

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAI'I

In the Matter of the Petition of the)	DOCKET NO. A99-728
))
HOUSING AND COMMUNITY DEVELOPMENT)	FINDINGS OF FACT,
CORPORATION OF HAWAI'I, STATE OF)	CONCLUSIONS OF LAW, AND
HAWAI'I)	DECISION AND ORDER
))
To Amend the Agricultural Land Use))
District Boundary into the Urban))
Land Use District for Approximately))
1,300 Acres of Land at Honouliuli,))
'Ewa, O'ahu, Hawai'i, TMK Nos.))
9-1-16: 8, 108, 109; 9-1-17: 71, 86;))
and 9-1-18: 3, 5))
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STATE OF HAWAII
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FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND DECISION AND ORDER

The Housing and Community Development Corporation of Hawai'i, State of Hawai'i, formerly known as the Housing Finance and Development Corporation ("Petitioner"), a corporate body and body politic of the State of Hawai'i, filed a Petition for Land Use District Boundary Amendment on March 5, 1999; a First Amendment to Housing and Community Development Corporation of Hawai'i's Petition for District Boundary Amendment on March 19, 1999; and a Second Amendment to Housing and Community Development Corporation of Hawai'i's Petition for District Boundary Amendment on April 20, 1999, pursuant to chapter 205, Hawai'i Revised Statutes ("HRS"), and chapter 15-15, Hawai'i Administrative Rules ("HAR"), to amend the State land use district boundary to reclassify approximately 1,300 acres of land from the State Land Use Agricultural District to the State Land Use Urban District at Honouliuli, 'Ewa, O'ahu, Hawai'i, identified as Tax Map Key Nos.

9-1-16: 8, 108, 109; 9-1-17:71, 86; and 9-1-18:3, 5 ("Petition Area" or "Property") for a master-planned community referred to as the "East Kapolei Master Plan" ("Master Plan").

The Land Use Commission ("Commission"), having heard and examined the testimony, evidence, and arguments presented during the hearing; Petitioner's Proposed Findings of Fact, Conclusions of Law, and Decision and Order; Haseko (Ewa), Inc.'s ("Haseko"), Proposed Findings of Fact, Conclusions of Law, and Decision and Order; the response to Haseko's Proposed Findings of Fact, Conclusions of Law, and Decision and Order filed by Petitioner; and the responses to Petitioner's Proposed Findings of Fact, Conclusions of Law, and Decision and Order filed by Haseko, the Office of Planning ("OP"), and the City and County of Honolulu Department of Planning and Permitting ("DPP"), does hereby make the following findings of fact, conclusions of law, and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. Petitioner filed its Petition for Land Use District Boundary Amendment on March 5, 1999. A First Amendment to Housing and Community Development Corporation of Hawai'i's Petition for District Boundary Amendment was filed on March 19, 1999, and a Second Amendment to Housing and Community Development Corporation of Hawai'i's Petition for District Boundary Amendment on April 20, 1999 (collectively "Petition").

2. Petitioner is a public body and a body corporate and politic with perpetual existence placed within the Department

of Business, Economic Development, and Tourism of the State of Hawai'i, organized and existing under chapter 201G, HRS. Petitioner's principal place of business is located at 677 Queen Street, Suite 300, Honolulu, Hawai'i 96813.

3. Haseko filed a timely Application to Intervene ("Petition for Intervention") on April 8, 1999. The Commission granted Haseko's Petition for Intervention on April 22, 1999, and by Order Granting Petition for Intervention filed on May 11, 1999. Haseko's scope of intervention was limited to any effect the master-planned community on the Property may have upon drainage and the adequacy of drainage facilities as it pertains to Haseko's Ocean Pointe property and the water quality of the marina and coastal waters.

4. The DPP filed its Statement of Position in Support of Petition on April 5, 1999.

5. OP filed its Statement of Position in Support of the Petition on April 19, 1999.

6. A prehearing conference was conducted on May 4, 1999, in Conference Room 405, Leipopapa A Kamehameha Building, 235 South Beretania Street, Honolulu, Hawai'i, which was attended by all the parties.

7. On May 11, 1999, the Commission issued its Stipulated Prehearing Order.

8. A hearing on the Petition was held in Conference Room 405, Leipopapa A Kamehameha Building, 235 South Beretania Street, Honolulu, Hawai'i, on May 20, 1999, and May 21, 1999, pursuant to a public notice published in the HS&CPN on April 5,

1999. The Commission received no requests to appear as public witnesses.

DESCRIPTION OF THE PROPERTY

9. The Property is located approximately 22 miles west of the primary urban center of Honolulu near the center of the 'Ewa Plain. The Property is located to the north of the Naval Air Station Barbers Point ("NASBP"), south of the proposed University of Hawai'i-West O'ahu Campus ("UHWOC"), and directly east of the Villages of Kapolei. Further to the west lies the City of Kapolei, Campbell Industrial Park, the Deep Draft Harbor, the Ko 'Olina resort/residential community, and the existing community of Honokai Hale. Major roadways such as the H-1 Freeway and Farrington Highway provide high speed access to the Property. Proposed access to the Property includes the Kapolei Parkway, North-South Road, and the East-West Road.

10. At present, the Property is primarily vacant although approximately 200 acres are used for the production of diversified agriculture by farmers with short-term leases. The Property had been continuously under sugarcane cultivation for many years. With the closing of Oahu Sugar Co. ("OSCO") in the mid-1990s, the Property has been fallow for at least four years.

11. The 1,300-acre Property is owned by the State of Hawai'i Department of Land and Natural Resources ("DLNR"). Petitioner has been authorized by DLNR to process the necessary land use entitlements required to permit the development as envisioned in the Master Plan.

12. The average elevation at the lower boundary of the Property is 65 feet mean sea level ("MSL") and rises to about 200 feet MSL at the upper boundary. The Property is relatively flat with slopes varying between 0.7 and 2 percent. The slopes gradually increase to over 5 percent at the H-1 Freeway. Above the H-1 Freeway (beyond the Property boundary), slopes increase considerably in mountainous terrain reaching well over 20 percent in the upper watershed areas.

13. The climate of the Property is typical of the surrounding `Ewa area, which is predominantly warm and dry. Average temperatures in the area range between 65 and 84 degrees Fahrenheit. The average annual rainfall for the `Ewa Plain is about 20 inches, with most rainfall occurring during the winter months.

14. The Property contains four general soil types as classified by the Soil Conservation Service, now called the Natural Resource Conservation Service (NRCS). These include Honouliuli (HxA and HxB), Waialua (WkA), Waipahu (WzA and WzB), Mamala (McN), `Ewa (EwC, EaB), Kunia (KyA), Kawaihapai (KlaB and KlbC), Moloka`i (MuB and MuC), Mahana (McD2 and MBL), and Stony Steep Land (rSY), with Honouliuli being the predominant type. These are clay soils with moderately low permeability and high shrink-swell potential. As a whole, nearly the entire Property is suited for a variety of agricultural uses.

15. The Detailed Land Classification reports were developed to provide land inventory and productivity evaluation based on statewide standards of crop yields and levels of

management. The Land Study Bureau designates 97.3 percent of the Property as "A" or "B" rated lands, indicating that most of the Property has good to very good productivity potential for most agricultural activities, if irrigated.

16. The Agricultural Lands of Importance to the State of Hawai'i ("ALISH") system consists of mapped identification of three broad classifications of agricultural land, based in part on the Soil Conservation Service. Approximately 1,245 acres (95.4 percent) of the Property is rated "Prime" by the ALISH system. Lands giving the highest yields with the lowest amount of energy input or money with the least amount of damage to the environment are considered to be "Prime" agricultural lands.

17. Flood hazards are primarily identified by the Flood Insurance Rate Map ("FIRM") prepared by the Federal Emergency Management Agency ("FEMA"). According to the revised (1995) FIRM, a portion of the Property is subject to inundation by the 500-year flood generally in the area makai of the proposed Kapolei Parkway in an area classified as Flood Zone X. Consequently, that portion of the Property studied by FEMA indicates relatively little flooding hazard. There are no tsunami hazards or unstable soil conditions, or other adverse environmental effects that could impact the Property.

PROPOSAL FOR RECLASSIFICATION

18. Petitioner's overall project goals and objectives for the Property include the following: promote housing development for the people and State of Hawai'i; create more housing, recreational, and support facilities in the 'Ewa

Development Plan ("DP") area for the residents of Hawai'i; generate income from State-owned lands in support of the UHWOC which is planned mauka of the H-1 Freeway (on March 22, 1996, the University of Hawai'i Board of Regents formally designated a parcel mauka of the H-1 Freeway of approximately 991 acres as the new location for the permanent UHWOC); provide 200 acres to the Department of Hawaiian Home Lands ("DHHL"); set aside land for the sports complex which will provide economic benefits to the State and recreational activities for the residents in and around the Petition Area.

19. The concept for the Master Plan includes a master-planned community with a mix of single-family, multi-family, commercial, public facility, (i.e., school parcels), sports complex, parks, open space, and recreational land uses ("Project"). These land uses are all planned to be within walking distance of one another and from other adjoining vacant land areas which will likely be developed in the future.

20. As the master developer, Petitioner intends to sell large lot improved development parcels to individual developers for construction of the proposed land uses in accordance with the Master Plan, the City and County of Honolulu's 'Ewa DP, and applicable zoning classifications. Backbone infrastructure consisting of major roadways, a large sports complex with parking, implementation of a drainage master plan, water and wastewater system master plans, expansion of electrical and communication systems, and development of open space recreation areas will be provided by Petitioner or other

State agencies. Further, the Project will include seven neighborhood parks, three elementary school sites, one intermediate school site, four commercial areas, and extensive open space areas. All infrastructure improvements will be designed and sized to accommodate future regional land uses, including the new UHWOC, located mauka of the H-1 Freeway.

21. Petitioner is committed to putting in the required infrastructure for the Project and contribute to development of the UHWOC or such other University of Hawai'i expenditures as the Board of Regents shall determine once funding is available or as the Project is sold to individual developers.

22. Because Petitioner is not proposing the development of any new housing, future developers will be bound to the City and County of Honolulu's affordable housing requirements in effect at the time of construction. All other applicable site plans and development programs for the Property will be implemented by future developers.

23. The single-family residential component of the Project involves approximately 722 acres of the Property to be used for residential building sites. Current plans assume that the residential subdivision will be designed in accordance with applicable provisions of the City and County of Honolulu's R-5 Residential zoning district (minimum lot sizes of 5,000 square feet) at densities ranging from 6-8 units per acre (4,300 to 5,800 units). Architecture of individual units will be designed by developers and sold in fee as house and lot packages to homebuyers.

24. The multi-family units will be designed, built, and sold in the same manner as the single-family real estate product but consisting of approximately 211 acres of the Property. Presently, densities are estimated to average approximately 10-12 dwelling units per acre which could yield approximately 2,100 to 2,600 units. Preliminary zoning designations for the multi-family areas will be A-1 Apartment. Units will be designed by developers and sold in fee as condominiums.

25. The Project Master Plan envisions the establishment of a network of six neighborhood parks (each approximately 3-6 acres), a 15-acre district park, and an open space recreational/drainage corridor. The corridor will run roughly parallel to the proposed North-South Road which will be developed by the State Department of Transportation ("DOT"). The open space/drainage corridor element of the plan will function as:

- collector for surface runoff,
- retention/detention facility,
- open space recreational corridor,
- open space buffer adjacent to heavily traveled roadways and higher density land uses; and
- a passive open space recreational and aesthetic amenity eventually extending from the UHWOC to off-site open space corridors at NASBP.

26. Development of new parks will be provided in accordance with the requirements of the City and County of

Honolulu's Park Dedication Ordinance. Private parks will likely be developed in association with multi-family residential developments that will add to the recreational facilities available to Project residents.

27. The proposed sports complex is planned for a site located makai of Kapolei Parkway and mauka of the Property boundary with NASBP. It has been designated with a 4,000-seat stadium expandable to 8,000 seats. A grass berm seating area could also be used to accommodate an additional 2,000 seats. Also included are a multi-purpose building, six practice fields to permit use by two teams, batting cages, bleachers, pitcher mounds, maintenance sheds and storage, and miscellaneous accessory uses such as lighting, restrooms, and drinking fountains.

28. The sports complex would be owned and built with public funds and available for public use much like Aloha Stadium. Planned public uses include organized league play, tournaments, and collegiate level play.

29. When the sports complex is not being used as an economic enterprise, it could be used by community groups in an organized fashion, according to the contract that is entered into between the Stadium Authority and the private management company.

30. Presentations have been made to the community to describe the proposed sports complex by OP and Petitioner.

31. Act 328, SLH 1997, which was the budget bill, states that the sports complex shall be a private-public

partnership to be determined by the Department of Accounting and General Services.

32. The 1999 Legislature passed Senate Bill 646, Conference Draft 1, which would expand the Stadium Authority responsibilities to manage and operate the proposed sports complex.

33. The commercial parcels are located at the intersection of Farrington Highway and the proposed North-South Road, at the intersection of the Kapolei Parkway and the North-South Road, and two small commercial parcels at the intersection of the North-South Road and East-West Road. Neighborhood commercial parcels total approximately 18 acres within the Property.

34. A total of four school sites (three elementary and one intermediate school) are located throughout the Master Plan area. Acreage allotments for proposed school sites include three elementary school sites of 12 acres each and an intermediate school site of 20 acres. Each of the school sites will also contain extensive recreational facilities to be jointly used by the school and community.

35. The State of Hawai'i will incur major costs as developer of the Project. Development costs are estimated to be approximately \$95 million for infrastructure and \$27.5 million for the sports complex.

36. Upon completion of the major infrastructure, construction required for the proposed land uses, the development of residential units and commercial areas will likely respond to

market demand and logical extensions of required infrastructure. Some developers may choose to purchase the large lot parcels early in the development process and hold the property undeveloped until future market conditions improve. Consequently, it is difficult to determine the actual phasing of completion of the Project. Large lot and unit absorption is projected over a 20-year development period.

37. According to the City and County of Honolulu's 'Ewa DP, the Project is permitted to develop up to 4,000 housing units on 750 acres for the period between 1997 - 2005, and 3,700 units on 300 acres for the period between 2006 to 2015. Major projects are categorized by the time period or phase in which they can apply for a zoning change. The proposed phasing of the 'Ewa DP area is also graphically depicted on the 'Ewa DP Phasing Map.

38. Although preliminary market indicators project a final build out of approximately 20-25 years, the major infrastructure would likely be in place within the first 1 to 2-year period following approval of all applicable land use entitlements and permits. Funding alternatives for the required drainage improvements are presently being explored by various State agencies.

39. Development of major infrastructure such as drainage improvements and roadways can take place under the present agricultural zoning classification. However, the large lot parcels could not be developed as envisioned by the Master

Plan until the appropriate zoning is approved by the City Council.

PETITIONER'S FINANCIAL CAPABILITY TO UNDERTAKE THE PROPOSED DEVELOPMENT

40. Notwithstanding section 15-15-50(c)(8), HAR, which exempts a State or county department or agency from the requirement of submitting a statement of current financial condition, attached to the Petition as Exhibit 9 is a copy of Petitioner's 1998 Annual Report with a financial statement.

STATE AND COUNTY PLANS AND PROGRAMS

41. The Petition Area lies within the State Land Use Agricultural District as shown on the Commission's official map, O-6 ('Ewa).

42. The Petition Area is located within the 'Ewa secondary urban center as envisioned by the General Plan of the City and County of Honolulu.

43. The proposed reclassification of the Petition Area generally conforms to the objectives and policies of the General Plan of the City and County of Honolulu to encourage development within the secondary urban center at Kapolei and the 'Ewa urban fringe areas and to direct economic activity to the secondary urban center at Kapolei and to permit moderate growth of business centers in the 'Ewa urban fringe areas.

44. The 'Ewa DP of the City and County of Honolulu provides the structure for implementation of General Plan objectives for that area. The DP provides a conceptual framework for future growth and not detailed design guidelines.

45. The proposed reclassification of the Petition Area generally conforms to the policies of the 'Ewa DP to build communities which are integrated in the development of the entire 'Ewa region. The Petition Area is also included in the list of master-planned residential communities expected to be developed in implementing the DP and is in an area scheduled for urban development either during the 1997-2005 period or the 2006-2015 period as shown on the 'Ewa DP Phasing Map.

46. The entire Property is currently zoned as AG-1 "Restricted Agriculture." A future "Change of Zone" application will be submitted to the City and County of Honolulu to rezone the Property to R-5 "Residential," A-1 "Low Density Apartment," B-1 "Neighborhood Commercial," and P-2 "Preservation."

47. Public uses and structures are permitted uses under all of the City and County's zoning districts and based on the City and County's understanding of the proposed sports complex, rezoning of the sports complex site will not be required. Other permits such as height waivers, grading permits, and building permits are required.

48. Mass grading allowed under the current agricultural zoning has been completed to improve the drainage characteristics of the sports complex site.

49. The Property is not located within the City and County of Honolulu's Special Management Area.

NEED FOR THE PROPOSED DEVELOPMENT

50. The Prudential Locations prepared a market study for the Project, dated March 14, 1997.

51. Approximately 1,000 to 1,500 new single-family home sales occur each year on 'Oahu with a similar sales level for multi-family units. However, because Petitioner will only sell large-lot development parcels to private developers and not construct new housing, the market demand for residential and commercial property was only used by Petitioner as a basis for determining the demand and pricing of large-lot development parcels.

52. A bulk sales price of \$347,000/acre for improved property with all necessary land use entitlements in place is projected. This price would likely be discounted based on the size of the bulk sale. For example, the price/acre range for bulk sales is estimated as follows: 1-90 acres at \$347,000, 90 - 135 acres at \$340,000, and 135 - 180 acres at \$329,650.

53. Recognizing that real estate values have generally fallen in recent years, the values for the low range estimate were reduced in the socio-economic assessment from \$347,000 to \$300,000 per acre for residential land, and from \$1,300,000 to \$1,000,000 for commercial land. This reduction was utilized to ensure that the net revenue projections for Petitioner were based on more "conservative" assumptions. Pricing at these levels could accelerate sales of the large-lots.

54. According to a recent assessment of the market demand for new homes and commercial properties over the past few years, slower sales rates in the current market will result in a slower estimated absorption rate and decreasing sales prices will likely push back the absorption schedule for the Property (set in

1997) by a few years and result in a lower initial price per acre than previously estimated. However, the slowdown between 1997 and 2000 could be offset by a rebound between 2002 and 2004.

55. Although the current housing market is soft, a recovery over the planned 20-year buildout period could have periods of economic growth. In addition, only west and central 'Oahu have viable areas for a significant number of new housing units for the foreseeable future. Notwithstanding the "softness" of the current housing market, Petitioner is positioning the Project to be ready with improved development lots when the market improves.

56. The pricing of the proposed units would likely be affordable and absorbed similar to the early and mid 1990s once the economic environment improves. Prices for single-family units are projected to start at \$250,000 and multi-family units at \$125,000, with an appreciation rate of 2 percent a year.

57. Approximately one acre of commercial land is required for every 230 residential dwelling units. Assuming the development of 375 residential units per year, estimates of approximately 1.6 acres of commercial development will be required each year during the buildout period until the planned 18 acres of commercial area are developed.

58. The economic success of the sports complex will depend on the effective recruitment of several eastbound, westbound, and Hawai'i-based market segments, including professional teams, adult amateurs, youth groups, and corporate interests.

SOCIO-ECONOMIC IMPACTS

59. SMS, Inc., prepared a socio-economic assessment of the Project, dated March 1998.

60. Direct construction employment as a result of the Project is estimated to be 7,350 to 8,050 person-years of work over 25 years time, for an average annual employment of about 290 to 320 construction workers over that time. Total direct, indirect, and induced employment is projected to be 18,700 to 20,600 person-years of employment over the entire period.

61. Construction-related income from direct, indirect, and induced jobs is projected to range (in 1997 millions of dollars) between \$634.1 million to \$798.7 million over the buildout period. Total direct, indirect, and induced jobs associated with the Project's operations would be in the range of 2,350 to 2,625 jobs after buildout. Operational incomes are projected to amount to some \$55.3 million to \$62.8 million annually at buildout.

62. Revenues projected from the Project include receipts from land sales, taxes on construction-related cash flows, operating revenues for the sports complex, and new income associated with visitor spending due to the sports complex.

63. The proposed sports complex is estimated to generate approximately 21,000 annual visitors and about \$500,000 in taxes and fees associated with spending by those visitors if the facility is marketed actively. Operating revenues plus taxes and fees to the State come out roughly equivalent to or slightly more than operating costs. A more in-depth market study and

business plan will start shortly to determine more specifics regarding sponsorships, licensing, and team interest in using the facility.

64. Development of the Project will also provide the City and County of Honolulu with significant new tax revenues. If real property tax rates remain at current levels, additional taxes will grow to about \$6.3 million to \$7.5 million (1997 dollars) annually at buildout. Costs to the City and County will be very small in relation to this income. Presently, no significant revenues to the City and County or the State are generated from the Property due to its undeveloped nature.

65. By 2022, the net balance of revenues over costs of the Project is estimated to be \$193 million to \$245 million (1997 dollars). The net present value of Petitioner's cash flows is estimated well over \$60 million (with a discount rate of 8 percent). The net present value of Petitioner and State general fund spending and income associated with the Project (not including DHHL investment) is estimated to be \$90 million to \$120 million through 2022. Eventually, after all residential and commercial land sales are complete and funds are transferred to the UHWOC, Petitioner is expected to net some \$34 million to \$54 million (constant 1997 dollars).

66. The 1990 population of the 'Ewa DP area is projected to increase 65.6 percent (81,844 persons) from a population of 42,931 in 1990 to 124,775 residents in 2020. In the 20-year period from 1990 to 2010, 'Ewa's housing stock is

expected to increase by nearly 24,136 units, almost triple the 1990 stock.

67. The General Plan population distribution policy for `Ewa is 119,000 - 132,900 in 2010 while the forecasted population for `Ewa in 2010 is only 93,112. Therefore, complementary policies to reclassify agricultural land for urban purposes is necessary if the population distribution policy for future new growth in `Ewa is to be realized.

68. Approximately 200 acres of the 1,300 total will be used for native Hawaiian homes, responding to strong demand from a group that has a high incidence of over-crowding and other housing problems.

69. The major social impacts associated with the Project are summarized as follows:

- Provision of needed housing for O`ahu;
- Enhancement of Kapolei's customer base;
- Development of a new community focus at the sports complex;
- Increase in traffic and congestion;
- Possible impacts on social life due to construction noise or dust;
- Competition for community resources and facilities, namely parks and schools;
- Continued transformation of `Ewa into a bedroom community; and
- Financing for development of University of Hawai'i facilities.

70. Regional facilities such as transportation improvements, schools, and recreational facilities and their development must also be coordinated as the regional population increases in the future. Interviews of members of the 'Ewa community revealed concerns regarding adequacy of infrastructure and public services. Citizens also stressed the importance of building public infrastructure and facilities in a timely manner.

IMPACTS UPON RESOURCES OF THE AREA

Agricultural Resources

71. Decision Analysts Hawaii, Inc., prepared an assessment of the impact of the Project on agriculture, dated December 1996.

72. The urbanization of the Property would cause the loss of "A" and "B"-rated lands, as well as "Prime" and "Other Important" agricultural lands.

73. Currently, about 1,100 acres of the Petition Area are fallow and the remaining 200 acres are farmed by two operations which lease most of the farm lands on the 'Ewa Plain and in Kunia below the pineapple fields. Approximately 140 acres of cultivated lands between Farrington Highway and the H-1 Freeway are under lease to the year 2005. In total, 380 acres adjacent to and off-site from the Property will also be taken out of production due to the potential nuisance problems associated with agricultural activity proximate to residential areas and the expense of rerouting existing water irrigation lines for lands under short-term lease. Therefore, the 380 off-site acres and

the 200 on-site acres represent the total area of agricultural lands that will be withdrawn from agricultural production.

74. This loss of agricultural production is likely to be compensated for by the affected operations farming their remaining lands more intensively to replace the lost production and/or farmers elsewhere on O'ahu increasing their production to meet demand. This reduction is not expected to significantly affect the potential growth of diversified agriculture in Hawai'i since there is an ample supply of land suitable for diversified agriculture on O'ahu and a lack of market demand. Accordingly, no mitigation measures are proposed to replace the anticipated loss of production associated with the Petition Area.

Flora and Fauna

75. Kenneth M. Nagata ("Nagata") prepared a biological survey of the Property, dated September 17, 1996. Char & Associates subsequently undertook a botanical survey of the Property in December 1996 to verify and to more accurately inventory and map the plants found by Nagata.

76. The vegetation on the Property is entirely secondary. Eight plant communities were recognized, each community existing as a continuum with one blending into another. Within the eight plant communities identified, 99 different plant species were recorded. Except for the ko'oloa'ula (Abutilon menziesii), all of the native species on the Property are common lowland species in Hawai'i. At least 38 individuals of the ko'oloa'ula were recorded and an additional 50 plants were identified in January 1997. The ko'oloa'ula is now a federally

listed endangered species once endemic to Lana'i, Maui, O'ahu, and Hawai'i. Historically, the ko'oloa'ula was once sold by several nurseries as "red 'ilima" prior to its listing as an endangered species due to its attractiveness and ease of cultivation. It is not known how many plants remain as urban landscape elements resulting from prior nursery sales.

77. Chapter 195D, HRS, provides for the preparation and implementation of Habitat Conservation Plans and Safe Harbor Agreements under the federal Endangered Species Act and the State's counterpart law. In accordance with both State and federal regulations, a Habitat Conservation Plan ("HCP") has been prepared in consultation with the DLNR to protect the existing ko'oloa'ula and to establish a methodology to ensure the future propagation of new plants.

78. The HCP requires establishment of three off-site wild populations that would be produced from one degraded population. The first off-site wild population has been established at Ka'ena State Park. The funding for the HCP during the pre-construction phase was provided by Petitioner and released through DLNR.

79. The only mammals known to inhabit the Property are introduced species such as feral cats, dogs, rats, mice, and mongooses. No mammals were observed on the Property during the field survey, although pig trails were observed in several plant communities. Seventeen species of birds were observed on the Property, of which 15 were introduced, one is a common migratory

species (Pacific golden-plover), and one is indigenous (Black-crowned night heron).

Archaeological/Historical Resources

80. Scientific Consultant Services, Inc., undertook an archaeological survey and literature search of the Property. The archival research included a review of relevant archaeological research previously conducted of the Property, historic records, and maps. The presence of any significant archaeological sites on the Property is unlikely due to the disruption caused by continuous cane cultivation for nearly 70 years.

81. The State Historic Preservation Division ("SHPD") stated that "review of our records shows that there are no known historic sites on these 1,300 acres of state lands. These lands were used for commercial sugarcane cultivation for many years and this would have destroyed any historic sites that might have been present. We believe that reclassification of these lands and their future development will have 'no effect' on historic sites." Should any unknown sites be uncovered during construction, work in the area of the site will stop and the SHPD will be notified in accordance with applicable State regulations.

82. The Petition Area contains no features or other evidence that would indicate any customary and traditional use by native Hawaiians for subsistence, cultural or religious purposes, or for any other historically or culturally significant use, requiring protection or regulation under Article XII, Section 7 of the Hawai'i State Constitution.

Groundwater Resources

83. The 'Ewa region of O'ahu overlies the Southern O'ahu Basal Aquifer, a designated Sole Source Aquifer. Underlying the 'Ewa Plain is terrestrial alluvium made up of clay and mud eroded from volcanic rock and interlayered with coral limestone deposited when the area was submerged. This geologic feature, known as the 'Ewa Caprock, extends from the Property to the ocean and contains nonpotable water.

The State Commission on Water Resource Management ("CWRM") officially adopted the boundary of a new brackish 'Ewa Caprock Aquifer as a separate aquifer management area within the Pearl Harbor Aquifer Sector. Since this designation, the CWRM has awarded one-year interim permits for new users of the 'Ewa Caprock Aquifer.

84. With the shutdown of OSCO's irrigation practices in 1994, the sustainable yield of aquifers in the Pearl Harbor Sector is currently under review and is expected to be reduced. The new sustainable yield numbers should reflect the change in land use from agriculture to urban use. The CWRM staff plans to submit a recommendation for adoption of new sustainable yield numbers in October 1999. Withdrawals from the brackish Pu'u'loa Aquifer system is regulated by a sustainable capacity at all irrigation wells which prohibits individual pumpages that cause the specific well to exceed 1,000 mg/l chloride cap.

85. The Board of Water Supply ("BWS") has requested a water reservation from the CWRM to convert agricultural water allocations from the Waiawa-Waipahu Aquifer to urban use. This

will serve the needs of developments, including the Project, envisioned by the 'Ewa DP.

Recreational and Scenic Resources

86. Existing recreation facilities near the Property include neighborhood parks located in 'Ewa Beach, Makakilo, and Villages of Kapolei; beach parks located in 'Ewa Beach and NASBP; and golf courses located on the eastern border of NASBP, the Villages of Kapolei, and Ko 'Olina. The Project would add a district park, numerous smaller parks, and a major sports complex. An open space corridor designed in conjunction with the realigned Kaloi Gulch would also provide a grassed passive recreation area that would add considerable recreational land area to the community.

87. To ensure that planned recreational facilities are adequate to service the projected population of the Project, Petitioner and/or future landowners will be required to comply with provisions of the City and County of Honolulu's Park Dedication Ordinance.

88. The predominant views from the Property are of the Wai'anae Mountain Range located approximately three miles to the north. Other views include the primary urban center with Diamond Head visible approximately 25 miles to the east. None of the Property has been designated as a significant visual resource on any State or City and County plans.

89. The only significant roadway view is makai from Farrington Highway and portions of the H-1 Freeway. Because the Property is relatively flat, views that do exist will be impacted

primarily by the siting of future buildings and residences similar to other developments in the 'Ewa region.

ENVIRONMENTAL QUALITY

90. An environmental impact statement was determined to be required by Petitioner pursuant to chapter 11-200, subchapter 5(b), HAR. The environmental impact statement prepared for the Project was accepted by the Governor in September 1998, in accordance with the statutory requirements of chapter 343, HRS.

Noise

91. D.L. Adams Associates, Ltd., dba Darby & Associates, prepared an environmental noise assessment study for the Project, dated April 1998.

92. The existing acoustical environment at the Property is exposed to daytime ambient noise levels of 41 to 47 dBA by noise generated from traffic, wind in foliage, and occasional aircraft flybys or flyovers. Within existing residential areas (i.e. Villages of Kapolei and 'Ewa Villages), ambient noise levels range from 44 to 47 dBA. When no aircraft activities occur, traffic on H-1 Freeway and Farrington Highway is the dominant source of noise.

93. The day-night equivalent sound level at the Property area due specifically to aircraft operations is less than 60 dBA and compatible with the DOT residential guidelines for noise, although some overflights will be audible. This is also true for the proposed reliever airport planned for 1,000 acres of the BPNAS after it is turned over in July 1999.

According to a draft master plan prepared for the reliever airport, the Property will continue to have aircraft noise levels less than 60 dBA for all alternatives considered.

94. Noise levels due to the Project are estimated to be less than or equal to 2.2 dBA in 2020 and should not be perceptible to the residents near the roadway. Specifically, noise in the morning at Farrington Highway would decrease approximately -0.4 dBA and increase 2.2 dBA in the evening as a result of the Project. At the H-1 Freeway, Project-related traffic will increase approximately 0.6 dBA in the morning and 0.4 dBA in the afternoon as a result of the Project. Noise level increases greater than 3 dBA are not generally perceptible by most residents.

95. Residential development along the H-1 Freeway, Farrington Highway, North-South Road, East-West Road, and Kapolei Parkway may be exposed to future traffic day-night equivalent levels greater than the HUD recommended limit of 65 dBA if located close to the roadways. The proposed setbacks, air conditioning, insulation in residential structures, and landscaping are anticipated to buffer much of the traffic noise generated by the roadway.

96. In the area of the proposed sports complex, nearby residences could be impacted; however, no residential development is planned within approximately 1,000 feet of these facilities. Noise from the sports complex itself will be mitigated by directing the loudspeakers downward onto the playing field and away from nearby homes. Regulating the hours of the sport

complex's use will also mitigate potential noise related impacts.

97. During construction of the infrastructure, noise will be generated by construction and earthmoving equipment. However, this noise will be relatively short-term, occur only during daytime hours, and will comply with State Department of Health ("DOH") noise regulations.

Air Quality

98. B.D. Neal & Associates prepared an air quality study for the Project, dated April 1998.

99. The present air quality in the Petition Area is relatively good and has probably improved recently with the discontinuation of sugarcane growing and open-cane burning in the 'Ewa Plain area.

100. Air quality impacts that do occur are mostly associated with emissions from vehicular, industrial, and natural and/or agricultural sources. Several industrial sources of air pollution are located a few miles to the southwest at Barbers Point, but the prevailing winds carry emissions away from the Petition Area more than 80 percent of the time. An additional 380 acres of land adjacent to and off-site from the Petition Area will be taken out of agricultural production. Removal of this 380 acres will reduce potential nuisance problems associated with agricultural activity that is located close to residential areas.

101. The Honouliuli Wastewater Treatment Plant ("HWWTTP") is located approximately 1.5 miles from the proposed sports complex location. If the HWWTTP is operated properly, it is unlikely that any odor will be detectable anywhere in the

Petition Area. Presently, during Kona winds, Tenney Village and Verona village which are closest to the HWWTP report the most odor complaints.

102. Future construction within the Petition Area may produce short- and long-term air quality impacts. Short-term impacts will include fugitive dust and exhaust emissions produced by construction equipment and vehicles. Long-term impacts will result from gradual urbanization of the area associated with future population growth. These impacts include increased vehicular exhaust, as well as indirect emissions resulting from increasing electrical power demand.

103. Based on an air quality modeling study prepared for the Petition, the Commission finds that future worst-case carbon monoxide concentrations in the vicinity of the Property would likely exceed the relatively stringent State ambient air quality standards for carbon monoxide near several roadway intersections.

104. Based on these anticipated impacts, recommended short-term and long-term mitigation measures include the following:

Short-term:

- a. Frequent watering during construction activities to maintain dust control in active work areas at least twice daily on days without rainfall.
- b. Initiate a construction phasing plan which considers wind patterns and existing and future residential land uses to minimize downwind dust impacts within residential areas.
- c. Grassing as soon as practicable once grading has been completed.

- d. Wind screening as appropriate to limit fugitive dust.
- e. Use mulch and soil stabilizers on graded areas.
- f. Trucks should be covered when traveling on roadways and washed on-site to keep dirt from traveled roadways.
- g. Monitoring of dust at the Project boundary during the construction period.

Long-term:

- a. Consider reduction of traffic volumes by promoting bus service and car pooling.
- b. Consider adjustment of local school and business hours to begin and end during off-peak times.
- c. Where possible increase buffer zones between major roadways and pedestrian facilities.
- d. Establish extensive landscaping to maintain long-term air quality and aesthetically integrate the Project into the surrounding neighborhood.

Water Quality

105. All domestic wastewater will be collected and transmitted to the City and County of Honolulu's HWWTP. Surface water runoff will be directed into the proposed drainage retention basins and open space areas along the proposed North-South Road detention and settlement. The urbanization of the Petition Area poses no known risk of contamination to groundwater or coastal waters.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Highway and Roadway Facilities

106. Julian Ng, Incorporated, prepared a traffic report for the Project, dated April 1998.

107. The Property is served by various regional and local road systems. Major public roadways adjacent to the Property include Farrington Highway, the future Kapolei Parkway (makai portion of the Property), and the future North-South Road. Further north of the Property is the six-lane H-1 Freeway allowing access to the Property via the Makakilo Interchange. A future freeway interchange will ultimately connect the North-South Road to the H-1 Freeway. The State of Hawai'i maintains a 40-foot railroad right-of-way immediately makai of the Property's boundary. The right-of-way is part of the former OR&L rail network.

108. The Honolulu Public Transit Authority operates "TheBus" on a supply and demand basis, subject to the availability of resources. Existing public transit service to the vicinity is provided by Route 51 between Honolulu and Makaha passing on Farrington Highway in front of the Property.

109. The Project will produce traffic impacts on local, collector, and regional transportation systems as the residential population of the area increases in the future.

110. Eight intersections in the East Kapolei area would warrant signalization at full development of the Project. Separate left and right turn lanes should be provided for turns from and onto the major streets to minimize delays and congestion for through traffic. The signalized intersections would operate at an acceptable level of service D or better condition in the future peak hours.

111. Traffic volumes at the intersection of Farrington Highway with the roadway providing access to the parcels in the northeast corner of the Property will not meet traffic signal warrants. Long delays to left turns onto Farrington Highway can be expected. The average peak hour delays for these movements would exceed the delay that is considered acceptable. The average delay of all movements on the side street approaches, however, would be within the acceptable range if two-lane approaches are provided on the side street. Access into the makai area through an eastward extension of East Kapolei Avenue would also mitigate these long delays.

112. The sports complex is not expected to have a traffic peak hour that would be worse than the normal traffic peak hours and the roadways that could accommodate commuting traffic would provide adequate access to the sports complex.

Water Service

113. R.M. Towill Corporation prepared a water master plan for the Project, dated February 1998.

114. Presently, there is no potable water system servicing the Petition Area. However, dual systems of potable and non-potable water will be included in the infrastructure development of the Project.

115. The Property spans two BWS service pressure zones, 215-feet and 440-feet. The portion of the Project below the planned East-West Road is primarily within the 215-foot service elevation zone. Most of the remaining portion is within the 440-foot service elevation zone. Existing BWS infrastructure in the

area includes a 30-inch and 36-inch water mains running along Farrington Highway that connect a series of 215-foot and 228-foot reservoirs. The 228-foot Honouliuli reservoir sustains pressure for much of 'Ewa Villages and provides water to the BWS 215-foot reservoir as well as the Kapolei 215-foot tank via the Honouliuli Booster Pumps.

116. Maximum daily demand projected to be generated by the Project is estimated at 6.8 million gallons per day ("mgd") and 7.5 mgd which includes water demand for the UHWOC. Average daily demand for the Project will be approximately 4.5 mgd.

117. When the Project is fully developed, the total storage requirement is projected to be 6.8 mgd. Therefore, a new 4.0 million gallon ("mg") reservoir for the 215' system and 4.0 mg reservoir for the 440' system will be developed which will surpass the storage requirement for the Project. To provide water to the higher elevation system, a booster pump at the 215' elevation will pump water to the 440' reservoir. The system will be connected to the 36-inch water main along Farrington Highway.

118. Non-potable water will be used to supplement the potable water system in meeting the total water demand for the Project. This non-potable system will utilize brackish water and/or reclaimed water for irrigation purposes primarily within road right-of-ways, parks, the sports complex, and the 15-acre district park. The average daily non-potable water demand for the Project is projected to be 0.95 mgd.

119. The Project's potable and non-potable water systems will be completely separate and fully comply with all

applicable DOH regulations. Petitioner has obtained a Well Construction Permit and a Water Use Permit for a new non-potable caprock well to meet the immediate non-potable water needs of the Project, including dust control and irrigation for the sports complex. Construction of the well is pending the reclassification of the Property by the Commission. Additional non-potable water needs will be met from the anticipated availability of reused water from the HWWTP or additional caprock wells if necessary.

120. All future water needs will be coordinated through the BWS as lead agency to obtain bulk water allocations from the CWRM.

121. The BWS may become the sole purveyor of water for all proposed developments in 'Ewa and all developers may be required to pay a facilities charge.

Wastewater

122. R.M. Towill Corporation prepared a sewer master plan for the Project, dated February 1998.

123. The Project is located within the City and County of Honolulu's HWWTP service area. The HWWTP is located adjacent to NASBP, approximately 4,000 feet makai of the Property. The only major trunk sewer line near the Property is the 30-inch Makakilo Interceptor which runs from Makakilo, along Ft. Barrette Road and Renton Road (parallel to the OR&L Railroad right-of-way), to the HWWTP.

124. The HWWTP has a primary treatment capacity of 38 mgd and a deep ocean outfall with a design capacity of 112 mgd.

This HWWTP presently treats approximately 25 mgd to a primary level and has secondary treatment facilities which process 13 mgd. The planned ultimate capacity of the HWWTP is 51 mgd, with a planned 13 mgd of tertiary treatment for re-use purposes. HWWTP capacity is based on average daily flows. Therefore, the HWWTP presently has a remaining capacity of 13 mgd available.

125. Maximum design flow generated by the Project is projected at 14.6 mgd and 19.5 mgd if the UHWOC is included. However, the design average flow based on the sewage generated on-site is estimated at 3.338 mgd and design average flow including the UHWOC is 5.258 mgd. The HWWTP will be able to accept projected flows from the Project at its current capacity. The solids handling facility of the HWWTP is anticipated to reach capacity in five years. Construction of the HWWTP 1A Solids Handling Facility is tentatively scheduled for completion in 2003, about the same time the first delivery of residential units of the Project is anticipated.

126. The Project's "backbone" sewer system will be comprised of a major trunk line along the North-South Road with sizes varying from 18 inches to 36 inches, and 12-inch and 15-inch branch lines along connecting collector roads. All pipe sizes range from a minimum diameter of 12 inches to a maximum of 36 inches.

127. Off-site trunk sewers are planned to include the existing 30-inch Makakilo Interceptor and the proposed 54-inch Kapolei Interceptor Sewer along Renton Road. Presently, the Makakilo Interceptor is operating at approximately 65 percent of

its 10.587 mgd capacity. Therefore, the Project at buildout will potentially exceed the capacity of the Makakilo Interceptor. To add the additional capacity for the Project and other large scale development projects in the 'Ewa region, a 54-inch "Kapolei" Interceptor Sewer is proposed that would have a capacity of 42.0 mgd. This additional capacity would serve the Villages of Kapolei, the City of Kapolei, and Ko 'Olina. Construction of the proposed Kapolei Interceptor Sewer is dependent upon the timeframe of future developments in the tributary area.

Drainage

128. R.M. Towill Corporation prepared a drainage master plan for the Project, dated June 1998.

129. The Kalo'i Gulch drainage basin extends from the crest of the Wai'anae Range to the shoreline within Haseko's Ocean Pointe development, encompassing 11 square miles and several developments. Mauka of the H-1 Freeway, where the land is relatively steep, stormwater has carved out a natural gulch. Between the freeway and into portions of the Petition Area, Kalo'i Gulch is generally a narrow, shallow unlined ditch with limited capacity. Kalo'i Gulch from within the Petition Area through to its terminus 1,700 feet from the ocean is man-made and consists of two levees built up above the adjacent ground. The original primary use of Kalo'i Gulch was as an irrigation ditch for the sugar fields. The capacity of Kalo'i Gulch is limited and unable to handle storm runoff under existing conditions.

130. Under current conditions in the Kalo'i Gulch drainage basin, very little stormwater runoff reaches the ocean.

During storms, Kalo'i Gulch would typically overtop and spill onto the adjacent fields. The natural contours of the land are flat, which, together with various natural depressions in the cane fields, cane haul roads, and other areas act to impede stormwater flow and provide retention/detention areas for runoff.

131. There are also man-made barriers that impede flow through the Kalo'i Gulch drainage basin; the most prominent is the OR&L railroad tracks makai of 'Ewa Villages. The tracks are bermed up and higher than the adjacent mauka lands. There are various small culverts with limited capacities. The railroad tracks act as a dam during heavy rainfall.

132. When sugarcane was cultivated in the Kalo'i Gulch drainage basin, it was an effective impediment to stormwater flows, slowing down the water and thereby resulting in greater percolation into the ground. Without the cultivation of sugarcane, larger runoff is passed downstream.

133. The 'Ewa DP recognizes the significance of the Kalo'i Gulch system and calls for minimizing nonpoint source pollution and providing adequate detention and retention basins.

134. Haseko's Ocean Pointe project lies at the terminus of Kalo'i Gulch. All stormwaters that are not retained upstream will eventually end up on or pass through Ocean Pointe. Ultimately, the drainage infrastructure within Ocean Pointe is planned to handle 10,000 cubic feet per second ("cfs"). Ocean Pointe's proposed marina is intended to be a part of the regional drainage infrastructure and serve as the final

retention/detention basin before stormwater is discharged into the ocean.

135. Haseko has a unilateral agreement condition that says that it has to provide for 11,000 cfs outfall to the ocean.

136. Most regional drainage systems are municipal systems, where the municipality plans, constructs, and maintains the drainage system. The Kalo'i Gulch drainage system, however, is a private system where each of the landowners and developers in the region is responsible for its own segment of the system.

137. Presently, all of the regional drainage infrastructure is not in place. There presently is no outlet to the ocean and the connecting infrastructure between the different developments is not in place.

138. In order to proceed with development prior to the completion of downstream drainage improvements, including an ocean outlet, the 'Ewa Villages, Ewa by Gentry, and Ocean Pointe projects have constructed various retention/detention basins, as well as temporary berms, such that the increase in storm runoff due to development is retained within the development area and not passed downstream, maintaining the amount of downstream stormwater flow at predevelopment levels.

139. In 1993, a technical committee of engineers representing the region's developers addressed an interim drainage plan for the region, including the drainage requirements and water quality issues that might result from drainage of the area. The recommended interim plan did not address non-technical issues, which the plan recognized had to be addressed by the

developers. Although most of the engineers endorsed the technical recommendations of the technical committee, the developers never reached agreement on the non-technical issues. The non-technical issues are: (1) responsibility for sugarcane damage; (2) responsibility for design and construction of interim drainage improvements; (3) responsibility for maintenance of interim drainage improvements; (4) responsibility for potential damages due to increased flows; (5) responsibility for maintenance of ultimate improvements; and (6) responsibility for water quality controls.

140. Following a 1996 storm in which 'Ewa Villages and Varona Villages were flooded, a task force was convened in 1997 which developed another interim solution ("Technical Solution"). The primary recommendation of this Technical Solution is to allow the passage of 2,500 cfs of water to the ocean through a controlled device such as a channel. This Technical Solution will remain in place until the year 2005 or until the proposed marina at Ocean Pointe provides an outlet to the ocean. All of the developers and landowners appear to be in agreement that this Technical Solution is reasonable and workable.

141. The Technical Solution requires all landowners and developers in the Kalo'i Gulch watershed to phase their developments and construct their portions of the drainage improvements in accordance with an agreed upon timetable. It identifies the amount of flow that would be released at various points in time and identifies the improvements that would be put in by the developer or landowner of each parcel of land. This is

intended to synchronize the various drainage improvements with drainage needs. For the Technical Solution to work, all of the developers would have to agree and implement the various improvements.

142. So long as interim flows exiting the makai boundary of the Petition Area are limited to 2,500 cfs and the interim improvements recommended by the Technical Solution are in place, Ocean Pointe will be able to accommodate those flows without damage to its residences, even if the ocean outlet is not in place.

143. To mitigate the increase in runoff and facilitate groundwater recharge, a drainage control system is planned within the 300-foot wide utility, drainage, and access corridor along the proposed North-South Road. This corridor includes a 96.5-foot wide corridor for a realigned and channelized Kalo'i Gulch with appropriate detention basins. The future development of the Property will need to include measures such as detention/retention basins on the Property in order to maintain off-site storm runoff at existing levels and to promote the recharge of groundwater.

144. The DOT is considering whether to combine the major drainage improvements for the Project with the development of the proposed North-South Road to facilitate construction and funding for both projects. DOT is aware that Petitioner does not have adequate funds to proceed with the relocation of Kalo'i and Hunehune Gulch or the construction of all the drainage improvements. The most likely scenario is that DOT will build

the North-South Road first, and if so, then DOT is committed in taking care of the runoff caused by the construction of the North-South Road.

145. The proposed drainage improvements along the North-South Road would retain approximately 100 acre-feet and detain approximately 300-400 acre-feet of runoff water. This drainage function is similar to the 'Ewa Villages Golf Course and the Coral Creek Golf Course. These improvements would bring the storm runoff generated within the Property back to pre-development conditions based upon a given engineering standard.

146. The UHWOC is proposed to have on-site retention and detention facilities to address storm runoff originating from the site.

147. Storm runoff from the sports complex site is proposed to drain in three directions during very intense storms instead of having all of the runoff flow through Verona Village. A berm has been constructed to divert water away from Verona Village.

148. The City and County of Honolulu currently has plans to improve the OR&L railroad bridge to reduce the obstruction created by the existing drainage culverts.

149. The agency responsible for maintenance of the Project's drainage improvements has not been determined at this time.

150. The State is prepared to work with the City and County of Honolulu to implement interim long-range regional

drainage and transportation solutions and to submit a drainage master plan to the City and County for review and approval.

151. Petitioner is willing to seek solutions that would be compatible with the 'Ewa Villages Drainage Master Plan and drainage designs for other developments in the Kalo'i Gulch drainage basin such as Gentry and Haseko.

152. Petitioner is amenable to a condition that requires the completion of drainage infrastructure prior to residential development of the Petition Area.

153. Petitioner is amenable to a condition that limits stormwater flows to 2,500 cfs to be released along the Petition Area's southern boundary during an interim period.

154. Any final drainage plan must rely on the cooperation of the private landowners to implement the plan.

155. In the event the proposed marina at Ocean Pointe is not constructed, the regional drainage plan will have to be dramatically altered and all of the developers in the Kalo'i Gulch watershed will have to seek an alternative solution to handling runoff without the marina.

Solid Waste Disposal

156. R.M. Towill Corporation prepared refuse calculations based on the uses proposed in the Project.

157. On O'ahu, residential and commercial wastes are hauled to landfills, the incinerator, or transfer stations. A waste-to-energy combuster, Honolulu Program of Waste Energy Recovery ("H-Power"), located at the Campbell Industrial Park, began full commercial operation on May 21, 1990. The facility is

designed to process about 2,000 tons per day, and its gross generating capacity is 57 megawatts of electricity (approximately 1 megawatt/35 tons). About 1,800 tons per day are incinerated, producing ash and non-processibles that are transported to Waimanalo Gulch Landfill and buried.

158. The 1997 annual fill rate at Waimanalo Gulch Landfill was estimated at 118,000 tons of solid waste along with 151,000 tons of ash and residue. However, actual fill rates were closer to 288,000 tons with the ash from the H-Power facility accounting for 161,000 tons of the total.

159. As the population of O`ahu grows in the future, loading on the City and County of Honolulu's H-Power facility and the Waimanalo Gulch Landfill site will also increase irrespective of where the new development occurs. Since these two sites accept all of the island-wide solid waste that is generated, the actual impacts on landfill capacity are dependent on island-wide population growth rather than where the population growth occurs.

160. The projected solid waste generated by the Project is estimated to average approximately 735.7 tons/day after buildout. Consequently, short-term impacts to the City and County's solid waste facilities are not anticipated to be significant since the solid waste contribution will stretch over the 20-year construction period. Fluctuations in the quantity of solid waste will occur in response to population growth, market trends, and construction activity on the Property and throughout O`ahu.

161. The future developers of the large-lot development parcels must cooperate with the DOH and the City and County of Honolulu Department of Public Works to ensure that their developments conform to the program goals and objectives of the Integrated Solid Waste Management Act, chapter 342G, HRS, and the City and County's approved integrated solid waste management plans in accordance with a schedule and timeframe satisfactory to the DOH.

Schools

162. Public schools in the vicinity of the Petition Area and their respective 1997 enrollments are: 'Ewa Beach Elementary (519 students), 'Ewa Elementary (612 students), Pohakea Elementary (552 students), 'Ilima Intermediate (1412 students) and Campbell High School (2210 students). Other schools in the 'Ewa District include Barbers Point (565 students), Mauka Lani Elementary (709 students), Makakilo (669 students), Kapolei Elementary (937 students), and Holomua Elementary (674 students).

163. Based on the absorption rates projected for the Project, sites for three elementary schools and an intermediate school planned for the Property are adequate to accommodate future educational requirements.

164. Petitioner has been working closely with the State Department of Education ("DOE") to identify the appropriate sites for the proposed schools and phasing for their construction. In addition, future developers will also contribute impact fees on a per unit basis in accordance with DOE's official policy. These

fees would be paid by Petitioner as revenues are generated from sale of the large lot development parcels. The DOE has indicated that the dedication of the 56 acres for school sites plus the balance of the fair-share requirement will satisfy the DOE's requirements in full.

165. Petitioner will contribute its fair share of \$1.5 million toward development of new schools in accordance with DOE procedures upon the sale of a portion of the Petition Area.

Police and Fire Protection

166. The Petition Area falls within the Police Department's District 8, which encompasses the leeward coast and the 'Ewa Plain. There are about 105 field officers assigned to the district. Response time for the entire district fluctuates between five and seven minutes.

167. In order to meet the growing needs of the 'Ewa Plain communities, the City and County operates a storefront station in the Campbell Building at 1001 Kamokila Boulevard. The new Regional Kapolei Police Station is currently being constructed across the street from the Campbell Building. Completion of the new police station is projected by the year 2000.

168. The preliminary population projection for the Project is estimated at 20,950 to 27,050 persons at buildout. Using the Police Department's staffing guideline of two officers per 1,000 population, it is assumed that approximately 42 to 54 new officers and staff will ultimately be required. Funding of these positions will be achieved by increased real property tax

revenues generated from the Property as it is improved for residential and commercial purposes.

169. Fire services in the 'Ewa area are provided from the 'Ewa Beach Fire Station, and additional fire support is available from the Waipahu Fire Station and the Makakilo Fire Station. The Kapolei Fire Station (previously, Campbell Industrial Park Fire Station), a battalion headquarters, has been completed to serve the expanding development on the 'Ewa Plain. Presently, the vacant scrub vegetation and low rainfall characteristic of the region create a potential fire hazard.

170. Other new facilities recently completed or being planned for the 'Ewa area include: (1) an engine company at Tenney Village; (2) A Kapolei engine-and-ladder company; (3) a Ko 'Olina engine-and-ladder company; and (4) the relocation of the existing 'Ewa Beach Fire Station into a new facility within the Ocean Pointe development.

171. Once the proposed urban structures and landscaping are in place, the potential fire hazard from scrub vegetation will no longer exist; however, the potential for fires in residential structures will increase. Fire protection services provided from Kapolei and Makakilo engine companies with ladder service from Kapolei are adequate. Access for fire apparatus, water supply, and building construction shall be in conformance to existing codes and standards.

Health Care/Hospital Services

172. St. Francis Medical Center - West is the nearest hospital facility to the Property. Ambulance service is

coordinated with the City and County of Honolulu, and the hospital has a helipad. The medical center offers general hospital services including emergency care, outpatient care, lab and imaging services, and medical offices. The hospital has 79 licensed beds available. Bed capacity will soon be expanded to 84 beds. The hospital is operating at about 80 percent occupancy. (Space for a total of 136 beds is available in the hospital.)

173. Nearby emergency medical and surgical services can also be provided by Pali Momi Medical Center (116 beds in 'Aiea and Wahiawa General Hospital (162 beds of which 93 are for long-term care). Non-emergency medical services are offered at Kaiser Permanente's Punawai Clinic in Waipahu. In addition, medical services can be obtained at major hospital facilities in urban Honolulu, about a 20-minute drive from the Property.

Construction of a new medical complex, to be known as the Kapolei Medical Park at the corner of Farrington Highway and Fort Barrett Road, was recently announced by the developer. The proposed facility will have more than 50,000 square feet of rental space for tenants including Ambulatory Services Inc., Hawai'i Medical Services Association, and Kaiser Permanente, and will employ approximately 250 persons.

Electricity and Telephone Service

174. R.M. Towill Corporation prepared electrical demand calculations for the Project.

175. Electricity for the surrounding area is currently being provided by Hawaiian Electric Company ("HECO"). HECO's available generation capacity peak demand is 1119 megawatts.

176. HECO owns and maintains a pole line along Farrington Highway that supports two 138 kilo-volt ("KV") lines (with provisions for a 46 KV line in the future) and two 12.47 KV lines from their "'Ewa Nui" Substation to the vicinity of the intersection with Palehua Road. Both 138 KV lines turn south at the intersection and follow the alignment of the future North-South Road to the OR&L right-of-way.

177. The Project is expected to generate a peak electrical demand of approximately 58,000 kva. However, much of this demand will be offset by the 735.7 tons of solid waste that will be produced daily from residential and commercial areas and converted to energy at the City and County of Honolulu's H-POWER facility.

COMMITMENT OF STATE FUNDS AND RESOURCES

178. The State of Hawai'i will incur major costs as developer but also gain significant revenues from the Project. Development costs are estimated to be about \$95 million for infrastructure and \$27.5 million for the sports complex. Revenues include receipts from land sales, taxes on construction-related cash flows, operating revenues for the sports complex, and new income associated with visitor spending due to the sports complex.

Petitioner will be able to cover its development costs and supply the University of Hawai'i with funds after major land

sales occur. Overall, the Project will result in continuing cash flows for the State over and beyond State costs. By 2022, the net balance of revenues to the State over costs of the Project is estimated as \$193 million to \$245 million (1997 dollars).

CONFORMANCE TO THE URBAN DISTRICT STANDARDS

179. The proposed reclassification of the Petition Area meets the standards applicable in establishing boundaries of the Urban District set forth in section 15-15-18, HAR, in that:

1. The Project is located adjacent to the Villages of Kapolei, 'Ewa Villages, and makai of the proposed UHWOC. The proposed North-South Road, Kapolei Parkway, and Farrington Highway will each provide direct vehicular access into the Project.

2. Center of trading are located at the City of Kapolei and Campbell Industrial Park. Existing employment centers are also located at the City of Kapolei and Campbell Industrial Park, the planned UHWOC, and Ko 'Olina Resort. Basic services such as wastewater systems, transportation systems, water, solid waste disposal, schools, parks and police and fire protection are, or will be, adequate to serve the Petition Area.

3. The Project is in an appropriate location for urban growth as it is contiguous to existing urban areas and located adjacent to major transportation systems. There is a demand for the large-lot development parcels that would accommodate residential development with an absorption period of approximately 20 years. With development of the UHWOC and the

City of Kapolei, urban growth on the 'Ewa Plain is projected to continue well into the future.

4. The topography of the Petition Area is suitable for urban development, having an overall slope of less than 5 percent. Existing drainage patterns would remain intact and additional drainage system improvements would be installed. There are no tsunami hazards or unstable soil conditions, or other adverse environmental effects that could impact the Project.

5. The Petition Area is surrounded by and contiguous to existing urban areas. In addition, urban development on the 'Ewa Plain, including the Petition Area, has been designated as a high priority by both the City and County of Honolulu and the State of Hawai'i to function as O'ahu's secondary urban center.

6. The Project does not constitute scattered, spot development due to the urban nature of the surrounding land uses. The Project is an "in-fill" project between the Villages of Kapolei, 'Ewa Villages, and the planned UHWOC.

7. The Petition Area does not contain any lands with general slopes of 20 percent or more.

CONFORMANCE WITH THE GOALS, OBJECTIVES AND POLICIES OF THE HAWAI'I STATE PLAN; RELATIONSHIP WITH APPLICABLE PRIORITY GUIDELINES AND FUNCTIONAL PLANS

180. The proposed reclassification of the Petition Area is generally consistent with the following objectives and policies of the Hawai'i State Plan, as defined in chapter 226, HRS:

Section 226-5 (b) (3) Promote increased opportunities for Hawai'i's people to pursue their socio-economic aspirations throughout the islands.

Section 226-6 (a) (1) Increased and diversified employment opportunities to achieve full employment, increased income and jobs, and improved living standards for Hawai'i's people.

The Project provides for a variety of land uses including residential (single-family and multi-family), commercial, public facility, and open space recreation. Development of these land uses will provide a diverse range of employment and economic opportunities for Hawai'i's people both during and after construction. With greater economic opportunities and increased availability of new housing, the ability to afford housing will be improved for a greater number of Hawai'i residents. The Project will offer short-term (construction-related) and long-term (commercial, public facilities) employment by contributing to the overall level of construction activity. Permanent operational employment will directly and indirectly increase employment throughout the region and State.

Section 226-11 (a) (2) Effective protection of Hawai'i's unique and fragile environmental resources.

Section 226-11 (b) (2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.

Section 226-11 (b) (3) Take into account the physical attributes of areas when planning and designing activities and facilities.

Section 226-11 (b) (6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai'i.

Section 226-11 (b) (8) Pursue compatible relationships among activities, facilities, and natural resources.

Physical, environmental, and cultural attributes of the Property were surveyed prior to preparation of the Master Plan. Site features such as slope, soil stability, drainage characteristics, presence of important archaeological sites, and provisions for the protection of important flora and fauna were incorporated into the design as applicable. Provisions for existing services and infrastructure are also considered by the Master Plan to assure more efficient use of existing facilities. In addition, new opportunities for recreation will be created where none presently exist. Most natural features on the Property have been modified in the past by previous agricultural activities.

Implementation of proposed mitigation measures for the Project will ensure continued protection of the land through better control of runoff and erosion, and reduced water, pesticide, and fertilizer use than under past agricultural conditions. In accordance with both State and City and County policy, new development is being directed toward the 'Ewa Plain since its physical attributes are compatible urbanized land uses.

There are no known unique or fragile environmental resources associated with the Property. Although there is one species of endangered plant located on the Property, appropriate mitigation plans have been prepared to ensure a compatible relationship with the flora resources in the area. The implementation of the plans will expand the population and

viability of the endangered Ko'oloa'ula compared to the "no-build" alternative.

Section 226-13 (a) (1) Maintenance and pursuit of improved quality in Hawai'i's land, air and water resources.

Section 226-13 (b) (2) Promote the proper management of Hawai'i's land and water resources.

Section 226-13 (b) (3) Promote effective measures to achieve desired quality in Hawai'i's surface, ground and coastal waters.

Section 226-13(b) (5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions and other natural or man-induced hazards and disasters.

The existing potential flood hazard will be mitigated by the development of an elaborate system of retention/detention facilities on-site which comply with City and County drainage regulations and ensure that the quantity of off-site drainage does not increase. As available, irrigation water will be derived from non-potable sources such as treated sewage effluent and brackish groundwater to conserve potable water for human consumption.

Hazards from hurricanes, earthquakes, and volcanic eruptions may exist but are no more likely to affect the Property than at any other location in the 'Ewa Plain area.

Section 226-13 (b) (7) Encourage urban developments in close proximity to existing services and facilities.

All proposed infrastructure has been sized and engineered to accommodate the projected population of the Project and planned land uses on adjoining properties. Where new infrastructure is required, occupancy will not be permitted

until adequate infrastructure capacity is in place. All necessary infrastructure either exists or will be provided as the Property is developed.

Section 226-15 (a) (1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.

Existing and planned wastewater treatment facilities are presently adequate to accommodate all projected flows associated with the Project. Other improvements such as wastewater transmission lines and pump stations will be expanded and constructed prior to the planned growth of the area in accordance with the Project's phasing requirements. Treated wastewater will be collected, treated, and disposed of in accordance with applicable DOH and City and County regulations at City and County-owned and operated facilities.

Solid wastes will be transferred to the City and County's designated solid waste disposal facilities and/or recycled into electricity at the City and County's co-generation facility at Campbell Industrial Park.

No significant impacts on groundwater resources or the quality of surface water are anticipated. Best management practices will be employed to control erosion in accordance with all applicable DOH regulations.

Section 226-16 (a) Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.

Section 226-16 (b) (1) Coordinate development of land use activities with existing and potential water supply.

Potable water will be provided by the BWS distribution system and water source development will be provided. In addition, recent policies adopted by the CWRM to promote the reuse of non-potable water and permit withdrawal of brackish water with a chloride cap of 1,000 mg/l will be followed. All applicable governmental regulations will be observed to ensure the public's safety and health.

Section 226-18 (c) (4) (B)&(C) Promote all cost-effective conservation of power and fuel supplies through conservation measures including education and adoption of energy-efficient practices and technologies.

The Project will promote greater energy self-sufficiency through increased efficiency in transportation systems and proximity of essential services and employment centers to residential areas. Pedestrian walkways, bikeways, and development of employment, education, and commercial centers within the Property and region will eventually reduce energy consumption required for transportation between these facilities and residential areas.

Other components of the Project that would promote energy efficiency include use of water efficient landscaping and provisions for open space to naturally cool structures, encourage natural ventilation in future structures, and insulation of buildings to permit more efficient use of air conditioning. Petitioner will encourage developers to implement the State's Model Energy Code in all phases of the design as applicable.

Section 226-19 (a) (1) Greater opportunities for Hawai'i's people to secure reasonably priced, safe, sanitary, livable homes located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals.

Section 226-19 (a) (2) The orderly development of residential areas sensitive to community needs and other land uses.

Section 226-19 (b) (1) Effectively accommodate the housing needs of Hawai'i's people.

Section 226-19 (b) (3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.

The Project consists primarily of single-family and multi-family residential development and small neighborhood commercial facilities. These components of the Master Plan will be developed by private developers in response to market indicators and as completion of required infrastructure warrants.

By providing a wide range of housing choices to all residents of O'ahu, the housing needs for Hawai'i's people will be expanded in terms of quality, location, cost, densities, style, and size of housing.

Section 226-103 (f) (1) Economic priority guidelines. Encourage the development, demonstration, and commercialization of renewable energy resources.

Section 226-103 (f) (2) Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy.

The primary renewable energy resource available to the Project will be solar water heating and combustion of solid waste into electricity. Petitioner will encourage all future developers to consider the use of solar water heating in their design of residential structures.

Section 226-104(b)(12) Utilize Hawai'i's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.

The proposed reclassification of the Property will provide new land necessary to accommodate projected population and economic growth needs while ensuring the protection of the environment. No significant potable groundwater resources or recharge areas are associated with the Petition Area. Consequently, the CWRM has developed water re-use policies for the region to facilitate the use of treated sewage effluent and non-potable water for irrigation purposes.

During the various construction phases, best management practices will be employed to mitigate potential erosion which could impact air and water quality. Long-term air quality associated with vehicular emissions will also be mitigated.

The one endangered plant species identified on the Property will be propagated in accordance with an mitigation program prepared and approved in accordance with applicable State and federal standards regarding the treatment of endangered plant species.

Should any historic and cultural sites be found during the construction period, they will be preserved in accordance with accepted standards and regulations of the SHPD.

Section 226-106 Affordable Housing priority guidelines

Create incentives for development which would increase home ownership and rental opportunities for Hawaii's low-

and moderate-income households, gap-group households, and residents with special needs.

Encourage public and private sector cooperation in the development of rental housing alternatives.

To meet the anticipated future demand for housing within the `Ewa region, the future developers of the Project will work with the public and private sectors as applicable to provide a wide range of economically feasible housing products.

The Project will provide opportunities for a wide range of single-family and multi-family housing types either for-sale or for-rent. This broad mixture of expanded housing opportunities will directly and indirectly stimulate and promote increased housing choices for Hawai'i's citizens. Increasing the housing inventory will indirectly help to stabilize the price of housing. Affordable housing will be provided in accordance with applicable requirements set forth by the City and County of Honolulu.

181. The proposed reclassification of the Petition Area generally conforms to the Housing, Employment, Energy, and Recreational Functional Plans.

CONFORMANCE WITH COASTAL ZONE MANAGEMENT
OBJECTIVES AND POLICIES

182. The proposed reclassification of the Petition Area generally conforms to the Coastal Zone Management Program, chapter 205-A, HRS, in the areas of recreational resources, historical/cultural resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing

development, public participation, beach protection, and marine resources.

INCREMENTAL DISTRICTING

183. Phasing of the Project has been determined in the City and County of Honolulu 'Ewa DP. This phased development program will be followed in accordance with applicable regulations for the 'Ewa DP.

RULING OF PROPOSED FINDINGS OF FACT

Any of the proposed findings of fact submitted by 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 herein improperly designated as a finding of fact should be deemed or construed as a conclusion of law; any finding of fact herein improperly designated as a conclusion of law should be deemed or construed as a finding of fact.

CONCLUSIONS OF LAW

Pursuant to chapter 205, HRS, and the Commission Rules under chapter 15-15, HAR, and upon consideration of the Commission decision-making criteria under section 205-17, HRS, this Commission finds upon the clear preponderance of the evidence that the reclassification of the Property, consisting of approximately 1,300 acres of land in the State Land Use Agricultural District at Honouliuli, 'Ewa, O'ahu, Hawai'i, identified as Tax Map Key Nos. 9-1-16:8, 108, 109; 9-1-17:71, 86; and 9-1-18:3, 5, into the State Land Use Urban District, is

reasonable, not violative of section 205-2, HRS, and is consistent with the policies and criteria established pursuant to sections 205-16 and 205-17, HRS.

DECISION AND ORDER

IT IS HEREBY ORDERED that the Property which is the subject of this Docket No. A99-728 filed by Petitioner Housing and Community Development Corporation of Hawai'i, State of Hawai'i, consisting of approximately 1,300 acres of land at Honouliuli, 'Ewa, O'ahu, Hawai'i, identified as Tax Map Key Nos. 9-1-16:8, 108, 109; 9-1-17:71, 86; and 9-1-18:3, 5, and approximately shown on Exhibit "A" attached hereto and incorporated by reference herein, is hereby reclassified from the State Land Use Agricultural District to the State Land Use Urban District, and the State land use district boundaries are hereby amended accordingly, subject to the following conditions:

1. Petitioner, its successors, and assigns shall provide affordable housing opportunities for residents of the State of Hawai'i in accordance with applicable affordable housing requirements of the City and County of Honolulu. The location and distribution of the affordable housing or other provisions for affordable housing shall be under such terms as may be mutually agreeable between Petitioner, its successors, and assigns, and the City and County of Honolulu.

2. Petitioner, its successors, and assigns shall coordinate and/or participate in the funding and construction of adequate water source, storage, and transmission facilities and improvements to accommodate the proposed Project. Water

transmission facilities and improvements shall be coordinated and approved by appropriate State and County agencies.

3. Petitioner shall contribute to the development, funding, and/or construction of public school and University of Hawai'i facilities as determined by and to the satisfaction of the State Department of Education (DOE) and the University of Hawai'i. The Petitioner, the DOE, and the University of Hawai'i shall enter into written agreements on this matter prior to Petitioner obtaining approval for City and County of Honolulu zoning.

4. Petitioner, its successors, and assigns shall coordinate and/or fund and construct adequate wastewater transmission and disposal facilities, as determined by the City and County of Honolulu and the State Department of Health, to include the planning design, construction, and scheduling of the proposed Kapolei Interceptor Sewer.

5. Petitioner, its successors, and assigns shall grant to the State of Hawai'i an avigation (right of flight) and noise easement in a form prescribed by the State Department of Transportation on any portion of the Property subject to noise levels exceeding 55 Ldn.

6. Petitioner, its successors, and assigns shall not construct residential components within areas exposed to noise levels of 60 Ldn or greater.

7. Petitioner, its successors and assigns shall be responsible for implementing sound attenuation measures to bring noise levels from sporting events, vehicular and air traffic

in and within the Property down to levels acceptable to the State Department of Health.

8. Petitioner shall attenuate the noise sensitive areas within commercial components of the Property that are exposed to exterior noise levels of 60 Ldn (day-night average sound level) by a minimum of 25 decibels.

9. Petitioner, its successors, and assigns shall participate in the pro-rata funding and construction of local and regional transportation improvements and programs necessitated by the proposed development in designs and schedules accepted and determined by the State Department of Transportation and the City and County of Honolulu. Petitioner and/or the State Department of Transportation shall submit the construction plans as they relate to drainage issues for the North-South Road to the City for review and approval.

10. Petitioner, its successors, and assigns of the affected properties shall fund and construct adequate civil defense measures as determined by the City and County of Honolulu and State Civil Defense agencies.

11. Should any previously unidentified burials, archaeological or historic sites such as artifacts, marine shell concentrations, charcoal deposits, or stone platforms, pavings or walls be found, Petitioner, its successors, and assigns of the affected properties shall stop work in the immediate vicinity and the State Historic Preservation Division of the Department of Land and Natural Resources (SHPD) shall be notified immediately. Subsequent work shall proceed upon an archaeological clearance

from the SHPD when it finds that mitigative measures have been implemented to their satisfaction.

12. Petitioner, its successors, and assigns shall coordinate the design and construction of drainage improvements required as a result of the development of the Property to the satisfaction of Federal, State and County agencies with the goal of executing an agreement on the interim and ultimate regional drainage plan as soon as possible. Petitioner, its successors, and assigns shall participate in the planning and coordination of off-site improvements with the Estate of James Campbell, the Barbers Point Naval Air Station, adjoining landowners and developers, the intervener, and other Federal, State, and County agencies. Funding for these improvements may be obtained from a combination of State, Federal, and/or private sources to be determined by Petitioner, its successors, and assigns.

13. Petitioner, its successors, and assigns, agrees to work with the city to implement interim and long-range regional drainage solutions as follows:

- a. Petitioner shall submit a drainage master plan for the Property to the City for its review and approval prior to any subdivision approvals other than for minor matters, such as easements.
- b. Drainage solutions for the Property shall be compatible with the 'Ewa Villages Drainage Master Plan and drainage designs for other developments in the Kalo'i Gulch drainage basin.

- c. Drainage improvements for the Property shall be consistent with the policies and principles in the 'Ewa Development Plan.
- d. Petitioner shall be responsible for implementing interim drainage improvements that will limit channelized runoff to 2,500 cubic feet per second (cfs) at the Property's southern boundary (specifically at the 'Ewa Villages Golf Course's Kalo'i Gulch Inlet Structure) for events up to a 100-year storm. Petitioner shall also take reasonable measures to minimize non-channelized flows from the Property by construction of berms, detention basins, or other appropriate methods. All flows and drainage patterns that cross the southern boundary of the Property shall remain as conceptually described in the 'Ewa Villages Drainage Master Plan. These requirements shall remain in force until long-range regional drainage improvements are in place in accordance with the approved drainage master plan for the Project.
- e. Should Petitioner sell various residential or commercial components prior to the completion of the construction of the master infrastructure, any such sale shall be conditioned upon the completion of the appropriate master infrastructure improvements for that portion of the residential or commercial component.

14. Petitioner shall apply for City zoning approval after the State Land Use Commission reclassifies the Project site from Agricultural to the Urban District. Said zone change application shall be accompanied by a conceptual master plan with land use information sufficient to satisfy county zoning and development plan requirements.

15. Petitioner shall comply with County zoning requirements. This condition is not intended to delay the construction of public uses or infrastructure to service the Property.

16. Prior to construction of any residential or commercial uses within the Petition Area, Petitioner, or its successors and assigns, shall submit a Regional Park, Open space and Pedestrian/Bikeway Master Plan to the City for its review and approval.

17. Prior to construction of any residential or commercial uses within the Petition Area, Petitioner, or its successors and assigns, shall submit a conceptual Urban Design Plan to the City for its review and approval. The Urban Design Plan shall depict the overall design theme and architectural character of streetscapes, residential neighborhoods and town centers. The Plan shall also include a conceptual landscape plan showing treatment of Project entries, major roadways, and common areas.

18. Petitioner, its successors, and assigns, where feasible, shall use indigenous and water conserving plants and

turf and incorporate the same into common area landscape planting.

19. Petitioner, its successors, and assigns shall facilitate an air quality monitoring program as specified by the State Department of Health. Petitioner, its successors, and assigns shall notify all prospective buyers of property, and buyers of individual lots or homes of the potential odor, noise and dust pollution resulting from surrounding agricultural and other uses, said notification to include a reference to potential odors emanating from the Honouliuli Wastewater Treatment Plant.

20. Petitioner shall fund an approved Habitat Conservation Plan to facilitate the propagation of the *abutilon mensiesii* in accordance with Department of Land and Natural Resources and U.S. Fish and Wildlife requirements.

21. Residential and commercial components of the project will not be developed and major site work for those areas shall not be undertaken until master drainage and infrastructure improvements for those components are completed.

22. Petitioner or landowners shall develop the Petition Area in substantial compliance with the representations made to the Commission. Failure to do so may result in reversion of the Petition Area to its former classification, or a change to a more appropriate classification.

23. Petitioner shall give notice to the Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interests in the Petition Area, prior to the development of the Petition Area.

24. Petitioner shall timely provide without any prior notice, annual reports to the Commission, the State Office of Planning, and the City and County of Honolulu Department of Planning and Permitting in connection with the status of the subject Project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

25. The Commission may fully or partially release the conditions provided herein 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 Petitioner.


26. Within 7 days of the issuance of the Commission's Decision and Order for the subject classification, Petitioner shall (a) record with the Bureau of Conveyances a statement that the Petition Area is subject to conditions imposed herein by the Land Use Commission in the reclassification of the Petition Area, and (b) shall file a copy of such recorded statement with the Commission.


27. Petitioner or landowners shall record the conditions imposed herein by the Commission with the Bureau of Conveyances pursuant to Section 15-15-92, Hawai'i Administrative Rules.

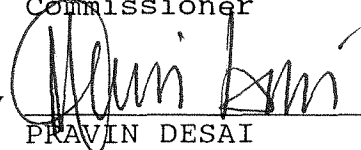
Done at Honolulu, Hawai'i, this 8th day of September 1999,
per motion on August 26, 1999.

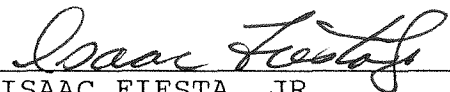
LAND USE COMMISSION
STATE OF HAWAII

By 
MERLE A. K. KELAI
Chairperson and Commissioner

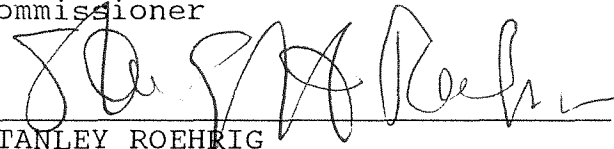
By 
LAWRENCE N.C. ING
Vice Chairperson and Commissioner


By 
P. ROY CATALANI
Commissioner

By 
PRAVIN DESAI
Commissioner

By 
ISAAC FIESTA, JR.
Commissioner


By (abstain)
M. CASEY JARMAN
Commissioner

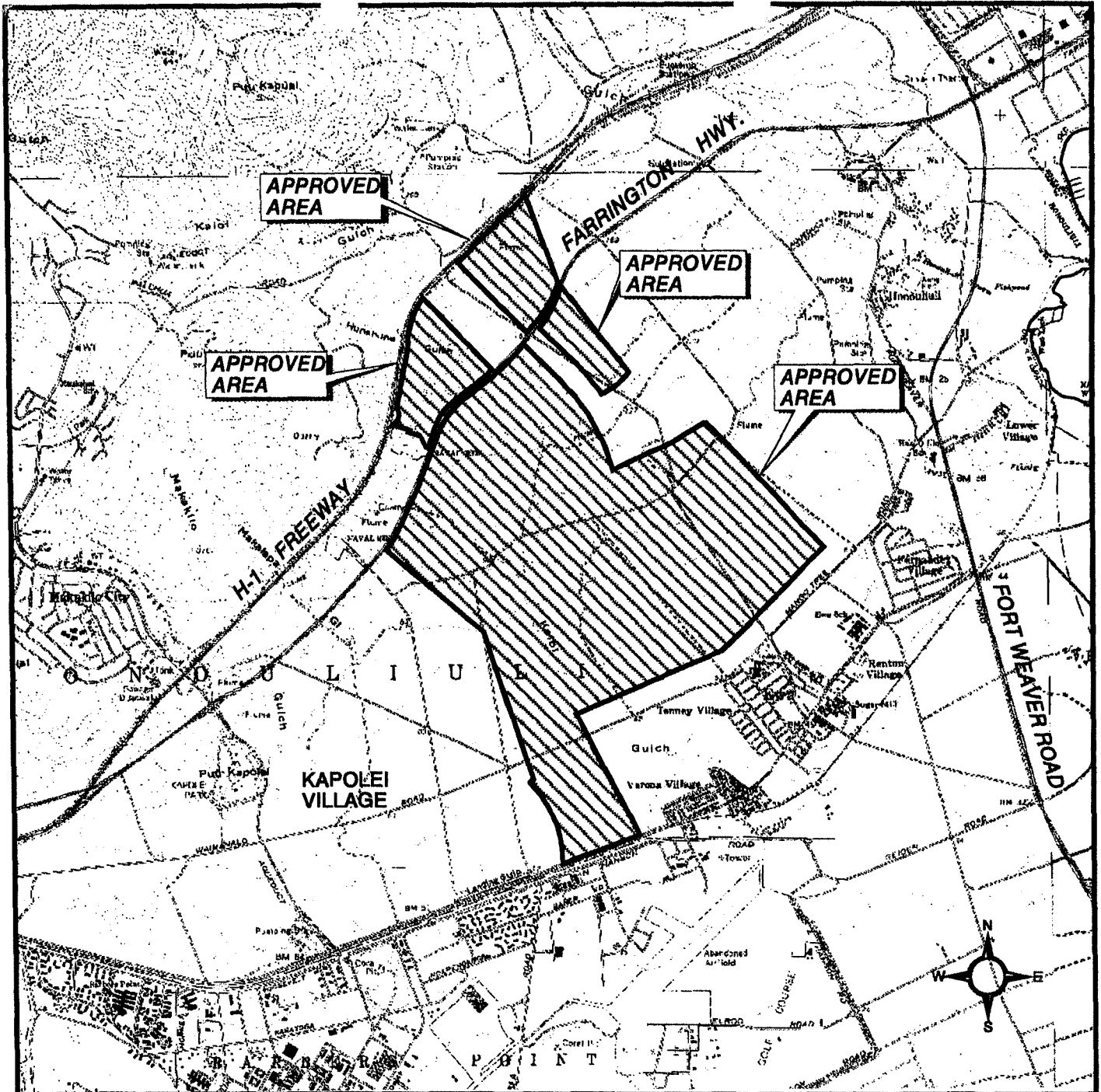
By 
STANLEY ROHRIG
Commissioner

By 
PETER YUKIMURA
Commissioner

Filed and effective on
September 8, 1999

Certified by:


Executive Officer

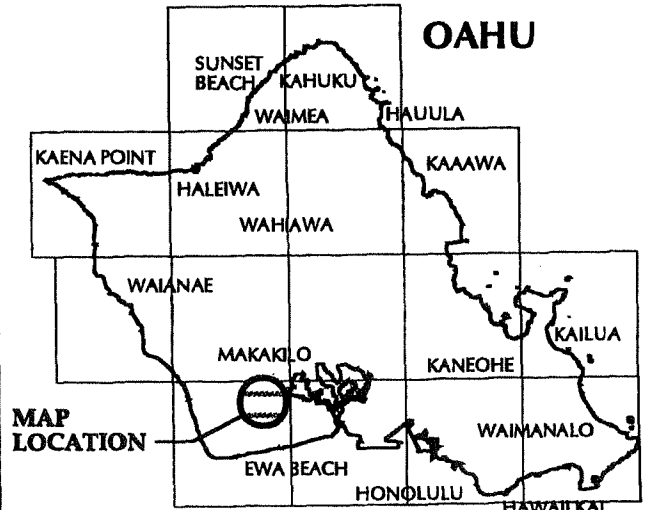


**A99-728 / HOUSING AND COMMUNITY
DEVELOPMENT CORPORATION OF HAWAII,
STATE OF HAWAII**

LOCATION MAP

Tax Map Key No.: 9-1-16: 8, 108, 109;
9-1-17: 71, 86; and 9-1-18: 3, 5
Honouliuli, Ewa, O'ahu, Hawaii

EXHIBIT "A"



BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAI'I

In the Matter of the Petition of the) DOCKET NO. A99-728
)
HOUSING AND COMMUNITY DEVELOPMENT) CERTIFICATE OF SERVICE
CORPORATION OF HAWAI'I, STATE OF)
HAWAI'I)
)
To Amend the Agricultural Land Use)
District Boundary into the Urban)
Land Use District for Approximately)
1,300 Acres of Land at Honouliuli,)
'Ewa, O'ahu, Hawai'i, TMK Nos.)
9-1-16: 8, 108, 109; 9-1-17: 71, 86;)
and 9-1-18: 3, 5)
_____)

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:

DEL. DAVID W. BLANE, Director
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DATED: Honolulu, Hawaii, this 8th day of September 1999.



ESTHER UEDA
Executive Officer