

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)	DOCKET NO. A88-631
HEMMETER-VMS KAUAI COMPANY V)	
To Amend the Agricultural Land)	HEMMETER-VMS KAUAI
Use District Boundary into the)	COMPANY V
Urban Land Use District for)	
Approximately 91.479 acres at)	
Kalapaki, Lihue, Kauai, Hawaii,)	
Tax Map Key No. 3-5-01: por. 102)	

JUL 11 7 57 AM '88
LAND USE COMMISSION

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

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)	DOCKET NO. A88-631
)	
HEMMETER-VMS KAUAI COMPANY V)	HEMMETER-VMS KAUAI
)	COMPANY V
To Amend the Agricultural Land)	
Use District Boundary into the)	
Urban Land Use District for)	
Approximately 91.479 acres at)	
Kalapaki, Lihue, Kauai, Hawaii,)	
Tax Map Key No. 3-5-01: por. 102)	
<hr/>		

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

Hemmeter-VMS Kauai Company V, a Hawaii general partnership, whose partners are Hemmeter Kauai Company, a Hawaii limited partnership, and Hemmeter Investment Company, a Hawaii general partnership (hereinafter "Petitioner"), filed a Petition on October 17, 1988, and an amendment to Petition on January 12, 1989, pursuant to Chapter 205, Hawaii Revised Statutes, as amended, and Title 15, Subtitle 3, Chapter 15, Hawaii Administrative Rules, as amended (hereinafter "Commission Rules"), to amend the land use district boundary for approximately 91.479 acres of land situate at Kalapaki, Lihue, Island of Kauai, State of Hawaii, Kauai Tax Map Key No. 3-5-01: portion of 102, (hereinafter the "Property") from the Agricultural District to the Urban District for golf course and golf academy uses. The Land Use Commission of the State of Hawaii (hereinafter the "Commission"), having heard and

examined the testimony, evidence and argument of counsel presented during the hearings, the stipulated proposed findings of fact, conclusions of law, and decision and order, hereby make the following findings of fact and conclusions of law:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. The Commission conducted hearings on the Petition on February 23 and 24, and May 11, 1989, pursuant to notice published on January 19, 1989, in the Garden Island and the Honolulu Advertiser, a newspaper of general circulation.

2. The Commission did not receive any request for intervention in the Petition.

3. Mayor JoAnn A. Yukimura, Maxine Correa, Kaipo Asing, Jack Lundgren, Patrick J. Childs, Thomas H. Oi, Hartwell Blake, Candace McCaslin, Cheryl Lovell-Obatake, Jeffrey Melrose, James Tehada and Paula Rudinoff appeared and testified as public witnesses. Written comments and communications were received by the Commission from the following persons: Maxine Correa, Jack Lundgren, Denny P. Boiser, Paul T. Akama, Elizabeth Stone, Hartwell H. K. Blake, Candace McCaslin, Patrick J. Childs, Ted K. Blake, JoAnn A. Yukimura, Thomas H. Oi, Lorita B. Wichman/Frederick B. Wichman, Kathleen Boyle, Melvin K. Dean/Edna Mae Dean, Diane and Fred Jager, Suzanne Marinelli, Jane and Van Klink, Ruth and John Koster, Beryl Blaich, Joyce and Joe Staton, Celia Rahe, Rienzi G. Remitio,

Ray T. Smith, Jr., Joseph and Elaine Strasser, Sharon Sherison, Thomas and Kathleen Pickett, Robert M. Long, Richard and Barbara G. Nakamura, Steven Levine, Ron Agor and Gary L. Blaich.

DESCRIPTION OF PROPERTY

4. The Property consists of approximately 91.479 acres of land located immediately makai or east of the Lihue Airport. The proposed north/south airport runway extension separates the Property from the balance of the Kauai Lagoons Resort of which the Property is proposed to be made a part. Ninini Point is located immediately to the south of the Property. The town of Lihue is located less than a mile to the northwest from the Property.

5. The Property is located within the State Agricultural District and is a portion of a 138.139-acre project site. The balance of the project site, which adjoins the Property, is approximately 46.66 acres and is situated along the coastline within the State Conservation District.

6. Slopes on the Property are generally less than 8 percent. Elevations range from sea level to approximately 75 feet with a steep cliff near the shoreline of the project site falling approximately 40 to 50 feet. Toward Ninini Point, grassy knolls and steep cliffs are common, however, slopes gradually become less severe along the more northerly portions of the shoreline. The Property, previously used for sugarcane production, has since been fallowed.

7. The United States Department of Agriculture Soil Conservation Service, Soil Survey Report classifies the project site into three major soil types defined by coastline surface features, agricultural lands under sugarcane cultivation, and a drainageway located central to the project site as follows:

a. The more gently sloping agricultural lands are comprised of two soil types from the Lihue Series which constitute approximately 60 percent of the project site. The Lihue silty clays, located on slopes of 0 to 8 percent (LhB) and 8 to 15 percent (LhC), are generally well drained and used for more different purposes. The surface layer is approximately 12 inches thick with a deeper subsoil approximately 48 inches thick. This soil is strongly acid, permeability is moderately rapid, runoff is slow, and erosion hazard slight.

b. Along the coastal areas, inland from the shoreline, the Koloa Series predominates. Koloa stony silty clays, located on slopes of 3 to 8 percent (KvB) and 8 to 15 percent (KvC), consist of well-drained soils located on slopes of old volcanic vents. The soil layer is approximately 20 inches thick with reddish-brown subangular blocky structure. Permeability is moderately rapid, runoff is slow, and the erosion hazard slight. This soil is also used for sugarcane cultivation.

c. The third soil type, the Hanalei silty clay (HnA), is found on slopes of 0 to 2 percent in the low-lying

drainage area. Typically found on stream bottoms and flood plains, these soils are very deep, well-drained alluvial soils or very poorly drained clay soils underlain by peat, muck or massive marine clay. Permeability is moderate, runoff is very slow and erosion hazard no more than slight. This soil is used for taro, pasture and sugarcane cultivation.

8. The project site is classified by the Agricultural Lands of Importance to the State of Hawaii (ALISH) classification system as approximately 50 percent "Prime", 5 percent "Other Important" with 45 percent remaining as unclassified. Approximately 90 percent of the Property is rated "Prime".

9. The Land Study Bureau system of land classification identifies approximately 50 percent of the project site as "B" rated, 25 percent "C" rated, and the remaining 25 percent as "E" rated lands. The Property is essentially "B" rated with a small portion of "C" lands located within a low-lying drainage area. The Property contains the physical qualities necessary for productive agricultural activities.

10. The Flood Insurance Rate Map (FIRM) for the County of Kauai developed by the Federal Insurance Administration indicates that the project site is located in Zones "C", "VE" and a small portion in "AE". Zone C indicates minimal flood hazard potential. The VE and AE areas are

located along the coastline and are subject to a 100-year flood at elevations ranging from 13 through 19 feet above mean sea level. Petitioner represents that no habitable activities are proposed for those areas subject to the 100-year coastal flood which areas are intended for use as fairways and greens of the golf course.

11. The climate at the project site is mild. The average temperature is 75.2 degrees Fahrenheit. The normal annual precipitation is about 44 inches. The relative humidity is approximately 78 percent.

12. Hemmeter-VMS Kauai Company I, a Hawaii limited partnership, is the fee simple owner of the Property. Petitioner is the holder of a leasehold interest in the Property under that certain lease dated September 30, 1988, a short form of indenture of which lease was recorded in the Bureau of Conveyances of the State of Hawaii on October 6, 1988 as Document No. 88-147187. Hemmeter-VMS Kauai Company I has authorized Petitioner to submit the Petition.

PROPOSAL FOR DEVELOPMENT

13. Petitioner proposes to develop an 18-hole golf course primarily for the conduct of a school of golf associated with the "Jack Nicklaus Academy of Golf". Other facilities proposed for the project site include a 22,900 square foot clubhouse and a 19,500 square foot academy to be located within one 43,400 square foot building. This structure would also

contain two dining areas, men's and women's health clubs, classrooms, lecture theater, pro shop, office and cart storage area. A separate 8,000 square foot golf course maintenance building would be located elsewhere on-site. A parking area to accommodate at least 148 cars is also proposed.

14. The proposed golf academy and golf course and related improvements constitute Phase V of the Kauai Lagoons Resort development and is not intended as a freestanding independent stand-alone investment but as an integral part of the Kauai Lagoons Resort.

15. According to Petitioner, the golf academy is designed to provide serious golfers with an opportunity to take an intensive three to five-day course. Trained golf professionals would provide both classroom and field classes at the project site. The golf course design would include a driving range, putting green and six clusters of three golf holes collectively forming an 18-hole golf course. The clusters would simulate most golf situations in regular golf course play while accommodating six classes of between 6 to 10 students each. The golf course would be reserved for students during the weekday. During the weekend, priority would be given to other resort guests for available tee times, and the general public would be permitted access on a space-available basis.

16. Pursuant to a condition of the Planning Commission of the County of Kauai and pursuant also to an

agreement between Petitioner and the County of Kauai, Petitioner shall include in the development of the project site a shoreline access road together with vehicular parking along the coastline of the project site over which access road the County of Kauai shall have in perpetuity an easement for public access to the shoreline.

17. Petitioner proposes to commence construction of the golf course immediately upon securing all of the governmental permits, the last of which is estimated to be obtained in the fall of 1989. All of the basic County land use permits have been approved by the County of Kauai. Besides the reclassification sought by this Petition, Petitioner must yet obtain from the State Board of Land and Natural Resources a Conservation District Use Application permit for the proposed uses within that 46.66-acre portion of the project site which is within the Conservation District.

18. Petitioner estimates that the projected development cost of the proposed golf course and golf academy and the related facilities on the project site will be approximately \$35 million based on 1988 dollars.

PETITIONER'S FINANCIAL CAPABILITY
TO UNDERTAKE THE PROPOSED DEVELOPMENT

19. Petitioner's Balance Sheet listed total assets and liabilities (including capital) of \$121,994 as of August 31, 1988.

20. Petitioner intends to achieve financing arrangement for the golf academy and golf course development as Phase V of the Kauai Lagoons Resort development through lead lenders Security Pacific National Bank of California and first Hawaiian Bank, as co-agents, who have put together the various consortiums of lenders who have financed in excess of \$400 million for the work done to date relating to Phases I through IV of the Kauai Lagoons Resort.

NEED FOR THE PROPOSED DEVELOPMENT

21. The proposed golf academy and golf course would add to the Kauai Lagoons Resort a major amenity to attract visitors and would be the first of its kind in Hawaii.

22. Petitioner's market consultant projects that the synergistic relationship between the golf academy-golf course development and the remaining activities of the Kauai Lagoons Resort would provide overall value enhancement potential to the Kauai Lagoons Resort as follows:

a. The golf academy could provide the potential to increase the occupancy of the existing 850-room Westin Kauai Hotel by approximately one percent per year. The existing hotel has 285,000 room nights available per year. The golf academy is proposed to accommodate up to 60 students per week who in 52 weeks can potentially occupy 3,120 room nights. Assuming less than full enrollment or other reasons resulting in only 2,850 room nights of occupancy by students, the occupancy increase would be one percent.

b. The golf academy-golf course would be an important marketing attribute to attract the group market and could add an additional four percent in occupancy.

c. The aggregate five percent increase in occupancy from the golf academy students and the large incentive groups translates into 14,250 room nights which at \$300 a night room could mean \$4,275,000 in additional revenues. If the additional 750 rooms at the proposed second hotel are considered, opportunity for increase in room nights occupancy at the second hotel would also be indicated.

d. The proposed golf academy-golf course complements the various and sundry attractions and activities of the Kauai Lagoons resort which make it a complete resort and more attractive to guests for extended stays.

23. The growing popularity of golf is indicated. The results of surveys conducted by the nonprofit National Golf Foundation show that the number of golfers in the United States is increasing faster than both the population growth rate or the rate at which golf courses are being built. Golf seems destined to be the game for the 1990s. Some 23 million golfers last year teed off at 13,626 courses in the U.S.--up 30 percent from 1985.

24. Petitioner's market consultant states that luxury resorts such as the Kauai Lagoons Resort are estimated to generate golf course demand at the rate of about one equivalent

18-hole course for each 500 to 600 rooms. Thus, the 850-room Westin Kauai creates a demand for 1.4 to 1.7 equivalent courses, and the proposed addition of another 750-room hotel will establish the economic need for the third proposed golf course.

STATE AND COUNTY PLANS AND PROGRAMS

25. The Property is located within the State Land Use Agricultural District as reflected on Land Use District Boundary Map K-11, Lihue.

26. The Kauai County General Plan designates the project site Open and Agriculture. The project site is designated for Open and Agricultural uses on the Lihue Development Plan. As such, the propose golf academy and golf course uses are consistent with the designations.

27. Portions of the project site are located within the Special Management Area.

28. On January 12, 1989, the Planning Commission of the County of Kauai approved, with certain conditions, a Use Permit, Special Management Area Use Permit, Shoreline Setback Variance Permit and Class IV Zoning Permit for the uses proposed on the project site. The Planning Commission also recommended approval, with conditions, of a State Special Permit for the proposed uses on the Property. Petitioner withdrew the Special Permit application on March 9, 1989.

IMPACT UPON RESOURCES OF THE AREA

Agricultural Resources

29. The Property was formerly cultivated for sugarcane by Lihue Plantation Co., Ltd., but has been fallowed since the early 1980's. Thus, no existing sugarcane acreage is affected.

30. A major factor contributing to the decline of the Property's agronomic potential was the creation of the new Lihue Airport runway. Significant expansion of airport runway and facilities effectively isolated the Property and removed the efficient use of the infrastructure (canehaul roads and irrigation lines) necessary to maintain economically feasible sugarcane production.

31. Petitioner's consultant on agricultural economics, Bruce Steven Plasch, anticipates little or no adverse impact on nearby sugar operations in terms of sugarcane acreage, cultivation practices, and canehaul operations. The consultant also states that the factors limiting sugarcane production will also eliminate the possibility of using the Property for diversified agriculture purposes.

32. The consultant cites other factors which tend to limit economical agricultural production on the Property, including:

a. Markets for potentially feasible agricultural products are very limited.

b. There is an abundance of agricultural land in other areas for sugar and replacement crops. The Land Evaluation and Site Assessment (LESA) Commission estimates that Kauai will need an additional 4,657 acres of agricultural land to accommodate the 1983 to 1995 increase in production. On the supply side, 14,500 acres have been freed from sugar production and about 2,000 acres have been freed from pineapple production on Kauai since 1970.

c. Small amounts of land are needed to achieve a realistic level of food and animal-feed self sufficiency.

d. The Property is exposed to on-shore tradewinds and salt spray which limit the choice of crops that can be grown.

33. The State Department of Agriculture agrees that the project site location between the sea and the Lihue Airport creates potentially high costs to establish irrigation water service, thereby reducing the project site's suitability for intensive agricultural use.

Historical/Archaeological Resources

34. An archaeological reconnaissance survey of the Property was conducted by Petitioner's archaeological consultant, Halett H. Hammatt, Ph.D. The survey covered approximately 150 acres of coastal land from Ninini Point to the Ahukini Dump Site in Kalapaki and Hanamaulu, Kauai, which includes the Property and the project site.

35. Under the survey, five archaeological sites were located along the sloping shoreline, mostly vegetated with ironwood trees. These include two wall remnants of the historic era, a midden scatter along the wave cut shoreline, an oval alignment or terrace and a 400-foot long wall, extending northwards from the Ninini Point Lighthouse.

36. The two wall remnants are probable cattle walls or pens of the historic era and are considered no longer significant. Limited subsurface testing is recommended at the midden scatter and in the oval terrace to determine age and possible function of the sites. The wall at Ninini Point is recommended for preservation because it may have been associated with a former heiau which stood near the location of the present lighthouse.

37. Petitioner's archaeological consultant states that the project site has been extensively modified in historic times by cane cultivation, rocky quarrying, bulldozing and dumping. Bennett's survey of 1931 mentions two heiaus, one at Ninini Point and one at Ahukini Point. Both of these places have been heavily modified, and there is no trace of former temple structures.

38. All of the five sites are not within the Property and some are within the adjoining 46.66-acre parcel within the State Conservation District. Impacts of the proposed development on the project site will be the subject of review

by the Board of Land and Natural Resources in Petitioner's Conservation District Use Application for the proposed uses on the 46.66-acre parcel.

39. Petitioner states that in the event archaeological remains are uncovered during the course of constructing the proposed development on the Property, work will immediately cease and the appropriate governmental agencies will be notified.

Flora and Fauna

40. A botanical survey of the project site was conducted by George K. Linney and Winona P. Char, botanical consultants. The survey determined that the project site consisted of two basic vegetation types: old cane field with associated roads, ditches and ponds; and coastal scrub, consisting of a narrow band of remnant native coastal plants and a windbreak of ironwood with associated weeds.

41. The survey found that only 104 species of vascular plants were found on the site, with 89 (86%) exotic weeds or deliberately introduced plants, and 15(14%) native plants. None of the species found on the project site were officially listed as endangered or threatened; nor were any species proposed or candidate for such status.

42. The botanical consultants state that there is little of botanical interest on the project site, as most of the area has been cultivated for some time. The proposed golf

academy-golf course development is not expected to have significant impact on the total island populations of the species involved. The native species (both endemic and indigenous) are found in similar environmental conditions throughout the islands.

43. A faunal survey of the project site was conducted by Petitioner's biology consultant, Phillip L. Bruner. The survey located no threatened or endangered species in the area. No endemic birds were recorded, however, the Short-eared Owl and Black-necked Stilt may periodically occur in the area. The native Pacific Gold Plover and Wandering Tattler were recorded, but it was impossible to determine if these individuals were territorial or transient. Resident indigenous birds recorded include two Laysan Albatross, a White-tailed Tropicbird, and a Wedge-tailed Shearwater. No endemic or endangered mammals were identified.

44. To preserve the biological diversity of the site for birds, Petitioner's consultant recommends planning a wide range of trees and maintenance of the coastal ironwoods to provide a wind break and increased opportunities for feeding and refuge for different species. The State Department of Land and Natural Resources, however, states that the impact of increasing bird population could cause a serious problem for the adjacent Lihue Airport. Of special concern are birds such as doves and egrets, and the recent colonization of Kauai by

the Laysan Albatross. Once the Laysan Albatross (which prefers grassy seaside bluffs for nesting activities) is established successfully, they could become a serious problem.

ENVIRONMENTAL QUALITY

Noise

45. A study on the impact of aircraft noise on the proposed development was conducted by Petitioner's acoustical consultant, Ronald A. Darby. The study was based on the official map of record delineating the 1991 projected noise (Ldn) contours for Lihue Airport by the State Department of Transportation (DOT).

46. Using DOT 1991 contours, the consultant estimated that about one-third of the project site nearest the runway will be in the 65 to 70 Ldn range based on two different scenarios for aircraft operation during an annual-average day. The remainder of the project site is exposed to less than 65 Ldn.

47. Using DOT "draft" 1995 contours, the consultant estimated that about two-thirds of the project site will be exposed to values above 65 Ldn. The consultant believes, however, that the contour levels will actually decrease in 1991 and 1995 because State airport consultants are taking into consideration a quieter Stage 3 aircraft which are expected to make up a larger percentage of the fleet in the future.

48. Under both DOT 1991 Ldn contours and DOT "draft" 1995 Ldn contours, the consultant states that:

a. Under land use compatibility criteria and guidelines from Federal agencies and the American National Standard Institute (ANSI), golf courses are "compatible" or "marginally compatible" up to Ldn 75 if any related structures are properly treated so interior noise levels are acceptable. The same criteria and guidelines recommend that the envelope of structures containing classrooms, retail trade, and eating and drinking establishments provide noise Level Reductions of 25 to 30 dB if the complex is in the Ldn 65 to 70 zone or Ldn 70 to 75 zone, respectively. Such reductions are obtainable by full-closure and air conditioning; the use of heavy roofing systems with insulated attic spaces; the use of sound traps on vents and other openings; and the use of sound rated glazing and doors.

b. Noise contours for days when only tradewind aircraft operations occur indicate that very little of the project site is exposed to Ldn values greater than 65 dB. During days when there are only Kona aircraft operations, the majority of the site is exposed to Ldn 65 and higher levels. When the aircraft are flying tradewind patterns, which occurs 88% to 90% of the time, the golf academy and golf club complexes would have day-night noise values near Ldn 60 or less. During Kona flight patterns, the Ldn range is estimated to be in the range of Ldn 70 to 75. Certain areas can be open and naturally ventilated about 90% of the time during periods

of tradewinds with capability of being closed with proper sliding doors and windows and air conditioning during times of noisy Kona overflights.

49. Petitioner proposes to install the sound attenuation measures to attain Ldn noise levels compatible for the proposed uses on the project site.

50. In the opinion of the acoustical consultant, outdoor instruction on the project site can be reasonably conducted. Communication is possible when there are 74 dBA noise levels if the talker and listener are between two to ten feet and use an expected voice level or a raised voice level, respectively. During tradewind conditions, communication would be possible throughout about 70 percent of the departures without the noise exceeding 74 decibels; but during 30 percent of the departures, conversation may be interrupted for about an average of ten seconds on each departure.

51. Based on current number of 14 arrivals and 14 departures at Lihue Airport by inter-island jet carriers between 7 a.m. and 11 a.m., communication during tradewind conditions (88% to 90% of the time) may be impaired on the average of about once every 22 minutes for a period of 13 seconds by the aircraft activity within the 4-hour period.

52. Richard Coffin, assistant airport manager at Lihue Airport for the State Department of Transportation, states that about half of the 70 inter-island flights at Lihue

Airport take off on Runway 3, the location of and noise impact from the aircraft activities at which are further removed from the Property than Runway 35 which adjoins the Property. He opines that the aircraft noise will not hinder golfing activity on the project site.

Air Quality

53. Petitioner's air quality consultants, Barry D. Root and Barry D. Neal, state that the major short-term air quality impact of project construction will be the potential emission of significant quantities of fugitive dust. Strict compliance with State of Hawaii Air Pollution Control Regulations regarding establishment of a regular dust-watering program and covering of dirt-hauling trucks will be required to effectively mitigate this concern.

54. The consultants' study determines that once completed, the proposed project would have little direct impact on ambient air quality in the area. Compliance with existing safety guidelines for the spraying of chemicals for golf course maintenance should mitigate potential air quality impacts from this activity. Long-term indirect air quality impact is expected to be minimal since detailed carbon monoxide modeling has indicated that worst-case projected levels of carbon monoxide will be within State of Hawaii and National AAQS. For this reason, no specific mitigative measures are proposed in this regard by the consultants.

Visual Impacts

55. With the exception of low-rise building support facilities for the golf academy, golf clubhouse and maintenance shed, the project site with the proposed uses will have the open space character of a golf course. Petitioner proposes that the ambience of the ironwood trees along the coast will be retained to the extent possible.

56. The project site is not readily visible from the main roads due to its distance and to the location of the Lihue Airport.

Water Quality

57. Surface and subsurface water quality impacts may be generated from (i) application of fertilizers and pesticides, and (ii) potential movement of these chemicals as a component of surface water runoff, and/or groundwater recharge. Fertilizers comprised of nitrogen, phosphorus and potassium are commonly applied to golf courses as a source of essential turf grass nutrients.

58. Petitioner's consultants, Charles Murdock and Richard Green, conducted a study on the impact of fertilizer and pesticide uses on the project site and determined that there would likely be no negative environmental impacts based on the findings, as follows:

a. Among the fertilizer elements, only nitrogen (N) in the form of nitrate could possibly diminish water

quality, but with proper management of nitrogen fertilizer and water, leaching of N will be minimal, since turfgrass roots are excellent scavenger of nitrate. Phosphorus (P) sorption in these soils is high, so that movement of P from the site of application will not be a problem.

b. Runoff does not constitute a problem at this site due to good permeability of the soils, moderate slopes and generally low rainfall.

c. Leaching of pesticide chemicals to groundwater is not expected to be a concern because the surface soils are inherently high in organic carbon (2% or higher), natural recharge is negligible in this area and pesticides used are highly sorbed and/or rapidly degraded under moist soil conditions.

d. In comparison to sugarcane, which was the traditional crop on the Property, the golf course will receive less nitrogen fertilizer and less herbicide. Thus, there is no reason to expect diminished quality of coastal waters after the golf course is developed.

e. The chemicals applied in golf course management pose little hazard for birds or wildlife. Fertilizers are relatively non-toxic unless ingested in large amounts. With the exception of chlorpyrifos, the pesticides are of low toxicity to birds. No bird kill have been reported in Hawaii from chemicals applied on golf courses.

f. There is little likelihood of adverse effects on air quality from application of pesticides in golf course management. The pesticide spray equipment used in golf course management is ground-operated. Nozzle heights are usually less than 2 feet. Low spray pressures and coarse nozzle openings result in relatively large droplet sizes which are not easily subject to drift.

59. The consultants' conclusions are based on the assumption that proper irrigation management under the supervision of a well qualified golf course superintendent will be conducted.

60. A baseline assessment of the marine environment offshore of the project site was conducted by Petitioner's biological and chemical oceanographic consultant, Steven Dollar, of Marine Research Consultants. None of the biotic assemblages of the area constitutes rare, endangered or commercially valuable resources.

61. The baseline assessment concluded that the proposed development on the project site does not appear to present the potential for severe or permanent alteration of the marine environment. If sediment runoff should occur, it will probably be episodic and the suspended material will be dispersed by normal circulation before settlement on the bottom can accumulate to the point of smothering biota. Similarly, if a fraction of applied fertilizer percolates to the groundwater

table and is discharged as non-point flow into the ocean, it is likely that mixing processes will dilute the input to undetectable levels within the nearshore zone.

SOCIO-ECONOMIC IMPACTS

62. Petitioner's economic consultant, Ming Chew, determines that for the proposed project, the employment multipliers for estimating the on-island job impacts would be 2.0 and 1.5 times direct on-site construction and operation jobs, respectively, applied as follows:

a. During construction, Petitioner estimates that the number of direct on-site work force would be about 50 workers. Using the 2.0 multipliers, another 50 jobs would be created in the community.

b. For the operations and maintenance of the golf academy-golf course, Petitioner projects 100 direct jobs to be created. Using the 1.5 multiplier, another 50 jobs would be created in the community. Total personal income on Kauai will increase about \$2.7 million from the increase in jobs.

63. The consultant projects a population gain of 20 persons from the proposed project, which represents a negligible gain. With projected increase of seven households, which are easily accommodated by the normal home-building industry, impact on housing is considered insignificant.

64. Real property tax revenues for the County of Kauai are expected to increase from \$9,000 per year to about \$285,000 per year.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Transportation Facilities

65. There would be two principal means of access to the golf academy and golf course development through the Kauai Lagoons Resort. One would be via Rice Street, the main entrance to the Kauai Lagoons Resort; the other would be from Kapule Highway. Both roads are private roads, with a minimum pavement width of 18 feet.

66. Along the southern end of Runway 17-35, an existing 20-foot wide easement over the Lihue Airport property would be used for access from the Kauai Lagoons Resort to the project site. This easement was granted to the former owner of the project site when it was cultivated for sugarcane use. This easement is proposed to be improved with at least an 18-foot wide pavement to allow for safe 2-car vehicular traffic. The location of the easement road can be moved so as not to interfere with the safety zone of Runway 17-35 as proposed to be extended by 1,500 feet at the southern end.

67. Under an agreement between the County of Kauai and the Petitioner, an access to the project site is to be made available at the Ahukini end of the project site intended primarily as an easement for public access to the coastline.

68. A traffic impact study was prepared by Belt Collins and Associates to evaluate the traffic impacts resulting from the construction and the use of the golf academy

and golf course on the project site. The study concluded that the operation of the golf academy-golf course on the project site would not have significant adverse impact on surrounding streets based on the study's findings, as follows:

a. During the weekdays, most if not all of the students of the academy will be guests of hotels within the resort. As such, there should not be any significant additional trip generations attributable to the proposed use.

b. At least 40 vehicle trips per day would be generated by the anticipated 30 regular staff and 6 golf professionals working at the site. These trips should be evenly distributed among the two accesses--Rice Street and Kapule Highway.

c. During the weekend, the academy course would be available for play by resort guests and to some extent the general public. About 120 players per weekend day arriving from off-site will generate 60 inbound and 60 outbound vehicle trips. However, the nature of spacing the starting times which are expected to run from 7 a.m. to 2 p.m. would break up the trips so that 8 inbound and 8 outbound vehicle trips would be generated per hour at the resort entrance road.

d. With the full build out of the Kauai Lagoons Resort, the study estimates that the overall average daily traffic in 1992 at the Rice Street intersection should be twice that of today without the proposed project. With the proposed

project, it is expected to increase by no more than 16 trips per hour. This would amount to a traffic volume increase between 1 and 2 percent.

Water Service

69. Water to the existing Kauai Lagoons Resort is already available from the County's Lihue-Kapaia water system. This system has two one-million gallon reservoirs at the 393 foot elevation level. These reservoirs feed into a 12-inch water main along Kapule Highway and Rice Street.

70. About 20,000 gallons of water per day will be required for the clubhouse activities. The waterline from the existing resort area will be extended to service the golf academy and related facilities.

71. The Water Department of the County of Kauai has no objection to the Petition provided that the building permit shall not be issued until Petitioner (i) prepares, and receives Water Department's approval of, construction drawings for necessary water system facilities, (ii) constructs said facilities, and (iii) pays the applicable charges.

72. Sewer effluent from the County's sewer plant will be used for golf course irrigation of the project site in much the same manner as the existing non-potable irrigation system used for the two existing golf courses within the Kauai Lagoons Resort. The existing system uses effluent from the County of Kauai which is supplemented by water from three different

wells. An expansion of the wells is probably needed to accommodate the proposed project.

Sewage Treatment and Disposal

73. The proposed uses at the project site will generate about 15,000 to 16,000 gallons of effluent per day. Petitioner is desirous of disposing the sewage at the Lihue Wastewater Treatment Plant (LWTP), but the project site is not currently within the area served by LWTP.

74. Petitioner intends to seek inclusion of the project site within the LWTP service area for accommodation of about 15,000 gallons of effluent per day. If inclusion in the LWTP service area cannot be allowed at this time, Petitioner would have to develop a small package plant on the project site for sewage treatment and disposal.

75. The County of Kauai has an easement for a future sewer outfall across the project site as an extension of the "dry line" installed under the airport runway. The County Department of Public Works recommends that the line be installed across the project site in the development of the proposed project to avoid construction difficulties in installing the line across a developed area at a later time.

76. Sewage effluent is being disposed of in the two existing golf courses and portions of the project site. The State Department of Health (DOH) recommends that Petitioner develop and adhere to a Wastewater Reuse Plan affecting the project site which plan shall be reviewed by DOH.

Drainage

77. Runoff from three relatively small drainage areas traverse the project site. Runoff from the airport runway and the area mauka of the runway surface drain across the project site via 30 to 60 inch drainage pipes located under the existing runway. These underground drainage pipes surface at the makai edge of the airport property. The runoff then travels over the project site and eventually discharges into the ocean.

78. Proposed drainage improvements consist of below grade, low flow pipes designed to transport normal runoff, and surface swales to transport runoff exceeding the capacity of the low flow pipes. Existing drainage patterns and discharge points would remain as currently located. Petitioner does not expect the quantity of runoff to increase above existing level inasmuch as sugarcane land and/or the existing vegetation would be converted to turf grasses and other landscaping.

79. Petitioner's engineering consultant, Belt Collins and Associates, indicates that the control of surface runoff of silt will be vastly improved after the golf course is built on the project site. The creation of siltation basins and ponds for short-term construction activities is wise but will not be necessary when the golf course is completed with vegetative cover.

80. The consultant also states that a buffer zone consisting of vegetation and siltation basins to prevent direct

discharge of chemicals and silt into near-shore waters is unnecessary inasmuch as the development of a golf course requires the vegetation of the project site with grass which would provide as much or even better vegetation coverage than the existing vegetation for the prevention of chemicals and silt discharge.

81. Petitioner's oceanographic consultant, Steven Dollar, states that siltation does no damage to the marine communities which have adapted to sediment stress on a natural basis along the Kauai shoreline areas.

82. Petitioner's engineering consultant further believes that a system of monitoring wells ten feet below the water table on the project site along the coastal area to monitor impacts of fertilizers and biocides on the groundwater and groundwater flow to the shoreline is neither practical nor cost effective for the benefit, if any, sought to be realized because:

a. There is no public drinking water system, in close proximity to the project site, that would warrant protection. Groundwater table on the project site is not intended for potable uses.

b. If the concern is the impact of the golf course activities on the coastal waters, monitoring the coastal waters would be as effective for the purpose sought to be served.

Parks and Recreation

83. The proposed golf course for the golf academy will be made available during the weekend for hotel guests and general public play. With the presence of the golf academy course, the golf play and opportunity for starting times at the two existing golf courses open for hotel guests and the general public will not be disturbed by golf instruction classes or preempted by tournaments of large incentive groups.

84. Under an agreement with the County of Kauai, the Petitioner shall provide on the project site for a shoreline access road together with vehicular parking along the coastline over which access road the County of Kauai shall have in perpetuity an easement for public access to the shoreline.

Police and Fire Protection

85. The main police station is located in Lihue, approximately 1/2 mile away. Security guards will be provided by the hotel.

86. The main fire station is located in Lihue, approximately 1/2 mile away. The entire Kauai Lagoons Resort development may result in an overall increase in annual responses to this area. While the personnel capacity may be sufficient at this time, the overall growth of the resort would eventually foster a demand for additional fire personnel and equipment.

Electrical and Telephone

87. In conjunction with the overall Kauai Lagoons Resort development, electrical service is being provided by the Kauai Electric Company. Service lines have been extended to various parts of the resort requiring electricity. The project site will be serviced by this same system.

88. Telephone service is available to the project site. Lines will be extended from the existing Kauai Lagoons Resort area.

Solid Waste Management

89. Solid waste will be hauled away by private contractors to the County disposal area. Construction waste will be hauled to the Kekaha sanitary landfill. The proposed development is not expected to generate any dangerous or uncommon substances.

Schools

90. The State Department of Education commented that the proposed golf course and academy should not result in any direct demand for additional school facilities. Indirect demand, however, may result from the increased employment opportunities and associated population increase in the area.

CONFORMANCE WITH THE HAWAII STATE PLAN

91. The proposed reclassification to the allow the proposed project conforms to the Hawaii State Plan, Chapter 226, HRS, as amended, including the following priority guidelines:

226-104(b)(1) "Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles."

226-104(b)(2) "Make available marginal or non-essential agricultural lands for appropriate urban uses while maintaining agricultural land of importance in the agricultural district."

92. The location of the project site adjoining the Lihue Airport and proximate to the existing Kauai Lagoons Resort, of which resort the golf academy-golf course is to be made a part, provides for reasonable access to existing urban areas where adequate public facilities are available or can be reasonably provided.

93. Expansion of the Lihue Airport runway and facilities effectively isolated the Property and foreclosed the efficient use of the infrastructure necessary to maintain economically feasible sugarcane and diversified agriculture. The State Department of Agriculture agrees that the location of the Property creates potentially high costs to establish irrigation water service, thereby reducing the Property's suitability for intensive agricultural use.

CONFORMANCE TO STATE LAND USE DISTRICT STANDARDS

94. The Property is a part of the project site proposed for the development of a golf academy-golf course which is to be included as an integral part of the existing Kauai Lagoons Resort.

95. The Property is situated between the State Urban District (Lihue Airport) in the mauka direction and the State Conservation District in the makai direction. Approval of the proposed reclassification would result in a contiguous Urban District encompassing the Kauai Lagoons Resort complex and abutting the State Conservation District along the shoreline.

96. The town center of Lihue is located approximately two and one-half miles to the northwest of the Property. The Property is proximate to basic services as sewer, water, public highway access, police and fire protection, power and other public services.

97. The topography of the Property is relative level with slopes less than 8 percent. The Property is within Zone C of the Flood Insurance Rate Map indicating minimal flood hazard potential.

98. The proposed development on the project site is consistent with the County General Plan and the Lihue Development Plan. The Planning Commission of the County of Kauai has issued approvals for a Use Permit, Special Management Area Use Permit, Shoreline Setback Variance Permit and Class IV Zoning Permit for the uses proposed on the project site.

CONFORMANCE WITH COASTAL ZONE POLICIES AND OBJECTIVES

99. The proposed reclassification of the Property for the development of the project conforms to the policies and objectives of the Coastal Zone Management Program Chapter 205A, Hawaii Revised Statutes, as amended.

RULING ON PROPOSED FINDINGS OF FACT

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

Any conclusion of law 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.

CONCLUSION OF LAW

Pursuant to Chapter 205, Hawaii Revised Statutes, as amended, the Hawaii Land Use Commission Rules, Chapter 15-15, Hawaii Administrative Rules, the Commission finds upon the preponderance of evidence that the reclassification of the Property, consisting of approximately 91.479 acres, from the Agricultural District to the Urban District at Kalapaki, Lihue, Island of Kauai, State of Hawaii, Tax Map Key No. 3-5-01: portion of 102, for a golf academy golf course, clubhouse, and other related uses, subject to the conditions stated in the Order, conforms to the standards established in the Hawaii Land Use Commission Rules, Chapter 15-15, Hawaii Administrative Rules, is reasonable and nonviolative of Section 205-2, Hawaii Revised Statutes, as amended, and the Hawaii State Plan as set forth in Chapter 226, Hawaii Revised Statutes, as amended.

ORDER

IT IS HEREBY ORDERED that the Property, consisting of approximately 91.479 acres, being the subject of this Docket No. A88-631 by Hemmeter-VMS Kauai Company V, situate at Kalapaki, Lihue, Island of Kauai, State of Hawaii, identified as Kauai Tax Map Key No. 3-5-01: portion of 102, and approximately identified on Exhibit "A" attached hereto and incorporated by reference herein, for reclassification from the Agricultural District to the Urban District, shall be and hereby is approved and the State Land Use District Boundaries are amended accordingly, subject to the following conditions:

1. No on-site construction activity shall be permitted on the Property prior to the Petitioner obtaining applicable Conservation District Use Application (CDUA) approval(s) from the State Board of Land and Natural Resources for the uses proposed on so much of the project site which is within the State Conservation District.
2. Petitioner shall comply with all State Department of Health environmental health requirements. Petitioner shall also develop and adhere to a Wastewater Reuse Plan affecting the project site which shall be reviewed and approved by the State Department of Health.
3. Petitioner shall fund and install the sewer outfall "dry line" across the subject Property and other wastewater improvements as may be required by the County of Kauai.

4. A detailed preservation and archaeological data recovery plan shall be prepared for the project site and shall be submitted for review and approval by the State Historic Sites Section and the Planning Department of the County of Kauai. These same agencies shall also verify the successful execution of this plan.

In addition, should any previously unidentified archaeological resources such as artifacts, shell, bone or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered during the project's development, the Petitioner shall immediately stop work and contact the State Historic Preservation Office.

5. Petitioner shall fund the design and construction of all necessary water facility improvements, including source development, as required by the County of Kauai Department of Water, to provide adequate quantities of potable and non-potable water to the project site.

6. Petitioner shall establish buffer zones as may be required by the State Department of Land and Natural Resources under CDUA approval(s) affecting so much of the project site which is within the State Conservation District.

7. Petitioner shall grant an avigation (right of flight) easement as prescribed by the State of Hawaii over any portion of the proposed project subject to noise levels of 55 Ldn or greater. The avigation easement shall run with the land and apply equally to any future owners of the subject Property.

8. Where flight operations at Lihue Airport are in any way affected by the bird population at the subject site, Petitioner shall undertake appropriate measures to control the bird population at the project site in accordance with the regulatory requirements of the Department of Land and Natural Resources or the United States Department of Agriculture Animal Damage Control Unit in Honolulu.

9. Petitioner shall ensure that no portion of the 18-foot wide access road leading into the subject Property is located within any portion of the Runway Safety Area of Lihue Airport.

10. Petitioner shall provide on the project site access to shoreline and beach areas as may be required by the County of Kauai and the Department of Land and Natural Resources.

11. Petitioner shall complete the development on the Property in substantial compliance with the representations made before the Commission.

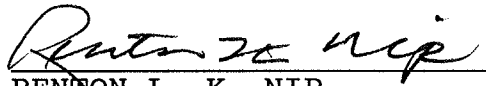
12. Petitioner shall notify the Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interest in the Property prior to visible commencement of construction on the Property; provided, however, that Petitioner may transfer ownership in the Property to an affiliate or in a manner consistent with prior representations to the Commission, and may mortgage the Property at any time without notice to the Commission.

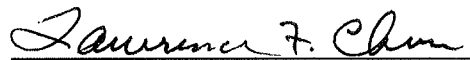
13. Petitioner shall provide annual reports to the Land Use Commission, the Office of State Planning and the County of Kauai Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed.

14. The Commission may fully or partially release these conditions as to all or any portion of the Property upon timely motion, and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.

Done at Honolulu, Hawaii, this 31st day of July 1989,
per motion June 29, 1989.

LAND USE COMMISSION
STATE OF HAWAII


By 
RENTON L. K. NIP
Chairman and Commissioner


By 
LAWRENCE F. CHUN
Vice Chairman and Commissioner

By (absent)
ALLEN K. HOE
Commissioner

By (excused)
SHARON R. HIMENO
Commissioner

By 
TEOFILO PHIL TACBIAN
Commissioner


By 
TORU SUZUKI
Commissioner

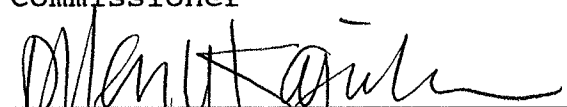
By 
ROBERT S. TAMAYE
Commissioner

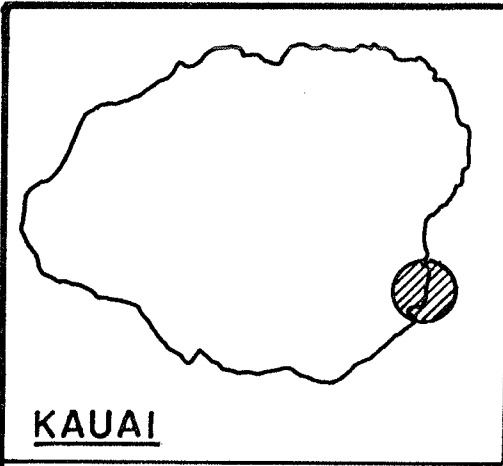
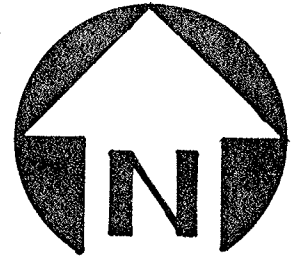
Filed and effective on
July 31, 1989

Certified by:

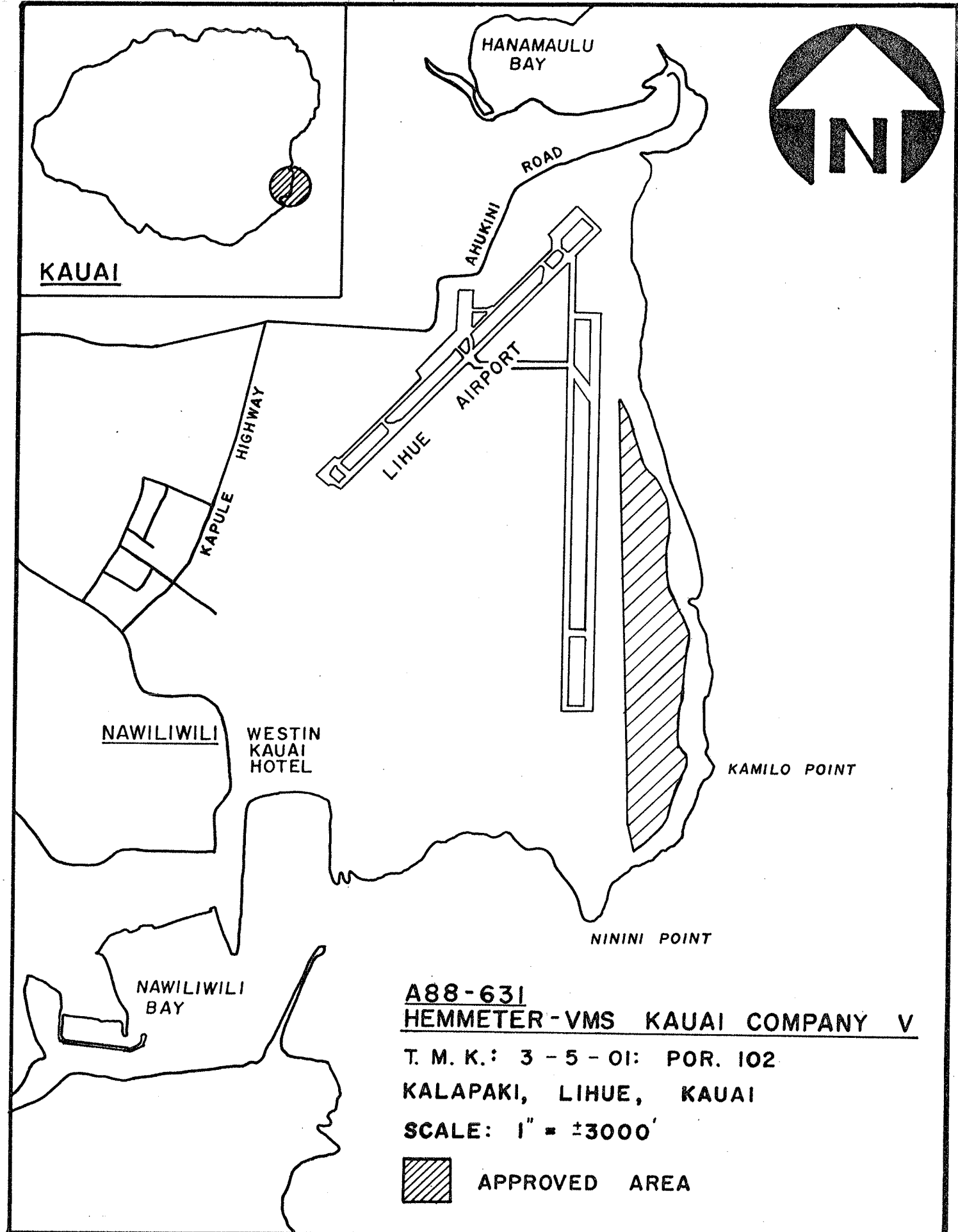

Executive Officer

By 
FREDERICK P. WHITTEMORE
Commissioner

By 
ALLEN Y. KAJIOKA
Commissioner



KAUAI



A88-631
HEMMETER-VMS KAUAI COMPANY V

T. M. K.: 3 - 5 - 01: POR. 102

KALAPAKI, LIHUE, KAUAI

SCALE: 1" = ±3000'



APPROVED AREA

EXHIBIT "A"

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of) DOCKET NO. A88-631
HEMMETER-VMS KAUAI COMPANY V)
To Amend the Agricultural Land)
Use District Boundary into the)
Urban Land Use District for)
Approximately 91.479 acres at)
Kalapaki, Lihue, Kauai, Hawaii,)
Tax Map Key No. 3-5-01: por. 102)
_____)

CERTIFICATE OF SERVICE

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

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

CERT. TOM H. SHIGEMOTO, Planning Director
Planning Department, County of Kauai
4280 Rice Street
Lihue, Hawaii 96766

CERT. JAMES T. FUNAKI, ESQ., Attorney for Petitioner
Okumura, Takushi, Funaki & Wee
Grosvenor Center, Suite 1400
733 Bishop Street
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, this 31st day of July 1989.



ESTHER UEDA
Executive Officer

DOCKET NO. A88-631 - HEMMETER-VMS KAUAI COMPANY V

A copy of the Land Use Commission's Findings of Fact, Conclusions of Law, and Decision and Order was served upon the following by regular mail on July 31, 1989.

DIANE J. PLOTTS
President
Hemmeter Corporation
1441 Kapiolani Boulevard
18th Floor
Honolulu, Hawaii 96814