversee the irrigation of the golf course and application of fertilizers and pesticides to the golf course within the Property and who shall be qualified in the application of fertilizers and pesticides on those areas.

25. Petitioner shall make available adequate golf tee times at affordable rates for public play by residents of the State of Hawaii.

26. Petitioner shall fund and install, to the specifications and satisfaction of the State Office of Civil Defense, the necessary number of emergency siren units

(including infrastructure) within the project area and a siren paging encoder in the Kona Police Department substation.

27. Petitioner shall provide at no cost to the State of Hawaii, Department of Education the school sites, with infrastructure, and facilities as may be required by the Department of Education.

28. Petitioner shall work with the County of Hawaii to ensure that police, fire, park, and solid waste disposal facilities are in place.

29. Petitioner shall complete the development on the Property in substantial compliance with the representations made before the Land Use Commission. Failure to so develop may result in the reversion of the property to its former land use classifications or a change to a more appropriate classification.

30. Petitioner shall give notice to the Land Use Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interest in the Property.

31. Petitioner shall provide annual reports to the Land Use Commission, the Office of State Planning, and the County of Hawaii, Planning Department in connection with the status of the subject project and the Petitioner's progress in complying with the conditions imposed.

32. The Commission may fully or partially release these conditions as to all or any portion of the petition area

upon timely motion and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.

Adequate assurance of satisfaction may be evidenced by execution of a certificate of satisfaction in recordable form stating that such condition has been satisfied, in whole or in part. The Office of State Planning will certify for itself and all state departments and agencies, and the Planning Department will certify for itself and all County departments and agencies.

33. Conditions requiring County agency review, coordination or approval are subject to the powers of the Housing Finance and Development Corporation as expressed in Act 15, Session Laws of Hawaii, 1988.

Done at Honolulu, Hawaii, this 18th day of December 1990,
per motion on December 10, 1990.

LAND USE COMMISSION
STATE OF HAWAII

By ABSENT
RENTON L. K. NIP
Chairman and Commissioner

By *Allen K. Hoe*
ALLEN K. HOE
Vice Chairman and Commissioner

By *Allen Y. Kajioka*
ALLEN Y. KAJIOKA
Vice Chairman and Commissioner

By *Karen S. Ahn*
KAREN S. AHN
Commissioner

By *Eusebio Lapenia, Jr.*
EUSEBIO LAPENIA, JR.
Commissioner

By *Joann N. Mattson*
JOANN N. MATTSON
Commissioner

Filed and effective on
December 18, 1990

Certified by:

Esther Reed
Executive Officer

By ABSENT
JAMES M. SHINNO
Commissioner

By *Elton Wada*
ELTON WADA
Commissioner

By *Delmond J. H. Won*
DELMOND J. H. WON
Commissioner

L O C A T I O N M A P

DOCKET NO. A90-660/HOUSING FINANCE AND DEVELOPMENT CORPORATION, STATE OF HAWAII

T.M.K.: 7-4-08: por. 17

KEALAKEHE, NORTH KONA, HAWAII

SCALE: 1" = 2,000 ft. ±



APPROVED AREA

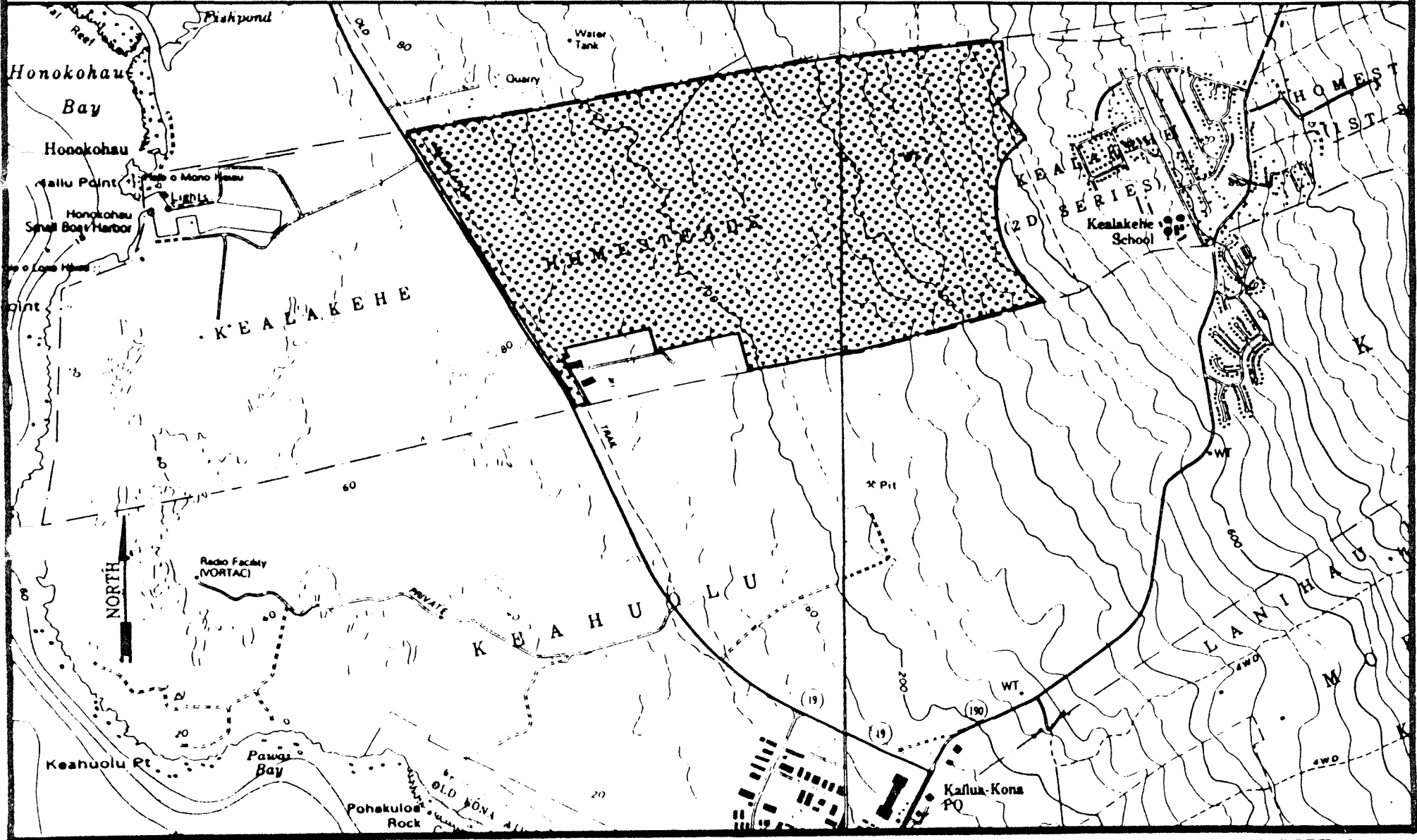


EXHIBIT A

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of the)	DOCKET NO. A90-660
)	
HOUSING FINANCE AND DEVELOPMENT CORPORATION, STATE OF HAWAII)	HOUSING FINANCE AND DEVELOPMENT CORPORATION, STATE OF HAWAII
)	
To Amend the Conservation and Agricultural Land Use District Boundaries into the Urban Land Use District for Approximately 727 acres at Kealakehe, North Kona, Island and County of Hawaii, State of Hawaii Tax Map Key No.7-4-8:17 (Portion))	
)	
)	

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Findings of Fact, Conclusions of Law, and Decision and Order was served upon the following by either hand delivery or depositing the same in the U. S. Postal Service by certified mail:

HAROLD S. MASUMOTO, Director
Office of State Planning
State Capitol, Room 410
Honolulu, Hawaii 96813

CERT. NORMAN HAYASHI, Planning Director
Planning Department, County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

CERT. DIANE T. KAWAUCHI, ESQ., Attorney for Petitioner
Deputy Attorney General
Kekuanao'a Building, Room 200
465 South King Street
Honolulu, Hawaii 96813

CERT. FRANCIS BLANCO, Project Coordinator
Housing Finance and Development Corporation
Seven Waterfront Plaza, Suite 300
500 Ala Moana Boulevard
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, this 18th day of December 1990.


ESTHER UEDA
Executive Officer